

Authors, Titles, and Subjects in the *Marine Fisheries Review* 46(1-4), 1984

A

- Acanthophora, 1:16
 Acanthuridae, 3:71
 Albacore, Thunnus alalunga, 1:1, 3:8, 4:65
 Alfonsin, 2:15
 distribution, 2:15
 fisheries, 2:15
 life history, 2:15-16
 Amberjack, Seriola dumerilli, 2:11
 American oyster, Crassostrea virginica, 3:15
 American sand lance, Ammodytes americanus, 2:44
Ammodytes americanus, American sand lance, 2:44
 Antarctic fur seals, Arctocephalus gazella, 3:59
Anthias bicolor, 2:11
 Archaeogastropods, 4:78-79
 Trochus incrassatus, 4:79
 T. maculatus, 4:79
 T. pyramis, 4:78
 Turbo argyrostoma, 4:79
 Artificial propagation, coho salmon, mid-Columbia River system, 3:34
 "Assessing the accuracy of a method to determine the amount of minced fish in mixed mince-fillet fish blocks," by J. Perry Lane, John J. Ryan, and Robert J. Learson, 3:76
 Atlantic croaker, Micropogonias undulatus, 2:45
 Atlantic salmon, Salmo salar, 3:44
 Atlantic thread herring, Opisthonema oglinum, 1:19

B

- Bailey, Jack E.--see Jaenicke et al.
Balaena glacialis, right whale, 4:2
Balaena mysticetus, bowhead whale, 3:7, 4:2
Balaenoptera borealis, sei whale, 4:2
Balaenoptera musculus, blue whale, 4:2
Balaenoptera physalus, fin whale, 4:2
 Ballistidae, 3:71
 Basham, Larry--see Slatick and Basham
 Bearded seal, Erignathus barbatus, 3:7
 Beluga whale, Delphinapterus leucas, 3:7
 Bigeye tuna, Thunnus obesus, 1:1, 4:65
 Bivalve mollusks, ageing, 2:27
 Blackfin tuna, Thunnus atlanticus, 4:65
 Blahm, Theodore H.--see Durkin et al.
 "(The) blue whale, Balaenoptera musculus," by Sally A. Mizroch, Dale W. Rice, and Jeffrey M. Breiwick, 4:15
 Blue whale, Balaenoptera musculus, 4:2
 distribution, 4:16
 exploitation, 4:18
 management, 4:18-19
 migration, 4:15
 mortality, natural, 4:18
 reproduction, 4:17, 18
 stocks, 4:16, 17
 Bluefin tuna, Thunnus thynnus, 1:1, 4:65
 Bluefin tuna, Thunnus thynnus orientalis, 3:5
 Bluegill, Lepomis macrochirus, 3:15
 Blueline surgeonfish, Acanthurus lineatus, 4:78
 "(The) bowhead whale, Balaena mysticetus," by Howard W. Braham, 4:45
 Bowhead whale, Balaena mysticetus, 3:7, 4:2, 4:5
 distribution, 4:45
 exploitation, 4:49-51
 management, 4:51-52
 migration, 4:45, 47
 mortality, natural, 4:49
 population, 4:51
 reproduction, 4:49
 stocks, 4:47-48
 Box crab, Calappa sp., 2:13
 Braham, Howard W., "The bowhead whale, Balaena mysticetus," 4:45
 Braham, Howard W., "The status of endangered whales: An overview," 4:2
 Braham, Howard W., and Dale W. Rice, "The right whale, Balaena glacialis," 4:38
 Braham, Howard W.--see Rice et al.
 Breiwick, Jeffrey M.--see Goshko et al., Mizroch et al.

- Brigham's snapper, Pristipomoides zonatus, 2:11
 Brook trout, Salvelinus fontinalis, 3:15
 Brown shrimp, Penaeus aztecus, 2:53
 Brusher, Harold A., Mark L. Williams, Lee Trent, and Barbara J. Paiko, "Using charterboat catch records for fisheries management," 3:48
 Buchanan, Kurt D.--see Durkin et al.
 Butler, Richard W.--see Coe et al.
 Butterfish, Hyperoglyphe japonica, 2:11

