1-1922

Farm Layout and Field Arrangements

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Extension Circular No. 70

FARM LAYOUT AND FIELD ARRANGEMENT

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Cooperative Extension Work in Agriculture and Home Economics, South Dakota State College and United States Department of Agriculture Cooperating.

Distributed in furtherance of Acts of Congress of May 8 and June
1914

FARM LAYOUT AND FIELD ARRANGEMENT

Farm layout involves the location of the fields with respect to the farmstead and public highways, the size, shape and number of fields, and the location of hog-lots, feed yards, etc. In arranging or re-arranging a farm layout the most important considerations are convenience and economy of operation. An ideal farm layout is so arranged that there shall be a minimum of time consumed, no retracing of steps and no lost motion in doing the routine work of the farm.

Relation of Fields to Farmstead and Highways

The distance from the farmstead to the fields and the ease or difficulty of access to them is an important consideration. The land to be farmed by one outfit should be in a compact body. Men often rent additional land from one to three miles from their home farm. The time lost in going to and from work on this land may very easily eat up the profit from the additional acreage. Fields should not only be located as near the farmstead as possible, but they should be easily accessible. As many fields as possible should border on the farmstead. This avoids the necessity of having lanes, which are wasteful of land and fencing. When lanes are necessary they should be wide and considered as an extension of the pasture. When made in this way the sod is less likely to be ruined by the tramping of the stock in wet weather. Much time can be saved by having gates to fields and lanes of a sort that are easily opened and closed. Since most products of the fields are hauled to the barns or directly to market, the relation of the fields to the public highways is important. Other considerations are economy in fencing and ease of shifting stock from one field to another.

The Size, Shape and Number of Fields

Large fields are easier to cultivate than small ones. Some farms are cut up by lakebeds, sloughs, gullies or railroads and have many small, irregular-shaped fields. The many corners and the large amount of turning necessary in tilling them make fields of this sort uneconomical in the use of labor and machinery. For the most part, the land in South Dakota is level or rolling and the fields large enough for the economical use of modern farm machinery.

Rectangular fields half again or twice as long as wide are well suited to the use of machinery. Square fields require less fencing, but unless they are very large and can be cut in two when harvesting, are not so convenient to work as rectangular fields. A square 40-acre field requires 240 rods of fencing, while a field of the same size 160 rods long and 40 rods wide requires 340 rods of fencing to inclose it.

The number of fields should correspond to the number of years in the cropping system that is followed on the farm. Thus, if the plan calls for equal acreages of wheat, corn, and sweet clover, there should be three fields. If a five-year rotation is followed there would logically be five fields. It is desirable that the fields on a farm be nearly equal in size so as to call for about the same amount of labor and the same machinery year after year. The number of years in the cropping system that is followed will therefore determine not only the number of fields, but on a given farm, the size of the fields.

Other factors affecting the size, shape, and number of fields are the type of farming followed, the amount of livestock kept, the size of the farm, and the wishes of the individual farmer.

