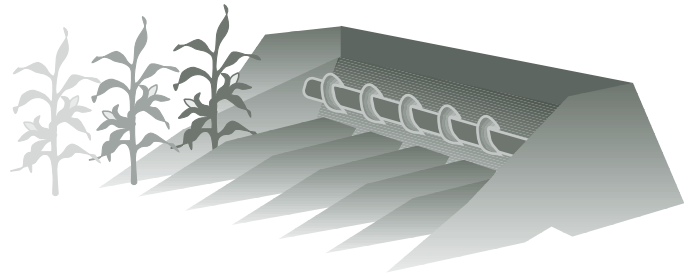


Fieldwork Days in Iowa



The number of days available to complete tillage, crop protection, planting, and harvesting is an important consideration in selecting farm machinery. A large set of machinery will complete fieldwork quickly, but will have high depreciation, interest, and other ownership costs. A smaller machinery set will cost less to own, but may not complete the job on time some years, which could lead to crop losses from late planting or harvesting.

The size of machinery that can accomplish the necessary work most efficiently depends on how many days it can actually be used in the field. This publication contains estimates of the number of suitable fieldwork days that can be expected in each of the nine crop reporting districts in Iowa, based on weekly records kept by the Iowa Agricultural Statistics Office from 1958 through 1995.

Estimates are listed for each week, and for multiweek periods corresponding to the times major field operations are normally performed. The values shown are the median number of days reported each week. There is a 50 percent chance that more days will be available in a given year, and a 50 percent chance there will be fewer. If fieldwork will not normally be done on Sundays or holidays, subtract 0.7 days per week.

Once you have determined the number of days that you can expect to be able to perform fieldwork, the

minimum daily machine capacity that is needed can be computed. For example, in northwest Iowa between April 30 and May 13, you can expect 4.8 plus 4.7, or 9.5 suitable field days.

If you have 1,600 acres of corn to plant, you would need to be able to plant $1,600 \div 9.5 = 168$ acres per day in order to finish on time. If the planter can be operated 14 hours per day, a planter large enough to plant 12.0 acres per hour is needed ($168 \text{ acres} \div 14 \text{ hours}$).

Iowa State University Extension publication PM 696, *Estimating Field Capacity of Farm Machines*, can be used to estimate the number of acres that can be completed per hour for different types and sizes of machines.

Publication PM 952, *Farm Machinery Selection*, can be used to estimate the total number of field days required to complete a **series** of machinery operations, such as tillage and planting. These estimates can then be compared to the number of expected field days from this publication to test whether your machinery capacity is adequate for timely planting and harvesting.

The actual number of suitable field days can be quite variable from year to year. Figure 1 shows the distribution of field days recorded for the April 2 to June 3 period. Eight percent of the time there were fewer than 20 days available. Figure 2 shows similar data for fall weather, which was less variable than spring.

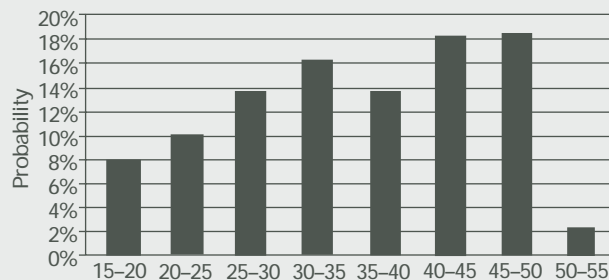


Figure 1. Number of suitable field days statewide from April 2 to June 3 (63 days)

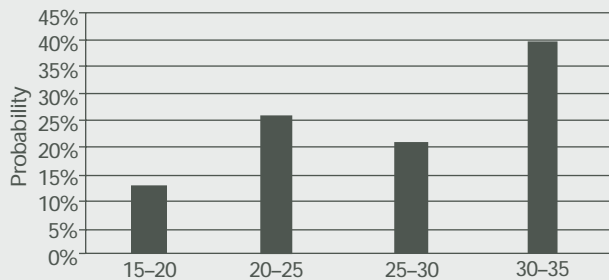


Figure 2. Number of suitable field days statewide from September 17 to October 28 (42 days)