C

- Callorhinus ursinus, northern fur seal, 3:9
 Cape fur seals, Arctocephalus pusillus, 3:59
 Carangidae, 2:11
 Caridean shrimps, 2:18-25
 Heterocarpus ensifer, 2:18
 Heterocarpus laevigatus, 2:18
 Caridean shrimps, N.W. Hawaiian Islands, 2:18-26
 catch rate, 2:20
 distribution, 2:20-22
 peak abundance, 2:25
 seasonal abundance, 2:23-24
 size/depth, 2:23
 Celowycz, Adrian G.--see Jaenicke et al.
 Cetaceans, 4:2
 "Characteristics of the Texas shrimp fleet," by Judith T. Krauthamer, William E. Grant, and Wade L. Griffin, 2:53
 Charterboat catch records, fishery management catch and effort data, 3:48
 catch per boat hour (CBH), 3:53
 effort distribution, 3:52
 fishing method, 3:49
 fishing zones, definition, 3:48
 species caught, 3:50
 Chinook salmon, Oncorhynchus tshawytscha, 3:5, 36
 Chub mackerel, Scorpaenopsis diabolus, 2:11
 Chum salmon, Oncorhynchus keta, 3:5, 35
 Chum salmon virus (CSV), 3:15
 Ciguatera fish poisoning, eastern Caribbean fish involved, 1:16-17
 frequency/incidence, 1:13
 hazardous (high risk) species, 1:17
 toxic areas, 1:15-16
 "Ciguatera in the eastern Caribbean," by David A. Olsen, David A., David W. Nellis, and Richard S. Wood, 1:13
Clupea harengus pallasii, Pacific herring, 3:5
 Coastal herrings, Atlantic and Gulf, 1:19-20
 proximate composition, 1:19-21
 proximate composition analyses, 1:20
 fatty acids, 1:20
 oil, 1:19-20
 protein, 1:20
 Coded wire tags (CWT), internal magnetic, 3:68
 Coe, James M., David B. Bolts, and Richard W. Butler, "The 'tuna-porpoise' problem: NMFS dolphin mortality reduction research, 1970-81," 3:18
 Coho salmon, artificial propagation in mid-Columbia River system, 3:35
 egg production, 3:37
 fisheries, 3:36
 life history, 3:35-37
 return rates, 3:40
 seasonal runs, 3:37
 spawning, 3:35-36
 survival rates, 3:40-41
 Coho salmon, Oncorhynchus kisutch, 3:5, 34, 64
 Collagen, content in tuna, 2:40
 Conger eels
 Ariosoma bowersi, 2:12
 Conger wilsoni, 2:12
 Congerellus aequoreus, 2:12
 Connors, Thomas J.--see Lane and Connors
 "Coral reef sanctuaries for trochus shells," by Gerald A. Hasling, Obichang Orak, and Marcus Ngiramangior, 4:73
 Coral reef snail, Trochus niloticus
 abundance, 4:75
 demand, 4:73-74

- depletion, 4:74
 distribution, 4:76
 fisheries, 4:73
 habitat, 4:76
 harvest, 4:73
 products, 4:73
 resource management, 4:74
 sanctuary program, 4:74-75
 Crab, Dungeness--see Dungeness crab
Crassostrea virginica, American oyster, 3:15

D

- Delphinapterus leucas, beluga whale, 3:7
 Dictyota, 1:16
 Dolly varden, Salvelinus malma, 3:64
 Dolphins, incidental mortality reduction, 3:18
 behavior patterns, 3:20
 management recommendations, 3:32
 mortality, 3:20-23
 net configuration, 3:21-22
 regulations, 3:18, 23-31
 research, behavioral, 3:29-32
 research, mechanical, 3:22-29
 handling methods/gear, 3:25-28
 net design/improvements, 3:25-28
 net/vessel handling, 3:23-25
 "Dungeness crab leg loss in the Columbia River estuary," by Joseph T. Durkin, Kurt D. Buchanan, and Theodore H. Blahm, 1:22
 Dungeness crab, Columbia River
 causes of injury, 1:24
 composition by sex, 1:22-24
 leg loss, 1:22
 regeneration, 1:22-24
 Durkin, Joseph T., Kurt D. Buchanan, and Theodore H. Blahm, "Dungeness crab leg loss in the Columbia River estuary," 1:22

E

- Eastern Pacific Ocean Tuna Fishing Agreement, 4:72
 Eicosapentaenoic acid, 2:60-61
 El Niño, 1:7-12
 El Niño, effects on tuna resources, 4:65
 El Niño, Pacific Northwest, 1:7-12
 Kelvin waves, 1:7-8
 oceanographic observations, 1:7-12
 sea surface temperature anomalies, 1:7-8
 sigma-t density, 1:9-10
 subsurface conditions, 1:8-10
 "Encounters of Hawaiian monk seals with fishing gear at Lisianski Island, 1982," by John R. Henderson, 3:59
 Endangered Species Act (ESA), 4:2
 Endangered whales, 4:2, 4
 Endangered Species Act (ESA), 4:2, 4
 listed whales' status, 4:2
 listing factors, 4:2
 populations, 4:5, 6
 status review, 4:2, 4, 5
Eschrichtius robustus, gray whale, 3:9, 4:2
 European flat oyster, Cracca edulis, 3:15
 "Evaluation of methods to determine the proportions of filets and minced fish flesh in mixed fish blocks," by J. Perry Lane and Thomas J. Connors, 2:36

