

in more conventional books on boating, and its intended use is for those chance occasions when the more usual systems are inoperative. There are helpful tips on how to avoid trouble and in some cases how to get out of trouble in the 40-page paper-bound booklet.

The author based this pamphlet on over 20 years of experience with the National Ocean Survey and Coast and Geodetic Survey. Single copies are free (multiple copies cost \$1.50 each) from the Division of Marine Resources, University of Washington HG-30, Seattle, WA 98195.

The **Atlas of Physical and Chemical Properties of Puget Sound and Its Approaches** by Eugene E. Collias, Noel McGary, and Clifford A. Barnes was planned to provide useful information for anyone making decisions based on physical and chemical characteristics of Puget Sound, and for anyone doing research on estuaries. Ocean engineers, commercial fishermen, fish farmers, regulatory agency personnel, and legislators are among those who will be interested in the data portrayed in this atlas.

The first readily available graphic description of Puget Sound water quality data over a sustained time period (1952-1966), the 235-page atlas includes the oceanographic parameters for vertical profiles along eight major channels of the Sound. The paperbound volume is available from the University of Washington Press, Seattle, WA 98195 for \$15.00.

Letter
Editor:

I found the paper "Some ABC's of Fo'c'sle Living" (Marine Fisheries Review, June 1974) most informative as well as entertaining. It was obvious that the authors had experienced both the hardships and rewards of life at sea, for only "someone there" could describe them with such vigor and color.

But while my "editorial greed" was aroused I wasn't able to overlook a few items to "nitpick" about. These may be small details or simple misconceptions in my mind, but if valid they are important to a seaman.

On several occasions the authors refer to the "dock" as the physical structure to which one secures his vessel. This structure may be called the pier or wharf, if open piered, or the bulkhead, if it is a solid structure. "Dock" would refer to the space alongside a wharf that a ship occupies when tied up; or more commonly to a basin or enclosure for the reception of vessels and subsequent control of the water level (i.e., a graving dock or floating dry dock); or to the act of berthing a vessel. The word "dock" should be used to describe a piece of water, or a particular act of shiphandling, or a specialized structure but not the good ol' pier.

A vessel is not necessarily "underway" when she is "in forward motion, running, steaming"; she is "making way." A vessel is underway when she is not at anchor, or made fast to the shore, or aground and may indeed be underway, but not making way. These definitions are provided for in the nautical rules of the road and accepted by most seamen.

Finally, with regard to an anchor watch, I cannot agree with the definition that a bearing "is a compass reading on a very close landmark." Bearings, whether radar or visual, are best

observed to landmarks or land tangents a good distance from the observer but sufficiently close to avoid their obscurity by weather. Bearings on objects at close range may change substantially as a vessel swings about her anchor causing undue alarm, but a watchstander will soon get the feel for how much a distant bearing may allowably change. In the absence of radar, a good range, and at least one cross bearing, will enable one to detect anchor drag.

The above comments should not detract in any way from the excellent essay written by Larssen and Jaeger. The authors have been going to sea for a longer period of time than I have been alive and it is from men such as these, who have both loved the sea and learned how to live with her, that younger men acquire their best knowledge. Any seaman, fisherman or merchant, should be indebted to someone who takes the time to pass on his experience.

Roger Hewitt
Southwest Fisheries Center
National Marine Fisheries Service
NOAA
P.O. Box 271
La Jolla, CA 92037

INDEX, VOL. 36

Marine Fisheries Review

Vol. 36, 1974

NOTE: Indexed here by author, title, and subject are the 85 papers which appeared in *Marine Fisheries Review* in 1974. (A list of these papers, in numerical order, appears at the end of the Index.) Anonymous notes, news articles, and regular departments are not indexed, since they are often of preliminary or ephemeral nature. The entries are indexed by number and page (i.e., 7:12 indicates the July number, page 12).

Aasted, Donald C.—see Struhsaker and Aasted.

"Aerial observations of gray whales during 1973," by Paul N. Sund and John L. O'Connor, 4:51.

"Aerial observations of migrating gray whales, *Eschrichtius robustus*, off southern California, 1969-72," by J. S. Leatherwood, 4:45.

Alaska

Kodiak Island, 8:39.

marine recreational fishing

marine sport fishing value, 3:18.

research that will produce spin-off benefits for sport fishing, 3:19.

review of impact of proposed projects on fish and their environments, 3:19.

sport fishing license sales, 3:18.

Prudhoe Bay, 7:31.

Algae, red

thermal bleaching of pigment in shucked oysters, 11:19.

Almand, J. David, "Publications and services of the National Marine Fisheries Service," 3:1.

Ampola, Vincent G., "Squid—its potential and status as a U.S. food resource," 12:28.

Anonymous, "Japanese skipjack tuna fishery development in foreign areas (Katsuo kaihatsu—kaigai katsuo-zuri gyogyo)," 12:12.

Anonymous, "Marine recreational fishing in Alaska," 3:18.

Anoplopoma fimbria—see Sablefish

Antarctic Ocean

future salmon harvest, 5:20.

Antonelis, George A., Jr.—see Gilmartin et al.

Argopecten irradians—see Scallop, bay.

Arius felis—see Catfish, sea

Asher, William M.—see Curran and Asher.

"Aspects of the distribution and abundance of the long-finned squid, *Loligo pealei*, between Cape Hatteras and Georges Bank," by Fredric M. Serchuk and Warren F. Rathjen, 1:10.

"Attitudinal and demographic characteristics for regular and irregular users of fresh finfish," by Peter M. Sanchez and Leonard J. Konopa, 10:31.

Auxis sp.—see Mackerel, frigate.

Bagre marinus—see Catfish, gafftopsail.

Bailey, Jack E., and Sidney G. Taylor, "Plastic turf substitute for gravel in salmon incubators," 10:35.

Bairdiella chrysura—see Perch, silver

Baker, Daniel W. II, John A. Peters, and Allan F. Bezanson, "Polyethylene trays for flounder fillets," 5:13.