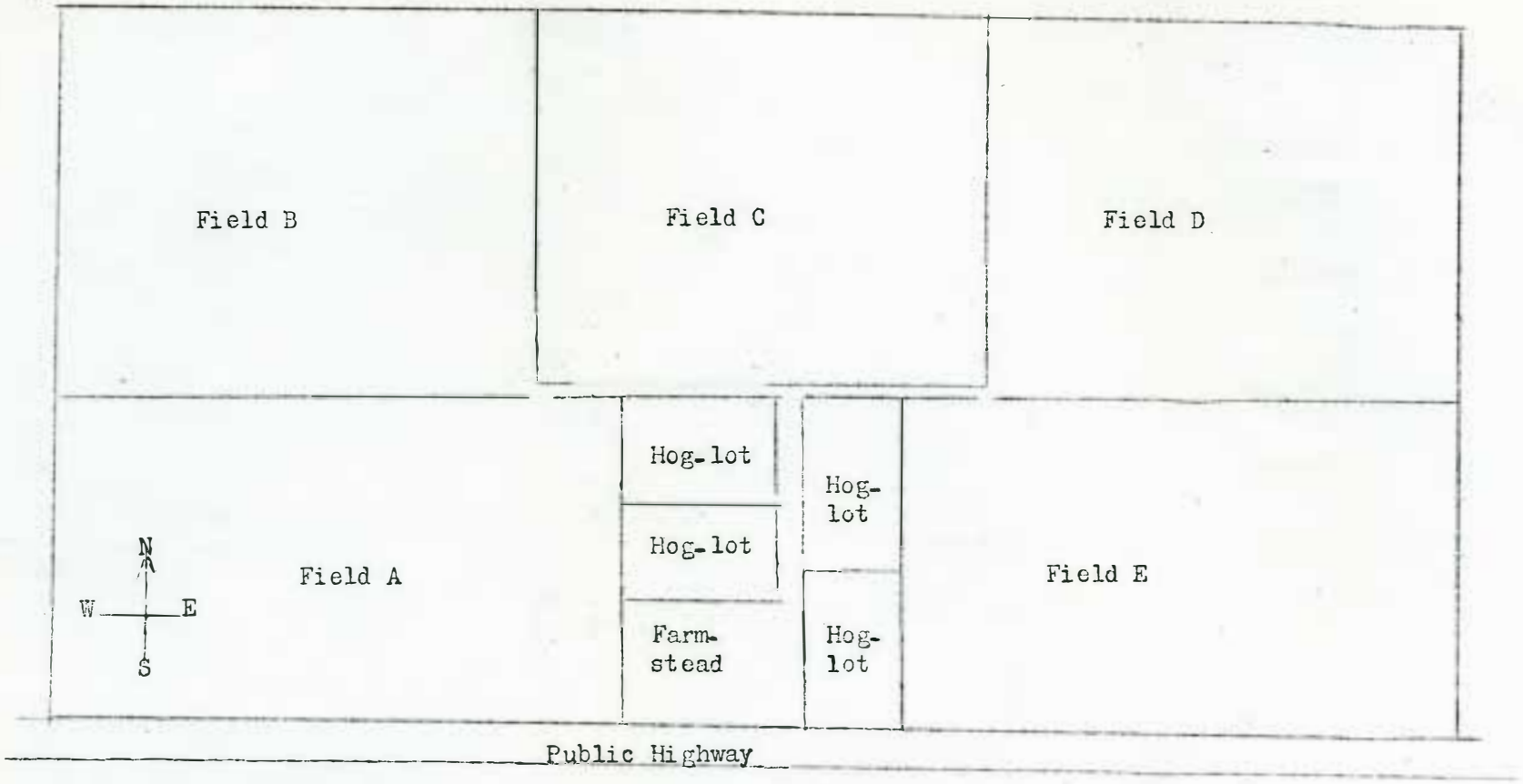
Hog-lots and Feed-yards

The raising of pigs and calves is an important enterprise on most South Dakota farms. Pigs and calves make economical gains on pasture, especially when they have an abundance of fresh water and a certain amount of skimmilk and grain. For convenience in feeding and watering, the pasture should be near the farmstead. On many farms the pasture is divided into two, three or four fields and the stock rotated from one field to another. This makes it possible to have a variety of pasture crops and let one field recover while another is being used. It also lessens the possibility of infecting the pasture with diseases and parasites.

