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SERIES II.

BULLETIN No. 20

AGRICULTURAL EDUCATION

NEBRASKA BOYS AND
GIRLS CLUB

SELECTING, SCORING AND STORING SEED CORN AND POTATOES

THE NEBRASKA CORN HUSKING CONTEST

Nebrovskz.

Issued Jointly by

DEPARTMENT OF PUBLIC
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LINCOLN

DEPARTMENT OF FARMERS'
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UNIVERSITY OF NEBRASKA,
LINCOLN

October. 1910

Monograph

INTRODUCTION.

This bulletin is one of the series published jointly by the State Department of Public Instruction and the Department of Farmers' Institutes, University of Nebraska, for the encouragement of the work of the Nebraska boys' and girls' club. The subject matter was written and compiled by A. E. Nelson. This is the last of the special bulletins for members of the Home Experiment Department and is sent to all members enrolled for any of the work in agriculture. It contains much of interest to others.

Each member is asked to read over carefully the entire bulletin and to as carefully follow the directions. We receive numerous letters from members in various departments asking questions which are answered in the bulletin, but the member has failed to read carefully enough to get the information.

The next bulletin for the Nebraska boys' and girls' club members will be a general bulletin sent to both boys and girls. It will tell about the state meeting and corn show to be held at Lincoln, January 16-20; it will explain the short courses open to members and give other information which will be of interest.

Each member of the Home Experiment Department is invited to take an active part in all work of a similar nature in his respective county. We believe that members of this department represent the most ambitious young people in each county and shall expect good things from them in school district and county contests.

If any members have been unfortunate this year in being unable to complete their work, or results have been unsatisfactory, we trust that such members will have the necessary amount of determination to profit by their failures and to prepare for better things next year by learning all they can about methods of procedure and how to avoid mistakes in their work.

We continue to receive the co-operation of many people and organizations in the work of our boys' and girls' clubs. This bulletin is printed for us by The Twentieth Century Farmer as an evidence of their interest in and appreciation of the work of the boys' and girls' club in Nebraska. We appreciate the kind words they say for us and are especially

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AGRICULTURAL EDUCATION

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grateful for their financial assistance in printing this bulletin.

Any members who for any reason have failed to report how they are getting along with their work this year are requested to make a final report after receiving this bulletin. We are just as much interested in knowing the cause why some have failed as to know of the success of others.

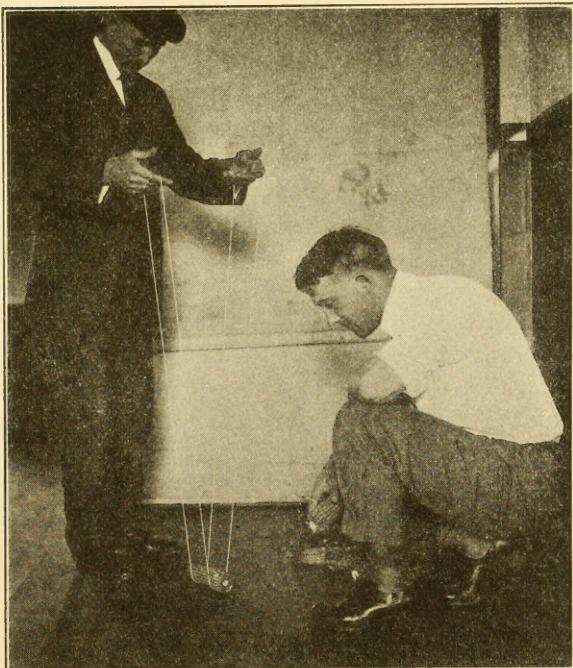
VAL KEYSER,

Superintendent Farmers' Institutes, University of Nebraska.

E. C. BISHOP,

State Superintendent Public Instruction.

September 24, 1910.



FIRST STEP IN SEE-SAW METHOD OF TYING UP

WHAT IS A GOOD EAR OF CORN?

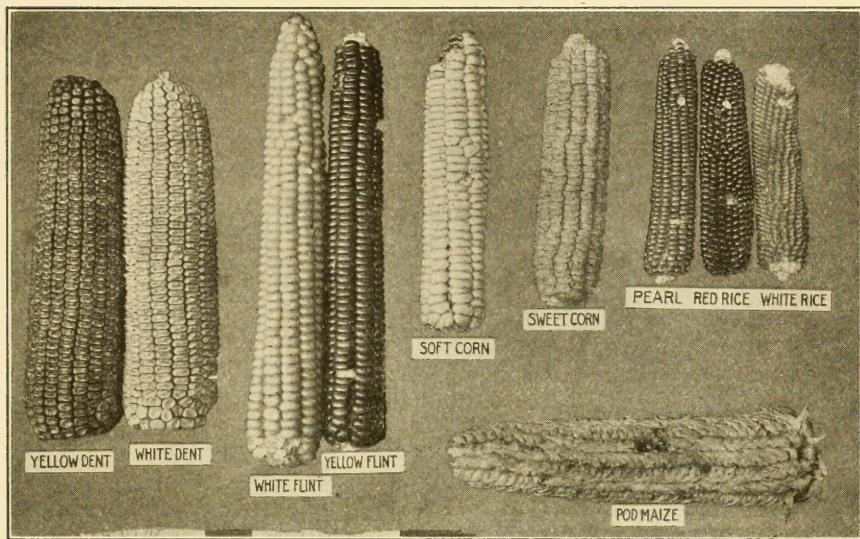
(By A. E. Nelson.)

Corn is raised for one thing—profit. It may have its fine points, it may be interesting to study, the ear may be beautiful, the plant even more so, but when all is said and done the object of all corn production is profit. Seed corn and show corn is for exactly the same thing, and the best seed ear is the ear that is the most profitable for your locality.

There are four things that naturally come to one's mind when looking at an ear or sample of corn for either the show room or the planter box. First, "Will it grow?" Second, "Will it yield?" Third, "Will it ripen?" Fourth, "Does it show improvement?" If the person who is selecting the corn can satisfy himself on these four points he is justified in retaining the ear or the bushel of corn for show or seed purposes.

