

NEBRASKA TECHNICAL NOTE

U. S. DEPARTMENT OF AGRICULTURE



SOIL CONSERVATION SERVICE

December 1980

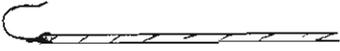
Agronomy Technical Note No. 92
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GUIDELINES FOR COLLECTING CROPLAND YIELDS

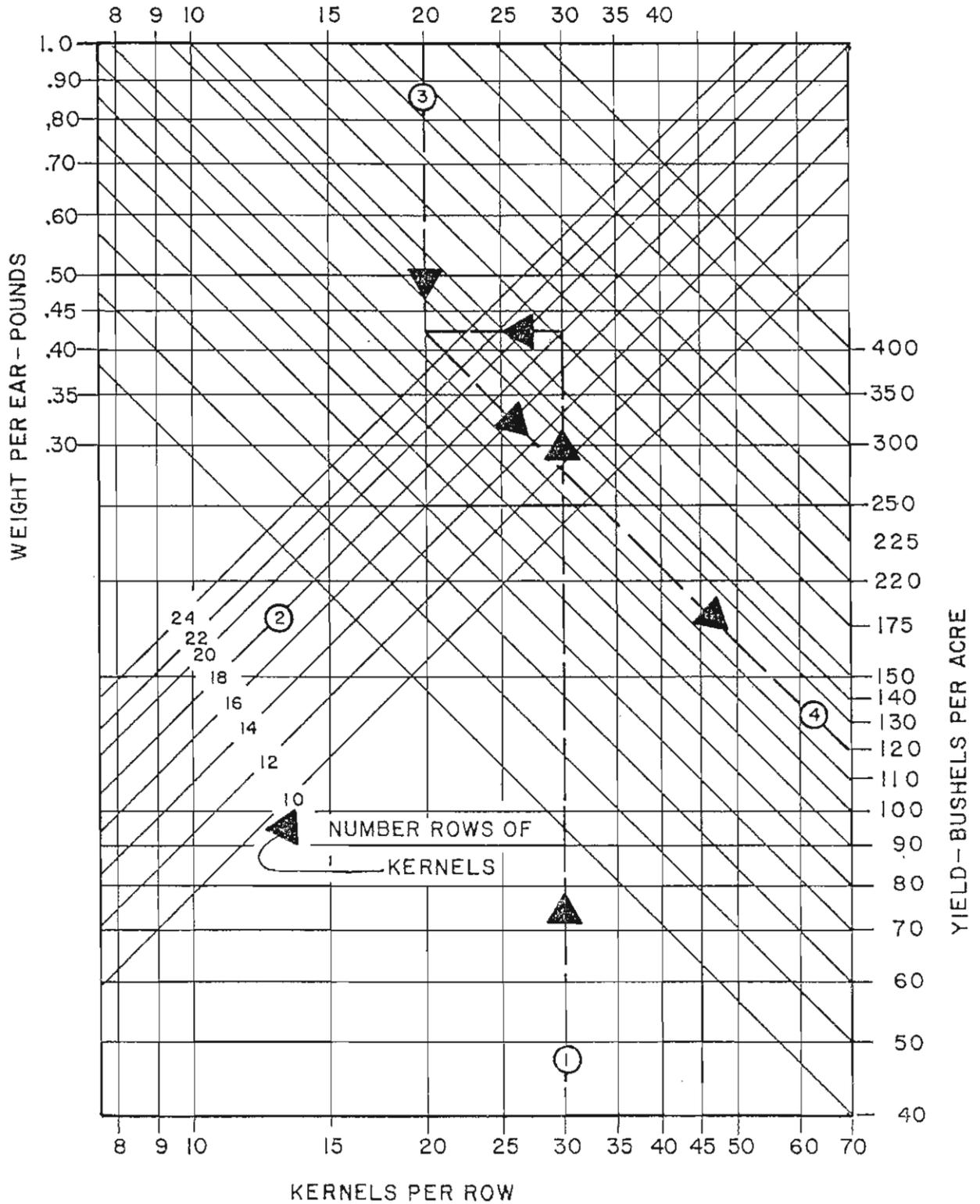
The Soil Conservation Service has need of knowing the crop yields of the various soil series in Nebraska. Soil interpretations for cropland soils, cost-return information for conservation practices, and assistance in land classification are some of the needs for this information.

It has been difficult to get accurate information from farmers, especially when the crop field will have two, three, or more soils in one field. The farmer can generally provide yield information on the entire field, but usually is unable to provide the yield for each soil series in the field.

The crop yield estimator and chart on the following pages can be used to determine corn yields from small samples. This chart is an adaptation from the slide-rule corn yield calculator of the University of Illinois Extension Service.

Ear Population	Ear Size	Yield Estimate												
<p>Measure 1/1000 acre. Make a soft wire hook with a string attached to it, so that its overall length is equal to 1/1000 acre for your row spacing. Use this device to check ear population at several locations in the same soil mapping unit. Make at least one check for each 5 acres. For each check, place the hook around a stalk and count the number of good ears to the end of the string.</p>  <p>Length = 1/1000 acre →</p> <p><u>Row Spacing--Length</u></p> <table> <tr><td>42"</td><td>12'5"</td></tr> <tr><td>40"</td><td>13'1"</td></tr> <tr><td>38"</td><td>13'9"</td></tr> <tr><td>36"</td><td>14'6"</td></tr> <tr><td>32"</td><td>16'4"</td></tr> <tr><td>30"</td><td>17'5"</td></tr> </table>	42"	12'5"	40"	13'1"	38"	13'9"	36"	14'6"	32"	16'4"	30"	17'5"	<p>Starting at the hook end, select and determine the size of the 2nd, 6th, and 10th ears within each 1/1000 acre plot.</p> <p>Count the rows of kernels and kernels per row for each ear.</p> <p>Do not count large butt kernels or tip kernels less than 1/2 size.</p> <p>Record the three ear sizes and the ear population for each 1/1000 acre check.</p>	<p>Use chart to determine the yield for each of the three ears.</p> <p>Yield for each 1/1000 acre check plot is the average of the three ears within that plot.</p> <p>Yield for the soil mapping unit is the average of all check plots in the mapping unit.</p> <p>Yield estimates and ear sizes are based on 15½% moisture corn with some allowance for harvesting losses.</p> <p><u>NOTE:</u> Ear weight in pounds per ear is provided at left side of chart.</p>
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EARS PER ACRE - THOUSANDS



- EXAMPLE -
- ① 30 Kernels per row
 - ② 18 Rows of kernels
 - ③ 20,000 ears per acre
 - ④ Yield = 120 bushels per acre