

# Lewiston Orchards Life

AN EXPONENT OF PROGRESSIVE HORTICULTURE AND THE SUCCESSFUL RURAL COMMUNITY

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## Horticultural Conditions in Lewiston Orchards and Vicinity

**G**EORGE E. AMES, of Lewiston Orchards, is deputy state horticultural inspector for Nez Perce County, which includes Lewiston Orchards as its most important district. In a recent interview by a representative of Lewiston Orchards Life, Mr. Ames gave an interesting outline of present horticultural conditions in the county.

As to Lewiston Orchards, Mr. Ames reports that the apples here are remarkably free from worms; in fact, it is hard to find any wormy apples at all, in orchards that have been thoroughly sprayed for codling moth. Trees that have been accidentally missed are found to have some wormy fruit. It is evident that the spraying here, with arsenate of lead, for codling moth, has been very effective. The spraying has been done with high pressure power sprayers, and two sprayings have been given. Present freedom from worms indicates that no more spraying will be needed this season. As practically all orchards here were free from San Jose scale this season, no spraying was done with lime-sulphur, but next season, the early spring spraying with lime-sulphur will be required as a matter of precaution. The only indications of San Jose scale found this season in Lewiston Orchards were on five trees in one orchard which were slightly infected from one small pear tree that evidently came badly infected from the nursery, but had since been treated for the scale. From these trees all traces of the scale have been removed and Lewiston Orchards as a whole may now be said to be entirely free from scale. Under state horticultural regulations, eternal vigilance is the price of liberty from orchard pests, and no pains will be spared to prevent the entrance of such evils.

Aside from the matter of scale and worms, the trees in Lewiston Orchards, Mr. Ames says, are in a fine, healthy condition generally. There is practically no apple scab, and the "little leaf," which appeared considerably earlier in the season, is disappearing. The aphid, which was quite prevalent during the

spring months, owing to the cool, wet weather, is also disappearing.

Outside of Lewiston Orchards, the largest and oldest of commercial orchards in the county are about Leland. These are about 35 years of age. The prune orchards there are making money, one instance being given of a four-acre prune orchard there which netted \$250 and acre. An evaporator is used for the fruit. Gifford has the best farm or-

done this season for codling moth.

Inspector Ames reports that some of the largest farm orchards in the county have recently been cut down. They were not successful, because isolated and not within easy reach of markets. There are very few commercial apples in the county, outside of Lewiston Orchards. Orchardling has become a science, and the strict regulations compel observance of methods that the ordinary farmer is



A SOCIAL GROUP IN LEWISTON ORCHARDS

Back Row (Left to Right)—Baby Cole, Miss Laue, Mrs. Charles A. Cole, Mrs. S. B. Stedman, Mrs. E. A. Morris, Mrs. F. D. Webb, Mrs. F. B. Gano, Mrs. Walter Eddy, Miss Susie M. Bickford, Mrs. A. H. Duffie, Mrs. H. H. S. Rowell, Mrs. L. A. Blackman, Mrs. W. S. Shearer, Mrs. J. L. Klapp.  
Middle Row—Mrs. S. W. Whitford, Mrs. L. C. Gieseke, Mrs. J. L. Goodnight, Mrs. J. B. White, Mrs. J. W. Haben, Mrs. C. Tyler, Mrs. J. E. Butler, Mrs. R. Pickering, Mrs. J. S. Mounce.  
Front Row—Ruth Rowell, Eleanor Eddy, Bobby Eddy, Mrs. W. F. Ebinger, Mildred McConnell, Baby McConnell, Mrs. A. V. McConnell.

chards and other orchards in the county are two to four or five-acre farm orchards, scattered throughout the county. These various orchards in the county have been sprayed for San Jose scale during the past two years in which Inspector Ames has had charge of the work, and have been well cleaned up, especially those belonging to white men. Until within the past two years, the Indian orchards had been neglected. Some of the farm orchards are just beginning to have scab, and must be treated for that disease. Spraying has also been

either unwilling or unable to follow. It follows that the successful small orchards are chiefly found in community districts. In unirrigated districts, the lack of water is also a disadvantage.

The state horticultural laws, says Inspector Ames, are being very generally observed. He has covered the county twice this season, and will go over it a third time this fall. The fall inspection is not usually made, but is to be done this season, in order that infected fruit may be discovered, as a guide for early

(Continued on page 5)

## Community Life in Lewiston Orchards

### Reception for a Guest

Mrs. Chas. McCreedy, of Oshkosh, Wis., is spending a week here, as the guest of Mr. and Mrs. P. W. Clark, at Fairmount Orchards. Mr. McCreedy, who is a prominent business man of Stevens Point, is an owner of an orchard tract here. On the afternoon of August 8, Mrs. Clark gave a reception in Mrs. McCreedy's honor to a number of ladies of the Orchards and Lewiston, many of them being former residents of Wisconsin. The occasion was one of delightful social nature. One feature of amusing diversion was a buttonhole contest, with head prize won by Mrs. J. W. Haben, who received a silver thimble and foot prize taken by Mrs. Storey Buck, who captured a mammoth beet in a fine basket. Some very appetizing refreshments were served. Those present were: Mesdames Chas. McCreedy, P. W. Clark, Walter Eddy, Hattie Finney, F. B. Gano, J. B. White, H. H. S. Rowell, H. H. Smith, P. W. Green, S. B. Stedman, A. H. Duffie, F. P. Nourse, Beach, C. D. McEachron, Will Mathews, J. F. Morse, G. E. Ames, G. G. Ames, L. A. Blackman, R. W. Cram, J. W. Haben, W. S. Shearer, Storey Buck, Jennings and Miss Jane Duffie.