- "Ballistocardiography as a technique for comparative physiology," by N. Ty Smith and Eric A. Wahrenbrock, 4:9.
- Ballistocardiography**
technique for comparative physiology, 4:9.
- Barracuda**, great
troll fishing results in the Caribbean, 9:35.
- "(The) bay scallop makes its bed of seagrass," Gordon W. Thayer and Harvey H. Stuart, 7:27.
- Bering Sea**
riddle of soundings resolved, 11:30.
- Bezanson, Allan F.**—see Baker et al.
—see Peters et al.
- Blood**
California gray whale
some physiological parameters of, 4:28.
- Bonnet, James C., Virginia D. Sidwell, and Elizabeth G. Zook.** "Chemical and nutritive values of several fresh and canned finfish, crustaceans, and mollusks. Part II. Fatty acid composition," 2:9.
—see Sidwell et al.
- Brown, Ausbon, Jr., and Daniel Patlan.** "Color changes in the ovaries of penaeid shrimp as a determinant of their maturity," 7:23.
- Buchanan, Chester C., Richard B. Stone, and R. O. Parker, Jr.** "Effects of artificial reefs on a marine sport fishery off South Carolina," 11:32.
- Burrell, V. G., Jr.** "Thermal bleaching of red algal pigment in shucked oysters," 11:19.
- Cancer borealis**—see Crab, Jonah
- "Capture and harnessing of young California gray whales," by Kenneth S. Norris and Roger L. Gentry, 4:58.
- Caribbean Fishery Development Project** experimental and exploratory shark fishing, 9:67.
exploratory fishing activities.
demersal fish resource, 9:6.
pelagic fish resource, 9:6.
shark resource, 9:7.
exploratory tuna longline fishing, 9:61.
minor miscellaneous exploratory/experimental fishing activities, 9:78.
results of live bait and pole and line fishing explorations, 9:31.
snapper
handline and longline fishing explorations in the Caribbean, 9:8.
spiny lobster fishing explorations, 9:43.
trap fishing explorations for snapper and related species, 9:49.
troll fishing results, 9:35.
- Catfish (cultured)**
fatty acid composition, 2:10.
- Catfish, gafftopsail**
recreational fishery on three piers near St. Petersburg, Florida during 1971, 10:14.
- Catfish, sea**
recreational fishery on three piers near St. Petersburg, Florida during 1971, 10:14.
- "Chemical and nutritive values of several fresh and canned finfish, crustaceans, and mollusks. Part II. Fatty acid composition," by James C. Bonnet, Virginia D. Sidwell, and Elizabeth G. Zook, 2:9.
- Cheng, Lanna.** "Notes on the ecology of the oceanic insect *Halobates*," 2:1.
- Chionoecetes bairdi**—see Crab, Tanner
- Chislett, Geoffrey R., and Mitsuo Yesaki.** "Spiny lobster fishing explorations in the Caribbean," 9:43.
—see Wolf and Chislett
- Clam, hard**
fatty acid composition, 2:13.
- Clam, soft**
fatty acid composition, 2:13.
- Clam, surf**
fatty acid composition, 2:13.
- Clams**
survey of giant, on a western Pacific atoll, 7:17.
- Clark, Robert C., Jr.**—see Joyner et al.
- Cod (Icelandic)**
fatty acid composition, 2:10.
- Cod, inshore (domestic)**
fatty acid composition, 2:10.
- Cohen, Daniel M.** "Names of fishes," 12:21.
- "Color changes in the ovaries of penaeid shrimp as a determinant of their maturity," Ausbon Brown, Jr. and Daniel Patlan, 7:23.
- "Composition of the edible portion of raw (fresh or frozen) crustaceans, finfish, and mollusks. I. Protein, fat, moisture, ash, carbohydrate, energy value, and cholesterol," by Virginia D. Sidwell, Pauline R. Foncannon, Nancy S. Moore, and James C. Bonnet, 3:20.
- "Controlling bone particle content in minced fish muscle," by Max Patashnik, David Miyauchi, and George Kudo, 8:37.
- Coryphaena hippurus**—see Dolphin
- Crab, blue**
fatty acid composition, 2:12.
- Crab, Jonah**
New England Fisheries Development Program economic feasibility of harvesting, processing, and marketing, 11:24.
- Crab, king**
nonpermanent tag for, 7:14.
- Crab, king (body)**
fatty acid composition, 2:12.
- Crab, red**
development of fishery in eastern Pacific Ocean, 10:1.
distribution and abundance in Norfolk Canyon, area fished, 1:31.
distribution and abundance in Norfolk Canyon, fishing gear, 1:32.
distribution and abundance in Norfolk Canyon, fishing results, 1:32.
distribution and abundance in Norfolk Canyon, intermolt stage, 1:34.
distribution and abundance in Norfolk Canyon, quality, 1:34.
distribution and abundance in Norfolk Canyon, reproductive aspects, 1:33.
distribution and abundance in Norfolk Canyon, size, 1:33.
- New England Fisheries Development Program** economic feasibility of harvesting, processing, and marketing, 11:24.
- Crab, tanner**
effect of crude oil on molting
acute bioassays with premolt and postmolt, 7:32.
autotomy of limbs induced by exposure to oil, 7:34.
molting success, 7:33.
subacute bioassays involving molting and autotomy of limbs, 7:33.
toxicity to premolt and postmolt, 7:33.
nonpermanent tag for, 7:14.
- Crustaceans**
composition of edible portion of raw (fresh or frozen)
data on protein, fat, moisture, ash, carbohydrate energy and cholesterol, 3:21.
total fat content, 2:9.
- Curran, Michael P., and William M. Asher.** "Investigation of blubber thickness in a gray whale using ultrasonography," 4:15.
- Currents**
seabed drifters used to study, off Kodiak Island, 8:39.
- Dammann, Arthur E.**—see Olsen et al.
- "Deepwater shrimp trapping in the Hawaiian Islands," by Paul Struhsaker and Donald C. Aasted, 10:24.
- "Development of the pelagic red crab (Galatheaidae, *Pleuroncodes planipes*) fishery in the eastern Pacific Ocean," by Susumu Kato, 10:1.
- "Distribution of seaward-migrating chinook salmon and steelhead trout in the Snake River above Lower Monumental Dam," by Jim Ross Smith, 8:42.
- "Diversification means progress in the Gloucester fishing industry," by Jon C. Rittgers, 3:14.
- Dolphin**
live bait and pole and line fishing explorations in the Caribbean, 9:31.
- Dolphin fish**
experimental fishing activities in the Caribbean and adjacent waters, 9:81.
- Drum seining**
Puget Sound
fishing operations, 12:7.
fleet composition, 12:10.
gear components, 12:6.
history, 12:6.
- operational advantages and disadvantages, 12:9.
- Duffield, Deborah A.** "Fluorescent karyotype of the California gray whale," 4:25.
- Ebel, Wesley J.** "Marking fishes and invertebrates. III. Coded wire tags useful in automatic recovery of chinook salmon and steelhead trout," 7:10.
—see Park and Ebel
- "Economics of Gulf of Mexico industrial and foodfish trawlers," by Rolf Juhl, 11:39.
- "Effect of draining method on the quality of fish stored in boxes," by John A. Peters, Allan F. Bezanson, and John H. Green, 2:33.
- "Effects of artificial reefs on a marine sport fishery off South Carolina," by Chester C. Buchanan, Richard B. Stone, and R. O. Parker, Jr., 11:32.
- "Effects of Prudhoe Bay crude oil on molting Tanner crabs, *Chionoecetes bairdi*," John F. Karinen and Stanley D. Rice, 7:31.
- Elagatis bipinnulata**—see Runner, rainbow
- Elsner, Robert**—see Wahrenbrock et al.
- Enzymes**
used in making fish protein concentrates
biological method, 2:15.
evaluation runs, 2:17.
hydrolysis conditions and amino acids, 2:16.
product uses and costs, 2:18.
selection of enzymes, 2:16.
- Eschrichtius robustus**—see Whale, California gray
- "Estimated costs, returns, and financial analysis: Gulf of Mexico shrimp vessels," by Wade L. Griffin, Ronald D. Lacewell, and Wayne A. Hayenga, 12:1.
- Euthynnus alletteratus**—see Tuna, little tunny
- Evans, W. E.** "Telemetering of temperature and depth data from a free ranging yearling California gray whale, *Eschrichtius robustus*," 4:52.
- "Exploratory fishing activities of the UNDP/FAO Caribbean Fishery Development Project, 1965-1971: A summary," by Robert S. Wolf and Warren F. Rathjen, 9:1.
- "Exploratory tuna longline fishing in the Caribbean and adjacent waters," by Kyotaro Kawaguchi, 9:61.
- Fable, William A., and Carl H. Saloman.** "The fishery on three piers near St. Petersburg, Florida during 1971," 10:14.
- Favorite, Felix.** "Riddle of Bering Sea soundings resolved," 11:30.
- "Feeding of a captive gray whale, *Eschrichtius robustus*," by G. Carleton Ray and William E. Schevill, 4:31.
- Fiji**
Japanese skipjack tuna fishery development, 12:16.
- Finfish**
composition of edible portion of raw (fresh or frozen)
data on protein, fat, moisture, ash, carbohydrate energy and cholesterol, 3:21.
fresh
attitudinal and demographic characteristics for regular and irregular users, 10:31.
total fat content, 2:9.
- Finfish (canned)**
total fat content, 2:9.
- Fish, James F., James L. Sumich, and George L. Lingle.** "Sounds produced by the gray whale, *Eschrichtius robustus*," 4:38.
- Fish**
effect of draining method on quality of, stored in boxes, 2:33.
introducing new products into seafood markets, 10:10.
names of
common names, 12:21.
scientific names, 12:21.
Users of common names, 12:22.
- Fish branding**—see Fish marking
- Fish cake**
new comminuted products, 10:10.
- Fish cake, comminuted**
report on National Marine Fisheries Service survey, 5:34.

