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SIR WILLIAM JARDINE, circa 1822.
From a Portrait at Luce.
[See " A Naturalist's Calendar," pp. 88-124.]

## Jardine, William, Sir

Reprinted from the Transactions of the Dumfriesshire and Galloway Natural History and Antiquarian Society. -21st February, 1919.

A Naturalist's Calendar, kept, by Sir William Jardine, Bart., LL.D., F.R.S., F.R.S E., \&c., at Jardine Hall, Domfriesshire, from list January to :3lst May, 1829.

Edited by Hugh S. Gladstone, M.A., F.Z.S., F.R.S.E.

## Introduction.

In agio my friend J. A. Harvie-Brown of Dunipace lent me a booklet in which Sir William Jardine had made a "Callendar" of natural history notes as recorded by him at Jardine Hall. I carefully transcribed these notes at the time and added such observations as appeared to be of interest. I then submitted my observations to several friends and incorprorated the remarks with which they favoured me. It was my intention to publish Sir William's "Callendar " immediately, but for various reasons I was prohibited from so doing. Eight years are not a long span in the life of man, but the years 1910 to 1918 have, I regret to say, robbed me of many a valued friend and adviser. During this period there have been many changes in the nomenclature of plants and birds; I have, however, adhered in my notes to the nomenclature in vogue in 1910.

Sir William was a man of twenty-nine years of age at the time of writing his "Callendar," the idea of which may well have been inspired by the example of Gilbert White's

Naturalist's Calendar first published in 1795 . Jardine Hall, his home where the majority of his records were made, is in the parish of Applegarth and Sibbaldbie, in the county of Dumfries; lat., 55 deg. 10 min. 30 sec. N.; long., 3 deg. 25 min . W.; and situated at an altitude of 190 feet above sea level.

I presume that the "Callendar" was included in Dr Harvie-Brown's bequest to the Royal Scottish Museum in 1916, and that it is now safely treasured there. It forms part of a thin octavo volume ( $7 \frac{1}{2}$ by $4^{\frac{1}{2}}$ ins.), in the preliminary pages of which Sir William has written an account of his trip to Holland, in August, ${ }_{18} 8_{2}$, to see the ornithological collection of C. J. Temminck. This account is of no local interest but the booklet contains one or two pencil sketches of birds' heads which testify to Sir William's ability as a draftsman. At the conclusion of the description of his Dutch tour several pages are utilised for recording various natural history observations made at Jardine Hall in 1826 and 1828 ; these, few though they are, I transcribed since they refer to Dumfriesshire. The remaining pages of the booklet are utilised for a " Naturalist's Calendar " for 1829, which it is to be regretted stops at the end of May of that year.

In my desire to copy Sir William's notes as near to the original as possible I have gone so far as to repeat many misspellings, or slips of the pen, such as "callendar," for calendar; " par," for parr; " plumb," for plum; " topp," for top; " rapidlye," for rapidly ; etc. Spaces that have been left blank by Sir William I have indicated thus $\quad 1$; and each word that is indecipherable is shewn by -?-. Doubtful words are placed in square brackets and queried [-? ? .

The abbreviations that occur from time to time throughout the manuscript are Bar., barometer; Boist., boisterous; Br., breeze; cult., cultivated; Edinr., Edinburgh; fl., first opening of flower ; H., hail ; 1., first opening of leaf ; R., rain ; Shs., showers; sl., slight; st. and str., strong; var., variety; and, of course, N., S., E., W. stand for the four points of the compass. The numerals occurring in the text refer to my notes, which are printed at the end of Sir William's "Callendar."


Sketch by Sir William Jardine, entitled-"Psaris Nov. Spec.Hab. Pernambuco;" presumably Tityra inquisitor, Lichtenstein.

It must be remembered that the records of the arrival or departure of birds, the fl. or 1 . of flowers, trees, etc., when recorded as late, or early, are considered entirely from a Dumfriesshire standpoint. It seems unnecessary here to give any review of the whole but it is remarkable, as regards birds, that so few of the Sylviidce are mentioned; there can be little doubt that we nowadays have a far larger number of these summer visitants than were met with in Sir William's time; this increase being in great measure brought about by the extended area now under afforestation.

## Sir Whiliam Jardine's Notes in 1826.01

28th Febry.-Lapwings (Fanellus cristatus) ${ }^{1}$ at Perch Hall loch, ${ }^{2}$ a few [scattered ?] individuals were also on the moors of Esk dale, ${ }^{3}$ and during the two following days, 1st and 2nd March. they were increasing, and were seen coming in in small flocks of 5 or six. Sometimes singly and in pairs.
28th March-Woodcocks ${ }^{4}$ have not yet left the country, when out to-day with the Stirling and Linlithgow foxhounds ${ }^{5}$ two or three 1 were raised from the covers, and several have been seen during the last week.
4th April-White Rump6 first seen this season (1826). Most probably some would be arrived-a few days earlier.
22nd April--Whinchat. 7 Riverside ${ }^{8}$ opposite [Garvies ? $]^{9}$ old house. Silvia Trochilus, 10 I have heard it since the 18th, saw it to-day 22 April.
27 th April-Hirundo Riparia, ${ }^{11}$ Jardine Hall.
30th April-Hirundo Domestica ${ }^{12}$ near Dumfries, ${ }^{13}$ at Jardine Hail 1st May. Mr Carruthers, ${ }^{14}$ Dormont, says he saw both about a week since.
"On the 28th of March swallows 12 in numbers were seen flying about Dugaldston Loch." 15 -Dumfries Courier, April, 1826.16 Anthus Arboreus ${ }^{17}$ end of April, 1826, Jardine Hall, cannot fix the exact date.
2nd May-Totanus Hippoleucus. ${ }^{18}$ Jardine Hall.
5th May-Cuculus Canorus. 19 Jardine Hall.
12th May-Hirundo urbica. 20 Jardine Hall. Cypselus Apus. 21 Jardine Hall.
14th May-Sylvia |-I, Sedge Bird. 22 Jardine Hall.
Rock Lark, Anthus petrosa. 23 Weight, $6 \frac{1}{2}$ Drs. male. ${ }^{24}$
do. do. 7 Drams about 1 grain. $2^{4}$
J.5th May-Whitethroat. 25 Jardine Hall.

17th May-Greater Petty Chaps. 26 Jardine Hall.
18th May-Ophioglossum vulgatum. 27 on the seashore about $\frac{1}{2}$ mi'o above Southerness ${ }^{28}$ among the whins ${ }^{29}$ in hollows; not in perfection.
19th May-Spotted Flycatcher. 30 Dumfries. ${ }^{13}$ Col. Grierson's ${ }^{31}$ garden.

Sir William Jardine's Notes in 1828.
List of seeds sown at Jardine Hall, May 24th, 1828.
The Tallies agree with the subjoined numbers.

