Labor Shortage Requires Employment of Time and Labor Saving Methods

TIMELY HINTS ON HARVESTING OF HAY INSURE ECONOMY

By R. C. Stewart

There is no other crop on the average farm that causes more worry, anxiety and disappointment than does the hay crop even when the labor supply is normal. The short period in which the hay is just right for cutting, the need of getting it quickly into bunches or some form to keep it from bleaching and becoming too dry and the fact that some of the other crops usually require some attention at the same time, make hay harvesting anything but a pleasant yearly experience.

From present indications the supply of available labor will be far below that of any year in the past, and a great deal of hay will be totally lost or put up in poor condition, unless labor saving and time saving methods are employed more generally.

TWO-HORSE RAKE BEST

If stirring the hay becomes necessary after it is in the window, a two-horse tedder operated by a boy will do more work than a dozen men with pitch forks, and do it better as well as cheaper. Hay is much better off in the windrow during a day or so of rain than it is in the swath, but it must be stirred daily to prevent heating.

The two-horse rake is far more economical to operate than the one-horse, but the side delivery is the best rake to put the hay in windrows. When curing is done in the swath and a hay loader is used, the crew can start taking the hay from the windrow as soon as the side delivery has made one double windrow across the field.

SIDE DELIVERY ECONOMICAL

If the sulky rake is used, the crew will have to wait until the rake has gone several times across the field. In this matter the extent of the haying operations has to be considered, of course. On very small farms the use of the side-delivery rake might not be an economy.

If the weather is clear and the hay is in proper condition, there will be no necessity for hay-caps or for further labor till the hay is thoroughly cured and ready to be hauled. But hay-caps will pay for themselves in one year when the weather is bad. They are more especially needed with clover, alfalfa, and pea vines, all of which cure slowly.

If hay is to be bunched, the hand method is too expensive. A two-horse sulky rake can bunch 30 acres or more a day and a boy drive it just as well as a man. Even more labor can be saved, however, by using the push rake to bunch hay after it has been raked into the windrow. It is a good plan to have two men working together to round up the bunches, since more can be accomplished than when each works alone.

AVOID LOSS OF TIME

It is a waste of time to pitch hay onto a small hayrack on a high-wheeled wagon. Use a large hayrack on a low-wheeled wagon.

Loading hay with pitchforks is the hardest, slowest, and most expensive way. The men are working constantly, but the horses are doing nothing most of the time. If a loader is used, the hardest part of the work is done by the horses and the men can handle about 50 per cent more hay.

The push rake furnishes the most economical method for hauling hay to the stack, barn, or hay press if the distance is not much more than one-fourth of a mile. One man, or a boy, with a good push rake an a team used to the work will handle three times as much hay as two men with a small rack on a high-wheeled wagon.

Stacking hay with a push rake and on overshot stacker mounted on wheels eliminates nearly all of the back breaking work of the old pitchfork method. With a yield of one to one and a half tons to the acre, two men on the stack can easily handle all the hay brought in by three push rakes, accomplishing a vast saving in labor and hay over the pitchfork method.

PUSH-RAKE SAVES TIME

For bunching the windrows or hauling short distances the push-rake is not excelled. It bunches without rolling or tangling the hay.

RICHES MISSING FARMER, IS CLAIM

By R. V. Gunn
Deschutes County Farm Management Demonstrator.

Farmers are not making large profits. In fact, many of them are selling their products at less than cost. At least, such is the case in some other Eastern Oregon counties not a great way from Deschutes.

Farmers believe and know such to be the case, but with the public the producer of farm products is included in the list of profiteers. The manufacturer, the middleman and the retailers defend themselves with a mass of data and cost figures. The farmer can, and should, do the same. Yet, if there is any one thing that the farmer is more lax in than any other, that one thing is a knowledge of the cost of production.

There is especially one error which not only the consuming public, but the farmer himself, falls into, and that is that cash costs are by no means the total cost of production. Recent figures secured in a nearby alfalfa section showed that the cash cost of raising alfalfa was $6 per ton, while the total costs—cash costs, plus the value of the farmer's time and interest on his investment—equalled $18 per ton. These same farmers sold their hay for $15 per ton. In a nearby wheat section some figures secured from a number of farmers showed the cash cost of producing a bushel of wheat to be less than $1, while the total costs averaged from $1.50 up to $2. The question is often asked, "If such is the case, how can farmers continue to stay in the game and buy high priced automobiles?" The answer is that "they are content to take less than going wages for their labor and less than the normal rate of interest on their investment."