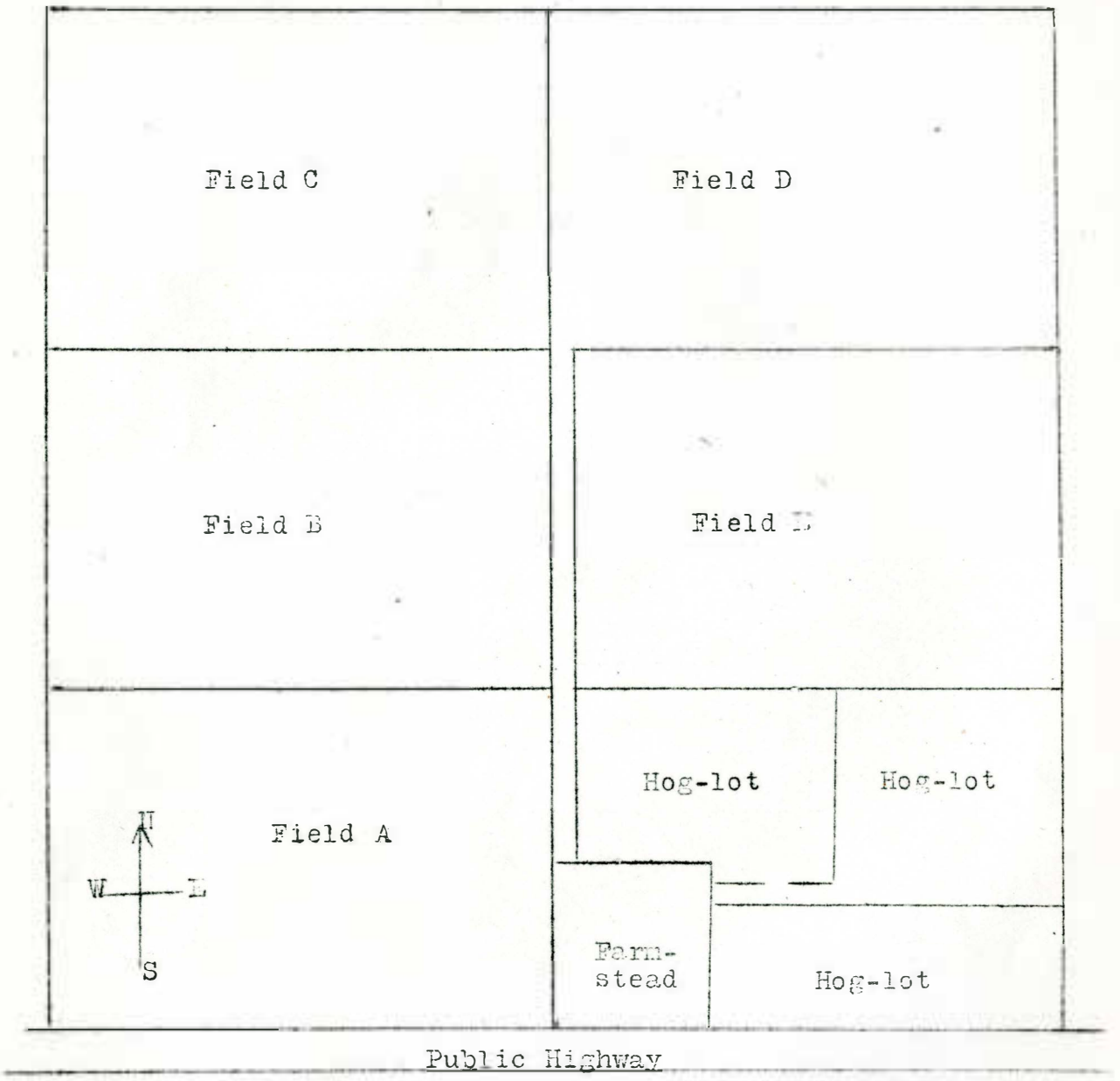
Shelter is a prime requisite for feed-yards, as is also good drainage and sunshine. Buildings make the best shelter and high-board fences can often be used to connect two or more buildings to increase the size of the yard and provide additional shelter. Wind-breaks and shelter-belts are helpful as are also straw-stacks near the barn, but they do not take the place of buildings and board fences in providing a warm, comfortable feed-lot for stock on winter days. If a feed-lot faces the south and has a good slope it is doubly sure to be warm and dry.

On the following pages are sketches of two farms showing field and hog-lot arrangement. Study them and then make a sketch of your own farm as it is and another as you would like to have it, making any changes that you think would make for convenience and the saving of time and labor in doing your work.

