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## NANTUCKET WILD FLOWERS

BY<br>ALICE O. ALBERTSON

CURATOR OF THE NANTUCKET MARIA MITCHELL ASSOCIATION

ILLUSTRATED BY

## ANNE HINCHMAN

"Great store of flowers-the honour of the field."
Edmund Spenser

G. P. PUTNAM'S SONS NEW YORK AND LONDON Tbe $\mathbb{k n i c k e r b o c k e r ~} \mathbb{P r e s s}$

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To
MARY A. MITCHELL ALBERTSON
FIRST CURATOR OF
THE NANTUCKET
MARIA MITCHELL ASSOCIATION
" There is no property of any species, even the properties that constitute the specific definition, that is not a matter of more or less."-H. G. Wells.
"The actual and past distribution of plants must obviously be controlled by the facts of physical geography."

Encyclopfdia Britannica.

## FOREWORD

This book attempts to be a companion for any one who desires to be more intimate with the wild flowers on Nantucket.

Undeniably, the natural setting of the island's wild flowers casts an abiding spell, most deeply felt on " the Commons" (the heathland), where the majority of the wild flowers grow. This allurement may be born of vast and open spaces, where an air of elusive mystery, under the magnifying influence of a salt atmosphere, hangs about the low and rolling hills. Or it may be due to a vicarious joy in the triumph of flowers that have to fight for existence. Yet the very elements that make the fight neces-sary-salt winds and unhampered sunshine-are known to be influences also in creating intensity of colour in flowers and grasses. And beauty of colouring is, unquestionably, one of the strongest bonds between the Commons and us.

Even in winter colour is by no means lacking. The lustrous Mealy-plum Vine carpets all the dry ground, and "Evergreen" bushes are abundant in the swamps. Later, the Commons in certain places are covered with Mayflowers or the eye rests on an endless carpet of the Barren Heath (Hudsonia), dazzlingly yellow, or

> "Over hill, over dale, Thorough bush, thorough brier,"
are flaunted the most brilliant crimsons and yellows and purples. A veiling haze and changing lights save this profuseness of colour from barbaric crudity, softening outlines and colours.

Still another factor in making Nantucket a happy hunt-ing-ground for those interested in flowers is the geographical location. As Prof. Asa Gray once declared, nothing is a surprise from Nantucket. It is an island, thirty miles
at sea, where the means of introduction of new seeds are limited and the wind and soil conditions unusual. Moreover, flowers grow here like the Scotch Heathers (Calluna vulgaris and Erius) that have been reported from few, if any, other parts of the United States, and the Centaury (Centuurium spicatum), not found between Nantucket and Portsmouth, Virginia, the presence of which on Nantucket suggests geologieal possibilities.

Local interests like these are not confined to the professional botanist, therefore this book has been written to describe, with all possible accuracy and few technicalities, the representative trees and flowers. A full and invaluable technical list has already been published by Mr. Eagene P. Bicknell of New York. To have described in detail all the trees and plants listed by Mr. Bicknell, would have resulted in the volume's being of such bulk that one of the cardinal purposes, the unacademic, would have been defeated. The book would also have increased in size without gain in value for our purpose if we had included such plant life as the club mosses and the grasses. For these reasons we have chosen three hundred species, and have started with the Pine Tree Family. We have inclucled the typical trees and maritime plants; also many plants which are not peculiar to seashore environment, but which on Nantucket grow very profusely; and some introduced weeds, which, if precaution is not taken against their spread, may, in time, prove to be a curse on Nantucket as they have elsewhere. We have added a few plants of unusual scientific interest.

The illustrations are from Nantucket flowers, showing, whenever possible, the variability of these island forms, as, for example, the bowed carriage of the Bush Clover (Lespedeza) which holds itself erect elsewhere. The flowers have been drawn their actual size. The scale, representing in every case one inch, will show which have been reduced in printing.

The illustrator has learned in this work that no individual flower is a final definition of the species, the viii

## FOREWORD

variations being so great that several examples need to be studied before the recording of characteristic facts. May we advise you, whenever possible, to examine sevcral specimens before giving up the identification of your flower with the description or drawing? Yet this advice entails a warning, for, knowing the danger of extermination, the flower-lover's perennial care is one of respect, a discrimination among the flowers, and a continual anxiety for the rare ones.

The author acknowledges indebtedness to the following books of reference: Manual of Botany, 7th edition, Gray; Flora of the Eastern United States and of Canada, Britton and Brown; The Ferns and Flowering Plants of Nantucket, Mr. Eugene P. Bicknell; Plants Growing without Cultivation on the Island of Nantucket, Mrs. Maria L. Owen; and The Household Physician, Warren. She wishes to express her gratitude to Mr. Eugene P. Bicknell; Dr. John Borneman; Mr. Stewardson Brown; Dr. Joseph Cushman; Miss Grace Brown Gardner; Dr. John W. Harshberger; Mrs. Charles S. Hinchman; Mr. F. Schuyler Mathews; Mrs. Stokeley Morgan; Mr. S. N. F. Sanford; Mrs. Edw. Sturdevant; and to many others, whose names it would be a pleasure to record here, did space permit.
A. O. A.

## KEY

This key is intended not only to help in the identification of an unknown specimen, but also to show the main characteristics of the Families.

## TREES

Leaves in bundles.

1. leaves needle-like. Pinacea (Pinus).

Leaves mostly or all opposite.

1. leaves extremely narrow, at least needle-pointed.

Pinacea (Juniperus).
2. leaves triangular in outline, the middle and end division decidedly the largest. Aceracer.

## Leaves alternate.

1. leaves oblong or nearly round, stipuled, with regular, saw-like teeth; flowers in catkins. Salicacere.
2. leaves pinnately divided. Juglandaceer.
3. leaves having rounded spaces between lobes.

Fagacea.
4. some leaves, at least, mitten-shaped. Lauracec.
5. leaves furnished with prickles.

Aquifoliacece (Ilex opaca).
6. leaves more or less irregularly saw-toothed; flowers white or tinted, fragrant, five-petalled, numerous stamens.

Rosacea.
7. leaves mostly unnotched.

Cornacear.

## SHRUBS AND LOW BUSHES

## Leaves opposite or in circles around the stem.

1. flowers circular, fluted on the back, crimson pink: or urn-shaped, whitish-pink, and fruit black; or white, in close, cylindrical clusters, very fragrant.

Ericacea.

## KEY

2. leaves stipuled; flowers in dense, round heads, whitish, very fragrant. Rubiafere (Cephalanthus).
3. leaves regularly saw-toothed or pinnately divided: flowers in flat-topped clusters, cream-white, fruit purple or blue-black.

Caprifoliacere.

## Leaves alternate.

Leaves entire.

1. leaves evergreen; flowers small, green or whitish; fruit black.

Aquifoliacere (Ilex).
2. leaves spine-like ; flowers butterfly-shaped.

Leguminosce (Ulex);
3. flowers more or less urn-shaped, white to coralred; fruit sometimes blue or black. Ericacer.
4. vine-like shrub; flowers funnel-formed, greenishpurple and brown. Solanacea (Lycium).
5. flowers minute, in dense globular heads which are magenta. Compositce (Arctium).

Leaves toothed or lobed.

1. leaves and broken twigs fragrant; berries bluishgrey.

Myricacear.
2. flowers minute; fruit a nut. Betulacerr.
3. flowers whitish, five petals, numeruos stamens; fruit red or purplish or black.

Rosacer.
4. flowers small, greenish-white; fruit red.

Aquifoliacere (Ilex).
5. flowers urn-shaped, white or reddish: fruit blue.

Ericacea (Vaccinium).

## Leaves palmately divided.

1. leaves hairy; flowers greenish yellow; fruit reddishpurple.

Saxifragacear.
2. flowers pink, numerous stamens.

Rosacear.
3. flowers butterfly-shaped; fruit a pod.

Leguminosce (Cytisus).

## KEY

Leaves pinnately divided.

1. Some, at least, having more than eleven divisions. flowers whitish-green.

Anacardiacra.
2. flowers pink, numerous stamens: Rosacce (Rosa).

## VINES

## Leaves entire.

1. parallel-veined; prickles on the stem.

Liliacea (S'milax).
2. leaves evergreen, with rough hairs or smooth; flowers more or less urn-shaped, at least tubular at the base; pink or white; fruit red, mealy or juicy. Ericacea.
3. flowers trumpet-shaped, corolla undivided, white or streaked with pink.

Convolvulacere.
Leaves lobed and having short, broad teeth.

1. a tendril opposite each leaf; flowers greenish; fruit purple.

Vitacere (Vitis).

## Leaves palmately divided.

1. abundant prickles on the stems; flowers white; fruit black.

Rosacear (Rubus).
2. leaves three-divided, shiny; flowers whitish-green; fruit yellow-cream colour. Anacardiacece (Rhus).
3. leaves five-divided, tendrils ending in disks; flowers whitish or yellow-green. Vitacere (Psedera).

Leaves pinnately divided.

1. flowers brown-lilac.

Leguminosa (Apios).

## AQUATIC PLANTS

1. Stems slender, one foot to three feet long, leaves thread-like.

Naiadacere.
2. Masses of tiny, green plants, having rounded, bluegreen leaves.

Lemnacear.

## KEY

3. Leaves four inches to twelve inches wide; flowers large white, fragrant.

Nymphaacea
4. Leaves one inch broad or less; flowers small, white. Gentianacece (Nymphoides)

## PLANTS HAVING PARALLEL-VEINED LEAVES

All the leaves from the root or sheathing the base of th flower-stem.

1. flowers brown, in cylindrical spikes, which are tw inches or more long. Typhacea
2. flowers white, with yellow centers. Alismacea
3. leaves three-divided above; over the flower-spik curves a purple or greenish flap.

Aracece (Ariscma)
4. flowers greenish yellow in spikes or "graters." Aracea (Acorus)
5. leaves in tufts, having prominent central marking and cross lines; flowers like pin-cushions, slate colour.

Eriocaulacer
6. leaves very narrow; flowers yellow. Xyridacea
7. flowers tubular, tawny-orange.

Liliacere (Hemerocallis)
8. plant and flowers mealy. Liliacece (Aletris)
9. flowers pink, having an inflated sack.

Orchidace» (Cypripedium)
10. flowers in twisted spirals, white.

Orchidaceæ (Spiranthes)
Some leaves basal, at least one leaf on the stem.

1. flowers in parts of 3 's and 6 's, blue, sometime variegated with white.

Iridacece

## Leaf or leaves on the flower-stem.

1. flowers brown-white, in bur-like heads.

Sparganiacea
2. leaf lance-shaped, deeply cut at the base; flower: blue.

Pontederiacea

## KEY

3. parts in 6 's, each stamen before one of the divisions or lobes; sepals and petals similarly coloured, flowers in varying shades of red and scarlet, green or white.

Liliacea.
4. flowers having three sepals, similarly coloured to two of the petals, the third petal more conspicuously marked and often spurred; one stamen united with the style, forming a column, which faces the lip, flowers yellow, white or varying shades of pink or purple.

Orchidacer.

## PLANTS HAVING NET-VEINED LEAVES AND SIMPLE FLOWERS

Basal.

1. flowers irregularly-shaped, whitish with purple markings.

Violacere.
2. flowers in branched sprays, lavender. Plumbaginacea.
3. flowers dull-white, in dense thimble-shaped heads. Plantaginacea.
Opposite.

1. leaves very fleshy, plants growing in beach sand. Caryophyllacea (Arenaria).
2. stems practically smooth and usually swollen at the joints; calyx united, often inflated, five petals, flowers white, pink, or magenta.

Caryophyllacea.
3. tiny plant; flowers greenish-white. Crassulacea (Tilloza).
4. leaves pressed against the stiff stem; flowers yellow.

Linacea.
5. plant resembling a miniature cypress tree; or in a rosette on the sand, reddish-green.

Euphorbiacea.
6. leaves usually glandular-dotted; flowers yellow, five petals, numerous stamens, more or less united.

Hypericacea.

## KEY

7. plants like tiny trees; flowers greenish.

Cistacea (Lechea).
8. leaves glandular-dotted, flowers star-shaped, yellow with darker centre, or scarlet.

Primulacere.
9. plant pale-green; flowers small, pink.

Gentianacea (Centaurium).
10. stems having milky juice; flowers lilac-green or dull crimson, lavender-brown or orange-red.

Asclepediacer.
11. leaves very narrow; flowers tubular, with flaring lobes yellow or purple. Scrophulariacece.
12. flowers having longer or shorter pistil, whitish to blue.

Rubiacea (Houstonia).

Alternate.

1. lower leaves smaller than the upper, flowers greenish-white. Santalacere.
2. stems jointed, with papery sheaths at the joints, or leaves swollen at jointure with stem.

Polygonacere.
3. leaves fleshy; mid-vein continued into a prickle. Chenopodiacece (Salsola).
4. leaves extremely narrow, flowers very small, greenish; or stem bushily branched, flowers yellow.

Cistacere.
5. parts of flowers in 4's or multiples of 4's, flowers magenta or yellow; fruit a capsule. Onagracece.
6. leaves fat; flowers star-shaped, yellow. Crassulacee (Sedum).
7. flowers irregularly-shaped, magenta, white stamens.

Polygalacea.
8. flowers pink, green sepals, alternating with petals. Gentianaceæ (Sabatia).
9. flowers funnel-formed, white to blue.

Boraginacew.
10. leaves very narrow; flowers lipped and spurred, lavender or yellow. Scrophulariacea (Linaria).

Leaves Crowded on the Stem.

1. dense, cushiony clumps of plants; flowers yellow. Cistaceo (Hudsonia).
2. dense, cushiony clumps; flowers red-brown. Empetracea.
3. plants in spreading patches.

Ericaceæ (Calluna, Erica).
Leaves in Circles at the Top of the Stem or in
Circles Around the Stem (Whorled).

1. flowers in heads, magenta pink.

Polygalacex (Polygala).
2. flowers arranged in circles around the stem, magenta. Lythraceo.
3. flowers white or yellow. Primulacer.
4. flowers small, white. Rubiacece (Galium).

## Leaves lobed or deeply cut.

Basal.

1. leaves from the roots and at the joints of the runners; flowers in heads, yellow. Ranunculacer.
2. leaves upright, nasturtium-shaped; flowers in a head, white. Umbelliferce (Hydrocotyle).

Opposite.

1. flowers magenta-pink. Geraniacea (Geranium). Alternate.
2. flowers small, green or brown-red.

Polygonacear (Rumex).
2. plant sprawling on the ground; flowers white to pale-magenta. Malvacea (Malva).
3. flowers large, trumpet-shaped, blue; or much smaller, purple, having a yellow cone at the centre.

Solanacer.

## Leaves palmately-divided.

## Basal.

1. divisions themselves deeply-slashed; flowers yellow.

Ranunculacea.

## KEY

2. divisions cut; flowers irregular, purple.

Violacex (Viola): Opposite.

1. leaves sensitive; flowers yellow. Oxalidacea.

## Alternate.

1. three-five divided; flowers white or yellow, five petals, numerous stamens. Rosacer.
2. flowers in loose sprays or dense heads, more or less butterfly shaped, yellow, white, pink, violet, purple, or magenta; fruit a pod. Leguminosa.

## Leaves pinnately-divided.

Opposite.

1. flowers pink or purple. Geraniacea (Erodium).

Alternate.

1. leaves sweet-scented; petalless flowers in spikes. Myricacea.
2. plant when cut exuding orange-coloured juice. Papaveracece.
3. leaves sensitive; flowers large, yellow.

Leguminosa (Cassia).
4. flowers in loose groups or in heads, more or less butterfly-shaped, yellow, bluish, or purple, white or pink; fruit a pod. Leguminosce.
5. divisions themselves very finely dissected; flowers in flat-topped clusters, white. Umbellifera.

Leaves " pitcher-shaped."
Sarraceniacea.

Leaves red, sticky.

1. flowers white or pink.

Droseracec.

Leaves like tiny scales.

1. at the joints of the stems. Chenopodiacex (Salicornia).
2. leaves early deciduous; stems extremely fleshy, bristly.

Састасеж.

## KEY

3. pressed against the stem; flowers "pipe-shaped." Ericacece (Monotropa).

Leaves toothed.
(at least some with saw-like or rounded teeth.)
Basal.

1. flowers irregular, pale violet. Violaceæ (Viola). Opposite.
2. flowers magenta, having prominent yellow stamens. Melastomacece.
3. leaves variegated with white; flowers whitish. Ericaceж (Chimaphila).
4. flowers small, purple in "candelabra-like" clusters. Verbenacea.
5. flowers somewhat tubular, or three-divided lower lip, two-divided upper; usually fragrant foliage; often square stem.

Labiata.
Alternate.

1. leaves having white wool beneath, flowers white or green.

Chenopodiacea.
2. flowers white, pinkish, or yellow, four petals arranged somewhat in the shape of a cross.

Crucifera.
3. flowers in loose or compact clusters, pink, five petals, numerous stamens. Rosacere (Spirax).
4. flowers yellow, spurred. Balsaminaceer.
5. flowers very large, rose-pink. Malvacea (Hibiscus).
6. flowers white, five pointed petals; fruit green or black; or flowers very large, trumpet-shaped, white.

Solanacear.
7. leaves and plant wooly; flowers in dense spikes, yellow. Scrophulariacee (Verbascum).
8. flowers cardinal red.

Lobeliacea.

## Leaves clustered at the ends of the branches.

1. flowers white; fruit red. Ericacea (Gaultheria).

## PLANTS HAVING MINUTE FLOWERS CROWDED IN HEADS, WITH OR WITHOUT RAY FLOWERS.

## Plants having no ray flowers.

Leaves Opposite.
(at least the lower, or in clusters around the stem.)

1. flower-heads whitish or magenta-crimson.

Eupatorium.
2. flower-heads about one inch broad, yellow. Bidens.
3. flower-heads purple, foliage fragrant. Pluchea.

Leaves Alternate (at least the majority).

1. alternate and basal; flower-heads whitish.

Sericocarpus.
2. flower-heads purple.

Liatris.
f. flower-heads short, slender, yellow or whitish.

Solidago.
4. flower-heads green-white. Erigeron (canadensis).
5. stem and leaves having long, white wool; flowerheads whitish.

Anaphalis.
6. more succulent plant than preceding. Gnaphalium.
7. flower-heads green. A mbrosia.
8. leaves finely-divided, fragrant; flower-heads oys-ter-white or pink.

Achillea.
9. foliage fragrant; flower-heads button-like, yellow.

Tanacetum.
10. leaves finely cut and covered with white wool; flowers greenish-yellow or yellow-white.

Artemisia.
11. plants having abundant juice, rank odour; flowerheads white.

Erechtites.
12. leaves spiny; flower-heads magenta or yellow.

Cirsium.

## Plants having ray flowers.

Leaves Basal

1. flower-stem thickened below the flower-heads; flower-heads yellow.
Leontodon.

## KEY

2. coarser plant than preceding; flower-heads bright yellow.

Taraxacum.
Leaves Opposite.

1. rays yellow, disks yellow. Helianthus.

Leaves Altervate.

1. flower-heads yellow; leaves entire. Chrysopsis.

2 . rays lilac to violet and white. Aster.
3. leaves very narrow, entire, scattered; rays white, disks yellow. Erigeron (ramosus).
4. rays yellow, disks brown-purple. Rudbechia.
5. leaves finely divided, fragrant; rays white; disks yellow.

Anthemis.
6. leaves cut and toothed, narrow; rays white; disks yellow.

Chrysanthemum.
7. flower-heads blue.

Cichorium.
8. leaves with spiny teeth; flower-heads yellow.

Sonchus.

## J LEAF 1 ARRANGEMENT ON STEM




acuminate mucronate




## GLOSSARY

Achene (from a Greek negative and a word to gape): a small, hard fruit that does not open by valves to distribute its seed. Achenes of the Wild Strawberry (Fragaria virginiana) are the small, hard seeds in the soft pulp.

Acuminate (from Latin, signifying to sharpen): tapering to a point. Leaves of the Beaked Hazlenut (Corylus rostrata) are acuminate.

Anther (from Greek for a flower): that organ at the top of the stamen which bears the pollen. Anthers of the Day Lily (Hemerocallis fulva), if pinched, drop yellow pollen.

Berry (from Anglo-Saxon with same meaning): a succulent fruit, in which the seeds are enveloped in pulp. Fruit of the Gooseberry (Ribes oxyacanthoides) is a berry.

Bract, Bractlet (from Latin for a thin plate of metal). Bract: any leaf that supports a flower or a group of flowers. It may closely resemble the other leaves or may be more or less modified in form or in colour. Bractlet: a secondary bract. Bracts of the Evening Primrose (Enothera muricata) are green and closely resemble the leaves.

Calyx (from Greek and Latin with same meaning): the outer circle of the showy part of the flower. Calyx of the Hedge Bindweed (Convolvulus sepium) is green, but of the Larger Blue Flag (Iris versicolor) is blue.

Capsule (from Latin for a small box or case): a dry form of fruit that contains more than one seed and opens by valves or slits. Fruit of the Evening Primrose (Enothera biennis) is a capsule.

Catkin (a diminutive, from Anglo Saxon with same meaning): a spike of unisexual flowers, sometimes the two kinds

## GLOSSARY

on one tree and sometimes on separate trees. Pistillate and staminate flowers grow on the same tree in the Chestnut Scrub Oak (Quercus prinoides).

Cordate (from Latin for heart-shaped): heart-shaped. Leaves of the White Violet (Viola pallens) are cordate in outline, those of the clasping-leaved Milkweed (Asclepias amplexicaulis) are cordate at the base only.

Corolla (Latin diminutive for a crown): the showiest and most distinctive part of the flower, immediately surrounding the stamens and pistil. Corolla of the Buttercup (Ranunculus bulbosus) is bright yellow.

Corymb (from Greek for a cluster of flowers): a flowerarrangement in which the main stem is so shortened that, although the flowers grow from different points on it, the result is flat-topped or convex. Flowers of the Cockspur Thorn (Crategus Crus-galli) are in a corymb).

Cyme (from Greek for a sprout): a flower-arrangement in which the succession of bloom is from the topmost flower downward or from the innermost outward. A cyme is variable in shape, but is frequently flat-topped. Flowers of the Common St. John's-wort (Hypericum perforatum) are in a cyme.

Dentate (from Latin for toothed): bluntly-toothed. Denticulate: diminutive form. Leaves of the Jewel-weed (Impatiens biflora) are dentate.

Disk (from Latin and Greek for a round plate or quoit): applied to the tubular flowers of the central head of flowers in the Composite Family to distinguish them from the ray-flowers. Disk flowers of the Common Daisy (Chrysanthemum leucanthemum var. pinnatifidum) are yellow.

Drope (from Latin and Greek for an olive): a pulpy fruit with a hard or stony seed-case at the centre. Fruit of the Beech Plum (Prunus maritima) is a drupe.

## GLOSSARY

Entire (from Latin, signifying entire): unnotched. Leaves of the Knotweed (Polygonum pennsylvanicum) are entire.

Filament (from Latin for a thread): that part of a stamen which carries the anther. Filaments of the Day Lily (Hemerocallis fulva) are yellow.

Follicle (from Latin, signifying a small bag or pair of bellows): a form of capsule. Fruit of the Common Milkweed (Asclepias syriaca) is a follicle.

Hastate (from Latin for halberd-shaped): having divergent basal lobes. Basal leaves of the Orach (Atriplex hastata) are hastate.

Imbricated (from Latin for tiled or shingled): over-lapping. Petals of the Wild Rose (Rosa virginiana) are imbricated in the bud; bracts of the Canada Hawkweed (Hieracium canadense) are imbricated in two or three series.

Inflorescence (from Latin for the beginning of blossoming): such an arrangement of flowers on the axis as determines the manner of bloom, whether from the top of the stem down or from the centre of the cluster out or the reverse. Inflorescence of the Common St. John's Wort (Hypericum perforatum) is from the top down.
Involucre (from Latin for a covering): a circle of small leaves (bracts) that surround the base of a cluster of flowers or a one-several ranked circle surrounding the flowerheads of a compound flower. An Involucre is found in both the Wild Carrot (Daucus carota) and the Thistle (Cirsium lanceolatum).

Lanceolate (from Latin for lance-shaped): lance-shaped. Leaves of the Salt Marsh Fleabane (Pluchea camphorata) are lanceolate.

Legume (from Latin to gather, because they may be picked without cutting); a pod-like kind of fruit, that, when fully ripe, opens along the seams. Fruit of the Scotch Broom (Cytisus scoparius) is a legume.

## GLOSSARY

Lineak (from Latin for flax): narrow. Leaves of the Blazing Star (Liatris scariosa) are linear.

Lyrate (from Greek and Latin, signifying a certain stringed, musical instrument): applied to a lobed leaf, when the terminal lobes are sufficiently large to give the character of a lyre. Lower leaves of the Sow Thistle (Sonchus oleraceus) are lyrate.

Mucronate, Mucronulate (from Latin meaning abrupt-ly-tipped) : said of the mid-vein when it projects as a short, abrupt tip beyond the end of the leaf. Mucronulate: a diminutive. Leaves of the Dwarf Huckleberry (Gaylussacia dumosa) are mucronate.

Nut (from Anglo Saxon with same meaning): a member of a cluster of fruits or a solitary fruit that has a bony eovering and does not open by valves. Fruit of the Hickory (Hicoria alba) is a nut.

Ов: a prefix, signifying the inverse. Oblanceolate means having the narrower part at the base, the broader at the apex.

Ovary (from Latin for an egg): that part of the flower which holds the immature seeds; the ovary may be one to several-celled. Ovary of Common Mallow (Malva rotundifolia) has a number of cells.

Palmate, Palmately-Divided (from Latin for a hand): said of a compound division, in which all the parts start at the same point or at very nearly the same point. Leaves of the Red Clover (Trifolium pratense) are palmately divided.

Panicle (from a Latin diminutive for a swelling referring to tufts on plants): an arrangement of flowers in which the flowering branchcs are rebranched. Flowers of the Red Sorrel (Rumex acetosella) are in a panicle.

## GLOSSARY

Pappus (from Latin and Greek for an old man, in allusion to the fact that many forms of pappus are white) : a tuft, resembling bristles or down, that adheres to the seed of an individual flower in the flower-head of a member of the Composite Family. Heads of Pappus (the "clocks") of the Common Dandelion (Taraxacum officinale) when it has gone to seed, are very conspicuous.

Peduncle, Pedicel (from a Latin diminutive for a foot). Peduncle: the main flower-stalk; pedicel, a secondary flower-stalk. From the peduncles of the Hardhack (Spirca tomentosa) rise the pedicels.

Perianth (from Greek for a flower): the flower-envelope, consisting of the calyx and corolla or of calyx alone. It may be all one colour or the corolla may be coloured and the calyx green. Perianth of the Wood Lily (Lilium philadelphicum) is of one general colour, red.

Petal (from Greek for a leaf): one of the divisions of the corolla. The petals of the Hairy Willow Herb (Epilobium hirsutum) are magenta.

Petiole (diminutive from Latin for a foot): a leaf-stalk. A petiole bears the same relation to the leaf that a peduncle does to the flower. Petioles of the Tall Buttercup (Ranunculus acris) are long.

Pinnate, Pinnatifid, Pinnately-Divided, PinnatelyVeined (from Latin for a feather): said of the arrangement of parts on either side of a main axis as the parts of a feather are arranged. Leaves of the Sweet Fern (Myrica asplenifolia) are pinnatifid.

Pistil, Pistillate (from Latin for a pestle, in allusion to the shape of the organ): the chief organ of the flower, consisting of the ovary that bears the seeds, the style that is the passage to the ovary, the stigma that receives the pollen from the stamens. Pistil of the Marsh Pink (Sabatia gracilis) is pure white, the stigma two-divided.

## GLOSSARY

Pod (from Greek for a foot): for definition see Legume.
Pome (from Latin for an apple): a fruit, consisting of a fleshy exterior and a core which contains the seeds. Fruit of the Shad-bush (Amelanchier canadensis) is a pome.

Raceme (from Latin for a bunch of grapes): a cluster of flowers, in which the individual flowers are borne on stems that branch from a central stem or axis. Racemose: having the general structure of a raceme. Flowers of Gerardia are in raceme.
Ray (from Latin for a beam or ray, in allusion to the radiating arrangement): in some members of the Composite Family, surrounding the central disk or head is a circle of what resembles petals. These are rays; each ray is the corolla of a flower. Rays of the New York Aster (Aster novi-belgii) are lilac.
Receptacle (from Latin signifying to receive): the part of the stem which bears the flower or flowers. The receptacle of the "heads" of White Clover (Trifolium repens) are round.
Sagittate (from Latin for an arrow): arrow-shaped. Leaves of the Arrowhead (Sagittaria Engelmanniana) are sagittate.

Scape (from Latin for a stem): a flower-stem that rises unbranched from the surface of the ground; it may or not bear bracts. Scape of the Moccasin Flower (Cypripedium acaule) is bractless.

Sepal (from Latin to separate): one of the divisions of the calyx. Sepals of the Deadly Nightshade (Solanum Dulcamara) are green ,of the Bladderwort (Silene latifolia) the sepals are united to form an inflated sack.
Serrate, Serrulate (from Latin for a saw): having sharp teeth, the points of which are usually directed upward. Serrulate: the diminutive form. Leaves of the Chokeberry (Pyrus arbutifolia, var. atropurpurea) are beautifully serrate.

## GLOSSARY

Sessile (from Latin diminutive for a seat): stemless. Leaves of the Field Chickweed (Cerastium arvense) are sessile.

Spatulate (from Latin diminutive for a spade): spadeshaped. Basal leaves of the Bushy Aster (Aster dumosus) are spatulate.

Spike (from Latin for an ear of corn): an arrangement of stemless or practically stemless flowers around a main stem. Flowers of the Common Plantain (Plantago Major) are in a spike.

Stamen (from Latin for a thread or fibre): the organ of the flower that produces the pollen. It consists of an anther and a filament. Stamens of the Turks-Cap (Lilium superbum) have long, coloured filaments which are capped with nodding anthers.

Stipule (from Latin for a stalk): one of a pair of small leaves that occur on many plants, borne at the base of the principal leaves, and usually deciduous. Stipules of the Honey Balls (Cephalanthus occidentalis) fall early.

Style (from Greek for a pillar): the slender stalk-like part of the pistil, the passage-way for the pollen grains from the stigma to the ovary. Style of the Bird's-foot Violet (Viola pedata) is bright orange.

Umbel, Umbellate (from Latin diminutive for a shade): a cluster of flowers, of which the stems come from the same point at the end of the main stem. Flowers of the Water Pennywort (Hydrocotyle umbellata) are in umbels.

Verticillate (from Latin diminutive for a whirl): arranged like the spokes of a wheel around a main axis. Leaves of the Swamp Milkwort (Polygala cruciata) are verticillate.

Whorl, Whorled (from Greek to whirl): arranged in a circle around the stem like the spokes of a wheel. Leaves of the Common Bed-straw (Galium Claytoni) are whorled.

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Nantucket Wild Flowers

## Pinus rigida, Mill.

April-May

> Pitch Pine, Torch Pine, Sap Pine, Candlewood Pine.

Pinus: the classical Latin name.
Rigida: from Latin, to be stiff with cold.
The Preferred Habitat: dry, sandy soil of the Commons.
The Tree: on an average three to five feet high, some as high as seven feet, many branches; the old bark rough and furrowed and "flaky in strips."

The Leaves: in the form of "needles"; in bundles of threes (very rarely some in fours); rather dark green; with two sheaths.

The Fruit: a cone, ovoid, becoming globular when the scales open, one and a half to three inches long, provided with prickles.

There are no strictly native pine trees on Nantucket, although several varieties have become naturalized and their offspring are numerous. In speaking of the Pitch Pine, Mrs. Owen says: "All the trees are from seed planted by Josiah Sturgis and others in 1847 and following years. They have spread extensively from seed, but are infested now with insects of the family Tortricidæ, which have killed many of the trees and threaten the destruction of the rest. This destruction could have been averted by measures taken in season, it is too late now to apply the remedy. Prof. Scudder's prediction, in a report on the subject has become history. 'Leave them alone,' he says, 'and the pine woods of Nantucket are doomed to

## PINACE $\neq$

destruction; to plant new trees would be to add fuel to flames.' But that is not all. 'There is no apparent reason,' to quote Prof. Scudder again, 'why the destruction should not extend to the Penobscot or as far as the pitch pine flourishes.' To prevent this it is the plain duty of the Nantucket people 'to cut down the entire forest, sell the wood (for fuel) and burn the brush, leaving not even a seedling anywhere; then to pasture the sheep upon the spot for two years, and carefully destroy every seedling that springs up outside of the fences, which confine the flock.'"

But, as Mr. Bicknell says,
"This prophecy remains unfulfilled. To-day although the blight of insect damage presents a dismal spectacle here and there, the pines in the main enjoy a clean and vigorous growth, and have grouped themselves into close or open formations, which are a very feature of parts of the Nantucket landscape."
"Indeed," Mr. Bicknell adds, "it is now the most abundant and conspicuous tree of Nantucket."

For the identifier the readiest mark of distinction of this pine lies in the fact that the needles are in threes, rarely fours.

## PINACE E

## PINE FAMILY

Juniperus virginiana, L.

| Red Cedar | Juniper Bush |
| :--- | :--- |
| Carolina Cedar, | Juniper, |
| Red Savin, | Pencil-wood. |
| Savin, |  |

Juniperus: the classical name. Virginiana: Latin for Virginian.

The Preferred Habitat: dry, sandy soil of the Commons or beach sand.

The Tree: generally erect, but often so wind-blown as to assume low and fantastic shapes, sometimes over twenty

## PINE FAMILY

feet high; the outer bark light reddish-brown, scaly or stringy, that of the branchlets, after the appearance of the leaves, dark brown, tinged with red or grey.

The Flowers: in terminal catkins on short, axillary branches.

The Fruit: a globose "berry-like cone," blue when ripe, with a bloom.

On Nantucket this is a low, straggling tree. Frequently, as Mrs. Owen says in her catalogue, "The old trees have grown into the strange forms often seen on wind-swept points of land; the low, twisted trunks and branches, close to the ground, make an impressive appearance."

The "leaves" are scale-like, about one eighth of an inch long, and very dark green; in fact this species is one of the darkest coloured of the evergreen trees. In strong contrast with this heavy green background is the blue colour of the fruit. These "berries" are the parts that are used medicinally. The wood is light, soft, fragrant, with nearly white sap-wood and a central pith of brownish-red.

Two other members of the Pine Family have been reported.

## Typha angustifolia, L.

Yellow-brown
Cat-o'-nine-tails, Cat-tail Flag,
June-July Lesser Reed Mace, Narrow-leaved Cat-tail.

> Typha: Greek for fen or marsh. Angustifolia: Latin for narrow-leaved.

The Preferred Habitat: brackish marshes.
The Plant: erect, five feet to ten feet high; the stem slender, hairless, often with a bluish tinge.
The Leaves: basal; very narrow; ribbon-like; obtusish at the apex; grooved at the lower end; parallel-veined.

The Flowers: in spikes; the staminate and pistillate spikes slender, separated by an interval.

The Fruit: minute nutlets.
There are two varieties of Cat-o'nine-tails in this country, and, interestingly enough, the Typha latifolia (the larger, stouter kind) is the more common species on the mainland, while the angustifolia is the more prevalent form on Nantucket. Of the latifolia, Mrs. Owen says: "I had to hunt a long time before I could find any specimens." Although still not very prolific, it has spread since that time.

Slenderness and stoutness are comparative qualities that at times are difficult to determine in young plants, so one looks for more reliable marks of distinction. This is found in the fact (open to occasional exception!) that in the latifolia the spikes are contiguous, but an interval separates the spikes of the angustifolia. When growing in a marsh, the two look similar. Their stalks are very

## CAT-TAIL FAMILY

tall, straight, and stiff, with brown cylindrical spikes at the top and long, grass-like leaves, more or less withered. The stalks sway slightly and the dry leaves rustle in the wind.

## TYPHACE

CAT-TAIL FAMILY

## Typha latifolia, L .

| Yellow-brown | Broad-leaved Cat-tail, <br> Jreat Reed-mace, | Black-cap, |
| :--- | :--- | :--- |
| June-July | Bulb-segg, |  |
|  | Cat-o'-nine-tails, | Water-torch, |
|  | Marsh Beetle, | Bee bresh, |
|  | Marsh Pestle, | Candlewick, |
|  | Cat-tail Flag, | Blackamoor. |
|  | Flax-tail, |  |

Typha: for derivation see angustifolia. Latifolia: Latin for broad-leaved.

The Preferred Habitat: brackish marshes.
The Plant: erect, four feet to eight feet high; the stem stout, hairless.

The Leaves: basal, linear, varying in width from one quarter of an inch to one inch; without hairs on both sides; obtusish at the apex; entire; parallel-veined.

The Flowers: in cylindrical spikes; the upper spike bearing the staminate, the lower the pistillate flowers.

The Fruit: minute nutlets; the down very copious.
Neither this nor the Narrow-leaved Cat-tail is the Bulrush of the Bible as some have erroneously thought. As Mr. Stepp, an English botanist, says: "Of late years it has become the general error to call this plant Bulrush. Every autumn the hawkers in London and other cities offer cylindrical spikes of Typha for sale as an æsthetic decoration and call them bulrushes. But they are not the originators of the blunder. It is the artists who have

## TYPHACE

done this thing, for in their pictures of "The finding of Moses," they depict the future leader of his people rocking in his ark amid a forest of Typha. What more was needed to associate the word Bulrush of the Bible with this plant?"

## Sparganium americanum, Nutt.

## Brown-white Bur-reed.

## June-September

Sparganium: an ancient name, probably from Greek for a band, in allusion to the ribbon-like leaves.
Americanum: Latin form for American.
The Preferred Habitat: bogs and swamps.
The Plant: erect, one half foot high; the flower-stalks unbranched.

The Leaves: alternate; linear and ribbon-like; thin and soft; hairless on both surfaces; acute or bluntish at the apex; sessile; parallel-veined.

The Flowers: (fertile ones) in bur-like heads.
It would be easy to consider this plant of the wet places a sedge or grass, but its sessile "burs" are really made up of tiny flowers in parts of three that are differently constructed from those of a sedge or grass. The heads are supported by bracts, and long, ribbon-like leaves cling to the stem.

Three other nembers of the Bur-reed Family have been reported.

## Potamogeton pectinatus, L.

## Green

July-August

Pondweed, Fennel-leaved Pondweed.

Potamogeton: an ancient Greek derivative, meaning the river's neighbour, in allusion to the habitat of the plants. Pectinatus: from Latin for comb-like, referring here to the thread-like segments of the leaves, like the teeth of a comb.

The Preferred Habitat: slightly brackish water.
The Plant: floating, one foot to three feet long; the stems slender, much branched, and repeatedly forking.

The Leaves: alternate; thread-like; one inch to six inches long.

The Flowers: tiny, in circles around the stem.
The Fruit: tiny drupelets.
Around the borders of a full pond, the surface of the water is covered with dense growths of these forking branches, that have long, green, and thread-like leaves.

Eleven other members of the Pondweed Family have been reported.

Sagittaria Engelmanniana, J. G. Sm.

White Arrow-head.
July-September
Sagittaria: from Latin for an arrow, in allusion to the prevailing form of the leaves.
Engelmanniana: in honour of the botanist Engelmann.

The Preferred Habitat: wet bogs.

The Plant: erect; the flower stem eight inches to twenty inches high, without hairs.

The Leaves: sheathing the base of the flower stem; narrowly sagittate, although varying greatly in size and form; they may be from one and a half to eight inches long; three quarters of an inch or less wide; without hairs on either surface; the lobes at the base narrowly linear, acuminate, one third to one half the length of the leaf; the edge entire; parallel-veined.

The Flowers: in threes, small, one inch broad, or less; three petals, which fall early; six stamens.

The Fruit: achenes, narrowly wedge-shaped with long and sometimes curved beaks; the sides usually one to three crested.

In general this plant is to be distinguished from the latifolia by its slighter build.

## ALISMACE®

ALISMACEA
WATER-PLANTAIN FAMILY
Sagittaria latifolia, (Willd.) forma obtusa, (Muhl.) Robinson.
White Arrow-head.
August
Sagittaria: for derivation see Engelmanniana.
Latifolia: from Latin for broad-leaved.
Obtusa: from Latin for blunt.
The Preferred Habitat: wet bogs.
The Plant: erect, four inches to four feet tall; the flowerstalk simple or branched, stout or slender, with few or no hairs, angled.

The Leaves: very variable in form and size, sometimes four inches broad at the stem end and as much as five inches long from stem to apex, sometimes broader than long; generally linear-lanceolate, always arrow-shaped; lacking hairs on either surface; acuminate or obtuse at the apex; petioled; prominently and parallel-veined; the bracts acute, acuminate or obtuse, the upper ones sometimes united.

The Flowers: slightly over one inch wide, on slender and hairless stems; three petals, which fall early; six stamens.

The Sagittarias are handsome plants in boggy ground. Above the lustrous green leaves, beautifully arrow-shaped, gleam the large pure white flowers with their yellow centres.

One other member of the Water-Plantain Family has been reported.


Ariscma triphyllum, (L.) Schott.

| Purple-brown | Jack-in-the-pulpit, | Wake-robin, |
| :---: | :--- | :--- |
| and green | Arum, | Priests' Pintle, |
|  | Indian Turnip, | Lords-and-Ladies, |
| April-July | Meadow-turnip, | Wild Pepper, |
|  | Pepper-turnip, | Brown Dragon, |
|  | Marsh-turnip, | Bog-onion, |
|  | Swamp-turnip, | Starch-wort. |

Arisama: from Greek word for the kind of Arum, a plant from which arrowroot is extracted, and from a Greek word meaning blood, because of the spotted leaves of some of the species.

Triphyllum: from Greek for three-leaved.
The Preferred Habitat: low or wet, shaded thickets.
The Plant: one foot to two feet high.
The Leaves: dull green; rising from the fleshy bulb-like base of the stem; ten inches high or more, usually taller than the flower stalk; three divided; about two inches wide or more; with entire or sometimes lobed margins. The leaflets ovate.

The Flowers: on a blunt and club-shaped spadix, two inches to three inches long; over the top of the column curves a lanceolate and tapering flap, green and purple striped or wholly green.

The Fruit: berries, smooth and shining and bright red, in a dense ovoid head.

A "foreigner" may be surprised to find this plant under its Nantucket conditions, for one is inclined to think of

## ARACE $E$

the Jack as preaching in the open spaces of a woodland, to tall trees. While Nantucket has some tall trees, Jack likes here to hide himself under shaded thickets. Jack, the Preacher, or to be literal, the flower of the plant is perhaps better known than the fruit, the bright red berries, that mature in late August or early September. Showy in its fall colouring, the plant is then often introduced into gardens. If there is anything in the theory that the dwellers of the woodland may be transplanted more readily than those of drier ground, Jack-in-thepulpit may surely be cited as an illustration. For transferred even to the sandy soil of our usual garden, it will persist for years.

Part of the plant is used as a cure for coughs.

| ARACEAE |  | ARUM FAMILY |
| :--- | :---: | :--- |
|  | Acorus Calamus, L. |  |
| Greenish-yellow | Sweet-flag, | Sedge-cane, |
|  | Calamus, | Sedge-grass, |
| June-July | Sweet Rush, | Flag-root, |
|  | Sweet Grass, | Sedge-rush, |
|  | Sweet Cane, | Sea-sedge, |
|  | Sweet Sedge, | Cinnamon-sedge, |
|  | Sweet Segg, | Myrtle-sedge, |
|  | Sweet Myrtle, | Myrtle-grass, |
|  | Sweet Root, | Myrtle-flag. |
|  | Sedge-root, |  |

Acorus: ancient name of an unknown meaning, from Pliny. Calamus: from Greek meaning a reed.

The Preferred Habitat: "wet meadows, pools and overflowed muddy places."

The Plant: one foot to four feet high.
The Leaves: light, yellow-green becoming still more yellow in the fall; closely sheathing each other and the

## ARUM FAMILY

flower stem below; linear-lanceolate; one inch wide or less; on both surfaces, smooth; acute at the apex; sharpedged; parallel-veined, with a rigid mid-vein running their whole length.

The Flowers: minute, crowded on a spike two inches or more long ("graters").

Probably most of us remember having been told sometime or other that at the base of those grass-like ribbons of yellow-green growing in a peat bog, was a "root" which was good to eat, and having dug it up and wiped off the black mire, we have enjoyed to the full the taste of Sweet Flag. Liking it, we have taken home still more of the "root" to boil and make candy from. In the former days, it used to be quite an industry among the Nantucket boys to peddle sticks of such candy from house to house at a cent a piece.

A further use of the "root" (which is really an underground stem) for years has been and still is in the way of a drug. Under the name of Calamus, a tonic and stimulant, it has played its rôle in the apothecary shop as well as in the family medicine chest. It is also used to make a spice.

## LEMNACEA

 DUCKWEED FAMILY
## Lemnas

Duckweeds.
Floating in many ponds and ditches are often masses of tiny green plants, with oblong or rounded blue green leaves and no visible flowers. These are the Lemnas of which two, the minor and the trisculca, are reported from Nantucket.

Eriocaulon articulatum, (Huds.) Morong.

Slate colour or white July-September

Pipewort, Seven-angled Pipewort.

Eriocaulon: from Greek for wool and stalk in allusion to the wool at the base of the stem in some species. Articulatum: Latin for jointed.

The Preferred Habitat: wet borders of ponds, or just within the water's edge.

The Plant: erect; the bare flower stalks one to eight inches high, unbranched, twisted and seven-angled, weak, sometimes when submerged four feet and more long.

The Leaves: numerous; in a tuft at the base; awl-shaped; sometimes three inches long; soft; hairless on both surfaces; tapering and acute at the apex; entire; with a prominent central marking and cross-lines at regular intervals.

The Flowers: minute, in dense heads at the top of the stem; bracts of the involucre smooth, oblong, usually shorter than the flowers.

The Fruit: capsules.
From the tufts of the basal leaves under the water, rise naked, whitish grey stems, and these in turn are topped with small curious heads, that look somewhat like tiny pin cushions filled with white pins-such is the Pipewort that grows on the clean borders of the fresh-water ponds.

## August-September

Xyris: name, derived from Greek for a river, and applied to some Greek plant with two-edged leaves.
Flexuosa: Latin, to bend.
The Preferred Habitat: sandy bogs and along pond shores.

The Plant: erect, four to twelve inches high; the flower stem without hairs.

The Leaves: erect, from a small bulb-like base; pale green; narrowly linear, twisted; slightly compressed toward the top; entire; parallel-veined.

The Flowers: in small heads supported by closely overlapping, pale brown bracts; sepals and petals three.

The Fruit: a capsule.
A stranger to the majority of people who are in search of beautiful flowers on the pond's border, and yet among the first plants to arouse the curiosity of one who is beginning to question everything he sees. The stem is stiff, thick, and leafless. At the top a small, irregularly-shaped yellow flower head is more than supported by a vaseshaped envelope of yellow-brown scales. From the bulbous root rise the grass-like leaves. The flowers close early, not to reopen.

One other member of the Yellow-eyed Gr s Family has been reported.

## Pontederia cordata, L.

Varying shades of lilac-blue. Pickerel-weed.
Pontcderia: plant dedicated to Pontedera, a professor at Padua in the 18th century.
Cordata: Latin for heart-shaped.
The Preferred Ha bitat: peaty borders of ponds.
The Plant: erect, one foot to four feet high; the stem rather stout, smooth, angled.

The Solitary Leaf: ovate to lanceolate; without hairs on either surface; obtuse at the apex; deeply cut at the base (cordate-sagittate), the lobes obtuse; on a long, hairless, angled stem, which at its base sheaths the main stem.

The Flowers: crowded in a short spike, borne on a glandular, hairy, angled stem; the tube, calyx, stamens, and pistil bright blue; the tube finally divided, the lips slightly shorter than the tube; the middle lobe of the upper lip with two yellow spots at the base within. When the flower dies, the lobes and upper part of the tube wither above, while the persistent base hardens around the fruit.

The Fruit: an utricle.
Tall plants of Pickerel-weed massed on the edges of deep blue ponds or even filling small peat holes, afford a beautiful sight! The flower stems are glossy and smooth, bearing one blunt, arrowhead-shaped, thick, dark green, leaf which contrasts in colour with dense spikes of violet blue, irregularly-shaped flowers. These are marked with a distinct yellow-green spot. Handsome as are the plants when growing out-of-doors, they are difficult to handle

## PONTEDERIACEÆ

in the house, for both leaves and flowers are apt to wither almost at once after the cutting of the stem. They may be kept fresh, however, if put at once into a vasculum or wet newspaper.

One other member of the Pickered-weed Family has been reported.

Hemerocallis fulva, L.

## Tawny-orange

## July-August

Day Lily, Eve's Thread, Lemon-lily.

Hemerocallis: from Greek meaning beauty for a day, in allusion to the fact that the flowers last but a day. Fulva: Latin for tawny.

The Preferred Habitat: gardens and roadsides and old fields.

The Plant: erect; two feet to five feet high; the flower stem slightly flattened, hairless, bare of leaves.

The Leaves: numerous; basal; light green, turning yellow when old; linear; hairless; tapering to an acute tip; entire; channelled; parallel-veined.

The Flowers: eight to nine; large and showy, on short, hairless stems; the tube is one inch or more long; the flower divisions, usually six, three narrow and three wide and blunt, with a veined texture; six showy stamens placed on the throat.

The Froit: a capsule, three angled, with several black seeds in each cell.

The tawny Day Lily, with its large, one-tinted flowers, rising on stout stems, from a tangled mass of yellowgreen, strap-like, ribbony leaves, is a familiar escape from the gardens to the roadsides or sheltered fence-corners. The flowers indeed last but a day, and at evening shrink to a sticky tube, but the buds come out well in water on successive days, and the flowers that thus open in the house are none the less pretty, because paler and softer in tone.

## LILIACEAE

LILIACEAE LILY FAMILY

> Lilium philadelphicum, L.

| Orange-scarlet | Red Lily, | Wild Orange-red Lily, |
| :--- | :--- | :--- |
|  | Wood Lily, | Flame Lily, |
| July-August | Philadelphia Lily, Huckleberry Lily. |  |

Lilium: classical Latin name, from Greek, for Lily. Philadelphicum: Latin for Philadelphian.

The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: erect, one foot to two feet high; the stem simple or branched at the summit, (the Nantucket form differing from the typical form on the mainland, in being sometimes unbranched), leafy, hairless.

The Leaves: dark green; chiefly in whorls of three to eight; lanceolate; hairless on both surfaces; acute at both ends or the lower sometimes obtuse; sessile; entire; parallelveined.

The Flowers: usually one or two, variable in colour and markings, bell-shaped, with six spreading divisions; the parts one half to three quarters of an inch wide, abruptly narrowed at the base into a slender stalk as it were, usually purple-spotted below. There are six long stamens with purple anthers, the filaments resembling the colour of the flower. The flowers turn darker in fading.

The Frdit: a capsule; the seeds densely packed in two rows.

A beautiful red lily, low-growing (in contrast to the Tiger Lily), with many bright green leaves, that is seen in open places among bayberry bushes, in the sandy soil of the Commons, singly or in pairs, or even three together. A yellow form without spots has been occasionally found; of the typical forms, the flowers are dark red, with purple spots.


## LILY FAMILY

LILIACEA

## LILY FAMILY

> Lilium superbum, L.

| Buff orange-yellow | Turk's-cap Lily, |
| :--- | :--- |
| August-September | Turk's-head Lily, |
|  | Nodding Lily, |
|  | Wild Tiger Lily. |

Lilium: for derivation see philadelphicum. Superbum: Latin for magnificent.

The Preferred Habitat: damp thickets.
The Plant: from bulbs, one inch to two inches in diameter; the stems three feet to eight feet tall, stout, leafy.

The Leaves: verticillate in threes or eights, or the upper alternate; lanceolate; hairless on both surfaces; acuminate at both ends; stemless or petioled; entire; prominently and parallel-veined.

The Flowers: one to twenty or more, rarely solitary, on long stems; the six divisions sometimes four inches long, lanceolate, acuminate, purple-spotted; six stamens.

The Fruit: a capsule.
Even when not in bloom, this tall lily, with its straight stem and clustered leaves, is beautiful, but doubly showy, when the flowers, sometimes as many as twenty, rise like a spreading candelabra above a tangled thicket of rosebushes and bayberry and grape-vines. The fresh flowers are large and orange-yellow with purple spots, but become much darker as they wither; the corolla segments curl backwards at real maturity, but straighten out as the flower dies, and the purple stamens hang loosely from out the throat. As seen under the microscope the pollen is white and beautifully shaped.

Smilacina racemosa, (L.) Desf.

White

May

> False Spikenard, False Solomon's Seal, Wild Spikenard, Job's Tears, Golden Seal, Small Solomon's Seal, Zigzag Solomon's Seal.

Smilacina: diminutive for smilax, which is an ancient Greek name of obscure meaning.
Racemosa: Latin for clustered.
The Preferred Habitat: open woods.
The Plant: erect, one foot to three feet high; the stem somewhat angled, slender or stout, sometimes zigzag, with fine soft hairs above or nearly hairless.

The Leaves: alternate or scattered; oblong-lanceolate or oval; with fine soft hairs beneath and sometimes above; acuminate at the apex; sessile or on short petioles; with minute hairs on the margins; entire.

The Flowers: on long stems in dense panicles; the stems shorter than the flowers; perianth in six parts, withering, persistent.

The Fruit: a berry, passing from greenish through yel-lowish-white to dull ruby-red, at times speckled with madder-brown.

A smooth and cool-feeling plant, with large parallelveined leaves and olive-green stem, at whose top are "spiræa-like clusters of fine white flowers," that later give place to ruby-red and translucent berries.

## LILY FAMILY

Smilacina stellata, (L.) Desf.
White Star-flowercd Solomon's Seal, False Solomon's Seal.