F

- Far East mussel, Crenomytilus grayanus, 2:33
 Fiedler, Paul C., Gary B. Smith, and R. Michael Lairs, "Fisheries applications of satellite data in the eastern North Pacific," 3:1
 "(The) fin whale, Balaenoptera physalus," by Sally Mizroch, Dale W. Rice, and Jeffrey M. Breiwick, 4:20
 Fin whale, Balaenoptera physalus, 4:2, 20
 distribution, 4:20-21
 exploitation, 4:22-23
 feeding, 4:22
 management, 4:24
 migration, 4:20
 population, 4:23-24
 reproduction, 4:22
 stocks, 4:21-22
 Finfish pathogens, 3:14
 Finfish resources, Gulf of Mexico, 1:19
 Fish Block Technical Working Group, 2:38
 Fish blocks, composition, 2:36, 3:76
 determination, 2:36, 3:77
 minced fish, amount, 3:76
 recommendations, 2:39, 3:77-78
 Fish farming, salmon, 3:44
 Fish farming, trout, 3:44
 Fish oil, dietary, 2:61-62
 consumption, 2:62

docosahexaenoic acid (DHA), 2:61
eicosapentaenoic acid (EPA), 2:61
heart attack, effects on, 2:62
high-, low-oil fishes, 2:62
Omega-3 long-chain fatty acid, 2:62
Fish oil concentrates, 2:61
"Fish or fish oil in the diet and heart attacks,"
by Maurice E. Stansby, 2:60
Fish poisoning--see ciguatera fish poisoning
Fish spoilage, honeycombing, 2:40
"Fisheries applications of satellite data in the
eastern North Pacific," by Paul C. Piedler, Gary
B. Smith, and R. Michael Laura, 3:1
Fisheries, eastern Caribbean, 1:13-17
Fishery Conservation Zone (FCZ), 3:48
Fishery research, remote sensing data, 3:1
Fishes, Red Sea
 proximate composition, 3:71
 seasonal variations, 3:74
Ford, Robert J., "Norwegian salmon and trout
farming," 3:44
Frank, Hilmer A., Mitchel E. Rosenfeld, Derrick H.
Yoshinaga, and Wai-Kit Nip, "Relationship
between honeycombing and collagen breakdown in
skipjack tuna, *Katsuwonus pelamis*," 2:40
Freshwater mussel, *Margaritana margaritana*, 2:33

G

Gambierdiscus toxicus--see ciguatera fish
poisoning
Gammaridean amphipods: *Ampelisca*
A. eschrichti, *A. macrocephala*, *A. nugax*,
Nototropis brueggemanni, *N. ekmani*, *Pontoporeia*
affinis, *P. femorata*, 4:9
Golden sardine, *Sardinella aurita*, 1:19
Gooding, Reginald M., "Trapping surveys for the
deepwater caridean shrimp, *Heterocarpus*
laevigatus and *H. ensifer*, in the northwest
Hawaiian Islands," 2:18
Gosho, Merrill E., Dale W. Rice, and Jeffrey M.
Breiwick, "The sperm whale, *Physeter*
macrocephalus," 4:54
Grant, William E.--see Krauthamer et al.
"(The) gray whale, *Eschrichtius robustus*," by Dale
W. Rice, Allen A. Wolman, and Howard W. Braham,
4:7
Gray whale, *Eschrichtius robustus*, 3:9, 4:2, 7-14
 distribution, 4:7
 exploitation, 4:10-12
 feeding, 4:9
 identification, 4:7
 management, 4:12-13
 migrations, 4:8
 natural mortality, 4:10
 reproduction, 4:10
 stocks, 4:7
Great whales--Special Section, 4:1
Green turtle, *Chelonia mydas*, 3:57
Griffin, Wade L.--see Krauthamer et al., Tettey
and Griffin
Groundfish, 2:11
"Groundfish fisheries and research in the vicinity
of seamounts in the North Pacific Ocean," by
Richard N. Uchida and Darryl T. Tagami, 2:1
Groundfish fisheries, Hawaiian Archipelago, 2:1
 commercial exploitation, 2:2
 preliminary management plan, 2:1
 species biology
 Alfonsin, 2:15
 pelagic armorhead, 2:13
Grouper, *Caprodon schlegelii*, 2:11
Grouper, *Epinephelus quernus*, 2:11
Growth lines, bivalve mollusks, 2:27

H

Hake, red and silver, surimi
 commercial processing, 2:44
 gel-forming ability, 2:44
 laboratory processing, 2:46
Hale, Malcolm B., "Proximate chemical composition
and fatty acids of three small coastal pelagic
species," 1:19
Hanna, Rifaat G. M., "Proximate composition of
certain Red Sea fishes," 3:71
Harbor seal, *Phoca vitulina*, 3:7
Hard clams, *Mercenaria mercenaria*, 2:33, 3:15
Hawaiian Archipelago, seamount survey, 2:7-13
 bottom topography, 2:7-8
 sampling, 2:8-9
 seamounts, 2:1
Hawaiian monk seals, *Monachus schauinslandi*, 3:59,
Hemirhamphidae, 3:71
Henderson, John R., "Encounters of Hawaiian monk
seals with fishing gear at Lisianski Island,
1982," 3:59

