

Hints From a Practical Farmer

By I. D. O'Donnell, Supervisor of Irrigation, U. S. Reclamation Service (Reclamation Record.)

Usually the first crops produced on irrigated land are small grains. This is due to the fact that in the locations of our irrigation projects small grains find a natural home, whereas corn and other cultivated crops require special care and experience in maturing of the crops. Also, small grains withstand for shorter periods excesses of drought or water and the inexperienced irrigator is able to secure a crop while he is learning how to irrigate. As the irrigated districts become more firmly established the production of small grains gradually gives place to other crops such as alfalfa, sugar beets, potatoes, fruits and others giving larger returns per acre and the production of small grains is put over on the dry-farming sections.

The ordinary plan of irrigating small grain is by the flooding system where the farm laterals are run on the highest places of the field and the water turned out of these farm laterals to flood or spread over the surface. The exceptions to this plan are in sections where the water supply is limited and where it is necessary to carefully prepare the fields in such manner as to secure the best possible use of all the water. In these cases the border or check system and the furrow system are avoided. In irrigating small grain by the flooding system, first mentioned, more irregular surfaces may be irrigated, but in irrigating by the check, border, or furrow system care must be taken to prepare the fields so that the surface is regular and the water easily controlled.

In producing wheat under irrigation scarcity of water may be overcome by planting fall or winter wheat which makes the best possible use of fall and winter rains and is usually matured by but one irrigation. Grains planted in the spring require from two to four irrigations, depending on the character of the soil and the amount of rainfall during the growing period.

The same methods of irrigation may be applied to wheat, oats, and barley with the exception that over-irrigation is less injurious to wheat than to oats and less injurious to oats than to barley.

The time of irrigation is influenced a great deal by the time of rainfall in the period of growth. Where grain is planted in dry ground in the spring it is necessary quite often to irrigate the field in order to germinate the seed. Some authorities favor irrigating the ground before planting the seed, but the objection to this method is the delay necessary to irrigation and waiting for the soil to get in condition before the seed is planted. By planting and then irrigating, the water immediately hurries the germination of the seed and furnishes moisture necessary for the early growth of the plant. After germination of seed and first growth of the plant the irrigation should be delayed until the appearance of the plant indicates a need of moisture. The plants are naturally a light green; as the need for moisture grows the plants turn a darker green and unless moisture is supplied the dark green turn to yellow and the plants are permanently injured. If possible, it is well to keep an even

amount of moisture available for the plants. The period of most rapid growth comes just about the time of bloom when the plant shoots up, and plenty of moisture should be available at this period. The quality of the grain, as well as the quantity, may be helped by plenty of moisture at the time the grains are forming. If the moisture is shut off at this period shriveled and undeveloped grains will result.

The quantity of water required for best yields of small grains is something each farmer should endeavor to work out as he may under the conditions he has on his farm. Heavy and clay soils require less water for maximum yields than sandy and gravelly soils. Where average conditions exist about 18 inches of water should mature grain well on clay soils; sandy or gravelly soils would probably require 30 or more inches for the same yield. This important fact should be borne in mind—the yield of both grain and straw increases with the application of water up to the amount which the plants need for their best development; if the application of water is continued above this point the yield of both grain and straw will decrease in proportion to the amount of excess water.

Some authorities have put forward claims to the effect that small grains will yield best by a certain program of alternating dryness and moisture. It is believed to be well for the average farmer not to experiment with any such theory, as it is a theory at the best and no one can say definitely just when the soil should be dry and when moist on every farm. The best plan for the farmer is to endeavor to keep available for plants just as much water as keeps them in healthy growth and time his irrigations to the periods when the plants need the maximum amount of moisture.

DAIRYMEN PLAN FORMATION OF COW TESTING ASSOCIATION

To Meet at McCall Ranch on June 16—Will Also Discuss Question of Silo Building.

Many of the dairymen in the Prineville and Redmond districts of Crook county have become greatly interested in the organization of a cow-testing association for the purpose of determining the value of the cows they are milking and of improving on the profits to be derived from their dairies. Should such an organization be affected, a specialist will take charge of the work with these herds and make official tests for one year at an expense of \$1.25 per cow in herds of twelve or more cows and at a

slightly higher cost in herds of less number. The formulating of some plan whereby two small herds may be tested as one will be undertaken.

Prof. F. W. Kehrl, U. S. Dairy Field Agent, will visit Crook county on June 16th and 17th and a meeting of all of the dairymen who are interested in an organization as above outlined or in the building of silos will be held on the ranch of H. McCall, about half way between Prineville and Redmond on the Crooked river on the 16th at 2 p. m. sharp. This will be a good place to discuss all of the phases of the dairy business from the viewpoint of both the expert specialist and the dairyman. Every man with cows should be present and take part in the discussion of the dairy business from this standpoint. It will prove very profitable if all of the dairymen can get together and pull together for the improvement of the dairy business in the county. Come out and get the information regarding the cow-testing association anyway. If you want to see the association organized here, be sure and come and if it is possible, it will be done.

Prof. Kehrl will be in the county on the 17th also but work for that day has not yet been arranged.

Several automobiles will leave Redmond for this meeting at 12:45 and dairymen in this vicinity can catch a ride if on hand at this time. Similar arrangements will probably be made at Prineville. To date, no one from the vicinity of Bend have reported intention of attending but we hope to see some of them on hand. It will pay you to be on hand and learn what you can from Prof. Kehrl, U. S. Dairy field agent, and your neighbor.