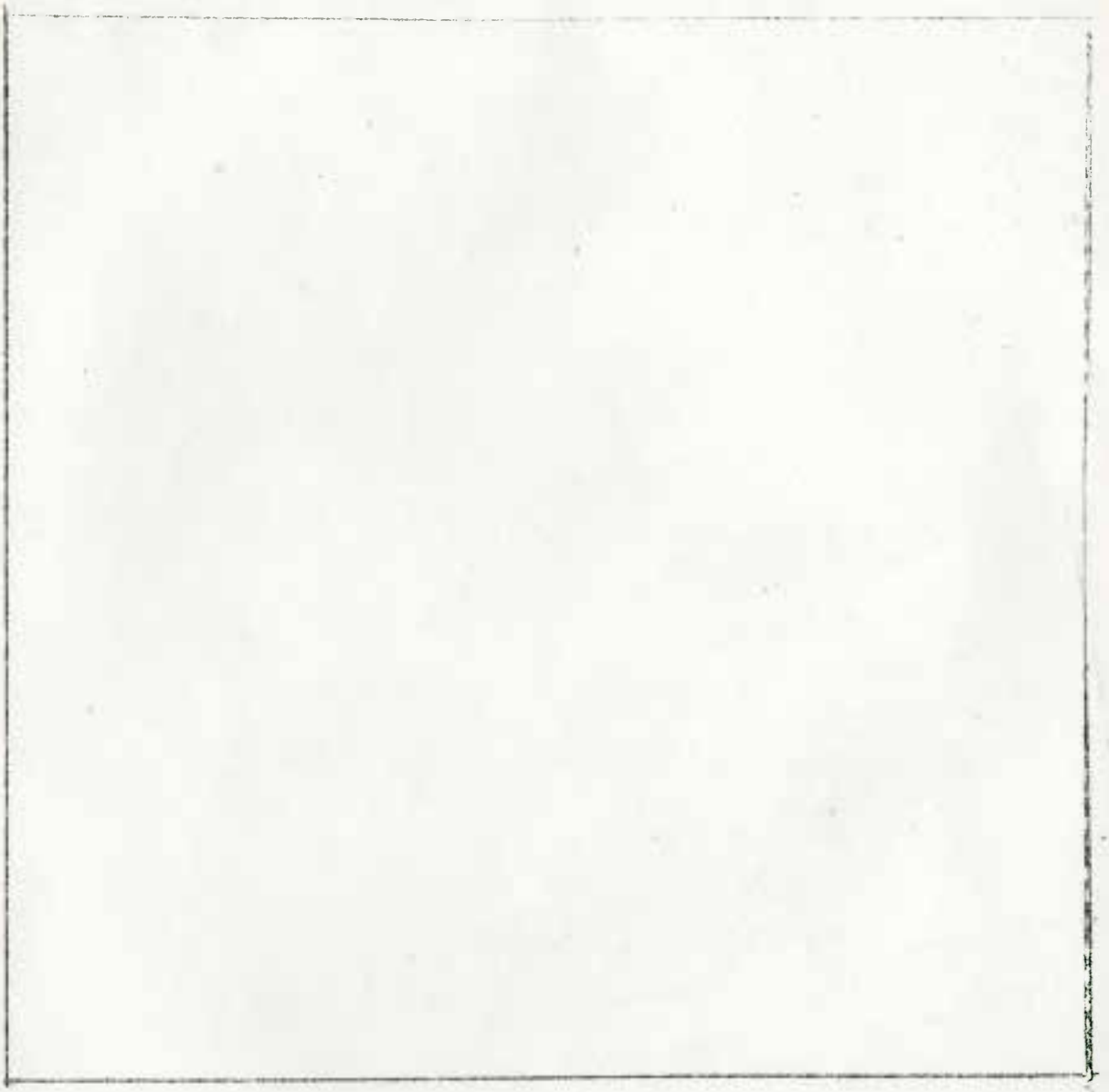
NOTE: A study of farm layout and field arrangement is hardly complete without some reference to the location of the farmstead, the arrangement of buildings, water supply, wind-breaks, garden, and dwelling. A good discussion on these subjects is found in Farmers' Bulletin No. 1132, "Planning the Farmstead", and club members are urged to read it.



This pictures a very good arrangement of fields, farmstead and hog-lots on a 320-acre South Dakota farm. It contains five 60-acre fields, four 3.5-acre hog-lots and a 6-acre farmstead located on the highway and near the center of the farm. The crops grown last year were: Field A, pasture; Field B, meadow; Field C, corn; Field D, wheat and rye; Field E, oats and barley. Field A is a permanent pasture, Field B is partly native hay and partly alfalfa. The other fields are rotated so that corn is grown on each field every third year and small grain the other two years. The hog-lots furnish plenty of pasture for the pigs that are grown. One lot is planted to flint corn and soy beans, two to alfalfa and the other to a mixture of oats, barley, rape and peas.



