

CHAPTER 19

19. LITERATURE CITED

- 32 FR 4001. Native Fish and Wildlife; Endangered Species. D. o. t. Interior, editor.
- 56 FR 49653. Endangered and Threatened Wildlife and Plants; Threatened Status for the Gulf Sturgeon. I. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, Commerce, editor.
- 57 FR 14658. Endangered and Threatened species: Threatened status for Snake River spring/summer Chinook salmon, threatened status for Snake River fall Chinook salmon. N. O. A. A. National Marine Fisheries Service, Commerce, editor.
- 58 FR 33212. Designated Critical Habitat; Sacramento River Winter-run Chinook Salmon. N. O. A. A. National Marine Fisheries Service, Commerce, editor.
- 58 FR 68543. Designated critical habitat; Snake River sockeye salmon, Snake River spring/summer Chinook salmon, and Snake River fall Chinook salmon. Final Rule. N. O. A. A. National Marine Fisheries Service, Commerce, editor.
- 59 FR 440. Endangered and Threatened Species; Status of the Sacramento River Winter-run Chinook Salmon. N. O. A. A. National Marine Fisheries Service, Commerce, editor.
- 64 FR 57399. Designated critical habitat: revision of critical habitat for Snake River spring/summer Chinook salmon. N. O. A. A. National Marine Fisheries Service, Commerce, editor.
- 68 FR 13370. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Gulf Sturgeon. I. Fish and Wildlife Service (FWS), and National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration, Commerce, editor.
- 68 FR 15674. Endangered and Threatened Species; Final Endangered Status for a Distinct Population Segment of Smalltooth Sawfish (*Pristis pectinata*) in the United States. N. O. A. A. National Marine Fisheries Service, Commerce, editor.
- 70 FR 37160. Endangered and Threatened Species: Final Listing Determinations for 16 ESUs of West Coast salmon, and Final 4(d) Protective Regulations for Threatened Salmonid ESUs. N. O. A. A. National Marine Fisheries Service, Commerce, editor.
- 70 FR 52488. Endangered and Threatened Species; Designation of Critical Habitat for Seven Evolutionarily Significant Units of Pacific Salmon and Steelhead in California. N. O. A. A. National Marine Fisheries Service, Commerce, editor.
- 71 FR 17757. Endangered and Threatened Wildlife and Plants: Threatened Status for Southern Distinct Population Segment of North American Green Sturgeon. N. O. A. A. National Marine Fisheries Service, Commerce, editor.

- 74 FR 45353. Endangered and Threatened Species; Critical Habitat for the Endangered Distinct Population Segment of Smalltooth Sawfish. N. O. A. A. National Marine Fisheries Service, Commerce, editor.
- 74 FR 52300. Endangered and Threatened Wildlife and Plants: Final Rulemaking to Designate Critical Habitat for Threatened Southern Distinct Population Segment of North American Green Sturgeon; Final Rule. N. O. A. A. National Marine Fisheries Service, Commerce, editor.
- 77 FR 5880. Endangered and Threatened Wildlife and Plants; Threatened and Endangered Status for Distinct Population Segments of Atlantic Sturgeon in the Northeast Region. N. O. A. A. National Marine Fisheries Service, Commerce, editor.
- 77 FR 5914. Endangered and Threatened Wildlife and Plants; Final Listing Determinations for Two Distinct Population Segments of Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*) in the Southeast. N. O. A. A. National Marine Fisheries Service, Commerce, editor.
- 79 FR 20802. Endangered and Threatened Wildlife; Final Rule To Revise the Code of Federal Regulations for Species Under the Jurisdiction of the National Marine Fisheries Service. N. O. A. A. National Marine Fisheries Service, Commerce, editor.
- Abbott, G., and coauthors. 2009. Resource guide for public health response to harmful algal blooms in Florida., Florida Fish and Wildlife Conservation Commission, editor. Fish and Wildlife Research Institute,.
- Abecassis, M., and coauthors. 2013. A model of loggerhead sea turtle (*Caretta caretta*) habitat and movement in the oceanic North Pacific. PLoS ONE 8(9):e73274.
- Acosta, A., and A. Acevedo. 2006. Population structure and colony condition of *Dendrogyra cylindrus* (Anthozoa: Scleractinia) in Providencia Island, Columbian Caribbean. Pages 1605-1610 in Proceedings of the 10th International Coral Reef Symposium, Okinawa, Japan.
- Acropora Biological Review Team. 2005. Atlantic Acropora Status Review Document.
- Adams, P. 2000. Status review update for the steelhead Northern California Evolutionary Significant Unit. Southwest Fisheries Science Center, Santa Cruz/Tiburon Laboratory, Tiburon, California.
- Adams, P. B., and coauthors. 2007. Population status of North American green sturgeon, *Acipenser medirostris*. Environmental Biology of Fishes 79(3-4):339-356.
- Adams, P. B., C. B. Grimes, S. T. Lindley, and M. L. Moser. 2002. Status review for North American green sturgeon, *Acipenser medirostris*. National Marine Fisheries Service, Southwest Fisheries Science Center, Santa Cruz, CA.
- Adey, W. H. 1978. Coral reef morphogenesis: A multidimensional model. Science 202(4370):831-837.

- Afzal, D., A. Harborne, and P. Raines. 2001. Summary of Coral Cay Conservation's fish and coral species lists compiled in Utila, Honduras. Coral Cay Conservation.
- Aguilar-Perera, A. 2006. Disappearance of a Nassau grouper spawning aggregation off the southern Mexican Caribbean coast. *Marine Ecology Progress Series* 327:289-296.
- Ajawani, S. 1956. A review of Lake Washington watershed, historical, biological, and limnological. M.s. thesis, University of Washington, Seattle, Washington.
- Albins, M. A., and M. A. Hixon. 2008. Invasive Indo-Pacific lionfish *Pterois volitans* reduce recruitment of Atlantic coral-reef fishes. *Marine Ecology Progress Series* 367:233-238.
- Albins, M. A., and M. A. Hixon. 2013. Worst case scenario: potential long-term effects of invasive predatory lionfish (*Pterois volitans*) on Atlantic and Caribbean coral-reef communities. *Environmental Biology of Fishes* 96(10-11):1151-1157.
- Albright, R., B. Mason, M. Miller, and C. Langdon. 2010. Ocean acidification compromises recruitment success of the threatened Caribbean coral *Acropora palmata*. *Proceedings of the National Academy of Sciences* 107(47):20400-20404.
- Alcolado, P. M., and coauthors. 2010. Condition of remote reefs off southwest Cuba. *Ciencias Marinas* 36(2):179-197.
- Alix et al. 2017. Alix A, Brown C, Capri E, Goerlitz G, Golla B, Knauer K, Volker Laabs, Mackay N, Marchis A, Poulsen V, Prados EA, Reinert W, Streloke M. *Mitigating the Risks of Plant Protection Products in the Environment: MAgPIE*. ISBN:978-1-880611-99-9.
- Altenritter, M. E., M. T. Kinnison, G. B. Zydlewski, D. H. Secor, and J. D. Zydlewski. 2015. Assessing dorsal scute microchemistry for reconstruction of shortnose sturgeon life histories. *Environmental Biology of Fishes* 98(12):2321-2335.
- Anderson, B.S., Hunt, J.W., Phillips, B.M., Nicely, P.A., Gilbert, K.D., DeVlaming, V., Connor, V., Richard, N., and Tjeerdemat, R.S. 2003. Ecotoxicologic impacts of agricultural drain water in the Salinas River, California, USA. *Environmental Toxicology and Chemistry* 22:2375-2384.
- Anderson, P. D., D. Dugger, and C. Burke. 2007. Surface water monitoring program for pesticides in salmonid-bearing streams, 2006 monitoring data summary. Washington State Department of Ecology, Publication No. 07-03-016, Olympia, Washington.
- Andrews, A. H., and coauthors. 2005. Bomb radiocarbon and lead-radium disequilibria in otoliths of bocacio rockfish (*Sebastes paucispinis*): a determination of age and longevity for a difficult-to-age fish. *Marine and Freshwater Research* 56:517-528.
- Anonymous. 2007. Biological Assessment of the effects of the Federal Columbia River Power System and mainstem effects of other tributary actions on anadromous salmonid species listed under the Endangered Species Act. Corps, Bonneville Power Administration, and Reclamation.

- Antonelis, G. A., J. D. Baker, T. C. Johanos, R. C. Braun, and A. L. Harting. 2006. Hawaiian monk seal (*Monachus schauinslandi*): status and conservation issues. *Atoll Research Bulletin* 543:75-101.
- Anthony, K. R. N., P. V. Ridd, A. R. Orpin, P. Larcombe, and J. Lough. 2004. Temporal variation of light availability in coastal benthic habitats: Effects of clouds, turbidity, and tides. *Limnology and Oceanography* 49(6):2201-2211.
- Aronson, R. B., and coauthors. 2003. Causes of coral reef degradation. *Science* 302(5650):1502-1502.
- Aronson, R. B., and W. F. Precht. 2001. White-band disease and the changing face of Caribbean coral reefs. *Hydrobiologia* 460(1):25-38.
- ASMFC. 1998. Amendment 1 to the interstate fishery management plan for Atlantic sturgeon.
- ASMFC. 2006. ASMFC Atlantic sturgeon by-catch workshop, Norfolk, Virginia.
- ASSRT. 2007. Status Review of Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*). Report to National Marine Fisheries Service, Northeast Regional Office:174.
- Ault, J. S. 1985. Species profiles: Life histories and environmental requirements of coastal fisheries and invertebrates (Pacific Southwest)-- black, green, and red abalones. U.S. Fish and Wildlife Service, US Army Corps of Engineers, TR EL-82-4.
- Aurioles-Gamboa, D., C. J. Hernandez-Camacho, and E. Rodriguez-Krebs. 1999. Notes on the southernmost records of the Guadalupe fur seal, *Arctocephalus townsendi*, in Mexico. *Marine Mammal Science* 15(2):581-583.
- Aurioles-Gamboa, D., F. Elorriaga-Verplancken, and C. J. Hernandez-Camacho. 2010. The current population status of Guadalupe fur seal (*Arctocephalus townsendi*) on the San Benito Islands, Mexico. *Marine Mammal Science* 26(2):402-408.
- Avens, L., J. C. Taylor, L. R. Goshe, T. T. Jones, and M. Hastings. 2009. Use of skeletochronological analysis to estimate the age of leatherback sea turtles *Dermochelys coriacea* in the western North Atlantic. *Endangered Species Research* 8(3):165-177.
- Baas, J. J., T; Kooijman, SALM. 2009. Estimation of no effect concentrations from exposure experiments when values scatter among individuals. *Ecological Modelling* 220:411-418.
- Babcock, R., and H. Keesing. 1999. Fertilization biology of the abalone *Haliotis laevis*: Laboratory and field studies. *Canadian Journal of Fisheries and Aquatic Science* 56:1668-1678.
- Bagley, D. A., W. E. Redfoot, and L. M. Ehrhart. 2013. Marine turtle nesting at the Archie Carr NWR: Are loggerheads making a comeback? Pages 167 in T. Tucker, and coeditors, editors. *Thirty-Third Annual Symposium on Sea Turtle Biology and Conservation*. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southeast Fisheries Science Center, Baltimore, Maryland.

- Bahr, D. L., and D. L. Peterson. 2017. Status of the Shortnose Sturgeon Population in the Savannah River, Georgia. *Transactions of the American Fisheries Society* 146(1):92-98.
- Bailey, K. M., and E. D. Houde. 1989. Predation on eggs and larvae of marine fishes and the recruitment problem. *Advances in Marine Biology* 25:1-83.
- Bain, M. B. 1997. Atlantic and shortnose sturgeons of the Hudson River: common and divergent life history attributes. Pages 347-358 in *Sturgeon Biodiversity and Conservation*. Springer.
- Bain, M., N. Haley, D. Peterson, J. Waldman, and K. Arend. 2000. Harvest and habitats of Atlantic sturgeon *Acipenser oxyrinchus* Mitchill, 1815 in the Hudson River estuary: lessons for sturgeon conservation. *Boletin-Instituto Espanol De Oceanografia* 16(1/4):43-54.
- Baker, J. D., A. L. Harting, T. A. Wurth, and T. C. Johanos. 2011. Dramatic shifts in Hawaiian monk seal distribution predicted from divergent regional trends. *Marine Mammal Science* 27(1):78-93.
- Baker, J. D., C. L. Littnan, and D. W. Johnston. 2006. Potential effects of sea level rise on the terrestrial habitats of endangered and endemic megafauna in the Northwestern Hawaiian Islands. *Endangered Species Research* 2:21-30.
- Balazik, M. T., and coauthors. 2012. The potential for vessel interactions with adult Atlantic sturgeon in the James River, Virginia. *North American Journal of Fisheries Management* 32(6):1062-1069.
- Balazik, M. T., and J. A. Musick. 2015. Dual annual spawning races in Atlantic Sturgeon. *PLoS One* 10(5):e0128234.
- Baldwin, D. H. S., Jason F; Labenia, Jana S; Scholz, Nathaniel L. 2003. Sublethal effects of copper on coho salmon: Impacts on nonoverlapping receptor pathways in the peripheral olfactory nervous system. *Environmental Toxicology and Chemistry* 22:2266-2274.
- Baldwin, D. T., CP; Scholz, NL. 2011. Copper induced olfactory toxicity in salmon and steelhead: Extrapolation across species and rearing environments. *Aquatic Toxicology* 101:295-297.
- Baldwin, D.B., Spromberg, J.A., Collier, T.K., and Scholz, N.L. 2009. A fish of many scales: extrapolating sublethal pesticide exposures to the productivity of wild salmon populations. *Ecological Applications* 19(8): 2004–2015.
- Barnhart, R. A. 1986. Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (Pacific Southwest): steelhead. . Technical Report, TR-EL-82-4/872-11-60. Humboldt State University, Arcada, California.
- Bartholomew Jr., G. A. 1950. A male Guadalupe fur seal on San Nicholas Island, California. *Journal of Mammalogy* 31(2):175-180.

- Bass, A. L. 2010. Juvenile coho salmon movement and migration through tide gates.
- Baums, I. B., C. B. Paris, and L. M. Chérubin. 2006b. A bio-oceanographic filter to larval dispersal in a reef-building coral. *Limnology and Oceanography* 51(5):1969-1981.
- Baums, I. B., M. E. Johnson, M. K. Devlin-Durante, and M. W. Miller. 2010. Host population genetic structure and zooxanthellae diversity of two reef-building coral species along the Florida Reef Tract and wider Caribbean. *Coral Reefs* 29:835–842.
- Baums, I. B., M. W. Miller, and M. E. Hellberg. 2005. Regionally isolated populations of an imperiled Caribbean coral, *Acropora palmata*. *Molecular Ecology* 14(5):1377-1390.
- Baums, I. B., M. W. Miller, and M. E. Hellberg. 2006a. Geographic variation in clonal structure in a reef-building Caribbean coral, *Acropora palmata*. *Ecological Monographs* 76(4):503-519.
- Baxter, J. C., SP. 2006. The application of the herbicide bromoxynil to a model soil derived bacterial community: impact on degradation and community structure. *Letters in Applied Microbiology* 43:659-665.
- Baxter, J. C., SP. 2008. The degradation of the herbicide bromoxynil and its impact on bacterial diversity in a top soil. *Journal of Applied Microbiology* 104:1605-1616.
- Beamer, E. M., B. Hayman, and D. Smith. 2005. Appendix C: Linking freshwater habitat to Skagit Chinook salmon recovery. Skagit River System Cooperative and Washington Department of Fish and Wildlife.
- Beamish, R. J., and coauthors. 2000. Trends in coho marine survival in relation to the regime concept. *Fisheries Oceanography* 9(1):114-119.
- Beamish, R. J., and D. R. Bouillon. 1993. Pacific salmon production trends in relation to climate. *Canadian Journal of Fisheries and Aquatic Sciences* 50:1002-1016.
- Beamish, R. J., R. M. Sweeting, and C. M. Neville. 2009. Planning the management of Pacific salmon in a changing climate. *American Fisheries Society Symposium* 69:155-173.
- Beamish, R.J., and Mahnken, C. 2001. A critical size and period hypothesis to explain natural regulation of salmon abundance and the linkage to climate and climate change. *Progress in Oceanography* 49: 423–437.
- Beauvais, S.L., Jones, S.B., Brewer, S.K., and Little, E.E. 2000. Physiological measures of neurotoxicity of diazinon and malathion to larval rainbow trout (*Oncorhynchus mykiss*) and their correlation with behavioral measures. *Environmental Toxicology and Chemistry* 19:1875-1880.
- Beckman, B.R., Larsen, D.A., Sharpe, C., Lee-Pawlak, B., Schreck, C.B., and Dickhoff, W.W. 2000. Physiological status of naturally reared juvenile spring Chinook salmon in the Yakima River: seasonal dynamics and changes associated with smolting. *Transactions of the American Fisheries Society* 129:727–753.

- Bednarski, M. S. 2012. Population dynamics of Shortnose Sturgeon, *Acipenser brevirostrum*, in the Altamaha River, Georgia. University of Georgia.
- Beechie, T. J., M. Liermann, E. M. Beamer, and R. Henderson. 2005. A classification of habitat types in a large river and their use by juvenile salmonids. *Transactions of the American Fisheries Society* 134(3):717-729.
- Belcher, R. L., and T.E. Lee, Jr. 2002. *Arctocephalus townsendi*. *Mammalian Species* 700(1):1-5.
- Belden JB, Gilliom RJ, Lydy MJ. 2007. How well can we predict the toxicity of pesticide mixtures to aquatic life? *Integrated Environmental Assessment and Management* 3(3):364-372.
- Belitz, K., and coauthors. 2004. *Water Quality in the Santa Ana Basin, California, 1999-2001*. U.S. Department of the Interior, 1238, Reston, Virginia.
- Benda, L. E., D. J. Miller, T. Dunne, G. H. Reeves, and J. K. Agee. 2001. Dynamic landscape systems. Pages 261-288 in R. J. Naiman, and R. E. Bilby, editors. *River Ecology and Management, Lessons from the Pacific Coastal Ecoregion*. Springer-Verlag New York, Inc., New York.
- Bennet, W. A. 2005. Critical assessment of the delta smelt population in the San Francisco Estuary, California. Pages Article 1 in *San Francisco Estuary and Watershed Science*. eScholarship Repository Journals.
- Benson, S. R., and coauthors. 2011. Large-scale movements and high-use areas of western Pacific leatherback turtles, *Dermochelys coriacea*. *Ecosphere* 2(7):art84.
- Berg, J. J., M. S. Allen, and K. J. Sulak. 2007. Population assessment of the Gulf of Mexico sturgeon in the Yellow River, Florida. Pages 365 in *American Fisheries Society Symposium*. American Fisheries Society.
- Bernardi, G., S. R. Fain, J. P. Gallo-Reynoso, A. L. Figueroa-Carranza, and B. J. Le Boeuf. 1998. Genetic variability in Guadalupe fur seals. *Journal of Heredity* 89(4):301-305.
- Bickham, J. W., T. R. Loughlin, J. K. Wickliffe, and V. N. Burkanov. 1998. Geographic variation in the mitochondrial DNA of Steller sea lions: Haplotype diversity and endemism in the Kuril Islands. *Biosphere Conservation* 1(2):107-117.
- Bigelow, H., and W. Schroeder. 1953. *Fishes of the western North Atlantic, Part 2—Sawfishes, Guitarfishes, Skates and Rays*. Mem. Sears Found 1:588pp.
- Bigelow, H. B., and W. C. Schroeder. 1953. Sawfishes, guitarfishes, skates and rays. Pages 1-514 in J. Tee-Van, C. M. Breder, A. E. Parr, W. C. Schroeder, and L. P. Schultz, editors. *Fishes of the Western North Atlantic, Part Two*. Memoir. Sears Foundation for Marine Research.

- Bilby, R. E., and P. A. Bisson. 2001. Function and distribution of large woody debris. Pages 324-346 in R. J. Naiman, and R. E. Bilby, editors. *River Ecology and Management, Lessons from the Pacific Coastal Ecoregion*. Springer-Verlag, Inc., New York.
- Bilby, R. E., B. R. Fransen, J. K. Walter, and W. J. Scarlett. 2001. Preliminary evaluation of the use of nitrogen stable isotope ratios to establish escapement levels for pacific salmon. *Fisheries* 26(1):6-14.
- Bisson, P. A., and coauthors. 2003. Fire and aquatic ecosystems of the western USA: current knowledge and key questions. *Forest Ecology and Management* (178):213-229.
- Bisson, P. A., and R. E. Bilby. 2001. Organic matter and trophic dynamics. Pages 373-398 in R. J. Naiman, and R. E. Bilby, editors. *River Ecology and Management, Lessons from the Pacific Coastal Ecoregion*. Springer-Verlag, Inc., New York.
- Bjorkstedt, E. P., and coauthors. 2005. An analysis of historical population structure for evolutionarily significant units of Chinook salmon, coho salmon, and steelhead in the North-Central California Coast Recovery Domain. U.S. Department of Commerce, NOAA-TM-NMFS-SWFSC-382.
- Bjorndal, K. A., A. B. Bolten, and M. Y. Chaloupka. 2005. Evaluating trends in abundance of immature green turtles, *Chelonia mydas*, in the greater Caribbean. *Ecological Applications* 15(1):304-314.
- Bjorndal, K. A., and A. B. Bolten. 2010. Hawksbill sea turtles in seagrass pastures: success in a peripheral habitat. *Marine Biology* 157:135-145.
- Blum, J. P. 1988. Assessment of factors affecting sockeye salmon (*Oncorhynchus nerka*) production in Ozette Lake, WA. Masters Thesis, University of Washington, Seattle, Washington.
- Boreman, J. 1997. Sensitivity of North American sturgeons and paddlefish to fishing mortality. *Environmental Biology of Fishes* 48(1-4):399-405.
- Borodin, N. 1925. Biological observations on the Atlantic sturgeon (*Acipenser sturio*). *Transactions of the American Fisheries Society* 55(1):184-190.
- Bortleson, G. C., and J. C. Ebbert. 2000. Occurrence of pesticides in streams and ground water in the Puget Sound basin, Washington, and British Columbia, 1996-98. United States Geological Survey, Water-Resources Investigations Report 00-4118, Tacoma, Washington.
- Bortleson, G. C., M. J. Chrzastowski, and A. K. Helgerson. 1980. Historical changes of shoreline and wetland at eleven major deltas in the Puget Sound region, Washington. U.S. Geological Survey, Hydrologic Investigations Atlas HA-617, U.S. Department of Justice and Bureau of Indian Affairs, Reston, Virginia.
- Boughton, D. A., and coauthors. 2007. Viability criteria for steelhead of the south-central and southern California coast. National Marine Fisheries Service.

- Bouldin, J. L., J. L. Farris, M. T. Moore, S. Smith, and C. M. Cooper. 2007. Assessment of diazinon toxicity in sediment and water of constructed wetlands using deployed *Corbicula fluminea* and laboratory testing. *Archives of Environmental Contamination and Toxicology* 53(2):174-182.
- Bowen, B., and J. Avise. 1990. Genetic structure of Atlantic and Gulf of Mexico populations of sea bass, menhaden, and sturgeon: influence of zoogeographic factors and life-history patterns. *Marine Biology* 107(3):371-381.
- Bowman, K. E., and G. W. Minshall. 2000. Assessment of short- and mid-term effects of wildlife on habitat structure of the Payette National Forest. Prepared by the Stream Ecology Center, Idaho State University for the Payette National Forest:45 p.
- Bradley P, Journey C, Romanik K, Barber L, Buxton H, Foreman W, Furlong E, Glassmeyer S, Hladik M, Iwanowicz L, Jones D, Kolpin D, Kuivila K, Loftin K, Mills M, Meyer M, Orlando J, Reilly T, Smalling K, Villeneuve D. 2017. Expanded target-chemical analysis reveals extensive mixed-organic contaminant exposure in U.S. streams. *Environmental Science and Technology* 51(9):4792-4802.
- Bradley, P. M., and coauthors. 2017. Expanded Target-Chemical Analysis Reveals Extensive Mixed-Organic-Contaminant Exposure in US Streams. *Environmental Science & Technology*.
- Brainard, R. E., and coauthors. 2011a. Status review report of 82 candidate coral species petitioned under the U.S. Endangered Species Act. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Pacific Islands Fisheries Science Center.
- Brainard, R. E., and coauthors. 2011b. Status review report of 82 candidate coral species petitioned under the U.S. Endangered Species Act. U.S. Dep. Commer.
- Brainard, R. E., and coauthors. 2011c. Status review report of 82 candidate coral species petitioned under the U.S. Endangered species Act. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Pacific Islands Fisheries Science Center.
- Brazner, J.C. and Kline, E.R. 1990. Effects of chlorpyrifos on the diet and growth of larval fathead minnows, *Pimephales promelas*, in littoral enclosures. *Canadian Journal of Fisheries and Aquatic Sciences* 47(6):1157-1165.
- Brennan, J. S., K. F. Higgins, J. R. Cordell, and V. A. Stamatiou. 2004. Juvenile salmon composition, timing, distribution, and diet in the marine nearshore waters of central Puget Sound in 2001-2002 King County Department of Natural Resources and Parks, Seattle, Washington:164 p.
- Brett, J. R. 1995. Energetics. *Physiological ecology of Pacific salmon*. Edited by C.Groot, L. Margolis, and W.C. Clarke. University of British Columbia Press, Vancouver, B.C.:pp. 3-68.