1. a Mespilus ${ }^{32}$

Rae Hills ${ }^{33}$ Shrubbery.
2. from a weeping ash 34 Arbigland. 35
3. Potentilla Nepaulensis. 36
4. Arenaria Marina ${ }^{37}$..................Southerness. 28
5. Cochlearia
6. Saxifraga Granulatus 39 ............Southerness. ${ }^{28}$
7. Orobus ${ }^{40}$.................................Rocks, Southerness. 28
8. Variegated columbine ${ }^{41}$.............Murraythwaite. 42

9 Bladder nut43 ............................Jardine Hall Garden.
10. Broom with downy pods $\mathrm{s}^{\text {: }}$.........Staffordshire.
11. A grass ................................on the Barony of Ross. 45
Thernometer, exposure nearly
North. Taken at Barometer
9 o'clock Morn- taken at
ing: Evening 9 o'clock
Sir Wilifam Jardine's " Callendar Kept at Jardine Hall, i829.'


| $\begin{array}{r} \text { JAN. } \\ \mathbf{3 .} \end{array}$ | Thermon Morn. 33 | $\begin{gathered} \text { ometer. B } \\ \text { Even. } \\ 35 \end{gathered}$ | Barometer. Inches. 29.4- $\frac{1}{2}$ | Weather. <br> Queensberry 59 on topp slightly whitened. Very thin ice. | Winds. <br> Nearly North very calm and close. Simcke of farmhouses in all directions. | Callendar. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4. | 39 .. | , 37 . | 29.1- $\frac{1}{2}$ | Very fine clear day.. High N. wind. Very slight frost during night. | N. High. Continues same all day |  |
| 5. | 34 | $33 \frac{3}{4}$ | 29.5 | Morning fine clear. Snow on the lower range of the Moffat60 and the highest Dinwoodie Hills. 61 Clear all day. | N. morning high fell by 3 o'clock. |  |
| 6. | $33$ <br> 12 | $\begin{gathered} 29 \\ 12 \text { o'clock } \end{gathered}$ | 29.6-1 | Morning fine. Snow extended further down the range. Clear and frosty during whole day, light wind, N.E., calm at night. | N. light breeze a point to $E$. in the evening. | Golden eyes 62 shot in river, Kingfisher 63 seen....Salmon still spawn. 50 |
| 7. | $33 \frac{1}{2}$ | 33 | 29.7 | Morning dull. Strong Hoar frost. Day clear. At night a slight fall with the dew Night dull, at 11 o'clock Threatening a fall of fine snow. Rather fresh. Barometer fallen about ${ }_{1}^{1}$ IT since morning. 64 | N. light. By evening N.E. and at 11 o'clock N.E. by E. |  |

A Naturalist's Calendar.



River8 considerably frozen. Common wild ducks 78 are now forced to resort to it and the ditches. Golden eye, 62
 Larks 80 in immense flocks.
 River. 8 Golden eye, 62 Tufted Ducks. 79 Teal 81 for the first time and Wigeon ${ }^{82}$ of the latter two killed. Wild geese ${ }^{83}$ about in flocks.

Wild fowl still in river. 8 The common gull 84 now begins to frequent it. Mostly young of the first year, in the stead of
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 in abundance in the turnip fields. Boys crossing river ${ }^{8}$ on the ice. 86 a
Calm Morning N. fol-
lowing the sun during
day at night S.- and
continuing W.
Rather high E.


20
Day fine olear. The wind
rather high. Weather.
Weather.
clear and
Whole day clear and Beauti-
ful.


| Thermometer. |
| :---: |
| Morn. |
| 23 |

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Morning thick cloudy wind high frequent snow showers and every appearance of snow storm. By midday clear. Freezing very hard evening. rivers closed up
except at streams.
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\begin{aligned}
& \text { Callendar, Remarks, Weather, etc. } \\
& \text { Dull, calm and very mild, geese } 83 \text { Have still passed up- }
\end{aligned}
$$ wards. Partridges 90 since the mild weather have begun

 are bucking openly. This operation has been going on for a fortnight or three weeks, but since the temperature became above 40 has been nearly at its height. Fine clear and mild with a sharp breeze. Goosanders 74 flock of 7 in river, Fieldfares 66 in flocks on the pastures Five swans 97 at Castle Loch Lochmaben 88 where they have remained for three weeks. Common wild duck78 are now paired and pairing. 99 A few salmon still on the streams spawning. 50 A few of the crows 94 appear to
 the nests. Many however apparently fixing situations etc. and other preliminaries. Carrion crows ${ }^{100}$ have now paired. Although these generally remain in pairs during winter, single birds about this period seek mates. ふu!pəəдq . places.
The day rather dull but fine and rery mild Small birds commencing spring notes 102 particularly redbreast 103 and the Titmice, 104 Com. Bees 105 on the heath edgings. Snowdrops 91 nearly out. During the night of 8 or morning of 9 th Hoar frost.


Callendar, Remarks, Weather, etc.
Day dull, calm and very mild, Blackbird 106 . singing. Early potatoes from the pit at table. 107

Dull but still mild. Flocks of fieldfares66 and redwings 108 Crows ${ }^{94}$ increase in numbers and remain all night. Partridges 93 now seen all paired, 95 male utters his peculiar cry when raised, Winter aconites ${ }^{109}$ in flower.

Dull slight showers in morn. Three o'clock thick and rain very mild. Thrush 110 singing.

Dull very slight showers in morning Mild, Morillons ${ }^{56}$ in river. 6 Fieldfares 66 on pastures, Sap running pretty freely in the Maples. 111 A. Tartaria 112 and alnus canadensis in nearly full flower-Catkins. 77

Very dull but fine, Japwings ${ }^{1}$ in flocks on the fallows
 tilis 113 in flower.

Dull. Slight breeze, Mild. Fieldfares 66 and Red-

 Black and White Wagtail46 pairing.

Dull and cloudy Showers, Rain for two hours from 2 to 4. Evening lowering. Chaffinches 69 still in flocks mostly males but some females. 70 Same place for several days before migration feeding on the ploughed land Same place for several years past,

Callendar, Remarks, Weather, etc.
Horning dull and cloudy. Threatening rain till one
o'clock, then heavy wind Sharp breeze from N W. and
N. About 6 cleared and fair. Wind N. Magpies 101
paired and working about their nests. Water ouzel 47
yesterday still about river. 8
Day clear Slight frost during night Moffat and higher
hills quite white the lower ranges 60 partially covered
with snow. Redwings108 driven in to the beeches.
Day fine and clear but remarkably cold from the S.E.
wind. and from the change from the mild weather of the
preceding week. At night (about 7 o'clock) overcast
Wind high and threatening some fall Barometer fall-
ing . 1 and $\frac{1}{4}$ since morning. Birds of all sorts are quite
still and in a manner benumbed from the change and
for a day have put on their winter habits.
Morning raw and dull, milder as the day increased, at
night overcast. Heavy rain about 6 or 7. Thick fog
during night drizzling rain Helleborous viridis 114 in fl.
Day cloudy occasional gleams of sunshine, fine and mild
Woodpigeons 85 cooing, 115 Hepatica all in flower, fully. 116
Day fine clear occasional clouds Sharp N.E breeze.
Yellow crocus 117 bursting. Black Headed gullsll8 are in
small focks on the fallows following plough. No ap-
pearance of black head. 119 Water Ouzel 47 still in river.
Black Wagtails 46 beginning to pair their note oftener

| $\begin{aligned} & \text { FEB. } \\ & 16 . \end{aligned}$ | Therm Morn. $47 \frac{1}{2}$ | neter. Even. 43 | Barometer. Inches. $29.3-\frac{1}{2}$ | Winds daily. <br> Morning S.W. changing gradually to to W.N W and N. Morning dull and cloudy Heavy rain about 1 o'clock with $\mathbf{N} W$ and $N$. wind. |
| :---: | :---: | :---: | :---: | :---: |
| 17. | 35 | 31 | 29.3-2 | Morn N. day N. and N E. Fresh gale. |
| 18. | $32 \frac{1}{2}$ | 36 | 29.4 | E and S E. sharp breeze, at night loud and blowing hard. |
| 19. | 34 | 41 | 29.1 | S and S E Moderate. |
| 20. | $43 \frac{1}{2}$ | 41 | 2918 | S. Morn calm even slight breeze. |
| 21. | 41 | 39 | 28.8- ${ }^{\frac{1}{2}}$ | N.E. sharp Breeze cold and piereing. |

