Waste From Salmon Canneries Converted to Stock Feed and Fertilizers

CANNERY SAVES BY-PRODUCTS FOR LIVESTOCK FEED

By R. C. Stewart

The war, by showing the need for conserving every possible by-product, has opened up many new industries. One that is of particular interest to stock feeders and poultry people is the reducing plants to take care of the fish waste at the salmon canneries along this coast. The Marine Products company of Tacoma specializes in the utilization of any waste organic material suitable for the manufacture of concentrated feeding stuffs and fertilizers.

At each cannery the company installs an offal tank with a capacity of storing the maximum amount of offal created by the cannery during two days' operations. Scows are used to haul the waste from tanks to the reducing plants.

The actual processing of the raw material starts with the removal of the raw material by conveyors from the storage to the cooking department, which is equipped with two high pressure digestors each having a capacity for cooking seven tons of fish per hour. From the digestors the cooked mass is conveyed to a hydraulic pressure of 450 tons equivalent to 5000 pounds piston pressure to the square inch.

PRESS CAKE BROKEN UP

After the fish has been pressed, thus removing practically all the oil and the moisture to below 45 per cent, the press cake is broken up mechanically and after passing through a pre-heater is automatically fed into the dryer which is 55 feet long, made up of five separate steam jacket units each 11 feet long and so constructed that the separate units may be heated to different temperatures, according to the kind and condition of the material being processed.

The drying is entirely automatic both as to feed and discharge. The opportunity to regulate temperature permits of perfect evaporation and uniformity of drying. From the dryer the material is elevated to the cooling room where the material after being cooled is screened, milled and after being cured is whipped to allow the air to come in contact with all the fine particles and is then bagged and ready for shipment.

WATER AND OIL SEPARATED

The oil department cares for all the liquids drained from the cooked fish and liquids from the press department. The process of separating the water and oil is done without the aid of any acid or chemical and depends entirely upon the free separation of the oil by the flotation system. The liquids first pass through the separating tanks which separate the water and pass it to the evaporators where crude glue stick is made and the crude oil to the oil cooking tanks where the oil is boiled under pressure until all of the organic moisture is removed. The boiled oil is then passed to the settling tanks where most of the stearin and foots are precipitated after which it is stored in large tanks awaiting shipment.

It is the intention of the Marine Products company to further increase their operations by the construction of similar plants wherever their is sufficient raw material to warrant the investment. Already two additional sites in Alaska have been approved and only await the completion of arrangements with the canneries in the districts to insure their construction. This company last year distributed over a million dollars' worth of goods to the farms and stock feeders of the Pacific coast.

Committee Named For Big Swine Show

R. J. Evans, president of the National Swine Growers' association, has just announced the show committee of the association which will have charge of the national swine show, Des Moines, Iowa, October 4-8, 1920. The committee consists of R. J. Evans, chairman, Chicago, Ill.; W. M. McFadden, Chicago, and Fred H. Moore, Rochester, Ind.

HOME OF FINE HOGS

Hog barn and some of the big type Poland Chinas owned by Ray J. Fox, of Lyons, Or. Fox recently held a sale with very satisfactory results. His herd took the following prizes in 1919: First aged herd at Oregon State fair, Western Royal Livestock Show, Spokane; Lewiston Livestock show, Lewiston, Idaho, and the Pacific International Livestock exposition, Portland. Many individual prizes were won as well.

L. F. RUSSEL USES SCIENCE ON PRUNES

Vancouver, Wash., July 17.—L. F. Russell, president of the Washington Growers' Packing association, is a grower of 35 years experience. At the present time he has 60 acres in bearing prunes, and has recently set out 60 acres of young trees.

Later he intends to increase this by 30 or 40 acres. He lives just east of Washougal on what is conceded to be one of the finest prune orchards in the Northwest.

Russell recently purchased a tract of land a half mile square situated on "Sunset View," about four miles east of Washougal and with an elevation of 1000 feet. In the last three months he has spent $7000 in setting much of this to young prune trees. On the tract are about 50 acres of good timber that will furnish fuel for his dryers for years to come. On the place are several living springs from one of which bubbles a two-inch stream. This, Russell proposes to control with two-inch pipe, and eventually to have a pretty fish pond. Future plans call for a log house and all that goes to make up a beautiful country place.

Russell is a prune expert and proposes to put his experience and all the necessary money into the project to see what can be done in developing an orchard. Associated with him in the Growers' association are most of the leading growers of the country.

