

References Historical Fisheries Oceanography: Sharp

- Adkins, M.D., R.M. Peterman, M.F. Lapointe, D.M. Gillis and J. Korman. 1996. Alternative models of climate effects on sockeye salmon, *Oncorhynchus nerka*, productivity in Bristol Bay, Alaska, and the Fraser River, British Columbia. *Fish. Oceanogr.* **5**:137-152.
- Allan, R., J. Lindesay, D. Parker. 1996. *El Niño-Southern Oscillation and Climate Variability*. CSIRO Publishing, Collingwood, AU. 405pp. with CD-ROM.
- Allen, B.D., and R.Y. Anderson (1993) Evidence from western North America for rapid shifts in climate during the last glacial maximum. *Science* **260**:1920-1923.
- Ahlstrom, E.H. 1943. Studies of the Pacific pilchard or sardine (*Sardinops caerulea*). Influence of temperature on the rate of development of pilchard eggs in nature. *U.S. Fish and Wildli. Serv., Spec. Sci. Rept.* **23**:1-23.
- Ahlstrom, E.H. 1959. Vertical distribution of pelagic fish eggs and larvae off California and Baja California. *U.S. Fish and Wildli. Serv., Fish. Bull.* **60**:107-146.
- Ahlstrom, E.H. 1966. Distribution and abundance of sardine and anchovy larvae In the California Current region off California and Baja California. *U.S. Fish and Wildli. Serv., Spec. Sci. Rept.* Fish. NO.534. 71 pp.
- Ahlstrom, E.H. and H.G. Moser. 1976. Eggs and larvae of fishes and their role in systematic investigations and in fisheries. *Rev. Trav. Inst. Peches Marit.* **40**:379-398.
- Ahlstrom, E.H. and H.G. Moser. 1980. Characters useful in identification of pelagic marine fish eggs. *CalCOFI Rep.* **21**:121-131.
- Ahlstrom, E.H. and H.G. Moser. 1981. Systematics and development of early life history stages of pelagic marine fishes: achievements during the past century, present status and suggestions for the future. *Rapp. P.-V. Reun. Cons. int. Explor. Mer.* **178**:541-546.
- Alverson, D.L., M.H. Freeberg, S.A. Murawski, and J.G. Pope. 1994. A global assessment of fisheries bycatch and discards. *FAO Fish. Tech. Paper* No. **339**, 233 pp.
- Anderson, J.J. 1997 in review: Decadal climate cycles and declining Columbia River salmon. Proceedings of the Sustainable Fisheries Conference, Victoria B.C. Canada, 1996, Eric Knudsen Editor. *Special publication of the American Fisheries Society*.
- Andersen, K.P. and E. Ursin. 1977. A multispecies extension to the Beverton and Holt theory of fishing, with accounts of phosphorus circulation and primary production. *Meddr. Danma. Fisk.-og Havunders., NS* (7):319-345.
- Anonymous. 1950. *Progress Report 1950, California Cooperative Sardine Research Program*. 54pp. State of California Dept. of Natural Resources, Marine Research Committee.
- Arthur, D.K. 1956. The particulate food and food resources of the larvae of three pelagic fishes, especially the Pacific sardine, *Sardinops caerulea*. Ph.D. Thesis, University of California, Scripps Institution of Oceanography, 231pp.
- _____. 1976. Food and feeding of the larvae of three fishes, in the California Current, *Sardinops caerulea*, *Engraulis mordax*, and *Trachurus symmetricus*. *Fish. Bull. U.S.*, **74**:517-530.
- Avaria, S. 1985: Efectos de El Niño en las pesquerias del Pacifico Sureste. Invest. Pesq. (Chile) **32**:101-116.
- Azam, F. 1998. Microbial control of oceanic carbon flux: the plot thickens. *Science* **280**:694-696.
- Bailey, K.M., R.D. Brodeur, N. Merati and M.M. Yoklavich. 1993. Predation on walleye pollock (*Theragra chalcogramma*) eggs and yolk-sac larvae by pelagic crustacean invertebrates in the western Gulf of Alaska. *Fish. Oceanogr.* **2**:30-39.
- Bailey, K.M., R.D. Brodeur, and A.B. Hollowed. 1996. Cohort survival patterns of walleye pollock, *Theragra chalcogramma*, in Shelikof Strait, Alaska: a critical factor analysis. *Fish. Oceanogr.* 5(Suppl. 1):179-188.
- Bailey, K.M., P. Stabeno, and D. Powers, 1997: The role of larval retention and transport features in mortality and gene flow of walleye pollock, *Theragra chalcogramma*. *J. Fish Biol.* **51**:135-154.
- Baker, D.L and B.E. Pierce (1997). Does fisheries management reflect societal values? Contingent valuation evidence for the River Murray. *Fisheries Management and Ecology* **4**: 1-15.
- Baker, D. and B.E. Pierce (eds.) (1998). *Wild fisheries with a future: Environmental Management Plan of the Southern Fishermen's Association*. Southern Fishermen's Association, Inc., Meningie, Australia. 61p.

- Bakun, A. 1985. Comparative studies and the recruitment problem: Searching for generalizations. *CalCOFI Rep.* **26**:30-40.
- Bakun, A. 1996. Patterns in the Ocean. California Sea Grant/CIB 323pp.
- Bakun, A., J. Beyer, D. Pauly, J.G. Pope and G.D. Sharp (1982) Ocean sciences in relation to living resources: a report. *Can. J. Fish. Aquat. Sci.* **39**(7):1059-1070.
- Bakun, A., P. Cury, M.-H. Durand, R. Mendelssohn, D. Pauly, and C. Roy 1998. The climate and eastern oceans systems project (CEOS) pp. 1-6 In: Global versus Local Changes in Upwelling Systems, edited by M.-H. Durand, P. Cury, R. Mendelssohn, C. Roy, A. Bakun, and D. Pauly, a report from the CEOS Workshop, Monterey, California, September, 1994. ORSTOM Editions, Paris.
- Bakun, A. and R.H. Parrish. 1981. Environmental inputs to fishery population models for eastern boundary current. Pp. 68-79 In: Report and Documentation of the Workshop on the Effects of Environmental Variation on the Survival of Larval Pelagic Fishes. G.D. Sharp, conv., editor. *IOC Workshop Rep. Ser.* No.28 Unesco, Paris.
- _____ 1990. Comparative studies of coastal pelagic fish reproductive habits: the Brazilian sardine (*Sardinella aurita*). *J. Cons. int. Explor. Mer.* **46**:269-283.
- _____ 1991. Comparative studies of coastal pelagic fish reproductive habitats: the anchovy (*Engraulis anchoita*) of the southwestern Atlantic. *J. Cons. int. Explor. Mer.* **48**:342-361.
- Baranov, F.I. 1918. On the question of the biological basis of fisheries. *Izv.Nauchno.-Issled.Iktiolo. Inst.* **1**:81-128. (in Russian).
- Baretta, J.W., W. Ebenhoh and P.Ruardij, 1995. The European regional seas ecosystem model, a complex marine ecosystem model, *Netherlands J. Sea Res.* **33**: 233-246.
- Barnston, A., M.H. Glantz, and Y. He. 1999. Predictive skill of statistical and dynamical climate models in SST forecasts during the 1997-98 El Niño Episode and the 1998 La Niña onset. Bulletin of the American Meteorological Society, Feb 1999.
- Barrick, D. E., M.W. Evans, and B.I. Weber. 1977. Ocean surface current mapping by radar. *Science.* **198**:138-144.
- Bas, C., R. Margalef, and P. Rubies, eds. 1985. *Simposio Internacional sobre las Areas de Afloramiento mas Importqntes del Oeste Africano (Cabo Blanco y Benguela)*. Barcelona, Instituto de Investigaciones Pesqueras, 2 Vols. 11143pp.
- Baumgartner, T.R., J. Michaelsen, L.G. Thompson, G.T. Shen, A. Soutar, and R.E. Casey. 1989. The recording of interannual climatic change by high-resolution natural systems: tree-rings, coral bands, glacial ice layers, and marine varves. D. Peterson, ed., pp.1-15 In: Aspects of Climate Variability in the Pacific and Western Americas, AGU Geophysical Monog. 55.
- Beamish, R. J. (ed.) 1995. Climate change and northern fish populations. *Can. Spec. Pub. Fish. Aquat. Sci.* **121**, 739 pp.
- Belvéze, H. and K. Erzini. The influence of hydroclimatic factors on the availability of the sardine (*Sardinops pilchardus* Walbaum) in the Moroccan fishery pp. 285-327 In: 'Proceedings of the Expert Consultation to Examine Changes in Abundance and Species Composition of Neritic Fish Resources'. San Jose, Costa Rica, April 1983. (G.D. Sharp and J. Csirke, eds.) *FAO Fisheries Report series* **291**(2).
- Beverton, R.J.H. and S.J. Holt. 1957. On the Dynamics of Exploited Fish Populations. *Min. Agric. Fish. Food, Fish Inv.* Ser 2, 19:533pp.
- Beyer, J. 1981. *Aquatic Ecosystem: an operational research approach*. University of Washington Press, Seattle, 315pp.
- Bienfang and Zieman. 1995.
- Blaxter, J.H.S. 1965. Feeding success of herring larvae and their ecology in relation to feeding. *Calif. Coop. Oceanic Fish. Invest. Rep.* **10**:79-88.
- Blaxter, J.H.S. and G. Hempel. 1963. The influence of egg size on herring larvae. *J. Cons. Perm. Int. Explor. Mer* **28**:211-240.
- _____ 1966. Utilization of yolk by herring larvae. *J. Mar. Biol. Ass. U.K.* **46**:219-234.
- Block, B.A., J.E. Keen, B. Castillo, H. Dewar, E.V. Freund, D.J. Marcinek, R.W. Brill and C. Farwell. 1997. Environmental preferences of yellowfin tuna (*Thunnus albacares*) at the northern extent