Callendar, Remarks, Weather, etc.
Heard. (in flying which they do by jerks the note is always uttered in the descent longer and shorter according to the undulation. See photographic reproduction of this page of Sir W. J.'s diary.)
lambs at Annan Hill. 120 Vanessa urticæ ${ }^{121}$ in my room most probably a late chrysalis of last year Remaining

## in room. 122

Day fine and clear Sharp N.E. Breeze. Alder ${ }^{123}$ in
flower. Cochlearia ${ }^{38}$ from Southerness 28 in ff .
Day fine clear during night frost sharp. Sun possessing great power at noon. In Pigeon-cot one or two nests with eggs. 124 Moles ${ }^{125}$ for last fortnight very busy, and now begin to throw up the large hillocks to contain the nests etc. Few crows ${ }^{94}$ yet remain all night, depart after a few circles, about 5 o'clock for some of the large fir woods, fly in bodies very regularly, the
 day very busy debating.

Morning fine and clear by 11 o'clock rather overcast from the evaporation of a strong Hoar frost. Good many woodcocks 4 in plantations, redwings 108 feeding in



 in flower.
Winds daily.
N.E and $E$ in even. rather High cold piercing, blowing loud at night.
Wind E. In the morn a point N.
sharp breeze.
Barometer.
Inches.
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Callendar, Remarks, Weather, etc.
 during night. Ploughs stopped. Crows ${ }^{94}$ carrying sticks in morn: Snipes 65 are not yet paired. ${ }^{128}$. Geese 129 laying.

Dull and overcast. Blowing hard, about 12 threatening snow, which turned to heavy rain. At night thick mist and heavy drizzling rain.
sorning dull few slight showers gradually clearing to



 out. Crows ${ }^{94}$ now very busy in morning. Water ouzel47 still about river ${ }^{8}$ not paired ${ }^{130}$ singing. Red-



 muirs 134 to breed. Individuals pass and repass for many days previous these small flocks, and they pass for probably 3 or four-weeks before fixing, 135
 able power, Bees 105 out and very busy.


Barometer.
Inches.
29. $4-\frac{1}{2}$

FEB.
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26.
$\stackrel{\text { in }}{i}$

N. calm.
N. calm.
S.W. slight breeze.

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March, 1829.

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S. and S.E. slight breeze. $\begin{array}{ll}\therefore \\ \mathrm{Ci} & 8 \\ \mathrm{Ci}\end{array}$ ल बू $\cdots \quad$ ब̈ กิ ค oi

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70 by $152 q$
$2 \sigma$ day lelondy accasionalgelecons of Sum thine. fine dimitoo $\qquad$
Woroofigeos coriy Hehraico all in tlowen - reez -
21 dogptire clens vecarional clouds
§thert $4-\&$ bregeal Gellown
F wrous buiftiy - Be\&ch Headed si fuces ase in tinale flachs on the d fallowes folerng plough 1 , ho as =
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\$ Jlocytaies beging to hain thim
N Wive offernin deond. (inflinig Whin they ar byyfertos the hode
 longet thontan aceorcling to maculation
lambs as connem thev.
22 Ooypront der that n. E. Koge alder intlown. Beotbenciou frov. Sostherses in fle.

Page of Sir William Jardine's Manuseript, "Callendar kept at Jardine Hall, 1829." See page 101.
 the Hoar frost. Trout 136 feeding on minnow and cod

 bait137 and other minnows in stomach.
Day fine but dull feeling raw and cold. Lapwings 1 in large flocks. Black headed gulls 118 just getting the Black cap, the indication perceptible when passing at 40 yards. 119
Day dull but fine mild. Sparrows ${ }^{138}$ and missel 'thrush ${ }^{131}$ carry building materials. At night the - - - - Day as yesterday In morn. few drops of rain. 'Pike ${ }^{139}$ in good season. Trout ${ }^{136}$ and par ${ }^{140}$ rising at natural flies. Par 140 taking with fly. Very lank and in bad order. Kingfisher63 in river. ${ }^{8}$
Day fine dull. Woodcocks ${ }^{4}$ yet in plantations. Day fine, morn dull clearing and sunshine midday. Frogs ${ }^{141}$ spawning and croaking, and most probably have been since commencement of month. Lapwings ${ }^{1}$ paired.
Day fine, dull with occasional gleams of sunshine. Black Wagtail46 pairing about rivers. Tussilago farfara ${ }^{142}$ in flower.

| MAR. $3 .$ | Thermom Morn. 35 risen during hour | eter. Even 36 | $\begin{gathered} \text { Barometer. } \\ \text { Inches. } \\ 29.9 \end{gathered}$ | Winds daily. <br> S.E. by S. slight breeze. |
| :---: | :---: | :---: | :---: | :---: |
| 4. | 43 | 39 | 29.8-4 | N.N.E. morning slight breeze rising by 5 o'clock and at night nearly calm. |
| 5. | 43 | 41 | $1-1$ | N.E. slight Breeze. |
| 6. | 42 | 41 | 29.7 | N. and N.E morn. calm, even slight br. |
| 7. 8. | $\begin{aligned} & 44 \\ & 45 \frac{1}{2} \end{aligned}$ | $\begin{aligned} & 42 \\ & 38 \end{aligned}$ | $\begin{aligned} & 29.6 \\ & 29.5-\frac{1}{2} \end{aligned}$ | N.E. slight breeze. N.N.W. morn calm, Even sl. B. |
| 9. | $45 \frac{1}{2}$ | $36 \frac{1}{2}$ | 29.5 | N.E. morn. calm even sl. B. Night calm clear. |


windy gusts. Grey Wagtails 143 on river ${ }^{8}$ still single. Culews ${ }^{133}$ passing. 135

Day fine but cold. Cumberland hills144 covered with snow. Black headed gulls 118 on Loch2 heads now black, 119 Curlews ${ }^{133}$ still passing 11 . 135 Drew Blacket Hole. 145 One sea trout146 taken. Several common
 at Loch. 2
S.W. morn but very calm. Even Morning fine clear and calm slight frost during night. Kingfisher63 in river. 8

Day dull from the great smoke of the Moor burning. 147 Very raw and cold. Day as yesterday. A strong W.N.W. wind and very cold. Redwings 108 still in flocks, a single Mountain
 their breeding scream.

Fine clear, frost sharp during night. Iong-tailed Titmouse ${ }^{148}$ in plantations.

