

INVENTORY AND EVALUATION

SOIL AND WATER RESOURCES



SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

July 1972

CLIMATIC DATA

FOR

HARDIN COUNTY

Climatic data for Hardin County was prepared for the Hardin Soil Conservation District by Richard L. Bassett, District Conservationist, Soil Conservation Service.

Precipitation, evaporation rate, temperature, average length of freeze-free season, last spring freeze date, first fall freeze date and plant winter hardiness information was assembled to be used for the following:

1. Animal waste storage facility design.
2. Crop and plant materials selection and planting dates.
3. Resource conservation planning.
4. Public information and education.

The information was obtained from several sources. The source is listed on each sheet.

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PRECIPITATION 1/

INCHES

NORTH CENTRAL IOWA 2/

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1.00	.95	1.92	2.40	3.97	5.00	3.48	3.94	3.24	1.83	1.67	1.01	30.41

CENTRAL IOWA 3/

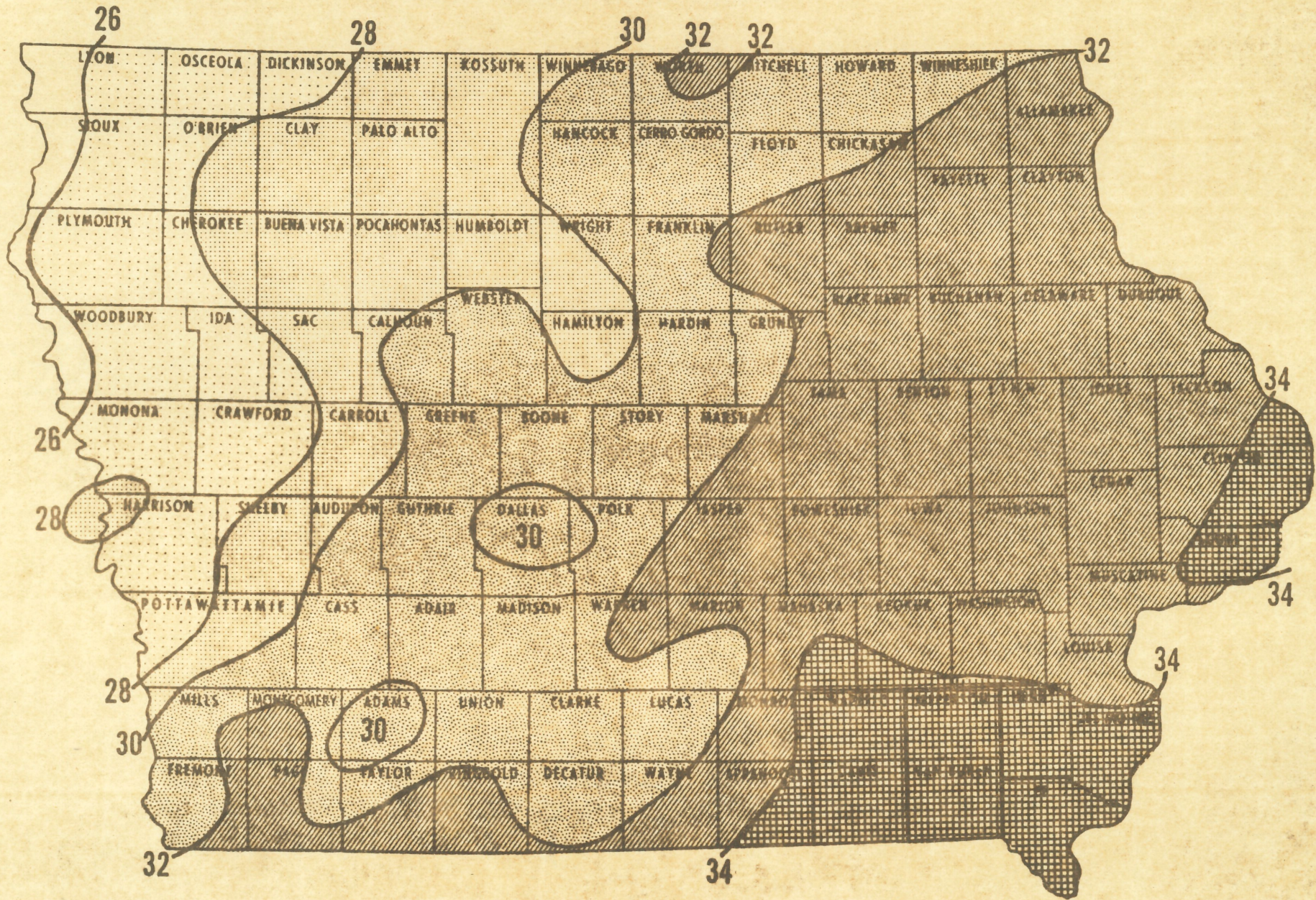
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1.18	1.03	2.04	2.61	4.20	4.95	3.57	3.77	3.28	2.03	1.85	1.12	31.63