## May-early June

Smilacina: for derivation see racemose.
Stellate: Latin for starred.
The Preferred Habitat: open woods.
The Plant: erect, eight inches to twenty inches tall; the stem unbranched, leafy, hairless.
The Leaves: alternate; oblong-lanceolate to lanceolate; hairless on both surfaces, or with minute soft hairs beneath; acuminate at the apex; sessile and slightly clasping at the base; entire.
The Flowers: few, in racemes, sessile or on short peduncles; perianth in six parts, withering, persistent.
The Fruit: a berry, black or green with six black stripes.
Smilacina stellata (False Solomon's Seal) is in every way a smaller and more delicate plant, than the racemosa, having narrower leaves and fewer flowers. Another and more reliable mark of distinction is the fact that its leaves are slightly clasping.

LILIACEA
LILY FAMILY
Maianthemum canadense, (Desf.) Greene.
White
False Lily-of-the-Valley, Wild Lily-of-the-Valley,
May-early June Two-leaved Solomon's Seal, Cowslip, Bead-ruby, One-leaf, One-blade.
Maianthemum: Latin for May and Greek for flower. Canadense: Latin for Canadian.

## LILIACEA

The Preferred Habitat: open woods.
The Plant: erect, two inches to seven inches high; the stem often zigzag, unbranched; hairless or with short, soft hairs, slender.

The Leaves: alternate; one to three; ovate or ovatelanceolate; acute, acuminate or blunt at the apex; heartshaped at the base; sessile or petioled; entire.

The Flowers: in a rather dense, many-flowered raceme which is one to two inches long; perianth four-parted; stamens four.

The Fruit: a berry, pale red and speckled.
This two-leaved Solomon's Seal is a tall and delicately constructed plant, whose slender stem is usually smooth and provided with two or three rather long leaves. At the summit of the stem are crowded in a cluster the small lily-shaped white flowers, which later give place to pale and speckled berries.

LILIACEA
LILY FAMILY
Polygonatum biflorum, (Walt) Ell.

Pale green to white

April-early June

Small Solomon's Seal
Ladder-to-Heaven, Jacob's Ladder,
Hairy Solomon's Seal, Dwarf Solomon's Seal, Seawort,
Conquer John.

Polygonatum: name from Greek meaning many-kneed in allusion to the numerous joints of the rootstalk.
Biflorum: Latin for two-flowered.
The Preferred Habitat: open woods.
The Plant: erect one foot to three feet high; the stem often zigzag, slender, hairless.

The Leaves: lance-oblong or lance-ovate; acute or tapering to a point at the apex; nearly sessile; narrowed or sometimes obtuse at the base; with short hairs and pale beneath, hairless above.

The Flowers: one to four, mostly two, on hairless stems, drooping in the axils of the leaves; perianth tubular, sixlobed at the top; six stamens set on the tube.

The Fruit: a globular berry, black or blue.
This plant is well described by its common names. Because its long, knotted, creeping root stalks are scarred with the stem marks of previous years, it is called Solomon's Seal, and because its leaves are arranged up the slender stem like the rungs of a ladder it is called Jacob's Ladder or Ladder-to-Heaven. But the popular names do not describe the pendulous white flowers that hang in clusters under the leaves, nor the later-appearing blueblack berries that, when mature, resemble Concord grapes.

LILIACEA

## LILY FAMILY

> Aletris farinosa, L.
Mealy-white tinged
with pink

| Colic-root, | Star Grass, |
| :--- | :---: |
| Unicorn-root, | Blazing-star, |
| Ague-root, | Spanish Bayonet, |
| Star-root, | (Local name). |
| Husk-root, |  |

Aletris: Greek for a female slave who grinds corn, in allusion to the apparent mealiness of the blossoms.
Farinosa: Latin name for coarse meal.
The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: erect, one and one half feet tall, hairless; the flower stem unbranched, with several small, inconspicuous leaves.

## LILIACEE

The Leaves: mostly basal; in a tuft-like whorl; light yellow-green turning pinkish-yellow; lanceolate; two inches to six inches long; hairless on both surfaces; acuminate at the apex; narrowed at the base; entire; parallel-veined; awl-shaped bracts, sometimes two to each flower.

The Flowers: mealy, inconspicuous, on extremely short stems; in a long raceme, which is four inches to ten inches long; corolla tubular, six cleft at the top; six stamens.

The Fruit: a capsule.
A tall, pale, mealy-white spike rising from a whorl of basal leaves, and standing stiff and erect-here one, and there close by, another-so that all told quite a colony of them is found growing on the sandy soil of the Commons. This is the Colic-root or Star Grass; its common names indicating its appearance as well as its medicinal properties, for it is a bitter and strong stomach tonic.

LILIACEAE
LILY FAMILY
Smilax rotundifolia, L.

| Light green | Green-brier, | Nigger-head, |
| :--- | :--- | :--- |
| Blue-black berries | Horse-brier, | Bamboo-brier, |
|  | Cat-brier, | Devil's Hop-vine, |
|  | Wait-a-bit | Hungry Nine |
| May-June | Biscuit-leaves, | Bread-and-Butter. |

Smilax: a Greek word of obscure meaning.
Rotundifolia: Latin for round-leaved.
The Preferred Habitat: thickets.
The Plant: a vine; the stem and branches slightly zigzag, hairless and covered with scattered prickles; branches more or less square, although not nearly so much so as

## LILY FAMILY

in the variety quadrangularis, the branches and young shoots often four angled.

The Leaves: alternate; ovate; acute or acuminate at the apex; obtuse or heart-shaped at the base; with stalks bent upward and the slender tendrils at their angles carled over; entire; or the margins ragged as if eaten.

The Flowers: small, in umbels, on axillary stems.
The Fruit: a small berry, blue-black, with a bloom.
Not a conspicuous vine, but a most exasperating trailer over wild rose bushes and bayberry, around which it twines affectionately. With its prickles it rends the clothing and tears the skin, and with its tough and unbreakable stem it embraces the waist or scrapes the knee or trips the foot of the persistent one who is eagerly bent on clutching a particularly delectable bunch of wild grapes. And one of the popular names of this obstinate vine is Wait-a-bit! "So far and no farther than I please, shalt thou go," is its motto.

Four other members of the Lily Family have been reported.

## Iris prismatica, Pursh.

Violet-blue
May-June

Slender Blue Flag, Narrow Blue Flag, Poison Flag-root.

Iris: from Greek for rainbow.
Prismatica: from Greek for a prism because of the prismatic shape of the seed-vessels.

The Preferred Habitat: open, damp ground, or even dry, sandy soil.

The Plant: erect, from a slender, tuberous and thickened underground stem, one foot to three feet tall; the flowerstem usually simple, without hairs.

The Leaves: two or three, basal, and scattered up the stem; grass-like; mostly shorter than the stem; hairless on both sides; acute at the apex; entire; parallel-veined.

The Flowers: large, solitary or two together, on slender stems, blue-veined with yellow markings; the outer parts of the flower sometimes two inches long, usually less, hairless; the inner smaller.

The Froit: a narrowly oblong capsule, acute at each end, with three deep angles.

The prismatica and versicolor are similar, but the prismatica, once known, is easily distinguishable by its more slender build, by its grass-like leaves, and, when in fruit, by the slender and distinctly prismatic seed-vessel, which is quite different from the cylindric and well-rounded seed-vessel of the versicolor.

## IRIS FAMILY

IRIDACEA
IRIS FAMILY
Iris versicolor, L .

| Violet-blue | Large Blue Flag, | Flag Lily, |
| :--- | :--- | :--- |
| Fleur-de-lis, | Snake Lily, |  |
| June | Iris, | Water Flag, |
|  | Liver Lily, | Poison Flag. |

Iris for derivation see prismatica. Versicolor: Latin for vari-coloured.

The Preferred Habitat: boggy grounds.
The Plant: erect, two to three feet high, often branched above; the stem one-angled, without hairs.

The Leaves: erect; sword-like; seven to ten inches long; without hairs, but with a slight greyish bloom; entire; heavily parallel-veined.

The Flowers: larger than those of the preceding species, the outer parts longer and wider than the inner.

Cultivation has altered the colour and increased the size of the flowers of the Iris, but has not materially altered their shape. There remain the three more upright divisions, which in the versicolor are violet-blue and unmarked, and the three larger and more showy petals, which, in this, are "beautifully veined with deep violet over a whitish ground, tinted at the base with yellow." Almost flat upori the petals, lie the three divisions of the style and beneath them are the stamens. The fruit is a long, cylindrical compact capsule.
"The name, Poison Flag, has been applied to it on account of the poisonous effect it has produced in children, who, owing to the close resemblance of the plants before reaching the flowering-stage, sometimes mistake it for Sweet-Flag."

## IRIDACEA

IRIDACEA
IRIS FAMILY
Sisyrinchium atlanticum, Bicknell
Violet-blue
Blue-eyed Grass.

## May-June

Sisyrinchium: name of Greek origin, of uncertain meaning. Atlanticum: Latin form for Atlantic in allusion to the fact that the plant grows mostly near the shore.

The Preferred Habitat: damp soil.
The Plant: erect, about six inches tall or taller; the stem without hairs, conspicuously kneed, wiry and slender, much exceeding the narrow leaves.

The Leaves: linear; without hairs on either surface; acute at the apex; sessile; parallel-veined. The bracteal leaf usually shorter than the slender stem.

The Flowers: with a yellow eye, clustered in an umbel, usually two to four bracts somewhat purplish and papery.

The Fruit: a capsule, slightly higher than broad.
A delicate, grass-like plant that prefers to grow in low grounds, where the soil is somewhat sandy. Its wheelshaped blue flowers are pretty, but last for only a few hours. Botanically, its most reliable distinction is the flexuous or "kneed" stem

Two other members of the Iris Family have been reported.

rese


## ORCHID FAMILY

> Cypripedium acaule, Ait.

Crimson-pink Stemless Lady's Slipper, Nerve Root, Pink Lady's Slipper, Camel's Foot,
May-June Purple Lady's Slipper, Squirrel-shoes, Moccasin Flower, Two-lips, Indian Moccasin, Old-goose. Noah's Ark,

Cypripedium: name incorrectly Latinized from Greek words for "veins" and a "shoe;" therefore by some authors spelled Cypripedilum.
Acaule: Latin, meaning without a stem.
The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: erect; the flower stem six inches to fifteen inches high, rough with crowded and flattened hairs.

The Leaves: practically basal, folded one around the other; elliptical; rough on both surfaces with flattened, white hairs; parallel veined; deeply grooved; entire; occasionally a smaller leaf is borne on the flower stem.

The Flowers: very large, solitary, with a lanceolate bract which is acute tipped; the sepals three different widths, sometimes one inch and more wide, striped, the hindmost one green at the base; the corolla very irregular, consisting of an inflated sack with deeper pink stripes on a white and pinkish background; the throat greenish with pink spots, bearded with short, white hairs; the mouth is closed with a stiff, triangular projection. Albinos have been found, but are rare.

The Fruit: a capsule.

## ORCHIDACEA

A very handsome flower (for one thinks more of the showy corolla than of the large, and basal leaves which slightly resemble those of the Lily-of-the-Valley) made so conspicuous by its corolla being inflated and folded in so that it resembles a pocket-roll.

ORCHIDACE $E$ ORCHID FAMILY

Habenaria blephariglottis, (Willd.) Torr.
White

July-August
Habenaria: name from Latin for a thong or rein, in allusion to the shape of the lip or spur of some species.
Blephariglottis: Greek for an eyelid.
The Preferred Habitat: sandy bogs.
The Plant: erect, twelve to twenty-four inches high; the stem unbranched, dark green, without hairs, grooved and angled.

The Leaves: few; erect; alternate; lanceolate; without hairs on either surface; four inches to eight inches long; the upper decidedly smaller; acute at the apex; stemless, in fact sheathing; parallel-veined; mid-rib prominent below.

The Flowers: rather small, in a raceme or spike, which is three inches to six inches long and sometimes three inches thick; the sepals round or elliptical, concave, acute; the petals linear-oblong, somewhat pointed, toothed above; the lip narrowly ovate-lanceolate, fringed.

The Fruit: a capsule.
The Habenaria blephariglottis and the lacera associate themselves in one's mind, partly because their flowers grow similarly in loose racemes; but they are easy to distinguish

## ORCHID FAMILY

the one from the other. The blephariglottis is the sweetscented, pure white one. When the flowers are fresh, no purer white than theirs can be imagined. Unfortunately when faded, they turi. a dingy brown.

ORCHIDACE $E$ ORCHID FAMILY

Habenaria ciliaris, (L.) R. Br.
Orange-yellow
Yellow Fringed Orchid.
July-August
Habenaria: for derivation see blephariglottis. Cilaris: Latin for eyelash.

The Preferred Habitat: peat bogs.
The Plant: eight inches to two feet high; the stem unbranched, without hairs, slightly grooved.

The Leaves: erect; alternate; lanceolate; the lower four inches to six inches long; the upper decidedly smaller, one inch to two inches long; without hairs on either surface; acute at the apex; markedly clasping; entire; parallel-veined.

The Flowers: medium-sized, numerous in a raceme on stems about as long as the flowers themselves, very much fringed; the bracts linear to lanceolate.

The Fruit: a capsule.
There are so many "False" plants, as False Solomon's Seal or False Toadflax, that it is a real pleasure to meet with the genuine Solomon's Seal or the genuine Toadflax, so, when so many plants (and even once a mushroom growth) have been mistaken for the Yellow Orchid, it is a satisfaction to know what to expect in the real flower. How much greater pleasure it would be actually to find in the original this orchid, which is so elusive on Nantucket.

## ORCHIDACEE

This orchid is peculiarly well described by Mr. Mathews as being "an exceedingly handsome, slender species, with lance-shaped leaves and a large, many-flowered spike of showy, golden and orange-yellow flowers with ovate sepals, narrow-fringed petals, and a deeply fringed lip. The spur long and slender." It is indeed a beautiful flower!

In speaking of its presence on Nantucket, Mrs. Owen says: "The only plant ever known on the Island was found in bloom by Mrs. E. W. Perry in 1872." Since then Mr. Lorin Dame found about twenty-five plants and recently Mr. Walter Burdick claims to have found it

ORCHIDACE $E$
ORCHID FAMILY
Habenaria lacera, (Michx.) R. Br.
Greenish-white Ragged Fringed Orchid, Ragged Orchid,
June-August Green Fringed Orchid.

Habenaria: for derivation see blephariglottis. Lacera: Latin for torn.

The Preferred Habitat: bogs, at times apparently in dry gravel, but where a short search reveals a clay foundation.

The Plant: erect; the stem one foot to twenty inches high, unbranched, without hairs, grooved.

The Leaves: erect; light green; alternate; the lower four to six inches long; the upper gradually smaller; without hairs on either surface; acute at the apex; clasping; parallel-veined.

The Flowers: medium-sized; numerous, in a raceme (one specimen found with a cluster six and a half inches long), on smooth stems; the bracts lanceolate; the sepals ovate, obtuse, the upper slightly broader; the petals linear, about as long as the sepals, obtuse, entire: the lip three parted;


## ORCHID FAMILY

divisions narrow, deeply fringed; the fringe of a few threads even about one half inch long; spur curved, claw-shaped at the apex.

The Fruit: a capsule.
A species remarkable for the torn three-parted lip of the delicately constructed white flowers, which tend sometimes to the greenish and sometimes to the yellowish. It is well-named, the lacera, as its "lacerated flower-lip is literally torn to divisions of thread-like fineness, and the general effect is accordingly unique. No other orchid is like it"; it is truly a thing of "shreds and tatters."

Structurally also it differs from others. After saying that no botanist has mentioned its distinct peculiarity, Mr. Wm. Hamilton Gibson goes on to describe thus the structure of the flower; "The nectary, instead of being freely open, is abruptly closed at the central portion by a firm protuberance or palate which projects downward from the base of the stigma, and closely meets the lip below." Mr. Mathews adds: "The opening is thus divided into two lateral ones, each lying directly beneath a sticky, elongated pollen-disc. Thus the insect, generally a butterfly, inserts its tongue exactly where the latter will touch the disc which is sure to clasp it and be withdrawn with the pollen."

ORCHIDACEA
ORCHID FAMILY
Pogonia ophioglossoides, (L.) Kerr.
Crimson-pink
June-August
Pogonia: Greek for bearded, from the hairy lip of some of the original species.
Ophioglossoides: a Latin derivative from Greek meaning "tongue-like."

The Preferred Habitat: bogs.

The Plant: erect, from fibrous roots; the flower stalk eight inches to eighteen inches high, without hairs, one to three-leaved, not rarely with a long stemmed basal leaf.

The Stem-Leaf or Leaves: bright green; lanceolate, or ovate; sometimes three inches long; without hairs on either surface; bluntly acute at the apex; entire; parallel-veined.

The Flowers: large, fragrant, solitary or occasionally in pairs, slightly nodding, with a leaf-like bract; the sepals and petals about equal or the petals broader, elliptic or oval, streaked and curling around a beautifully fringed lip; the lip spatulate, yellow to white, crested and fringed; the column much shorter than the petals, thick and clubshaped. Albinos have been found.

The Fruit: a capsule.
A delicate and dainty orchid, that seems perched momentarily on the stem. Just below the flower is a tiny leaf, while farther down the stem is a second and much larger one. Among the sepals and petals which are of unequal length, is a beautifully fringed lip, "curved like the hollow of the hand."

ORCHIDACEA
ORCHID FAMILY
Calopogon pulchellus, (Sw.) R. Br.

Magenta-pink
June-July

Grass Pink, Calopogon, Bearded Pink, Swamp Pink.

Calopogon: name derived from Greek for beautiful, and beard in allusion to the hairs on the beautiful lip.
Pulchellus: Latin diminutive for beautiful.
The Preferred Habitat: fresh water marshes.
The Plant erect; the flower stem ten inches to fourteen inches high, coloured toward the base, hairless, slender.

## ORCHID FAMILY

The Single Leaf: erect; linear-lanceolate; eight inches to twelve inches long; hairless on both surfaces; acute at the apex; sheathing the flower stem at the base; entire; parallel-veined.

The Flowers: sweet-scented, large, in a loose terminal raceme, on short, angled peduncles, with a lanceolate bract at the base; the sepals ovate-lanceolate, acute; the petals lanceolate, obtuse, constricted near the middle; the lip broadly triangular at the apex, linear-oblong at the base, crested with yellow, orange or magenta-coloured hairs; the column incurved; both sepals and petals glisten as if wet with dew. Albinos have been found.

The Fruit: a capsule.
The truth of Mrs. Oxven's warning remains, although her prophecy has, fortunately, not been fulfilled. She writes: "Profusely abundant now in wet places, but picked for its beauty in such immense bunches that it is likely to become rare before many years." A handsome orchid, indeed, and an aristocratic one, too. As rarely happens among the orchids, the ovary is untwisted, so that the lip is on the upper instead of being on the lower side of the blossom. "Not to offend by this omission, our lovely flower has one of the coloured sepals brought forward, which suits the undiscriminating taste of its visitors (the bees) quite as well."

ORCHIDACEÆ
ORCHID FAMILY
Arethusa bulbosa, L.
Magenta-crimson to rose purple
Wild Pink,
Dragon's-mouth.
May-June
Arethusa: named for the nymph Arethusa.
Bulbosa: Latin for full of bulbs.
The Preferred Habitat: bogs.

The Plant: from a bulb, erect; the scape from five inches to ten inches high, hairless, with three brownish bracts that sheath the lower part.
The Solitary Leaf: light green; linear; four inches to six inches long, with very few, scattered silky hairs; obtuse at the apex; clasping three quarters up the stem; entire; many nerved; parallel-veined.
The Flowers: large, solitary; the sepals oblong, acute or obtuse; the petals oblong; the obtuse lip, which is usually drooping, also oblong, with a conspicuously broad apex, narrowed toward the base, plain or spotted and streaked with magenta-crimson, with three to five fringed yellow crests, the margin minutely fringed; the petal-like column attached to the lip is broadened above, toothed and topped with a lid-like anther. As Mr. Mathews says, "A large single-flowered and delicately-scented orchid, the magenta-crimson petals and sepals of which point upward like the fingers of a half-open hand viewed in profile." Albinos have been found.
The Fruit: a capsule.
Of certain plants the Nantucket people seem to feel particularly that they are "natives," and of this delicate orchid they are deservedly proud, for it is one of the most dainty and also one of the most beautiful of the Nantucket orchids, possessing among its recommendations, a sweet odour in addition to charm of colour and grace of form.

Spiranthes Beckii, Lindl.

## White

Little Ladies' Tresses.

## July-September

Spiranthes: composed of Greek words for "a coil" or "a curl," and "a flower."
Beckii: in honour of Lewis C. Beck.

## ORCHID FAMILY

The Preferred Habitat: dry, sandy soil of the Commons, often in pure sand.

The Plant: from a spindle-shaped, solitary root, eight inches to eighteen inches high; the hairless stem having scale-like bracts.

The Leaves: basal; lanceolate; smooth on both surfaces; acute at the apex; entire; parallel-veined.

The Flowers: small, in a small, slender spike; sepals and petals (all white) more or less united; the margins waved.

The Fruit: a capsule.
The Spiranthes-Beckii, cernua, and gracilis-are three white orchids that, because of their general similarity in appearance, group themselves together in one's mind. All have twisted spirals of bell-shaped, white flowers, that, some claim, look like miniature Lily-of-the-Valley, but it requires a keen imagination to see a striking resemblance! However, the Beckii is distinguished from the others by its lips being pure white and its root-if one does accidentally pull up the plant from the sandy soil-being spindle-shaped and "solitary."

ORCHIDACEE ORCHID FAMILY

Spiranthes cernua, (L.) Richard.

Yellowish-white

August-September

Nodding Ladies' Tresses, Drooping Ladies' Tresses, Wild Tube Rose, Screw Augur.

Spiranthes: for derivation see Beckii. Cernua: Latin for nodding.

The Preferred Habitat: swampy ground.
The Plant: six inches to two feet high, unbranched; the flower-stem without hairs or with short, soft ones above, usually with two to six bracts.

## ORCHIDACEE

The Leaves: nearly basal; oblong-lanceolate or linear; three inches to fourteen inches long; narrow; sometimes without stems and sometimes distinctly petioled; entire; parallel-veined.

The Flowers: small, in a spike in two or three spiral or vertical rows; the lip ovate-oblong with its margin waved or ragged as if eaten.

The Fruit: a capsule.
The second of the Spiranthes group, the cernua, is characterised, in the first place, by its habitat, which is swamps and damp ground, and in the second, by its decided robustness and sturdiness.

The flowers vary from yellowish white to cream white and are odourless or fragrant, the whiter ones generally the more fragrant.

ORCHIDACEA
ORCHID FAMILY
Spiranthes gracilis, (Rigel) Beck.
White
Slender Ladies' Twisted Stalk, Cork-screw Plant.
August-September
Spiranthes: for derivation see Beckii. Gracilis: Latin for slender.

The Preferred Habitat: dry, sandy soil of the Commons, sometimes in pure sand.

The Plant: from clustered roots, erect; the flower stem eight inches to eighteen inches high, usually without hairs or rarely with short, soit hairs, above slender, bearing small, deciduous bracts.

The Leaves: basal; obovate or tending to lanceolate; one and one half inches to two inches long; blunt or acutish at the apex; petioled; entire; parallel-veined.

## ORCHID FAMILY

The Flowers: small, in a loose spike, which is one to three inches long, and usually much twisted; lip with a wavy margin, usually thick and greenish in the middle.

The Fruit: a capsule.
This, the third of the Spiranthes group, is the most closely allied with the Beckii; it also grows in the dry soil of the Commons. It is a very slender plant, to be identified by its lip being green above, with white margin, and if one does pull it up-by the "clusters of thickened roots."

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## Populus tremuloides, Michx.

March-May<br>American Aspen, Quaking Aspen, Quiver-leaf.

Populus: Classical name of uncertain origin.
Tremuloides: Latin to signify tremulous in allusion to the trembling of the leaves on their slender stems.

The Preferred Habitat: edges of woods.
The Tree: slender, with smooth, light, green-brown bark.
The Leaves: alternate; ovate or nearly round; when young with no hairs above, shining, light green; when full grown thin, dark green, and shining above, pale dull yellow-green beneath; short-acuminate at the apex; sawed off or slightly heart-shaped at the base; on very slender stems which are flattened laterally on the margins; finely serrate and hairy on the margins; net veined.

The Flowers: minute, borne in drooping catkins which are one and a half to two inches long.

The Fruit: capsule.
Trees on Nantucket are not so numerous but what, by process of elimination, they can easily be identified. The distinctive quality of a poplar tree is in the leaf, which is generally triangular in shape, disproportionately broad at the base, acute at the apex, and more or less deeply toothed or waved all around the edge. What distinguishes the tremuloides from the other members of the genus is the trembling of the leaves. This peculiar trembling is due to the shape of the long, slender stem, which is "pinched sideways, not flattened, and this compression being ver-

## SALICACEE

tical to the plane of the leaf, counteracts the ordinary waving motion, which a leaf has in the wind, and causes it to quiver with the slightest breeze, whence the proverbial comparison, 'trembling like an aspen leaf.'"

One is apt to think of the commercial value of trees as being for cutting purposes. But out of the inner bark of many trees and shrubs valuable solutions are distilled. This bark is heavily charged with tannic acid. And a drug is derived from this tree, which is used in the treatment of rheumatism.

WILLOW FAMILY
Salix discolor, Muhl.

March-April

Pussy-willow, Glaucous Willow, Silver Willow.
Salix: Latin classical name.
Discolor: Latin for two-coloured.
The Preferred Habitat: damp borders of thickets.
The Tree or Shrub: sometimes twelve feet high, with light greenish-brown bark, sometimes tinged with red; the smaller branches at first dark reddish-purple, coated with pale, short soft hairs, later dull green.

The Leaves: alternate; oblong, tending to lanceolate; when full grown, thick and firm; above without hairs and bright green; below silvery white; gradually narrowed at both ends; acute at the apex; wedge shaped or rounded at the base; serrate; mid-ribs broad.

The Flowers: minute; in catkins appearing before or with the leaves; white and silky before the flowers open.

The Fruit: a capsule.
Unlike many shrubs and trees, the Pussy-willow is the best known when in bud. Before the "pussies" appear,

## WILLOW FAMILY

the shrub is to be recognized by its light greenish-brown bark and its slender and ascending branchlets, which are at first a dark reddish colour. The winter buds are purple. Later come the catkins or "pussies," which soon put forth the yellow stamens, and later appear the green leaves. The Pussy-willow shoots develop roots and leaves in water; an interesting experiment is to grow a willow-tree in your own home.

In speaking of the Pussy-willow, Harriet Keeler says, "The leaves and twigs of many willows are subject to gall growths caused by the stings of insects. The great cone-like buds an inch or more long and three-quarters of an inch in diameter which are found at the top of the branches of Salix discolor, especially, are an interesting example of these. One often sees a Pussy-willow virtually covered with these monstrous buds. But open one of them with a sharp knife and within will be found the sleeping larva of a gall-fly. This bud is formed of many overlapping scales which are crowded and modified leaves, all diverted from their normal purpose and compelled to serve as the covering of an enemy."

Nineteen other members of the Willow Family have been reported.

MYRICA ASPLENIFOLIA


$$
\text { Myrica asplenifolia, } \mathrm{L} \text {. }
$$

| April-May | Fern-gale, | Spleenwort Bush, |
| :--- | :--- | :--- |
|  | Fern Bush, | Sueet Bush, |
|  | Meadow Fern, | Sweet Ferry, |
|  | Shrubbery Fern, | Sueet Fern, |
|  | Canada Sweet Gale, | Fernwort Bush. |

Myrica: ancient name of the Tamarisk or some other shrub; perhaps from the Greek word to perfume.
Asplenifolia: Latin for leaves of Asplenium (a fern).
The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: very slightly shrubby, one foot to two and one half feet tall, much branched; the branches erect or spreading; the stem reddish-brown.

Tife Leaves: alternate; linear-lanceolate; deeply pinnatifid into numerous, rounded, entire or sparingly dentate lobes which are three to six inches long; obtuse or slightly acute at the apex; short-petioled.

The Flowers: minute, in catkins, which are out before the leaves, reddish-brown, at the ends of the branches. In this formation lies one of the reasons for the classification as a Myrica.

The Fruit: a bur-like green nut.
A welcome native of the Commons, where its fern-like leaves add a still different shade of green to the many neutral tints. The plant withers quickly after being picked, but retains its fragrance a long time.

As an herb, it has tonic properties and was included in the family medicine-chest.

Myrica carolinensis, Mill.

April-May

Bayberry, Wax-berry, Candle-berry, Wax-myrtle.

## Myrica: for derivation see asplenifolia. Carolinensis: Latin for Carolinian.

The Preferred Habitat: dry, sandy soil of the Commons.
The Shrub: a spreading shrub, two feet to eight feet high, branched near the summit, with smooth, grey bark.

The Leaves: crowded at the summit; alternate; lanceolate or ovate; without hairs above, often with a few short, soft hairs beneath; with resinous dots on both sides; blunt at the apex; narrowed at the base; with waved margins; serrate or with a few low teeth above the middle.

The Flowers: minute, in catkins; the sterile catkins dark reddish-brown.

The Fruit: drupes, bluish white, small, globular, dry, coated with resinous grains of wax, especially waxy when mature.

A picture of the Commons that failed to include the bayberry bushes would be as incomplete as one that failed to include scrub-oak trees or mealy-plum vines. One cannot think of the heathland, or the dunes, or the thickets, and not remember the bayberry. In general, the bushes most nearly resemble the beach-plum, but their more ascending branches give them a tidier appearance. Always the bayberry can be distinguished by the pungent odor of stem and leaves. But the easiest mark of distinction is the waxy, grey resinous berries that cling to the stem below the dark green leaves clustered

## SWEET-GALE FAMILY

at the ends of the branches. These berries are the part that is used in making wax candles.
"A bayberry candle burned to the socket, Brings luck to the house, and gold to the pocket."

Another application of them is as wax for smoothing flatirons, while a former use to which they were put, was a mouth-wash.

One other member of the Sweet-Gale Family has been reported.

Carya alba, (L.) K. Kock.

June<br>White-heart Hickory,<br>Mocker-nut,<br>Fragrant Hickory.

Carya: ancient Greek name of the walnut. Alba: Latin for white.

The Preferred Habitat: thickets.
The Tree: erect, six feet to fifteen feet high; the trunk stout; the bark rough, but close; the twigs hairy, fragrant when crushed.

The Leaves: alternate; pinnately compound, the leaflets seven to nine, oblong-lanceolate, with short, more or less matted hairs, acuminate at the apex; sessile; fragrant when crushed.

The Flowers: of two kinds, in catkins; the staminate catkins covered with matted wool, peduncled.

The Fruit: a nut, enclosed in a thick shell, greyish-white, angled, pointed at the top.

A noble and symmetrical tree, thickly clothed with handsome and compound leaves-the father, so to speak, of the thicket, that so densely surrounds it.

Two other members of the Walnut Family have been 'reported.

Corylus americana, Walt.
March-April Filbert, Hazelnut.
Nuts ripe July-September

Corylus: probably a Greek word meaning helmet, in allusion to the shape of the involucre.
Americana: Latin for American.
The Preferred Habitat: sandy soil, thickets, and borders of thickets.

The Shrub: three feet to five feet tall, branched; the young shoots a russet-brown, rough, with short, pinkish hairs; the twigs becoming hairless.

The Leaves: alternate; ovate or broadly oval; three inches to six inches long; two inches to five inches wide; above, hairless or nearly so; beneath with a fine, soft, matted wool; acute or acuminate at the apex; cordate or obtusish at the base; with very fine sharp teeth on the margin.

The Flowers: minute, in catkins which are three to four inches long.

The Fruit: a nut, in clusters of four, enclosed in a fringed, leaf-like envelope.

In thinking of the two Hazelnut bushes (Corylus americana and Corylus rostrata), one remembers many leaves, not all of which are green, but usually, some at least, a madder-brown, that are shaped like those of the birch and have deep, regular saw-teeth. Below the thicket, so to speak, of upper leaves, are the nut cases. One kind has a fluted edge to the saucer-like envelope which en-

## BETULACEA

closes the four nutlets. The other (Corylus rostrata) has a beaked furry covering, holding one nut.

BETULACEA
BIRCH FAMILY
Corylus rostrata, Ait.
April-May
Beaked Hazelnut.

## Fruit ripe <br> August-September

Corylus: for derivation see americana.
Rostrata: Latin meaning beaked.
The Preferred Habitat: sandy soil.
The Shrub: three feet high or more, branched.
The Leaves: alternate; ovate or narrowly oval; sometimes four inches long and two inches wide; thin; above without hairs or with some scattered, matted ones; beneath with few, short, soft hairs, at least on the veins; acuminate at the apex; cordate or obtuse at the base; deeply serrate, with incisions retoothed.

The Flowers: minute, in catkins which are three to four inches long.

The Fruit: a nut, enclosed in bristly, hairy bractlets, prolonged into a tubular beak, fringed at the top, about twice the length of the nut.

There are two chief distinctions between the Corylus americana and the Corylus rostrata. One lies in the difference between the edges of the leaves, the other in the covering of the nuts. In both, the leaves are toothed, but of the rostrata, the teeth themselves are again toothed; the nuts of the americana are in a flat and circular case, while those of the rostrata are in a beaked case.

Three other members of the Birch Family have been reported.

## Quercus alba, L.

May-June White Oak.

## Acorns ripe

September-October
Quercus: elassical Latin name of the oak.
Alba: Latin for white.
The Preferred Habitat: thickets and "low, swampy woods."

The Tree: usually six to ten feet high, "at least fifteen feet high in low, swampy woods." "The stoutest native tree of any kind met with on the island was a white oak in a dense thicket which measured forty inches in circumference a foot above the base." " The bark is light grey varying to dark grey, with shallow fissures, scaling off in thin plates.

The Leaves: alternate; obovate; four inches to seven inches long; green above; beneath pale and with few hairs, more when young; thin; pinnatifid into three to nine oblong, obtuse, toothed or entire lobes, without bristles, the apex lobe rounded; with short, stout, grooved, and flattened stems

The Flowers; minute, in catkins; the staminate hairy, two and a half to three inches long, calyx bright yellow, anthers yellow; the pistillate on short stems, the scales reddish, stigmas bright red.

The Fruit: a nut, called an "acorn"; the cup part ovoid or oblong-round at the apex, enclosing about one-fourth of the nut, covered with soft matted wool on the outside.

## FACACEA

This is the tall oak, that grows in damp ground or thickets, whose young leaves on the underneath surface are covered with a white wool and, when mature, become pale or bear a bloom. Their lobes are five to nine, being narrow, obtuse and mostly entire.

From the inner bark may be derived an astringent and antiseptic.

FAGACE $\mathcal{E}$
BEECH FAMILY
Quercus ilicifolia, Wang.

May
Acorns ripe
October-November

Black Scrub Oak, Bear Scrub Oak, Dwarf Black Oak,
Holly' Oak, Bitter-bush.

Quercus: for derivation see alba.
Ilicifolia: Latin for leaves of the Ilex (Holly), because of
the resemblance of these leaves to those of the Holly.
The Preferred Habitat: dry, sandy soil of the Commons.
The Tree: a straggling shrub or rarely a small tree; seldom more than four feet high; the bark dark brown, nearly smooth, scaly; the branchlets slender, at first dark green, tinged with red, later red brown and finally dark brown.

The Leaves: alternate; greyish-white beneath; two inches to five inches long; above dark green and hairless; beneath greyish white, with soft, matted wool; wedgeshaped at the base; three to seven lobed; the lobes triangular, ovate, spreading, acute, bristle-tipped.

The Flowers: minute, in catkins, staminate and pistillate; the staminate reddish, hairy, four inches to five inches long, which often remain until mid-summer; pistillate, on stout stems, covered with matted wool, the scales red and also covered with matted wool.


## BEECH FAMILY

The Fruit: a nut. The cup of the "acorn" is saucershaped with a somewhat round base; the kernel somewhat ovoid, longer than the cup.

This is one of the dwarf oaks of the Commons, where, with its spreading and twisted branches, it makes up longitudinally for what it lacks in height. Like other oaks, its leaves vary, having usually five lobes, but there are chances for three or even seven; and, if the strong winds have not worn away the bristles, every lobe is bristle-tipped.

Later in the summer, the tree is filled with the abundant acorns. In the fall the leaves turn maroon and do their share in making the Commons actually blossom in reds and yellows and crimsons.

FAGACEE

## BEECH FAMILY

## Quercus prinoides, Willd.

April-May |  | Scrub Oak, |
| :--- | :--- |
|  | Scrub Chestnut Oak, |
| Dwarf Chestnut Oak, |  |
|  | Chinkapin or Chinquapin. |

Quercus: for derivation see alba.
Prinoides: resembling (Quercus prinus, the Chestnut Oak.
The Preferred Habitat: dry, sandy soil of the Commons, where it often forms dense thickets.

The Tree: from two feet to six feet or more in height, profusely branched, the branches often spreading on the ground; the bark light brown, charged with tannic acid.

The Leaves: alternate; obovate or oblong; densely covered on the underneath side with short, soft hairs, which are sometimes slightly tawny; acute or acuminate at the apex; wedge-shaped at the base; the petioles stout, short, flattened and grooved; coarsely wavy-toothed, with rounded or acute teeth; mid-rib and primary veins conspicuous.

## FACACEF

The Flowers: appear when leaves are one third grown; staminate catkins from one to two inches long or longer, hairy; the pistillate on short peduncles; the scales covered with silvery white matted wool.

The Fruit: "acorns." The nut, pale chestnut brown, one half to three quarters of an inch long, oval, rounded or obtuse at the apex which is covered with white down; near the deep cup enveloping one half to one third of the nut is light brown, downy on the inside and covered on the outside with dense, white hairs. The scales loosely over-lapping, red-tipped, acute, thickened toward the base of the cup.

Another of the commonest Scrub Oaks on Nantucket, of which the chief mark of individuality is the chestnutlike leaf and the deep cup of the acorn densely covered on the outside with white and matted wool.

FAGACE $E$

## BEECH FAMILY

## Quercus velutina, Lam.

May

Acorns ripe August-September

Quercitron, Yellow-barked Oak, Black Oak, Dyer's Oak.

Quercus: for derivation see alba.
Velutina: Latin meaning shaggy hairs.
The Preferred Habitat: woodlands.
The Tree: sometimes twenty feet high; the outer bark rough, in low ridges, very dark brown; the inner, bright orange.

The Leaves: alternate; firm; oblong to lanceolate; above, at first bright crimson and covered with white hairs; below, at first covered with silvery-white, matted wool; when full

## BEECH FAMILY

grown, above dark shiny green, below yellow-green, brownish or tawny, with some short, soft hairs; petioled; the stems long, yellow, generally flattened on the upper side. The leaves very variable in outline, usually seven lobed and sometimes divided nearly to the middle by wide rounded sinuses into narrow lobes with stout bristlepointed teeth, or sometimes the lobes are nearly entire, each lobe tipped with a bristle; or the sinuses are shallow, and the heavy part of the leaf is toward the apex, but the lobes are always tipped with a bristle. The end lobe is oblong, acute, with, large or small teeth.

The Flowers: minute, in catkins, appearing when the leaves are half-grown; the staminate hairy, four inches to six inches long; the pistillate on short, hairy stems; stigmas bright red.

The Fruit: a nut, stemless or on stalks, solitary or in pairs; the "acorn" somewhat ovate or hemispherical, broad and rounded at the base, rounded at the apex, light reddish-brown, frequently covered with short, soft hairs, from one half inch to one inch long, the cup embraces one third to one half of the "acorn" and is covered with brown scales which at the base are closely flattened, but above are loose and at the rim form a fringe-like border.

Five other members of the Beech Family have been reported.

## April-July

Comandra: Greek meaning a hairy man, in allusion to the hairs on the calyx lobes.
Umbellata: Latin diminutive for shade.

The Preferred Habitat: dry, sandy soil of the Commons.

The Plant: erect, six inches to twe $\quad$ ve inches high; the stem usually branched, without hairs, brittle. The plant forms parasitic attachments to the roots of other plants, particularly those of the Heath Family, as, for example, to the Mealy-plum Vine (Arctostaphylos Uva-ursi).

The Leaves: numerous, especially above; partially erect; alternate; light green; oblong to oblong-lanceolate; one half inch to one inch long; the lower smaller than the upper; acute or acutish at both ends; stemless or nearly so; entire; the pale mid-rib prominent beneath.

The Flowers: small, on thread-like stems in corymbose cymes which are terminal or axillary; the calyx greenishwhite or purplish; the five petals white; sometimes tinged with purple.

The Fruit: drupe-like or nut-like, crowned by the persistent calyx lobes.

Not an exciting plant; on the contrary a rather sickly, green and stiff one, with whitish flowers clustered at the top of the leafy stem somewhat as Sweet Alyssum heads

## SANDALWOOD FAMILY

are clustered, and short, opposite leaves, that bear a faint resemblance to the Sweet Alyssum leaves. It keeps well, but being undecorative, that is not a great virtue. But what real charm could be expected in a plant that forms parasitic attachments to the roots of other plants?

| Green or brown-red | Sheep Sorrel, | Gentleman's-sorrel, |
| :---: | :--- | :--- |
|  | Field Sorrel, | Red Weed, |
| May-September | Sour Dock, | Wood Sorrel, |
|  | Sharp Dock, | Red Sorrel, |
|  | Mountain Sorrel, | Redtop Sorrel, |
|  | Horse Sorrel, | Sour Weed, |
|  | Cow Sorrel, | Sour-grass. |
|  | Toad Sorrel, |  |

Rumex: the ancient Latin name. Acetosella: from Latin, signifying a little sour.

The Preferred Habitat: dry, sterile soil everywhere.
The Plant: six inches to twelve inches high, very variable in colour, growing darker with sterility of the soil; the stem slender, simple or branched; the sheaths silvery, early becoming ragged.

The Leaves: alternate; the uppermost lanceolate or linear, usually widest above the middle, the lower halberd-form; hairless; obtuse or acute at the apex; on stems; the lobes at the base entire or one or two toothed.

The Flowers: small, in erect, panicled racemes; six sepals, the outer three herbaceous, the three inner larger and somewhat colored.

The Fruit: achenes.
Both the ground leaves, light green and notched, and the tiny flowers, dark red and numerous, on the top branches of a tall red stem are familiarly known, but not always thought of as belonging together. The young leaves are good to eat and the deep red flowers colour the

## BUCKWHEAT FAMILY

more barren parts of the Commons. Its presence is an indication of sour soil. Mr. Bicknell says, "In early June when in full flower, it is one of the conspicuous plants of the season, reddening the fields and plains and damp sandy levels along the shore."

POLYGONACE $E$
BUCKWHEAT FAMILY
Rumex crispus, L.
Dark green
Yellow Dock, Curled Dock.
June-August
Rumex: for derivation see Acetosella.
Crispus: from Anglo Saxon, with same meaning.
The Preferred Habitat: damp ground.
The Plant: erect, one foot to three and one half feet tall; the stem rather slender, simple or branched above, dark green, grooved.
The Leaves: alternate; the lower oblong or oblong-lanceolate; six inches to twelve inches long, on long stems; the upper narrowly oblong or lanceolate, about half as long, on short stems; all heart-shaped or obtuse at the base; wavy-margined.
The Flowers: in a rather open panicle, the individual ones rather loosely whorled, petalless, the calyx the dark green part.
The Fruit: achenes.
A familiar but deadly uninteresting plant, whose large, heavy lower leaves which are usually, in part at least, brown and withered, irritate with their seemingly unnecessary existence the one who is bent on swamp treasure trove. The flowers are tiny balls, so to speak, although they try by their numbers and by their loose-hanging to appear more conspicuous.

From this plant is made a valuable drug.

## POLYGONACEÆ

POLYGONACEA
BUCKWHEAT FAMILY
Polygonum acre, HBK.
White or flesh-colour Water Smartweed. August-September

Polygonum: name from Greek for many a knee, in allusion to the numerous joints.
Acre: Latin for bitter.
The Preferred Habitat: swampy ground.
The Plant: usually erect or nearly so, seldom prostrate, one foot high or higher; the stem simple or branched, practically hairless.

The Leaves: alternate; lanceolate or oblong-lanceolate; one inch to eight inches long; acuminate at both ends; petioled; conspicuously glandular; entire; hairs on the margins and frequently on the mid-rib below; sheaths deciduous, when present cylindric, fringed with long bristles.

The Flowers: in slender racemes, at the top of the stem.
The Fruit: achenes, thick, smooth, and shining.
This is the Polygonum of damp places, with tiny greenishwhite flowers in long and slender, continuous clusters. A fairly sure method of identification is to bite the leaves, which have a pungent, puckery taste, that lasts for a few minutes.

POLYGONACEE
BUCKWHEAT FAMILY
Polygonum dumetorum, L.
Green and white
August-September
Polygonum: for derivation see acre. Dumetorum: Latin for a thicket.

## BUCKWHEAT FAMILY

The Preferred Habitat: thickets and over bushes in waste ground.

The Plant: extensively twining, two feet to twelve feet long; the stem much branched, horizontally grooved.

The Leaves: ovate, or somewhat hastate; sometimes uneven; acuminate at the apex; heart-shaped at the base; long-stemmed or nearly stemless; the sheaths smooth.

The Flowers: small, in mostly axillary racemes which are much interrupted; two inches to five inches long, with leafy bracts.

The Fruit: black, smooth, and shining achenes.
One of those extensively twining vines that are found resting on the tops of rose bushes and other low plants in open thickets. It has large, but thin, ovate and untoothed leaves and tiny white flowers in a long loose spray down the stem.

Polygonum glaucum, Nutt.

| White or pinkish |
| :---: |
| Seaside Knotweed, |
| Coast Knot-grass. |

August-September
Polygonum: for derivation see acre.
Glaucum: Latin for bluish.
The Preferred Habitat: sea beaches.
The Plant: prostrate or striving to be erect, eight inches to twenty inches long; the stem branched, with a bloom but without hairs, deeply grooved, often red or reddish, jointed.

The Leaves: alternate; ovate or oblong; mostly small, scarcely longer than the intermediate joints; fleshy; above,

## POLYGONACEE

somewhat rough and wrinkled; beneath, conspicuously veined; blunt at the apex; entire; the sheaths large, silvery, two-parted or at length of a ragged appearance, becoming brown at the base.

The Flowers: small, one to three together in the axils, on slender stems.

This is one of the dwellers on the beach sand. It grows in loose and flat rosettes, grey green and pink; its long, slender, and spreading branches bear small, entire leaves, and tiny pink flowers.

POLYGONACEE BUCKWHEAT FAMILY

> Polygonum pennsylvanicum, L.

| Pink, in varying shades | Pennsylvania Persicaria, |
| :--- | :--- |
| August-September | Glandular Persicary, |
| Purple-lead. |  |

Polygonum: for derivation see acre. Pennsylvanicum: Latin for Pennsylvania.

The Preferred Habitat: dry, sandy soil.
The Plant: somewhat erect, one foot to three feet tall, simple or branched; the stem jointed, the lower part hairless, the upper glandular.

The Leaves: alternate; lanceolate; two inches to eleven inches long; the upper sometimes glandular beneath; taper-pointed at the apex; petioled; the margins hairy; the sheaths thin, naked, and hairless.

The Flowers: small, in spikes or panicled racemes which are erect, thick, oblong or cylindric, one inch to two inches long.

The Fruit: achenes, round, at least one surface mostly concave, pointed, smooth, and shining.

## BUCKWHEAT FAMILY

A would-be tall but in reality a sprawling plant, with narrow, very long entire leaves, and withered, papery sheaths at the joints. The flowers usually pink, are crowded in thick cylinders.

## POLYGONACEÆ

BUCKWHEAT FAMILY

> Polygonum Persicaria, L.

Crimson-pink or deep magenta

Lady's Thumb, Spotted Knotweed, Heartweed.

## June-October

Polygonum: for derivation see acre.
Persicaria: literally, "like a peach," from the resemblance of the leaves.

The Pre ferred Habitat: damp ground.
The Plant: generally erect or nearly so, one and one half feet to two feet high; the stem simple or much branched; with no hairs or with very tiny ones, kneed; the sheaths at the knees fringed with short bristles.

The Leaves: alternate; lanceolate or linear-lanceolate; one inch to six inches long; roughish; tapering to a point at both ends; on short stems; conspicuously dotted with glands and usually having a dark blotch near the centre; the margins entire or having the appearance of having been eaten.

The Flowers: tiny, in spikes or racemes which are one half inch to two inches long, petalless, the coloured part being the calyx.

The Fruit: achenes, smooth, shining.
This is very closely allied to the pennsylvanicum, but the flowers are crimson-pink or deep magenta, instead of "pink or white-green"; the leaves are rough and generally marked with a darker green blotch near the centre.

## POLYGONACEE

POLYGONACE $A$
Polygonum sagittatum, L.

| Red-purple, pink | Arrow-leaved Knotweed, <br> to nearly white |
| :---: | :--- |
| Tear-thumb, |  |
| August-September | Arrow-leaved Tcar-thumb, <br> Scratch-grass. |

Polygonum: for derivation see acre.
Sagittatum: Latin for arrow-shaped.
The Preferred Habitat: damp ground.
The Plant: low-lying, or climbing over other plants, sometimes two feet long; the stem light green or coloured with red, slender, weak, four-angled with more or less re-curved prickles on the angles.

The Leaves: alternate; lanceolate, sagittate, or oblongsagittate; one half inch to three inches long; the mid-ribs or the lower surfaces prickly; obtuse or acute at the apex; the lower petioled; the upper almost sessile; the petioles also with prickles, slightly rough on the margins; the sheaths fringed at the base by a few, bristle-like prickles.

The Flowers: small, in rather dense terminal heads or racemes.

The Fruit: achenes, smooth and shining.

Another weak-stemmed and trailing representative of the Family, and another easy to identify. Its flowers may vary from deep pink to a cream white, but its leaves are always sagittate and its soft prickles always, as it were, turned the wrong way. This may be a provision of nature to spread the seeds, for the prickles, with their tin hooks, catch on the fur and wool of animals and the clothes of human intruders.

## BUCKWHEAT FAMILY

POLYGONACEA

## BUCKWHEAT FAMILY

Polygonella articulata, (L.) Meisn.

Deep rose colour to white
July-October

Sand Knotweed, Coast Jointweed, Sand-grass.

Polygonella: a diminutive for polygonum, Greek for many joints.
Articulata: Latin for jointed.
The Preferred Habitat: very sandy soil, or even beach sand.

The Plant: erect, or sometimes diffusely spreading, six inches to eighteen inches high, simple or branched; the stem slender, wiry, grooved, and slightly angled, having a bloom; the sheaths slightly expanded at the top.

The Leaves: fall early, when present alternate; linear; stemless; the margins so rolled backwards that the leaves appear thread-like.

The Flowers: small, numerous, in very slender racemes, on stems; petals lacking; the parts of the calyx with a dark mid-rib.

The Fruit: achenes, brown, smooth, and shining.
A feathery plant, when in bloom, whose delicately tinted whitish flowers are frequently mistaken for "white heather." But the knees of the leafless stem and the absence of petals are marks by which one can place it in the Buckwheat and not in the Heath Family.

Twenty-three other members of the Buckwheat Family have been reported.

Chenopodium album, L.

| White | Lamb's Quarters, Meldweed, <br> Jigweed, |
| :--- | :--- |
| June-September | Beaconweed, |
|  | Smooth Pigweed, Fat-hen, |
|  | White Goosefoot, |

Chenopodium: from Greek meaning a goosefoot, in allusion to the shape of the leaves.
Album: Latin for white.
The Preferred Habitat: roadsides and neglected fields.
The Plant: erect, one foot to five feet high, with many branches of equal length; the branches ascending; the stem often dark-streaked, grooved at least when dry.

The Leaves: alternate; ovate or the upper lanceolate or linear-lanceolate; one to four inches long; above light green; beneath white; nearly acute or somewhat obtuse at the apex; narrowed at the base; on petioles often as long as the blade; dentate; irregularly lobed, or the upper entire.

The Flowers: very small, crowded in terminal and axillary spikes.

The Fruit: small and bladder-shaped.
An almost repulsive weed. Its colour-tone is an ashygreen, its "goose-foot" leaves are thick, the spikes of inconspicuous flowers characterless. A swift grower, it rapidly absorbs food and moisture needed by the crops, and, further, it is a frequent host for mildews and rust.

## GOOSEFOOT FAMILY

However, there are redeeming qualities. For instance, the young plants make excellent greens and from the seeds is extracted a unique oil that is valuable medicinally.

CHENOPODIACEA
GOOSEFOOT FAMILY
Atriplexpatula, L. var. hastata, (L.) Gray.
Green
Halberd-leaved Orach.

## August-September

Atriplex: from Greek for the Orach.
Patula: from Latin meaning spreading.
Hastata: from Latin for halberd-shaped.
The Preferred Habitat: waste places and brackish marshes.

The Plant: erect or nearly so, one foot high or taller; the stem branched, pale green, scurfy.

The Leaves: mostly pale green; alternate or some of them opposite; variable but at least the lower broadly halberd-shaped, the basal lobes divergent; acuminate at the apex; usually narrowed at the base; slender-petioled; often coarsely and irregularly toothed.

The Flowers: of two kinds, the staminate and pistillate sometimes united and sometimes separate, but growing in rather slender spikes.

The Fruit: called an utricle (that is one-seeded and bladder-shaped).

An unalluring pale green plant of the shores and brackish meadows. If it is noticed, it is easy to identify by its short and slender spike of tiny green flowers and by its halberd-shaped leaves.

## CHENOPODIACEA

CHENOPODIACEA
Salicornia europaza, L.
July-September
Samphire,
Salt-marsh Samphire.
Salicornia: from Latin for salt and a horn.
Europaa: Latin for European.
The Preferred Habitat: salt marshes.
The Plant: erect, six inches to one foot high, simple or branched; the branches slender, ascending; both stem and branches fleshy and jointed, turning bright red in the autumn.

