

RECENT TECHNOLOGICAL PUBLICATIONS

COMMERCIAL FISHERIES REVIEW Articles and Separates:

The following technological articles appeared in Commercial Fisheries Review and were also issued as separates. Both the issue in which each article appeared and the number of the separate which was issued after the article was published in the Review are given below.

Salmon Cannery Trimmings: Part I - Relative Amounts of Separated Parts, by H. W. Magnusson and W. H. Hagevig, vol. 12, no. 9 (Sept. 1950), pp. 9-12 (Sep. 258).

Studies on Analytical Methods of Extracting Vitamin A and Oil from Fishery Products: Part III - Experiments on the Extraction of Low Oil Content Livers with Petroleum Ether by the Shaking Method, by F. Bruce Sanford and Neva L. Karrick, vol. 12, no. 6 (June 1950), pp. 4-8 (Sep. 254).

Utilization of Salmon Eggs for Production of Cholesterol, Lipide, and Protein, by G. I. Jones, Edward J. Carrigan, and John A. Dassow, vol. 12, no. 11a (Nov. 1950 - Supplement), pp. 8-14 (Sep. 262).

Studies on Analytical Methods of Extracting Vitamin A and Oil from Fishery Products: Part IV - Experiments on the Extraction of Low Oil Content Livers with Acetone, Ethyl Ether, and Petroleum Ether, by F. Bruce Sanford and Wm. Clegg, vol. 12, no. 11a (Nov. 1950 - Supplement), pp. 18-20 (Sep. 264).

A Chemical Evaluation of Tuna Liver and Beef Liver Meals Prepared by Different Methods, by G. I. Jones and Wm. Hoyer, vol. 12, no. 11a (Nov. 1950 - Supplement), pp. 21-7 (Sep. 265).

Vitamin A Potencies of Liver Oils of Bering Sea Cod and Flounder, by F. Bruce Sanford, John A. Dassow, and E. F. Dietrich, Technical Note No. 6, vol. 12, no. 11a (Nov. 1950 - Supplement), pp. 29-30 (Sep. 267).

Processing Canned King Crab Meat, by M. E. Stansby, Technical Note No. 8, vol. 13, no. 2 (Feb. 1951), pp. 29-30 (Sep. 275).

Characteristics of Oil from Cold-Rendered Fur-Seal Blubber, by Wm. Clegg, Technical Note No. 9, vol. 13, no. 2 (Feb. 1951) pp. 30-1.

Paper Bags for Fish Meal, by G. M. Pigott, Technical Note No. 10, vol. 13, no. 3 (Mar. 1951), pp. 13-4 (Sep. 276).

Use of Frozen Salmon for Canning, by M. E. Stansby and John Dassow, vol. 13, no. 4 (Apr. 1951), pp. 20-5 (Sep. 279).

"Pink Yeast" Isolated from Oysters Grows at Temperatures Below Freezing, by Grace McCormack, Technical Note No. 5, vol. 12, no. 11a (Nov. 1950 - Supplement), p. 28 (Sep. 266).

Feeding Studies with the Gum of Gracillaria confervoides and Carboxymethylcellulose, by Hugo W. Nilson and Maurice Bender, vol. 12, no. 11a (Nov. 1950 - Supplement), pp. 15-7 (Sep. 263).

Feeding Value of Fish Meals, by Hugo W. Nilson, vol. 12, no. 12 (Dec. 1950), pp. 8-11 (Sep. 269).

Results of Some Tests with Frozen Lobsters and Lobster Meat, by S. R. Pottinger, vol. 12, no. 11a (Nov. 1950 - Supplement), pp. 31-3 (Sep. 268).

Effect of Fluctuating Storage Temperature on Quality of Frozen Fish Fillets, by S. R. Pottinger, vol. 13, no. 2 (Feb. 1951), pp. 19-27 (Sep. 272).

Control of Fish Spoilage by Icing and Freezing, by Harold E. Crowther, vol. 13, no. 3 (Mar. 1951), pp. 6-10 (Sep. 274).