- Fish marking**
brand size and configuration in relation to long-term retention, 7:7.
coded wire tags useful in automatic recovery, 7:10.
state of art of fish branding
 coded wire, 7:2.
 cold branding, 7:2.
 tetracycline, 7:2.
- "Fish meal; international market situation and the future," by Jukka Kolhonen, 3:36.
- Fish meal**
international market situation and the future.
 competing products, 3:38.
 demand, 3:36.
 outlook, 3:39.
 prices, 3:37.
 supply, 3:36.
- Fish muscle**
solubilized, as a food binding material, 1:18.
- Fish, frozen**
introducing new products, 10:10.
- Fish, minced**
acceptance survey, 8:35.
advantages of new market form, 8:36.
controlling bone particle content in muscle, 8:37.
future potential, 8:36.
large minced blocks, 8:34.
marketing considerations of products
marketing opportunities, 12:19.
marketing problems, 12:18.
tapping the market, 12:19.
production costs, 8:36.
small minced blocks, 8:35.
storage stability, 8:35.
- "Fisheries of the Republic of Korea," by William B. Folsom, 11:1.
- Fisheries, Soviet**
administration, 8:5.
catch, 8:9.
education and training, 8:7.
fishing operations, 8:8.
fleet, 8:10.
foreign relations, 8:21.
future development, 8:21.
research and development, 8:6.
- Fisherman, commercial**
what it is like
 clothing, 6:14.
 glossary, 6:8.
 how you get paid, 6:35.
 in general, 6:2.
 living in the fo'c'sle, 6:4.
 medical rights and care, 6:30.
 pilot house duty, 6:17.
 responsibilities, 6:26.
 shore leave, 6:36.
 the hold, 6:28.
 working on deck, 6:21.
- Fishing vessel, commercial**
life aboard, 6:1.
- Flores Sea, Makassar Strait**
Japanese skipjack tuna fishery development, 12:16.
- Florida**
recreational fishery on three piers near St. Petersburg during 1971, 10:14.
St. Petersburg
 recreational fishery on three piers during 1971, 10:14.
- Flounder**
polyethylene trays for fillets, 5:13.
- Flounder, yellowtail**
fatty acid composition, 2:10.
- "Fluorescent karyotype of the California gray whale," by Deborah A. Duffield, 4:25.
- Folsom, William B.**, "Fisheries of the Republic of Korea," 11:1.
- , "Japan's frozen shrimp imports: 1973," 8:23.
- Foncannon, Pauline R.**—see Sidwell et al.
- Gauglitz, E. J., Jr.**—see Teeny et al.
- Gentry, Roger L.**—see Norris and Gentry
- Geryon sp.**—see Crab, red
- Ghana**
Japanese skipjack tuna fishery development, 12:16.
- Gilmartin, William G., Richard W. Pierce, and George A. Antonelis, Jr.**, "Some physiological parameters of the blood of the California gray whale," 4:28.
- Gloucester**
diversification means progress in fishing industry, 3:14.
- Green, John H.**, "Mushroom culture: A new potential for fishery products," 2:27.
———see Peters et al.
- Griffin, Wade L., Ronald D. Lacewell, and Wayne A. Hayenga**, "Estimated costs, returns, and financial analysis: Gulf of Mexico shrimp vessels," 12:1.
- Haddock, inshore (domestic)**
fatty acid composition, 2:10.
- Haefner, Paul A., Jr., and John A. Musick**, "Observations on distribution and abundance of red crabs in Norfolk Canyon and adjacent continental slope," 1:31.
- Hake, Pacific**
fatty acid composition, 2:10.
- Hale, Malcolm B.**, "Using enzymes to make fish protein concentrates," 2:15.
- Halibut**
fatty acid composition, 2:10.
- Hall, Alice S.**—see Teeny et al.
- Halobates**
notes on the ecology
 distribution, 1:1.
 general biology, 2:1.
 predators, 1:1.
 prey, 1:1.
- "Handline and longline fishing explorations for snapper and related species in the Caribbean and adjacent waters," by Kyotaro Kawaguchi, 9:8.
- Handwork, W. D.**—see Lux et al.
- Hastings, James R.**—see Ingraham and Hastings
- Hayenga, Wayne A.**—see Griffin et al.
- Heiligman, Fred**—see King et al.
- Hester, Frank J.**, "Some considerations of the problems associated with the use of live bait for catching tunas in the tropical Pacific Ocean," 5:1.
———, and Everet C. Jones, "A survey of giant clams, Tridacnidae, on Helen Reef, a western Pacific atoll," 7:17.
- Heterocarpus laevigatus**
deepwater trapping in Hawaiian Islands, 10:24.
- High, William L.**, "Puget Sound drum seining," 12:5.
- "Home freezing of seafoods," by Melvin E. Waters, 1:1.
- Indonesia**
Japanese skipjack tuna fishery development
 Flores Sea, Makassar Strait, 12:16.
 Kendari (southeastern Celebes), 12:15.
 Sorong (West Irian), 12:15.
 Sumatra, west coast, 12:16.
 Ternate, Kendari, 12:15.
- Ingraham, W. James, Jr., and James R. Hastings**, "Seabed drifters used to study bottom currents off Kodiak Island," 8:39.
- "Introducing new products into seafood markets," by Morton Miller, 10:10.
- Invertebrates**
marking
 nonpermanent tag for crabs, 7:14.
- "Investigation of blubber thickness in a gray whale using ultrasonography," by Michael P. Curran and William M. Asher, 4:15.
- Jaeger, Sig**—see Larssen and Jaeger
- Japan**
frozen shrimp imports for 1973, 8:23.
skipjack tuna fishery development
 Indonesia, 12:15.
 Madagascar, 12:16.
 Maldiv Islands, 12:17.
 Palau, 12:16.
 Papua New Guinea, 12:13.
 Philippines, 12:16.
 Samoa, 12:16.
 Solomon Islands, 12:15.
- "Japan's frozen shrimp imports: 1973," by William B. Folsom, 8:23.
- "Japanese skipjack tuna fishery development in foreign areas (Katsuo kaihatsu—kaigai katsuo-zuri gyogyo)," Anonymous, 12:12.
- John, Joshua**, "Some marketing considerations with respect to minced fish products," 12:18.
- Johnsen, Richard H.**—see Sims and Johnsen
- Jones, Everet C.**—see Hester and Jones
- Joyner, Timothy, Conrad V. W. Mahnken, and Robert C. Clark, Jr.**, "Salmon—future harvest from the Antarctic Ocean?" 5:20.
- Juhl, Rolf**, "Economics of Gulf of Mexico industrial and foodfish trawlers," 11:39.
- Karinen, John F., and Stanley D. Rice**, "Effects of Prudhoe Bay crude oil on molting Tanner crabs, *Chionoecetes bairdi*," 7:31.
- Kato, Susumu**, "Development of the pelagic red crab (Galatheaidae, *Pleuroncodes planipes*) fishery in the eastern Pacific Ocean," 10:1.
- Katsuwonus pelamis**—see Tuna, skipjack
- Kavieng (New Ireland)**
Japanese skipjack tuna fishery development, 12:13.
- Kawaguchi, Kyotaro**, "Exploratory tuna longline fishing in the Caribbean and adjacent waters," 9:61.
———, "Handline and longline fishing explorations for snapper and related species in the Caribbean and adjacent waters," 9:8.
- Kendari**
Japanese skipjack tuna fishery development
 Ternate and southeastern Celebes, 12:15.
- Kenny, David W.**—see Wahrenbrock et al.
- King, Frederick J., Fred Heiligman, and Eugen Wierbicki**, "Solubilized fish muscle as a food binding material," 1:18.
- Kleijn, L. J. K.**, "Results of experimental and exploratory shark fishing off north-eastern South America," 9:67.
- Kodiak Island, Alaska**, 8:39.
- Kolhonen, Jukka**, "Fish meal: International market situation and the future," 3:36.
- Konopa, Leonard J.**—see Sanchez and Konopa
- Korea**
catch statistics, 11:1.
coastal catch, 11:4.
fishermen, 11:14.
fishery exports, 11:18.
fleet size, 11:9.
high-seas catch, 11:2.
inland fisheries catch, 11:8.
shallow-sea aquaculture harvest, 11:7.
whale catch, 11:4.
- Kudo, George**—see Patashnik et al.
- Lacewell, Ronald D.**—see Griffin et al.
- Larsen, A. K., and Sig Jaeger**, "Some ABC's of fo'c'sle living," 6:1.
- Leatherwood, J. S.**, "A note on gray whale behavioral interactions with other marine mammals," 4:50.
———, "Aerial observations of migrating gray whales, *Eschrichtius robustus*, off southern California, 1969-72," 4:45.
- Lingle, George L.**—see Fish et al.
- Lobster, spiny**
fatty acid composition, 2:12.
fishing explorations in the Caribbean, 9:43.
- Loligo opalescens**
potential and status of U.S. food resource, 12:29.
- Loligo pealei**
potential and status as U.S. food resource, 12:29.
- Longline**
vertical
 for red snapper fishing, 1:7.
- Lopholatilus chamaeleonticeps**—see Tilefish
- Lux, F. E., W. D. Handwork, and W. F. Rathjen**, "The potential for an offshore squid fishery in New England," 12:24.
- Mackerel, frigate**
live bait and pole and line fishing explorations in the Caribbean, 9:31.
- Mackerel, Spanish**
recreational fishery on three piers near St. Petersburg, Florida during 1971, 10:14.
- Macrozoarces americanus**—see Ocean pout
- Madagascar**
Japanese skipjack tuna fishery development, 12:16.
- Madang**
Japanese skipjack tuna fishery development, 12:14.
- Mahnken, Conrad V. W.**—see Joyner et al.