- of its range. *Mar. Biol.* **130**:119-132.
- Block, B.A., C. Farwell, H. Dewar, and E. Prince. In press. Novel satellite technology for tracking the movements of Atlantic bluefin tuna. *PNAS*.
- Block, B.A., H. Dewar, T. Williams, E. Prince, C. Farwell, and D. Fudge. 1998 Archival tagging of Atlantic bluefin tuna (*Thunnus thynnus thynnus*). *Marine Biotechnology Society Journal*, **32**(1):37-46.
- Boehlert, G.W. 1996. Biodiversity and the sustainability of marine fisheries. *Oceanogr.* **9**(1):28-35.
- Boehlert, G.W. and J.D. Schumacher, eds. 1996a. Changing Oceans and Changing Fisheries: Environmental Data for Fisheries Research and Management. *NOAA Tech. Memo. NOAA-TM-NMFS-SWFSC-239*. 146 p.
- Boehlert, G.W. and J.D. Schumacher. 1997. Changing Oceans and Changing Fisheries: Environmental Data for Fisheries Research and Management. *NOAA Tech. Memo. NOAA-TM-NMFS-SWFSC-239*. 146 p.
- Brodeur, R.D., C.E. Mills, J.E. Overland, G.E. Walters. in press. Recent increase in jellyfish biomass in the Bering Sea: possible links to climate change : *April 23, 1998 For Submission to Nature*
- Brodeur, R. D. and W. G. Pearcy. 1992. Effects of environmental variability on trophic interactions and food web structure in a pelagic upwelling ecosystem. *Mar. Ecol. Prog. Ser.* **84**:101-118.
- Brodeur, R. D. and D. M. Ware. 1992. Long-term variability in zooplankton biomass in the subarctic Pacific Ocean. *Fish. Oceanogr.* **1**:32-38.
- Brodeur, R. D. and D. M. Ware. 1995. Interdecadal variability in distribution and catch rates of epipelagic nekton in the Northeast Pacific Ocean. In: R. J. Beamish (ed.) Climate change and northern fish populations. *Can. Spec. Pub. Fish. Aquat. Sci.* **121**:329-356.
- Brodeur, R. D., R. C. Francis, and W. G. Pearcy. 1992. Food consumption by juvenile coho (*Oncorhynchus kisutch*) and chinook salmon (*O. tshawytscha*) on the continental shelf off Washington and Oregon. *Can. J. Fish. Aquat. Sci.* **49**:1670-1685.
- Burkholder, J.M. 1996. Surface water issues in North Carolina, p.11-15. In: *Solutions: a Technical Conference on Water Quality*. Symposium proceedings, North Carolina State University, Raleigh.
- Burkholder, J.M., H.B. Glasgow Jr., and K. A. Steidenger. 1995. Stage transformations in the complex life cycle of an "ambush-predator" estuarine dinoflagellate. pp. 567-572 In: Harmful marine algal blooms. Lassus, P.G. Arzul, E. Erard, P. Gentien, and C. Marcaillou (eds.). Elsevier, Amsterdam
- Caddy, J.F. 1983. An alternative to equilibrium theory for management of fisheries. In: Papers presented at the Expert Consultation on the Regulation of Fishing Effort (Fishing Mortality)' Rome, January 1983. *FAO Fisheries Report series* **290**(2):285-327.
- Caddy, J.F. .1993. Towards a comparative evaluation of human impacts on fishery ecosystem of enclosed and semi-enclosed seas. *Rev. Fish. Sci.* **1**(1):57-95.
- Caddy, J.F. and A. Bakun. 1994. A tentative classification of coastal marine ecosystems based on dominant processes of nutrient supply. *Ocean and Coastal Management*, **23**:201-211.
- Caddy, J.F. and J.A. Gulland. 1983. Historical patterns of fish stocks. *Marine Policy* **7**(4):267-278.
- Caddy, J.F. and G.D. Sharp 1986. An ecological framework for marine fishery investigations. *FAO Fisheries Technical Paper* **283**: 152pp.
- Carpenter, S., T.M. Frost, A.R. Ives, J.F. Kitchell, and T.K. Krantz (1994) Complexity, cascades and compensation in ecosystems. In: *Biodiversity: Its Complexity and Role*. (Yasuno and Watanabe, eds.) pp.197-207 (Global Environmental Forum, Tokyo).
- Carey, F. G., and G. Lawson. 1973. Comp. *Biochem. Physiol.* **44A**:375-392.
- Checkley, jr., D.M., P.B. Ortner, L.R. Settle, and S.R. Cummings. 1997. A continuous, underway fish egg sampler. *Fish. Oceanogr.* **6**(2):58-73.
- Clancy, R.M. and R.A. Weller. 1992. Sea Surface Temperature: Ad Hoc Working Group Report. Joint Oceanographic Institutions, Inc. Washington DC. 52pp.

- Costanza, R., F. Andrade, P. Antunes, M. van den Belt, D. Boersma, D.F. Boesch, F. Catarino, S. Hanna, K. Limburg, B. Low, M. Molitor, J.G. Pereira, S. Rayner, R. Santos, J. Wilson, and M. Young. 1998. Principles for sustainable governance of the ocean. *Science* 281:198-199.
- Constanza, R. and Daly, H.B. (1992) Natural capital and sustainable development. *Conservation Biology*, 6:3746.
- Crawford, R.J.M., L.G. Underhill, L.V. Shannon, D. Lluch-Belda, W.R. Siegfried, and C.A. Villacastin-Herero (1991) An empirical investigation of trans-oceanic linkages between areas of high abundance of sardine. *In Long-Term Variability of pelagic Fish Populations and Their Environment*. (Kawasaki, T., S. Tanaka, Y. Toba, and A. Taniguchi. eds.) pp.319-332. (Pergamon Press, Tokyo).
- Christensen, V. and D. Pauly. 1995. Fish roduction, catches and the carrying capacity of the world oceans. *NAGA* 18(3):34-40.
- Csirke, J. 1980. Recruitment in Peruvian anchoveta and its dependence on the adult population. *Rapp. P.-v. Réun. Cons. Per. Int.Explor.Mer.* 177:307-313.
- Csirke, J. 1995. Fluctuations in abundance of small and mid-sized pelagics. *Scientia Marina* 59(3-4):481-490.
- Csirke, J. and G.D. Sharp, eds. 1983. Reports of the Expert Consultation to Examine Changes in Abundance and Species Composition of Neritic Fish Resources. San Jose, Costa Rica, April 1983. *FAO Fisheries Report series* 291(3):1-102.
- Cury, P., and C. Roy. 1989: Optimal environmental window and pelagic fish recruitment success in upwelling areas. *J. Can. Fish. Aquat. Sci.* 46(4):670-680.
- Cushing, D.H. 1982. *Climate and Fisheries*. 373pp. Academic Press, London.
- Daan, N. 1989. The ecological setting of the North Sea fisheries. *Dana* 8:17-31.
- Dayton, P.K. (1979) Ecology: a science or a religion. In: *Ecological Processes in Coastal and Marine Systems*. (R.J. Livingston, ed.) pp.3-20, Marine Science 10. (Plenum, New York).
- Dayton, P. K. 1998. Reversal of the burden of truth in fisheries management. *Science* 279:821-822.
- Deevey, E.S. 1947. Life tables for natural populations of animals. *Quart. Rev. Biol.* 22:283-314.
- Dean, W.E., J.P. Bradbury, R.Y. Anderson, and C.W. Barnowsky. (1984) The variability of Holocene climate change: evidence from varved lake sediments. *Science, U.S.*, 226:1191-1194.
- Demarcq, H. 1998. Spatial and temporal dynamics of the upwelling off Senegal and mauritania: local change and trend. Pp.149-166 pp. 503-524 In: *Global versus Local Changes in Upwelling Systems*, edited by M.-H. Durand, P. Cury, R. Mendelssohn, C. Roy, A. Bakun, and D. Pauly, a report from the CEOS Workshop, Monterey, California, September, 1994. ORSTOM Editions, Paris.
- Deme-Gningue, I. 1998. Trends and variability of environmental time series along the Senegalese Coast. Pp.179-194 pp. 503-524 In: *Global versus Local Changes in Upwelling Systems*, edited by M-H. Durand, P. Cury, R. Mendelssohn, C. Roy, A. Bakun, and D. Pauly, a report from the CEOS Workshop, Monterey, California, September, 1994. ORSTOM Editions, Paris.
- Diaz, H. and V. Markgraf (eds.) 1992. *El Niño: Historical review and paleoclimatic aspects of the Southern Oscillation*. Cambridge University Press, Cambridge, UK. 476pp.
- Druffel, E.M. 1985. Detection of El Niño and decade time scale variations of sea surface temperature from banded coral records: implications for the carbon cycle. pp.111-122 In: *The Carbon Cycle and Atmospheric CO2: Natural variations Archean to Present*. (E.T Sundquist and W.S. Broecker, eds.) *AGU Monog.* 32.
- Druffel, E.M., R.B. Dunbar, G.M. Wellington and S.A. Minnis. 1989. Reef-building corals and identification of ENSO warming episodes. In: *Global Ecological Consequences of the 1982-83 El Niño-Southern Oscillation*. (P.W. Glynn, ed.) Elsevier Press, Amsterdam.
- Durand, M.-H., P. Cury, R. Mendelssohn, C. Roy, A. Bakun, and D. Pauly, sci. eds. 1998. *Global versus Local Changes in Upwelling Systems - a report from the CEOS Workshop, Monterey, California, September, 1994*. ORSTOM Editions, Paris. 594 pp.

