

# Lessons of an Adverse Season



*This Year's Experience Emphasizes the Mistake of Seeding Too Early—By Seager Wheeler*

THE season of 1918 will long be remembered as one of the most disappointing, especially as an extra effort was made to crop a large area. The season opened up early, and expectation ran high for a big yield. Every season brings its lessons, and the lessons of 1918 may well be taken, and to some extent we may very materially benefit, provided the lessons are well learned and future operations regulated accordingly, so as to avoid errors of the past. Errors have been made this season unwittingly, and I shall try and point out where this was the case.

#### A Combination of Disasters

In many instances the summerfallow, and fall plowing crops have made a poor showing in comparison with the spring plowing and stubble sown crops. This season may be called an abnormal season. We often speak of normal seasons, but they are the exception rather than the rule. Abnormal seasons are the rule, rather than the exception, and 1918 will stand out as an abnormal or freak season. The outstanding features were spring frost, high winds, drifting of the soil, and drought; a bad combination of forces seldom met. Sometimes we have one or the other, but seldom all together. The spring opened up early with little or no precipitation of moisture. Throughout April, May and June, and in many districts during July, frosts cut down the early grain, and were followed by drought and continual winds. The frost damage was insignificant in the early stage of the crops if rain had fallen, or if the damage had not been aggravated by high winds. The high winds would not have affected the situation so badly if the frost had not cut down the grain at the time. The grain that was cut down did not recover in time, and the ground being bare allowed the wind to play havoc with the crop. Had rains fallen immediately after the crop was cut down by frost, the effect of the winds would not have been so severe, but this combination of forces kept the crop in check and hindered recovery until too late in the season.

Many fields never recovered, and are bare or plowed up or sown to other crops. Where the grain did recover the continued drought hindered growth, and the crop was kept in check and forced into head while short, in some cases too short to properly harvest. Where rains came in July some fields were benefitted as this lengthened the stem somewhat, but in some cases this did not occur as the crop was too far gone.

#### What Caused the Most Damage?

In some seasons we have spring frost when the crop quickly recovers by rain

falling soon after. In some seasons drought is a drawback. In other seasons the soil drifts, but the crop quickly recovers, even when the soil exposes the roots, and the crop is excellent. But I cannot recall any season that can be likened to 1918. I find that some lay the blame to the drag harrows in using it on the fallow previous to seeding, and too frequent use of the fallow the previous season. I agree with the latter, but not with the former. I am no advocate of its free use throughout the summer. After the first harrowing after the fallow is plowed, a light cultivation by the spring tooth cultivator, leaving the field thus, is more advisable. Some men have told me that they have stacked away their drag harrow and do not intend to use them this season.

The drag harrow is not to blame. Many are apt to jump to false conclusions too quickly by only looking on the surface of things, and not getting nearer to the root of the matter.

Fall plowing also is not responsible for a poorer showing than the spring plowing. Fall plowing never ought to be seeded early, and may well be left unsown until the fallow and spring plowing is finished. Neither the drag harrow, fall plowing, summerfallow, spring frost, drifting soil, or drought, are so responsible as too early spring seeding.

Drought is more responsible for reduced crop yields than either spring frost or high winds, but drought could have been largely overcome by delaying the seeding of the crop until the middle or third week in April. The spring frosts and drifting wind and drought would not have had so much effect.

#### Some Previous Lean Years

I am firmly convinced that the main cause of so much crop failure this season is due to too early seeding. This conviction is backed by my experience and close observations in the past in the field. Unless it were so I would not pen this article, and am now doing so with the sole object of pointing out the unwise practice of seeding too early when the spring opens up early, so that one may take a lesson that may be profitable in the future. Referring back to 1906, 1910, 1914, 1918, at intervals of four years, we have had reduced crop yields owing to spring frosts and drought when the spring opened up early. In 1906, the spring opened the first day of April when seeding was general, while in this district we had rains early in June to give a good crop.