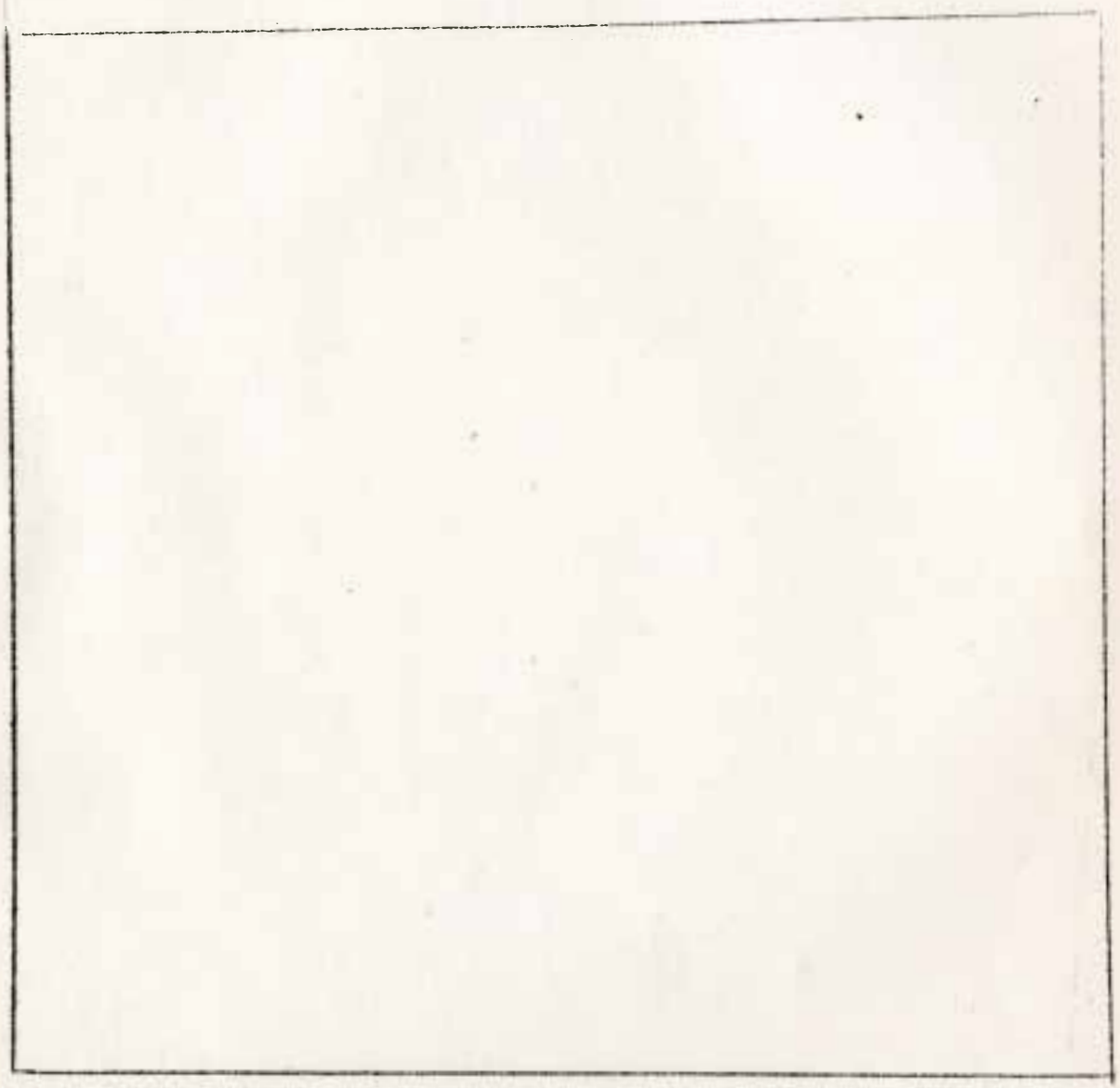
This sketch shows a suggested field and hog-lot arrangement for a 160-acre farm in South Dakota. It contains five 27-acre fields, three 6-acre hog-lots and a 7-acre farmstead. The cropping system suggested for the farm on the preceeding page might be used here, or, if fielf A and the hog-lots would furnish enough hay and pasture for the stock, then two of the other fields could be planted to corn and the other two to small grain. This would require plowing of these fields only every other year. The hog-lots might then all be seeded to alfalfa or some other legume and used as pasture for cattle as well as hogs.



Sketch your farm showing location of fields, farmstead and hog lots.

Compare your sketch with those on the preceeding pages. Could your fields and lots be re-aranged so as to:

(a) Shorten the distance from farmstead to fields,
(b) Lessen the amount of fencing required, or
(c) Make for convenience in doing chores and in the use of machinery?



On this page sketch your farm as you would like to have it, making any changes from your present plan that you think would save time and labor in doing your work and thus make for greater efficiency and economy in operating the farm.