- Ebbesmeyer, C.C., D.R. Cayan, D.R. McClain, F.H. Nichols, D.H. Peterson and K.T. Redmond. 1991. 1976 step in Pacific climate: Forty environmental changes between 1968-1975 and 1977-1984, p.115-126. In: J.L. Betancourt and V.L. Tharp, editors. 1991. Proceedings of the 7th Annual Pacific Climate (PACLIM) Workshop, April 1990. *California Department of Water Resources. Interagency Ecological Study Program Technical Report 26*.
- Eichinger, W.E., D.I. Cooper, M. Parlange, and Gabriel Katul. 1993. The application of a scanning, water Raman-Lidar as a probe of the atmospheric boundary layer. *IEEE Trans. Geosci. Remote Sensing*. **31**(1):70-79.
- Engel, J. and R. Kvitek, 1998. Effects of otter trawling on a benthic community in the Monterey Bay National Marine Sanctuary. *Conserv. Biol.* **12**(6): 1204-1214.
- Enzel, Y., Cayan, D.R. Anderson, R.Y. and Wells, S.G. 1989. Atmospheric circulation during Holocene lake stands in the Mojave Desert: evidence of regional climatic change. *Nature*, **341**:44-47.
- FAO. 1981. *Mammals in the Sea*, FAO ACMRR Working Party on Marine Mammals, *Fish. Ser.*(5) Vol.1-3. 1981.
- FAO. 1994. *Status of the World Fisheries Resources*.
- Falkowski, P.G., R.T Barber, and V. Smetacek. 1998. Biogeochemical controls and feedbacks in ocean primary production. *Science* 281:200-209.
- Fasham, M.J.R., ed. 1984. *The Flows of Energy and Materials in Marine Ecosystems, Theory and Practice*. Plenum Press, New York. 733pp.
- Feller, R.J., G.L. Taghon, E.D. Gallagher, G.E. Kenny, and P.A. Jumars. 1979. Immunological methods for food web analysis in a soft-bottom benthic community. *Mar. Biol.* **54**:61-75.
- Finlayson, A.C. 1994. *Fishing for Truth* (Institute of Social and Economic Research) Memorial University, St. John's, Newfoundland).
- Francis, R. C. and S. R. Hare. 1994. Decadal-scale regime shifts in the large marine ecosystems of the Northeast Pacific: a case for historical science. *Fish. Oceanogr.* **3**:279-291.
- Fry, F.E.J. 1947. Effects of environment on animal activity. *Pub. Ontario Fish. Res. Lab. No.68 U. Toronto Studies, Biol. Ser.* 55:1-52.
- Fréon, P. 1983. Production models as applied to sub-stocks depending on upwelling fluctuations. pp. 1047-1064 In: 'Proceedings of the Expert Consultation to Examine Changes in Abundance and Species Composition of Neritic Fish Resources'. San Jose, Costa Rica, April 1983. (G.D. Sharp and J. Csirke, eds.) *FAO Fisheries Report series 291*(3):
- Friis-Christensen, E., and K. Lassen. 1991. Length of the solar cycle: An indicator of solar activity closely associated with climate. *Science*, **254**, 698-700.
- Garcia, S.M. 1996. The precautionary approach to fisheries and its implications for fishery research, technology and management, an updated review. *FAO Fish. Tech. Rep.* **350**(2).
- Garcia, S.M. and R.J.R. Grainger. 1997. Fisheries management and sustainability: A new perspective of an old problem. pp.631-654 In: *Developing and Sustaining World Fisheries Resources: The state of science and management*. Hancock, Smith, Grant and Beumer, eds. CSIRO, Australia.
- Garcia, S. and L. LeReste. 1981. Life cycles, dynamics, exploitation and management of coastal penaeid shrimp stocks. *FAO Fish. Tech. Pap.* 203: 215pp. (original in French, same ref.).
- Garcia, S.M., and C.H. Newton. 1997. Current situation, trends, and prospects in world capture fisheries. PP. 3-27 IN E.K. Pikitch and D.D. Huppert and M.P. Sissenwine (eds.) *Global Trends: Fisheries Management American Fisheries Society Symposium 20*, American Fisheries Society, Bethesda, Maryland..
- Gauldie, R.W., S. K. Sharma and C. E. Helsley. 1996. LIDAR applications to fisheries monitoring problems. *Can. J. Fish. Aquat. Sci.* **53**:1459-1468.
- Gauldie, R.W. and G.D. Sharp. 1995. Skipjack velocity, dwell time, and migration. *Fish. Oceanog.* **5**(2):100-113.
- Glantz, M.H. 1996. Currents of Change: *El Niño's Impact on Climate and Society*. Cambridge University Press, 200pp.

- Glantz, M.H., and L.E. Feingold (eds.). 1990. *Climate Variability, Climate Change and Fisheries*. Environmental and Societal Impacts Group, NCAR, Boulder, CO. 139pp.
- Glantz, M.H. and J.D. Thompson (eds.). 1981. *Resource Management and Environmental Uncertainty: Lessons from coastal upwelling fisheries*. P. Adv. Env. Sci. vol. 11, Wiley-Interscience. 491pp.
- Glantz, M.H., R. Katz and M. Krenz. 1987. *The Societal Impacts Associated with the 1982-83 Worldwide Climate Anomalies*. 105pp. NCAR/ESIG, Boulder, Colorado.
- Glantz, M.H. R. Katz, and N. Nicholls (eds.) 1991. *ENSO Teleconnections linking worldwide climate anomalies: Scientific basis and societal impacts*. Cambridge university Press, Cambridge, UK.
- Glynn, P.W. (ed.) 1990. *Global Ecological Consequences of the 1982-83 El Niño-Southern Oscillation*. Elsevier Oceanography Series, vol. 52, Elsevier, Amsterdam. 563pp.
- Goodridge, J.D. 1996. Comments on Regional simulation of greenhouse warming including natural variability. *Bull. Amer. Met. Soc.* **77**(7):1588-89.
- _____ 1997. *Historic Rainstorms in California*. Calif. Resources Agency Dept. Water Resources. Sacramento, CA. 118pp.
- Gomes, M.C., R.L. Haedrich and M.G. Villagarcia. 1995. Spatial and Temporal Changes in the Groundfish Assemblages On the Northeast Newfoundland/Labrador Shelf, Northwest Atlantic, 1978-1991. *Fisheries Oceanography*, **4**(2):85-101.
- Gould, S.J. 1998. The great asymmetry. *Science*, **279**(6 February):812-813.
- Graham, G.M. 1935. Modern theory of exploiting a fishery and its implication to North Sea trawling. *J Cons.* **10**:264-274.
- _____ 1939. The sigmoid curve and the overfishing problem. Rapp. P.-v. Réun. Cons. Int. Explor. *Mer.* **110**(2):15-20.
- Gray, W.M. 1990: Strong association between west African rainfall and U.S. landfall of intense hurricanes. *Science*, **249**:1251-1256.
- Gray, W.M., and J.D. Sheaffer. 1991. El Niño and QBO influences on tropical cyclone activity. pp.257-284. In: Glantz, M.H. R. Katz, and N. Nicholls (eds.) *ENSO Teleconnections linking worldwide climate anomalies: Scientific basis and societal impacts*. Cambridge university Press, Cambridge, UK.
- Gulland, J.A. (1983) *Fish Stock Assessment*. Wiley, London. 223pp.
- Gunn, J., Polacheck, T., Davis, T., Sherlock, M. and M. Nicolau. 1994. The development and use of archival tags to study the movement, behavior and physiology of the southern bluefin tuna, *Thunnus maccoyii*. IATTC. *45th Annual Tuna Conference. National Marine Fisheries Service*, La Jolla, CA. 85pp.
- Hancock, D.A., D.C. Smith, A. Grant and J.P. Beumer (eds). 1997. *Developing and Sustaining World Fisheries Resources: The state of science and management*. CSIRO, Australia. 797pp.
- Hare, S. R., and R. C. Francis. 1995. Climate change and salmon production in the Northeast Pacific Ocean. Spec. In: R. J. Beamish (ed.) Climate change and northern fish populations. *Pub. Can. Fish. Aquat. Sci.* **121**:357-372.
- Hela, I. and T. Laevastu. 1971. *Fish. Oceanogr.*. Blackwell, Fishing News, London.
- Helle, J. H. and M. S. Hoffman. 1995. Size decline and older age at maturity of two chum salmon (*Oncorhynchus keta*) stocks in western North America, 1972-92. III: R. J. Beamish (ed.) Climate and northern fish populations. *Can. Spec. Pub. Fish. Aquat. Sci.* **121**:245-260.
- Hewitt, R.P. 1981. The value of pattern in the distribution of young fish. Rapp. P.-v. Réun. Cons. Int. Explor. *Mer.* **178**:229:236.
- Hewitt, R.P., G.T. Theilacker, N.C.H. Lo. 1985. Causes of mortality in young jack mackerel. *Marine. Ecol. Prog. Ser.* **26**:1-10.
- Hilborn, R. (1992) Current and future trends in stock assessment and management. *So. Afric. J. Mar. Sci.* **12**:975-988.
- Hilborn, R., and M. Mangel. 1997. *The Ecological Detective: Confronting Models with Data*. Princeton Univ. Press, Princeton NJ.
- Hill, R. D. 1994. pp.227-236 In: Elephant Seals. B.J. LeBoeuf (ed.). California Press.
- Hjort, J. 1914 The fluctuations in the great fisheries of northern Europe viewed in the light of biological research. Rapp. P.-v. Reun. Cons. int. Explor. *Mer.* **20**:1-228.

