



SECTION 6

References

Photo on previous page: Cliff fishing with a seine net near Sitka, Alaska. Photo: David Csepp, NMFS.

REFERENCES

SECTION 6 References

- AFSC. 2006. North Pacific groundfish observer manual. Alaska Fisheries Science Center, North Pacific Groundfish Observer Program, 7600 Sand Point Way NE, Seattle, WA. Available from http://www.afsc.noaa.gov/FMA/Manual_pages/MANUAL_pdfs/manual2007.pdf.
- Allison, P. 1999. *Logistic Regression Using the SAS System: Theory and Application*. SAS Institute Inc. Cary, NC, 304 p.
- Alverson, D. L., M. H. Freeberg, S. A. Murawski, and J. G. Pope. 1994. A global assessment of fisheries bycatch and discards. FAO Fisheries Technical Paper 339, 235 p.
- Andersen, M. S., K. A. Forney, T. V. N. Cole, T. Eagle, R. Angliss, K. Long, L. Barre, L. Van Atta, D. Borggaard, T. Rowles, B. Norberg, J. Whaley, and L. Engleby. 2007. Differentiating serious and non-serious injury of marine mammals. Report of the Serious Injury Technical Workshop, 10–13 September 2007, Seattle, Washington. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-OPR-39, 94 p.
- Babcock, E. A., and E. K. Pikitch. 2003. How much observer coverage is enough to adequately estimate bycatch? Pew Institute for Ocean Science and Oceana, 36 p.
- Barlow, J. 1989. Estimating sample size required to monitor marine mammal mortality in California gillnet fisheries. Southwest Fisheries Science Center Administrative Report LJ-89-08, 8 p.
- Barlow, J., and G. A. Cameron. 2003. Field experiments show that acoustic pingers reduce marine mammal bycatch in the California drift gillnet fishery. *Marine Mammal Science* 19(2):265–83.
- Belden, D. 2007. Estimates of cetacean and seal bycatch in the 2005 Northeast sink gillnet and mid-Atlantic coastal gillnet fisheries. Northeast Fisheries Science Center Reference Document 07-08, 16 p. Available from NEFSC, 166 Water St., Woods Hole, MA 02543-1026 or <http://www.nefsc.noaa.gov/nefsc/publications/crd/crd0708/crd0708.pdf>.
- Belden D., and C. D. Orphanides. 2007. Estimates of cetacean and pinniped bycatch in the 2006 Northeast sink gillnet and Mid-Atlantic coastal gillnet fisheries. Northeast Fisheries Science Center Reference Document 07-20, 18 p. Available from NEFSC, 166 Water St., Woods Hole, MA 02543-1026 or <http://www.nefsc.noaa.gov/nefsc/publications/crd/crd0720/crd0720.pdf>.
