

## Winter Short Course at O. A. C.

(Special to Farm Magazine.)  
**O**NLY a small percentage of Oregon farmers keep books and really know whether or not they make profits. Of course several arrange their banking in such a way that the bank balance partially tells whether their business is being conducted with a profit or loss, but only occasionally are farmers found who can tell exactly which crops are paying for themselves and making profit besides, and which crops are the grand parlor boarders. The books of the general farmer should show accounts with crops, livestock, labor and implements, as well as with investments, interest and depreciation.

The crop accounts should be classified and so kept as to show plainly which are profitable from the income standpoint and which are not. This phase of the work will receive special emphasis at the Winter Short Course of the Oregon Agricultural College, in which other subjects directly and intimately related to it will also receive attention.

### Understanding Feeds.

"The eye of the feeder fattens his stock," says an old adage, but now-a-days if the feeder does not know silage from "S to E," the fattening is likely to be too expensive to leave any profit on the work and investment. There are many other feeds which likewise should be thoroughly understood by the feeder of any kind of stock. All of these will be considered from the standpoint of production, cost, market value, and soil fertility effects, during the annual Short Course. Lectures concerning the general principles of stock feeding with reference to the scientific principles of nutrition will be given during the first week of the series beginning the first Monday in January. This knowledge should enable the stock growers better to appreciate and understand the work given later in the course. The feeding of poultry, swine, horses, sheep, beef and dairy cattle, will be considered in detail by specialists of the faculty who are best qualified by special knowledge of each of the several types of stock and their particular requirements.

### Practicing Cooking.

"What shall I cook for dinner?" Often the Oregon housewife asks herself this important question without knowing where to find the best answer. Yet, on the correct answer to this question depends largely the family income as well as the family expenses, since the wage-earner must have plenty of nourishing food of sufficient variety if he is to maintain his efficiency in office, field or factory. Some very definite help toward finding the answer to the foregoing question will be offered in the work of the Short Course. Two hours each day through the entire four weeks will be spent in practicing cooking by those who are interested in this feature of the work. The purchase, use and nutritive value of foods will be explained by specialists in charge. The preparation of menus and the serving of meals will receive attention. This work will be given in two sections providing both for the experienced and the inexperienced and less skilled, so that each student may receive precisely the desired instruction.

### Farmers Not Specialists.

The great majority of farmers in Oregon are not specialists but are producers of general crops. Special attention will be given to the growing and handling of the pasture, hay, silage and silage crops from seeding to feeding, at the Short Course. The departments interested in such crops will give a complete discussion of silage crop systems and silage making. For many conditions, alfalfa, clover, kale, vetch and corn are especially needed and for such Professor G. R. Hyslop will go into detail and will consider every main point, including inoculation and other special practices.

Certain parts of Oregon are especially suited to the growing of seed crops. Oregon potato growers who can produce disease-free seed potatoes are receiving fancy prices from California growers. In this course Professor Hyslop will give close attention to the best methods for the production of grain and seed crops, such as barley, oats, wheat and corn for grain or for seed; and the production of seed crops of vetch, clover, potatoes, alfalfa and field peas will be discussed from the seed grower's standpoint. A "coming" money crop for Eastern Oregon farmers is the growing of seed from alfalfa and field peas, but special methods must be followed for suc-

cess, and these will be discussed in detail. Practical plant breeding methods for the farmer will be discussed, and to illustrate the principles the students will judge grain, corn and other seeds in the laboratory.

### Soil Requirements.

In conjunction with this study of Oregon's crops, Professors Scudder and Ruzick will present a study of the soil requirements of each crop and the most profitable rotations for each type of farming. They will also discuss the value, preservation and correct use of manures and fertilizers, and the various treatments for acid soils. Oregon is a land of varied soils and there will be lectures, demonstrations and round-table discussions of the good and bad features of each of the chief soil types of the state and the crops and treatment best adapted to each. The fundamental facts relating to the physical problems of the soil, including soil structure, soil moisture, heat and air, soil bacteria, and plant foods, tillage operations, will be presented in lectures, both illustrated and non-illustrated, and by demonstrations in field and laboratory. There will be special laboratory and field practice in sampling and judging soils.

### Work in Soils.

The work in soils will be assisted by the Department of Bacteriology, which will present the results of its experiments in inoculating and liming soils, and other special features of soil management that should be known to every farmer in both Eastern and Western Oregon. The Department of Horticulture will present the question of the proper soils for horticultural purposes.

Illustrated lectures will be given by Dr. W. W. Atwood on the subject of Plant Physiology. Those bearing directly upon the subjects of crops and soils are: "How Plants Draw from the Soil and Make Use of the Materials They Need," "The Relation of the Green Coloring Matter of Plants to Their Ability to Make Their Own Food," "How Plants Increase in Size," and "Rest Periods of Seeds and Plants."

### SOME BREEDERS GET ADVANTAGE.

The man who wants to succeed in poultry-raising must look keenly to his profits. There must not be a loophole anywhere. There are so many chances for leaks that few breeders actually take in the amount of money invested. The man who uses Lice-O has the advantage. His birds lay in season, his chick loss is very low, and his birds develop one-third faster. He is sure of his profits. Lice-O is used in every state on the Coast and is sold under a positive guarantee. A tube large enough to last the average breeder one year postpaid 50c. The Lice-O Co., 286 1/2 Washington street, Portland, Or.—Adv.

### Sugar Beet Industry.

The first beet-sugar factory in the United States was erected in Philadelphia in 1830. It did not prove a success and was dismantled. In 1853 Brigham Young imported a beet mill to Utah from France and Peter Magness set a small one up near Denver in 1860. The first successful factory was built in 1870 at Alvarado, Cal., and was in operation until 1913, when it closed down. It is estimated that \$100,000,000 is now invested in the sugar beet industry of this country. The sugar supply of the American people is drawn from three main sources. These are: Domestic beet sugar produced in 17 states from Ohio in the East to California in the West, with Colorado having more factories than any other state; domestic cane sugar produced in Louisiana, Hawaii, Porto Rico and the Philippine; imported cane sugar produced in Cuba.

### Forgetfulness.

How quietly above this ruined home Wild roses creep, and green vines kindly roam;  
 So do the years above the hearts of grief  
 Lay love's soft covering of bloom and leaf!  
 —Arthur Wallace Peach, in New York Sun.

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