The yield of an ear of corn is estimated by its size, its weight, the size of the germs, the filling of the butts and tips of the ears, the furrows between the rows and the size and condition of the cob. An ear from most sections of Nebraska should not exceed nine and one-half inches in length, and seven inches in circumference, although the location of the field in the state would influence this size considerably; for instance, in the northern part of the state one would expect a much smaller ear than in the southeastern corner.

It is well to select as large an ear as can thoroughly mature in your locality. However, one should never sacrifice maturity for size of ear. The depth of kernel will, to a large extent, determine whether or not an ear will mature in the section in which it is grown. The depth of kernel in most sections of the state should not exceed one-half inch; however, here again the climatic condition and the location of the field in the state would be the determining factor. In selecting corn with good butts and tips, bear in mind that it is not so necessary that the kernels extend over the ends of the ear, as that the corn should be of superior quality and uniform in size and shape, when compared with the kernels grown in the middle ear. Chaffy, starchy corn with tip caps that stick to the cob is always objectionable, both in the planter box and in the show room.



THE EVOLUTION OF CORN

Very little can be told as to whether or not an ear will grow by looking at the outside. The only method that can give us any definite authority on the subject is the germination box. Sappy or chaffy ears showing mold-spores or wrinkled backs on the kernels are always objectionable.

One of the requirements of a good show sample is that it shows purity in the color of the cob and the grain. White corn should be free from yellow or red kernels, and should have a white cob. Yellow corn should be yellow throughout and have a red cob. Calico corn may have either a white or red cob but a mixed colored cob is preferred. The kernels should be of the same shape as well as of the same color, as irregular shaped kernels will not pass through the planter box and give an even drop. The rows should be straight as it shows a certain amount of selection and the kernels are usually more nearly the same size. The indentation or roughness of the ear depends on the variety. Late maturing corn is as a rule deeply indented. The earlier maturing corns such as flint, squaw, and pop corn are not indented. One should take great pains in selecting corn to see that the tips are not covered with fine, smooth, hard, flinty kernels, as this is a sign of deterioration, or running out of the corn.

METHODS OF SELECTING SEED IN THE FIELD.

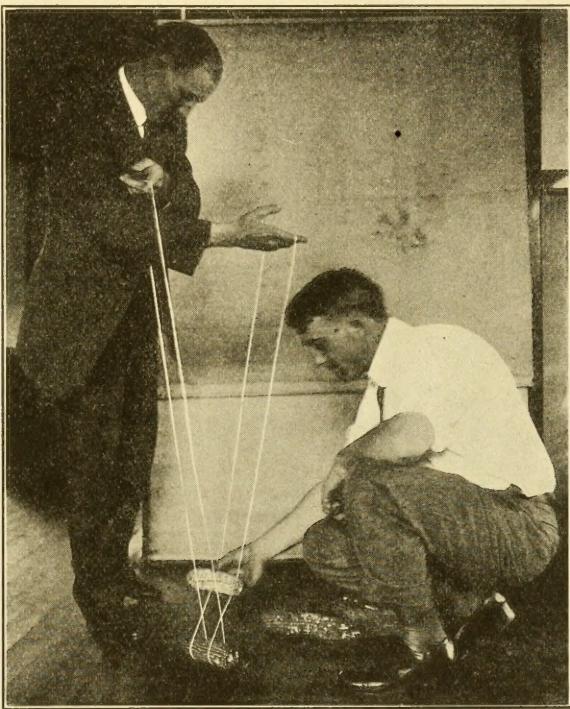
If the seed corn planted on our farms last spring had been harvested before the freezes of the previous fall, Nebraska would be richer today by many thousands of dollars. The corn contained moisture, the early frosts swelled the kernels, breaking down and destroying the germs.

Corn should be selected from the field in the fall, for several good reasons. For instance one should know something of the parentage of his seed. No farmer would think of buying an animal to head his dairy herd without inquiring into its ancestry. Besides many other important questions, he would ask whether or not the sire, dam, grand dam etc., of such an animal were of a good milking strain. The "Ear to Row Test" conducted by many of the boys and girls of Nebraska this past season is the best known method of studing the parentage of our corn. However, many of us were not so situated that we could carry out this experiment and must therefore select our seed from a general field.

In selecting seed corn from the field we have an opportunity to study the environment under which the corn was grown. There are many factors which contribute to, and take part in the production of an ear of corn. The physical condition of the soil, the fertility of the soil, amount of moisture present, kind of soil, that is clay, sand, sub-soil, etc., influence the stand and yield.

The corn grower should select seed ears from stalks that are of medium height and foliage. It should be a standing stalk with a good root system. The ear should hang at a medium height, have a rather short, medium sized shank, and droop at an angle of about sixty-five degrees. Such an ear is usually of medium maturity, is of the proper height to be husked with the least effort and hangs at such an angle that snow or water cannot enter beneath the husks. Ears that are born near the ground are usually early maturing ears. Ears that hang high on the stalk are objectionable as they are generally late maturing, hard to husk and, because of their position break the stalk easily in a wind storm. As a rule ears born high on the stock point nearly straight up, allowing the snow and rain to enter beneath the shucks and decrease the vitality of the kernels.