- Belden, D. L., C. D. Orphanides, M. C. Rossman, and D. L. Palka. 2006. Estimates of cetacean and seal bycatch in the 2004 Northeast sink gillnet and mid-Atlantic coastal gillnet fisheries. Northeast Fisheries Science Center Reference Document 06-13, 24 p. Available from NEFSC, 166 Water St., Woods Hole, MA 02543-1026 or <http://www.nefsc.noaa.gov/nefsc/publications/crd/crd0613/crd0613.pdf>.
- Benaka, L. R., and T. J. Dobrzynski. 2004. The National Marine Fisheries Service's national bycatch strategy. *Marine Fisheries Review* 66(2):1–8.
- Bisack, K. 1993. Estimates of total U.S. harbor porpoise bycatch in the Gulf of Maine sink gillnet fishery. Northeast Fisheries Science Center Reference Doc. 93-11, 23 p.
- Bisack, K. D. 1997. Harbor porpoise bycatch estimates in the New England multispecies sink gillnet fishery. 1994 and 1995. Report of the International Whaling Commission 47:705–14.
- Bisack, K. D. 2003. Estimates of marine mammal bycatch in the northeast (New England) multispecies sink gillnet fishery in 1996. Northeast Fisheries Science Center Reference Document 03-18.
- Boggs, C. H. 2001. Deterring albatrosses from contacting baits during swordfish longline sets. *In* Proceedings. Seabird bycatch: Trends, roadblocks, and solutions, p. 79–94. Univ. Alaska Sea Grant AK-SG-01-01,
- Bravington, M. V., and K. D. Bisack. 1996. Estimates of harbor porpoise bycatch in the Gulf of Maine sink gillnet fishery, 1990–1993. Report of the International Whaling Commission 46:567–74.
- Brown, C. A. 2001. Revised estimates of bluefin tuna dead discards by the U.S. Atlantic pelagic longline fleet, 1992–1999. ICCAT Collective Volume of Scientific Papers 52(3):1007–21.
- Burnham, K. P., D. R. Anderson, and G. C. White. 1987. *Design and Analysis Methods for Fish Survival Experiments Based on Release–Recapture*. American Fisheries Society Monograph 5, 437 p.
- Carretta, J. V. 2001. Preliminary estimates of cetacean mortality in California gillnet fisheries for 2000. Unpublished report SC/53/SM9 presented to the Scientific Committee of the International Whaling Commission, June 2001, 21 p. Available from SWFSC, 8604 La Jolla Shores Drive, La Jolla, CA 92037.
- Carretta, J. V. 2003. Effects of varying observer coverage levels on marine mammal mortality estimates in California drift and set gillnet fisheries. NMFS Observer Coverage Level Workshop, Seattle, WA.