Poultrymen Active In Improving Stock

The large number of well-bred flocks of poultry and the skillful methods used in improving them are becoming more and more evident with the development of the "Better sires—better stock" campaign. One Florida poultry farm, recently enrolled, has 200 cocks and 950 hens, all standard bred, single comb White Leghorns. In addition, they are line bred for high egg production and the flock has been trap nested for 24 years. The owner states that in addition the fowls are of good exhibition type.

POULTRY NOTES

A GREEN range of alfalfa, clover or grass furnishes the ideal condition. When these are not available it is necessary to give the birds some kind of succulent food. Mangel beets, cabbage, sprouted oats or green clover are usually considered the best green feeds.

It isn't a good plan to get careless about feeding time so that the hens are trotting up and down along the fence and looking for you.

Recommended only to hasten the development of late hatched pullets or to help in keeping to egg production of hens in late summer, eapecially those hens which are not to be used for breeders the following spring.

Hard, sharp grit is necessary for grinding feed; oyster shell to supply lime for egg shells. Neither will replace the other.

One dozen eggs contains about one pint of water. Clean, fresh, pure water should be kept constantly before the hens and should be renewed at least once daily.

Fish meal is rich in protein and can be fed to laying hens with good results. Skim milk will take the place of meats in the ration.

To keep the hens busy and prevent them from getting the habit of moping around, feed their grain in a straw litter.

Majority of Farmers' Creameries Succeed

Most but not all of the 17 farmers' creameries in Oregon surveyed by Eric Englund, field agent in marketing for the agricultural college, have been successful. That is, they have paid at least the market price for butter fat, have made 6 per cent on capital invested, and have continued solvent. The causes of failure of some to reach this measure of success are pointed out in the report of the survey, just issued by the experiment station. Many facts of interest to all dairymen are presented. Copies free.

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POULTRY ADVICE GIVEN BY EXPERT

By C. S. Brewster
(Of Kerr, Gifford & Co.)

There appears to be a wide difference of opinion as to the value of salt in the poultry ration. The larger poultrymen seem to be about equally divided as to its use. There is no experimental data to prove its value or lack of value, but we do know definitely that if fed in excess it acts as a deadly poison.

The writer is inclined to think that it is not necessary. If it is fed, it should be fed very sparingly. See that no lumps go into the feed. Perhaps the best way is to dissolve the salt in the drinking water and use this to mix a moist mash, or give them the water to drink.

A word of caution might be added here also with regard to the use of condiments, such as pepper, mustard and various commercial egg foods or tonics. Condiments of all kinds act as a stimulant to the hen's organs, and while they may result in an immediate increase in production, they frequently overstimulate and result in the breaking down of the egg-producing organs.

LEAVE THEM ALONE

It is safer, wiser and cheaper in the long run, to leave these things strictly alone. This is especially true if the fowls are ever to be used for breeding purposes, as the vitality of the stock and therefore of the chicks may be permanently affected.

In Australia and in the New Jersey egg laying contest, Epsom salts have been used regularly as a means of keeping the hens healthy. In Australia they state that the regular use of Epsom salts will take the place, to a large extent, of green feed. Professor H. R. Lewis says with regard to their use in the Vineland contest:

"It is my belief that one of the main reasons why the birds at the Vineland contest were able to make such a phenomenal production last year was due to the regular use of2 Epsom salts as follows: One and one-half pounds of salts was fed to each 100 birds about every two weeks in the drinking water. During a period of damp weather, when colds seemed to be prevalent, the frequency of salts was increased, while during spring and summer, when the birds were on range and the bowels were moderately loose, it is not necessary to feed the salts so frequently; possibly every three of four weeks will suffice at this season."

Another authority recommends the use of Epsom salts as follows:

"One third of a teaspoonful of Epsom salts is measured out for each bird in the flock. This is dissolved in water and a mash moistened with it. This mixture is given to the flock every month during the fall and winter."

BUTTERMILK IS GOOD

Sour milk or buttermilk is a valuable food product. It is high in animal protein of the most digestible nature, and is very palatable. The lactic acid contained in it aids digestion, increases the assimilation of other foods and stimulates the appetite. It will help to keep fowls in better condition, increase the efficiency of the other feeds and produce more economical results. Buttermilk is fed as a drink by practically all the larger poultrymen and will increase the efficiency of practically any ration.

People often wonder how much buttermilk a hen will drink. In experiments at Cornell, hens fed both milk and water drank on an average of 1½ ounces of water and 5½ ounces of buttermilk per day. In other words, 100 hens will require about 12 to 14 quarts of milk per day if given all they want. In experiments at Purdue university, the hens averaged to drink 93 pounds of buttermilk per year or about 12 gallons.