Farm accounts will assist to put farming operations on a business basis, show the cost of production, defend the farmer from the public charge of profiteering, and do more than any other one thing to secure fair prices for farm products. Just as manufacturers and merchants base their claims for certain prices, the only way the farmer can justify his demand for fair prices is to know and show the cost of production.

POULTRY NOTES

IF THE best results are to be expected from the flock, the hens must not be allowed to become overrun with lice. Usually, there will be a place in the yard where the hens can dust themselves in the dry dirt. In the absence of such a place, a box about two feet square and containing ordinary road dust or fine dirt should be placed in the house. Keep it slightly moist in summer.

Meat meal made from the flesh of wild rabbits is sold to poultrymen in Australia.

Before starting to pack any case see that the same is well nailed, that the cushions at the bottom are in shape to act as cushions, and if they are not, make them so.

Mites multiply in summer. Paint the roosts or spray the houses—better do both—with distillate and crude carbolic, about four to one.

If you give the hens plenty of charcoal and greens you will not have so many standing around and looking discouraged.

HINTS ON CONTROL OF CHERRY INSECTS

By C. J. McIntosh, O. A. C.

The insect causing cherry maggots, together with a method of control, has been described by A. B. Black, assistant entomologist of the O. A. C. experiment station. Black made a study of this insect in the district near Salem and Newberg.

The size of the fly is reported as one-eighth to one-fourth of an inch in length, about half the size of an ordinary house fly. The wings are flat and crossed by smoky bands. The abdomen is tapering, flat and not very thick. The insect resembles the fly that causes the gooseberry maggot.

The fly emerges in the spring, usually the latter half of May, depending on the season, although the hatching period usually extends over a month or five weeks.

AVERAGE LIFE TWO WEEKS

The life of the average fly is about two weeks. It lays from 50 to 100 eggs in this time, rarely laying more than one egg to a cherry.

Perched on the lower half of the cherry, the fly can ordinarily be seen near the end opposite the stem. The eggs, which are just below the skin, are very hard to locate, due to their smallness and color. These eggs hatch in from three to four days and produce a small white or yellowish maggot, pointed at the head and blunt at the rear. The maggots then burrow to the pit and feed around in the fruit for 15 to 21 days before finding their way out.

BURROWS IN GROUND

When the insect leaves the cherry it drops to the ground and burrows from two to six inches and forms a pupa or cocoon, lying dormant until the following spring, when it emerges as a fly. They develop in a few minutes. The cocoon looks like a grain of rye.

The preferred preventive measure is to pick off the affected cherries, which prevents the worm from developing. So many growers allow seedlings to remain on the tree that a breeding ground is formed for a next year's crop of flies. Mr. Black warns cherry growers against this practice.

The fly is very fond of moisture and may be seen early in the morning drinking drops of dew from the leaves. After the dew is dried off, spraying with a poison solution is recommended. The flies will drink of this and die. Spray applied should be made up of one pound of basic (or neutral) lead arsenate powder to 50 gallons of water.

SPRAYING HINTS GIVEN

If spraying for the cherry maggot fly alone, use one pound of the basic lead arsenate powder to 16 gallons of water, adding four pounds of brown sugar or one gallon of some syrup. Make the first application between May 15 and 25, depending on the lateness of the season. Two more applications should be made at five to seven days apart. If it rains during this time, a new coat of spray should be put on as soon as the leaves dry.

A solution of sodium arsenate in the same quantities is more effective poison, Black says, but it is also harder to apply. This solution will burn the leaves, and great care must be used not to use too much to a tree. A pint to a tree is sufficient and should be applied with a compressed air knapsack sprayer that throws a coarse mist.

5-Year-Old Jersey Cow Brings $6300 At Public Auction

The increasing value of the Jersey cow as a food producer was demonstrated at an auction sale of Jerseys at Hood farm, Lowell, Mass., when Sophie's Elberta was knocked off at $6300, the highest price for any Jersey at public sale in this country this year.

Sophie's Elberta is a 5-year-old cow out of the famous Sophie's Tormentor family. When 3 years old she gave nearly 11,000 pounds of milk in the year, and breeders say she combines beauty with her utility. The purchaser was a wealthy paper manufacturer from Pennsylvania.

Another cow, Sophie's Florence, 4 years old, went for $3000. A bull only 1 year old went for $1600, and another of the same age, $1500. There were 71 animals sold for a total of nearly $54,000, an average of $755. Many of the Jerseys went to Texas, some to Oregon and others to different parts of the country.