U.S. NATIONAL BYCATCH REPORT

- Carretta, J. V., J. Barlow, and L. Enriquez. 2008. Acoustic pingers eliminate beaked whale bycatch in a gill net fishery. *Marine Mammal Science* 24(4):956–61.
- Carretta, J. V., K. A. Forney, M. M. Muto, J. Barlow, J. Baker, B. Hanson, and M. S. Lowry. 2007. U.S. Pacific marine mammal stock assessments: 2006. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SWF-SC-398, 312 p.
- Carretta, J. V., K. A. Forney, M. S. Lowry, J. Barlow, J. Baker, B. Hanson, and M. M. Muto. 2007. U.S. Pacific marine mammal stock assessments: 2007. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SWF-SC-414, 316 p. Available at <http://www.nmfs.noaa.gov/pr/pdfs/sars/po2007.pdf>.
- Carretta, J., K. Forney, M. Lowry, J. Barlow, J. Baker, D. Johnston, B. Hanson, M. Muto, D. Lynch, and L. Carswell. 2009. U.S. Pacific marine mammal stock assessments: 2008. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SWFSC-434, 316 p.
- Carretta, J. V., T. Price, D. Petersen, and R. Read. 2005. Estimates of marine mammal, sea turtle, and seabird mortality in the California drift gillnet fishery for swordfish and thresher shark, 1996–2002. *Marine Fisheries Review* 66(2):21–30.
- Cochran, W. G. 1963. *Sampling Techniques*. Wiley, New York.
- Cochran, W. G. 1977. *Sampling Techniques*. 3rd ed. Wiley, New York.
- Cramer, J., and H. M. Adams. 1999. Pelagic longline bycatch. ICCAT Collective Volume of Scientific Papers 49(4):288–99.
- Cramer, J., A. R. Bertolino, and G. P. Scott. 1998. Estimates of recent shark bycatch by U.S. vessels fishing for Atlantic tuna and tuna-like species. ICCAT Collective Volume of Scientific Papers 48(3):117–28.
- Credle, V. A., D. P. DeMaster, M. M. Merlein, M. B. Hanson, W. A. Karp, and S. M. Fitzgerald (Editors). 1994. NMFS observer programs: Minutes and recommendations from a workshop held in Galveston, Texas, 10–11 November 1993. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-OPR-94-1, 96 p.
- DeAlteris, J., and R. Silva. 2008. Performance in 2004 and 2005 of an alternative leader design on the bycatch of sea turtles and the catch of finfish in Chesapeake Bay pound nets, offshore Kiptopeake, VA. Final report, 47 p. NOAA Contract No. EA1330-04-RQ-0076 and EA133F-05-RQ-1321.
- Deng, R., C. Dichmont, D. Milton, M. Haywood, D. Vance, N. Hall, and D. Die. 2005. Can vessel monitoring system data also be used to study trawling intensity and population depletion? The example of Australia's northern prawn fishery. *Canadian Journal of Fisheries and Aquatic Sciences* 62:611–22.
- Department of Commerce. 1987. Sea turtle conservation; shrimp trawling requirements. Final rule. *Federal Register* 52(124):24,244–62, June 29, 1987.
- DuPaul, W. D., D. B. Rudders, and R. J. Smolowitz. 2004. Industry trials of a modified sea scallop dredge to minimize the catch of sea turtles, final report. Virginia Institute of Marine Science Marine Resource Report 2004-12, 35 p.
- Epperly, S., L. Avens, L. Garrison, T. Henwood, W. Hoggard, J. Mitchell, J. Nance, J. Poffenberger, C. Sasso, E. Scott-Denton, and C. Yeung. 2002. Analysis of sea turtle bycatch in the commercial shrimp fisheries of southeast U.S. waters and the Gulf of Mexico. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SEFSC-490, 88 p.
- Epperly, S., and W. G. Teas. 2002. Turtle excluder devices—Are the escape openings large enough? *Fishery Bulletin* 100:466–474.
- Fairfield Walsh, C., and L. P. Garrison. 2006. Estimated bycatch of marine mammals and turtles in the U.S. Atlantic pelagic longline fleet during 2005. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SEFSC-539, 52 p.
- FAO. 2007. Fishery statistics: Capture production. Fisheries Agriculture Organization of the United Nations Yearbook, 539 p. Available from <http://www.fao.org/fishery/statistics/global-capture-production/en>.
- Forney, K. A., S. R. Benson, and G. A. Cameron. 2001. Central California gillnet effort and bycatch of sensitive species, 1990–1998. *In* Proceedings. Seabird bycatch: Trends, roadblocks, and solutions, p. 141–60. Univ. Alaska Sea Grant AK-SG-01-01.
- Garrison, L. P. 2003a. Estimated bycatch of marine mammals and turtles in the U.S. Atlantic pelagic longline fleet during 2001–2002. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SEFSC-515, 51 p.
- Garrison, L. P. 2003b. Protected species interactions with the directed shark gillnet fishery of Florida and Georgia from 1999–2002. Southeast Fisheries Science Center, Miami, FL, 10 p.
- Garrison, L. P. 2007. Estimated marine mammal and turtle bycatch in shark gillnet fisheries along the southeast U.S.