- _____ 1926. Fluctuations in the year classes of important food fishes. *J. Cons. Int. Explor. Mer.* 1:5-38
- Hollowed, A. B., K. M. Bailey, and W. S. Wooster 1995. Patterns of Recruitment in the northeast Pacific Ocean. *Biol. Oceanog.*, 5:99-131.
- Hollowed, A. B. and W. S. Wooster. 1992. Variability of winter ocean conditions and strong year classes of Northeast Pacific groundfish. *ICES Marine Science Symposia* 195:433-444.
- Hollowed, A. B. and W. S. Wooster 1995. Decadal-scale variations in the eastern subarctic Pacific: II. Response of Northeast Pacific fish stocks. In: R. J. Beamish (ed.) *Climate change and northern fish populations*. *Can. Spec. Pub. Fish. Aquat. Sci.* 121:373-385.
- Hoyt, D.V., and K. H. Schatten, 1997. *The Role of the Sun in Climate Change*, Oxford University Press, 279 pp.
- Hubbs, C.L. 1960. Quaternary paleoclimatology of the Pacific coast of North America. *CalCOFI Rep.* VII:105-112.
- Hewitt, R.P. G.H. Thielacker, and N.C.H. Lo. 1985. Causes of mortality in young jack mackerel. *Mar. Ecology, Prog. Ser.* 26(1)1-10.
- Hunter, J.R. 1972. Swimming and feeding behavior of larval anchovy *Engraulis mordax*. *Fish. Bull., U.S.*, 70(3):821-838.
- Hunter, J.R. 1976. Culture and growth of northern anchovy. *Engraulis mordax* larvae. *Calif.-Coop. Oceanic Fish. invest. Rep.* 19:138-146.
- Hunter, J.R. and S.R. Goldberg. 1980. spawning incidence and batch fecundity in northern anchovy (*Engraulis mordax*). *Fish. Bull., U.S.* 77:641-652.
- Hunter, J.R. and G.L. Thomas. 1974. Effect of prey distribution and density on the searching and feeding behavior of larval anchovy, *Engraulis mordax*, Girard. pp. 559-574 In: *The Early Life History of Fish*. (J.H.S. Blaxter, ed.) Springer Verlag, Berlin.
- Hunter, J.R. and J. Zweifel. 1971. Swimming speed, tailbeat frequency, tailbeat amplitude and size in jack mackerel, *Trachurus symmetricus*, and other fishes. *Fish. Bull., U.S.*, 69:253-266.
- Hunter, J. and G.D. Sharp. 1983. Physics and fish populations: Shelf sea fronts and fisheries. pp659-682 In: Sharp, G.D. and J. Csirke, eds.) *Proceedings of the Expert Consultation to Examine the Changes in Abundance and Species Composition of Neritic Fish Resources*, Sharp, G.D. and J. Csirke, eds. San Jose, Costa Rica, 18-29 April 1983. *FAO Fish. Rep. Ser.* 291, vol. 2. FAO Rome.
- Hutchings, J.A. and R.A. Myers. 1994. What can be learned from the collapse of a renewable resource? Atlantic cod, *Gadus morhua*, of Newfoundland and Labrador. *Can. J. Fish. Aquat. Sci.* 51: 2126-2146.
- Hutchings, J.A., Neis, B., and Ripley, P. 1996. The nature of cod (*Gadus morhua*): perceptions of stock structure and cod behaviour by fishermen, 'experts' and scientists from the nineteenth century to the present. In: *Marine Resources and Human Societies in the North Atlantic since 1500*, (Vickers, D., ed.), Proceedings, ISER, St. John's.
- Hutchings, J.A., Walters, C.W. and Haedrich, R. (1997) Is scientific inquiry incompatible with government information control? *Can. J. Fish. Aquat. Sci.*, 54:
- IFOP. 1985. Taller Nacional: fenomeno El Niño 1982-83. *Invest. Pesq. (Chile)* 32. Numero especial. 256pp.
- IPCC. 1990. *Impacts Assessment of Climate Change. The policymaker's summary of the Report of Working Group II to the Intergovernmental Panel on Climate Change.* WMO/UNEP. Australian Government Publishing Service. Canberra.
- IPCC. 1996. *Climate Change 1995 - The Science of Climate Change - Working Group I report*, 1996, 584 pp., *Climate Change 1995 - Impacts, Adaptations and Mitigation of Climate Change - Working Group II report*, 1996, 880 *Climate Change 1995 - Economic and Social Dimensions of Climate Change - Working Group III report*, 1996, 608 pp. Cambridge Univ. Press, New York.
- Illanes, J.E., S. Akaboshi, y E. Uribe. (1985) Efectos de la temperatura en la reproduccion del ostion del norte *Chlamys* (*Argopecten*) *purpuratus* en la Bahía Tonggoy, durante el fenomeno El Niño 1982-83. pp.167-173 In Taller Nacional: fenomeno El Niño 1982-83. *Invest. Pesq. (Chile)* 32.
- Isaacs, J.D. 1976 Some ideas and frustrations about fishery science. *CalCOFI Rep.* XVIII:34-43.
- Johnson, L. 1981 The thermodynamic origin of ecosystems. *Can. J. Fish. Aquat. Sci.* 38(5):571-590.
- Johanesson, K. and R. Vilchez 1981. Note on hydroacoustic observations of changes in distribution and abundanc of some common fish species in the coastal waters of Peru, with special emphasis on anchoveta. Pp 287-323 In: Report of the Workshop on Effects of Environmental Variation on the Survival of Larval Pelagic Fishes. pp. 1-47 In: *Report and Documentation of*

the Workshop on the Effects of Environmental Variation on the Survival of Larval Pelagic Fishes. G.D. Sharp, convenor, ed. IOC Workshop Series No. 28, Unesco, Paris.

- Kawai, T. and K. Isibasi. 1983. Change in abundance and species composition of neritic pelagic fish stocks in connection with larval mortality caused by cannibalism and predatory loss by carnivorous plankton. pp. 1081-1111 In: Proceedings of the Expert Consultation to Examine Changes in Abundance and Species Composition of Neritic Fish Resources. *FAO Fish. Rep.* **291**(3).
- Kawasaki, T. 1983: Why do some fishes have wide fluctuations in their number? - A biological basis of fluctuation from the viewpoint of evolutionary ecology. G.D. Sharp and J. Csirke, eds. pp.1065-1080 In: Proceedings of the Expert Consultation to Examine Changes in Abundance and Species Composition of Neritic Fish Resources. *FAO Fish. Rep.* **291**(3).
- Kawasaki, T., S. Tanaka, Y. Toba and A. Taniguchi, eds. 1991. *Long-term Variability of Pelagic Fish Populations and Their Environment*. Pergamon Press, Tokyo.
- Kendall, A. W., jr., R.I. Perry, and S. Kim. 1996. Fisheries oceanography of the walleye pollock in Shelikof Strait, Alaska. *Fish. Oceanogr.* **5**(Suppl.1), 203pp.
- Kesteven, G.L. 1996. A fisheries science approach to problems of world fisheries or: three phases of an industrial revolution. *Fisheries Research* **25**(1): 5-18.
- Kidd, K. A., D. W. Schindler. R. H. Hesslein and D. C. G. Muir. 1995. Correlation between stable isotopes of nitrogen and organochlorine concentrations in biota from a freshwater food web. *The Science of the Total Environment* **160/161**:381-390.
- Kitchell, J. F., F. A. Eby, X. Re, D. E. Schindler and R. M. Wright. 1994. Predator-prey dynamics in an ecosystem context. *J. Fish Biol.* **45**:209-226.
- Klyashtorin, L.B. 1998. Long-term climate change and main commercial fish production in the Atlantic and Pacific. *Fisheries. Res.***37**:115-125.
- Kondo, K. 1980. The recovery of the Japanese sardine - the biology basis of stock size fluctuations. Rapp. p.-v. Reun. Cons. int. Explor. Mer. **177**:332-352.
- Koslow, J.A. (1992) Fecundity and the Stock-Recruitment relationship *Can. J. Fish. Aquat. Sci.*, **49**:210-217.
- Kullenberg, G.E.B. 1976. In: vertical mixing and the energy transfer from the wind to the water. *Tellus* **28**:159-165.
- Kurlansky, M. 1997. *Cod*. Walker and Co. New York. 294pp.
- Laevastu , T. 1993. *Marine Climate, Weather and Fisheries*. Wiley, and Sons, Inc. Halstead press, 204pp.
- Laevastu , T. and F. Favorite. 1980. Holistic simulation models of shelf-sea ecosystems. pp. 701-727 In: *Analysis of Marine Ecosystems*. A.R. Longhurst, ed., Academic Press, London.
- Laevastu, T. and H.A. Larkins. 1981. *Marine Fisheries Ecosystem: Its quantitative evaluation and management*. Fishing News Books, Farmingham, Surrey, UK. 162pp.
- Lasker, R. 1975. Field criteria for survival of anchovy larvae: The relation between chlorophyll layers and successful first feeding. *Fish. Bull. U.S.*, **73**:453-462.
- Lasker, R. 1978. The relation between oceanographic conditions and larval anchovy food in the California current: factors leading to recruitment failure. *Rapp. P.-v. Reun. Cons. int. Explor. Mer.* **173**:212-230.
- Lasker, R. ed. 1981. *Marine Fish Larvae, Morphology, Ecology and Relation to Fisheries*. University of Washington Press, Seattle. 131 pp.
- Lasker, R. 1988. Food chains and Fisheries: An assessment after 20 years. pp.173-182 In: *Toward a Theory of Biological-Physical Interactions in the World Ocean*. (B.D. Rothschild, ed.)
- Lasker, R. and E. Brothers 1974???. Daily Growth Rings ETC. ETC. ETC *CalCOFI Rep.* ???
- Lasker, R. H.M. Feder, G.H. Theilacker, and R.C. May. 1970. feeding, growth and survival of *Engraulis mordax* larvae reared in the laboratory. *Mar. Biol.* **5**:345-353.
- Lasker, R. and J.R. Zweifel. 1978. Growth and survival of first feeding northern anchovy larvae (*Engraulis mordax*) in patches containing different proportions of large and small prey. pp. 329-354 In: *Spatial Patterns In Plankton Communities*, J.H. Steele, ed., Cambridge University Press.