- Brett, J.R., Shelbourn, J.E., and Shoop, C.T. 1969. Growth rate and body composition of fingerling sockeye salmon, *Oncorhynchus nerka*, in relation to temperature and ration size. *Journal of the Fisheries Board of Canada* 26:2363-2394.
- Brewer, S.K., Little, E.E., DeLonay, A.J., Beauvais, S.L., Jones, S.B. and Ellersieck, M.R. 2001. Behavioral dysfunctions correlate to altered physiology in rainbow trout (*Oncorhynchus mykiss*) exposed to cholinesterase-inhibiting chemicals. *Archives of Environmental Contamination and Toxicology* 40:70-76.
- Broderius, S. J., M. D. Kahl, and M. D. Hoglund. 1995. Use of joint toxic response to define the primary mode of toxic action for diverse industrial organic chemicals. *Environmental Toxicology and Chemistry* 14:1591-1605.
- Brooke, L., D. Call, D. Geiger, and C. Northcott. 1984. *Acute Toxicities of Organic Chemicals to Fathead Minnows (Pimephales promelas)*, Vol. 1. Center for Lake Superior Environmental Studies, University of Wisconsin-Superior, Superior, WI
- Brown, L. R., P. B. Moyle, and R. M. Yoshiyama. 1994. Historical decline and current status of coho salmon in California. *North American Journal of Fisheries Management* 14(2):237-261.
- Bruckner, A. 2012. Factors contributing to the regional decline of *Montastraea annularis* (complex). D. Yellowlees, and T. P. Hughes, editors. *Twelfth International Coral Reef Symposium*. James Cook University, Cairns, Australia.
- Bruckner, A. W., and R. J. Bruckner. 2006. The recent decline of *Montastraea annularis* (complex) coral populations in western Curaçao: A cause for concern? *Revista de Biologia Tropical* 54:45-58.
- Bruckner, A. W., and R. L. Hill. 2009. Ten years of change to coral communities off Mona and Desecheo Islands, Puerto Rico, from disease and bleaching. *Diseases of Aquatic Organisms* 87(1-2):19-31.
- Brundage III, H. M. 2006. Final report of shortnose sturgeon population studies in the Delaware River, January 1999 through March 2003. National Oceanic and Atmospheric Administration, National Marine Fisheries Service and New Jersey Division of Fish and Wildlife.
- Buchwalter, D. B., J. F. Sandahl, J. J. Jenkins, and L. R. Curtis. 2004. Roles of uptake, biotransformation, and target site sensitivity in determining the differential toxicity of chlorpyrifos to second to fourth instar *Chironomus riparius* (Meigen). *Aquatic Toxicology* 66(2):149-157.
- Buchwalter, D. B., J. J. Jenkins, and L. R. Curtis. 2003. Temperature influences on water permeability and chlorpyrifos uptake in aquatic insects with differing respiratory strategies. *Environmental Toxicology and Chemistry* 22(11):2806-2812.

- Buckley, J., and B. Kynard. 1985. Habitat use and behavior of pre-spawning and spawning shortnose sturgeon, *Acipenser brevirostrum*, in the Connecticut River. North American Sturgeons, Dr W. Junk Publications, Dordrecht, The Netherlands:111-117.
- Budd, A. F., H. Fukami, N. D. Smith, and N. Knowlton. 2012. Taxonomic classification of the reef coral family Mussidae (Cnidaria: Anthozoa: Scleractinia). *Zoological Journal of the Linnean Society* 166(3):465-529.
- Buhl, K. J., S. J. Hamilton, and J. C. Schmulbach. 1993a. ACUTE TOXICITY OF THE HERBICIDE BROMOXYNIL TO DAPHNIA-MAGNA. *Environmental Toxicology and Chemistry* 12:1455-1468.
- Buhl, K. J., S. J. Hamilton, and J. C. Schmulbach. 1993b. Chronic toxicity of the bromoxynil formulation Buctril(r) to *Daphnia magna* exposed continuously and intermittently. *Archives of Environmental Contamination and Toxicology* 25:152-159.
- Burman, S. G., R. B. Aronson, and R. van Woesik. 2012. Biotic homogenization of coral assemblages along the Florida reef tract. *Marine Ecology Progress Series* 467:89-96.
- Busack, C. 1990. Yakima/Klickitat production project genetic risk assessment. Genetics Unit, Washington Department of Fisheries, Olympia, Washington.
- Busby, P. J., and coauthors. 1996. Status review of steelhead from Washington, Oregon, and California. U.S. Department of Commerce, Northwest Fisheries Science Center, NMFS-NWFSC-27, Seattle, Washington.
- Bush, P., G, and coauthors. 2006. The Nassau Grouper spawning aggregation fishery of the Cayman Islands—an historical and management perspective.
- Butler, J., and coauthors. 2009. Status review report for black abalone (*Haliotis cracherodii* Leach, 1814). National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Long Beach, California.
- Butler, P. 1965. Effects of Pesticides on Fish and Wildlife. United States Department of the Interior, Washington, DC.
- Cairns, J. H., A. G.; Parker, B. C. 1975. Temperature influence on chemical toxicity to aquatic organisms. *Journal Water Pollution Control Federation* 47:267-280.
- Cairns, S. D. 1982. Stony corals (Cnidaria: Hydrozoa, Scleractinia) of Carrie Bow Cay, Belize. Pages 271-302 in K. Rützler, and I. G. Macintyre, editors. *The Atlantic Barrier Reef Ecosystem at Carrie Bow Cay, Belize., I. Structure and Communities., volume 1.* Smithsonian Institution Press, Washington, DC, USA.
- California Department of Finance. 2018. New Demographic Report Shows California Population Nearing 40 Million Mark With Growth of 309,000 in 2017.in D. S. Kuczynski, E;Palmer, HD, editor. Demographic Research Unit,, Sacramento, California.

- Call, D., and D. Geiger. 1992. Subchronic Toxicities of Industrial and Agricultural Chemicals to Fathead Minnows (*Pimephales promelas*). Volume I. Center for Lake Superior Environmental Studies, University of Wisconsin-Superior, Superior, WI
- Candy, J. R., and coauthors. 2015. Population differentiation determined from putative neutral and divergent adaptive genetic markers in Eulachon (*Thaleichthys pacificus*, Osmeridae), an anadromous Pacific smelt. *Molecular Ecology Resources* 15(6):1421-1434.
- Carlson, J. K., and C. A. Simpfendorfer. 2015. Recovery potential of smalltooth sawfish, *Pristis pectinata*, in the United States determined using population viability models. *Aquatic Conservation: Marine and Freshwater Ecosystems* 25(2):187-200.
- Carlson, J. K., and J. Osborne. 2012. Relative abundance of smalltooth sawfish (*Pristis pectinata*) based on the Everglades National Park Creel Survey. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southeast Fisheries Science Center.
- Carlson, J. K., J. Osborne, and T. W. Schmidt. 2007. Monitoring the recovery of smalltooth sawfish, *Pristis pectinata*, using standardized relative indices of abundance. *Biological Conservation* 136(2):195-202.
- Caron, F., D. Hatin, and R. Fortin. 2002. Biological characteristics of adult Atlantic sturgeon (*Acipenser oxyrinchus*) in the St Lawrence River estuary and the effectiveness of management rules. *Journal of Applied Ichthyology* 18(4-6):580-585.
- Carpenter, K. D., S. Sobieszczyk, A. J. Arnsberg, and F. A. Rinella. 2008. Pesticide Occurrence and distribution in the lower Clackamas basin, Oregon, 2000-2005. U.S. Department of the Interior, 2008-5027.
- Carr, M. H. 1983. Spatial and temporal patterns of recruitment of young-of-the-year rockfishes (Genus *Sebastes*) into a central California kelp forest. San Francisco State University.
- Carr, S., F. Tatman, and F. Chapman. 1996. Observations on the natural history of the Gulf of Mexico sturgeon (*Acipenser oxyrinchus de sotoi* Vladykov 1955) in the Suwannee River, southeastern United States. *Ecology of Freshwater Fish* 5(4):169-174.
- Carretta, J. V., and coauthors. 2016. U.S. Pacific marine mammal stock assessments: 2015.
- Carter, J. L., and V. H. Resh. 2005. Pacific Coast rivers of the coterminous United States. Pages 541-590 in A. C. Benke, and C. E. Cushing, editors. *Rivers of North America*. Elsevier Academic Press, Burlington, Massachusetts.
- Casillas, E. 1999. Role of the Columbia River estuary and plume in salmon productivity. in *Ocean conditions and the management of the Columbia River salmon*, proceeding of a symposium, July 1, 1999.
- Caswell, H. 2001. *Matrix population models: Construction, analysis, and interpretation*. Sunderland, MA, USA: Sinauer Assoc.

- Catton, C. A., K. L. Stierhoff, and L. Rogers-Bennett. 2016. Population Status Assessment and Restoration Modeling of White Abalone *Haliotis sorenseni* in California. *Journal of Shellfish Research* 35(3):593-599.
- CBFWA. 1990. Review of the history, development, and management of anadromous fish production facilities in the Columbia River basin. Columbia Basin Fish and Wildlife Authority, Portland, Oregon.
- CDFG. 1993. Restoring Central Valley streams: A plan for action. CDFG, Yountville, California.
- CDFG. 2003. September 2002 Klamath River fish kill: preliminary analysis of contributing factors.
- CDFG. 2007. Final 2006 California Commercial Landings. Available: <http://www.dfg.ca.gov/marine/landings06.asp> (February 2008).
- Cedergreen N. 2014. Quantifying synergy: A systematic review of mixture toxicity studies within environmental toxicology. *PLoS ONE* 9(5) e96580.
- Chaloupka, M., and coauthors. 2008. Encouraging outlook for recovery of a once severely exploited marine megaherbivore. *Global Ecology and Biogeography* 17(2):297-304.
- Chambers, J. E., J. S. Boone, R. L. Carr, H. W. Chambers, and D. L. Straus. 2002. Biomarkers as predictors in health and ecological risk assessment. *Human and Ecological Risk Assessment* 8:165-176.
- Chang, K.H., Sakamoto, M., and Hanazato, T. 2005. Impact of pesticide application on zooplankton communities with different densities of invertebrate predators: An experimental analysis using small-scale mesocosms. *Aquatic Toxicology* 72:373-382.
- Chapman, D. D., and coauthors. 2011. Genetic diversity despite population collapse in a critically endangered marine fish: the smalltooth sawfish (*Pristis pectinata*). *Journal of Heredity* 102(6):643-652.
- Chapman, D. J., and B. E. Julius. 2005. The use of preventative projects as compensatory restoration. *Journal of Coastal Research* 40(Special Issue):120-131.
- Chapman, D. W. 1962. Aggressive behavior in juvenile coho salmon as a cause of emigration. *Journal of the Fisheries Board of Canada* 19(6):1047-1080.
- Chapman, D., and coauthors. 1994. Status of summer/fall Chinook salmon in the mid-Columbia region. Report to Chelan, Douglas, and Grant County PUDs, Boise, Idaho.
- Chapman, P. M., R. S. Caldwell, and P. F. Chapman. 1996. A warning: NOECs are inappropriate for regulatory use. 15:77-79.
- Clark, G. M., and coauthors. 1998. Water quality in the upper Snake River Basin, Idaho and Wyoming, 1992-1995.

- Claro, R., and K. C. Lindeman. 2003. Spawning aggregation sites of snapper and grouper species (Lutjanidae and Serranidae) on the insular shelf of Cuba. *Gulf and Caribbean Research* 14(2):91-106.
- Clemens, W. A., and G. V. Wilby. 1961. *Fishes of the Pacific Coast of Canada*, Second edition, volume 68. Fisheries Research Board of Canada.
- Climate Impacts Group (CIG). 2004. Overview of climate change impacts in the U.S. Pacific Northwest. University of Washington, Seattle, Washington.
- Cohen, A.L., and M. Holcomb. 2009. Why corals care about ocean acidification: Uncovering the mechanism. *Oceanography* 22(4):118–127, <http://dx.doi.org/10.5670/oceanog.2009.102>
- Colella, M. A., R. R. Ruzicka, J. A. Kidney, J. M. Morrison, and V. B. Brinkhuis. 2012. Cold-water event of January 2010 results in catastrophic benthic mortality on patch reefs in the Florida Keys. *Coral Reefs* 31(2):621-632.
- Colella, M. A., R. R. Ruzicka, J. A. Kidney, J. M. Morrison, and V. B. Brinkhuis. 2012. Cold-water event of January 2010 results in catastrophic benthic mortality on patch reefs in the Florida Keys. *Coral Reefs*.
- Colette, B., and G. Klein-MacPhee. 2002. *Bigelow and Schroeder's Fishes of the Gulf of Maine*. Smithsonian Institution Press, Washington, DC.
- Colgrove, D. J., and J. W. Wood. 1966. Occurrence and control of *Chondrococcus columnaris* as related to Fraser River sockeye salmon. *Int. Pac. Salmon Fish. Comm. Prog. Rep. No. 15*.
- Collins, B. D., and A. J. Sheikh. 2005. Historical reconstruction, classification, and change analysis of Puget Sound tidal marshes. Final report to Washington Department of Natural Resources Aquatic Resources Division, Olympia, Washington. Available: http://riverhistory.ess.washington.edu/project_reports/finalrpt_rev_aug12_2005.pdf (February 2008).
- Collins, M. R., and T. I. Smith. 1993. Characteristics of the adult segment of the Savannah River population of shortnose sturgeon. Pages 485-491 in *Proceedings of the Annual Conference of the Southeastern Association of Fish and Wildlife Agencies*.
- Collins, M. R., T. I. Smith, W. C. Post, and O. Pashuk. 2000. Habitat utilization and biological characteristics of adult Atlantic sturgeon in two South Carolina rivers. *Transactions of the American Fisheries Society* 129(4):982-988.
- Collins, M. R., W. C. Post, D. C. Russ, and T. I. Smith. 2002. Habitat use and movements of juvenile shortnose sturgeon in the Savannah River, Georgia-South Carolina. *Transactions of the American Fisheries Society* 131(5):975-979.
- Colville, A., Jones, P., Pablo, F., Krassoi, F., Hose, G., and Lim, R. 2008. Effects of chlorpyrifos on macroinvertebrate communities in coastal stream mesocosms. *Ecotoxicology* 17: 173-180.

- Colville, A., P. Jones, F. Pablo, F. Krassoi, G. Hose, and R. Lim. 2008. Effects of chlorpyrifos on macroinvertebrate communities in coastal stream mesocosms. 17:173-180.
- Colway, C., and D. E. Stevenson. 2007. Confirmed records of two green sturgeon from the Bering Sea and Gulf of Alaska. *Northwestern Naturalist* 88(3):188-192.
- Conant, T. A., and coauthors. 2009. Loggerhead sea turtle (*Caretta caretta*) 2009 status review under the U.S. Endangered Species Act. Report of the Loggerhead Biological Review Team to the National Marine Fisheries Service August 2009:222 pages.
- Conaway, C. H., S. Squire, R. P. Mason, and A. R. Flegal. 2003. Mercury speciation in the San Francisco Bay estuary. *Marine Chemistry* 80(2-3):199-225.
- Connor, W. P., and coauthors. 2014. Research, monitoring, and evaluation of emerging issues and measures to recover the Snake River fall Chinook salmon ESU, 1/1/2012–12/31/2013: Annual report, 1991-029-00. Bonneville Power Administration.
- Connor, W. P., J. G. Sneva, K. F. Tiffan, R. K. Steinhorst, and D. Ross. 2005. Two alternative juvenile life history types for fall Chinook salmon in the Snake River basin. *Transactions of the American Fisheries Society* 134(2):291-304.
- Cook, D. 2008. Chinook salmon spawning study Russian River fall 2002-2007. Sonoma County Water Agency, Santa Rosa, California.
- Cooke, D. W., J. P. Kirk, J. V. Morrow Jr, and S. D. Leach. 2004. Population dynamics of a migration limited shortnose sturgeon population. Pages 82-91 in *Proceedings of Annual Conference of Southeastern Association for Fish and Wildlife Agencies*.
- Cooley, S.R., H.L. Kite-Powell, and S.C. Doney. 2009 Ocean acidification's potential to alter global marine ecosystem services. *Oceanography* 22(4):172–181,
- Cooney, T., and coauthors. 2007. Viability criteria for application to interior Columbia Basin salmonid ESUs. Portland: National Marine Fisheries Service:93.
- Corps, BPA, and Reclamation. 2007. Biological Assessment of the Effects of the Federal Columbia River Power System and Mainstem Effects of Other Tributary Actions on Anadromous Salmonid Species Listed under the Endangered Species Act.
- Cote, I. M., S. J. Green, and M. A. Hixon. 2013. Predatory fish invaders: Insights from Indo-Pacific lionfish in the western Atlantic and Caribbean. *Biological Conservation* 164:50-61.
- Council, N. R. 2004. Endangered and threatened fishes in the Klamath River Basin: causes of decline and strategies for recovery. National Academies Press.
- Cox, K. W. 1960. Review of the abalone of California. *California Fish and Game Bulletin* 46:381-406.
- Cox, K. W. 1962. California Abalones, family Haliotidae. *California Fish and Game Bulletin* 118:1-133.

- Crance, J. 1987. Habitat suitability index curves for anadromous fishes. Pages 554 in *Common Strategies of Anadromous and Catadromous Fishes*, MJ Dadswell (ed.). Bethesda, Maryland, American Fisheries Society. Symposium.
- Crozier, L., D. Dechant, and K. Sullivan. 2014. Impacts of Climate Change on Columbia River Salmon – A review of scientific literature published in 2013. Northwest Fisheries Science Center, National Marine Fisheries Service, NOAA.
- Cruz-Piñón, G., J. P. Carricart-Ganivet, and J. Espinoza-Avalos. 2003. Monthly skeletal extension rates of the hermatypic corals *Montastraea annularis* and *Montastraea faveolata*: Biological and environmental controls. *Marine Biology* 143(3):491-500.
- Cuffney, T. F., M. R. Meador, S. D. Porter, and M. E. Gurtz. 1997. Distribution of fish, benthic invertebrate, and algal communities in relation to physical and chemical conditions, Yakima River Basin, Washington, 1990. U.S. Geological Survey, Water Resources Investigations Report 96-4280.
- Cuffney, T.F., Wallace, J.B., and Webster, J.R. 1984. Pesticide manipulation of a headwater stream: invertebrate responses and their significance for ecosystem processes. *Freshwater Invertebrate Biology* 3: 153-171.
- Dadswell, M. 1979. Biology and population characteristics of the shortnose sturgeon, *Acipenser brevirostrum* LeSueur 1818 (Osteichthyes: Acipenseridae), in the Saint John River estuary, New Brunswick, Canada. *Canadian Journal of Zoology* 57(11):2186-2210.
- Dadswell, M. 1984. Status of the shortnose sturgeon, *Acipenser brevirostrum*, in Canada. *Canadian field-naturalist*.
- Dadswell, M. J., B. D. Taubert, T. S. Squiers, D. Marchette, and J. Buckley. 1984. Synopsis of biological data on shortnose sturgeon, *Acipenser brevirostrum* LeSueur 1818.
- Dalton, M.M., P.W. Mote, and A.K. Snover [Eds.]. 2013. *Climate Change in the Northwest: Implications for Our Landscapes, Waters, and Communities*. Washington, DC: Island Press
- DART. 2013. http://www.cbr.washington.edu/dart/query/adult_annual_sum. D. A. R. Time), editor.
- Davies, P.E., and Cook, L.S.J. 1993. Catastrophic macroinvertebrate drift and sublethal effects on brown trout, *Salmo trutta*, caused by cypermethrin spraying on a Tasmanian stream. *Aquatic Toxicology* 27(3-4):201-224.
- Davis, G. E. 1982. A century of natural change in coral distribution at the Dry Tortugas: A comparison of reef maps from 1881 and 1976. *Bulletin of Marine Science* 32(2):608-623.
- Davis, G. E. 1993. Mysterious demise of southern California black abalone *Haliotis cracherodii* Leach, 1814. *Journal of Shellfish Research* 12(2):183-184.

- Davis, G. E. 1996. California abalone. Pages 22-23 in Status and Trends of the Nations Biological Resources. U.S. Geological Survey, Biological Resources Division, Reston, Virginia.
- Davis, G. E., P. L. Haaker, and D. V. Richards. 1998. The perilous condition of white abalone *Haliotis sorenseni*, Bartsch, 1940. *Journal of Shellfish Research* 17(3):871-875.
- DeLacy, A. C., C. R. Hitz, and R. L. Dryfoos. 1964. Maturation, gestation, and birth of rockfish (Sebastodes) from Washington and adjacent waters. Washington Department of Fisheries.
- Deng, X. 2000. Artificial reproduction and early life stages of the green sturgeon (*Acipenser medirostris*).
- Dennis, M. H. 2015. Status Review of the Gulf Grouper (*Mycteroperca jordani*). National Marine Fisheries Service West Coast Division, Contractor with Herrera Environmental Consultants.
- Dionne, P. E., G. B. Zydlewski, M. T. Kinnison, J. Zydlewski, and G. S. Wippelhauser. 2013. Reconsidering residency: characterization and conservation implications of complex migratory patterns of shortnose sturgeon (*Acipenser brevirostrum*). *Canadian Journal of Fisheries and Aquatic Sciences* 70(1):119-127.
- Dodson, J., and C. Mayfield. 1979. Modification of the rheotropic response of rainbow trout (*Salmon gairdneri*) by sublethal doses of the aquatic herbicides diquat and simazine. *Environmental Pollution* 18:147-157.
- Domagalski, J. 2000. Pesticides in surface water measured at select sites in the Sacramento River Basin, California, 1996–1998. U.S. GEOLOGICAL SURVEY Water-Resources Investigations Report 00-4203 National Water-Quality Assessment Program.
- Doney, S. C., M. Ruckelshaus, J. E. Duffy, J. P. Barry, F. Chan, C. A. English, H. M. Galindo, J. M. Grebmeier, A. B. Hollowed, and N. Knowlton. 2012. Climate change impacts on marine ecosystems. *Marine Science* 4
- Dorn, M. W. 2002. Advice on west coast rockfish harvest rates from Bayesian meta-analysis of stock-recruit relationships. *North American Journal of Fisheries Management* 22:280-300.
- Dovel, W., and T. Berggren. 1983. Atlantic sturgeon of the Hudson estuary, New York. *New York Fish and Game Journal* 30(2):140-172.
- Downing, A. L., K. M. DeVanna, C. N. Rubeck-Schurtz, L. Tuhela, and H. Grunkemeyer. 2008. Community and ecosystem responses to a pulsed pesticide disturbance in freshwater ecosystems. *Ecotoxicology* 17:539-548.
- Downs, C. A., and coauthors. 2016. Toxicopathological Effects of the Sunscreen UV Filter, Oxybenzone (Benzophenone-3), on Coral Planulae and Cultured Primary Cells and Its

- Environmental Contamination in Hawaii and the U.S. Virgin Islands. *Archives of Environmental Contamination and Toxicology* 70(2):265-288.
- Dubrovsky, N. M., C. R. Kratzer, L. R. Brown, J. M. Gronberg, and K. R. Burow. 1998. Water quality in the San Joaquin-Tulare Basins, California, 1992-1995. U.S. Department of the Interior, U.S. Geological Survey circular 1159, Reston, Virginia. Available: <http://pubs.usgs.gov/circ/circ1159/circ1159.pdf> (February 2008).
- Dustan, P. 1977. Vitality of reef coral populations off Key Largo, Florida: Recruitment and mortality. *Environmental Geology* 2(1):51-58.
- Dustan, P., and J. Halas. 1987. Changes in the reef-coral community of Carysfort Reef, Key
- Dutton, P. H., and coauthors. 2014. Population structure and phylogeography reveal pathways of colonization by a migratory marine reptile (*Chelonia mydas*) in the central and eastern Pacific. *Ecology and Evolution*.
- Dutton, P. H., B. W. Bowen, D. W. Owens, A. Barragan, and S. K. Davis. 1999. Global phylogeography of the leatherback turtle (*Dermochelys coriacea*). *Journal of Zoology* 248:397-409.
- Dutton, P. H., V. Pease, and D. Shaver. 2006. Characterization of mtDNA variation among Kemp's ridleys nesting on Padre Island with reference to Rancho Nuevo genetic stock. Pages 189 in *Twenty-Sixth Annual Conference on Sea Turtle Conservation and Biology*.
- Ebbert, J. C., S. S. Embrey, R. W. Black, A. J. Tesoriero, and A. L. Haggland. 2000. Water quality in the Puget Sound basin, Washington and British Columbia, 1996-98. U.S. Department of the Interior, U.S. Geological Survey Circular 1216, Reston, Virginia. Available: <http://pubs.usgs.gov/circ/circ1216/pdf/circ1216.pdf> (February 2008).
- Ebbert, J., and S. Embry. 2001. Pesticides in surface water of the Yakima River Basin, Washington, 1999-2000 - their occurrence and an assessment of factors affecting concentrations and loads. U.S. Geological Survey, Water Investigations Report 01-4211, Portland Oregon.
- Echeverria, T. W. 1987. Thirty-four species of California rockfishes: maturity and seasonality of reproduction. *Fisheries Bulletin* 85(2):229-250.
- Eckdahl, K. A. 2015. Endangered black abalone (*Haliotis cracherodii*) abundance and habitat availability in Southern California. M.S. California State University, Fullerton, Ann Arbor.
- Eckert, K., B. Wallace, J. Frazier, S. Eckert, and P. Pritchard. 2012. Synopsis of the biological data on the leatherback sea turtle (*Dermochelys coriacea*). .172.
- Eder, K. J., H. R. Kohler, et al. 2007. Pesticide and pathogen: Heat shock protein expression and acetylcholinesterase inhibition in juvenile Chinook salmon in response to multiple stressors. *Environmental Toxicology and Chemistry* 26(6): 1233-1242.

- Edmunds, P. J. 2015. A quarter-century demographic analysis of the Caribbean coral, *Orbicella annularis*, and projections of population size over the next century. *Limnology and Oceanography* 60(3):840-855.
- Edmunds, P. J., and R. Elahi. 2007. The demographics of a 15-year decline in cover of the Caribbean reef coral *Montastraea annularis*. *Ecological Monographs* 77(1):3-18.
- Ehrhart, L. M., D. A. Bagley, and W. E. Redfoot. 2003. Loggerhead turtles in the Atlantic Ocean: Geographic distribution, abundance, and population status. Pages 157-174 in A. B. Bolten, and B. E. Witherington, editors. *Loggerhead Sea Turtles*. Smithsonian Institution Press, Washington, D. C.
- EPA 2004. Bromoxynil: Analysis of risks to endangered and threatened salmon and steelhead. November 26, 2004. United States Environmental Protection Agency, Office of Pesticide Programs.
- EPA 2013. Interim approaches for national-level pesticide Endangered Species Act assessments based on the recommendations of the National Academy of Sciences April 2013 report. November 15, 2013. United States Environmental Protection Agency, Office of Pesticide Programs.
- EPA 2017. Preliminary ecological risk assessment in support of the registration review of prometryn (PC Code 080805; DP Barcodes 438070 & 435550). June 9, 2017. United States Environmental Protection Agency, Office of Pesticide Programs.
- EPA 2017a. Biological Evaluation of chlorpyrifos risks to threatened and endangered species. <https://www.epa.gov/endangered-species/biological-evaluation-chapters-chlorpyrifos-esa-assessment>. January 18, 2017. United States Environmental Protection Agency, Office of Pesticide Programs.
- EPA 2017b. Biological Evaluation of diazinon risks to threatened and endangered species. <https://www.epa.gov/endangered-species/biological-evaluation-chapters-diazinon-esa-assessment>. January 18, 2017. United States Environmental Protection Agency, Office of Pesticide Programs.
- EPA 2017c. Biological Evaluation of malathion risks to threatened and endangered species. <https://www.epa.gov/endangered-species/biological-evaluation-chapters-malathion-esa-assessment>. January 18, 2017. United States Environmental Protection Agency, Office of Pesticide Programs.
- EPA 2017d. Pesticide industry sales and usage 2008-2012 market estimates. United States Environmental Protection Agency, Office of Pesticide Programs. https://www.epa.gov/sites/production/files/2017-01/documents/pesticides-industry-sales-usage-2016_0.pdf.
- EPA 2018. Bromoxynil and bromoxynil esters: draft ecological risk assessment for registration review. September 20, 2018. United States Environmental Protection Agency, Office of Pesticide Programs.