REFERENCES

- Atlantic Coast: 2000–2006. NMFS SEFSC Contribution PRD-07/08-02, 22 p.
- Gilman, E., D. Kobayashi, T. Swenarton, P. Dalzell, I. Kinan, and N. Brothers. 2006. Efficacy and commercial viability of regulations designed to reduce sea turtle interactions in the Hawaii-based longline swordfish fishery. Western Pacific Regional Fishery Management Council, Honolulu, HI.
- Glass, A. H., T. V. N. Cole, M. Garron, R. L. Merrick, and R. M. Pace, III. 2008. Mortality and serious injury determinations for baleen whale stocks along the United States eastern seaboard and adjacent Canadian maritimes, 2002–2006. Northeast Fisheries Science Center Reference Document 08-04, 18 p.
- Hall, M. A. 1996. On bycatches. *Reviews in Fish Biology and Fisheries* 6:319–52.
- Hall, M. A., D. L. Alverson, and K. I. Metuzals. 2000. Bycatch: Problems and solutions. *Marine Pollution Bulletin* 41(1–6):204–19.
- Harrington, J. M., M. A. Ransom, and A. A. Rosenberg. 2005. Wasted resources: Bycatch and discards in U.S. fisheries. In U.S. atlas of fisheries bycatch, Prepared by MRAF Americas for Oceana, 286 p. Available from na.oceana.org/sites/default/files/reports/PDF_Bycatch_July281.pdf
- Hastie, J., and M. Bellman. 2006. Estimated 2005 discard and total catch of selected groundfish species. Northwest Fisheries Science Center, 2725 Montlake Blvd E, Seattle, WA. Available from http://www.nwfsc.noaa.gov/research/divisions/fram/observer/datereport/docs/totalmortality2005_final.pdf.
- Hata, D. N. 2006. Incidental captures of seabirds in the U.S. Atlantic pelagic longline fishery. Report to Southeast Fisheries Science Center, Protected Resources and Biodiversity. SEFSC PRD-05/06-13.
- Johnson, D. R., C. Yeung, and C. A. Brown. 1999. Estimates of marine mammal and marine turtle bycatch by the U.S. Atlantic pelagic longline fleet in 1992–1997. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SEFSC-418, 70 p.
- Julian, F., and M. Beeson. 1998. Estimates of mammal, turtle and bird mortality for two California gillnet fisheries: 1990–1995. *Fishery Bulletin* 96:271–84.
- Kelleher, K. 2004. Discards in the world's marine fisheries: an update. Food and Agricultural Organization of the United Nations Fisheries Technical Paper 470, 134 p., 5 appendices.
- Kraus, S. D., A. J. Read, A. Solow, K. Baldwin, T. Spradlin, E. Anderson, and J. Williamson. 1997. Acoustic alarms reduce porpoise mortality. *Nature* 388:525.
- Larese, J. P., and A. L. Coan. 2008. Fish and invertebrate bycatch estimates for the California drift gillnet fishery targeting swordfish and thresher shark, 1990–2006. U.S. Department of Commerce, NOAA Technical Memorandum NOAA-TM-NMFS-SWFSC-246, 53 p.
- Larson, D. M., B. W. House, and J. M. Terry. 1998. Toward efficient bycatch management in multispecies fisheries: A nonparametric approach. *Marine Resource Economics* 11:181–201.
- Levy, P. S., and S. Lemeshow. 1999. *Sampling of Populations: Methods and Applications*. 3rd ed. Wiley, New York.
- Lewis, R. L., Crowder, L. B., Read, A. J., and S. A. Freeman. 2004. Understanding impacts of fisheries bycatch on marine megafauna. *Trends in Ecology and Evolution* 19(11).
- Manly, B. F. J. 2006. Incidental catch and interactions of marine mammals and birds in the Cook Inlet salmon drift-net and setnet fisheries, 1999–2000. Final report to NMFS Alaska Region, 98 p.
- Manly, B. F. J. 2007. Incidental take and interactions of marine mammals and birds in the Kodiak Island salmon set gillnet fishery, 2002 and 2005. Final report to NMFS Alaska Region, Alaska Marine Mammal Observer Program, 221 p.
- McCarthy, K. 2005. Estimates of greater amberjack, vermilion snapper, and gray triggerfish discards by vessels with Federal permits in the Gulf of Mexico. Southeast Data, Assessment, and Review SEDAR 9 DW 17, SFD-2005, 16 p.
- McCarthy, K. 2006a. A review of calculated Gulf of Mexico red grouper discards from handline and longline vessel discard logbook data. Southeast Data, Assessment, and Review SEDAR 12 AW 4, SFD-2006-045.
- McCarthy, K. 2006b. Calculated gag grouper discards by vessels with Federal permits in the Gulf of Mexico. Southeast Data, Assessment, and Review SEDAR 10 DW 11, SFD-2006-007.
- McCarthy, K. 2007. Discards of greater amberjack and red snapper calculated for vessels with Federal fishing permits in the U.S. South Atlantic. Southeast Data, Assessment, and Review SEDAR 15 DW 01, SFD-2007-025.
- McElderry, H. 2008. At-sea observing using video-based electronic monitoring. Archipelago Marine Research Ltd., 55 p.