Hermit crabs, *Dardanus* spp., 2:12, 4:76
Herrick, Samuel F., Jr., "U.S. tuna trade summary,
1982," 1:1
Herrick, Samuel F., Jr., and Steven Koplin, "U.S.
tuna trade summary, 1983," 4:65
Heslinga, Gerald A., Obichang Orak, and Marcus
Ngramenglor, "Coral reef sanctuaries for
trochus shells," 4:73
"History of artificial propagation of coho salmon,
Oncorhynchus kisutch, in the mid-Columbia River
system," by Roy J. Wahle and Roger E. Pearson,
3:34
Holts, David B.--see Coe et al.
Honeycombing, skipjack tuna
 analysis, 2:41
 definition, 2:40
 evaluation, 2:40
"(The) humpback whale, *Megaptera novaeangliae*,"
by James H. Johnson, and Allen A. Wolman, 4:30
Humpback whale, *Megaptera novaeangliae*, 3:9, 4:30
 distribution, 4:31
 exploitation, 4:35
 feeding, 4:33-34
 habitat protection, 4:36
 identification, 4:30
 management, 4:35-36
 migration, 4:31
 mortality, 4:34-36
 population, 4:35
 recruitment, 4:34
 reproduction, 4:34
 stocks, 4:31-32

I-J

"(The) incidental capture of sea turtles in the
Atlantic U.S. Fishery Conservation Zone by the
Japanese tuna longline fleet," by W. N. Witzell,
3:56
Infectious hematopoietic necrosis virus (IHNV),
3:14
International Whaling Commission (IWC), 4:21, 26,
35, 39, 47, 59
"Investment in Gulf of Mexico shrimp vessels,
1965-77," by Ernest O. Tettey and Wade L.
Griffin, 2:49
Jack mackerel, *Trachurus symmetricus*, 3:5
Jaenicke, Herbert W., Adrian G. Celewycyz, Jack E.
Bailey, and Joseph A. Orsi, "Paired open beach
seines to study estuarine migrations of juvenile
salmon," 3:62
Johnson, James H., and Allen A. Wolman, "The
humpback whale, *Megaptera novaeangliae*," 4:30

K-L

Kemp's ridley turtle, *Lepidochelys kempi*, 3:57
Killer whale, *Orcinus orca*, 4:34
King crab, *Paralichthodes* spp., 3:7
Koplin, Steven--see Herrick and Koplin
Krauthamer, Judith T., William E. Grant, and Wade
L. Griffin, "Characteristics of the Texas shrimp
fleet," 2:53
Labridae, 2:11, 3:71
Lane, J. Perry and Thomas J. Connors, "Evaluation
of methods to determine the proportions of
fillets and minced fish flesh in mixed fish
blocks," 2:36
Lane, J. Perry, John J. Ryan, and Robert J.
Learson, "Assessing the accuracy of a method to
determine the amount of minced fish in mixed
mince-fillet fish blocks," 3:76
Lanier, Tyre C., "Suitability of red hake, *Merluccius*
bilinearis, and silver hake, *Merluccius*
bilinearis, for processing into surimi," 2:43
Lauris, R. Michael--see Piedler et al.
Learson, Robert J.--see Lane et al.
Leatherback turtle, *Dermochelys coriacea*, 3:57
Lethrinidae, 3:71
Loggerhead turtle, *Caretta caretta*, 3:57
Lutjanidae, 2:11, 3:71

M

Mackerel scad, *Decapterus tabl*, 2:11
Magnuson Fishery Conservation and Management Act
(MFCMA), 2:1, 3:48
"Marine bivalve mollusks as reservoirs of viral
finfish pathogens: Significance to marine and
anadromous finfish aquaculture," by Theodore R.
Meyers, 3:14
Marine fish farms, Norwegian
 Atlantic salmon, 3:44-46
 rainbow trout, 3:46
Marine Mammal Protection Act (MMPA) of 1972, 3:18,
4:2

Megaptera novaeangliae, humpback whale, 3:9, 4:2
Mercenaria mercenaria, hard clams, 3:15
Merluccius productus, Pacific whiting, 3:5
Meyers, Theodore R., "Marine bivalve mollusks as
reservoirs of viral finfish pathogens:
Significance to marine and anadromous finfish
aquaculture," 3:14
Microponogonias undulatus, Atlantic croaker, 2:45
Minced fish, amount in fish blocks, 3:76
Mizroch, Sally A., Dale W. Rice, and Jeffrey M.
Breiwick, "The blue whale, *Balaenoptera*
musculus," 4:15
Mizroch, Sally, Dale W. Rice, and Jeffrey M.
Breiwick, "The fin whale, *Balaenoptera*
physalus," 4:20
Mizroch, Sally, Dale W. Rice, and Jeffrey M.
Breiwick, "The sei whale, *Balaenoptera*
borealis," 4:25
Monk seals, entanglement with fishing gear, 3:59
 incidence, 3:60-61
 response, 3:60-61
Moray eels: *Gymnothorax berndti*, *G.*
steindachneri, *G. undulatus*, 2:12
Mullidae, 3:71