### Young Folks' Dancing Party

A delightful occasion to those participating was the dancing party given to their young friends, by Miss Ardys Ames and Ralph and Paul Rowell, at the packing house, on the evening of July 29. The hostesses, Mrs. G. E. Ames and Mrs. H. H. S. Rowell, were assisted by Mrs. R. W. Cram, Mrs. L. A. Blackman and Mrs. F. B. Gano in serving refreshments, which consisted of cake and grape juice punch. Dancing continued from eight to twelve o'clock and included about twenty numbers. The programs were hand-painted with sunflower designs, the color scheme being yellow.

The participants were Misses Ardys Ames, Betty Barr, Bernice Webb, Cecil Willey, Esther Maxwell, Laurretta Gieseker, Ruth Gieseker, Eileen O'Conner, Irma Jackson, R. Henderson, Mabel Gray; Messrs. Paul White, Paul Guiland, Harold Guiland, Clyde Sipes, Roy Sipes, Joe Johnson, Murray Burns, Clarence Chase, Arthur Chase, Alan

Eddy, Emmett Mullarky, Jean Mullarky, Wayne Jackson, Ralph Rowell and Paul Rowell.

### Coming and Going

R. C. Dalhjem and A. Nortz returned with Mr. Powers to Portland on their way to Seattle.

Mrs. Charles A. Cole has recently had as a guest her sister, Miss Laue, of Portland, Ore.

Mr. and Mrs. A. N. Long, of Spokane, are guests of R. Pickering and family, while looking after their orchard tract here.

Mrs. J. L. Klapp is having a visit from her sister, Mrs. O'Conner, and daughter, Miss Eileen O'Conner, of Oshkosh, Wis.

Mrs. J. E. Butler has as a guest her sister, Miss Eunice Gordon, of Fowler, Calif. She expects to stay through the fall and winter.

F. E. Willard, assistant superintendent of the Seattle schools, spent several days here early this month as the guest of W. S. Shearer.

Doctor Geo. E. Watts spent the last day in July looking over the district and his own ten acre property in tract 4, just east of the Relief Reservoir Park.

H. D. Eisman formerly superintendent of the Dufur Orchards, has associated in the work here to handle the seventy-five acres of five-year-old orchards owned by the Oregon-Idaho Fruit Company.

Bernard F. Hemp and John N. Davis, of Spokane, are spending a month here, while attending to the fruit on Mr. Hemp's tract, near the Relief reservoir.

Mrs. U. B. Hinds and son, of Watertown, S. D., were visitors for a day or two last month, stopping at the Bollinger Hotel, Lewiston. They were interested in seeing the tract that Mr. Hinds owns in the Orchards.

Mr. H. A. Brewer of Portland, Oregon, was here July 5th to meet Mr. and Mrs. E. H. Smith of Duluth. Both Mr. Brewer and Mr. Smith are owners of five-year-old orchards, and while here made arrangements for the harvesting and sale of their fruit as well as the installation of their pipe line to their property in order to facilitate irrigation.

David Ewart of Ottawa arrived here Saturday afternoon, July 26th, to inspect his Orchard property.

Professor M. M. Ames and wife of Stevens Point, Wis., and Mrs. Nancy D. Willis, of Berlin Falls, N. H., are expected to arrive August 11, for a visit with the families of Messrs. G. G. and G. E. Ames. Professor Ames, who will remain two weeks, is a member of the faculty of the State Normal School at Stevens Point. He is a brother of G. E. Ames. Mrs. Willis, who is a sister of G. G. Ames, may stay during the fall and winter months.

### Home Happenings

Mrs. J. Kouwenhoven recently returned to her home on Burrell avenue, from St. Joseph's hospital, having recovered from an illness of two months' duration.

John Cramblit's hay stack burned July 22, while the owner was absent from home, but Wayne Jackson and Dell Sipes went to the rescue and by their efforts probably saved the house and barn from destruction.

An eleven-pound boy arrived at the home of Mr. and Mrs. D. H. Guiland, July 15, making the fourth boy in the family, which has no girls. On the same date, Mr. and Mrs. Wessling at the other end of the Orchards were visited by the stork who left a baby girl, the fourth in a family of girls only.

Western Poultry, published by R. G. Baliey, of Lewiston Orchards, always speaks a good word for this district. In its July issue, it calls attention to the recent use by a Yakima newspaper of the cut of a scene from Lewiston Orchards, and applying it to its own locality. This of course, is a kind of scenic plagiarism highly complimentary to Lewiston Orchards.

A morning musicale of delightful and artistic character was given July 23, at the home of Mr. and Mrs. J. B. White, by Miss Frances DeLarsh Chamberlain, formerly of the faculty of the Lewiston State Normal School, but now a teacher in San Francisco. It was of impromptu nature, being given on short notice before Miss Chamberlain's departure. Miss Chamberlain sang with charming effect a number of ballads, lullabies and operatic selections. Miss Chamberlain left a few days later for her home at San Francisco. She expects next year to go to Paris for voice culture.