Day dull and threatening snow very cold and strong $S$. pue soyozip qnoqe su!ysy 6tIsuo.iot 'puta . Al'S no
 breeding places. 150

Still cold, a considerable fall of snow this morning, changing to rain, in forenoon and evening. Left home for H.dinr. 151 and returned on 23 rd .
 rather stormy Night calm
N.E. Nearly calm.

Barometer.
Inches.
Thermometer.
MAR. Morn. Even.
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H
11.

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8
8
$29.3-\frac{1}{2}$
29.4

Nearly due N. sharp breeze.

## N W. by W.

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36
34
$\stackrel{\sim}{\square} \stackrel{\oplus}{\sim} \stackrel{-1}{\square}$
S. blowing hard very cold S.S.W.
$29.4-\frac{1}{2}$
C
C
C
S.E.

$\underset{\infty}{\infty}$ $34 \frac{1}{2}$
Absent for the last week On 17 Fieldfares 66 near Rae－
Remaining same until 30 with strong S．and N．E gales evidently commencement of the Equinoctial． 152 On 29 Fieldfares ${ }^{66}$ near Church， 153 and on 28 several flocks of Starling ${ }^{154}$ feeding with the Lapwings． 1 Larch 155 in flower．
Morning cold with snow showers，continued through day by sleet．Evening rather milder，calm．Red－ wings， 108 Large flocks of Chaffinches 70 mixed with Green linnet ${ }^{156}$ and a few Mountain finch 71 in sheltered places， the latter feeding on larch cones．A few Siskins． 157

## Callendar，etc．

Callendar，etc．
Absent for the last week On 17 Fieldfares 66 near Rae－
hills33 The weather fine clear but cold．
S．E．Winds daily．
S．
N．W．
N．
E．
S．E．slight breeze．
S．W．very light．
N．E．strong B．

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＊Kept by George Belli58 in my absence．


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## April, 1829.



| APR． | ${ }_{\text {Thermon }}$ | Ever． | rometer． |
| :---: | :---: | :---: | :---: |
| 12. | 463 | $47 \frac{1}{2}$ | 28.6 |
| 13. | 47 | 41 | 28．3－3 |
| 14. | 48 | 46 | 28．6－2 |
| 15. | 47 | 47 | $28.3{ }^{165}$ |
| 16. | 49 | 38 | 28.7 |
| 17. | 47 | 42 | $29 \frac{1}{2}$ |
| 18. | 473 | 421 ${ }^{\frac{1}{2}}$ | 29.2 |

Morning windy with showers Midday fine，even rery stormy with heavy rain．Trout136 rising well．Many entered the river ${ }^{8}$ from the burns by late rains，few yet in perfect condition．Fieldfares 66 passing in flocks． Dull and showery，much rain during night．Larch155 leaves half out Planes 167 bursting．Missel thrush 131 about half built．

Morning from 6 o＇clock with heavy showers，on the Hills snow．Hartfell58 covered and Queensberry 59 tipped，the latter free from snow by 12 o＇clock．A single Hirundo Riparia ${ }^{11}$ by river， 8 first this year． Day fine slight breeze in forenoon，a few Hir．Riparia ${ }^{11}$ about river， 8 also a pair of R．Dotterels．${ }^{168}$ Bat， 169 at dusk．Common owl170 hooting much at dusk．Tussilago petasites ${ }^{171}$ in full flower．

Viola canina ${ }^{172}$ in fl．
 cherry174 beginning to blossom on all exposures except N．Ribes peruviana ${ }^{175}$ also．
W．E．Boist．Winds daily．
S．W5．Boist．with heavy showers of
R．and H．
S and S．W Boist At night stormy
with rain．
S．W．Blowing hard．
S．W．Morn．and Even calm．Mid－ day Breeze．

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\begin{aligned}
& \text { due North. The latter at night. }
\end{aligned}
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Callendar, etc.
Calm mild clear and fine but with heavy showers from
the Hills accompanied with Gusts of wind At night
Bat 169 flying. Owl li hooting. Green linnetl56 has for
ten days used his spring flight.
Fine with a sharp br. during night Hoar frost.
Fine but with very boisterous wind during night and
day. Broadleaved poplar 176 at side of garden door in
flower. Norwegian maple. 177
As yesterday wind not so high.
Still windy and rather raw. Moffat Hills 162 white.
Fieldfares 66 passing in flocks in evening. 178
(25 to 29.) Weather nearly similar, on 28 very highly
wind with violent showers of rain and sleet. Field-
fares 66 passing. During night considerable fall of snow on Moffat
Hills 162 and Wamphray 163 . Ice on Ponds $\frac{1}{8}$ inch thick.
Day very cold and blowy. Totanus Hippoleucus 18 on
river. ${ }^{8}$ Winter birds very late Fieldfares 66 yesterday


Winds daily.
occasional

S.E. moderate but in squalls.
S.E. moderate by even nearly calm.

Even SW.
Nearly S. at midday.
Due North with heavy squalls and Hail sha.

Due N. with heavy squalls and rain.
Due North very cold blowing hard. Mercury rising fast.
$29.6-\frac{1}{2}$
$29.1-\frac{1}{2}$
28.7
29.3
S.E. sharp breeze.
SE very stormy.

SE. very stormy.

## S.E. moderate.



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A Naturalist's Calendar.

Winds daily.
N.W. Blowing hard.

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N ?
$\stackrel{\infty}{10}$
MAY.

Thermometer. Barometer.
Morn. Even. Inches.

## 芫

Day mild but pretty sharp N.E. wind. Snow nearly off the Upper Moffat Hills. 162 The melting during day very perceptible.

Fine but still cold, during day blast of wind with hail. A fresh fall of snow on Hills during night, but which nearly disappeared during day.
Morning dull strong S.W. wind Rained heavily from 11 o'clock till half past Four when suddenly cleared to pleasant sunshine. Went out then to walk, saw flock of fieldfares ${ }^{66}$ passing and wheeling round young plantations as if in search of roosting place. A single Swift мори!й fo .!!ed e asnot fo quorf u! pue tzsndy 'H Swallows Martelets 20 playing around and alighting on




 swallow ${ }^{12}$ here before. Pairs have been known to remain longer ${ }^{183} \mathrm{~S}$. Trochilus ${ }^{10}$ by a letter from Twizel ${ }^{184}$ is arrived there No other summer birds. 185
 from hills, Sylvia Trochilus, ${ }^{10}$ yesterday not one was
 heard in evening for first time. Common swallow ${ }^{12}$ seen. Many were seen previously at Lochmaben 98 but

 rapidlye.
on
O
O
0 Heavy rain or very thick and damp all day.
Wind Several Swifts. 21

N.W. Strong Breeze.
S.S.W. blowing hard.

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0
Callendar, etc.
Dull but fine blowing hard. In evening very stormy.
 flower. Morning rainy Day dull and threatening. Winchat ${ }^{7}$ Horse-chestnut189 nearly in leaf. Larch155 commencing to burst.
Morning dull, clearing about noon with [clear sun ?] very sultry and calm. Whitethroat. 25 Day fine bright, slight breeze. Sylvia Sibalatrix. 190 Fine clear. Land rail191 seen, probably a week earlier said to be seen by Nichol's192 boys. Asparagus ${ }^{193}$ Sedge Warbler. 22 Fine clear Black Italian Poplar 194 in flower. Horse chestnut189 in leaf. Larch155 is now fully in leaf. Oak 195 bursting peels well. Common white lily ${ }^{196} \mathrm{~N}$. Poeticus 197 coming into flower. Dull close and mild Slight [rain ?] during day. Gulls 118 at Loch2 eggs. 119 Viola palustris 198 in full flower.