A desirable bread knife free with every annual subscription to The Bend Bulletin.

For sign painting see Edwards.—Adv.

ISSUES CORN PRIMER.

The Union Pacific System has recently issued a Corn Primer and premium list for the Corn show to be held at Walla Walla, Washington, on November 22, 23, 24, 25, under the management of the O. W. R. & N. Co. The primer gives instructions for growing corn which are of value to every farmer. Copies may be obtained from C. L. Smith, agriculturist, Portland, Oregon.

See J. Ryan & Co., for farm land loans.—Adv.

Clean up and paint up. See Edwards.—Adv.

A desirable bread knife free with every annual subscription to The Bend Bulletin.

How to Live Long

Rules reprinted by permission of Metropolitan Life Insurance Company from booklet issued by it.

FOOD—RULE 9.

Eat Slowly.

Chew your food until you can swallow it very easily. If you have to force the food down, you have not chewed it enough.

Slip all liquids slowly. Do not gulp them down. Do not take a drink of water while your mouth is full of food.

Some of the best foods are fruits, milk, sour milk, potatoes, bread, vegetables, sugar (if mixed with liquid) and nuts, if they are well chewed.

It is best not to use pepper, mustard, catsup or other "hot" relishes at all.

DO YOU KNOW THAT?

- Rural sanitation is a health protection to the city-dweller?
- It's foolish to educate a boy and then let him die of typhoid fever?
- The U. S. Health Service issues a free bulletin on the summer care of infants?
- Exercise in the garden is better than exercise in the gymnasium?
- Clean water, clean food, clean houses make clean healthy American citizens?
- The state of California has reduced its typhoid death rate 70 per cent in the past ten years?
- Rats are the most expensive animal which man maintains?
- It is estimated that the average manure pile will breed 800,000 flies per ton.

In order to aid the farmer the Bend Flour Mill Co. has this year obtained Apex Lend Plaster, a scientific fertilizer.—Adv.

Four chairs at your service at the Metropolitan. No waiting.—Adv.

See Edwards for paper hanging.—Adv.

Diamonds set while you wait. Myron H. Symons.—Adv.

For farm land loans see J. Ryan & Co. Reasonable rates, prompt service.—Adv.

Expert watch and jewelry repairing at Symons.—Adv.

TO LOCATE TRAILS.

Definite and exact information on the location of pioneer trails and the oldest wagon roads of Oregon is wanted by members of the association in charge of locating and marking permanently these routes of travel. The Oregon geographic board and the Daughters of the American Revolution are co-operating with the department of history at the Oregon Agricultural College in an effort to locate these early travel ways. The Linn chapter is taking an active part in establishing and making arrangements to mark permanently these routes of travel. Anyone having information on the subject may send it to Professor J. B. Horner in care of the Oregon Agricultural College.

No waiting at the Metropolitan for that shave or hair cut. Four chairs now ready.—Adv.

Lenses duplicated. Glasses repaired at Symons.—Adv.

FLIES are carriers of disease seed. Live and breed in all kinds of filth. Infect food and drink by germ laden feet. Each female fly can lay 150 eggs. Should be kept out of dwellings.



This is the package - 20 for 15¢
FATIMA
A SENSIBLE CIGARETTE

WOOD WOOD WOOD

WOOD PROBLEM NOW SOLVED

Lay in your wood supply now at the following prices:
GREEN 16-INCH WOOD \$2.00 PER LOAD
DRY 16-INCH WOOD \$2.50 PER LOAD
DRY 16-INCH PLANER ENDS \$3.00 PER LOAD

THIS INCLUDES FREE DELIVERY

Oregon Transfer Co.
PHONE US NOW—BLACK 451

O'DONNELL BROTHERS
UNION MARKET

We Know How to Swat the Fly

If you want to see a flyless store just drop around. We will not tolerate the appearance of a fly. Our sanitary refrigerator counter keeps our fresh and perishable goods free from contact with dust or flies. The very best of grocery merchandise in the very best of condition may always be purchased at

BAKER'S GROCERY

Wall Street, Near Ohio Phone Red 161

Bulletin No. 3

Why Not Face the Facts About Armor Competition?

To the People:

The policy of the United States Government for many years has made real competition in armor-making ineffective.

The Government might have asked the three armor plants for bids and let the entire tonnage to the lowest bidder. That would have made competition effective.

The result of such a course would have been to drive two of the three manufacturers out of business, and leave the country with facilities of only one plant in time of need.

The Government in fact has always asked for bids from the three manufacturers, but no matter what the price quoted, each year's business was divided among them.

Armor makers serve but one customer—the Government, just as a public utility serves but one customer—a community.

The solution of the public utility problem is regulation of rates.

The solution of the armor problem is for the Government to fix the price.

We voluntarily agree to accept any price fixed by the Federal Trade Commission. Isn't acceptance of that offer better than the destruction of an industry built solely to serve the Government?

CHAS. M. SCHWAB, Chairman
EUGENE G. GRACE, President

Bethlehem Steel Company

For the man who wants to own his own home

Let us show you, for your selection, some of the prettiest lots in Bend. They are level and free from rock and are spotted with lovely shade trees; they are within fifteen minutes walk of either of the big mills and are close to the business district. These lots may be had on terms that are within the reach of all and every assistance will be given our buyers to enable them to build a comfortable home. We will be pleased to show you.

INSURANCE THAT INSURES

We write insurance in all its branches in world known companies and will gladly accept the smallest risk.



Bend Park Company

PHONE 381. OFFICE ON OREGON STREET.