The Leaves: tiny scales at the joints.
The Flowers: sunken, three to seven together in narrow, terminal spikes in the axils of the upper scales.

The Fruit: very small, bladder-shaped.
The chief glory of the salt marshes in the fall is the red Samphire. For stretches on stretches, these stiff, muchjointed, low spikes arise, flaming red.

CHENOPODIACE $\mathbb{E}$
GOOSEFOOT FAMILY
Salsola Kali, L.
July-September Common Saltwort, Prickly-glasswort, Kelpwort, Salt-grape, Sea-grape, Tumbling Thistle, Sea-thrift.

Salsola: derivative of a Latin word for salty, in allusion to the saline marshes, the habitat of most of the species. Kali: an Arabic name.

The Preferred Habitat: beach sand.

## GOOSEFOOT FAMILY

The Plant: stiff and prickly; dark green; somewhat erect or spreading; ten inches to eighteen inches high; branched; the branches freely divergent; the stem hairless or often with short, stiff hairs.

The Leaves: alternate; lanceolate; one inch long or less; fleshy; the mid-vein at the apex continuing into a yellowishgreen prickle; the leaf swollen at the base; entire.

The Flowers: very small, single, in the axils of the leaves.
The Fruit: small and bladder-shaped.
In the summer only a dark green, prickly plant of the sea beaches, but in the fall, a glory of flaming red.

Thirteen other members of the Goosefoot Family have been reported.

Spergularia rubra, Presl.

## Crimson-pink

June-September

Spergularia: a derivative of Spergula, which see for derivation.
Rubra: Latin for red.
The Preferred Habitat: sandy places.
The Plant: prostrate or partially erect, two inches to six inches high; the stem slender, hairless or with soft, short hairs.

The Leaves: opposite; often clustered in the axils; linear; one half inch long or less; scarcely fleshy; acute at the apex; entire.
The Flowers: very small, solitary in the axils, bright pink to light purple.

The Fruit: a capsule.
A seemingly insignificant weed or weeds (for they grow in such dense clumps), small-leaved and lying almost flat on the ground, but having crimson-pink flowers that demand attention.

CARYOPHYLLACE $\mathbb{E}$
PINK FAMILY
Spergula arvensis, L.

## White

## Summer

Corn-spurry, Poverty-weed, Cow-quake, Sandweed, Pink-purse, Spurry, Pine-cheat, Yarr.

Spergula: from Latin to scatter, because the plant turns its capsules upside down to disperse the ripe seed. Arvensis: Latin, belonging in a field.

## PINK FAMILY

The Preferred Habitat: roadsides and neglected fields.
The Plant: erect or partially so, six to eighteen inches high, branching near the base, without hairs or with scattered, short, soft hairs.

The Leaves: numerous; whorled; narrowly linear; without hairs or with scattered, short, soft hairs on both surfaces; acute at the apex; entire.

The Flowers: very small, numerous, in loose cymes, turning brown early.

The Fruit: a capsule.
A bright green weed of many stems (for it branches profusely near the ground) with numerous fine leaves and plenty of minute white flowers. In spite of its multitudinous parts, the weed is insignificant looking, but it may do much harm in a field for being so prolific, it easily smothers the young growth of carrots or turnips, clover or grasses.

CARYOPHYLLACE $\notin$

## PINK FAMILY

Arenaria peploides, L.
White

## June-August

Sea Chickweed, Sea-purslane, Sea Pimpernel, Sea-beach Sandwort.

Arenaria: derived from Latin for sand, in allusion to the habitat.
Peploides: from Latin, in allusion to the arrangement of the leaves, like a peplos.

The Preferred Habitat: beach sand.
The Plant: low, three inches to ten inches high, simple or branched or tufted at the base; the stems stiff, light green, fleshy, hairless.

## CARYOPHYLLACEA

The Leaves: opposite; fat; ovate; shiny and without hairs on either surface; acute or with a small, short, abrupt tip at the apex; stemless and partly clasping at the base; entire.

The Flowers: (seldom found) generally grow in the axils of the leaves, on short stems; the petals five, entire or sometimes barely notched, rarely lacking.

The Fruit: a pod, globular, depressed, with a pointed peak, distinctly grooved.

The Nantucket beach plants, few in number, are fortunately blessed with strong characteristics and are thus easy to identify. This is that light green, fleshy plant that grows in circular mats on the shore; its short, and stout branches stand stiff and erect and hold the sand blown among them until miniature dunes are formed. The flowers are seldom seen, the plant is extremely uninteresting, but its yellow-greenness does give life to the beaches.

CARYOPHYLLACE $\boldsymbol{E}$
PINK FAMILY
Stellaria media, (L.) Cyrill.

| White | Common Chicliweed, |
| :--- | :--- |
| April-October | Starwort, |
|  | Starweed, |
|  | Winterweed, |
|  | Birdweed. |

Stellaria: from the Latin for star, in allusion to the starshaped flowers.
Media: from Latin signifying intermediate.
The Preferred Habitat: dry, sandy soil.
The Plant: weak, tufted, semi-prostrate, much branched, without hairs except for a line along the stem and branches, on the sepals, and sometimes on the margins of the petals.


The Leaves: opposite; ovate or oval; one and one half inches long or less; acute or rarely obtuse at the apex; the lower petioled and often heart-shaped at the base; the upper stemless; entire.
The Flowers: very small, in terminal, leafy cymes, or, solitary in the axils, on slender stems, close early and open late or not at all in cloudy weather.

The Fruit: a capsule.
This is the common Chickweed, of slight and delicate build, with a weak and low-lying stem and small, pointed, light-green leaves. The minute flowers have five white petals, so deeply cleft that they appear as ten. As someone has observed, "In spite of its frail appearance, this plant is probably the hardiest and most persistent weed on earth."

CARYOPHYLLACE $E$
PINK FAMILY
Cerastium arvense, L.

## White

## April-July

Cerastium: Greek, meaning a thorn, in allusion to the shape of the pod.
Arvense: Latin, belonging in a field.
The Preferred Habitat: dry, sandy soil.
The Plant: densely tufted, four inches to ten inches high; the flowering stem simple or sparingly branched, with short, downy hairs or nearly hairless.
The Leaves: opposite; linear-oblong, linear, or narrowly lanceolate; with few, short, soft hairs on both surfaces; acute at the apex; narrowed at the base; entire; sessile.

The Flowers: few, at the top of the stem in a cyme.
The Fruit: a pod

## CARYOPHYLLACEA

A dainty arrival of springtime. There is a tufted appearance to the numerous, fine leaves. The white flowers, with broad, deeply cleft petals open in sunshiny weather. Although pretty, it is a frequent garden weed. On the Commons, it is so prolific that sheets of the starry flowers, growing with Bird's Foot Violet (Viola pedata), cover the ground.

CARYOPHYLLACE $E$
PINK FAMILY

Cerastium vulgatum, L.

## White

May-September
Cerastium: for derivation see arvense. Vulgatum: Latin for common.

The Preferred Habitat: yards and lanes.
The Plant: erect or ascending, six inches to eighteen inches high; the stem sticky, with short, soft hairs.

The Leaves: basal and stem opposite; oblong to spatulate; acute or obtuse; entire.

The Flowers: small, loosely clustered; with leaf-like bracts; petals two-cleft; sepals short.

The Fruit: a capsule, borne on fairly long pedicels.
A bothersome, low-growing weed, growing in dense clumps in gardens and fields, that has clammy stems and numerous oblong leaves. The small, starry white flowers are somewhat wheel-shaped. They open only in the brightest sunshine, a fact that has introduced the plant to the ranks of Nature's weather-prophets.

Agrostemma Githago, L.

| Magenta | Corn-campion, <br> July-September | Corn-cockle, |
| :--- | :--- | :--- |
| Corn-mullen, | Crown-of-the-field, |  |
|  | Corn-pink, | Oullen Pink, |
|  | Old-Maid's-pink. |  |

Agrostemma: Greek for a field and a crown in allusion to the beauty of the flower.
Githago: classical Latin name for the Corn-cockle.
The Preferred Habitat: cornfields and cultivated ground.

The Plant: erect, one foot to two feet high; the stem simple or sparingly branched, clothed throughout with soft, whitish, flattened hairs.

The Leaves: opposite; linear, tending to lanceolate; clothed on both surfaces with soft hairs; tapering to an acute apex; more or less narrowed at the base; stemless; entire.

The Flowers: on stems three inches to eight inches high; the calyx ovoid; its five sepals, with ten ribs, much exceeding the petals; the five petals overlap, slightly notched on the margin, paler toward the centre and spotted with black.

The Fruit: a capsule, with numerous black poisonous seeds.

A really beautiful weed, bearing large, wheel-shaped flowers, encircled and out-distanced by the slender, green sepals.

Although it is an attractive plant to the lay person, it is much disliked by the farmer, for a very little cockle is sufficient to cut the grade of the wheat and the seeds when ground with the wheat are poisonous to poultry.

## CARYOPHYLLACEA

It has been proven that "a small quantity of bread that contains these seeds if eaten regularly will produce a peculiar and chronic disease." The plant also contains a poisonous ingredient, which is easily soluble in water and when inhaled produces violent sneezing.

CARYOPHYLLACE $\boldsymbol{E}$ PINK FAMILY

Silene latifolia, (Mill.) Britton \& Rendle.

| Whitish | Bladder Campion, | Bubble Poppy, |
| :--- | :--- | :--- |
| July-August | Catchfly, | Sprattling Poppy, |
|  | Devil's Rattle-box, | Spider's Flower, |
|  | Rattle-box, | White-hen, |
|  | Bull-rattle, | Sea-pink, |
|  | Snappers, | Bird's-eggs, |
|  | Cow-bell, | Behen, |
|  | Knap-bottle, | Maiden's-tears. |
|  | White-bottle, |  |
|  | Frothy Poppy, |  |

Silene: derived from the Greek for saliva, from the viscid discharge on the stem and calyx of many species. The popular English name, Catchfly, refers to the same peculiarity.
Latifolia: Latin meaning side-leaves.
The Preferred Habitat: roadsides and waste places, near dwellings.

The Plant: erect, six inches to eighteen inches high, branched from the base, with few leaves; the stem smooth, with a bloom.

The Leaves: opposite; usually curving; lanceolate to oblong; those at the top smaller; the lower larger and often spatulate; hairless on both surfaces; acute at the apex; entire; mid-rib somewhat prominent.

The Flowers: in a loose compound corymb, on hairless peduncles; the calyx inflated, cylindrical, with purple


SAPONARIA OFFICINAIIS

## PINK FAMILY

markings on its whitish-green surface. The petals five, veined; the pistil and stamens quite prominent; the stamens dark, the pistil white.

The Froit: a capsule.
This plant just escapes being inconspicuous and uninteresting, by virtue of its sac-like whitish-green calyx, with purplish lines and its five pure white delicate petals.

Saponaria officinalis, L.
CARYOPHYLLACE $E$

| Pale magenta | Bouncing-bet, <br> pink to white <br> Bunch-of-keys, <br> June-October | Soapwort, <br> (localfordouble |
| :--- | :--- | :--- |
|  | Sorm) | Ladder-by-the-Gate, |
|  | Bruisewort, | London-Pride, |
|  | Old Maid's Pink, | Mock-gilliflower, |
|  | Soap-gentian, |  |
|  | Boston Pink, | Wild Sweet William |
|  | Chimney Pink, | Woods Flax, |
|  | Hedge Pink, | World's-wonder. |
|  | Fuller's Herb, |  |

Saponaria: from the Greek for soap, because the plant's mucilaginous juice makes a lather with water.
Offcinalis: A Latin form that means 'belonging in a work shop" because the plant was known medicinally in the workshop of the chemists.

The Preferred Habitat: roadsides and waste grounds.
The Plant: erect, one to two feet high, sparingly branched; the stem leafy, stout, without hairs.
The Leaves: opposite; ovate or oval; two inches to three inches long; about one inch wide; without hairs; acute at the apex; narrowed at the base into a broad, short petiole; entire; strongly three ribbed.
The Flowers: variable in colour and in number of petals. They are in densely terminal corymbs with numerous small

## CARYOPHYLLACE $\notin$

lanceolate bracts or floral leaves. The calyx tubular, about three quarters of an inch long, faintly veined.
The Froit: a capsule, shorter than the calyx.
A dweller by the roadsides or in neglected gardens, it never strays far from people. Touched by the dew of evening, the flowers emanate profusely their sweet, oldfashioned odour. In the day-time, the chief charm lies in the colour of these pretty, but variable flowers, that are sometimes deep pink and sometimes actually white. A further variation is that on some plants the petals are five and on others six. There even occurs a form that is fringed and double and this is particularly pretty.

The plant has its uses, some of which are more practical than others. If the already slightly inflated calyx is blown out still more, it will snap satisfactorily on the hand! From the mucilaginous stem, leaves, and young rootstocks, when crushed in water, a sudsy solution can be made for washing silks and woolens. Such a solution in pioneer days, was undoubtedly used as a soap substitute. The root had its place, also, in the family medicine chest, and a valuable drug for the treatment of rheumatism is still made from it. Another application is the concoction of a puree, from the young leaves.

CARYOPHYLLACE $E$
PINK FAMILY
Dianthus Armeria, L.

Crimson-pink or magenta
June-September

Deptford Pink, Grass Pink, Carnation.

Dianthus: Greek, meaning Jove's own flower. Armeria: Latin name of the Thrift.

The Preferred Habitat: dry, sandy soil, in fields and along roadsides.

The Plant: erect, six inches to eighteen inches high; the stem simple or sparingly branched toward the summit, covered with fine, soft hairs.

## DIANTHUS ARMERIA



## PINK FAMILY

The Leaves: opposite; linear; one to three inches long; hairy on both surfaces; acute or the lower obtusish at the apex; narrowed at the base; entire.

The Flowers: at the top of the stem in ones and fours, although only one is usually open at a time; petals with whitish dots.

The Fruit: a capsule.
A low, attractive plant, whose stem, although branched at the top, is stiff like an upright stick. The leaves are few and narrow. Its charm lurks in the wide-open flowers. Shadowed by a fence where the plants grow the highest, these look very pretty and pink. On their spreading petals glistens a white powder, like dew.

Unfortunately the flowers are apt to close towards the end of the day, not to reopen, but the buds come out well in water.

Eleven other members of the Pink Family have been reported.

Castalia odorata, (Ait.) Woodville and Wood.

| White | Water Lily, <br> Pond Lily, | Water Cabbage, <br> Toad Lily. |
| :--- | :--- | :--- |
| June-September | Water Nymph, |  |

Castalia: Greek meaning a mythical fountain on Parnassus, sacred to Apollo and the muses.
Odorata: Latin for scented, in allusion to the sweet and heavy fragrance of the flowers.

The Preferred Habitat: muddy bottoms of ponds.
The Plant: from horizontal roots which are twined in the mud, simple or with a few branches.

The Leaves: floating; four inches to twelve inches wide; without hairs on the upper surface, beneath crimsonpurple, with few or many short, soft hairs; deeply heartcleft at the base; on long, hairless, dark-coloured stems; margins entire.

The Flowers: fragrant, opening early in the morning and closing in the afternoon, large, cup-shaped; three inches to six inches broad; single in the axils of the leaves; petals numerous, in several series, passing gradually into the stamens; anthers bright yellow, the outer stamens on longer filaments, having broader anthers.

The Fruit: a capsule, covered with the bases of the petals, ripening under water.

This is the large water lily, so familar to all, with floating leaves supporting white cups that shield truegolden stamens at their centre. "The flowers," Mrs. Owen says, "reach a greater size than in the centre of the State;

## WATER LILY FAMILY

remarkably large specimens are sometimes found in the shallow ponds nearly dried up by the summer heat."

When gathering, it pays to take the buds, for floated in water, they will reopen for two or three successive days. The young leaves also keep fresher than the older ones. A very artistic arrangement can be made in a deep and wide plain glass dish, if the stems are so twined that the leaves float and the pure white flowers open above them.

To discover what makes the leaves float, an interesting experiment is to place under the microscope a shaving of the skin from the underneath side of the leaf, when the air cavities may be seen.

In short, the "atmosphere" of the flowers could not be better suggested than by Emerson, "If eyes were made for seeing, Beauty is its own excuse for being." But the older Nantucketers found more than mere beauty. They took a homely part, the root, and from it made a demulcent, to be used as a mouth-wash and gargle.

Two other members of the Water Lily Family have been reported.

## RANUNCULACEA

Ranunculus acris, L.

| Yellow | Tall Buttercup, | Butter-daisy, |
| :--- | :--- | :--- |
| May-August | Tall Crowfoot, | Goldcup, |
|  | Meadow Buttercup, | Ringcup, |
|  | Meadow Crowfoot, | Horse-gold, |
|  | Gold-knaps, | Bachelor Buttons, |
|  | Butter-rose, | Blister-plant, |
|  | Butter-cresses, | Blister-flower. |

Ranunculus: Latin diminutive for a little frog, applied by Pliny to these plants, because the water forms grow where frogs abound.
Acris: Latin for bitter, the juice being so acrid as to draw blisters when applied to the skin.

The Preferred Habitat: damp ground.
The Plant: from a fibrous root, erect, eighteen inches to three feet high; the flowering stem erect, branched above, hairy or sometimes practically hairless, dark green.

The Leaves: some, tufted at the base, three to seven divided, the divisions cleft into numerous narrow lobes, stemless, mainly acute; upper leaves merely three-parted, short petioled.

The Flowers: numerous, about one inch broad, the corolla slightly cup-shaped; the five petals two or three times the length of the five sepals; sepals acute; stamens clustered and prominent.
The Fruit: achenes.
This Buttercup of the fields and meadows has three to seven slashed, dark green leaves (the divisions being stemless), which are further cut and slashed very decoratively, "only the upper ones showing the simple, three-parted

## RANUNCULACEÆ

figure," and open, deep yellow cup-shaped flowers, about one inch broad, with five glossy, overlapping petals, holding clusters of yellow stamens at the base. The fact that the petals tend to whiten when fading is due to oxidation.

RANUNCULACEE
CROWFOOT FAMILY
Ranunculus bulbosus, L.
Yellow
May-July

Bulbous Croufoot, Bulbous Buttercup, English Kingcup, Frogwort, St. Anthony's Turnip.

Ranunculus: for derivation see acris.
Bulbosus: Greek for a bulbous root.
The Preferred Habitat: roadsides and fields.
The Plant: from a bulbous, thickened base, erect, six inches to eighteen inches high; the stem hairy.
The Leaves: mostly basal; these variously lobed and cleft, the lobes all wedge-shaped, usually three-divided, with the terminal divisions on a long stem, the side divisions stemless or nearly so; toothed.

The Flowers: about one inch broad, on furrowed stems; petals round, wedge-shaped at the base, much longer than the sepals.
The Fruit: achenes.
Ranunculus bulbosus is also a characteristically formed buttercup. It is a small plant, growing in dry places (roadsides and fields), from a bulbous base or root. Its leaves are "deep green, decoratively cut and slashed, three-divided, each division three-lobed." The flowers are large, golden or deep yellow and about one inch across.

From this plant is made a drug, valuable in the treatment of neuralgia.

## CROWFOOT FAMILY

RANUNCULACEE
CROWFOOT FAMILY
Ranunculus Cymbalaria, Pursh.
Yellow
Seaside Croufoot.
Summer
Ranunculus: for derivation see acris.
Cymbalaria: Greek for hollow of a vessel.
The Preferred Habitat: salt marshes.
The Plant: from fibrous roots, low, spreading by root runners; the stem without hairs.

The Leaves: mostly basal, clustered at the root and on the joints of the runners; somewhat oval, tending to heartshaped; on slender stems; with very round teeth.

The Flowers: one to seven, about one third of an inch wide, borne in a dense corymb on stems, which are sometimes six inches long; petals five to eight.

The Fruit: achenes.
As you hold in your hand long runners of this creeping species, you notice that the small round flower headsgreen, yellow, or light dirty-brown, in accordance with the age of the tiny flowers-top the short and slender stems, which are smooth and leafless. At the base of the stems or at the joints of the runners, are the small, broad leaves, round-toothed and heavily veined.

When brought into the house, this plant will actually grow in water in a shallow dish.

Ranunculus repens, L.

Yellow, rarely white

May-September

Creeping Buttercup, Gold-balls, Ram's-claws, Sitfast, Shotted-leaf Butter-cup.

## RANUNCULACEE

Ranunculus: for derivation see acrıs. Repens: Latin for creeping.

The Preferred Habitat: damp ground, by roadsides, and in waste places.

The Plant: spreading by runners and forming large patches; the stem generally hairy, but sometimes only slightly so.

The Leaves: mostly basal; three-divided, all divisions or the end ones only petioled; ovate; acute at the apex; wedge-shaped at the base; often blotched or white-variegated.

The Flowers: nearly one inch broad; the five petals obovate, much longer than the sepals.

The Fruit: achenes; the seed vessel tipped with a short, stout spine.

This is that creeping or spreading Buttercup that grows on long straight stems and has frequently white-variegated or spotted leaves, and large deep-yellow flowers nearly an inch across.

RANUNCULACEE
CROWFOOT FAMILY
Anemone quinquefolia, L.

| White or tinted with | Wood Anemone, | Wood-flower, |
| :--- | :--- | :--- |
| pink | Five-leaved Anemone, | May-flower, |
|  | Wind-flower, | Nimble Weed, |
| May-June | Wild Cucumber, | Herb Trinity. |

Anemone: the ancient Greek and Latin name, a corruption from the Semitic name for Adonis, from whose blood the crimson-flowered anemone of the Orient is said to have sprung.
Quinquefolia: Latin for five-leaved.
The Preferred Habitat: thickets and open woods.

## CROWFOOT FAMILY

The Plant: from underground stems; the flowering stem four inches to nine inches high, simple, nearly hairless.

The Leaves: basal; five-parted, the divisions oblong or wedge-shaped, long-petioled; the upper leaves three to five-parted, the divisions variously cut and lobed, acute.

The Flowers: solitary, one inch broad; sepals four to seven, obovate or oval, tinged with purple outside, resembling petals, which in reality are lacking.

The Fruit: achenes.
It hardly seems as if the delicate, white flowers and slender stems of this dainty plant were sufficiently robust to cope with the rigours oi early spring. But, in truth, such early-comers need no strong qualities of resistance, for cold is easier to withstand than evaporation in strong heat; there are but few plant enemies then about and in the absence of many rivals, white is sufficiently strong to attract the bees.

Eight other members of the Crowfoot Family have been reported.

Sassafras variifolium, (Salisb.) Ǩtze.

Greenish-yellow
April-May

Sassafras Tree, Ague Tree, Cinnamon Wood, Smelling Stick, Saloop.

Sassafras: the popular Spanish name.
Varifolium: Latin to signify the variable form of the leaf.
The Preferred Habitat: groves.
The Tree: sometimes fifteen feet high, the bark rough in irregular ridges, aromatic; the young twigs yellowishgreen becoming hairless.

The Leaves: alternate; persistent; oval or mitten shaped or three-lobed to about the middle, and often as wide as long; obtuse at the apex; narrowed at the base; petioled; entire; pinnately veined. The twigs and foliage all very mucilaginous.

The Flowers: in corymbed racemes, appearing with the leaves, staminate and pistillate; the sterile kind with nine stamens, arranged in three rows; the fertile with six stamens.

The Fruit: an oblong, blue drupe.
A large or small tree, as the environment may dictate, with rough bark irregularly ridged, and yellowish-green twigs. It has two easy marks of distinction-the one, the "mitten" like leaves and the other, the aromatic taste, particularly of the young twigs. This taste is due to the presence of an oil, which is widely used as flavouring, and is also valuable medicinally.

## Chelidonium majus, L.

Deep yellow
May-September

Great Celandine, Swallow-wort, Devil's Milk, Kill-wort, Felon-wort.

Chelidonium: Greek for swallow. It is said that the swallows come with the first opening flower and depart as the last bloom fades.
Majus: Latin for larger.
The Preferred Habitat: dry roadsides in town.
The Plant: one foot to two feet high, branched; the stems with short, soft hairs, exuding orange-yellow juice, when broken.

The Leaves: alternate; thin; one to two pinnately divided; the parts ovate or obovate, toothed or lobed; with a bloom beneath; on stems that are often swollen at the base.

The Flowers: less than an inch broad; in small umbels, in the axils of the leaves; the four petals rounded; sixteen to twenty-four stamens.

The Fruit: a hairless capsule, tipped with the persistent style and stigma (the tiny knob).

A common weed, found usually about town. The light green, lustreless leaves are rather decoratively lobed. The small, yellowish flowers, with frail petals, have a prominent green style and many yellow stamens. Some at least are still in bloom when the magenta-coloured seed-vessels form thin lines, tipped with long and persist-

## POPPY FAMILY

ent styles. When the stem is broken, there oozes forth a strong, orange-yellow juice, bitter and acrid. Once it was thought that from this juice could be made a drastic purge, "which was a sure cure for warts, corns, pimples, boils of every kind, even painful felon." From this plant is still made a valuable drug.

## Draba verna, L.

## White

March-May

Whitlow Grass, Shad-flower.

Draba: Greek name applied to some cress. Verna: Latin signifying spring.

The Preferred Habitat: gardens and roadsides.
The Plant: erect, one inch to five inches high; the leafless flowering stems numerous, with very few hairs.

The Leaves: alternate; oblong, spatulate, or oblanceolate; one half inch long or more; with short, soft hairs or nearly smooth; acutish at the apex; large at the base; roundtoothed or nearly entire.

The Flowers: very small, on disproportionately long stems, which are still longer in fruit; petals four; sepals four, falling early; six stamens of irregular length.

The Fruit: a pod.
A tiny weed of gardens and roadsides, coming in the early spring, its small, white flowers on bare stems from a basal rosette of slender leaves. When the plant is in seed, the brownish seed pod, rising from the dusty ground, is an excellent example of color protection.

This is an interesting species since it is an aggregate of many closely related forms which seldom come to maturity because of their cleistogamous or closed flowers.

It is to be distinguished from the Lepidium (Peppergrass) and from the Capsella (Shepherd's Purse) by its much smaller, almost entire leaves, of which ail are basal.

## MUSTARD FAMILY

CRUCIFERA MUSTARD FAMILY

Lepidium virginicum, L.

## White

## June-November

Wild Peppergrass, Tongue Grass, Bird's Pepper.

Lepidium: from Greek, meaning a small scale, in allusion to the resemblance of the seed-pod to a scale.
Virginicum: Latin for Virginian.

The Preferred Habitat: gardens, neglected fields, roadsides.

The Plant: erect, six inches to fifteen inches high; the stem branched, hairless.

The Leaves: basal or those of the stem alternate; obovate, lanceolate and oblong-linear; without hairs or with a few, short, soft hairs; obtusish or blunt at the apex; narrowed at the base; with a very short stem or sessile; somewhat pinnatifid (generally with a large lobe and numerous small ones at the sides) ; dentate or round-toothed.

The Flowers: very small, on very slender stems; four petals; four sepals which fall early; six stamens of irregular length.

The Fruit: a flat, orbicular pod.

Another unwelcome invader of the gardens or neglected fields, from which it often escapes to the roadsides. In general appearance, it is similar to the Capsella Bursapastoris (Shepherd's Purse), but may be distinguished from that in two ways: first by the leaves, which are narrower and more nearly entire, and, secondly, by the seed-vessels, which are round and unscalloped.

## CRUCIFERA

CRUCIFERAE
MUSTARD FAMILY
Capsella Bursa-pastoris, (L.) Britton

| White | Shepherd's Purse, | St. James'-weed, |
| :--- | :--- | :--- |
| May-November $\quad$ Shepherd's Bag, | Pick-purse, |  |
|  | Shepherd's Pouch, | Ladies'-purse, |
|  | Pichpocket, | Witch's Pouch, |
|  | Case-weed, | Shovel-weed. |
|  | Mother's-hearts, |  |

Capsella: Latin diminutive for a box.
Bursa-pastoris: Latin for a shepherd's wallet.
The Preferred Habitat: gardens, neglected fields, roadsides.

The Plant: from a long, deep root, erect, six inches to twenty inches high; the stem mainly without hairs above, below with short soft hairs.

The Leaves: (stem) few, alternate; two inches to five inches long, lanceolate, entire or round-toothed; (the basal) forming a rosette, larger, more or less lobed or pinnatifid, rarely entire.

The Flowers: very small, on slender stems; four petals; four sepals, which fall early; six stamens of unequal length.

The Fruit: a pod, heart-shaped.
For various reasons, one should be able to identify this weed, which as Ada Georgia points out, is, next to chickweed, the most common in the world, because it is so prolific and the seeds have a long vitality. Also it is harmful, for it absorbs much fertility from the soil, and, further, it often harbours a fungus disease, which is ruinous to cabbage, cauliflower, turnips, and radishes, and will infect the soil, where these might otherwise be cultivated.

From this plant is made a valuable drug.

> Cakile edentula, (Bigel) Hook.

Pale purple-pink
Sea Rochet.

## July-September

Cakile: an old Arabic name.
Edentula: Latin, meaning without teeth.

The Preferred Habitat: beaches.

The Plant: spreading or erect; the stem bushily branched, very fleshy and tough, the lower branches spreading, the central ones erect.

The Leaves: alternate; oblanceolate or obovate; three inches to four inches long; without hairs on either surface; rounded at the apex; narrowed at the base; wavy-toothed or lobed.

The Flowers: numerous, in a raceme, the uppermost often yet unopened, when the flowers have gone to seed; the corolla wheel-shaped; four petals, more than twice the length of the sepals; the sepals short and inconspicuous, falling early.

The Fruit: a silicle, the upper joint slightly longer than the lower, narrowed into a beak above; or, when young, the joints nearly even.

A clean and sturdy plant of the beaches, with a peculiarly smooth appearance of the fleshy stems and thick leaves. In spite of its stoutness and awkwardness, the plant, at least when in bloom, is saved from being unattractive by the colour of the pale purple-pink wide-open flowers, that appear at the ends of the branches.

# CRUCIFERA 

> Raphanus Raphanistrum, L

| Pale yellow fading to white | Wild Radish, |
| :--- | :--- |
| May-October | Jointed Charlock, |
|  | Black Mustard, |
|  | Wild Mustard, |
|  | White Charlock. |

Raphanus: Greek meaning "to appear quickly" in allusion to the rapid germination of the plant.
Raphanistrum: from Greek signifying quick-appearing, in allusion to its rapid germination.

The Preferred Habitat: neglected fields, roadsides.
The Plant: erect, one foot to two and one half feet high, freely branching; the stem with scattered short, soft hairs on the lower part, or rarely hairless throughout.

The Leaves: basal or those of the stem alternate; the basal and lower deeply lyrate or pinnatifid, with a large lobe at the end, and four to six pairs of successively smaller ones; four inches to eight inches long; the upper, few, small, oblong; all thin and round-toothed.

The Flowers: small, purplish veined, on stems which become very long; four petals; four sepals, which fall early.

The Fruit: a pod, one inch long or more, nearly cylindric; when fresh, constricted between the seeds, like a series of beads.

The Wild Radish is a straggly plant that springs up in neglected fields, by roadsides, or even, alas! on lawns, and has small, but staring flowers with pale yellow petals that soon fade to white.

Brassica nigra, (L.) Koch.
Yellow
June-October
Black Mustard, Charlock, Brown Mustard, Cadlock, Red Mustard, Warlock, Brassica: Latin name of the cabbage. Nigra: Latin for black.

The Preferred Habitat: waste ground, roadsides, an 1 neglected fields.

The Leaves: alternate; the uppermost lanceolate or oblong; entire; the upper pinnatifid or round-toothed; the lower deeply pinnatifid, with one large lobe at the end and two to four smaller ones at the sides, round-toothed.

The Flowers: small, on slender stems; petals four; sepals four, both falling early; stamens usuallysix, of uneven length.

The Fruit: a pod.
A large and showy plant, that brightens old fields and dumps and roadsides with its small light yellow flowers. On the lower stems are numerous large leaves, but the flowering branches are almost bare. It is not an ungraceful plant and makes really decorative bouquets, only the early dropping of the petals causes trouble.

Out of the black seeds the condiment is manufactured. The plant is also used in medicine.

CRUCIFERA

## MUSTARD FAMILY

Barbarea vulgaris, R. Br.

Bright yellow
April-June

Common Winter Cress, Yellow Rocket, Herb of St. Barbara.

Barbarea: anciently called Herb of St. Barbara. Vulgaris: Latin for common.

## CRUCIFERA

The Preferred Habitat: low grounds and roadsides.
The Plant: erect, one foot to two feet high; the stems tufted.

The Leaves: scattered; at least the lower pinnatifid, the end division much larger than the lateral, all oval or obovate; upper leaves toothed or pinnatifid, sessile or nearly so or sometimes clasping.

The Flowers: four petals slightly in the form of a cross; six stamens of which four are prominent.

The Fruit: a pod.
This, the prettiest and the daintiest of the mustards described here, is characterized by the pleasing contrast of colouring of the spikes of small yellow flowers with the dark green and shining leaves. The flowers have the four petals as is seemly in this Family and the leaves are properly cut.

Twenty two other members of the Mustard Family have been reported.

Sarracenia purpurea, L.

| Dull dark red or green | Pitcher-plant, | Forefather's |
| :--- | :--- | :--- |
| with variations | Side-saddle | Pitcher, |
|  | Flower, | Foxglove, |
| May-June | Huntsman-cup, | Small-pox-plant, |
|  | Eve's-cup, | Adam's-cup, |
|  | Indian Pitcher, | Forefather's-cup, |
|  | Indian-cup, | Whippoorwill's- |
|  | Fly-trap, | boots, |
|  | Meadow-cup, | Whippoorwill's- |
|  | Fever-cup, | shoes, |
|  | Adam's Pitcher | Watches. |

Sarracenia: named for Dr. Michel Sarrasin, a physician at the Court of Quebec in the 18th Century, who sent our northern species to Europe.
Purpurea: Latin for red or purple.
The Preferred Habitat: sphagnum bogs.
The Plant: the flower stem erect, one foot to two feet high, practically without hairs throughout.

The Leaves: tufted; somewhat erect; "pitcher-shaped"; four inches to twelve inches long; purple veined or sometimes green, especially when the plant grows in more open places; on the inner surface, densely clothed with stiff hairs at the mouth, but smooth below; narrowed into a petiole.

The Flowers: single, drooping on slender stems; five dull pink petals narrowed in the middle, not curved over the yellowish style; five madder-purple sepals with three coloured, persistent bractlets at the base; stamens numerous; five-celled ovary, crowned with a short green style,

## SARRACENIACE®

which is expanded at the top into a very broad and petallike five-angled umbrella-shaped body, with five parts, the parts terminating under the angles in as many little, hooked stigmas.

The Fruit: a capsule.
This is an interesting plant, and by its "pitchers" very easy to identify. The hollow leaves or pitchers "keeled on the inner side toward the flower-stem," as Mr. Mathews so well describes them, "are usually partly filled with water and the fragments of insects; the latter are apparently drowned and no doubt contribute to the physical sustenance of the plant. The outer surface of the pitchers is smooth, but the inner surface is covered with fine bristles pointing downward which manifestly interfere with the escape of the trapped insects."

A drug, made from this plant, was at one time used in the treatment of small-pox.

> Drosera filiformis, Raf.

Purple-magenta

## July-September

Drosera: Greek for dewy. "The Droseras are the famous Rassolis (Dew of the Sun) of the old herbalists and were sometimes known as Youthwort, from a belief in their regenerating powers when administered medicinally." An old English name was Red-rot, because as the soil where they grow is poor, they were supposed to have caused it to rot.

Filiformis: Latin for thread-shaped.
The Preferred Habitat: open, boggy land, or wet sand.
The Plant: the flower stem erect, eight inches to twenty inches high, hairless.

The Leaves: basal; erect; dark reddish brown; narrowly linear or filiform; six inches to fifteen inches high, about one-twelfth of an inch wide; covered throughout with glandular hairs, so that they glisten as if washed with dew; woolly with brown hairs at the very base; the hairs capped by a red bead or dot; usually acutish at the apex; with no distinction between the blade and the petiole at the base.

The Flowers: small; ten to thirty so arranged in a onesided raceme, that the fresh-blown flower is always the highest, on short stems, opening only in sunshine; five stamens.

The Fruit: a capsule.
The most beautiful, perhaps, of the three Droseras. The slender scapes, bearing pretty magenta-purple flowers, are

## DROSERACEA

even taller than the straight, thread-like, glistening red leaves. Sometimes, in the marshy ground, the plants form a carpet, yards in extent, or furnish a low border to a damp, thickety entanglement. If imbedded in sphagnum moss and thoroughly watered, the plants will keep well in the house, the flowers opening for days, but when the season is over, the whole withers and cannot be transplanted to the garden.

DROSERACEE

## SUNDEW FAMILY

## Drosera longifolia, L.

## White

Oblong-leaved Sundew.

## June-August

Drosera: for derivation see filiformis. Longifolia: Latin for long-leaved.

The Preferred Habitat: open bogs, wet sand.
The Plant: flower stalk erect, six inches to eight inches high.

The Leaves: basal; the leaf blade elongated; spatulate; usually less than an inch long; with red hairs at the oblong end; blunt at the apex; at the base narrowed into a hairless erect stem, which is sometimes four inches long.

The Flowers: several (one to twenty), in a raceme, less than an inch wide; five stamens.

The Fruit: a capsule.
In the damp moss or wet gravel a rosette of red and glistening leaves with oblong ends, and from this rosette a few low, slender stems, with pure white, simple flowers at their top-that is the oblong-leaved Sundew.


# Drosera rotundifolia, L. 

| White | Round leaved Sundew, <br> Dew Plant, | Moor-grass, <br> Youthwort, |
| :--- | :--- | :--- |
| July-August | Eyebright, | Rosa-solis. |

Drosera: for derivation see filiformis.
Rotundifolia: from Latin for wheel and leaves, hence round-leaved.

The Preferred Habitat: open bogs, usually in sphagnum moss, or wet sandy places.

The Plant: the flower stalk erect, four inches to ten inches high, slender, hairless.

The Leaves: basal; spreading on the ground; round or even broader; one half inch to two inches long; the upper surface covered with slender glandular hairs; round at the apex; at the base abruptly narrowed into a flat stem with short, soft hairs.

The Flowers: small, four to twelve on stems, in a one sided raceme, which is simple or sometimes once-forked. Petals oblong, somewhat exceeding the sepals; five stamens.

The Fruit: a capsule.
This species forms flat rosettes of glistening red leaves with round ends, from which rise slender flower stalks bearing pure white flowers.

A drug, made from this plant, is used in the treatment of whooping-cough.

Tilloa Vaillantii, Willd.
Greenish-white
Pigmy Weed
July-September
Tilloxa: named after Michel Angelo Tilli, an Italian botanist.
Vaillantii: named for Sebastian Vaillant, a French botanist.
The Preferred Habitat: sandy shores of fresh water ponds, or in the water.

The Plant: erect or nearly so; one half inch to three inches high; the stem usually simple, hairless.

The Leaves: opposite, linear-oblong; very short; united at the base; entire.

The Flowers: very small, axillary; petals, stamens, and pistils, three to four.

The Fruit: a follicle.
The Tillca is a dainty and minute, aquatic plant, with opposite, entire, thin leaves, and tiny, greenish-white flowers, somewhat tubular in shape, with five sepals. The flowers are on slender stems, which are about as short as the leaves.

This plant, though so tiny, and evidently inconspicuous, has caused considerable commotion among scientists and many have sought it but few have found it. Its range as given in Gray's Botany is "Prince Edward's Island, Nantucket, Europe, and northern Africa." The interesting question is whether the Nantucket plant is really the typical species or an aquatic form. The somewhat doubtful evidence for the theory of there being an aquatic form may

## ORPINE FAMILY

be due to the fact that the Nantucket plant grows more or less submerged, while the typical form elsewhere grows in wet gravel. "In the herbarium of the Nantucket Maria Mitchell Association and of the New York Botanical Gardens are Nantucket specimens, which were collected by Mrs. Mabel P. Robinson on the shores of Hummock Pond, August 15, 1894 and July 1896."

## CRASSULACEÆ

ORPINE FAMILY
Sedum acre, L.

| Yellow | Golden Chain, | Golden Moss, |
| :---: | :---: | :---: |
|  | Creeping Jack, | Biting Stonecrop, |
| June-August | Bird's Bread, <br> Mountain Moss, | Creeping Charlie, Wall-moss, |
| Stone Crop, | Pride-madam, | Pepper Crop, |
| Mossy Stone Crop, | Biting Orpine, | Ginger, |
| Pricket, | Love-entangled, | Poor-man's-pepper |
| Mouse-tail |  |  |
| Wall-pepper, | Treasure-glove, Tangle-tail | Little House Leek. |
| Country-pepper, | Rock-plant, |  |
| Jack-of-the-Buttery, | Welcome-home-hus-band-though-ever-so-drunk, |  |

Sedum: from Latin meaning to sit, because of the lowly habit of these plants.
Acre: Latin for bitter.
The Preferred Habitat: dry fields, roadsides in town.
The Stems: tufted or spreading, densely matted, one inch to three inches high; the sterile branches prostrate; the flowering erect or nearly so, warty.

The Leaves: alternate and arranged in serried ranks up the stem; yellow-green; fat; ovate; one half inch long; smooth on both surfaces; entire.

## CRASSULACEA

The Flowers: stemless, about one third of an inch broad; the five petals linear-lanceolate, acute; the calyx bellshaped; the sepals ovate, obtuse; the stamens yellow, prominent, eight to ten.

The Fruit: a follicle.
Few plants are so suggestively described by their popular names as the Mossy Stone-crop. Here one does not need to query: "What's in a name?" The answer lies sprawling under the fence, on the ground amid the grass, in every place where the plant has scattered en mass its golden wealth of bright flowers-"Welcome-home-hus-band-though-ever-so-drunk," as the old English name styles it. The shrubby branches, never raised more than a few inches above the ground bear short, fat leaves set near together on stems crowned with the bright yellow, star-shaped flowers which have pointed petals and prominent stamens.

A drug, made from this plant, is valuable medicinally.
One other member of the Orpine Family has been reported.

Ribes oxyacanthoides, (L.) var. calcicola, Fernald.
Greenish-yellow Swamp Gooseberry, Smooth Currant.

## May-June

Ribes: the Arabic name.
Oxyacanthoides: a Greek combination for sharp and spine, in allusion to the spines on the stems.

The Preferred Habitat: thickets, or open ground, dry or moist soil, sometimes in open, boggy places.

The Shrub: erect, branched, very bushlike; the stem with soft and scattered prickles or with none, but with short, soft hairs.

The Leaves: alternate; palmately divided; sometimes densely white-wooly below and above closely soft-hairy; the lobes obtuse or acute; on petioles with soft hairs.

The Flowers: one to three on short stems which have sometimes silky hairs; calyx five lobed, often coloured; five petals; five stamens.

The Fruit: a globose berry, without hairs or with fine, soft ones, sometimes one half inch in diameter, reddish purple when ripe.

A low, spiny-appearing, dark green bush, with loosely hung branches and numerous small, dark green leaves, is the gooseberry. Occasionally one finds it growing on the Commons, but usually in a thicket border, where it is an inconspicuous neighbour to rose bushes and bayberry.

## SAXIFRAGACE®

Neither its flowers nor its fruit make it the more noticeable, the one small and greenish-yellow, the other dark purple.

But insignificance of appearance does not necessarily indicate lack of utility. On the contrary, from the fruit is made a tart but delicious jelly.

Spirca latifolia, (Ait) Borkh.
Flesh-pink
Meadowsweet. August

Spiraa: from Greek, to twist, in allusion to the twisting of the pods in some species.
Latifolia: Latin for leaves on the side.
The Preferred Habitat: borders of ponds.
The Plant: erect; the stem simple or branched above, wiry, usually buff-coloured.

The Leaves: alternate; generally ovate; practically hairless; acute at the apex; narrowed at the base; coarsely serrate.

The Flowers: small; crowded in panicles, pyramidal, blunt, and branched; the prominent stamens pink-red.

The Fruit: follicles.

This plant has delicately tinted flowers, "like miniature apple-blossoms," crowded in feathery clusters at the top of a buff stem, on which are freely set the light green leaves.

Spiraxa tomentosa, L.
Pink
July-September
Steeple-bush, Hard-hack, Rosy-bush, Silver-leaf, Silver-weed. Poorman's-soap,

Spiraxa: for derivation see latifolia.

## ROSACEA

Tomentosa: from Latin, signifying a stuffing of wool or hair, in allusion to the white, wooly pubescence on the under side of the leaves.

The Preferred Habitat: damp places.
The Plant: erect, two feet to three feet high, unbranched; the stem with few short, soft hairs, woody.

The Leaves: numerous; erect; alternate; dark green; hairless, or woolly above, with short, soft hairs; very light, with white woolly short, soft hairs below; obtuse or acutish at the apex; narrowed or rounded at the base; pinnately net-veined.

The Flowers: small, in dense racemes, crowded into a panicle. Petals obovate, darker at the centre, clawed; stamens numerous, long, persistent.

The Fruit: follicles.
A decorative plant when seen close to, as it grows among the grasses and sedges and one well described by the popular name of Steeple-bush, for the many rose-pink flowers are crowded in a pyramidal spiræa-like cluster at the summit of straight stems, which are somewhat relieved from their stiffness by numerous prettily-shaped toothed leaves, which are a dark green above and a very light white-brown below. Sometimes such a touch of colour among the yellow-green grasses of the blue pond's border is so conspicuous that the flowers are noticeable from the carriage road at a considerable distance.

The plant is not without medicinal value, having been used to make a tonic and an astringent.

Pyrus arbutifolia, (L.) Ell.

| White or tinged with red | Choke-pear, <br> Red Choke-berry, |
| :--- | :--- |
| April-June | Dog-berry. |

## ROSE FAMILY

Pyrus: classical name of the Pear-tree.
Arbutifolia: combination of Latin words to denote the leaves of the wild strawberry tree.

The Preferred Habitat: damp thicket borders.
The Shrub: erect, sometimes six feet high; the bark red-dish-grey and smooth.

The Leaves: alternate; generally oval with a tendency to be wider at the apex; lacking hairs and shining above; with short, soft hairs beneath; with an abrupt but tapering point at the apex; somewhat wedge-shaped at the base; on short stems; saw-toothed with sharp, small, red teeth.

The Flowers: appearing at the same time as the leaves, in cymes which at first are terminal but at length are outdistanced by the young, sterile shoots. They are on hairy stems. The calyx which is also covered with short, soft hairs, persists after the petals have fallen, turning purplish. The petals five, concave, spreading; stamens numerous, prominent.

The Fruit: a pome, usually nine to eighteen together, bright red when mature, long persistent.

A spunky shrub that often blooms and produces fruit when only a foot or so high. When at mature height, six feet tall or less, it is a fine sight in the spring, its branches filled with small open, white flowers, surmounted by fresh young leaves The bush is scarcely less handsome later in the season, when its shining green leaves contrast with the numerous bright red berries.

Var. atropurpurea (Britton) Robinson is also abundant. This has dark, purple fruit.

Amelanchier canadensis, (L.) Medic.

| White | Shad-bush, <br> Service-berry, | Sugar-pear, <br> Indian-cherry, |
| :--- | :--- | :--- |
| April-May | Sune-tree, | Wild Indian-pear, |
|  | Service-tree, | May-pear, |
| Fruit, rich purple | Sugar-berry, | June-plum, |
| ripens in June | Sugar-plum, | Boxwood. |

Amelanchier: name said to be barbaric, but derivation not satisfactorily explained.
Canadensis: Latinized form of Canadian.
The Preferred Habitat: thicket borders and open ground.

The Shrub or Tree: low, "with a slender trunk and spreading branches, which form a narrow, oblong head." The bark a pale, red-brown; the branchlets bright green, becoming dark brown or purplish brown, smooth.

The Leaves: alternate; simple; ovate or oval; one inch to three inches long or sometimes larger on young shoots; with few matted short, soft hairs when young, soon entirely hairless; acute or acuminate at the apex; rounded or cordate at the base; irregularly, sharply, finely, sawtoothed; petioled; young leaves frequently tinged.

The Flowers: appear when leaves are about one third grown, borne on slender pedicles in drooping racemes from three inches to five inches long; each flower has two lanceolate, purplish, silky bractlets, which fall as the flower opens; five obovate petals; stamens numerous; calyx five-cleft.

The Froit: a sweet-tasting pome, with a slight bloom; remnants of the calyx-lobes and filaments crown the open top.


## ROSACEA

The slender, pale red trunk and brown, spreading branches of this symmetrical shrub or small tree, form a conspicuous feature of the thicket borders in the spring, when the pale green leaves, one third grown, are practically eclipsed by the loosely hung white blossoms, with their numerous clustered stamens. Later, in June, when the leaves are the more prominent feature, come the rich, red-purple fruits, that are so much relished by the robins.

## ROSACEA

ROSE FAMILY

## Cratæogus Crus-Galli, L.

Flesh-colour
Cockspur Thorn.

## May-June

Cratagus: from Greek for strength, because of the hardness and roughness of the wood.
Crus-Galli: from Latin, meaning the spur of a cock, in allusion to the resemblance of the long thorns to a cock's spur.

The Preferred Habitat: dry soil.
The Shrub or Tree: reaches a height of about twenty-five feet branched, especially above, in the older trees; branches spreading.

The Leaves: alternate; leathery; obovate or oblanceolate; one inch to two inches long; above shining, dull beneath; without hairs on either surface; obtuse cr abruptly acuminate at the apcx; decidedly wedge-shaped at the base; sharply and somewhat irregularly saw-toothed. Thorns, numerous, slender, two inches to four inches long.

The Flowers: fragrant, numerous, in terminal corymbs, on short branches, pedicles without hairs; five petals; calyx lobes linear-lanceolate.

The Fruit: a pome, globose or slightly pear-shaped.

Few of the Nantucket trees or even plants, combine, from so many viewpoints, as these Cockspur Thorns the essence of Nantucket's struggle against heavy odds. Some are trim bushes or low flat-topped trees that have sprung up spontaneously here and there and are remarkable for the symmetry of their spreading branches, that hide long grey prickles by sharply toothed leaves, beautiful in their shiningness. Handsome bushes, these, both in the spring when the clustres of fragrant whitish flowers decorate the almost leafless branches and later, when the flowers have been replaced by bright red fruit, with the remains of the withered calyx at their summit and the leaves have turned to a beautiful dark red. But I am not thinking of these, which are "natives," so much as of the introduced Cockspur Thorn trees, whose trunks are draped with long grey moss (Usnea barbata), and blotched with patches of green or russet-yellow lichens. Their almost bare upper branches, grey and gnarled and interlocked from beating in the heavy winter winds, fan the air, as they alternately rise and fall in the breeze. These have fought and been more than conquerors. "Only God can make a tree."

The Cockspur Thorn offers at present one of the most puzzling botanical studies on the Island.

A drug, made from this tree, is used in the treatment of heart-trouble.

ROSACEA

## ROSE FAMILY

Fragaria virginiana, Duchesne

## White

April-June

Wild Strawberry, Virginia Strawberry, Scarlet Strawberry.

Fragaria: Latin for fragrance, alluding to the fragrance of the fruit.
Virginiana: Latin for Virginian.
The Preferred Habitat: dry, sandy soil, especially near. the shore; usually in grassy places, sometimes in pure sand.

## ROSACEA

The Plant: low, branching profusely near the base; the stem rather stout, dark green, more or less silky-haired; the hairs spreading or lying flattened against the stem.

The Leaves: alternate; palmately three-divided; the division ovate; dark green above, lighter beneath; with soft, white bristles along the veins; on petioles bearing similar soft hairs; regularly serrate; prominently but not heavily veined beneath.

The Flowers; large, in proportion to the length of the plant, with five spreading separate petals; stamens numerous; sepals spreading very flat under the wheel-shaped corolla, united at the base; the stamens under each petal and alternating with them. The petals fall early when the calyx closes to make a cup-shaped receptacle.

The Fruit: achenes, imbedded in pits in soft, red, berrylike pulp. The fruit not a true berry. (See glossary for definition of achene and berry.)

This creeping plant has three-divided, coarsely toothed, dark green leaves, and in their season, small, pure white five-petaled flowers with numerous orange-yellow stamens. The flowers are later succeeded by small, bright scarlet, fragrant fruit, with a very "moreish" taste.

ROSACEA
ROSE FAMILY
Potentilla argentea, L.

## Yellow

May-September
Potentilla: a Latin diminutive for powerful, from the plant's once reputed medicinal powers.
Argentea: Latinized form for silvery.
The Preferred Habitat: sandy fields, especially near the town.

The Plant: nearly erect, four inches to twelve inches long; the stems tufted, branched, slightly woody at the base, with short, soft, white-woolly hairs, often tinged with red at the base.

The Leaves: alternate; palmately divided into five, the divisions lanceolate with five to six lobes; above dark green and without hairs; below covered with short, soft, white hairs; obtuse at the apex; wedge-shaped at the base; all but the uppermost petioled; the margins rolled backwards. The stipules lanceolate and tapering to a point at the apex.

The Flowers: small, on stems; the five lobes of the calyx ovate, acutish, a little shorter than the petals; the five petals obovate, with a shallow notch at the end. The stamens very numerous slightly darker yellow than the petals.
The Fruit: follicle.
A low cinquefoil; at the ends of the branches are very dense clusters of greenish buds, which, simultaneously develop into small, round, yellow flowers; the petals, wide-apart and square. The stem and underneath side of the leaves are conspicuously white-silky; the upper surface of the leaves very dark green.

## ROSACEAE

## ROSE FAMILY

Potentilla canadensis, L.
Yellow
Cinquefoil, Five-finger,
April-August
Wild Strawberry.
Potentilla: for derivation see argenta. Canadensis: Latin for Canadian.

The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: trailing and spreading by runners, three inches to two feet long; the stem with slightly spreading hairs.