U.S. NATIONAL BYCATCH REPORT

- Mills, C. M., S. E. Townsend, S. Jennings, P. D. Eastwood, and C. A. Houghton. 2007. Estimating high resolution trawl fishing effort from satellite-based vessel monitoring system data. *ICES Journal of Marine Science* 64:248–55.
- Moore, J. E., B. P. Wallace, R. L. Lewison, R. Zydalis, T. M. Cox, and L. B. Crowder. 2009. A review of marine mammal, sea turtle, and seabird bycatch in USA fisheries and the role of policy in shaping management. *Marine Policy* 33:435–51.
- Moyes, C. D., N. Fragoso, M. K. Musyl, and R. W. Brill. 2006. Predicting postrelease survival in large pelagic fish. *Transactions of the American Fisheries Society* 135(5):1389–97.
- Murawski, S. A., S. E. Wigley, M. J. Fogarty, P. J. Rago, and D. G. Mountain. 2005. Effort distribution and catch patterns adjacent to temperate MPAs. *ICES Journal of Marine Science* 62(6):1150–67.
- Murray, K. T. 2004a. Magnitude and distribution of sea turtle bycatch in the sea scallop (*Placopecten magellanicus*) dredge fishery in two areas of the northwestern Atlantic Ocean, 2001–2002. *Fishery Bulletin* 102:671–81.
- Murray, K. T. 2004b. Bycatch of sea turtles (*Caretta caretta*) in the Mid-Atlantic sea scallop (*Placopecten magellanicus*) dredge fishery during 2003. 2nd ed. Northeast Fisheries Science Center Reference Document 04-11, 25 p. Available from NEFSC, 166 Water St., Woods Hole, MA 02543-1026.
- Murray, K. T. 2005. Total bycatch estimate of loggerhead turtles (*Caretta caretta*) in the 2004 Atlantic sea scallop (*Placopecten magellanicus*) dredge fishery. Northeast Fisheries Science Center Reference Document 05-12, 22 p. Available from NEFSC, 166 Water St., Woods Hole, MA 02543-1026.
- Murray, K. T. 2006. Estimated average annual bycatch of loggerhead sea turtles (*Caretta caretta*) in U.S. Mid-Atlantic bottom otter trawl gear, 1996–2004. Northeast Fisheries Science Center Reference Document 06-19, 26 p. Available from NEFSC, 166 Water St., Woods Hole, MA 02543-1026.
- Murray, K. T. 2007. Estimated bycatch of loggerhead sea turtles (*Caretta caretta*) in U.S. Mid-Atlantic scallop trawl gear, 2004–2005, and in sea scallop dredge gear, 2005. Northeast Fisheries Science Center Reference Document 07-04, 30 p. Available from NEFSC, 166 Water St., Woods Hole, MA 02543-1026.
- Murray, K. T. 2009. Characteristics and magnitude of sea turtle bycatch in US mid-Atlantic gillnet gear. *Endangered Species Research* 8:211–224.
- Naughton, M., K. Morgan, and K. S. Rivera. 2008a. Species information: Black-footed albatross (*Phoebastria nigripes*). Unpublished report submitted to ACAP for 4th Meeting of Advisory Committee, August 2008, Cape Town, South Africa. AC4 Document 46.
- Naughton, M., K. Morgan, and K. S. Rivera. 2008b. Species information: Laysan albatross (*Phoebastria immutabilis*). Unpublished report submitted to ACAP for 4th Meeting of Advisory Committee, August 2008, Cape Town, South Africa. AC4 Document 45.
- NEFMC and MAFMC. 2007. Northeast Region standardized bycatch reporting methodology: An omnibus amendment to the fishery management plans of the Mid-Atlantic and New England Regional Fishery Management Councils, Newburyport, MA.
- NMFS. 1998. *Managing the Nation's Bycatch. Programs, Activities, and Recommendations for the National Marine Fisheries Service*. U.S. Department of Commerce, Silver Spring, Maryland, 174 p.
- NMFS. 2000. Biological opinion on the issuance of permit under Section 101(a)(5)(E) of the Marine Mammal Protection Act to the California/Oregon drift gillnet fishery for the taking of endangered species under the Endangered Species Act and the continued implementation of the Pacific Cetacean Take Reduction Plan. Endangered Species Division, Office of Protected Resources, 127 p.
- NMFS. 2001. Marine Fisheries Stock Assessment Improvement Plan. Report of the National Marine Fisheries Service National Task Force for Improving Stock Assessment. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-F/SPO-56, 60 p., 25 appendices.
- NMFS. 2002. Endangered Species Act—Section 7: Consultation biological opinion. Shrimp trawling in the southeastern United States, under the sea turtle conservation regulations and as managed by the fishery management plans for shrimp in the South Atlantic and Gulf of Mexico. NMFS Southeast Region, St. Petersburg, FL.
- NMFS. 2003. Final programmatic environmental impact statement for Pacific salmon fisheries management off the coasts of southeast Alaska, Washington, Oregon, and California, and in the Columbia river basin. Northwest Fisheries Science Center, Seattle, WA.
- NMFS. 2004a. Defining a basis: Summary report of NMFS Fisheries Observer Coverage Level Workshop, 29–31 July 2003, 40 p.
- NMFS. 2004b. Evaluating bycatch: A national approach to standardized bycatch monitoring programs. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-F/SPO-66, 108 p.