Wheat Raisers of Gilliam Organized To Sell New Crop

Condon, July 17. — About 50 of the wheat farmers of Gilliam county gathered here to make final arrangements for a cooperative marketing plan for their product. O. B. Robertson, former cashier of the First National bank of this city, presided and was chosen to handle the business of the organization.

Another important action taken at the meeting was setting of the wage scale to be paid during harvest. The scale has not been announced yet but it is planned to take up the matter with similar organizations in other counties and all adopt a uniform scale. The grain will be graded and placed on sale in pools large enough to secure the best price.

Holstein Breeders Of Washington to Form Association

Yakima, July 17.—First steps to form a Washington Holstein Breeders' association were taken here yesterday at the annual meeting and picnic of the Yakima Holstein Breeders' association, where about 50 were present. The picnic was held at the farm of Todd & Sons in the Ahtanum. It was decided to make a drive to increase the membership in the valley and to open negotiations with breeders for the formation of a state association. At the annual election C. G. Sprong of Grandview was elected president; James Ames of the Ahtanum, vice president; Stanley Butchart of Granger, secretary, and H. C. Davis of Yakima, treasurer. These, with E. B. Marks and Alex Todd form the board of directors.

Sandy Dairymen Have Well Attended Meet

Sandy, Or., July 17.—There was a large attendance of dairymen at the regular meeting of the local Oregon Cooperative Dairymen's league last night. M. S. Shrock of Portland explained the present workings and future plans of the league. J. A. Draper, a league field worker, also spoke. Shrock reported there are already 1800 members in the state who have signed the new contract. There are 213 patrons shipping cream to the Sandy creamery, and the amount of cream is double what it was when the patronage was larger, which shows the dairymen are becoming larger producers. Anton Malar is president and Max Kligel secretary of the local league.

$40,000 in Prizes To Be Offered at Spokane Stock Show

Spokane, Wash., July 17.—A total of nearly $40,000 in cash prizes and premiums will be given this year at the Interstate Fair and Livestock show to be held at the fair grounds September 6 to 11, it was announced today by the fair officials in issuing the 1920 premium list and fair catalogue. This is said to be the largest amount ever offered by the fair association in prizes and premiums.

FEDERAL RESERVE TO AID WOOL MEN

The federal reserve board has restored confidence in the wool industry by suggesting a plan for financing the woolgrowers during the present emergency.

By advance arrangement with the federal reserve board, woolgrowers, bankers in the wool-producing sections and Eastern wool markets, wool dealers, warehousemen, manufacturers and others interested in the wool trade held an all-day session with the federal reserve board. The condition of the wool market caused by the recent cessation of purchases of raw wool was laid before the board and a full discussion was had of various plans for financing the industry until normal buying operations are resumed. Unlike most other crops, wool is marketed in the spring and early summer, and the marketing conditions prevailing during the last month have threatened great losses to woolgrowers which might be disastrous. Such a condition, if it developed, might cause serious sacrifice of sheep on farm and range and result in reduced supplies of wool and mutton in future years. It was clearly shown that there was no disposition on the part of anyone to maintain artificial prices, but simply to make arrangements by which the temporary interruption of the wool market would be removed and normal marketing conditions restored.

The plan of action finally arrived at was adopted as a more simple and satisfactory way of dealing with the situation than the cotton-loan plan of 1914 which had been suggested. At the termination of a conference between the board and a subcommittee consisting of bankers thoroughly familiar with the entire situation, the board authorized the following statement:

"A woolgrower may ship his wool to one of the usual points of distribution, obtaining from the railroad a bill of lading for the shipment; the grower may then draw a draft against his bank for such an amount as may be agreed upon by the grower and the bank, secured by the bill of lading. The federal reserve act authorizes any member bank to accept a draft secured in this manner at the time of acceptance, provided that the draft matures in not more than six months from the time of acceptance. After acceptance such a draft, bearing the indorsement of a member bank, is eligible for rediscount or purchase by a federal reserve bank, providing that it has a maturity of not more than three months from the date of rediscount or purchase."

While the statement refers only to acceptances based on bills of lading, Governor Harding referred those present to the provisions of section 13 of the federal reserve act as to eligibility for discount of paper secured by warehouse receipts.

Livestock Shipping Plan Works Well

Seven counties included cooperative livestock shipping in their farm bureau programs during 1919, marketing 137 carloads of stock at a saving of $13,670. Linn county shipped 21 cars, and Douglas shipped a total of 20 cars. The livestock shipping associations organized in these two counties now employ full-time managers, a feature essential to the success of extensive adoption of this marketing plan. The Linn county association has been in operation since July, 1918, and in that time has shipped 21 cars of stock, at a saving according to the directors in the neighborhood of $5000. This association was brought into existence by the county farm bureau.