- Makassar Strait, Flores Sea
Japanese skipjack tuna fishery development, 12:16.
- Maldiv Islands
Japanese skipjack tuna fishery development, 12:17.
- Manus
Japanese skipjack tuna fishery development, 12:14.
- "Marine recreational fishing in Alaska," Anonymous, 3:18.
- "Marking fishes and invertebrates. I. State of the art of fish branding," by Howard L. Raymond, 7:1.
- "Marking fishes and invertebrates. II. Brand size and configuration in relation to long-term retention on steelhead trout and chinook salmon," by Donn L. Park and Wesley J. Ebel, 7:7.
- "Marking fishes and invertebrates. III. Coded wire tags useful in automatic recovery of chinook salmon and steelhead trout," by Wesley J. Ebel, 7:10.
- "Marking fishes and invertebrates. IV. A nonpermanent tag for king crabs, *Paralithodes camtschatica*, and Tanner crabs, *Chionoecetes bairdi*," by Robert M. Meyer, 7:14.
- Maruschak, Gary F.—see Wahrenbrock et al.
- Matsumoto, Walter M., "The skipjack tuna, *Katsuwonus pelamis*, an underutilized resource," 8:26.
- Mattsson, Joel L.—see Sweeney and Mattsson
- Medway, W., "Some coagulation factors in plasma from a California gray whale, *Eschrichtius robustus*," 4:24.
- Mendelsohn, Joseph M., "Minced fish in a new form," 8:34.
- "Menhaden and power plants—a growing concern," by James S. Young, 10:19.
- Menhaden
kills associated with power plants
biocides, 10:21.
cold shock, 10:20.
entrainment of larval fish and their passage through a condenser system, 10:21
gas embolism, 10:21
heat shock, 10:20
impingement on intake screens, 10:21
plant design for minimum impact on aquatic organisms, 10:22
unfavorable public relations, 10:22
- Metabolism
California gray whale calves, 4:3.
"The Mexican marine sport fisheries," by Aurelio Solorzano, 2:19.
- Mexico
marine sport fisheries
billfish resources and areas of fishing, 2:20.
government agencies involved, 2:19.
sport fisheries, 2:21.
sport fishes, 2:20.
sport fishing tournaments, 2:22.
their future, 2:22.
- Meyer, Robert M., "Marking fishes and invertebrates. IV. A nonpermanent tag for king crabs, *Paralithodes camtschatica*, and Tanner crabs, *Chionoecetes bairdi*," 7:14.
- Miller, Morton, "Introducing new products into seafood markets," 10:10.
- "Minced fish in a new form," by Joseph M. Mendelsohn, 8:34.
- Minced fish—see Fish, minced
- "Minor miscellaneous exploratory/experimental fishing activities in the Caribbean and adjacent waters," by Robert S. Wolf, 9:78.
- Miyauchi, David—see Patashnik et al.
- Mollusks
composition of edible portion of raw (fresh or frozen)
data on protein, fat, moisture, ash, carbohydrate energy value, and cholesterol, 3:21.
total fat content, 2:9.
- Moore, Nancy S.—see Sidwell et al.
- Morehead, Bruce C., "A report on the National Marine Fisheries Service comminuted fish cake survey," 5:34.
- Murrells Inlet, South Carolina, 11:32.
- "Mushroom culture: A new potential for fishery products," by John H. Green, 2:27.
- Mushroom culture
New potential for fishery products
composting and nitrogen supplements, 2:28.
experimental use of fish solubles as nitrogen supplement, 2:30.
potential for fish oils, 2:32.
- Musick, John A.—see Haefner and Musick
- "Names of fishes," by Daniel M. Cohen, 12:21.
- National Marine Fisheries Service publications and services, 3:1.
report on comminuted fish cake survey, 5:34.
- Neal, Don—see Olsen et al.
- "New England Fisheries Development Program," by Warren F. Rathjen, 11:23.
- New England Fisheries Development Program
crab
Jonah, 11:25.
red, 11:25.
mixed species, 11:28.
squid
long-finned, 11:26.
short-finned, 11:26.
- New Ireland—see Kavieng (New Ireland)
- Norris, Kenneth S., and Roger L. Gentry, "Capture and harnessing of young California gray whales, *Eschrichtius robustus*," 4:58.
- "(A) note on gray whale behavioral interactions with other marine mammals," by J. S. Leatherwood, 4:50.
- "Notes on the ecology of the oceanic insect *Halobates*," by Lanna Cheng, 2:1.
- "Observations on distribution and abundance of red crabs in Norfolk Canyon and adjacent continental slope," by Paul A. Haefner, Jr. and John A. Musick, 1:31.
- "Ocean pout parasites," by Daniel J. Sheehy, Michael P. Sissenwine, and Saul B. Saita, 5:29.
- Ocean pout
Rhode Island Sound
parasites of, 5:29.
- O'Connor, John L.—see Sund and O'Connor
- Olsen, David A., Arthur E. Dammann, and Don Neal, "A vertical longline for red snapper fishing," 1:7.
- Oncorhynchus tshawytscha*—see Salmon, chinook
- Oyster
shucked
thermal bleaching of red algal pigment, 11:19.
- Oyster (Long Island)
fatty acid composition, 2:13.
- Oyster (Maryland-Virginia)
fatty acid composition, 2:13.
- Palau
Japanese skipjack tuna fishery development, 12:16.
- Panulirus argus*—see Lobster, spiny
- Papua New Guinea
Japanese skipjack tuna fishery development
canning company, 12:14.
Kavieng (New Ireland), 12:13.
Manus and Madang, 12:14.
Rabaul, 12:14.
- Paralithodes camtschatica*—see Crab, king
- Park, Donn L., and Wesley J. Ebel, "Marking fishes and invertebrates. II. Brand size and configuration in relation to long-term retention on steelhead trout and chinook salmon," 7:7.
- Parker, R. O., Jr.—see Buchanan et al.
- "Participation by Panamanian and the U.S. seiners in 1972 tuna fishery of the eastern tropical Atlantic," by Gary T. Sakagawa, 3:10.
- Patashnik, Max, David Miyauchi, and George Kudo, "Controlling bone particle content in minced fish muscle," 8:37.
- Patlan, Daniel—see Brown and Patlan
- Penaeus marginatus*
deepwater trapping in Hawaiian Islands, 10:24.
- Perch, ocean
fatty acid composition, 2:10.
- Perch, silver
recreational fishery on three piers near St. Petersburg, Florida during 1971, 10:14.
- Peters, John A., Allan F. Bezanson, and John H. Green, "Effect of draining method on the quality of fish stored in boxes," 2:33.
—see Baker et al.
- Philippines
Japanese skipjack tuna fishery development, 12:16.
- Pierce, Richard W.—see Gilmartin et al.
- "Plastic turf substitute for gravel in salmon incubators," by Jack E. Bailey and Sidney G. Taylor, 10:35.
- Plastic turf—see Turf, plastic
- Pleuroncodes planipes*—see Crab, red
- Pollock
fatty acid composition, 2:10.
"Polyethylene trays for flounder fillets," by Daniel W. Baker II, John A. Peters, and Allan F. Bezanson, 5:13.
- "(The) potential for an offshore squid fishery in New England," by F. E. Lux, W. D. Handwork, and W. F. Rathjen, 12:24.
- Prudhoe Bay, Alaska, 7:31.
- "Publications and services of the National Marine Fisheries Service," by J. David Almand, 3:1.
- "Puget Sound drum seining," by William L. High, 12:5.
- Rabaul
Japanese skipjack tuna fishery development, 12:14.
- Rathjen, Warren F., "New England Fisheries Development Program," 11:23.
—see Lux et al.
—see Serchuk and Rathjen
—see Wolf and Rathjen
- Ray, G. Carleton, and William E. Schevill, "Feeding of a captive gray whale, *Eschrichtius robustus*," 4:31.
- Raymond, Howard L., "Marking fishes and invertebrates. I. State of the art of fish branding," 7:1.
- "(The) recreational fishery on three piers near St. Petersburg, Florida during 1971," by William A. Fable, Jr. and Carl H. Saloman, 10:14.
- Red algae—see Algae, red
- "Reduction of mercury in sablefish (*Anoplopoma fimbria*) and the use of the treated flesh in smoked products," by F. M. Teeny, Alice S. Hall, and E. J. Gauglitz, Jr., 5:15.
- Reefs, artificial
effects on marine sport fishery off South Carolina
bottom fishing, 11:35.
surface fishing, 11:33.
- "(A) report on the National Marine Fisheries Service comminuted fish cake survey," by Bruce C. Morehead, 5:34.
- "Respiration and metabolism in two baleen whale calves," by Eric A. Wahrenbrock, Gary F. Maruschak, Robert Elsner, and David W. Kenny, 4:3.
- Respiration
California gray whale calves, 4:3.
"Results of experimental and exploratory shark fishing off northeastern South America," by L. J. K. Kleijn, 9:67.
- "Results of live bait and pole and line fishing explorations for pelagic fishes in the Caribbean," by Donald P. Wagner, 9:31.
- "Results of troll fishing explorations in the Caribbean," by Donald P. Wagner and Robert S. Wolf, 9:35.
- "(A) review of the Indonesian shrimp fishery and its present developments," by M. Unar, 1:21.
- Rhode Island Sound
ocean pout parasites, 5:29.
- Rice, Stanley D.—see Karinen and Rice
- "Riddle of Bering Sea soundings resolved," by Felix Favorite, 11:30.
- Rittgers, Jon C., "Diversification means progress in the Gloucester fishing industry," 3:14.
- Rockfish
fatty acid composition, 2:10.
- Runner, rainbow
live bait and pole and line fishing explorations in the Caribbean, 9:31.