## ROSACEÆ

The Leaves: alternate; five-fingered, the leaflets generally oblong, obtuse at the apex, narrowed at the base, with varying amount of silky hairs; deeply serrate; leaves long-stalked.

The Flowers: small; petals broadly oval; calyx lobes acute; stamens numerous.

The Fruit: achenes.
This is the weak-stemmed Cinquefoil, that lies on the ground and from the nodes rise pure yellow, five-petaled flowers, about half an inch broad.

ROSACEA ROSE FAMILY

> Potentilla recta, L.

Light yellow
June-September
Rough-fruited Cinquefoil.

Potentilla: for derivation see argentea. Recta: Latin for upright.

The Preferred Habitat: roadsides and waste places.
The Plant: erect, one foot to two feet high; the stem rather stout, branched above, with silky hairs.

The Leaves: alternate; five-seven fingered; leaflets generally lanceolate, with few scattered hairs on the upper surfaces, hairs more dense on the lower surface, obtuse at the apex, narrowed at the base; all but the uppermost petioled.

The Flowers: numerous; about twenty stamens.
The Fruit: carpels.
A pretty Cinquefoil, of which the light yellow flowers - look somewhat like extremely small, old-fashioned, single

## ROSE FAMILY

roses, but there are no prickles on the light green hairy stem, and the pale green decorative leaves are unmistakably five-fingered.

ROSACEE ROSE FAMILY

Rubus frondosus, Bigelow.

## White

Wild Blackberry.

## June

## Fruit ripe August

Rubus: the Roman name, allied to ruber, red.
Frondosus: Latin, signifying to be full of leaves or fronds.
The Preferred Habitat: thickets, open ground.
The Vine: prostrate, erect, or partially erect, when it finally trails over tall bushes; the runners with short, glandular hairs and stout prickles.

The Leaves: light or dark green; alternate; three to five divided, the leaflets ovate or tending to oblong, acute or acuminate at the apex, with short hairs beneath, coarsely and unequally serrate to more or less round-toothed; bracts very persistent.

The Flowers: less than an inch wide; five deciduous petals; numerous stamens.

The Fruit: a drupe; not quite round, white green to red at first, becoming black at maturity, slightly sour but good-tasting.

Everybody thinks he has had sufficient experience with them, to know the Blackberry vines. But, botanically, it is another story. Mr. Bicknell has minutely described the variations of thirty-seven different Nantucket species, including this, the frondosus, which is, perhaps, the easiest one to identify.

ROSACEA
Rosa carolina, L.

Rose-pink

June-August

ROSE FAMILY

Wild Rose, Swamp Rose, Carolina Rose, Hip-trec.

> Rosa: Latin for a rose. Carolina: Latin for Carolinian.

The Preferred Habitat: thicket borders of swamps.
The Bush: erect; one foot to seven feet high; much branched; the stems armed with distinct, stout, usually recurved spines; the branches with similar, not very abundant prickles.

The Leaves: alternate; compoundly divided into five to nine (usually seven) leaflets, which vary considerably from oval to obovate, even with a lanceolate tendency; pale, acute or acutish at each end; generally on short stems: finely serrate; stipules narrow.

The Flowers: in a corymb or rarely solitary; sepals lanceolate, acuminate, hairy; petals early deciduous.

The Fruit: achenes, enclosed in a berry-like "haw."
The most striking illustration, perhaps, of the brilliancy of colouring among Nantucket wild flowers, is the Wild Roses. Masses of these deeply rose-coloured, sweetscented flowers, that have brilliantly yellow stamens crowded at the petal's base, pass along the roadsides, border the ponds or wander over the Commons. The flowers are satisfying in the house, too, for while the fullblown blossoms seldom reach home intact, the buds come out exceptionally well in water.

This is the most common rose of damp places. Its few prickles are like spines; they are stout and usually curved.

# ROSE FAMILY 

ROSACEA
Rosa virginiana, Mill.

| Rose-pink | Dwarf Wild Rose, |
| :--- | :--- |
| June-October | Low Wild Rose, |
|  | Pasture Wild Rose, |
|  | Virginia Wild Rose. |

Rosa: for derivation see carolina. Virginiana: Latin form for Virginian.

The Preferred Habitat: dry, sandy soil of the Commons, waste lands, or "moist soil about the borders of thickets, and on banks passing down to pond holes or low grounds."
The Bush: erect, eighteen inches to three feet high, much branched; the stems often very stout; the prickles at length stout and usually more or less hooked.

The Leaves: alternate; compound, with usually seven leaflets, which vary from oval to oblong; above dark green and without hairs, often shining; acute or acutish at the apex; serrate.
The Flowers: solitary or in a corymb; the outer sepals often with one or two small lobes; numerous stamens; petals early deciduous.
The Fruit: bony achenes, "enclosed in the berry-like, persistent calyx-tube."

This is the most prevalent Rose of the Commons and dry ground. Its chief distinguishing feature is the prickles, which are more or less hooked at the end.

## ROSACEA

ROSE FAMILY
Prunus maritima, Wang.

## White

May-June
Fruit ripe
September-October

Beach Plum, Sand Plum.

## ROSACE $\mathcal{E}$

Prunus: ancient Latin name of the plum-tree. Maritima: Latin for seaside.

The Preferred Habitat: dry, sandy soil of the Commons.
The Bush or Shrub: low, one foot to seven feet high, much branched, not thorny; bark reddish-grey and smooth.

The Leaves: dark green; oval, ovate, or obovate; older ones with short, soft hairs beneath; acutish or acute at the apex; rounded at the base; finely and sharply sawtoothed.

The Flowers: medium-sized, appearing before the leaves or at the same time as the very young leaves; borne without stems in umbels; the five petals, falling early, allow the prominent stamens to give a slightly pinkish cast; calyx five-divided; stamens numerous.

The Fruit: a globose, purple drupe, sometimes an inch in diameter, puckery when unripe, sweet, with a tang when mature. Drupe covered with a bloom; stone a little flattened, usually pointed at both ends.

A low and straggly shrub, that grows mostly in groups on the Commons. When in bloom or in fruit, it is more conspicuous; at other times the leaves are dark green and the bush somewhat resembles the bayberry. But both the flowers and the plums are beautiful; the one (coming when the new leaves are only partially grown), of a delicate flesh colour, with heavier-tinted stamens; the other (when ripe) a large luscious-looking purple. From this fruit is made the famous beach-plum jam and jelly-that claret red jelly with a wild tang. The yellow or amber fruit, that does occur on some bushes makes a lighter coloured jelly. So far the plums have not been improved by cultivation, although various attempts have been made along that line.

## ROSE FAMILY

Prunus serotina, Ehrh.
White
May-June

## Fruit ripe

August-September
Prunus: for derivation see maritima.
Serotina: Latin, meaning produced late in the season.
The Preferred Habitat: dry, sandy soil, in the open or among pine trees.

The Tree: scraggly, sometimes twelve feet high, but usually much lower; the bark rough and black-grey.

The Leaves: always narrow and seldom spread out flat; alternate; oval, through lanceolate to ovate; with no hairs, shining above; hairless or with short, soft hairs along the veins beneath; acute at the apex; narrowed or rounded at the base; the margins saw-toothed, the teeth turning inward.

The Flowers: small, in elongated racemes, which droop more or less at the ends of leafy branches; five petals.

The Frdit: a globose drupe, less than one-half inch in diameter, dark purple or black, "slightly bitter, but with a pleasant vinous flavour."

This is a low and scraggly tree, with rough, blackgrey branches and narrow shining leaves, pointed at the end, and usually badly eaten. It bears long, loose sprays of white flowers in their season, that are later succeeded by would-be sprays of small dark-purple or black fruit, of which only a few usually are left in the drooping clusters.

## ROSACEA

From this fruit are made the famous Rum Cherry wine and jam and also a concoction for summer complaint and for coughs.

Thirty-seven other members of the Rose Family have been reported.

> Cassia Chamæcrista, L.

Yellow
July-September

Partridge Pea, Prairie Senna, Large-flowered Sensitive Pea, Wild Sensitive Plant.

Cassia: an ancient name of obscure derivation from Greek. Chamoccrista: Greek and Latin for a crest on the ground.

The Preferred Habitat: the sandiest part of the gravelly roadside.

The Plant: erect or spreading on the ground, eight inches to sixteen inches high; the stem widely branched, the branches spreading, brown, with short, soft hairs or nearly hairless.

The Leaves: alternate; pinnately compound, with twenty to thirty leaflets, which are linear-oblong, or the upper lanceolate, obtuse and mucronate at the apex; pinnately veined.

The Flowers: large, one inch wide; two to four in the axils, on slender pedicels; some of the petals often purpleblotched.

The Fruit: a pod, linear, two inches long or more; with few or many short, soft hairs.

A cheery plant that has finely-divided, sensitive leaves and large golden flowers, often purple-spotted, that decorate the sandiest part of the gravelly roadsides.

At night the leaves go to sleep by folding blade to blade, and drooping against the stalk.

Another interesting fact about the plant is that the pods split when ripe, and by means of a twisting motion, throw the seeds a short distance. In consequence, the next year in place of one plant there will be a little patch of plants.

## PULSE FAMILY

Baptisia tinctoria, (L.) R. Br.

Yellow
June-August

$$
\begin{array}{ll}
\text { Wild Indigo, } & \text { Rattlebush, } \\
\text { Yellow Broom, } & \text { Indigo-broom, } \\
\text { Clover-broom, } & \text { Indigo-weed, } \\
\text { Horsefly-weed, } & \text { Horse-fleaweed. } \\
\text { Shoofly, } &
\end{array}
$$

Baptisia: from Greek to dye, in allusion to the economical use of some species which yield a poor indigo.
Tinctoria: Latin for coloured.
The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: erect and bushy, two feet to four feet high, much branched; the stem slender, hairless, and with a slight bloom.

The Leaves: alternate; three-divided, the leaflets resembling those of the clover, hairless on both surfaces, obtuse at the apex, at the base, wedge-shaped.

The Flowers: in terminal racemes, on very short stems.
The Fruit: a pod, ovoid or nearly globose, black and persistent.

A low, bushy plant with numerous dark blue-green leaves and bright yellow pea-shaped flowers, or, in the early fall, with blackened leaves and small, blackened seed-pods.

So compact and symmetrical are these low "bushes" that they are numbered among the well-known plants of the Commons. They have long been familiar to the Nantucketers, for the "old people" used to make from this plant a wash to bathe sores and to pour into open wounds.

A drug is still made from it, of value in the treatment of low fevers.

## LEGUMINOSA

LEGUMINOSÆ

Cytisus scoparius, (L.) Link.

| Yellow | Scotch-broom, |
| :--- | :--- |
| May-October | Irish-broom, |
|  | Green-broom, |
|  | Hoguced, |
|  | Bannal, |
|  | Besom, |
|  | Broom, |

Cytisus: ancient Roman name of a plant, probably a Medicago.
Scoparius: Latin for many twigs.
The Preferred Habitat: sandy soil.
The Shrub: three feet to five feet high, profusely branched, the stems grey, olive-green; the branchlets dark green, deeply grooved, smooth or nearly so, woody and tough.

The Leaves: alternate; compound, the leaflets oval or obovate, hairy on both surfaces, mucronate at the apex, narrowed at the base, entire.

The Flowers: in racemes, on slender stems in the axils of the leaves; solitary or in pairs; butterfly-shaped; the keel darker than the upright petals, stamens light yellow.

The Fruit: a pod or legume, flat; when green very hairy on the margins with long, sharp points, later becoming black and hanging open long after the seeds have fallen, when it rattles in the wind.

One of the showiest and, some claim, one of the handsomest of Nantucket's bushes. In the late spring, or early summer, its golden yellow pea-shaped blossoms glow afar. Sometimes even the atmosphere seems to be illumined by their shine. Later in the summer the bushes arouse quite as much curiosity if not so much admiration, when the


## PULSE FAMILY

black pods hold the rattling seeds or, having split open, they still hang in lonely emptiness on the branches. Numerous, small, dark green leaves clothe the upright branches, which look in their stiffness like the long bristles of the brooms that the street-cleaners use in London.

While a showy plant, it is not a desirable one for cultivation, because in the bright sunlight the flowers emit a very disagreeable odour.

With the presence of the Scotch or Irish Broom on Nantucket, an interesting story is connected. Not far from Hummock Pond lived, about 1860, an old Irishman by the name of John O'Connell. A friend said to him one day that he was going to visit the Old Country and asked what he might bring to Mr. O'Connell. The Irishman begged for a few seeds of Gorse and of Broom. The Gorse has scarcely spread from the O'Connell farm, but the Broom has spread practically into all parts of the Island. In this it has been helped by an enthusiastic "off-islander" who planted the seeds wherever she might happen to be driving.

## LEGUMINOSA

Ulex europæus, L.
Yellow

Sometimes throughout whole year.

## PULSE FAMILY

Gorse, Furze, Whin, Prickly Broom.

Ulex: an ancient name used by Pliny for some not certainly identified plant.
Europøus: Latin for European.
The Preferred Habitat: dry, sandy soil.
The Shrub: two feet to six feet high; much branched; the branchlets very leafy, tipped with yellow-green spines; the plant more or less covered with fine, soft hairs.
The Leaves: alternate; usually in the form of prickles, but sometimes the lowest leaf-like and lanceolate; tipped with yellow spines and white hairs of variable length.

## LEGUMINOSA

The Flowers: borne on the twigs of the preceding season, the arrangement of the twigs appearing like racemes; butterfly-shaped, solitary on the ends of very short stems; bracted at the base; the calyx a little shorter than the petals, with two minute bracts.
The Fruit: a compound pod, scarcely longer than the calyx, two-seeded

There is little danger of confusing the Gorse with any other shrub, nor is there likelihood of forgetting the sight when one has seen the clumps of dark green, spiny bushes, covered with delicate yellow flowers that look as if a flock of tiny, golden butterflies had lighted there. When the prickly bushes are not in bloom, the sombreness of their dull greyish-green among the brighter greens and browns of the pine woods are interestingly sober.

Nantucket is the northern limit.
LEGUMINOSE
PULSE FAMILY
Trifolium agrarium, L.
Yellow
June-August

Hop Clover, Yellow Clover.

Trifolium: Latin for three-leaved. Agrarium: Latin for a field.

The Preflrred Habitat: dry, sandy soil of the Commons and by roadsides.
The Plant: six to eighteen inches high; branched; the stem hairless or with a few short hairs.
The Leaves: numerous; alternate; generally palmately three-divided, the leaflets ovate or oblong ismooth on both surfaces, rounded or cut off short at the apex, narrowed at the base, with fine teeth.
The Flowers: in large, oblong or"oval heads, the lower opening first becoming shriveled and brown when old, persistent.


## PULSE FAMILY

The Fruit: a pod.
This is the clover with the large, dense heads of golden yellow flowers that in withering turn a dingy light brown and rustle like tissue-paper. Because at that time the heads turn downward and resemble hops, the plant is called Hop Clover.

LEGUMINOSA

## PULSE FAMILY

Trifolium arvense, L.
Green-white having a Pussy-foot Clover, Stone Crop, grey-pink appearance Hare's-foot Clover, Hare's-foot, Rabbit-foot Clover, Poverty-grass,
June-October Old Field Clover, Dogs and Cats, Stone Clover, Pussies, Pussy Clover, Pussy Cats. Calf Clover,

Trifolium: for derivation see agrarium.
Arvense: Latin to signify belonging in a field.
The Preferred Habitat: dry, sandy soil of the roadsides or neglected fields.
The Plant: erect; six inches to eighteen inches high; the stem freely branched, with short, silky hairs, weak.
The Leaves: numerous; alternate; three-compound, the leaflets linear or oblanceolate, obtuse at the apex, narrowed or wedge-shaped at the base.
The Flowers; in dense heads, on stems clothed with short, soft hairs; calyx very silky.

The Fruit: a pod.
A low, much branched clover, with three light green, narrow leaflets, and oblong, fuzzy flower heads. The corollas of the separate flowers being green-white and the calyx green with pink tips, the effect is a rather soft grey-pink.

## LEGUMINOSA

On Nantucket it is a harmless plant of the waste grounds, but elsewhere it is often a pernicious weed, and especially in pastures must be exterminated, for the excessive hairiness sometimes collects into hair-balls, that cause a distressful form of death to horses and cattle.

LEGUMINOSA PULSE FAMILY

Trifolium hybridum, L.
White, pink-tinted
Alsike Clover,
Alsatian Clover.

## May-October

Trifolium: for derivation see agrarium.
Hybridum: Latin for a mongrel.

The Preferred Habitat: roadsides, meadows, waste places.

The Plant: generally erect, about one foot high; the stem branched, stout, smooth or practically so, rather juicy.

The Leaves: alternate; on long petioles; palmately compound, the three leaflets obovate, narrowed or wedgeshaped at the base, stemmed, finely serrate.

The Flowers: in heads; very sweet-scented, and rich in honey; the withered blossoms brownish.

The Fruit: a pod.
This is a prettier "White Clover" than the Honeysuckle Clover (the repens), because these flowers are usually tinted with rose-pink. For identification, a reliable characteristic is the fact that these stems do not root at the joints, and, also, that the leaflets are round at the end.

## PULSE FAMILY

LEGUMINOSE
PULSE FAMILY
Trifolium pratense, L.
Magenta and white Red Clover, Broad-leaved Clover, Meadow Clover, Sugar-plums, April-November Purple Clover, Cow-grass.

Trifolium: for derivation see agrarium.
Pratense: Latin, to denote belonging in a field.

The Preferred Habitat: fields and waste places; often cultivated for fodder.

The Plant: erect or generally upright, six inches to two feet high, branched; the stem more or less covered with short, soft hairs.

The Leaves: alternate; palmately divided; leaflets usually three, sometimes four to eleven, oval, oblong or obovate, sometimes nearly one inch long, often dark-spotted near the middle, with a few short, soft hairs, obtuse and sometimes notched at the apex, narrowed at the base, finely denticulate.

The Flowers: usually sessile, rarely peduncled, in globose or sometimes ovoid heads; heads about one inch long and about three-quarters of an inch thick, brown when withered.

The Fruit: a small pod.
This is the Common Red Clover, with soft head in varying shades of magenta, and white, and usually threeparted, long-stemmed, prettily marked leaves, so familiar to us all. The plant makes good fodder, and the flowers have decorative possibilities, and-as everyone knows-of the leaflets there may be four, five, or even more!

## LEGUMINOSA

LEGUMINOSA

> Trifolium procumbens, L.

Yellow
May-September

Low Hop Clover, Smaller Hop Clover, Low Hop Trefoil, Smaller Hop Trefoil.

Trifolium: for derivation see agrarium. Procumbens: Latin for procumbent.

The Preferred Habitat: principally roadsides.
The Plant: spreading or ascending, about five or six inches high; the stems having short, soft hairs.
The Leaves: alternate; compound, the three leaflets wedge-obovate, notched at the end, the lateral leaflets at some distance from the end ones and sessile or nearly so, the end ones on stalks, having short, soft hairs.
The Flowers: in globose or short-oval heads, light brown when withered.

The Fruit: a dry pod.
This Smaller Hop Clover is easily distinguishable from the Large Hop Clover (Trifolium agrarium) by the smallness of its stature. More likely it is to be confused with the Black Medic (Medicago lupulina). But the leaflets of this are nearly sessile and the dried flower heads are brownish-white and papery, not black.

## LEGUMINOSÆ

PULSE FAMILY

> Trifolium repens, L.

White or pinkish
May-December

White Clover, Dutch Clover, Shamrock, White Trefoil, Honeystalks, Honeysuckle Clover.

## PULSE FAMILY

Trifolium: for derivation see agrarium. Repens: Latin for creeping.

The Preferred Habitat: meadows and waste places, often cultivated for fodder.

The Plant: branched; the branches creeping, often rooting at the nodes, four inches to twelve inches long; the stem without hairs or with a few, scattered ones.
The Leaves: alternate; palmately three-divided, the leaflets obovate or obcordate; three-quarters of an inch long or less; without hairs or with few short, soft ones; often notched at the apex; broadly wedge-shaped at the base; long-stemmed.
The Flowers: in globose heads, on long stems, the individual flowers on long pedicels which hang down when old, giving an untidy ragged appearance to the heads.
The Fruit: a small pod.
The lay person finds not infrequently when trying to distinguish different species in the same genus, that he can mate the flowers: So it is with the true clovers (Trifolium). For the Alsation white (hybridum) and the "white" (repens) pair off and the yellows, the Yellow Hop (agrarium) and the Low Hop (procumbens) are similar. Of the two white clovers this, repens, is the one whose branches root at the nodes

LEGUMINOSA
PULSE FAMILY
Melilotus alba, Desr.

White

## June-October

Sweet Clover, White Melilot, Honey-lotus, Honey Clover, Tree Clover.

Melilotus: from Greek for honey and some leguminous plant. Alba: Latin for white.

## LEGUMINOSÆ

The Preferred Habitat: dry, sandy soil of roadsides, along the wharves, near dwellings, in dump-heaps.

The Plant: erect, one foot to five feet high, much branched; the branches fairly erect; the stem hairless.

The Leaves: alternate; compound, the leaflets oblong, tending to oblanceolate, cut off, notched or rounded at the apex, narrowed at the base, serrate; the whole leaf petioled.
The Flowers: in slender, one-sided racemes, which are sometimes four inches long.

The Fruit: an ovoid, hairless pod.
A rank-growing plant, or a tall, stiffly branched bush with small, dark green clover-like leaves. When in bloom it proclaims its presence by the delicate fragrance of the many tiny white flowers that pass down the stem in a onesided raceme, which is sometimes four inches long.

It is a wholesome adventive for the garden patch. "As a soil renovator," when the deep roots break up the ground, aërating and draining it, it is uscful as well as when, decayed, it furnishes the soil with humus. On its roots it bears "many tubercles which contain beneficent nitro-gen-gathering bacteria. It is often used to prepare the ground for alfalfa." Also, from it is made a valuable drug.

## LEGUMINOS®

## PULSE FAMILY

Medicago lupulina, L.

Yellow
July-September

Nonesuch, Beach Medick, Black Trefoil, Hop Clover.

Medicago: the Greek name for the alfalfa, which came to the Greeks from Media.
Lupulina: Latin diminutive for wolf.
The Preferred Habitat: dry, sandy soil, frequently about the wharves.

## PULSE FAMILY

The Plant: low-lying, often one foot or two feet long, branched at the base; the branches spreading; the stems with short, soft hairs.
The Leaves: alternate; palmately compound, the leaflets oval or tending to wedge-shaped, variable in size; obtuse or notched at the apex; narrowed or rounded at the base; more or less shallow-toothed.

The Flowers: in oblong or cylindrical, dense heads.
The Fruit: a kidney-shaped pod, practically without hairs, black when ripe, curved into a partial spiral, strongly veined.

This low and insignificant plant has three-divided leaves and tiny, thimble-shaped heads of yellow flowers. At first glance, one might confuse it with the Low Hop Clover (Trifolium procumbens), but it is to be distinguished from that by the black heads, for the persistent fruit is a shiny, jet black when ripe.

## LEGUMINOSA

PULSE FAMILY
Medicago sativa, L.

Bluish-purple
Summer

Alfalfa, Purple Medic, Lucern, Burgundy Clover, Chilian Clover, Brazilian Clover.

Medicago: Greek name for alfalfa, because the plant came to the Greeks from Media.
Sativa: Latin to denote "sown in a field."
The Preferred Habitat: dry fields, often roadsides near fields.

The Plant: semi-erect, one foot to one and a half feet high, much branched; stem without hairs or sometimes with a few, short, soft ones.

## LEGUMINOSE

The Leaves: opposite; palmately divided; the three leaflets oblanceolate tending to obovate, at the apex obtuse or cut off short (truncate) or notched, often capped with an abrupt tip, at the base narrowed or wedge-shaped; the leaf petioled.

The Flowers: in short, dense racemes.
The Fruit: a pod, twisted in two or three spirals, having short, soft hairs.

This low, bushily-branched plant, which from its zigzag stem gives the impression that it has never decided whether to stand erect or to grow sideways, has threedivided leaves with a tiny, sharp bristle at the tip, and clover-like heads of whitish-purple flowers, that vary in tone with the age and possibly with the situation of the plant.

It has been much cultivated for fodder and often persists as a weed in neglected fields or spreads to near-by roadsides.

LEGUMINOSA PULSE FAMILY

Tephrosia virginiana, (L.) Pers.
Straw-yellow with Hoary Pea, Goat's Rue, crimson-red keel

July-August $\begin{array}{ll}\text { Wild Pea, } & \text { Catgut, } \\ \text { Turkey Pea } & \text { Devil's Shoe- }\end{array}$ Indian Bean, strings.
Tephrosia: from Greek for ash-coloured or hoary. Virginiana: Latin for Virginian.

The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: from long and tough roots; erect or nearly so, one foot to two feet high; the stem clothed with short, silky, whitish hairs.

The Leaves: alternate; pinnately compound, the seven to twenty-five leaflets oblong, mucronate or notched at


TEPHROSIA

VIRGINIANA.
 - Wers

ONE INCH

## PULSE FAMILY

the apex, narrowed or wedge-shaped at the base; the leaves short-petioled.

The Flowers: nearly sessile, crowded in a raceme.
The Fruit: a narrow pod, one inch to two inches long, densely covered with short, soft hairs.

The Hoary Pea, growing in extensive clumps on the Commons presents a grey-green appearance of its finely divided leaves and a bright touch of colour in the blossom shaped like that of a pea, and having straw-yellow wings, and crimson-red keel.

LEGUMINOSE
PULSE FAMILY
Desmodium sessilifolium, (Torr.) T. and G.
Magenta-blue
Sessile-leaved Tick Trefoil. July-September
Desmodium: from Greek for a band or chain, in allusion to the connected joints of the pods.
Sessilifolium: Latin for a stemless leaf.
The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: spreading, much branched; the stem one foot. to two feet long and slender, with short, soft hairs.

The Leaves: alternate; pinnately three-compound, the leaflets linear or linear-oblong, blunt at the apex, rough above, downy beneath; the stems much shorter than the leaflets.

The Flowers: very small, in panicles at the ends of the branches.

The Fruit: a jointed pod.
The Tick Trefoils are sometimes difficult to discover for they spread their long and slender branches in rosettes among the other green things on the ground. The sprays

## LEGUMINOSA

of tiny, magenta-blue flowers seem inadequate to the sturdiness of the plants. When picked, the branches are found to be delicate and rather graceful, but unfortunately, neither leaves nor flowers keep well after the stem has been cut. Botanically, the Tick Trefoils are difficult to separate. The distinguishing feature of this one is the almost stemless leaves and the narrow leaflets.

Lespedeza capitata, Michx. var. velutina, (Bicknell) Fernald.

Yellowish-white

Bush Clover, Dusty Clover.

## August-September

Lespedeza: dedicated to Lespedez, the Spanish governor of Florida in the time of Michaux.
Capitata: Latin denoting in a head, in allusion to the heads of flowers.
Velutina: from Latin for shaggy hairs.
The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: wand-like, somewhat erect or prostrate, two feet to three feet high; the stem simple, with silky and silvery hairs.

The Leaves: alternate; pinnately three-compound; the leaflets oblong tending to oval with short and matted, ashy wool on both surfaces, acute or obtusish at each end, entire.

The Flowers: in dense, oblong heads, in the upper axils of the leaves, sessile, or on short peduncles; the petals spotted with purple.

The Froit: a very small, pubescent pod.


## PULSE FAMILY

A wand-like, light grey-green plant that is another example of the effect of the strong winds over the Commons, for elsewhere the plant is erect; here the green branches often are almost prostrate, forming a rosette on the ground. All through the winter and even during the summer, the dead flower stalks with brown withered heads, stand erect.

LEGUMINOSA
PULSE FAMILY
Lespedeza procumbens, Michx.
Purple-magenta or magenta-pink
Trailing Bush Clover. August-September

Lespedeza: for derivation see capitata. Procumbens: Latin for low-lying.

The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: trailing; stems twelve inches to twenty-four inches long, with soft, short hairs.

The Leaves: alternate; palmately three-compound, leaflets oval or elliptic, obtuse at the apex, rounded at the base; petioles shorter than the leaves.

The Flowers: in clusters in the axils of the leaves, peashaped.

The Fruit: a pod.
The showiest and the prettiest of the Bush Clover group. The tiny, purple-magenta flowers are scattered toward the ends of the long branches, that spread in rosettes on the ground and the small leaves are clover-like.

# LEGUMINOSA 

## LEGUMINOSA

## PULSE FAMILY

Vicia Cracca, L.

Light-violet<br>June-August<br>Cow Vetch, Tufted Vetch, Blue Vetch, Bird Vetch, Time Grass, Cat Pea.

Vicia: classical Latin name of Vetch. Cracca: classical name for some leguminous plant.

The Preferred Habitat: dry, sandy soil.
The Plant: climbing or trailing, two feet to four feet long; the stems slender and weak, having fine, soft hairs or being sometimes nearly smooth.

The Leaves: alternate; pinnately-compound, with eighteen to twenty-four leaflets, which are linear or linearoblong, thin, obtuse or obtusish at the apex, capped with an abrupt tip, sessile; the whole leaf on an axillary stem, which equals the leaves or is shorter than they.

The Flowers: in dense, spike-like racemes, which are one inch to four inches long.

The Fruit: a short-stalked, hairless pod, five to eight seeded.

A graceful plant that climbs by tendrils and is characterized by a fine, downy hairiness on the grey stems, and by olive-green compound leaves, which have twenty or more lance-shaped leaflets, ending abruptly in a bristlelike point. In their axils grow one-sided clusters of light violet, slightly tubular flowers, of which the upper petal is streaked with a deep violet.

# PULSE FAMILY 

LEGUMINOSA

## Vicia sativa, L.

Purple to magenta pink<br>May-August<br>Common Vetch, Spring Vetch, Pebble Vetch, Tarr.

Vicia: for derivation see Cracca. Sativa: Latin for "sown."

The Preferred Habitat: wheat fields and waste places. In Europe extensively cultivated for fodder.

The Plant: spreading, slightly erect or climbing, one foot to three feet high; the stem with short, soft hairs or no hairs; the stipules broad, generally sharp-toothed.

The Leaves: alternate; pinnately divided, the leaflets two to fourteen, obovate, oblong or oblanceolate, obtuse, cut off suddenly or mucronate at the apex, narrowed at the base.

The Flowers: one or two in the axils of the leaves, sessile or on short peduncles.

The Fruit: a linear-oblong, hairless pod, five to ten seeded.
The most important botanical question about the Vicia sativa is, how it differs from the other Vicias. An easy distinction is to remember that the flowers of Vicia sativa are chiefly in twos, in the upper axils of the leaves and are purple, but those of the cracca and of the villosa are violet and white, and crowded in one-sided racemes. A still further distinction is that older plants of Vicia sativa become practically hairless.

# LEGUMINOSÆ 

LEGUMINOSA
PULSE FAMILY

> Vicia villosa, Roth.

Violet and white
Hairy Vetch, Winter Vetch.

Vicia: for derivation see Cracca.
Villosa: Latin, full of hairs.
The Preferred Habitat: waste fields.
The Plant: trailing, one and one-half feet to two and onehalf feet long; the stem branched, angled, covered with velvety hairs.

The Leaves: alternate; pinnately compound, the leaflets on short petioles, long, taper-pointed at the apex, covered with silky hairs, margins entire; the tendrils short, forked.

The Flowers: arranged in a spike, fifteen to forty, all growing on long, hairy stems on one side of the main stem; the corolla tube is deep magenta; the petals are violet, veined with dark, or white tinged with purple.
The Fruit: a pod.
A very pretty, trailing plant, that has finely and regularly divided silky-haired leaves and long stems, from one side of which hang the tubular deep violet flowers with white markings.

LEGUMINOSA PULSE FAMILY

Lathyrus maritimus (L.), Bigel.

Ruddy purple
May-August

Beach Pea, Sea-side Pea, Everlasting Pea, Vetchling.

Lathyrus: Greek for a leguminous plant. Maritimus: Latin for seaside.

## PULSE FAMILY

The Preferred Habitat: beach sand.
The Plant: semi-prostrate, one foot to two feet long; the stem branched, sharply angled, without hairs, fleshy.

The Leaves: numerous; alternate; pinnately compound in three to six parts, the leaflets oval or oblong, above hairless, below with short hairs, mucronate at the apex, narrowed at the base, beautifully veined. At the base of the leaves are a pair of conspicuous arrow-shaped stipules, nearly as large as the leaflets.

The Flowers: seldom solitary, usually six to ten in a raceme on hairy peduncles, the individual flowers on short, magenta-coloured hairy pedicels; the calyx tinged with magenta, notched; the keel petals are very light, edged with darker.

The Fruit: a pod, linear-oblong, hairless and veined, sometimes three inches long.

A semi-prostrate plant, that spreads over the sand, its stiff and rather heavy appearing branches. On one side of the branches grow the "ruddy-purple" bean-shaped blossoms, that make the Beach Pea one of the few brightly colored flowers of the shore line. Under the hot sunshine, the thick, oval leaflets tend to fold together, to avoid evaporation.

A pios tuberosa, Mœnch.

| Maroon and pale | Ground-nut, <br> brown-lilac | Pig-potato, <br> Wild-bean, |
| :--- | :--- | :--- |
| Indian-potato, |  |  |
| August-September | Ground-pea, | White-apple, |
|  | Trailing-pea, | Travelers'- |
|  | Potato-pea, | delight. |

Apios: from Greek for a pear, from the shape of the tubers. Tuberosa: Latin for a swelling or tuber.

## LEGUMINOSA

The Preferred Habitat: swamps.
The Plant: climbing from a tuberous, underground stem; two to three feet long, slender, without hairs or with short, soft ones.

The Leaves: alternate; divided into five to seven (rarely three) leaflets; leaflets ovate, or ovate-lanceolate; one inch to three inches long; hairless on both surfaces; acute or acutish at the apex; rounded at the base; petioled.

The Flower-heads: in racemes in the axils of the leaves on short peduncles, violet centered.

The Fruit: a linear pod, straight or slightly curved, sometimes four inches long, many seeded.

A beautiful climber, with five to seven leaflets, arranged along the axis, like the pinions of a feather. The vine is not in the least fastidious but will spread luxuriantly over bayberry or sweet-pepper-bush or goldenrod, twining itself around the branches.

Twenty-one other members of the Pulse Family have been reported.

Linum medium, (Planch) Britton.
Yellow Yellow Flax.
June-August
Linum: classical name of the flax, from Latin for a thread. Medium: Latin to denote intermediate size.

The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: erect, ten inches high or higher, branched above; the branches stiff, erect, smooth.

The Leaves: the lowest, opposite; all lanceolate to linearlanceolate; pressed against the stem; acute at the apex; sessile; entire.

The Flowers: in a panicle, wide open; five petals.
The Fruit: a capsule.
This flax has a rather low stem, light green and thin very erect, yet not stiff. Toward the top are irregularly clustered, small, pale-yellow flowers. An inconspicuous plant, to be sure, but one extremely interesting from the botanical point of view, for it does not conform to type.

Three other members of the Flax Family have beer reported.

> Oxalis stricta, L.

## Yellow

May-August

> Sheep Sorrel, Upright Yellow Wood Sorrel, Poison Sheep Sorrel, Toad Sorrel, Ladies' Sour-grass, Sheep-poison, Sour-grass.

Oxalis: from Greek for sour.
Stricta: Latin for constricted.
The Preferred Habitat: gardens and neglected ground.
The Plant: erect, five inches to six inches high; usually branched at the base; the branches spreading; the stem set with sharp, stiff, flattened hairs.
The Leaves: opposite; pale green; compound, leaflets three, with short, soft hairs on both surfaces, petioled closing when the stem is cut.

The Flowers: in umbel-like cymes on long, stout stems. The pedicels at length bent down. Petals pale yellow, often with a reddish spot near the base.

The Fruit: a capsule, sharp pointed, breaking open at a touch.

A pretty weed, with dainty, compound clover-like leaves and small yellow flowers that often have a red spot near the base. A pretty plant, but not a satisfactory one to pick. When the stem has been cut and when night comes, the sensitive leaves droop.

The distinction between this species and others is that in this the seed-vessel finally stands at an angle with the stem.

One other member of the Oxalis Family has been reported.

## Geranium maculatum, L.

Magenta-Pink
May-June

> Wild Geranium, Spotted Geranium, Wild Cranesbill, Spotted Cranesbill, Stork's-bill, Crowfoot, Dovefoot, Sailor's-knot, Shameface, Old Maid's-nightcap.

Geranium: an old Greek name for a crane, the long beak of this fruit thought to resemble the bill of that bird.
Maculatum: Latin for spotted.
The Preferred Habitat: damp ground, in the shade of other plants.

The Plant: erect, one foot to two feet high; the stem unbranched or branching above, covered with short, soft hairs.

The Leaves: opposite; orbicular or heart-shaped; deeply three to five parted, the divisions obcordate, wedgeshaped, variously toothed and cleft; three inches to six inches wide; petioled, the two stem leaves on shorter petioles than the basal leaves.

The Flowers: in an umbel, rising on long stems from the junction of the pair of leaves. The petals veined, whitish at the centre, bearded.

The Fruit: a carpel, the axis elongated into a beak.

## GERANIACEÆ

A tall, delicate, branching plant of the damp and shady places, remarkable from a distance for its magenta-pink flowers that rise on long stems above the dark green leaves of the thicket. On closer view, one discovers basal leaves, a very light green stem, which bears toward the top, or at least below the flower-cluster, two additional deeply-cut, five-lobed and rough-hairy leaves, which being very sensitive, curl up when the plant is held in the hand. They are spotted with white or brown, a fact that has given rise to the specific title of maculatum.

From this plant is made a valuable drug.

GERANIACEA
GERANIUM FAMILY
Erodium cicutarium, (L.), L'Her.
Magenta-purple
Stork's-bill, Heron's bill, Wild Musk, Pin-clover, Pin Grass, Pin Weed.

Erodium: Greek for a heron, in allusion "to the long fruitbearing beak, thought to resemble the bill of that bird."
Cicutarium: a Latin form, to denote a resemblance to the poison hemlock (Cicuta).

The Preferred Habitat: roadsides and gardens in town, sandy soil.

The Plant: erect or somewhat so, six inches to eight inches high; the stem branched, reddish, with flattened loosely-spreading white hairs, rather weak.

The Leaves: dark; alternate; from jointed nodes; pinnately divided; two inches to four inches long; with long, white hairs on both surfaces; the lower petioled, the upper sessile.



ERODIUM
CICUTARIUM

## GERANIUM FAMILY

The Flowers: two to twelve, in umbels, on reddish stems longer than the leaves; petals five; five anther-bearing stamens. The calyx with five very light green sepals, which are striped with dark green, bristle tipped, having silky hairs.

The Fruit: a beaked carpel, the divisions of which are spirally coiled when the fruit is ripe.

A low, half erect plant, that comes and leaves early in the season. The colouring of its reddish stems and ma-genta-purple flowers is rather vigorous but the fine divisions of the dark green leaves is dainty. It has received the name of Stork's bill from the shape of the fruit which is beaked and when ripe, spirally coiled.

Four other members of the Geranium Family have been reported.

Polygala cruciata, Walt.
Dull magenta-pink
June-September

Bitter Milkwort, Polygala, Pink Milkwort, Century (local name).

Polygala: old Greek name applied to some low shrub, reputed to increase lactation because of a "notion that cows eating this plant were able to give a greatly increased supply of milk."
Cruciata: from Latin for a cross.

The Preferred Habitat: moist ground.

The Plant: erect, four inches to ten inches high; the stem freely branched above, square or angled, without hairs.

The Leaves: verticillate in fours or a few of them scattered; linear or oblanceolate; usually less than one inch long; obtuse and capped with an abrupt tip at the apex; stemless or nearly so.

The Flowers: crowded in oval heads, really in racemes.

The Froit: a capsule.

This low, pretty milkwort with its clover-like heads of dull magenta-pink flowers, keeps company in the swamps with hedge hyssop and the sundews. The stem is square and widely branched and the narrow leaves prevailingly in clusters of fours, are thin and smooth.



Dull magenta
July-September

Century (local name), Bitter Milkwort, Pink Milkwort.

Polygala: for derivation see cruciata.
Polygama: Greek for many marriages.
The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: in low and spreading tufts; the stems four inches to twenty inches high, unbranched, angled, without hairs.

The Leaves: numerous; alternate; light dull green or dark magenta; oblong or lanceolate; without hairs; thick; obtuse or capped with an abrupt tip at the apex; entire.

The Flowers: in a loose raceme, at the ends of the leafy stems. Albinos have been found.

The Fruit: a capsule.
A very satisfactory plant, for it keeps a week or more in the house and is quite decorative. On the Commons, where it grows in great abundance, there are flattened rosettes of small, dull crimson, irregularly shaped flowers (with a touch of white from the stamens), that grow in delicate, loose clusters on the tinted, leafy stem. In the colour of the flowers only does it suggest the Scotch heather and in that way only remotely. Still, it is frequently mistaken for heather.

An interesting feature of the plant is the cleistogamous or closed flowers on the underground branches.

Two other members of the Milkwort Family have been reported.

Euphorbia Cyparissias, L.<br>Greenish and $\tan$<br>May-June<br>\[ \begin{aligned} \& Spurge Cypress,<br>\& Napoleon's Plume (local),<br>\& Bonaparte's Crown,<br>\& Quack Salver's Grass,<br>\& Tree Moss,<br>\& Balsam,<br>\& Garden Spurge,<br>\& Kiss-me-Dick,<br>\& Welcome-to-our-House,<br>\& Graveyard Weed. \end{aligned} \]

Euphorbia: Euphorbus, physician to King Jubal. Cyparissias: Latin for cypress; in allusion to the fact that it was often planted in cemeteries.

The Preferred Habitat: an escape, originally from cemeteries, to roadsides and gardens.

The Plant: erect, six inches to twelve inches high; the stem branched and scaly below, leafy above, hairless, with a milky acid juice.

The Leaves: opposite; those upholding the flower heads, whorled; linear or almost threadlike; the floral leaves heart-shaped; stemless; the margins entire, slightly rolled backwards.

The Flowers: small, of two kinds, sterile and fertile, in umbels, which have a tufted appearance, surrounded by a cup-shaped involucre, which resembles a calyx or corolla.

The Froit: a capsule.
A tufted plant, in appearance somewhat like a miniature cypress tree. The leaves are dark green, and with them

## SPURGE FAMILY

blend (as the petals are early deciduous) the dark-yellow sepals of the flowers, borne at the ends of the branches.

There is an interesting touch of local story in the Nantucket name of Napoleon's Plume: Mrs. Stokeley Morgan once wrote me, "Mrs. Owen had mentioned to me that she had never heard that name for Cypress Spurge except in Nantucket, it seemed local. In 1901 I spent the month of August in Touraine. The Cypress Spurge was everywhere and called 'La plume de Napoleon!' When I came home I told Mrs. Owen. She immediately said, 'Then the name here must be a relic of the visit of the French botanist, Marsillac. If you have here 'A catalogue of plants growing without cultivation on the island of Nantucket,' you will find in the preface, under date of July, 1888, it (Nantucket) was once a garden of flowers. Such it was called by the Frenchman, Marsillac, who, nearly a hundred years ago, regardless of his silk stockings, plunged into the swamps for their floral treasures.'"

EUPHORBIACEE

## SPURGE FAMILY

Euphorbia polygonifolia, L.

## Whitish-green

July-September
Euphorbia: for derivation see Cyparissias.
Polygonifolia: from Greek and Latin, signifying leaves and many knees, in allusion to the many joints of the leafy branches.

The Preferred Habitat: beach sand.
The Plant: from a long, straight root, flat on the sand; the stem branched at the base, without hairs; the branches radiating, forked, three inches to eight inches long, wiry.

The Leaves: opposite; oblong to linear-lanceolate; fleshy; obtuse, often mucronate at the apex; obtuse or slightly

## EUPHORBIACE $\neq$

heart-shaped at the base; short petioled; entire; stipules an inconspicuous fringe of short bristles.

The Flowers: solitary in the axils, minute.
The Fruit: a capsule.
A wheel-shaped rosette of bright green, forked stems, tinged with red, lying flat on the beach sand, that is Seaside Spurge. To the brightness of the leaves and stems is due the cheer of the plant, and not, certainly, to the insignificant whitish-green flowers, which are less than onetenth of an inch long.

Two other members of the Spurge Family have been reported.

## EMPETRACEA BROOM CROWBERRY FAMILY

Corema Conradii, Torr.
Red-brown
Broom Crowberry.

## March

Corema: from Greek for a broom, in allusion to the bushy aspect of the clumps.
Conradii: in honour of a Philadelphia botanist, S. W. Conrad.

The Preferred Habitat: dry, sandy soil of the Commons, even in beach sand.

The Plant: shrubby, evergreen, six inches to two feet high, profusely branched; the young twigs with very short hairs.

The Leaves: densely crowded; very small; linear-oblong; when mature, bright green; without hairs; obtuse at the apex; entire.

The Flowers: of two kinds; numerous, in heads at the ends of the branches, sessile; the staminate the more noticeable on account of the long purple stamens.

The Fruit: a drupe.
This plant is included, not because it has æsthetic charm, but, rather, because it is interesting botanically. Its presence on Nantucket, Dr. Harshberger claims, is one of the proofs that, ecologically, Nantucket and the plains and pine-barrens of New Jersey are related.

As for its identification, the dense leaves are fine but rigid, and the red-brown flowers inconspicuous. In general, as the Crowberry grows from one root, its cushiony clumps are high in the centre and lower on the sides.

## Rhus copallina, L.

| Green-white | Common Sumach, |
| :--- | :--- |
|  | Dwarf Black Sumach, Spoth Sumach, |
| June-September Mountain Sumach, |  |

Rhus: from the old Greek and Latin names of this plant. Copallina: from a Spanish-Mexican word meaning resinous.

The Preferred Habitat: borders of thickets.

The Shrub: four to six feet high, freely branched; the branches dark brown and woody.

The Leaves: alternate; pinnately divided into nine to twenty-one broadly lanceolate leaflets, which are dark green and without hairs above, beneath paler and often with short, soft hairs; turning dull red in fall, acute or obtusish at the apex; on more or less hairy petioles; entire or few-toothed toward the apex; the stem between the leaflets widened.

The Flowers: very small, in dense panicles, at the top of the stems.

The Fruit: very small drupes, maroon-red, covered with fine, soft hairs.

The two non-poisonous members of the Cashew Family described here, are usually low bushes (similar in general appearance), that make part of the copse of Nantucket. Both have regularly divided leaves, and bear in season large conical heads of tiny, densely crowded, greenishwhite flowers, which later turn into maroon-red fruits,

## ANACARDIACE $\notin$

covered with sticky looking hairs. After the leaves have fallen, the fruits persist and the stiff branches then resemble hot pokers.

ANACARDIACEE CASHEW FAMILY

Rhus glabra, L.

| Green-white | Smooth Sumach, | Scarlet Sumach, |
| :--- | :--- | :--- |
|  | Sleek Sumach, | Shoemaker Sumach, |
| June-August | Pennsylvania Sumach, Vinegar Tree, |  |
|  | White Sumach, |  |

> Rhus: for derivation see copallina. Glabra: Latin for smooth.

The Preferred Habitat: borders of thickets.
The Shrub: two feet to six feet high, branched; the branches lacking hairs.

The Leaves: alternate; pinnately divided into eleven to thirty-one lanceolate or oblong-lanceolate leaflets which are dark green above, beneath whitish; sharply saw-toothed; the stem between the leaflets not widened.

The Flowers: very small, similar to those of the copallina, although the clusters are usually more dense. Sometimes a part of the flower cluster is changed into small leaves.

The Froit: similar to that of the copallina.
A shrub or rarely a small tree that grows with the copallina and from a distance seems to resemble it, but on closer view one finds that the stem between the leaflets is not widened.

From the berries a valuable gargle used to be made that was effective also as a mouth wash. The bark, as well as the berries, is astringent.

Rhus Toxicodendron, L.
Whitish-green
May-June

| Poison Ivy, | Poison Oak, |
| :--- | :--- |
| Poison Creeper, | Black Mercury, |
| Poison Vine, | Climbing Ivy, |
| Climath, | Mark-weed, |
| Markry, | Pickry, |
| Mercury Vine, | Three-leaved Ivy |
| Poison Ash, |  |

Rhus: for derivation see copallina. Toxicondendron: from Greek for arrow-poison.

The Preferred Habitat: along fences, through thickets, over the Commons, and in pure beach sand.

The Vine: sometimes climbs by numerous aërial rootlets and then waves freely in the wind, sometimes it is half erect or even fully erect and shrub-like; the stem, occasionally two inches to three inches in diameter, very much branched, woody, and hairless.

The Leaves: alternate; palmately three-divided; variable, but typically acute or tapering quickly to a point at the apex; narrow or wedge-shaped at the base; above shiny, with short, soft hairs or smooth; beneath more or less covered with short, soft rusty hairs; entire or coarsely round-toothed, or sometimes essentially entire.

The Flowers: very small, in loose axillary panicles, which are from one to three inches in length.

The Fruit: whitish or cream-coloured, usually globose and covered with short, soft hairs; like all the other parts of this plant, the fruit is very poisonous.

A beautiful vine growing profusely along fences, clambering over bushes, or spreading in the dry beach sand-

## ANACARDIACEA

everywhere its three-divided leaf may be seen shining brightly in the summer sun or flaunting its baleful red among the innocent crimsons and golds of the fall. Even the greenish or yellowish white berries looking as though good to eat, are pretty and attractive.

Poison Ivy and Virginia Creeper (Psedera quinquefolia of the Vitacece or Grape Family) are often confused. The chief distinction between them is the fact that the leaf of the Poison Ivy has three divisions while that of the Virginia Creeper, as the name quinquefolia signifies, has five divisions.

> Leaflets three, quickly flee.
> Leaflets five, save alive.

Berries white, dread the sight, Berries red, have no dread.

Or, in the words of an old saying, "The vine is safe to pick, if there are as many divisions to the leaf as there are fingers on your hand."

This plant works its mischief in various ways. In the spring, the hairs, and in the summer, the pollen, blown by the wind often over great distances, cause the passerby to be poisoned even when he has not gone near the vines. If you have touched the Poison Ivy, the best thing to do when you reach home is to rub freely with some pure alcohol, for it alone cuts the semivolatile oil that is the poisonous part of the plant. Water or a small quantity of alcohol will only spread the oil. If alcohol is difficult to obtain, white lead is good, but being such a severe poison in itself, care must be taken in its use. Other efficient remedies are photographers' hypo, ammonia, and Pond's Extract. If one is conscious of having touched Poison Ivy, while in the field, rubbing the hands with gritty sand or gravel will often prevent trouble later.

If the vine is discovered growing near frequented spots, it may be destroyed by the application every few days of

## CASHEW FAMILY

a few drops of sulphuric acid (handled with care) to the woody stem near the roots.

From the oil is distilled a drug, valuable in the treatment of rheumatism.

ANACARDIACE Æ CASHEW FAMILY

Rhus Vernix, L.

| Whitish-green | Poison Sumach, |
| :--- | :--- |
| June | Poison Elder, |
|  | Poison Ash, |
|  | Poison Dogwood. |

Rhus: for derivation see copallina. Vernix: from Latin for green.

The Preferred Habitat: low grounds.
The Shrub: six feet to fifteen feet high; the bark smooth or nearly so; the inner wood soft and light-coloured.

The Leaves: alternate; pinnately-compound, seven to thirteen leaflets, thin, obovate, green on both surfaces, acute or acuminate at the apex, on very short stems, entire.

The Flowers: in loose panicles at the angles of the leaves.
The Fruit: a berry, in slender clusters, green-grey.
Fortunately this harmful shrub is not very common on Nantucket. But as it carries a volatile oil, which is even more irritating than that of Poison Ivy (Rhus Toxicodendron) it should be so well known that it will always be avoided. If one has been unlucky enough to have touched it, the same remedies will be found efficacious that have been recommended for Poison Ivy. This oil is used in the treatment of rheumatism.

The Poison Elder or Poison Dogwood is a low shrub, almost tree-like. Its branches spread at right angles to the trunk, so that its general appearance is flat-topped.

## ANACARDIACEE

The smooth bark of the trunk and branches is ashy grey in the summer months, but, as winter advances, they tend to a lighter and more lurid tone. The leaves are pinnatelydivided; the small whitish-green flowers and the greygreen berries, in slender clusters, resemble those of the Poison Ivy.
"Beyond the fern," Mr. Scoville writes in his picturesque way, "I met that pale-grey vitriol thrower, the Poison Sumac, with its corpse-colored berries, growing out from the side of the twigs instead of from the end as do the berries of the harmless varieties."

One other member of the Cashew Family has been reported.

Ilex fastigiata, Bicknell
Ilex: ancient Latin name of the Holly Oak rather than of the Holly.
Fastigiata: A Latin derivation, alluding to the erect and close habit of the branches.
"A derivative of Ilex verticellata, the Nantucket winterberry, having smaller and narrower leaves and crowded, erect branches. It is abundant on Nantucket and is almost insular in its habitat, occurring elsewhere, as far as known, only locally in New Jersey."

AQUIFOLIACEA
HOLLY FAMILY

> Ilex glabra, (L.) Gray

| Green and | Inkberry, $\quad$ Dye-leaves, |
| :--- | :--- |
| cream-white | Evergreen Winterberry, Gall-berry |
| June-July | Appalachian Tea, |

Ilex: for derivation see fastigiata. Glabra: Latin for smooth.

The Preferred Habitat: sandy soil of thickets and borders of thickets.

The Shrub: two feet to six feet high, branched; young twigs and petioles with fine, soft hairs.

The Leaves: evergreen; alternate; oblanceolate or elliptic; thick and leathery; one inch or more long; one-half inch or more wide; above dark green and shining; without hairs on either surface; obtusish at the apex; generally wedge-shaped at the base; sparingly toothed or entire.