## Lewiston Orchards Life

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For the information and aid of orchard owners here and elsewhere.

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### JOYS OF ORCHARDING

The joys of orcharding are coincident with the labor of orcharding. The true orchardist is one who loves his work, and he who finds only drudgery in the care of his orchard has missed his vocation.

To watch the development of a fruit tree from the time that it is placed in the ground until it comes into fruitage is an interesting study in horticultural evolution. To have a hand in shaping, protecting, nourishing and promoting its growth is to acquire a personal interest, perhaps even affection and love for the tree itself. It is soon learned that each variety has a character of its own, and that each tree has an individuality of its own that must be studied, if development is to be of the best.

The general appearance, the habit of growth, the time of fruiting, the manner of bearing its fruit and many other considerations enter into the tree's make-up. It may be more or less subject to insect pests and diseases and must be treated accordingly. Its habits can be modified but not eliminated. Each tree changes from year to year and must be studied anew to some extent. The study of all these changes and characteristics is a source of continual fascination to the intelligent orchardist who becomes

a scientific investigator in a great field of research.

The old orchard tree becomes an old friend to him who has watched its development. He knows its fruit and values it for its special qualities. He will remember and return to a favorite tree after years of absence, with a joy of renewed friendship. He prizes it for its shade as well as for its fruit. "In the shade of the old apple tree" expresses a sentiment familiar to many. There is both prose and poetry of a high order in the association of the orchardist with his apple trees. Commercially, his pursuit may be a matter of dollars and cents, but the orchardist who gets nothing more from his experience has lost a large part of the joys of orcharding.

### GET READY FOR THE FAIR

The Lewiston-Clarkston Fair will this year be held on the Lewiston side, in the new quarters purchased last year for the fair and the livestock show. By the most enterprising and self-sacrificing efforts, the business men of Lewiston have equipped the fair with grounds and buildings and are planning for an excellent exhibition and entertainment for the fall season which opens the latter part of next month.

It is now none too early to make plans for representation at the fair, and growers in Lewiston Orchards will do well to keep this fact in mind. Some of the most creditable exhibits at the fair in former years have come from the Orchards. Here are products of orchard, field and garden that may well compete with the best of their kind anywhere. Even the boys and girls are this year remembered in the liberal premiums arranged for exhibitors. While the pecuniary value of the awards are worth while, the greatest compensation for efforts in such worthy competition is the satisfaction that comes from successful effort, the evidence of which is seen in the prizes gained. It is also a source of pride to have the district well represented, and all such effort has a considerable advertising value.

In Mr. P. W. Clark, the Orchards have a worthy representative on the board of the fair association. Other members are among the leading business men of Lewiston and vicinity. The fair should be made of great educational and industrial value to this portion of the northwest and every producer can do something to promote its success.

### THE FRUIT OUTLOOK

The fruit outlook in Lewiston Orchards at the present time justifies earlier hopeful anticipations. Small fruits have been harvested and marketed to good advantage. The early peach crop, with plums, apricots and other early orchard fruits are ready for marketing. The later ones promise a large yield. The apple crop is as large as the age of the trees will warrant, it having been necessary to remove about four-fifths of the fruit to prevent over-bearing.

The market outlook is favorable in general and satisfactory returns seem reasonably assured. Throughout the east and in some parts of the south and in California, both the apple and peach crop has been injured and a shortage is probable in many places, so that the danger of any great surplus in competing sections seems quite remote.

### Home Happenings

Mr. and Mrs. D. R. Macdonald and family spent a few days at Lake Waha the latter part of July.

Mrs. G. G. Ames recently fell and sprained both wrists, but has been rapidly recovering from the injury.

C. W. Green, who is a graindealer at Lenore, Idaho, has lately purchased lot 7, in block 29, and expects to build his home there. It is located on Grelle avenue, between Fourth and Fifth Sts., and has an orchard four years old.

This is the humming bird season in Lewiston Orchards and many of the delicate winged creatures are seen hovering about the deeper blossoms, such as those of the hollyhock, which grows with great luxuriance in this locality.

A party of girls from Lewiston Orchards encamped for a week's stay August 1, at Lake Waha, with Mrs. Kate B. Chase and Mrs. W. F. Ebinger as chaperones. Those in the party were Misses Dorothy Ebinger, Esther Derrick, Bernice Webb, Eileen O'Conner, Dinah Lee and Norah Lee.

At a special meeting held July 23, by Lewiston Orchards Assembly, it was unanimously voted to favor a special road tax levy of 1 1-2 mills for the road district which includes Lewiston Orchards. On the present basis of valuation, this is expected to produce a fund of about \$3,700. A petition, asking for the levy, is now being circulated for signatures of tax payers, and will later be presented to the board of county commissioners.