GUERNSEY HERDS IN CLACKAMAS FAMED

By E. K. Hill, Secretary Oregon Dairy Council.

Clackamas county is making Oregon famous for its Guernsey cattle. The county has some energetic members in its Guernsey Cattle club and their achievements are claiming the attention of breeders throughout the country. At the recent meeting of the Clackamas county breeders E. L. Westover, dairy husbandman of Oregon Agricultural college, conducted an inspection of two fine herds and used them as a demonstration in judging. There was a good attendance of club members and spectators.

ORGANIZED IN 1917

The Clackamas county Guernsey Cattle club was organized in 1917 with 17 members. In 1919 the club had 30 members, and in 1920 30 dairymen not previously identified with Guernseys have signed for one or more Guernsey heifers to be brought from the island during this summer or fall. Besides this, ten boys and girls that have signed for a Guernsey heifer each, making 40 persons for 1920, plus the previous membership of 30, which gives a total of 70 Guernsey followers.

Breeders of this breed of dairy animals are anticipating the day when the 300 Guernseys ordered by the Oregon Guernsey club will arrive from the Isle of Guernsey. Neither time nor funds nor effort are spared in getting and keeping a high standard.

R. G. Scott presided at the recent meeting in the absence of the president, Scott, who is the county agent, reviewed the work of the club and gave an instructive and interesting talk.

M. S. Schrock of the Oregon Dairyman's league spoke on the marketing of dairy products and the new plan for the league's organization.

GREAT EXPOSITION PLANNED

O. M. Plummer, manager of the Pacific-International Livestock exposition, gave an interesting address, in which he stated that the Pacific-International is being recognized as one of the most progressive institutions of the West and is making the Northwest known and recognized all over the country as a great livestock section. He stated that all indications point to a record breaking show this year. Last year 75,000 attended and he expects 150,000 this year.

A. I. Hughes of Red Wing farm and secretary and treasurer of the Guernsey Cattle club of Clackamas county, spoke of the progress of the club and its work in this state.

By a unanimous vote the club indorsed the millage tax measure for higher education, giving special tribute to the university, the Agricultural college and the Normal school for their help to the dairymen and breeders in educating the young people.

Petition for Drainage District

A petition has been presented to the county commissioners at Vancouver, Wash., by a number of residents and property owners in and near Hockinson, asking that they be allowed to establish a drainage district. There are from 3000 to 5000 acres in the proposed project. This will make the fifth such district in this country.

Bonds of the Shillapoo lake project were advertised, but when the commissioners met there were no bids. The bonds must sell for par, with interest at 6 per cent.

NOTES FROM O. A. C.

There is no one best or essential ration. Chickens may be fed on various feeds and do well, but all rations should contain the kind of ingredients necessary for growth in right proportions, whether corn or wheat, meat scrap or fish scrap or milk. The poultryman who is feeding for profit must consider the question of prices and the availability of feeds.

Farm management—Facts and figures on the cost of production must be produced by the farmer in order to make arguments for price regulations effective.

Dairy—Pastures will soon be getting short. A diminishing milk yield is the proof. Cut early vetch, clover or other green feed daily for the cows. It will more than pay for the labor expended.

Calves should have milk for at least six months. A small amount daily will suffice but it is important that they are fed regularly.

Bowel trouble in calves is common in hot weather. See that buckets are clean and the milk sweet and wholesome.

Plan to fill the silo with oats and vetch or clover for summer feeding and again in the fall with corn. A continuous supply of succulent feed helps to cheapen cost of production and in this way increase profits.

5,000,000 Bushels Of Wheat Signed Up

Spokane, Wash., June 26.—That approximately 5,000,000 bushels of wheat in Washington and Idaho have been "signed up" to be sold through the Washington Wheat Growers' association is the assertion made today by A. A. Elmore, president of the organization. Elmore declared that the wheat crops of the Palouse and Walla Walla districts are looking very good, but that some sections of the Big Bend region are dry.

Wheat Standards Held

E. T. Meredith, secretary of agriculture, has decided that no change in the federal standards for wheat should be made.

The decision has been published in full in pamphlet form for free distribution.

Shaver Buys Modern J. I. Case Separator

Moliala, June 26.—A 32x54 J. I. Case separator, completely equipped with all modern attachments and regarded as a most advanced product of the threshing machine trade, was purchased by Leo Shaver of this section last week through O. K. Cole of this city.

The separator, to be operated by a 22-40 Case gasoline tractor, has received wide attention at this place and will be placed in operation early in July.

