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PELAGIC FISHERIES RESEARCH PROGRAM

Request documents directly from: <http://www.soest.hawaii.edu/PFRP/pfrp1.html>, scroll down to Publications List.

Publication Year 2001:

McConnell, Kenneth E., and Timothy C. Haab, 2001. Small boat fishing in Hawaii: Choice and economic values. SOEST Publication 01-01, JIMAR Contribution 01-336, 62 pp.

Porter, Richard M., Maribeth Wendt, Michael D. Travis, and Ivar Strand, 2001. Cost-earnings study of the Atlantic-based U.S. pelagic longline fleet. SOEST Publication 01-02, JIMAR Contribution 01-337, 102 pp.

Publication Year 2000:

Chakravorty, Ujjayant and Keiichi Nemoto, 2000. Modeling the effects of area closure and tax policies: A spatial model of the Hawaii longline fishery. SOEST Publication 00-02, JIMAR Contribution 00-329, 28 pp.

Hamnett, Michael P., and Cheryl L. Anderson, 2000. Impact of ENSO events on tuna fisheries in the U.S. affiliated Pacific Islands. SOEST Publication 00-03, JIMAR Contribution 00-330, 27 pp.

Itano, David G., 2000. The reproductive biology of yellowfin tuna (*Thunnus albacares*) in Hawaiian Waters and the western tropical Pacific Ocean: Project summary. SOEST Publication 00-01, JIMAR Contribution 00-328, 69 pp.

Kaneko, John, Paul Bartram, Marc Miller and Joe Marks, 2000. Local fishery knowledge: The application of cultural consensus analysis to the management and development of small-scale pelagic fisheries. Project final report. SOEST Publication 00-06, JIMAR Contribution 00-334, 34 pp.

Weng, Kevin C.M., and John R. Sibert, 2000. Analysis of the fisheries for two pelagic carangids in Hawaii. SOEST Publication 00-04, JIMAR Contribution 00-332, 78 pp.

Publication Year 1999:

Chakravorty, Ujjayant and John Sibert, 1999. Ocean-scale management of pelagic fisheries: Economic

and regulatory issues. (Proceedings of an international workshop organized by the Pelagic Fisheries Research Program, JIMAR, UH, November 12-13, 1997). SOEST Publication 99-01, JIMAR Contribution 99-321, 102 pp.

Glazier, Edward W., 1999. Non-commercial fisheries in the central and western Pacific: A summary review of the literature. SOEST Publication 99-07, JIMAR Contribution 99-326, 48 pp.

Pan, MinLing, PingSun Leung, Fang Ji, Stuart T. Nakamoto, and Samuel G. Pooley, 1999. A multilevel and multiobjective model for the Hawaii fishery: Model documentation and application results. SOEST Publication 99-04, JIMAR Contribution 99-324, 84 pp. With user's manual: Fisheries management decision support system (FMDSS), by Omar F. El-Gayar and Fang Ji, 54 pp.

Sharma, K.R., A. Peterson, S.G. Pooley, S.T. Nakamoto and P.S. Leung, 1999. Economic contributions of Hawaii's fisheries. SOEST Publication 99-08, JIMAR Contribution 99-327, 40 pp.

Publication Year 1998:

Grewe, Peter, and John Hampton, 1998. An assessment of bigeye (*Thunnus obesus*) population structure in the Pacific Ocean, based on mitochondrial DNA and DNA microsatellite analysis. SOEST Publication 98-05, JIMAR Contribution 98-320, 23 pp.

Hamilton, Marcia S., 1998. Cost-earnings study of Hawaii's charter fishing, 1996-1997. SOEST Publication 98-08, JIMAR Contribution 98-322, 105 pp.

McConnell, K.E., I.E. Strand, and R.E. Curtis, 1998. An analysis of auction prices of tuna in Hawaii: Hedonic prices, grading and aggregation. SOEST Publication 98-03, JIMAR Contribution 98-317, 27 pp.

Stöcker, Sabine, 1998. Cellular automaton models for fish schools: Merging social behavior and hydrodynamics. SOEST Publication 98-02, JIMAR Contribution 98-316, 19 pp.

Publication Year 1997:

Bills, Peter J. and John R. Sibert, 1997. Design of tag-recapture experiments for estimating yellowfin tuna stock dynamics, mortality, and fishery interactions. SOEST Publication 97-05, JIMAR Contribution 97-313, 80 pp.

Hamilton, Marcia S. and Stephen W. Huffman, 1997. Cost-earnings study of Hawaii's small boat fishery. SOEST Publication 97-06, JIMAR Contribution 97-314, 102 pp.

Walker, Julie, 1997. Sociology of Hawaii charter boat fishing. SOEST Publication 97-02,

JIMAR Contribution 97-309, 50 pp.

Publication Year 1996:

Bartram, Paul, Peter Garrod and John Kaneko, 1996. Quality and product differentiation as price determinants in the marketing of fresh Pacific tuna and marlin. SOEST Publication 96-06, JIMAR Contribution 96-304, 50 pp.

Hamilton, Marcia S., Rita E. Curtis and Michael D. Travis, 1996. Cost-earnings study of the Hawaii-based domestic longline fleet. SOEST Publication 96-03, JIMAR Contribution 96-300, 59 pp.

Hamnett, Michael P. and William Sam Pintz, 1996. The contribution of tuna fishing and transshipment to the economies of American Samoa, the Commonwealth of the Northern Mariana Islands, and Guam. SOEST Publication 96-05, JIMAR Contribution 96-303, 38 pp.

Miller, Marc L., 1996. Social aspects of Pacific pelagic fisheries, Phase I: The Hawai'i troll and handline fishery. SOEST Publication 96-04, JIMAR Contribution 96-302, 120 pp.

Schoen, Christian, and John Sibert, 1996. Feasibility of dual mode lidar for pelagic fish surveys. SOEST Publication 96-02, JIMAR Contribution 96-301, 18 pp.

Sibert, John, and Mary Nunn (eds.), 1996. Pacific pelagic fisheries: Current projects and related research. Abstracts of papers presented November 28-30, 1995. SOEST Publication 96-01, JIMAR Contribution 96-299, 49 pp.

Journal Publications by PFRP Project Investigators

Brill, Richard W., and Molly E. Lutcavage, 2001. Understanding environmental influences on movements and depth distributions of tunas and billfishes can significantly improve population assessments. American Fisheries Society Symposium, 25: 179-198.

Brill, Richard, Yonat Swimmer, Carina Taxboel, Katherine Cousins, and Timothy Lowe, 2001. Gill and intestinal NA+-K⁺ ATPase activity, and estimated maximal osmoregulatory costs, in three high-energy-demand teleosts: yellowfin tuna (*Thunnus albacares*), skipjack tuna (*Katsuwonus pelamis*), and dolphin fish (*Coryphaena hippurus*). Marine Biology, 138:935-944.

Bigelow, Keith A., Christofer H. Boggs, and Xi He, 1999. Environmental effects on swordfish and blue shark catch rates in the US North Pacific longline fishery. Fisheries Oceanography, 8:3, 178-198. (Please contact PIs for color illustrations)

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. *Marine Biology*, 130: 119-132.

Block, Barbara A., Heidi Dewar, Charles Farwell, and Eric D. Prince, 1998. A new satellite technology for tracking the movements of Atlantic bluefin tuna. *Proceedings of the National Academy of Sciences*, 95:9384-9389, August 1998.

Brill, R.W., 1996. Selective advantages conferred by the high performance physiology of tunas, billfishes and dolphin fish. *Comparative Biochemistry and Physiology*, 113A, 3-15.

Brill, R.W., K.L. Cousins, D.R. Jones, P.G. Bushnell, and J. F. Steffensen, 1998. Blood volume, plasma volume and circulation time in a high-energy demand-high teleost, the yellowfin tuna (*Thunnus albacares*). *Journal of Experimental Biology*, 201, 647-654.

Brill, Richard W., Timothy E. Lowe, and Katherine L. Cousins, 1998b. How water temperature really limits the vertical movements of tunas and billfishes - It's the heart stupid. Abstract from the American Fisheries Society, International Congress on Biology of Fish, July 26-20, 1998, Towson University, Baltimore, MD.

Brill, R.W., B.A. Block, C.H. Boggs, K.A. Bigelow, E.V. Freund, and D.J. Marcinek, 1999. Horizontal and depth distribution of large adult yellowfin tuna (*Thunnus albacares*) near the Hawaiian Islands, recorded using ultrasonic telemetry: implications for the physiological ecology of pelagic fishes. *Marine Biology*, 133: 395-408.

Buonaccorsi, Vincent P., Kimberly S. Reece, Lee W. Morgan, and John E. Graves, 1999. Geographic distribution of molecular variance within the blue marlin (*Makaira nigricans*): A hierarchical analysis of allozyme, single-copy nuclear DNA, and mitochondrial DNA markers. *Evolution*, 53(2), 1999: 568-579.

Chakravorty, Ujjayant, and Keiichi Nemoto, 2001. Modeling the effects of area closure and tax policies: a spatial-temporal model of the Hawaii longline fishery. *Marine Resources Economics*, 15: 179-204.

Curran, D.S., C.H. Boggs, and X. He., 1996. Catch and effort from Hawaii's longline fishery summarized by quarters and five degrees squares. NOAA Technical Memorandum, NMFS-SWFSC-225, 68 pp.

Curtis, Rita and Robert L.Hicks, 2000. The cost of sea turtle preservation: The Case of Hawaii's Pelagic Longliners. *American Journal of Agricultural Economics* 82(5):1191 -1197.

Firing, E., B. Qiu and W. Miao, 1999. Time-dependent island rule and its application to the time-varying North Hawaiian Ridge Current. *Journal of Physical Oceanography*, 29,2671-2688.

Fonteneau, A., P. Pallares, J. Sibert and Z. Suzuki, 2002. Effect of tuna fisheries on tuna resources and on offshore pelagic ecosystems. In *Ocean Yearbook Vol. 16*. E. M. Borgese, A. Chircop, and M. McConnell (eds).

Fonteneau, A., R. Allen, T. Pollachek, P. Pallares, J. Sibert and Z. Suzuki. 1999. Effect of tuna fisheries on the tuna resources and on the offshore pelagic ecosystems. ICES/SCOR Symposium on Ecosystem Effects of Fishing, Montpellier, France, 16-19 March 1999.

Fournier, D., J. Hampton, and J. Sibert. 1999. MULTIFAN-CL: a length-based, age-structured model for fisheries stock assessment, with application to south Pacific albacore, *Thunnus alalunga*. *Canadian Journal of Fisheries and Aquatic Sciences*, 55:2105 - 2116.

Grewe, Peter, and John Hampton, 1998. An assessment of Bigeye (*Thunnus obesus*) population structure in the Pacific Ocean, based on mitochondrial DNA and DNA microsatellite analysis. CSIRO Marine Research publication, Tasmania, Australia

Hamilton, Marcia, 1999. A system for classifying small boat fishermen in Hawaii. *Marine Resource Economics*, 13: 289-291.

He, Xi, Keith A. Bigelow and Christofer H. Boggs, 1997. Cluster analysis of longline sets and fishing strategies within the Hawaii-based fishery. *Journal of Fisheries Research*, 31:147-158.

Holland, K.N., S. M. Kajiura, D.G. Itano and J. R. Sibert, 2001. Tagging techniques can elucidate the biology and exploitation patterns of aggregated pelagic fishes. In *Island in the stream: oceanography and fisheries of the Charleston Bump*. G. R. Sedberry, editor. American Fisheries Society, Symposium 25, pp. 211-218.

Holland, K.N., P. Kleiber and S.M. Kajiura, 1999. Different residence times of yellowfin tuna, *Thunnus albacares*, and bigeye tuna, *Thunnus obesus*, found in mixed aggregations over a seamount. *Fishery Bulletin*, 97:392-395.

Itano, David G., 1996. The reproductive biology and spawning behavior of yellowfin tuna: Implications to gear vulnerability and fishery interaction. *NMFS Tuna Newsletter*, Issue 120, February 1996.

Itano, David G., and Kim N. Holland, 2000. Movement and vulnerability of bigeye (*Thunnus obesus*) and yellowfin tuna (*Thunnus albacares*) in relation to FADs and natural aggregation points. *Aquatic Living Resources*, 13 (2000): 213-223.

Klimley, A.P., and C.F. Holloway, 1999. School fidelity and homing synchronicity of yellowfin tuna, *Thunnus albacares*. *Marine Biology*, 133: 307-317.

Leung, PingSun, Jill Muraoka, Stuart T. Nakamura, and Sam Pooley, 1998. Evaluating fisheries management options in Hawaii using analytic hierarchy process (AHP). *Fisheries Research*, 36 (1998): 171-183.

Lowe, T.E., R.W. Brill, and K.L. Cousins, 1998. Responses of the red blood cells from two high-energy-demand teleosts, yellowfin tuna (*Thunnus albacares*) and skipjack tuna (*Katsuwonus pelamis*) to catecholamines. *Journal of Comparative Physiology and Biology*, 168: 405-418.

Lowe, T.E., R.W. Brill, and K.L. Cousins, 2000. Blood oxygen-binding characteristics of bigeye tuna (*Thunnus obesus*), a high-energy-demand teleost that is tolerant of low ambient oxygen. *Marine Biology*, 136: 1087-1098.

Lumpkin, C.F., P. Flament, R. Kloosterziel and L. Armi, 2000. Vortex merging in a 1.5-layer fluid on an f-plane. *Journal of Physical Oceanography*, 30:233-242.

Lund S.G., M.C. Phillips, C.D. Moyes, and B.L.Tufts, 2000. The effects of cell ageing on protein synthesis in rainbow trout (*Oncorhynchus mykiss*) red blood cells. *Journal of Experimental Biology*, 203:2219-2228.

Lutcavage, Molly E., Richard W. Brill, Gregory B. Skomal, Bradford C. Chase, and Paul W. Howey, 1999. Results of pop-up satellite tagging of spawning size class fish in the Gulf of Maine: do North Atlantic bluefin tuna spawn in the Mid-Atlantic? *Canadian Journal of Fisheries and Aquatic Sciences*, 56: 173-177 (1999).

Lutcavage, M.E., R.W. Brill, G.B. Skomal, B.C. Chase, J.L. Goldstein, and J. Tutein, 2000. Tracking adult North Atlantic bluefin tuna (*Thunnus thynnus*) in the northwestern Atlantic using ultrasonic telemetry. *Marine Biology*, (2000) 137: 347-358.

Mathieu-Costello, O., R.W. Brill, and P.W. Hochachka, 1996. Structural basis for oxygen delivery: Muscle capillaries and manifolds in tuna red muscle. *Comparative Biochemistry and Physiology*, 114A, 25-31.

Mistian, Johan A., and Ivar E. Strand, 2000. Location choice of commercial fishermen with heterogenous risk preferences. *American Journal of Agricultural Economics*, Nov. 15, 2000, vol. 82, no. 5, pg. 1184.

Phillips M.C.L., C.D. Moyes, and B.L. Tufts, 2000. The effects of cell ageing on metabolism of

nucleated red blood cells. *Journal of Experimental Biology*, 03: 1039-1045.

Polovina, J.J., P. Kleiber and D.R. Kobayashi, 1999. Application of TOPEX/Poseidon satellite altimetry to simulate transport dynamics of spiny lobster, *Panulirus marginatus*, in the Northwestern Hawaiian Islands, 1936-1996. *Fishery Bulletin*, 97:132-143.

Polovina, J.J., D.R. Kobayashi, D.M. Ellis, M.P. Seki and G.H. Balazs, 2000. Turtles on the edge: Movement of loggerhead turtles (*Caretta caretta*) along oceanic fronts in the central North Pacific, 1997-1998. *Fisheries Oceanography*, 9(1):71-82.

Qiu, B., D. Koh, C. Lumpkin, and P. Flament, 1997. Existence and formation mechanism of the North Hawaiian Ridge Current. *Journal of Physical Oceanography*, v. 27, no. 3: 431-434.

Reeb, C.A., L. Arcangeli and B.A. Block, 2000. Structure and migration corridors in Pacific populations of the swordfish, *Xiphias gladius*, as inferred through analysis of mitochondrial DNA. *Marine Biology*, 136: 1123-1131.

Rizzuto, J. (with R.W. Brill), 1996. New data on yellowfin tuna behavior. *Saltwater Sportsman*, May 1996, 50-55. (Article describes tracking project on adult yellowfin tuna conducted off the Kona coast during the summer of 1995).

Rosel, Patty E., and Barbara A. Block, 1996. Mitochondrial control region variability and global population structure in the swordfish (*Xiphias gladius*). *Marine Biology*, 125, 11-22.

Seki, Michael P., Jeffrey J. Polovina, Russell E. Brainard, Robert R. Bidigare, Carrie L. Leonard, and David G. Foley, 2001. Biological enhancement at cyclonic eddies tracked with GOES thermal imagery in Hawaiian waters. *Geophysical Research Letters*, 28(8):1583-1586.

Sharma, Khem R., and PingSun Leung, 2001. Economic impacts of catch reallocation from the commercial fishery to the recreational fishery in Hawaii. *North American Journal of Fisheries Management*, 21: 125-134.

Sharma, Khem R., and PingSun Leung, 1999. Technical efficiency of the longline fishery in Hawaii: An application of a stochastic production frontier. *Marine Resource Economics*, 13: 259-274.

Sibert, J., 2000. Symposium on tagging and tracking marine fish. *Strategies and Technologies for ICZM. Integrated Coastal Zone Management*, 1: 213-215.

Sibert, John, Kim Holland, and David Itano, 2000. Exchange Rates of Yellowfin and Bigeye Tunas and Fishery Interaction Between Cross Seamount and Near-shore FADs in Hawaii.

Aquatic Living Resources. 13 (4): 225-232.

Sibert, John R., J. Hampton, and D. Fournier, 1996. Skipjack movement and fisheries interaction in the Western Pacific. Second FAO Expert Consultation on Interactions of Pacific Tuna Fisheries, Shimizu, Japan.

Sibert, John R., John Hampton, David A. Fournier and Peter J. Bills, 1999. An advection-diffusion-reaction model for the estimation of fish movement parameters from tagging data, with application to skipjack tuna (*Katsuwonus pelamis*). Canadian Journal of Fisheries and Aquatic Sciences, 56: 925-938.

Sibert, John, Kim Holland and David Itano, 2000. Exchange rates of yellowfin and bigeye tunas and fishery interaction between Cross Seamount and near-shore FADs in Hawaii. Aquatic Living Resources, 13 (2000): 225-232.

Stöcker, Sabine, 1999. Models for tuna school formation. Mathematical Biosciences, 156: 167-190.

Yang H., G.F. Tibbits , J. Velema , M. Hedrick and C.D. Moyes, 2000. Evolutionary and physiological variation in cardiac troponin C in relation to thermal strategies of fish. Physiological and Biochemical Zoology, 73:841-849.

Other Publications by PFRP Project Investigators

Adam, M.S., and J. Sibert, 2001. Population dynamics and movements of skipjack tuna in the Maldivian fishery: Analysis of tagging data from advection diffusion reaction model. (Ms. in review).