Corn that is thoroughly matured contains about ten and one-half per cent of water. In the fall of the year, at the time of our first killing frost, it contains a far greater quantity. Experiments have proven beyond a doubt that the harder and oftener corn is frozen, the greater is the decrease in vitality. Those who tested seed that remained in the snow and freezes

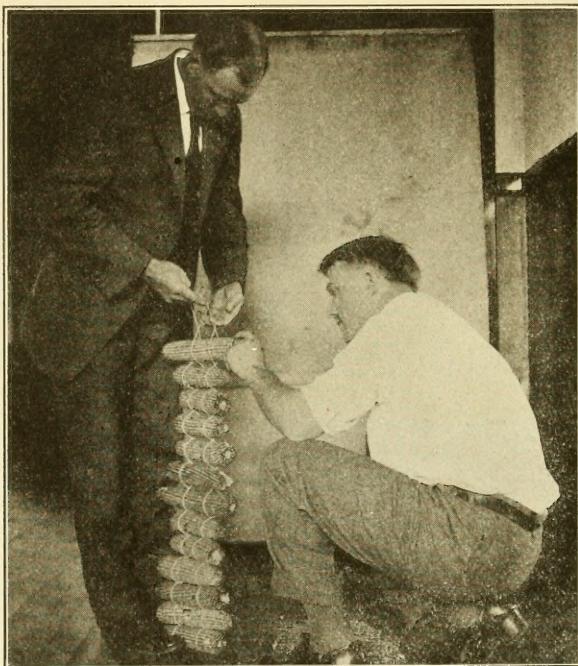


SECOND STEP IN SEE-SAW METHOD

of the winter of 1909-1910 are convinced of this fact without further argument.

The majority of us wait until spring to select our seed. We then go to the crib, scoop the corn from side to side and select the largest and deepest kerneled ears. This is a mistake. If the facts were known, these large ears came from the low, fertile places in the field or where the stand was exceptionally thin and if planted on medium ground under average conditions they will not prove so efficient as the average sized ear raised under adverse conditions. Practically all the corn in the crib was husked after a severe frost. The ears selected

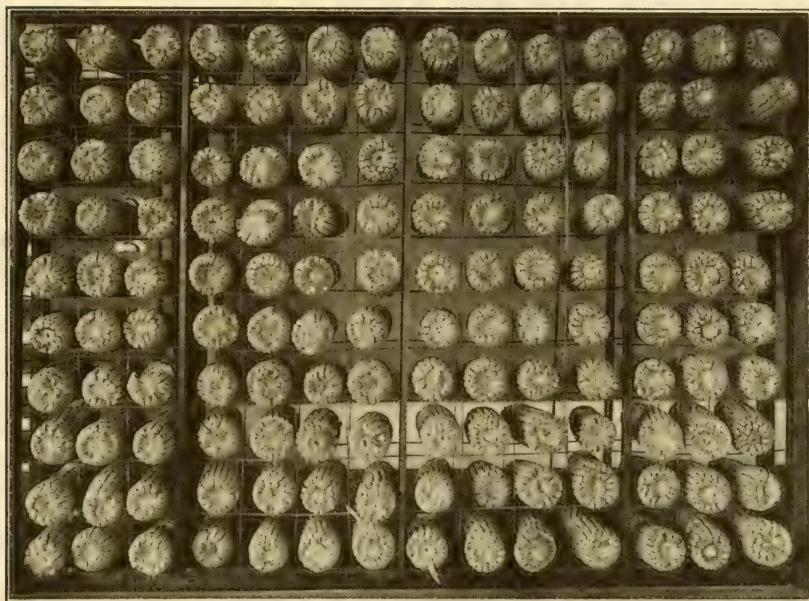
were frozen when put into the crib. During the warm fall and spring days they thawed out, it turned cold and they froze again. They had no chance to dry out. Mold set in. It is reasonable to believe that corn selected and cared for in that way is not fit for seed.



SEE-SAW STRING COMPLETED

Another method often used, to which there are some objections, is selecting the seed at the time the corn is unloaded. After the ear is once in the wagon one can tell nothing of the stalk that produced the ear or the location of that stalk in the field. As a great many farmers practice unloading after supper by lantern light, much corn is necessarily selected in the semi-dusk. The larger ears, many of which are sappy and immature are of course the ones that attract the selector's attention. When a man has husked corn all day he is tired, his sense of sight is somewhat dulled and he is, as a rule, in no mood or condition to select seed by lantern light.

Some fasten a box along side of the wagon, others partition off a small space in the wagon. When a good ear is

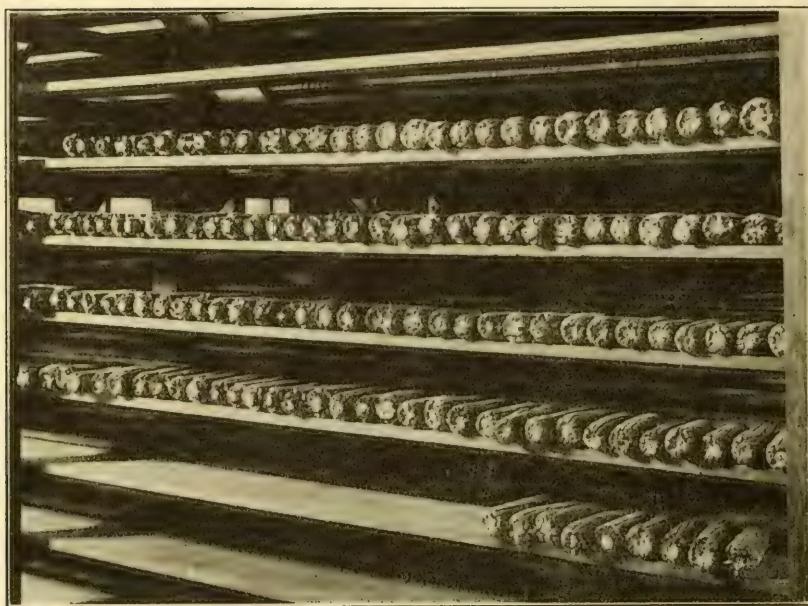


SEED CORN RACK FILLED

found the intention is to put it in either the box or the space partitioned off. This is generally the result: We husk along all day and forget to select seed. About dusk we see that we have only three seed ears selected. "Well," we say, "that won't do, I'll have to get that box full" and we throw every large ear into the seed box. Another thing, a farmer can hardly expect his help, hired to husk by the bushel, to stop, examine each ear he husks and place the desirable seed ears in a small space partitioned off for that purpose or in a box alongside of the wagon. There wouldn't be much in it for the hired man.