- Sablefish
reduction of mercury in and use in smoked products
hot smoking, 5:16.
mercury analysis, 5:16.
mercury distribution in flesh prior to and after cysteine extraction, 5:18.
preparation of fish tissue and extraction procedures, 5:15.
reduction of mercury, 5:17.
removal of organoleptically detectable cysteine, 5:18.
sensory evaluation of finished smoked products, 5:19.
total solids and fat, 5:16.
yield of smoked products, 5:19.
- Saila, Saul B.—see Sheehy et al.
- Sakagawa, Gary T., "Participation by Panamanian and U.S. seiners in 1972 tuna fishery of the eastern tropical Atlantic," 3:10.
- Salmo gairdneri*—see Trout, steelhead
- "Salmon—future harvest from the Antarctic Ocean?" by Timothy Joyner, Conrad V. W. Mahnken, and Robert C. Clark, Jr., 5:20.
- Salmon
Antarctic Ocean, future harvest
environmental preference, 5:22.
general characteristics, 5:22.
seeding the Southern Ocean with salmon, 5:25.
plastic turf substitute for gravel in incubators, 10:35.
- Salmon, chinook
brand size and configuration in relation to long-term retention, 7:7.
coded wire tags useful in automatic recovery
adults detected and separated, 7:13.
tag used in marking migrating juveniles, 7:11.
distribution of seaward-migrating, in Snake River above Lower Monumental Dam, 8:42.
- Salmon, red (canned)
fatty acid composition, 2:11.
- Saloman, Carl H.—see Fable and Saloman
- Samoa
Japanese skipjack tuna fishery development, 12:16.
- Sanchez, Peter M., and Leonard J. Konopa, "Attitudinal and demographic characteristics for regular and irregular users of fresh finfish," 10:31.
- Scallop
experimental fishing in the Caribbean and adjacent waters, 9:85.
- Scallop, bay
abundance varies with density of seagrass, 7:27.
fatty acid composition, 2:13.
- Scallop, calico
fatty acid composition, 2:13.
- Scallop, sea
fatty acid composition, 2:13.
- Schevill, William E.—see Ray and Schevill
- Scomberomorus maculatus*—see Mackerel, Spanish
- "Seabed drifters used to study bottom currents off Kodiak Island," by W. James Ingraham, Jr. and James R. Hastings, 8:39.
- Seabed drifters
used to study currents off Kodiak Island, 8:39.
- Seafood
home freezing
freezing and storing, 1:3.
packaging, 1:2.
preparation, 1:2.
proper use of the frozen product, 1:4.
selecting, 1:2.
introducing new products, 10:10.
- Sealy, T. S., "Soviet fisheries: A review," 8:5.
- Seine, beach
variable-mesh for sampling juvenile salmon capabilities, 2:25.
fishing technique, 2:25.
net, 2:23.
- Seining—see Drum seining
- Serchuk, Fredric M., and Warren F. Rathjen, "Aspects of the distribution and abundance of the long-finned squid, *Loligo pealei*, between Cape Hatteras and Georges Bank," 1:10.
- Shark
experimental and exploratory fishing off northeastern South America, 9:67.
- Sheehy, Daniel J., Michael P. Sissenwine, and Saul B. Saila, "Ocean pout parasites," 5:29.
- Shrimp
color changes in ovaries as a determinant of maturity
developing or yellow ovaries, 7:26.
ripe or nearly ripe ovaries, 7:26.
undeveloped ovaries, 7:23.
- Japan
frozen imports for 1973, 8:23.
review of the Indonesian fishery Arafura Sea, 1:26.
assessment of the standing stocks, 1:27.
east coast of Kalimantan, 1:25.
east coast of Sumatra, 1:22.
management, 1:29.
north coast of Java, 1:23.
source of data, 1:22.
west and south coasts of Kalimantan, 1:24.
- Shrimp vessels
estimated costs, returns, and financial analysis of Gulf of Mexico
budget analysis, 12:1.
costs adjusted to spring 1974, 12:3.
investment analysis, 12:2.
- Shrimp, brown
fatty acid composition, 2:12.
- Shrimp, caridean
deepwater trapping in Hawaiian Islands
Heterocarpus ensifer, 10:24.
Heterocarpus laevigatus, 10:24.
- Shrimp, Maine
fatty acid composition, 2:12.
- Shrimp, Mexican
fatty acid composition, 2:12.
- Shrimp, penaeid
deepwater trapping in Hawaiian Islands
Penaeus marginatus, 10:24.
- Shrimp, white Gulf
fatty acid composition, 2:12.
- Shrimp, white South Atlantic
fatty acid composition, 2:12.
- Sidwell, Virginia D.—see Bonnet et al.
- Moore, Pauline R. Focannon, Nancy S. Moore, and James C. Bonnet, "Composition of the edible portion of raw (fresh or frozen) crustaceans, finfish, and mollusks. 1. Protein, fat, moisture, ash, carbohydrate, energy value, and cholesterol," 3:21.
- Sims, Carl W., and Richard H. Johnsen, "Variable-mesh beach seine for sampling juvenile salmon in Columbia River estuary," 2:23.
- Sissenwine, Michael P.—see Sheehy et al.
- "(The) skipjack tuna, *Katsuwonus pelamis*, an underutilized resource," by Walter M. Matsumoto, 8:26.
- Smith, Jim Ross, "Distribution of seaward-migrating chinook salmon and steelhead trout in the Snake River above Lower Monumental Dam," 8:42.
- Smith, N. Ty, and Eric A. Wahrenbrock, "Ballistocardiography as a technique for comparative physiology," 4:9.
- Snapper
handline and longline fishing explorations in Caribbean
Aruba-Curacao-Bonaire area, 9:28.
Aves Island area, 9:28.
bait, 9:11.
bottom longline fishing, 9:18.
commercial potential, 9:18.
continental shelf of South America, 9:28.
fishing gear, 9:11.
fishing methods, 9:11.
handline and mechanical reel fishing, 9:15.
historical review, 9:9.
Jamaica south to southwestern waters, 9:20.
Leeward Islands, 9:25.
north of Hispaniola to Virgin Islands, 9:23.
vessels, 9:10.
Windward Islands, 9:27.
trap fishing explorations for snapper and related species in the Caribbean and adjacent waters, 9:49.
- Snapper, red
fatty acid composition, 2:10.
- fishing
vertical/longline for, 1:7.
- Solomon Islands
Japanese skipjack tuna fishery development, 12:15.
- Solórzano, Aurelio, "The Mexican marine sport fisheries," 2:19.
- "Solubilized fish muscle as a food binding material," by Frederick J. King, Fred Heiligman, and Eugen Wierbicki, 1:18.
- "Some ABC's of fo'c'sle living," by A. K. Larssen and Sig Jaeger, 6:1.
- "Some coagulation factors in plasma from a California gray whale, *Eschrichtius robustus*," by W. Medway, 4:24.
- "Some considerations of the problems associated with the use of live bait for catching tunas in the tropical Pacific Ocean," by Frank J. Hester, 5:1.
- "Some hematologic observations on the California gray whale," by Alfred Zettner, 4:22.
- "Some marketing considerations with respect to minced fish products," by Joshua John, 12:18.
- "Some physiological parameters of the blood of the California gray whale," by William G. Gilmartin, Richard W. Pierce, and George A. Antonelis, Jr., 4:28.
- Sorong (West Irian)
Japanese skipjack tuna fishery development, 12:15.
- "Sounds produced by the gray whale, *Eschrichtius robustus*," by James F. Fish, James L. Sumich, and George L. Lingle, 4:38.
- Sounds
produced by California gray whale, 4:38.
- South Carolina
Murrells Inlet, 11:32.
- "Soviet fisheries: A review," by T. S. Sealy, 8:5.
- Sphyræna barracuda*—see Barracuda, great
- "Spiny lobster fishing explorations in the Caribbean," by Geoffrey R. Chislett and Mitsuo Yesaki, 9:43.
- "Squid—its potential and status as a U.S. food resource," by Vincent G. Ampola, 12:28.
- Squid
long-finned, distribution and abundance between Cape Hatteras and Georges Bank
bathymetric distribution, 1:14.
data and techniques, 1:11.
diel variation in catch, 1:16.
distribution related to water temperature, 1:15.
geographic distribution, 1:14.
seasonal variations in abundance, 1:16.
potential and status as a U.S. food resource, 12:29.
potential for offshore fishery in New England
catch value, 12:25.
charter operations, 12:24.
day-night differences, 12:26.
economic feasibility, 12:27.
- Squid, long-finned
New England Fisheries Development Program
economic feasibility of harvesting, processing, and marketing, 11:26.
- Squid, short-finned
New England Fisheries Development Program
economic feasibility of harvesting, processing, and marketing, 11:26.
- Stone, Richard B.—see Buchanan et al.
- Struhsaker, Paul, and Donald C. Aasted, "Deepwater shrimp trapping in the Hawaiian Islands," 10:24.
- Stuart, Harvey H.—see Thayer and Stuart
- Sumatra
Japanese skipjack tuna fishery development on west coast of, 12:16.
- Sumich, James L.—see Fish et al.
- Sund, Paul N., and John L. O'Connor, "Aerial observations of gray whales during 1973," 4:51.
- "Surgical attachment of a telemetry device to the dorsal ridge of a yearling California gray whale, *Eschrichtius robustus*," by John C. Sweeney and Joel L. Mattsson, 4:20.
- "(A) survey of giant clams, Tridacnidae, on

