

SUPPLEMENT TO ESTACADA PROGRESS

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The Press Bulletin aims to keep the state press informed in all matters of interest and value related to the work of the Oregon Agricultural College. Editors are respectfully requested to publish for the benefit of their readers such items as they think reasonable and suited to local use.

EXTENSION

DAIRY HERD RECORD MAKES GOOD SHOWING

Oregon Agricultural College, Corvallis, Sept. 13.—The first man here to complete a year's herd record keeping under the supervision of the office of F. W. Kehrli, field dairyman with the U. S. Dairy Division and the O. A. C. Extension Service, is F. A. Baker, of Stanfield, says the *Hermiston Herald*. Some very interesting figures are brought out in these results. The weight of the milk of each cow was taken and recorded at each milking, and a sample taken from the morning's and evening's milking near the middle of each month was tested for butter fat. A record of the feed was also kept.

"Records for the full year are obtainable on nine cows and these proved to be very profitable and show what can be done by systematically weeding out the unprofitable cows. The average milk production per cow for the year was 6410 pounds, while the fat production for this period amounted to 306 pounds per cow. This is an excellent herd average and has been secured by keeping tab on each cow and disposing of the inferior ones.

"An average price of 30 cents per pound was received for the butterfat throughout the year, thus making the average receipts per cow amount to \$92 for the year. The average cost of the feed consumed by each cow for the year's period was estimated to be about \$35, figuring hay and grain at farm prices. This leaves an average net income of \$57 per cow from the sale of butterfat. It is generally figured that the skim-milk and manure will pay for the work of taking care of the cows, thus leaving the above amount as net profit per cow.

"The best cow in Mr. Baker's herd produced 8025 pounds of milk containing 419 pounds of butterfat worth \$126. Her feed was \$39 showing a net profit of \$87 for the year. This cow produced butterfat at a cost of 6.2 cents per pound."

DEMANDS EDUCATED PEOPLE

Young man, if you expect to run your father's farm in years to come, prepare yourself for the business; attend the college maintained in your state for farmer's sons. Young women, if you expect to be a happy wife some day in the future, obtain the industrial training that will best fit you for your life's work; the agricultural college also holds out a helping hand to you. Avail yourselves of the opportunities in life as they present themselves. The future demands people with special knowledge of special work.—*Western Farmer*.

JUDGE HEPPNER FAIR

Three specialists of the Extension Service of the Oregon Agricultural College have been assigned by Director R. D. Hetzel to judge the livestock, horticultural, agricultural and poultry exhibits at the Morrow County

fair Sept. 16-18. Secretary Smead, of the fair board, says that the board is endeavoring to have all matters pertaining to the management of the exhibits in the hands of these and other experts who understand the business and is very much pleased with the selection of the faculty men, who are the following: R. E. Reynolds, livestock; W. S. Brown, agricultural and horticultural; and C. C. Lamb, poultry.

O. A. C. JUDGES BUSY

The week ending September 11 was a very busy one for specialists of the Agricultural College Extension division who were called upon to act as judges of various county and community fairs held in Oregon. E. B. Pitts, W. S. Brown and Miss Anna Turley judged the exhibits of the George community fair and the Estacada East Clackamas fair, Professor Pitts giving a lecture and Miss Turley a demonstration at the latter. These three judges, in addition to Professor A. G. Bouquet and J. E. Larsen, officiated at the Scio Linn County fair; Professors Pitts and Griffin at Medford, September 10; Professor Reynolds at Baker on the same date; and Professor W. A. Barr at the Coos and Curry County fair, Myrtle Point, September 10 and 11.

ALUMNI

STUDENT FORMS PARTNERSHIP

Oregon Agricultural College, Corvallis, Sept. 13.—Congressman C. N. McArthur has sold an interest in his dairy farm near Rickerall, Oregon, to O. B. Stauff, a graduate of dairying at the Oregon Agricultural College. The dairy and Jersey breeding business previously conducted by Mr. McArthur will be continued by the new firm operating under the title of McArthur & Stauff.

Mr. Stauff is a practical dairyman with experience gained on his father's farm in Coos County in addition to his college training. Since graduation he has acted as supervisor of official tests for register of merit work carried on under direction of the College, and bears a favorable name among the dairymen and breeders of the state.

It is the intention of the new firm to develop their herd along certain family lines and in carrying out this idea only about 20 cows and heifers in addition to the herd bull, Holger, will be maintained as a foundation herd. Mr. McArthur's congressional duties will call him to Washington this fall and Mr. Stauff will have entire charge during his absence.

MORE MANUAL TRAINING

Manual training and systematic gymnasium and athletic work have been added to the Heppner public schools, J. W. Motley, an O. A. C. graduate of 1915, in charge. Mr. Motley will install the manual training work, give instruction in physical education, coach athletics and give a portion of his time to high school instruction.

POULTRY

NEW POULTRYMAN AT O. A. C.