- EPA. 2004. Overview of the ecological risk assessment process in the Office of Pesticide Programs, U.S. Environmental Protection Agency - Endangered and threatened species effects determinations. Environmental Protection Agency - Office of Pesticide Programs.
- EPA. 2009. Risks of Prometryn Use to Federally Threatened California Red legged Frog (*Rana aurora draytonii*). Washington, D.C.
- EPA. 2018a. Draft Ecological Risk Assessment for the Registration Review of Bromoxynil and Bromoxynil Esters.in O. o. P. P. U. S. Environmental Protection Agency, Environmental Fate and Effects Division, Environmental Risk Branch II, editor.
- EPA. 2018b. Preliminary Ecological Risk Assessment in Support of the Registration Review of Prometryn.in O. o. P. P. U. S. Environmental Protection Agency, Environmental Fate and Effects Division, Environmental Risk Branch V, editor., Washington, DC.
- Erfteimeijer, P. L. A., B. Riegl, B. W. Hoeksema, and P. A. Todd. 2012. Environmental impacts of dredging and other sediment disturbances on corals: A review. *Marine Pollution Bulletin* 64(9):1737-1765.
- Eschmeyer, W. N., E. S. Herald, and H. Hammann. 1983. *A Field Guide to Pacific Coast Fishes of North America*. Houghton Mifflin Company, Boston, Massachusetts.
- Esperon-Rodriguez, M., and J. P. Gallo-Reynoso. 2012. The re-colonization of the Archipelago of San Benito, Baja California, by the Guadalupe fur seal. *Revista Mexicana de Biodiversidad* 83(1):170-176.
- Esperon-Rodriguez, M., and J. P. Gallo-Reynoso. 2013. Juvenile and subadult feeding preferences of the Guadalupe fur seal (*Arctocephalus townsendi*) at San Benito Archipelago, Mexico. *Aquatic Mammals* 39(2):125-131.
- Evans, P. G. H., and A. Bjørge. 2013. Impacts of climate change on marine mammals. *Marine Climate Change Impacts Partership: Science Review*:134-148.
- Evermann, B. W., and B. A. Bean. 1898. *Indian River and its Fishes*. Report U.S. Comm. Fish and Fisheries for 1896.
- Fairbanks, R. G. 1989. A 17,000-year glacio-eustatic sea level record: Influence of glacial melting rates on the Younger Dryas event and deep-ocean circulation. *Nature* 342(6250):637-642.
- Fast, D.E., Hubble, J.D., and Kohn, M.S. 1988. *Yakima River Spring Chinook Enhancement Study, Annual Report FY 1988*.U.S. Department of Energy, Bonneville Power Administration Division of Fish and Wildlife. Project No. 82-16. 101pp.
- Fay, C., and coauthors. 2006. Status review of anadromous Atlantic salmon (*Salmo salar*) in the United States. National Marine Fisheries Service and U.S. Fish and Wildlife Service.
- Feder, H. M., C. H. Turner, and C. Limbaugh. 1974. Observations on fishes associated with kelp beds in southern California. *Fisheries Bulletin* 160:144.

- Feely, R.A., S.C. Doney, and S.R. Cooley. 2009. Ocean acidification: Present conditions and future changes in a high-CO₂ world. *Oceanography* 22(4):36–47, <http://dx.doi.org/10.5670/oceanog.2009.95>.
- Ferrari, A., Venturino, A., and Pechen de D'Angelo, A.M. 2004. Time course of brain
- Figureroa-Carranza, A. L. 1994. Early lactation and attendance behavior of the Guadalupe fur seal females (*Arctocephalus townsendi*). University of California, Santa Cruz, California.
- Finney, B. P., I. Gregory-Eaves, M. S. V. Douglas, and J. P. Smol. 2002. Fisheries productivity in the northeastern Pacific Ocean over the past 2200 years. *Nature* 416:729–733.
- Fish, U., and W. Service. 1995. Working paper on restoration needs: habitat restoration actions to double natural production of anadromous fish in the Central Valley of California. US Fish and Wildlife Service.
- Fisher, F. W. 1994. Past and present status of Central Valley chinook salmon. *Conservation Biology*:870-873.
- Fisher, J. P., and coauthors. 2014. Early ocean dispersal patterns of Columbia River Chinook and coho salmon. *Transactions of the American Fisheries Society* 143(1):252-272.
- Fisher, T., and R. Hinrichsen. 2006. Abundance-based trend results for Columbia Basin salmon and steelhead ESUs. . Bonneville Power Administration, Portland, Oregon.
- Flagg, T. A., F. W. Waknitz, D. J. Maynard, G. B. Milner, and C. V. W. Mahnken. 1995. The effect of hatcheries on native coho salmon populations in the lower Columbia River. Pages 366-375 in H. Schramm, and R. Piper, editors. *Uses and effects of cultured fishes in aquatic systems*. American Fisheries Society, Bethesda, MD.
- Fleeger, J.W., Carman, K.R., and Nisbet, R.M. 2003. Indirect effects of contaminants in aquatic ecosystems. *Science of the Total Environment* 317:207-233.
- Fleischer, L. A. 1978. The distribution, abundance, and population characteristics of the Guadalupe fur seal, *Arctocephalus townsendi* (Merriam 1897). University of Washington, Seattle, Washington.
- Fleming, J., T. Bryce, and J. Kirk. 2003. Age, growth, and status of shortnose sturgeon in the lower Ogeechee River, Georgia. Pages 80-91 in *Proceedings of the Annual Conference of the Southeast Association of Fish and Wildlife Agencies*.
- Florida Fish and Wildlife Conservation Commission. 2013. A Species Action Plan for the Pillar Coral *Dendrogyra cylindrus*, Final Draft. Florida Fish and Wildlife Conservation Commission, Tallahassee, Florida.
- Flournoy, P. H., S. G. Rogers, and P. S. Crawford. 1992. Restoration of shortnose sturgeon in the Altamaha River, Georgia. Final Report to the US Fish and Wildlife Service, Atlanta, Georgia.

- Foott, J. S., R. Harmon, and R. Stone. 2003. Ceratomyxosis resistance in juvenile Chinook salmon and steelhead trout from the Klamath River, 2002 Investigational Report. U.S. Fish and Wildlife Service, California-Nevada Fish Health Center, Anderson, California. [768 Kb] at KRIS Web site.
- Ford, M. J. 2011a. Status review update for Pacific salmon and steelhead listed under the Endangered Species Act: Pacific Northwest. NOAA Technical Memorandum NMFS-NWFSC 113.
- Ford, M. J. e. 2011b. Status review update for Pacific salmon and steelhead listed under the Endangered Species Act: Pacific Northwest, volume NMFS-NWFSC-113. U.S. Dept. Commer., NOAA Tech. Memo.
- Ford, M. J., J. Hempelmann, M. B. Hanson, K. L. Ayers, R. W. Baird, C. K. Emmons, J. I. Lundin, G. S. Schorr, S. K. Wasser, L. K. Park. 2016. Estimation of a Killer Whale (*Orcinus orca*) Population's Diet Using Sequencing Analysis of DNA from Feces. PLoS One. January 6, 2016. 14 pages.
- Ford, M. J., M. B. Hanson, J. Hempelmann, K. L. Ayres, C. K. Emmons, G. S. Schorr, R. W. Baird, K. C. Balcomb, S. K. Wasser, K. M. Parsons, K. Balcomb-Bartok. 2011. Inferred Paternity and Male Reproductive Success in a Killer Whale (*Orcinus orca*) Population. *Journal of Heredity*. Volume 102 (Issue 5), pages 537 to 553.
- Foss, S. F., P. R. Ode, M. Sowby, and M. Ashe. 2007. Non-indigenous aquatic organisms in the coastal waters of California. *California Fish and Game* 93(3):111-129.
- Foster, A. M., and J. P. Clugston. 1997. Seasonal migration of Gulf sturgeon in the Suwannee River, Florida. *Transactions of the American Fisheries Society* 126(2):302-308.
- Fox, D. A., J. E. Hightower, and F. M. Parauka. 2000. Gulf sturgeon spawning migration and habitat in the Choctawhatchee River system, Alabama–Florida. *Transactions of the American Fisheries Society* 129(3):811-826.
- Fox, D. A., J. E. Hightower, and F. M. Parauka. 2002. Estuarine and nearshore marine habitat use by Gulf sturgeon from the Choctawhatchee River system, Florida. Pages 111-126 in *American Fisheries Society Symposium*.
- FR 64 50394. Endangered and Threatened Species; Threatened Status for Two Chinook Salmon Evolutionarily Significant Units (ESUs) in California. Pages FR 64 50394 in N. O. A. A. National Marine Fisheries Service, Commerce, editor.
- Francis, R. C., and S. R. Hare. 1994. Decadal-scale regime shifts in the large marine ecosystems of the North-east Pacific: A case for historical science. *Fisheries Oceanography* 3(4):279-291.
- Fresh, K. D. 1997. The role of competition and predation in the decline of Pacific salmon and steelhead. Pages 245-275 in D. J. Stouder, P. A. Bisson, and R. J. Naiman, editors.

- Pacific salmon and their ecosystems: status and future options Chapman and Hall, New York.
- Fresh, K. L., E. Casillas, L. Johnson, and D. L. Bottom. 2005. Role of the estuary in the recovery of Columbia River basin salmon and steelhead: an evaluation of limiting factors. NOAA Technical Memorandum NMFS-NWFSC 69:105.
- Fuhrer, G. J., and coauthors. 2004. Water quality in the Yakima Basin, Washington, 1999-2000. U.S. Department of the Interior, U.S. Geological Survey Circular 1237, water research investigations report 03-4026, Portland, Oregon. Available: <http://pubs.usgs.gov/wri/wri034026/pdf/wri034026.pdf> (February 2008).
- Gago, P. T., and coauthors. 2012. Establishment of arribada censusing methodology at olive ridley (*Lepidochelys olivacea*) Nicaraguan rookeries. Pages 219 in T. T. Jones, and B. P. Wallace, editors. Thirty-First Annual Symposium on Sea Turtle Biology and Conservation. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southeast Fisheries Science Center, San Diego, California.
- Gallagher, S. P., D. W. Wright, B. W. Collins, and P. B. Adams. 2010. A regional approach for monitoring salmonid status and trends: results from a pilot study in coastal Mendocino County, California. *North American Journal of Fisheries Management* 30(5):1075-1085.
- Gallo-Reynoso, J. P. 1994. Factors affecting the population status of Guadalupe fur seals, *Arctocephalus townsendi* (Merriam 1897), at Isla de Guadalupe, Baja California, Mexico. University of California, Santa Cruz.
- Gallo-Reynoso, J. P., B. J. L. Boeuf, and A. L. Figueroa. 1995. Track, location, duration and diving behavior during foraging trips of Guadalupe fur seal females. Pages 41 in Eleventh Biennial Conference on the Biology of Marine Mammals, Orlando, Florida.
- Garcia Reyes, J., and N. V. Schizas. 2010. No two reefs are created equal: fine-scale population structure in the threatened coral species *Acropora palmata* and *A. cervicornis*. *Aquatic Biology* 10:69-83.
- Gaunt, P. B., SA. 2000. Matrix solid phase dispersion extraction of triazines from catfish tissues; examination of the effects of temperature and dissolved oxygen on the toxicity of atrazine. *International Journal of Environment and Pollution* 13:284-312.
- Geiger, D. C., DJ; Brooke, LT, editor. 1988. Acute Toxicities of Organic Chemicals to Fathead Minnows (*Pimephales promelas*). University of Wisconsin-Superior, Superior, WI.
- Geiger, D. L. 1999. A total evidence cladistic analysis of the Family Haliotidae (Gastropoda: Vetigastropoda). University of Southern California, Los Angeles.
- Gilbert, C. R. 1989. Species Profiles. Life Histories and Environmental Requirements of Coastal Fishes and Invertebrates (Mid-Atlantic). Atlantic and Shortnosed Sturgeons. DTIC Document.

- Gilliom R.J. 2007. Pesticides in U.S. streams and groundwater. *Environmental Science and Technology* 41(10):3407-3414.
- Gilliom, R. J. 2007. Pesticides in U.S. streams and groundwater. *Environmental Science & Technology* 41:3407-3413.
- Gilliom, R. J., and coauthors. 2006. The quality of our nation's waters; pesticides in the nation's streams and groundwater, 1992-2001. U.S. Geological Survey circular 1291:52 p.
- Gilman, E. L. 2009. Guidelines to reduce sea turtle mortality in fishing operations. FAO, Rome.
- Gilmore, M. D., and B. R. Hall. 1976. Life history, growth habits, and constructional roles of *Acropora cervicornis* in the patch reef environment. *Journal of Sedimentary Research* 46(3):519-522.
- Goldberg, W. M. 1973. The ecology of the coral octocoral communities off the southeast Florida coast: Geomorphology, species composition and zonation. *Bulletin of Marine Science* 23:465-488.
- Good, J. W. 2000. 3.3 Summary and current status of Oregon's estuarine ecosystems, Salem, OR.
- Good, T. P., R. S. Waples, and P. Adams. 2005. Updated status of federally listed ESUs of West Coast salmon and steelhead. U.S. Department of Commerce, NMFS-NWFSC-66, Seattle, Washington.
- Good, T. P., R. S. Waples, and P. Adams. 2005a. Updated status of federally listed ESUs of West Coast salmon and steelhead.
- Good, T. P., R. S. Waples, and P. Adams. 2005b. Updated status of federally listed ESUs of West Coast salmon and steelhead. U.S. Department of Commerce, NMFS-NWFSC-66, Seattle, Washington.
- Goreau, T. 1959a. The Ecology of Jamaican Coral Reefs I. Species Composition and Zonation. *Ecology* 40:67-90.
- Goreau, T. F. 1959b. The ecology of Jamaican coral reefs I. Species composition and zonation. *Ecology* 40(1):67-90.
- Goreau, T. F., and J. W. Wells. 1967. The shallow-water Scleractinia of Jamaica: Revised list of species and their vertical distribution range. *Bulletin of Marine Science* 17(2):442-453.
- Graham, J. E., and R. van Woesik. 2013. The effects of partial mortality on the fecundity of three common Caribbean corals. *Marine Biology*:1-5.
- Greene, C.M., and Beechie, T.J. 2004. Consequences of potential density-dependent mechanisms on recovery of ocean-type Chinook salmon (*Oncorhynchus tshawytscha*). *Canadian Journal of Fisheries and Aquatic Sciences* 61:590-602.
- Gregory, S. 2000. 3.5 Summary of current status and health of Oregon's riparian areas. Oregon Progress Board, Salem, OR.

- Gregory, S. V., and P. A. Bisson. 1997. Degradation and loss of anadromous salmonid habitat in the Pacific Northwest. pages 277-314 in Stouder D.J, Bisson, P.A, Naiman, R.J. (editors) Pacific salmon and their ecosystems. New York: Chapman and Hall.
- Greswell, R. E. 1999. Fire and aquatic ecosystems in forested biomes of North America. Transactions of the American Fisheries Society 128(2):193-221.
- Groombridge, B. 1982. Kemp's Ridley or Atlantic Ridley, *Lepidochelys kempii* (Garman 1880). Pages 201-208 in The IUCN Amphibia, Reptilia Red Data Book.
- Grottoli, A. G., and coauthors. 2014. The cumulative impact of annual coral bleaching can turn some coral species winners into losers. *Global Change Biology* 20(12):3823-3833.
- Grunwald, C., L. Maceda, J. Waldman, J. Stabile, and I. Wirgin. 2008. Conservation of Atlantic sturgeon *Acipenser oxyrinchus oxyrinchus*: delineation of stock structure and distinct population segments. *Conservation Genetics* 9(5):1111-1124.
- Gu, B., D. Schell, T. Frazer, M. Hoyer, and F. Chapman. 2001. Stable carbon isotope evidence for reduced feeding of Gulf of Mexico sturgeon during their prolonged river residence period. *Estuarine, Coastal and Shelf Science* 53(3):275-280.
- Guilbard, F., J. Munro, P. Dumont, D. Hatin, and R. Fortin. 2007. Feeding ecology of Atlantic sturgeon and lake sturgeon co-occurring in the St. Lawrence estuarine transition zone. Pages 85 in American Fisheries Society Symposium. American Fisheries Society.
- Guillen, G. 2003. Klamath River fish die-off, September 2002: causative factors of mortality. Report number AFWO-F-02-03. U.S. Fish and Wildlife Service, Arcata Fish and Wildlife Office. Arcata, California 128 p.
- Gustafson, R. G., editor. 2016. Status Review Update of Eulachon (*Thaleichthys pacificus*) Listed under the Endangered Species Act: Southern Distinct Population Segement.
- Gustafson, R.G., Wainwright, T.C., Winans, G.A., Waknitz, F.W., Parker, L.T., and Waples, R.S. 1997. Status review of sockeye salmon from Washington and Oregon. U.S. Dept. Commerce, NOAA Tech. Memo. NMFS-NWFSC-33, 282 pp.
- Haaker, P. L. 1994. Assessment of abalone resources at the Channel Islands. W. L. Halvorson, and G. J. Maender, editors. The Fourth California Islands Symposium: Update on the Status of Resources. Santa Barbara Museum of Natural History.
- Haaker, P. L., and coauthors. 1989. Abalone withering syndrome and mass mortality of black abalone, in California. First International Symposium on Abalone Biology, Fisheries, and Culture. November 21- 25, La Paz, Mexico.
- Haaker, P. L., K. C. Henderson, and D. O. Parker. 1986. California abalone. California Fish and Game Marine Resources Leaflet No. 11. . California Department of Fish and Game, Marine Resources Division.

- Hager, C., J. Kahn, C. Watterson, J. Russo, and K. Hartman. 2014. Evidence of Atlantic Sturgeon spawning in the York River system. *Transactions of the American Fisheries Society* 143(5):1217-1219.
- Hale, E. A., and coauthors. 2016. Abundance Estimate for and Habitat Use by Early Juvenile Atlantic Sturgeon within the Delaware River Estuary. *Transactions of the American Fisheries Society* 145(6):1193-1201.
- Hallock, R. J., W. F. Van Woert, and L. Shapovalov. 1961. An evaluation of stocking hatchery-reared steelhead rainbow trout (*Salmo gairdneri gairdneri*) in the Sacramento River System. *Fisheries Bulletin* 114:1-74.
- Halstead, B. W., P. S. Auerbach, and D. R. Campbell. 1990. A colour atlas of dangerous marine animals. Wolfe Medical Publications Ltd, W.S. Cowell Ltd, Ipswich, England.
- Hansen, J. M., JCA; Lipton, J; Cacela, D; Bergman, HL. 1999. Differences in neurobehavioral responses of chinook salmon (*Oncorhynchus tshawytscha*) and rainbow trout (*Oncorhynchus mykiss*) exposed to copper and cobalt: Behavioral avoidance. *Environmental Toxicology and Chemistry* 18:1972-1978.
- Hanson, M. B., and coauthors. 2010. Species and stock identification of prey consumed by endangered southern resident killer whales in their summer range. *Endangered Species Research* 11:69-82.
- Hard, J., R. P. J. Jones, M. R. Delarm, and R. S. Waples. 1992. Pacific salmon and artificial propagation under the endangered species act. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-NWFSC-2, Seattle, Washington.
- Hard, J., R. P. J. Jones, M. R. Delarm, and R. S. Waples. 1992. Pacific salmon and artificial propagation under the endangered species act. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-NWFSC-2, Seattle, Washington.
- Hare, S. R., and N. J. Mantua. 2000. Empirical evidence for North Pacific regime shifts in 1977 and 1989. *Progress in Oceanography* 16-Feb(4-Feb):103-145.
- Harmelin-Vivien, M. 1994. The effects of storms and cyclones on coral reefs: A review. *Journal of Coastal Research* 12:211-231.
- Hart, J. L. 1973. Pacific fishes of Canada. *Bulletin of the Fisheries Research Board of Canada* 180.
- Harvey, C. J., N. Tolimieri, and P. S. Levin. 2006. Changes in body size, abundance, and energy allocation in rockfish assemblages of the Northeast Pacific. *Ecological Applications* 16(4):1502-1515.
- Hassler, T. J. 1987. Species Profiles: Life Histories and Environmental Requirements of Coastal Fishes and Invertebrates (Pacific Southwest). Coho Salmon. DTIC Document.

- Hawkes, A., R. DeWitt, S. Hecht, and T. Hooper. 2018. Use versus Usage: A critical consideration for modeling pesticide exposure to federally-listed threatened and endangered species. Presentation at 39th annual meeting of Society for Environmental Toxicology and Chemistry. Presentation No. 454.
- Hayes, S. A., M. H. Bond, C. V. Hanson, and R. B. MacFarlane. 2004. Interactions between endangered wild and hatchery salmonids: can the pitfalls of artificial propagation be avoided in small coastal streams? *Journal of Fish Biology* 65:101 - 121.
- Hayhoe, K., S. Doherty, J. P. Kossin, W. V. Sweet, R. S. Vose, M. F. Wehner, and D. J. Wuebbles. 2018. In *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II* (Reidmiller, D.R., et al. [eds.]). U.S. Global Change Research Program, Washington, DC, USA.
- Hayman, R. A., E. M. Beamer, and R. E. McClure. 1996. FY 1995 Skaig River chinook restoration research. Report by Skagit System Cooperative, La Conner, Washington:54p + Appendices.
- Hays, G. C. 2000. The implications of variable remigration intervals for the assessment of population size in marine turtles. *J Theor Biol* 206(2):221-7.
- HCCC. 2005. Hood Canal and Eastern Strait of Juan de Fuca Summer Chum Salmon Recovery Plan.
- Healey, M. C. 1991. Life history of Chinook salmon (*Oncorhynchus tshawytscha*). Pages 311-394 in C. Groot, and L. Margolis, editors. *Pacific salmon life histories*. University of British Columbia Press, Vancouver, Canada.
- Healey, M., C. Groot, and L. Margolis. 1991. Life history of chinook salmon (*Oncorhynchus tshawytscha*). *Pacific salmon life histories*:313-393.
- Healey, M.C. 1982. Timing and relative intensity of size-selective mortality of juvenile chum salmon (*Oncorhynchus keta*) during early sea life. *Canadian Journal of Fisheries and Aquatic Sciences* 39:952-957.
- Healey, M.C. 1991. Life history of Chinook salmon (*Oncorhynchus tshawytscha*). Pages 311–394 in C. Groot and L. Margolis, editors. *Pacific salmon life histories*. University of British Columbia Press, Vancouver, Canada.
- Healey, M.C., and Heard, W.R. 1984. Inter- and intra-population variation in the fecundity of Chinook salmon (*Oncoryhchus tshawytscha*) and its relevance to life history theory. *Canadian Journal of Fisheries and Aquatic Sciences* 41:476-483.
- Heckmann, L. H., and N. Friberg. 2005. Macroinvertebrate community response to pulse exposure with the insecticide lambda-cyhalothrin using in-stream mesocosms. *Environmental Toxicology and Chemistry* 24:582-590.

- Heise, R. J., W. T. Slack, S. T. Ross, and M. A. Dugo. 2004. Spawning and associated movement patterns of Gulf sturgeon in the Pascagoula River drainage, Mississippi. *Transactions of the American Fisheries Society* 133(1):221-230.
- Heise, R., W. Slack, S. T. Ross, and M. Dugo. 2005. Gulf sturgeon summer habitat use and fall migration in the Pascagoula River, Mississippi, USA. *Journal of Applied Ichthyology* 21(6):461-468.
- Heppell, S. S., and coauthors. 2005. A population model to estimate recovery time, population size, and management impacts on Kemp's ridley sea turtles. *Chelonian Conservation and Biology* 4(4):767-773.
- Hernandez-Delgado, E. A., and coauthors. 2011. Sediment stress, water turbidity, and sewage impacts on threatened elkhorn coral (*Acropora palmata*) stands at Vega Baja, Puerto Rico. Pages 83-92 in 63rd Gulf and Caribbean Fisheries Institute. Proceedings of the 63rd Gulf and Caribbean Fisheries Institute, San Juan, Puerto Rico.
- Heron, S. F., Jeffrey A. Maynard, Ruben van Hooijdonk and C. Mark Eakin. 2016. Warming Trends and Bleaching Stress of the World's Coral Reefs 1985–2012. *Sci. Rep.* 6, 38402; doi: 10.1038/srep38402 (2016). <https://www.nature.com/articles/srep38402>
- Hessan, D., T. Kallqvist, M. Abdel-Hamid, and D. Berge. 1994. Effects of pesticides on different zooplankton taxa in mesocosm experiments. *Norwegian Journal of Agricultural Sciences, Supplement* 13:153-161.
- Heublein, J. C., J. T. Kelly, C. E. Crocker, A. P. Klimley, and S. T. Lindley. 2009. Migration of green sturgeon, *Acipenser medirostris*, in the Sacramento River. *Environmental Biology of Fishes* 84(3):245-258.
- Heupel, M. R., J. K. Carlson, and C. A. Simpfendorfer. 2007. Shark nursery areas: concepts, definition, characterization and assumptions. *Marine Ecology Progress Series* 337:287-297.
- Heydari, A. M., IJ; McCloskey, WB. 1997. Effects of three soil applied herbicides on populations of plant disease suppressing bacteria in the cotton rhizosphere. *Plant and Soil* 195:75-81.
- Hickerson, E. L., G. P. Schmahl, M. Robbart, W. F. Precht, and C. Caldwell. 2008. The state of coral reef ecosystems of the Flower Garden Banks, Stetson Bank, and other banks in the northwestern Gulf of Mexico. Pages 189–217 in J. E. Waddell, and A. M. Clarke, editors. *The State of Coral Reef Ecosystems of the United States and Pacific Freely Associated State: 2008*. NOAA, National Centers for Coastal Ocean Science, Silver Spring, Maryland.
- Higgs, D.A., MacDonald, J.S., Levings, C.D., and Dosanjh, B.S. 1995. Nutrition and feeding habits in relation to life history stage. Pages 159-315. in C. Groot, L. Margolis, and W.C. Clarke, editors. *Physiological Ecology of Pacific Salmon*. University of British Columbia Press, Vancouver, Canada.