The last three methods mentioned above are all improvements on the "Crib selection method," but the selecting is all done after the corn is frozen, and as a general thing without any definite knowledge of the stalk that produced the ear or the stalks surrounding it.

The person who has lived in the State for a few years can almost invariably predict a killing frost a few days in advance. This varies considerably in different sections. All seed corn should be selected before a killing frost. This means we



SHELVES FOR STORING CORN

should go through the field and select our seed before husking time. Probably the easiest method it to tie a hitch-strap to the top and bottom, on the same side, of a gunny sack. Pass the strap over the right shoulder and allow the sack to hang under the left arm. This leaves both arms free. The farmer can now pass through his field and select ears conforming to his ideal. If he is especially particular, he can fasten an ear to his suspenders and use this ear as a sort of pattern to follow.

Some men collect their seed in a common market basket carried on the arm. This method has the advantage of leaving the corn exposed, and enables one to select corn of a more uniform type.

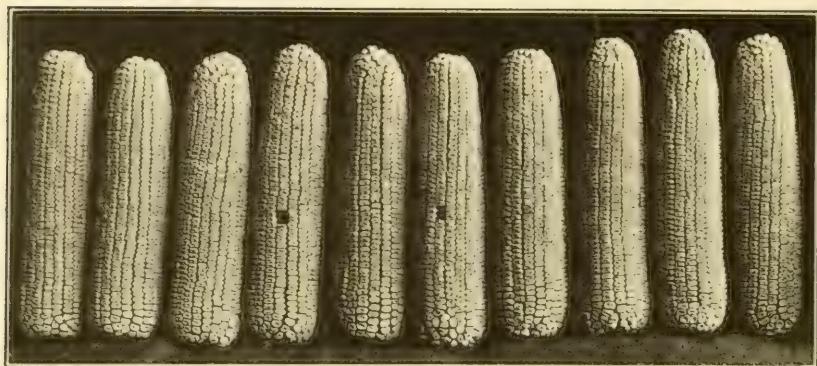
Corn has been collected successfully and easily by making a hole in one side of a common grain sack near the top. The ear can be slipped through the hole, leaving the hand free. One can select about three-fourths bushel by this method before emptying the sack.

Where a large quantity of seed is to be selected it is better to make a seed corn sled. These sleds much resemble the old fashioned stone boats. Make a box about three feet wide, two



PRIZE WINNERS IN FIRST (1906) COUNTY CORN SHOW IN PAWNEE COUNTY

feet high and eight feet long. Fasten this to runners made by rounding off the ends of two half cedar posts or two railroad ties. Place two uprights in the center of the box one at each end. Let them protrude about four feet above the sides of the box. Stretch a strong piece of canvas between the uprights. Fasten a single-tree to the runner and your sled is complete. It is advisable to place a wire muzzle on the horse to prevent it from tearing off the ears and breaking down the stalks. The sled can be drawn between the rows, thus making no "down row." A man can select the best seed ears from ten rows on each side of the sled. The canvas is stretched over the center of the sled and acts as a sort of "bang-board" when the ears are thrown against it. One man can select about five bushels of good seed in eight hours by using either the sack or basket method. He should be able to double that amount when the seed corn sled is brought into use.



GOOD EXHIBIT OF UNIFORM EARS

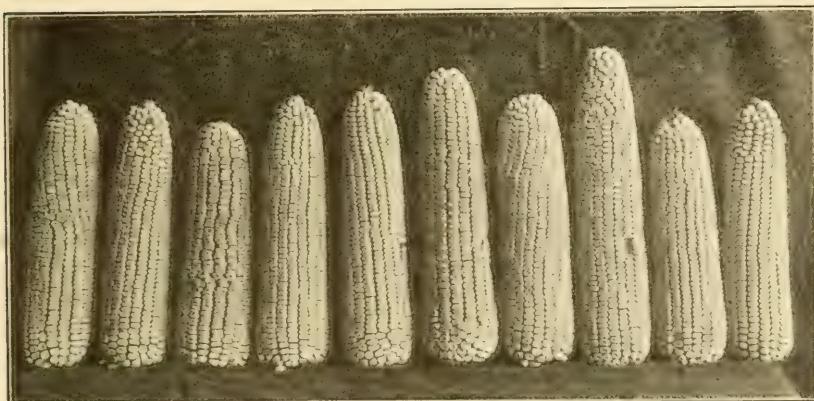
STORING SEED CORN.

After the corn has been selected it should be stored carefully and in such a place that it will dry out quickly but naturally. Many corn growers make a mistake by throwing their seed in some out of the way place where it cannot dry out thoroughly. I have seen corn stored in salt-barrels, vegetable cellars, boxes, potato caves, and other damp, unventilated places, and the next spring, the owners of the seed wondered why they had such a poor stand.

Many of us are making a mistake by throwing our seed corn on top of the oats in the oat bin. The oats go through a certain process of "sweating" in which they give off considerable moisture. This moisture is of course detrimental to the seed corn. Experiments have proven that in almost every case where corn was stored in the barn, hog house, hen house or near any of the farm animals, the vitality has been reduced. This is doubtless due to the moisture given off by the animals.

Many of us practice piling or "ricking" our seed corn along the wall in a close room or bin. The ears are laid one on top of another, touching each other on three or four sides. It is impossible for corn piled in this way to dry out thoroughly without molding more or less.

There are many desirable ways of storing seed corn. Any method that will keep the ears from coming into direct contact with each other or some other object is good. There are so many ways this can be done that it hardly seems neces-



INFERIOR AND IRREGULAR BUNCH OF CORN

sary to give specific directions, however for the amateur a few suggestions may not come amiss.