REFERENCES

- NMFS. 2004c. Alaska Groundfish Fisheries. Final programmatic supplemental environmental impact statement. NMFS Alaska Regional Office, Juneau, AK. Multiple pagination and appendices. Available from <http://www.fakr.noaa.gov/sustainablefisheries/seis/default.htm>.
- NMFS. 2005. NOAA Fisheries glossary. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-F/SPO-69, 63 p.
- NMFS. 2006a. 2005 Pacific whiting fishery for non-tribal motherships and catcher/processors. NMFS Northwest Regional Office, Seattle, WA. Available from <http://www.nwr.noaa.gov/Groundfish-Halibut/Groundfish-Fishery-Management/Whiting-Management/upload/05HAK-report.pdf>.
- NMFS. 2006b. Endangered and threatened wildlife: Sea turtle conservation. Final Rule. Federal Register 71(165):50,361–73.
- NMFS. 2007. List of fisheries for 2008. Federal Register 27(227):66,048–80.
- NMFS. 2008. Estimated takes of sea turtles in the bottom longline portion of the Gulf of Mexico reef fish fishery July 2006 through 2007 based on observer data. NMFS Southeast Fisheries Science Center Contribution PRD 07/08-15.
- NOAA. 1998. Taking of marine mammals incidental to commercial fishing operations: Harbor porpoise take reduction plan regulations. Federal Register Notice 63(231):66464–66490. Department of Commerce, National Oceanic and Atmospheric Administration 50 CFR Part 229.
- NWFSC. 2006a. Data report and summary analyses of limited-entry trawl permits. Northwest Fisheries Science Center, West Coast Groundfish Observer Program, 2725 Montlake Blvd E, Seattle, WA. Available from <http://www.nwfsc.noaa.gov/research/divisions/fram/observer/datareport/docs/narrative-trawl-rpt2006.pdf>.
- NWFSC. 2006b. West Coast groundfish observer training manual. Northwest Fisheries Science Center, West Coast Groundfish Observer Program, 2725 Montlake Blvd E, Seattle, WA. Available from <http://www.nwfsc.noaa.gov/research/divisions/fram/observer/observermanual/observermanual.cfm>.
- NWFSC. 2006c. Data report and summary analyses of sablefish-endorsed fixed-gear permits. Northwest Fisheries Science Center, West Coast Groundfish Observer Program, 2725 Montlake Blvd E, Seattle, WA. Available from <http://www.nwfsc.noaa.gov/research/divisions/fram/observer/datareport/docs/narrative-fgsablefish-rpt2006.pdf>.
- NWFSC. 2006d. Data report and summary analyses of limited-entry non-sablefish-endorsed fixed-gear permits. Northwest Fisheries Science Center, West Coast Groundfish Observer Program, 2725 Montlake Blvd E, Seattle, WA. Available from <http://www.nwfsc.noaa.gov/research/divisions/fram/observer/datareport/docs/narrative2006.pdf>.
- NWFSC. 2006e. At-sea hake observer program sampling manual and information. Northwest Fisheries Science Center, At-Sea Hake Observer Program, 2725 Montlake Blvd E, Seattle, WA. Available from http://www.nwfsc.noaa.gov/research/divisions/fram/observer/observermanual/hake_manual2007.pdf.
- NWFSC. 2007. Data report and summary analyses of open access fixed-gear fisheries in waters less than 50 fathoms. Northwest Fisheries Science Center, West Coast Groundfish Observer Program, 2725 Montlake Blvd E, Seattle, WA. Available from http://www.nwfsc.noaa.gov/research/divisions/fram/observer/datareport/docs/narrative_oa_nearshore_rpt_feb2007.pdf.
- NWFSC. 2008. Report on the bycatch of marine mammals and seabirds by the U.S. West Coast groundfish fleet. Northwest Fisheries Science Center, At-Sea Hake Observer Program. Available at http://www.nwfsc.noaa.gov/research/divisions/fram/observer/datareport/otherreports/full_mmsb_report072308.pdf.
- O'Brien, C. M., G. M. Pilling, and C. Brown. 2004. Development of an estimation system for U.S. longline discard estimates of bluefin tuna. In A. I. L. Payne, C. M. O'Brien, and S. I. Rogers (Editors), *Management of Shared Fish Stocks*, p. 23–41. Blackwell Publishing, Oxford.
- Pacific Islands Fisheries Group. n.d. Methods for releasing deepwater bottomfish. Pacific Islands Fisheries Group, www.fishtoday.org. Available at http://www.wpcouncil.org/bottomfish/Documents/200705_Closure/BF_Releasing_Methods.pdf.
- Palka, D., and M. C. Rossman. 2001. Bycatch estimates of coastal bottlenose dolphin (*Tursiops truncatus*) in U.S. Mid-Atlantic gillnet fisheries for 1996 to 2000. Northeast Fisheries Science Center Reference Document 01-15, 77 p. Available from NEFSC, 166 Water St., Woods Hole, MA 02543-1026 and <http://www.nefsc.noaa.gov/nefsc/publications/crd/crd0115/0115.htm>.
- Palka, D. L., M. C. Rossman, A. S. VanAtten, and C. D. Orphanides. 2008. Effect of pingers on harbour porpoise (*Phocoena phocoena*) bycatch in the U.S. Northeast gillnet fishery. *Journal of Cetacean Research and Management* 10(3):217–26.