Adam, S., J. Sibert, D. Itano, K. Holland. 2001. Population dynamics and fishery interaction of yellowfin and bigeye tuna from the Hawaii tuna tagging project. (Ms in review)

Brill, R. and G. Antonelis, 2001 - Research work has been documented in the form of a five minute video entitled: "Bait Selection Study in Marine Turtles". This video has been presented to various government and scientific meetings and highlights our research with captive turtles.

Brill, R., M. Lutcavage, G. Metzger, P. Bushnell, M. Arndt, J. Lucy, and C. Watson, 2000. Horizontal and vertical movements of juvenile Atlantic bluefin tuna (*Thunnus thynnus*) determined using ultrasonic telemetry, with reference to population assessment using aerial surveys. Fishery Bulletin, submitted.

Brill, R.W. and P.G. Bushnell, 2000. Cardiovascular Systems of Tunas. Chapter in Fish Physiology, vol. 19, Academic Press, accepted for publication.

Brill, R.W., 1996b. Cooperative NMFS-university projects get recognition in the popular and scientific press. Commerce People, in preparation.

Brill, R.W., K. Cousins, and P. Kleiber, 1996d. Feasibility and effects of long term intramuscular implantation of model archival tags in yellowfin tuna (*Thunnus albacares*). Bulletin of Marine Science, submitted.

Buonaccorsi, V., and J.E. Graves, 1996. Evaluating intra- and inter-ocean population structure in the blue marlin: Evidence from anonymous single copy nuclear DNA. Canadian Journal of Fisheries and Aquatic Science, in preparation.

Cousins, K.L. and R.W. Brill, 1996. Fast conducting fibers in the cardiac muscle of a teleost, the yellowfin tuna (*Thunnus albacares*). Journal of Morphology, in preparation.

Curtis, Rita and Robert L. Hicks, 2000. The cost of sea turtle preservation: The case of Hawaii's pelagic longliners. NMFS Office of Science and Technology. Working paper pending publication.

Curtis, Rita E., 1996a. Short-run supply response in a multi-species fishery. In preparation.

Curtis, Rita E., 1996b. Spatial allocation of effort: a discrete choice model of short run supply response in the Hawaii longline fishery. Dissertation project with the University of Maryland, Department of Agricultural and Resource Economics.

Glazier, Edward W., 2000. Interim report: Hawaii charter patron survey, 2000. Unpublished JIMAR report.

Graves, J.E., and J.R. McDowell, 1996. Population genetic structure of blue marlin in the Atlantic and Pacific Oceans: Evidence from RFLP analysis of mtDNA. Fishery Bulletin, in preparation.

Hamilton, Marcia S., Rita E. Curtis and Michael D. Travis, 1996. Hawaii longline vessel economics. Marine Resource Economics, submitted.

Hampton, John, and David Fournier, 1998. Preliminary analysis of yellowfin tuna catch, effort, size and tagging data using an integrated age-structured model.

He, X., and C.H. Boggs, 1996a. Bycatch and discards of blue shark, *Prionace glauca*, by the

Hawaii-based longline fishery from 1991 to 1995 (technical report).

He, X., and C.H. Boggs, 1996b. Estimating fisheries impacts using commercial fisheries data: Simulation models and time series analysis of Hawaii's yellowfin tuna fisheries. Proceedings of the Second World Fisheries Congress, July 28-August 1, 1996, Brisbane, Australia, in press.

He, X., and C.H. Boggs, 1996c. Time series analysis on Hawaii's tuna fisheries: Do local catches affect local abundance? Second FAO Expert Consultation on Interactions of Pacific Tuna Fisheries, Paper No. 5-24, Shimizu, Japan., in press.

Jones, D.R., Brill, R.W., Cousins, K.L., Bushnell, P.B., Steffensen, J.F. and Keen, J.K, 1996. Capillary permeability and Starling forces in three teleosts: yellowfin tuna (*Thunnus albacares*), rainbow trout (*Oncorhynchus mykiss*) and cod (*Gadus morhua*). *Journal of Experimental Biology*, in preparation.

Kitchell, J.F., T.E. Essington, C.H. Boggs, D.E. Schlinder and C. J. Waters, 2000. Sharks and shark fisheries in an ecosystem context. Proceedings of the International Pelagic Shark Workshop, Feb. 14-17, 2000, Asilomar, CA.

Leung, PingSun, 1996b. Multilevel and multiobjective programming model of Hawaii commercial multifishery. Draft working paper, in preparation.

Lowe, T., R. Brill and K. Cousins, 2000. Blood O₂-binding characteristics of bigeye tuna (*Thunnus obesus*), a high-energy-demand teleost that is tolerant of low ambient O₂. *Marine Biology*, in press.

Lumpkin, C.F. and P. Flament, 2000. Lagrangian statistics in the central north Pacific. *Journal of Marine Systems*, forthcoming.

Lutcavage, M.E., R.W. Brill, J.L. Goldstein, G.B. Skomal, B.C. Chase and J. Tutein, 2000. Movements and behavior of adult northern bluefin tuna (*Thunnus thynnus*) in the northwest Atlantic determined using ultrasonic telemetry. *Marine Biology*, in press.

McConnell, K.E. and T.C. Haab, 2000. Small vessel fishing in Hawaii: Models for economic values and behavior. Draft technical report.

McConnell, Kenneth E., 1999. Hedonic prices for fish: Tuna prices in Hawaii. *American Journal of Agricultural Economics*, forthcoming.

Moyes, C.D., M.L. Sharma, C. Lyons, S.C. Leary, M. Leon, A. Petrie, S. Lund, and B.L. Tufts,

May 2001. Origins and consequences of mitochondrial decline in nucleated erythrocytes.
Submitted to American Journal of Physiology.

Musyl, M.K., R.W. Brill, D.S. Curran, J.S. Gunn, J.R. Hartog, R.D. Hill, D.W. Welch, J.P. Eveson, C.H. Boggs, and R.E. Brainard. 2001. Ability of archival tags to provide estimates of geographical position based on light intensity. *Reviews in Fish Biology* (In Press)

Musyl, M.K. and D.S. Curran, 2000. Depth and temperature distributions of pelagic fishes caught on longlines in Hawaii. (Draft manuscript under NMFS review)

Musyl, M.K., R.W. Brill, D.S. Curran, J.S. Gunn, J.R. Hartog, R.D. Hill, D.W. Welch, J.P. Eveson, C.H. Boggs and R.E. Brainard, 2000. Ability of archival tags to provide estimates of geographical positioin based on light intensity. *Reviews in Fish Biology and and Fisheries*, in review.

Pan, Minling, PingSun Leung and Samuel G. Pooley, 2000. A decision support model for fisheries management in Hawaii: a multilevel and multiobjective programming approach. *North American Journal of Fisheries Management*, under revision.

Pan, Minling and Samuel G. Pooley, 2000. Factors affecting the prices of pelagic fish in the Hawaii markets: A simple statistical analysis. Submitted for publication as a SOEST-JIMAR technical report, under revision.

Polovina, J.J., E. Howell and M.P. Seki, 2000. Satellite ocean color sensors detect biological change in mid-latitude North Pacific, 1997-2000. *Fisheries Oceanography*, in review.

Polovina, J.J., E. Howell, D.R. Kobayashi and M.P. Seki, 2000. The transition zone chlorophyll front, a dynamic global feature defining migration and forage habitat for marine resources. *Progress in Oceanography*, in press.

Reeb, C.A., L. Arcangeli and B.A. Block, 1999. Global population structure of the swordfish (*Xiphias gladius*) as inferred through analysis of eleven microsatellite loci. *Molecular Ecology*, in preparation.

Seki, M.P., J.J. Polovina, D.R. Kobayashi and G.T. Mitchum, 2000. An oceanographic characterization of swordfish longline fishing grounds in the Subtropical Central North Pacific. *Fisheries Oceanography*, in press.

Travis, Michael D., 1996a. Fishing effort, power, and capacity: The importance and evolution of terminology in fisheries science. In preparation.

Travis, Michael D., 1996b. Regulatory changes and their impact on Hawaii's longline fishery. In preparation.

Walsh, W.A. and Kleiber, P. Generalized additive model and regression tree analyses of blue shark (*Prionace glauca*) catch rates by the Hawai'i-based commercial longline fishery. Accepted for publication in Fisheries Research as of November 21, 2000.

Walsh, W.A., Kleiber, P., and McCracken, M. Comparison of logbook reports of incidental blue shark catch rates by Hawai'i-based longline vessels to fishery observer data by application of a generalized additive model. Accepted for publication in Fisheries Research as of April 20, 2001.

Ward, R.D., C.A. Reeb and B.A. Block, 2001. Population structure of Australian swordfish *Xiphias gladius*. Final Report to Australian Fisheries Management Authority, Canberra.

White, R.J., G.P. Morris, C.D. Moyes, M.G. Blennerhassett, C.E. Hill, G.C. Pringle, W.G. Paterson, 2001. Analysis of the muscoal stress response in acid-induced esophagitis in opossum. American Journal of Physiology. 1st revision under review

PFRP Publications: Quarterly Newsletter

Publication Year 2001:

January-March 2001

Contents: PFRP research continues to diversify. The importance of local knowledge in fisheries management.

April-June 2001

Contents: Bluefin spawning in central North Atlantic. Luring anglers to research. A sociocultural study of pelagic fishing in Guam. Bigeye moorings recovered/deployed. MHLC7-Evaluation and comment.

July-September 2001

Contents: New discoveries in visual performance. The associated tuna-school fishing technique. MHLC7-Evaluation and comment. Blue shark study nets early results. MHLC: Years remain to bring order to high seas tuna fisheries. PSATs will tell swordfish secrets.

Publication Year 2000:

January-March 2000

Contents: Data requirements to assess bigeye tuna population. Reflections on MHLC5. Fishermen rewarded for return of archival tag.

April-June 2000

Contents: Tagging and tracking with electronic devices (Tagging Symposium). The substitution effect of area closures. The trophic ecology of two Hawaiian Ommastrephid squids.

July-September 2000

Contents: MHLC6 assesses science and costs of migratory stock management. IATTC tags bigeye tuna in EPO. Protected species workshops. Charter fishing patronage in Hawaii. Conference targets marine debris. Economic contributions of Hawaii's marine fisheries. Tournament-tagged marlin.

October-December 2000

Contents: Swordfish fisheries and management today. December workshop for PFRP PI's. NMFS workshops for longliners well attended. New PFRP projects funded in FY 2000.

Publication Year 1999:

January-March 1999

Contents: Workshop consensus: International project on bigeye tuna needed. Creating the big picture for Pacific bigeye tuna. New data fuels old debate on bluefin tuna.

April-June 1999

Contents: MHLC4 sets convention area, calls for scientific support. How to get the best science into regional fishery management. Archival tags - the good, the bad and the desired.

July-September 1999

Contents: New Pacific bigeye tuna projects. Oceanography's role in bigeye tuna aggregation and vulnerability. Pacific-wide stock assessment of bigeye tuna.

October-December 1999

Contents: Status of South Pacific tuna stocks. Pacific blue marlin stock is healthy says new analysis.

Publication Year 1998:

January 1998

Contents: Managing highly migratory species. Legal considerations for managing highly migratory fish. The importance of tuna to the Pacific Islands. School behavior and site fidelity of monitored tuna.

April 1998

Contents: Economics and fishery management. How many purse seiners should exploit the Western Pacific tuna fishery. Access fees, economic benefits in the Western Pacific U.S. purse-seine tuna fishery. Biological "threats" to sustainable tuna fisheries.

July 1998

Contents: Keeping our eye on bigeye. Archival tags - a wealth of information. All things considered, eating fish is better. Tracking Hawaii's tuna. Preparing for the Hawaii Tuna Tagging Project (HTTP). How to assist the HTTP.

October 1998

Contents: Do you know where your longline is? How to set a longline to a desired depth. Reducing longline bycatch. Predicting the shape of longlines. Recovered archival tag loaded with data.

Publication Year 1997:

January 1997

Contents: Social sciences in fisheries research. Price determinants in the marketing of fresh Pacific tuna. Tuna economics in the Pacific Islands. The 1993 Hawaii-based longline fleet. The social value of Hawaii's troll and handline fishery.

April 1997

Contents: Tuna tagging in Hawaii. The Western Pacific region: Small islands, big changes.

July 1997

Contents: Oceanography and fishery management. Current and eddy statistics for the Hawaii EEZ. Tracking fish by mapping ocean features. Modeling the ocean circulation around the main Hawaiian Islands.

October 1997

Contents: Tuna behavior and physiology. Tuna telemetry in Tahiti. How tuna physiology affects tuna movements and distribution. Yellowfin tuna biology and fisheries in the Pacific.

Publication Year 1996:

October 1996, first issue of newsletter

Contents: About the Pelagic Fisheries Research Program. Using DNA to analyze the population structure of swordfish and Pacific blue marlin. Bigeye tuna population structure in the Pacific Ocean. Were dolphinfish once an endangered species?

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2002 PUBLICATIONS

Antonelis, G. A.

2002. Rookeries. *In: Encyclopedia of Marine Mammals.* William F. Perrin, Bernd Wursig, J. G. M. Thewissen (editors), Academic Press, p. 1051-1053.

Brainard, R., E. DeMartini, and S. Holzwarth.

2002. Coral reef ecosystems of the Northwestern Hawaiian Islands: Interim results emphasizing the 2000 surveys. *In: J. Maragos and D. Gulko, editors. U.S. Fish and Wildlife Service and the Hawaii Department of Land and Natural Resources, Honolulu, Hawaii,* pp. 10-11, 17, 31, 39, and 43.

Brill, R., M. Lutcavage, G. Metzger, P. Bushnell, M. Arendt, J. Lucy, C. Watson, and D. Foley.

2002. Horizontal and vertical movements of juvenile bluefin tuna (*Thunnus thynnus*), in relation to oceanographic conditions of the western North Atlantic, determined with ultrasonic telemetry. *Fish. Bull.* 100:155-167.

DiNardo, G. T., E. E. DeMartini, and W. R. Haight.

2002. Estimates of lobster-handling mortality associated with the Northwestern Hawaiian Islands lobster-trap fishery. *Fish. Bull.* 100:128-133.

Johanos, T. C., and J. D. Baker (editors)

2002. The Hawaiian monk seal in the Northwestern Hawaiian Islands, 2000. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SWFSC-340, 125 p.

Musyl, M. K., R. W. Brill, C. H. Boggs, D. S. Curran, T. K. Kazama, and M. P. Seki.

In press. Vertical movements of bigeye tuna (*Thunnus obesus*) associated with islands, buoys, and seamounts of the Hawaiian Archipelago from archival tagging data. *Fish. Oceanogr.*

Parrish, F. A., K. Abernathy, G. J. Marshall, B. M. Buhleier.

2002. Hawaiian monk seals (*Monachus schauinslandi*) foraging in deep-water coral beds. *Marine Mammal Science* 18(1):244-258.

Parrish, F. A., and R. L. Pyle.

2002. Field comparison of open-circuit scuba to closed-circuit rebreathers for deep mixed-gas diving operations. *Mar Technol. Soc. J.* 36(2):13-22.

Polovina, J. J., G. H. Balazs, E. A. Howell, D. M. Parker, and M. P. Seki.

In press. Dive-depth distribution of loggerhead (*Caretta caretta*) and olive ridley (*Lepidochelys olivacea*) sea turtles in the central North Pacific Ocean: Might deep longline sets catch fewer turtles? *Fish. Bull.*

Polovina, J. J., G. H. Balazs, E. A. Howell, D. M. Parker, M. P. Seki, and P. H. Dutton.

In press. Forage and migration habitat of loggerhead (*Caretta caretta*) and olive ridley

(*Lepidochelys olivacea*) sea turtles in the central North Pacific Ocean. Fish. Oceanogr.

Seki, M. P., R. Lumpkin, and P. Flament.

2002. Hawaii cyclonic eddies and blue marlin catches: The case study of the 1995 Hawaiian International Billfish Tournament. J. Oceanogr. 58:739-745.

Seki, M. P., J. J. Polovina, D. R. Kobayashi, R. R. Bidigare, and G. T. Mitchum.

In press. An oceanographic characterization of swordfish longline fishing grounds in the Subtropical North Pacific. Fish. Oceanogr. 11(5):1-16.

Walsh, W. A.

2002. Incidental catches of fishes by Hawai'i longliners. Pelagics Fisheries Research Program Newsletter 7:1-4.

Walsh, W. A., P. Kleiber, M. McCracken.

2002. Comparison of logbook reports of incidental blue shark catch rates by Hawaii-based longline vessels to fishery observer data by application on a generalized additive model. Fish. Res. 58:79-94.

Zug, G. R., G. H. Balazs, J. A. Wetherall, D. M. Parker, and S. K. K. Murakawa.

2002. Age and growth of Hawaiian seaturtles (*Chelonia mydas*): an analysis based on skeletochronology. Fish. Bull. 100:117-127.

Administrative Reports

Botsford, L., G. DiNardo, M. Fogarty, D. Goodman, and J. Hampton.

2002. Workshop proceedings on the development of spatially structured population models for Northwestern Hawaiian Islands lobster resources. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Cent. Admin Rep. H-02-01, 27 p.

2001 PUBLICATIONS

Brill, R. W. and M. E. Lutcavage.

2001. Understanding environmental influences on movements and depth distributions of tunas and billfishes can significantly improve population assessments. In Proceedings of the Charleston Bump Colloquium, Charleston, South Carolina, October 28-29, 1999 (George R. Sedberry, ed.) American Fisheries Society Symposium 25:179-198.

Brill, R., Y. Swimmer, C. Taxboel, K. Cousins, T. Lowe.

2001. Gill and intestinal Na⁺-K⁺ ATPase activity, and estimated maximal osmoregulatory

costs, in three high energy-demand teleosts: yellowfin tuna (*Thunnus albacares*), skipjack tuna (*Katsuwonus pelamis*), and dolphin fish (*Coryphaena hippurus*), Mar. Biol. 138(5):935-944.

Caretta, J. V., J. Barlow, K. A. Forney, M. M. Muto, and J. Baker.

2001. U.S. Pacific marine mammal stock assessments: 2001. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SWFSC-317, 280 p.

Donohue, M. J., R. C. Boland, C. M. Sramek, and G. A. Antonelis.

2001. Derelict fishing gear in the Northwestern Hawaiian Islands: Diving surveys and debris removal in 1999 confirm threat to coral reef ecosystems. Mar. Poll. Bull. 42(12):1301-1312.

Henderson, J. R.

2001. A pre- and post-MARPOL Annex V summary of Hawaiian monk seal entanglements and marine debris accumulation in the Northwestern Hawaiian Islands, 1982-1998. Marine Pollution Bulletin 42(7):584-589.

Horrocks, J. A., L. A. Vermeer, B. Krueger, M. Coyne, B. A. Schroeder, and G. H. Balazs.

2001. Migration routes and destination characteristics of post-nesting hawksbill turtles satellite-tracked from Barbados, West Indies. Chelonian Conservation and Biology, 4(1):107-114.

Ito, R. Y. and W. A. Machado.

2001. Annual report of the Hawaii-based longline fishery for 2000. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Cent. Admin Rep. H-01-07, 55 p.