## Orchard Cover Crops

By W. S. THORNER, Director Lewiston-Clarkston School of Horticulture

THE dust or clod mulch system of orchard cultivation so commonly practiced in the west is the ideal system so far as the conservation of moisture is concerned, but has the very undesirable feature of exposing the bare surface of the soil to the burning rays of the sun during the summer season, causing the loss of its humus, and permitting excessive leaching of soluble plant food as well as surface erosion during the winter season. From the nature of the crop and the necessary cultivation, orchard trees are one of the hardest crops grown on the soil. The soil is bare and exposed to the elements during the greater part of the season, the fruit is all picked and carefully hauled away, the leaves that should naturally fall to the ground and form humus blow into the adjoining fields, and the prunings are burned in piles or left in some remote corner of the orchard to decay and incidentally form the breeding grounds of the various foes of the fruit grower. There is a constant demand upon the soil for plant food and nothing is ever permitted to return. A system of this kind cannot help but result in the depletion of the soil and serious if not permanent injuries to the horticultural industries of the west.

### SUPPLYING PLANT FOOD.

Commercial fertilizers are always expensive and usually difficult to satisfactorily apply to orchard crops, and since it is impossible to secure barnyard manure in sufficient quantities in orchard districts like ours there remains but one method to pursue, that is to grow the humus and such plant food as is possible on the soil in the form of cover crops. This is nature's method of improving the physical as well as the chemical condition of the soil and it is surely the most economical one, since the cover crop can be grown during those months of the year when the trees are not using the available plant food and the land be made to grow two crops annually, not as competitors but rather as co-operators in the production of fruit.

Do not confuse the cover crop with the grass, weed, clover or alfalfa mulch crop. A cover crop is any crop grown among orchard trees during the interval between the regular fruit crops or

normal season of tillage. It occupies the land at a season of the year when the fruit trees require little or no plant food, and is of value to orchards in the following ways: (1). It directly improves the physical condition of the soil by the addition of humus and the loosening up of the subsoil by root action. (2). It prevents hard soils from cementing and clay soils from puddling. (3). It makes the soil more moist by holding the snows and rains until they have had a chance to soak into the soil. (4). By drying out the soil early in spring, thus making early tillage possible. (5). It serves as a protection for tender roots from frost. (6). It catches and holds the easily lost nitrates of which the trees are not in need at that season of the year. (7). It renders plant food more available by the action and the decomposition of humus. (8). By the addition of humus it makes cultivation and irrigation much easier and more effective. (9). The leguminous cover crops add plant food by appropriating the nitrogen of the air and storing it up in the roots of the plants. (10). It checks the growth in the fall and causes the wood to completely ripen up, thus preventing fall or winter injury. (11). It prevents erosion on steep orchard lands. (12). It keeps weeds down and catches and holds the leaves of the trees. (13). A series of cover crops on alkali orchard lands will very materially reduce the quantity of alkali that comes to the surface.

### NEED OF HUMUS AND NITROGEN.

The most of our orchard soils while well supplied with practically all kinds of plant food are very deficient in humus and nitrogen. This deficiency is due to the geological formation of our soils and the climatical conditions prevailing over the dryer districts of the west. Raw sage brush land in all cases, and cleared or burned over timber lands in most instances, are practically void of humus when first prepared for cropping and if humus is not added before planting to trees it should be as soon as possible after planting. While very good returns are now being obtained from unimproved lands, yet better and more lasting results cannot help but follow

the working in of several good crops of green manure or its equivalent in stable or barnyard manure.

The fall or winter injury so common in young orchards is due in part to the late growth of the trees, which caused them to go into winter with a full flow of sap and a lot of unmaturing wood in the stems, which is killed by the first heavy frost in the late fall or early winter. This can be easily overcome by the systematic use of cover crops which will take up the surplus water and available plant food late in the summer and early in the fall, and in this manner cause the wood and buds to mature early.

### A PLAN OF CULTIVATION.

The orchard should be plowed or disced as deep as possible without injuring the tree roots and as early in the spring as the weather and nature of the soil will permit the working without injury. Immediately after plowing the surface should be put in fine tilt with a harrow or some other surface working tool and perfect condition be maintained through the growing season or until the middle or last of August, depending somewhat upon the soil, climate and moisture conditions.

### SOWING OF THE COVER CROP.

Just previous to the last harrowing the cover crop should be sown either with a common grain drill or broad casted on the surface and thoroughly disced into the soil. The drilling in of the seed with a common grain drill gives the best results since it places the seed down in the moist earth permitting the immediate germination, and the getting of the crop in definite strips between the trees; thus keeping it away from the trees, which would otherwise make hoeing necessary and afford a harbor near the trees for mice and moles. Immediately after seeding the ground should be thoroughly worked down with a harrow or some other surface-working tool. While this has the disadvantage of leaving the surface smooth, yet the cover crop will serve all the purposes of rough surface and has additional advantages.

### PLANTS TO USE.

Plants that can be profitably used in the orchard as cover crops are divided into two groups or classes according to

their food storing habits. The leguminous, or plants which by the aid of root bacteria take nitrogen from the air and store it up in the roots and the non-leguminous plants, or those that are unable to appropriate the nitrogen of the air. To the first group belong such plants as clovers, vetches, beans, peas, etc., which are commonly known as nitrogen-gatherers, while to the second group belong such plants as rye, wheat, corn, buckwheat, rape, and most of the common orchard weeds which are known as nitrogen consumers. From each of these groups crops may be selected that will survive the winter and thus serve all the purposes of a hardy cover crop.