Poultrymen Balk On Assessed Valuation

Centralia, July 17.—At a meeting of the Centralia branch of the Lewis County Poultry association held Saturday night in the Grange hall on Fords Prairie, a committee, consisting of Frank Ipe, chairman; G. Sours and Mrs. L. L. Harriman was appointed to make an investigation of the county poultry assessed valuation with a view of taking steps toward having it reduced. A report on activities of the state board of directors of the state poultry association was given by Mr. Swain, a member. Following this talk members of the association carried on a general discussion of the price of feed and standardization of the size of eggs.

Good Hay Is Cured in Windrows, Not Dried

Sun burned hay is not good hay. Well cured hay is cured either in windrows or in shocks, point out the farm crops specialists at O. A. C. It is allowed to lie in the swath only long enough to wilt, not to dry out. Sun drying wastes the juices; curing saves them.

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CENTRAL OREGON SHEEP MEN ELECT

The semi-annual meeting of the Central Oregon Rambouillet Breeders' association was held at Bend, Or., on July 7. The purpose of this meeting was to take care of the registration of 112 Rambouillet lambs which are the product of the 74 ewes brought into Central Oregon last spring by the First National bank of Bend and distributed to farmers of the county.

Every member reported excellent success with his ewes, and some very high lambing percentages. The lambs are showing up in splendid shape and just previous to the meeting Grover Gerking of Tumalo weighed up a four months' old lamb which tipped the scales at 90 pounds.

The association decided to handle all of its advertising, exhibiting and selling through one person. They selected R. A. Ward of the First National bank of Bend to act as advertising and sales manager. It was planned to make an exhibit at the Pacific International show. The lambs for exhibition will be selected from the best of various members by an impartial committee who will endeavor to select the best lambs available.

In order to assist in selecting the best lambs the association will hold a breeders' picnic on August 1 at the ranch of one of the members—Dan Heisig—on the upper Metolius river. Most of the associations' sheep will be at the picnic and officials of the Oregon Agricultural college are expected to be in attendance and assist in this work. The lambs which are to be shown by the association were sired by a C. P. Raup ram from Ohio, a Coffey ram from the University of Illinois and a J. H. Seely ram from the Hobbs & Gillett herd of Castleford, Idaho. The stud ram, which the association now has at the head of its herd, was purchased by the bank from Hobbs & Gillett and is a Seely bred ram, sired by a Seely ram which Hobbs & Gillett purchased at Salt Lake in 1917, and which is believed to be one of the best rams Seely ever sold. The dam is sired by a Butterfield ram known amongst breeders as the famous Old Twenty-six. On the sire's side the breeding runs back to Markham and Puffer stock, which is a well known line of breeding in Rambouillet circles.

The officers of the association are: President, John Marsh of Tumalo; vice president, Dan Heisig of Sisters; secretary treasurer, Grover Gerking of Tumalo.

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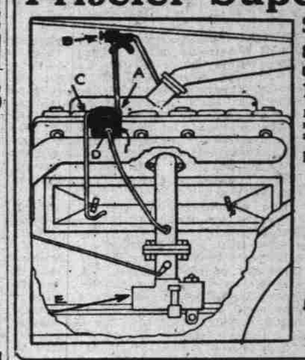

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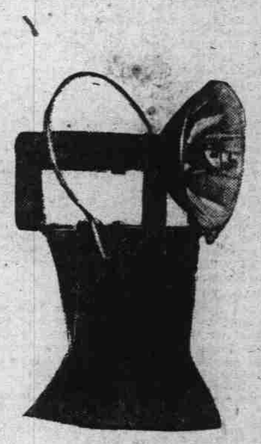

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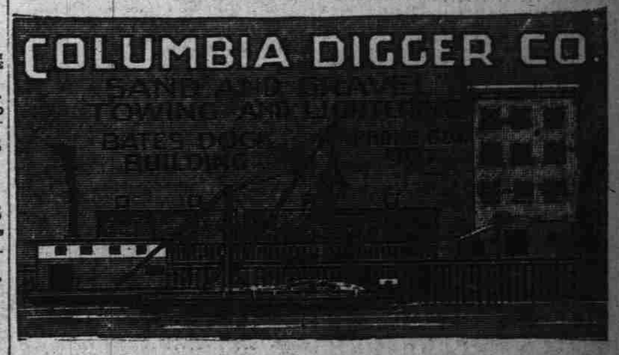

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