Johanos, T. C., and J. D. Baker.

2001. The Hawaiian monk seal in the Northwestern Hawaiian Islands, 1999. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SWFSC-310, 130 p.

Leonard, C. L., R. R. Bidigare, M. P. Seki, J. J. Polovina.

2001. Interannual mesoscale physical and biological variability in the North Pacific Central Gyre. Progress in Oceanography 49:227-244.

Lluch-Belda, D., R. M. Laurs, D. B. Lluch-Cota, and S. E. Lluch-Cota.

2001. Long-term trends of interannual variability in the California current system. In: J. Olfe, Editor, California Cooperative Oceanic Fisheries Investigations Reports, p. 129-144. California Cooperative Oceanic Fisheries Investigations, La Jolla, California.

O'Malley, J. M., and E. W. Glazier.

2001. Motivations, satisfaction and expenditures of recreational pelagic charter fishing patrons in Hawaii. SOEST 01-03, JIMAR Contribution 01-339.

- Polovina, J. J., E. Howell, D. R. Kobayashi, M. P. Seki.
2001. The transition zone chlorophyll front, a dynamic global feature defining migration and forage habitat for marine resources. *Progress in Oceanography* 49:469-483.
- Pan, M., P. Leung, and S. G. Pooley.
2001. A decision support model for fisheries management in Hawaii: a multilevel and multiobjective programming approach. *North American Journal of Fisheries Management* 21:293-309.
- Quackenbush, S. L., R. N. Casey, R. J. Murcek, T. A. Paul, T. M. Work, C. J. Limpus, A. Chaves, L. duToit, J. V. Perez, A. A. Aguirre, T. R. Spraker, J. A. Horrocks, L. A. Vermeer, G. H. Balazs, and J. W. Casey.
2001. Quantitative analysis of herpesvirus sequences from normal tissue and fibropapillomas of marine turtle with real-time PCR. *Virology* 287, 105-111.
- Seki, M. P.
2001. Distribution patterns of pelagic cephalopods through the Subarctic and Subtropical Frontal Zones in the central North Pacific. M. Sc. thesis, Univ. Hawaii, Honolulu, Hawaii, 102 p.
- Seki, M. P., and J. J. Polovina.
2001. Food webs: ocean gyre ecosystems. In: J. H. Steele, K. K. Turekian, and S. A. Thorpe (editors), *Encyclopedia of Ocean Sciences*, Vol. 4, pp. 1959-1965. Academic Press, San Diego, CA.
- Seki, M. P., and J. J. Polovina.
2001. Ocean gyre ecosystems. In: *Encyclopedia of Ocean Sciences*, Steven A. Thorpe and Karl K. Turekian, editors, Volume 4, p. 1959-1965. Academic Press.
- Seki, M. P., J. J. Polovina, R. E. Brainard, R. R. Bidigare, C. L. Leonard, and D. G. Foley.
2001. Biological enhancement at cyclonic eddies tracked with GOES thermal imagery in Hawaiian waters. *Geophysical Research Letters*, Vol. 28, No. 8, 1583-1586 p.
- Skillman, R. A.
2001. Pacific billfishes. In K. Hinman (ed.), *Getting Ahead of the Curve. Conserving the Pacific Ocean's Tunas, Swordfish, Billfishes and Sharks*, p. 31-34. Marine Fisheries Symposium No. 16, Monterey Bay, California, November 4-6, 1996. National Coalition for Marine Conservation, Leesburg, Virginia.
- Walsh, W. A., P. Kleiber.
2001. Generalized additive model and regression tree analyses of blue shark (*Prionace*

glauca) catch rates by the Hawaii-based commercial longline fishery. Fish. Res. 53 (2001) 115-131.

Work, T. M., R. A. Rameyer, G. H. Balazs, C. Cray, and S. P. Chang.
2001. Immune status of free-ranging green turtles with fibropapillomatosis from Hawaii. J. Wild. Dis. 37:574-581.

Administrative Reports

DiNardo, G. T. and R. Marshall.

2001. Status of lobster stocks in the Northwestern Hawaiian Islands, 1998-2000. Southwest Fish. Cent. Honolulu Lab., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-01-04, 47 p.

Hamm, D. C., N. T. S. Chan, C. J. Graham, and M. M. C. Quach.

2001. Fishery statistics of the western Pacific. Volume XVI. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396, Southwest Fish. Sci. Cent. Admin. Rep. H-01-05.

Kleiber, P., Y. Takeuchi, and H. Nakano.

2001. Calculation of plausible maximum sustainable yield (MSY) for blue sharks (*Prionace glauca*) in the North Pacific. Southwest Fish. Cent. Honolulu Lab., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-01-02, 10 p.

Lutz, P. L., C. Cray, and P. L. Sposato.

2001. Studies of the association between immunosuppression and fibropapillomatosis within three habitats of *Chelonia mydas*. Southwest Fish. Cent. Honolulu Lab., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-01-01C, 24 p.

McCracken, Marti L.

2001. Estimation of albatross take in the Hawaiian longline fisheries. Southwest Fish. Cent. Honolulu Lab., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-01-03, 26 p.

Abstracts

Anderson, Y., J. Landsberg, G. H. Balazs, and R. Carthy.

2001. The relationship between the potential tumor-promoting dinoflagellates *Prorocentrum* spp. and green turtle fibropapillomatosis: Preliminary results of a comparison between Hawaii

and Florida. [Abstr.] For the Twenty-first Annual Symposium on Sea Turtle Biology and Conservation, Philadelphia, Pennsylvania, February 24-28, 2001.

Baker, J. D. and T. C. Johanos.

2001. First survey of Hawaiian monk seals in the main Hawaiian Islands. [Abstr.] For the 2001 Marine Mammal Conference, Vancouver, British Columbia, Canada, November 2001.

Balazs, G. H., G. L. Nakai, S. Hau, M. J. Grady, and W. G. Gilmore.

2001. Year 2000 nesting of a captive-reared Hawaiian green turtle tagged and released as a yearling. [Abstr.] For the Twenty-first Annual Symposium on Sea Turtle Biology and Conservation, Philadelphia, Pennsylvania, February 24-28, 2001.

Balazs, G. H., M. R. Rice, N. Hoffman, S. K. K. Murakawa.

2001. Green turtle foraging and resting habitats at Midway Atoll: significant findings over 25 years, 1975-2000. [Abstr.] For the Twenty-first Annual Symposium on Sea Turtle Biology and Conservation, Philadelphia, Pennsylvania, February 24-28, 2001.

Bidigare, R. R., M. P. Seki, C. L. Leonard, C. Benitez-Nelson, R. D. Vaillancourt, and J. J. Polovina.

2001. Influence of cyclonic eddies on new production rates in the vicinity of the Hawaiian Islands. [Abstr.] For the Tenth Anniversary Meeting, North Pacific Marine Science Organization, Victoria, B.C., Canada, October 5-13, 2001.

Blanchard, M., B. Aldridge, C. Funke, D. King, T. Goldstein, F. Gulland, G. Antonelis, A. A. Aguirre, R. Braun, J. Reif, L. Dalton, S. Dickerson, and J. Stott.

2001. Can blind monk seals help us see? [Abstr.] In: Proceedings of the American Association of Zoo Veterinarians, International Association for Aquatic Animal Medicine, C. K. Baer and R. A. Patterson, editors. Joint Conference New Orleans, Louisiana, September 17-21, 2000.

Boland, R. E., M. Donohue, N. Young, and R. Ohrel.

2001. Derelict fishing net characteristics: Aids to identification and source. [Abstr.] Pacific Congress on Science and Technology, San Francisco, California, July 2001.

Brainard, R. E., J. Kenyon, S. Holzwarth, R. Hoeke, D. Foley, R. Mirshak, and K. Wong.

2001. A multidisciplinary program to assess, monitor, map, and protect the coral reef ecosystems of the U.S. Pacific Islands. [Abstr.] Ocean Sciences Meeting, Honolulu, Hawaii, February 2002.

Brill, R. W., M. K. Musyl, C. H. Boggs, D. S. Curran, M. P. Seki, and T. K. Kazama.

2001. Horizontal and vertical movements of bigeye tuna (*Thunnus obesus*) near the main Hawaiian Islands determined using archival tags. [Abstr.] For the annual Tuna Conference, Lake Arrowhead, California, May 2001.

- Curran, D. S. and C. H. Boggs.
2001. The use of intrinsic rebound potential indices in comparing disparate species groups in the central Pacific. [Abstr.] For the annual Tuna Conference, Lake Arrowhead, California, May 2001.
- Donohue, M., R. Boland, C. Sramek, and G. Antonelis.
2001. Efforts to remove and identify marine debris in the Northwestern Hawaiian Islands. [Abstr.] Pacific Congress on Science and Technology, San Francisco, California, July 2001.
- Donohue, M. J. and R. E. Brainard.
2001. A comprehensive effort to mitigate marine debris and restore coral reef habitat in the Northwestern Hawaiian Islands. [Abstr.] For Oceans 2001, Pelagic Fisheries Session, Hilton Hawaiian Village, Honolulu, Hawaii, November 5-8, 2001.
- Firing, J., R. Brainard, and E. Firing.
2001. Ten years of shipboard ADCP Data along the Northwestern Hawaiian Islands. [Abstr.] 2002 Ocean Sciences, Hawaii Convention Center, Honolulu, Hawaii, February 2002.
- Foley, D., R. Mirshak, R. Brainard, and J. Sibert.
2001. Development of an ocean atlas and applications to studying and monitoring coral reef ecosystems in the Pacific Basin. [Abstr.] Ocean Sciences meeting, Honolulu, February 2002.
- Keuper-Bennett, U., P. Bennett, and G. H. Balazs.
2001. The eyes have it: Manifestation of ocular tumours in the green turtle ohana of Honokowai, West Maui, Hawaii. [Abstr.] For the Twenty-first Annual Symposium on Sea Turtle Biology and Conservation, Philadelphia, Pennsylvania, February 24-28, 2001.
- Parker, D. M., G. H. Balazs, S. K. K. Murakawa, and J. J. Polovina.
2001. Post-hooking survival of sea turtles taken by pelagic longline fishing in the North Pacific. [Abstr.] For the Twenty-first Annual Symposium on Sea Turtle Biology and Conservation, Philadelphia, Pennsylvania, February 24-28, 2001.
- Parker, D. M., P. Dutton, S. Eckert, D. R. Kobayashi, J. J. Polovina, D. Dutton, and G. H. Balazs.
2001. Transpacific migration along oceanic fronts by loggerhead turtles released from Sea World San Diego. [Abstr.] For the Twenty-first Annual Symposium on Sea Turtle Biology and Conservation, Philadelphia, Pennsylvania, February 24-28, 2001.
- Seki, M. P. and A. Yatsu.
2001. The distribution and migration of Pacific pomfret, *Brama japonica*, in the North Pacific. [Abstr.] For the Tenth Anniversary Meeting, North Pacific Marine Science Organization,

Victoria, B.C., Canada, October 5-13, 2001.

Seki, M. P., R. R. Bidigare, R. Lumpkin, P. Flament, and J. J. Polovina.

2001. Mesoscale cyclonic eddies and their interest to pelagic fisheries in Hawaiian waters. [Abstr.] For the Tenth Anniversary Meeting, North Pacific Marine Science Organization, Victoria, B.C., Canada, October 5-13, 2001.

Seki, M. P., R. R. Bidigare, R. Lumpkin, P. Flament, and J. J. Polovina.

2001. Mesoscale cyclonic eddies and their interest to pelagic fisheries in Hawaiian waters. [Abstr.] For Oceans 2001, Pelagic Fisheries Session, Hilton Hawaiian Village, Honolulu, Hawaii, November 5-8, 2001.

Seki, M. P., R. R. Bidigare, R. Lumpkin, J. J. Polovina, D. R. Kobayashi, P. Flament, and D. Foley

2001. Mesoscale cyclonic eddies and pelagic fisheries in Hawaiian waters. [Ext. Abstr.] For proceedings of Oceans 2001, Hilton Hawaiian Village, Honolulu, Hawaii, November 5-7, 2001.

Swimmer, J. Y., R. W. Brill, L. Mailloux, and C. Moyes.

2001. Metabolic biochemistry of cardiac muscle in three species of tuna with widely divergent temperature and oxygen tolerances. [Abstr.] For the annual Tuna Conference, Lake Arrowhead, California, May 2001.

Swimmer, J. Y., R. W. Brill.

2001. Research directed at mitigating sea turtle-longline interactions. [Abstr.] For the annual Tuna Conference, Lake Arrowhead, California, May 2001.

2000 PUBLICATIONS

Aguirre, A. A., T. R. Spraker, A. Chaves, L. du Toit, W. Eure, and G. H. Balazs.

2000. Fibropapillomatosis in olive ridley turtles in Costa Rica. In Proceedings of the 18th International Sea Turtle Symposium (A. Abreu-Grobois, R. Briseño-Dueñas, R. Márquez-Millán, L. Sarti-Martínez, eds.), 3-7 March 1998. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SEFSC-436, pp. 111.

Aguirre, A. A.

2000. Rescue, rehabilitation and release of marine turtles with fibropapillomatosis: An epidemiologic perspective. In Proceedings of the 18th International Sea Turtle Symposium (A. Abreu-Grobois, R. Briseño-Dueñas, R. Márquez-Millán, L. Sarti-Martínez, eds.), 3-7 March 1998. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SEFSC-436, pp. 111.

- Aquirre, A. A., and G. H. Balazs.
2000. Blood biochemistry values of green turtles, *Chelonia mydas*, with and without fibropapillomatosis. Comparative Haematology International 10:132-137.
- Balazs, G. H., S. K. K. Murakawa, D. M. Ellis, and A. A. Aguirre.
2000. Manifestation of fibropapillomatosis and rates of growth of green turtles at Kaneohe Bay in the Hawaiian Islands. In Proceedings of the 18th International Sea Turtle Symposium (A. Abreu-Grobois, R. Briseño-Dueñas, R. Márquez-Millán, L. Sarti-Martínez, eds.), 3-7 March 1998. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SEFSC-436, pp. 112-113.
- Balazs, G. H., L. K. Katahira, and D. M. Ellis.
2000. Satellite tracking of hawksbill turtles nesting in the Hawaiian Islands. In Proceedings of the 18th International Sea Turtle Symposium (A. Abreu-Grobois, R. Briseño-Dueñas, R. Márquez-Millán, L. Sarti-Martínez, eds.), 3-7 March 1998. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SEFSC-436, pp. 279-281.
- Balazs, G. H. and D. M. Ellis.
2000. Satellite telemetry of migrant male and female green turtles breeding in the Hawaiian Islands. In Proceedings of the 18th International Sea Turtle Symposium (A. Abreu-Grobois, R. Briseño-Dueñas, R. Márquez-Millán, L. Sarti-Martínez, eds.), 3-7 March 1998. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SEFSC-436, pp. 281-283.
- Balazs, G. H., M. Rice, S. K. K. Murakawa, and G. Watson.
2000. Growth rates and residency of immature green turtles at Kiholo Bay, Hawaii. In Proceedings of the 18th International Sea Turtle Symposium (A. Abreu-Grobois, R. Briseño-Dueñas, R. Márquez-Millán, L. Sarti-Martínez, eds.), 3-7 March 1998. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SEFSC-436, pp. 283-285.
- Bjorndal, K. A., J. A. Wetherall, A. B. Bolten, and J. A. Mortimer.
2000. Green turtle nesting at Tortuguero, Costa Rica: An encouraging trend. In Proceedings of the 18th International Sea Turtle Symposium (A. Abreu-Grobois, R. Briseño-Dueñas, R. Márquez-Millán, L. Sarti-Martínez, eds.), 3-7 March 1998. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SEFSC-436, pp. 52.
- Bustamente, R. H., G. K. Reck, B. I. Ruttenberg, and J. J. Polovina.
2000. The Galapagos spiny lobster fishery. In: Spiny lobsters: fisheries and culture, B. F. Phillips, and J. Kittaka (eds.). Fishing News Books, pp. 210-220.
- DeMartini, E. E., J. H. Uchiyama, and H. A. Williams.
2000. Sexual maturity, sex ratio, and size composition of swordfish, *Xiphias gladius*, caught

by the Hawaii-based pelagic longline fishery. Fish. Bull. 98:489-506.

Donohue, M. J., D. P. Costa, M. E. Goebel, and J. D. Baker.

2000. The ontogeny of metabolic rate and thermoregulatory capabilities of northern fur seal, *Callorhinus ursinus*, pups in air and water. J. Exp. Biol. 203:1003-1016.

Dutton, P., G. Balazs, A. Dizon, and A. Barragán.

2000. Genetic stock identification and distribution of leatherbacks in the Pacific: Potential effects on declining populations. In Proceedings of the 18th International Sea Turtle Symposium (A. Abreu-Grobois, R. Briseño-Dueñas, R. Márquez-Millán, L. Sarti-Martínez, eds.), 3-7 March 1998. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SEFSC-436, pp. 38-39.

Ellis, D. M., G. H. Balazs, W. G. Gilmartin, S. K. K. Murakawa, and L. K. Katahira.

2000. Short-range reproductive migrations of hawksbill turtles in the Hawaiian Islands as determined by satellite telemetry. In Proceedings of the 18th International Sea Turtle Symposium (A. Abreu-Grobois, R. Briseño-Dueñas, R. Márquez-Millán, L. Sarti-Martínez, eds.), 3-7 March 1998. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SEFSC-436, pp. 252-253.

Forney, K. A., J. Barlow, M. M. Muto, M. Lowry, J. Baker, G. Cameron, J. Mobley, C. Stinchcomb, and J. V. Carretta.

2000. U.S. Pacific marine mammal stock assessments: 2000. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SWFSC-300, 276 p.

Humphreys, R. L., Jr.

2000. Otolith-based assessment of recruitment variation in a North Pacific seamount population of armorhead *Pseudopentaceros wheeleri*. Mar. Ecol. Prog. Ser. 204:213-223.

Johanos, T. C. and J. D. Baker.

2000. The Hawaiian monk seal in the Northwestern Hawaiian Islands, 1998. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SWFSC-292, 125 p.

Laurs, R. M. and J. J. Polovina.

2000. Satellite remote sensing: an important tool in fisheries oceanography. In Paul J. Harrison and Timothy R. Parson, eds. Fisheries oceanography: an integrative approach to fisheries ecology and management. Blackwell Science, pp. 146-157.

Lu, Y., A. A. Aguirre, T. M. Work, G. H. Balazs, V. R. Nerurkar, and R. Yanagihara.

2000. Identification of a small, naked virus in tumor-like aggregates in cell lines derived from a green turtle, *Chelonia mydas*, with fibropapillomas. J. Virol. Methods 86:25-33.