- Lehodey, P. M. Bertignac, J. Hampton, A. Lewis, and J. Picaut. 1997. El Niño Southern Oscillation and tuna in the western Pacific. *Nature* **389**(16 October 1997):715-718.
- Leong, R.J.H., and C.P. O'Connell. 1969. A laboratory study of particulate and filter feeding of the northern anchovy (*Engraulis mordax*). *J. Fish. Res. Bd. Canada*. **26**:557-582.
- Lluch-Belda D., R.A. Schwartzlose, R. Serra, R. Parrish, T. Kawasaki, D. Hedgecock and R.J.M. Crawford. 1992. Sardine and anchovy regime fluctuations of abundance in four regions of the world oceans: a workshop report. *Fish. Oceanogr.* **1**(4):339-347.
- Lluch-Belda, R., J.M. Crawford, T. Kawasaki, A.D. MacCall, R.H. Parrish, R.A. Schwartzlose and P.E. Smith. 1989. World-wide fluctuations of sardine and anchovy stocks: The regime problem. *S. Afr. J. Mar. Sci.* **8**:195-205.
- Lo, N.C.H. 1985. A model for temperature dependent northern anchovy egg development and an automated procedure for the assignment of age to staged eggs. pp.43-50 In: An Egg Production Method for Estimating Spawning Biomass of Pelagic Fish: Application to Northern Anchovy, *Engraulis mordax*. (R. Lasker, ed.) *NOAA Tech. Rep NMFS* **36**.
- _____. 1986 Modeling life-stage-specific instantaneous mortality rates, an application to northern anchovy, *Engraulis mordax*, eggs and larvae. *Fish. Bull., U.S.* **84**:395-407.
- Lo, N. C. J. R. Hunter, H. G. Moser, P. E. Smith, and R. D. Methot. 1992. The daily fecundity reduction method: a new procedure for estimating adult fish biomass. *ICES J. Mar. Sci.* **49**:209-215.
- Lo, C.-H., R. J. Hunter, H. G. Moser, and P. E. Smith. 1993. A daily fecundity reduction method of biomass assessment with application to Dover sole *Microstomus pacificus*. *Bull. Mar. Sci.* **53**:842-863.
- Lo, N.C.H., R. J. Hunter, H. G. Moser, and P. E. Smith. 1993. A daily fecundity reduction method of biomass assessment with application to Dover sole *Microstomus pacificus*. *Bull. Mar. Sci.* **53**:842-863.
- Lo, N.C.H., Y.A. Green Ruiz, M. J. Cervantes, H.G. Moser, and R. J. Lynn. 1996. Egg production and spawning biomass of Pacific sardine (*Sardinops sagax*) in 1994, determined by the daily egg production method *CalCOFI Rep* **37**:160-174.
- Loeb, V. and O. Rojas. 1988. Interannual variation of ichthyoplankton composition and abundance relations off northern Chile. *Fish. Bull., U.S.*, **86**(1):1-24.
- Loeb, V., V. Siegel, O. Holm-Hansen, R. Hewitt, W. Fraser, W. Trivelpiece, S. Trivelpiece, 1997. Effects of sea-ice extent and krill or salp dominance on the Antarctic food web. *Nature* **387**, 897-900.
- Loeb, V.E., P.E. Smith, and H.G. Moser. 1983a. Ichthyoplankton and zooplankton abundance patterns in the California Current area, 1975 *CalCOFI Rep* **24**:109-131
- Loeb, V.E., P.E. Smith, and H.G. Moser. 1983b. Geographical and seasonal patterns of larval fish species structure in the California Current area, 1975. *CalCOFI Rep.* **24**:132-151.
- Lotka, A.J. 1956. Elements of Mathematical Biology. Dover Publ. 1956 (1924).
- Johnson, L. 1981. The thermodynamic origin of ecosystems. *Can. J. Fish. Aquat. Sci.*, **38**:571-590.
- Longhurst, A.R. 1995. Seasonal cycles of pelagic production and consumption. *Prog. Oceanogr.* **36**:77-167.
- Longhurst, A.R., S. Sathyendranath, T. Platt and C.M. Cayerhill. 1995. An estimate of global primary production in the ocean from satellite radiometer data, *J. Plankton Res.*, **17**(6):1245-1271.
- Lubchenko, J. 1998. Entering the century of the environment: a new social contract for science. *Science*, **279**(23 January):491-497.
- MacCall, A.D. 1981. The consequences of cannibalism in the Stock-Recruitment relationship. Pp. 201-219 In: Report and Documentation of the Workshop on the Effects of Environmental Variation on the Survival of Larval Pelagic Fishes. G.D. Sharp, conv., editor. *IOC Workshop Rep. Ser.* No.28 Unesco, Paris.
- _____. 1990. *Dynamic Geography of Marine Fish Populations*. Washington Sea Grant. University of Washington Press, Seattle
- MacKenzie, B.R. and W.C. Leggett. 1991. Quantifying the contribution of small-scale turbulence to

- the encounter rates between larval fish and their zooplankton prey: the effects of wind and tide. *Mar. Ecol. Prog. Ser.* **73**:149-160.
- MacKenzie, B.R. and W.C. Leggett. 1993. Wind-based models for estimating the dissipation rates of turbulent energy in aquatic environments: empirical comparisons. *Mar. Ecol. Prog. Ser.* **94**:207-216.
- MacKenzie, B.R., W.C. Leggett and R.H. Peters. 1990. Estimating larval fish ingestion rates: can laboratory derived values be reliably extrapolated to the wild? *Mar. Ecol. Prog. Ser.* **67**:209-225.
- McPhaden, M.J. 1999. Genesis and evolution of the 1997-1998 El Niño. *Science* **283**:950-954.
- McGoodwin, J.R. 1990 *Crisis in the World Fisheries: People, Problems, and Policies*. Stanford University Press, Stanford, California, 235 pp.
- McGowan, J.A., D.R. Cayan, and L.M. Dorman. Climate-ocean variability and ecosystem response in the northeast Pacific. *Science* **281**:210-217.
- Maksimov, I.V. and N. P. Smirnov. 1965. A contribution of the study of the causes of long-period variations in the activity of the Gulf Stream. *Oceanology*, **5**:15-24.
- Mantua, N.J. and S.R. Hare, Y. Zhang, J.M. Wallace, and R.C. Francis. 1997. A Pacific interdecadal climate oscillation with impacts on salmon production. *Bull. Amer. Meteor. Soc.* **78**, pp. 1069-1079.
- Martin, J.H., R.M. Gordon, and S.E. Fitzwater. 1991. Iron limitation? The case for iron. *Limnol. Oceanogr.* **36**(8): 1793-1802.
- Mather, III, F.J., J.M. Mason, jr., and A.C. Jones. 1995. *Historical Document: Life History and Fisheries of Atlantic Bluefin Tuna*. NOAA Technical Memorandum NMFS-SEFSC-370. 165pp.
- May, R., J.R. Beddington, C.W. Clark, S.J. Holt, and R.M. Laws (1979) Management of Multispecies Fisheries. *Science*, **205**:267-277.
- Mendelssohn, R. and P. Cury. 1989. Temporal and spatial dynamics of a coastal pelagic species, *Sardinella maderensis*, off the Ivory Coast. *Can. J. Fish. Aquat. Sci.* **46**:408-421.
- Mendelssohn, R. and P. Cury. 1987. Fluctuations of a fortnightly abundance index of the Ivorian coastal pelagic species and associated environmental conditions. *Canadian Journal of Fisheries and Aquatic Sciences.* **44**:408-421.
- Myers, N. 1998. Lifting the veil on perverse subsidies. *Nature* **392**:327-328
- Michael, R.D. 1997. Immunoindicators of environmental pollution/stress and of disease outbreak in aquaculture. pp514-519 In: *Developing and Sustaining World Fisheries Resources: The state of science and management*. Hancock, Smith, Grant and Beumer, eds. CSIRO, Australia.
- Moser, H.G. 1966. Reproductive and developmental biology of the rockfishes (*Sebastes* spp.) off California. Ph.D. Dissertation. University of Southern California, 540 p.
- Moser, H.G., ed. 1996. The early stages of fishes in the California Current region. *CalCOFI Atlas* **33**. 1505 pp.
- Moser, H.G. and E.H. Ahlstrom. 1985. Staging anchovy eggs. pp.37-41. in: R. Lasker, ed., An egg production method for estimating spawning biomass of pelagic fish: Application to the northern anchovy (*Engraulis mordax*), *U.S. Dep. Commerce. NOAA Tech. Rep. NMFS*
- Moser, H.G. and E.H. Ahlstrom. 1974. Role of larval stages in systematic investigations of marine teleosts: The Myctophidae, a case study. *Fish. Bull., U.S.* **72**(2):391-413.
- Moser, H.G., and J.L. Butler, 1987. Descriptions of reared larvae of six species of *Sebastes* (*S. constellatus*, *S. entomelas*, *S. ovalis*, *S. rubrivinctus*, *S. rufus*, and *S. serranoides*). U.S. Dep. Commer. NOAA Tech. Rep. NMFS **48**:19-29.
- Moser, H.G., N.C.H. Lo, and P. F. Smith. 1997. Vertical distribution of Pacific hake eggs in relation to stage of development and temperature. *CalCOFI Rep.* **38**:120-126.
- Moser, H.G., W.J. Richards, D.M. Cohen, M.P. Fahay, A.W. Kendall, Jr., and S.L. Richardson, eds. 1984. Ontogeny and Systematics of Fishes. *Spec. Publ. 1. Amer. Soc. Ichthyol. Herpetol.* 760 pp.