## HOLLY FAMILY

The Flowers: of two kinds, the fertile generally solitary, sometimes two or three together. The sterile flowers, several, in a cyme. Calyx four-six toothed; petals four-six, separate or united only at the base; stamens four-six.

The Fruit: a black drupe.
A large, symmetrical bush that has spreading branches and shiny, leathery, evergreen leaves (more or less brown in the winter). The small, greenish-white flowers cuddle under the leaves at the ends of the branches. Later they are replaced by the black fruit.

## AQUIFOLIACEE

HOLLY FAMILY
Ilex opaca, Ait.

Greenish-white
American Holly,
Berries, red
April-June
Ilex: for derivation see fastigiata.
Opaca: Latin for opaque.
The Preferred Habitat: groves.
The Tree: thirty feet high or taller the trunk slender with light grey bark, "roughened by excresences"; the branchlets stout, green at first and covered with rusty down, later smooth and brown.

The Leaves: alternate; evergreen; elliptical to oblong; acute at the apex, more or less wedge-shaped at the base; stems short, stout, grooved, thickened at the base; with minute stipules; the margin wavy-toothed with a few spiny teeth; feather-veined, the primary veins conspicuous. "They remain on the branches for three years, finally falling in the spring when pushed off by the growing buds."

## AQUIFOLIACEA

The Flowers: small, both sterile and fertile borne in short cymes from the axils of young leaves, or seattered along the base of young branches; sterile clusters, three to nine flowered; fertile clusters, one to three flowered.

The Fruit: a berry-like drupe, one quarter inch across, red, persisting all winter.

This is the Christmas Holly, mentioned here because it is an interesting fact that the tree is very rare on Nantucket. There are many Holiday substitutes for it, among which the chief is Black Alder (Ilex verticillata) with similarly shaped, but scarlet, instead of red, berries, and at Christmas time, bare branches.

From this tree is distilled a drug, valuable in the treatment of eye conditions.

AQUIFOLIACEÆ
HOLLY FAMILY
Ilex verticillata, (L.) Gray.

Greenish-white
June-August

Black Alder, Fern Bush, False Alder, Virginia Striped Alder, Winterberry, White Alder, Wintergreen.

Ilex: for derivation see fastigiata.
Verticillata: the diminutive form in Latin, meaning the little whirl of a spindle.

The Preferred Habitat: dampish ground of thickets.
The Shrub: six feet high or less, branched; the twigs without hairs or with few short ones.

The Leaves: alternate; oval, obovate or oblong-lanceolate; two to three inches long, about one inch wide; rather thick and leathery; above nearly hairless; beneath, especially on the veins, with short, soft hairs; acute or acuminate at the apex; acute or obtusish at the base; sharply serrate; in the fall a maroon-red.

## HOLLY FAMILY

The Fertile Flowers: one to three; the staminate, two to ten; calyx with silky hairs on the margins; all flowers on very short peduncles.

The Froit: a very small, bright red drupe.
A tall, reserved shrub, with smooth, olive-green bark and many ascending twigs. Its bright berries usually still cling to the bare branches after the leaves have disappeared, and sometimes persist throughout the whole winter, making the bushes a conspicuous feature of the swamps. These are the sprays of scarlet berries that have long been popular with the Nantucket people for brightening their winter bouquets and Christmas wreaths.

This species should be distinguished from the lovvigata (Pursh) Gray, which, also, is frequent on Nantucket. The lovigata has lanceolate or oblong-lanceolate leaves; that are shining above and mostly glabrous beneath, with appressed and very fine, saw-teeth. Its sterile flowers are on long peduncles, the calyx lobes without silky hairs.

Acer rubrum, L.

## March-April

Acer: from Celtic for hard.
Rubrum: Latin for red.
The Preferred Habitat: swamps and woodlands.
The Tree: usually low, but sometimes thirty or thirty-five feet high; with smoothish or flaky bark, and reddish twigs.

The Leaves: opposite; very variable in shape, ranging from ovate to orbicular; above, when young, covered with matted wool, but soon becoming green and hairless; below, whitish along the veins; at the apex acute or acuminate; at the base cut off squarely or heart-shaped; on smooth, reddish-green stems; three to five lobed, the middle lobe longer than the others, the lobes irregularly toothed.

The Flowers: minute; borne on the branches of the previous year, appearing much before the leaves; the petals linear-oblong, on very short stems.

The Winged Fruit: with which we are all so familiar, is called a samara and is borne on a long stem.

In Nantucket swamps, this prettily-leaved tree is usually of no greater stature than a shrub, but in sheltered woodlands, it does attain a height of not less than thirty or thirty-five feet. Its twigs are reddish, its leaves lobed similarly to those of the cultivated maples and in the early

## MAPLE FAMILY

fall they turn a brilliant crimson. The trees are then conspicuous features of the swamps.

Four other members of the Maple Family have been reported.

## Impatiens biflora, Walt.

Yellow
July-September

| Impatience, | Kicking-horses, |
| :--- | :--- |
| Jewel-weed, | Speckled Jewels, |
| Touch-me-not, | Ear-jewel, |
| Sling-fruit, | Ear-drop, |
| Snap-weed, | Silver-leaf, |
| Snap-dragon, | Balsam, |
| Kicking-colt, | Ladies'Slipper. |

Impatiens: Latin for impatient, in allusion to the sudden bursting of the pod when touched.
Biflora: Latin form for two-flowered.
The Preferred Habitat: damp ground, often borders of thickets.

The Plant: erect, two feet to four feet high; the stem branched, hairless, usually ruddy.

The Leaves: alternate; ovate; above hairless; below with a bloom; margins coarsely toothed.

The Flowers: large, loosely hanging, irregular; sepals and petals not easily distinguishable, together forming a deep sack, longer than broad, and terminated by an incurved spur nearly one half or fully one third the length of the sack; mottled with reddish-brown or paler and without spots, or with whitish spots.

The Fruit: a pod.
The Touch-me-not is a tall, somewhat unsubstantial and weak-looking plant with many yellow flowers that attract by their grace of form and beauty of colour. Its botanical name, Impatiens, and many of the common

## BALSAM FAMILY

names are equally significant because the seed vessel is so constructed that at its sudden bursting, (an achievement often aided by children) the seed is thrown to a great distance, sometimes as far as nine feet

The crushed foliage is a good antidote for Poison Ivy.

Psedera quinquefolia, (L.) Greene.

| Whitish or yellow-green | Virginia Creeper, | American Ivy, |
| :--- | :--- | :--- |
|  | Woodbine, | Five-fingered Ivy, |
| July-August | False Grape, | Five-leaf Ivy. |

Psedera: name probably a contraction of the Greek denoting "false ivy."
Quinquefolia: Latin for five leaves.

The Preferred Habitat: bushes in damp, open thickets.
The Vine: often several feet in length, branched; the stems more or less woody, hairless.

The Leaves: alternate; palmately compound, with five to seven (generally five) lanceolate leaflets, the leaflets dull green, decidedly paler beenath, hairless, acute or tapering to a point at the apex, with unmistakable though short, reddish petioles, hairless, rather coarsely sawtoothed, conspicuously veined and grooved; the five to ten slightly leaf-like tendrils branched and ending in adhering disks.

The Flowers: very small in compound panicles; the main branches unequal.

The Fruit: a "cadet blue" berry.
A familiar trailing vine that is frequently cultivated. It climbs by means of aërial rootlets and tendrils tipped with a flat disc. A really decorative vine with tiny, whitish or yellowish green flowers, coloured stems and petioles, and five to seven lance-shaped, sharply toothed, deep green leaflets, which in the fall turn a brilliant deep red. Fre-

## VINE FAMILY

quently it is confused with Poison Ivy (Rhus toxicodendron) but, as has been already cited:

> "Leaflets three, quickly flee, Leaflets five, save alive."

VITACEE
VINE FAMILY
Vitis Labrusca, L.
Greenish
Northern Fox-grape.
May-June
Vitis: the classical Latin name.
Labrusca: a classical name.
The Preferred Habitat: low thickets, open places, bare, sandy fields.

The Vine: climbing by forked tendrils, very much branched; the young branches woody; the bark shredded.

The Leaves: scattered, opposite a tendril or flower-cluster; above light green; with tawny hairs below; heart-shaped; abruptly acute at the apex; cut at the base; petioled; variably lobed; with short, broad teeth.

The Flowers: some perfect, some staminate, the fertile in a compact panicle.

The Fruit: a pulpy berry; deep purple or amber purple in colour or sometimes greenish or greenish-purple, with a sweet musky flavor.
"Improved by cultivation it has given rise to the Isabella, Catawba, Concord, and other varieties."

This is the more prevalent wild grape of the Island. "It thrives in low thickets, draping the shrubbery, and strays into open places, trailing among the grass and herbaceous plants, or even sprawling in bare, sandy fields." It is, indeed, a decorative vine, with large light green leavis,

## VITACEE

slightly toothed or entire or deeply lobed and rusty-woolly beneath. The flowers are insignificant, but not so the usually large and always luscious fruit. From it the Nantucket people make excellent jam and jelly. "The fruit may be of the largest size and deep purple or amber purple in colour or much smaller, more numerous and crowded in the cluster, and greenish or greenish-purple when fully ripe."
"A very old vine near Abram's Point measured twentyone inches around close to the base, and seventeen inches a foot above."

One other member of the Vine Family has been reported.

## Malva rotundifolia, L.

| White, pale pinkish- Common Mallow, | Doll-cheeses, |  |
| :--- | :--- | :--- |
| magenta, magenta- | Low Mallow, | Fairy-cheeses, |
| veined | Dwarf Mallow, | Cheeses, |
|  | Running Mallow, | Maud, |
| June-October | Blue Mallow, | Malice, |
|  | Country Mallow, | Round Dock, |
|  | Dutch-cheeses, | Shirt-button Plant. |

Malva: Greek, referring to the emollient leaves.
Rotundifolia: Latin for round-leaved.
The Preferred Habitat: gardens and roadsides.
The Plant: spreading, or low-lying; the stem four inches to twelve inches long, branched at the base, with rough hairs; root very extensive.

The Leaves: alternate; round heart-shaped; one inch to three inches wide; with short, soft hairs on both surfaces; lobed; on very long stems; palmately net-veined.

The Flowers: clustered in the axils of the leaves; notched or fringed petals about twice the length of the calyx lobe.

The Fruit: a capsule.
A creeping and rather untidy weed that spreads its round, grey-green, scalloped leaves by means of long stems in the dust of the roadsides of the town. The whitish flowers, veined with magenta, clustered in the axils of the leaves, are like miniature hollyhocks, the notched petals surrounding the united white stamens. More familiar, perhaps, than the flowers, are the round, flat seed-vessels, the "cheeses" as they are called, which are not disagreeable to the taste.

Hibiscus moscheutos, L.

| Rose | Swamp Rose Mallou, |
| :--- | :--- |
| August-September | Swamp Mallow, |
|  | Mallow Rose, |
|  | Water Mallow, |
|  | Sea Hollyhock. |

Hibiscus: an old Greek and Latin name of unknown meaning.
Moscheutos: Latin for musk.
The Preferred Habitat: salt bogs.
The Plant: erect, four to five feet high; the stem canelike, woody below, with short, soft hairs.

The Leaves: olive-green; alternate; ovate or ovate-lanceolate; three to seven inches long; above, green and hairless or with few short soft hairs; below densely coated with soft, white hairs; acute or acuminate at the apex; on long petioles; conspicuously dentate or serrate, and the lowest three-lobed; palmately veined.

The Flowers: four to six inches broad, clustered on stout pedicels at the top of the stem, only one opening at a time; the five petals imbricated in the bud; petals broad, conspicuously veined, with or without a crimson base; stamens numerous united in a column, conspicuously white. Albinos have been found.

When in bloom, one of the most showy plants of the Island, for a mass of the magnificent, large flowers on the edge of a blue pond causes one's heart to thrill at the wealth of deep pink colour, so well supported by the olive-green background of the large leaves.

It is not only a plant of the big out-of-doors, for it can also be domesticated, so to speak. In the house it is deco-


## MALLOW FAMILY

rative, although the open flowers wilt very soon after being picked. But the buds will unroll in water by the following morning. Moreover, it is easily transplanted into a garden. But this really is a misfortune, for the Swamp Mallow is on the list of plants in danger of extermination.

Three other members of the Mallow Family have been reported.

# Ascyrum hypericoides, L. 

## Pale yellow

St. Andrew's Cross.
July-August
Ascyrum: ancient Greek name of some plant probably of this family.
Hypericoides: (Greek) resembling the Hypericum.
The Preferred Habitat: dry, sandy roadsides of the Commons.

The Plant: somewhat spreading, five inches to ten inches high; the stem much branched from the base; the branches low-spreading or slightly erect; both stem and branches somewhat woody, flattened and two-edged.

The Leaves: opposite; pale yellow green, often tinged with red; narrowly oblong or obovate; thin; sometimes over an inch long, but usually shorter; obtuse at the apex; narrowed at the base; sessile; entire.
The Flowers: terminal or axillary on short pedicels, with two bracts just below and supporting the flowers; the petals are arranged but slightly in the form of a crosstwo below for the lower limb and two above for the upper limb and side-arms.
The Fruit: a capsule.
A low, branching plant, which often spreads out into patches of considerable size, that is almost as noticeable for the small, light green oblong leaves, as for the lemon yellow flowers, whose four petals, are arranged in the shape of a St. Andrew's cross.

It is an interesting fact, from the point of view of distribution, that Nantucket is both the northern and the castern limit of its range.


# ST. JOHN'S WORT FAMILY 

HYPERICACE $\mathcal{E}$
ST. JOHN'S-WORT FAMILY

## Hypericum boreale, (Britton) Bicknell.

Yellow
Northern St. John's-wort.
July-September
Hypericum: Ancient Greek name of obscure meaning. Boreale: from Greek and Latin, to signify northern.

The Preferred Habitat: low grounds, damp, or wet, sandy places, and pond shores.

The Plant: from creeping underground stems or erect; one inch to eighteen inches high; the stem slightly fourangled, simple or branched.

The Leaves: opposite; elliptic, oval, oblong, or linearoblong; the lower commonly much smaller and closer together; obtuse at the apex; sessile and sometimes slightly clasping at the base; mostly three-nerved.

The Flowers: small, few or several in cymes with leafy bracts, wheel-shaped, closing early.

The Froit: capsules, purple, crossed, and lined.

Mr. Bicknell has an interesting account of this, the commonest Hypericum of the Island. He says: "It is sometimes aquatic, inhabiting deep water with the habit of a Callitriche (Water Star-wort), the elongated leafy stems either wholly submerged or their tips emersed. In wet sand it may become strongly stoloniferous, putting forth prostrate basal offshoots which reach a length of several inches and root at intervals, sending up small flowering stems and terminating in a cluster of stems from the rooted tip."

## HYPERICACEA

Hypericum canadense, L.
Yellow
Canadian St. John's-wort.
July-August
Hypericum: for derivation see boreale. Canadense: Latin for Canadian.

The Preferred Habitat: brackish swamps.
The Plant: erect, eight inches to one foot high; the stem hairless, branched; the branches decidedly flattened against the stem.

The Leaves: opposite; linear tending to lanceolate; sometimes almost threadlike; acutish at the apex; sessile; entire; the mid-vein below somewhat prominent.

The Flowers: small, numerous, closing early; petals five; sepals linear-lanceolate.

The Fruir: a purplish-red capsule, much longer than the sepals.

A low, rather weak-stemmed, dull green plant, with many fine and spreading branches and tiny, deep yellow flowers, which are wide open early in the day, but close tightly later or very soon after the plant has been picked.

HYPERICACE $E$
ST. JOHN'S-WORT FAMILY
Hypericum gentianoides, (L.) BSP.
Deep golden yellow
Orange-grass, Pine-weed.

## June-September

Hypericum: for derivation see boreale.
Gentianoides: Greek, to denote resemblance to a gentiar
The Preferred Habitat: dry, sandy soil.

## ST. JOHN'S WORT FAMILY

The Plant: erect, four inches high or taller; the stem branched, the branches erect and near together, thread-like.

The Leaves: opposite; reduced to mere scales; minute; awl-shaped.

The Flowers: minute, nearly sessile, opening in sunshine.
The Fruit: capsules.
This is usually a small, but always a wiry plant, with such tiny scales instead of leaves that the upright branches appear leafless. It is made noticeable in the dry sand where it grows, by the deep yellow, almost orange flowers.
"The plant may be actually minute," Mr. Bicknell says, "its simple stem bearing only a single flower, or densely branched to form a firm, convex mass."

HYPERICACE $\mathbb{E}$
ST. JOHN'S-WORT FAMILY
Hypericum mutilum, L.
Yellow
Dwarf St. John's-wort, Small-flowered St. John's-wort, August-September Slender St. John's-wort.

Hypericum: for derivation see boreale. Mutilum: Greek meaning curtailed.

The Preferred Habitat: swamps.
The Plant: generally erect, eight inches to eighteen inches high; the stem generally branched above, weak, often coloured.

The Leaves: often coloured, especially when young; opposite; small; ovate to narrowly oblong; obtuse at the apex; sessile and partly clasping at the base; entire; five-nerved.

The Flowers: very small, in a cyme with leaf-like bracts, closing early, seldom to re-open.

## HYPERICACEA

The Fruit: tiny pods.
This is the weak-stemmed St. John's-wort of the swamps, that has generally ovate leaves and tiny, orange-yellow flowers, that close early.

HYPERICACEA
ST. JOHN'S-WORT FAMILY
Hypericum perforatum, L.

| Yellow | Common St. | Herb John, |
| :--- | :--- | :--- |
| July-September | John's-wort, | Speckled John, |
|  | Amber John, | Rosin Rose, |
|  | Penny-John, | Touch-and-Heal. |

Hypericum: for derivation see boreale. Perforatum: Latin, meaning to bore through.

The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: erect, twelve to twenty-four inches high, densely branched; the stem hairless, more or less two-edged.

The Leaves: numerous; oblong or linear; without hairs on either surface; obtuse at the apex; sessile; thin; entire; with black dots.

The Flowers: in a cyme at the ends of the branches, on short, smooth peduncles. The sepals lance-shaped, acute at the apex; the petals broad, somewhat spreading; the stamens numerous and prominent.

The Fruit: a capsule.
This Hypericum has a tall, wand-like stem, which bears numerous vivid deep-yellow, open flowers with many fine, yellow stamens. Conspicuous also is the fruit, reddishbrown seed-vessels, that stay long on the almost leafless stems.

From this plant is made a drug valuable in the treatment of neuritis and of rheumatism.


## ST. JOHN'S WORT FAMILY

HYPERICACEA
ST. JOHN'S-WORT FAMILY
Hypericum virginicum, L.
Pinkish-flesh colour Marsh St. John's-wort.
July-August

> Hypericum: for derivation see boreale. Virginicum: Latin for Virginian.

The Preferred Habitat: swamps.
The Plant: erect; one foot to two feet high; the stem branched or simple.

The Leaves: opposite; ovate, tending to oblong; with slight bloom on the under surface; rounded at the apex; slightly heart-shaped at the base; stemless or clasping by broad base; entire; sepia-dotted.

The Flowers: in small terminal clusters with orange glands separating the three groups of golden-yellow stamens; five petals; five sepals.

The Fruit: a capsule, more or less magenta-coloured.
The flowers and leaves and stems of this St. John's-wort form a harmonious whole. Gracefulness of form and beautiful variations of colour from pale flesh tints of flowers, and light green to deep red tones of stems and leaves characterize. Seldom are the stem and all the leaves green and in the fall low masses of red colour the swamps.

Unfortunately, like so many swamp flowers, the plants droop almost immediately after being picked and seldom revive even in warm water.

Four other members of the St. John's-wort Family have been reported.

$$
\begin{aligned}
& \text { b.cze uell ii Fecn. } \\
& \text { Helianthemum majus, BSP. }
\end{aligned}
$$

| Yellow | Rochrose, | Frostweed, |
| :--- | :--- | :--- |
| Ice Plant, | Frostwort, |  |
| July-September | Canadian Rochrose, | Scrofula Plant. |

Helianthemum: from Creek for sun and flower, in allusion to the fact that the flowers open mostly in the sunlight. Majus: Latin for larger.

The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: erect, eight to fourteen inches high; the stem of young plants simple, later having numerous stout branches, clothed with hoary short hairs.

The Leaves: alternate, or the lower opposite; generally lanceolate; with hoary hairs beneath, darker above; acute or obtuse at the apex; short-petioled.

The Flowers: the first blossoms clustered on peduncles at the top of the stem, sometimes nearly an inch broad, but generally smaller; the sepals with hoary hairs; the later blossoms clustered along slender branches in the axils of the leaves, very tiny; all flowers open only in sunshine.

The Fruit: capsules; the second fruiting minute.
A low and much branched, but delicately built plant that when out of bloom seems inconspicuous. But when the open "yellow roses" are hanging under the numerous narrow leaves, it is very attractive. In mid-summer it is recognizable by its pinkish seed-vessels. Still later, comes the second bloom of much smaller blossoms and tiny seed-vessels, the size of pin-heads. Late in autumn

## ROCKROSE FAMILY

crystals of ice shoot from the cracked bark at the base of the stem, hence the popular name, Frost-weed.

It also had its place in the medicine chest as a gargle for ulcerations, and as a tonic.

## CISTACEAE

## ROCKROSE FAMILY

> Hudsonia ericoides, L.

Lemon-yellow
May-June

Hudsonia, Barren-heath, American Heath, Poverty-grass, Field-pine.

Hudsonia: in honour of William Hudson, an early English botanist.
Ericoides: the suffix oides means resembling, therefore resembling Erica or heather.

The Preferred Habitat: dry, sandy soil of the Commons, and beach sand.

The Plant: erect, four to nine inches high, bushily branched from the base; the stems tufted, dark brown and woody, covered with short, very soft hairs.

The Leaves: persistent; alternate; awl-shaped or scalelike; very small, less than one half inch long; downy; stemless; entire.

The Flowers: numerous and showy, crowded on the upper part of the branches, on slender, naked stems; persistent calyx a fawn-pink.

The Fruit: a pod.
One of the most common plants of Nantucket, and yet, there is no plant that so frequently sails under false colours, for, when not in bloom, it closely resembles the heather, as is indicated by the name, ericoides. Again, it is easily

## CISTACEA

confused with the Broom Crowberry (Corema Conradii). Moreover, it is difficult always to distinguish at a glance, between this and the other barren heath, the Hudsonia tomentosa.

The ericoides, like the real heathers, grows in cushiony clumps in the dry, sandy soil of the Commons or under the pine-trees, but, while the ericoides is practically everywhere, so that when it is in bloom, the Commons are yellow with its bright flowers, the Calluna and the Ericas are very rare. Further, these flowers are yellow, the others, pink or purplish. The Hudsonia is to be distinguished from the Corema, first, by the manner of growth; with the Hudsonia there being a number of roots in a clump, with the Corema only one root, hence the effect of the Corema clump being crowded from the centre outward and downward. Again, if the plant is in bloom, the bright yellow flowers, different from the purple-brown ones, are a distinguishing feature. As for the two Hudsonias, when not in bloom, the easiest distinction is made on the basis of the colour of the leavesthe ericoides are a dark, healthy green, those of tomentosa are a bluer, greyer green, and the plants usually bear more signs of having been winter-killed. No better picture could be made of this plant than Mr. Bicknell has painted: "Few plants of Nantucket spread over the island more widely or in greater abundance than this little heath-like species, and not one is more conspicuous in the landscape when in full bloom. Nor is there any other that at flowering time, puts its scene in colour with quicker transformation, for there come seasons when it bursts into bloom on all sides in the hours of a single hot morning.

After full bloom, it remains for one or two weeks the season's most conspicuous flower, spreading its sheets of gold along the roadways and over acres of plain and hillside; a radiant sight. A few days later the flowers are withered and the wide tracts that had glowed with their color become brown and rusty as if seared by fire."


## ROCKROSE FAMILY

CISTACEÆ
ROCKROSE FAMILY
Hudsonia tomentosa, Nutt.

| Yellow | Barren Heath, <br> Maverty-grass, | Heath, |
| :--- | :--- | :--- |
| Malse Heather, |  |  |
|  | Poverty-plant, | Beach Heather, |
|  | Ground-cedar, | Bear-grass, |
|  | Woolly Hudsonia, | Dog's Dinner. |
|  | Ground-moss, |  |

Hudsonia: for derivation see ericoides.
Tomentosa: Latin meaning stuffing for cushions.
The Preferred Habitat: dry, sandy soil of the Commons, and beach sand.

The Plant: erect, densely tufted, four inches to eight inches high, intricately branched and matted; stems "pale with hoary pubescence."

The Leaves: alternate; densely crowded and pressed close to the stem; oval or oblong; less than one twelfth of an inch long.

The Flowers: numerous; slightly smaller than those of the ericoides, sessile or nearly so, like those of the ericoides falling early.
The Fruit: a pod.
Mr. Godfrey, in his "Island of Nantucket", says: "When sheep were allowed to roam at large on our Commons, one feeble specimen of the blossom of the Hudsonia tomentosa could be found in perfection, where now, freed from the sheep, the whole surface of the island is covered with this heath-like plant in its season." In fact, the Commons and sand dunes are yellow, when the Barren Heath is in bloom, as the mountain sides of Scotland are coloured by the gorse. The Nantucket people appreciate that the plant may now be had for the taking and great quantities are gathered and dried to be used for fuel.

## CISTACEA

CISTACEA

## ROCKROSE FAMILY

Lechea maritima, Leggett.
Greenish or magenta-tinted
Beach Pinweed.

## July-September

Lechea: in honour of Johan Leche, a Swedish botanist. Maritima: Latin for seaside.

The Preferred Habitat: dry, sandy soil of the Commons, and sometimes pure sand.
The Plant: stout, rigid, six inches to ten inches high, the stems densely tufted; covered with whitish and matted hairs; some branches spreading or somewhat erect; flowering branches slender, stiff and spreading; all numerous.
The Leaves: alternate; linear or linear-oblong; less than one inch long; those of the basal shoots, oblong or ovateoblong; densely hoary on both surfaces; mostly acute at the apex; stemless or nearly so.
The Flowers: very small, numerous, clustered in an open panicle.
The Fruit: a pod, like a pin-head.
A densely tufted plant, evenly branched, with many short leaves and tiny inconspicuous flowers.

A characterless growth and yet a frequent one on the Commons. Even after a long look, one finds difficulty in revisualizing this low plant, with spreading branches that bear in great profusion the tiniest of pinkish-green flowers. In fact magenta-green is the keynote of the colour scheme, and thus arises a protective colouring that blends with the general scheme of the Commons and makes this plant such as one "might see, but notice not."
"In the autumn, sometimes as early as September, the basal shoots may be found beneath the surface of the sand so densely invested with white pubescence as to appear as if coated with hoar frost."

## ROCKROSE FAMILY

## CISTACEAE

ROCKROSE FAMILY
Lechea minor, L.
Greenish or magenta-tinted
Thyme-leaved Pinweed. July-September

Lechea: for derivation see maritima.
Minor: Latin for smaller.
The Preferred Habitat: dry, sandy soil of the Commons, and occasionally beach sand.

The Plant: erect, six inches to two feet high, freely branching above; the branches slender, erect, or somewhat so; the stem more or less hairy.

The Leaves: opposite, or whorled; oval or oblong, at least the upper; one half inch long; the lower decidedly smaller; with silky hairs; acutish or obtuse at the apex; petioled; entire.

The Flowers: very small, numerous, in rather crowded panicles; the petals persistent within the sepals after fading.

The Fruit: a pod, appearing like a pin-head.
This compact pin-weed usually grows singly, or, as one might say, individually, and is like a tiny toy Christmas tree. Its numerous leaves are narrow and stand out stiffly from the man short and somewhat erect branches. Its flowers are tiny and have a magenta tinge. There is little difficulty in distinguishing this tidy plant from its larger and more openly branched sisters.

Five othrr members of the Rockrose Family have been reported.

Viola lanceolata, L.
White
Lance-leaved Violet.
April-June
Viola: ancient Latin name.
Lanceolata: Latin, denoting lance-shaped.
The Preferred Habitat: swampy ground.
The Plant: erect; bearing numerous runners especially late in the season, these runners rooting at the nodes; all the flower-stems about two inches to six inches high, reddish, often without hairs.

The Leaves: basal; erect; lanceolate or elliptical, sometimes three inches to six inches long; sometimes acute but tending to obtuse at the apex; at the base gradually tapering into the long petiole, which is often reddish with obscure, red-tipped teeth.

The Flowers: small, solitary on long stems, which equal or outdistance the leaves; of the five petals, two are upright, the lower three spreading, the three, especially the middle one, veined with purple; the calyx blotched with red; the sepals lanceolate, tapering to a point at the apex.

The Fruit: a capsule. Those of the cleistogamous flowers (complete flowers that never fully open) nodding on short peduncles.

A dainty white violet, poised on a leafless and slender stem and almost outdistanced by a cluster of lance-shaped leaves, that rise directly from the root. It is not so well known, though, when the green seed vessel has appeared or, burst open, still hangs in mid-air.


# VIOLET FAMILY 

## VIOLACEA

VIOLET FAMILY
Viola pallens, (Banks) Brainerd.

## Whitish May-August

Sweet White Violet.

Viola: for derivation, see lanceolata.
Pallens: Latin for pale.

The Preferred Habitat: sphagnum bogs.
The Plant: erect, four to six inches high; the flower stem often with scattered hairs, sometimes dotted with red.

The Leaves: basal; heart-shaped; obtuse at the apex, or rarely acute; petioled, the stems often with scattered hairs and sometimes dotted with red.

The Flowers: small; some of the petals usually bearing a small tuft of hairs.

The Fruit: a capsule.
Mr. Bicknell says, in speaking of the plant, "a form of distinct appearance was found in several wet sphagnum bogs, especially in one near Shawkemmo Spring. It is strictly glabrous throughout. The scapes and petioles delicately streaked with pink. The leaf blades unusually thick and veiny, becoming as large as 5 cm . in breadth, (almost 2 in .) and varying in shape from long-ovate and deeply cordate to broadly cordate-reniform (heart-kidneyshaped). The petioles sometimes 9 cm . (about 6 in .) long, longer peduncles 1 to 5 dm . ( 9 in .) capsules green, seeds 1 mm . long or more ( $1 / 4 \mathrm{in}$.), dark grey to nearly black when mature. Dr. Brainerd who has examined specimens regards it as a form of Viola pallens.

Viola blanda (Willd) which proves to be common on Martha's Vineyard is to be looked for on Nantucket."

## VIOLACEA

Probably the majority of people enjoy at least a bowing acquaintance with this dainty, violet-shaped flower on slender, leafless stem braving the wet of the sphagnum moss. The petals are whitish, and some at least bear the tufts of purple hairs at their base.

VIOLACE $\notin$
VIOLET FAMILY

Viola papilionacea, Pursh.
Light purple-pale violet
Common Violet. May-June

Viola: for derivation see lanceolata
Papilonacea: from Latin for a butterfly.
The Preferred Habitat: boggy meadows.
The Plant: from numerous underground root stalks; three to seven inches high; stems tufted, smooth or with very fine hairs.

The Leaves: basal; deep green; cordate; smooth, or on the upper surface with few, short hairs; obtuse at the apex; deeply cut and somewhat coiled at the base; wavingly saw-toothed.

The Flowers: irregularly shaped; five petals, two of which are beautifully fringed at the throat of the flower; sepals narrowly lanceolate. Other petalless flowers on shorter stems come later; they are fertilized in the bud and are much more fruitful.

The Fruit: a capsule.
Delicate, irregularly shaped flowers, violet or light purple, poised at the top of smooth stems, that are surrounded by a clump of dark green, heart-shaped leaves.

## VIOLA PEDATA



> Viola pedata, L.

| Lilac-purple | Bird's Foot Violet, |
| :--- | :--- |
| May-June | Crowfoot Violet, |
|  | Velvets, |
|  | Sand Violet, |
|  | Wood-violet. |

Viola: for derivation see lanceolata.
Pedata: Latin denoting footed.
The Preferred Habitat: dry, sandy soil of the Commons, frequently in gravelly roadways.

The Plant: erect, or spreading, three inches to ten inches high.

The Leaves: basal; dull pale green; three to five divided, three of which divisions are again cut and toothed, so that the average leaf has nine or more distinct divisions; the divisions linear to spatulate.

The Flowers: large in proportion to the size of the plant; the five petals often an inch long, the lower spurred petal grooved and partly white, veined with violet; the throat of the flower filled with the anthers and the style, which are conspicuously orange. Albinos have been found.

The Fruit: a capsule.
Without question, the most beautiful violet on Nantucket! In the spring, whole sheets of white chickweed cover the Commons, together with the Bird's Foot Violet, (so called from the shape of the pale green compound leaves). The flowers are light blue or lilac and have a striking splash of deep orange at the throat.

Five other members of the Violet Family have been reported.

## Opuntia vulgaris, Mill.

| Yellow | Cactus, <br> Prickly Pear, | Barberry, <br> Devil's-tongue. |
| :--- | :--- | :--- |
| June-August |  | Indian Fig. |

Opuntia: a name given by Theophrastus, but originally belonging to some different plant.
Vulgaris: Latin for frequent or common.
The Preferred Habitat: beach sand.
The Plant: prostrate or slightly erect; the stem much branched, light green, copiously armed with very short bristles, and very fleshy.

The Leaves: minute; deciduous; when present generally ovate.

The Flowers: large, showy, solitary, usually with a reddish centre, yellow and tending to white when faded, lasting but little more than a day.

The Fruit: a berry.
The presence on Nantucket beaches of this "queer" plant is very interesting from the point of view of its distribution, which is given in Gray's Botany (7th edition) as Nantucket to South Carolina, near the Coast; Falls of the Potomac. But the plant is not dependent on its distribution to make it interesting; it is that "per se" also. For one reason, no better example than this can be found of water storage by beach plants. One plant, which had been neglected in the house for over a year, without even being watered, at the end of that time actually put out new leaves! To enable them to store up their water supply, extreme fleshiness has been given to the stems. Through

## CACTUS FAMILY

the mention of this fact we come to another interesting point about the plant. That stout, prickly pear-shaped arrangement that spreads over the sand is stem; the leaves are comparatively inconspicuous and early deciduous. Out of the stems grow the large handsome yellow flowers, that by their beauty lead many to transfer the plant to their gardens, undeterred by the multitude of irritating prickles that cling to the hands. So readily indeed, does the cactus transplant, that it is well that it has this natural protection, else it might be exterminated.

From this plant is obtained a drug, valuable in the treatment of heart trouble.

Decodon verticillatus, (L.), Ell.
Magenta Swamp Loosestrife, July-September Suamp Willow-herb.

Decodon: from Greek for ten and a tooth. Verticillatus: from Latin for the whirl of a spindle.

The Preferred Habitat: swampy ground.
The Plant: erect, three feet high or more; the submerged parts of the stem often spongy-thickened; the upper stem four to six sided, smooth or downy.

The Leaves: opposite or whorled; lanceolate; with densely matted hairs below; acute at both ends; on short petioles; entire.

The Flowers: several, in cymes; five petals; ten stamens, half of which are long.

The Fruit: a capsule.
"No aquatic plant of Nantucket," Mr. Bicknell says, "grows in a greater number of ponds and bog-holes than the Swamp Loosestrife and where it gets a footing it slowly pushes into undisputed possession of the places it chooses to occupy. It is the only shrubby aquatic of the island's ponds, where it makes the outermost fringe of vegetation along many a bushy shore, its wand-like arching and recurving stems forming an airy embankment above the water. In the autumn its foliage becomes as brilliant as it is possible for leaves to be and enriches some of the smaller ponds with a zone of variegated scarlet."


## LOOSESTRIFE FAMILY

LYTHRACEÆ

## LOOSESTRIFE FAMILY

## Lythrum Salicaria, L.

Purple-magenta Purple Loosestrife, Soldiers, Spiked Loosestrife, Long Purples, June-August Spiked Willow-herb, Washington's Plume (Local name).

Lythrum: from Greek for blood, possibly in allusion to the plant's property of stopping bleeding.
Salicaria: Latin for willow-like.
The Preferred Habitat: wet meadows.
The Plant: erect, two feet high or higher, much branched above; the stem without hair or with short, soft ones.

The Leaves: opposite or sometimes in three's; lanceolate; practically smooth; acute at the apex; heart-shaped at the base; sessile; entire.

The Flowers: in circles around the stem, with green bracts interrupting the spike; petals long; calyx greenish, with few, short, soft hairs; stamen and style of three different lengths.

The Froit: a capsule.
This is a member of a family, which for the sake of its handsome flowers, deserves attention. It bears heavy sprays of deep magenta flowers that grow on only one side of the long stem. Possibly these are the Long Purples which Ophelia wove into garlands.

Rhexia virginica, L.
Magenta

## July-September

Rhexia: name used by Pliny for some unknown plant. Virginica: Latin for Virginian.

The Preferred Habitat: boggy land.
The Plant: erect, six inches to more than a foot high; stem simple or branched above, rather stout, square, prominently angled, with short, soft hairs.

The Leaves: opposite; ovate; with a few hairs on both surfaces; acute or acutish at the apex; rounded at the base; mostly five-nerved; serrulate.

The Flowers: large and showy, somewhat bell-shaped; in cymes, petals four, overlapping in bud; sepals acute; stamens eight, yellow, united in a column.

The Fruit: a capsule.
A low plant of the damp, slightly brackish soil, which is conspicuous when in bloom. The showy magenta flowers have broad petals, prominent yellow stamens with large golden anthers and a long, white pistil. The flowers fade quickly or the petals fall so that it is not a satisfactory plant for home decoration.

The seed-vessels Thoreau called cream-pitchers.

> Epilobium angustifolium, L.

Bright magenta
July-August

Fireweed, Burnt Weed, Fire-top, Purple Rocket, Blooming Sally, Spiked Willowherb, French Willow.

Epilobium: Greek for a little pod, in allusion to the shape of the seed vessel.
Angustifolium: Latin for narrow-leaved.
The Preferred Habitat: dry, sandy soil of the Commons, particularly in burnt-over areas.

The Plant: erect, two to eight feet high; the stem usually branched, leafy, without hairs or with fine soft ones above.

The Leaves: alternate; lanceolate; two inches to six inches long; without hairs on either surface; beneath paler green; acute at the apex; narrowed at the base; entire or with shallow teeth; pinnately veined, the mid-rib prominent, the veins uniting in the margins.

The Flowers: large, in a showy spike, with four broad and conspicuous petals; coloured stamens; and prominent white pistil.

The Froit: a slender pod, "velvety and purple tinged; with the seeds attached to silky down as in the milkweed.

A tall plant, growing in clumps in burnt-over districts on the Commons. A handsome species, almost equally conspicuous when it bears magenta flowers, rather feathery in their outline, with coloured stamens, as when it bears the

## ONAGRACE $\notin$

long seed-pods, pale magenta and thread-like. An albino form has been found, but is not at all frequent. However, being softer in tone, it is prettier, although not so striking.

A patch of these bright magenta flowers, partially hidden by the trunks of burned pine-trees, furnishes indeed a wealth of gorgeous colouring.

ONAGRACEE
EVENING PRIMROSE FAMILY
Epilobium hirsutum, L.
Magenta

## September

Epilobium: for derivation see angustifolium.
Hirsutum: Latin, for stiff, coarse hairs.
The Preferred Habitat: fields and roadsides, around wharves, and in damp ground.

The Plant: erect, three to five feet high, branched; the stem with dense, soft hairs, varying in woodiness, according to habitat.

The Leaves: opposite; oblong-lanceolate; acute at the apex; sessile and clasping; entire.

The Flowers: large, in long, terminal spike-like racemes; the white stamens prominent.

The Fruit: a narrow capsule suggesting the fruit of the milkweed, but much more slender, the seeds attached to long, silky hairs.

A tall plant, with long, willow-like leaves, that grows in masses in somewhat damp ground near dwellings. The small, cup-shaped flowers are pink, with pure white sta-


## EVENING PRIMROSE FAMILY

mens and a four-cleft pure white pistil. When the sunshine slants through the long, grey hairs of the stems and leaves and the pink flowers give the needed touch of colour, the sight is indeed a fine one.

Mrs. Owen says that the plant was raised "in or about 1855 in a garden in Union St. from which it gradually spread by seed."

ONAGRACEE
EVENING PRIMROSE FAMILY
(Enothera biennis, L.

## Yellow

## July-October

(Enothera: an old name of unknown origin for a species of Epilobium (willow-herb).
Biennis: Latin for biennial.
The Preferred Habitat: dry, sandy soil of fields, the Commons, even beach sand.

The Plant: erect, generally stout, one foot to six feet high; the stem simple and wand-like or branched, with many or few short, slightly stiff hairs, rarely without any.

The Leaves: opposite; lanceolate, tending to oblong; one inch to six inches long; acute to acuminate at the apex; narrowed at the base; sessile or the lowest petioled; slightly toothed or toothless; the bracts leaf-like, lanceolate, usually shorter than the flower-stems.

The Flowers: large, in terminal spikes, leafy-bracted; eight prominent stamens. The flowers usually open just before sundown and fade in the strong sunshine of the following day. Lemon-scented

The Fruit: an oblong capsule, narrowed above, abruptly cut off at the tip, having short, soft hairs.

## ONAGRACEE

A puzzlingly variable Primrose that grows in almost any kind of soil, from beach sand to the richer ground of thickets and woodlands. In general appearance it is very similar to the muricata, but the type form of this species usually differs from the muricata in that the bases of the hairs on the stem are not red, and secondly, that the upper bracts are shorter than the capsule or scarcely longer. They are deciduous.

From this plant is obtained a drug, valuable in the treatment of whooping-cough.

## ONAGRACEE EVENING PRIMROSE FAMILY

Enothera Lamarckiana, DeVries.

## Bright yellow

Evening Primrose.

## August-September

Enothera: for derivation see biennis.
Lamarckiana: Latin form, in honor of the botanist, Lamarck.

The Preferred Habitat: gardens, where it spreads readily by natural means and from which it escapes.

The Plant: about three feet tall; the stem branched.
The Leaves: alternate; large; with a generally lanceolate outline.

The Flowers: "remarkably showy; the petals bright golden yellow; the sepals in marked contrast a deep pur-plish-red." "On bright days the flowers open late in the afternoon, closing in the forenoon of the following day."
The Fruit: capsules, glandular, hairy with minute hairs.
An intensely interesting species because this is the one which the Dutch botanist, DeVries, employed in working out his Mutation theory. The original plant on Nantucket was raised from seed, but has spread by natural means.


OENOTHERA MURICATA

## EVENING PRIMROSE FAMILY

ONAGRACE $\neq$
EVENING PRIMROSE FAMILY
Enothera muricata, L.
Yellow
Evening Primrose, Night Willow Herb.
June-October
Enothera: for derivation see biennis.
Muricata: Latin, meaning roughened by short, stiff processes.

The Preferred Habitat: dry, sandy soil of the Commons, often in pure sand and gravelly spots.

The Plant: erect, one foot to three feet tall or higher; the stem simple or nearly so, usually having long, spreading hairs on enlarged reddish bases.

The Leaves: alternate or scattered; ascending; lanceolate; acute at the apex; entire, or sparingly and very shallowly denticulate; passing without marked transition into the leaf-like bracts.

The Flowers: lemon-scented, in the axils of the leaves, much exceeded by the bracts; the petals obovate.

The Fruit: a more or less hairy capsule, somewhat cylindric.

They seem like garden flowers, growing in the "inevitable" spot where a remarkable colour-picture will result, these tall, straight plants that lift their large, pure-yellow flowers above the surrounding green of the open Commons.

Botanically, the flowers are difficult to identify on account of their variability. In the type form, the stem has spreading hairs on enlarged reddish bases and the bracts are much longer than the flowers or capsules.

Mr. Bicknell says, "Professor DeVries who, on his first visit to America looked over some of my Nantucket and Long Island specimens of this Enothera, pronounced them

## ONAGRACE $\neq$

to be essentially the same as the introduced American plant growing in Holland known to him as Enothera muricata, L. Miss Vail has recorded (Carnegie Institute, Wash. publ. No. 81, 74), that 'Enothera muricata, L. raised from seed received from Professor DeVries from the Holland sand dunes resembled these American plants, but were not absolutely identical.'
"As compared with the Enothera biermis, this is a lower and more leafy bracted plant, with more numerous and ascending leaves of narrower form and thicker texture and less definitely denticulate. The lower with oblanceolate tendency. The general pubescence is softer, denser and more oppressed. The longer hairs tending to form a villous or even pilose investiture, especially on the capsules. In Enothera biennis the sparcer pubescence is harsher and more or less hirsute, the smaller hairs mostly erect and incurved. The seeds are considerably smaller, than these of Enothera muricata."

Twelve other members of the Evening Primpose Family have been reported.

Hydrocotyle umbellata, L.

White

June-July

Water Pennywort, Sheep Rot, Marsh Pennywort, Water-navelwort, White Rot, Water-grass.

Hydrocotyle: Greek denoting water and a flat cup, because the leaves of some of the species are cup-shaped.
Umbellata: Latin diminutive for a shade.
The Preferred Habitat: marshes.
The Plant: creeping; the stems several inches long; the underground branches with tubers, the above-ground hairless.

The Leaves: erect or nearly so; shield-shaped; more or less heart-shaped at the base; without hairs on either side; seven to eleven lobed; on petioles.

The Flowers: small, in umbels, on slender stems.
The Fruit: called a mericarp; strongly notched.
A very low plant of the damp, peaty ground, that tries to hide its flat-topped, feathery clusters of small, whitish flowers under its small, nasturtium-like leaves.

Ptilimnium capillaceum, (Mich.) Raf.

## White

## June-September

Ptilimnium: probably from Greek for a feather, alluding to the fine division of the leaves.
Capillaceum: Latin for hair-like.

## UMBELLIFERA

The Preferred Habitat: brackish marshes.
The Plant: erect, one foot to two feet high, much branched, the branches somewhat erect, or sometimes widely spreading; the stems tufted, slender.

The Leaves: alternate; finely dissected into thread-like divisions; the upper stemless, the lower petioled.

The Flowers: tiny, in umbels which are two to four inches wide.

The Fruit: called a mericarp, ovate, very small.
Around the borders of brackish ponds one sees, as if they had been planted, in delightful abundance among the grasses, the blue skullcap, the pinkish germander, the yellow St. John's-wort, and, softening the whole with their featheriness, tiny white flowers on delicate stems which are all but concealed by fine, thread-like leaves. This is the Mock Bishop-weed a plant of persistent individuality, that blooms just as eagerly when only a few inches high as when more than a foot.

UMBELLIFERE
PARSLEY FAMILY
Sium cicutoxfolium, Schrank.
White
July-September
Hemlock Water Parsnip.

Sium: Greek name for some marsh plant.
Cicutofolium: Latin for the leaf of the hemlock.
The Preferred Habitat: swamps.
The Plant: erect, two feet to four feet high; the stem without hairs, hollow.

The Leaves: alternate; compound, the divisions linear to lanceolate, without hairs on either surface, mostly acu-

## PARSLEY FAMILY

minate at the apex; the lower leaves at least long petioled, the petioles sheathing at the base; sharply serrate or the lowermost, especially if they are submerged, finely dissected.

The Flowers: on peduncles, in broad umbels, which are two to three inches across.

The Fruit: ovate, ribbed, bearing oil tubes.
Laciness of white flowers in a flat-topped cluster and fine-cutting of leaves characterize this smooth and hollowstemmed plant of the wet places.

UMBELLIFERAE
PARLSEY FAMILY
Daucus carota, L.

Dull white to roseate or straw colour

July-October

Queen Anne's Lace,
Wild Carrot, Bird's Nest Plant, Crow's Nest, Lacc-flower, Parsnip, Devil's-plague.

Daucus: the ancient Greek name. Carota: name for the common carrot.

The Preferred Habitat: waste ground everywhere.
The Plant: from a fleshy, cone-shaped root, one foot to three feet high; the stem furnished with rough hairs.

The Leaves: alternate; compound, particularly the lower; the divisions linear or lanceolate; with rough hairs on both surfaces; round-toothed.

The Flowers: crowded in umbels which are sometimes four inches across. The inner flower stems shorter than the outer.

## UMBELLIFERÆ

The Fruit: oblong and convex, each carpel ridged and some armed with distinct spines and pierced with oil tubes. The vitality of the seed is estimated at fifteen years!

Mrs. Owen has a pointed comment on the Wild Carrot! She says, with unconscious humour, "Too common, a great pest overrunning entire fields." Granted, from the farmers' point of view. But from the side view of the lay person not "a great pest" at all, but a very decorative plant.

The stem is light whitish-green, the finely divided carrotlike leaves yellowish-green and the umbrella-like clusters of dainty and tiny flowers very lacy. Rosy forms, in varying degree of colour, occur mostly in the younger plants and frequently a dark spot occurs in the center, but neither of these variations indicates a different species.

Thirteen other members of the Parsley Family havo been reported.

Nyssa sylvatica, Marsh.

| Yellowish-green | Black Gum, | Yellow Gumtree, |
| :--- | :--- | :--- |
|  | Sour Gum, | Snag-tree, |
| May | Tupelo Gum, | Butte-bung, |
|  | Pepperidge, | Horn-beam, |
|  | Swamp Hornbeam, | Horn-pipe, |
|  | Horn-pine. |  |

Nyssa: Greek name of nymph, because the original species grows in the water.
Sylvatica: Latin meaning in the woods.
The Preferred Habitat: damp thickets and groves.
The Tree: seven feet to thirty-five feet high; the branches horizontal, especially when the tree is young; the bark rough.

The Leaves: alternate; obovate or oval; two inches to four inches long; hairless and shining above, beneath having few to many short, soft hairs; acute or acuminate at the apex, or even obtuse; usually narrowed at the base; on very short stems; entire or toothed.

The Flowers: are of two kinds; the staminate in compound clusters, the pistillate two to four together.

The Fruit: a drupe.
One of our most beautiful shrubs or trees, with shiny dark green leaves, slightly oval and generally untoothed. Early in the fall, the leaves gradually turn crimson, but seldom, for some reason, make the brilliant blaze of colour on the edge of a thicket that "Off-islanders" associate with this tree.

Three other members of the Dogwood Family have been reported.

Clethra alnifolia, L.

Creamy yellow-white

## July-September

Sweet Pepperbush, White Alder, Spiked Alder.

Clethra: Greek name of the alder, which this genus somewhat resembles.
Alnifolia: Latin for leaves of the alder.

The Preferred Habitat: swamps.

The Shrub: erect, three feet to ten feet high, very much branched, densely leafy to the summit; the stems smooth, except for minute hoary hairs on the twigs.

The Leaves: opposite; obovate; one inch to three inches long; hairless, or very nearly so, and green on both surfaces; blunt or acute at the apex; narrowed or wedge-shaped at the base; with short saw-teeth at least beyond the middle, entire toward the base; rather prominently veined.

The Flowers: in a close spike, small, somewhat urnshaped; pedicels and calyx with hoary hairs; calyx-lobes oblong, obtuse.

The Fruit: a capsule, about the length of the calyx.

This bush grows on the damp thicket-borders of swamps. If recognition does not come through the small creamcoloured flowers crowded in cylinders at the tip of the numerous stiff and leafy branches, it is bound to come through the sweet odour. So prolific are these bushes in

## HEATH FAMILY

places that one standing by them cannot see beyond the mass of cream colour, and, at such times, the air is flooded by a heavy fragrance that may carry a long distance. From the flowers and from the leaves a soapy lather can be made with water.

ERICACEA
HEATH FAMILY

Chimaphila maculata, (L.) Pursh.

| Flesh or |
| :--- |
| cream-coloured $\quad$Spotted Wintergreen, <br> Spotted Pipsissewa, <br> Rheumatism Root, |
| June-August | | Wild Arsenic, |
| :--- |
| Rat's-bane. |

Chimaphila: Greek meaning to love the winter, in allusion
to the popular name, Wintergreen.
Maculata: Latin for spotted.

The Preferred Habitat: under pine trees, or on dry, sandy soil of the Commons.

The Plant: stem extensively trailing or creeping below the surface, sending up both sterile and flowering branches, which are three inches to ten inches high and woody at the base.

The Leaves: opposite; lanceolate; one inch to three inches long, or the lower much shorter and obovate; hairless on both surfaces; dark green and mottled with white along the veins; acute or acuminate at the apex; rounded or narrowed at the base.

The Flowers: umbellate or somewhat corymbose, less than one inch broad; peduncles covered with tiny, soft hairs; the petals five, wide open; stamens white, distinct, with a ring of green at their base.

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The Fruit: a capsule.
The two cream-coloured flowers, borne on long stems above the shining leaves, are slightly inconspicuous, but the deep green leaves, white-spotted and armed at intervals with sharp teeth, are noticeable indeed. A decided fragrance adds its charm to this deservedly popular flower.

From this plant is obtained a valuable drug.

## ERICACEA

HEATH FAMILY

> Pyrola americana, Sweet.

## White, tinged with pink <br> Shin-leaf, False Wintergreen.

## June-August

Pyrola: from a diminutive for Pyrus, the pear-tree, in allusion to some fancied resemblance in the foliage. Americana: Latin for American.

The Prefered Habitat: under pine trees.
The Plant: erect, the flower-stalk six inches to twelve inches tall.

The Leaves: basal; orbicular to broadly elliptic; thick; without hairs and shining; usually as short as the stems; entire; pinnately veined; evergreen.

The Flowers: many, nodding in a raceme on a bracted scape; five petals raiher spreading, roundish, thick; calyxlobes persistent, one-third the length of the petals, lanceolate to oblong, acutish with somewhat spreading tips.

The Fruit: capsules, seeds minute, innumerable, resembling sawdust.