- Hightower, J. E. 2007. Oceanic distribution and behavior of green sturgeon. Pages 197-211 in *Anadromous Sturgeons: Habitats, Threats, and Management: Proceedings of the Symposium "Anadromous Sturgeons--Status and Trends, Anthropogenic Impacts, and Essential Habitats"* Held in Quebec City, Quebec, Canada, August 11-13, 2003. American Fisheries Society.
- Hinck, J. E., and coauthors. 2004. Biomonitoring of environmental status and trends (BEST) program: environmental contaminants and their effects on fish in the Columbia River basin. U.S. Department of the Interior, U.S. Geological Survey, Columbia Environmental Research Center, scientific investigation report 2004-5154, Columbia, Missouri.
- Hiruki, L. M., and T. J. Ragen. 1992. A compilation of historical monk seal, *Monachus schauinslandi*, counts. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southwest Fisheries Science Center.
- Hobday, A. J., and M. J. Tegner. 2000. Status review of white abalone (*Haliotis sorenseni*) throughout its range in California and Mexico.
- Hobday, A. J., M. J. Tegner, and P. L. Haaker. 2001. Over-exploitation of a broadcast spawning marine invertebrate: Decline of the white abalone. *Reviews in Fish Biology and Fisheries* 10:493-514.
- Hoegh-Guldberg, O. 2010. Dangerous shifts in ocean ecosystem function? *Isme Journal* 4(9):1090-1092.
- Holsman, K. K., M. D. Scheuerell, E. Buhle, and R. Emmett. 2012. Interacting effects of translocation, artificial propagation, and environmental conditions on the marine survival of Chinook salmon from the Columbia River, Washington, USA. *Conservation Biology* 26(5):912-922.
- Holstein, D. M., C. B. Paris, A. C. Vaz, and T. B. Smith. 2016. Modeling vertical coral connectivity and mesophotic refugia. *Coral Reefs* 35(1):23-37.
- Holtby, L.B., Andersen, B.C., and Kadowak, R.K. 1990. Importance of smolt size and early ocean growth to interannual variability in marine survival of coho salmon (*Oncorhynchus kisutch*). *Canadian Journal of Fisheries and Aquatic Sciences* 47:2181-2194.
- Horrocks, J. A., and coauthors. 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.
- Houston, J. J. 1988. Status of green sturgeon, *Acipenser medirostris*, in Canada. *Canadian field-naturalist* 102:286-290.
- Howard, T. E. 1975. Swimming performance of juvenile coho salmon (*Oncorhynchus kisutch*) exposed to bleached kraft pulp mill effluent. *Journal of Fisheries Research Board of Canada* 32:789-793.

- Howell, P., and coauthors. 1985. Stock assessment of Columbia River anadromous salmonids. Volume II: Steelhead stock summaries stock transfer guidelines-information needs. Final report to Bonneville Power Administration. Bonneville Power Administration, DE-A179-84BP12737, Project 83-335, Portland, Oregon.
- Howell, P., Jones, K., Scarnecchia, D., LaVoy, L., Kendra, W., Ortmann, D., Neff, C., Petrosky, C., and Thurow, R. 1985. Stock assessment of Columbia River anadromous salmonids Volume I: Chinook, coho, chum, and sockeye salmon stock summaries. Final Report to Bonneville Power Administration. Bonneville Power Administration, P.O Box 3621, Portland OR 97208, DE-AI79-84BP12737, Project No. 83-335. 579 p.
- Howorth, P. C. 1978. The abalone book. Naturegraph Publishers, Happycamp, California.
- Hubbs, C. L. 1956. Back from oblivion. Guadalupe fur seal: Still a living species. *Pacific Discovery* 9(6):14-21.
- Huff, D. D., S. T. Lindley, B. K. Wells, and F. Chai. 2012. Green sturgeon distribution in the Pacific Ocean estimated from modeled oceanographic features and migration behavior. *PLoS One* 7(9):e45852.
- Huff, J. A. 1975. Life history of Gulf of Mexico sturgeon, *Acipenser ohrhynchus desotoi*, in Suwannee River, Florida.
- Humphrey, C., M. Weber, C. Lott, T. Cooper, and K. Fabricius. 2008. Effects of suspended sediments, dissolved inorganic nutrients and salinity on fertilisation and embryo development in the coral *Acropora millepora* (Ehrenberg, 1834). *Coral Reefs* 27(4):837-850.
- Huntington, B. E., M. Karnauskas, and D. Lirman. 2011. Corals fail to recover at a Caribbean marine reserve despite ten years of reserve designation. *Coral Reefs* 30(4):1077-1085.
- Hurnyn, A. D. 1996. An appraisal of the Allen paradox in a New Zealand trout stream. *Limnology and Oceanography* 41:243-252.
- Hurnyn, A. D. 1998. Ecosystem-level evidence for top-down and bottom-up control of production in a grassland stream system. *Oecologia* 115:173-183.
- Hutchins, D.A., M.R. Mulholland, and F. Fu. 2009. Nutrient cycles and marine microbes in a CO₂-enriched ocean. *Oceanography* 22(4):128-145, <http://dx.doi.org/10.5670/oceanog.2009.103>.
- ICTRT. 2003. Independent populations of chinook, steelhead, and sockeye for listed evolutionarily significant units within the Interior Columbia River Domain. NMFS, Northwest Fisheries Science Center, Seattle, Washington.
- ICTRT. 2008a. Entiat spring Chinook population. NMFS, Northwest Fisheries Science Center, Seattle, Washington.

- ICTRT. 2008b. Methow spring Chinook salmon. NMFS, Northwest Fisheries Science Center, Seattle, Washington.
- ICTRT. 2008c. Wenatchee River spring Chinook population. NMFS, Northwest Fisheries Science Center, Seattle, Washington.
- Idedan, I. T., T; Noguchi, T. 2011. Herbicide effect on the photodamage process of photosystem II: Fourier transform infrared study. *Biochimica Et Biophysica Acta-Bioenergetics* 1807:1214-1220.
- Idjadi, J. A., and coauthors. 2006. Rapid phase-shift reversal on a Jamaican coral reef. *Coral Reefs* 25(2):209-211.
- Incardona, J. P., T. K. Collier, and N. L. Scholz. 2004. Defects in cardiac function precede morphological abnormalities in fish embryos exposed to polycyclic aromatic hydrocarbons. *Toxicology and Applied Pharmacology* 196:191-205.
- IPCC, 2013: Summary for Policymakers. In: *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S. K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- IPCC. 2001. *Climate change 2001: impacts adaptation and vulnerability. Summary for policy makers and technical summary.* IPCC, Geneva, Switzerland.
- IPCC. 2007. *Contribution of working groups I, II, and III to the fourth assessment report of the intergovernmental panel on climate change.* Intergovernmental Panel on Climate Change, Geneva, Switzerland.
- IPCC. 2014. *Climate change 2014: Impacts, adaptation, and vulnerability. IPCC Working Group II contribution to AR5.* Intergovernmental Panel on Climate Change.
- ISG. 1996. *Return to the river: restoration of salmonid fishes in the Columbia River ecosystem.* Northwest Power Planning Council, Independent Science Group report 96-6, Portland, Oregon. Available: <http://www.ecy.wa.gov/programs/WR/wstf/images/pdf/normrivr.pdf> (February 2008).
- Ishikita, H. H., K; Noguchi, T. 2011. How Does the Q(B) Site Influence Propagate to the Q(A) Site in Photosystem II? *Biochemistry* 50:5436-5442.
- Israel, J. A., J. F. Cordes, M. A. Blumberg, and B. May. 2004. Geographic patterns of genetic differentiation among collections of green sturgeon. *North American Journal of Fisheries Management* 24(3):922-931.
- Israel, J. A., K. J. Bando, E. C. Anderson, and B. May. 2009. Polyploid microsatellite data reveal stock complexity among estuarine North American green sturgeon (*Acipenser medirostris*). *Canadian Journal of Fisheries and Aquatic Sciences* 66(9):1491-1504.

- Jaap, W. 1984a. The ecology of the south Florida coral reefs: a community profile. US Fish and Wildlife Service.
- Jaap, W. C. 1984b. The ecology of south Florida coral reefs: A community profile, FWS/OBS-82/08.
- Jaap, W. C., W. G. Lyons, P. Dustan, and J. C. Halas. 1989. Stony coral (Scleractinia and Milleporina) community structure at Bird Key Reef, Ft. Jefferson National Monument, Dry Tortugas, Florida.
- Jackson, A. M., and coauthors. 2014a. Population Structure and Phylogeography in Nassau Grouper (*Epinephelus striatus*), a Mass-Aggregating Marine Fish. *Plos One* 9(5):e97508.
- Jackson, J. B. C., M. K. Donovan, K. L. Cramer, and V. V. Lam. 2014b. Status and Trends of Caribbean Coral Reefs: 1970-2012. Global Coral Reef Monitoring Network, IUCN, Gland, Switzerland.
- James, M. C., R. A. Myers, and C. A. Ottensmeyer. 2005. Behaviour of leatherback sea turtles, *Dermochelys coriacea*, during the migratory cycle. *Proceedings of the Royal Society Biological Sciences Series B* 272(1572):1547-1555.
- Javorekova, S. S., I; Makova, J. 2010. Influence of benomyl and prometryn on the soil microbial activities and community structures in pasture grasslands of Slovakia. *Journal of Environmental Science and Health Part B-Pesticides Food Contaminants and Agricultural Wastes* 45:702-709.
- Jenkins, J., P. Jepson, J. Bolte, and K. Vache. 2004. Watershed-based ecological risk assessment of pesticide use in Western Oregon: A conceptual framework.
- Jobling, S., T. Reynolds, R. White, M. G. Parker, and J. P. Sumpter. 1995. A variety of environmentally persistent chemical, including some phthalate plasticizers, are weakly estrogenic. *Environmental Health Perspectives* 103(6):582-587.
- Johnson, A., and A. Newman. 1983. Water quality in the gap-to-gap reach of the Yakima River, June - October 1982. Washington Department of Ecology, Olympia, Washington. Available: <http://www.ecy.wa.gov/biblio/83e17.html> (February 2008).
- Johnson, D. W. 2006. Predation, habitat complexity, and variation in density-dependent mortality of temperate reef fishes. *Ecology* 87:1179-1188.
- Johnson, J. H., D. S. Dropkin, B. E. Warkentine, J. W. Rachlin, and W. D. Andrews. 1997. Food habits of Atlantic sturgeon off the central New Jersey coast. *Transactions of the American Fisheries Society* 126(1):166-170.
- Johnson, L., T. K. Collier, and J. Stein. 2002. An analysis in support of sediment quality thresholds for polycyclic aromatic hydrocarbons (PAHs) to protect estuarine fish. *Aquatic Conservation: Marine Freshwater Ecosystems* 12:517-538.

- Johnson, L.L., Ylitalo, G.M., Arkoosh, M.R., Kagley, A.N., Stafford, C.L., Bolton, J.L., Buzitis, J., Anulacion, B.F., and Collier, T.K. 2007. Contaminant exposure in outmigrant juvenile salmon from Pacific Northwest estuaries. *Environmental Monitoring and Assessment* 124:167-194.
- Johnson, O., and coauthors. 1997. Status review of chum salmon from Washington, Oregon, and California, Seattle, WA.
- Jokiel, P. L., and coauthors. 2014. Response of reef corals on a fringing reef flat to elevated suspended-sediment concentrations: Moloka'i, Hawai'i. *Peerj* 2.
- Jones, R., G. F. Ricardo, and A. P. Negri. 2015. Effects of sediments on the reproductive cycle of corals. *Marine Pollution Bulletin* 100(1):13-33.
- Jouon, A., and coauthors. 2008. Spatio-temporal variability in suspended particulate matter concentration and the role of aggregation on size distribution in a coral reef lagoon. *Marine Geology* 256(1-4):36-48.
- Joy, J. 2002. Upper Yakima River basin suspended sediment and organochlorine pesticide total maximum daily load evaluation. Washington Department of Ecology, publication number 02-30-012, Olympia, Washington. Available: <http://www.ecy.wa.gov/biblio/0203012.html> (February 2008).
- Joy, J., and A. Madrone. 2002. Data summary: upper Yakima River basin suspended sediment and organochlorine TMDL evaluation. Washington Department of Ecology, publication number 02-30-032, Olympia, Washington. Available: <http://www.ecy.wa.gov/biblio/0203032.html> (February 2008).
- Jud, Z. R., C. A. Layman, J. A. Lee, and D. A. Arrington. 2011. Recent invasion of a Florida (USA) estuarine system by lionfish *Pterois volitans/P. miles*. *Aquatic Biology* 13(1):21-26.
- Kahn, J., and coauthors. 2014. Atlantic Sturgeon annual spawning run estimate in the Pamunkey River, Virginia. *Transactions of the American Fisheries Society* 143(6):1508-1514.
- Kamezaki, N., and coauthors. 2003. Loggerhead Turtles Nesting in Japan. Pages 210-217 in A. B. Bolten, and B. E. Witherington, editors. *Loggerhead Sea Turtles*. Smithsonian Institution.
- Keck, J., R. S. Houston, S. Purkis, and B. M. Riegl. 2005. Unexpectedly high cover of *Acropora cervicornis* on offshore reefs in Roatán (Honduras). *Coral Reefs* 24(3):509.
- Kemmerich, J. 1945. A review of the artificial propagation and transplantation of the sockeye salmon of the Puget Sound area in the State of Washington conducted by the federal government from 1896 to 1945. Report to the Regional Director, U.S. Fish and Wildlife Service.
- Khan, R. M., WT. 1996. Photosynthetic electron transport in thylakoids from cotton cultivars (*Gossypium sp*) differing in tolerance to prometryn. *Plant Cell Reports* 15:969-973.

- Kieffer, M. C., and B. Kynard. 1993. Annual movements of shortnose and Atlantic sturgeons in the Merrimack River, Massachusetts. *Transactions of the American Fisheries Society* 122(6):1088-1103.
- Kiely T, Donaldson D, Grube A. 2004. Pesticide industry sales and usage: 2000-2001 market estimates. EPA 733-R-04-001. Washington, DC. U.S. Environmental Protection Agency.
- Kier Associates. 1991. Long range plan for the Klamath River Basin Conservatin Area Fishery Restoration Program. U.S. Fish and Wildlife Service Klamath River Fishery Resource Office. Yreka, California. [8.5 MB] at KRIS Web site:403 p.
- King County. 2002. Literature review of endocrine disruptors in secondary treated effluent: toxicological effects in aquatic organisms. King County Department of Natural Resources, Seattle, Washington 98104.
- King, T. L., and coauthors. 2014. A nuclear DNA perspective on delineating evolutionarily significant lineages in polyploids: the case of the endangered shortnose sturgeon (*Acipenser brevirostrum*). *PLoS One* 9(8):e102784.
- King, T., B. Lubinski, and A. Spidle. 2001. Microsatellite DNA variation in Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) and cross-species amplification in the Acipenseridae. *Conservation Genetics* 2(2):103-119.
- Kintisch, E. 2006. As the seas warm: Researchers have a long way to go before they can pinpoint climate-change effects on oceangoing species. *Science* 313:776-779.
- Kjelson, M. A., P. F. Raquel, and F. W. Fisher. 1982. Life History of Fall-run Juvenile Chinook Salmon, *Oncorhynchus Tshawytscha*, in the Sacramento-San Joaquin Estuary, California.
- Kleypas, J.A., and K.K. Yates. 2009. Coral reefs and ocean acidification. *Oceanography* 22(4):108–117, <http://dx.doi.org/10.5670/oceanog.2009.101>.
- Kleypas, J.A., R.A. Feely, V.J. Fabry, C. Langdon, C.L. Sabine, and L.L. Robbins, 2006. Impacts of Ocean Acidification on Coral Reefs and Other Marine Calcifiers: A Guide for Future Research, report of a workshop held 18–20 April 2005, St. Petersburg, FL, sponsored by NSF, NOAA, and the U.S. Geological Survey, 88 pp
- Knowlton, N., J. L. Maté, H. M. Guzmán, R. Rowan, and J. Jara. 1997. Direct evidence for reproductive isolation among the three species of the *Montastraea annularis* complex in Central America (Panamá and Honduras). *Marine Biology* 127(4):705-711.
- Knudsen, C.M., Schroder, S.L., Busack, C.A., Johnston, M.V., Pearsons, T.N., Bosch, W.J., and Fast, D.E. 2006. Comparison of life history traits between first-generation hatchery and wild upper Yakima River spring Chinook salmon. *Transactions of the American Fisheries Society* 135:1130-1144.

- Knudsen, E.E., Symmes, E.W., and Margraf, F.J. 2002. Searching for an ecological life history approach to salmon escapement management. *American Fisheries Society Symposium* 34:261-276.
- Kornicker, L. S., and D. Boyd. 1962. Shallow-water geology and environments of Alacran reef complex, Campeche Bank, Mexico. *Bull Amer Assoc Petr Geol* 46:640-673
- Koski, K. 2009. The fate of coho salmon nomads: the story of an estuarine-rearing strategy promoting resilience. *Ecology and Society* 14(1).
- Kostow, K. 1995. Biennial Report on the Status of Wild Fish in Oregon. *Oreg. Dep. Fish Wildl. Rep.*, 217 p. + app. (Available from Oregon Department of Fish and Wildlife, P.O. Box 59, Portland, OR 97207.)
- Kretzmann, M. B., and coauthors. 1997. Low genetic variability in the Hawaiian monk seal. *Conservation Biology* 11(2):482-490.
- Kretzmann, M. B., N. J. Gemmill, and A. Meyer. 2001. Microsatellite analysis of population structure in the endangered Hawaiian monk seal. *Conservation Biology* 15(2):457-466.
- Kroeker, K. J., R. L. Kordas, R. N. Crim, and G. G. Singh. 2010. Meta-analysis reveals negative yet variable effects of ocean acidification on marine organisms. *Ecology Letters* 13(11):1419-1434.
- Kuffner, I. B., B. H. Lidz, J. H. Hudson, and J. S. Anderson. 2015. A Century of Ocean Warming on Florida Keys Coral Reefs: Historic In Situ Observations. *Estuaries and Coasts* 38(3):1085-1096.
- Kump, L.R., T.J. Bralower, and A. Ridgwell. 2009. Ocean acidification in deep time. *Oceanography* 22(4):94–107, <http://dx.doi.org/10.5670/oceanog.2009.100>.
- Kynard, B. 1997. Life history, latitudinal patterns, and status of the shortnose sturgeon, *Acipenser brevirostrum*. *Environmental Biology of Fishes* 48(1-4):319-334.
- Kynard, B., and E. Parker. 2004. Ontogenetic behavior and migration of Gulf of Mexico sturgeon, *Acipenser oxyrinchus desotoi*, with notes on body color and development. *Environmental Biology of Fishes* 70(1):43-55.
- Kynard, B., and M. Horgan. 2002. Ontogenetic behavior and migration of Atlantic sturgeon, *Acipenser oxyrinchus oxyrinchus*, and shortnose sturgeon, *A. brevirostrum*, with notes on social behavior. *Environmental Biology of Fishes* 63(2):137-150.
- Kynard, B., P. Bronzi, and H. Rosenthal. 2012. Life History and Behaviour of Connecticut River Shortnose and Other Sturgeons. *Books on Demand*.
- La Riviere, M. G. 1991. The Ozette Lake sockeye salmon enhancement program. *Makah Fisheries Management Department, unpubl. Rep.*:9 p.
- Laetz C, Baldwin D, Herbert V, Stark J, Scholz N. 2014. Elevated temperatures increase the toxicity of pesticide mixtures to juvenile coho salmon. *Aquatic Toxicology* 146:38-44.

- Laidig, T. E., J. R. Chess, and D. F. Howard. 2007. Relationship between abundance of juvenile rockfishes (*Sebastes* spp.) and environmental variables documented off northern California and potential mechanisms for the covariation. *Fishery Bulletin* 105(1):39-48.
- Lamont, M. M., I. Fujisaki, and R. R. Carthy. 2014. Estimates of vital rates for a declining loggerhead turtle (*Caretta caretta*) subpopulation: implications for management. *Marine Biology* 161(11):2659-2668.
- Lande, R. 1993. Risks of population extinction from demographic and environmental stochasticity and random catastrophs. *The American Naturalist* 142:911-927.
- Lande, R. 1993. Risks of population extinction from demographic and environmental stochasticity and random catastrophs. *The American Naturalist* 142:911-927.
- Lande, R. 1993. Risks of population extinction from demographic and environmental stochasticity and random catastrophs. *The American Naturalist* 142:911-927.
- Landis, W. G., and P. M. Chapman. 2011. Well past time to stop using NOELs and LOELs. 7:vi-viii.
- Landsberg, J. H. 2002. The effects of harmful algal blooms on aquatic organisms. *Reviews in Fisheries Science* 10(2):113-390.
- Lapointe, B. E., and B. J. Bedford. 2007. Drift rhodophyte blooms emerge in Lee County, Florida, USA: Evidence of escalating coastal eutrophication. *Harmful Algae* 6:421-437.
- Lapointe, B. E., P. J. Barile, and C. A. Yentsch. 2004. The physiology and ecology of macroalgal blooms (green tides) on coral reefs off northern Palm Beach County, Florida (USA). *Harmful Algae* 3:185-268.
- Largo, Florida: 1974 to 1982. *Coral Reefs* 6:91-106.
- Larson, Z. S., and M. R. Belchik. 2000. A preliminary status review of eulachon and Pacific lamprey in the Klamath River Basin. Yurok Tribal Fisheries Program, Klamath, California.
- Laskowski, R. 1995. Some Good Reasons to Ban the Use of NOEC, LOEC and Related Concepts in Ecotoxicology. *Oikos* 73:140-144.
- LCFRB. 2004. Lower Columbia salmon recovery and fish and wildlife subbasin plan.
- LCFRB. 2010a. Washington Lower Columbia Salmon Recovery and Fish & Wildlife Subbasin Plan. Lower Columbia Fish Recovery Board, Washington.
- LCFRB. 2010b. Washington Lower Columbia Salmon Recovery and Fish & Wildlife Subbasin Plan. Lower Columbia Fish Recovery Board, Washington. May 28, 2010.
- Learmonth, J. A., C. D. MacLeod, M. B. Santos, G. J. Pierce, H. Q. P. Crick, and R. A. Robinson. 2006. Potential effects of climate change on marine mammals. *Oceanography and Marine Biology: an Annual Review* 44:431-464.

- Leet, W., C. Dewees, R. Klingbeil, and E. Larson. 2001. California's living marine resources: A status report.
- Leighton, D. L. 1989. Abalone (Genus *Haliotis*) mariculture on the North American Pacific coast. *Fisheries Bulletin* 87(3):698-702.
- Leighton, D. L. 2000. The biology and culture of the California abalones. Dorrance Publishing Company, Inc., Pittsburgh, Pennsylvania.
- Leland, J. G. 1968. A survey of the sturgeon fishery of South Carolina. Bears Bluff Laboratories.
- Leroux, R. A., and coauthors. 2012. Re-examination of population structure and phylogeography of hawksbill turtles in the wider Caribbean using longer mtDNA sequences. *Journal of Heredity* 103(6):806-820.
- Lesser, M. P., and M. Slattery. 2011. Phase shift to algal dominated communities at mesophotic depths associated with lionfish (*Pterois volitans*) invasion on a Bahamian coral reef. *Biological Invasions* 13(8):1855-1868.
- Levin, P. S. 2003. Regional differences in responses of Chinook salmon populations to large-scale climatic patterns. *Journal of Biogeography* 30(5):711-717.
- Levitan, D. R., N. D. Fogarty, J. Jara, K. E. Lotterhos, and N. Knowlton. 2011. Genetic, spatial, and temporal components of precise spawning synchrony in reef building corals of the *Montastraea annularis* species complex. *Evolution* 65(5):1254-1270.
- Lichatowich, J. A. 1999. Salmon without rivers. A history of the Pacific salmon crisis. Island Press, Washington D.C.
- Lidz, B. H., and D. G. Zawada. 2013. Possible return of *Acropora cervicornis* at Pulaski Shoal, Dry Tortugas National Park, Florida. *Journal of Coastal Research* 29(2):256-271.
- Liebig, M. S., G; Bontje, D; Kooi, BW; Streck, G; Traunspurger, W; Knacker, T. 2008. Direct and indirect effects of pollutants on algae and algalivorous ciliates in an aquatic indoor microcosm. *Aquatic Toxicology* 88:102-110.
- Liess, M., and Schulz, R. 1999. Linking insecticide contamination and population response in an agricultural stream. *Environmental Toxicology and Chemistry* 18(9):1948-1955.
- Lighty, R. G., I. G. Macintyre, and R. Stuckenrath. 1978. Submerged early Holocene barrier reef, southeast Florida shelf. *Nature* 276:59-60.
- Lindley, S. T., and coauthors. 2006. Historical population structure of Central Valley steelhead and its alterations by dams. *San Francisco Estuary & Watershed Science* 4(1):1-19.
- Lindley, S. T., and coauthors. 2007. Framework for assessing viability of threatened and endangered Chinook salmon and steelhead in the Sacramento-San Joaquin Basin. *San Francisco Estuary and Watershed Science* 5(1).

- Lindley, S. T., and coauthors. 2008. Marine migration of North American green sturgeon. *Transactions of the American Fisheries Society* 137(1):182-194.
- Lindley, S. T., and coauthors. 2011. Electronic tagging of green sturgeon reveals population structure and movement among estuaries. *Transactions of the American Fisheries Society* 140(1):108-122.
- Lindley, S., and coauthors. 2004. Population structure of threatened and endangered Chinook salmon ESUs in California's Central Valley basin. NOAA Technical Memorandum NMFS-SWFSC 360.
- Lirman, D., and coauthors. 2010. A window to the past: documenting the status of one of the last remaining 'megapopulations' of the threatened staghorn coral *Acropora cervicornis* in the Dominican Republic. *Aquatic Conservation: Marine and Freshwater Ecosystems* 20(7):773-781.
- Lirman, D., and P. Fong. 2007. Is proximity to land-based sources of coral stressors an appropriate measure of risk to coral reefs? An example from the Florida Reef Tract. *Marine Pollution Bulletin* 54(6):779-791.
- Little, E., and S. Finger. 1990. Swimming behavior as an indicator of sublethal toxicity in fish. *Environmental Toxicology and Chemistry* 9:13-19.
- Love, M. S., and M. Yoklavich. 2008. Habitat characteristics of juvenile cow cod, *Sebastes levis* (Scorpaenidae), in Southern California. *Environmental Biology of Fishes* 82:195-202.
- Love, M. S., D. M. Schroeder, and W. Lenarz. 2005. Distribution of bocaccio (*Sebastes paucispinis*) and cow cod (*Sebastes levis*) around oil platforms and natural outcrops off California with implications for larval production. *Bulletin of Marine Science* 77:397-408.
- Love, M. S., J. E. Caselle, and K. Herbinson. 1998a. Declines in nearshore rockfish recruitment and populations in the southern California Bight as measured by impingement rates in coastal electrical power generating stations. *Fishery Bulletin* 96(3):492-501.
- Love, M. S., J. E. Caselle, and W. Van Buskirk. 1998b. A severe decline in the commercial passenger fishing vessel rockfish (*Sebastes* spp.) catch in the Southern California Bight, 1980-1996. *California Cooperative Oceanic Fisheries Investigations Reports* 39:180-195.
- Love, M. S., M. M. Yoklavich, and L. Thorsteinson. 2002. *The Rockfishes of the Northeast Pacific*. University of California Press, Berkeley, California.
- Lundgren, I., and Z. Hillis-Starr. 2008. Variation in *Acropora palmata* bleaching across benthic zones at Buck Island Reef National Monument (St. Croix, USVI) during the 2005 thermal stress event. *Bulletin of Marine Science* 83:441-451.
- Lytle, J. S., and T. F. Lytle. 2002. Uptake and loss of chlorpyrifos and atrazine by *Juncus effusus* L. in a mesocosm study with a mixture of pesticides. *Environmental Toxicology and Chemistry* 21:1817-1825.