1/ Normal rainfall from 1931-602/ Counties: Kossuth, Winnebago, Worth, Mitchell, Hancock, Cerro Gordo, Floyd, Humboldt, Wright, Franklin, Butler.3/ Counties: Webster, Hamilton, Hardin, Grundy, Boone, Story, Marshall, Tama, Dallas, Polk, Jasper, Poweshiek.

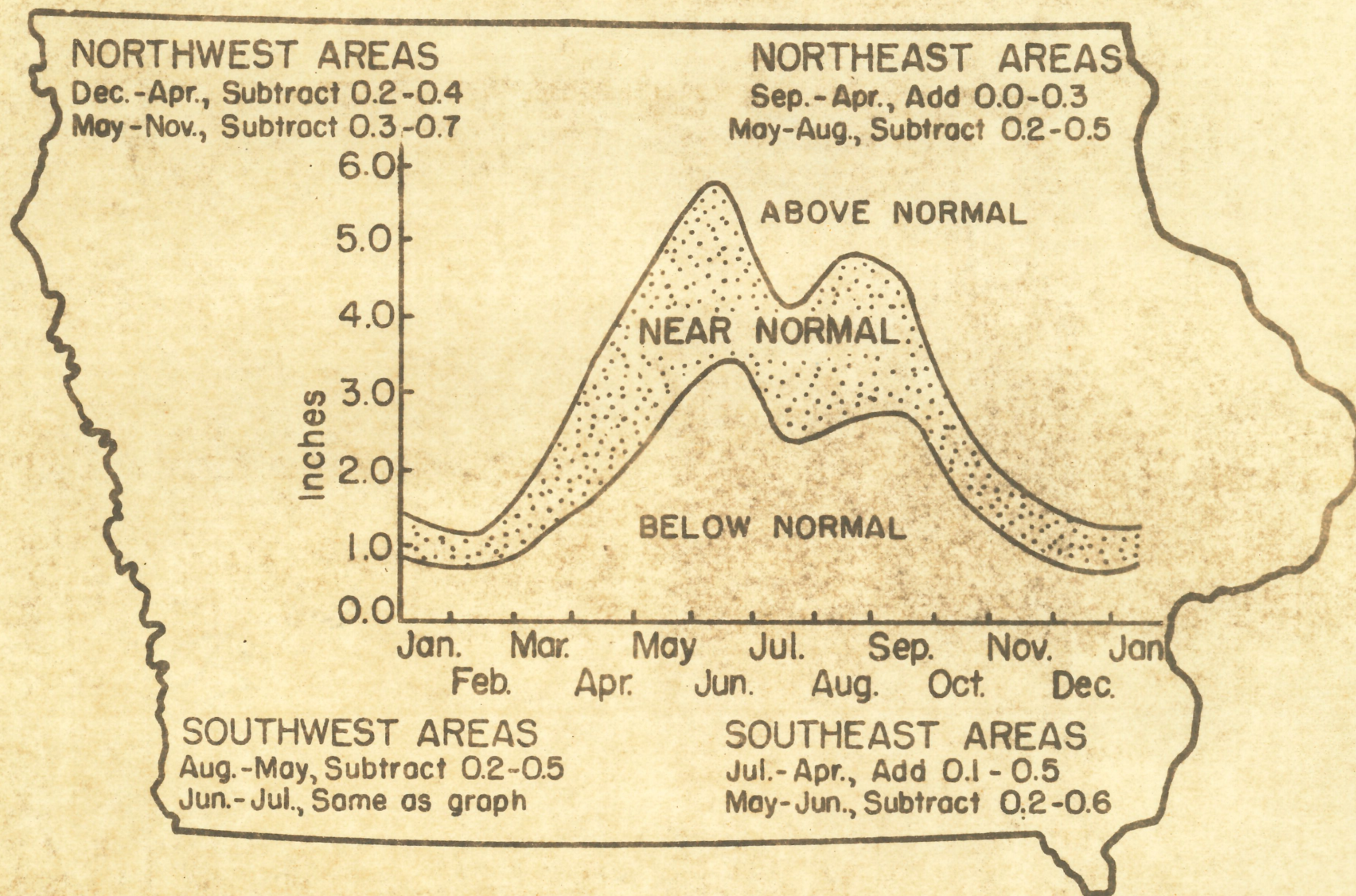
Reference:

WEATHER AND CROPS - 1969 ANNUAL SUMMARY,
 U.S. Department of Commerce, U.S. Department of Agriculture, Agricultural Extension Service, Iowa
 Department of Agriculture, February 1970.

The Climate of Iowa



Annual Precipitation (inches)



EVAPORATION 1/

INCHES

CENTRAL 2/

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1970	-	-	-	-	7.26B	10.27B	8.11B	8.24	7.20	4.72	-	-	45.80
1971	-	-	-	-	8.89B	9.64B	10.02B	6.96B	5.35B	3.58	-	-	44.44

1/ Evaporation, Pan evaporation Rate

2/ Recording Station Located at Ames

B Adjusted to a full month

INFORMATION: National Weather Service
400 US Courthouse
East 1st. and Walnut Steets
Des Moines, Iowa 50309

Carl Orgell
Eldora, Iowa 50627

Reference:

CLIMATOLOGICAL DATA

U.S. Department of Commerce, National Oceanic and Atomospheric Administration, Iowa
1970 and 1971 Annual Summary

TEMPERATURE 1/

OF

North Central Iowa 2/

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
16.9	20.6	31.2	47.0	59.2	68.9	73.7	71.5	62.8	51.7	34.4	22.2	46.6

Central Iowa 3/

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
20.5	24.3	34.6	49.4	60.9	70.6	75.3	73.2	64.8	53.8	37.0	25.5	49.2

1/ Normal Temperature from 1931-602/ Counties: Kossuth, Winnebago, Worth, Mitchell, Hancock, Cerro Gordo, Floyd, Humboldt, Wright, Franklin, Butler.3/ Counties: Webster, Hamilton, Hardin, Grudny, Boone, Story, Marshall, Tama, Dallas, Polk, Jasper, Poweshiek.

Reference:

WEATHER AND CROPS - 1970 Annual Summary.

U.S. Department of Commerce, U. S. Department of Agriculture, Agricultural Extension Service,
Iowa Department of Agriculture, February 1971.