U.S. NATIONAL BYCATCH REPORT

- Pascoe, S. 1997. Bycatch management and the economics of discarding. Food and Agricultural Organization of the United Nations Fisheries Technical Paper 370, 137 p.
- Pennington, M. 1983. Efficient estimators of abundance for fish and plankton surveys. *Biometrics* 39:281–86.
- Perez, M. A. 2006. Analysis of marine mammal bycatch data from the trawl, longline, and pot groundfish fisheries of Alaska, 1998–2004, defined by geographic area, gear type, and target groundfish catch species. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-AF-SC-167.
- PFMC. 2000. Amendment 14 to the Pacific Coast Salmon Plan (1997) incorporating the regulatory impact review/initial regulatory flexibility analysis and final supplemental Environmental Impact Statement. Pacific Fishery Management Council, 7700 NE Ambassador Place, Ste. 101, Portland, OR 97220.
- PFMC. 2005. Preseason report III. Analysis of council adopted management measures for 2005 ocean salmon fisheries. Pacific Fishery Management Council, 7700 NE Ambassador Place, Ste. 101, Portland, OR 97220, 42 p. Available from <http://www.pcouncil.org/salmon/salpreIII05/salpreIII05.html>.
- PFMC. 2006. Review of 2005 ocean salmon fisheries. Pacific Fishery Management Council, 7700 NE Ambassador Place, Ste. 101, Portland, OR 97220, 311 p. Available from <http://www.pcouncil.org/salmon/salsafe05/salsafe05.html>.
- PFMC. 2007. Status of the Pacific coast coastal pelagic species fishery and recommended acceptable biological catches. Stock Assessment and Fishery Evaluation (SAFE) 2007, 126 p. Available from Pacific Fishery Management Council at <http://www.pcouncil.org>.
- Pikitch, E. K., J. R. Wallace, E. A. Babcock, D. L. Erickson, M. Saelens, and G. Oddsson. 1998. Pacific halibut bycatch in the Washington, Oregon, and California groundfish and shrimp trawl fisheries. *North American Journal of Fisheries Management* 18:269–82.
- Poffenberger, J. 2003. Discard estimates: South Atlantic region. Southeast Data, Assessment, and Review SEDAR 4-DW-12.
- Price, B. 2007. Sea turtle bycatch monitoring of the 2006 fall gillnet fisheries in southeastern Pamlico Sound, North Carolina. Completion report [to the NMFS] for activities under ESA Section 10 Incidental Take Permit 1528.
- Rago, P. J., S. E. Wigley, and M. J. Fogarty. 2005. NEFSC bycatch estimation methodology: Allocation, precision, and accuracy. Northeast Fisheries Science Center Reference Document 05-09, 56 p.
- Read, A. J., P. Drinker, and S. Northridge. 2006. Bycatch of marine mammals in U.S. and global fisheries. *Conservation Biology* 20(1):163–9.
- Renaud, M., G. Gitschlag, E. Klima, A. Shah, J. Nance, C. Caillouet, Z. Zein-Eldin, D. Koi, and F. Patella. 1990. Evaluation of the impacts of Turtle Excluder Devices (TEDs) on shrimp catch rates in the Gulf of Mexico and South Atlantic, March 1988 through July 1989. U.S. Department of Commerce, NOAA Technical Memorandum, NMFS-SEFC-254.
- Richards, P. R. 2007. Estimated takes of protected species in the commercial directed shark bottom longline fishery 2003, 2004, and 2005. Southeast Fisheries Science Center, Protected Resources and Biodiversity PRD-06/07-08, 21 p.
- Rossman, M. C. 2007. Allocating observer sea days to bottom trawl and gillnet fisheries in the Northeast and Mid-Atlantic Regions to monitor and estimate incidental bycatch of marine mammals. Northeast Fisheries Science Center Reference Document 07-19, 17 p.
- Rossman M. C. 2010. Estimated bycatch of small cetaceans in U.S. bottom trawl fishing gear during 2000–2005. *J. Northw. Atl. Fish. Sci.*, Vol. 42:77–101.
- Rossman, M. C., and R. L. Merrick. 1999. Harbor porpoise bycatch in the Northeast multispecies sink gillnet fishery and the Mid-Atlantic coastal gillnet fishery in 1998 and during January–May 1999. Northeast Fisheries Science Center Reference Document 99-17, 36 p.
- SEFSC. 2008. Estimated takes of sea turtles in the bottom longline portion of the Gulf of Mexico reef fish fishery July 2006 through 2007 based on observer data. NMFS Southeast Fisheries Science Center Contribution PRD-07/08-15, 21 p.
- Smith, T., D. Palka, and K. Bisack. 1993. Biological significance of bycatch of harbor porpoise in the Gulf of Maine demersal gillnet fishery. Northeast Fisheries Science Center Reference Document 93-23, 15 p.
- Snedecor, G. W., and W. G. Cochran. 1967. *Statistical Methods*. Iowa State University Press, 593 p.
- Stephens, A., and A. MacCall. 2004. A multispecies approach to subsetting logbook data for purposes of estimating CPUE. *Fisheries Research* 70:299–310.
- Thompson, S. K. 1992. *Sampling*. Wiley, New York.
- USFWS. 2002. Birds of conservation concern 2002. U.S. Fish and Wildlife Service, Division of Migratory Bird Management, Arlington, VA, 99 p. Available from <http://migratorybirds.fws.gov/reports/bcc2002.pdf>.