> Morn as yesterday, clear and fine at even No rain. Day fine. Mild Land rail191 calling. Spotted flycatcher ${ }^{30}$ in garden.67. Anthus arboreus ${ }^{17}$ and most probably a day or two earlier.

| MAY. | Thermo Morn. | Even. | arometer. Inches. | Winds dail |
| :---: | :---: | :---: | :---: | :---: |
| 6. | 55 | 46 | 29.2 | S.W. Blowing hard. |
| 7. | 54 | 48 | 29.2 | N.W. Blowing hard. |
| 8. | $52 \frac{1}{2}$ | 5.1 | 29.5 | S.W. blowing hard. |
| 9. | $54 \frac{1}{2}$ | 49 | 29.5-1 ${ }^{4}$ | S W Blowing hard. |
| 10. | 60 | 52 | 29.6 | S.W. calm and sultry. |
|  | at 12 <br> o'e'ock |  |  |  |
| 11. | $57 \frac{1}{2}$ | $47^{\circ}$ | 29.6 | N.E. |
| 12. | 59 | 44 | 29.6 | N.TV. |
| 13. | 55 | 50 | 29.4-1 | Nearly South. |
| 14. | $51 \frac{1}{2}$ | 46 | $29.4-\frac{1}{2}$ | Morning S. Even. nearly due N |
| 15. | $1-1$. | 48 | 29.5-1 | N W. |
| 16. | 52 | 50 | $1-1$ | Nearly calm. |

## Callendar, etc.


 Thermometer.



## Notes on Sir William Jardine’s Manuscript.

01 The year 1826 is famous locally as "the year of the short corn." There was no rain from May till harvest; the corn was so short that it could not be reaped but was pulled up by hand. The people washed and ground the roots of grass, etc., for fodder.

1 Vanellus Cristatus. Resort to their breeding places in February; eggs in some seasons are found as early as the end of March.

2 Perch-hall Loch, half mile east of Jardine Hall. Partially drained in 1814. Now (1909) completely drained, and planted.

3 About 10 miles N.-E. of Jardine Hall.
4 Scolopax Rusticula. At this season of the year (March) woodcock are nowadays (1910) especially numerous in Dumfriesshire. From subsequent entries in the "Callendar" it seems probable that (although Sir W. J. does not notice it) the species bred locally. (See Note 181.)

5 This pack, which was in existence in the eighteenth century, still flourishes. In 1826, James Johnston of Straiton and Champfleurie, and William D. Gillon of Wallhouse, were joint masters. Sir W. J. does not appear to have hunted regularly with the L. and S. (James H. Rutherford, in litt. 15, ix. 09.)

6 The Wheatear: Saxicola Enanthe. "In 1907 this species was noticed near Dumfries on March 19th; but it is not until towards the end of that month, or in the early days of April, that the bird usually puts in an appearance." (Gladstone, Hugh S.: Birds of Dumfriesshire, 1910, p. 9.)

7 Pratincola Rubetra. A somewhat late date for the first appearance of this species.

8 The River Annan, which flows close to Jardine Hall.
9 I have been unable to trace this old house.
10 The Willow Wren: Phylloscopus Trochilus. "From ten years' observation, the date of the first arrival near Dumfries varies from the 14th to the 25th of April." (Birds of Dumfriesshire, p. 28.)
${ }^{11}$ The Sand-Martin: Cotile Riparia. A late date for the first appearance of this species, the "usual date of their arrival being between April 8th and 12th." (Birds of Dumfriesshire, p. 68.)

12 The Swallow (Hirundo Rustica) is presumably here referred to in view of Sir W. J.'s distinct reference to the Martin on 3rd May, 1829 (q.v.). 30th April would be an exceptionally late date for the first appearance of the Swallow. "If an average date for their arrival is permissible, it would seem to lie between April 16th and 20th." (Birds of Dumfriesshire, p. 62.) (See Note 15.)
$13.10 \frac{1}{2}$ miles.S.-W. of Jardine Hall.
14 William Thomas Carruthers of Dormont, a friend and correspondent of Sir W. J. Dormont is eight miles S. of. Jardine Hall.

15 I know of no Dugaldston (sic) Loch. Dougalstion Loch, in tho parish of New Kilpatrick, Dumbartonshire, is " $4 \frac{1}{2}$ furlongs by 1 furlong, contains an islet, and is noted for its rare aquatic plants." (C'assell's Gazetteer of Great Britain and Ireland, 1896.) If this is the place intended by Sir W. J., it would be some 64 miles N.-W. of Jardine Hall. In Dumfriesshire the earliest date of the arrival of the Swallow that I know of is 26th March in 1903.

16 Sir W. J. has here pasted in a newspaper cutting, which he states is from Dumfries Courier, April, 1826. I have, however, oxamined the files of this newspaper of that date without finding it.
${ }_{17}$ The Tree-Pipit: arrives late in April or early in May.
18 The Common Sandpiper. Rather a late date for first appearance; usually arrives at its nesting haunts about the third week of April.

19 Cuculus Canorus. A very late date to hear this species for the first time in the year.

20 The Martin: Chelidon Urbica. "The Martlet, or Window Swallow" of Sir W. J. (Nat. Lib., 1839, vol. is., p. 400). A late date for the first arrival of this species.

21 The Swift: Cypselus Apus. The 9th May is the :verage date for the arrival of this species.

22 The Sedge Warbler: Acrocephatus Phragmitis. A late date for first arrival.

23 The Rock Pipit: Anthus Obscurus. Sir W. J. would meet with this species on the Solway, not at Jardine Hall.

24 "About 7 drachms" is the weight given by Rev. F. O. Morris. (Fiist. Brit. Birds, 1870, vol. II., p. 149.)
${ }_{25}$ Sylvia Cinerea. A late date for first arrival.
${ }^{26}$ The Garden Warbler: Sylvia Hortensis. A late date for the arrival of this species.

27 Adder's Tongue. Mr R. Service wrote to me: "I saw the Adder's Tongue fern fairly plentiful at what must have been the identical place in May, 1908." (In litt. 18, ix., 1909.)

28 In Kirkcudbrightshire, 24 miles S.S.-W. of Jardine Hall: one of Sir W. J.'s favourite hunting grounds, both botanical and ornithological.

29 Ulex Europcus. Rather early.
30 Muscicapa Grisola. An average date for first arrival. "First appearance within the last few years between 13 th and 17th May." (J. Rutherford, in litt. 16, ix., 1909.)

31 Lt.-Col. William Grierson. "He resided in a house in St. Michael Street (Dumfries) very nearly opposite to St. Michael's Church. It was a very commodious house, with a nice productive and flower garden fronting to the Dock Park." . . . The house "was afterwards, along with the garden, split up and sold in portions." (Sir Alexander Grierson, in litt. 22 ix. 1909.) Lt.-Col. Grierson, second son of Sir Robert Grierson, 5th Bart. of

Lag, b. 7th August, 1778, m. Jane, daughter of Thomas Beattie, d. 30th November, 1865, and was buried in St. Mary's Churchyard, Dumfries, leaving his Dumfries house and property of Barndennoch, Glencairn, Dumfriesshire, to his daughter, Margaret Elizabeth, who m. firstly, 25th January, 1860, David Baird HopeJohnstone; and secondly, 21st April, 1871, John Henry Gordon. "The Dumfries property was 'split up,' as above stated, in or about 1872, and Barndennoch sold to Major William M'Call in 1897." (J. Henderson; in litt. 11. x. 09.)