It is a pleasure to find in a clear space under the pine trees a cluster of these waxy-white, sweet-scented flowers,

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with their round and spreading petals, hanging freely on a leafless stem, at whose base is a rosette of nearly round, shining, deep green leaves.

| ERICACE $\boldsymbol{E}$ | HEATH FAMILY |
| :--- | :--- |
|  | Monotropa uniflora,, |
| White or pink |  |
|  | Indian Pipe, |
| August-September | Dutchman's Pipe, |
|  | Fairy Smoke, |
|  | American Ice Plant, |
|  | Convulsion Weed, |
|  | Corpse Plant, |
|  | Ghost Flower, |
|  | Eyebright, |
|  | Bird's Nest. |

Monotropa: from Greek meaning one turn, because the stem at the summit is turned to one side.
Uniflora: Latin for one-flowered.
The Preferred Habitat: leaf-mould around pine trees, sometimes on the open Commons; possibly a parasite on the Heath Family.

The Plant: erect, white or whitish throughout, four inches to ten inches high; flower stems usually clustered from a mass of brittle roots, thick, nairless.

The Leaves: reduced to scales alternate above; crowded at the base; more or less pressed against the stem; lanceolate; acutish at the apex; sessile.

The Flowers: single, or rarely in twos, sometimes an inch long; oblong bell-shaped, with five and sometimes four, rarely six, oblong petals, having tiny soft hairs within; stamens ten to twelve, paler than the petals.

The Fruit: a capsule, erect.

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A cluster of whitish and uncanny plants, growing stiffly from out a bed of brown pine needles,-that is the Indian Pipe. Its pinkish stems are stout, and at their top droop large flowers, that faintly resemble, in shape, the bowl of a pipe. Closely pressed against the soiled stems are thin scales, that take the place of leaves. In short the plant is well described by the popular names of Indian Pipe and Ghost Flower. The name, Ice Plant, is due to the fact that "it resembles frozen jelly and is juicy and tender and dissolves in the hands, like ice."

The root is the medicinal part, from it is obtained a valuable eye-wash. A powder from it has sometimes been used in the place of opium.

The plants keep much better out of water, for in water they turn inky black. The change is due to oxidation.

Rhododendron viscosum, (L.) Torr.

| White, with pinkish cast | Swamp Pink, |
| :--- | :--- |
|  | White Swamp Honeysuckle, |
| June-August | Clammy Honeysuckle, |
|  | Clammy Azalea, |
|  | White Azalea, |

Rhododendron: the ancient Greek name for a rose tree. Viscosum: Latin for viscid.

The Preferred Habitat: borders of swamps.
The Shrub: four feet to eight feet high, much branched; the stem light russet-brown, very woody; the twigs hairy. The Leaves: numerous; alternate; tending from obovate to oblanceolate; two inches to four inches long; hairless on either surface or with a few more or less bristly hairs on the veins beneath, a few scattered hairs above; obtuse and capped with an abrupt tip or acute at the apex; narrowed at the base; on very short stems; entire, the margins rolled under.


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The Flowers: in umbel like clusters, with a long tube, covered with sticky hairs, to which small insects adhere. The five prominent stamens protrude beyond the throat of the corolla; the long style with knob-like stigma.

The Fruit: a capsule.
Early in the season, you are often attracted, while still at a distance from the swamp, by a very sweet odour, even before you have caught sight of the large pure white flowers against the dark background of the thicket. On closer view the flowers are found to be funnel-shaped, like those of the cultivated honeysuckle, with prominent stamens. They are very clammy or viscid. In drying they become quite brown and unattractive, and finally the corolla drops and leaves the pistil hanging, but the buds come out well in water so that, with a little doctoring, it is possible to keep a bunch fresh for some time.

## ERICACEA

HEATH FAMILY
Kalmia angustifolia, L.

Crimson pink
June-August

Sheep Laurel, Narrow-leaved Laurel, Wicky, Lambkill. Calfkill, Sheep Poison.

Kalmia: dedicated to Peter Kalm, a pupil of Linnæus, who traveled in America.
Angustifolia: Latin for narrow-leaved.
The Preferred Habitat: swampy ground.
The Plant: shrublike, erect, six inches to three feet high, with few, nearly erect branches.
The Leaves: mostly opposite or verticillate in threes; oblong to oblong-lanceolate; sometimes more than two

## ERICACEA

inches long; above dark green, beneath light green; obtuse or sometimes acute at the apex, narrowed at the base; petioled.

The Flowers: numerous in lateral, compound or simple corymbs; sepals ovate, acute, hoary with whitish hairs, persistent.

The Fruit: a capsule, globose, depressed, five-lobed, hoary with whitish hairs.

The Sheep Laurel is stiff and small and unattractive compared with the handsome and popular Mountain Laurel (Kalmia latifolia). The principal resemblance is in the shape of the small crimson pink flower, which is also bowlshaped with sharp ridges at the back. The leaves of the Sheep Laurel are evergreen, dull olive and drooping.

The plant is perennial. One often finds two or even three clusters of winter-dried calyx below the season's bloom, representing fruit of former years.

It is poisonous to cattle. This has given rise to the popular names of Lambkill, Sheep-poison, and Calfkill.

From the plant is obtained a valuable drug.

ERICACEA
HEATH FAMILY
Lyonia ligustrina, (L.) DC.

## White

May-July

Male Berry, Privet Andromeda, White Alder, Pepper Bush, White-wood, Seedy Buckberry.

Lyonia: named for John Lyon, an early American botanist and explorer of the southern Alleghenies.
Ligustrina: Latin for privet.
The Preferred Habitat: thickets, on the border of ponds.

## HEATH FAMILY

The Shrub: three feet to twelve feet high, much branched; the twigs having tiny, fine, soft hairs, or hairless.

The Leaves: obovate or oblong to oval; falling early; above somewhat hairless; below with some short, soft hairs, at least on the veins, or with none; acute at the apex; acute at the base; entire.

The Flowers: numerous in racemes, which are mostly leafless; or, in terminal, many-flowered panicles or clusters; bracts small, calyx lobes triangular, acute.

The Fruit: a capsule.
One of the bushes among the dense growth of the thicket's border, with oval and leathery leaves that somewhat resemble those of Privet. Both the small, urn-shaped, white flowers, and the greenish berries are inconspicuous, but in the late fall, the shrub comes to its own, when every one of its leaves has turned a translucent yellow.

ERICACEAE
HEATH FAMILY

> Epigoa repens, L.

| White to pink | Mayflower, <br> Trailing Arbutus, | Mountain Pink, <br> April-May |
| :--- | :--- | :--- |
|  | Ground Laurel, | Gravel-plant, |
|  | Shad-flower, | Crocus. |

Epigcea: Greek, meaning upon the earth.
Repens: Latin for creeping.
The Preferred Habitat: dry, sand soil of the Commons and pine barrens.

The Plant: creeping; the branches six inches to fifteen inches long; the twigs with rough hairs.

The Leaves: opposite; oval; one inch to three inches long, thick and leathery; mostly hairless above, with few to

## HEATH FAMILY

many rough hairs beneath; green on both sides but early becoming brown and wrinkled; acute, obtuse or capped with a thin abrupt tip, at the apex; heart-shaped or rounded at the base; white hairy margins; pinnately net-veined.
The Flowers: few to several in clusters, very fragrant; corolla tubes somewhat longer than the sepals.
The Fruit: a capsule, seldom found.
The most confirmed romanticist cannot exaggerate the beauty of the May flowers in Nantucket, for as a "neverending line" of deep white or even rose pink, "they flash upon that inward eye, which is the bliss of solitude," and then one's "heart with rapture thrills." In very few other places grow in so great a profusion, such large Mayflowers, so deep coloured or so sweet-scented!

One can let one's joy run riot over the beauty and odour of these waxy flower-cups, growing on long, woody branches in the midst of hairy, withered brown or dull green leaves, for parts of the Commons in the spring are covered with sheets of such flowers.

From this plant is obtained an oil, valuable medicinally.
ERICACEÆ

## HEATH FAMILY

Gaultheria procumbens, L.

White
June-July
Checkerberry,
Aromatic Wintergreen,
Tea Berry,
Mountain Tea,
Spring Wintergreen,
Creeping Wintergreen,

Spicy Wintergreen, Tea-berry, Partridge Berry, Green-berry, Grouse Berry, Ivy-plum, Spiceberry,
One-berry,
Chicken-berry,
Deer-berry,
Ground Berry,
Hill-berry, Ivy-berry, Box-berry,

Ivory-plum, Chinks, Drunkards, Red Pollen, Rapper Dandies, Wax Cluster, Redberry Tea, Canadian Tea,

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Gaultheria: dedicated to Dr. Gaultier, naturalist and court physician at Quebec, in the middle of the 18th century.
Procumbens: Latin for lying prostrate.

The Preferred Habitat: dry, sandy soil of the Commons.

The Plant: has creeping or underground branches; the stems slender; the flowering branches ascending, somewhat erect, without hairs.

The Leaves: mostly clustered at the ends of the branches; oval to obovate; one inch to two inches long; green and shining above, pale beneath; obtuse or acute at the apex; narrowed at the base; short stemmed; the margins slightly rolled backwards, and obscurely serrate, with low, bristletipped teeth.

The Flowers: usually solitary or few on recurved stems; corolla ovoid, five-toothed.

The Fruit: a globose capsule, slightly five-lobed, bright red.

A low evergreen that one greets with enthusiasm, for the oval leaves, shiny and dark green or russet when young, have a deliciously spicy flavour (one often encountered in commercial products-toothpaste, for instance). The white flowers are not very conspicuous, but are prettily vase-shaped. They are followed by the pure red berries. Both flowers and berries are to be found snugly tucked under the leaves.

From the plant is obtained a volatile oil, valuable medicinally.

> Arctostaphylos Uva-ursi, (L.) Spreng.

| White to deep | Mealy-plum Vine. | Upland Cranberry, |
| :--- | :--- | :--- |
| pink | Mealy-berry, | Mountain Cran- |
| May-October | Red Bearberry, | berry, |
|  | Bear's Grape, | Mountain Box, |
|  | Bear's Bilberry, | Barren Myrtle, |
|  | Bear's Whortle- | Universe Vine, |
|  | berry, | Creashaıs, |
|  | Foxberry, | Brawlins, |
|  | Rockberry, | Sagachomi, |
|  | Crowberry, | Kinnikinnick. |
|  | Hog Cranberry, |  |

Arctostaphylos: name composed of Greek words meaning bear and bunch of grapes.
Uva-ursi: Latin for a bear's grape.

The Preferred Habitat: dry, sandy soil of the Commons.
The Vine: shrubby, profusely branched; the branches sometimes more than two feet long; the stems woody, reddish-brown.

The Leaves: numerous; alternate; spatulate; leathery; above without hairs; hairless or with very soft hairs below; obtuse at the apex; petioled; entire; finely veined.

The Flowers: few, in short racemes; corolla ovoid, inflated at the base, suddenly narrowed at the throat; the stems dark.

The Fruit: a drupe, red, smooth, globose, insipid and rather dry, containing five united nutlets, each one heavily veined on the back.

## VACCINIUM MACROCARPON



ARCTOSTAPHYLOS UVA-URSA

## ERICACEA

If the word ubiquitous could be applied to any plant on Nantucket, it could be applied to the Mealy-plum vine. Over all the Commons is spread a veritable carpet of these leathery, shining, evergreen leaves, with small pretty pinktipped, urn-shaped flowers successfully concealed, and later, small bright red "plums" partially hidden beneath the elliptical leaves. Practically everywhere one can pull up yards of this woody-stemmed vine, which trails over the ground and spreads its long fingers over the bare gravel of the rutted road.

The Nantucket people have used this plant in various ways, from employing it as a tonic to making wreaths and garlands of it for winter bouquets and wedding decorations.

It is also interesting that the vine is one of those natives which prove the glacial origin of Nantucket.

## ERICACEA

HEATH FAMILY

Calluna vulgaris, (L.) Hull.

| Purple-pink, sometimes |  |
| :--- | :--- |
| tending to white | Ling, |

## July-August

Calluna: name from Greek, to brush or sweep, brooms being made of the twigs.
Vulgaris: Latin for common.

The Preferred Habitat: dry, sandy soil.
The Plant: erect, five inches to fifteen inches high, shrubby, densely branched; the twigs more or less woody, with very short hairs or hairless.

The Leaves: evergreen; densely packed; overlapping each other in four rows along the branches; very minute; triangular; sessile.

## HEATH FAMILY

The Flowers: in the axils or at the ends of the branches, crowded in spikes or spike-like racemes. "The corolla is concealed by the longer calyx" (equally coloured or tending to white) "and below these are four bracts which resemble a calyx." "The corolla has not merely four short lobes at the mouth of the bell, but is deeply split into four parts. The anthers are short and contained within the corolla, but the style is long, and protrudes."

The Fruit: capsules.
These Scotch heathers may be said to be established, however slightly, on Nantucket. For the Calluna or Ling, Nantucket must share the glory, according to Gray's Manual, 7th edition, with "low grounds in the coastal region, very locally, from Rhode Island to Newfoundland." But for the other two, the Cross-leaved (Erica Tetralix) and the Bell (Erica cinerea), Nantucket is the only locality in the United States so far recorded.

How the three heathers became even "slightly established" on Nantucket is a question frequently put. A single plant of Calluna or Ling was first discovered on Nantucket in 1880 on the open Commons where "its production by human agency seems highly improbable" (Mrs. Owen). This plant subsequently disappeared. In 1886 a patch was discovered among Larch and Pine trees, which had been imported probably from Scotland. The discovery in such an environment suggests an easy solution to the problem of its introduction. But on Nantucket, as Mr. Bicknell notes, there are two forms of the Calluna or Ling, one without hairs in any part and the other with soft hairs (variety pubescens). Therefore, Mr. Bicknell claims that the Ling came "not alone from its chance introduction with trees imported from Europe, but also through some other channel, which remains quite unknown."


## ERICACEAE

## ERICACEÆ

HEATH FAMILY
Erica cincrea, L.
Reddish-purple, almost white on the under side

Scotch Heather, Purple Heath. July-August

Erica: Greek for heath.
Cinerea: Latin for ashy.
The Preferred Habitat: dry, sandy soil.
The Plant: erect, ten inches high or higher; the stems more or less woody, without hairs.

The Leaves: arranged around the stems in whorls of three, with clusters of minute leaves in their axils; hairless on either surface; exceedingly narrow; their edges curled under.

The Flowers: "Also in whorls and either horizontal or drooping; sepals four in number, green; corolla in one, egg-shaped, with four short lobes around the mouth."

The Fruit: capsules.
"Found at one spot on Nantucket Island" (Britton and Brown); "found slightly established in small patches on Nantucket Island, Mass. (Gray's Manual).

This is "to be distinguished from the foregoing species (Erica Tetralix) by its more slender reddish-purple flowers, and its smooth skin and leaves."

The history of the Cross-leaved (Erica Tetralix) and of the Bell (Erica cincrea) can be more briefly related. The Cross-leaved was first discovered in 1844 among the same imported Pines in which the Calluna was found. The Bell was discovered in 1871 among Pine trees, where there is some likelihood of its having been planted. From there it has been transplanted for the sake of protection to private grounds, where, at last accounts, it seemed to be taking hold.

## HEATH FAMILY

All three Heaths have increased partly by self-sown seed, but largely through propagation by interested and loyal people, to whose success various "secret" patches in different parts of the island bear testimony. Gratitude is due to those who have thus aided in the spread of this interesting plant, but to no one probably is due a larger share than to Mr. John Appleton, who, with tireless energy, propagated plants and with unremitting vigilance guarded the treasures from the ruthless.

> Erica Tetralix, L.

Pale rose-colour

## July-August

Erica: for derivation see cinerea.
Tetralix: Greek, in allusion to the arrangement of the leaves in fours.

The Preferred Habitat: dry, sandy soil.
The Plant: erect, five inches to eighteen inches high; the stems downy.

The Leaves: arranged around the stem in whorls of four; very small; linear; entire; the margins rolled under and fringed with fine hairs.

The Flowers: clustered in a dense head at the summit of the stem, all drooping. "Each flower is egg-shaped, the corolla all in one piece, with four small lobes to its mouth."

The Fruit: capsules.
The range is the same as that given for the Erica cinerea. "The cross-leaved species may be known at a glance by its larger, pale-rose coloured, drooping flowers" (the comparison is with the Erica cinerea) "which pale almost to

## ERICACEA

white on their undersides. The plant is downy and the turned-under margins of the leaves are fringed with fine hairs. It is important to note as a further mark of identification that the leaves are arranged around the stem in whorls of four." The flowers are all drooping and clustered in a dense head at the summit of the stem.

## ERICACEA

HEATH FAMILY
Gaylussacia baccata, (Wang) C. Koch.
Coral-red
May-June

## Fruit ripe, July

Gaylussacia: named for the chemist, Gay-Lussac. Baccata: Latin, meaning berry-like.

The Preferred Habitat: dry, sandy soil of the Commons.
The Shrub: low, one foot to two feet high, much branched; the stem having few, short hairs.

The Leaves: alternate; ovate or oblong, shining and thickly covered with resinous globules; obtuse at the apex; narrowed at the base.

The Flowers: small, on one side of the stem, in racemes; corolla cylindrical, with five short spreading lobes.

The Fruit: a drupe, black, sweet-tasting.
"Although a low and inconspicuous shrub, this huckleberry has much to do with giving character to the Nantucket landscape. Outspread along the hills in distant view, its foliage blends into heaths of brassy or golden green in effective contrast with the more sombre tones of colour spread in broad patchwork about it."

# HEATH FAMILY 

ERICACEA
HEATH FAMILY
Gaylussacia dumosa, (Andr.) T. \& G.
Whitish-pink or coral-red
May-June
Dwarf Huckleberry, Bush Huckleberry.

## Fruit ripe: July-August

Gaylussacia: for derivation see baccata.
Dumosa: Latin for clustered.
The Preferred Habitat: dry, sandy soil of the Commons.
The Shrub: one foot to two feet high, from horizontdl or almost erect base, usually leafless below; the branches nearly erect; the young twigs having short, soft hairs, or longer and stiffer ones.

The Leaves: opposite; oblong, obovate, or oblanceolate; one inch to one and one half inches long; green on both sides; shining when old; sparingly clothed with short hairs or practically hairless; firm or even leathery; obtuse and mucronate at the apex; narrowed at the base; sessile or nearly so; entire.

The Flowers: in rather loose racemes, bell-shaped.
The Fruit: a capsule, black without bloom, pleasant to the taste.

This is the low and often loosely growing huckleberry bush of the Commons. The High-bush Huckleberry (Gaylussacia baccata) is a member of the thicket growth about a damp "kettle hole."

These Low-bush Huckleberries are inconspicuous in the summer, although by their lustrous green leaves, they add a livelier tone to the sober reds, browns, and yellow-greens of the Commons, but in the fall, their crimson leaves make the hills a rolling contour of flaming scarlet, even to the horizon.

ERICACEA
HEATH FAMILY

Vaccinium corymbosum, L.
White or faintly pink
High-bush Blueberry, Swamp Blueberry.
May-June
Fruit ripe: July-August
Vaccinium: Latin for a blueberry.
Corymbosum: Latin for the uppermost point.

The Preferred Habitat: damp swamp-borders.
The Shrub: six feet to eight feet high, branched; the branches stiff; the twigs minutely warty, greenish-brown, with short, soft hairs or with none.

The Leaves: alternate; oval or oblong; one inch to three inches long; above green and hairless; below paler and often with short, soft hairs, at least on the veins; mostly acute at each end; short petioled; usually entire, sometimes with hairs on the margins.

The Flowers: in short racemes, appearing with the leaves, as long as, or longer than the flower-stems; bracts oblong or oval, falling early; corolla five-toothed.

The Fruit: a berry, blue, with a bloom.
This is the tall Blueberry of the swamps. Its branches are long and ascending; its leaves, when full-grown, are ovate, tending toward being lanceolate, and generally smooth. Its flowers, which come when the leaves are only half-grown, are small, pinkish-white, and urn-shaped. The berry is blue, with a bloom, and has a very sweet taste.

Vaccinium macrocarpon, Ait.
White or reddish
June-August

## Fruit ripe: August-October

Vaccinium: for derivation see corymbosum.
Macrocarpon: Greek name meaning long-fruit.
The Preferred Habitat: swamps.
The Vine: spreading, six inches to one foot long; the stem usually simple, reddish, weak.

The Leaves: numerous; alternate; erect; oblong; hairless on both surfaces; thin; obtuse at both ends; somewhat hairy on the entire margins; pinnately net-veined.

The Flowers: in a loose cluster, on slender, reddish, slightly hairy stems; the five petals lanceolate, curled backwards; the prominent stamens united below into a purplish-brown base.

The Fruit: a red berry.
Within recent years, growing cranberries has become such a business enterprise on Nantucket, that the area now covered by the vines under cultivation comprises the largest bogs in the world. This fact is comparatively little known, because, unfortunately, the Nantucket berries are shipped to the markets with the Cape Cod berries and sold under that name.

Besides these larger bogs, there are many small ones, some under cultivation, but quite a sufficient number in the wild state to allow the Nantucket people to get all the fruit they want for cranberry jelly.

The most frequent Cranberry on Nantucket is the American (Vaccinium macrocarpon), which is readily dis-

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tinguished by its long stems, red-brown and woody (in reality the axis of the leaves), bare for some distance, but finally filled with numerous, oblong leaves, that are slightly paler beneath and end in two flat bracts, small and leaf-like.

ERICACEA HEATH FAMILY

Vaccinium pennsylvanicum, Lam.

White or reddish

May-June
Fruit ripe: June-July

Low Sweet Blueberry, Dwarf Blueberry, Early Sweet Blueberry, Sugar Blueberry.

Vaccinium: for derivation see macrocarpon. Pennsylvanicum: Latin for Pennsylvanian.

The Preferred Habitat: dry, sandy soil of the Commons.
The Shrub: six inches to two feet high, branched; the branches bearing green warts and being nearly or quite hairless.

The Leaves: alternate; oblong, tending to lanceolate; from less than an inch to over an inch long; green and hairless on both sides or with few, short, soft hairs on the veins beneath; acute at both ends; with very fine, sharp teeth.

The Flowers: few, on very short stems, clustered; the corolla long bell-shaped, slightly contracted at the throat.

The Fruit: a blue berry, with a bloom, small.
Variable in size, and in the shape of the leaves, and, therefore, difficult to identify botanically, but ever a conspicuous feature of the Commons, where it grows over large tracts. In general, the typical plant is low and bushy, with numerous, oblong leaves. In late May or early June,

## HEATH FAMILY

these bushes are laden with small, white or reddish, urnshaped flowers, that last for only a short season. In late summer come the small, lustrous blueberries, that fill all, even the tiniest of bushes, while in the fall, the leaves, by turning a brilliant crimson, like the Low-bush Huckleberry, become one of the principal factors in making the Commons a blaze of colour, from hillside to hillside, and through the intervening valleys, as far as the eye can reach.

Seventeen other members of the Heath Family have been reported.

Limonium: carolinianum, (Walt.) Britton.

Lavender<br>August-October<br>Sea Lavender, Marsh Rosemary, Lavender-thrift, American-thrift, Canker-root.

Limonium: ancient name of the wild beet. Carolinianum: Latin for Carolinian.

The Preferred Habitat: salt marshes.
The Plant: from thick, underground rooting stems.
The Leaves: basal; oblanceolate; three inches to ten inches long; obtuse or acutish and crowned with an abrupt tip at the apex; narrowed into petioles; entire or slightly wavy-margined; the mid-vein prominent, the lateral veins very obscure.

The Flowers: usually solitary but clustered in spikes which grow practically on only one side of the branches; corolla of five nearly or quite distinct petals with a tooth or claw between each of the lobes; the calyx funnel-form, dry membranous, persistent.

The Fruit: is called an utricle; it is enclosed by the calyx.
One of the few plants that grow only in the salt marshes. In the fall its feathery clusters of tiny lavender flowers on the numerous spreading branches add a low-toned soft touch of the colour to the marsh, already red with the stiff spikes of samphire. The only leaves, basal, are large and usually withered.

## PLUMBAGINACEÆ

Although this plant is sold every year on the streets of Nantucket for Scotch Heather, it bears a resemblance to the heather only in the general pink of the small flowers. And yet there is another point in common. Both flowers closing only slightly when withered, retain their colour and general appearance in drying. Both make excellent winter bouquets, although of course the Rosemary as it is so very prevalent is far the more frequently used. A more practical value once lay in the use as a cure for canker-sores.



## Lysimachia quadrifolia, L.

Yellow

June-August

Whorled Loosestrife, Four-leaved Loosestrife, Five Sisters, Yellow Balm, Cross-wort, Liberty-tea.

Lysimachia: in honour of King Lysimachus, a name which is derived from the Greek, a release from strife. Quadrifolia: a Latin form for four leaves.

The Preferred Habitat: moist soil.
The Plant: erect, one foot to three feet high, simple or rarely branched; the stem slender, with few short, soft hairs or practically none.

The Leaves: very rarely opposite or partly alternate, usually whorled in fours or fives, sometimes in twos or threes, sixes or even sevens; lanceolate to ovate; without hairs on either surface; acute or tapering to a point at the apex; short petioled or stemless; usually with black, glandular dots; entire.

The Flowers: in the axils of the leaves, on stems which are sometimes loosely hairy or smooth. "The star shaped light golden yellow flowers are prettily dotted around the centre with terra cotta red which sometimes extends in faint streaks all over the corolla lobes."

The Fruit: a capsule.
This is very similar to the terrestris but the leaves usually are in whorls of fours, as the name quadrifolia signifies, and the red spots at the centre are single.

## PRIMULACE $\boldsymbol{E}$

> Lysimachia terrestris, (L.) BSP.

Yellow
June-August

Upright Loosestrife, Bulb-bearing Loosestrife, Swamp Candles.

Lysimachia: for derivation see quadrifolia. Terrestris: Latin for the land form.

The Preferred Habitat: swamps.
The Plant: erect, eight inches to two feet high, simple or branched, with somewhat erect branches; after flowering often bearing bulblets in the axils; stem light yellow-green, smooth.

The Leaves: opposite, rarely alternate; lanceolate or oblong-lanceolate; one to three inches long; hairless on both surfaces; acute or tapering to a point at both ends; on short stems or sessile; the margins rolled backward; usually with black, translucent glandular dots; entire; the mid-rib particularly prominent below.

The Flowers: on slender stems in a terminal bracted raceme or some of them solitary or two or three together in the upper axils; stems slender or thread-like; five sepals ovate or lanceolate, acute; the corolla star-shaped, deeply five-parted, the lobes alternating with the sepals, later bending backward, with red-purple streaks or dots at the centre, wavy; the five stamens prominent, standing in front of the petals.

The Fruit: a capsule.
A tall, delicate plant of the damp ground, that has a smooth, clean green stem, numerous lance-shaped and slightly drooping leaves and striking yellow flowers. These have sharply pointed petals that have a dark ring of double red spots at the centre. The stamens and pistil project

## PRIMROSE FAMILY

in a "cone-shaped cluster." Usually the middle flowers of the spike are in full bloom while the lower are withered, the petals fallen, but the calyx persisting and the upper ones still in bud. This is not a long-stemmed plant but an optimistic one, for often a stem is found, bent and curved, but full of bloom. En masse in a damp spot, the "misty" yellow of the flowers is in fine contrast with the deep green of the meadow grass.

## PRIMULACE $\neq$

PRIMROSE FAMILY
Trientalis americana, (Pers.) Pursh.
White

## June

Trientalis: Latin, meaning the third part of a foot, in allusion to the height of the plant.
Americana: Latin for American.
The Preferred Habitat: thickets and damp woods.
The Plant: from horizontal or creeping root-stocks which send up simple and stem-like branches, three inches to nine inches high, naked or scaly below.

The Leaves: in a whorl at the top; five to ten, lanceolate or oblong-lanceolate; one and one-half inches to four inches long; without hairs on either surface; tapering to a point at both ends; sessile or stout-petioled; entire; with minute hairs on the margins.

The Flowers: solitary or few on very slender stems, starshaped, daintily formed.

The Fruit: a capsule.
This is one of those beautiful, earlier flowers that are not well known on Nantucket because their flowering season is so short. Mr. Bicknell says that in 1909 he found the first flowers June 1st but after June 9th few flowers

## PRIMULACEA

were remaining, and in no year did he find any flowers after the middle of June. June is also the month given in the herbarium of the Nantucket Maria Mitchell Association.

Mr. Mathews is so very happy in his description of this dainty dweller of the shaded thickets that I cannot refrain from quoting him: "A delicate and interesting little woodland plant, with a long, horizontal creeping root, which sends upward an almost bare or few scaled thin stem, terminating in a circle of sharp-pointed, lance-leaved, light green leaves, thin, shiny, and tapering to both ends. There are five to nine leaves in the circle, from the centre of which proceed two thread-like stalks, each bearing a fragile, white, star-shaped flower with six to seven pointed divisions. The stamens are long and delicate, with tiny golden anthers."

PRIMULACEA
A nagallis arvensis, L.

| Scarlet or white | Poorman's | Bird's-tongue, |
| :---: | :---: | :---: |
|  | Weatherglass, | Inn Flower, |
| June-August | Shepherd's | Eycbright, |
|  | Shepherd's Clock, | Delight, |
|  | Poison Chickweed, | Wink-a-peek, |
|  | Scarlet Pimpernel, | Shepherd's |
|  | Red Chickweed, | Warning, |
|  | Burnet Rose, | Shepherd's |
|  | Red Pimpernel, | Sundial. |
|  | Bird's-eye, |  |

Anagallis: ancient Greek name, probably signifying to delight once more.
Arvensis: Latin to signify belonging in a field.
The Preferred Habitat: gardens and waste ground everywhere.


ANAGALLIS ARVENSIS

## PRIMROSE FAMILY

The Plant: weak and spreading, four inches to twelve inches long, usually much branched; the stem four-sided.

The Leaves: opposite, or rarely in threes; ovate or oval; membranous; black dotted beneath; obtuse or acutish at the apex; somewhat clasping at the base; entire.

The Flowers: star-shaped, usually with a darker centre. Albinos have been found.

The Fruit: a capsule.
Even when it intrudes in the garden or lawn, this is almost a welcome visitor, for the cheerful scarlet flowers and ovate leaves are decorative. The corolla is wheelshaped, with a touch of purple at the centre surrounding the upright stamens.

The popular names, referring to the plant's apparently being a weather-prophet, have arisen from its habit of opening its flowers only in bright sunshine.

From the plant is derived a drug, used in the treatment of rheumatism.

Four other members of the Primrose Family have been reported.

Sabatia gracilis, (Michx.) Salisb.

## Pink

Marsh Pink.
July-August
Sabatia: Dedicated, it is said, to W. L. Sabbati, an early Italian botanist.
Gracilis: Latin for slender.

The Preferred Habitat: shores of ponds "and in wet places also under fresh water conditions."

The Plant: erect; ten inches high, more or less, the stem rather slender; without hairs.

The Leaves: alternate; linear, oval or ovate; without hairs on either surface; usually obtuse at the apex; sessile and slightly clasping at the base; entire; mid-rib prominent below.

The Flowers: solitary, at the ends of the branches and peduncles; mostly five-parted. Albinos have been found.

The Fruit: a capsule.

These beautiful, star-like flowers, with their spreading pointed, pink petals, yellow centre, and white, two-cleft style, deserve their reputation, of being one of Nantucket's most popular wild flowers. Their very pinkness as the flowers shine among the taller grasses, near a pond's border, gives an alluring touch of colour.


## GENTIAN FAMILY

In fact the Sabatia is so dear to the heart of Nantucketers that they feel the flower to be peculiarly their own property. But it is also interesting to scientists; for in "the cut of the jib" of leaves and flowers there is so much variation that botanists have argued long over its specific name. Mr. Bicknell has solved the problem very skillfully. He says:
"The Nantucket plant, while in many examples quite typical, is mostly reduced in size and little branched, with the leaves in many cases relatively short and broad, frequently, indeed, exactly oval throughout or the long ones ovate.
"The specific distinction of Sabatia gracilis (Salisb.) (Sabatia campanulata (L.) Torr) from Sabatia stellaris (Pursh.) seems to be not well supported by the characters that have been mainly relied upon for its separation. As points of difference that are not at all constant are to be found in the more or less divided style, the longer or shorter calyx lobes, the broader or the narrower leaves. Actually all of these differences are unstable to a very marked degree. Much less so are two other characters which, indeed, seem to be almost always sharply distinctive although they have been little emphasized in descriptions. In Sabatia stellaris the main stem leaves, broadest at or above the middle, are distinctly narrowed to the base and the usually acute apex and the entire plant, unless carefully pressed, readily turns black in drying. Sabatia gracilis, on the contrary, shows little or no discoloration on the herbarium sheet, and the commonly obtuse leaves linear oblong, oval or low on the stem, usually ovate, are broadly sessile or sub-clasping. It is also worthy of remark that the leaves of the Sabatia stellaris, although the more fleshy in life, become more membranous in the dried specimens and more distinctly reticulate-veined."

# GENTIANACEÆ 

Centaurium spicatum (L.), Fernald.
Spiked Centaury.

## Magenta-Pink

## August-September

Centaurium: an old name from Latin, centum, a hundred, and aurum, gold or a gold piece, variously applied by the herbalists, but always in allusion, it is said, to the priceless medicinal value.
Spicatum: Latin, meaning furnished with spikes.

The Preferred Habitat: salt marshes.
The Plant: six inches to eighteen inches high; the stem branched, hairless, slender.

The Leaves: opposite; oblong to lanceolate; short in proportion to the height of the stem; hairless on both surfaces; obtusish at the apex; clasping at the base; entire.

The Flowers: less than one inch wide, in spike-like racemes on the mostly simple and leafless branches, wide open; the tube of the corolla somewhat longer than the calyx.

The Fruit: a capsule.
A charming little flower that grows in sufficient quantity, where it does condescend to grow, to give a deeper note of pink to the already pinkish-purple-brown tints of the salt marsh. The beautiful pink of the wide open Centaury blends with the pale purple of the Seaside Gerardia and the red-brown of the grasses, and makes the salt meadow a spot of beauty.

## GENTIAN FAMILY

This is the plant, spoken of in the Preface, which has not been found between Nantucket and Portsmouth, Virginia.

GENTIANACEAE GENTIAN FAMILY

> Menyanthes trifoliata, L.

| White or slightly <br> reddish | Buckbean, <br>  <br> Mogbean, | Water Shamrock, <br> Moonflower, |
| :---: | :--- | :--- |
| May-July | Marsh Trefoil, Bog Myrtle, |  |
|  | Bean Trefoil, Brook Bean, |  |
|  | Water Trefoil, |  |

Menyanthes: the Greek name for a flower and a month, some say because its flowering period is about that length of time.
Trifoliata: Latin for three-leaved.
The Preferred Habitat: wet bogs.
The Plant: from thick, scaly, underground stems, which are sometimes one foot long, marked by the scars of bases of former leaf-stems.

The Leaves: alternate (this plant is one of the two exceptions to the rule that the leaves of this family are opposite); palmately three-parted, the leaflets oblong or obovate; obtuse at the apex; sometimes three inches long, usually less; narrowed at the base; stemless; entire; pinnatelyveined; the (whole leaf) on long petioles (two inches to ten inches long); sheathing at the base.

The Flowers: ten to twenty in a raceme on a long leafless stem; the pedicels short, with small bracts at the base. The calyx shorter than the corolla, which is bearded within with white hairs.

The Fruit: a capsule.

## GENTIANACEA

The bluish-green, three-parted leaves of this tall, aquatic plant form dark stretches in the edge-nooks of wet bogs. The numerous white flowers, bearded within and sometimes tinged with red are borne on long, leafless stems. The plant has spread considerably since 1853 when, Mrs. Owen records, it was first discovered by "Eben W. Tallant, a school-boy at that time."

GENTIANACEE
GENTIAN FAMILY
Nymphoides lacunosum, (Vent.) Fernald.

## White

Floating Heart.

## July-September

Nymphoides: Greek "resembling a nymph." Lacunosum: Latin derivation for a basin.

The Preferred Habitat: fresh-water ponds.
The Plant: from underground stems buried in the mud; the roots long and fibrous; stem sometimes ten feet long.

The Leaves: floating; opposite; very broadly ovate; one inch long or more; hairless on both surfaces; green above. purple-red beneath; obtuse at the apex; heart-shaped at the base; petioled; entire; hairy-veined beneath. The tubers are linear-conic, about one inch long.

The Flowers: in an umbel; smooth stems; the five petals more or less erect.

The Fruit: a capsule.
A beautiful growth over the surface of fresh-water ponds, where it floats in large masses, its small white flowers glistening in the sun and its somewhat round leaves turning up their edges to show the dark purple-red beneath. The flowers, unfortunately, close early in the day. Of

## GENTIAN FAMILY

the young plants, Mrs. Owen says: "The seedlings in the fall spring up along the edge of the pond so closely as to look like a border of grassy turf.'

Three other members of the Gentian Family have been reported.

Asclepias amplexicaulis, Sm.

| Lilac-green | Blunt-leaved Milkweed, <br>  <br> June-August |
| :--- | :--- |
| Milkweed, |  |
| Silkweed. |  |

Asclepias: from the Greek name of Æsculapius, to whom the genus is dedicated.
Amplexicaulis: from Latin signifying that the leaves clasp the stem.

The Preferred Habitat: dry, sandy soil of the Commons.

The Plant: erect; the stem two feet high or more, not branched and very smooth. The milky juice is quite abundant.

The Leaves: a beautiful, dark green; opposite; oblong; about four inches long or more; obtuse at the apex and furnished with a short abrupt tip; heart-shaped and clasping at the base; with very wavy and entire margins.

The Flowers: as Mr. Mathews has so well described them, are, "pale magenta, purple-stained green," in a loose and nodding cluster at the top of the stem. Five of the petals, sepal-like, turned backward at time of blooming.

The Fruit: a follicle, growing singly or in pairs.

The most beautiful milkweed on Nantucket, standing erect but not stiffly in ones and twos, with bright green, wavy leaves and delicately coloured flowers that hang in loose clusters.


## MILKWEED FAMILY

Asclepias incarnata, (L.) var. pulchra, (Ehrh.) Pers.
Dull or light crimson Swamp Milkweed, Swamp Silkweed, Hairy Milkweed, Flesh-coloured July-September Rose-coloured Swallow-wort, Silkweed, Water Nerve-root.

Asclepias: for derivation see amplexicaulis.
Incarnata: from Latin signifying into flesh, i.e. fleshcoloured.
Pulchra: Latin for beautiful.

The Preferred Habitat: swamps.
The Plant: erect, two feet high or higher, usually branched, stout, leafy to the top; the stem covered with matted wool and with short, soft hairs.

The Leaves: opposite; broadly lanceolate; three to five inches long, sometimes as much as two inches wide; above having short, soft hairs or without hairs; beneath, soft hairy, at least on the veins; acute and acuminate at the apex; narrowed or rounded at the base; with entire margins and prominent net-veining.

The Flowers: a dull crimson or pink or even a pinkish white, in clusters of somewhat stiffer character than the nodding clusters of the syriaca; their stems covered with matted wool.

The Fruit: a follicle, densely clothed with soft, short hairs.
A showy member of the Milkweed Family, sturdy and handsome, which, with its crimson-pink flowers and vivid green leaves, is well called the pulchra or the beautiful, for in swamps its flat topped flower-clusters are spots of bright colour. The root is used in medicine.

## ASCLEPIADACEA

Asclepias syriaca, L.

| Pale lavender-brown | Common Milkweed, <br> Cotton-weed, | Virginia Silk, <br> Virginia Swal- |
| :--- | :--- | :--- |
| June-August | Silkweed, | low-wort, |,

Asclepias: for derivation see amplexicaulis.
Syriaca: Latin for Syria in which country Linnæus erroneously thought the species was native.

The Preferred Habitat: fields and waste ground, banks and roadsides.

The Plant: erect, from three to five feet tall; its stems usually unbranched and covered with fine, short, soft hairs, at least above.

The Leaves: scattered; light yellow-green; oblong to broadly ovate; four inches to nine inches long, two inches or more wide; acute or acutish at the apex; narrowed or obtuse or somewhat heart-shaped at the base; petioled; with entire margins; the principal veins stout and widespreading, but often turning to join one another toward the edge of the leaf.

The Flowers: several or many, in loose umbels at the joining of leaf stem and plant stem; the colour of the stems varying in intensity. Albinos have been found.

The Fruit: a rough pod, packed with very silky white down, to which are attached flat, dark brown seeds overlapping each other, "like the scales of a fish."

A plant that one associates with neglected garden patches and dump heaps; a large-leaved plant with pale lavenderbrown flowers nodding in loose, fiat-topped clusters at the top of stout and leafy stems. It might be developed for

## MILKWEED FAMILY

commercial purposes, for from it, the milkiest of the milkweeds, by the addition of vinegar, a kind of rubber can be made. The young stalks, if pared, can be used as a substitute for asparagus, the leaves for spinach. From the root is derived a drug, valuable in the treatment of pleurisy.

ASCLEPIADACEÆ

## MILKWEED FAMILY

Asclepias tuberosa, L.

| Orange-red | Butterfly Weed, | Canada-root, |
| :--- | :--- | :--- |
| June-September | Butterfly Flower, | Colic-root, |
|  | Yellow or Orange | Flux-root, |
|  | Milkweed, | Pleurisy-root, |
|  | Orange-root, | Tuber-root, |
|  | Orange A pocynum | Whitc-root, |
|  | Swallow-wort, | Indian-posy |
|  | Orange Swallow- |  |
|  | wort, |  |

Asclepias: for derivation see amplexicaulis.
Tuberosa: Latin in allusion to the thickened tuber-like root.
The Preferred Habitat: dry ground.
The Plant: erect or nearly so, one foot to two feet high, unbranched; the stem stout, very leafy, with short, stiff hairs; the milky sap scanty.

The Leaves: usually all alternate; linear, lanceolate, or oblong; two inches to six inches long; with short, stiff hairs on both surfaces; acute or sometimes obtuse at the apex; narrowed, rounded or heart-shape at the base; sessile or short-petioled.

The Flowers: numerous, on umbels at the ends of the branches; stemmed, the stems hairy; the petals oblong, obtuse.

The Fruit: a follicle, four to five inches long, covered with fine hairs.

## ASCLEPIADACEÆ

A clump of Orange Milkweed, found unexpectedly on the open Commons, is a delightful surprise, for here is a plant of which the graceful build and handsome flowerclusters make one think of an old-fashioned garden. To add to the picture, several Milkweed butterflies are usually alighting or pausing on the showy flowers.

From a part of this plant is obtained a valuable drug.
Two other members of the Milkweed Family have been reported.

## C'onvolvulus arvensis, L .

| White, or tinged | Field Bindweed, | Bell-bind, |
| :---: | :--- | :--- |
| with pink | Small Bindweed, | Corn-bind, |
|  | Hedge-bells, | Cow-bind, |
| May-September | Bear-bind, | European Bindweed, |
|  | Cow-lily, | Corn-lily, |
|  | Lap-love, | Small-flowered |
|  | Sheep-bind, | Morning Glory. |

Convolvulus: Latin, to entwine. Arvensis: Latin, belonging in a field.

The Preferred Habitat: open thickets.
The Plant: trailing, one foot to two and one half feet long; stems simple or branched, very slender, hairless or nearly so.

The Leaves: alternate; one inch to two inches long; ovate or oblong; hairless or nearly so; obtusish, mucronulate, acutish at the apex; sagittate or somewhat hastate at the base; petioled; the basal lobes spreading; slender, acute; entire.

The Flowers: one to four, on peduncles shorter than the leaves, which are bracted at the summit; usually another bract is on one of the pedicels; corolla sometimes nearly one inch across; sepals oblong-obtuse.

The Fruit: a globose capsule.
The Bindweed of the dry soil, frequently seen in the streets of the town. It has funnel-shaped, usually deadwhite flowers. Not unattractive when crawling along the ground, it fades almost immediately after being picked.

## CONVOLVULACEÆ

> "It closes in wet weather and at night, that its honey may not be reduced in quality."

From the plant is obtained a valuable oil.

CONVOLVULACE $E \quad$ MORNING GLORY FAMILY
Convolvulus sepium, L.

| White, streaked | Wild Morning Glory, | Lily-bind, |
| :---: | :--- | :--- |
| with pink | Hedge Bindweed, | Bell-bind, |
|  | Great Bindweed, | Wood-bind, |
| June-August | Hooded Bindweed, | Lady's Nightcap, |
|  | Bracted Bindweed, | Hedge-lily, |
|  | Rutland Beauty, | Devil's Vine. |

Convolvulus: for derivation see arvensis. Sepium: Latin for a hedge.

The Preferred Habitat: open thickets.
The Plant: trailing, three feet to ten feet long; the stem branched, without hairs.

The Leaves: alternate; hastate; two inches to five inches long; smooth on both surfaces; acute at the apex; lobed at the base, the lobes spreading; usually acute or acuminate; entire.

The Flowers: solitary, on stems longer than the leaves, pink or rose-coloured with white stripes, or white throughout, about two inches long; bracts at the base of the corolla acute or obtuse, ovate or heart-shaped.

The Fruit: a capsule.
A surprise awaits the one who pushes his way through a dense thicket and, coming to an open space, is greeted by the pretty, pink-tinted flowers of the Bindweed, which strays for yards and yards over the bushes. Immediately one suspects the Wild Morning Glory, but it is interesting to find its characteristics.

## MORNING GLORY FAMILY

## CONVOLVULACE $\mathbb{E}$ MORNING GLORY FAMILY

## Cuscuta Gronovii, Willd.

| Dull white | Wild Dodder, | Love-vine, |
| :--- | :--- | :--- |
|  | Onion Dodder, | Scald Weed, |
| July-August | Gronovius' Dodder, | Devil's-gut. |

Cuscuta: name supposed to be of Arabic derivation. Gronovii: name in honour of Gronovius.

The Preferred Habitat: other plants.
The Plant: high, climbing; the stems yellow to orange, slender but coarse.

The Leaves: none; the stem "bearing a few, minute scales in place of leaves."

The Flowers: numerous, in dense cymes. The corolla bell-shaped, very small.

The Fruit: a capsule.
A pernicious parasite that attaches itself to plants and grows by inserting its aerial roots into their stems and branches. It has inconspicuous tiny flowers, but fortunately bright-coloured stems, which loudly proclaim the presence of the criminal.

One writer when speaking of Dodder says:
"Owing to the serious nature of the attack upon our flax crops Professor Buckman was induced to experiment years ago with the object of elucidating its mode of growth. He found that the seeds of Dodder, sown strictly apart from any host-plants, germinated in four days and on the sixth a thread-like plant was seeking a foster parent, but by the eighth, not having succeeded in its object, it died. Others were sown in company with flax-seed, and in a few days the young Dodders attached themselves to the young Flax plants, made one or two tight coils around the victims, whose growth soon lifted the Dodders right out

## CONVOLVULACEA

of the soil, and thereupon the parasites sent aerial roots right into the flax and their natural roots dwindled and perished. Thereafter their true parasitical growth was most rapid to the detriment of the foster plant."

Ada Georgia has a pointed account of the plant:
"This species is probably the most widely known of its tribe. Like the Field Dodder, it seems indifferent as to its hosts and
"Like a living skein, enlacing, Coiling, climbing, turning, chasing,
will embrace anything, from a tall New England Aster to an onion or even some shrubby plant, such as the willows, and it is a high climber." "Wherever it attacks cultivated plants, boih it and they should be treated with scythe and fire before any seed ripens."

One other member of the Convolvulus Family has been reported.

Mertensia maritima, (L.) S. F. Gray.

## White to blue

Sea Lungwort.
June-September
Mertensia: in honour of a German botanist.
Maritima: Latin for sea-side.
The Preferred Habitat: beach sand.
The Plant: low-lying, spreading or partially erect, with branches three inches to eight inches long; stem smooth and covered with a bloom.

The Leaves: alternate; obovate to ovate; one to four inches long; fleshy; becoming roughened above; acute or obtuse at the apex; narrowed at the base; the lower and basal contracted into petioles.

The Flowers: very small, bell-funnel form, twice the length of the calyx.

The Fruit: a nutlet.

Unfortunately, few people have been sufficiently lucky to have seen this plant, so rare on Nantucket. Without question, it is the handsomest of the beach plants. If one has ever caught sight of the large, blue flowers amid their bright green foliage, against the brownish background of the sand, and with the blue, white-capped ocean near by, one can never forget the vision.

Its presence on Nantucket is interesting, because the island is the southern limit of its range. In speaking of the plant, Mr. Bicknell says:

## BORAGINACE $\neq$

"It seems to have always remained one of the island's rarer plants and never to have established any permanent colony. Nor is it known that more than a few plants have ever been found together on the island. It seems to appear sporadically and to disappear at widely separated points along those miles of seashore that, it might be thought, would offer good encouragement to its continued growth. These circumstances of its occurrence suggest that its seeds may come to the island from time to time by some natural agency of dispersion, but that the plant is unable to overcome some condition in the environment not quite favourable to its particular need."

BORAGINACE $\notin$

## Echium vulgare, L.

| Blue to pink and violet | Blue-devil, <br> Viper's-bugloss, | Viper's-stem, <br> Jiper's-herb, |
| :--- | :--- | :--- |
|  | Blue-weed, | Snake Flower, |
|  | Blue-thistle, | Adder's-wort, |
|  | Viper's Grass, | Cat's Tail. |

Echium: a plant name used by the Greeks, from a word meaning viper, because it was claimed that a concoction of the plant was a protection from a viper's bite. Vulgare: Latin form for common.

The Preferred Habitat: dry, sandy soil of gardens and roadsides.

The Plant: erect; the stem one foot to two feet high, beset with stiff hairs growing from swollen red bases; the straight root sometimes at least three feet long.

The Leaves: alternate; oblong to linear-lanceolate; two inches or more long; hairy on both surfaces and on the margin; the lower and basal narrowed into petioles, the upper stemless; acute or obtuse at the apex.

## BORAGE FAMILY

The Flowers: in a dense, one-sided spike, which at first is closely coiled, but finally only slightly curved; the corolla tube funnel-formed; the lobes fringed; pink stamens prominent, protruding from the corolla.

The Fruit: a nutlet.
The common name, Blue-devil, holds various possibilities of evil character. But this greyish-green, furzy plant with its blue and pinkish flowers, from which hang the prominent stamens, makes rather decorative bouquets and keeps well in water. Besides, there are interesting facts associated with it, as, for example, that it is one of the few really blue flowers, and that the change from blue to pink is due to the change from an alkaline to an acid condition, as occurs with blue litmus paper. Why, then, is this interesting and pretty plant dubbed Blue-devil? Because its deep root, being tough and wide, is difficult to eradicate, and because the plant, as it spreads freely, soon becomes a pest in grain-fields. Moreover, it is apt to make horses and cattle ill. In Australia, where it is called Patterson's Curse, after the unfortunate man who introduced it, it has been exterminated by a government order.

The popular name, Bugloss, derived from the Greek for ox-tongue, is in allusion to the fact that the leaves are rough, like the tongue of an ox.

Seven other members of the Borage Family have been reported.


Verbena: Latin word of obscure derivation. Hastata: Latin for spear-shaped.

The Preferred Habitat: borders of wet thickets.
The Plant: erect, three feet to seven feet high, usually branched above: the stem rough with very short hairs, four-sided.

The Leaves: opposite; often tinged with purple; oblong, lanceolate or lanceolate; acute or tapering to a point at the apex; narrowed at the base; toothed; the lower sometimes with three hastate lobes at the base.

The Flowers: usually on peduncles, in slender panicles, long persistent.

The Fruit: a drupe.
This is one of the handsomest and most decorative plants for bouquets that we have. Mr. Mathews describes it very well when he says, "The flower-spikes are numerous

## VERVIAN FAMILY

and branch upward like the arms of a candelabra; the flowers bloom from the foot of the cluster upward a few at a time, leaving behind a long line of purple-tinged calyx; the tiny blossoms are deep purple or violet-either one hue or the other. The flowers never approach blue or any hue allied to it, so the common name is misleading." Whatever one calls the colour, the plant is easily recognized as it rises gracefully from a tangled mass of green rose bushes, dingy white Thoroughwort and Yarrow, where there is, perhaps, an extra dash of violet purple from the Nightshade.

From the plant is obtained a valuable drug.
One other member of the Vervian Family has been reported.

Teucrium canadense, L. var. littorale, (Bicknell) Fernald.

## Pinkish-white tinged with magenta or purple

Germander, Wood Sage.

## July-September

Teucrium: named for the Trojan king, Teucer. Canadense: Latin for Canadian. Littorale: Latin, belonging to the sea-shore.

The Preferred Habitat: slightly brackish marshes.
The Plant: erect, one foot to two feet tall; the stem generally unbranched, stiff, rather slender, with short soft hairs.

The Leaves: opposite; generally lanceolate; with short, soft, appressed whitish hairs, especially above; thick and somewhat wrinkled; acuminate at the apex; mostly narrowed at the base; short-petioled; irregularly dentate.

The Flowers: in dense spikes; the lower lip broad and prominent.

The Fruit: nutlets.

Sometimes a plant, like a person, is successfully the average-neither very stupid, nor very interesting. So, the Germander, of which the purplish spikes and downy pale green leaves tint and soften the general colour tone of salt-marsh grass and blend prettily with the blue of the Skull-cap.

> Trichostema dichotomum, L.

Deep violet or magenta-blue Blue-curls, Bastard Pennyroyal.

## July-October

Trichostema: from Greek for a hair and a stamen from the capillary filaments.
Dichotomum: from Latin and Greek meaning cut in two.

The Preferred Habitat: dry, sandy soil.
The Plant: generally erect; three inches to two feet high, much branched; the branches spreading or somewhat erect; the stem slender, rather stiff, covered with minute, sticky hairs.

The Leaves: opposite; lance-oblong to oblong; one inch to three inches long, the upper gradually smaller, with minute, sticky hairs; entire; with an aromatic pennyroyal-like odour.

The Flowers: one to three together on stems; the calyx very unequally lobed.