In the selection of a cover crop it is first necessary to determine the needs of the trees and second the physical needs of the soil. If the trees are making a poor, unsatisfactory growth, it is necessary to use a nitrogen gathering crop in order to add nitrogen as well as humus, but if the trees are making a long, sappy growth and producing little or no fruit, it will be necessary to use a nitrogen consumer for the purpose of checking the tree growth and compelling fruit production.

The following crops have been tested as cover crops and have given the following general results.

#### HAIRY OR SAND OR WINTER

**VETCH:** This plant has proved itself to be by far the most satisfactory nitrogen gathering cover crop that we can use here in the northwest. Coming up as it does immediately after sowing and continuing to grow until cold weather sets in, and in this way forming a low, dense mat before winter which is capable of holding leaves, trash, etc., and thus preventing washing of the soil during the winter. In spring it starts into growth early and by the last of April or first of May it has produced from five to twelve tons of green manure per acre.

**SPRING VETCH:** While a very valuable cover crop plant, is not so hardy as the Winter Vetch, nor does it start into growth as early, however it produces a fine large growth before time to work into the soil in spring.

**CANADA FIELD PEAS:** Are one of our most valuable cover crop plants. It germinates at once, enriches the land, produces a large amount of green material before frost kills it, and leaves the soil in a perfect physical condition for future crops. While the tops are killed early in the winter, they remain on the surface and after serving as a soil protection are easily disced into the soil early in the spring.

**FALL RYE:** Is an excellent crop to use on hard soils, alkali soils, soils where

nothing else will grow, or in very windy locations, but it is not a valuable soil builder. It grows with a minimum amount of moisture, comes on early and can be plowed in early. In fact it is a pioneer in cover crop use, and can be profitably used in our district, especially on clay areas.

**WINTER OR FALL WHEAT:** Serves as a valuable cover crop plant. It comes up early, forms a good mat, produces a lot of green material and adds a lot of humus to the soil.

#### QUANTITY TO SOW.

Mixtures of these crops may be made to advantage using two, three or even more different crops together, however, wheat or rye should form a part of each combination.

#### QUANTITY OF SEED PER ORCHARD ACRE.

Hairy Vetch .....	20 to 30 lbs.
Spring Vetch .....	40 to 50 lbs.
Wheat .....	40 to 50 lbs.
Rye .....	50 to 60 lbs.

All of the above plants afford excellent green feed in fall and early spring for all kinds of domestic animals, and if grown for that purpose alone give big returns on the cost of seed and sowing. No orchardist in the Lewiston Orchards district can afford to overlook this factor and should consider the sowing of at least a small amount of cover crop.

## Packing House of Lewiston Orchards Association Opens

THE packing house of the Lewiston Orchards Association opened for the season August 4, in charge of Gerrit Oldenburg as foreman. Mr. Oldenburg has had long experience in the handling of fruit in the Northwest. For two years he was in the employ of the White Bros. & Crum Co., of Lewiston, with which firm the association will this season market its carload shipments. Smaller shipments by the Association will be handled by the fruit department of the Lewiston Mercantile Company, of Lewiston.

An interesting feature this season will be the use of bushel baskets for the marketing of peaches, something new in this section but successfully used in some southern peach districts. The basket will have a capacity of 50 pounds or more, or approximately two and one-half times that of a peach box and can be packed and sold at a moderate cost that will make it a popular form of fruit package, especially for nearby points,

where the riper fruit, not suited to distant shipment, can be disposed of.

An important improvement this season is the installation of a Victor fruit brusher and grader, by means of which all peaches will be cleaned and graded. The brusher removes all dust and fuzz, from even the most delicate peach, without injury, putting the fruit in more marketable condition. The process not only enhances the market value of the fruit but it increases the packing capacity of the packing house by grading the fruit and thus greatly facilitating the work of the packers. To afford space for the installation of the grader, without curtailing the operating quarters of the packing house, the wide covered platform is being extended to fill all floor space under the projecting roof.

Peaches will be marketed under the "Gateway Brand," a very attractive label, similar in design to that adopted for apples, a peach being substituted for

an apple in the design. It is artistic in appearance and is characteristic in its features of the district that it represents. These beautiful labels should do much to spread far and wide the fame of the fine, high-grade fruits of Lewiston Orchards. The name, "Gateway Brand," is suggested not only by the design which shows a view of the stone gateway at the entrance to Lewiston Orchards, but also by the fact that Lewiston is the "Gateway City," on the Open-River-to-The-Sea.

#### HORTICULTURAL CONDITIONS IN LEWISTON ORCHARDS AND VICINITY.

(Continued from Page 1)

spraying next season. The fruit generally here is reported to be unusually well colored and developed, and a crop of high-grade quality seems assured for the present season.

## Lewiston Orchards Assembly Considers School Problem

THE Lewiston Orchards Assembly had its regular monthly meeting July 14th, and a special meeting July 23, both to consider the same subject, the proposition by the Lewiston State Normal School to establish a rural training school in Lewiston Orchards, using the Orchards school for observation and demonstration purposes. Professor E. S. Wooster explained the purpose and conditions of the movement, stating that the rural department of the Lewiston State Normal School desired to have free privilege of use of all classes and activities of the school for the purpose of giving student teachers observation and practice in the conduct of rural schools, their classes and activities, and also to have the privilege of the use of any unoccupied room for class purposes.