- Lu, Y., Y. Qigui, J. P. Zamzow, Y. Wang, G. S. Losey, G. H. Balazs, V. R. Nerurkar, and R. Yanagihara.
2000. Detection of green turtle herpesviral sequence in saddleback wrasse *Thalassoma duperrey*: a possible mode of transmission of green turtle fibropapilloma. *J. Aquat. Anim. Health* 12:58-63.
- Parrish, F. A., M. P. Craig, T. J. Ragen, G. J. Marshall, and B. M. Buhleier.
2000. Identifying diurnal foraging habitat of endangered Hawaiian monk seals using a seal-mounted video camera. *Mar. Mammal Sci.*, Vol. 16, No. 2.
- Polovina, J. J.
2000. The lobster fishery in the Northwestern Hawaiian Islands. *In: Spiny lobsters: fisheries and culture*, B. F. Phillips, and J. Kittaka (eds.) Fishing News Books, 2nd edition, pp. 98-104.
- Polovina, J. J., D. R. Kobayashi, D. M. Ellis, M. P. Seki, and G. H. Balazs.
2000. Turtles on the edge: movement of loggerhead turtles (*Caretta caretta*) along oceanic fronts in the central North Pacific, 1997-1998. *Fish. Oceanogr.* 9(1):71-82.
- Polovina, J. J., M. P. Seki, and E. Howell.
2000. Sensors detect biological change in mid-latitude North Pacific. *EOS*, 81(44):519.
- Rice, M. R., G. H. Balazs, L. Hallacher, W. Dudley, G. Watson, K. Krussell, and B. Larson.
2000. Diving, basking, and foraging patterns of a subadult green turtle at Punalu'u, Hawaii. *In Proceedings of the 18th International Sea Turtle Symposium* (A. Abreu-Grobois, R. Briseño-Dueñas, R. Márquez-Millán, L. Sarti-Martínez, eds.), 3-7 March 1998. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SEFSC-436, pp. 229-231.
- Russell, D. J. and G. H. Balazs.
2000. Identification manual for dietary vegetation of the Hawaiian green turtle *Chelonia mydas*. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SWFSC-294, 49 p.
- Swimmer, J. Y. and G. H. Balazs.
2000. The biology of basking in the green turtle (*Chelonia mydas*). *In Proceedings of the 18th International Sea Turtle Symposium* (A. Abreu-Grobois, R. Briseño-Dueñas, R. Márquez-Millán, L. Sarti-Martínez, eds.), 3-7 March 1998. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SEFSC-436, pp. 233-234.
- Work, T. M., G. H. Balazs, R. A. Rameyer, S. P. Chang, J. Berestecky.
2000. Assessing humoral and cell-mediated immune response in Hawaiian green turtles, *Chelonia mydas*. *Vet. Immunol. Immunopathol.* 74:179-194.

Zamzow, J. P.

2000. Cleaning symbioses between Hawaiian reef fishes and green sea turtles, *Chelonia mydas*. In Proceedings of the 18th International Sea Turtle Symposium (A. Abreu-Grobois, R. Briseño-Dueñas, R. Márquez-Millán, L. Sarti-Martínez, eds.), 3-7 March 1998. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SEFSC-436, pp. 235.

Zug, G. R. and G. H. Balazs.

2000. Estimating age in Hawaiian green sea turtles by skeletochronology. In Proceedings of the 18th International Sea Turtle Symposium (A. Abreu-Grobois, R. Briseño-Dueñas, R. Márquez-Millán, L. Sarti-Martínez, eds.), 3-7 March 1998. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SEFSC-436, pp. 127-128.

Administrative Reports

Aguirre, A. A.

2000. Health assessment and disease status studies of the Hawaiian monk seal (*Monachus schauinslandi*). Southwest Fish. Cent. Honolulu Lab., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-00-01, 44 p.

Boggs, C., P. Dalzell, T. Essington, M. Labelle, D. Mason, R. Skillman, and J. Wetherall.

2000. Recommended overfishing definitions and control rules for the Western Pacific Regional Fishery Management Council's pelagic fishery management plan. Southwest Fish. Cent. Honolulu Lab., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-00-05, 18 p.

Kawamoto, K. E. and S. G. Pooley.

2000. Annual report of the 1998 western Pacific lobster fishery (with preliminary 1999 data). Southwest Fish. Cent. Honolulu Lab., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-00-02, 38 p.

Kleiber, P. and C. Boggs

2000. Workshop on reducing sea turtle takes in longline fisheries-Miami, August 31-September 1, 1999. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396, Southwest Fish. Sci. Cent. Admin. Rep. H-00-09, 16 p.

McCracken, Marti L.

2000. Estimation of sea turtle take and mortality in the Hawaiian longline fisheries. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-00-06, 29 p.

Moffitt, R. B. and D. R. Kobayashi.

2000. Recommended overfishing definitions and control rules for the Western Pacific Regional Fishery Management Council's bottomfish and seamount groundfish fishery management plan. Southwest Fish. Cent. Honolulu Lab., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-00-03, 8 p.

Walsh, W. A.

2000. Comparisons of fish catches reported by fishery observers and in logbooks of Hawaii-based commercial longline vessels. Southwest Fish. Cent. Honolulu Lab., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-00-07, 45 p.

Work, T. M., R. A. Rameyer, G. H. Balazs, C. Cray, and S. P. Chang.

2000. Immune status of free-ranging green turtles from Hawaii with fibropapillomatosis. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396, Southwest Fish. Sci. Cent. Admin. Rep. H-00-11C, 12 p.

Abstracts

Aguirre, A. A., J. V. Pérez, T. R. Spraker, P. H. Saldaña, B. Zimmerman, E. A. Padilla, E. M. L. Reyes, G. H. Balazs.

2000. Studies of marine turtle fibropapillomatosis in Mexico: an international collaboration of research and training. [Abstr.] To be presented at the Proceedings of the 20th Annual Symposium on Sea Turtle Biology and Conservation, February 29 through March 4, 2000, Orlando, Florida.

Balazs, G. H., M. R. Rice, and P. A. Bennett.

2000. Remote interactive imaging: implementation of a seaturtlecam system in the Hawaiian Islands. [Abstr.] To be presented at the Proceedings of the 20th Annual Symposium on Sea Turtle Biology and Conservation, February 29 through March 4, 2000, Orlando, Florida.

Balazs, G. H., S. K. K. Murakawa, D. M. Parker, M. R. Rice.

2000. Adaptation of captive-reared green turtles released into Hawaiian coastal foraging habitats, 1990-1999. [Abstr.] To be presented at the Proceedings of the 20th Annual Symposium on Sea Turtle Biology and Conservation, February 29 through March 4, 2000, Orlando, Florida.

Bennett, P. A., U. Keuper-Bennett, and G. H. Balazs.

2000. Remigration and residency of Hawaiian green turtles in coastal waters of Honokowai, West Maui. [Abstr.] To be presented at the Proceedings of the 20th Annual Symposium on Sea Turtle Biology and Conservation, February 29 through March 4, 2000, Orlando, Florida.

- Bennett, P. A., U. Keuper-Bennet, and G. H. Balazs.
2000. Changing the landscape: evidence for detrimental impacts to coral reefs by Hawaiian marine turtles. [Abstr.] To be presented at the Proceedings of the 20th Annual Symposium on Sea Turtle Biology and Conservation, February 29 through March 4, 2000, Orlando, Florida.
- Bidigare, R. R., C. L. Leonard, D. G. Foley, M. P. Seki, and J. J. Polovina.
2000. Eddy formation and new production rates in the vicinity of the Hawaiian Islands. [Abstr.] To be presented at the NASA SeaWiFS Science Team Meeting, May 2000.
- Bidigare, R. R., C. L. Leonard, D. G. Foley, M. P. Seki, and J. J. Polvina.
2000. Eddy formation and new production rates in the vicinity of the Hawaiian Islands. [Abstr.] To be presented at the Ocean Optics XV, Musée Océnographique, Monaco, October 16-20, 2000.
- Brainard, R. E., M. P. Seki, J. J. Polovina, D. G. Foley.
2000. The role of oceanography on aggregation and vulnerability of bigeye tuna in the Hawaii longline fishery from satellite, moored, and shipboard time series. [Abstr.] To be presented at the Annual Tuna Conference, Lake Arrowhead, California, May 22-25, 2000.
- Brainard, R. E., D. G. Foley, M. J. Donohue, and R. C. Boland.
2000. Accumulation of marine debris by ocean currents threatens coral reef ecosystems of the Hawaiian Islands and elsewhere. [Abstr.] To be presented at the 9th International Coral Reef Symposium, Bali, October 23-27, 2000.
- Brainard, R. E., J. E. Maragos, E. E. DeMartini, M. F. Parke, R. Wass, F. A. Parrish, R. C. Boland, and R. Newbold.
2000. An overview of a joint NOAA/USFWS rapid ecological assessment of the coral reef ecosystems of the U.S. line and Phoenix Islands. [Abstr.] To be presented at the 9th International Coral Reef Symposium, Bali, October 23-27, 2000.
- Harrington, K. A., M. R. Rice, and G. H. Balazs.
2000. Habitat use of mixohaline fish ponds by green turtles at Kiholo Bay, Hawaii. [Abstr.] To be presented at the Proceedings of the 20th Annual Symposium on Sea Turtle Biology and Conservation, February 29 through March 4, 2000, Orlando, Florida.
- Kikkawa, B.S., and J. W. Cushing.
2000. Variations in the growth of the bigeye tuna (*Thunnus obesus*) in the central Western Pacific. [Abstr.] For the International Meeting of the Standing Committee for Tuna and Billfishes, Noumea, New Caledonia, July 5-12, 2000.
- Kikkawa, B. S., D. P. Harris, J. W. Cushing, and D. C. Hamm.

2000. Status of the Guam fresh tuna transshipment fishery, 1990-98: Declining trends. [Abstr.] For the International Meeting of the Standing Committee for Tuna and Billfishes, Noumea, New Caledonia, July 5-12, 2000.

Parker, D. M., W. Cooke, G. H. Balazs.

2000. Dietary components of pelagic loggerhead turtles in the North Pacific Ocean. [Abstr.] To be presented at the Proceedings of the 20th Annual Symposium on Sea Turtle Biology and Conservation, February 29 through March 4, 2000, Orlando, Florida.

Parrish, F. A., C. K. Abernathy, G. Marshall, and B. Buhleier.

2000. Deepwater coral beds as foraging habitat for the endangered Hawaiian monk seal. [Abstr.] To be presented at the 9th International Coral Reef Symposium, Bali, October 23-27, 2000.

Parrish, F., M. Ridgley.

2000. A multiobjective approach for identifying no-take zones in large-scale coral reef ecosystems. [Abstr.] To be presented at the 9th International Coral Reef Symposium, Bali, October 23-27, 2000.

Quackenbush, S. L., J. V. Pérez, A. A. Aguirre, J. A. Horrocks, G. H. Balazs, R. N. Casey, and J. W. Casey.

2000. Prevalence and phylogeny of herpesvirus sequences from normal and fibropapilloma tissues of green and olive ridley turtles sampled at Oaxaca, Mexico and Barbados, West Indies. [Abstr.] To be presented at the Proceedings of the 20th Annual Symposium on Sea Turtle Biology and Conservation, February 29 through March 4, 2000, Orlando, Florida.

Rice, M. R., D. K. Kopra, and G. H. Balazs.

2000. Ecology and behavior of green turtles basking at Kiholo Bay, Hawaii. [Abstr.] To be presented at the Proceedings of the 20th Annual Symposium on Sea Turtle Biology and Conservation, February 29 through March 4, 2000, Orlando, Florida.

Work, T. M., R. A. Rameyer, G. H. Balazs, C. Cray, S. P. Chang.

2000. Immunology of green turtle fibropapillomatosis in Hawaii. To be presented at the Proceedings of the 20th Annual Symposium on Sea Turtle Biology and Conservation, February 29 through March 4, 2000, Orlando, Florida.

1999 PUBLICATIONS

Aguirre, A. A., J. S. Reif, G. A. Antonelis.

1999. Hawaiian monk seal epidemiology plan: health assessment and disease status studies. U.S. Dep. Commer., NOAA Tech Memo., NOAA-TM-NMFS-SWFSC-280, 63 p.

- Aguirre, A. A., T. R. Spraker, A. Chaves, L. DuToit, W. Eure, and G. H. Balazs.
1999. Pathology of fibropapillomatosis in olive ridley turtles *Lepidochelys olivacea* nesting in Costa Rica. *J. Aquat. Anim. Health* 11:283-289.
- Balazs, G. H.
1999. Factors to consider in the tagging of sea turtles. In K. L. Eckert, K. A. Bjorndal, F. A. Abreu-Grobois, and M. Donnelly (eds.), *Research and Management Techniques for the Conservation of Sea Turtles*, p. 101-109. IUCN/SSC Marine Turtle Specialist Group Publication No. 4.
- Bjorndal, K. A., Wetherall, J. A., Bolten, A. B., and Mortimer, J. A.
1999. Twenty-six years of green turtle nesting at Tortuguero, Costa Rica: an encouraging trend. *Conserv. Biol.* 13(1):126-134.
- Bower, J. R., M. P. Seki, R. E. Young, K. A. Bigelow, J. Hirota, and Pierre Flament.
1999. Cephalopod paralarvae assemblages in Hawaiian Island waters. *Mar. Ecol. Prog. Ser.* 185:203-212.
- Brainard, R. E., M. J. McPhaden, and R. W. Garwood, Jr.
1999. The diurnal cycle of high-frequency temperature variability at 0°, 140°W on seasonal and interannual time scales. In COARE98: Proceedings of a Conference on the TOGA Coupled Ocean-Atmosphere Response Experiment (COARE), Boulder, Colorado, USA, July 7-14, 1998, p. 326-327/World Climate Research Programme WCRP-107, World Meteorological Organization WMO/TD-No. 940.
- Brill, R. W., B. A. Block, C. H. Boggs, K. A. Bigelow, E. V. Freund, and D. J. Marcinek.
1999. Horizontal movements and depth distribution of large adult yellowfin tuna (*Thunnus albacares*) near the Hawaiian Islands, recorded using ultrasonic telemetry: Implications for the physiological ecology of pelagic fishes. *Mar. Biol.* 133:395-408.
- Craig, M. P., and T. J. Ragen.
1999. Body size, survival, and decline of juvenile Hawaiian monk seals, *Monachus schauinslandi*. *Mar. Mammal. Sci.* 15(3):786-809.
- DeMartini, E. E.
1999. Intertidal spawning. In M. H. Horn, K. L. M. Martin, and M. A. Chotkowski (eds.). *Intertidal Fishes: Life in Two Worlds*, pp. 143-164. Academic Press, San Diego, 399 p.
- DeMartini, E. E., and B. B. Lau.
1999. Morphometric criteria for estimating sexual maturity in two snappers, *Etelis carbunculus* and *Pristipomoides sieboldii*. *Fish. Bull.* 97(3):449-458.

- DeMartini, E. E., B. C. Mundy, and J. J. Polovina.
1999. Status of nearshore sports and commercial fishing and impacts on biodiversity in the tropical insular Pacific. In L. G. Eldredge, J. E. Maragos, P. F. Holthus, and H. F. Takeuchi (eds.) *Marine and Coastal Biodiversity in the Tropical Island Pacific Region*, pp. 339-355.
- DiNardo, G. T., and J. A. Wetherall.
1999. Accounting for uncertainty in the development of harvest strategies for the Northwestern Hawaiian Islands lobster trap fishery. *ICES Journal of Marine Science*, 56:943-951.
- DiNardo, G. T., and J. A. Wetherall.
1999. The application of precautionary principles to the Northwestern Hawaiian island lobster fishery: life in the trenches. [Abstr.] In Victor R. Restrepo (ed.), *Proceedings of the Fifth National NMFS Stock Assessment Workshop: providing scientific advice to implement the precautionary approach under the Magnuson-Stevens Fishery Conservation and Management Act*, Key Largo, Florida, p. 23. U.S. Dep. Commer., NOAA Tech Memo., NOAA-TM-NMFS F/SPO-40.
- Eberhardt, L. L., R. A. Garrott, and B. L. Becker.
1999. Using trend indices for endangered species. *Mar. Mammal Sci.* 15(3):766-785.
- Forney, Karin A., Marcia M. Muto, and Jason Baker.
1999. U.S. Pacific marine mammal stock assessment: 1999. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SWFSC-282, 62 p.
- Hamilton, M. S.
1999. A system for classifying small boat fishermen in Hawaii. *Marine Resource Economics* 13:289-291.
- Hassett, R. P., and G. W. Boehlert.
1999. Spatial and temporal distributions of copepods to leeward and windward of Oahu, Hawaiian Archipelago. *Mar. Biol.* 134(3):571-584.
- Herbst, L. H., E. R. Jacobson, P. A. Klein, G. H. Balazs, R. Moretti, T. Brown, and J. P. Sundberg.
1999. Comparative pathology and pathogenesis of spontaneous and experimentally induced fibropapillomas of green turtles (*Chelonia mydas*). *Vet Pathol.* 36:551-564.
- Holland, K. N., P. Kleiber, and S. M. Kajiura.
1999. Different residence times of yellowfin tuna, *Thunnus albacares*, and bigeye tuna, *T. obesus*, found in mixed aggregations over a seamount. *Fish. Bull.* 97:392-395.
- Johanos, T. C., and T. J. Ragen.

1999. The Hawaiian Monk Seal in the Northwestern Hawaiian Islands, 1996. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SWFSC-259, 134 p.

1999. The Hawaiian Monk Seal in the Northwestern Hawaiian Islands, 1997. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SWFSC-262, 131 p.

Kitchell, J. F., C. H. Boggs, Xi He, and C. J. Walters.

1999. Keystone predators in the central Pacific. In Ecosystem approaches for fisheries management, Alaska Sea Grant College Program, AK-SG-99-01, p. 665-683.

Landsberg, J. H., G. H. Balazs, K. A. Steidinger, D. G. Baden, T. M. work, and D. J. Russell.

1999. The potential role of natural tumor promoters in marine turtle fibropapillomatosis. J. Aquat. Anim. Health 11:199-210.

Leung, P., Pan, M., Pi, F., S. T. Nakamoto, and S. G. Pooley.

1999. A bilevel and bicriterion programming model of Hawaii's multifishery. In U. Chakravorty and J. Sibert (eds.), Ocean-scale management of pelagic fisheries: economic and regulatory issues, p. 41-63. Proceedings of an international workshop organized by the Pelagic Fisheries Research Program, Joint Institute for Marine and Atmospheric Research, University of Hawaii at Manoa, Honolulu, Hawaii, November 12-13, 1997. SOEST 99-01, JIMAR 99-321.

Lu, Y., V. R. Nerurkar, A. A. Aguirre, T. M. Work, G. H. Balazs, and R. Yanagihara.

1999. Establishment and characterization of 13 cell lines from a green turtle (*Chelonia mydas*) with fibropapillomas. In Vitro Cell. Dev. Biol.-Animal 35:389-393.

Lutcavage, M. E., R. W. Brill, G. B. Skomal, B. C. Chase, and P. W. Howey.

1999. Results of pop up satellite tagging of spawning size class fish in the Gulf of Maine: Do North Atlantic bluefin tuna spawn in the mid-Atlantic? Can. J. Fish. Aquat. Sci. 56:173-177.

Pan, M. L., P. S. Leung, J. Fang, S. T. Nakamoto, and S. G. Pooley.

1999. A multilevel and multiobjective programming model for the Hawaii fishery: model documentation and application results, vi, 84 p., SOEST 99-04, JIMAR Contribution 99-324.