N-O

Narwhal, *Monodon monoceros*, 3:7
National Aeronautics and Space Administration
(NASA), satellites, 3:1
Nellis, David W.--see Olsen et al.
Ngramenglor, Marcus--see Heslinga et al.
Nip, Wai-Kit--see Frank et al.
"Nonselectivity of gillnet fishery on jaw-tagged
adult steelhead, *Salmo gairdneri*," by Emil
Slatick and Larry Basham, 3:68
Northern fur seal, *Callorhinus ursinus*, 3:9, 59
"Norwegian salmon and trout farming," by Robert J.
Ford, 3:44
Observer program, voluntary/mandatory, 3:20-21
Ocean condition research, remote sensing data, 3:1
Ocean quahog, *Arctica islandica*,
 age and growth studies, 2:28-29
 sex determination, 2:32-33
 validation of annual periodicity, 2:29-30
"Oceanographic observations off the Pacific
Northwest following the 1982 El Niño event," by
R. K. Reed, 1:7
Octopus sp., 2:13
Olsen, David A., David W. Nellis, and Richard S.
Wood, "Ciguatera in the eastern Caribbean," 1:13
Omega-3 long chain fatty acid, 2:60-62
 fish oil concentrates, in, 2:61
 serum cholesterol effects, 2:61
Oncorhynchus gorbusha, pink salmon, 3:5, 35
O. keta, chum salmon, 3:5, 35
O. kisutch, coho salmon, 3:5, 34
O. nerka, sockeye salmon, 3:5, 14
O. tshawytscha, chinook salmon, 3:5, 36
Orak, Obichang--see Heslinga et al.
Orcinus orca, killer whale, 4:34
Orsi, Joseph A.--see Jaenicke et al.

P-Q

Pacific herring, *Clupea harengus pallasi*, 3:5
Pacific mackerel, *Scomber japonicus*, 3:5
Pacific salmon, see *Oncorhynchus* spp.
Pacific salmon migrations, S.E. Alaska, 3:62
 analysis, 3:65
 direction, 3:63
 timing, 3:63
Pacific whiting, *Merluccius productus*, 3:5
"Paired open beach seines to study estuarine
migrations of juvenile salmon," by Herbert W.
Jaenicke, Adrian G. Celewycyz, Jack E. Bailey,
and Joseph A. Orsi, 3:62
Palko, Barbara J.--see Brusher et al.
Pathogens, finfish, 3:14
 bioaccumulation, 3:14-16
 depuration, 3:14
 epizootics, 3:14
 infectious hematopoietic necrosis, 3:14
 IPN molluscibornaviruses, 3:15
 JOV-1, 3:15
 management implications, 3:16
 potential infections, bivalves, 3:15
 chum salmon virus (CSV), 3:15
 infectious hematopoietic necrosis virus
 (IHNV), 3:16
 salmonid IPN piscibornaviruses, 3:16
 13:2 reovirus, 3:15
Pearson, Roger E.--see Wahle and Pearson
Pelagic armorhead, *Pentaceros richardsoni*, 2:2
 distribution, 2:13
 feeding behavior, 2:13

fisheries, 2:14
 life history, 2:13-14
 migration, 2:13
 morphological differences, 2:14
 population, 2:13
 Penaeid shrimp, *Penaeus marginatus*, 2:19
Phoca vitulina, harbor seal, 3:7
Physeter macrocephalus, sperm whale, 4:2
 Pink salmon, *Oncorhynchus gorbuscha*, 3:5, 35, 62, 64
 Pink shrimp, *Penaeus duorarum*, 2:53
 Pink snapper, *Pristipomoides sieboldii*, 2:11
Plectranthias kelloggi, 2:11
 Poisons--see Ciguatera fish poisoning
 Polar bear, *Ursus maritimus*, 3:7
 Pollock, *Theragra chalcogramma*, 2:45
 Polyunsaturates, 2:60-61
 "Procedures for preparing acetate peels and evidence validating the annual periodicity of growth lines formed in the shells of ocean quahogs, *Arctica islandica*," by John W. Ropes, 2:27
 "Proximate chemical composition and fatty acids of three small coastal pelagic species," by Malcolm B. Hale, 1:19
 Proximate composition
 coastal (S.E. U.S.) herrings, 2:20
 Red Sea fishes, 3:71
 "Proximate composition of certain Red Sea fishes," by Rifaat G. M. Hanna, 3:71
 Purse-seining, tuna, 3:18