- Moser, H.G., P.E. Smith and L.E. Eber. 1987. Larval fish assemblages in the California Current, 1951-1960, a period of dynamic environmental change. *CalCOFI Rep.* **XXVIII**:97-127.
- Moser, H.G., P.E. Smith, and L.A. Fuiman, eds. 1993. Advances in the Early Life History of Fishes. *Bull. Mar. Sci.* **53**:336-361.
- Moum, J.N., D.R. Caldwell and C.A. Paulson. 1989. Mixing in the equatorial surface layer and thermocline. *J. Geophys. Res.* **94**:2005-2021.
- Moum, J.N. 1998. Quantifying vertical ocean fluxes from turbulence in the ocean. *Oceanography* **10**(3):111-115.
- Munk, W.H., and A.M.G. Forbes. 1989 Global ocean warming: An acoustic measure? *J. Phys. Oceanogr.* **19**:1765-1778.
- Myers, N. 1998. Lifting the veil on perverse subsidies. *Nature* 392:327-328.
- Mysak, L. A. 1986. El Niño, interannual variability and fisheries in the northeast Pacific Ocean. *Can. J. Fish. Aquat. Sci.* **43**:464-497.
- Neill, W.H., J.M. Miller, H.M. Van Der Veer, and K.O. Winemiller. 1994. Ecophysiology of marine fish recruitment: a conceptual framework for understanding interannual variability. *Netherlands J. Sea Res.* **32**(2):135-152.
- Nixon S.W. 1982. Nutrient dynamics, primary production and fisheries yields of lagoons. *Oceanol. Acta* **4**(suppl):357-371
- _____ 1997. Prehistoric nutrient inputs and productivity in Narragansett Bay. *Estuaries* **20**(2):253-261.
- _____ 1988. Physical energy inputs and the comparative ecology of lake and marine ecosystems. *Limnol. Oceanogr.* **33**(4, part2):1005-1025.
- Norton, J.G., D.R. McLain, R. Brainard and D.M. Husby. 1985. The 1982-83 El Niño event off Baja and Alta California and its ocean climate context. p. 44-72 In: *El Niño North: Niño Effects in the Eastern Subarctic Pacific Ocean*. (W.S. Wooster and D.L. Fluharty, eds.). Wash. Sea Grant, University of Washington, Seattle. 312 pp.
- NRC. 1998. *Improving Fish Stock Assessments*. National Academy Press, Washington DC. 177pp.
- Oceanography. 1996. *Marine Biological Diversity: A special issue commemorating 25 years of science and service by the National Oceanic and Atmospheric Administration.* **9**(1):110pp.
- Oceanography. 1998. *Special issue on High Frequency radars for coastal oceanography.* **10**(2):100pp.
- O'Connell, C.P. 1976. histological criteria for diagnosing the starvation condition in early post yolk sac larvae of northern anchovy, *Engraulis mordax* Girard. *J Exp. Mar. Biol. Ecol.* **25**:285-312.
- _____ 1980. Percentage of starving northern anchovy, *Engraulis mordax*, larvae in the sea as estimated by histological methods. *Fish. Bull. US.* **70**:789-798.
- _____ 1981. Development of organ systems in the northern anchovy, *Engraulis mordax*, and other teleosts. *Am. Zool.* **21**:429-446.
- O'Connell, C.P. and L.P. Raymond. 1970. The effect of food density on survival and growth of early post-larvae of northern anchovy (*Engraulis mordax* Girard) in the laboratory. *J. Exp. Mar. Biol. Ecol.* **5**:187-197
- Ohman, M.D. G.H. Theilacker, and S.E. Kaupp. 1991. Immunochemical detection of ciliate protists by larvae of the northern anchovy (*Engraulis mordax*). *Biol. Bull.* **181**:500-504.
- Olson, R.J. 1982. Feeding and energetics studies of yellowfin tuna: food for ecological thought. *Collect. Vol. Sci. Pap. ICCAT/Rech. Doc.Sci. CICTA/Colecc. Doc.Cient.* **17**:444-457.
- Olson, R. J., and C. H. Boggs. 1986. Apex predation by yellowfin tuna (*Thunnus albacares*): independent estimates from gastric evacuation and stomach contents, bioenergetics, and cesium concentrations. *Can. J. Fish. Aquat. Sci.* **43**(9): 1760-1775.
- Overpeck, J.T. (1996) Warm climate surprises. *Science* **271**:1820-1821.
- Owen, R.W. 1981 Patterning of flow and organisms in the larval anchovy environment. pp.167-200 In: Report and Documentation of the Workshop on the Effects of Environmental Variation on the Survival of Larval Pelagic Fishes. G.D. Sharp, conv., editor. *IOC Workshop Rep. Ser. No.28*. UNESCO, Paris.

- _____ 1989 Microscale and finescale variations of small plankton in coastal and pelagic environments. *J. Mar. Res.* **47**:197-240.
- Paduan, J.D. and H.C. Graber. 1997. Introduction to High Frequency radar: reality and myth. *Oceanogr.* **10**(2):36-39.
- Parrish, R.A., A. Bakun, D.M. Husby and C.S. Nelson. 1983. Comparative climatology of selected processes in relation to eastern boundary current pelagic fish reproduction. pp.731-778 In: Proceedings of the Expert Consultation to Examine Changes in Abundance and Species Composition of Neritic Fish Resources. (G.D. Sharp and J. Csirke, eds.) *FAO Fish, Rep. Ser.* No. **291** (3).
- Parrish, R.H. and A.D. MacCall. 1978. Climatic variation and exploitation in the Pacific mackerel fishery. *Calif. Dep. Fish. Game Fish. Bull.* **167**:109pp.
- Parrish, R. and D. Mallicoate. 1995. Variation in the condition factors of California pelagic fishes and associated environmental factors. *Fish. Oceanogr.* **4**(2):171-190.
- Parrish, R.H., D.L. Mallicoate and R.A. Klingbeil. 1985. Age dependent fecundity, number of spawnings per year, sex ratio, and maturation stages in northern anchovy, *Engraulis mordax*. *Fish. Bull., US.* **84**(3):503-517.
- Parrish, R.H., C.S. Nelson and A. Bakun. 1981. Transport mechanisms and reproductive success of fishes in the California Current. *Biol. Ocean.* **1**(2):175-203.
- Parker, K. S., T. C. Royer and R. B. Deriso. 1995. High- climate forcing and tidal mixing by the 18.6-year lunar nodal cycle and low-frequency recruiting trends in Pacific halibut (*Hippoglossus stenolepis*). Pages 447-459 in R. J. Beamish, editor. *Climate Change and Northern Fish Populations* Pub. Can. Fish. Aquat. Sci. 121.
- Payne, A.I.L., J.A. Gulland, and K. Brink, eds.. 1987. *The Benguela and Comaparble Ecosystems*. S. Afr. J. Mar. Sci. 5:957pp.
- Payne, A.I.L., K.H. Brink, K.H. Mann, and R. Hilborn, eds. 1991. *Benguela Trophic Functioning*. S. Afr. J. Mar. Sci. 12:1205pp.
- Pauly, D. and I. Tsukayama, eds. 1987. *The Peruvian Anchoveta and its Upwelling Ecosystem: Three Decades of Change*. IMARPE;GTZ;ICLARM, Callao, Peru. 351pp.
- Pauly, D., P. Muck, J. Mendo, and I. Tsukayama, eds. 1989. *The Peruvian Anchoveta and its Upwelling Ecosystem:Dynamics and Interactions*. IMARPE;GTZ;ICLARM, Callao, Peru. 438pp.
- Pauly, D., J. Christensen, J. Dalsgaard, R. Froese, F. Torres, Jr. 1998. Fishing down marine food webs. *Science* **279**: 860-863.
- Pauly, D. 1996 One hundred million tonnes of fish, and fisheries research. *Fisheries Research* **25**(1): 25-38.
- Pauly, D., V. Christensen, J. Dalsgaard, R. Froese and F. Torres, jr. 1998. Fishing down marine food webs. *Science* **229**:860-862.
- Paxton, J.R., E.H. Ahlstrom, and H.G. Moser. 1984. Myctophidae: relationships. Pages 239-244 in H.G. Moser, et al., eds. *Ontogeny and Systematics of Fishes, Spec. Publ. 1. Amer. Soc. Ichthyol. Herpetol.*
- Pearcy, W.G. 1966. Salmon production in changing ocean domains. pp331-352 In: D. J. Stouder, P. A. Bisson, and R. J. Naiman (eds.) *Pacific Salmon and their Ecosystems: Status and Future Options*. Chapman and Hall, New York.
- _____ ed. 1984: *The Influence of Ocean Conditions on the Production of Salmonids In the North Pacific: a workshop*. 8-10 November 1983, Newport, Oregon. Oregon State University Sea Grant College Program. 327pp.
- _____ 1992. *Ocean ecology of North Pacific salmonids*. Univ. Washington Press, Seattle 179 pp.
- Pearcy, W.G., J. Fisher, R. Brodeur, and S. Johnson. 1985. Effects of the 1983 El Niño on coastal nekton off Oregon and Washington. pp188-204. In: W S. Wooster, and D. L. Fluharty (eds.) *El Niño North: Niño effects on the eastern subarctic Pacific*. Washington Sea Grant Pub. WSG-WO-85-3.
- Platt, T., ed. 1981. *Physiological Bases of Phytoplankton Ecology*. *Can. Bull. Fish. Aq. Sci.* 210:346pp.
- Polovina, J.J., G. T. Mitchum, and O. T. Evans. 1995. Decadal and basin-scale variation in mixed layer