Parrish, F. A., and T. L. Martinelli-Liedtke.

1999. Some preliminary findings on the nutritional status of the Hawaiian spiny lobster (*Panulirus marginatus*). Pac. Sci. 53:361-366.

Polovina, J. J., and W. R. Haight.

1999. Climate variation, ecosystem dynamics, and fisheries management in the Northwestern Hawaiian Islands. In: Ecosystem approaches for fisheries management, Alaska Sea Grant

College Program, AK-SG-99-01, p. 23-32.

Polovina, J. J., P. Kleiber, and D. R. Kobayashi.

1999. Application of TOPEX-POSEIDON satellite altimetry to simulate transport dynamics of larvae of spiny lobster, *Panulirus marginatus*, in the Northwestern Hawaiian Islands, 1993-1996. Fish. Bull. 97:132-143.

Pultz, S., D. O'Daniel, S. Krueger, H. McSharry, and G. Balazs.

1999. Marine turtle study on Tinian, Mariana Islands. Micronesica 32(1):85-94.

Quackenbush, S. L., C. J. Limpus, A. A. Aguirre, T. R. Spraker, G. H. Balazs, R. N. Casey, and J. W. Casey.

1999. Prevalence and phylogeny of herpes virus sequences from normal and fibropapilloma tissues of green and loggerhead turtles sampled at Moreton Bay, Australia. Proceedings of the Nineteenth Annual Symposium on Sea Turtle Biology and Conservation, March 2-6, 1999, South Padre Island, Texas.

Rice, M. R., and G. H. Balazs.

1999. Obake turtles of Hawaii. Proceedings of the nineteenth Annual Symposium on Sea Turtle Biology and Conservation, March 2-6, 1999, South Padre Island, Texas.

Schroeder, B. A., and G. H. Balazs.

1999. Design and field testing of an internal helix antenna satellite transmitter for sea turtles. Proceedings of the Nineteenth Annual Symposium on Sea Turtle Biology and Conservation, March 2-6, 1999, South Padre Island, Texas.

Sharma, K. R., A. Peterson, S. G. Pooley, S. T. Nakamoto, and P. S. Leung.

1999. Economic contributions of Hawaii's fisheries iv, 40 p. SOEST 99-08, JIMAR Contribution 99-327.

Uchiyama, J. H., E. E. DeMartini, and H. A. Williams.

1999. Length-weight interrelationships for swordfish, *Xiphias gladius* L., caught in the central North Pacific. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SWFSC-284, 82 p.

Wibbels, T., G. H. Balazs, D. M. Ellis, and J. Hanson.

1999. Sand temperatures of green turtle nesting beaches in the Hawaiian archipelago. Proceedings of the Nineteenth Annual Symposium on Sea Turtle Biology and Conservation, March 2-6, 1999, South Padre Island, Texas.

1999. Quantification of tumor severity and hematology in green turtles afflicted with

fibropapillomatosis in the Hawaiian Islands. Proceedings of the Nineteenth Annual Symposium on Sea Turtle Biology and Conservation, March 2-6, 1999, South Padre Island, Texas.

1999. Relating tumor score to hematology in green turtles with fibropapillomatosis in Hawaii. J. Wildl. Dis. 35:804-807.

Wyneken, J., G. H. Balazs, S. K. K. Murakawa, and Y. Anderson.

1999. Size differences in hind limbs and carapaces of hatchling green turtles (*Chelonia mydas*) from Hawaii and Florida, USA. Chelonian Conservation and Biology 3(3):491-495.

Administrative Reports

Bjorndal, K. A., A. B. Bolten, and B. Riewald.

1999. Development and use of satellite telemetry to estimate post-hooking mortality of marine turtles in the pelagic longline fisheries. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin Rep. H-99-03C, 25 p.

Hamm, D. C., N. T. S. Chan, and M. M. C. Quach.

1999. Fishery statistics of the western Pacific, Vol. XIV. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin Rep. H-99-04, var. p.

Ito, R. Y., and W. A. Machado.

1999. Annual report of the Hawaii-based longline fishery for 1998. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin Rep. H-99-06, 62 p.

Laurs, R. M., and Associates.

1999. 1999 Program Review Honolulu Laboratory. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin Rep. H-99-05, 25 p.

Work, T.

1999. Evaluating methods to assess humoral and cell mediated immune response in captive green turtles (*Chelonia mydas*). Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-99-02C, 16 p.

Abstracts

Aguirre, A. A., J. S. Reif, and G. A. Antonelis.

1999. Seriologic evidence of zoonotic diseases in the Hawaiian monk seal; are they limiting population recovery? [Abstr.] To be presented at the World Marine Mammal Conference 13th Biennial Conference, Maui, Hawaii, 28 November-3 December 1999.

Antonelis, G.A., J.D. Baker, and T.C. Johanos.

1999. Population dynamics and status of the endangered Hawaiian monk seal (*Monachus schauinslandi*). [Abstr.] To be presented at the World Marine Mammal Conference 13th Biennial Conference, Maui, Hawaii, 28 November-3 December 1999.

Baker, J.D. and T.C. Johanos.

1999. Effects of research handling and instrumentation on Hawaiian monk seals (*Monachus schauinslandi*). [Abstr.] To be presented at the World Marine Mammal Conference 13th Biennial Conference, Maui, Hawaii, 28 November-3 December 1999.

Becker, B.L. and T.C. Johanos.

1999. Trends in Hawaiian monk seal (*Monachus schauinslandi*) pupping site fidelity and juvenile survival at Laysan Island. [Abstr.] To be presented at the World Marine Mammal Conference 13th Biennial Conference, Maui, Hawaii, 28 November-3 December 1999.

Boland, R.C.

1999. Surveys of submerged marine debris and impacts on endangered monk seals at two Hawaiian atolls. [Abstr.] To be presented at the World Marine Mammal Conference 13th Biennial Conference, Maui, Hawaii, 28 November-3 December 1999.

Craig, M., M. Shaw, G. Mo, and M. Rutishauser.

1999. Aggressive male behavior and shark predation dramatically increase mortality of Hawaiian monk seal pups at french frigate shoals. [Abstr.] To be presented at the World Marine Mammal Conference 13th Biennial Conference, Maui, Hawaii, 28 November-3 December 1999.

Johanos, T.C., B.L. Becker, T.J. Ragen, and J.D. Baker.

1999. Population impacts of absolute and functional sex ratio fluctuations on the endangered Hawaiian monk seal (*Monachus schauinslandi*) at Laysan Island. [Abstr.] To be presented at the World Marine Mammal Conference 13th Biennial Conference, Maui, Hawaii, 28 November-3 December 1999.

Parrish, F. A.

1999. Use of technical diving to survey forage habitat of the endangered Hawaiian monk seal. [Abstr.] To be presented at the Technical Diving Forum, American Association of Underwater Scientists, Monterey, California, November 3, 1999.

- Parrish, F. A., M. Craig, K. Abernathy, G. Marshall, and B. Buhleier.
1999. Use of deepwater coral beds by monk seals at French Frigate Shoals, Hawaii. [Abstr.] To be presented at the World Marine Mammal Conference 13th Biennial Conference, Maui, Hawaii, 28 November-3 December 1999.
- Polovina, J. J., E. Howell, D. Kobayashi, and M. P. Seki.
1999. The transition zone chlorophyll front, a dynamic, global feature defining migration and forage habitat for marine resources. [Abstr.] For Beyond El Niño Conference March 2000.
- Polovina, J.P., J.D. Baker, and G.A. Antonelis.
1999. Do Hawaiian monk seals benefit from El Niño? [Abstr.] To be presented at the World Marine Mammal Conference 13th Biennial Conference, Maui, Hawaii, 28 November-3 December 1999.
- Reif, J. S., A. A. Aguirre, A. M. Bachand, L. S. Kashinsky, and G. A. Antonelis.
1999. Morphometry, hematology and serum chemistry in subpopulations of the Hawaiian monk seal (*Monachus schauinslandi*). [Abstr.] To be presented at the World Marine Mammal Conference 13th Biennial Conference, Maui, Hawaii, 28 November-3 December 1999.
- Ryon, B. C., R. C. Braun, and L. P. Dalton.
1999. Effects of midazolam and its antagonist flumazenil in the Hawaiian monk seal (*Monachus schauinslandi*). [Abstr.] To be presented at the World Marine Mammal Conference 13th Biennial Conference, Maui, Hawaii, 28 November-3 December 1999.
- Seki, M. P., J. J. Polovina, Robert R. Bidigare, and Donald R. Kobayashi.
1999. A physical-biological characterization of the central North Pacific subtropical frontal system during winter-spring. [Abstr.] For the 10th Ocean Sciences Meeting (American Geophysical Union), San Antonio, Texas, January 24-28, 2000.
- Stewart, B., M.P. Craig, and G.A. Antonelis.
1999. Foraging habitats and conservation of Hawaiian monk seals. [Abstr.] To be presented at the World Marine Mammal Conference 13th Biennial Conference, Maui, Hawaii, 28 November-3 December 1999.
- Wilcox, M., Buzitis, J., Woodward, L., Atkinson, S., and Antonelis, G.
1999. Survey for select xenobiotics in the free-ranging Hawaiian monk seal (*Monachus schauinslandi*). [Abstr.] To be presented at the World Marine Mammal Conference 13th Biennial Conference, Maui, Hawaii, 28 November-3 December 1999.

1998 PUBLICATIONS

Aguirre, A. A.

1998. Fibropapillomas in marine turtles: A workshop at the 18th Annual Symposium on Biology and Conservation of Sea Turtles. Mar. Turt. Newsl. 82:10-12.

Aguirre, A. A., T. R. Spraker, G. H. Balazs, and B. Zimmerman.

1998. Spirorchidiasis and fibropapillomatosis in green turtles from the Hawaiian Islands. J. Wildl. Dis. 34(1):91-98.

Aguirre, A. A., G. H. Balazs, S. Murakawa, and T. R. Spraker.

1998. Oropharyngeal fibropapillomas in Hawaiian green turtles (*Chelonia mydas*): Pathological and epidemiological perspectives. In S. P. Epperly and J. Braun (comps.), Proceedings of the Proceedings of the Seventeenth Annual Sea Turtle Symposium, March 4-8, 1997, Orlando, Florida, p. 113. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-SEFSC-415.

Atkinson, S., T. J. Ragen, W. G. Gilmartin, B. L. Becker, and T. C. Johanos.

1998. Use of a GnRH agonist to suppress testosterone in wild male Hawaiian monk seals (*Monachus schauinslandi*). Gen. Comp. Endocrinol. 112:178-182.

Balazs, G. H.

1998. Sea turtles. In S. P. Juvik and J. O. Juvik (eds.), Atlas of Hawai'i, 3d edition, p. 115. Department of Geography, University of Hawaii at Hilo. University Press.

Balazs, G. H., and D. M. Ellis.

1998. Satellite telemetry of migrant male and female green turtles breeding in the Hawaiian Islands. In R. Byles and Y. Fernandez (comps.), Proceedings of the Sixteenth Annual Symposium on Sea Turtle Biology and Conservation, February 28-March 1, 1996, Hilton Head, South Carolina. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-SEFSC-412.

1998. Satellite tracking of hawksbill turtles nesting in the Hawaiian Islands. In R. Byles and Y. Fernandez (comps.), Proceedings of the Sixteenth Annual Symposium on Sea Turtle Biology and Conservation, February 28-March 1, 1996, Hilton Head, South Carolina. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-SEFSC-412.

Balazs, G. H. S. K. K. Murakawa, J. Wyneken, and B. A. Schroeder.

1998. Differences in flipper size and esophagus morphology of green turtles from Hawaii and Florida. In S. P. Epperly and J. Braun (comps.), Proceedings of the Proceedings of the Seventeenth Annual Sea Turtle Symposium, March 4-8, 1997, Orlando, Florida, p. 127-129. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-SEFSC-415.

- Balazs, G. H., M. Rice, S. K. K. Murakawa, and G. Watson.
1998. Growth rates and residency of immature green turtles at Kiholo Bay, Hawaii. In R. Byles and Y. Fernandez (comps.), Proceedings of the Sixteenth Annual Symposium on Sea Turtle Biology and Conservation, February 28-March 1, 1996, Hilton Head, South Carolina. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-SEFSC-412.
- Balazs, G. H., W. Puleloa, E. Medeiros, S. K. K. Murakawa, and D. M. Ellis.
1998. Growth rates and incidence of fibropapillomatosis in Hawaiian green turtles utilizing coastal foraging pastures at Palau, Molokai. In S. P. Epperly and J. Braun (comps.), Proceedings of the Proceedings of the Seventeenth Annual Sea Turtle Symposium, March 4-8, 1997, Orlando, Florida, p. 130-132. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-SEFSC-415.
- Boness, D. J., M. P. Craig, L. Honigman, and S. Austin.
1998. Fostering behavior and the effect of female density in Hawaiian monk seals, *Monachus schauinslandi*. J. Mammal. 79(3):1060-1069.
- Casey, R. N., S. L. Quackenbush, T. M. Work, G. H. Balazs, P. R. Bowser, and J. W. Casey.
1998. Identification of retroviruses associated with green sea turtles from the Hawaiian Islands. In S. P. Epperly and J. Braun (comps.), Proceedings of the Proceedings of the Seventeenth Annual Sea Turtle Symposium, March 4-8, 1997, Orlando, Florida, p. 23. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-SEFSC-415.
- Cheng, I.-J., and G. H. Balazs.
1998. The post-nesting migration of the green turtles that nest at Wan-An Island, PengHu Archipelago, Taiwan. In S. P. Epperly and J. Braun (comps.), Proceedings of the Proceedings of the Seventeenth Annual Sea Turtle Symposium, March 4-8, 1997, Orlando, Florida, p. 29-32. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-SEFSC-415.
- DeMartini, E. E.
1998. How might recruitment research on coral-reef fishes help manage tropical reef fisheries? Aust. J. Ecol. 23:305-310.
- DeMartini, E. E.
1998. Intertidal spawning. Intertidal Fishes: Life in Two World 8:143-164.
- DiNardo, G. T., and W. Kwock.
1998. Spatiotemporal dynamics of swordfish, *Xiphias gladius*, landings in the Hawaii-based North Pacific pelagic longline fishery. In I. Barrett, O. Sosa-Nishizaki, and N. Bartoo (eds.), Biology and fisheries of swordfish, *Xiphias gladius*: Papers from the International Symposium on Pacific Swordfish, Ensenada, Mexico, December 11-14, 1994, p. 51-64. U. S. Dept,

- Commer., NOAA Tech. Rep. NMFS 142.
Dutton, P. H., G. H. Balazs, and A. E. Dizon.
1998. Genetic stock ID of turtles caught in the Pacific longline fishery. *In* S. P. Epperly and J. Braun (comps.), Proceedings of the Proceedings of the Seventeenth Annual Sea Turtle Symposium, March 4-8, 1997, Orlando, Florida, p. 43-44. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-SEFSC-415.
- Ellis, D. M., and G. H. Balazs.
1998. The use of the generic mapping tools program to plot ARGOS tracking data. *In* S. P. Epperly and J. Braun (comps.), Proceedings of the Proceedings of the Seventeenth Annual Sea Turtle Symposium, March 4-8, 1997, Orlando, Florida, p. 166-168. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-SEFSC-415.
- Gilmartin, W. G., and G. A. Antonelis.
1998. Recommended recovery actions for the Hawaiian monk seal population at Midway Island. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SWFSC-253, 14 p.
- Hamilton, Marcia.
1998. A system for classifying small boat fishermen in Hawaii. *Marine Resource Economics* 13:289-291.
1998. Cost-earnings study of Hawaii's charter fishing industry, 1996-97. SOEST 98-08. University of Hawaii.
- He, X., and M. Laurs (Synopsis).
1998. Bycatch, discards, finning, and economic value of blue shark in the Hawaii based longline fishery. *In* N. A. Gibble, G. McPherson, and B. Lane (eds.), *Shark Management and Conservation: Proceedings from the Sharks and Man Workshop of the Second World Fisheries Congress*, Brisbane, Australia, August 2, 1996, p. 88-91. Conference and Workshop Series QC98001, Department of Primary Industries, Queensland.
- Ikehara, W., C. Kelley, B. Moffitt, and J. Parrish.
1998. Scientists working together to help save bottomfish. *Hawaii Fishing News* 24(11):14-15.
- Ito, R. Y., and W. Kwock.
1998. The Hawaii-based longline fishery for swordfish, *Xiphias gladius*. *In* I. Barrett, O. Sosa-Nishizaki, and N. Bartoo (eds.), *Biology and fisheries of swordfish, Xiphias gladius: Papers from the International Symposium on Pacific Swordfish*, Ensenada, Mexico, December 11-14, 1994, p. 77-88. U. S. Dep., Commer., NOAA Tech. Rep. NMFS 142, 276 p,

- Lowe, T. E., R. W. Brill, and K. L. Cousins.
1998. Responses of the red blood cells from two high-energy-demand teleosts, yellowfin tuna (*Thunnus albacares*) and skipjack tuna (*Katsuwonus pelamis*) to catecholamines. *J. Comp. Physiol. B* 168:405-418.
- Leung, S., J. Muraoka, S. T. Nakamoto, and S. G. Pooley.
1998. Evaluating fisheries management options in Hawaii using analytic hierarchy process (AHP). *Fish. Res.* 36:171-183.
- McKinnell, S., and M. P. Seki.
1998. Shark bycatch in the Japanese high seas squid driftnet fishery in the North Pacific Ocean. *Fish. Res.* 39:127-138.
- Mundy, B. C.
1998. National issues and threats. In Mac, M. J., P. A. Opler, C. E. Puckett Haecker, and P. D. Doran (eds.), *Status and trends of the nation's biological resources*, Vol. 2, p. 847-855. U.S. Department of the Interior, U. S. Geological Survey, Reston, VA.
- Mundy, B. C.
1998. Taxonomic knowledge—Nonindigenous species. In Mac, M. J., P. A. Opler, C. E. Puckett Haecker, and P. D. Doran (eds.), *Status and trends of the nation's biological resources*, Vol. 2, p. 848-849. U.S. Department of the Interior, U. S. Geological Survey, Reston, VA.
- Mundy, B. C., and A. R. Everson.
1998. Western Pacific oceanic report. In Mac, M. J., P. A. Opler, C. E. Puckett Haecker, and P. D. Doran (eds.), *Status and trends of the nation's biological resources*, Vol. 2, p. 824-844. U.S. Department of the Interior, U. S. Geological Survey, Reston, VA.
- Parrish, F. A., and R. S. Goto.
1997. Patterns of insular shark dynamics based on fishery bycatch and lifeguard surveillance at Oahu, Hawaii 1983-1992. *Bull. Mar. Sci.* 61(3):763-777.
- Polovina, J. J., and W. R. Haight.
1998. Climate variation, ecosystem dynamics, and fisheries management in the northwestern Hawaiian Islands. In G. Holloway, P. Müller, and D. Henderson (eds.), *Biotic impacts of extratropical climate variability in the Pacific: Proceedings 'Aha Huliko'a, Hawaiian winter workshop*, University of Hawaii at Manoa, Honolulu, Hawaii, January 25-29, 1998, p. 105-108. SOEST Special Production, Univ. Hawaii, Honolulu, Hawaii.