Professor Wooster stated that the rural department work had five different phases including physical environment, community welfare, a curriculum adapted to the particular needs of the commu-

nity, the effective training of teachers for the work and first-hand investigation and extension work. He further said that a model school was sought for the purpose and that the school in Lewiston Orchards seemed ideal in building location and community. The proposition had first been made to the school board of the Lewiston Independent district in which the Lewiston Orchards school is located, and the board had referred the matter to the people of Lewiston Orchards.

When first presented to the Assembly, the matter was generally discussed and continued to a special meeting, the school affairs committee of the Assembly being authorized to meanwhile take up the matter with the school board. At the special meeting the committee referred back the matter without recommendation to the Assembly and the question was again thoroughly discussed. While it was generally acknowledged that the Lewiston State Normal School was do-

ing splendid advanced work, especially in its rural training school department, and that the proposition made was a high compliment to the Lewiston Orchards school, it was finally decided, by an almost unanimous vote that the proposition would not be accepted, the argument against it being that the division of authority in the school might be detrimental to the interests of the school. While the aim of the Normal school would be to help to keep up the school to the highest standard, the people evidently felt that the school would be so maintained in any case, and might suffer from outside interference in case that the rural training work should be taken up in connection with the school. The spirit of the meeting was not antagonistic in any way to the Lewiston State Normal School but conclusively showed that the people of Lewiston Orchards were alive to the interests of their home school and jealous of its reputation and advancement.

## Rural Free Delivery Route Established in Lewiston Orchards

AFTER efforts of nearly four years, under auspices of Lewiston Orchards Assembly, the people of Lewiston Orchards have finally secured the service which started August 1, with Thomas C. Lukens, of Lewiston, as carrier. The first definite move made was at a meeting of the Assembly, then known as the Producers' Association, November 23, 1909, when a committee of three, consisting of H. A. Canter, D. W. Clark and H. H. S. Rowell was appointed to look into the matter. During the following month, the secretary, H. H. S. Rowell, made a canvass of the district and secured the required number

of signatures, (over 100 families) to the petition for a route.

The petition was forwarded to Washington, but no final action was taken by the postoffice authorities until the summer of 1912, when notice was received that if not less than 123 pledges for service could be secured, the route would be established. The secretary made another canvass in July, 1912, obtaining the required number, and the list was forwarded to Washington. It was then found that there would be difficulty in changing the star route that passed through the Orchards, and in February of the present year, Inspector Fullen-

weider, of Spokane, went over the proposed rural route and made a number of changes, shortening the route from 25 to 20 miles. Owing to these changes, a new canvass for pledges was demanded and this was made by the secretary, in April of the present year. About two months later, word was received that the route would be established August 1, and that an examination for carrier would be held July 12.

The rural route adds another important modern convenience to the advantages of the district, to which will probably be added in the near future, street cars and electric lights.

### AN AFTERNOON RECEPTION.

A very pleasant social occasion was the afternoon reception given July 24, by Mrs. R. W. Cram, to her guests, Mrs. E. A. Harris and Miss Susie M. Bickford, of Boston. Those present were: Mesdames E. A. Harris, R. W. Cram, J. B. White, F. D. Webb, G. E. Ames, H. H. S. Rowell, F. B. Gano, Walter Eddy, L. A. Blackman, W. S. Shearer, S. B. Stedman, A. H. Duffie, A. V. McConnell, W. F. Ebinger, C. A. Cole, J. E. Butler, J. W. Haben, J. S. Mounce, J. L. Goodnight, J. L. Klapp, S. W.

Whitford, R. Pickering, C. Tyler, L. C. Giesecker; Misses Laue and Susie M. Bickford. Mrs. Cram took a snap shot that caught all of the crowd except herself and her little daughter Virginia. (See cut on first page).

### BOY RANGERS CAMP AT LAKE

The Rangers of Lewiston Orchards, under the direction of the Chief Ranger, Harry H. Tondevold, pitched their camp August 1, for a week's stay on the shores of Lake Waha. All went out by auto truck, with full outfit for a well

equipped outing. The party included Harry H. Tondevold, Clyde Sipes, Dell Sipes, Roy Sipes, Arthur Chase, Clarence Chase, Cornelius Lee, Verner Ebinger, Leon French, Robert Spann, Martin Lee, Wayne Jackson, James O'Leary, Ralph Rowell and Paul Rowell.

The young friends of Ardys Ames gave her a surprise party on the occasion of her fourteenth birthday anniversary, July 24.

H. L. Powers left for Portland July 26th after a stay of three weeks here.

## Harvesting the Apple Crop

By Chas. A. Cole, Horticulturist.

**A**S the picking season for apples is only a few weeks off it is high time for the grower to begin overhauling his picking equipment, or if he has not supplied himself with one to do so at once. This part of the orchard equipment is as important as that for cultivation. The equipment should include ladders, baskets, lug boxes, and a field wagon.