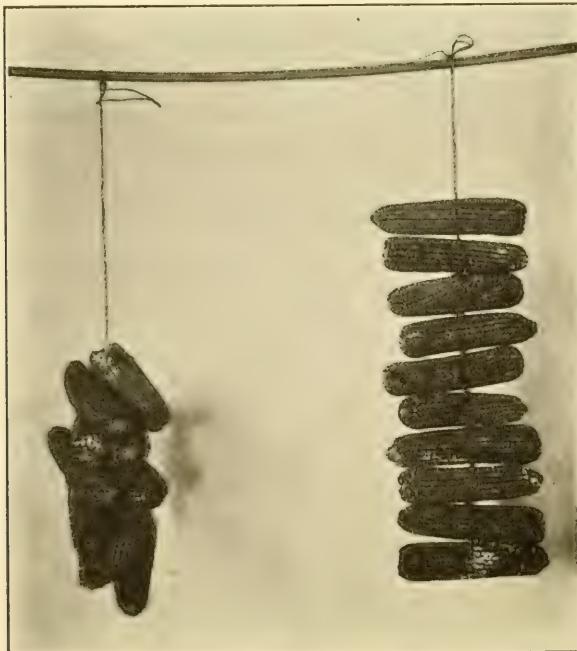
Experiment Stations have proven that one of the cheapest and best ways to store seed corn is by tying the ears together in lots of ten with a strong piece of binder-twine looped around the middle of each ear. (See illustration). This allows ample circulation of air and if the strings are tied to wires suspended between rafters, mice cannot get at it.

Another excellent method, much faster than the one just described, is the "see-saw" method illustrated by the photographs. The "seed corn tree" has been used very successfully and can be made at little expense. The two base boards are made of one by four inch lumber, are thirty-six inches long and are notched so that the edges of both boards touch the ground squarely. Any discarded pan slipped over the top of the post before the nails are driven, will prevent the mice from damaging the corn. The nails to hold the ears are ten-penny finishing nails. They should be driven at an upward slant of forty-five degrees. This will prevent the ears from falling off during the drying process. The upright is usually a seven foot, round cedar post. If the nails are arranged carefully a "seed corn tree" can be made to hold five bushels.

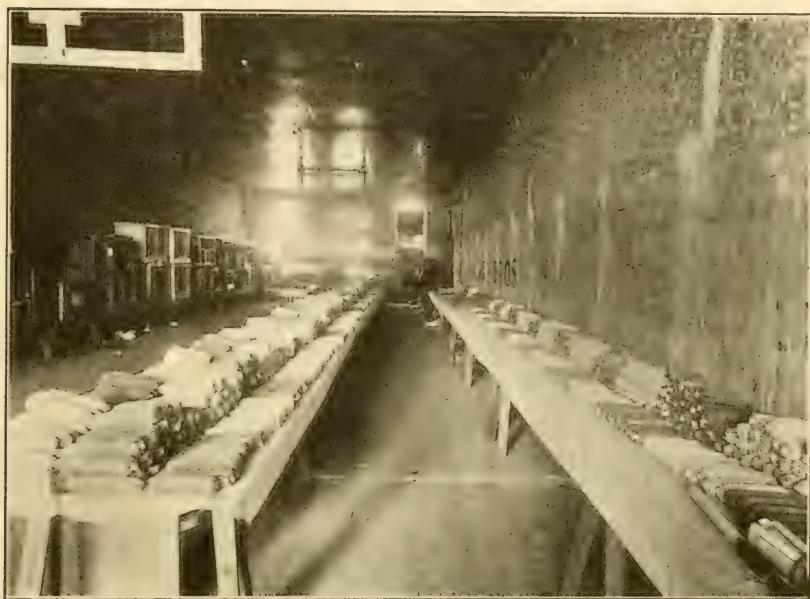
Wire chicken netting strung between rafters has been used as a place to store seed corn with limited success. The ears which are pushed through the meshes in the wire often fall out during the drying process.

Probably the best known place to store seed corn is over the drive way of a double corn crib. Here it is out of the way and has a free circulation of air. Another good place is a well ventilated attic. In selecting a place to store seed corn, one should always keep these two things in mind: First, seed corn, during the "drying out" process, requires a free circulation of air at a temperature above freezing. Second: It should be hung in such a way and place that mice, rats or other pests cannot get at it.

"But," we say, "all the collecting and storing of seed corn, takes too much time." Did you ever stop to think that it takes but twelve medium sized seed ears to plant an acre of corn? That next year's crop largely depends on the selection and care of an armful, a good horse feed, of corn for each acre of corn you plant? It seems reasonable that if the law, "Like will produce like" is true there is no job on the farm that should receive so much care and attention as the selection of our seed corn each fall.



A POOR WAY OF TYING UP CORN



A PART OF PAWNEE COUNTY EXHIBIT (Feb. 8-10, 1906)

SELECTING A SAMPLE OF CORN FOR SHOW.

Notice—

Rule 1. All ten-ear exhibits having one or more ears with an off-colored cob, or having a total of more than twenty off-colored kernels on the ten ears, which in the estimation of the judge is due to a mixture of white and yellow types of corn, shall be disqualified—unless entered in classes for other than yellow or white varieties.

Rule 2. Any ear entered in the single-ear class, which in the estimation of the judge shows a mixture of white and yellow varieties either in the kernels or in the cob, shall be disqualified—unless entered in a class for other than yellow or white varieties.

A ten-ear show sample should be uniform throughout. The ears should be of the same roughness, shape, length, circumference, etc. The tips and butts should be equally well filled on all ears, and covered with kernels of the same size and shape. If ears are of the same circumference and have the same number of rows, the kernels will be of the same width. The germs should be of the same general size and

shape. The ten ears should be of the same shade of yellow or white, and free from mixture in both the cob and kernels.

The following score card will assist the amateur in selecting corn for the show room:

Score Card.			
ADAPTABILITY			20
Size of ears.....	10.....		
Ripeness	5.....		
Filling of kernel.....	5.....		
UNIFORMITY			30
Of Ears			
Size	5.....		
Shape	5.....		
Color	5.....		
Indentation	5.....		
Of Kernels			
Size	5.....		
Shape	5.....		
SOUNDNESS AND VIABILITY			25
Condition of Germ.....	10.....		
Condition of Hull.....	5.....		
Freedom from Injury.....	5.....		
Solidity of Ears and of Kernels on Cob.....	5.....		
SHAPE OF EARS.....			5.....
COLOR OF COBS.....			5.....
COLOR OF KERNELS.....			5.....
SHAPE OF KERNELS.....			5.....
BUTTS AND TIPS.....			5.....