Pooley, S. G.

1998. Fisheries. In S. P. Juvik and J. O. Juvik (eds.), *Atlas of Hawai'i*, Department of Geography, 3d edition, p. 252-254. University of Hawaii at Hilo. University Press.

Pooley, S. G. in collaboration with the NMFS Limited Access Working Group.

1998. Issues and options in designing and implementing limited access programs in marine fisheries. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SWFSC-252, 73 p.

Pooley, S. G.

1998. Issues and options in designing and implementing limited access programs in marine fisheries. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SWFSC-252, 73 p.

1998. Community ownership and natural resource management: fisheries. (Paper presented to the annual conference of the International Association for the Study of Common Property: Vancouver, British Columbia).

1998. "Fisheries" in *Atlas of Hawaii*. Third Edition. Sonia P. Juvik and James O. Juvik (eds.). University of Hawaii Press: Honolulu, HI.

Pooley, S. G., and Ralph E. Townsend.

1998. A community corporation approach to management of marine fisheries: with some applications to Hawaii. In John A. Baden and Douglas S. Noonan, *Managing the Commons*. (Bloomington, Indiana; Indiana University Press).

Quackenbush, S. L., T. M. Work, G. H. Balazs, R. N. Casey, J. Rovnak, A. Chaves, L. duToit, J. D. Baines, C. R. Parrish, P. R. Bowser, and J. W. Casey.

1998. Three closely related herpesviruses are associated with fibropapillomatosis in marine turtles. *Virol.* 246:392-399.

Randall, J. E., and B. C. Mundy.

1998. *Balistes polylepis* and *Xanthichthys caeruleolineatus*, two large triggerfishes (Tetraodontiformes: Balistidae) from the Hawaiian Islands, with a Key to Hawaiian Species. *Pac. Sci.* 52(4):322-333.

Skillman, R. A.

1998. Central Pacific swordfish, *Xiphias gladius*, fishery development, biology, and research. In I. Barrett, O. Sosa-Nishizaki, and N. Bartoo (eds.), *Biology and fisheries of swordfish, Xiphias gladius: Papers from the International Symposium on Pacific Swordfish*, Ensenada, Mexico, December 11-14, 1994, p. 101-124. U. S. Dept. Commer., NOAA Tech. Rep.

NMFS 142.

Skillman, R. A., P. Kleiber.

1998. Estimation of sea turtle take and mortality in the Hawai'i-based longline fishery, 1994-96. U.S. Dep. Commer., NOAA Tech. Memo. NOAA-TM-NMFS-SWFSC-257, 52 p.

Swimmer, J. Y., and G. H. Balazs.

1998. The biology of basking in the green turtle, *Chelonia mydas*. In R. Byles and Y. Fernandez (comps.), Proceedings of the Sixteenth Annual Symposium on Sea Turtle Biology and Conservation, February 28-March 1, 1996, Hilton Head, South Carolina, p. 128-130. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-SEFSC-412.

Uchiyama, J. H., R. A. Skillman, J. D. Sampaga, and E. E. DeMartini.

1998. A preliminary assessment of the use of hard parts to age central Pacific swordfish, *Xiphias gladius*. In I. Barrett, O. Sosa-Nishizaki, and N. Bartoo (eds.), Biology and fisheries of swordfish, *Xiphias gladius*: Papers from the International Symposium on Pacific Swordfish, Ensenada, Mexico, December 11-14, 1994, p. 261-273. U. S. Dept, Commer., NOAA Tech. Rep. NMFS 142.

Wetherall, J. A., G. H. Balazs, and M. Y. Y. Yong.

1998. Statistical methods for green turtle nesting surveys in the Hawaiian Islands. In S. P. Epperly and J. Braun (comps.), Proceedings of the Proceedings of the Seventeenth Annual Sea Turtle Symposium, March 4-8, 1997, Orlando, Florida, p. 278-280. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-SEFSC-415.

Work, T. M., and G. H. Balazs.

1998. Causes of sea turtle mortality in Hawaii. In S. P. Epperly and J. Braun (comps.), Proceedings of the Proceedings of the Seventeenth Annual Sea Turtle Symposium, March 4-8, 1997, Orlando, Florida, p. 291-292. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-SEFSC-415.

Wibbels, T., J. Hanson, G. H. Balazs, Z.-M. Hillis-Starr, and B. Phillips.

1998. Blood sampling techniques for hatchling Cheloniid sea turtles. Herpetol. Rev. 29(4):218-220.

Work, T. M., R. E. Raskin, G. H. Balazs, S. D. Whittaker.

1998. Morphologic and cytochemical characteristics of blood cells from Hawaiian green turtles. Am. J. Vet. Res., 59(10):1252-1257.

Administrative Reports

- Casey, James W.
1998. Retrovirus and herpesvirus associations with fibropapillomatosis of marine turtles. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Cent. Admin. Rep. H-98-07C, 12 p.
- DeMartini, E. E., and P. Kleiber.
1998. Estimated body size at sexual maturity of slipper lobster *Scyllarides squamosus* at Maro Reef and Necker Island (Northwestern Hawaiian Islands), 1986-97. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin Rep. H-98-02, 14 p.
- DeMartini, E. E., and F. A. Parrish.
1998. August 1997 reevaluation of shallow reef fish populations at French Frigate Shoals and Midway Atoll. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-98-12, 27 p.
- DiNardo, G. T., W. R. Haight, and J. A. Wetherall.
1998. Status of lobster stocks in the Northwestern Hawaiian Islands, 1995-97, and outlook for 1998. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin Rep. H-98-05, 35 p.
- Haight, W. R.
1998. Maro Reef juvenile spiny lobster survey, 1993-97. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin Rep. H-98-01, 8 p.
- Hamm, D. C.
1998. Central Western Pacific Fishery Information Network (WPACFIN) three-year plan. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-98-11, 38 p.
- Hamm, D. C., N. T. S. Chan, and M. M. C. Quach.
1998. Fishery statistics of the western Pacific, Volume XIII. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-98-04, 200 p.
- Kleiber, Pierre.
1998. Estimating annual takes and kills of sea turtles by the Hawaiian longline fishery, 1991-97, from observer program and logbook data. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Cent. Admin. Rep. H-98-08, 15 p.

Lu, Yuanan.

1998. Use of polymerase chain reaction amplification for the detection of papillomavirus in tumor tissue of green turtles with fibropapillomas. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Cent. Admin. Rep. H-98-03C, 8 p.

Pooley, S. G., and K. E. Kawamoto.

1998. Annual report of the 1995-97 western Pacific lobster fishery. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Cent. Admin. Rep. H-98-09, 34 p.

Zamzow, Jill P.

1998. Investigation of green turtle fibropapillomatosis and the potential role of cleaner fishes and reef habitat characteristics in disease transmission in Kaneohe Bay, Oahu, Hawaii. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Cent. Admin. Rep. H-98-06C, 15 p.

Abstracts

Aguirre, A. A.

1998. Rescue, rehabilitation and release of marine turtles with fibropapillomatosis: an epidemiologic perspective [Abstr.] For the 18th International Sea Turtle Symposium, March 3-6, 1998, Mazatlan, Mexico.

Aguirre, A. A.

1998. Histopathology of fibropapillomas in olive ridley turtles at Ostional, Costa Rica. [Abstr.] For presentation at the 18th Annual Symposium on Sea Turtle Biology and Conservation, March 3-7, 1998, Mazatlan, Mexico.

Aguirre, A. A.

1998. The Hawaiian monk seal (*Monachus schauinslandi*) epidemiology plan: health and disease considerations in the management of an endangered species. [Abstr.] For presentation at the Wildlife Disease Association Meeting, Madison, Wisconsin, August 9-13, 1998.

Balazs, G. H., S. K. K. Murakawa, D. M. Ellis, and A. A. Aguirre.

1998. Manifestation of fibropapillomatosis and growth rates of green turtles in Kaneohe Bay, Hawaii. [Abstr.] For presentation at the 18th International Sea Turtle Symposium, March 3-6, 1998, Mazatlan, Mexico.

Boggs, C. H., J. F. Kitchell.

1998. ECOSIM modeling of pelagic fishery impacts. [Abstr.] Working document prepared for

the American Institute of Fishery Research Biologists sponsored symposium for the American Fisheries Society Meeting (128th annual meeting), Hartford, Connecticut, August 23-27, 1998.

Dutton, P., G. H. Balazs, A. Dizon, and A. Barragan.

1998. Genetic stock identification and distribution on leatherbacks in the Pacific: Potential effects on declining populations. [Abstr.] For the 18th Annual Symposium on Sea Turtle Biology and Conservation, Mazatlan, Mexico, March 3-7, 1998.

Ellis, D. M., G. H. Balazs, W. G. Gilmartin, and S. K. K. Murakawa.

1998. Short-range reproductive migrations of hawksbill turtles in the Hawaiian Islands as determined by satellite telemetry. [Abstr.] For presentation at the 18th International Sea Turtle Symposium, March 3-6, 1998, Mazatlan, Mexico.

Humphreys, J. R.

1998. Progress in ageing juvenile Pacific swordfish using sagittal otoliths. [Abstr.] For presentation at the 2nd International Symposium on Fish Otolith Research and Application, Bergen, Norway, 20-25 June 1998.

Ito, R. Y.

1998. Catch of albacore by the Hawaii-based longline fishery. [Abstr.] Working document prepared for the 15th North Pacific Albacore Workshop, Nanaimo, British Columbia, Canada, 1997.

Kitchell, J. F., C. H. Boggs, X. He, and C. J. Walters.

1998. Keystone predators in the central Pacific. [Abstract] Paper presented at the Proceedings of the Wakefield Symposium, "Ecosystem Considerations in Fisheries Management," Anchorage, Alaska, September 1998.

Leonard, C. L., R. R. Bidigare, N. L. Ash, and M. P. Seki.

1998. Mesoscale chlorophyll variations in the North Pacific as revealed by shipboard and satellite measurements. [Abstr.] For presentation at the Ocean Optics XIV Meeting, 10-13 November 1998, Kailua-Kona, Hawaii.

Lu, Y., V. R. Nerurkar, A. A. Aguirre, G. H. Balazs, T. M. Work, and R. Yanagihara

1998. In vitro formation of tumor-like aggregates in cell cultures established from green sea turtles (*Chelonia mydas*) with fibropapilloma. [Abstr.] For presentation at the American Society for Virology, 17th Annual Meeting, Vancouver, B.C., Canada, July 11-15, 1998.

Rice, M. R., G. H. Balazs, L. Hallacher, W. Dudley, G. Watson, K. Krussell, B. Larson.

1998. Diving, basking and foraging patterns of a sub-adult green turtle at Punalu'u, Hawaii. [Abstr.] For presentation at the 18th Annual Symposium on Sea Turtle Biology and

Conservation, March 3-7, 1998, Mazatlan, Mexico.

Swimmer, J. Y., G. H. Balazs.

1998. The biology of basking in the green turtle (*Chelonia mydas*). [Abstr.] For presentation at the 18th Annual Symposium on Sea Turtle Biology and Conservation, Mazatlan, Mexico, March 3-7, 1998.

Wibbels, T., J. Hanson, G. Balazs, Z. Hillis-Starr, and B. Phillips.

1998. Blood sampling techniques for hatchling cheloniid sea turtles. *Herpetol. Rev.* 29(4):218-220.

Work, T. M., R. E. Raskin, G. H. Balazs, and S. Whitaker.

1998. Morphologic and cytochemical characteristics of blood cells from the green turtle, *Chelonia mydas*, in the Hawaiian Islands. [Abstr.] For presentation at the 18th Annual Symposium on Sea Turtle Biology and Conservation, Mazatlan, Mexico, March 3-7, 1998.

Zug, G. R., G. H. Balazs.

1998. Estimating age in Hawaiian green sea turtles by skeletochronology. [Abstr.] For presentation at the 18th Annual Symposium on Sea Turtle Biology and Conservation, Mazatlan, Mexico, March 3-7, 1998.

1997 PUBLICATIONS

Antonelis, G.A., and T. J. Ragen.

1997. Habitat conservation and the Hawaiian monk seal. In G. Stone and J. Goebel (eds.) Pinniped populations, eastern North Pacific: status and trends and issues, p. 142-149. American Fisheries Society.

Antonelis, G. A., E. H. Sinclair, R. R. Ream, and B. W. Robson.

1997. Inter-island variation in the diet of female northern fur seals (*Callorhinus ursinus*) in the Bering Sea. *J. Zool. Lond.* 242:435-451.

Balazs, G. H.

1997. Occurrence of oral fibropapillomas in the Hawaiian green turtle: differential disease expression. *Mar. Turt. Newslett.* 76:1-2.

Casey, R. N., S. L. Quackenbush, T. M. Work, G. H. Balazs, P. R. Bowser, and J. W. Casey.

1997. Evidence for retrovirus infections in green turtles *Chelonia mydas* from the Hawaiian islands. *Dis. Aquat. Org.* 31:1-7.

Graczyk, T. C., G. H. Balazs, T. Work, A. A. Aguirre, D. M.

Ellis, S. K. K. Murakawa, and R. Morris. 1997. Cryptosporidium sp. infections in green turtles, Chelonia mydas, as a potential source of marine waterborne oocysts in the Hawaiian Islands. Appl. Environ. Microbiol. 63(7):2925-2927.

Grant, G. S., P. Craig, and G. H. Balazs.

1997. Notes on juvenile hawksbill and green turtles in American Samoa. Pac. Sci. 51:48-53.

He, X, K. A. Bigelow, and C. H. Boggs.

1997. Cluster analysis of longline sets and fishing strategies within the Hawaii-based fishery. Fish. Res. 31:147-158.

Johanos, T. C., and T. J. Ragen.

1997. The Hawaiian monk seal in the Northwestern Hawaiian Islands, 1995. U.S. Dep. Commer., NOAA Tech. Memo., NOAA-TM-NMFS-SWFSC-241, 121 p.

Kretzmann, M. B., W. G. Gilmartin, A. Meyer, G. P. Zegers, S. R. Rain, B. F. Taylor, and D. P. Costa.

1997. Low genetic variability in the Hawaiian monk seal: Conservation implications. Conserv. Biol. 11:482-490.

Laurs, R. M.

1997. Overview of satellite remote sensing applications in fisheries research. In G. W. Boehlert, and J. D. Schumacher (eds), Changing oceans and changing fisheries: environmental data for fisheries research and management: a workshop, p. 9-16. NOAA Tech. Memo. NOAA-TM-NMFS-SWFSC-239.

Mundy, B. C., and H. G. Moser.

1997. Development of early stages of pelagic armorhead *Pseudopentaceros wheeleri* with notes on juvenile *PS. Richardsoni* and larval *Histiopterus typus* (Pisces, Percoidei, Pentacerotidae). Bull. Mar. Sci. 61(2):241-269.

Niethammer, K. R., G. H. Balazs, J. S. Hatfield, G. L. Nakai, and J. L. Megyesi.

1997. Reproductive biology of the green turtle (Chelonia mydas) at Tern Island, French Frigate Shoals, Hawai'i. Pac. Sci. 51:36-47.

Parrish, F. A., and R. S. Goto.

1997. Patterns of insular shark dynamics based on fishery bycatch and lifeguard surveillance at Oahu, Hawaii 1983-1992. Bull. Mar. Sci. 61(3):763-777.

Parrish, F. A., E. E. DeMartini, and D. M. Ellis.

1997. Nursery habitat in relation to production of juvenile pink snapper, Pristipomoides filamentosus, in the Hawaiian Archipelago. Fish. Bull. 95:137-148.

Polovina, J. J.

1997. Utilization of marine science for fisheries management. In Proceedings of the International Symposium held at the 1997 Annual Meeting of the Oceanographic Society of Japan, Tsukuba, Japan, April 1997, p. 24-26.

Williams, H. A., and Lowe, M. K.

1997. Growth rates of four Hawaiian deep slope fishes: a comparison of methods for estimating age and growth from otolith microincrement widths. Can. J. Fish. Aquat. Sci. 54:126-136.

Administrative Reports

Brill, R., K. Cousins, and P. Kleiber.

1997. Test of the feasibility and effects of long-term intramuscular implantation of archival tags in pelagic fishes using scale model tags and captive juvenile yellowfin tuna (Thunnus albacares). Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-97-11, 12 p.

DeMartini, E. E., and F. A. Parrish.

1997. August-September 1996 reevaluation of shallow reef fish populations at French Frigate Shoals and Midway Atoll. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-97-05, 22 p.

Ito, R. Y., and W. A. Machado.

1997. Annual report of the Hawaii-based longline fishery for 1996. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin Rep. H-97-12, 48 p.

Hamm, D. C., N. T. S. Chan, and M. M. C. Quach.

1997. Fishery statistics of the western Pacific, Volume XII. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-97-03, 200 p.

Kawamoto, K. E.

1997. Northwestern Hawaiian Islands bottomfish fishery, 1995. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-97-06, 27 p.

Kawamoto, K. E.
1997. Northwestern Hawaiian Islands bottomfish fishery, 1996. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-97-09, 46 p.

Ostazeski, Joseph.
1997. The deepwater shrimp fishery of the Northern Mariana Islands. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-97-10C, 44 p.

Abstracts

Abernathy, K. J., M. C. Craig, T. J. Ragen, and D. B. Siniff.
1997. Hawaiian monk seal pelagic habitat use at French Frigate Shoals, Hawaii. [Abstr.] World Marine Mammal Conference, Monaco, January 20-24, 1998.

Antonelis, G. A.
1997. Foraging ecology of the Hawaiian monk seal: Plan of investigations. [Abstr.] World Marine Mammal Conference, Monaco, January 20-24, 1998.

Craig, M. C., F. A. Parrish, T. J. Ragen, G. Marshall, B. Buhleier, and K. Fuchs.
1997. Underwater behavior of adult male Hawaiian monk seals instrumented with crittercams. [Abstr.] World Marine Mammal Conference, Monaco, January 20-24, 1998.

Henderson, J. R.
1997. Entanglement of Hawaiian monk seals in marine debris, 1982-96, and the effects of Marpol Annex V. [Abstr.] World Marine Mammal Conference, Monaco, January 20-24, 1998.

Parrish, F. A., M. C. Craig, T. J. Ragen, G. Marshall, B. Buhleier, and K. Fuchs.
1997. Foraging habitat of the adult Hawaiian monk seal at French Frigate Shoals, Hawaii. [Abstr.] World Marine Mammal Conference, Monaco, January 20-24, 1998.

1996 PUBLICATIONS

Aguirre, A. A., T. Graczyk, and G. H. Balazs,
1996. ELISA test for detection of anti-blood fluke immunoglobins in Hawaiian green turtles. In J. A. Keinath, D. E. Barnard, J. A. Musick, and B. A. Bell (comps.), Proceedings of the Fifteenth Annual Symposium on Sea Turtle Biology and Conservation, February 20-25, 1995, Hilton Head, South Carolina, p. 5. U.S. Dep. Commer. NOAA Tech. Memo. NMFS-

SEFSC-387.