- depth and the impact on biological production in the Central and North Pacific. 1960-88. *Deep Sea Res.* **42**:1710-1716.
- Price, N.M., B.A. Ahner, and F.M.M. Morel. 1994. The equatorial Pacific Ocean: grazer controlled phytoplankton populations in an iron-limited ecosystem. *Limnol. Oceanogr.* **39**(3): 520-534.
- Priede, I.G. 1977. Natural selection for energetic efficiency and the relationship between activity level and mortality. *Nature* 267(5612):610-611.
- Priede, I.G. 1984. *Fish. Res.* **2**:201-216.
- Quinn, W.H., V.T. Neal, S.E. Antunez de Mayolo. 1987. El Niño occurrences over the past four and a half centuries. *J. Geophys. Res.* **92**:14,449-14,461.
- Rawitscher, M. and J. Mayer. 1977. Nutritional outputs and energy inputs in seafoods. *Science* **198**:261-264.
- Ricker, W.E. (1975) Computation and interpretation of biological statistics of fish populations. *Bull. Fish. Res. Bd. Canada.* **191**:382pp.
- Ropelewski, C.F., and M.S. Halpert. 1987: Global and regional scale precipitation patterns associated with El Niño/Southern Oscillation, *Mon. Wea. Rev.* **115**:1606-1626.
- Scheiber, H.N. 1090. California marine research and the founding of modern fisheries oceanography: CALCOFI's early years, 1947-1964. *CalCOFI Rep.* 31:63-83.
- Schindler, D.W., S.E. Bayley, B.R. Parker, K.G. Beaty, D.R. Cruikshank, E.J. Fee, E.U. Schindler, and P.M. Stainton. 1996. The effects of climatic warming on the properties of boreal lakes and streams at the Experimental Lakes Area, northwest Ontario. *Limnol. Oceanogr.* **41**(5):1004-1017.
- Schlesinger, D.A. and H.A. Regier. 1982. Climatic and morphoedaphic indices of fish yields from natural lakes. *Trans. Am. Fish. Soc.* **111**:141-150.
- Semtner, A.J. and R.M. Chervin. 1989. A simulation of the global ocean circulation with resolved eddies. *J. Geophys. Res.* **93**(C12):15502-15522 and 15767-15775.
- Sette, O. 1943. Biology of the Pacific mackerel (*Scomber scombrus*) of North America. Part II. Migrations and habits. *U.S. Fish and Wildl. Ser., Fish. Bull.* **51**(49):251-358.
- _____. 1960. The long term historical record of meteorological, oceanographic and biological data. *CalCOFI Rep.* **VII**:181-190.
- Sharp, G.D. 1978. Behavioral and physiological properties of tunas and their effects on vulnerability to fishing gear. pp. 397-449 In: *The Physiological Ecology of Tunas*. (G.D. Sharp and A.E. Dizon, eds.) Academic Press. San Francisco and New York.
- _____. 1979. Areas of potentially successful exploitation of tunas in the Indian Ocean with emphasis on surface methods. Indian Ocean Programme, FAO, Rome, *Tech. Reports IOFC/DEV/79/47*. 50pp.
- _____. 1981a. Report of the Workshop on Effects of Environmental Variation on the Survival of Larval Pelagic Fishes. pp.6-62 In: Report and Documentation of the Workshop on the Effects of Environmental Variation on the Survival of Larval Pelagic Fishes. G.D. Sharp, conv., editor. *IOC Workshop Rep. Ser. No.28* Unesco, Paris.
- _____. 1981b. Colonization: modes of opportunism in the ocean. pp. 125-148 In: Report and Documentation of the Workshop on the Effects of Environmental Variation on the Survival of Larval Pelagic Fishes. G.D. Sharp, conv., editor. *IOC Workshop Rep. Ser. No.28* Unesco, Paris.
- _____. 1984. Ecological efficiency and activity metabolism. pp. 459-474 In: *Flows of Energy and Materials in Marine Ecosystems: theory and practice* . M.J.R. Fasham, ed. Plenum Press. New York and London.
- _____. 1987. Climate and Fisheries: cause and effect or managing the long and short of it all.. In: The Benguela and Comparable Ecosystems. (Payne, A.I.L., J.A. Gulland and K.H. Brink, eds.) *So. Afr. J. Mar. Sci.* **5**:811-838.
- _____. 1988. Fish Populations and Fisheries: their perturbations, natural and man induced. pp.155-202 In: *Ecosystems of the World 27, Continental Shelves*. (H. Postma and J.J. Zijlstra, eds.) Elsevier, Amsterdam.

- _____ 1991. Climate and Fisheries: Cause and Effect - A system review. pp. 239-258. In: **Long-term Variability of Pelagic Fish Populations and Their Environment**. (T. Kawasaki, S. Tanaka, Y. Toba and A. Taniguchi, eds.) Pergamon Press, Tokyo.
- _____ 1992 . Fishery Catch Records, ENSO, and Longer Term Climate Change as Inferred from Fish Remains From Marine Sediments. pp. 379-417 In: **Paleoclimatology of El Niño - Southern Oscillation**, H. Diaz and V. Markgraf, eds., Cambridge University Press.
- _____ 1992. Climate Change, the Indian Ocean Tuna Fishery, and Empiricism. pp. 377-416 In: **Climate Variability, Climate Change and Fisheries**. M.H. Glantz, ed., Cambridge University Press.
- Sharp, G.D. 1995a. Arabian Sea Fisheries and Their Production Contexts pp239-264 In: **Arabian Sea Oceanography and Fisheries**, Thompson and Tirmizi, eds. Karachi, Pakistan.
- _____ 1995b. Its about time: new beginnings and old good ideas in fisheries science. **Fish. Oceanogr.** **4**(4):324-341.
- Sharp, G.D. 1996. Its about time: Rethinking fisheries management. pp731-736 In: **Developing and Sustaining World Fisheries Resources; The State of Science and Management**. D.A. Hancock, D.C. Smaith, A. Grant and J.P. Beumer, eds. CSIRO Publishing, Collingwood, Australia.
- _____ 1997. Its About Time: Rethinking fisheries management. pp731-736. In: **Developing and Sustaining World Fisheries Resources: The state of science and management**. Hancock, Smith, Grant and Beumer, eds. CSIRO, Australia.
- _____ 1998. The Case for Dome-Shaped response Curves by Fish Populations, pp. 503-524 In: **Global versus Local Changes in Upwelling Systems**, edited by M-H. Durand, P. Cury, R. Mendelssohn, C. Roy, A. Bakun, and D. Pauly, a report from the CEOS Workshop, Monterey, California, September, 1994. ORSTOM Editions, Paris.
- Sharp, G.D. and J. Csirke, eds. 1983: Proceedings of the Expert Consultation to Examine the Changes in Abundance and Species Composition of Neritic Fish Resources, San Jose, Costa Rica, 18-29 April 1983. **FAO Fish. Rep. Ser.** **291**, vols 2-3. 1294pp.
- Sharp, G.D., J. Csirke and S. Garcia. 1983. Modelling Fisheries: What was the Question? In 'Proceedings of the Expert Consultation to Examine Changes in Abundance and Species Composition of Neritic Fish Resources'. San Jose, Costa Rica, April 1983. (G.D. Sharp and J. Csirke, eds.) **FAO Fisheries Report series 291**(3):1177-1224.
- Sharp, G.D. and D.R. McLain. 1993a. Comments on the global ocean observing capabilities, indicator species as climate proxies, and the need for timely ocean monitoring. **Oceanogr.** **5**(3):163-168.
- _____. 1993b. Fisheries, El Niño-Southern Oscillation and upper-ocean temperature records. **Oceanogr.** **6**(1): 13-22.
- Sheldon, R. W., and T. R. Parsons. 1967. A Continuous Size Spectrum for Particulate Matter in the Sea. **J. Fish. Res. Bd. Canada** **24**:909-915.
- Sheldon, R. W., A. Prakash, and W. H. Sutcliffe, Jr. 1972. The Size Distribution of Particles in the Ocean. **Limnol. Oceanogr.** **17**:327-340.
- Sheldon, R. W., W. H. Sutcliffe, Jr., and M. A. Paranjape. 1977. The Structure of the Pelagic Food Chain and the Relationship Between Plankton and Fish Production. **J. Fish. Res. Bd. Canada** **34**:2344-2353.
- Silvert, W. 1988. Generic Models of Continental Shelf Ecosystems. **Proc. "Ecodynamics" Workshop on Theoretical Ecology**, Jülich, Oct. 1987. Springer-Verlag, "Lecture Notes in Physics".
- Silvert, W., and T. Platt. 1978. Energy Flux in the Pelagic Ecosystem: A Time-Dependent Equation. **Limnol. Oceanogr.** **23**:813-816.
- Silvert, W., and T. Platt. 1980. Dynamic energy- flow model of the particle size distribution in pelagic ecosystems. pp. 754-763 In: **Evolution and Ecology of Zooplankton Communities**, W. C. Kerfoot, Ed. Univ. Press of New England, Hanover, N. H.
- Silvert, W. 1993. Size-structured models of continental shelf food webs, p. 40-43. In V. Christensen and D. Pauly (eds.), **Trophic models of aquatic ecosystems**. ICLARM Conference Proceedings No. **26**, 390 p.
- Simpson, J.H. and R.D. Pingree. 1978. Shallow sea fronts produced by tidal stirring. pp29-42 In: M.J. Bowman and W.E. Esaias, eds.) **Oceanic Fronts In Coastal Processes**. Springer.