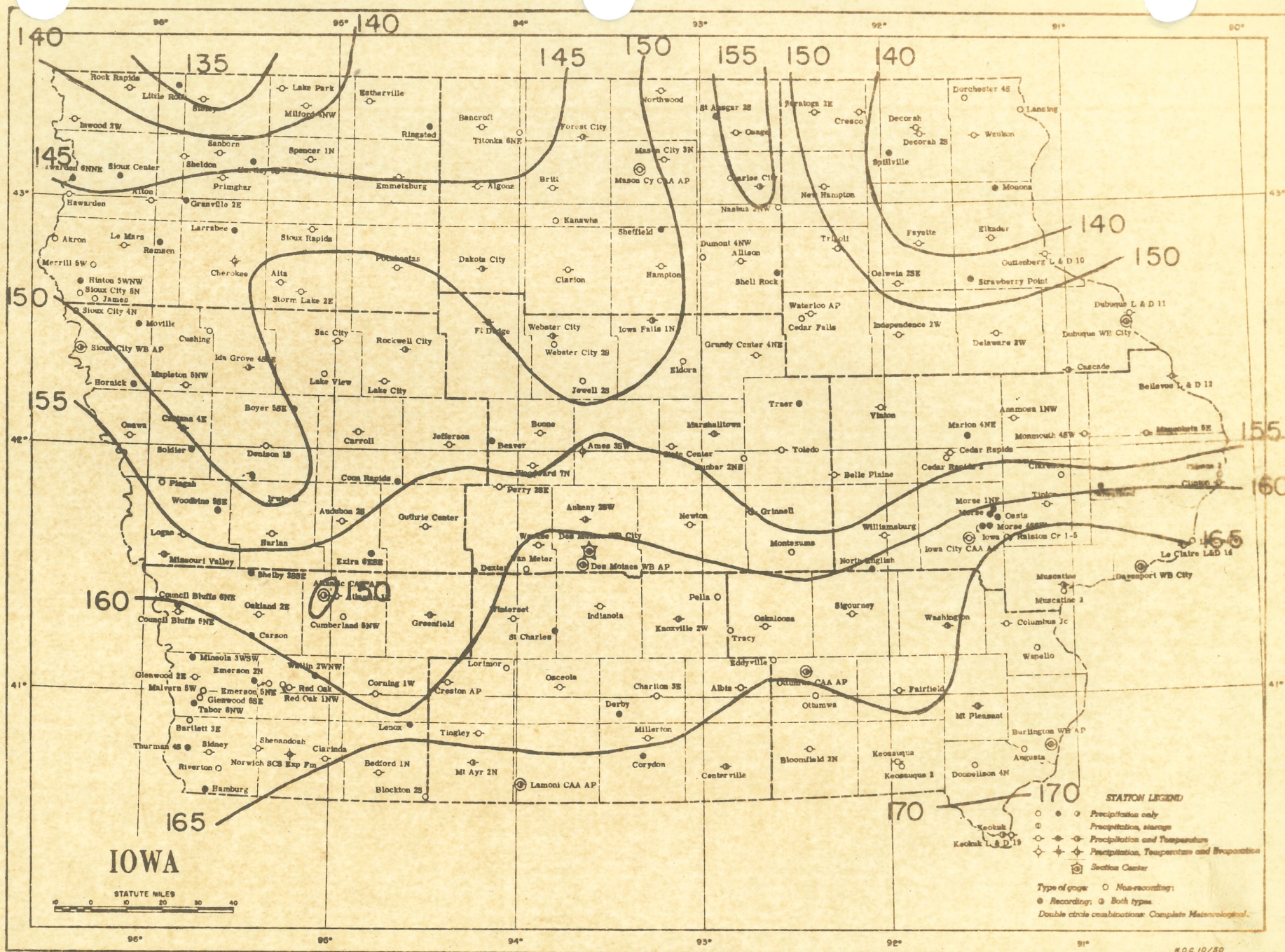


Fig. 11. Average length of freeze-free season in Iowa.