R

Rainbow trout, *Salmo gairdneri*, 3:15, 44
 Red bigeye, *Cookeolus boops*, 2:10
 Red hake, *Urophycis chuss*, 2:43
 Red snapper, *Epinephelus quernus*, 2:11
 Reed, R. K., "Oceanographic observations off the Pacific Northwest following the 1982 El Nino event," 1:7
 "Relationship between honeycombing and collagen breakdown in skipjack tuna, *Katsuwonus pelamis*," by Hilmer A. Frank, Mitchell E. Rosenfeld, Derrick H. Yoshinaga, and Wai-Kit Nip, 2:40
 Remote sensing, satellite, 3:1
 Ribbon seal, *Phoca fasciata*, 3:7
 Rice, Dale W., Allen A. Wolman, and Howard W. Braham, "The grey whale, *Eschrichtius robustus*," 4:7
 Rice, Dale W.--see Braham and Rice, Goshu et al., Mizroch et al.
 "(The) right whale, *Balaena glacialis*," by Howard W. Braham and Dale W. Rice, 4:38
 Right whale, *Balaenoptera glacialis*, 4:2, 38
 distribution, 4:38
 exploitation, 4:42-43
 feeding, 4:41
 identification, 4:38-39
 management, 4:43-44
 migration, 4:38
 mortality, 4:42
 population, 4:43
 reproduction, 4:41-42
 stocks, 4:39-41
 Ringed seal, *P. hispida*, 3:7
 Rockfish, *Sebastes matsubari*, 2:4
 Ropes, John W., "Procedures for preparing acetate peels and evidence validating the annual periodicity of growth lines formed in the shells of ocean quahogs, *Arctica islandica*," 2:27
 Rosenfeld, Mitchell E.--see Frank et al.
 Round scad, *Decapterus punctatus*, 1:19
 Ryan, John J.--see Lane et al.

S

Salmo gairdneri, 3:15, 35
 Satellite, remote sensing, 3:1
 Satellite sensors, 3:1-10
 applications, 3:3-7
 charts, 3:7
 coastal zone monitoring, 3:6-7

ocean/surface conditions, 3:3-6
 prediction, stock recruitment, 3:5
 sea-ice monitoring, 3:7
 Saturated fatty acids, 2:60-61
Scorpaenidae, 2:11
Scorpaenidae, 2:11
 Scrod cod, *Gadus morhua*, 3:76
 Scyphomedusidae, 3:57
 Sea turtles, incidental tuna-trawl catch, 3:57
 Atlantic longline fishery, in, 3:57
 catch, 3:56-58
 catch permits, 3:49
 distribution, 3:57
 Sea urchin, Echinometridae, 2:13
 Sea-ice, remote sensing monitoring, 3:7
 SEASAT satellite, 3:6
 "(The) sei whale, *Balaenoptera borealis*," by Sally Mizroch, Dale W. Rice, and Jeffrey M. Breitwick, 4:25
 Sei whale, *Balaenoptera borealis*, 4:2, 25
 distribution, 4:25-26
 exploitation, 4:27-28
 feeding, 4:27
 identification, 4:25
 management, 4:28-29
 migration, 4:25
 mortality, 4:27
 population, 4:28
 reproduction, 4:27
 stocks, 4:26-27
 Serranidae, 3:71
 Shrimp fishery, Texas, 2:53
 commercial, 2:53
 costs, 2:53
 economic impacts, 2:53
 fishing areas, 2:53
 fleet, 2:54
 legislation, 2:58-59
 licensing, 2:53
 management, 2:53
 recreational, 2:53
 total landings/value, 2:53
 vessels, 2:53
 Shrimp landings, Gulf of Mexico, 2:51
 Shrimp vessels, Gulf of Mexico, 2:49
 Signidae, 3:71
 Silver hake, *Merluccius bilinearis*, 2:43
 Skipjack tuna, *Euthynnus pelamis*, 1:1, 2:40, 4:65
 Slatick, Emil and Larry Basham, "Nonselectivity of gillnet fishery on jaw-tagged adult steelhead, *Salmo gairdneri*," 3:68
 Slipper lobster, *Scyllarides squamosus*, 2:13
 Smith, Gary B.--see Fiedler et al.
 Snake mackerel, *Promethichthys prometheus*, 2:9
 Snow (tanner) crab, *Chionoecetes* spp., 3:7
 Sockeye salmon, *Oncorhynchus nerka*, 3:5, 14, 35
 Spanish sardine, *Sardinella aurita*, 1:19
 Sparidae, 3:71
 "(The) sperm whale, *Physeter macrocephalus*," by Merrill E. Goshu, Merrill E., Dale W. Rice, and Jeffrey M. Breitwick, 4:54
 Sperm whale, *Physeter macrocephalus*, 4:2, 54
 distribution, 4:54-59
 exploitation, 4:60-62
 feeding, 4:59-60
 identification, 4:54
 management, 4:63
 population, 4:60
 reproduction, 4:60
 stocks, 4:59, 62-63
 stocks, 4:59
Spyridia, 1:16
 Stansby, Maurice E., "Fish or fish oil in the diet and heart attacks," 2:60
 Starfish, Astropectinidae, 2:12
 "(The) status of endangered whales: An overview," by Howard W. Braham, 4:2
 Steelhead, *Salmo gairdneri*, 3:35, 68-69
 Stock recruitment, remote sensing predictions, 3:5
 "Suitability of red hake, *Urophycis chuss*, and silver hake, *Merluccius bilinearis*, for processing into surimi," by Tyre C. Lanier, 2:43
 Surf clam, *Spisula solidissima*, 2:27
 Surimi, red and silver hake, 2:43