Balazs, G. H,

1996. Behavioral changes within the recovering Hawaiian green turtle population. In J. A. Keinath, D. E. Barnard, J. A. Musick, and B. A. Bell (comps.), Proceedings of the Fifteenth Annual Symposium on Sea Turtle Biology and Conservation, February 20-25, 1995, Hilton Head, South Carolina, p. 16-21. U.S. Dep. Commer. NOAA Tech. Memo. NMFS-SEFSC-387.

1996. He La Honu--Turtle Day 1995: In celebration of Hawaiian sea turtles. Mar. Turt. Newsol. 74:15-16.

Balazs, G. B., R. K. Miya, and S. C. Beaver.

1996. Procedures to attach a satellite transmitter to the carapace of an adult green turtle, *Chelonia mydas*. In J. A. Keinath, D. E. Barnard, J. A. Musick, and B. A. Bell (comps.), Proceedings of the Fifteenth Annual Symposium on Sea Turtle Biology and Conservation, February 20-25, 1995, Hilton Head, South Carolina, p. 21-26. U.S. Dep. Commer. NOAA Tech. Memo. NMFS-SEFSC-387.

Boehlert, G. W., and B. C. Mundy.

1996. Ichthyoplankton vertical distributions near Oahu, Hawaii, 1985-1986: Data report. U.S. Dep. Commer., NOAA Tech. Memo., NOAA-TM-NMFS-SWFSC-235, 148 p.

Bolten, A. B., K. A. Bjorndal, H. R. Martins, and G. H. Balazs.

1996. Satellite telemetry of pelagic-stage juvenile loggerheads in the eastern Atlantic. In J. A. Keinath, D. E. Barnard, J. A. Musick, and B. A. Bell (comps.), Proceedings of the Fifteenth Annual Symposium on Sea Turtle Biology and Conservation, February 20-25, 1995, Hilton Head, South Carolina, p. 39-41. U.S. Dep. Commer. NOAA Tech. Memo. NMFS-SEFSC-387.

Bolten, A. B., J. A. Wetherall, G. H. Balazs, and S. G. Pooley.

1996. Status of marine turtles in the Pacific Ocean relevant to incidental take in the Hawaii-based pelagic longline fishery. U.S. Dep. Commer., NOAA Tech. Memo., NOAA-TM-NMFS-SWFSC-230, 167 p.

Curran, D. S., C. H. Boggs, and X. He.

1996. Catch and effort from Hawaii's longline fishery summarized by quarters and five degree squares, 1991-1994. U.S. Dep. Commer., NOAA Tech. Memo., NOAA-TM-NMFS-SWFSC-225, 68 p.

DeMartini, E. E.

1996. Sheltering and foraging substrate uses of the arc-eye hawkfish *Paracirrhites arcatus* (Pisces: Cirrhitidae). Bull. Mar. Sci. 58:826-837.

DeMartini, E. E., and D., T. J. Donaldson.

1996. Color morph-habitat relations in the arc-eye hawkfish *Paracirrhites arcatus* (Pisces: Cirrhitidae). Copeia 1996(2): 362-371.

DeMartini, E. E., F. A. Parrish, and D. M. Ellis.

1996. Barotrauma-associated regurgitation of food: implications for diet studies of Hawaiian pink snapper, *Pristipomoides filamentosus* (family Lutjanidae). Fish. Bull. 94:250-256.

DeMartini, E. E., F. A. Parrish, and J. D. Parrish.

1996. Interdecadal change in reef fish populations at French Frigate Shoals and Midway Atoll, Northwestern Hawaiian Islands: Statistical power in retrospect. Bull. Mar. Sci. 58:826-837.

Dutton, P. H., and G. H. Balazs.

1996. Simple biopsy techniques for sampling skin for DNA analysis of sea turtles. In J. A. Keinath, D. E. Barnard, J. A. Musick, and B. A. Bell (comps.), Proceedings of the Fifteenth Annual Symposium on Sea Turtle Biology and Conservation, February 20-25, 1995, Hilton Head, South Carolina, p. 78-79. U.S. Dep. Commer. NOAA Tech. Memo. NMFS-SEFSC-387.

Johanos, T. C., and T. J. Ragen.

1996. The Hawaiian monk seal in the Northwestern Hawaiian Islands, 1993. U.S. Dep. Commer., NOAA Tech. Memo., NOAA-TM-NMFS-SWFSC-227, 141 p.

1996. The Hawaiian monk seal in the Northwestern Hawaiian Islands, 1994. U.S. Dep. Commer., NOAA Tech. Memo., NOAA-TM-NMFS-SWFSC-229, 111 p.

Koga, S. K., and G. H. Balazs.

1996. Sex ratios of green turtles stranded in the Hawaiian Islands. In J. A. Keinath, D. E. Barnard, J. A. Musick, and B. A. Bell (comps.), Proceedings of the Fifteenth Annual Symposium on Sea Turtle Biology and Conservation, February 20-25, 1995, Hilton Head, South Carolina, p. 148-152. U.S. Dep. Commer. NOAA Tech. Memo. NMFS-SEFSC-387.

Kushima, J., S. Pooley, and A. Katekaru.

1996. Lobster rumble on the docks. Hawaii Fishing News 22(5):20-21.

Moffitt, R. B., and F. A. Parrish.

1996. Habitat and life history of juvenile Hawaiian pink snapper, *Pristipomoides filamentosus*. Pac. Sci. 50:371-381.

- Moore, M. K., G. T. Seaborn, and G. H. Balazs.
1996. Fatty acids in depot fat of juvenile green turtles feeding at different locations in the Hawaiian Islands. In J. A. Keinath, D. E. Barnard, J. A. Musick, and B. A. Bell (comps.), Proceedings of the Fifteenth Annual Symposium on Sea Turtle Biology and Conservation, February 20-25, 1995, Hilton Head, South Carolina, p. 216-219. U.S. Dep. Commer. NOAA Tech. Memo. NMFS-SEFSC-387.
- Moser, H. G., and B. C. Mundy.
1996. Bramidae: Pomfrets. In H. G. Moser (ed.), The early stages of fishes in the California current region, p. 964-971. California Cooperative Oceanic Fisheries Investigations, Atlas No. 33.
- Mundy, B. C.
1996. Book review: Coastal fishes of Oman, by John E. Randolph. Copeia 1996(4):1064-1066.
- Polovina, J. J.
1996. Decadal variation in the trans-Pacific migration of northern bluefin tuna (*Thunnus thynnus*) coherent with climate-induced change in prey abundance. Fish. Oceanogr. 5:114-119
- Schroeder, B. A., L. M. Ehrhart, and G. H. Balazs.
1996. Post-nesting movements of Florida green turtles: Preliminary results from satellite telemetry. In J. A. Keinath, D. E. Barnard, J. A. Musick, and B. A. Bell (comps.), Proceedings of the Fifteenth Annual Symposium on Sea Turtle Biology and Conservation, February 20-25, 1995, Hilton Head, South Carolina, p. 289. U.S. Dep. Commer. NOAA Tech. Memo. NMFS-SEFSC-387.
- Swimmer, J. Y. B., G. C. Whittow, and G. H. Balazs.
1996. Atmospheric basking in the Hawaiian green turtle, *Chelonia mydas*: Comparisons of tumored and non-tumored turtles. In J. A. Keinath, D. E. Barnard, J. A. Musick, and B. A. Bell (comps.), Proceedings of the Fifteenth Annual Symposium on Sea Turtle Biology and Conservation, February 20-25, 1995, Hilton Head, South Carolina, p. 318-322. U.S. Dep. Commer. NOAA Tech. Memo. NMFS-SEFSC-387.
- Walker, J.
1996. Work and leisure in Hawaii small boat pelagic fishing. M.Sc. thesis, Univ. Washington, Seattle, 78 p..
- Wynneken, J., and G. H. Balazs.
1996. Morphological differences in hind flippers of hatchling green turtles from the Hawaiian

Islands and Florida, USA. In J. A. Keinath, D. E. Barnard, J. A. Musick, and B. A. Bell (comps.), Proceedings of the Fifteenth Annual Symposium on Sea Turtle Biology and Conservation, February 22-25, 1995, Hilton Head, South Carolina, p. 348-349. U.S. Dep. Commer. NOAA Tech. Memo. NMFS-SEFSC-387.

Administrative Reports

Aguirre, A. A., and T. R. Spraker.

1996. Microscopic and ultrastructural evidences of a herpesvirus-like virus in Hawaiian green turtles (*Chelonia mydas*) with fibropapillomatosis. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-96-06C, 14 p.

Aguirre, A. Alonso.

1996. Plasma biochemistry values of green turtles (*Chelonia mydas*) with and without fibropapillomas in the Hawaiian Islands. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-96-10C, 15 p.

DeMartini, E. E., and J. Specker.

1996. Results of a pilot test for the presence of vitellogenins in muscle tissue of swordfish (*Xiphias gladius*) sampled at the Honolulu fish auction. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-96-11, 9 p.

DeMartini, E. E., and F. A. Parrish.

1996. A reevaluation of shallow reef fish populations at French Frigate Shoals and Midway Atoll in September 1995. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-96-01, 20 p.

DiNardo, G. T., and W. R. Haight.

1996. Estimates of lobster handling mortality associated with the Northwestern Hawaiian Islands lobster trap fishery. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-96-03, 7 p.

Hamm, D. C., N. T. S. Chan, and M. M. C. Quach.

1996. Fishery statistics of the western Pacific, Volume XI. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-96-08, var. p.

Herbst, L. H., and P. A. Klein.

1996. Analysis of tumorigenicity and differential gene expression in fibroblast cell lines derived from normal skin and fibropapillomas of the green turtle (*Chelonia mydas*). Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-96-04C, 19 p.

Ito, R. Y., and W. A. Machado.

1996. Annual report of the Hawaii-based longline fishery for 1995. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-96-12, 45 p.

Kikkawa, Bert S.

1996. WPACFIN Island Data Assessment (WIDA) of American Samoa small boat-based fishery survey, 1985-93 and shoreline fishery survey, 1990-93. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-96-09, 56 p.

Pooley, Samuel G.

1996. Economic determination of the optimal number of Northwestern Hawaiian Islands bottomfish vessels. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-96-07, 21 p.

Skillman, R. A., J. A. Wetherall, and G. T. DiNardo.

1996. Recommendations for scoping the sea turtle observer program for the Hawaii-based longline fishery. Honolulu Lab., Southwest Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96822-2396. Southwest Fish. Sci. Cent. Admin. Rep. H-96-02, 12 p.

Abstracts

Balazs, G. H., and D. M. Ellis.

1996. Satellite telemetry of migrant male and female green turtles breeding in the Hawaiian Islands. [Abstr.] Proceedings of the Sixteenth Annual Symposium on Sea Turtle Biology and Conservation, Hilton Head, South Carolina, February 1996.

Balazs, G. H., L. K. Katahira, and D. M. Ellis.

1996. Satelite tracking of hawksbill turtles nesting in the Hawaiian Islands. [Abstr.] Proceedings of the Sixteenth Annual Symposium on Sea Turtle Biology and Conservation, Hilton Head, South Carolina, February 1996.

Balazs, G. H., M. Rice, S. K. K. Murakawa, and G. Watson.

1996. Growth rates and residency of immature green turtles at Kiholo Bay, Hawaii. [Abstr.]

Proceedings of the Sixteenth Annual Symposium on Sea Turtle Biology and Conservation,
Hilton Head, South Carolina, February 1996.

Bigelow, K. A., and C. H. Boggs.

1996. Swordfish longline fleet distribution and performance in relation to satellite observed sea-surface temperature. [Abstr.] PORSEC, British Columbia, August 13-16, 1996,

Bigelow, K. A., X. He, and C. H. Boggs.

1996. Examination of longline fishing strategies and performance using cluster analysis and general additive models (GAMs). [Abstr.] The 47th Tuna Conference, Lake Arrowhead, California, May 20-23, 1996.

Bigelow, K. A., R. N. Nishimoto, R. M. Laurs, and J. A. Wetherall.

1996. Validated age and growth models for North Pacific albacore tuna. [Abstr.] The 47th Tuna Conference, Lake Arrowhead, California, May 20-23, 1996.

Boggs, C. H., and J. Gunn.

1996. External attachment techniques for archival tags. [Abstr.] The 47th Tuna Conference, Lake Arrowhead, California, May 20-23, 1996.

Brill, R., B. Block, C. Boggs, E. Freund, K. Bigelow, and D. Marcinek.

1996. Horizontal and vertical movements of adult yellowfin tuna near the Hawaiian Islands observed by acoustic telemetry. [Abstr.] The 47th Tuna Conference, Lake Arrowhead, California, May 20-23, 1996.

Casey, R. N., S. L. Quackenbush, T. M. Work, G. H. Balazs, P. R. Bowser, and J. W. Casey.

1996. Identification of retroviruses associated with unaffected green sea turtles and turtles with fibropapilloma. [Abstr.] AQUAVET 20th Anniversary Conference, Marine Biological Laboratory, Woods Hole, MA, November 14-17.

Gunn, J., and C. H. Boggs.

1995. A pop-up satellite transmitting archival tag (PSTAT) for studying swordfish movement and behavior. [Abstr.] Pelagics Fisheries Research Program Review, Honolulu, Hawaii, November 28-30, 1995.

He, X.

1996. Spatial, temporal, and gear-related bycatch of blue shark by the Hawaii-based longline fishery. [Abstr.] The 47th Tuna Conference, Lake Arrowhead, California, May 20-23, 1996.

Lombard, K. B., J. D. Allan, and T. J. Ragen.

1996. A population viability analysis (PVA) of the endangered Hawaiian monk seal. [Abstr.] Joint Conference Between The Society for Conservation Biology, The Ecological Society of America, The Society For Tropical Biology, and others, Providence, Rhode Island, August 11-15, 1996.

Polovina, J. J.

1996. Climate and ecosystem in the North Pacific. [Abstr.] IWC meeting, Turtle Bay Hilton, Oahu, Hawaii, March 25-29, 1996.

Polovina, J. J., and D. R. Kobayashi.

1996. Ocean circulation models as a tool to provide oceanographic data needed to achieve sustainable pelagic fisheries. [Abstr.] Tuna Conference, Lake Arrowhead, California, May 20-23, 1996.

IATTC: request documents directly from <http://www.iatc.org/PublicationsENG.htm>

Stock assessment reports:

Status of the tuna and billfish stocks in 2000.

Status of bluefin tuna in the Pacific Ocean.

Status of albacore tuna in the Pacific Ocean.

Status of skipjack tuna in the eastern Pacific Ocean.

Status of bigeye tuna in the eastern Pacific Ocean.

Status of yellowfin tuna in the eastern Pacific Ocean.

Bulletins:

Volume 21:

1. WILD, A., 1994. An evaluation of length-frequency sampling procedures and subsequent data analysis for purse-seine-caught yellowfin tuna in the eastern Pacific Ocean.
2. FOREMAN, TERRY. 1996. Estimates of age and growth, and an assessment of ageing techniques, for northern bluefin tuna, (*Thunnus thynnus*), in the Pacific Ocean.

3. LAUTH, ROBERT R., ROBERT J. OLESON. 1996. Distribution and abundance of larval Scombridae in relation to the physical environment in the northwestern Panama Bight.
4. HINTON, MICHAEL G., HIDEKI NAKANO. 1996. Standardizing catch and effort statistics using physiological, ecological, or behavioral constraints and environmental data, with an application to blue marlin (*Makaira nigricans*) catch and effort data from Japanese longline fisheries in the Pacific.
5. SCHAEFER, KURT M. 1998. Reproductive biology of yellowfin tuna (*Thunnus albacares*) in the eastern Pacific Ocean.
6. UOSAKI, KOJI, WILLIAM H. BAYLIFF. 1999. A review of the Japanese longline fishery for tunas and billfishes in the eastern Pacific Ocean, 1988-1992.
7. SCHAEFER, KURT M. 1999. Comparative study of some morphological features of yellowfin (*Thunnus albacares*) and bigeye (*Thunnus obesus*) tunas.
8. WATTERS, GEORGE, RICHARD DERISO. 2000. Catch per unit of effort of bigeye tuna; a new analysis with regression trees and simulated annealing.

Volume 22:

1. MARGULIES, DANIEL, JEANNE B. WEXLER, and collaborators. 2001. Early life history studies of yellowfin tuna, (*Thunnus albacares*).

Special Reports:

9. DERISO, RICHARD B., WILLIAM H. BAYLIFF, NICHOLAS J. WEBB (editors). 1998. Proceedings of the First World Meeting on Bigeye Tuna.
10. MIZUNO, KEISUKE, MAKOTO OKAZAKI, HIDEKI NAKANO, HIROSHI OKAMURA. 1999. Estimating the underwater shape of tuna longlines with micro-bathythermographs.
11. SCOTT, MICHAEL D., WILLIAM H. BAYLIFF, CLERIDY E. LENNERT-CODY, KURT M. SCHAEFER (compilers). 1999. Proceedings of the International Workshop on the Ecology and Fisheries for Tunas Associated with Floating Objects.
12. 2001. Symposium on world tuna fisheries: commemorating the 50th anniversary of the establishment of the Inter-American Tropical Tuna Commission.
13. BAYLIFF, WILLIAM H. 2001. Organization, functions, and achievements of the Inter-American Tropical Tuna Commission.

Data Reports:

9. OWEN, R.W. 1997. Oceanographic atlas of habitats and larval tunas in the Pacific Ocean off the Azuero Peninsula, Panama.
10. WATTERS, GEORGE M. 1999. Geographical distributions of effort and catches of tunas by purse-seine vessels in the eastern Pacific Ocean during 1965-1998.

Books:

DERISO, RICHARD, TERRANCE QUINN, JEREMY COLLIE, RAY HILBORN, CYNTHIA JONES, BRUCE LINDSAY, ANA PARMA, SAUL SAILA, LYNDY SHAPIRO, STEPHEN JOSEPH SMITH, CARL WALTERS. 1998. Improving Fish Stock Assessments. National Academy Press, Washington D.C.: x, 177 pp.

QUINN, TERRANCE J., II, RICHARD B. DERISO. 1999. Quantitative Fish Dynamics. Oxford University Press, New York: xv, 542 pp.

Other Publications:

HALL, MARTIN A. 1995. Ecological impacts of fishing operations: assessments and mitigation in the eastern Pacific tuna-dolphin interaction. *Europ. Cetacean Soc.*, Eight Ann. Comf., 42-46.

WILD, ALEX, JEANNE B. WEXLER, and TERRY J. FORMAN. 1995. Extended studies of increment deposition rates in otoliths of yellowfin and skipjack tunas. *Bull. Bar. Sci.*, 57 (2): 555-562.

SAYIGH, LAELA S., PETER L. TYACK, RANDALL S. WELLS, MICHAEL D. SCOTT, and A. BLAIR IRVINE. 1995. Sex difference in signature whistle production of free-ranging bottlenose dolphins, *Tursiops truncatus*. *Behav. Ecol. Sociobiol.* 36 (3): 171-177.

LENNERT, C., AND M. A. HALL. 1995. Estimates of incidental mortality of dolphins in the eastern Pacific Ocean tuna fishery in 1993. *Inter. Whaling Comm.*, Rep., 45: 387-390.