- Lyty, Belden J, Ternes M. 1999. Effects of temperature on the toxicity of M-parathion, chlorpyrifos, and pentachlorobenzene to Chironomus tentans. Archives of Environmental Toxicology 37(4):542-547.
- MacCall, A. D. 1996. Patterns of low frequency variability in fish populations of the California Current. California Cooperative Oceanic Fisheries Investigation Report.
- MacCall, A. D. 2002. Use of known-biomass production models to determine productivity of west coast groundfish stocks. North American Journal of Fisheries Management 22:272-279.
- MacCall, A. D. 2003. Status of bocaccio off California in 2003. Pacific Fishery Management Council, Portland, Oregon.
- MacCall, A. D., and X. He. 2002. Status review of the southern stock of bocaccio (Sebastes paucispinis). National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southwest Fisheries Science Center, Santa Cruz Laboratory, Santa Cruz, California.
- MacFarlane, R. B., and E. C. Norton. 2002. Physiological ecology of juvenile chinook salmon (Oncorhynchus tshawytscha) at the southern end of their distribution, the San Francisco Estuary and Gulf of the Farallones, California. Fishery Bulletin 100(2):244-257.
- Mackun, P., S. Wilson, T. Fischetti, and J. Goworowska. 2011. Population Distribution and Change: 2000 to 2010. 2010 Census Briefs. U.S. Department of Commerce Census Bureau
- MacLeod, C. D., S. M. Bannon, G. J. Pierce, C. Schweder, J. A. Learmonth, J. S. Herman, and R. J. Reid. 2005. Climate change and the cetacean community of north-west Scotland. Biological Conservation 124:477-483.
- Macneale, K.H., Spromberg, J.A., Baldwin, D.H., Scholz, N.L. 2014. A modeled comparison of direct and food web-mediated impacts of common pesticides on Pacific salmon. PLoS ONE 9(3):e92436.
- Makah Fisheries Management. 2000. Lake Ozette sockeye hatchery and genetic management plan. Biological assessment Section 7 consultation. available from Makah Fisheries, P. O. Box 115, Neah Bay, Washington 98357.
- Mangel, M. 1994. Climate change and salmonid life history variation. Deep-Sea Research 41(1):75-106.
- Mantua, N. J., S. R. Hare, Y. Zhang, J. M. Wallace, and R. C. Francis. 1997. A pacific interdecadal climate oscillation with impacts on salmon production. Bulletin of the American Meteorological Society (78):1069-1079.
- Manzello, D. P., I. C. Enochs, G. Kolodziej, and R. Carlton. 2015. Recent decade of growth and calcification of Orbicella faveolata in the Florida Keys: an inshore-offshore comparison. Marine Ecology Progress Series 521:81-89.

- Marchini, S., L. Passerini, D. Cesareo, and M. L. Tosato. 1988. Herbicidal triazines - acute toxicity on daphnia, fish, and plants and analysis of its relationships with structural factors. *Ecotoxicology and Environmental Safety* 16:148-157.
- Marinez, M., and A. Lugo. 2008. Post Sugar Cane Succession in Moise Alluvial Soils in Puerto Rico. R. Myster, editor. *Post-Agricultural Succession in the Neotropics*. Springer Science, New York.
- Markle, J., O. Kalman, and P. Klassen. 2005. Mitigating Diazinon runoff into waterways from fruit and nut orchards in the Sacramento Valley. Coalition for Urban/Rural Environmental Stewardship. Report funded by CALFED.
- Marshall, A. R., and coauthors. 1995. Genetic diversity units and major ancestral lineages for chinook salmon in Washington. in C. Busack and J.B. Shaklee (editors). *Genetic diversity units and major ancestral lineages of salmonid fishes in Washington*. Wash. Dep. Fish Wildl. Tech. Rep. RAD 9502.
- Masuda, A. 2010. Natal Origin of Juvenile Loggerhead Turtles from Foraging Ground in Nicaragua and Panama Estimated Using Mitochondria DNA.
- Matarese, A. C., A. W. Kendall, D. M. Blood, and B. M. Vinter. 1989. Laboratory guide to early life history stages of northeast Pacific fishes. NOAA.
- Matsuzawa, Y. 2011. Nesting beach management in Japan to conserve eggs and pre-emergent hatchlings of the north Pacific loggerhead sea turtle. Contract Report to the Western Pacific Regional Fishery Management Council.
- Matsuzawa, Y., and coauthors. 2016. Fine-scale genetic population structure of loggerhead turtles in the Northwest Pacific. *Endangered Species Research* 30:83-93.
- Matthews, G., and R. Waples. 1991. Status review for Snake River spring and summer Chinook salmon. Department of Commerce, National Oceanic and Atmospheric Administration, Northwest Fisheries Science Center, Seattle, Wash. NOAA Fisheries Tech. Memo. No. NMFS-NWFSC-200.
- Maund, S., J. Biggs, P. Williams, M. Whitfield, T. Sherratt, W. Powley, P. Heneghan, P. Jepson, and N. Shillabeer. 2009. The influence of simulated immigration and chemical persistence on recovery of macroinvertebrates from cypermethrin and 3,4-dichloroaniline exposure in aquatic microcosms. *Pest Management Science* 65:678-687.
- Mayer F, Ellersieck M. 1986. 'Manual of acute toxicity: Interpretation and data base for 410 chemicals and 66 species of freshwater animals.' in *Manual of acute toxicity: Interpretation and data base for 410 chemicals and 66 species of freshwater animals*, 579. USFWS.
- Mayer FL, Ellersieck MR. 1988. Experiences with single-species tests for acute toxic effects on fresh-water animals. *Ambio* 17(6):367-375.

- Mayor, P. A., C. S. Rogers, and Z. M. Hillis-Starr. 2006. Distribution and abundance of elkhorn coral, *Acropora palmata*, and prevalence of white-band disease at Buck Island Reef National Monument, St. Croix, US Virgin Islands. *Coral Reefs* 25(2):239-242.
- McClellan, C. M., J. Braun-McNeill, L. Avens, B. P. Wallace, and A. J. Read. 2010. Stable isotopes confirm a foraging dichotomy in juvenile loggerhead sea turtles. *Journal of Experimental Marine Biology and Ecology* 387:44-51.
- McClure, M.M., Holmes, E.E., Sanderson, B.L., and Jordan, C.E. 2003. A large-scale, multispecies status assessment: anadromous salmonids in the Columbia River Basin. *Ecological Applications* 13(4):964-989.
- McCormick, S. D., and coauthors. 2009. Taking it with you when you go: How perturbations to the freshwater environment, including temperature, dams, and contaminants, affect marine survival of salmon. *American Fisheries Society Symposium* (69):195-214.
- McCullough, D. A. 1999. A review and synthesis of effects of alterations to the water temperature regime on freshwater life stages of salmonids, with special reference to Chinook salmon. Columbia River Inter-Tribal Fish Commission, EPA 910-R-99-010, Portland, Oregon.
- McElhany, P., and coauthors. 2003. Interim report on viability criteria for Willamette and Lower Columbia basin Pacific salmonids. National Marine Fisheries Service, Seattle, WA.
- McElhany, P., M. Chilcote, J. Myers, and R. Beamesderfer. 2007a. Viability status of Oregon salmon and steelhead populations in the Willamette and lower Columbia basins. NMFS and Oregon Department of Fish and Wildlife, Draft, Seattle, Washington.
- McElhany, P., M. Chilcote, J. Myers, and R. Beamesderfer. 2007b. Viability Status of Oregon Salmon and Steelhead Populations in the Willamette and Lower Columbia Basins: Part 6- Upper Willamette Chinook. ODFW and NMFS.
- McElhany, P., M. H. Ruckleshaus, M. J. Ford, T. C. Wainwright, and E. P. Bjorkstedt. 2000. Viable salmonid populations and the recovery of evolutionarily significant units. U.S. Department of Commerce, NMFS-NWFSC-42, Seattle, Washington.
- McElhany, P., M. H. Ruckleshaus, M. J. Ford, T. C. Wainwright, and E. P. Bjorkstedt. 2000. Viable salmonid populations and the recovery of evolutionarily significant units. U.S. Department of Commerce, NMFS-NWFSC-42, Seattle, Washington.
- McElhany, P., M. H. Ruckleshaus, M. J. Ford, T. C. Wainwright, and E. P. Bjorkstedt. 2000b. Viable salmonid populations and the recovery of evolutionarily significant units. U.S. Department of Commerce, NMFS-NWFSC-42, Seattle, Washington.
- McElhany, P., M. Ruckelshaus, M. Ford, T. Wainwright, and E. Bjorkstedt. 2000a. Viable salmon populations and the recovery of evolutionarily significant units US Department of Commerce. NOAA Tech. Memo. NMFS-NWFS-42.

- McEwan, D. R. 2001. Central Valley steelhead. California Department of Fish and Game, Sacramento, California.
- McEwan, D., and T. A. Jackson. 1996. Steelhead restoration and management plan for California. California Department of Fish and Game, Sacramento, California.
- McGurk, M.D. 2000. Comparison of fecundity–length–latitude relationships between nonanadromous (kokanee) and anadromous sockeye salmon (*Oncorhynchus nerka*). *Canadian Journal of Zoology* 78: 1791–1805.
- McIntyre, J. K., D. H. Baldwin, J. P. Meador, and N. L. Scholz. 2008. Chemosensory Deprivation in Juvenile Coho Salmon Exposed to Dissolved Copper under Varying Water Chemistry Conditions. 42:1352-1358.
- McKinnon, R. J., T. A. Fischer, M. N. Lodato, and J. F. Dowd. 2011. Site Investigation of Southern Historic Cattle Dip Vats. Proceedings of the 2011 Georgia Water Resources Conference, Athens, Georgia.
- McMahon, C. R., and G. C. Hays. 2006. Thermal niche, large-scale movements and implications of climate change for a critically endangered marine vertebrate. *Global Change Biology* 12:1330-1338.
- McMichael, G., and coauthors. 2008. Lower Monumental Reservoir juvenile fall Chinook salmon behavior studies, 2007. Report prepared for USACE, Walla Walla District, Walla Walla, Washington.
- Meador, J., J. Stein, W. Reichert, and U. Varanasi. 1995. A review of bioaccumulation of polycyclic aromatic hydrocarbons by marine organisms. *Environmental Contamination and Toxicology* 143:79-165.
- Mebane, C. A., and D. L. Arthaud. 2010. Extrapolating Growth Reductions in Fish to Changes in Population Extinction Risks: Copper and Chinook Salmon. 16:1026-1065.
- Mendes, J., and J. Woodley. 2002. Effect of the 1995-1996 bleaching event on polyp tissue depth, growth, reproduction and skeletal band formation in *Montastraea annularis*. *Marine Ecology Progress Series* 235:93-102.
- Metro, O. 2015. 2014 Urban Growth Report: Investing in Our Communities 2015-2035.
- Miller, J. D., K. A. Dobbs, C. J. Limpus, N. Mattocks, and A. M. Landry. 1998. Long-distance migrations by the hawksbill turtle, *Eretmochelys imbricata*, from north-eastern Australian. *Wildlife Research* 25:89-95.
- Miller, J., R. Waara, E. Muller, and C. Rogers. 2006. Coral bleaching and disease combine to cause extensive mortality on reefs in US Virgin Islands. *Coral Reefs* 25(3):418-418.
- Miller, R. R., J. D. Williams, and J. E. Williams. 1989. Extinctions of North American fishes during the last century. *Fisheries* 14(6):22-38.

- Miller, R., and E. Brannon. 1982. The origin and development of life history patterns in Pacific salmonids. Pages 296-309 in Proceedings of the Salmon and Trout Migratory Behavior Symposium. Edited by EL Brannon and EO Salo. School of Fisheries, University of Washington, Seattle, WA.
- Miller, S. L., M. Chiappone, and L. M. Ruetten. 2011. Abundance, distribution and condition of *Acropora* corals, other benthic coral reef organisms and marine debris in the upper Florida Keys National Marine Sanctuary - 2011 Quick look report and data summary. University of North Carolina at Wilmington, Center for Marine Science, Key Largo, Florida.
- Miller, S. L., M. Chiappone, L. M. Rutten, and D. W. Swanson. 2008. Population status of *Acropora* corals in the Florida Keys. Proceedings of the 11th International Coral Reef Symposium:775-779.
- Miller, S. L., W. F. Precht, L. M. Rutten, and M. Chiappone. 2013a. Florida Keys population abundance estimates for nine coral species proposed for listing under the U.S. Endangered Species Act. Nova Southeastern University, Oceanographic Center, 1(1), Dania Beach, Florida.
- Miller, S. L., W. F. Precht, L. M. Rutten, and M. Chiappone. 2013b. Florida Keys Population Abundance Estimates for Nine Coral Species Proposed for Listing Under the U.S. Endangered Species Act., 1(1), Dania Beach, Florida.
- Mills, K. E., A. J. Pershing, T. F. Sheehan, and D. Mountain. 2013. Climate and ecosystem linkages explain widespread declines in North American Atlantic salmon populations. *Global Change Biology* 19(10):3046-3061.
- Minshall, G. W., T. V. Royer, and C. T. Robinson. 2001. Response of the Cache Creek macroinvertebrates during the first 10 years following disturbance by the 1988 Yellowstone wildfires. *Canadian Journal of Fisheries and Aquatic Sciences* 58(6):1077-1088.
- Monzon-Arguello, C., C. Rico, A. Marco, P. Lopez, and L. F. Lopez-Jurado. 2010. Genetic characterization of eastern Atlantic hawksbill turtles at a foraging group indicates major undiscovered nesting populations in the region. *Journal of Experimental Marine Biology and Ecology* in press(in press):in press.
- Moore, A. L., N. 2001. The impact of two pesticides on olfactory mediated endocrine function in mature male Atlantic salmon (*Salmo salar* L.) parr. *Comparative Biochemistry and Physiology B-Biochemistry & Molecular Biology* 129:269-276.
- Moore, A. L., N; Mayer, I; Greenwood, L. 2007. The impact of a pesticide on migratory activity and olfactory function in Atlantic salmon (*Salmo salar* L.) smolts. *Aquaculture* 273:350-359.

- Moore, A. W., CP. 1998. Mechanistic effects of a triazine pesticide on reproductive endocrine function in mature male Atlantic salmon (*Salmo salar* L.) parr. *Pesticide Biochemistry and Physiology* 62:41-50.
- Moore, A., and Waring, C.P. 1996. Sublethal effects of the pesticide Diazinon on olfactory function in mature male Atlantic salmon parr. *Journal of Fish Biology* 48:758-775.
- Moore, D. R. J., and P.-Y. Caux. 1997. Estimating low toxic effects. 16:794-801.
- Moore, M. M. 1980. Factors influencing survival of juvenile steelhead rainbow trout (*Salmo gairdnerii* *gairdnerii*) in the Ventura River. Master of Science. Humboldt State University, Arcata, CA.
- Mora, E. A. 2015. Personal communication via email with Phaedra Doukakis regarding green sturgeon DIDSON survey and results. UC Davis May 6, 2015.
- Morace, J. L. 2012. Reconnaissance of contaminants in selected wastewater-treatment-plant effluent and stormwater runoff entering the Columbia River, Columbia River Basin, Washington and Oregon, 2008-10. US Geological Survey, 2328-0328.
- Morales Tirado, J. A. 2006. Sexual reproduction in the Caribbean coral genus *Mycetophyllia*, in La Parguera, Puerto Rico. University of Puerto Rico, Mayaguez.
- Morgan, M.J., and Kiceniuk, J.W. 1990. Effect of fenitrothion on the foraging behavior of juvenile Atlantic salmon. *Environmental Toxicology and Chemistry* 9:489-495.
- Morin PA, Parsons KM, Archer FI, Avila-Arcos MC, Barrett-Lennard LG, Dalla Rosa L, Duchene S, Durban JW, Ellis GM, Ferguson SH, et al. 2015. Geographic and temporal dynamics of a global radiation and diversification in the killer whale. *Molecular Ecology* 24:3964-3979.
- Morris, R. H., D. P. Abbott, and E. C. Haderlie. 1980. Intertidal invertebrates of California. 1980. Stanford University Press, Stanford, California.
- Morris, W. F., and D. F. Doak. 2002. Quantitative conservation biology. Theory and practice of population viability analysis. Sinauer Associates Inc., Sunderland, MA.
- Morris, W. F., and D. F. Doak. 2002. Quantitative conservation biology. Theory and practice of population viability analysis. Sinauer Associates Inc., Sunderland, MA.
- Morris, W. F., and D. F. Doak. 2002. Quantitative conservation biology. Theory and practice of population viability analysis. Sinauer Associates Inc., Sunderland, MA.
- Moser, H. G. 1996. The early life stages of fishes in the California current region. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, La Jolla, California.
- Moser, H. G., and coauthors. 2000. Abundance and distribution of rockfish (*Sebastes*) larvae in the Southern California Bight in relation to environmental conditions and fishery

- exploitation. California Cooperative Oceanic Fisheries Investigations Reports 41:132-147.
- Moser, M. L., and S. T. Lindley. 2007. Use of Washington estuaries by subadult and adult green sturgeon. *Environmental Biology of Fishes* 79(3-4):243.
- Moser, M. L., and S. W. Ross. 1995. Habitat use and movements of shortnose and Atlantic sturgeons in the lower Cape Fear River, North Carolina. *Transactions of the American Fisheries Society* 124(2):225-234.
- Mote, P.W., and E.P. Salathe Jr. 2009. *Future Climate in the Pacific Northwest*
- Mount, J. F. 1995. *California rivers: the conflict between fluvial process and land use*. University of California Press, Berkeley and Los Angeles, California.
- Moyle, P. B. 2002a. *Inland fishes of California*. Univ of California Press.
- Moyle, P. B. 2002a. *Inland fishes of California*. Univ of California Press.
- Moyle, P. B. 2002b. *Inland fishes of California. Revised and Expanded*. University of California Press, Berkeley, California.
- Moyle, P. B. 2002b. *Inland fishes of California: revised and expanded*. Univ of California Press.
- Moyle, P., P. Foley, and R. Yoshiyama. 1992. Status of green sturgeon, *Acipenser medirostris*. California. Final Report submitted to National Marine Fisheries Service, Terminal Island, CA.
- Muller, E. M., C. S. Rogers, A. S. Spitzack, and R. van Woesik. 2008. Bleaching increases likelihood of disease on *Acropora palmata* (Lamarck) in Hawksnest Bay, St. John, US Virgin Islands. *Coral Reefs* 27(1):191-195.
- Mumby, P. J., and A. R. Harborne. 2010. Marine reserves enhance the recovery of corals on Caribbean reefs. *PLoS ONE* 5(1):e8657.
- Munk, K. 2001. Maximum ages of groundfishes in waters off Alaska and British Columbia and consideration of age determination. *Alaska Fisheries Research Bulletin* 8:12-21.
- Murawski, S. A., and A. L. Pacheco. 1977. Biological and fisheries data on Atlantic sturgeon, *Acipenser oxyrinchus* (Mitchill). Sandy Hook Laboratory, Northeast Fisheries Center, National Marine Fisheries Service, National Oceanic and Atmospheric Administration, US Department of Commerce.
- Murdoch, T. J. T., and R. B. Aronson. 1999. Scale-dependent spatial variability of coral assemblages along the Florida Reef Tract. *Coral Reefs* 18(4):341-351.
- Musick, J. A., and C. J. Limpus. 1997. Habitat utilization, and migration in juvenile sea turtles. Pages 137-163 in P. L. Lutz, and J. A. Musick, editors. *The biology of sea turtles*. CRC Press, Boca Raton, Florida.

- Muto, M. M., V. T. Helker, R. P. Angliss, B. A. Allen, P. L. Boveng, J. M. Breiwick, M. F. Cameron, P. J. Clapham, S. P. Dahle, M. E. Dahlheim, B. S. Fadely, M. C. Ferguson, L. W. Fritz, R. C. Hobbs, Y. V. Ivaschenko, A. S. Kennedy, J. M. London, S. A. Mizroch, R. R. Ream, E. L. Richmond, K. E. W. Shelden, R. G. Towell, P. R. Wade, J. M. Waite, and A. N. Zerbini. 2016. Alaska marine mammal stock assessments, 2015. NOAA-TM-AFSC-323.
- Myers, J. M., and coauthors. 1998a. Status review of chinook salmon from Washington, Idaho, Oregon, and California. NOAA Technical Memorandum NMFS-NWFSC 35:443.
- Myers, J. M., and coauthors. 1998b. Status review of chinook salmon from Washington, Idaho, Oregon, and California. U.S. Department of Commerce, NMFS-NWFSC-35, Seattle, Washington.
- Myers, J., and coauthors. 2006. Historical population structure of Pacific salmonids in the Willamette River and Columbia River basins. U.S. Department of Commerce, NMFS-NWFSC-79, Seattle, Washington.
- Myers, J., Busack, C., Rawding, D., Marshall, A., Teel, D., Van Doornik, D.M., and Maher, M.T. 2006. Historical population structure of Pacific salmonids in the Willamette River and lower Columbia River basins. U.S. Dept. Commerce, NOAA Tech. Memo. NMFS-NWFSC-73, 311 p.
- Nakamoto, R. J., T. T. Kisanuki, and G. H. Goldsmith. 1995. Age and growth of Klamath River green sturgeon (*Acipenser medirostris*).
- Nalewaja, J. D., and G. Skrzypczak. 1986. ENVIRONMENT AND BROMOXYNIL PHYTOTOXICITY. *Weed Science* 34:101-105.
- Neely, K. L., K. S. Lunz, and K. A. Macaulay. 2013. Simultaneous gonochoric spawning of *Dendrogyra cylindrus*. *Coral Reefs* 32(3):813-813.
- Nelson, T. S., G. Ruggerone, H. Kim, R. Schaefer, and M. Boles. 2004. Juvenile Chinook migration, growth and habitat use in the Lower Green River, Duwamish River and Nearshore of Elliott Bay 2001-2003, Draft Report. King County Department of Natural Resources and Parks. Seattle, Washington.
- Neuman, M., B. Tissot, and G. VanBlaricom. 2010. Overall status and threats assessment of black abalone (*Haliotis cracherodii* Leach, 1814) populations in California. *Journal of Shellfish Research* 29(3):577-586.
- Nicholas, J., B. McIntosh, and E. Bowles. 2005. Oregon coastal coho assessment. Oregon Watershed Enhancement Board and Oregon Department of Fish and Wildlife, Salem, OR.
- Nishizawa, H., and coauthors. 2014. Genetic composition of loggerhead turtle feeding aggregations: migration patterns in the North Pacific. *Endangered Species Research* 24(1):85-93.

- NMA. 2007. 2004 State Mining Statistics. Available:
http://www.nma.org/statistics/state_statistics_2004.asp# (February 2008).
- NMFS 2017c. Biological Opinion for Environmental Protection Agency's Registration of Pesticides containing Chlorpyrifos, Diazinon, and Malathion. December 29, 2017.
<https://www.fisheries.noaa.gov/resource/document/biological-opinion-pesticides-chlorpyrifos-diazinon-and-malathion>
- NMFS Salmon Recovery Division. 2008. Proposed recovery plan for Lake Ozette sockeye salmon (*Oncorhynchus nerka*). U.S. Department of Commerce Seattle, Washington.
- NMFS, a. U. 2007. Green sea turtle (*Chelonia mydas*) 5-year review: summary and evaluation. National Oceanic and Atmospheric Administration, National Marine Fisheries Service and U.S. Fish and Wildlife Service, Silver Spring, Maryland.
- NMFS, and USFWS. 2007. Loggerhead sea turtle (*Caretta caretta*) 5-year review: Summary and evaluation. National Marine Fisheries Service and U.S. Fish and Wildlife Service, Silver Spring, Maryland.
- NMFS, and USFWS. 2008. Recovery plan for the northwest Atlantic population of the loggerhead sea turtle (*Caretta caretta*), second revision. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Protected Resources, Silver Spring, Maryland.
- NMFS, and USFWS. 2014. Olive ridley sea turtle (*Lepidochelys olivacea*) 5-year review: Summary and evaluation. NOAA, National Marine Fisheries Service, Office of Protected Resources, Silver Spring, Maryland.
- NMFS, USFWS, and SEMARNAT. 2010. Draft bi-national recovery plan for the Kemp's ridley sea turtle (*Lepidochelys kempii*), second revision. National Marine Fisheries Service, U.S. Fish and Wildlife Service, and SEMARNAT, Silver Spring, Maryland.
- NMFS. 1998. Recovery Plan for the Shortnose Sturgeon (*Acipenser brevirostrum*). Prepared by the Shortnose Sturgeon Recovery Team for the National Marine Fisheries Service. Pages 104 pages in, Silver Spring, Maryland.
- NMFS. 2001. Status review update for coho salmon (*Oncorhynchus kisutch*) from the Central California Coast and the California portion of the Southern Oregon/Northern California Coasts Evolutionary Significant Units. National Marine Fisheries Service, Southwest Fisheries Science Center, Santa Cruz, California.
- NMFS. 2005. Atlantic Acropora status review document. NOAA, National Marine Fisheries Service, Southeast Regional Office, Acropora Biological Review Team.
- NMFS. 2005a. Assessment of NOAA Fisheries' critical habitat analytical review teams for 12 evolutionarily significant units of West Coast salmon and steelhead, Portland, Oregon.
- NMFS. 2005b. Status review update for Puget Sound steelhead. National Marine Fisheries Service, Northwest Fisheries Science Center, Seattle, Washington.