The Fruit: nutlets.
An optimistic plant, blooming as profusely when only three inches high as when two feet high. The stem is much branched and bears deep violet or magenta-blue flowers. These are remarkable for the extraordinarily long violet stamens, which, curved, extend far beyond the petals, a fact that has given rise to the popular name of Blue-curls. Another popular name, Bastard Pennyroyal, is due to the plant's possessing an odor like pennyroyal. After the petals have fallen, the nutlets can plainly be seen within the calyx.

## Scutellaria galericulata, L.

## Blue-violet

July-August

Marsh Skull-cap, European Skull-cap, Hooded Willow-herb.

Scutellaria: from Latin for a dish, in allusion to the shape of the fruiting calyx.
Galericulata: from Latin for helmet because of the shape of the flower.

The Preferred Habitat: borders of ponds.

The Plant: erect, branched; stem one foot to two feet high; without hairs or slightly downy, four-angled.

The Leaves: opposite; ovate-lanceolate to oblong; slightly downy above, decidedly so beneath; acute at the apex; rounded and slightly heart-shaped at the base; short-petioled or the upper sessile; serrate.

The Flowers: solitary, in the axils of the upper leaves, about one inch long, with a long tube.

The Fruit: nutlets, resembling a skull-cap.
The delicate blue of these flowers, en masse, among the soft, feathery grasses of a pond's edge, with the deep blue water just visible beyond, presents a characteristic Nantucket picture. This is one of the largest flowered of the Mint Family that has been described here, and is interesting in that the solitary flower is borne at the junction of the leaf and flower stem.

Not an official drug remedy, but considered by many people an antidote for the bite of a mad dog.

# MINT FAMILY 

LABIATE
MINT FAMILY
Nepeta cataria, L.
Purple-pink, lilac-white
July-November

Nepeta: Latin name, thought to be derived from the name of an Etruscan city where the plant was common.
Cataria: from Latin for a cat.
The Preferred Habitat: gardens, roadsides.
The Plant: erect, two feet to three feet high; the stem sage green, with dense white down, branched; the branches ascending.
The Leaves: opposite; heart-shaped to oblong; one inch to three inches long; above with few, short, soft hairs; below covered with white down and therefore paler; acute at the apex; mostly heart-shaped at the base; deeply dentate.
The Flowers: small, in terminal clusters, which are rarely four inches long and are downy; the tube a little longer than the calyx; the broad middle lobe of the lower lip with shallow scallops; the teeth somewhat awl-shaped.
The Fruit: nutlets.
A mint of the barnyard or waste ground with a densely downy stem, downy round-toothed leaves, and pale lilac flowers. This exceedingly common weed has a great allurement for cats. Mr. Mathews says, "A favourite Manx cat of mine would walk a mile every other day or so from my Campton studio to a spot where it [the Catnip] grew in plenty, notwithstanding the way was through the woods and over a hill of no small difficulty!"

Whatever effect it may have on a cat's nerves, the plant was formerly considered an excellent nervine for people, and for that purpose was extensively gathered. A drug obtained from it is still considered valuable.

## LABIAT $\notin$

LABIATE
Nepeta hederacea, (L.) Trevisan.
Light purple
May-July

| Ground-ivy, | Cat's-foot, |
| :--- | :--- |
| Gill-over-the-ground, | Field-balm, |
| Creeping Charlie, | Hayhoof, |
| Robin-runaway, | Haymaids, |
| Alehoof, | Hedge- |
| Gill-ale, | maids. |

Nepeta: for derivation see Cataria.
Hederacea: common botanical $n_{n}$ me for ivy, in allusion to the ivy-shaped leaf.

The Preferred Habitat: fields and roadsides.
The Plant: low, creeping, with more or less upright branches, six to eighteen inches long; the stem four-angled, with short, soft hairs, weak.

The Leaves: opposite; kidney-shaped; hairy on both surfaces; obtuse at the apex; petioled, the lower petioles particularly long; the veining prominent.

The Flowers: clustered on short stems in the axils of the leaves; corolla-tube decidedly longer than the calyx, fringed with hairs and spotted; calyx hairy, with five widely separated sepals, often magenta tinted; upper pair of stamens much longer than the lower.

The Fruit: achenes.
A small, creeping plant with dark green, kidney-shaped leaves and pale purple tubular flowers, spotted darker near the throat. Its low-lying habit is well suggested by the popular names of Gill-over-the-ground and Creeping Charlie, although the plant must share the latter name with quite different flowers. But the names of Alehoof and Gill-ale are not easily understood until one realizes that in the old days, prior to the use of hops, the plant was used for flavouring and clarifying the home-brewed ale.


NEPETA
HEDERACEA

PRUNELLA VULGARIS

> Prunella vulgaris, L.

| Light or deep purple | Heal-all, | Brownwort, |
| :--- | :--- | :--- |
|  | Self-heal, | Thimble-flower, |
| June-November | Carpenter-weed, | Heart-of-the-earth, |
|  | Sicklewort, | Blue-curls. |

Prunella: name said to have been derived from the German word for a disease of the throat, for which this plant was supposed to be a remedy.
Vulgaris: Latin signifying common.

The Preferred Habitat: dry roadsides, lawns.
The Plant: generally erect, but sometimes procumbent, two inches to two feet high; the stem usually simple, but sometimes considerably branched, slender, with short soft hairs or nearly hairless.

The Leaves: opposite; ovate through oblong to oblonglanceolate; with short, soft hairs or none; obtuse or acutish at the apex; usually narrowed at the base; petioled; entire or wavy-margined.

The Flowers: in a spike, sessile or on short peduncles, with many bract-like leaves supporting them.

The Fruit: achenes.
A very common weed with tubular purple flowers in a head, liberally beset with rusty-coloured green flower-like bracts. "The bracts and calyx turn brown and make the spike look like a little pine cone with its tip broken off."

The variation in the name, Brunella or Prunella, is said to have been due to a mistake in copying by an early printer. However that may be, the name is a corruption from the German word for quinsy, for which this plant was considered a certain cure. The plant was also used in

## LABIATA

England as an application to the wounds received by rustic labourers as its popular names bear testimony-Carpenter's-weed, Heal-all, and Sicklewort.

LABIAT $E$
MINT FAMILY
Leonurus cardiaca, L.

| Pale lilac | Motherwort, <br> Lion's-tail, <br> June-September <br>  <br> Lion's-ear, <br> Throwwort. |
| :--- | :--- |

Leonurus: from Greek for a lion's tail. Cardiaca: from Greek for a heart.

The Preferred Habitat: gardens and around dwellings.
The Plant: erect, two feet to five feet tall; the stem rather stout, with very fine hairs, square, usually branched; the branches somewhat erect.

The Leaves: opposite; ear-shaped or wedge-shaped or tending to lanceolate; membraneous; acuminate at the apex; with stems of varying length, at least slender; the margins variable, the lower leaves palmately three- to five-divided, the lobes cut or toothed, the upper three divided or merely three-toothed.

The Flowers: numerous, clustered, tube-shaped, with a ring of hairs within, densely white-woolly without; the lower lip mottled.

The Fruit: nutlets.
An upright and rather decorative plant, without any particular mint odour. It grows in waste places and about dwellings and is easily recognized by its deeply cut leaves and tiny pale lilac flowers encircling the plant stem at the point of junction with the leaves.

Pycnanthemum virginianum, (L.) Durand \& Jackson.

White, purple dotted<br>July-September<br>Virginia Mountain Mint, Virginia Thyme, Mountain Thyme, Prairie-hyssop, Pennyroyal, Basil.

Pycnanthemum: Greek for a dense blossom, because of the compact arrangement of the flowers.
Virginianum: Latin for Virginian.
The Preferred Habitat: dry, sandy soil of the Commons and in low thickets.

The Plant: erect, one foot to three feet high; the stem rather stout, not strikingly square, hairless or having scattered, short, soft hairs.

The Leaves: opposite; lanceolate or linear-lanceolate; firm; without hairs, or beneath with very short, soft ones, or the upper densely covered with hoary hairs; acuminate at the apex; rounded or narrowed at the base; entire; often with short, leafy branches in the axils.

The Flowers: in terminal cymose arrangement, with flattened, stiff, acute or acutish bracts; the teeth of the calyx about one fourth as long as the tube; the corolla with short, soft hairs on the outer surface.

The Fruit: nutlets.
A high, straight plant of the thickets where it grows under the branches of the taller shrubs. It has a slight fragrance of mint. The lance-shaped, stemless leaves are in reality opposite, although they have the appearance of being in tufts. The tiny, whitish flowers, purpledotted, grow in dense globular heads, the outer flowers

## LABIATE

in full bloom or even withered, while the inner are still merely green buds, with the result that the flower heads suggest those of mignonette.

## LABIATE

## MINT FAMILY

Lycopus americanus, Muhl.

## White

July-September
Bugle-weed.
Lycopus: for derivation see virginicus.
Americanus: Latin for American.
The Preferred Habitat: low grounds and along pond shores.
The Plant: erect, one foot high or higher; with very short hairs or none.
The Leaves: opposite, generally lanceolate in outline; acuminate at the apex; petioled; very deeply cut, especially the lower, the upper serrate.
The Flowers: in whorls around the stem; corolla tubular, slightly longer than the calyx.

Tae Fruit: nutlets.
Very similar in every way to the other Bugle-weed, $L$. virginicus.

## LABIATE

## MINT FAMILY

Lycopus virginicus, L.

| White | Bugle-weed, <br> Virginia Horehound, | Gypsyweed, <br> Gypsy Herb, |
| :--- | :--- | :--- |
| July-August | Paul's Betony, <br> Carpenter's Herb, | Archangel (local). |

Lycopus: from Greek for a wolf's foot, from some fancied resemblance in the leaves.
Virginicus: Latin for Virginian.

The Preferred Habitat: swamps.
The Plant: erect, six inches to two feet tall or sometimes taller; the stem slender, four-angled, and generally smooth.

The Leaves: opposite; light green; ovate-lanceolate; rather abruptly acuminate at both ends; sharply toothed.

The Flowers: small, in whorls around the stem at the base of the leaves; the corolla tubular; the stamens mostly shorter than the petals.

The Fruit: nutlets.
A very variable plant, and, consequently, one interesting to the botanist. It used to be highly prized by the Nantucket herbalists, too, who used it for a cold remedy. The sharply toothed leaves grow opposite to each other and the small, bugle-shaped flowers are in a whorl around the stem.

LABIAT $\mathbb{E}$ MINT FAMILY

Mentha arvensis, var. canadensis (L)., Briquet.

White or lilac-white

## July-September

Field Mint, Corn Mint, Lamb's Tongue, Wild Pennyroyal.

Mentha: Greek name of a nymph who is fabled to have been changed into mint by Proserpine.
Arvensis: Latin, meaning growing in a field
The Preferred Habitat: low grounds.
The Plant: erect, six inches to two feet high; the stem freely branched, especially below, slender, somewhat coloured at the base.

The Leaves: opposite; oblong-lanceolate, tending to ovate; all about the same size, sometimes two inches long;

## LABIAT $\mathbb{E}$

light green, with dense, short hairs; acute or the lower obtuse at the apex; wedge-shaped at the base; conspicuously veined.

The Flowers: in whorls in the axils of the leaves; the calyx with short, soft hairs, bell-shaped, about one third as long as the corolla tube.

The Fruit: nutlets.
This mint grows in low, wet places and has a decidedly mint odour. The small bell-shaped flowers, with sharplytoothed edges, are crowded around the stem in whorls in the axils of the leaves; the whorls becoming gradually smaller, the farther they are up the stem.

Mentha piperita, L.

Pale purple
July-September

Peppermint, American Mint, Brandy Mint, Lamb Mint.

Mentha: for derivation see arvensis. Piperita: Latin for peppery.

The Preferred Habitat: marshes.
The Plant: mostly erect, one foot to three feet high, branched; the stem without hairs, square, purplish.

The Leaves: opposite; dark green; ovate tending to lanceolate; without hairs on either surface or with very fine, soft hairs on the veins beneath, at least rough; acute at the apex; rounded or narrowed at the base; sharply sawtoothed; veins prominent beneath.

The Flowers: in dense whorls forming spikes at the tips of the stem; these spikes thick and in fruit sometimes three inches long. The bracts lanceolate, tapering to a point at

## MINT FAMILY

the apex, usually not longer than the flowers, leaf-like; the calyx generally bell-shaped, without hairs, but its teeth hairy.

The Fruit: nutlets.
Colour and odour make this a noticeable plant of the low grounds. In the axils of the regularly-toothed leaves grow the flowers in whorls at intervals up the stem and, at the top, in spikes. The taste and odour of the leaves are very pungent, and a spray of peppermint gives a delicious flavour to a glass of iced tea, as some Nantucketers have proven.

Menthol is derived from this plant.
Twenty-two other members of the Mint Family have been reported.

## Solanum Dulcamara, L.

| Violet-purple | Bitter Nightshade, <br> Climbing Nightshade, | Violet-bloom, <br> Scarlet-berry, |
| :--- | :--- | :--- |
| Berries red | Dulcamara, | Dogwood, |
|  | Poison-flower, | Bittersweet. |

May-September
Solanum: name of unknown derivation.
Dulcamara: Latin form for bittersweet.
The Preferred Habitat: along ditches in town, or in damp, waste places.

The Plant: climbing or straggling, two feet to eight feet long; the stems woody below, with short, soft hairs or practically without any.

The Leaves: alternate; ovate or hastate; with short, soft hairs; acute or tapering to a point at the apex; usually somewhat heart-shaped at the base; petioled; rather variable, some having a lobe on one side near the base, others having three deep lobes or divisions, with much the largest part at the end.

The Flowers: in compound cymes on one side of the stem, drooping on slender pedicels; the corolla deeply five-cleft; the lobes at first spreading, soon curved backwards, triangular-laceolate, acuminate. The projecting yellow cone at the base of which is a ring of black, encloses the stamens.

The Fruit: a berry, oval or globose, hanging or drooping in small clusters, translucent, ruby-red when ripe.

A really very decorative plant, with dark green, leaves, which are usually lobed at the base, and dainty purple


## NIGHTSHADE FAMILY

flowers from which project the stamens and pistil united in a brilliantly yellow cone. Later appear oval green berries, of undesirable reputation that finally turn a brilliant ruby red. For, they it is, which, because of their likeness to currants, lure children to eat them. They are seriously, but not necessarily, fatally, poisonous. From the plant is derived a valuable drug.

On account of the overlapping of popular names, this is not to be confused with another Bittersweet (Celastrus scandens) which is a twining shrub and bears very small green flowers.

SOLANACEA
NIGHTSHADE FAMILY
Solanum nigrum, L.

White

## Berries Black

Deadly Nightshade,
Black Nightshade, Garden Nightshade, Poison Berry.

## July-October

Solanum: for derivation see Dulcamara.
Nigrum: Latin for black.
The Preferred Habitat: roadsides in town, waste ground, barnyards.

The Plant: erect, one foot to two and a half feet high; the stem without hairs or with few, short, soft hairs.

The Leaves: alternate; ovate; more or less equilateral; acute or tapering to a point at the apex; narrowed or rounded at the base; petioled; entire or toothed; wavymargined.

The Flowers: small, three to ten in umbels; calyx-lobes persistent at the base of the berry.

The Fruit: berries, green at first, black when ripe, globose and hairless, with a faint odour and a sweet, nauseous taste.

## SOLANACEA

A low, weedy-looking plant with a faint odour, that has irregularly lobed leaves and insignificant white flowers, which are not to be compared to the handsome flowers of the Dulcamara.

The name, nigrum, (the flowers being white) is given because the berry is black when fully ripe. The berry has a sweet, nauseous taste and while poisonous, is not so virulent as the red berry of the Dulcamara.

From this plant, also, is made a valuable drug.

## SOLANACEÆ

 NIGHTSHADE FAMILYNicandra Physalodts, (L.) Pers.

## Blue

## July-September

Apple of Peru.

Nicandra: named for the Grecian poet, Nicander.
Physalodes: Greek for resembling a bladder, in allusion to the inflated calyx.

The Preferred Habitat: waste grounds, barnyards, and old gardens.

The Plant: somewhat erect, two feet to three feet high; the stem angled.

The Leaves: alternate; ovate or oblong; tapering; acuminate but blunt pointed at the apex; narrowed at the base; petioled; lobed.

The Flowers: trumpet-shaped, one inch long or more, with shallow lobes.

The Fruit: a berry, about one half inch in diameter, loosely surrounded by the inflated and angled calyx.

To few weeds is granted the grace of being as attractive in appearance as the Apple of Peru. The large, trumpetshaped flowers are a beautiful, light China blue, and their margins are neatly lobed. The leaves, although rather

## NIGHTSHADE FAMILY

heavy, are sufficiently broad to support the flowers. The shape of the inflated calyx explains the popular name, Apple of Peru.

SOLANACEE

## NIGHTSHADE FAMILY

Lycium halimifolium, Mill.

## Greenish-purple and greenish-brown

Summer

Matrimony Vine, Box-thorn, Bastard Jassamine, Jassamine, Jackson-vine.

Lycium: name from the country Lycia.
Halimifolium: Latin, having leaves like the Orach (Atriplex halimus) of Europe.

The Preferred Habitat: dry, sandy soil, frequently an escape.

The Shrub: vine-like, six feet high and often much higher, branched; the branches somewhat angled; the stems with few or no spines, slender and drooping; if the spines are present, they are slender, about one half an inch long.

The Leaves: alternate; lanceolate, tending to spatulate; acute or obtuse at the apex; narrowed into short stems; firm.

The Flowers: two to five together in the axils of the leaves, or solitary. The corolla somewhat funnel-formed.

The Fruit: orange red oval berry.
A decorative vine with lance-shaped leaves, that is frequently trained around doorways and even, when neglected, continues to flourish. Often it spreads to nearby fences. Occasionally it is found in a tangled, bushy mass. The flowers are small and funnel-shaped, with five petals. At first purplish, they later turn to a green-brown-an interesting example of change due to oxidation.

Datura Stramonium, L.
White, striped with purple or blue Thorn-apple, Jamestown Weed, July-September

Jimson Weed, Peru Apple, Devil's Apple, Devil's Trumpet, Stinkweed, Fireweed.

Datura: altered from the Arabic name. Stramonium: old name for the plant.

The Preferred Habitat: waste grounds, door yards, roadsides in town.

The Plant: erect, one foot high or higher; the stem without hairs or the young part with few, soft hairs.

The Leaves: alternate; thin; ovate; acute or tapering to a point at the apex; mostly narrowed at the base; angularly coarse toothed; on slender stems.

The Flowers: trumpet-shaped, about four inches long, much longer than the light green calyx.

The Fruit: a capsule, covered with stout prickles of which the longest are at the tip.

A malodorous, sprawling weed, that has a heavy stem and thin leaves, ovate and coarsely toothed. The large, white flowers are trumpet-shaped, the corolla deep cut and waved around the edge. Later the flowers give place to large, ovoid, green fruit, with stout prickles of varying length.

From this plant is obtained a valuable drug
Five other members of the Nightshade Family have been reported.

| Verbascum Thapsus, L. |  |  |
| :---: | :---: | :--- |
| Yellow, rarely white | Common Mullein, | Velvet-plant, |
|  | Great Mullein, | Candle Wick, |
| June-September | Velvet Mullein, | Feltwort, |
|  | Mullein Dock, | Flannel Leaf, |
| Aaron's Rod, | Old-man's Flannel, |  |
| Aaron's Fiannel, | Hare's Beard, |  |
| Adam's Flannel, | Hedge Taper, |  |
| Blanket Leaf, | Ice Leaf, |  |
| Bullock's | Jacob's Staff, |  |
| Lungwort, | Peter's Staff, |  |
|  | Cow's Lungwort, | Torches, |
|  | Jupiter's Staff, | Lady's Foxglove, |
|  | Shepherd's Club, | Torchwort. |

Verbascum: ancient Latin name.
Thapsus: Latin for Thapsus, in the Island of Sicily, where the plant is native.

The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: erect, two feet to seven feet high; the stem stout, simple, rarely with erect branches, densely woolly all over, the hairs branched.

The Leaves: alternate; oblong; thick; woolly on both surfaces; acute at the apex; narrowed at the base; the upper running down the stem, the basal on petioles; roundtoothed.

The Flowers: numerous, in dense cylindrical spikes, sometimes one inch broad; the stamens unequal.

The Fruit: a capsule.
There are occasions when the Mullein might be called effective in the landscape. As, for instance, when a colony

## SCROPHULARIACEA

of these tall sentinels, bearing their large, blanket-like leaves, that become gradually smaller toward the top of the stem, and their steeple-like spike of yellow flowers, are thrown into contrasting colour with the red-grey background of a group of burned and twisted pine-tree trunks. The flowers could aid in making the plant more beautiful, if the buds would only hurry in opening. The large fullblown flowers with numerous golden-yellow stamens are really pretty. But the buds develop so sluggishly that on the same spike are usually mature flowers, buds and green fruit forming.

However, "Handsome is as handsome does." This was once one of the most useful herbs of the home medicine chest. The leaves, boiled in milk and sweetened, could be used internally for digestive troubles. Or "the leaves dipped in hot vinegar and water are very useful, applied as a fomentation for colds or in malignant sore throat. A handful of them may also be placed in an old teapot, with hot water, and the steam inhaled through the spout in the same complaints." (Warren.) An oil made from the flowers is still considered valuable in the treatment of earache.

> Linaria canadensis, (L.) Dumont.

## Lavender

June-September
Linaria: Derivative from Latin for flax, which some species resemble in their leaves.
Canadensis: Latin for Canadian.
The Preferred Habitat: sandy roadsides.
The Plant: the flowering stem erect, from four inches to two feet high, simple or branched, hairless, brittle, the sterile shoots spreading or low-lying, very leafy.

Wild Toad Flax, Blue Toad Flax.

## FIGWORT FAMILY

The Leaves: alternate, those on the flowering stem scattered; erect; linear or somewhat oblong; smooth on both surfaces; acutish at the apex; stemless; entire; the leaves on the sterile shoots opposite.

The Flowers: in slender, long and loose racemes, spurred; the lower lip large and three-lobed with a white, convex two-ridged throat; the upper lip with two acute divisions; the spur curving and thread-like, rarely pink, frequently white.
The Fruit: a capsule.
A low and very straight plant, which has thin branches (if it is branched at all) and very few leaves on the slender flowering stem. It stands stiffly erect in the sandy ground or often in pure gravel. It is the small lavender flowers that make the plant attractive. They grow in a long and loose cluster down the stem; they are two-lipped and spurred and carry a dainty touch of white at the throat.

SCROPHULARIACEE
FIGWORT FAMILY
Linaria vulgaris, Hill.

| Yellow and orange | Butter and eggs, | Devil's Flower, |
| :--- | :--- | :--- |
| July-September | Yellow Toad Flax, | Brideweed, |
|  | Wild Flax, | Ramsted, |
|  | Devil's Flax, | Ramcid, |
|  | Flaxweed, | Deadmen's-bones, |
|  | Eggs and Bacon, | Jacob's Ladder, |
|  | Bread and Butter, | Impudent Lawyer. |
|  | Wild Snap-dragon, |  |

Linaria: for derivation see canadensis. Vulgaris: Latin for common.

The Preferred Habitat: dry ground, dumps.
The Plant: erect, one foot to two and a half feet high; the stem slender, pale green, very leafy with a slight bloom, hairless or with a few short, soft hairs.

## SCROPHULARIACEAE

The Leaves: mostly alternate; linear; one half inch to one and a half inches long; acute at both ends; sessile; entire.

The Flowers: in dense racemes, upright on short stems, one inch long or more; the spur somewhat darker, nearly as long as the body of the corolla; the middle lobe of the lower lip shorter than the other two; the throat orangecoloured.

The Fruit: a capsule.
Handsome, irregularly-shaped flowers, that have the spur and the two lobes to the petals, which are characteristic of the family. In close array they run up the stem that is thickly draped with slightly drooping, light green, narrow leaves. Yellow and yellow-orange in their coloring, they suggest scrambled eggs as much as Butter and Eggs.

From this plant is obtained a valuable drug.

SCROPHULARIACE $\mathcal{E}$
FIGWORT FAMILY
Gratiola aurea, Muhl.
Yellow
Golden Hedge Hyssop, Golden Pest.

## July-August

Gratiola: named from Latin for favour from supposed medicinal properties.
Aurea: Latin derivative for golden.
The Preferred Habitat: wet, sandy borders of ponds.
The Plant: low-lying, creeping or erect, four inches to twelve inches high; the stems simple or branched, with very fine, short hairs or hairless above, somewhat four-sided.

The Leaves: opposite; lanceolate; without hairs; obtusish at the apex; narrowed at the base; sessile and somewhat clasping; with few very fine round teeth or entire.

gRATIOLA
AUREA


## FIGWORT FAMILY

The Flowers: on thread-like stems, somewhat cupshaped, with flaring lobes.

The Fruit: a capsule.
The sandy border of one of Nantucket's deep blue ponds is often glorified by these low, light green plants with their yellow, vase-shaped flowers.

SCROPHULARIACEA
FIGWORT FAMILY
Gerardia purpurea, L.
Magenta-purple
Large Purple Gerardia.
August-October
Gerardia: dedicated to the celebrated herbalist, John Gerarde, who lived in 1673.
Purpurea: Latin for purple or red.
The Preferred Habitat: dry, sandy soil but generally more moist ground.

The Plant: erect, one foot to two and one half feet high; the stem slender, without hairs, roughish, somewhat angled.

The Leaves: usually widely spreading, opposite; narrowly linear, sometimes with smaller ones in their axils; without hairs on either surface; acute at the apex; with rough margins.

The Flowers: in racemes, cup-shaped, with five wide flaring lobes; pedicled; the calyx teeth somewhat lanceolate, one third to one half as long as the tube; the stamens persistent. Albinos have been found.

The Fruit: a capsule.
Among the shorter plants of the Common or open damp ground, there are few more alluring in form and colour

## SCROPHULARIACEÆ

than the Gerardia purpurea, which is equally decorative when growing in the mass-a sheet of magenta-purple, mingled with bright green, or when single plants are scattered in the gravelly wheel-rut-here one and farther along another, miniature bushes laden with large vaseshaped flowers.

The flowers are generally larger in size and deeper in colour than those on the mainland. They have five deep, flaring lobes, slightly curled backwards, hairy and whitespotted within, the pure white stamens in contrast with them.

The Gerardia is also a satisfactory plant for bouquets, for, although the mature flowers fall very soon, the buds come out in water successively for days, and if the flowers are paler, they are still a pretty shade.

Nineteen other members of the Figwort Family have been reported.

LENTIBULARIACE $\neq$
BLADDERWORT FAMILY
Utricularia subulata, L
Yellow

June-August
Utricularia: Latin for a little bladder.
Subulata: Latin to signify "borne underground."
The Preferred Habitat: sandy swamps.
The Plant: aquatic and immersed, with thread-like, dissected leaves, borne underground on little bladders to float it; sometimes both leaves and bladders are missing; the flower stem thread-like and hairless, stiff.

The Flowers: borne in zigzag raceme; the corolla one half inch long or less, deeply two-lipped; the lower lip larger, three-lobed and with a prominent palate, which is usually bearded; the calyx two-lipped.
The Fruit: a capsule.
This beautiful little flower has been mistaken for the famous "Yellow Orchid" (Habenaria ciliaris), but those hunting for the Yellow Orchid are wrong if they stop their search here. These irregularly shaped flowers do certainly suggest the characteristics of an orchid. For they have two lips, the lower with three lobes, much larger than the upper, and a spur that lies almost flat on the lower lip, which it nearly equals in length. But these flowers cannot be orchids, because among other more technical reasons, in an orchid both the calyx and the corolla must be attached to the ovary. In this flower the calyx is free.

As the range is given in Gray's Botany (7th edition), Nantucket is the northern limit.

Four other members of the Bladderwort Family have been reported.

## Plantago lanceolata, L.

| Dull white | Dog's-ribs, | Long Plantain, |
| :--- | :--- | :--- |
| Ray-November | Ribwort, | Snake Plantain, |
|  | Buckthorn, | Lance-leaved |
| Thimble Grass, | Plantain, | Ripplain, Plantain, |
| Ribwort Plantain, | Cocks, | Kempseed, |
| Rib Grass, | Kemps, | Headsman, |
| Ripple Grass, | Leechwort, | Hen-plant, |
| English Plantain, | Ram's-tongue, | Clock, |
| Black-jacks, | Rat-tail, | Chimney-sweeps, |
| Jack-straws, | Windles, | Cat's Cradles, |
|  |  | Nigger Heads. |

Plantago: The Latin name.
Lanceolate: from Latin diminutive for a lance.
The Preferred Habitat: dry, sandy soil.
The Leaves: basal; narrowly oblong-lanceolate; generally erect; mostly hairy; tapering to a point at the apex; gradually narrowed into petioles; three- to five-ribbed; entire.

The Flowers: in very dense spikes which are at first short and ovoid, and later become cylindrical and blunt.

The Fruit: a capsule.
The Plant: from underground rooting-stems; the flower stalks slender, channeled, at length much higher than the leaves.

This is recognizable as a Plantain by its naked flowerstalk, topped with a hairy head of tiny fly-away flowers. But it differs from the Common Plantain in that its nearly erect leaves are long and lance-shaped.

## PLANTIAN FAMILY

PLANTAGINACEE

## PLANTAIN FAMILY

> Plantago major, L.

| Dull white | Rib Grass, | Bird-seed, |
| :--- | :--- | :--- |
|  | Greater Plantain, | Broad-leaf, |
| May-September | Way Bread, | Hen-plant, |
|  | Dooryard | Lamb's-foot, |
|  | Plantain, | Healing-blade. |

Plantago: for derivation see lanceolata.
Major: Latin for greater.
The Preferred Habitat: dry soil everywhere.
The Plant: leaves and flower stems from an underground stem; a root stock; flower stems four inches to fourteen inches high.

The Leaves: in a rosette on the ground; broad elliptic to heart-shaped or ovate; two inches to ten inches long; thick and leathery; hairless or sometimes with short, soft hairs; acutish at the apex; the broad stem channeled; the margin waved, or more or less toothed.

The Fruit: a capsule.
One would blush to have to be introduced to this homely weed, which has almost the persistence of a dandelion, springing up cheerfully, no matter how close it has been cut by the lawn mower. However-the plant had its compensations. Out of the thimble-shaped flower-spikes, the herbalists made a concoction "highly spoken of for skin diseases." The thick, leathery leaves, if bruised, were considered "most useful when applied to wounds, ulcers, and bites of poisonous insects," and a drug is still obtained, valuable in the cure of toothache.

Four other members of the Plantain Family have been reported.

Galium Claytoni, Michx.

## White

Clayton's Bed-straw.

## July-September

Galium: from Greek for milk, which some species are used to curdle
Claytoni: name in honour of the botanist, John Clayton.
The Preferred Habitat: damp ground.
The Plant: erect, or, when older, low-lying, six to twelve inches high, branched; the branches in twos; the stems slender, sharply four-angled, more or less rough.
The Leaves: in fives or sixes; linear-spatulate or spatu-late-oblong; dull, dark green above, discoloured in drying; obtuse at the apex; wedge-shaped at the base; petioled; rough on the margins and midrib; bracts minute.
The Flowers: in clusters of twos and threes, on straight, hairless, pedicels, which branch out as the fruit ripens; petal-lobes oval, obtuse.
The Fruit: a capsule.
This is a very delicate and insignificant plant of damp ground, where it spreads among the general tangle of "green things" a mat of its rough, thread-like branches with narrow, slightly spade-shaped leaves, that grow in groups of fours and sixes around the stem. The tiny, white flowers are wheel-shaped. It is a delicate plant and not undecorative, but it requires considerable patience to pick a sufficient amount to use in a bouquet. It is easier just to grasp a handful of stems and pull up a whole colony at once-easier, but also more destructive.

This is the Family to which the Coffee and Peruvianbark trees belong.

## MADDER FAMILY

RUBIACEÆ
Cephalanthus occidentalis, L .

| White | Button-bush, | Boxwoorl, |
| :--- | :--- | :--- |
| June-September | Buttonwood Shrub, | Honey-balls, |
|  | Button-tree, | Pin-ball, |
|  | Button Willow, | Little Snowball, |
|  | River-bush, | Globe-flower, |
|  | Swamp-wood, | Crane-willow. |

Cephalanthus: Greek, signifying head-flower. Occidentalis: Latin for western.

The Preferred Habitat: damp places near ditches.
The Shrub: erect, three feet to eight feet high, much branched; the branches hairless or with few, short, soft hairs.

The Leaves: opposite or verticillate in threes; ovate or oval or tending to lanceolate; essentially hairless; tapering to a point or acute at the apex; rounded or narrowed at the base; petioled; entire; with short stipules.

The Flowers: very fragrant, sessile, in globose heads which are about an inch in diameter; the style almost twice the length of the corolla.

The Fruit: a capsule.
Reading through the list of popular names for this rather inconspicuous bush of the damp ground, gives one a fairly clear mental picture of the symmetrical shrub, with ovate and toothless leaves and yellow-white "balls" of a heavy, honey-sweet odour, that is perceptible even from quite a distance.

It is not a shrub that can be used for decoration, for the short-lived, white flowers quickly become a dingy brown, and the leaves frequently wilt and are not easily refreshed in water.

## RUBIACEA

RUBIACEE
MADDER FAMILY
Houstonia ccrrulea, L.

Sometimes blue,
generally whitish
May-October

Quaker-ladies, Quaker-bonnets, Bluets, Innocence (said to be the only common name they do not share with any other flower),
Eyebright, Venus' Pride, Angel-eyes, Blue-eyed Babies, Bright-eyes, Star of Bethlehem.

Houstonia: in honour of Dr. William Houston, an English botanist, who collected in tropical America.
Corulea: Latin for sky-blue.
The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: erect, three inches to seven inches high, sometimes so branched at the base as to form dense tufts; stem slender, smooth or nearly so.

The Leaves: opposite; the lower and root-leaves broader than the upper; oblong-lanceolate to spatulate; hairy above; obtusish at the apex; sessile or sometimes narrowed into a petiole; entire; hairy on the margins.

The Flowers: solitary, on slender stems, terminal or in the axils, the tube of the flower yellowish; petals white or tinged with purple, yellow, or light-blue; two forms of flowers occur on different plants, one form with projecting style, the other with the style shorter than the corolla-tube.

The Fruit: a capşule.
This is the delicate and ingenuous, yet noticeable, and open-eyed, little, white flower just tinged with blue, that

## MADDER FAMILY

grows on a very low stem, from a tuft of oblong-lanceolate leaves. No better mental picture of it can be made than is suggested by the popular names of Quaker Lady, and Innocence or Angel-eyes. That is, in Nantucket. For, contrary to the usual custom of flowers in Nantucket, which are usually deeper in colour here than elsewhere, the petals in this instance are paler than on the mainland where they are generally a delicate but decided blue; and there the flowers may well be described as Bluets and Blue-eyed Babies.

Seven other members of the Madder Family have been reported.

## June-July

Viburnum: the classical Latin name of unknown meaning. Venosum: Latin for vein.

The Preferred Habitat: border of thickets.
The Shrub: three to six feet high or more, branched; the young bran ches ashy with soft hairs; the bark grey-brown.

The Leaves: opposite; elliptic-ovate to orbicular; about two inches long and nearly as wide; above dark green and hairless; beneath pale, with rusty brown hairs; sharply saw-toothed; the veining prominent beneath.

The Flowers: small, in cymes.
The Fruit: a sub-globose drupe.
A shapely bush, which at times reaches the height, if not the stature of a young tree. The oval leaves are the most distinctive part of the shrub. Clusters of yellowishwhite flowers suggesting those of the Elder (Sambucus canadensis), but slightly stiffer than these, in their season soften the outlines of the bush; later, blue-black "berries" that seem to avoid notice, add a touch of mysteriousness to the dark green foliage.

CAPRIFOLIACE $\boldsymbol{A}$
HONEYSUCKLE FAMILY
Sambucus canadensis, L.

Cream-white

June-July

Common Elder, Elder-blow Elderberry, Sweet Elder, American Elder,

## HONEYSUCKLE FAMILY

Sambucus: Latin name perhaps from the Greek for an ancient musical instrument.
Canadensis: Latin for Canadian.
The Preferred Habitat: damp thickets.
The Shrub: erect, four to eight feet high, branched; the stem smooth and woody.

The Leaves: opposite; pinnately divided, the leaflets five to eleven, but usually seven; two to five inches long; ovate to oval; acute at the apex; sharply serrate; sometimes with short, soft hairs beneath.

The Flowers: small, funnel-shaped, in flat-topped, loose cymes.

The Fruit: a purple-black drupe.
A very decorative shrub and one that holds possibilities for the kitchen cupboard and for the medicine chest. Unfortunately its sensitive leaves wilt almost immediately after the stem has been cut and do not revive in water. The shrub is as graceful when filled with the large drooping clusters of creamy-white flowers as later when its berries, purple-black, hang at the ends of the branches, clothed so thickly with their dark green compound leaves. These berries are but one of the useful parts of the plant. Not good to eat raw, they make delicious wine and even better jelly, as Nantucket people can testify. In medicine, practically the whole plant is utilized, or at least used to be. From the flowers and berries and inner bark was made a tonic; while the outer bark compounded with lard composed a soothing ointment for burns and scalds.

Five other members of the Honeysuckle Family have been reported.

## Lobelia cardinalis, L.

| Red, rarely rose-colour or white | Red Lobelia, |
| :--- | :--- |
| August-September | Cardinal Flower, |
|  | Red Betty, |
|  | Slink-weed, |
|  | Hog's-physic. |

Lobelia: Dedicated to Matthias de l'Obel, an early Flemish herbalist.
Cardinalis: a Latin form used to refer to colour, from the red of a cardinal's vestments.

The Preferred Habitat: wet ground.
The Plant: erect, two feet to four and a half feet high; the stem slightly tinged with red, hairless or having a few short hairs.

The Leaves: alternate; oval, tending to lanceolate; dark green or tinged with red; smooth or nearly so; acute at both ends; the upper sessile, the lower on stems; slightly toothed.

The Flowers: in a racemose spike; the corolla with a straight tube, which is split apparently on the upper side, somewhat two-lipped; the upper lobed, the lower cleft.

The Fruit: a pod.
A very beautiful and, unfortunately, a very rare flower on Nantucket. But it is one of the flowers that, once seen, is never forgotten, for the beautiful, cardinal-red of the graceful blossoms, nodding amid the high green grass, is a

## LOBELIA FAMILY

treat indeed. Probably one reason why the plant is so rare in Nantucket is the fact that it prefers running water; here it must grow in a sluggish marsh.

From this plant is obtained a drug, valuable in the treatment of asthmatic complaints.

> Eupatorium perfoliatum, L.

| Dull white | Boneset, <br> Common | Ague-weed, <br> Sweating Plant, |
| :--- | :--- | :--- |
|  | Thoroughwort, | Indian Sage, |
|  | Thoroughstem, | Feverwort, |
|  | Thorough-wax, | Wild Isaac. |
|  | Thorough-grow, |  |

Eupatorium: dedicated to Eupator Mithridates, who is said to have used this species in medicine.
Perfoliatum: Latin denoting through the leaf.
The Preferred Habitat: ditches and damp ground.
The Plant: erect, two feet to five feet high, branched above; the stem stout with short, soft hairs.

The Leaves: opposite or rarely in threes, four inches to eight inches long, one inch to one and a half inches wide; wrinkled and with short, soft hairs on both surfaces; tapering to a point at the apex; larger at the base and so grown together that the stem appears to pass through them; toothed.

The Flower Heads: crowded in a modified panicle, small; involucre bell-shaped; its bracts lanceolate, acutish, overlapping in two or three series, covered with short, soft hairs, the outer ones shorter.

The Fruit: achenes; pappus consisting of bristles.
This is that tall, rather heavily-stemmed plant of the ditches and damp ground, with purple-tinged, heavy, opposite leaves, through which the stem passes, and large, whitish flower heads that are increasingly fuzzy and increasingly grey as they mature. But not for any grace
or charm that it might possess was the plant known to the old Nantucketers. It was, perhaps, the most useful "herb" they had. As indicated by the common names, Ague-weed and Feverwort, it was a popular remedy for fever and ague. The symptoms following its use, it is said, were those of a setting bone, hence the name of Boneset. The plant is still in favour medicinally, being considered an excellent remedy in influenza.

COMPOSIT $\notin$
COMPOSITE FAMILY
Eupatorium purpureum, L.

| Magenta-crimson | Joe-Pye Weed, |
| :--- | :--- |
| August-September | Tall Boneset, |
|  | Trumpet-weed, |
|  | Gravel-root. |

> Eupatorium: for derivation see perfoliatum. Purpureum: Latin for red or purple.

The Preferred Habitat: borders of swamps or low, damp ground.

The Plant: erect, three feet tall or taller; branched at the top; the stem green (r purple without hairs or with short ones.

The Leaves: verticillate in threes or sixes; thin; ovate or ovate-lanceolate; without hairs or with short ones on the veins beneath; acuminate at the apex; petioled; serrate.

The Flower Heads: numerous and long; the bracts of the involucre pink, oblong, obtuse, in four or five series. Albinos have been found.

The Fruit: achenes.
A handsome and a satisfying plant is the Joe-Pye Weed, named in honour of an Indian who used it in the cure of fevers. From the plant is obtained a drug, valuable

## COMPOSIT雨

medicinally. Possibly the "æsthetic dull magenta crimson" tone of the "soft bristly" flower-heads is responsible for our admiration. Or it may be partly due to the good proportions of the sturdy plant-stem stout and tall, leaves large and yet thin so that the whorls are not heavy.

COMPOSIT $£$

## COMPOSITE FAMILY

Eupatorium verbenofolium, Michx.
Dull white
July-September

Rough Thoroughwort, Vervain Thoroughwort.

Eupatorium: for derivation see perfoliatum. Verbenoxfolium: Latin for "leaf of verbena."

The Preferred Habitat: damp ground.
The Plant: erect, two feet or more tall; the stem slender, branched at the top, with short, rough hairs.

The Leaves: opposite or occasionally in threes, or the upper alternate; ovate-oblong; two inches to four inches long; usually obtuse or blunt-pointed at the apex; rounded at the base; closely sessile or the lower short-petioled; more or less round-toothed.

The Flower Heads: small in unequal modified panicles; involucre bell-shaped; its bracts oblong, or linear-lanceolate, acute, overlapping, in about three series, the outer shorter, densely covered with short, soft hairs.

The Fruit: achenes; pappus consists of bristles.
The leaves of this Eupatorium are quite different from the heavy, united leaves of the better known Thoroughwort (the Eupatorium perfoliatum); these are short in comparison to the height of the plant. However, there is no denying that the somewhat triangular whitish flowerheads resemble, in their furziness, the Thoroughwort group.
LIATRIS SCARIOSA

# COMPOSITE FAMILY 

COMPOSIT $\boldsymbol{E}$

## COMPOSITE FAMILY

Liatris scariosa, Wild.

Magenta-purple<br>August-October

Liatris: derivation unknown. Scariosa: Latin for thorny shrub.

The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: erect, two feet high or more; the stem covered with fine, soft, short hairs, at least above.

The Leaves: alternate; the lower oblanceolate, spatulate, or oblong-lanceolate; the upper linear and linear-lanceolate; all acute or obtusish at the apex; narrowed into margined petioles; thickly dotted with tiny glands.

The Flower Heads: hemispheric, sometimes nearly one inch broad, on short stems, or sometimes stemless; bracts of the involucre overlapping in five or six series, varying in shape, round at the apex; their tips dry and chaffy, often coloured. Albinos have been found.

The Fruit: achenes; pappus consisting of bristles.
In thinking of the earliest fall colouring the Nantucket heaths, one associates with the tinting of the leaves of the Scrub Oak and the Huckleberry, a deep magenta-purple flower, that stands alone or in twos or threes, or more often tints the waving grasses and offers strong colour contrast to the low Goldenrods. Essentially of a stiff and unyielding character, with erect stem and long, linear, drooping leaves, the plant is one and owes its undeniable magnetism to colour and not to graceful form.

## COMPOSITÆ

> Chrysopsis falcata, (Pursh.) Ell.

Yellow
July-October

> Chrysopsis: Greek for golden aspect. Falcata: from Latin for a sickle.

The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: partially erect and spreading, four inches to twelve inches high; the stem corymbosely branched above, rather stiff, leafy to the top, with tiny, soft, woolly, short hairs, at least when young or becoming almost hairless.

The Leaves: alternate; spreading; rigid; sometimes slightly curved; linear; one inch to four inches long; acutish at the apex; stemless; entire; obscurely parallel-nerved.

The Flower Heads: rather few at the tips of the branches, less than one inch wide; involucre bell-shaped; its bracts with a few short, soft hairs. Rays numerous, overlapping.

The Fruit: achenes; pappus brownish and bristly.
The wealth of the Indies in yellow tone is spread over the Commons and particularly along the ruts of the sandy roads out of town, by the Golden Aster, in its crowded clumps. The flowers raise their bright heads from the fine, grey-green leaves, equally happy in the sunshine or the rain. Unfortunately, this is another difficult plant to use for decoration, for, while it lasts well, the branches are so spreading that the fresh flower heads are far apart and there are always many that, having gone to seed, have already become brown-white and fuzzy.


## COMPOSITE FAMILY

## COMPOSIT $\notin$

COMPOSITE FAMILY

## Solidago.

Of the fifty-six Goldenrods listed in Gray's Manual, 7th edition, probably seventeen distinct species have been found on Nantucket. Of these the most characteristic and the most frequent are the following:

COMPOSIT $\mathbb{E}$
COMPOSITE FAMILY
Solidago altissima, L.

| Yellow | Tall Goldenrod, |
| :--- | :--- |
| August-September | Double Goldenrod, |
| Yellow-weed. |  |

Solidago: Latin meaning to join or make whole, in allusion to reputed vulnerary qualities.
Altissima: Latin for "highest."
The Preferred Habitat: dry ground, roadsides, also "along thickets, near low grounds."

The Plant: erect, three feet high and frequently higher; the stem having ashy-grey, soft, short hairs, stout.

The Leaves: alternate; lanceolate; sometimes five inches long; thickish; having short hairs which may be soft or somewhat dry above, soft hairs beneath; nearly entire or more or less toothed.

The Flower Heads: crowded in recurved racemes, forming dense, high, broadly pyramidal panicles; the bracts of the involucre linear.

The Fruit: achenes; pappus of bristles.
This Goldenrod is particularly fond of growing in close masses in "thickets near low ground." It is one of the tallest of the Nantucket Goldenrods, one of the earliest to bloom and one of the first to disappear. Its distinguish-

## COMPOSITÆ

ing feature is the ashy-greenness of the stem and the velvety feel of the lance-shaped, slightly toothed leaves, whose drooping appearance gives them a weary and dusty look. The stem is branched at the top like a candelabra, and the flower-clusters are somewhat heavy in appearance.

COMPOSIT $\mathbb{E}$ COMPOSITE FAMILY

Solidago aspera, Ait.

## Yellow

## September-October

> Solidago: for derivation see altissima. Aspera: Latin for rough.

The Preferred Habitat: "mainly the borders of thickets, the dryish levels in low grounds."

The Plant: erect, three feet tall and taller; the stem having tiny, dry or bristly hairs.

The Leaves: alternate; ovate, oblong or ovate-lanceolate; thick; very dry on both surfaces; rounded at the base; serrate; strongly wrinkled.

The Flower Heads: much as in the rugosa, but the lengthened racemes mostly forming a more slender panicle.

The Fruit: achenes; the pappus of bristles.
This is one of the later-blooming Goldenrods, belonging as far as height is concerned, in the group with altissima, Elliottii, odora, rugosa, sempervirens, and nuiligulata, but not closely resembling any of these unless it be rugosa.

In speaking of this one, Mr. Bicknell says:
"A little recognized and widely variable Goldenrod, not ordinarily to be confused with rugosa, but often associated with it and quite probably subject to intercrossing."

## COMPOSITE FAMILY

Its chief distinguishing characteristic lies in the short, rough hairs of the stem and of the leaves. The leaves are rounded at the base and are usually very short in comparison with the height of the plant.

COMPOSITE FAMILY
Solidago bicolor, L.

| Whitish | Silver-rod, |
| :--- | :--- |
| September-October | Pale Goldenrod, |
|  | White Goldenrod, |
|  | Silver-weed, |
|  | Belly-ache-weed. |

Solidago: for derivation see altissima.
Bieolor: Latin for two colours.
The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: erect, six inches to two feet tall or taller; the stem simple or branched, usually stout, having hoary, matted wool.

The Leaves: alternate; obovate, oblong, or sometimes lanceolate; two inches to four inches long; with soft matted wool on both surfaces; mostly obtuse or sometimes acute at the apex; narrowed into long petioles or sessile or nearly so; dentate; often entire.

The Flower Heads: small, clustered in an interrupted or crowded panicle at the ends of slender terminal branches that are closely set with small leaves of nearly uniform size; "the green tips of the scales of the involucre which are often so obvious in this species, are only faintly, if at all, perceptible," in the Nantucket specimen.

The Fruit: achenes; pappus of bristles.
This is the easiest of the Nantucket Goldenrods to determine. It must be a Goldenrod, one thinks, from the straight, wand-like stem, and the generally lanceolate

## COMPOSIT $\mathbb{E}$

leaves and the tubular flowers, but the creamish cast of the flower heads is misleading, until one is assured that this plant is the exception that proves the rule that all Goldenrods are yellow.

COMPOSITA
COMPOSITE FAMILY
Solidago Elliottii, T. and G.

## Yellow

Elliott's Goldenrod.
September-October
Solidago: for derivation see altissima. Elliottii: in honour of Stephen Elliot.

The Preferred Habitat: low grounds.
The Plant: erect, three feet to six feet high; the stem hairless or with minute hairs above, simple, or branched at the inflorescence.

The Leaves: alternate; oblong or oblong-lanceolate, rarely ovate-oblong; one inch to five inches long; firm; hairless on both sides, or with very few, short, soft hairs on the veins beneath; acute or acuminate at the apex; broad at the base or sometimes narrowed below; sessile; finely sawtoothed or the upper entire; rough on the margins; pinnately veined.

The Flower Heads: growing mostly on one side of the short, spreading, or recurving branches of the narrow panicle; bracts of the involucre linear-oblong and obtuse.

The Fruit: achenes; pappus of bristles.
This is one of the easiest of the tall Goldenrods to identify. Like the odora, its tendency is to be hairless throughout. Unlike the odora, it prefers the thicket borders of ponds, where its rather heavy flower heads create a handsome dash of yellow.

Solidago graminifolia, (L.) Salisb.
Yellow
Flat-topped Goldenrod.
August-September
Solidago: for derivation see altissima. Graminifolia: Latin for grass-like leaves.

The Preferred Habitat: dry soil of the Commons.
The Plant: erect, two to four feet high; the stem paniculately much branched, or rarely simple, hairless but sometimes slightly rough above.

The Leaves: numerous; alternate; linear-lanceolate; having on the nerves of the lower surface minute rough hairs; acute or tapering to a point at each end; sessile; entire; with rough, short hairs on the margin; three to five nerved; with few resinous dots (seen when leaf is held to the light).

The Flower Heads: very small, clustered in a flat-topped modified cyme; involucre ovoid bell-shaped, its bracts oblong or oblong-lanceolate; the flower heads slightly fragrant.

The Fruit: achenes; pappus consisting of bristles.
This Goldenrod is very difficult to distinguish from the tenuifolia, which, in habitat and appearance, is a close neighbour. In general, this, the graminifolia, is the coarser plant. Or a more accurate distinction, lies in the straw or yellowish-green colour of the bracts of the involucre, of which the tips are rarely darker. The outermost bracts, moreover, are ovate or oblong.

Both Göldenrods have numerous leaves, light green and narrow. The tiny flower heads are in small, crowded groups in flat-topped clusters and not at all showy in colour.

# COMPOSIT平 

COMPOSIT $\mathbb{E}$

## COMPOSITE FAMILY

Solidago nemoralis, Ait.

| Yellow | Low Goldenrod, |
| :--- | :--- |
| August-October | Grey Goldenrod, |
|  | Ficld Goldenrod, |
|  | Dwarf Goldenrod, |
|  | Dyer's Goldenrod. |

Solidago: for derivation see alltissima. Nemoralis: Latin for a grove.

The Preferred Habitit: dry, sandy soil of the Commons.
The Plant: mainly spreading or prostrate; six inches to two feet high; the stem slender, ashy-grey, with dense and fine soft, short hairs.

The Leaves: alternate; oblanceolate, spatulate or linearoblong; thick; roughish; acutish at the apex; petioled; the upper entire or round-toothed; obscurely three-nerved.

The Flower Heads: very small, on one side of the spreading or recurving branchas of the usually one-sided panicle which tops the stem; bracts of the involucre linear oblong.

The Fruit: achenes; the pappus consisting of bristles.
One might think that it would be easy to identify the low nemoralis, the grey Goldenrod, which spreads its ashy stems and heavy panicles of flowers in a rosette over the ground or strives somewhat unsuccessfully to hold them upright, but it, too, is variable. The flower-clusters, for example, are sometimes compact and unbranched, but sometimes as much as five armed. But, fortunately, the ashy-grey, hoary hairs, even though they may vary in quantity, are always present on the stem at least.


Solidago odora, Ait.

Yellow
August-September

Sweet Goldenrod,
Anise-scented Goldenrod, Blue Mountain-iea.

Solidago: for derivation see altissima. Odora: Latin for sweet scented.

The Preferred Habitat: dry soil, open growths of low shrubbery.

The Plant: erect, two to four feet high; the stem simple, slender, without hairs or with a few short, soft hairs above.

The Leaves: alternate; lanceolate; two inches to four inches long; hairless on both surfaces; acute at the apex or tapering to a point; narrowed at the base; stemless or very short petioled; entire; anise-scented when crushed; dotted with glands.

The Flower Heads: very small, growing on one side of the spreading racemes of the panicles which are at the end of the stem; bracts of the involucre oblong-lanceolate, acute.