HALL, MARTIN A. 1995. Strategies to reduce the incidental capture of marine mammals and other species in fisheries. *Develop. Mar. Biol.*, 4: 537-544.

HALL, MARTIN A. 1995. Bycatches in purse-seine fisheries. Univ. British Columbia, Fish. Centre, Res. Rep., 2 (1) 53-58.

HALL, MARTIN A. 1995. A classification of bycatch problems and some approaches to their solutions. Univ. British Columbia, Fish. Centre, Res. Rep., 2 (1): 65-74.

CHILDERS, JOHN, and FORREST R. MILLER. 1995. Summary of the 1994 U.S. North and South Pacific albacore troll fisheries. U.S. Nat. Mar. Fish. Serv., Admin. Rep., LJ-95-15:iv, 57 pp.

MATE, BRUCE R., KELLEY A ROSSBACK, SHARON L. NIEUKIRK, RANDALL S. WELLS, A. BLAIR IRVINE, MICHAEL D. SCOTT, and ANDREW J READ. 1995. Satellite monitored movements and dive behavior of a bottlenose dolphin. (*Tursiops truncatus*) in Tampa Bay, Florida. Mar. mammal Sci., 11 (4): 452-463.

TROLLEY, K. A., A. J. READ, R. S. WELLS, K.W. URIAN, M.D. SCOTT, A.B. IRVINE, and A. A. HOHN. 1995. Sexual dimorphism in wild bottlenose dolphins (*Tursiops truncatus*) from Sarasota, Florida. Journal Mammal., 76 (4): 1190-1198.

SCOTT, MICHAEL. 1995. Dolphin mortality takes a plunge. The Pilot, 13:6.

JOSEPH, JAMES. 1995. Summing up-tuna in the 21st century. INFOFISH International, 6/95: 14-15. SCHAEFER, KURT M. 1996. Spawning time, frequency, and batch fecundity of yellowfin tuna, *Thunnus albacares*, near Clipperton Atoll in the eastern Pacific Ocean. U.S. Nat. mar. Fish. Serv., Fish Bull., 94 (1): 98-112.

SCOTT, MICHAEL D., RANDALL S. WELLS, and A. BLAIR IRVINE. 1996. Long-term studies of bottlenose dolphins in Florida. Inter. Mar. Biol. Res. Inst. (Kamogawa, Japan), IBI Reports, 6: 73-81.

GRAVES, JOHN E. 1996. Conservation genetics of fishes in the pelagic marine realm. In Avise, John C. and James L. Hamrick (editors), Conservation Genetics: Case Histories from Nature, Chapman and Hall, New York: 335-366.

CHILDERS, JOHN and FORREST R. MILLER. 1996. Summary of the 1995 U.S. North and South Pacific albacore troll fisheries. U.S. Nat. Mar. Fish. Serv., Admin. Rep., LJ-96-07:iii, 53 pp

LENNERT, C., and M. A. HALL. 1996. Estimates of incidental mortality of dolphins in the eastern Pacific Ocean tuna fishery in 1994. Inter. Whaling Comm., Rep., 46:555-558.

HALL, MARTIN A. 1996. On bycatches. Rev. Fish. Biol. Fish., 6: 319-352.

DERIS-O, RICHARD B., J. THOMAS BARNES, LARRY D. JACOBSON, and PABLO R. ARENAS. 1996. Catch-at-age analysis for Pacific sardine (*Sardinops sagax*), 1983-95. Calif. Coop. Ocean. Fish. Inves., Rep., 37: 175-187.

ANGANUZZI, ALEJANDRO A. 1996. Some technical issues regarding the study of fisheries interactions. FAO Fish Tech. Pap., 365: 21-37.

MULLEN, ASHLEY. 1996. A method to estimate movement from changes in estimated distributions, and then revise those estimates (Abstract). FAO Fish. Tech. Pap., 365: 147.

ANGANUZZI, ALEJANDRO A. 1996. An aggregate model of effort distribution for the eastern Pacific tuna fishery. FAO Fish Tech. Pap., 365: 148-161.

MULLEN, ASHLEY J., ALEJANDRO ANGANUZZI, RICHARD B. DERISO, RICHARD G. PUNSLEY and G. JAY WALKER. 1996. A spatial model to investigate the effects on catches of tunas in the eastern Pacific Ocean which might have ensued from curtailment of certain fishing methods. FAO Fish. Tech. Pap., 365: 381-401.

IANELLI, JAMES N. 1996. Studies on the population structure of skipjack tuna, *Katsuwonus pelamis*, in the central and eastern Pacific Ocean: signs of interaction potential using environmental data. FAO Fish. Tech. Pap., 365: 381-401.

TOMLINSON, PATRICK K. 1996. Movement of large bluefin tuna, *Thunnus thynnus*, in the north Pacific Ocean, as determined from the Japanese longline fishery, and implications regarding interactions between the fisheries of the western and eastern Pacific Ocean. FAO Fish. Tech. Pap., 365: 425-459.

BAYLIFF, WILLIAM H. 1996. Indices of abundance of northern bluefin tuna, *Thunnus thynnus*, in the eastern Pacific ocean. FAO Fish., Tech. Pap., 365: 460-475.

MULLEN, ASHLEY J., NOEL BARUT, and BACHTIAR GAFA. 1996. Examination of data relevant to tuna fisheries interactions in the Phillipines and Indonesia. FAO Fish. Tech. Pap., 365: 542-555.

BAYLIFF, WILLIAM. H. 1996. An indexed bibliography of papers on tagging of tunas and billfishes; Supplement 1: FAO Fish. Tech. Pap., 365: 592-612.

SCOTT. MICHAEL D. 1996. The tuna-dolphin controversy. Whalerwatcher, 30 (1): 16-20.

HALL, MARTIN A. 1996. Strategies to reduce the incidental capture of marine mammals and other species in fisheries. In Castro, Kathleen, Tony Corey, Joseph DeAlteris, and Chris Gagnon (editors), Proceedings of the East Coast Bycatch Conference, Rhode Island Sea Grant: 41-43.

ANGANUZZI, A. A., K. A. STOBBERTUP, and N. J. WEBB (editors). 1996. Proceedings of the Sixth Expert Consultation on Indian Ocean Tunas. Indo-Pacific Yuna Develop. Manag. Prog., IPTP Coll. Vol., 9: vi, 373 pp.

JOSEPH, JAMES. 1997. La comision Interamericana del Atun Tropical. Panorama. Aquicola, 3(1): 4.

HINTON, MICHAEL G., RONALD G. TAYLOR, and MICHAEL D. MURPHY. 1997. Use of gonad indices to estimate the status of reproductive activity of female swordfish, *Xiphias gladius*: a validated classification method. U.S. Nat. Mar. Fish. Serv., Fish. Bull., 95 (1): 80-84.

WELLS, RANDALL S. and MICHAEL D. SCOTT. 1997. Seasonal incidence of boat strikes on bottlenose dolphins near Sarasota, Florida. Mar. mammal Sci., 13 (3): 75-80.

MARGUILIES, DANIEL, VERNON P. SCHOLEY, JEANNE B. WEXLER, ROBERT J. OLSON, AKIO NAKAZAWA, and JENNY M SUTER. 1997. Captive spawning of yellowfin tuna and the development of their eggs and larvae. Tuna Newsletter, (U.S. Nat. Mar. Fish. Serv., Southwest Fish Center, LaJolla), 126: 4-5.

CHILDERS, JOHN, AND FORREST R. MILLER. 1997. Summary of the 1996 U.S. North and South Pacific albacore troll fisheries. U.S. Nat. Mar. Fish. Serv., Admin. Rep., LJ-97-07: iii, 52 pp.

HALL, MARTIN A. 1997. Strategic issues in managing fishery bycatches. Solving Bycatch: Considerations for Today and Tomorrow. University of Alaska, Sea Grant College Program, Report 96-03: 29-32.

CHANG, SHU-KAI, and MICHAEL HINTON. 1997. The Inter-American Tropical Tuna Commission and its fishery data collecting and handling systems. China Fisheries Monthly, 534: 19-28.

SCHOLEY, VERNON P. 1997. Construction and operation of a laboratory or aquaculture facility in a developing country. Rev. fish. Sci., 5: (3): 279-302.

MARGULIES, DANIEL. 1997. Development of the visual system and inferred performance capabilities of larval and early juvenile scombrids. Mar. Fresh. Behav. Physiol., 30 (2): 75-98.

ALLEN, ROBIN. 1997. La comision Interamericana del Atun Tropical. Com. Perm Pacif. Sur, Rev., 23: 161-184.

JOSEPH, JAMES. 1997. Preface. In Fonteneau, Alain, Atlas of Tropical Tuna Fisheries: World Catches and the Environment. L'Institut Francais de Recherche Scientifique pour le Developpement en Cooperation, Paris: 7-10.

HALL, MARTIN A. 1997. Dolphins and other bycatch in the eastern Pacific Ocean purse seine fishery. Univ. Alaska, Sea Grant College Program, Rep. 97-02: 35-38.

GARCIA, MARCO A., and MARTIN A. HALL. 1997. Spatial and seasonal distribution of bycatch in the purse seine tuna fishery in the eastern Pacific Ocean. Univ. Alaska, Sea Grant College Program, Rep. 97-02: 39-43.

BRATTEN, DAVE, and MARTIN A. HALL. 1997. Working with fishers to reduce bycatch: the tuna-dolphin problem in the eastern Pacific Ocean. Univ. Alaska, Sea Grant College Program, Rep. 97-02: 97-100.

HALL, M. A., and C. LENNERT. 1997. Incidental mortality of dolphins in the eastern Pacific Ocean tuna fishery in 1995. Inter. Whaling Comm., Rep., 47: 641-644.

HALL, MARTIN A. 1998. An ecological view of the tuna-dolphin problem: impacts and trade-offs. Rev. Fish Biol. Fish., 8 (1): 1-34.

JOSEPH, JAMES. 1998. A review of the status of world tuna resources. Pap. 5th World Tuna trade Conference, Bangkok, Thailand: 8-21.

MILLER, FORREST R. 1998. Ocean Conditions during El Nino in the eastern tropical Pacific. Tuna newsletter (U.S. Nat. Mar. Fish. Serv., Southwest Fish. Center. LaJolla), 129: 5-7.

SCOTT, MICHAEL D. and KAREN L. CATTANACH. 1998. Diel patterns in aggregations of pelagic dolphins and tunas in the eastern Pacific. Mar. Mammal Sci., 14 (3): 401-428.

CHILDERS, JOHN, and FORREST R. MILLER. 1998. Summary of the 1997 U.S. North and South Pacific albacore troll fisheries. U.S. Nat. Mar. Fish. Serv., Admin. Rep., LJ-98-06: iii, 45 pp.

JOSEPH, JAMES. 1998. A brief history of tuna research. Inter. Comm. Cons. Atlan. Tunas, Coll. Vol.

HALL, MARTIN. 1998. Dealing with by-catches: practical considerations. Inter. Comm. Cons. Atlan. Tunas, Coll. Vol. Sci. Pap., 50 (2): 661-662.

HALL, MARTIN. 1998. Ecosystem research and tuna fisheries management: some key questions. Inter. Comm. Cons. Atlan. Tunas, Coll. Vol. Sci. pap., 50 (2): 671-672.

JOSEPH, JAMES. 1998. On scientific advice and tuna management. Inter. Comm. Cons. Atlan. Tunas, Coll. Vol. Sci. Pap., 50 (2): 855-861.

HINTON, MICHAEL G., AND RICHARD B. DERISO. 1998. Distribution and stock assessment of swordfish, *Xiphias gladius*, in the eastern Pacific Ocean from catch and effort data standardized on biological and environmental factors. U.S. Nat. Mar. Fish. Serv., NOAA Tech Rep. NMFS 142: 161-179.

SAYIGH, LAELA S., PETER L. TYAK, RANDALL S. WELLS, ANDREW L. SOLOWS, MICHAEL D. SCOTT, and A. B. IRVINE. 1999. Individual recognition in wild bottlenose dolphins; a

field test using playback experiments. *Animal Behav.*, 57(1): 41-50.

WELLS, RANDALL S., and MICHAEL D. SCOTT. 1999. Bottlenose dolphin *Tursiops truncatus* (Montagu, 1821). In Ridgeway, Sam H., and Richard Harrison (editors), *Handbook of Marine Mammals*, Vol 6. Academic Press, San Diego: 137-182.

JOSEPH, JAMES. 1999. Nomads of the sea. *Big Game Fishing Journal*, 12 (2): 10-17.

OLSON, ROBERT J., and CHRISTOFER H. BOGGS. 1999. Apex predation by yellowfin tuna (*Thunnus albacares*): independent estimates from gastric evacuation and stomach contents, bioenergetics, and cesium concentrations. In Dodson, Stanley I., Timothy F.H. Allen, Stephen R. Carpenter, Kandis Elliot, Anthony R. Ives, Robert L. Jeanne, James F. Kitchell, Nancy E. Langston, and Monica G. Turner (editors), *Readings in Ecology*, Oxford University Press, New York: 257-282 (reprinted from *Canad. Jour. Fish. Aquatic. Sci.*, 43 (9): 1760-1775).

CHILDERS, JOHN and FORREST R. MILLER. 1999. Summary of the 1998 U.S. North and South albacore troll fisheries. *U.S. Nat. Mar. Fish. Serv., Admin. Rep.*, LJ-99-09:iii, 44 pp.

SCHAEFER, KURT M. and JOHN CHILDERS. 1999. Northernmost occurrence of the slender tuna, *Allothunnus fallai*, in the Pacific Ocean. *Calif. Fish. Game*, 85 (3): 121-123.

HALL, MARTIN A. 1999. Estimating the ecological impacts of fisheries: what data are needed to estimate bycatch? In Nolan, C.P. (editor), *Proceedings of the International Conference on Fisheries Monitoring*, FAO, Rome: 175-184.

FINNERAN, JAMES J., CHARLES W. OLIVER, KURT M. SCHAEFER, and SAM H. RIDGWAY. 2000. Source levels and estimated yellowfin tuna (*Thunnus albacares*) detection ranges for dolphin jaw pops, breaches, and tail slaps. *Accous. Soc. Amer., Jour.*, 107 (1): 649-656.

SCHAEFER, KURT M., and CHARLES W. OLIVER. 2000. Shape, volume, and resonance frequency of the swim bladder of yellowfin tuna, *Thunnus albacares*. *U.S. Nat. Mar. Fish. Serv., Fish Bull.*, 98 (2): 364-374.

ALLEN, ROBIN. 2000. International management of the tuna fisheries of the eastern Pacific Ocean. *Papers on Fisheries Economics*. 38: 8 pp.

DAGORN, LAURENT, FILIPPO MENC ZER, PASCAL BACH, and ROBERT J. OLSON. 2000. Co-evolution of movement behaviors by tropical pelagic predatory fishes in response to prey environment: a simulation model. *Ecol. Model.*, 134 (2-3): 325-341.

HALL, MARTIN A., DAYTON L. ALVERSON, and KAIJA I. METUZALS. 2000. By-catch:

problems and solutions. Mar. Pollution Bull., 41 (1-6): 204-219.

JOSEPH, JAMES. 2000. World tuna production: past, present and future. Pap. 6th World Tuna Trade Conference, Bangkok, Thailand: 3-20.

DERISO, RICHARD B., and WILLIAM H. BAYLIFF. 2000. The status of Pacific tuna stocks. In Hinman, Ken (editor), Getting ahead of the Curve: Conserving the Pacific Ocean's Tunas, Swordfish, Billfishes, and Sharks, National Coalition for Marine Conservation, Symposium 16: 12-30.

HALL, MARTIN A., and PETER G. WILLIAMS. 2000. Bycatch in the tuna net fisheries. In Hinman, Ken (editor), Getting ahead of the Curve: Conserving the Pacific Ocean's Tunas, Swordfish, Billfishes, and Sharks, National Coalition for Marine Conservation, Symposium 16: 72-81.

ALLEN, ROBIN. 2000. The Inter-American Tropical Tuna Commission: role, functions, and future. In Hinman, Ken (editor), Getting ahead of the Curve: Conserving the Pacific Ocean's Tunas, Swordfish, Billfishes, and Sharks, National Coalition for Marine Conservation, Symposium 16: 145-152.

MAUNDER, MARK N. 2001. A general framework for integrating the standardization of catch per unit effort into stock assessment models. Canad. Jour. Fish. Aquatic Sci., 58 (4): 795-803.

SCHAEFER, KURT M. 2001. Assessment of skipjack tuna (*Katsuwonus pelamis*) spawning activity in the eastern Pacific Ocean. U.S. nat. Mar. Fish. Serv., Fish. Bull., 99 (2): 343-350.

SCHOLEY, VERNON, DANIEL MARGULIES, ROBERT OLSON, JEANNE WEXLER, JENNY SUTER, and SHARON HUNT. 2001. Lab culture and reproduction of yellowfin tuna in Panama. Global Aqua. Advocate, 4 (2): 17-18.

CHOW, S., V. P. SCHOLEY, A. NAKAZAWA, D. MARGULIES, J. B. WEXLER, R. J. OLSON, and K. HAZAMA. 2001. Direct evidence for Mendelian inheritance of the variations in the ribosomal protein gene introns in yellowfin tuna (*Thunnus albacares*). Mar. Biotech., 3 (1): 22-26.

ALLEN, ROBIN. (chairman). 2001. Research implications of adopting the precautionary approach to management of tuna fisheries. FAO Fish. Circ., 963:xii, 74 pp.

Scott, Michael D., and ALETA A. HOHN, ANDREW J. WESTGATE, JOHN R. NICHOLS, BRENT R. WHITAKER, and WALTON B. CAMPBELL. 2001. A note on the release and tracking of a rehabilitated pygmy sperm whale (*Kogia breviceps*). Jour. Cetacean Res. Manag., 3 (1): 87-94.

SOUTH PACIFIC COMMISSION: request documents directly from

<http://www.spc.org.nc/coastfish/reports/Publications2.htm>

HANDBOOKS:

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Lyn Lambeth and Rooston Abraham Complete report

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Reef Resources Assessment and Management Technical Papers

The Live Reef Food Fish of Bua Province, Fiji Islands - A first assessment of the stock
potential
for a management policy, by Being M. Yeeting, Pierre Labrosse and Timothy J.H.
Adams

(SOME) SPC FISHERIES MEETING PAPERS

21st Regional Technical Meeting on Fisheries - August 1989 (final report only)
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ICRI Pacific Regional Symposium, SPC/IRD Fisheries Workshop - May 2000
(Planned) 2nd SPC Heads of Fisheries Meeting - July 2001

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1st SOPAC/SPC/SPREP Colloquium, Nadi, July, 2000. Record of Proceedings (produced by Marine Resources Division for SPC Chair)

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Pacific Island Marine Resources - the next 50 years - A presentation to the South Pacific Conference 1997

Review of fishery management issues and regimes in the Pacific Islands region - 1997 GPA consultancy report towards the GEF Strategic Action Plan for Pacific Island International Waters

SPC's approach to quantitative information about Pacific Island inshore fisheries. Address to FAO statistics workshop 2001

SPC Marine Resources Division, Director's Bulletins (1999)