On my own farm, owing to circumstances, my own seeding was delayed well into April. I have no record at hand as to conditions generally over the country, but know of some districts where the crop was very light owing to drought. In 1910, the spring came in at the end

of March, and the crop was frozen down several times. Little rain fell until early in July, and although the crop was forced into head in June, rains that fell in July helped the crop considerably. In 1914 there was also an early spring, and a light crop.

Following 1910, in 1911 we had abundant moisture. Following 1914, 1915 gave a record crop. In all probability 1919 will show more general rainfall.

#### The Right Time to Seed

There is no guarantee that an early spring will give a record harvest, rather otherwise if seeding starts too early, which has generally been followed in the past. There is a proper time to put the seed in the ground, and that time is when conditions are favorable for rapid, quick, growth in the early stage. The question may well be put, when is the right time? Certainly not at the end of March, or too early in April.

We all know that in order to escape the fall frosts and rust, it is advisable to sow early, in order to bring the crop to maturity in good time, but sowing the seed too early will not guarantee an early harvest, or a good crop or a safe crop. This is regulated by the growth of the crop. If anything happens to check the growth it delays maturity, reduces the yield, and sometimes the quality of the crop. Considerable areas were seeded too early this spring where the snow left the field in March. Grain sown at the time, or early in April, is going to be handicapped by the big possibility of spring frosts and drought at a time when the crops ought to be making quick and vigorous growth, from the middle of May to the middle of June. We cannot expect or depend on much precipitation throughout April and May, although sometimes we do have light rains or showers, and sometimes snowfall in May, but they are the exception. April and May is a time of dry and evaporating winds. When the crop is sown at the end of March or too early in April it usually gets a set-back, as the crop when well above ground draws rapidly on the soil moisture, and then drought conditions hinder the necessary growth.

If the grain crop receives a check in the early stage, it suffers, as the heads form while the plant is young, long before it is seen in the shot blade, and the heads will be small. If this happens, no matter what rainfall afterwards, the heads will be no larger.

If drought continues throughout June, then the grain is forced early into head, and, as was the case this season, when only a few inches high according to the condition of the crop, making not only a considerable loss in yield, but also making it difficult to

harvest with the prospect of considerable waste in handling.

#### The Farmer's Many Problems

We have many problems to consider when putting the seed in the ground—drought, spring frost, fall frost, rust. It is a noticeable fact that rust does not affect the crop in dry years such as 1906, 1910, 1914, and there is little probability of it doing so in 1918. These were all seasons where the spring opened up early. Only in late seasons, with abundant rainfall, especially throughout August, and heavy crops may we expect rust to appear. Therefore, when the spring opens early the seeding should be delayed until the proper time. On the other hand in a late spring seeding should be done as soon as possible.

There is no authority who can lay down any exact course to follow as none can foretell the kind of season we may have. The best we can do is to use our best judgment, as no two seasons are alike. Drought may come early in the season and break up at the end, or it may come late in the season. The effect on the crop is different in each case. Preferably I would have it come at the end of the season rather than early, as when it comes early it affects the crop more by checking the growth of the plant in the early stage, by drying out the stools in the formation of small heads, and by reducing the plant to a single stem. When conditions are favorable in the early part of the season, a healthier stronger plant is established with more stems and longer heads. Even light showers benefit, and the crop carries on. If drought comes after it is headed out it will stand considerable drought, and a light rain will be sufficient to bring the crop to maturity, at least with one advantage that the straw is sufficiently long to harvest satisfactorily.

The big thing is to get the plant well established in the early stages up to the time of heading out, and this can seldom be done if sown too early and droughty conditions prevail.

#### The Course to Adopt in Seeding

When the spring opens up at the end of March or early in April, seeding should be delayed until the 15th or 20th of April. The time may be well spent in giving any prepared lands, such as the fallow, breaking or fall plowing, a stroke of the harrows to prevent any crust forming after the snow has gone and to maintain a mulch. When this is done there is little or no evaporation of moisture from the soil. Spring plowing may be carried on and worked down up to the time when it is time to seed the prepared lands. About April 20 this

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