32 Medlar: Mespilus Germanica.
${ }_{33}$ Five miles N.N.-W. of Jardine Hall. The residence in 1826 of John James Hope-Johnstone, which Sir W. J. would pass when driving to Edinburgh.

34 Fraxinus Excelsior, var.
3520 miles S.S.-W. of Jardine Hall. The residence in 1828 of Douglas Hamilton Craik.
${ }^{36}$ Potentilla Nepalensis. A red flowered East Indian species, frequently met with in gardens. An old-fashioned border plant. Rather an early date for fl.

37 Now called Buda Rubra var. Marina or Sands mercury.
38 Scurvy Grass: Cochlearia Officinalis. Rather early. "This might be C. Danica " (G. F. Scott-Elliot, in litt. 3, ix. 1909).

39 Saxifraga Granulata.
40 "Might be Rathyrus Maritimus, in which case a very interesting record; or it might be Ononis Arvensis: Rest-harrow." (G. F. Scott-Elliot in litt. 3, ix. 1909.)
${ }^{41}$ Aquilegia Vulgaris, var.
$429 \frac{1}{2}$ miles S.S.-E. of Jardine Hall. The residence in 1828 of Sir W. J.'s friend, John Dalrymple Murray.

43 Staphyla Pinnata.
44 Cytisus Scoparius, var.?
${ }^{45}$ Roughly speaking, the Barony of Ross may be described as comprising two-thirds, and lying towards the south-east, of the parish of Kirkmichael, Dumfriesshire; it gives the title of "Viscount Ross" to the Duke of Buccleuch.
${ }^{46}$ Presumably the Pied Wagtail: Motacilla Lugubris.
${ }^{47}$ The Dipper: Cinclus Aquaticus. "I usually hear the song of this cheery bird on bright sunny days in January." (J. Rutherford in litt. 16, ix. 1909.) The Dipper sings far more frequently in December than in the other winter months.
${ }^{48}$ Laurustinus. "Naturally flowering hereabouts in late December, and in January. Regularly suffers from severe frosts, and the flowers are continually destroyed. The plant is, however, an evergreen and the foliage is consequently not shed. The foliage is, I think, very seldom, if ever, frosted." (R. Service, in litt. 11, х. 1909.)

49 Azalea Pracox, early.
50 "Salmon spawn in the River Annan from November to

March. I have seen them on the beds in October, but it is not usual." (P. A. Pasley-Dirom, in litt. 7, ix. 09.) The close-time for salmon (Salmo Salar) on the River Annan is now (1910) November 16th to February 24th.
${ }^{51}$ Christmas Rose. "Rather an early date for the old form of H. Niger.'" (R. Service, in litt. 28, ix. 1909.)

52 Primrose; very early.
53 Early.
54 Common Hepatica; early.
55 Early.
${ }^{56}$ A name commonly given by old-time fowlers and naturalists to the females and immature males of the Golden-Eye: Clangula Glaucion. "The mistake no doubt originated in, and is partly excused by, the facts that the birds called Morillons were often of opposite sexes, and differed greatly from the adult male GoldenEye, whose full and beautiful plumage is not assumed until the second year." (Newton, Alfred: Dict. Birds, 1893-1896, p. 593.)

57 Bastard Box ; early.
582651 feet. 16 miles N. of Jardine Hall.
592285 feet. 10 miles N.-W. of Jardine Hall.
60 About 1000 feet.
61 Dinwiddie Hill, 740 feet.
62 Clangula Glaucion. (See Note 56.)
${ }^{63}$ Alcedo Ispida.
67 "An unusual marking of barometer." (J. Rutherford, in litt. 16, ix. 1909.)
${ }^{65}$ Gallinago Colestis.
66 Turdus Pilaris. (See Notes 178 and 183.)
67 Jardine Hall. Lat., 55 deg. $10 \mathrm{~min} .30 \mathrm{sec} . \mathrm{N} . ;$ Long., 3 deg. 25 min . W. ; Alt., 190 feet above sea level.

68 The Tree-Creeper (Certhia Familiaris) is heard irregularly during the winter months.

69 Fringilla Coelebs.
70 "Owing to a partial and temporary separation of the sexes [in winter] the name Coelebs, or bachelor, was used by Linnæus in reference to the deserted males." (Howard Saunders: Man. Brit. Birds, 1899, p. 183.) Sir W. J.'s observation is therefore of interest.
${ }^{71}$ The Brambling: Fringilla Montifringilla.
${ }^{72} 5 \frac{1}{2}$ miles W.N.-W. of Jardine Hall. The highest point on the Applegirth Estate, overlooking the Vale of the Annan, and also part of the Dryfe Valley.
${ }^{73}$ Helianthus Tuberosus: Jerusalem Artichoke, a winter vegetable.

74 Sir W. J. writes in 1843: "The Goosander, Mergus Merganser . . . Goosander male. .. Dun Diver, fomale, of British Authors. . . . The plumage of the sexes for the first year is nearly similar, but the males and females were long by
many considered distinct species, and were known under the names of Goosander and Dun Diver, Mergus Merganser and Castor. The fact of their identity has, however, been long since proved." (Nat. Lib., 1843, vol. xiv., pp. 177, 178.)

75 Lesser Periwinkle; rather early.
76 Podicipes Fluviatilis.
77 Canadian Alder, early.
78 Anas Boscas.
79 Fruligula Cristata.
80 Alauda Arvensis. Skylarks do flock largely in winter; nevertheless "immense" flocks would nowadays be remarkable so far as this part of the county of Dumfries is concerned.

81 Querquedula Crecca.
82 Mareca Penelope.
83 The Bean Goose: Anser Segetum. This is believed to have been the prevailing species of Goose visiting the Solway in Sir W. J.'s time.

84 Larus Canus, the Common Gull, may here be referred to, but it is not so common in Dumfriesshire as its name implies; the most common gull inland being the Black-headed Gull, L. Ridibundus.

85 The Ring Dove: Columba Palumbus.
86a "I should fancy this was more common in olden days than now." . '. . "When I was a boy I seem to recollect the Annan much more often frozen across than now. . . $\because$ One year (I think spring of 1906) the Annan was frozen across for a considerable time. The curlers deserted the curling-pond, which was spoilt by snow, for the river." (P. A. Pasley-Dirom, in litt. 9, ix. 1909.)

8âb Mergus Merganser. (See Note 74.)
87. Rallus Aquaticus.

88 The low lying fields on the banks of the Annan.
89 Plectrophanes Nivulis. As regards this species being seen at such a low altitude (i.e., circa 200 ft .), Mr R. Service wrote to me: " I have seen these birds down on the shore and along the Nith sides at end of September, and fairly often during the later months of winter in similar low altitudes, but $I$ think only after violent northerly or north-easterly winds.". (In litt. 11, x. 1909.)