EXPLANATORY NOTES.

Adaptability: (20) Of great importance in selecting seed corn. Indicated in part by the following:

(a) Size of Ear. (10) The following sizes are given as representative of each section.

Eastern Section: Length, 9½ inches; circumference, 7 inches.

Western Section: Length, 8 inches; circumference, 6 inches.

(b) Ripeness: (5) An essential quality in corn. Indicated by solidity of kernels, rigidity of cob and firmness of kernels on cob. If immature, the kernels may contain some sap. Such kernels often loose their tip caps in shelling.

(c) Filling of Kernels: (5) Kernels of medium roughness are considered best. The kernels with a chaffy crown "pinched dent" is indicative of late maturity.

Uniformity: (30) Necessary in all exhibits. Hence the ears and kernels of the exhibit should possess uniform characteristics. For purposes of study, two kernels may be removed from one row in each ear between three and four inches from the butt.

Soundness and Viability: (25) Of great importance. Seed that will not grow is worse than worthless.

(a) Condition of Germ: (10) The germ should be bright and oily. A pale, shrunken, dull looking germ indicates poor vitality. A dark colored one indicates injury from frost or moisture or from both.

(b) Condition of Hull: (5) Germination tests show that kernels with a blistered or wrinkled hull will either not grow or are of low vitality—the lack of vitality varying with the degree of blister.

(c) Freedom from Injury: (5) There should be no missing, mouldy, cracked, or otherwise injured kernels. (The two kernels removed for study, excepted.)

(d) Solidity of Ears and of Kernels on Ears: (5) Ears should be firm. In many cases looseness of kernels and weakness of cob indicates poor vitality.

Shape of Ears: (5) Varies with variety. In general the ears should be cylindrical or nearly so. A good rule is "circumference three-fourths the length." (The circumference measured at one-third the length of the ear from the butt.)

Color of Cobs: (5) Grain free from evidence of mixing shows careful breeding. Cobs of uncertain tints suggest impure breeding.

Color of Kernels: (5) The same rule holds as for color of cob.

Shape of Kernels: (5) Kernels should narrow gradually from crown to tip, with straight edges that touch full length. The two sides of the kernel facing ends of the ear should be parallel. The shoe-peg type of kernel is objectionable.

Butts and Tips: (5) The butt should be smoothly rounded over with straight rows of uniform kernels. The shank should not be too large, but should have sufficient size to support the ear.

Tips should be covered well towards the end with straight rows of uniform kernels. Irregular, shallow or small kernels are more objectionable than tips somewhat exposed. Very tapering tips are objectionable.

"TO THE COUNTY SUPERINTENDENT."

Making the Entries.

Where possible the white uniform tags should be used. These can be attached to the ears of corn with a rubber band. On the aprons and the dress goods the tag should be fastened with a pin. After the exhibits have been judged the contestants' name, address, etc., should be filled in on the entry tag.

Shipping to the State Show.

After the show is over, the exhibits should be placed in strong boxes lined with screen. They should then be nailed up tightly and set away. In case the corn is too green to pack, hang each contestant's sample on a string suspended from a wire or some other place where it will be impossible for mice to reach it. Every precaution should be taken to protect the children's exhibits from mice, rats, water, etc.

SELECTING POTATOES FOR THE CONTEST.

(By Val Keyser)

The first thing is to study the score card and become thoroughly acquainted with the requirements of the card. This score card was drawn up for the boys' contest work, it being

necessary to have a standard by which the exhibitors and the judge can be guided. As soon as you are familiar with the essential points which compose a good exhibit, place the potatoes which have been chosen as worthy of consideration on a table before you, and carefully select the twelve best tubers which conform to the regulations of the score card. If two exhibits are equally good in all respects, except size, the larger potatoes will be given first place unless the judge should deem them too large. It has been found that medium-sized tubers of proper shape usually cook better and are more profitable for seed and for the market. This applies to early varieties rather than late.

Score Card for Potatoes.

Variety Name.....	Value.	Score.	Score.
Uniformity of Exhibit.....	20	.....	.....
Trueness of Type.....	10	.....	.....
Shape of Tuber.....	15	.....	.....
Size of Tuber.....	15	.....	.....
Eyes	5	.....	.....
Skin	5	.....	.....
Texture of Tuber.....	5	.....	.....
Soundness	10	.....	.....
Freedom from Blemishes.....	15	.....	.....
Totals	100	.....	.....
Contestants Name.....			
Date.....			

Explanation of Score Card.

Uniformity of Exhibit—Select twelve potatoes that are uniform in size, shape, color, and which have uniformly well defined eyes of the same depth.

Trueness to Type—Each potato should be typical of the variety to which it belongs, i. e., the characteristics should be clearly defined, enabling one to easily identify it.

Shape of Tuber—The shape of the potato will depend largely upon variety, but the flat-round or oval shape is favored, because these shapes usually give best quality tubers.

Size of Tuber—As a rule, select medium-sized potatoes, but if two exhibits are otherwise equal, choose the larger, unless potatoes are so large as to be considered overgrown.

Eyes—The eyes of the potato should be medium deep, well defined and not too numerous. Deep eyes cause waste in peeling and have a tendency to affect shape of tuber. Eyes too shallow are low in vitality.

Skin—The skin may be whitish, brown, reddish, yellowish brown, blue or black, depending on variety. It may be thick or thin, tough or brittle. A thick, fairly tough skin is preferred, lenticels not too prominent, or potatoes sunburned.

Texture of Tuber—This is determined by cutting tuber. A fairly fine grained, brittle texture is preferred. A tough texture does not cook up mealy and is usually poor in flavor.