Fishery Products as a Source of Animal Protein, by Hugo W. Nilson, vol. 13, no. 5 (May 1951), pp. 6-9 (Sep. 282).

Special Scientific Report: Fisheries:

Seasonal Variations in Toxicity of Butter Clams from Selected Alaska Beaches, by John S. Chambers and Harris W. Magnusson, Report No. 53 (Aug. 1950).

Research Report:

Curing of Fishery Products, by N. D. Jarvis, Report No. 18 (1950).

Articles by Fish and Wildlife Service Authors in Outside Publications:

The Amazing Fish Meal Industry, by F. Bruce Sanford. Presented at the National Fisheries Institute Annual Convention (1951) and reproduced by N.F.I. for distribution to its members.

Fish Liver Oils, by F. Bruce Sanford. Published in the Encyclopedia of Chemical Technology, vol. 6 (1951).

Fish and Shellfish, by M. E. Stansby. Published in the Encyclopedia of Chemical Technology, vol. 6 (1951).

An Improved Method of Glazing Fish for Locker Storage, by S. R. Pottinger. Published in Quick Frozen Foods (Nov. 1950), also Fishery Leaflet 321.

Feeding Tests with Some Algin Products, by Hugo W. Nilson and John A. Wagner, Proceedings of the Society for Experimental Biology and Medicine, vol. 76, pp. 630-5 (1951).

Miscellaneous Reports or Outside Publications:

Marine Products of Commerce, by D. K. Tressler and J. McW. Lemon, Reinhold Publishing Corp., New York, N. Y. (1951).

Official Report of the Delegation of the United States of America to the Food and Agriculture Organization Meetings at Bergen, Norway (1950). Part I - Meeting on Herring Technology, Part II - Meeting on Fisheries Technologists, by H. E. Crowther.

FREEZING FISH AT SEA--NEW ENGLAND

The following reports on the project "Freezing Fish at Sea, Defrosting, Filleting, and Refreezing the Fillets," will appear in the February 1952 issue of Commercial Fisheries Review.

FREEZING FISH AT SEA - NEW ENGLAND

PART 1 - PRELIMINARY EXPERIMENTS, BY J. C. HARTSHORNE AND J. F. PUNCOCHAR

Fillets from round-frozen thawed fish are compared with fillets from iced fish as to percent drip, salt content, trimethylamine content, keeping quality, and yield.

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PART 2 - EXPERIMENTAL PROCEDURES AND EQUIPMENT, BY H. W. MAGNUSSON, S. R. POTTINGER, AND J. C. HARTSHORNE

In view of the favorable results of the preliminary tests on freezing-fish-at-sea, further laboratory and pilot-plant studies were carried out to secure data in preparation for a commercial-scale investigation. For freezing fish at sea aboard the Service's experimental trawler Delaware, the method of freezing fish by immersion in cold brine was adopted for the initial tests. Salt penetration into the fish meat does not seem to be a serious problem. Thawing the frozen whole fish in water (so that they can be filleted) seems to be the most practical method. Organoleptic, physical, and chemical test procedures for judging the quality of the frozen fillets are described.

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PART 3 - THE EXPERIMENTAL TRAWLER DELAWARE AND SHORE FACILITIES, BY C. BUTLER, J. F. PUNCOCHAR, AND B. O. KNAKE.

A description of the experimental trawler Delaware is presented, including the general characteristics of the vessel, alteration of the fish hold, and the refrigeration system. Also described are the shore facilities, which consist of the pier for moorage of the vessel; a pilot plant; a laboratory; and offices. Operation of the vessel and freezing facilities, and handling of the fish ashore are discussed.

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PART 4 - COMMERCIAL PROCESSING OF BRINE FROZEN FISH, BY C. BUTLER AND H. W. MAGNUSSON

Results are presented of the first semicommercial scale processing of round brine-frozen scrod haddock under normal fillet-plant operating conditions.

Technological Associate Editors for this Issue:

H. E. Crowther

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