90 Perdix Cinerea.
91 Galanthus Nivalis. Rather a late date for first flower.
92 Botaurus Stellaris. A notable rarity, even in 1829. "Formerly not uncommon; is now a rare accidental winter visitor. . . Unfortunately there are no records of this species having nested in the county, and it is improbable that it has done so within at any rate the last huridred years." (Birds of Dumfriesshire, pp. $233,237$.

93 Larus Claucus. This was probably the specimen which passed into the Edinburgh Museum in 1876, labelled as "obtained on the Solway" and "from the Jardine Collection." The specimen
has since been destroyed. There are only five records of the occurrence of this species in Dumfriesshire. (Birds of Dumfriesshire, p. 439.)

94 The Rook: Corvus Frugilegus. There is an old saying that Rooks begin to build on the first Sunday of March. Mr R. Service wrote to me: "I can hardly exactly tabulate dates re Rooks, but let us say (1) Mid January for Rooks returning to nesting stations in mild scasons, of course not to remain continuously; (2) begin building, 15 th February ; (3) my first date for eggs is March 16th, but I think that is exceptional." (In litt. 11, x. 1909.)

95 In open winters they sometimes pair in January.
96 Lepus Europous. March or April is the more usual time.
97 Probably the Whooper Swan: Cygnus Musicus.
$983 \frac{1}{2}$ miles S. of Jardine Hall. (See Note 182.)
99 In some seasons, pair in January.
100 Corvus Corone. Early.
101 Pica Rustica. Early.
102 Early.
103 Erithacus Rubecula: A very pertinacious songster, except in severest weather.

104 The Paridce. Early.
105 Apis Mellifica. An average date to appear. "Heath borders, must mean the borders in the garden planted with species of Heather : or an Ericarium, as was the case in the old generation of gardens. Here the common hive bee must be intended." (R. Service, in litt. 28, ix. 1909.)

106 Turdus Merula. Rather early.
107 "There is some ambiguity about this remark. Does it mean new potatoes that have been forced in a pit; or an early variety of potatoes that have been stored in a pit, and some taken on that day for dinner?" (J. Rutherford, in litt. 16, ix. 1909.) But Mr R. Service wrote to me as regards Sir W. J.'s note: "'Forced' in a glass framed pit, as was the regular custom then." (In litt. 28, ix. 1909.)

108 I'urdus Iliacus.
109 Eranthis Hiemalis. A fair average date.
110 Turdus Musicus. Heard irregularly during Winter on sunny days.

111 Aceracice. Average date.
112 Tartarian Maple: Acer Tartaricum. Average date of fl .
113 Water Crowfoot. "Extraordinarily early. I should expect some warm water in the place where it grew." (G. F. ScottElliot, in litt. 3, ix. 1909.)

114 Green Hellebore, or Bear's Foot. "Fl. early Spring." (Bentham \& Hooker: Handbook Brit. Flora, 1904, p. 12.)

115 Heard irregularly during Winter on sunny days.
116 Nothing unusual.
117 Crocus Satirus. An average date.

118 Larus Ridibundus.
119 It is not till April that the "black" feathers of the head are in complete perfection. Eggs are laid towards the end of April or in May. Mr P. H. Bahr, in his paper "On the Supposed 'Colour-Change' and the Spring Moult of the Black-headed Gull," states: "The conclusions I have arrived at are as follows: (1) That individuals vary in the amount of black on the crown in the winter plumage, and that this variation has given rise to the belief that a 'colour-change' takes place. (2) That no 'colourchange' occurs. (3) That a moult takes place usually about the beginning of February, and under natural conditions takes about a week to complete, and that it not only embraces the head, but the breast and back as well. (4) That birds of the previous year occasionally assume the black hood of the breeding plumage, while retaining the immature dress on back and wings." (Brit. Birds Mag., Vol. III., pp. 105-111.)

120 Early.
121 Lesser Tortoiseshell Butterfly.
122 Sir W. J. must have made a mistake here. The species hibernates in the imago state and emerges in Summer season. A very early date for its appearance.

123 Alnus Glutinosa. Rather early.
124 An average date.
125 Talpa Europous. Early. Moles do not hibernate. They pair in March or April, and have young in May and June.

126 Gallinago Gallinula. Rather a late date; though the species has been seen in Dumfriesshire as late as March.

127 Mezereon; a late date for first f.
128 Usually pair about a fortnight later.
129 Farm-yard gecse. Early.
130 Hardly to be expected for another fortnight. Their song often heard even during Winter.

131 Tuidus Viscivorus. As a nesting species this is one of our earliest. Sir William Jardine writes in 1832 as follows: "Fifteen years ago they were rarely to be seen, but in consequence of the increased extent of plantations, they are now frequently met with in pairs, or in parties of five or six.". (Birds of Dumfriesshire, p. 1.)

132 Early.
133 Numenius Arquata.
134 Moors.
135 March 1st is an early date for such a concerted movement as these observations would seem to record. The average date during thirteen years, for the first arrival of this species at their breeding places in Eskdalemuir, was 27th February, according to the late Richard Bell of Castle O'er ; but it should be remembered that this average was only for first arrivals there. "Curlews pass up at a much later date (say March 10th) in great numbers en
masse, probably going to Northern European haunts." (R. Service, in litt. 28, ix. 1909.)
136. Salmo Fario." It depends on the season.. If an early season, it is quite likely that for half-an-hour, or an hour, on a sunny day with fly hatching out they would feed greedily. Whether they would be in good condition or not, is another question.". (P. A: Pasley-Dirom, in litt. 7, ix. 1909.) The close-time for Burn-Trout on the River Annan is now (1910) November 16th to February 24th.
137. "Cod-bait, caä-bait, or cadis-bait," vide The Art of Angling by Thomas Best (eleventh ed., 1822, p. 23). "Cod-bait may probably be the little bottom fish known locally as ' Bairdie,' but I never heard the name 'Cod-bait' before. 'Bairdie,' i.e:, The Loach $=$ Nemachilus Barbatulus, so called from the barbules on the chin." (R. Service, in litt. 11, x. 1909.)

138 The House Sparrow: Passer Domesticus. Early.
139 Esox Lucius. Early.
140 The young of Salmo Salar: Early.
141 Rana T'emporaria." An early date.
142 Common Colt's foot. A somewhat early date.
143 Motacilla Melanope. They do not pair till about a week or ten days later.

144 From about 1000 to 2500 ft . 30 to 40 miles S.S.-E. of Jardine Hall.

145 Still (1910) a noted salmon and sea-trout pool in the Annan.
146 Salmo Trutta." "We have never caught sea-trout in the R. Annan before April (Rod and Line), except Kelts: though once on 29th February, I forget which year, after I had returned a sea-trout to the river, I became almost certain it was a new-run one; but it was too late then to make sure. .. . . I have seen a villager who said he got a fresh-run sea-trout on 25th February one year when some of the villagers had leave to use a Rake-net." (P. A: Pasley-Dírom; in litt. 7, ix. 1909:)

147 "The legal period for making Muirburn or for setting fire to any Heath or Muir in Scotland, is now (1910) from 1st November to 11th April, but Proprietors of wet lands in their own occupation may burn heath between 11th and 25th April, or may authorise their Tenants of such wet lands to do so, provided that the Writing authorising such burning, when the lands are in the occupation of Tenants, shall, previous to such burning, have been recorded in the Sheriff Court Books of the County within which such lands are situated. The above Provisions are enacted in Sections 4, 6, and 7 of The Game (Scotland) Act, 1772." (13 Geo. III., Cap. 54.)

