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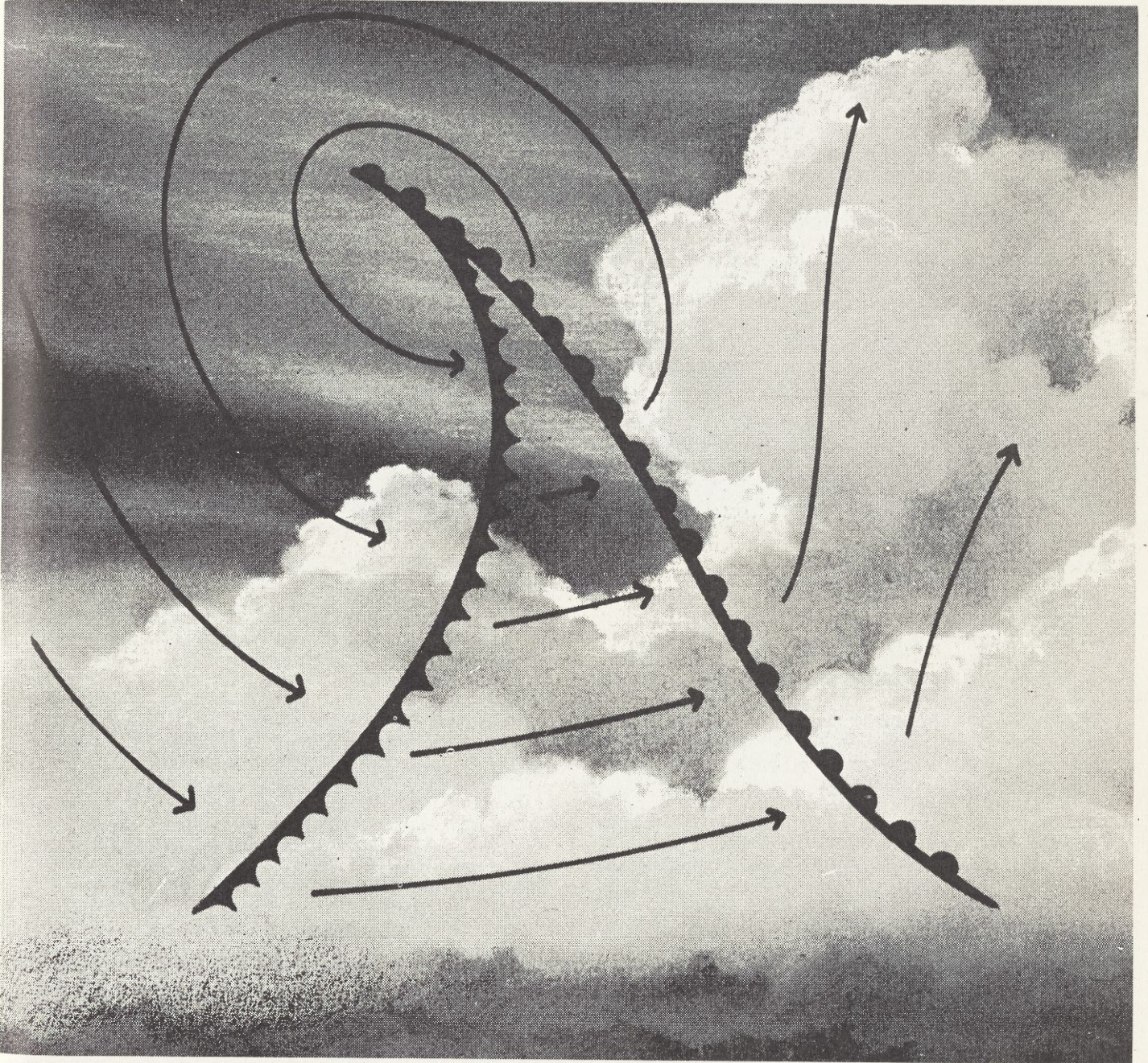


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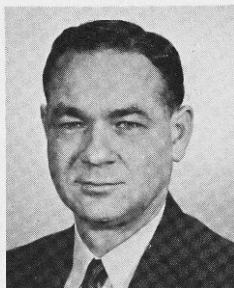
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May - June, 1968



Probability of Wet or Dry Days in North Dakota . . . Page 3

From the DIRECTOR



A. G. HAZEN

Of the numerous climatic factors which influence decision-making relative to crop production in North Dakota, precipitation has a dominant role.

With a knowledge of stored soil water at seeding and information on prospects of receiving a given amount of precipitation during the growing season, farmers are better equipped to make decisions that are moisture dependent. The amount of precipitation influences not only day to day decisions, but also decisions involving practices covering longer periods of time.

The amount and distribution of precipitation during the crop growing season generally is such that supplies stored in the soil during the nongrowing season are needed for satisfactory crop production. To improve chances of storing ample water in the soil, many farmers practice summer fallowing. An article in this issue deals with this topic.

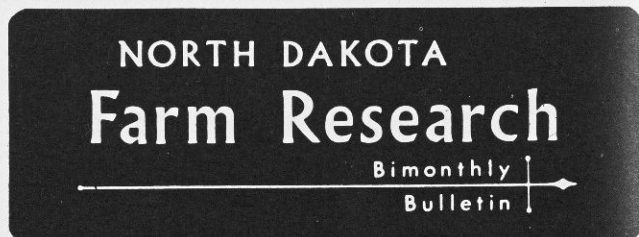
Research at this station in recent years has demonstrated the relationship and importance of stored water at seeding and precipitation during the growing season on yield response to fertilizers. The data show that less growing season precipitation is needed when the soil is well supplied with water at seeding to effect a yield response to fertilizer.

Estimating the amount of stored water present at seeding can be done by the producer, but he has no way of knowing what the future holds in terms of receiving a given amount of precipitation over a given time period. However, a bulletin being prepared by the Environmental Science Services Administration (ESSA) and the Soils Department, based on long-term precipitation records, provides information about the probabilities of receiving a given amount of precipitation over a given period of time. These probabilities are based on an expanded analysis of the same type of data used in determining wet-dry day probabilities. Examples of uses of wet-dry day probability data in decision making are presented in an article in this issue. Such wet-dry day probabilities can be used to indicate what the chances are of precipitation during tillage operations conducted in summer fallowing, initial tillage of seedbeds, seeding or other operations during a growing season.

In This Issue

Probability of Wet or Dry Days in North Dakota	3
Evaluation of Fallow to Increase Water Storage for Dryland Wheat Production	6
The Rise in Farmland Values Continues	10
Effect of Seeding Date on 3 Malting Barley Varieties In North Central North Dakota	13
Toxicological Analyses of Dogs and Cats	16

On The Cover: A summer storm moves over North Dakota. The first turbulent cumulus clouds are already boiling. Above them are visible wisps from the distant thunderhead's anvil top, streaming out ahead of it. The storm is about five miles away, and within minutes the quiet will be broken by a stir of air. The fresh smell of rain will arrive with a shift in the wind before the storm breaks.



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