Soundness—Select potatoes that are sound and firm, not wrinkled and flabby. Hollow potatoes are objectionable, likewise any internal discoloration indicating a diseased condition. The judge should cut two potatoes in each exhibit.

Freedom from Blemishes—The judge will deduct from score for scab spots or skin ruptures from any other disease, cuts, bruises, scratches or any other defects.

Definitions.

A large potato is a potato larger than the average twelve year old boy's fist.

A medium sized potato is a potato larger than an average size hen's egg, but smaller than a twelve year old boy's fist.

A small potato is a potato smaller than an average size hen's egg, but larger than an English walnut.

A cull is a potato smaller than an English walnut and also scabby, badly sun burned, decayed or badly bruised. In fact, culs include all potatoes that are not fit for the market.

Directions—Plow out each row of potatoes carefully and in such a way that the potatoes from one row will not become mixed with the potatoes from connecting rows. Gather all the potatoes including the small and scabby ones. Collect the potatoes from the first row, which will be the one containing the products from the one-eighth potatoes planted in each hill. Weigh these potatoes and mark weights in the proper square under "B." Divide the potatoes into large, medium, small and cull lots. Weigh each lot and write the weights in the proper square under "C," "D," "E," and "F."

To Find the Per Cent of Large Potatoes—Divide the number of pounds of large potatoes by the total weight of potatoes in the row, and insert the figure in the proper square under "G."

To Find the Per Cent of Medium Potatoes—Divide total weight of medium potatoes by the total weight of potatoes in the row and insert the figure in the proper square under column "H."

To Find the Per Cent of Small Potatoes—Divide the total weight of small potatoes by the total weight of potatoes in the row and insert in the proper square under "I."

To Find the Per Cent of Culls—Divide the total weight of culs by the total weight of potatoes in the row and insert in the proper square under "J."



POTATO FIELD IN NORTHWESTERN NEBRASKA

To Find the Number of Bushels Per Acre—Divide the total number of pounds of potatoes raised on each row by 100 (the number of hills in each row.) Multiply this number by 8306 (the number of hills on an acre when planted 18 inches apart in rows 3 feet 6 inches apart.) Divide this number by 60 (the number of pounds in a bushel of potatoes.) The result will be the number of bushels per acre.

SOME CORN DEFINITIONS AND DIRECTIONS FOR FINDING PER CENT OF STAND.

A Sucker is a stalk without roots of its own. It is usually attached to another stalk below or very near the surface of the ground. Care should be taken not to confuse suckers and barren stalks.

A Barren Stalk is a stalk without an ear on it.

A Smutted Stalk is a stalk containing smut, a black, powdery substance, on any part of the stalk or ear.

To Count the Stand—Begin at the first hill in the first row and count all the stalks in each hill in the row. Mark down the number of stalks in each hill. These correspond with the number of hills in the row. If a hill contains no stalks write 0; if it contains one stalk write 1, etc. After the first row is completed count the second row and so on until the

October.

REPORT CARD
Nebraska Boys' and Girls' Club

POTATOES.
HARVEST NOTES.

Name.....	Town.....		County.....		Age.....		Date.....		191.....	
	B	C	D	E	F	G	H	I	J	K
No. of Row	Total Weight of Potatoes on Large Row	Total Weight of Potatoes	Total Weight of Medium Potatoes	Total Weight of Small Potatoes	Per Cent of Large Potatoes	Per Cent of Medium Potatoes	Per Cent of Large Potatoes	Per Cent of Small Potatoes	Per Cent of "Culls"	Bushels Per Acre
1/6 Potato										
1/4 Potato										
3/8 Potato										
1/2 Potato										
5/8 Potato										
3/4 Potato										
7/8 Potato										
1 Potato										

Remarks

(NOTE.—See pages 19 and 20 for directions.)



hills in each row are counted.

To Find the Total Suckers—Count all the suckers in each row and write the number.

To Find the Total Barren Stalks—Count all the barren stalks in each row and write the number.

To Find the Total Smutted Stalks—Count all stalks affected by smut in each row and write the number.

To find the 0 Stalk Hills—Count from the record (each row) all the hills containing no stalks.

To find the 1 Stalk Hills—Count from the record (each row) all the hills having one stalk.

To find the 2 Stalk Hills—Count from the record (each row) all the hills having two stalks.

To find the 3 Stalk Hills—Count from the record (each row) all the hills having three stalks.

To Find the Total Stalks in Row—Multiply the 3 stalk hills in each row by 3, and the 2 stalk hills in each row by 2. Add the products obtained by this multiplication and the number of hills having 1 stalk in each row. The number obtained from this addition will give the total stalks in the row.

To Find Per Cent Suckers—Divide the total number of suckers in each row by the total number of stalks in the same row.

To Find Per Cent Barren Stalks—Divide the total number of barren stalks in each row by the total number of stalks in the same row.

To Find the Per Cent Smutted Stalks—Divide the total number of smutted stalks in each row by the total number of stalks in the same row.

To Find Per Cent Stand—Divide the total stalks in each row by the number there should be.

TO THOSE ENTERED IN THE EAR TO ROW TEST.

It is now fall. You have noted the difference in growth between the ten ears of corn planted last spring. You have seen how that one ear produced ears high on the stalk, while another produced the ear close to the ground. You have noticed considerable difference in the per cent of barren stalks, suckers, smutted stalks, per cent stand, etc., produced on each row. Now we have come to the most interesting and important step in our whole season's work; we will find out which ear yielded the most corn of the best quality. This can only be done by following the instructions closely and paying minute attention to the definitions of seed ear, marketable ear, nubbin and worthless ear. The equipment you will need is a husking peg, a pair of reliable scales and a basket or box in which to weigh the corn from each row. When you enter the total weight of corn on the report card, be sure you subtract each time the weight of the box, basket or sack in which the corn is weighed. If this is not done, your results will not be correct.

Be sure to husk all the ears in the row, whether large, small or worthless. If an ear is found lying between two rows, look around and see what row the stalk it came from is

in. Then put it back in the proper row so that you will not get it mixed with corn from another row.