A. C. McCulloch of the Poultry Department, Ontario Agricultural College, Canada has arrived at O. A. C. to take up his duties as instructor in Poultry Husbandry in the position formerly held by Prof. A. G. Lunn, who has gone to the Massachusetts Agricultural College as Extension in-

structor in Poultry Husbandry. Mr. McCulloch is a graduate of the Canada College and for the past two years has been instructor there. The Canadian institution has one of the leading poultry departments of the country in charge of Prof. W. R. Graham, one of the foremost men in his line anywhere. Mr. McCulloch is a young man who is highly recommended and will give to his classes the best practical information available.

ENTOMOLOGY

DRIVING THE ANTS OUT OF HOUSE AND HOME

Oregon Agricultural College, Corvallis, Sept. 13.—Ants, particularly troublesome this time of year, may be controlled with considerable success by smearing a mixture of three parts tartar emetic and four parts syrup on bits of china or wood and placing this bait about the runways of the ants. This is a slow-acting poison, of which the ants eat enough to poison themselves and also carry away enough to poison their young. In this way the entire colony may be exterminated.

Where it is possible to locate the colonies outside the house the ants may be exterminated by the carbon bisulphide treatment. For killing off a large, well established colony, about an ounce of carbon bisulphide is required. It is placed in a shallow dish on the opening of the colony runway and covered with a galvanized tub or other vessel that is inverted over the dish. All openings from the colony not covered by the tub should be closed with dirt pressed down slightly. The gas then formed is allowed to act for about six hours, when the treatment is applied to another colony.

The action of the bisulphide is thus explained by Professor A. L. Lovett, assistant entomologist of the Oregon Agricultural College, who prepared the foregoing recommendations: The bisulphide is obtained in liquid form, which, upon exposure to the air, is transformed to gas. This gas is heavier than air and permeates down to the very bottom of the colony home, where its deadly properties destroy the ants. If the colonies are near a tree care should be taken that not too much is used or it may injure the tree. The gas is highly inflammable and must not be opened near a fire, nor exposed to smoking.

DAIRY

CLEARING OUT DOGBANE

Repeated hoe cuttings at the surface of the ground and salting the area affected is the recommendation for eradicating spreading dogbane made by H. S. Hammond, instructor of botany at the Oregon Agricultural College. If it is practicable to do so the infested land should be put into thorough cultivation for two or three seasons, thoroughly harrowing the land after it is plowed and gathering stems and roots for burning. A somewhat easier method of control but one requiring repeated going over is to mow the tops off above the ground whenever they reach a height of 6 or 8 inches. The success of this method depends upon not permitting the plants to mature seeds.

VALUE OF STRAW

HOW TO USE IT

Crop Residues Add Dollars in Fertility and Humus to Acre of Land

APPLICATION METHODS GIVEN

May First Be Used as Feed or Bedding of Animals or Scattered, Disked and Plowed.

Straw is too valuable to burn or to waste and it contains so much expensive plant food and humus-forming material that we should apply it to the soil without undue loss of time. Straw is our most valuable crop residue and while, in general, there is a feeling of satisfaction over good grain crops this year, let none of us forget that the straw crop of Oregon contains plant food that if purchased at ordinary market prices is worth approximately three and one-half million dollars. If in addition we take the stubble into consideration, this large figure is swelled by about another million dollars. The table below indicates the amount and value of plant foods contained in the various, ordinary farm straws and it should be noted that these values take into consideration only the plant foods that are normally sold in commercial fertilizers and that the value of straw as a producer of organic matter or humus in the soil is not taken into account. In many cases the humus value equals or exceeds that of the plant food elements contained in the straw.

Fertilizing constituents in one ton of litter:

	Nitrogen	Phos.	Acid	Potash	Val.
	pounds	pounds	pounds		
Wheat Straw	9.6	4.4	12.6		\$2.84
Barley Straw	11.0	4.0	21.2		3.52
Oat Straw	9.2	5.6	35.4		4.05
Clover Straw	29.4	8.4	25.2		7.48
Pea Vine "	28.6	7.0	20.2		7.05
Vetch straw	21.8	5.4	12.6		5.24

The above table should be a strong argument in favor of keeping the straw on the farm and using it on the soil to assist in better production of future crops. Straw that is burned is almost a total loss. Straw that is sold to balers at fifty cents to a dollar a ton is not returning its fertilizing value nor its value in producing organic matter for the soil. Below are some estimates of various types of Oregon straw and their value as calculated from the data given in the table above.

Wheat	600,000 tons	\$1,704,000
Oats	225,000 tons	911,250
Barley	105,000 tons	369,600
Clover	40,000 tons	299,200
Vetch and Alfalfa	10,000 tons	52,400

Total 980,000 tons \$3,336,450

This does not include a considerable amount of miscellaneous straw; such as rye, speltz, emmer, field peas, grass, etc. Neither does it take into consideration the stubble that is left on the field.

So valuable a by-product of crop production must not be wasted or lost. When it becomes fully understood that every acre of straw burned represents a loss of from one to three dollars in plant foods and probably fully as much more in organic matter, there will be considerably less of that waste-