- NMFS. 2007. Final Supplement to the Hood Canal and Eastern Strait of Juan de Fuca Summer Chum Salmon Recovery Plan, Portland, Oregon.
- NMFS. 2008. Biological opinion for water supply, flood control operations, and channel maintenance conducted by the U.S. Army Corps of Engineers, the Sonoma County Water Agency, and the Mendocino County Russian River Flood Control and Water Conservation Improvement District in the Russian River watershed. U.S. Department of Commerce, F/SWR/2006/07316, Santa Rosa, California.
- NMFS. 2008. Final white abalone recovery plan (*Haliotis sorenseni*). National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Long Beach, California.
- NMFS. 2008. Recovery Plan for the Steller Sea Lion (*Eumetopias jubatus*). Revision., Silver Spring, MD.
- NMFS. 2008a. Endangered Species Act - Section 7 Consultation Final Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation Implementation of the National Flood Insurance Program in the State of Washington Phase One Document - Puget Sound Region. U.S. Department of Commerce, 2006/00472.
- NMFS. 2008b. Endangered Species Act section 7 consultation: biological opinion on Environmental Protection Agency registration of pesticides containing chlorpyrifos, diazinon, and malathion. U.S. Department of Commerce, Silver Spring, Maryland.
- NMFS. 2008c. Endangered Species Act Section 7(a)(2) Consultation Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation on remand for operation of the Federal Columbia River Power System, 11 Bureau of Reclamation Projects in the Columbia Basin and ESA Section 10(a)(1)(A) permit for juvenile fish transportation program. U.S. Department of Commerce.
- NMFS. 2009. Endangered Species Act section 7 consultation: biological opinion on Environmental Protection Agency registration of pesticides containing carbaryl, carbofuran, and methomyl. Biological Opinion, U.S. Department of Commerce, Silver Spring, Maryland.
- NMFS. 2009. Smalltooth sawfish recovery plan (*Pristis pectinata*). N. O. A. A. National Marine Fisheries Service, Commerce, editor. Smalltooth Sawfish Recovery Team, Silver Spring, Maryland.
- NMFS. 2009a. Biological Opinion and Conference Opinion on the long-term operations of the Central Valley Project and State Water Project. U.S. Department of Commerce, 2008/09022, Sacramento, California.
- NMFS. 2009a. Endangered Species Act section 7 consultation: biological opinion on Environmental Protection Agency registration of pesticides containing carbaryl, carbofuran, and methomyl. U.S. Department of Commerce, Silver Spring, Maryland.

- NMFS. 2009b. Middle Columbia River Steelhead Distinct Population Segment ESA Recovery Plan National Marine Fisheries Service Northwest Regional Office, May 4, 2009.
- NMFS. 2009b. Recovery plan for smalltooth sawfish (*Pristis pectinata*).
- NMFS. 2009c. Recovery Plan For Lake Ozette Sockeye Salmon. Northwest Regional Office, May 4, 2009.
- NMFS. 2010. NMFS Endangered Species Act Section 7 Consultation, Biological Opinion: Environmental Protection Agency registration of pesticides containing azinphos methyl, bensulide, dimethoate, disulfoton, ethoprop, fenamiphos, naled, methamidophos, methidathion, methyl parathion, phorate and phosmet. U.S. Department of Commerce, Washington, D.C.
- NMFS. 2010a. Federal Recovery Outline North American Green Sturgeon Southern Distinct Population Segment. N. M. F. Service, editor, Southwest Region.
- NMFS. 2010b. Shortnose Sturgeon Status Review Team. A Biological Assessment of Shortnose Sturgeon (*Acipenser brevirostrum*). Report to National Marine Fisheries Service. Pages 417 pp in, Northeast Regional Office.
- NMFS. 2010c. Smalltooth sawfish (*Pristis pectinata*) 5-year review: summary and evaluation. N. O. A. A. National Marine Fisheries Service, Commerce, editor. Protected Resources Division, St. Petersburg, FL.
- NMFS. 2011. 5-Year Review: Summary & Evaluation of Snake River Sockeye, Snake River Spring-Summer Chinook, Snake River Fall-Run Chinook, Snake River Basin Steelhead. N. M. F. S. N. Region, editor, Portland, OR.
- NMFS. 2011. Bi-National Recovery Plan for the Kemp's Ridley Sea Turtle (*Lepidochelys kempii*), Second Revision. Pages 156 in USFWS, editor, Silver Spring, MD.
- NMFS. 2011a. NMFS Endangered Species Act Section 7 Consultation, Biological Opinion: Environmental Protection Agency registration of pesticides containing 2,4-D, Triclopyr BEE, Diuron, Linuron, Captan, and Chlorothalonil. National Marine Fisheries Service, Office of Protected Resources: Interagency Cooperation Division, Silver Spring, MD.
- NMFS. 2011b. U.S. National Bycatch Report. Pages 508 in U. S. D. Commer., editor. W. A. Karp, L. L. Desfosse, S. G. Brooke, Editors.
- NMFS. 2011c. U.S. National Bycatch Report [W. A. Karp, L. L. Desfosse, S. G. Brooke, Editors]. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-F/SPO-117E, 508 p.
- NMFS. 2012. Biological Opinion on the Permits, Conservation and Education Division's proposal to issue Permit 16306 for research on shortnose sturgeon in Maine, Massachusetts, and New Hampshire Rivers pursuant to section 10(a)(1)(A) of the Endangered Species Act of 1973.

- NMFS. 2012. Endangered Species Act - Section 7 Consultation: Biological Opinion on Environmental Protection Agency registration of pesticides containing oryzalin, pendimethalin, and trifluralin. Pages 1094 in U. S. D. o. Commerce, editor, Silver Spring, Maryland.
- NMFS. 2012. Final Recovery Plan for Central California Coast coho salmon Evolutionarily Significant Unit. National Marine Fisheries Service, Southwest Region, Santa Rosa, California.
- NMFS. 2013. Nassau Grouper, *Epinephelus striatus* (Bloch 1792) Biological Report.
- NMFS. 2013a. ESA Recovery Plan for Lower Columbia River Coho Salmon, Lower Columbia River Chinook Salmon, Columbia River Chum Salmon, and Lower Columbia River Steelhead, Portland, Oregon.
- NMFS. 2013a. Hawksbill sea turtle (*Eremochelys imbricata*) 5-year review: Summary and evaluation. National Marine Fisheries Service and U.S. Fish and Wildlife Service.
- NMFS. 2013b. ESA Recovery Plan for the White Salmon River Watershed. June 2013.
- NMFS. 2013b. Leatherback Sea Turtle (*Dermochelys coriacea*) 5-Year Review: Summary and Evaluation. N. a. USFWS, editor.
- NMFS. 2014. ESA Section 7 Consultation for Permit Number 17787 (Southeast Fisheries Science Center) to Authorize Research on Smalltooth Sawfish along the Coast of Florida. N. O. A. A. National Marine Fisheries Service, Commerce, editor. Protected Resources.
- NMFS. 2014a. Final Recovery Plan for the Southern Oregon/Northern California Coast Evolutionarily Significant Unit of Coho Salmon (*Oncorhynchus kisutch*). National Marine Fisheries Service. Arcata, CA.
- NMFS. 2014b. Recovery Plan for the Evolutionarily Significant Units of Sacramento River Winter-run Chinook Salmon and Central Valley Spring-run Chinook Salmon and the Distinct Population Segment of California Central Valley Steelhead. California Central Valley Area Office.
- NMFS. 2015. Kemp's Ridley Sea Turtle (*Lepidochelys kempii*) 5-year Review: Summary and Evaluation. Silver Spring, MD.
- NMFS. 2015. Proposed ESA Recovery Plan for Snake River Fall Chinook Salmon (*Oncorhynchus tshawytscha*). N. F. W. C. Region, editor.
- NMFS. 2015. Southern Distinct Population Segment of the North American Green Sturgeon (*Acipenser medirostris*); 5-year Review: Summary and Evaluation. W. C. R. National Marine Fisheries Service, editor, Long Beach, CA.
- NMFS. 2016. Southern Resident Killer Whales (*Orcinus orca*) 5-year Review: Summary and Evaluation. National Marine Fisheries Service, West Coast Region, Seattle, Washington.

- NMFS. 2016a. 2016 5-Year Review: Summary and Evaluation of Eulachon. West Coast Region, Portland, OR.
- NMFS. 2016a. 5-year Review: Summary and Evaluation of Central Valley Spring-run Chinook Salmon Evolutionarily Significant Unit. N. O. A. A. National Marine Fisheries Service, Commerce, editor.
- NMFS. 2016b. Draft Recovery Plan for Eulachon (*Thaleichthys pacificus*) Pages 120 in. West Coast Region, Protected Species Division, Portland, OR.
- NMFS. 2016b. Final Coastal Multispecies Recovery Plan. National Marine Fisheries Service, West Coast Region, Santa Rosa, California.
- NMFS. 2016c. Draft Rockfish Recovery Plan: Puget Sound/Georgia Basin yelloweye rockfish (*Sebastes ruberrimus*) and bocaccio (*Sebastes paucispinis*). Seattle, WA.
- NMFS. 2016c. Proposed ESA Recovery Plan for Snake River Spring/Summer Chinook Salmon (*Oncorhynchus tshawytscha*) & Snake River Steelhead (*Oncorhynchus mykiss*). N. O. A. A. National Marine Fisheries Service, Commerce, editor, West Coast Region.
- NMFS. 2016d. Recovery Plan for Oregon Coast Coho Salmon Evolutionarily Significant Unit. National Marine Fisheries Service, West Coast Region Portland, Oregon.
- NMFS. 2016d. Yelloweye rockfish (*Sebastes ruberrimus*), canary rockfish (*Sebastes pinniger*), and bocaccio (*Sebastes paucispinis*) of the Puget Sound/Georgia Basin. Pages 131 in Five-Year Review: Summary and Evaluation, West Coast Region Seattle, WA.
- NMFS. 2016e. Species in the Spotlight; Priority Actions: 2016-2020; Sacramento River Winter-run Chinook Salmon. N. O. A. A. National Marine Fisheries Service, Commerce, editor, www.fisheries.noaa.gov.
- NMFS. 2017a. 5-Year Review: Summary & Evaluation of Puget Sound Chinook Hood Canal Summer Chum Puget Sound Steelhead, Portland, Oregon.
- NMFS. 2017b. 2016 5-Year Review: Summary & Evaluation of Lower Columbia River Chinook Salmon, Columbia River Chum Salmon, Lower Columbia River Coho Salmon, and Lower Columbia River Steelhead, Portland, Oregon.
- NMFS-SEFSC. 2009. An assessment of loggerhead sea turtles to estimate impacts of mortality reductions on population dynamics. NMFS Southeast Fisheries Science Center.
- NOAA. 2013. Memorandum - North Central California Coast Salmonid Recovery Priority Populations. Santa Rosa, California.
- NOAA. 2016. Species in the Spotlight Priority Actions: 2016-2020 Atlantic Salmon (*Salmo salar*). Atlantic Salmon Five Year Action Plan.
- Norton, S. L., and coauthors. 2012. Designating critical habitat for juvenile endangered smalltooth sawfish in the United States. *Marine and Coastal Fisheries* 4(1):473-480.

- Novak, A. J., A. E. Carlson, C. R. Wheeler, G. S. Wippelhauser, and J. A. Sulikowski. 2017. Critical foraging habitat of Atlantic Sturgeon based on feeding habits, prey distribution, and movement patterns in the Saco River estuary, Maine. *Transactions of the American Fisheries Society* 146(2):308-317.
- NRC NAS. 2013. Assessing risks to endangered and threatened species from pesticides. National Research Council of the National Academy of Sciences. The National Academies Press. Washington, D.C. 175 pages.
- NRC NAS. 2013. Assessing risks to endangered and threatened species from pesticides. National Research Council of the National Academy of Sciences. The National Academies Press. Washington, D.C. 175 pages.
- NRC. 1996. Upstream: Salmon and society in the Pacific northwest. National Academy Press, Washington, D.C. Available: http://books.nap.edu/openbook.php?record_id=4976&page=381 (February 2008).
- NRC. 2003. Endangered and threatened fishes in the Klamath River Basin: Causes of decline and strategies for recovery. National Research Council, Washington DC.
- NRC. 2004. Managing the Columbia River: Instream flows, water withdrawals, and salmon survival. National Academy Press, Washington D.C. Available: http://www.nap.edu/catalog.php?record_id=10962#toc (February 2008).
- NWFSC. 2015a. Status Review Update for Pacific Salmon and Steelhead Listed under the Endangered Species Act: Pacific Northwest. December 21, 2015.
- NWFSC. 2015b. Status review update for Pacific salmon and steelhead listed under the Endangered Species Act: Pacific Northwest. National Marine Fisheries Service, Northwest Fisheries Science Center:356.
- NWPPC. 1986. Compilation of information on salmon and steelhead losses in the Columbia River basin. Report to the Northwest Power Planning Council, Portland, Oregon. Available: <http://www.nwcouncil.org/library/1986/Compilation.htm> (February 2008)
- O'Connor, J. M., J. B. Alber, and L. G. Arvidson. 1981. Development and identification of larval Atlantic sturgeon (*Acipenser oxyrinchus*) and shortnose sturgeon (*A. brevirostrum*) from the Hudson River estuary, New York. *Copeia* 1981(3):711-717.
- ODFW. 2005. Oregon plan for salmon and watersheds: Oregon coast coho assessment habitat. Oregon Department of Fish and Wildlife.
- ODFW. 2007. Oregon Coast Coho Conservation Plan for the State of Oregon.
- ODFW. 2007. Oregon Department of Fish and Wildlife. Fish Hatchery Management Plan. Available online at: http://www.dfw.state.or.us/fish/nfcp/hatchery_mgmt.pdf
- ODFW. 2010. Lower Columbia River Conservation and Recovery Plan for Oregon Populations of Salmon and Steelhead. August 6, 2010.

- ODFW. 2016. Oregon Adult Salmonid Inventory and Sampling Project. Estimated Total Population, Ocean Harvest Impact Rate, and Spawning Population of Naturally Produced Coho.
- O'herron, J. C., K. W. Able, and R. W. Hastings. 1993. Movements of shortnose sturgeon (*Acipenser brevirostrum*) in the Delaware River. *Estuaries* 16(2):235-240.
- O'Neill, S. M., and coauthors. 2006. Regional patterns of persistent organic pollutants in five Pacific salmon species (*Oncorhynchus* spp) and their contributions to contaminant levels in northern and southern resident killer whales (*Orcinus orca*).
- Ong, T.-L., J. Stabile, I. Wirgin, and J. R. Waldman. 1996. Genetic divergence between *Acipenser oxyrinchus oxyrinchus* and *A. o. desotoi* as assessed by mitochondrial DNA sequencing analysis. *Copeia* 1996(2):464-469.
- Orpin, A. R., and coauthors. 2004. Natural turbidity variability and weather forecasts in risk management of anthropogenic sediment discharge near sensitive environments. *Marine Pollution Bulletin* 49(7-8):602-612.
- Orr, J. C., and coauthors. 2005. Anthropogenic ocean acidification over the twenty-first century and its impact on calcifying organisms. *Nature* 43(681-686).
- Pachauri, R. K., and coauthors. 2014. Climate change 2014: synthesis report. Contribution of Working Groups I, II and III to the fifth assessment report of the Intergovernmental Panel on Climate Change. IPCC.
- Palmisano, J. F., R. H. Ellis, and V. W. Kaczynski. 1993. The impact of environmental and management factors on Washington's wild anadromous salmon and trout. Washington Forest Protection Association and Washington Department of Natural Resources, Olympia, Washington.
- Pampulha, M. O. i., A. 2006. Impact of an herbicide combination of bromoxynil and prosulfuron on soil microorganisms. *Current Microbiology* 53:238-243.
- Parker, E., and B. Kynard. 2014. Latitudinal variation in ontogenetic behaviour of shortnose sturgeon, *Acipenser brevirostrum* Lesueur, 1818: an artificial stream study. *Journal of Applied Ichthyology* 30(6):1115-1124.
- 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. *Marine Mammal Science* 16(2):392-412.
- Parsons, K. M., K. C. B. III, J. K. B. Ford, and J. W. Durban. 2009. The social dynamics of southern resident killer whales and conservation implications for this endangered population. (*Orcinus orca*). *Animal Behaviour* 77(4):963-971.
- Parsons, K., J. Durban, A. Burdin, V. Burkanov, R. Pitman et al. 2013. Geographic patterns of genetic differentiation among killer whales in the northern Pacific. *Journal of Heredity*. doi: 10.1093/jhered/est037.

- Paul, M. J., and J. L. Meyer. 2001. Streams in the urban landscape. *Annual Review Ecological System* 32:333-365.
- Paul, V. J., R. W. Thacker, K. Banks, and S. Golubic. 2005. Benthic cyanobacterial bloom impacts the reefs of South Florida (Broward County, USA). *Coral Reefs* 24(4):693-697.
- Pauley, G.B., Risher, R., and Thomas, G.L. 1989. Species profiles: Life histories and environmental requirements of coastal fishes and invertebrates (Pacific Northwest) - sockeye salmon. U.S. Fish Wildl. Serv., Biol. Rep. 82(11.116). U.S. Army Corps of Engineers, TR EL-82-4, 22 p.
- Pess, G.R., Montgomery, D.R., Steel, E.A., Bilby, R.E., Feist, B.E., and Greenberg, H.M. 2002. Landscape characteristics, land use, and coho salmon (*Oncorhynchus kisutch*) abundance, Snohomish River, Wash., U.S.A. *Canadian Journal of Fisheries and Aquatic Sciences* 59: 613–623.
- Peterson, J.L., Jepson, P.C., and Jenkins, J.J. 2001. A test system to evaluate the susceptibility of Oregon, USA, native stream invertebrates to triclopyr and carbaryl. *Environmental Toxicology and Chemistry* 20:2205-2214.
- Peterson, R. S., C. L. Hubbs, R. L. Gentry, and R. L. Delong. 1968. The Guadalupe fur seal: Habitat, behavior, population size and field identification. *Journal of Mammalogy* 49(4):665-675.
- Phlips, E. J., and coauthors. 2011. Scales of temporal and spatial variability in the distribution of harmful algae species in the Indian River Lagoon, Florida, USA. *Harmful Algae* 10(3):277-290.
- Phlips, E. J., S. Badylak, and T. C. Lynch. 1999. Blooms of the picoplanktonic cyanobacterium *Synechococcus* in Florida Bay, a subtropical inner-shelf lagoon. *Limnology and Oceanography* 44(4):1166-1175.
- Phlips, E. J., S. Badylak, E. Bledsoe, and M. Cichra. 2006. Factors affecting the distribution of *Pyrodinium bahamense* var. *bahamense* in coastal waters of Florida. *Marine Ecology Progress Series* 322:99-115.
- Phlips, E. J., S. Badylak, M. C. Christman, and M. A. Lasi. 2010. Climatic Trends and Temporal Patterns of Phytoplankton Composition, Abundance, and Succession in the Indian River Lagoon, Florida, USA. *Estuaries and Coasts* 33(2):498-512.
- Pierson, M. O. 1978. A study of the population dynamics and breeding behavior of the Guadalupe fur seal, (*Arctocephalus townsendi*). University of California, Santa Cruz.
- Pilot, M., M. E. Dahlheim, and A. R. Hoelzel. 2010. Social cohesion among kin, gene flow without dispersal and the evolution of population genetic structure in the killer whale (*Orcinus orca*). *Journal of Evolutionary Biology* 23(1):20-31.

- Pine, W., and S. Martell. 2009. Status of Gulf sturgeon *Acipenser oxyrinchus desotoi* in the Gulf of Mexico: a document prepared for review, discussion, and research planning. Gulf sturgeon annual working group meeting, Cedar Key, Florida.
- Piner, K. R., J. R. Wallace, O. S. Hamel, and R. Mikus. 2006. Evaluation of ageing accuracy of bocaccio (*Sebastes paucispinis*) rockfish using bomb radiocarbon. *Fisheries Research* 77(2):200-206.
- Pitcher, T. J. 1986. Functions of shoaling behaviour in teleosts. Springer.
- Plotkin, P. 2003. Adult migrations and habitat use. Pages 225-241 in P. L. Lutz, J. A. Musick, and J. Wyneken, editors. *Biology of sea turtles, volume II*. CRC Press, Boca Raton, Florida.
- PNERC. 2002. Willamette River Basin Planning Atlas: Trajectories of Environmental and Ecological Change. . Institute for a Sustainable Environment, University of Oregon, Eugene, OR.
- Popova, G. 1976. Characteristics of the Effect of the Herbicide Prometryn on Fish. *Nauchn. Osn. Okhr. Prir.* 4:118-125.
- Porter, J. W., and coauthors. 2001. Patterns of spread of coral disease in the Florida Keys. *Hydrobiologia* 460(1-3):1-24.
- Porter, J. W., J. F. Battey, and G. J. Smith. 1982. Perturbation and change in coral reef communities. *Proceedings of the National Academy of Sciences* 79(5):1678-1681.
- Poulakis, G. R., P. W. Stevens, A. A. Timmers, T. R. Wiley, and C. A. Simpfendorfer. 2011. Abiotic affinities and spatiotemporal distribution of the endangered smalltooth sawfish, *Pristis pectinata*, in a south-western Florida nursery. *Marine and Freshwater Research* 62(10):1165-1177.
- Poulakis, G., and coauthors. 2014. Smalltooth Sawfish (*Pristis pectinata*) Research and Outreach: an Interdisciplinary Collaborative Program. F. F. a. W. C. Commission, editor, Port Charlotte, FL.
- Poulakis, G., and J. Seitz. 2004. Recent occurrence of the smalltooth sawfish, *Pristis pectinata* (Elasmobranchiomorphi: Pristidae), in Florida Bay and the Florida Keys, with comments on sawfish ecology. *Florida Scientist* 67(1):27-35.
- Poytress, W. R., and F. D. Carrillo. 2010. Brood-year 2007 winter Chinook juvenile production indices with comparisons to juvenile production estimates derived from adult escapement. Red Bluff: United States Fish and Wildlife Service.
- Poytress, W. R., and F. D. Carrillo. 2011. Brood-year 2008 and 2009 winter Chinook juvenile production indices with comparisons to juvenile production estimates derived from adult escapement. Red Bluff: United States Fish and Wildlife Service.

- Poytress, W. R., and F. D. Carrillo. 2012. Brood-year 2010 winter Chinook juvenile production indices with comparisons to juvenile production estimates derived from adult escapement. Red Bluff: United States Fish and Wildlife Service.
- Poytress, W. R., J. J. Gruber, and J. Van Eenennaam. 2009. 2008 Upper Sacramento River Green Sturgeon spawning habitat and larval migration surveys. Final Annual Report to US Bureau of Reclamation, US Fish and Wildlife Service.
- Poytress, W. R., J. J. Gruber, and J. Van Eenennaam. 2010. 2009 Upper Sacramento River Green Sturgeon spawning habitat and larval migration surveys. Annual Report to US Bureau of Reclamation, US Fish and Wildlife Service.
- Poytress, W. R., J. J. Gruber, and J. Van Eenennaam. 2011. 2010 Upper Sacramento River Green Sturgeon spawning habitat and larval migration surveys. Final Annual Report to US Bureau of Reclamation, US Fish and Wildlife Service.
- Poytress, W. R., J. J. Gruber, and J. Van Eenennaam. 2013. 2012 Upper Sacramento River Green Sturgeon spawning habitat and young of the year migration surveys. Annual Report to US Bureau of Reclamation, US Fish and Wildlife Service.
- Precht, W. F., and R. B. Aronson. 2004. Climate flickers and range shifts of reef corals. *Frontiers in Ecology and the Environment* 2(6):307-314.
- Precht, W. F., M. L. Robbart, G. S. Boland, and G. P. Schmahl. 2005. Establishment and initial analysis of deep reef stations (32-40 m) at the East Flower Garden Bank. *Gulf of Mexico Science* 1:124-127.
- Price, E. R., and coauthors. 2004. Size, growth, and reproductive output of adult female leatherback turtles *Dermochelys coriacea*. *Endangered Species Research* 5:1-8.
- PSAT. 2004. State of the Sound 2004. State of Washington, Office of the Governor, Olympia, Washington. Available: http://www.psat.wa.gov/Publications/StateSound2004/141963_811.pdf (February 2008).
- PSAT. 2005. State of the Sound 2004. Puget Sound Action Team, Office of the Governor, Olympia, WA.
- PSAT. 2007. State of the Sound 2007. State of Washington, Office of the Governor, Publication Number PSAT 07-01, Olympia, Washington. Available: http://www.psat.wa.gov/Publications/state_sound07/2007_stateofthesound.pdf (February 2008).
- PSCCTC (Pacific Salmon Commission Chinook Technical Committee). 2002. Pacific Salmon Commission Joint Chinook Technical Committee Report: Annual Exploitation Rate Analysis and Model Calibration. Report TCCHINOOK (02)-3. Vancouver, British Columbia, Canada.
- PSU Population Research Center. 2018. PSU's Population Research Center Releases Preliminary Oregon Population Estimates. in C. Rynerson and J. Jurjevich, editors.

- Quattro, J., T. Greig, D. Coykendall, B. Bowen, and J. Baldwin. 2002. Genetic issues in aquatic species management: the shortnose sturgeon (*Acipenser brevirostrum*) in the southeastern United States. *Conservation Genetics* 3(2):155-166.
- Quinn, T.P. 2005. *The behavior and ecology of Pacific salmon and trout*. University of Washington Press. Seattle, WA. 378pp.
- Raabe, E. A., and R. P. Stumpf. 2016. Expansion of Tidal Marsh in Response to Sea-Level Rise: Gulf Coast of Florida, USA. *Estuaries and Coasts* 39(1):145-157.
- Radtke, L. 1966. Distribution of smelt, juvenile sturgeon, and starry flounder in the Sacramento-San Joaquin Delta with observations on food of sturgeon. *Ecological studies of the Sacramento-San Joaquin Estuary, Part II*:115-119.
- Ragen, T. J. 1999. Human activities affecting the population trends of the Hawaiian monk seal. *American Fisheries Society Symposium* 23:183 - 194.
- Raimondi, P. T., M. C. Wilson, R. F. Ambrose, J. M. Engle, and T. E. Minchinton. 2002. Continued declines of black abalone along the coast of California: Are mass mortalities related to El Niño events? *Marine Ecology Progress Series* 242:143-152.
- Ralston, S., and J. N. Ianelli. 1998. When lengths are better than ages: The complex case of bocaccio. University of Alaska, Fairbanks, Alaska.
- Randall, M., and K. Sulak. 2012. Evidence of autumn spawning in Suwannee River Gulf sturgeon, *Acipenser oxyrinchus desotoi* (Vladykov, 1955). *Journal of Applied Ichthyology* 28(4):489-495.
- Ratner, S., Lande, R., and Roper, B.B. 1997. Population viability analysis of spring Chinook salmon in the South Umpqua River, Oregon. *Conservation Biology* 11:879-889.
- Rawson, K., and coauthors. 2009. Viability criteria for the Lake Ozette sockeye salmon evolutionarily significant unit. Department of Commerce, NMFS-NWFS-99, Seattle, Washington.
- Reeves, G. H., F. H. Everest, and T. E. Nickelson. 1989. Identification of physical habitats limiting the production of coho salmon in western Oregon and Washington.
- Reeves, R. R., B. S. Stewart, P. Clapham, and J. Powell. 2002. *Guide to marine mammals of the world*. Knopf, New York.
- Reilly, C. A., T. W. Echeverria, and S. Ralston. 1992. Interannual variation and overlap in the diets of pelagic juvenile rockfish (genus *Sebastes*) off central California. *Fishery Bulletin* 90(3):505-515.
- Reina, R. D., P. A. Mayor, J. R. Spotila, R. Piedra, and F. V. Paladino. 2002. Nesting ecology of the leatherback turtle, *Dermochelys coriacea*, at Parque Nacional Marino Las Baulas, Costa Rica: 1988-1989 to 1999-2000. *Copeia* 2002(3):653-664.