- Helen Reef, a western Pacific atoll," by Frank J. Hester and Everett C. Jones, 7:17.
- Sweeney, John C., and Joel L. Mattsson, "Surgical attachment of a telemetry device to the dorsal ridge of a yearling California gray whale, *Eschrichtius robustus*," 4:20.
- Taylor, Sidney G.—see Bailey and Taylor
- Teeny, F. M., Alice S. Hall, and E. J. Gauglitz, Jr., "Reduction of mercury in sablefish (*Anoplopoma fimbria*) and the use of the treated flesh in smoked products," 5:15.
- "Telemetry of temperature and depth data from a free ranging yearling California gray whale, *Eschrichtius robustus*," by W. E. Evans, 4:52.
- Ternate, Kendari
Japanese skipjack tuna fishery development, 12:15.
- Thayer, Gordon W., and Harvey H. Stuart, "The bay scallop makes its bed of seagrass," 7:27.
- "Thermal bleaching of red algal pigment in shucked oysters," by V. G. Burrell, Jr., 11:19.
- Thunnus albacares*—see Tuna, yellowfin
Thunnus atlanticus—see Tuna, blackfin
- Tilefish
fishing activities in the Caribbean and adjacent waters, 9:78.
- "Trap fishing explorations for snapper and related species in the Caribbean and adjacent waters," by Robert S. Wolf and Geoffrey R. Chislett, 9:49.
- Trawlers, foodfish
economics of Gulf of Mexico
catch rate and composition, 11:40.
economic data of optimum vessel, 11:40.
income projection of present fleet activities, 11:40.
level of fishing effort, 11:40.
vessel characteristics, 11:39.
- Trawlers, industrial
economics of Gulf of Mexico
catch rate and composition, 11:41.
economic data of optimum vessel, 11:41.
income projection of present fleet activities, 11:42.
level of fishing effort, 11:41.
vessel characteristics, 11:41.
- Trout, steelhead
brand size and configuration in relation to long-term retention, 7:7.
coded wire tags useful in automatic recovery
adults detected and separated, 7:13.
tag used in marking migrating juveniles, 7:11.
distribution of seaward-migrating, in Snake River above Lower Monumental Dam, 8:42.
- Tuna
eastern tropical Atlantic, 1972
participation by Panamanian and U.S. seiners, 3:10.
exploratory longline fishing in the Caribbean and adjacent waters, 9:61.
problems using live bait for catching aquaculture as a means of supplying baitfish, 5:9.
artificial bait, 5:11.
bait catching methods, 5:3.
chumming, 5:6.
holding and transport of bait, 5:4.
new baits, 5:11.
supply of bait, 5:7.
types and characteristics of good baitfish, 5:1.
- Tuna, blackfin
live bait and pole and line fishing explorations in the Caribbean, 9:31.
troll fishing results in the Caribbean, 9:35.
- Tuna, little tunny
live bait and pole and line fishing explorations in the Caribbean, 9:31.
troll fishing results in the Caribbean, 9:35.
- Tuna, skipjack
biology, 8:27.
distribution, 8:26.
eastern tropical Atlantic, 1972
catch rates, 3:10.
catches, 3:10.
fishing areas, 3:10.
sizes, 3:10.
ecology, 8:27.
fisheries, 8:26.
harvesting, 8:31.
Japanese fishery development in foreign areas, 12:12.
live bait and pole and line fishing explorations in the Caribbean, 9:31.
opportunities for the United States, 8:32.
resource assessment, 8:28.
- Tuna, yellowfin
eastern tropical Atlantic, 1972
catch rates, 3:10.
catches, 3:10.
fishing areas, 3:10.
sizes, 3:10.
live bait and pole and line fishing explorations in the Caribbean, 9:31.
- Tuna, yellowfin (canned in brine)
fatty acid composition, 2:11.
- Tuna, yellowfin (canned in oil)
fatty acid composition, 2:11.
- Turf, plastic
substitute for gravel in salmon incubators, 10:35.
- Ultrasonography
using to measure blubber thickness of California gray whale, 4:15.
- Unar, M., "A review of the Indonesian shrimp fishery and its present developments," 1:21.
- "Using enzymes to make fish protein concentrates," by Malcolm B. Hale, 2:15.
- "Variable-mesh beach seine for sampling juvenile salmon in Columbia River estuary," by Carl W. Sims and Richard H. Johnsen, 2:23.
- "(A) vertical longline for red snapper fishing," by David A. Olsen, Arthur E. Dammann, and Don Neal, 1:7.
- Vessels
Gulf of Mexico shrimp, 12:1.
- Wagner, Donald P., "Results of live bait and pole and line fishing explorations for pelagic fishes in the Caribbean," 9:31.
—, and Robert S. Wolf, "Results of troll fishing explorations in the Caribbean," 9:35.
- Wahrenbrock, Eric A.—see Smith and Wahrenbrock
—, Gary F. Maruschak, Robert Elsner, and David W. Kenny, "Respiration and metabolism in two baleen whale calves," 4:3.
- Waters, Melvin E., "Home freezing of seafoods," 1:1.
- West Irian—see Sorong (West Irian)
- Whale, California gray
aerial observations during 1973, 4:51.
aerial observations of migrating, off southern California
cow-calf groups, 4:47.
migration peaks and offshore movements, 4:47.
rates of movement, 4:48.
yearlings, 4:48.
behavioral interactions with other marine mammals, 4:50.
capture and harnessing of young
harness design, 4:61.
study site, 4:59.
tracking and harness recovery, 4:62.
comparative physiology
ballistocardiography as a technique for, 4:9.
feeding
anatomical interpretation, 4:37.
behavioral observations, 4:33.
fluorescent karyotype of, 4:25.
hematologic observations
alkali denaturation, 4:23.
hemoglobin electrophoresis, 4:23.
routine blood examination, 4:22.
investigation of blubber thickness using ultrasonography, 4:15.
respiration and metabolism in calves, 4:3.
some coagulation factors in plasma, 4:24.
some physiological parameters of the blood, 4:28.
sounds produced by, 4:38.
surgical attachment of telemetry device to yearling, 4:20.
telemetry of temperature and depth data from
data parameters, 4:53.
data receiving system, 4:55.
data transmission system, 4:53.
- Whiting
fatty acid composition, 2:10.
- Wierbicki, Eugen—see King et al.
- Wolf, Robert S., "Minor miscellaneous exploratory/experimental fishing activities in the Caribbean and adjacent waters," 9:78.
—see Wagner and Wolf
—, and Geoffrey R. Chislett, "Trap fishing explorations for snapper and related species in the Caribbean and adjacent waters," 9:49.
—, and Warren F. Rathjen, "Exploratory fishing activities of the UNDP/FAO Caribbean Fishery Development Project, 1965-1971: A summary," 9:1.
- Yesaki, Mitsuo—see Chislett and Yesaki
Young, James S., "Menhaden and power plants—a growing concern," 10:19.
- Zettner, Alfred, "Some hematologic observations on the California gray whale," 4:22.
- Zook, Elizabeth G.—see Bonnet et al.