- Simpson, J.H. and P.B. Tett. 1988. Island stirring effects on phytoplankton growth. pp41-76 In: *Tidal Mixing and Plankton Dynamics*, M.J. Bowman, et al., eds. Springer.
- Sinclair, A.F., and S.A. Murawski. 1997. Why have groundfish stocks declined? p. 71-93 In: *Northwest Atlantic groundfish: perspectives on a fishery collapse*. (Boreman, J.; Nakashima, B.S.; Wilson, J.A.; Kendall, R.L., eds.) American Fisheries Society; Bethesda, MD.
- Smetacek, V.S. 1985. Role of sinking in diatom life-history cycles: ecological, evolutionary and geological significance. *Mar. Biol.* **84**:239-251.
- _____ 1988: Plankton Characteristics. H. Postma and J.J. Zijlstra, eds, p. 93-130 In: *Ecosystems of the World, Continental Shelves*, Vol. **27**. Elsevier, Amsterdam.
- Smith, P.E. 1978. The biological effects of ocean variability: time and space scales of biological response. Rapp. p.-v. Reun. Cons. int. Explor. Mer. 173:112-127.
- Smith, P.E., and G.H. Moser. 1988: CalCOFI time series: an overview of fishes. *CalCOFI Rep.* **XXIX**:66-90.
- Smith, P.E., and R. Lasker. 1978. Position of larval fish in an ecosystem: *Rapp. Per.-v. Reun. int. Explor. Mer.* **173**:77-84.
- Solemdal, P. 1884. "The Cod Hatchery in Flodevigen - Background and Realities," *Flodevigen rapportser*, 1, 1884.
- Soutar, A. and J.D. Isaacs. 1974. Abundance of pelagic fish during the 19th and 20th centuries as recorded in anaerobic sediments of the Californias. *Fish. Bull., US*, **72**:257-273.
- Soutar, A. and P.A. Crill. 1977. Sedimentation and climatic patterns in the Santa Barbara Basin during the 19th and 20th centuries. *Bull. Geol. Soc. of America*. **88**:1161-1172.
- Southward, A.J. 1974a. Changes in the plankton community in the western English Channel. *Nature*, **259**:5433.
- _____ 1974b. Long term changes in abundance of eggs in the Cornish pilchard (*Sardina pilchardus* Walbaum) off Plymouth. *J. Mar. Biol. Assn. UK NS* **47**:81-95.
- Southward, A.J., E.I. Butler and L. Pennycuik. 1975. Recent cyclic changes in climate and abundance of marine life. *Nature*, **253**:714-717.
- Southward A.J., G.T. Boalch, and L. Mattock (1988) Fluctuations in the herring and pilchard fisheries of Devon and Cornwall linked to change in climate since the 16th century. *J. Mar. Biol. Assoc. UK*, **68**:423-445.
- Sparre, P. 1991. Introduction to multispecies population analysis. *ICES mar. Sci. Symp.* **193**:12-21.
- Stebbing, A.R.D. 1981. The kinetics of growth control in a colonial hydroid. *J. Mar. Biol. Assn. U.K.* **61**:35-63.
- Stebbing, A.R.D. 1982. Hormesis - the stimulation of growth by low levels of inhibitors. *Science of the Total Environment*, **22**:213-234.
- Steele, J.H. (1996) Regime shifts in fisheries management. *Fisheries Research* **25**(1): 19-24.
- Stevenson, 1981. XXX
- Theilacker, G.H. 1978. Effect of starvation on the histological and morphological characteristics of jack mackerel, *Trachurus symmetricus*, larvae. *Fish. Bull. U.S.*, **76**(2):403-414.
- _____ 1980. Rearing container size affects morphology and nutritional condition of larval jack mackerel, *Trachurus symmetricus*. *Fish. Bull., U.S.*, **78**(3):789-791.
- _____ 1986. Starvation-induced mortality of young sea-caught jack mackerel, *Trachurus symmetricus*, determined with histological and morphological methods. *Fish. Bull. U.S.*, **84**(1):1-17.
- _____ 1987a. Changes in body measurements of larval northern anchovy, *Engraulis mordax*, and other fishes due to handling and preservation. *Fish. Bull., U.S.*, **78**(3):685-692.
- _____ 1987b. Feeding ecology and growth energetics of larval northern anchovy, *Engraulis mordax*. *Fish. Bull. U.S.*, **85**(2):213-228.
- _____ 1993. Calibrating starvation-induced stress in larval fish using flow cytometry. *Am. Fish. Soc. Sympos.* **14**:85-94.

- Theilacker, G.H., K.M. Bailey, M.F. Caninoi and S.M. Porter. 1995. Variations in larval walleye pollock feeding and condition: a synthesis. *Fish. Oceanogr.* **5**(1):112-123.
- Theilacker, G.H., and K.T. Dorsey. 1981. Larval Fish diversity, a summary of laboratory and field research. pp 105-142 In: Report of the Workshop on Effects of Environmental Variation on the Survival of Larval Pelagic Fishes. pp. 1-47 In: *Report and Documentation of the Workshop on the Effects of Environmental Variation on the Survival of Larval Pelagic Fishes*. G.D. Sharp, convenor, ed. IOC Workshop Series No. 28, Unesco, Paris.
- Theilacker, G.H., A.S. Kimball, and J.S. Trimmer. 1986. Use of ELISPOT immunoassay to detect euphausiid predation on larval anchovy. *Mar. Ecology. Prog. Ser.* **30**:127-131.
- Theilacker, G.H., and R. Lasker. 1974. Laboratory studies of predation by Euphausiid shrimps on fish larvae. pp.287-298 in: *The Early Life History of Fishes*. (J.H.S. Blaxter, ed.) Springer-Verlag.
- Theilacker, G.H., N.C.H. Lo, and A.W. Townsend. 1993. an immunological approach to quantifying predation by euphausiids on the early stages of anchovy. *Mar. Ecology, Prog. Ser.* **92**:35-50.
- Theilacker, G.H., and M.F. McMaster. 1971. Mass culture of the rotifer *Brachionus plicatilis* and its evaluation as a food for larval anchovies. *Marine Biol.* **10**(2):183-188.
- Theilacker, G.H. and S.M. Porter. 1995. Condition of larval walleye pollock, *Theragra chalcogramma*, in the western Gulf of Alaska and shrinkage indices. 1994. *Fish. Bull., U.S.*, **93**:333-344.
- Theilacker, G.H., and Y. Watanabe. 1989. Midgut cell height defines nutritional status of laboratory raised larval northern anchovy, *Engraulis mordax*, *Fish. Bull., U.S.*, **87**:457-469.
- Uda, M. 1927. Relation between the daily catch statistical studies in the influence of cyclone upon the fishing. *J. Imper. Fish. Inst.* **23**(3):80-88.
- Uda, M. 1957. On the relation of the important fisheries conditions and the oceanographical conditions in the adjacent water of Japan. *J. Tokyo Univ. Fish.* **38**(3):363-369
- Ulanowicz, R.E. 1986. *Growth and Development: ecosystem phenomenology*. (Springer-Verlag, New York).
- Venrick, E.El., J. A. McGowan, DR. Cayan, and T. L. Hayward. 1987. Climate and chlorophyll a: long-term trends in the central North Pacific Ocean. *Science* **238**:70-72.
- Vetter, E.F. 1988. Estimation of natural mortality in fish stocks: a review. *Fish. Bull. US*, **86**(1):25-35.
- Volterra, V. 1928. Variations and fluctuations of the number of individuals in animal species living together. *J. Cons. Int. Explor. Mer.* III No.1:3-51.
- Vlymen, W.J., III, 1974. Swimming energetics of larval anchovy, *Engraulis mordax*. *Fish. Bull. U.S.* **72**:885-899.
- Vlymen, W.J., III. 1977. A mathematical model of the relationship between larval anchovy (*Engraulis mordax*), growth, prey microdistribution and larval behavior. *Envir. Biol. Fishes.* **2**:211-233.
- Walker, G.T. 1910. On the meteorological evidence for supposed changes of climate in India, mem. *India Meteorol. Dep.* **XXI**, Part 1. 21pp.
- _____ 1930. Seasonal forecasting. *Quart. J. Roy. Meteor. Soc.* **56**:359-364.
- _____ 1947. Arctic conditions and world weather. *Quart. Roy. Meteor. Soc.* **73**:226-256.
- Ware, D. M. 1995. A century and a half of change in the climate of the NE Pacific. *Fish. Oceanogr.* **4**(4):267-277.
- Ware, D. M. and G. A. McFarlane. 1989. Fisheries production domains in the Northeast Pacific Ocean. Pages 359-379 in R. J. Beamish and G.A. McFarlane editors. Effects of ocean variability on recruitment and an evaluation of parameters used in stock assessment models. *Canadian Special Publication of Can. Fish. Aquat. Sci.* **108**.
- Ware, D. M. and R. E. Thompson. 1991. Link between long-term variability in upwelling and fish production in the northeast Pacific Ocean. *Can. J. Fish. Aquat. Sci.* **48**(12):2296-2306.
- Watling, L. and E.A. Norse 1998. Disturbance of the seabed by mobile fishing gear: a comparison to forest clearcutting. *Conserv. Biol.* **12**(6): 1180-1197.
- Walker, R.V., K.W. Myers, N.D. Davis, K.Y. Aydin, H.R. Carlson, K.D. Friedland, G.W. Boehlert, S. Urawa, Y. Ueno, and G Anma. 1998. Thermal habitat of migrating salmonids in the North

Pacific Ocean and Bering Sea as recorded by temperature data tags in 1998. (*NPAFC Doc 350.*) *FRI-UW-9813*. Fisheries Research Institute, University of Washington, Seattle, WA. 28pp.

- Walters, C.J. and J.S. Collie (1988) Is research on environmental factors useful to fisheries management?. *Can. J. of Fish. Aquat. Sci.* **45**:1848-1854.
- Welch, D.W., A.I. Chigirinsky and Y. Ishida (1995) Upper thermal limits on the oceanic distribution of pacific salmon (*Onchorhynchus sp.*) in the spring. *Can. J. Fish. Aquat. Sci.* **52**:489-503.
- Welch, D.W, Y. Ishida and K. Nagasawa. 1998. Thermal limits and ocean migrations of sockeye salmon (*Oncorhynchus nerka*): long-term consequences of global warming. *Can. J. Fish. Aquat. Sci.* **55**:937-948.
- Welch, D.W., Y. Ishida, K. Nagasawa and J.P. Eveson. 1998. Thermal limits on the ocean distribution of steelhead trout (*Oncorhynchus mykiss*). *N. Pac. Anadr. Fish Comm. Bull.* No. **1**:396-404.
- Willers, B. 1994. Sustainable development: a new world deception. *Conservation Biology*, **8**:1146-1148.
- Wooster, W.S. and D.L. Fluharty (eds). 1984. *El Niño North: Niño Effects in the Eastern Subarctic Pacific Ocean*. Wash. Sea Grant, University of Washington, Seattle. 312 pp.
- Wyatt, T., and M.G. Larrañeta, eds. 1988. *Long Term Changes in Marine Fish populations*. Proceedings of a Symposium in Vigo, Spain 18-21 Nov. 1986. Imprento REAL, Bayona.
- Zijlstra, j.j., R. Dapper, and J.W. Witte. 1982. Settlement, growth and mortality of post-larval plaice (*Plueronectes plattessa*) in the Wadden Sea. *Neth. J. Sea Rev.* **15**(2).