The ladders are an important item of the field equipment. The main points to look for in selecting one are durability, lightness, and ability to stand firmly when in use. There are many types on the market. I prefer the three-legged ladder, as it will stand solid on uneven ground, a heavy bulky ladder is hard to handle and there is a tendency for the pickers to knock off the fruit and spurs with them. Some of the types are so bulky that the picker puts in more time handling the ladder than in picking the fruit.

Any good 12, 14, or 16 qt. bucket will do for picking the fruit into. These buckets must be free from sharp corners or ridges that will be apt to cut or bruise the fruit. There are many new types of picking buckets and bags on the market. Some of them are so high priced that an average grower can not afford to buy them.

There are two types of long boxes in use here in the orchards. I prefer the larger (size 10x14x20 inches). This lug is large enough to allow the picking

bucket to be lowered down into it, then tipped over so that the fruit rolls out gently. All well made lug boxes have a strip 1 1-2 inches nailed across each end at the top. This strip holds the boxes apart when stocked, allowing a free circulation of air over the fruit. Good deep hand-holds are cut in each end of the box.

The type of wagon used to handle the fruit from the field to the packing house must not be over looked. Many of our growers haul their fruit in light wagons with springs. This is excellent, as the less jolting the fruit gets from the field to the packing house the better the condition when it reaches the market. A springless wagon must not be used.

Just when to pick depends on the variety and what is to be done with the fruit. It is impossible to give a set rule for picking apples. We pick green and yellow apples when they have reached a proper size and the seeds are brown or black. Some of the yellow apples are picked while pretty green and they color up in storage. Red apples are picked when they have reached a color characteristic for that variety. Some growers desiring to obtain a very high color allow the fruit to remain on the trees too long, thereby lowering its shipping quality. An apple reaching maturity prepares itself for picking by forming a loose joint between the stem and fruit spur. Apples are not ready to pick when the stem pulls out, breaks

in two or the spur comes off with the fruit. Weak stemmed varieties such as the Rome Beauty will always have a certain percentage of stems broken or pulled out. The best way to find out just when an apple should be picked is by experience.

When picking apples leave the fruit spurs on the tree and the stem in the apple. By breaking off the spurs you are lowering your tree's bearing capacity. Apples without stems are classed as culls. A little practice will teach you the best method for picking off the fruit. Never allow the picker to drop the apple into the bucket. It must be laid down on the bottom. The bucket must not be heaped up. If so the fruit will roll off and be lost by bruising. A heaped up bucket can not be emptied carefully. When emptying a bucket of fruit, lower it into the lug box, place the hand over the top of the apples to prevent them rolling out, turn bucket on side and tip up the bottom allowing the fruit to roll out gently. Never heap up the lug box. No fruit should come above the side of the box. When the lugs are stacked this will prevent bruised fruit also allow room for air circulation. When the lug boxes are being filled they must be set so that the tree shades them from the sun. If the sun is allowed to shine on the fruit it becomes heated thus reducing the keeping quality. The fruit should be removed to the packing or store house as quickly as possible after picking.

### GRAIN AND HAY HARVEST.

The grain and hay harvest in Lewiston Orchards is now in progress. The Orchards company has already cut about 400 tons of peas and oats which were sown as an inter-orchard crop. The yield is about three tons to the acre. A portion of the peas will be threshed for seed for next year. The hay will be for use of the Orchards company, which is also cutting 1,500 acres of wheat and barley, using a combine, operated by a caterpillar engine; also a thresher. The combine is cutting about thirty acres a day. The wheat and barley are yielding from 30 to 35 bushels per acre. There are also 300 acres of beans of different varieties, and 50 acres of potatoes. Harvesting operations will be completed about September 1.

According to the records of the government weather observer, W. W. Thomas, of Lewiston, the past month was slightly cooler than the average of July, the mean temperature being 73 degrees, against the average of 73.6. The highest was 105 and the lowest was 47, which was the lowest in 13 years. On four days it was 100 or higher. In 1906, the average was 82, or 9 degrees warmer than this year. Since Jan. 1, there has been an average deficiency of 3.3 degrees.

The total precipitation for last month was only .10 of an inch, against a normal of .42 for the month, but since Jan. 1, there has been an excess of 3.9 inches.

Mrs. Edwin A. Harris, mother of Doctor R. W. Cram, and her sister, Miss Susie M. Bickford, both of Dorchester,

Mass., were guests for several weeks of Dr. and Mrs. R. W. Cram, on Preston avenue and Seventh streets. Miss Bickford is a teacher in the Brookline, Mass., schools. Both were much pleased with the appearance of the Orchards. They left July 30, for a visit at Missoula, Mont., before returning home. During their stay here, they were entertained at dinners, luncheons or receptions at the homes of Dr. and Mrs. R. W. Cram, Mr. and Mrs. L. A. Blackman, Mr. and Mrs. H. G. Conover, Mr. and Mrs. A. H. Duffie and Mr. and Mrs. H. H. S. Rowell.

The cultivation and irrigation of orchards is now under way, but the cultivation will soon be discontinued. Fall plowing will start immediately after harvesting is done.

## Timely Horticultural Problems Are Discussed

OF much practical and timely interest was the meeting of the horticultural society of the Orchards held July 21, and addressed by Professors W. S. Thornber and Chas. A. Cole of the Lewiston-Clarkston School of Horticulture, and by W. S. Ballard, horticultural pathologist of the United States department of agriculture.