Estimated Number of Days Suitable for Fieldwork in Iowa

Median Values, by Crop Reporting District

Week	Median Values, by Crop Reporting District									
	Northwest	North Central	Northeast	West Central	Central	East Central	Southwest	South Central	Southeast	State
2-Apr to 8-Apr	2.6	1.1	2.0	3.4	3.1	2.6	3.8	2.8	2.5	2.8
9-Apr to 15-Apr	3.3	2.7	3.0	3.8	3.8	3.2	3.8	2.5	2.7	3.3
16-Apr to 22-Apr	4.3	3.7	3.7	4.4	3.9	3.7	4.6	3.2	2.8	3.7
23-Apr to 29-Apr	4.2	3.9	4.2	4.4	4.0	3.9	3.9	3.2	3.5	3.7
30-Apr to 6-May	4.8	4.4	4.7	4.6	4.1	4.4	3.8	3.7	3.9	4.4
7-May to 13-May	4.7	4.2	4.6	4.8	4.1	4.7	4.5	3.9	4.6	4.3
14-May to 20-May	5.0	5.2	5.4	5.3	5.4	5.1	5.5	5.0	5.0	5.2
21-May to 27-May	4.8	4.7	4.9	4.8	4.6	4.8	3.7	3.4	4.2	4.5
28-May to 3-Jun	4.8	4.5	4.6	4.4	4.6	4.8	4.4	3.7	4.2	4.5
4-Jun to 10-Jun	5.5	4.9	5.3	5.5	5.5	5.4	5.6	5.3	5.3	5.2
11-Jun to 17-Jun	5.6	5.3	5.6	5.2	5.3	5.1	5.1	4.8	5.4	5.1
18-Jun to 24-Jun	5.4	5.5	5.6	5.3	5.5	5.3	5.3	5.5	5.1	5.4
25-Jun to 1-Jul	5.5	5.2	5.4	5.9	5.3	5.6	5.8	6.2	5.3	5.6
2-Jul to 8-Jul	5.6	5.8	6.0	5.7	5.5	5.7	5.8	5.5	5.3	5.5
9-Jul to 15-Jul	5.6	5.4	5.4	5.9	5.3	5.2	5.8	5.5	5.6	5.6
16-Jul to 22-Jul	5.5	5.6	5.5	5.9	5.8	5.5	5.8	5.9	5.8	5.6
23-Jul to 29-Jul	6.0	6.0	6.1	6.0	6.2	5.6	6.0	5.9	5.3	6.0
30-Jul to 5-Aug	6.0	5.9	5.9	5.7	5.9	5.5	5.7	5.5	5.7	5.8
6-Aug to 12-Aug	5.7	5.9	5.5	5.9	5.8	5.6	5.8	5.9	5.8	5.7
13-Aug to 19-Aug	5.9	6.1	6.2	6.3	6.1	6.0	6.0	5.9	6.0	6.0
20-Aug to 26-Aug	5.5	5.7	5.8	5.9	5.6	5.9	5.5	5.8	5.6	5.7
27-Aug to 2-Sep	5.8	5.7	5.7	5.6	5.7	5.9	5.9	6.0	5.6	5.7
3-Sep to 9-Sep	5.6	5.6	5.8	5.7	5.7	5.4	5.3	5.6	5.3	5.6
10-Sep to 16-Sep	5.1	5.4	5.5	5.2	5.4	5.5	5.4	5.4	5.5	5.5
17-Sep to 23-Sep	5.2	5.4	5.3	5.4	5.7	5.7	5.6	5.4	5.4	5.4
24-Sep to 30-Sep	5.8	5.8	5.9	6.0	5.7	6.0	6.0	6.2	5.7	5.7
1-Oct to 7-Oct	5.8	5.7	5.5	5.6	5.6	5.4	5.4	5.3	5.3	5.4
8-Oct to 14-Oct	5.6	5.6	5.8	5.6	5.5	6.2	5.8	5.7	5.9	5.7
15-Oct to 21-Oct	5.7	5.8	5.6	5.8	5.6	5.8	5.4	5.4	5.2	5.5
22-Oct to 28-Oct	6.1	6.4	6.1	6.2	6.2	5.9	6.3	5.9	6.0	6.1

Period	Northwest	North Central	Northeast	West Central	Central	East Central	Southwest	South Central	Southeast	State
2-Apr to 3-Jun	38.8	37.3	37.9	37.4	37.1	37.1	36.1	31.2	29.6	35.5
4-Jun to 16-Sep	75.8	74.8	76.1	75.8	74.5	75.2	73.7	72.9	72.8	75.1
17-Sep to 28-Oct	38.1	38.0	37.5	37.4	37.5	38.6	36.8	37.2	37.0	36.9

Source: Iowa Agricultural Statistics Records, 1958–1995.

Prepared by Mark Hanna, extension agricultural engineer, and William Edwards, extension economist. Originally prepared by George Ayres and David Williams, former extension agricultural engineers.

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