Instructions—Definitions.

1. **Seed Ear:** An ear of corn showing the requirements of a good seed ear.
2. **Marketable Ear:** An ear not good enough for seed but well matured, round and in such condition that it will sell well on the market.
3. **Nubbin:** A short, stunted ear, less than five inches long or an ear having kernels on but one side.
4. **Worthless Ear:** An ear with but few kernels on the cob, one that is moldy, rotten or in some other way useless as feed.

Directions.

Do not weigh closer than one-fourth pound.

1. **Total Weight of Pounds of Corn on Row:** Found by husking every ear on the row, whether good or not, and weighing on a reliable scale.
2. **Weight of Seed Ears:** Found by sorting out and weighing all the nubbins on the row.
3. **Weight of Marketable Ears:** Found by sorting out and weighing all the marketable ears on the row.
4. **Weight of Nubbins:** Found by sorting out and weighing all the nubbins found on the row.
5. **Weight of Worthless Ears:** Found by sorting out and weighing all the worthless ears on the row.
6. **Per Cent of Seed Ears:** Found by dividing the weight of seed ears by the total number of pounds of corn on the row.
7. **Per Cent of Marketable Ears:** Found by dividing the weight of marketable ears by the total number of pounds of corn on row.
8. **Per Cent of Nubbins:** Found by dividing the weight of nubbins by the total number of pounds of corn on the row.

9. Per Cent of Worthless Ears: Found by dividing the weight of the worthless ears by the number of pounds of corn on the row.

10. Number of bushels per acre: This is the most important point of all. Found by dividing the number of pounds of corn on the row by 100 the number of hills in the row. The answer will be the number of pounds corn on one hill. Multiply this number by 3556, (the number of hills on an acre when planted 3 feet 6 inches each way.) The answer will be the number of pounds of corn produced on 3556 hills or one acre. Divide this number by 75, the number of pounds in a bushel at this time of year. The result is the number of bushels per acre.

Note: The contestant will find it advisable to reduce all fractions to decimals when figuring percentage. Do not carry any problems out farther than one place to the right hand side of the decimal point.

FIRST ANNUAL NEBRASKA CORN HUSKING CONTEST.

Nebraska Boys' and Girls' Club.

(Rules and Regulations.)

1. Any person under twenty-one years of age is eligible to this contest.
2. He must husk eight hours in the same day, four hours in the forenoon and four in the afternoon.
3. He must stop one hour at noon.
4. He must use the same team the entire day.
5. He may have no person, other than himself, drive or lead the team attached to the wagon in which he is husking.
6. He shall use a common farm wagon.
7. He may husk in any field he sees fit, whether his own or some other.
8. He may use any make of husking-peg, hook or other device attachable to the hand or wrist.

REPORT CARD
Nebraska Boys' and Girls' Club

October.

EAR TO ROW TEST.

HARVEST NOTES.

Name	Town	County	Age	Date	1911					
No. of Row	Total No. of lbs. on Row	Weight of Marketable Bars	Weight of Seed Ears	Weight of Nubbins	Weight of Worthless Ears	Per Cent of Marketable Ears	Per Cent of Seed Ears	Per Cent of Nubbins	Per Cent of Worthless Ears	No. of Bushels Per Acre
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

Remarks

(NOTE.—See page 24 for directions.)

9. He may use gloves, cloth mittens or any other protection to his hands he wishes.

10. He must husk all ears more than three inches long as he goes along, whether on the ground or attached to the stalks.

11. Practically all husks must be removed from the ears before thrown into the wagon. Not more than one husk to three ears will be allowed.

12. He may use no endgate more effective than the ordinary "Boss" endgate.

13. He must unload his load of corn without the assistance of another person.

14. He must unload his corn with a scoop-shovel.

15. He must have his loads unloaded before the expiration of the eight hours mentioned in (2).

16. The affidavit as indicated, must be filled out and sent to the county superintendent, who will forward the same to the state superintendent.

AFFIDAVIT.

(To be filled in before a Notary Public.)

I..... residing in..... the County of..... and the State of..... being first duly sworn, depose and say, that I did on the..... day of..... 19..... husk..... pounds, making bushels of corn according to the Rules and Regulations printed on page 25 of this bulletin.

Age of contestant..... years. Address of contestant:
Town..... County.....

State of Nebraska. {
County..... ss.

On this..... day of..... 19..... before me, a..... for and residing in said

County came.....
who is personally known to me to be the identical person
whose name is affixed to the foregoing Affidavit.

Witness my hand and seal at.....
on the date last above mentioned.

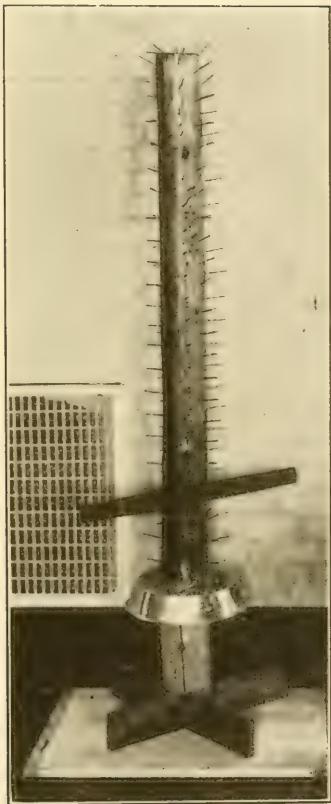
.....
.....
.....

CERTIFICATE OF COUNTY SUPERINTENDENT.

I, County Superintendent
of Public Instruction of.....
County..... Nebraska, certify that to the
extent of my knowledge and belief the accompanying report
of....., a contestant
in the Nebraska corn husking contest is true and correct in
every particular.

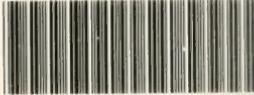
..... County Superintendent.

Date....., 1910.



SEED CORN TREE

P LIBRARY OF CONGRESS



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LIBRARY OF CONGRESS



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