T

Tagami, Darryl T.--see Uchida and Tagami
 Tetraodontidae, 2:11
 Tetley, Ernest O., and Wade L. Griffin, "Investment in Gulf of Mexico shrimp vessels, 1965-77," 2:49
Theragra chalcogramma, pollock, 2:45
Thunnus alalunga, albacore, 3:8
T. albacares, yellowfin tuna, 3:18
T. thynnus orientalis, bluefin tuna, 3:5
 Toxins--see ciguatera fish poisoning
Trachurus symmetricus, jack mackerel, 3:5
 "Trapping surveys for the deepwater caridean shrimps, *Heterocarpus laevigatus* and *H. ensifer*, in the Northwest Hawaiian Islands," by Reginald M. Gooding, 2:18
 Trent, Lee--see Brusher et al.
Trochus niloticus, 4:73
Trochus pyramis, 4:76
 Tunas--see individual species
 "(The) 'tuna-porpoise' problem: NMFS dolphin mortality reduction research, 1970-81," by James M. Coe, David B. Holts, and Richard W. Butler, 3:18
 Tuna trade, U.S., 1:1-7, 4:65, 71
 albacore production, white meat tuna, 4:66
 Atlantic catch, 1:3-4
 canned tuna imports, 4:65, 70-71
 canned white meat tuna, 4:67
 cannery receipts, 1:1-4
 domestic production, 4:65
 fleet characteristics, 4:65
 foreign processors, 4:65
 markets, 4:71
 Pacific catch, 1:2
 production, 1:4-5
 resource limitations, 4:71
 retail sales, 4:71
 tropical light meat tuna processing, 4:68
 U.S. consumption of canned tuna, 4:71
Turbinaria, 1:16

U-V

U.S. Department of Commerce Voluntary Fishery Product Inspection Program, 3:76
 U.S. fisheries, regulatory guidelines, 3:49
 U.S. Grade Standards for Fishery Products, 3:76
 U.S. Standards for Grades of Frozen Fish Blocks, 2:38, 3:76
 "U.S. tuna trade summary, 1982," by Samuel F. Herrick, Jr., 1:1
 "U.S. tuna trade summary, 1983," by Samuel F. Herrick, Jr., and Steven Koplin, 4:65
 Uchida, Richard N., and Darryl T. Tagami, "Groundfish fisheries and research in the vicinity of seamounts in the North Pacific Ocean," 2:1
 "Using charterboat catch records for fisheries management," by Harold A. Brusher, Mark L. Williams, Lee Trent, and Barbara J. Palko, 3:48

W-Z

Wahle, Roy J., and Roger E. Pearson, "History of artificial propagation of coho salmon, *Oncorhynchus kisutch*, in the mid-Columbia River system," 3:34
 Walrus, *Odobenus rosmarus*, 3:7
 White shrimp, *Penaeus setiferus*, 2:53
 Williams, Mark L.--see Brusher et al.
 Witzell, W. N., "The incidental capture of sea turtles in the Atlantic U.S. Fishery Conservation Zone by the Japanese tuna longline fleet," 3:56
 Wolman, A. A.--see Johnson and Wolman, Rice et al.
 Wood, Richard S.--see Olsen et al.
 Yellowfin tuna, *Thunnus albacares*, 1:1, 3:18
 Yoshinaga, Derrick H.--see Frank et al.

Papers in the Marine Fisheries Review 46(1-4), 1984

46(1)

- "U.S. Tuna Trade Summary, 1982," Samuel F. Herrick, Jr., 1:1-6.
 "Oceanographic Observations Off the Pacific Northwest Following the 1982 El Nino Event," R. K. Reed, 1:7-12.
 "Ciguatera in the Eastern Caribbean," David A. Olsen, David W. Nellis, and Richard S. Wood, 1:13-18.
 "Proximate Chemical Composition and Fatty Acids of Three Small Coastal Pelagic Species," Malcolm B. Hale, 1:19-21.
 "Dungeness Crab Leg Loss in the Columbia River Estuary," Joseph T. Durkin, Kurt D. Buchanan, and Theodore H. Blahm, 1:22-24.