### FRUIT THINNING.

As one of the most seasonable of subjects, that of fruit thinning called for many questions. It was recommended that, on five-year-old Elberta peach trees, the fruit be thinned to four to five inches apart, according to size of the stock; that Muir peaches be thinned to three to four inches apart and that early peaches could be given less space. Apples should be one to a spur and four to five inches apart, the Jonathan requiring four inches and some larger varieties, such as the Rome Beauty, needing more space.

Three ways were mentioned for removing the fruit; pulling off, cutting the stem and pulling the stem off. While fruit thinning is chiefly confined to peaches, apples and pears, it was stated that apricots were sometimes thinned and that plums were sometimes thinned for fancy fruit.

### SOME FRUIT DISEASES.

It was stated that some apple scab had been seen, and that, while it was now too late to spray for this pest, the scabby fruit can be pulled off. The disease, being a fungus one, is infectious and rain makes it worse. It is found in the fall on the leaves and is carried on these to the ground. It should be combatted by spraying with lime-sulphur just before blossoming time. When spraying is done later with arsenate of lead, some lime-sulphur should be put in.

A few cases of pear blight had been found and all such are receiving prompt attention, the remedy being immediate removal of infected parts.

Considerable rosette, also known as winter injury, had appeared. This is not a disease, said Professor Thornber, but a physical condition brought about by unfavorable circumstances of soil, season or care. A hard subsoil gives more rosette and it prevails more where there is clean cultivation, while seeded orchards have been found to be free from it. Rosette can be removed by seeding down the orchard and stopping cultivation. Neglected, weedy orchards are found to be free from it, but it can be avoided as well by seeding down with alfalfa. The alfalfa should be thoroughly disced in the spring and new irrigation ditches put in. Dynamiting the soil is also successfully used for rosette.

### SUMMER PRUNING.

Next in order for the season comes summer pruning, which Prof. Thornber said is divided into four periods: late winter, early summer, late summer and fall. In sections of heavy snowfall, fall pruning is done as a matter of convenience. Winter pruning is practiced generally for wood production. To produce the largest tree possible, don't prune at all, but this method will not produce the best shape.

Summer pruning may be either early or late. Wood growth may be produced by early pruning, the present time being the time to prune pear trees for wood growth. Later than this it has the opposite effect. Early summer pruning here is in June or July. It can be used on strong growing, two, three and four-year-old apple trees, and the same with peach and pear trees. On the contrary, used at this time on bearing cherry trees, it induces fruit-bud development, as the cherry tree growth at this time has matured. The cherry trees should now be cut back and thinned. Apple trees should have bad limbs cut out. The effect of early summer pruning is the same as that of winter pruning. In this way, the growth of a tree can be hastened by one year. It hurries the tree for-

mation but should not be used on a tree of poor growth. It is only suited to trees of strong growth. In this work, remove one-fourth to one-third of this year's growth, but do not bare the trunk of the tree to the glare of the hot summer sun.

### LATE SUMMER PRUNING.

As to the present pest of the cabbage worm, the use was recommended of a spray consisting of two pounds of arsenate of lead to fifty gallons of water, the preference being to use some flour paste as a spreader.

The corn worm nuisance, for which no remedy is yet known, could be largely avoided, it was stated, by planting an early catch crop and chopping it out and planting a late crop.

### NATIONAL HORTICULTURAL PROBLEMS.

Mr. Ballard, who was present as a visitor, reported the results of his investigations of pear blight, apple pests and apricot diseases that he had been investigating on the Pacific coast, chiefly in the Powder River Valley in California. The problem of pear blight he regarded as easy where all growers work together. Continual and concerted efforts prove effective. The great point is to get a community to work together, and to work hard. The conditions here he considered exceptionally favorable for such cooperation. For tree growth and vigor, he considered the orchards here up to the best. He said that the Yellow Newtowns here grow as they should, being more vigorous than in California.

Mr. Ballard spoke of experiments in spraying fruit trees with nitrate of soda, with a little caustic soda added. The result was that the blossoms came out ten days earlier, were larger, and set a larger crop, producing five times as much fruit. Similar results were noted even the second year.

### AN EVENING RECEPTION.

Of much social interest was the evening reception given by Mr. and Mrs. L. A. Blackman, July 26, in honor of Mrs. E. A. Harris and Miss Susie M. Bickford, of Boston, who were spending several weeks in the Orchards as the guests

of Dr. and Mrs. R. W. Cram. The evening was divided between the lawn and the parlor. Dainty refreshments were served and a number of musical selections were given. Those present were: Mrs. E. A. Harris, Miss Susie M. Bickford, Dr. and Mrs. R. W. Cram, Mr.

and Mrs. L. A. Blackman, Mr. and Mrs. P. W. Clark, Mr. and Mrs. G. E. Ames, Mr. and Mrs. F. B. Gano, Mr. and Mrs. H. H. S. Rowell, Mr. and Mrs. J. F. Morse, Mr. and Mrs. W. S. Shearer, Mr. and Mrs. J. E. Butler; Misses Ruth Finney, Ardys Ames, Ruth Rowell and Virginia Cram.