The Fruit: achenes; the pappus of bristles.
This is the most delicately formed and the most graceful of all the Nantucket Goldenrods. The leaves, when crushed, usually have a more decided anise odour than the other Goldenrods, but this is not an infallible means of distinction, for other Goldenrod leaves also have a pungent odour when crushed, and occasionally a plant of odora is scentless. But by the general slenderness and more especially by the smoothness of the stem and of the narrow leaves shall you recognize the odora.

From the pollen is made a drug, valuable in the treatment of hay-fever.

# COMPOSIT $\boldsymbol{E}$ 

COMPOSITE COMPOSITE FAMILY

Solidago puberula, Nutt.

Yellow

## September-October

Downy Goldenrod, Minaret Goldenrod.

Solidago: for derivation see altissima. Puberula: a Latin diminutive for ripe age.

The Preferred Habitat: dry, sandy soil of the Commons; oak barrens.

The Plant: erect, one and a half feet to three feet high; the stem usually simple, rather slender, with minute, short, soft hairs, or hairless.

The Leaves: alternate; oblong-lanceolate, or spatulate; two inches to four inches long; obtuse or acute at the apex; narrowed at the base; short-stemmed or stemless; serrate or entire.

The Flower Heads: very small, in panicles topping the stem; the "panicle varies in form from virgate (wand-like) and only two centimetres wide (a little over one half inch) to oblong-pyramidal and more than twelve centimetres (over six inches) in natural spread at its widest part." Bracts of the involucre somewhat awl-shaped, very acute.

The Fruit: achenes; pappus of bristles.

This is one of the low Goldenrods and is usually erect and rather stiff. Its leaves are wedge-lanceolate and sparingly, but sharply toothed. That is its distinguishing characteristic, its changeableness lies in the shape of the panicle, which varies in width from one to five inches.


Solidago rugosa, Mill.
Yellow
August-September
Wrinkle-leaved Goldenrod, Tall Hairy Goldenrod, Pyramid Goldenrod, Butterweed, Dyer's-weed.

Solidago: for derivation see altissima. Rugosa: Latin for full of wrinkles.

The Preferred Habitat: in or about low ground.
The Plant: erect, one foot to five feet high; the stem simple, or branched at the summit, usually stout, with short, coarse hairs.

The Leaves: numerous; alternate; dark green; oval or oblong-lanceolate; one inch to four inches long; rather thin; covered with few or many short, soft, hairs or with rather dry ones; acute or acuminate at the apex (rarely obtusish); narrowed at the base; stemless or sometimes tapering into panicles; sharply serrate; on the lower surface heavily veined and wrinkled.

The Flower Heads: very small, on one side of, spreading or recurving, often leafy, branches of the usually large and compound panicle; the bracts of the involucre linear, obtuse or obtusish.

The Fruit: achenes; pappus of bristles.
This is one of the tall and probably most variable of the Nantucket Goldenrods. Mr. Bicknell says he found "a low, villous form with small and narrow almost leafless panicles and numerous crowded leaves, smooth or nearly so on the upper surface." But the type form has large, thin, very veiny, sharply saw-toothed leaves and long, more or less soft hairs on the stem.

## COMPOSITÆ

This Goldenrod readily hybridizes with others including the sempervirens, the Beach Goldenrod. A cross between the two is included as a separate species in Mr. Bicknell's list.

COMPOSIT $\notin$ COMPOSITE FAMILY

Solidago sempervirens, L.
Yellow
August to late Autumn

Beach Goldenrod, Salt-marsh Goldenrod. Seaside Goldenrod.

> Solidago: for derivation see altissima. Sempervirens: Latin for ever-blooming.

The Preferred Habitat: beach sand and sandy places.
The Plant: somewhat spreading, about two feet high or more; the stem usually simple, very stout, without hairs, or with few, short, soft ones above.

The Leaves: alternate; oblong; spatulate or lanceolate; sometimes as much as one foot long; thick and fleshy; hairless on both surfaces; acute at the apex; stemless or narrowed into long petioles; entire; with two to five lateral veins.

The Flower Heads: very small, in racemes that grow at the end of the stem on one side only of a large, often leafy panicle. Bracts of the involucre lanceolate, acute.

The Fruit: achenes; pappus of bristles.
This husky and handsome Goldenrod is perhaps the easiest to recognize. Even though it varies in robastness and size, becoming actually soft and succulent in more moist soil, yet it never loses its clean greenness of colour, nor the smoothness of its leaves and stem. The leaves remain thick and leathery and entire, and the numerous flower heads continue to be crowded in heavy panicles.


Solidago tenuifolia, Pursh.
Yellow
Slender-leaved Goldenrod.
August-October
Solidago: for derivation see altissima. Tenuifolia: Latin for very narrow leaves.

The Preferred Habitat: dry or damp soil.
The Plant: erect, seldom over one and one half feet high; the stem paniculately much branched above, without hairs.

The Leaves: alternate, smaller leaves clustered in the axils; narrowly linear; one inch to three inches long; glandular dotted; acuminate at the apex; narrowed at the base; stemless; entire; one-nerved or with an additional pair of faint nerves on the sides.

The Flower Heads: very small, numerous, crowded in the dense modified cyme; the involucre oblong bell-shaped; its bracts oblong.

The Fruit: achenes; the pappus of bristles.
This is the second of the low, numerously branched and slender-leaved, wiry Goldenrods. Mr. Bicknell describes it as "perplexingly variable" for some coarser forms appear "quite intermediate with the graminifolia." It is a slightly fragrant species, with very narrow, linear, minutely dotted leaves, taper-pointed and usually one-ribbed.

Commonly in the axils of the main stem leaves are bunches of smaller leaves, but the shorter leaves of the branches have no such bundles. The involucre of the flower heads is bell-shaped, its bracts firm, oblong and glutinous.

## COMPOSITA

COMPOSIT $\notin$

Aster concolor, L.

## Deep lilac-pink

## September-October

Aster: Greek for a star, in allusion to the radiate heads of the flowers.
Concolor: Latin for combination of colours.

The Preferred Habitat: dry, sandy soil of the Commons.

The Plant: somewhat prostrate or slightly erect, one foot to two feet long; the stem nearly simple, wand-like; hairless or with few, short hairs above.

The Leaves: crowded; alternate; linear-oblong or lanceolate; one and a half to two inches long; flattened against the stem; the upper reduced to little bracts; with dense, fine, white hairs on both sides, or the lower practically hairless; obtuse or capped with an abrupt tip at the apex; stemless; entire.

The Flower Heads: numerous in a simple or compound wand-like raceme; the involucre obovoid; the bracts lightly and closely over-lapped in several rows; the rays ten to fifteen.

The Fruit: achenes; pappus, bristly.

One of the most beautifully coloured Asters that we have, preferring very sandy soil and so found along roadsides or almost in the sand dunes. At times, by the shore, the lacy network of the sprays of flowers waving above the shorter grasses, is Japanese in its delicacy of colouring.

# COMPOSITE FAMILY 

COMPOSIT $\notin$
COMPOSITE FAMILY

> Aster dumosus, L.

White or lilac-white<br>Bushy Aster, Rice-button Aster.

## August-October

Aster: for derivation see concolor.
Dumosus: Latin, meaning full of brambles or thorns.

The Preferred Habitat: dry, sandy soil of the roadsides, and Commons; waste ground.

The Plant: erect, one foot to two feet high; the stem freely branched, rather stiff, slender, hairless or very nearly so, sticky.

The Leaves: alternate; crowded; those of the stem linear, or the upper oblong or linear-lanceolate; the basal one spatulate; one inch to three inches long; acute or acutish at the apex; the basal dentate, those of the upper stem entire, or roughish on the margins; those of the branches very numerous, small and bract-like.

The Flower Heads: small, usually at the end of spreading, slender branches and branchlets; the involucre broadly bell-shaped; its bracts linear, obtuse or acutish, appressed in about four series, green tipped. Rays fifteen to thirty, about one inch long.

The Fruit: achenes; pappus white.

A bushy, but slenderly branched and delicately-flowered Aster. The white or lilac-white rays very fine, the leaves small and fine.

## COMPOSITÆ

COMPOSIT $E$
COMPOSITE FAMILY

> Aster linariifolius, L.

Light violet to pale blue
Late August to October

Pine-starwort, Sandpaper-starwort, Savory-leaved Aster, Thyme-leaved Aster.

Aster: for derivation see concolor. Linariifolius: Latin denoting linear-leaved.

The Preferred Habitat: dry, sandy soil of the Commons, especially in the more sterile parts.

The Plant: erect, four inches to ten inches high; the stem, from a woody root, tufted, corymbosely branched above, with tiny, short, soft hairs or with stiff hairs.

The Leaves: numerous; the uppermost reduced to bracts; alternate; spreading; rigid; linear; rough on both surfaces; with a tiny abrupt tip at the apex; stemless; entire on the margins; those of the branches much smaller and usually hairy.

The Flower Heads: solitary, or several at the ends of the stem and branches; about one inch broad; the involucre broadly top-shaped; the bracts linear-lanceolate, green on the back, flattened, overlapping in four or five series. Rays ten to fifteen, less than one half inch long, entire or their tips toothed or even torn.

The Fruit: achenes; pappus tawny.
This is the low, dark green rigid Aster of the extremely sandy plain. When the plant is in bloom, its stiffness, however, is slightly relieved by the pretty, wide-open flowers.


Aster multiflorus, Ait.

| White or lilac-white | Dense-flowered Aster, |
| :--- | :--- |
| Late August to November | Fall-flower, |
|  | Many-flowered Aster, |
|  | White Reef Aster, |
|  | White Wreath Aster. |

Aster: for derivation see concolor.
Multiflorus: Latin denoting many-flowered.
The Preferred Habitat: roadsides, waste places.
The Plant: erect, one foot to three feet high, bushily branched; the branches ascending or spreading; the stem often brownish, pale or hoary, with minute somewhat rough, short hairs.

The Leaves: alternate; those of the stem linear or linearoblong; one half inch to one and one half inches long; those of the branches very small and crowded; all rigid; rough on both surfaces; mostly obtuse at the apex; sessile or slightly clasping at the base; entire, and hairy on the margins.

The Flower Heads: scarcely one half inch broad; densely crowded; nearly stemless, having sometimes a tendency to grow only on one side of the branches; involucre topshaped; its bracts leathery, short haired, in three or four series, the short green tips obtuse or finished with an abrupt tip. Rays ten to twenty, very short.

The Fruit: achenes; pappus brownish white.
This is the stocky Aster that one thinks of, particularly, as growing in the streets of the town. The numerous leaves are dark green and fine and a multitude of flowers always adorn the plant with white clusters,

> Aster novi-belgii, L.

| Lilac or blue-violet | New York Aster, |
| :--- | :--- |
|  | Willow-leaved Blue Aster. |

August-October
Willow-leaved Blue Aster.

Aster: for derivation see concolor.
Nori-belgii: Latin for New Belgium.
The Preferred Habitat: moist ground.
The Plant: erect, one foot to three feet high, profusely but not closely branched; the stem hairless or with few, short, soft hairs.

The Leaves: alternate; lanceolate or linear-lanccolate; two inches to six inches long; hairless on both surfaces or very nearly so; acuminate at the apex; narrowed or more or less clasping at the base, the lowest petioled, the upper sessile; entire or slightly serrate.

The Flower Heads: usually numerous in modified panicles, on the average one inch wide; the involucre hemispheric to bell-shaped; its bracts linear, generally acute, green, somewhat spreading in three to five series, the outer shorter; rays fifteen to twenty-five, about one half inch long.

The Fruit: achenes, pappus whitish.
The most graceful and the most beautiful of our Asters. Above the surrounding green of rose-bushes and brambles, rise the slender branches, covered with tiny leaves, and topped by the large, flat, flower heads, lilac in colour, with bright yellow centres. The purplish stem and the lower leaves, long and narrow, are usually hidden by the undergrowth.

Aster patens, Ait.
Light violet-purple
August-October

Late Purple Aster, Purple Daisy, Spreading Aster.

Aster: for derivation see concolor. Patens: Latin denoting open.

The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: erect, one foot to three feet high; the stem slender, rough.

The Leaves: alternate; ovate-oblong to oblong-lanceolate; rough or with short, soft hairs; those of the branches much smaller and bract-like; acute at the apex; or the lowest obtuse; strongly heart-shaped or ear-shaped, and clasping at the broad base; entire; the margins rough.

The Flowers: in heads; solitary at the ends of the branches; the bracts of the involucre with short, soft or somewhat dry hairs and green acute tips. Rays twenty to thirty.

The Fruits: achenes; pappus tawny.
A pretty purple Aster of the dry, sandy soil of the Commons, that somewhat resembles the undulatus, but is to be distinguished from it as well as from other Asters by the leaf. heart-shaped and clasping at the base.

COMPOSITE FAMILY
Aster spectabilis, Ait.
Violet
Showy Aster.
August-October
Aster: for derivation see concolor.
Spectabilis: Latin for showy.

## COMPOSITA

The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: erect, one foot or more high; stems stiff, simple or corymbosely branched above, with short, soft hairs or rough below.

The Leaves: alternate; linear-oblong the basal or lower tones oval; three inches to five inches long, firm, thickish, acute or acutish at the apex, narrowed at the base on slender petioles; the upper sessile, sparingly dentate or entire.

The Flower Heads: several or numerous, about one and a half inches broad; involucre nearly hemispheric; its bracts linear-oblong or slightly spatulate, in about five series, the tips green. Rays thirteen to fifteen.

The Fruit: achenes, pappus whitish.
Brilliancy of violet rays and brightness of yellow centre are the strongest elements in the picture when one recall a patch of these showy Asters, of which the flowers are large and rather heavy in proportion to the height of the stem and the slenderness of the long leaves.

COMPOSIT $\notin$
COMPOSITE FAMILY

> Aster undulatus, L.

Pale blue to violet
September-October

Wavy-leaved Aster, Various-leaved Aster Fleabane.

Aster: for derivation see concolor.
Undulatus: Latin denoting borne on a wave.
The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: erect, one foot to two and a half feet high; the stem widely branched, stiff, rough and with short, soft hairs.

## COMPOSITE FAMILY

The Leaves: alternate; cordate or ovate; usually thick; rough on both sides; with short hairs beneath; acute or acuminate at the apex; with margined petioles which are broadened and clasping at the base; dentate, undulate or entire.

The Flower Heads: in racemes, often growing on one side only of the spreading branches, nearly one inch broad; involucre broadly top-shaped; rays, eight to fifteen.

The Fruit: achenes; pappus whitish.
The Aster undulatus is a fairly tall plant, whose flowers closely resemble those of the patens. Its never-failing mark of distinction is the peculiar shape of the leaf-stem. The leaf is slightly indented at the base, then slips into the flattened petiole, which, at first contracted, soon broadens out to clasp the stem with more or less heart-shaped lobes.

Erigeron canadensis, L.

| Greenish-white | Horse-weed, Bitter-weed, |  |
| :--- | :--- | :--- |
| Cow's Tail, | Blood-staunch, |  |
|  | Colt's Tail, Hogweed, |  |
|  | Fleabane, | Fireweed. |

Erigeron: ancient Greek name, probably suggesting spring, and an old man, from the hoariness of the seed-vessel of some of the species.
Canadensis: Latin for Canadian.
The Preferred Habitat: barnyards and neglected fields.
The Plant: erect, three inches to ten inches high, the larger plants paniculately, much branched; the stem wandlike, with rough hairs or practically hairless.

The Leaves: alternate; the root leaves differing from the stem leaves. The basal and lower leaves being spatulate,

## COMPOSITÆ

cut-lobed; those of the stem linear are mainly entire; all covered with short, soft hairs, at least on the margins; obtuse or acutish at the apex; petioled.

The Flower Heads: very small and very numerous, panicled in cylindrical groups at the end of the stem.

The Fruit: achenes; pappus bristles or scales.
Few, even of the weeds, are so deadly stupid in appearance as this, the Horseweed or Hogweed. It is tall, and stiff like the proverbial yard-stick, with small flower-clusters that seem to be always undeveloped, because the outer green bracts almost cover the tiny, greenish-white flower heads. These are borne on diverging branches at the top of the stem so that the popular name is very clearly applied when it dubs the plant Colt's Tail. But, as in many other cases already cited, homeliness does not preclude value. The plant was formerly used as a tonic, and at the present time a valuable oil which is an ingredient of a "mosquito dope," is distilled from it.

## COMPOSITAE

## COMPOSITE FAMILY

Erigeron ramosus, (Walt.) BSP
White, with yellow centre
Daisy Fleabane, Slender Whitc-top.

## May-September

Erigeron: for derivation see canadensis. Ramosus: Latin for branched.

The Preferred Habitat: dry, sandy soil of the Commons, neglected grounds.

The Plant: erect, one foot to three feet high; the stem corymbosely branched above, with short, soft hairs.

The Leaves: alternate; those of the stem linear-oblong or linear-lanceolate, the lowest and basal ones spatulate or
oblong; two inches long and more; obtuse or obtusish at the apex; stemless or on short petioles; the stem leaves usually entire; the lowest and basal usually serrate.

The Flower Heads: rather numerous, on stems; bracts of the involucre without hairs or nearly so. Rays sometimes purplish, occasionally minute or wanting.

The Frdit: achenes; pappus of bristles and scales.
If its stem were only more leafy, this plant would not be unattractive, for its forking branches are somewhat graceful, and its small, daisy-like flowers, with their yellow centres and thin, narrow rays, rather pretty.

COMPOSITA
COMPOSITE FAMILY
Sericocarpus asteroides, (L.) BSP
Whitish
White-topped Aster.

## July-September

> Sericocarpus: Greek for silky fruit. Asteroides: Latin, resembling an aster.

The Preferred Habitat: dry, sandy soil, under pine trees.

The Plant: erect, one foot to two feet high; the stem slightly angled, with few, soft hairs or practically hairless.

The Leaves: basal or those of the stem alternate; obovate or spatulate, oblong or oblong-lanceolate; two inches to four inches long; with short, soft hairs or hairless; acute or obtuse at the apex; narrowed into petioles; entire or roundtoothed; pinnately veined and faintly three-nerved.

The Flower Heads: about one half inch high, densely clustered; involucre bell-shaped; its bracts oblong, with short, soft hairs on the surface or on the edge, the outer with green reflexed tips.

## COMPOSIT $\nrightarrow$

The Fruit: achenes; pappus brown or white.
Many of the plants of the Commons are stiff, even if they are low growing, and the White-topped Aster is no exception. On the ground under the pine trees and practically everywhere on the Commons are flat rosettes of spatulate leaves, from which rise somewhat leafy stems, topped with large, much branched clusters of what appear to be small flowers of a pinkish cast. If these flower heads are examined more closely, they are found to be a circle of rays set within an outer circle, and under the strong lens of the microscope, tiny flowers can be discerned.

## COMPOSIT $\notin$

## COMPOSITE FAMILY

Pluchea camphorata, (L.) DC.

Magenta-purple
August-October

Salt-marsh Fleabane, Spicy Fleabane, Ploughman's Wort.

Pluchea: dedicated to the Abbé Pluche, a French naturalist of the 18th century.
Camphorata: Latin for camphor, in allusion to the strong camphor odour of the plant.

The Preferred Habitat: salt marshes.
The Plant: erect, four inches to two feet high, usually branched; the stem with short, soft hairs, sticky.

The Leaves: opposite; ovate-oblong or lanceolate; three inches to eight inches long, one inch wide or more; thickish; with few short, soft hairs or none; acute or acuminate at the apex; narrowed at the base; stemless, but not clasping, or the lower on short stems; serrate or denticulate; not conspicuously net-veined.

The Flower Heads: mostly in naked modified cymes; bracts of the involucre ovate-lanceolate, acute, with tiny, soft hairs.

The Fruit: achenes; pappus of bristles.
Although low-growing, yet it is one of the conspicuous salt-marsh plants, for it has deep magenta-purple flower heads and thick grey-green leaves, not to forget a strong, pungent odour, which is supposed to be camphor-like.

The plants wilt rather quickly after being picked, but soon revive in water and last for many days, although the leaves, by turning yellow, become shabby in time.

COMPOSIT $\mathbb{E}$

## COMPOSITE FAMILY

Anaphalis margaritacea, (L.) B. \& H.

| White | Silver-button <br> (Local name), | Lady-never-fade, <br> Moonshine, |
| :--- | :---: | :--- |
| July-October | Pearly Everlasting, | None-so-pretty, |
|  | Life Everlasting, | Cotton-weed, |
|  | Large-flowered | Poverty-weed, |
|  | Everlasting, | Indian Posy, |
|  | Silver-leaf | Ladies' Tobacco. |
|  | Everlasting, |  |

Anaphalis: said to be ancient Greek name for some similar plant.
Margaritocea: Latin, pearly.
The Preferred Habitat: dry, sandy soil.
The Plant: erect, one foot to three feet high, corymbosely branched above; the stem clothed with flakes of white wool.

The Leaves: alternate; linear-lanceolate or the lower broader and spatulate; from three to five inches long; above, sage green; below paler; more or less woolly on both surfaces; tapering to a point at the apex; narrowed at the base; stemless; entire; the margins rolled backward.

The Flower Heads: very numerous, close-set in a compound corymb; the staminate flowers at the centre yellow; involucre bell-shaped; its bracts ovate-lanceolate, obtuse.

## COMPOSITÆ

The Fruit: achenes, pappus copious.
A greenish-white plant that grows among Bayberry bushes or Goat's-rue or in big, round clumps in the open. The leaves, clothed with white wool, are long, slender and drooping, the flower heads pearly white, with yellow-brown centres. Of so essentially dry a nature is the whole plant, that the rubbing of the flower heads together produces a harsh sound. Because of this dry character, it "keeps" well and no old Nantucket bouquet was complete without it.

## COMPOSIT $\neq$

Gnaphalium polycephalum, Michx.

| Cream-white | Common Everlasting, | Old Field Balsam, |
| ---: | :--- | :--- |
| Cudweed, | Rabbit-tobacco, |  |
| August-October | Sweet Life Everlasting, | Life-of-Man, |
|  | Fragrant Everlasting, | Moonshine. |
|  | Sweet White Balsam, |  |

Gnaphalium: an ancient Greek name of some downy plant. Polycephalum: Greek for many-headed.

The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: erect, one foot to three feet high; stem simple, or branched above, with densely matted wool.

The Leaves: alternate; lanceolate or linear-lanceolate; one inch to three inches long; above practically hairless and commonly dark green, beneath densely white woolly; acute or acutish at the apex; narrowed at the base; without stems; having wavy margins. Leaves of the winter rosettes, oblong.

The Flower Heads: small and few in numerous clusters; bracts of the involucre white or tinged with brown, oblong, obtuse, the outer woolly at the base.

The Fruit: achenes, pappus of bristles.

The general colour-tone of this low, bushy plant is yel-low-green. The flower heads are a yollow-creamy white and the stem (much branched at the top) as well as the narrow leares is "velvety-hairy and delicately sage green." The plant has an aromatic odour, strong and very lasting, which resembles that of slippery elm, and while one cannot call the succulent stems "tasty," the Nantucket boys say they used to chew them to quench their thirst.

From the plant is obtained a drug, valuable in the treatment of sciatica.

COMPOSITE COMPOSITE FAMILY

Ambrosia artemisiifolia, L.

| Green | Ragweed, | Black-weed, |
| :--- | :--- | :--- |
|  | Hayuced, | Butter-weed, |
| July-October | Hayfever-weed, | Tassel-weed, |
|  | Hog-weed, | Roman-wormwood. |
|  | Carrot-weed, |  |

Ambrosia: the Greek and Latin name of several plants as well as the food of the gods, signifying to die immortal. Artemisiifolia: Latin, meaning "the leaves of the Artemisia," in allusion to the fact that these leaves resemble those of the Artemisia.

The Preferred Habitat: roadsides and neglected fields.
The Plant: erect, paniculately branched, one foot to five feet high; the stem with short, soft hairs or more or less stiff ones.

The Leaves: upper, alternate; lower, mostly opposite; all very variable; one to two pinnatifid or the leaves of the flowering branches often undivided; two to four inches long; above, smoothish; beneath, paler and with ashy-grey hairs; petioled; the divisions, lanceolate, acute or obtuse at the apex.

## COMPOSIT. . $^{2}$

The Flower Heads: the sterile numerous and tiny; the staminate in slender spikes; the pistillate solitary or clustered in the upper axils.

The Fruit: achenes; pappus none.
A rather decorative frequenter of old gardens and roadsides and neglected fields, where its numerous, long and slender spikes of green flowers and its light green, finely dissected leaves make it easy to recognise. One should be able to identify readily this not unattractive but un-fortunately-endowed plant, in order to aid in its extermination, for the pollen is quite as responsible for causing hayfever as that of Goldenrod.

From the pollen is obtained a drug, valuable in the treatment of hay-fever.

> Rudbeckia hirta, L.

| Yellow | Black-eyed Susan, | Great Hairy Rudbeckia, |
| :---: | :--- | :--- |
|  | Brown-eyed Susan, | Yellow Daisy, |
| May-October | Yellow Ox-eye- | Nigger-head, |
|  | Daisy, | Golden Jerusalem. |
|  | Cone Flower, |  |

Rudbeckia: named in honour of the Professors Rudbeck, father and son, predecessors of Linnæus at Upsala.
Hirta: Latin for rough.

The Preferred Habitat: grain fields, or the dry sandy soil of the Commons.

The Plant: erect, one foot to three feet high, often branched near the base, with rather coarse, more or less stiff, short hairs throughout.

## COMPOSITE FAMILY

The Leaves: alternate; mumerous; lanceolate or oblong or spatulate; two inches to seven inches long; thick; arute or acutish at the apex; stemless or the lower ones petioled; sparingly serrate with low teeth, or entire.

The Flower Heads: commonly few or solitary; two inches broad; rays ten to twenty; bracts of the involucre beset with short, stiff hairs.

The Fruit: achenes; pappus lacking.
A clump of deep but bright yellow in a hay-field, suggests the Black-eyed Susan, a handsome plant, evidently of the Composite Family, that has large showy rays and "madder purple" or brown dises, solid and slightly cone-shaped. The stem is very hairy, the hairs rough and bristly, and the leaves dull olive green, lance-shaped, and practically toothless.

COMPOSIT $\notin$ COMPOSITE FAMILY

Helianthus divaricatus, L.

| Ycllow | Wild Sunflower, |
| :--- | :--- |
| July-September | Rough Sunflower, |
| Woodland Sunflower. |  |

Helianthus: Greek, denoting a sunflower.
Divaricatus: Latin, denoting widely divergent.
The Preferred Habitat: thickets.
The Plant: erect, two feet to seven feet high, branched; the stem without hairs throughout or with short hairs at the top, slender.

The Leaves: usually all opposite, wide-spreading or divergent (divaricate); lanceolate or ovate-lanceolate; three inches to eight inches long, acuminate at the apex; sessile or nearly so, with a suddenly-cut base; dentate or denticulate; three prominent veins.

## COMPOSIT $\nrightarrow$

The Flower Heads: few or solitary, two inches broad, borne on short hairy peduncles; involucre hemispheric; its bracts lanceolate or ovate-lanceolate, the outer ones spreading; rays eight to fifteen.

The Fruit: achenes, the pappus consists of deciduous chaffy scales.

This Wild Sunflower is a copy, on a much slenderer and smaller scale, of the cultivated Sunflower. The flat centre or disk is brown although more yellow-brown than purplebrown, and the oblong, petal-like rays are yellow. On account of its slightness, this is the more graceful plant.

COMPOSIT $\nVdash$
COMPOSITE FAMILY
Bidens cernua, L.

Yellow

July-October

Smaller Bur-marigold, Nodding Bur-marigold, Double-tooth, Pitch-forks, Stick-tight, Water Agrimony.

Bidens: Latin, meaning two-toothed. Cernua: Latin for stooping.

The Preferred Habitat: damp borders of fresh-water ponds.

The Plant: erect, bushy, one foot to three feet high, branched; the stem with stiff hairs or hairless.

The Leaves: generally opposite or the uppermost alternate; lanceolate to oblong-lanceolate; three inches to six inches long; hairless on both surfaces; tapering to a point at the apex; stemless and partly united at the base; usually shortly and sharply and unequally saw-toothed.

The Flower Heads: numerous, nodding on short stems,

## COMPOSITE FAMILY

on an average one inch broad, hemispheric; involucre hemispheric, its outer bracts often large and leaf-like.

The Fruit: achenes; pappus armed with bristles.
A bushy, but by no means stalwart plant, a frequenter of the damp thicket border, on the edges of ponds, with narrow, smooth, and lance-shaped leaves, coarsely and sharply toothed, and small but fairly conspicuous round heads of yellow flowerets.

## Achillea millefolium, L.

| Oyster-white or | Yarrow, | Sand-leaved Clover, |
| :--- | :--- | :--- |
| crimson-pink | Milfoil, | Bloodwort, |
|  | Thousand-leaf, | Cammock, |
| June-October | Nosebleed-weed, | Carpenter's Grass, |
|  | Soldier's | Dog-daisy, |
|  | Woundwort, | Green Arrow, |
|  | Sanguinary, | Old Man's-pepper. |

Achillea: because its virtues are said to have been found by Achilles.
Millefolium: Latin for a thousand-leaf.
The Preferred Habitat: gardens, roadsides, Commons.
The Plant: erect, one foot to two feet high, simple or stiffly branched at the top; the stem leafy, with short, soft hairs.

The Leaves: alternate; narrowly oblong or lanceolate; some of them ten inches long and one half inch wide; with soft, matted wool or short hairs or even hairless on both surfaces; acute at the apex; narrow at the base; petioled or sessile; very finely dissected.

The Flower Heads: numerous in compound, dense, somewhat convex or flat-topped corymbs; yellowish at the centre; the involucre ovoid; the bracts oblong, obtusish; the five rays oyster-white.

The Fruit: achenes; pappus none.
One of the everywhere plants and, in a sense, one of the always plants. For its rather large clusters of flowers persist, withered and brown, often all winter, long after the finely dissected, feathery, dark green leaves have disappeared. A stiff plant, with a strong, rather disagreeable odour, not so attractive when white, but very pretty in the coloured forms. Under a microscope, too, the flowerets are particularly beautiful.

Though not always handsome, the plant is useful. For "it checks excessive discharges." Evidently its virtues have long been known. So has come the botanical name, Achillea, and so have accumulated the long list of common names, many of which indicate its medicinal value.

COMPOSIT $\notin$
COMPOSITE FAMILY
Anthemis Cotula, L.

| White, with yellow | May-weed, | Dog-fenne!, |
| :--- | :--- | :--- |
| centre | Chamomile, | Fetid, |
| June-October | Dog's-chamomile, | Pig-sty, |
|  | Dog-Daisy, | Stinking-daisy. |

Anthemis: the ancient (ircek name of the Chamomile. Cotula: from Greek for a cup or socket.

The Preferred Habitat: well-travelled roadsides, neglected fields.

The Plant: erect or spreading, from one foot to two feet high; much branched; the stem usually without hairs bur sometimes with short, soft hairs above.

The Leaves: alternate; one to three pinnately-divided into narrow, almost thread-like, acute lobes, from one inch to two inches long; hairless or sometimes with short, soft hairs above; mostly stemless.

## COMPOSITE FAMILY

The Flower Heads: numerous; about one inch broad; the rays ten to eighteen, mostly three-toothed; at length recurved.

The Fruit: achenes; pappus none or practically none.
A bright-faced visitor around dwellings, in neglected gardens, and by well-travelled roadsides, where the pure white rays and yellow centres of the conspicuous flowers are rather decorative. But, unfortunately, it is not a house-plant, for the rays drop very soon and the yellow centres turn brown. Still, it has long been useful as an herb for Chamomile tea has been for generations a popular cure for certain ailments.

## COMPOSIT $\mathbb{E}$

## COMPOSITE FAMILY

> Chrysanthemum Leucanthemum, L. var. pinnatifidum, Lecoq and Lamotte.

| White, with | Daisy, | Marguerite, |
| :---: | :--- | :--- |
| yellow centre | Big Bull, | Maudlin, |
|  | Mull's Eye Daisy, | Ox-eye Daisy, |
| May-October | Butter-dog, | Moon-penny, |
| (at least) | Dog-blow, | Poverty-weed, |
|  | Dutch Morgan, | Poor-land, |
|  | Field Daisy, | Moon-flower, |
|  | Great White Ox- | Sheriff-pink, |
|  | eyed Daisy, | White Daisy, |
|  | Farmer's Curse, | White-man's-weed, |
|  | Herb-margaret, | White-weed. |
|  | Horse, |  |
|  | Horse-gowan, |  |

Chrysanthemum: Greek name meaning a golden flower.
Leucanthemum: Greek, signifying white and a flower, in allusion to the white rays.
Pinnatifidum: Latin for pinnatifid (divided like a fea ther)
The Preferred Habitat: dry, sandy soil everywhere.

## COMPOSITÆ

The Plant: erect, six inches to three feet high, branched and often tufted, at the least at the base; the stem smooth or with a few scattered hairs.

The Leaves: alternate; obovate, oblong, or spatulate; one inch to three inches long; the upper small, narrowed into a long, slender stem, or stemless, nearly entire; the lower pinnatifid, in fact all are sometimes doubly pinnatifid.
The Flower Heads: few or several, on bare stems; one inch to two inches broad; the involucre spreading, the bracts oblong-lanceolate, obtuse. Rays twenty to thirty, slightly two- to three-toothed.

The Fruit: achenes; pappus lacking.
Probably there is no better known plant in the world than this. It is interesting to note that the variety which is the common form in the United States is the rare form in England and on the Continent, and vice versa, the common form in the more eastern countries, the true Chrysanthemum Leucanthemum, is the rarer one here.

Tanacetum vulgare, L. var. crispum, DC.
Yellow

July-October

| Tansy, | Parsley Fern, |
| :--- | :--- |
| Bitter Buttons, | English Cost, |
| Ginger Plant, | Hindhcal. | Tanacetum: name of uncertain origin. Vulgare: Latin for common. Crispum: Latin for crisp.

The Preferred Habitat: roadsides.
The Plant: erect, one and one half feet to three feet high; the stem usually simple up to the flowering branches, stout, hairless or with few short, soft hairs.

The Leaves: alternate; pinnately divided into linear-oblong, pinnatifid or incised parts, the lobes acute, usually

## COMPOSITE FAMILY

serrate; the lower segments of the leaves often smaller than the others.

The Flower Heads: commonly numerous, very small, rather short-stemmed; the involucre hemispheric; its braets oblong-lanceolate, obtuse or the outer acute; the variety crispum has the leaf segments more incised and crisped than the type.

The Fruit: achenes; the pappus eonsisting of bristles.
This is a striking plant, with robust stem and very finely divided dull green leaves and bright yellow buttonlike heads of flowers.

It is interesting to know that the varicty crispum, which is the more rare form on the mainland, is the more abundant in Nantucket.

As the name "crispum" implies, the leaves are slightly crisp. They have a strong, pungent odour, due to a volatile oil. This oil, mixed with that distilled from Fleabane and Pennyroyal and diluted with alcohol, makes a. good "mosquito dope."

Artcmisia caudata, Michn.
Green-yellow
July-October
Artemisia: ancient name of the Mugwort, in honour of Artemisia, wife of Mausolus.
Caudata: Latin, meaning with a tail.
The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: nearly erect, two feet to three feet high, at length paniculately branched; the branches without hairs or rarely with few, soft, short hairs, the stems slender; very leafy, hairless.

The Leaves: alternate; two to three pinnately divided into narrowly linear, acute lobes; upper leaves pinnately divided, or the uppermost entire; all sometimes bearing a few short, soft hairs; lower leaves and those of sterile shoots on slender stems; upper leaves sessile or nearly so.

The Flower Heads: very small, in a large, somewhat leafy panicle.

The Fruit: achenes; pappus none.
The presence of this Wormwood is an indicator of very sandy soil. In some places, indeed, its low-spreading, flattened branches offer footholds in the beach sand, where little else but Eel grass is growing. In form and in colour it varies as it matures. When the plant is young, the finely divided light green leaves on low stems remind one of the Wild Carrot. Later, the stem still unbranched, crowded with very dark green leaves, bends stiffly backward, while still later one finds single plants or rosettes of plants, much branched and crowded with leaves and bearing tiny, green-yellow flower-clusters that resemble little pin-heads, or the whole plant already turned reddish brown and withered.

Even this ugly plant has been mistaken for Heather!

COMPOSIT $E$
COMPOSITE FAMILY
Artemisia Stelleriana, Bess.

## Yellow-white

July-August

Beech Worm-wood, Dusty Miller, Mugwort, Old Woman.

Artemisia: for derivation see caudata.
Stelleriana: Latin name in honor of G. W. Steller, an explorer of the early eighteenth century.

The Preferred Habitat: beach sand.



## COMPOSITE FAMILY

The Plant: erect, one foot to two feet high or more, bushily branched; the branches somewhat ereet; the stems clothed with a white, matted wool.

The Leaves: alternate; obovate to spatulate; pimately compound; one inch to four inches long; beneath densely covered with long, white, matted hairs, becoming smoother and greener when old; the lower petioled, the upper sessile; deeply lobed, the lobes entire or few-toothed; obtuse.

The Flower Heads: very small, in a racemose spike on short stems, which are clothed with greenish-white, matted wool; the involucre bell-shaped; its bracts also covered with matted hairs.

The Fruit: achenes; the pappus none.
This is the greenish-white plant that grows in round clumps on the beach sands, or is frequently used in gardens, as a border-plant. It is easily transplanted, because it roots so readily in water.

When in its "native haunts," it is not difficult to identify. For the decoratively slashed grey-green leaves are matted, some often close to the sand, and from them rise stiff spikes of yellow-white flower heads. These, unfortunately, soon turn a dingy brown.

## COMPOSIT $\nrightarrow$

COMPOSITE FAMILY
Erechtites hieracifolia, (L.) Raf.
White
July-September
Erechtites: the ancient name of some species of groundsel, probably called after Erechtheus.
Hieracifolia: Latin, having leaves like Hieracium, the hawkweed.

The Preferred Habitat: dry, sandy soil, particularly of the Commons.

## COMPOSITÆ

The Plant: erect, one foot to five feet high, usually branched; the stem grooved and hairless or with somewhat stiff, short hairs on the lines, succulent, often dark purple, with rank odour and a juice most nauseous to the taste.
The Leaves: alternate; lanceolate or ovate-lanceolate; two inches to eight inches long; thin, acuminate at the apex; stemless and slightly clasping at the base, or the lower narrowed into petioles; dentate and often deeply cut; with rough margins; in drying turn black.
The Flower Heads: seldom an inch long, about one quarter inch in diameter; the involucre cylindrical, conspicuously swollen at the base before flowering; its bracts numerous, green or dark purple, with rough margins.
The Fruit: achenes; pappus bright white.
An uninteresting, weedy-looking plant that grows practically anywhere in poor soil-in the Town as well as on the Commons. It has a heavy, succulent stem, with coarse leaves and small tubes for flower heads, green, tipped with white, that are later followed by pure white puff-balls, the only good-looking part of the plant!

The popular name, Fireweed, has been given it, because it is supposed to be one of those plants that come up after a fire, but on account of its name it is not to be confused with the handsome Fireweed (Epilobium angustifolium) of the Commons, that has large magenta flowers, and prominent stamens.

COMPOSIT $\notin$ COMPOSITE FAMILY

Arctium tomentosum, Fernald.

## Light magenta

Burdock, Cuckoo Button.
July-October
Arctium: from Greek for "a bear," in allusion to the rough involucre.
Tomentosum: Latin for a stuffing of wool or hair.

## COMPOSITE FAMILY

The Preferred Habitat: waste-places, near dwellings.
The Bush: ereet, from three to five feet high, branched, its main stem with short, soft hairs, more or less woolly and matted.

The Leaves: alternate; the upper roundish or ovate; the lower deeply heart-shaped; sometimes twelve inches long; obtusish at the apex; on long, hollow petioles; usually entire (rarely finely divided).

The Flower Heads: lilac-pink or light magenta, about three quarters of an inch broad; the involucre subglobose; the spines tipped with bristles.

The Fruit: achenes; pappus consists of scales.
What ehild has not made baskets from the prickly green burs of the burdock, and who is not familiar with the stout, coarse bush, over whose small, purple flower heads on a warm August morning, crowds of white cabbage butterflics hover, some alighting on the broad and heavy leaves? It grows in the midst of old dumps and along roadsides; anywhere, in fact, near dwellings, the burdock flourishes.

The bush has a use, the root being placed in the medicinal cupboard, and the young stalks, earefully pared and boiled, serving as a substitute for asparagus.

COMPOSIT $\notin$
COMPOSITE FAMILY
Cirsium arvense, (L.) Seop.

| Lilac or pale magenta | Canada Thistle, <br> Cursed Thistle, | Grey Thistle, <br> Jerennial Thistle, |
| :---: | :---: | :---: |
| July-September | Prickly Thistle, | Small-flowered |
|  | Hard Thistle, | Thistle, |
|  | Corn Thistle, | Creeping Thistle. |

Cirsium: Greek for a swollen vein for whieh the thistle was a reputed remedy.
Arvense: Latin, belonging in a field.

## COMPOSITÆ

The Preferred Habitat: roadsides and neglected ground.

The Phant: erect, one foot to three feet high; bramehed above; the stem slender and grooved.

The Leaves: alternate; lanceolate or oblong-lanceolate; five inches to eight inches long; without hairs on the upper surface and, when young, slightly wooly on the under surface; acute at the apex; broader at the base; sometimes petioled or sometimes sessile and slightly (lasping; the lower sometimes rumning down the stem; all deeply pinnatifid into very prickly lobed or toothed segments.

The Flower Heads: numerous, one inch broad, nearly one inch high; the outer bracts ovate to lanceolate, tipped with short, prickly points.

The Fruit: achenes, pappus of bristles.
This is that tall, bushy thistle, with very narrow leaves and small lilac flower heads. To explain its appearance on Nantucket, legend says that a Canadian ship, freighted with mattresses, was wrecked here and the down contained seed, which germinated, and the plant spread. It is really a pest, and Nantucket shoald be none too glad to welcome it.
('irsium lanceolatum, L.
Magenta

July-October

## COMPOSITE FAMILY

Cirsium: for derivation, see arvense.
Lanceolatum: Latin for lance-shaped.
The Preferred Habitat: dry, sandy soil, particularly of the Commons.

The Plant: erect, branched, three feet to four feet high; the stem stout, leafy to the flower heads, grooved, clothed with matted hairs.

The Leaves: alternate; dark green; three inches to six inches long, or the lowest larger; lanceolate; the upper surface with short somewhat soft or roughish hairs; the lower with brown, matted wool; acuminate at the apex; sessile, continued down the stem and branches; deeply cut, the lobes triangular-lanceolate, tipped with stout prickles; the margins and bases prickly, and mid-vein hairy, especially when young.

The Flower Heads: mostly solitary at the ends of the branches, one and one half inches to two inches broad, one and one half inches to two inches high; bracts of the involucre cottony, narrowly lanceolate, tipped with slender prickles.

The Froit: achenes; pappus consists of bristles.

The monarch of the fields is this dignified plant that holds stiffly its numerous dark green spiny leaves at right angles to the stem and carries erect the large solitary handsome head of magenta flowers neatly ragged above (if such a paradox is permissible), and well-armoured below by dark and spiny bracts. The "off-islanders" consider the plant in its fresh condition very effective for bouquets; the Nantucket people prefer to make puff-balls from it for winter decoration.

## COMPOSITÆ

COMPOSIT $\mathbb{E}$
COMPOSITE FAMILY
Cirsium spinosissimum, (Walt.) Scop.
Yellow, sometimes with Yellow Thistle. purple markings
June-August
Cirsium: for derivation see arvense.
Spinosissimum: from Latin, meaning most thorny.
The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: erect, two feet tall or taller, branched; stem leafy, somewhat woolly when young, but becoming smoother.

The Leaves: numerous; green on both sides; lanceolate or oblong; acute at the apex; sessile and clasping at the base; deeply cut or lobed, the parts generously armed with prickles.

The Flower Heads: two to four inches broad; bracts of the involucre narrowly lanceolate, roughish.

The Fruit: achenes.
Indubitably a thistle, and a very spiny one!

## COMPOSIT $\notin$

COMPOSITE FAMILY
Cichorium Intybus, L.
"Chicory blue"
July-October

Chicory, Succory, Blue-sailors, Coffee Weed, Bachelor's-buttons.

Cichorium: altered from the Arabian name of the plant. A similar name is used in nearly all the languages of civilization.
Intybus: a classical Latin name for the species.

## COMPOSITE FAMILY

The Preferred Habitit: roadsides and fields.
The Plant: erect, one foot to three feet high; the stem stiff, much branched, with fev, short, stiff hairs.

The Leaves: those of the stem alternate, the basal spreading on the ground; those of the stem oblong-lanceolate or lanceolate, those of the rigid flowering-branches, spatulate; the lower three inches to six inches long, the upper much smaller, those of the flowering branches minute; acute or acutish at the apex; clasping or partly clasping at the base, even narrowed into long petioles; the lowest pinnatifid, the upper entire or lobed.

The Flower Heads: very numerous, sometimes one and one half inches broad, one to four together in stemless clusters on the nearly leafless or bracted branches. Albinos are found from pale blue to pure white. In fading, flowers turn white, due to oxidation.

The Fruit: achenes; the pappus of short, blunt seales.
A beautifully coloured, rather stiff plant, about which there are interesting stories. The root-leaves are still used in Europe for forage, and, blanched, are a substitute for pot-herbs or are served as a salad or used as spinach. In this country, during the Civil War, the ground-up root was used for making coffee and is still an adulterant in the cheaper grades, while in France it is still put to this use. Also a valuable drug is obtained from it.

This historic plant was at one time very rare on Nantucket. In commenting on this fact, Mrs. Owen says, "At the south end of Orange Street, scattered along the roadside, where it has been known for fifty years, and never, apparently, any more or less abundant than now." Mr. Dame reports two plants in Siasconset and a few in Polpis. But now it is everywhere. Unfortunately it cannot be picked advantageously, for the minute the stem has been cut, the flowers usually droop and do not revive.

## COMPOSITÆ

But out in the open, it is a different story. On a cloudy day, when the grey-blue colouring is exceptionally deep, a whole field of Chicory amid the waving grasses, stretching even to the sombre background of larker bushes, is a sight fit for the gods.

COMPOSITAE
Leomtodon autumnalis, L. var. pratensis, (Link.) Koch.

| Yellow | Fall Dandelion, | Lion's-tooth, |
| :--- | :--- | :--- |
| June-November | Iaurkhit, | Dog Dandelion, |
|  | Arvica, | Arnica Bud. |
|  | August Flouer, |  |

Leontodon: from Greek, a lion and a tooth, in allusion to the toothed leaves. French, tooth of a lion (dent-de-lion). Autumnalis: Latin for the season of increase, which is the Autumn.
Pratensis: Latin for belonging in a field.
The Preferred Habitat: streets of the town, open places.
The Plant: erect, six inches to two feet high; the flowerstems hairless or very nearly so, usually branched and scaly.

The Leaves: basal; narrowly oblong to linear-lanceolate; with a few short, soft hairs; acuminate at the apex; narrowed at the base into rather short petioles; pinnatifid or some of them coarsely dentate.

The Flower Heads: several, about one inch broad or more; on peduncles thickened at the top; involucre oblong, hairless or with short, soft hairs.

The Fruit: achenes; pappus tawny, a row of equal bristles.

In fields and along roadsides, in town or out, but more frequently in grassy places along the streets, are found

## COMPOSITE FAMILY

these bright yellow flat-topped dandelion-like heads, on slender, wiry stems. The rosette of dull green and blimntly lobed leaves is at the base and usually well hidden in the grass.

Although both the Leontodon autumnalis and the variety are abundant on Nantucket, Mr. Bicknell says they are very scarce on Martha's Vineyard. "The var. pratensis seems to have made its appearance only on a few lawns at Oak Bluffs and Vineyard Haven, not far from where the Nantucket boats make their landings." Thus may Nantucket help to populate the world!

COMPOSIT $E$

## COMPOSITE FAMILY

Taraxacum officinale, Weber.

| Yellow | Common Dandelion Yellow Gowan, |  |
| :--- | :--- | :--- |
|  | Blow-ball, | Lion's Tooth, |
| From early spring to | One O'Clock, | Milk-witch, |
| autumn, and sometimes Fortune-teller, | Monk's-head, |  |
| throughout the winter. | Puff Ball, | Priest's Crown, |
|  | Cancer Wort, | Arnica, |
|  | Horse Gowan, | Witches' Gowan. |
|  | Irish Daisy, |  |

T'araxacum: Greek, to disorder, in allusion to the medicinal properties.
Officinale: Latin for workshop, the place where the drugs were compounded.

The Preferred Habitat: waste places and gardens.
The Plant: from a thick, deep root, often ten inches long.
The Leaves: tufted at the base; pinnatifid; oblong to spatulate; three inches to ten inches long; rather succulent; usually with short, soft hairs; acute or obtuse at the apex; narrowed into stems; dentate or rarely with the margin wavy, or nearly entire.

The Scape: erect, two inches to eighteen inches tall, without hairs.

The Flower Heads: one inch to two inches broad, containing one hundred and fifty to two hundred flowers; the imner bracts of the involucre linear or linear-lanceolate, the outer shorter, turned back, all acute.

The Fruit: achenes; pappus white.
This cheerful, irrepressible weed needs no introduction. When it appears in November or December, in the absence of flower rivals, we pay it our compliments, but when in the early spring we find its gayety spoiling our lawn, we seek measures of extermination, and, if an unfortunate Puff-ball appears, we go for it, tooth and nail.

It is no solace that the young leaves may be used for greens or salads, or that the plants, if popped into warm water the instant after they have been gathered, keep well and are decorative, or that they make excellent wine and have medicinal qualities as a tonic. We must seek means of extermination. Cutting off only acts as a stimulant to the plant. A pinch of dry salt on the cut root retards recovery. Chemical sprays kill the young plants, but the old ones are not much affected. The best method is to spray the lawn with copper or iron sulphate, which does not injure the grass. But diligence must be your watchword, whatever method you employ, if you would have final success.

It is interesting that the plant is protected from destruction by animals by its bitter, milky juice, which they dislike.

Sonchus oleraceus, L.

| Yellow | Common Sow-thistle, | Milky Tassel, |
| :--- | :--- | :--- |
| Harc's Lettuce, | Sevinie's Cole-wort, |  |
| June-November Milkweed, | Hare's Cole-wort. |  |

Milk Thistle,
Sonchus: (ireek name for Sow-thistle.
Oleraceus: Latin, signifying greens.

## COMPOSITE FAMILY

The Preferred Habitat: waste ground and fields.
The Plant: erect, one foot high and more; the stem nearly simple, sometimes reddish at the base.

The Leaves: alternate; lyrate-pinnatifid or the uppermost lanceolate; the terminal part commonly larger and triangular; four inches to ten inches long; clasping by earshaped or arrow-shaped base; the margins slightly roundtoothed, with bristly or scarcely spiny teeth, or those of the uppermost leaves entire.

The Flower Heads: several or numerous; involucre hairless.

The Fruit: achenes; pappus of soft, white bristles, which usually fall away, connected sometimes with one or two stouter ones which fall separately.

This is a coarse and weedy plant, yet somewhat decorative, with a stout, hollow, and succulent stem and dark green leaves, which like those of a thistle have prickly edges. The pale yellow flower-heads, too, are shaped like a thistle's.

In Europe the plant is used as a pot-herb. It is kept succulent by constant pinching of the flower heads.

## COMPOSIT $\notin$

COMPOSITE FAMILY
Hieracium canadense, Michx.
Yellow
Canadian Hawkweed. July-October

Hieracium: Greek for hawk. Canadense: Latin for Canadian.

The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: erect, one foot high and taller; the stem sparingly branched, leafy, practically hairless, or with a few, short, soft ones.

## COMPOSIT $\neq$

The Leaves: alternate; oblong-lanccolate, ovate-oblong, or lanceolate; above usually hairless, beneath hairless or with short, soft hairs; acute or acuminate at the apex; rounded or somewhat heart-shaped at the base; at least the upper sessile; coarsely toothed or especially cut below the middle; the margins sometimes hairy.

The Flower Heads: usually numerous, in modified panicles; the involucre with small, short, soft hairs, its bracts overlapping in two or three series, the outer spreading.

The Fruit: achenes; pappus brown.
To recognize that the Hawkweeds are closely related to the Dandelions is easy, but to distinguish the Hawkweeds one from another is a more difficult task. This is the large, stout one, almost handsome in its vigour, with deep yellow flowers and numerous, lance-shaped leaves, dark green and stout.

COMPOSITE
COMPOSITE FAMILY
Hieracium marianum, Willd.

## Yellow

Hawkwced.

## June-October

> Hieracium: for derivation see canadense. Marianum: Latin for Maryland.

The Preferred Habitat: dry, sandy soil of the Commons.
The Plant: erect, about one foot high or taller; stems usually solitary, paniculately branched above, slender, with short, silky hairs.

The Leaves: mostly basal but two to several stem leaves; stem leaves obovate or oblong, somewhat upright or lying against the stem; with slightly rough hairs; obtuse at the apex; narrowed at the base; without stem or petioled; may be purple veined or wholly green.

## COMPOSITE FAMILY

The Flower Heads: usually numerous in modified panicles, one half inch broad or more, on slender peduncles which are more or less glandular and sometimes covered with whitish hairs; principal bracts of the involucre linearlanceolate, acute or acuminate, hairless or nearly so.

The Fruit: achenes; pappus brown.
This Hawkweed has a rosette of leaves at the base of a slender and practically bare flowering stem. The plant is very variable and therefore difficult always to distinguish readily. But Mr. Bicknell says that "a character worthy of primary consideration in the determination of ambiguous examples" is the white hoariness (canescence) of the panicle together with the very glandular dark-hairiness (pubescence and nigrescence) of the involuere.

Seventy-one other members of the Composite Family have been reported.

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[^0]:    Three other members of the Orchid Family have been reported