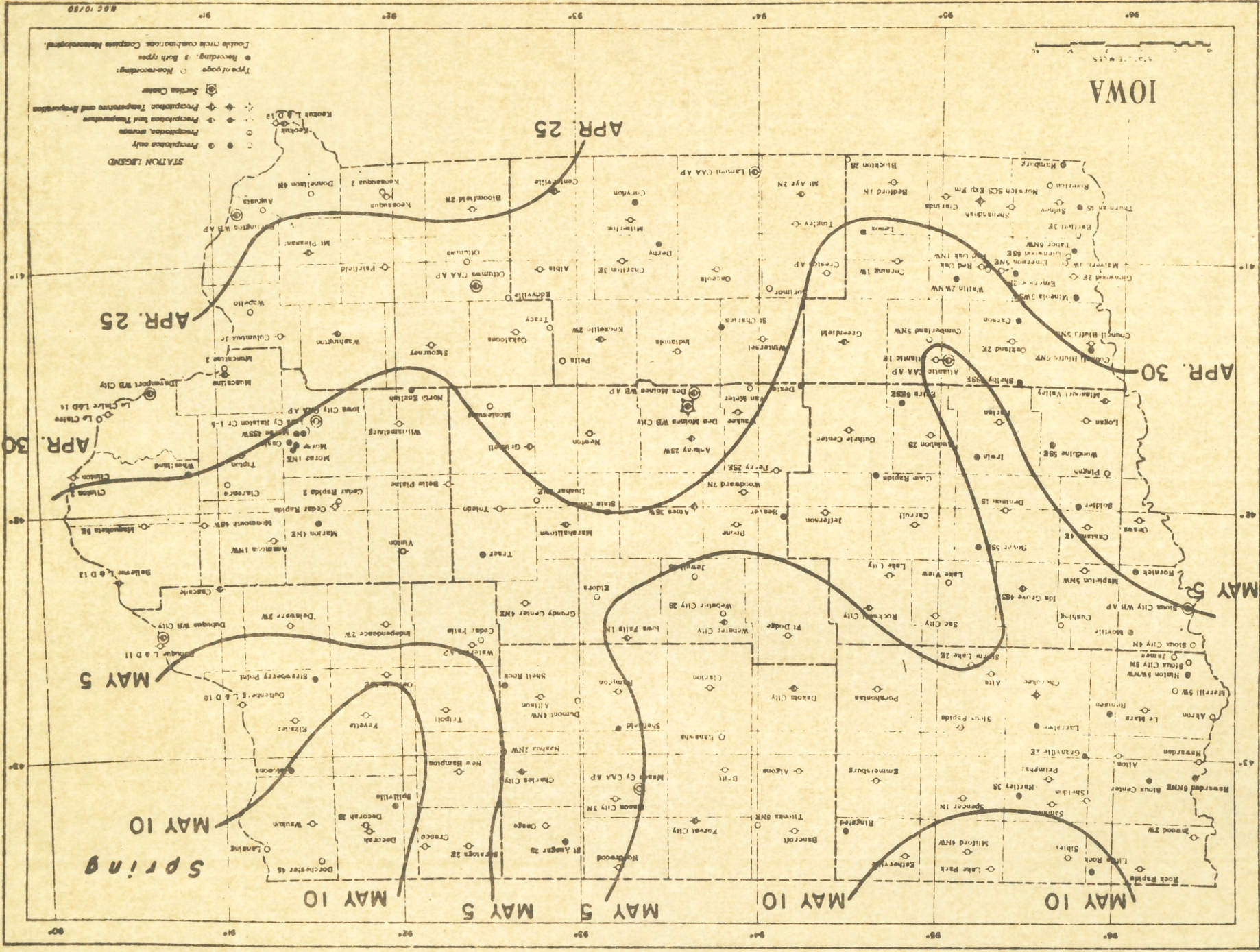


Fig. 3. Mean date of last 32° F. freeze in spring.