- Reisenbichler, R. R. 1997. Genetic factors contributing to declines of anadromous salmonids in the Pacific Northwest. Pages 223-244 in D. J. Stouder, P. A. Bisson, and R. J. Naiman, editors. Pacific salmon and their ecosystems: status and future options. Chapman and Hall, New York.
- Relyea, R.A. 2005. The impact of insecticides and herbicides on the biodiversity and productivity of aquatic communities. *Ecological Applications* 15(2): 618–627.
- Richards, D. V. 2000. The Status of rocky intertidal communities in Channel Islands National Park. California Islands Symposium, Santa Barbara.
- Richards, D. V., and G. E. Davis. 1993. Early warnings of modern population collapse in black abalone *Haliotis cracherodii*, Leach, 1814 at the California Channel Islands. *Journal of Shellfish Research* 12(2):189-194.
- Richardson, L. L., and coauthors. 2007. The presence of the cyanobacterial toxin microcystin in black band disease of corals. *Fems Microbiology Letters* 272(2):182-187.
- Riegl, B., S. J. Purkis, J. Keck, and G. P. Rowlands. 2009. Monitored and modeled coral population dynamics and the refuge concept. *Marine Pollution Bulletin* 58(1):24-38.
- Riggs, L. A. 1990. Principles for genetic conservation and production quality: results of a scientific and technical clarification and revision. Unpublished report prepared for the Northwest Power Planning Council, prepared by Genetic Resource Consultants.
- Riley, W. D., P. I. Davison, D. L. Maxwell, and B. Bendall. 2013. Street lighting delays and disrupts the dispersal of Atlantic salmon (*Salmo salar*) fry. *Biological Conservation* 158:140-146.
- Rinne, J. N. 2004. Forests, fish and fire: relationships and management implications for fishes in the southwestern USA. pages 151-156 in G.J. Scrimgeour, G.Eisler, B. McCulloch, U. Silins, and M. Monita (editors). Forest Land - Fish Conference II - Ecosystem Stewardship through Collaboration. Proceedings of the Forest-Land-Fish Conference II, April 26-28, 2004. Edmonton, Alberta, Canada.
- Ritchie, A. C. 2005. Lake Ozette shoreline Morphology: 1953-2003, Port Angeles, Washington.
- Ritson-Williams, R., V. J. Paul, S. N. Arnold, and R. S. Steneck. 2010. Larval settlement preferences and post-settlement survival of the threatened Caribbean corals *Acropora palmata* and *A. cervicornis*. *Coral Reefs* 29(1):71-81.
- Robinson, R. A., J. A. Learmonth, A. M. Hutson, C. D. Macleod, T. H. Sparks, D. I. Leech, G. J. Pierce, M. M. Rehfish, and H. Q. P. Crick. 2005. Climate change and migratory species. Defra Research, British Trust for Ornithology, Norfolk, U.K.
- Roegner, G. C., R. McNatt, D. J. Teel, and D. L. Bottom. 2012. Distribution, size, and origin of juvenile Chinook salmon in shallow-water habitats of the lower Columbia River and estuary, 2002–2007. *Marine and Coastal Fisheries* 4(1):450-472.

- Rogers, C. S., and E. M. Muller. 2012. Bleaching, disease and recovery in the threatened scleractinian coral *Acropora palmata* in St. John, US Virgin Islands: 2003–2010. *Coral Reefs* 31(3):807-819.
- Rogers, C. S., and V. H. Garrison. 2001. Ten years after the crime: Lasting effects of damage from a cruise ship anchor on a coral reef in St. John, U.S. Virgin Islands. *Bulletin of Marine Science* 69(2):793-803.
- Rogers-Bennett, L., and coauthors. 2016. Implementing a Restoration Program for the Endangered White Abalone (*Haliotis sorenseni*) in California. *Journal of Shellfish Research* 35(3):611-618.
- Rogers-Bennett, L., P. L. Haaker, T. O. Huff, and P. K. Dayton. 2002. Estimating baseline abundances of abalone in California for restoration.
- Rogillio, H., and coauthors. 2001. Status, movement, and habitat use of Gulf Sturgeon in the Lake Pontchartrain basin, Louisiana. Louisiana Department of Wildlife and Fisheries and National Wildlife Foundation, Shell Marine Habitat Program, Final Report, Baton Rouge.
- Rohr, J. R., and P. W. Crumrine. 2005. Effects of an herbicide and an insecticide on pond community structure and processes. *Ecological Applications* 15:1135-1147.
- Roletto, J., S. Kimura, G. Cox, J. Steinbeck. 2015. Black abalone survey of the South Farallon Islands: Summary Report. Summary Report. .
- Roni, P., and Quinn, T.P. 1995. Geographic variation in size and age of North American Chinook salmon. *North American Journal of Fisheries Management* 15:325-345.
- Rosales-Casian, J. A., and C. Almeda-Jauregui. 2009. Unusual occurrence of a green sturgeon, *acipenser medirostris*, at El Socorro, Baja California, Mexico. *California Cooperative Oceanic Fisheries Investigations Reports* 50:169-171.
- Rosenthal, R. J., L. Haldorson, L. J. Field, V. Moran-O'Connell, and M. G. LaRiviere. 1982. Inshore and shallow offshore bottomfish resources in the southeastern Gulf of Alaska. Alaska Coastal Research, Sitka, Alaska.
- Rosetta, T., and D. Borys. 1996. Identification of sources of pollutants to the lower Columbia River basin. Draft report. Prepared for the Lower Columbia River Bi-State Program. Oregon Department of Environmental Quality. Available: <http://www.lcrep.org/pdfs/58.%2002750.pdf> (February 2008).
- Ross, S. T., and coauthors. 2009. Estuarine and coastal habitat use of Gulf sturgeon (*Acipenser oxyrinchus desotoi*) in the north-central Gulf of Mexico. *Estuaries and Coasts* 32(2):360-374.
- Ross, S., R. Heise, M. Dugo, and W. T. Slack. 2001. Movement and Habitat use of the Gulf Sturgeon (*Acipenser oxyrinchus desotoi*) in the Pascagoula Drainage of Mississippi: year V. Project No. E-1, Segment 16. University of Southern Mississippi, Mississippi Museum of Natural Science.

- Royal Society of London. 2005. Ocean acidification due to increasing atmospheric carbon dioxide. Royal Society of London.
- Ruckelshaus, M. H., and M. M. McClure. 2007. Sound Science: synthesizing ecological and socioeconomic information about the Puget Sound ecosystem. Prepared in Cooperation with the Sound Science collaborative team. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Northwest Fisheries Science Center, Seattle, Washington. Available: http://www.nwfsc.noaa.gov/research/shared/sound_science/index.cfm (February 2008).
- Rudd, M. B., R. N. Ahrens, W. E. Pine III, and S. K. Bolden. 2014. Empirical, spatially explicit natural mortality and movement rate estimates for the threatened Gulf Sturgeon (*Acipenser oxyrinchus desotoi*). *Canadian Journal of Fisheries and Aquatic Sciences* 71(9):1407-1417.
- Ruggerone, G. T., and F. A. Goetz. 2004. Survival of Puget Sound Chinook salmon (*Oncorhynchus tshawytscha*) in response to climate-induced competition with pink salmon (*Oncorhynchus gorbuscha*). *Canadian Journal of Fisheries and Aquatic Sciences* 61:1756-1770.
- Rutherford, A. K.-L., A. 2001. Herbicide induced oxidative stress in photosystem II. *Trends in Biochemical Sciences* 26:648-653.
- Ryberg, K. R., A. V. Vecchia, R. J. Gilliom, and J. D. Martin. 2014. Pesticide trends in major rivers of the United States, 1992-2010. US Geological Survey, 2328-0328.
- Sakuma, K. M., and S. Ralston. 1995. Distributional patterns of late larval groundfish off central California in relation to hydrographic features during 1992 and 1993. *California Cooperative Oceanic Fisheries Investigations Reports* 36:179-192.
- Sala, E., E. Ballesteros, and R. M. Starr. 2001. Rapid Decline of Nassau Grouper Spawning Aggregations in Belize: Fishery Management and Conservation Needs. *Fisheries* 26(10):23-30.
- Salo, E. O. 1991. Life history of chum salmon (*Oncorhynchus keta*). Pages 231–309 in C. G. a. L. Margolis, editor. *Pacific salmon life histories*. University of British Columbia Press, Vancouver, B.C.
- Sandahl, J. F., D. H. Baldwin, J. J. Jenkins, and N. L. Scholz. 2004. Odor-evoked field potentials as indicators of sublethal neurotoxicity in juvenile coho salmon (*Oncorhynchus kisutch*) exposed to copper, chlorpyrifos, or esfenvalerate. *Canadian Journal of Fisheries Aquatic Sciences* 64:404-413.
- Sandahl, J.F., Baldwin, D.H., Jenkins, J.J., and Scholz, N.L. 2005. Comparative thresholds for acetylcholinesterase inhibition and behavioral impairment in coho salmon exposed to chlorpyrifos. *Environmental Toxicology and Chemistry* 24:136-145.

- Sandercock, F. 1991. Life history of coho salmon (*Oncorhynchus kisutch*). Pacific salmon life histories:396-445.
- Sands, N. J., K. Rawson, K.P. Currens, W.H. Graeber, M.H., Ruckelshaus, R.R. Fuerstenberg, and J.B. Scott. 2009. Determination of Independent Populations and Viability Criteria for the Hood Canal Summer Chum Salmon Evolutionarily Significant Unit. National Marine Fisheries Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.
- Saunders, T. M., S. D. Connell, and S. Mayfield. 2009b. Differences in abalone growth and morphology between locations with high and low food availability: morphologically fixed or plastic traits? *Marine Biology* 156(6):1255-1263.
- Saunders, T., S. Mayfield, and A. Hogg. 2009a. Using a simple morphometric marker to identify spatial units for abalone fishery management. *Ices Journal of Marine Science* 66(2):305-314.
- Savoy, T. 2007. Prey eaten by Atlantic sturgeon in Connecticut waters. Pages 157 in American Fisheries Society Symposium. American Fisheries Society.
- Savoy, T. F. 2004. Population estimate and utilization of the lower Connecticut River by shortnose sturgeon.
- Savoy, T., and D. Pacileo. 2003. Movements and important habitats of subadult Atlantic sturgeon in Connecticut waters. *Transactions of the American Fisheries Society* 132(1):1-8.
- Scatterday, J. 1974. Reefs and associated coral assemblages off Bonaire, Netherlands Antilles, and their bearing on Pliocene and Recent reef models. Pages 85-106 in Proc 2nd Intl Coral Reef Symp 2.
- Schmid, J. R. 1998. Marine turtle populations on the west-central coast of Florida: Results of tagging studies at the Cedar Keys, Florida, 1986-1995. *Fishery Bulletin* 96(3):589-602.
- Schmitt-Jansen, M., and R. Altenburger. 2005. Predicting and observing responses of algal communities to photosystem II-herbicide exposure using pollution-induced community tolerance and species-sensitivity distributions. *Environmental Toxicology and Chemistry* 24:304-312.
- Scholz, N.L., Truelove, N.K., French, B.L., Berejikian, B.A., Quinn, T.P., Casillas, E., and Collier, T.K. 2000. Diazinon disrupts antipredator and homing behaviors in Chinook salmon (*Oncorhynchus tshawytscha*). *Canadian Journal of Fisheries and Aquatic Sciences* 57(9): 1911–1918.
- Schopmeyer, S. A., and coauthors. 2012. In situ coral nurseries serve as genetic repositories for coral reef restoration after an extreme cold-water event. *Restoration Ecology* 20(6):696-703.

- Schueller, P., and D. L. Peterson. 2010. Abundance and recruitment of juvenile Atlantic Sturgeon in the Altamaha River, Georgia. *Transactions of the American Fisheries Society* 139(5):1526-1535.
- Schuhmacher, H., and H. Zibrowius. 1985. What is hermatypic? A redefinition of ecological groups in corals and other organisms. *Coral Reefs* 4(1):1-9.
- Schultz, J. K., J. D. Baker, R. J. Toonen, A. L. Harting, and B. W. Bowen. 2011. Range-wide genetic connectivity of the Hawaiian monk seal and implications for translocation. *Conservation Biology* 25(1):124-132.
- Schultz, J. K., J. D. Baker, R. J. Toonen, and B. W. Bowen. 2009. Extremely low genetic diversity in the endangered Hawaiian monk seal (*Monachus schauinslandi*). *Journal of Heredity* 100(1):25-33.
- Schulz, R. 2004. Field studies on exposure, effects, and risk mitigation of aquatic nonpoint-source insecticide pollution: A review. *Journal of Environmental Quality* 33:419-448.
- Schulz, R., and Liess, M. 1999. A field study of the effects of agriculturally derived insecticide input on stream macroinvertebrate dynamics. *Aquatic Toxicology* 46:155-176.
- Schulz, R., M. Moore, E. Bennett, J. Farris, J. S. Smith, and C. CM. 2003a. Methyl parathion toxicity in vegetated and nonvegetated wetland mesocosms. *Environmental Toxicology and Chemistry* 22:1261-1268.
- Schulz, R., M. T. Moore, E. R. Bennett, C. D. Milam, J. L. Bouldin, J. L. Farris, S. Smith, and C. M. Cooper. 2003b. Acute toxicity of methyl-parathion in wetland mesocosms: Assessing the influence of aquatic plants using laboratory testing with *Hyaella azteca*. *Archives of Environmental Contamination and Toxicology* 45:331-336.
- Schulz, R., Thiere, G., and Dabrowski, J.M. 2002. A combined microcosm and field approach to evaluate the aquatic toxicity of azinphosmethyl to stream communities. *Environmental Toxicology and Chemistry* 21:2172-2178.
- Scott, W. B., and E. J. Crossman. 1973. *Freshwater fishes of Canada*. Fisheries Research Board of Canada Bulletin 184.
- Scott, W., and M. Scott. 1988. *Atlantic fishes of Canada Canadian Bulletin of Fisheries and Aquatic Science*, 219. University of Toronto Press, Toronto, Canada.
- Secor, D. H. 2002. Atlantic sturgeon fisheries and stock abundances during the late nineteenth century. Pages 89-100 in *American Fisheries Society Symposium*. American Fisheries Society.
- Seesholtz, A. M., M. J. Manuel, and J. P. Van Eenennaam. 2015. First documented spawning and associated habitat conditions for green sturgeon in the Feather River, California. *Environmental Biology of Fishes* 98(3):905-912.

- Seitz, J., and G. R. Poulakis. 2002. Recent occurrence of sawfishes (Elasmobranchiomorphi: Pristidae) along the southwest coast of Florida (USA). *Florida Scientist* 65(4):256-266.
- Seminoff, J. A., and coauthors. 2014. Loggerhead sea turtle abundance at a foraging hotspot in the eastern Pacific Ocean: Implications for at-sea conservation. *Endangered Species Research* 24(3):207-220.
- Seminoff, J. A., and coauthors. 2015. Status review of the green turtle (*Chelonia mydas*) under the Endangered Species Act. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southwest Fisheries Science Center.
- SETAC 2013. Mitigating the Risks of Plant Protection Products in the Environment: MAgPie. Eds A. Alix, Anne & Brown, Colin & Capri, Ettore & Goerlitz, Gerhard & Golla, Burkhard & Knauer, Katja & Laabs, Volker & Mackay, Neil & Vasile, Alexandru & Alonso Prados, Elena & Reinert, Wolfgang & Streloke, Martin & Poulsen, Véronique.
- Shamblin, B. M., and coauthors. 2012. Expanded mitochondrial control region sequences increase resolution of stock structure among North Atlantic loggerhead turtle rookeries. *Marine Ecology Progress Series* 469:145-160.
- Shamblin, B. M., and coauthors. 2014. Geographic patterns of genetic variation in a broadly distributed marine vertebrate: New insights into
- Shamblin, B. M., and coauthors. 2016. Mexican origins for the Texas green turtle foraging aggregation: A cautionary tale of incomplete baselines and poor marker resolution. *Journal of Experimental Marine Biology and Ecology*.
- Shapovalov, L., and A. C. Taft. 1954a. The life histories of the steelhead rainbow trout (*Salmo gairdneri gairdneri*) and silver salmon (*Oncorhynchus kisutch*) with special reference to Waddell Creek, California, and recommendations regarding their management. California Department of Fish and Game Bulletin 98:375.
- Shapovalov, L., and A. C. Taft. 1954b. The life histories of the steelhead rainbow trout (*Salmo gairdneri gairdneri*) and silver salmon (*Oncorhynchus kisutch*): with special reference to Waddell Creek, California, and recommendations regarding their management. California Department of Fish and Game.
- Sharma, R., and T. P. Quinn. 2012. Linkages between life history type and migration pathways in freshwater and marine environments for Chinook salmon, *Oncorhynchus tshawytscha*. *Acta Oecologica* 41:1-13.
- Shoop, C. R., and R. D. Kenney. 1992. Seasonal distributions and abundances of loggerhead and leatherback sea turtles in waters of the northeastern United States. *Herpetological Monographs* 6:43-67.
- Simmonds, M. P., and S. J. Isaac. 2007. The impacts of climate change on marine mammals: Early signs of significant problems. *Oryx* 41:19-26.

- Simpfendorfer, C. 2002. Smalltooth sawfish: the USA's first endangered elasmobranch. *Endangered Species UPDATE* 19(3):45-49.
- Simpfendorfer, C. A. 2000. Predicting population recovery rates for endangered western Atlantic sawfishes using demographic analysis. *Environmental Biology of Fishes* 58(4):371-377.
- Simpfendorfer, C. A. 2002. Smalltooth sawfish: the USA's first endangered elasmobranch? *Endangered Species Update* 19:45-49.
- Simpfendorfer, C. A. 2005. Threatened fishes of the world: *Pristis pectinata* Latham, 1794 (Pristidae). *Environmental Biology of Fishes* 73(1):20-20.
- Simpfendorfer, C. A., and coauthors. 2011. Environmental influences on the spatial ecology of juvenile smalltooth sawfish (*Pristis pectinata*): results from acoustic monitoring. *PLoS One* 6(2):e16918.
- Simpfendorfer, C. A., and T. R. Wiley. 2004. Determination of the distribution of Florida's remnant sawfish population, and identification of areas critical to their conservation. Mote Marine Laboratory Technical Report.
- Simpfendorfer, C. A., T. R. Wiley, and B. G. Yeiser. 2010. Improving conservation planning for an endangered sawfish using data from acoustic telemetry. *Biological Conservation* 143(6):1460-1469.
- Simpfendorfer, C., G. Poulakis, P. O'Donnell, and T. Wiley. 2008. Growth rates of juvenile smalltooth sawfish *Pristis pectinata* Latham in the western Atlantic. *Journal of Fish Biology* 72(3):711-723.
- Smith, C. J. 2005. Salmon habitat limiting factors in Washington State. Washington State Conservation Commission, Olympia, Washington.
- Smith, T. B. 2013. United States Virgin Island's response to the proposed listing or change in status of seven Caribbean coral species under the U.S. Endangered Species Act. University of the Virgin Islands, Center for Marine and Environmental Studies.
- Smith, T. B., and coauthors. 2013. Convergent mortality responses of Caribbean coral species to seawater warming. *Ecosphere* 4(7):87.
- Smith, T. I. 1985. The fishery, biology, and management of Atlantic sturgeon, *Acipenser oxyrinchus*, in North America. *Environmental Biology of Fishes* 14(1):61-72.
- Smith, T. I., and J. P. Clugston. 1997. Status and management of Atlantic sturgeon, *Acipenser oxyrinchus*, in North America. *Environmental Biology of Fishes* 48(1-4):335-346.
- Smith, T., D. Marchette, and R. Smiley. 1982. Life history, ecology, culture and management of Atlantic sturgeon, *Acipenser oxyrinchus oxyrinchus*, Mitchill. South Carolina. South Carolina Wildlife Marine Resources. Resources Department, Final Report to US Fish and Wildlife Service Project AFS-9 75.

- Smith, T., J. McCord, M. Collins, and W. Post. 2002. Occurrence of stocked shortnose sturgeon *Acipenser brevirostrum* in non-target rivers. *Journal of Applied Ichthyology* 18(4-6):470-474.
- Snider, B., and R. G. Titus. 2000. Timing, Composition, and Abundance of Juvenile Anadromous Salmonid Emigration in the Sacramento River Near Knights Landing October 1997-September 1998. California Department of Fish and Game Stream Evaluation Program Technical Report No. 00-5.
- Sogard, S., T. H. Williams, and H. Fish. 2009. Seasonal patterns of abundance, growth, and site fidelity of juvenile steelhead in a small coastal California stream. *Transaction of American Fisheries Society* 138(3):549-563.
- Somerfield, P. J., and coauthors. 2008. Changes in coral reef communities among the Florida Keys, 1996–2003. *Coral Reefs* 27:951-965.
- Sonoma County Water Agency (SCWA). 2002. Documenting biodiversity of coastal salmon (*Oncorhynchus* spp.) in Northern California. Bodega Marine Laboratory, University of California at Davis, TW 99/00-110, Bodega Bay, California.
- Sonoma County Water Agency (SCWA). 2008. Chinook salmon in the Russian River, http://www.scwa.ca.gov/environment/natural_resources/chinook_salmon.php.
- Soong, K., and J. C. Lang. 1992. Reproductive integration in reef corals. *Biological Bulletin* 183(3):418-431.
- Spence, B. C., and coauthors. 2008a. A framework for assessing the viability of threatened and endangered salmon and steelhead in the north-central California Coast Recovery Domain. NOAA Technical Memorandum NMFS NOAA-TM-NMFS-SWFSC-423:173.
- Spence, B. C., and coauthors. 2008b. A framework for assessing the viability of threatened and endangered salmon and steelhead in the North-Central California Coast Recovery Domain. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southwest Fisheries Science Center.
- Spence, B. C., G. A. Lomnicky, R. M. Hughs, and R. P. Novitzki. 1996. An ecosystem approach to salmonid conservation. Man Tech Environmental Research Services Corps, TR-4501-96-6057, Corvallis, Oregon.
- Spotila, J. R., and coauthors. 1996. Worldwide population decline of *Dermochelys coriacea*: Are leatherback turtles going extinct? *Chelonian Conservation and Biology* 2(2):209-222.
- Spotila, J. R., R. D. Reina, A. C. Steyermark, P. T. Plotkin, and F. V. Paladino. 2000. Pacific leatherback turtles face extinction. *Nature* 405:529-530.
- Squiers, T. 2004. State of Maine 2004 Atlantic sturgeon compliance report to the Atlantic States Marine Fisheries Commission. Report submitted to Atlantic States Marine Fisheries Commission.

- Stabile, J., J. R. Waldman, F. Parauka, and I. Wirgin. 1996. Stock structure and homing fidelity in Gulf of Mexico sturgeon (*Acipenser oxyrinchus desotoi*) based on restriction fragment length polymorphism and sequence analyses of mitochondrial DNA. *Genetics* 144(2):767-775.
- Stanford, J. A., F. R. Hauer, S. V. Gregory, and E. B. Synder. 2005. Columbia River basin. Pages 591-653 in A. C. Benke and C. E. Cushing, editors. *Rivers of North America*. Elsevier Academic Press, Burlington, Massachusetts. Available: http://books.google.com/books?id=faOU1wkiYFIC&pg=RA3-PA541&lpg=RA3-PA541&dq=pacific+coast+rivers+of+the+coterminous+united+states&source=web&ots=-pMpyECFaA&sig=FkGrIiwgkfDyHxXCWXRaK_XSvU#PPR1,M1 (February 2008).
- Stark, J.D., Banks, J.E., and Vargas, R. 2004. How risky is risk assessment: The role that life history strategies play in susceptibility of species to stress. *Proceedings of the National Academy of Sciences, USA* 101:732-736.
- Stein, A. B., K. D. Friedland, and M. Sutherland. 2004. Atlantic sturgeon marine distribution and habitat use along the northeastern coast of the United States. *Transactions of the American Fisheries Society* 133(3):527-537.
- Steiner, S. 2003a. Stony corals and reefs of Dominica. *Atoll Research Bulletin* 498:1-15.
- Steiner, S. C. C. 2003b. Stony corals and reefs of Dominica. *Atoll Research Bulletin* 498:1-15.
- Stevenson, J. 1997. Life history characteristics of Atlantic sturgeon (*Acipenser oxyrinchus*) in the Hudson River and a model for fishery management. Master's thesis. University of Maryland, College Park.
- Stevenson, J., and D. Secor. 2000. Age determination and growth of Hudson River Atlantic sturgeon, *Acipenser oxyrinchus*. *Fishery Bulletin* 98(1):153-166.
- Steward, C. R., and T. C. Bjornn. 1990. Supplementation of salmon and steelhead stocks with hatchery fish: a synthesis of published literature. Bonneville Power Administration, Technical Report 90-1, Portland, Oregon.
- Stone, W. W., R. J. Gilliom, and K. R. Ryberg. 2014. Pesticides in US streams and rivers: occurrence and trends during 1992–2011. ACS Publications.
- Storlazzi, C. D., A. S. Ogston, M. H. Bothner, M. E. Field, and M. K. Presto. 2004. Wave- and tidally-driven flow and sediment flux across a fringing coral reef: Southern Molokai, Hawaii. *Continental Shelf Research* 24(12):1397-1419.
- Storr, J. 1964. Ecology and Oceanography of the Expand Coral-Reef Tract, Abaco Island, Bahamas. Geological Society of America.
- Sulak, K. J., and J. P. Clugston. 1998. Early life history stages of Gulf sturgeon in the Suwannee River, Florida. *Transactions of the American Fisheries Society* 127(5):758-771.