REFERENCES

- Vølstad, J. H., and M. Fogarty. 2006. Report on the National Observer Program Vessel Selection Bias Workshop, 17–19 May 2006, 532 p.
- Wallace, J., and J. Hastie. 2006. Pacific halibut bycatch in IPHC area 2A in the 2005 groundfish trawl fishery. Northwest Fisheries Science Center, 2725 Montlake Blvd E, Seattle, WA. Available from <http://www.nwfsc.noaa.gov/research/divisions/fram/observer/datareport/index.cfm>.
- Waring, G. T., E. Josephson, C. P. Fairfield, and K. Maze-Foley. 2007a. U.S. Atlantic and Gulf of Mexico marine mammal stock assessments—2006. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-NE-201, 378 p.
- Waring, G. T., E. Josephson, C. P. Fairfield-Walsh, and K. Maze-Foley (Editors). 2007b. U.S. Atlantic and Gulf of Mexico marine mammal stock assessments—2007. U.S. Department of Commerce, NOAA Technical Memorandum NMFS NE 205. 415 p. Available at <http://www.nefsc.noaa.gov/nefsc/publications/tm/tm205/>.
- Watson, J., D. Foster, S. Epperly, and A. Shah. 2005. Fishing methods to reduce sea turtle mortality associated with pelagic longlines. *Canadian Journal of Fisheries and Aquatic Sciences* 62(5):965–81.
- Wigley, S. E., M. C. Palmer, J. Blaylock, and P. J. Rago. 2008. A brief description of the discard estimation for the National Bycatch Report. Northeast Fisheries Science Center Reference Document 08-02, 35 p. Available from <http://www.nefsc.noaa.gov/nefsc/publications/crd/crd0802/>.
- Wigley, S. E., P. J. Rago, K. A. Sosebee, and D. L. Palka. 2007. The analytic component to the standardized bycatch reporting methodology omnibus amendment: Sampling design, and estimation of precision and accuracy. 2nd ed. Northeast Fisheries Science Center Reference Document 07-09, 156 p. Available from <http://www.nefsc.noaa.gov/nefsc/publications/crd/crd0709/>.
- Williams, G. H., and D. Chen. 2004. Pacific halibut discard mortality rates in the 1990–2002 Alaskan groundfish fisheries, with recommendations for monitoring in 2004–2006. International Pacific Halibut Commission Report of Assessment and Research Activities 2003:227–44.
- WPFMC. 2006. Bottomfish and seamount groundfish resources of the western Pacific region 2005 annual report. Western Pacific Fisheries Management Council, Honolulu, HI. Available at <http://www.wpcouncil.org/hawaii/bottomfish.htm>.
- WPFMC. 2007. Shark depredation and unwanted bycatch in pelagic longline fisheries: Industry practices and attitudes, and shark avoidance strategies. Western Pacific Fisheries Management Council, Honolulu, HI. Available at http://www.wpcouncil.org/pelagic/Documents/Shark-Longline_Interactions_Report.pdf.
- Yeung, C. 1999. Estimates of marine mammal and marine turtle bycatch by the U.S. Atlantic pelagic longline fleet in 1998. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SEFSC-430, 26 p. Available from Southeast Fisheries Science Center, 75 Virginia Beach Dr., Miami, FL 33149.