Marine Fisheries Review Paper Numbers, 1974

1026. "Home freezing of seafoods," Melvin E. Waters, 1:1-6.
1027. "A vertical longline for red snapper fishing," David A. Olsen, Arthur E. Dammann, and Don Neal, 1:7-9.
1028. "Aspects of the distribution and abundance of the long-finned squid, *Loligo pealei*, between Cape Hatteras and Georges Bank," Fredric M. Serchuk and Warren F. Rathjen, 1:10-17.
1029. "Solubilized fish muscle as a food binding material," Frederick J. King, Fred Heiligman, and Eugen Wierbicki, 1:18-20.
1030. "A review of the Indonesian shrimp fishery and its present developments," M. Unar, 1:21-30.
1031. "Observations on distribution and abundance of red crabs in Norfolk Canyon and adjacent continental slope," Paul A. Haefner, Jr. and John A. Musick, 1:31-34.
1032. "Notes on the ecology of the oceanic insect *Halobates*," Lanna Cheng, 2:1-7.

1033. "Chemical and nutritive values of several fresh and canned finfish, crustaceans, and mollusks. Part II. Fatty acid composition," James C. Bonnet, Virginia D. Sidwell, and Elizabeth G. Zook, 2:8-14.
1034. "Using enzymes to make fish protein concentrates," Malcolm B. Hale, 2:15-18.
1035. "The Mexican marine sport fisheries," Aurelio Solórzano, 2:19-22.
1036. "Variable-mesh beach seine for sampling juvenile salmon in Columbia River estuary," Carl W. Sims and Richard H. Johnsen, 2:23-26.
1037. "Mushroom culture: A new potential for fishery products," John H. Green, 2:27-32.
1038. "Effect of draining method on the quality of fish stored in boxes," John A. Peters, Allan F. Bezanson, and John H. Green, 2:33-35.
1039. "Publications and services of the National Marine Fisheries Service," J. David Almand, 3:1-9.
1040. "Participation by Panamanian and U.S. seiners in 1972 tuna fishery of the eastern tropical Atlantic," Gary T. Sakagawa, 3:10-13.