- Sulak, K., and coauthors. 2009. Defining winter trophic habitat of juvenile Gulf Sturgeon in the Suwannee and Apalachicola rivermouth estuaries, acoustic telemetry investigations. *Journal of Applied Ichthyology* 25(5):505-515.
- Sulak, K., and J. Clugston. 1999. Recent advances in life history of Gulf of Mexico sturgeon, *Acipenser oxyrinchus desotoi*, in the Suwannee River, Florida, USA: a synopsis. *Journal of Applied Ichthyology* 15(4-5):116-128.
- Suter, G. W. 1996. Abuse of hypothesis testing statistics in ecological risk assessment. *Human and Ecological Risk Assessment: An International Journal* 2:331-347.
- Sytsma, M. D., J. R. Cordell, J. W. Chapman, and R. C. Draheim. 2004. Lower Columbia River aquatic nonindigenous species survey 2001-2004. Final Technical Report. October. Prepared for the US Coast Guard and the US Fish and Wildlife Service.
- Szmant, A. M. 1986. Reproductive ecology of Caribbean reef corals. *Coral Reefs* 5(1):43-53.
- Szmant, A. M., and M. W. Miller. 2005. Settlement preferences and post-settlement mortality of laboratory cultured and settled larvae of the Caribbean hermatypic corals *Montastrea faveolata* and *Acropora palmata* in the Florida Keys, U.S.A. Pages 43-49 in Tenth International Coral Reef Symposium.
- Szmant, A. M., E. Weil, M. W. Miller, and D. E. Colón. 1997. Hybridization within the species complex of the scleractinian coral *Montastraea annularis*. *Marine Biology* 129(4):561-572.
- Tabor, R. A., H. A. Gearns, C. M. McCoy III, and S. Camacho. 2006. Nearshore habitat use by Chinook salmon in lentic systems of the Lake Washington basin. U.S. Fish and Wildlife Service, Lacey, Washington.
- Tans, P. 2009. An accounting of the observed increase in oceanic and atmospheric CO₂ and an outlook for the future. *Oceanography* 22(4):26-35,
- Tapilatu, R. F., and coauthors. 2013. Long-term decline of the western Pacific leatherback, *Dermochelys coriacea*: A globally important sea turtle population. *Ecosphere* 4:15.
- Tarja, N. K., E; Marja, L; Kari, E. 2003. Thermal and metabolic factors affecting bioaccumulation of triazine herbicides by rainbow trout (*Oncorhynchus mykiss*). *Environmental Toxicology* 18:219-226.
- Taubert, B. D., and M. J. Dadswell. 1980. Description of some larval shortnose sturgeon (*Acipenser brevirostrum*) from the Holyoke Pool, Connecticut River, Massachusetts, USA, and the Saint John River, New Brunswick, Canada. *Canadian Journal of Zoology* 58(6):1125-1128.
- Teel, D. J., and coauthors. 2014. Genetic identification of Chinook salmon in the Columbia River estuary: stock-specific distributions of juveniles in shallow tidal freshwater habitats. *North American Journal of Fisheries Management* 34(3):621-641.

- TEWG. 2000. Assessment update for the Kemp's ridley and loggerhead sea turtle populations in the western North Atlantic. NOAA Technical Memorandum NMFS-SEFSC-444.
- TEWG. 2007. An Assessment of the Leatherback Turtle Population in the Atlantic Ocean. Pages 116 in NOAA Technical Memorandum.
- Theodore, I., J. Smith, E. K. Dingley, and D. E. Marchette. 1980. Induced spawning and culture of Atlantic sturgeon. *The Progressive Fish-Culturist* 42(3):147-151.
- Thorson, T. B. 1976. Observations on the reproduction of the sawfish, *Pristis perotteti*, in lake Nicaragua, with recommendations for its conservation.
- Tierney, K. B., D. H. Baldwin, T. J. Hara, P. S. Ross, and N. L. Scholz. 2010. Olfactory toxicity in fishes. *Aquatic Toxicology* 96:2-26.
- Tomas, J., and J. A. Raga. 2008. Occurrence of Kemp's ridley sea turtle (*Lepidochelys kempii*) in the Mediterranean. *Marine Biodiversity Records* 1(01).
- Tomascik, T. 1990. Growth rates of two morphotypes of *Montastrea annularis* along a eutrophication gradient, Barbados, WI. *Marine Pollution Bulletin* 21(8):376-381.
- Tomascik, T., and F. Sander. 1987. Effects of eutrophication on reef-building corals. II. Structure of scleractinian coral communities on fringing reefs, Barbados, West Indies. *Marine Biology* 94(1):53-75.
- Townsend, C. H. 1924. The northern elephant seal and the Guadalupe fur seal. *Natural History* 24(5):567-577.
- Tracy, C. 1990. Memorandum: Green sturgeon meeting and comments. State of Washington Department of Fisheries.
- Trudel, M., and coauthors. 2009. Distribution and migration of juvenile Chinook salmon derived from coded wire tag recoveries along the continental shelf of western North America. *Transactions of the American Fisheries Society* 138(6):1369-1391.
- Tucker, S., and coauthors. 2011. Life history and seasonal stock-specific ocean migration of juvenile Chinook salmon. *Transactions of the American Fisheries Society* 140(4):1101-1119.
- Tunnell, J. W. J. 1988. Regional comparison of southwestern Gulf of Mexico to Caribbean Sea coral reefs. Pages 303-308 in *Proceedings Of The Sixth International Coral Reef Symposium*, Townsville, Australia.
- Tunncliffe, V. 1981. Breakage and propagation of the stony coral *Acropora cervicornis*. *Proceedings of the National Academy of Sciences* 78(4):2427-2431.
- Tutschulte, T. C. 1976. The comparative ecology of three sympatric abalones. Doctoral dissertation. University of California, San Diego.

- U.S. Fish and Wildlife Service and National Marine Fisheries Service 1998. Endangered Species Consultation Handbook: Procedures for conducting consultations and conference activities under Section 7 of the Endangered Species Act.
- USASAC. 2016. Annual Report of the U.S. Atlantic Salmon Assessment Committee. Report No. 28 2015 Activities, Falmouth, Maine.
- USEPA. 1992. Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)). Environmental Fate and Effects Division, U.S.EPA, Washington, D.C.
- USEPA. 1996. Ecological Effects Test Guidelines OPPTS 850.4000, Background -Nontarget Plant Testing.' in Ecological Effects Test Guidelines OPPTS 850.4000, Background - Nontarget Plant Testing, 15.
- USEPA. 2012. Ecological Effects Test Guidelines OCSPP 850.4000: Background and special considerations: tests with terrestrial and aquatic plants, cyanobacteria, and terrestrial soil-core microcosms.in O. o. C. S. a. P. Prevention, editor., Washington, DC.
- USEPA. 2015. National Coastal Condition Assessment 2010, Washington, D.C.
- USEPA. 2018. Bromoxynil and Bromoxynil Esters: Draft Ecological Risk Assessment for Registration Review.in O. o. P. P. Environmental Fate and Effects Division, EPA, editor., Washington, DC.
- USFS. 2000. Fire recharges native fisheries. U.S. Department of Agriculture, Forest Service - Northern Region.
- USFWS, N. 2008. Recovery Plan for the Northwest Atlantic Population of the Loggerhead Sea Turtle (*Caretta caretta*), Second Revision. National Marine Fisheries Service, Silver Spring, MD.
- USFWS. 1995. Gulf Sturgeon Recovery Plan. Pages 170 in U. S. F. W. Service, editor. Gulf States Marine Fisheries Commission, Atlanta, GA.
- USFWS. 2004. Fisheries Resources Annual Report. Pages 47 in U. S. F. W. Service, editor, Panama City, FL.
- USFWS. 2007. Fisheries Resources Annual Report. Pages 37 in U. S. F. W. Service, editor, Panama City, FL.
- USFWS. 2009a. Fisheries Resources Annual Report. Pages 56 in U. S. F. W. Service, editor, Panama City, FL.
- USFWS. 2009b. Gulf Sturgeon (*Acipenser oxyrinchus destoi*) 5-year review: summary and evaluation. S. R. USFWS, Panama City Ecological Services Field Office, National Marine Fisheries Service, Office of Protected Resources, editor, St. Petersburg, FL.
- Vaidya, K. 2017. Oregon's Demographic Trends. Office of Economic Analysis; Department of Administrative Services.

- Van den Brink, P. J., J. M. Baveco, J. Verboom, and F. Heimbach. 2007. An individual-based approach to model spatial population dynamics of invertebrates in aquatic ecosystems after pesticide contamination. *Environmental Toxicology and Chemistry* 26:2226-2236.
- Van den Brink, P. J., N. Blake, T. C. M. Brock, and L. Maltby. 2006. Predictive value of species sensitivity distributions for effects of herbicides in freshwater ecosystems. *Human and Ecological Risk Assessment* 12:645-674.
- Van den Brink, P.J., van Wijngaarden, R.P.A., Lucassen, W.G.H., Brock, T.C.M. and Leeuwangh, P. 1996. Effects of the insecticide Dursban 4E (active ingredient chlorpyrifos) in outdoor experimental ditches: II. Invertebrate community responses and recovery. *Environmental Toxicology and Chemistry* 15(7):1143-1153.
- Van Eenennaam, J. P., and coauthors. 2006. Reproductive conditions of the Klamath River green sturgeon. *Transactions of the American Fisheries Society* 135(1):151-163.
- Van Eenennaam, J., and coauthors. 1996. Reproductive conditions of the Atlantic sturgeon (*Acipenser oxyrinchus*) in the Hudson River. *Estuaries* 19(4):769-777.
- VanMetre, P.C., Morace, J.L., and Sheibley, Rich, 2015, The Pacific northwest stream quality assessment: U.S. Geological Survey Fact Sheet 2015–3020, 2 p., <https://dx.doi.org/10.3133/fs20153020>.
- Van Metre, P.C., Egler, A.L., and May, Jason, 2017, The California Stream Quality Assessment: U.S. Geological Survey Fact Sheet 2017–3014, 2 p., <https://doi.org/10.3133/fs20173014>.
- Van Wijngaarden, R.P.A., Van den Brink, P.J., Crum, S.J.H., Oude Voshaar, J.H., Brock, T.C.M. and Leeuwangh, P. 1996. Effects of the insecticide Dursban 4E (active ingredient chlorpyrifos) in outdoor experimental ditches: I. Comparison of short-term toxicity between the laboratory and the field. *Environmental Toxicology and Chemistry* 15(7):1133-1142.
- Varanasi, U., and coauthors. 1992. Chlorinated and aromatic hydrocarbons in bottom sediments, fish and marine mammals in U.S. coastal waters; laboratory and field studies of metabolism and accumulation. *Persistent Pollutants in Marine Ecosystems*. C.H. Walker and D.R. Livingstone (eds). Pergamon Press: New York:83-115.
- Varanasi, U., J. Stein, and M. Nishimoto. 1989. Biotransformation and disposition of PAH in fish. *Metabolism of polycyclic aromatic hydrocarbons in the aquatic environment*, Varansi U. (ed). CRC Press: Boca Raton, Florida:93-149.
- Vargas-Angel, B., J. D. Thomas, and S. M. Hoke. 2003. High-latitude *Acropora cervicornis* thickets off Fort Lauderdale, Florida, USA. *Coral Reefs* 22(4):465-473.
- Vargas-Angel, B., S. B. Colley, S. M. Hoke, and J. D. Thomas. 2006. The reproductive seasonality and gametogenic cycle of *Acropora cervicornis* off Broward County, Florida, USA. *Coral Reefs* 25(1):110-122.

- Veron, J. 2014. Results of an update of the Corals of the World Information Base for the Listing Determination of 66 Coral Species under the Endangered Species Act. Report to the Western Pacific Regional Fishery Management Council, Honolulu.
- Villinski, J. T. 2003. Depth-independent reproductive characteristics for the Caribbean reef-building coral *Montastraea faveolata*. *Marine Biology* 142(6):1043-1053.
- Vladykov, V. D., and J. R. Greeley. 1963. Order Acipenseroidi. Pages 24-60 in *Fishes of the Western North Atlantic*. Memoir Sears Foundation for Marine Research 1 (part III).
- Vo, A.-T. E., M. C. Ashley, A. Dikou, and S. P. Newman. 2014. Fishery exploitation and stock assessment of the endangered Nassau grouper, *Epinephelus striatus* (Actinopterygii: Perciformes: Serranidae), in the Turks and Caicos Islands. *Acta Ichthyologica Et Piscatoria* 44(2):117.
- Vogel, D. A., K. R. Marine, and J. G. Smith. 1988. Fish passage action program for Red Bluff Diversion Dam: Final report on fishery investigations. US Fish and Wildlife Service.
- Vollmer, S. V., and S. R. Palumbi. 2007. Restricted gene flow in the Caribbean staghorn coral *Acropora cervicornis*: Implications for the recovery of endangered reefs. *Journal of Heredity* 98(1):40-50.
- Vyas, NB. 1999. Factors influencing estimation of pesticide-related wildlife mortality. *Toxicology and Industrial Health*. 15:186-191.
- Waddell, J. E. 2005. The state of coral reef ecosystems of the United States and Pacific freely associated states: 2005. NOAA, NOS, NCCOS, Center for Coastal Monitoring and Assessment's Biogeography Team, NOAA Technical Memorandum NOS NCCOS 11., Silver Spring, Maryland.
- Waddell, J. E., and A. M. Clarke, editors. 2008b. The state of coral reef ecosystems of the United States and Pacific Freely Associated States: 2008. NOAA/National Centers for Coastal Ocean Science, Silver Spring, MD.
- Waddell, J. E., and A. M. Clarke. 2008a. The state of coral reef ecosystems of the United States and Pacific Freely Associated States. National Oceanic and Atmospheric Administration, NCCOS, Center for Coastal Monitoring and Assessment's Biogeography Team, Silver Spring, Maryland.
- Wagner, D. E., P. Kramer, and R. van Woesik. 2010. Species composition, habitat, and water quality influence coral bleaching in southern Florida. *Marine Ecology Progress Series* 408:65-78.
- Wainwright, T. C., M. W. Chilcote, and P. W. Lawson. 2008. Biological recovery criteria for the Oregon Coast coho salmon evolutionarily significant unit.
- Waldman, J. R., and I. I. Wirgin. 1998. Status and restoration options for Atlantic sturgeon in North America. *Conservation Biology* 12(3):631-638.

- Waldman, J. R., K. Nolan, and J. Hart. 1996. Genetic differentiation of three key anadromous fish populations of the Hudson River. *Estuaries* 19(4):759-768.
- Waldman, J., C. Grunwald, J. Stabile, and I. Wirgin. 2002. Impacts of life history and biogeography on the genetic stock structure of Atlantic sturgeon *Acipenser oxyrinchus oxyrinchus*, Gulf sturgeon *A. oxyrinchus desotoi*, and shortnose sturgeon *A. brevirostrum*. *Journal of Applied Ichthyology* 18(4-6):509-518.
- Walker, B. K., E. A. Larson, A. L. Moulding, and D. S. Gilliam. 2012. Small-scale mapping of indeterminate arborescent acroporid coral (*Acropora cervicornis*) patches. *Coral Reefs*.
- Walker, R. L., and J. S. Foott. 1993. Disease survey of Klamath River salmonid smolt populations, 1992. U.S. Fish and Wildlife Service, California-Nevada Fish Health Center, Anderson, California. [150 Kb] at KRIS Website:46 p.
- Wallace, B. P., and coauthors. 2007. Maternal investment in reproduction and its consequences in leatherback turtles. *Oecologia* 152(1):37-47.
- Wallace, B. P., S. S. Kilham, F. V. Paladino, and J. R. Spotila. 2006. Energy budget calculations indicate resource limitation in Eastern Pacific leatherback turtles. *Marine Ecology Progress Series* 318:263-270.
- Wallace, J.B., Huryn, A.D., and Lugthart, G.J. 1991. Colonization of a headwater stream during 3 years of seasonal insecticidal applications. *Hydrobiologia* 211: 65-76.
- Ward, S., Arthington, A.H., and Pusey, B.J. 1995. The effects of a chronic application of chlorpyrifos on the macroinvertebrate fauna in an outdoor artificial stream system – species responses. *Ecotoxicology and Environmental Safety* 30: 2-23.
- Waring, C.P., and Moore, A.P. 1997. Sublethal effects of a carbamate pesticide on pheromonal mediated endocrine function in mature male Atlantic salmon (*Salmo salar*) parr. *Fish Physiology and Biochemistry* 17:203-211.
- Washington Department of Fish and Wildlife (WDFW). 1993. 1992 Washington state salmon and steelhead stock inventory (SASSI) WDFW and Western Washington Treaty Indian Tribes, Olympia, Washington.
- Washington Department of Fish and Wildlife (WDFW). 2005. Washington Department of Fish and Wildlife. Methow River Steelhead Hatchery and Genetic Management Plan. Available online at: <http://wdfw.wa.gov/hat/hgmp>.
- Washington Department of Fish and Wildlife (WDFW). 2008. *Oncorhynchus mykiss*: Assessment of Washington State's anadromous populations and programs WDFW, Olympia, Washington.
- Washington Department of Fish and Wildlife (WDFW). 2009. SalmonScape online database <http://fortress.wa.gov/dfw/gispublic/apps/salmonscape/default.htm>. Washington Department of Fish and Wildlife.

- Washington Office of Financial Management. 2018. 2018 Population Trends. Forecasting & Research Division Office of Financial Management.
- Wasser S.K, J.I. Lundin, K. Ayres, E. Seely, D. Giles, K. Balcomb, J. Hempelmann, K. Parsons, R. Booth. Population growth is limited by nutritional impacts on pregnancy success in endangered Southern Resident Killer whales (*Orninus orca*). PLoS ONE 12(6): e0179824. <https://doi.org/10.1371/journal.pone.0179824>
- Weatherley, A.H., and Gill, H.S. 1995. Growth. Pages 103-158. in C. Groot, L. Margolis, and W.C. Clarke, editors. *Physiological Ecology of Pacific Salmon*. University of British Columbia Press, Vancouver, Canada.
- Weber, D. S., B. S. Stewart, and N. Lehman. 2004. Genetic consequences of a severe population bottleneck in the Guadalupe fur seal (*Arctocephalus townsendi*). *Journal of Heredity* 95(2):144-153.
- Weber, W., C. Jennings, and S. Rogers. 1998. Population size and movement patterns of shortnose sturgeon in the Ogeechee River system, Georgia. Pages 18-28 in *Proceedings of the Annual Conference of the Southeast Association of Fish and Wildlife Agencies*.
- Weil, E., and N. Knowton. 1994. A multi-character analysis of the Caribbean coral *Montastraea annularis* (Ellis and Solander, 1786) and its two sibling species, *M. faveolata* (Ellis and Solander, 1786) and *M. franksi* (Gregory, 1895). *Bulletin of Marine Science* 55(1):151-175.
- Wentz, D. A., and coauthors. 1998. Water quality in the Willamette Basin, Oregon 1991-95.
- West, C.J., and Larkin, P.A. 1987. Evidence of size-selective mortality of juvenile sockeye salmon (*Oncorhynchus nerka*) in Babine Lake, British Columbia. *Canadian Journal of Fisheries and Aquatic Sciences* 44: 712-721.
- Westrheim, S. J., and W. R. Harling. 1975. Age-length relationships for 26 scorpaenids in the northeast Pacific Ocean. Fisheries and Marine Service Research Division, Nanaimo, British Columbia.
- Whaylen, L., C. V. Pattengill-Semmens, B. X. Semmens, P. G. Bush, and M. R. Boardman. 2004. Observations of a Nassau grouper, *Epinephelus striatus*, Spawning Aggregation Site in Little Cayman, Cayman Islands, Including Multi-Species Spawning Information. *Environmental Biology of Fishes* 70(3):305-313.
- Wheaton, J. W., and W. C. Jaap. 1988. Corals and other prominent benthic cnidaria of Looe Key National Marine Sanctuary, FL.
- Wheeler, A. P., P. L. Angermeier, and A. E. Rosenberger. 2005. Impacts of new highways and subsequent landscape urbanization on stream habitat and biota. *Fisheries Science* 13:141-164.
- Wieting, D.S. 2016. Interim guidance on the Endangered Species Act term “harass”. Memorandum for Regional Administrators. October 21, 2016.

- Wilcove, D. S., D. Rothstein, J. Dubow, A. Phillips, and E. Losos. 1998. Quantifying threats to imperiled species in the United States: Assessing the relative importance of habitat destruction, alien species, pollution, overexploitation, and disease. *Bioscience* 48(8):607-615.
- Wiley, T. R., and C. A. Simpfendorfer. 2010. Using public encounter data to direct recovery efforts for the endangered smalltooth sawfish *Pristis pectinata*. *Endangered Species Research* 12:179-191.
- Wilkinson, C., and D. Souter. 2008. Status of Caribbean coral reefs after bleaching and hurricanes in 2005. Global Coral Reef Monitoring Network and Reef and Rainforest Research Centre, Townsville.
- Wilkinson, C., and G. Hodgson. 1999. Coral reefs and the 1997-1998 mass bleaching and mortality. *Nature & Resources* 35(2):16-25.
- Williams, C. D., M. T. Auel, A. D. Chapman, and P. E. D'Aiuto. 2007. Identification of cyanobacterial toxins in Florida's freshwater systems. *Lake and Reservoir Management* 23:144-152.
- Williams, D. E., M. Miller, A. J. Bright, and C. M. Cameron. 2014. Removal of corallivorous snails as a proactive tool for the conservation of acroporid corals. *Peerj* 2:17.
- Williams, D. E., M. W. Miller, and K. L. Kramer. 2008. Recruitment failure in Florida Keys *Acropora palmata*, a threatened Caribbean coral. *Coral Reefs* 27:697-705.
- Williams, T. H., and coauthors. 2008. Framework for assessing viability of threatened coho salmon in the Southern Oregon/Northern California Coast Evolutionarily Significant Unit. NOAA Technical Memorandum NMFS-SWFSC 432.
- Williams, T. H., S. T. Lindley, B. C. Spence, and D. A. Boughton. 2011. Status review update for Pacific salmon and steelhead listed under the endangered species act: Southwest. NOAA's National Marine Fisheries Service, Southwest Fisheries Science Center, Santa Cruz, CA.
- Williamson, A. K., and coauthors. 1998. Water Quality in the Central Columbia Plateau, Washington and Idaho, 1992-95: U.S. Geological Survey Circular 1144, on line at: <http://water.usgs.gov/pubs/circ114>.
- Wilson, Steven G. and T. Fischetti. 2010. Coastline Population Trends in the United States: 1960-2008. Population Estimates and Projections. USCB U.S. Department of Commerce.
- Wirgin, I., and coauthors. 2000. Genetic structure of Atlantic sturgeon populations based on mitochondrial DNA control region sequences. *Transactions of the American Fisheries Society* 129(2):476-486.

- Wirgin, I., and coauthors. 2005. Range-wide population structure of shortnose sturgeon *Acipenser brevirostrum* based on sequence analysis of the mitochondrial DNA control region. *Estuaries* 28(3):406-421.
- Wirgin, I., C. Grunwald, J. Stabile, and J. R. Waldman. 2010. Delineation of discrete population segments of shortnose sturgeon *Acipenser brevirostrum* based on mitochondrial DNA control region sequence analysis. *Conservation Genetics* 11(3):689-708.
- Wirgin, I., J. Waldman, J. Stabile, B. Lubinski, and T. King. 2002. Comparison of mitochondrial DNA control region sequence and microsatellite DNA analyses in estimating population structure and gene flow rates in Atlantic sturgeon *Acipenser oxyrinchus*. *Journal of Applied Ichthyology* 18(4-6):313-319.
- Witherington, B., P. Kubilis, B. Brost, and A. Meylan. 2009. Decreasing annual nest counts in a globally important loggerhead sea turtle population. *Ecological Applications* 19(1):30-54.
- Woodbury, D., and S. Ralston. 1991. Interannual variation in growth rates and back-calculated birth-date distributions of pelagic juvenile rockfishes (*Sebastes* spp.) off the central California coast. *Fishery Bulletin* 89(3):523-533.
- Wooley, C. M., and E. J. Crateau. 1985. Movement, microhabitat, exploitation, and management of Gulf of Mexico sturgeon, Apalachicola River, Florida. *North American Journal of Fisheries Management* 5(4):590-605.
- Worthing, C. H., RJ 1991. The Pesticide Manual. Pages 100-101 The British Crop Protection Council, Farnham.
- Wunderlich, R. C., B. D. Winter, and J. H. Meyer. 1994. Restoration of the Elwha River ecosystem. *Fisheries* 19((8)):11-19.
- Wydoski, R. S., and R. R. Whitney. 1979. *Inland fishes of Washington*. University of Washington. University of Washington Press, Seattle, Washington.
- Yamanaka, K. L., and A. R. Kronlund. 1997. Inshore rockfish stock assessment for the west coast of Canada in 1996 and recommended yields for 1997.
- Yamanaka, K. L., and coauthors. 2006. A review of yelloweye rockfish *Sebastes ruberrimus* along the Pacific coast of Canada: Biology, distribution, and abundance trends
- Yates, D., and coauthors. 2008. Climate warming, water storage, and Chinook salmon in California's Sacramento Valley. *Climate Change* 91(3-4):335-350.
- Yoshiyama, R. M., E. R. Gerstung, F. W. Fisher, and P. B. Moyle. 2001. Historical and present distribution of Chinook salmon in the Central Valley drainage of California. *Contributions to the Biology of Central Valley Salmonids*, *Fish Bulletin* 179:71-176.
- Yoshiyama, R. M., F. W. Fisher, and P. B. Moyle. 1998. Historical abundance and decline of chinook salmon in the Central Valley region of California. *North American Journal of Fisheries Management* 18(3):487-521.

- Young, J., T. Hoff, W. Dey, and J. Hoff. 1988. Management recommendations for a Hudson River Atlantic sturgeon fishery based on an age-structured population model. Fisheries Research in the Hudson River, State University of New York Press Albany. 1988. p 353-365, 6 fig, 2 tab.
- Zabel, R.W., and Achord, S. 2004. Relating size of juveniles to survival within and among populations of Chinook salmon. Ecology 85:795-806.
- Zedonis, P. A. 1992. The biology of steelhead (*Onchorynchus mykiss*) in the Mattole River estuary/lagoon, California. Humboldt State University, Arcata, CA.
- Zottini, M. S. V. D., Z. 1994. Effects of 3,5 Dibromo 4 Hydroxybenzonnitrile (Bromoxynil) on Bioenergetics of Higher Plant Mitochondria (*Pisum sativum*). Plant Physiology 106:1483-1488.
- Zurita, J. C., and coauthors. 2003. Nesting loggerhead and green sea turtles in Quintana Roo, Mexico. Pages 25-127 in J. A. Seminoff, editor Twenty-Second Annual Symposium on Sea Turtle Biology and Conservation, Miami, Florida.
- Zwinnenberg, A. J. 1977. Kemp's ridley, *Lepidochelys kempii* (Garman 1880), undoubtedly the most endangered marine turtle today (with notes on the current status of *Lepidochelys olivacea*). Bulletin of the Maryland Herpetological Society 13(3):378-384.