46(2)

- "Groundfish Fisheries and Research in the Vicinity of Seamounts in the North Pacific Ocean," Richard N. Uchida and Darryl T. Tagami, 2:1-17.
 "Trapping Surveys for the Deepwater Caridean Shrimps, *Heterocarpus laevigatus* and *H. ensifer*, in the Northwest Hawaiian Islands," Reginald M. Gooding, 2:18-26.
 "Procedures for Preparing Acetate Peels and Evidence Validating the Annual Periodicity of Growth Lines Formed in the Shells of Ocean Quahogs, *Arctica islandica*," John W. Ropes, 2:27-35.
 "Evaluation of Methods to Determine the Proportions of Fillets and Minced Fish Flesh in Mixed Fish Blocks," J. Perry Lane and Thomas J. Connors, 2:36-39.
 "Relationship Between Honeycombing and Collagen Breakdown in Skipjack Tuna, *Katsuwonus pelamis*,"

- Hilmer A. Frank, Mitchel E. Rosenfeld, Derrick H. Yoshinaga, and Wai-Kit Ng, 2:40-42.
 "Suitability of Red Hake, *Urophycis chuss*, and Silver Hake, *Merluccius bilinearis*, for Processing into Surimi," Tyre C. Lanier, 2:43-48.
 "Investment in Gulf of Mexico Shrimp Vessels, 1965-77," Ernest O. Tetley and Wade L. Griffin, 2:49-52.
 "Characteristics of the Texas Shrimp Fleet," Judith T. Krauthamer, William E. Grant, and Wade L. Griffin, 2:53-59.
 "Fish or Fish Oil in the Diet and Heart Attacks," Maurice E. Stansby, 2:60-63.

46(3)

- "Fisheries Applications of Satellite Data in the Eastern North Pacific," Paul C. Fiedler, Gary B. Smith, and R. Michael Laurs, 3:1-13.
 "Marine Bivalve Mollusks as Reservoirs of Viral Finfish Pathogens: Significance to Marine and Anadromous Finfish Aquaculture," Theodore R. Meyers, 3:14-17.
 "The 'Tuna-Porpoise' Problem: NMFS Dolphin Mortality Reduction Research, 1970-81," James M. Coe, David B. Holts, and Richard W. Butler, 3:18-33.
 "History of Artificial Propagation of Coho Salmon, *Oncorhynchus kisutch*, in the Mid-Columbia River System," Roy J. Wahle and Roger E. Pearson, 3:34-43.
 "Norwegian Salmon and Trout Farming," Robert J. Ford, 3:44-47.
 "Using Charterboat Catch Records for Fisheries Management," Harold A. Brusher, Mark L.

- Williams, Lee Trent, and Barbara J. Palko, 3:48-55.
 "The Incidental Capture of Sea Turtles in the Atlantic U.S. Fishery Conservation Zone by the Japanese Tuna Longline Fleet," W. N. Witzell, 3:56-58.
 "Encounters of Hawaiian Monk Seals With Fishing Gear at Lisianski Island, 1982," John R. Henderson, 3:59-61.
 "Paired Open Beach Seines to Study Estuarine Migrations of Juvenile Salmon," Herbert W. Jaenicke, Adrian G. Celewycz, Jack E. Bailey, and Joseph A. Orsi, 3:62-67.
 "Nonselectivity of Gillnet Fishery on Jaw-tagged Adult Steelhead, *Salmo gairdneri*," Emil Slatick and Larry Basham, 3:68-70.
 "Proximate Composition of Certain Red Sea Fishes," Rifaat G. M. Hanna, 3:71-75.
 "Assessing the Accuracy of a Method to Determine the Amount of Minced Fish in Mixed Mince-Fillet Fish Blocks," J. Perry Lane, John J. Ryan, and Robert J. Learson, 3:76-79.

46(4)

- "The Status of Endangered Whales: An Overview," Howard W. Braham, 4:2-6.
 "The Gray Whale, *Eschrichtius robustus*," Dale W. Rice, Allen A. Wolman, and Howard W. Braham, 4:7-14.
 "The Blue Whale, *Balaenoptera musculus*," Sally A. Mizroch, Dale W. Rice, and Jeffrey M. Breiwick, 4:15-19.
 "The Fin Whale, *Balaenoptera physalus*," Sally Mizroch, Dale W. Rice, and Jeffrey M. Breiwick, 4:20-24.
 "The Sei Whale, *Balaenoptera borealis*," Sally Mizroch, Dale W. Rice, and Jeffrey M. Breiwick, 4:25-29.
 "The Humpback Whale, *Megaptera novaeangliae*," James H. Johnson and Allen A. Wolman, 4:30-37.
 "The Right Whale, *Balaena glacialis*," Howard W. Braham and Dale W. Rice, 4:38-44.
 "The Bowhead Whale, *Balaena mysticetus*," Howard W. Braham, 4:45-53.
 "The Sperm Whale, *Physeter macrocephalus*," Merrill E. Goshu, Dale W. Rice, and Jeffrey M. Breiwick, 4:54-64.
 "U.S. Tuna Trade Summary, 1983," Samuel F. Herrick, Jr. and Steven Koplin, 4:65-72.
 "Coral Reef Sanctuaries for Trochus Shells," Gerald A. Heslinga, Obichang Orak, and Marcus Ngramegor, 4:73-80.