20,000 Cow Owners Sign Up

The Oregon Dairymen's Cooperative league has met with the approval of the Oregon dairymen. The owners of over 20,000 cows have signed up, representing an annual production value of more than $3,000,000.

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WHEN DID REVELATION CEASE In Olden Times?

By DR. JAMES E. TALMAGE
Of the Council of the Twelve, Church of Jesus Christ of Latter-day Saints; Salt Lake City, Utah.

Note: For free copies of other articles of this series, send request to the author.

All who accept the Holy Bible for what it professes to be, by that very acceptance aver as an established fact the actuality of direct communication from God to man.

Throughout the Patriarchal period, from Adam to Moses, comprising the several dispensations of, and successive apostasies from, the Gospel of the then unembodied but chosen and foreordained Lord and Savior Jesus Christ, the voice of God was heard by mortal ears, calling men to repentance, and proclaiming baptism in water and the conferment of the Holy Ghost by the laying on of hands as the indispensable and unchangeable conditions of salvation. See Pearl of Great Price; and Book of Mormon, Alma 22:12-16.

From Moses to John the Baptist, the Israelitish government, whether administered by judges or kings, was essentially a theocracy: for there were prophets through that chain of centuries who spoke with authority, both to the people and to their rulers, avowing "Thus saith the Lord."

Then came the Baptist as a voice in the wilderness, crying aloud the old yet ever new call of God, "Repent ye," and administering baptism by immersion for the remission of sins. John's authority to preach and baptize was not the pronouncement of the Sanhedrin, nor license from any of the great theological schools. He proclaimed himself as one commissioned of God. See John 1:22, 23, 33.

And the Mightier One followed, avowing that He had been sent, and that the doctrine He taught was the Father's, not distinctively His own. Thus did the Lord testify that He was a Revelator, receiving from God and giving liberally to man. See John 6:38; 7:17; 12:48-50.

That the Church was guided by direct revelation throughout the period of apostolic ministry is abundantly attested by the Holy Scriptures, from the first chapter of Acts to the last of Revelation. Assuredly, therefore, revelation as a gift to the Church did not terminate with our Lord's ascension.

John the Apostle expressly avouches that the last book of the New Testament, in our current compilation, is no independent production of his, but "The revelation of Jesus Christ, which God gave unto him, to shew unto his servants things which must shortly come to pass; and he sent and signified it by his angel unto his servant John." (Rev. 1:1.)

The Primitive Church was undeniably blessed by specific revelation from God through His servants ordained to power and authority in the Holy Priesthood; and, in the light of this fact, we are confronted by the momentous question—When did God cease to speak thus to His Church?

That He did so cease to speak has been openly proclaimed for centuries. According to the precepts of men, the canon of Scripture was made complete by the testimonies and testaments of the ancient Apostles; and this in spite of the Lord's solemn affirmation that upon the rock of revelation should His Church be builded. See Matt. 16:17-19.

The significant truth is, that revelation to the Church did not cease so long as there was in fact a Church of Jesus Christ on earth.

That the apostolic administration was followed by a widespread and increasing apostasy from the Church, which culminated in the apostasy of the Church itself, or what still flaunted the title of the Church though bereft of spiritual powers and blessings, is proved by a rational interpretation of both ecclesiastical and general history. Moreover, this declension, by which the world became enshrouded in spiritual darkness, while the institution calling itself the church bedizened the eyes and minds of men by her glittering display of wealth and secular power, had been predicted in circumstantial detail while yet there were prophets empowered to speak in the name of the Lord.

While it may not be possible to determine the day or year in which the Primitive Church ceased to exist as a body acknowledged of Jesus Christ as His Church, for the apostasy was progressive though rapidly so, it is evident that before the close of the third century the so-called Church had lost the distinguishing features specified by the Lord and emphasized by His Apostles, and had become an institution of men, characterized in function by the aberrations of human fancy. For centuries thereafter, sacerdotalism professed some form of godliness while miserably lacking the power thereof.

Then, in fulfillment of ancient prophecy, the Holy Priesthood was restored anew, not as a revival of investiture from early Christendom, but as a definite reestablishment, the very day of which is recorded in modern history.

In 1830 the Church of Jesus Christ of Latter-day Saints was organized, and since has unceasingly proclaimed that the very voice of God has been heard by prophets of the current age; and that latter-day revelation from the heavens is a solemn certainty, with which mankind must reckon, to their salvation or loss.

For price list of Book of Mormon and other publications, including "The Vitality of Mormonism," which comprises 10½ of these articles, apply to Northwestern States Mission, 810 East Madison street, Portland, Oregon.

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