148 Acredula Caudata Rosea. I am not aware of the occurrence of the Continental form, Acredula Caudata Europca, in Dumfriesshire.

149 Ardea Cinerea.

150 Usually resort to their breeding places in February.
15162 miles by road from Jardine Hall.
152 Vernal Equinox, 21st March;'Autumnal Equinox, 22nd September. The belief that there occurs an unusual frequeney of gales and storms at these dates has been unsupported by the records of carefully conducted and long continued observations.

153 Applegirth Kirk. Built in 1760. The seating was renewed in 1808, and a private gallery built, by Sir Alexander Jardine. It was here Sir W. J. attended worship. He was buried in Applegirth Kirkyard, 27th November, 1874.

154 Sturnus Vulgaris. Sir William Jardine, writing in 1832, says: "It is found in flocks during Autumn and Spring, but few in number, having diminished much of late years. In 1819 and 1820 flocks of many hundreds frequented the holms on the Annan, but of late not more than from ten to twenty have been seen together." Again, he writes in 1839 from Newbie House, Annan: "A pair of Starlings bred in a hole in one of the large trees in front; the first time I have ever known any remain over Summer." (Birds of Dumfriesshire, p. 106.) The species may now (1910) be said to be excessively abundant.

155 Larix Europca. An early date; fl. about 20th April; 1. about 10 days earlier.

156 The Greenfinch: Ligurinus Chloris. They congregate in flocks in Autumn. "The breeding season of this species is very prolonged, nests being commonly found from April to September."
(Birds of Dumfriesshire, p. 69.)
157 Carduelis Spinus.
168 Mr James Bell writes me: "My father, George Bell, entered the service of Sir William Jardine at Jardine Hall in 1827 or 1828. He transferred his services to the Marquis of Queensberry in 1837, and acted as factor on the Queensberry Estates of Kinmount, Torthorwald, Tinwald, etc., under three Marquises: John, Archibald, and Sholto. He retired about 1869, and was (rather strange to say) succeeded by Sir W. J.'s son, the late Sir Alexander. He died 1873." (In litt. 28, ix. 1909.)

159 Strawberry-leaved Cinquefoil: Potentilla Fragariastrum. An early date:

160 Marsh Marigold. Rather a late date for first fl.
16111 miles S.S.-W. of Jardine Hall.
162 About 1000 to 2500 feet.
163 About 1000 to 2000 feet.
164 A sign of unsettled weather, confirmed by the weather of following days. The atmosphere being heavily moisture-laden, the ring or halo is a circle of refracted moon-light.

165 Remarkably low.
166. Adoxa-Moschatellina: Moscatel. Fl. about April.

167 ? Sycamore: Acer Pseudo Platinus. An average date.
168 The Ringed Plover: Agialtis Hiaticola. "The Ringed

Dotterel (Charadrius Hiaticola)" of Sir W. J. (Nat. Lib., 1842, Yol. xii., p. 299.) "Ringed Plover are usually very conservative in returning to their breeding-haunts, where they may be looked for from April 17th to 23rd." (Birds of Dumfriesshire, p. 365.)

169 Vespertilio Pipistrellus. An average date.
170 Probably the Tawny Owl: Syrnium Aluco.
171 Giant's Colt's foot, or Butterbur: Petasitis Vulgaris. An average date.

172 Dog Violet. An average date.
173 Plum: Prunus Domestica. Cult. var., early.
174 Cerasus Vulgaris. Cult. var., early.
175 ? Ribes Punctatum: the dotted leaved Black Currant. Rather early.

176 ? Populus Balsamifera var. Candicans.
177 Acer Platanoides.
178 "A familiar observation in April evenings when clear. These are then going E. high in air, heading for Summer home." (R. Service, in litt. 28, ix. 1909.)

179 Edinburgh Observer, No. 839, of Tuesday, April 21st, 1829.
180 Kelly House is 85 miles N.-W. of Jardine Hall, in the Parish of Inverkip, Renfrewshice. The lands of Kelly were acquired from James III. prior to 1488 by a family of the name of Bannatyne, descended from the Bannatynes of Kames, Bute; they held it till 1792, when John Wallace acquired it. He built Kelly House in 1793, and Robert Wallace was the occupier in 1830. The latter was M.P. for Greenock 1831-1846, and was one of the champions, with Sir Rowland Hill, of penny postage. About 1890 the house was re-built by Mr Alexander Stephen, shipbuilder, Linthouse, at a cost of $£ 30,000$. It may be added that on 5th December, 1913, the house was totally destroyed by fire, which is believed to have been the work of Suffragettes. (Daily Mail, 6, xii., 1913.)

181 Woodcock are now (1911) " protected" between February 1st and October 1st, both dates exclusive, in Dumfriesshire. (See Note 4.)

182 The names of the Lochmaben Lochs are: (1) Castle Loch; (2) Kirk Loch; (3) Broomhill, or Halleaths Loch, drained away in 1906; (4) Mill Loch; (5) Ure Loch; (6) Hightae Loch; (7) Blind Lochs, now mere tarns and not worth mentioning. (See Note 98.)

183 Fieldfares would appear nowadays (1910) to often remain later with us than in Sir W. J.'s time. "It has been a not uncommon event during the last thirty years, and one that draws the attention of the most casual natural history observer." (R. Service, in litt. 28, ix. 1909.)

184 Twizell House, in Northumberland. 60 miles N.-E. of Jardine Hall. The residence in 1829 of Sir W. J.'s friend, correspondent, and collaborator, Prideaux John Selby.

185 "The various items recorded in the 'Callendar' for May 3rd show clearly that a 'migration rush' was occurring, but such
events were unknown by that name in Sir W. J.'s time." (R. Service, in litt. 28, ix. 1909.)

186 "Wood anemone. First flower-1907, 30th March; 1908, 2nd April; 1909, 11th April." (J. Rutherford, in litt. 16, ix. 1909.) 187 Lonicera Periclymenum. A late date for first 1.
188 Water Avens. An early date.
189 Esculus Hippocastanum. A very late date for first 1.
190 The Wood-wren. A late date for first arrival.
191 Crex Pratensis. A late date for first appearance, which seldom deviates more than a couple of days on either side of April 29th.

192 James Nichol was what is locally termed "odd-man" at Jardine Hall. He worked in the gardens, looked after the fishing, carried the bag out shooting, etc., in fact did "odd jobs." "He was at one time gamekeeper to Sir Alexander, Sir W. J.'s father, and was a great character. Sir W. J. and he had many an expedıtion together." (A. Chapman, in litt. 22, xii. 1909.)

193 Asparagus Officinalis. This early date shows the vegetable had been "forced."

194 Populus Nigra; ? var. Pyramidalis. A late date for first fl.
195 Quercus Robur. Rather early.
196 ? Lily-of-the-valley : Convallaria MLajalis. An average date.
197 Narcissus Poeticus: Pheasant's-Eye Narcissus. An average date for fl .

198 Marsh Violet. "Fl. Spring and early Summer; the petalless flowers in Summer." (Bentham \& Hooker: Handbook Brit. Flora, 1904, pp. 53, 54.)