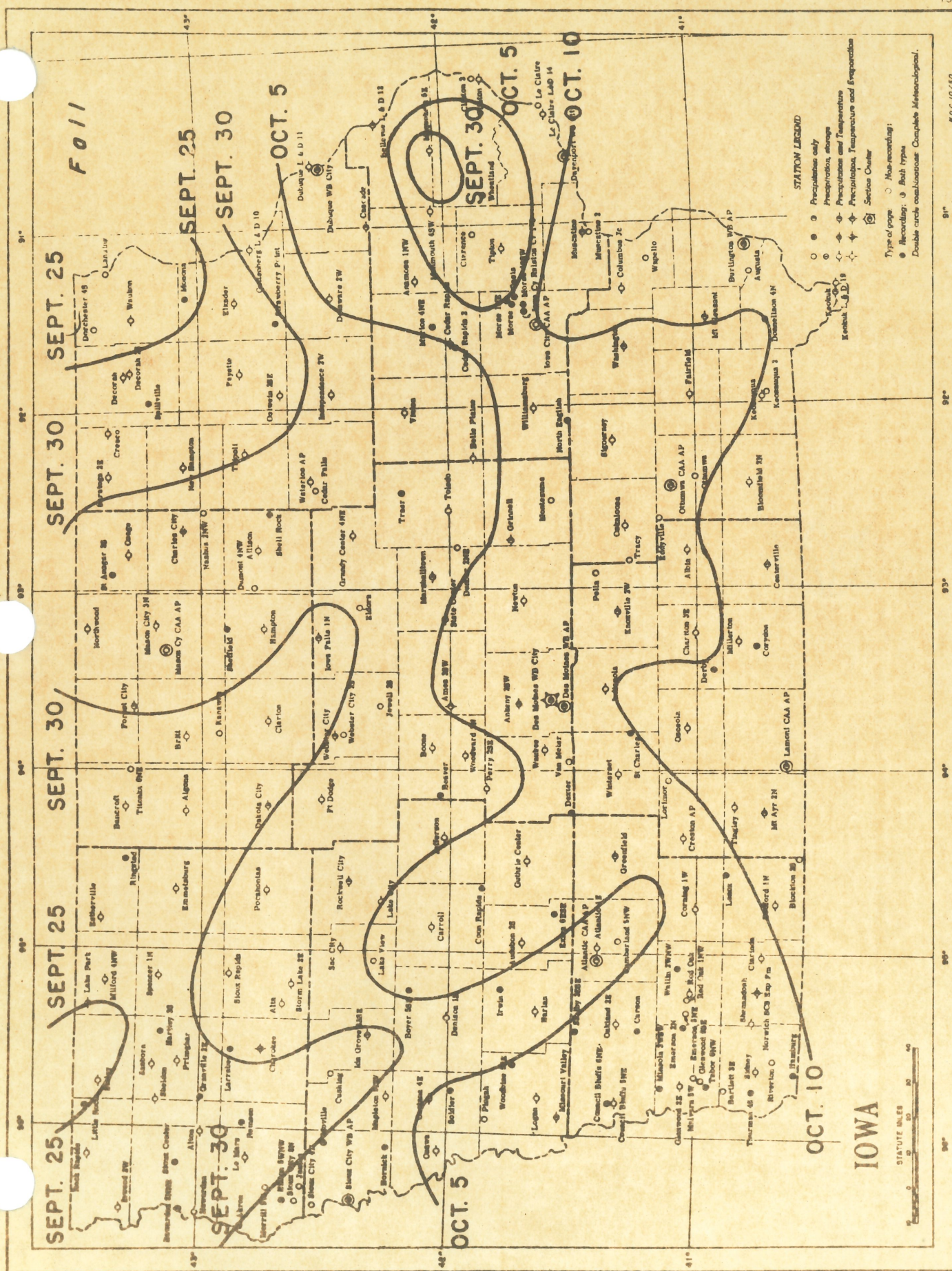
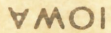


Fig. 4. Mean date of first 32°F. freeze in fall.



SCALE - STATUTE MILES
0 10 20 30 40

U.S. Soil Conservation Service, August 1971

Zone 4b	-20-25 degrees F.
Zone 5a	-15-20 degrees F.
Zone 5b	-10-15 degrees F.

PLANT HARDINESS ZONES

AVERAGE ANNUAL MINIMUM TEMPERATURE

59

95

dg

4b

NOTES:

Evaporation rate from a lake is 0.70 of pan evaporation rate.

Reference: Agricultural Engineering Department - ISU

Evaporation rate from a lagoon is 0.75 of pan evaporation rate.

Reference: Now Conducting Research, Agricultural Engineering Department, ISU.