1041. "Diversification means progress in the Gloucester fishing industry," Jon C. Rittgers, 3:14-17.
1042. "Marine recreational fishing in Alaska," Anonymous, 3:18-20.
1043. "Composition of the edible portion of raw (fresh or frozen) crustaceans, finfish, and mollusks. I. Protein, fat, moisture, ash, carbohydrate, energy value, and cholesterol," Virginia D. Sidwell, Pauline R. Foncannon, Nancy S. Moore, and James C. Bonnet, 3:21-35.
1044. "Fish meal: International market situation and the future," Jukka Kolhonen, 3:36-40.
1045. "Respiration and metabolism in two baleen whale calves," Eric A. Wahrenbrock, Gary F. Maruschak, Robert Elsner, and David W. Kenney, 4:3-8.
1046. "Ballistocardiography as a technique for comparative physiology," N. Ty Smith and Eric A. Wahrenbrock, 4:9-14.
1047. "Investigation of blubber thickness in a gray whale using ultrasonography," Michael P. Curran and William M. Asher, 4:15-20.
1048. "Surgical attachment of a telemetry device to the dorsal ridge of a yearling California gray whale, *Eschrichtius robustus*," John C. Sweeney and Joel L. Mattsson, 4:20-22.
1049. "Some hematologic observations on the California gray whale," Alfred Zettner, 4:22-24.
1050. "Some coagulation factors in plasma from a California gray whale, *Eschrichtius robustus*," W. Medway, 4:24-25.
1051. "Fluorescent karyotype of the California gray whale," Deborah A. Duffield, 4:25-28.
1052. "Some physiological parameters of the blood of the California gray whale," William G. Gilmartin, Richard W. Pierce, and George A. Antonelis, Jr., 4:28-31.
1053. "Feeding of a captive gray whale, *Eschrichtius robustus*," G. Carleton Ray and William E. Schevill, 4:31-38.
1054. "Sounds produced by the gray whale, *Eschrichtius robustus*," James F. Fish, James L. Sumich, and George L. Lingle, 4:38-45.
1055. "Aerial observations of migrating gray whales, *Eschrichtius robustus*, off southern California, 1969-72," J. S. Leatherwood, 4:45-49.
1056. "A note on gray whale behavioral interactions with other marine mammals," J. S. Leatherwood, 4:50-51.
1057. "Aerial observations of gray whales during 1973," Paul N. Sund and John L. O'Connor, 4:51-52.
1058. "Telemetry of temperature and depth data from a free ranging yearling California gray whale, *Eschrichtius robustus*," W. E. Evans, 4:52-58.
1059. "Capture and harnessing of young California gray whales, *Eschrichtius robustus*," Kenneth S. Norris and Roger L. Gentry, 4:58-64.
1060. "Some considerations of the problems associated with the use of live bait for catching tunas in the tropical Pacific Ocean," Frank J. Hester, 5:1-12.
1061. "Polyethylene trays for flounder filets," Daniel W. Baker II, John A. Peters, and Allan F. Bezanson, 5:13-14.
1062. "Reduction of mercury in sablefish (*Anoplopoma fimbria*) and the use of the treated flesh in smoked products," F. M. Teeny, Alice S. Hall, and E. J. Gauglitz, Jr., 5:15-19.
1063. "Salmon—future harvest from the Antarctic Ocean?" Timothy Joyner, Conrad V. W. Mahnken, and Robert C. Clark, Jr., 5:20-28.
1064. "Ocean pout parasites," Daniel J. Sheehy, Michael P. Sissenwine, and Saul B. Salla, 5:29-33.
1065. "A report on the National Marine Fisheries Service comminuted fish cake survey," Bruce C. Morehead, 5:34-37.
1066. "Some ABC's of fo'e'sle living," A. K. Larssen and Sig Jaeger, 6:1-38.
1067. "Marking fishes and invertebrates. I. State of the art of fish branding," Howard L. Raymond, 7:1-6.
1068. "Marking fishes and invertebrates. II. Brand size and configuration in relation to long-term retention on steelhead trout and chinook salmon," Donn L. Park and Wesley J. Ebel, 7:7-9.
1069. "Marking fishes and invertebrates. III. Coded wire tags useful in automatic recovery of chinook salmon and steelhead trout," Wesley J. Ebel, 7:10-13.
1070. "Marking fishes and invertebrates. IV. A nonpermanent tag for king crabs, *Paralithodes camtschatica*, and tanner crabs, *Chionoecetes bairdi*," Robert M. Meyer, 7:14-16.
1071. "A survey of giant clams, Tridacnidae, on Helen Reef, a western Pacific atoll," Frank J. Hester and Everet C. Jones, 7:17-22.
1072. "Color changes in the ovaries of penaeid shrimp as a determinant of their maturity," Ausbon Brown, Jr. and Daniel Patlan, 7:23-26.
1073. "The bay scallop makes its bed of seagrass," Gordon W. Thayer and Harvey H. Stuart, 7:27-30.
1074. "Effects of Prudhoe Bay crude oil on molting tanner crabs, *Chionoecetes bairdi*," John F. Karinen and Stanley D. Rice, 7:31-37.
1075. "Soviet fisheries: A review," T. S. Sealy, 8:5-22.
1076. "Japan's frozen shrimp imports: 1973," William B. Folsom, 8:23-25.
1077. "The skipjack tuna, *Katsuwonus pelamis*, an underutilized resource," Walter M. Matsumoto, 8:26-33.
1078. "Minced fish in a new form," Joseph M. Mendelsohn, 8:34-36.
1079. "Controlling bone particle content in minced fish muscle," Max Patashnik, David Miyauchi, and George Kudo, 8:37-38.
1080. "Seabed drifters used to study bottom currents off Kodiak Island," W. James Ingraham, Jr. and James R. Hastings, 8:39-41.
1081. "Distribution of seaward-migrating chinook salmon and steelhead trout in the Snake River above Lower Monumental Dam," Jim Ross Smith, 8:42-45.
1082. "Exploratory fishing activities of the UNDP/FAO Caribbean Fishery Development Project, 1965-1971: A summary," Robert S. Wolf and Warren F. Rathjen, 9:1-8.
1083. "Handline and longline fishing explorations for snapper and related species in the Caribbean and adjacent waters," Kyotaro Kawaguchi, 9:8-31.
1084. "Results of live bait and pole and line fishing explorations for pelagic fishes in the Caribbean," Donald P. Wagner, 9:31-35.
1085. "Results of troll fishing explorations in the Caribbean," Donald P. Wagner and Robert S. Wolf, 9:35-43.
1086. "Spiny lobster fishing explorations in the Caribbean," Geoffrey R. Chislett and Mitsuo Yesaki, 9:43-48.
1087. "Trap fishing explorations for snapper and related species in the Caribbean and adjacent waters," Robert S. Wolf and Geoffrey R. Chislett, 9:49-61.
1088. "Exploratory tuna longline fishing in the Caribbean and adjacent waters," Kyotaro Kawaguchi, 9:61-66.
1089. "Results of experimental and exploratory shark fishing off northeastern South America," L. J. K. Kleijn, 9:67-77.
1090. "Minor miscellaneous exploratory/experimental fishing activities in the Caribbean and adjacent waters," Robert S. Wolf, 9:78-87.
1091. "Development of the pelagic red crab (Galatheidae, *Pleuromcodes planipes*) fishery in the eastern Pacific Ocean," Susumu Kato, 10:1-9.
1092. "Introducing new products into seafood markets," Morton Miller, 10:10-13.
1093. "The recreational fishery on three piers near St. Petersburg, Florida during 1971," William A. Fable, Jr. and Carl H. Saloman, 10:14-18.
1094. "Menhaden and power plants—a growing concern," James S. Young, 10:19-23.
1095. "Deepwater shrimp trapping in the Hawaiian Islands," Paul Struhsaker and Donald C. Aasted, 10:24-30.
1096. "Attitudinal and demographic characteristics for regular and irregular users of fresh finfish," Peter M. Sanchez and Leonard J. Konopa, 10:31-34.
1097. "Plastic turf substitute for gravel in salmon incubators," Jack E. Bailey and Sidney G. Taylor, 10:35-38.
1098. "Fisheries of the Republic of Korea," William B. Folsom, 11:1-19.
1099. "Thermal bleaching of red algal pigment in shucked oysters," V. G. Burrell, Jr., 11:19-22.
1100. "New England Fisheries Development Program," Warren F. Rathjen, 11:23-30.
1101. "Riddle of Bering Sea soundings resolved," Felix Favorite, 11:30-32.
1102. "Effects of artificial reefs on a marine sport fishery off South Carolina," Chester C. Buchanan, Richard B. Stone, and R. O. Parker, Jr., 11:32-38.
1103. "Economics of Gulf of Mexico industrial and foodfish trawlers," Rolf Juhl, 11:39-42.
1104. "Estimated costs, returns, and financial analysis: Gulf of Mexico shrimp vessels," Wade L. Griffin, Ronald D. Laceywell, and Wayne A. Hayenga, 12:1-4.
1105. "Puget Sound drum seining," William L. High, 12:5-11.
1106. "Japanese skipjack tuna fishery development in foreign areas (Katsuo Kaihatsu—Kaigar Katsuoziuri Gogyo)," Anonymous, 12:12-17.
1107. "Some marketing considerations with respect to minced fish products," Joshua John, 12:18-20.
1108. "Names of fishes," Daniel M. Cohen, 12:21-23.
1109. "The potential for an offshore squid fishery in New England," F. E. Lux, W. D. Handwork, and W. F. Rathjen, 12:24-27.
1110. "Squid—its potential and status as a U.S. food resource," Vincent G. Ampola, 12:28-32.