

TAKING AND IMPORTING MARINE MAMMALS; TAKING MARINE MAMMALS INCIDENTAL TO THE U.S. NAVY TRAINING ACTIVITIES IN THE GULF OF ALASKA TEMPORARY MARITIME ACTIVITIES AREA

References: 2022 Final Rule

- Abramson, L., S. Polefka, S. Hastings, and K. Bor. (2011). Reducing the Threat of Ship Strikes on Large Cetaceans in the Santa Barbara Channel Region and Channel Islands National Marine Sanctuary: Recommendations and Case Studies (Marine Sanctuaries Conservation Series). Silver Spring, MD: U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service, Office of Ocean and Coastal Resource Management, Office of National Marine Sanctuaries.
- Aicken, W., E. Clements, E. Harland, S. Healy, G. Smith, P. Ward, . . . C. Pierpont. (2005). STUFT2 Trial: Environmental protection data analysis report Unpublished report prepared by QuinetiQ Limited for the United Kingdom Ministry of Defense. Hampshire, United Kingdom.
- Allen, A. N., J. J. Schanze, A. R. Solow, and P. L. Tyack. (2014). Analysis of a Blainville's beaked whale's movement response to playback of killer whale vocalizations. *Marine Mammal Science*, 30(1), 154–168.
- Arranz, P., Glarou, M., & Sprogis, K. R. (2021). Decreased resting and nursing in short-finned pilot whales when exposed to louder petrol engine noise of a hybrid whale-watch vessel. *Scientific Reports*, 11(1).
- Astrup, J., and B. Mohl. (1993). Detection of Intense Ultrasound by the Cod *Gadus Morhua*. *Journal of Experimental Biology*, 182, 71–80.
- Astrup, J. (1999). Ultrasound detection in fish - a parallel to the sonar-mediated detection of bats by ultrasound-sensitive insects? *Comparative Biochemistry and Physiology, Part A*, 124, 19–27.
- Atkinson, S., D. Crocker, D. Houser, and K. Mashburn. (2015). Stress physiology in marine mammals: How well do they fit the terrestrial model? *Journal of Comparative Physiology B*, 185, 463–486.
- Au, W. W., and M. C. Hastings. (2008). *Principles of Marine Bioacoustics* (pp. 121-174). New York: Springer.
- Au, W. W. L. (1993). The Sonar of Dolphins. New York: Springer-Verlag.
- Au, W. W. L., R. W. Floyd, R. H. Penner, and A. E. Murchison. (1974). Measurement of echolocation signals of the Atlantic bottlenose dolphin, *Tursiops truncatus* Montagu, in open waters. *Journal of the Acoustical Society of America*, 56(4), 1280–1290.
- Au, D., and W. Perryman. (1982). Movement and speed of dolphin schools responding to an approaching ship. *Fishery Bulletin*, 80(2), 371–372.
- Au, D. W. K., and W. L. Perryman. (1985). Dolphin habitats in the eastern tropical Pacific. *Fishery Bulletin*, 83, 623–643.
- Ayres, K. L., R. K. Booth, J. A. Hempelmann, K. L. Koski, C. K. Emmons, R. W. Baird, K. Balcomb-Bartok, M. B. Hanson, M. J. Ford, and S. K. Wasser. (2012). Distinguishing the impacts of inadequate prey and vessel traffic on an endangered killer whale (*Orcinus orca*) population. *PLoS ONE*, 7(6), e36842.

- Bain, D. E. (2002). *A Model Linking Energetic Effects of Whale Watching to Killer Whale (*Orcinus orca*) Population Dynamics*. Friday Harbor, WA: Friday Harbor Laboratories University of Washington.
- Baird, R. W., and A. M. Gorgone. (2005). False Killer Whale Dorsal Fin Disfigurements as a Possible Indicator of Long-Line Fishery Interactions in Hawaiian Waters. *Pacific Science*, 59(4), 593–601.
- Baird, R. W., D. L. Webster, D. J. McSweeney, A. D. Ligon, G. S. Schorr, and J. Barlow. (2006). Diving behaviour of Cuvier's (*Ziphius cavirostris*) and Blainville's (*Mesoplodon densirostris*) beaked whales in Hawai'i. *Canadian Journal of Zoology*, 84, 1120-1128.
- Baird, R. W., D. L. Webster, G. S. Schorr, D. J. McSweeney, and J. Barlow. (2008). Diel variation in beaked whale diving behavior. *Marine Mammal Science*, 24, 630-642.
- Baker, C. S., L. M. Herman, A. Perry, W. S. Lowton, J. M. Straley, A. A. Wolman, G. D. Kaufman, H. E. Winn, J. D. Hall, J. M. Reinke, and J. Ostman. 1986. Migratory movement and population structure of humpback whales (Megaptera novaeangliae) in the central and eastern north Pacific. *Marine Ecology Progress Series* 31: 105-119.
- Bakhchina, A. V., L. M. Mukhametov, V. V. Rozhnov, and O. I. Lyamin. (2017). Spectral analysis of heart rate variability in the beluga (*Delphinapterus leucas*) during exposure to acoustic noise. *Journal of Evolutionary Biochemistry and Physiology*, 53(1), 60–65.
- Barlow, J. (2010). *Cetacean Abundance in the California Current Estimated from a 2008 Ship-Based Line-Transect Survey* (NOAA Technical Memorandum NMFS-SWFSC-456). La Jolla, CA: Southwest Fisheries Science Center.
- Barlow, J. (2016). *Cetacean Abundance in the California Current Estimated from Ship-based Linetransect Surveys in 1991–2014*. (NOAA Administrative Report NMFS-SWFSC-LJ1601). La Jolla, CA: Southwest Fisheries Science Center.
- Barlow, J., and K. A. Forney. (2007). Abundance and population density of cetaceans in the California Current ecosystem. *Fishery Bulletin*, 105, 509–526.
- Barlow, J., M. C. Ferguson, E. A. Becker, J. V. Redfern, K. A. Forney, I. L. Vilchis, P. C. Fiedler, T. Gerrodette, and L. T. Ballance. (2009). *Predictive Modeling of Cetacean Densities in the Eastern Pacific Ocean* (NOAA Technical Memorandum NMFS-SWFSC-444). La Jolla, CA: Southwest Fisheries Science Center.
- Baumann-Pickering S., A. E. Simonis, S. M. Wiggins, Brownell, R.L., Hildebrand, J.A. 2013a. Aleutian Islands beaked whale echolocation signals. *Mar. Mamm. Sci.* 29:221–227. doi: 10.1111/j.1748-7692.2011.00550.x
- Baumann-Pickering, S., A. Širović, J. Hildebrand, A. Debich, R. Gottlieb, S. Johnson, S. Kerosky, L. Roche, A. S. Berga, L. Wakefield, and S. Wiggins. 2012b. Passive Acoustic Monitoring for Marine Mammals in the Gulf of Alaska Temporary Maritime Activities Area 2011-2012. Marine Physical Laboratory, Scripps Institute of Oceanography. MPL Technical Memorandum # 538.
- Beauchamp, G., and B. Livoreil. (1997). The effect of group size on vigilance and feeding rate in spice finches (*Lonchura punctulata*). *Canadian Journal of Zoology*, 75(9), 1526-1531.
- Becker, E. A., K. A. Forney, M. C. Ferguson, D. G. Foley, R. C. Smith, J. Barlow, & J. V. Redfern. (2010). Comparing California Current cetacean-habitat models developed using in situ and remotely sensed sea surface temperature data. *Marine Ecology Progress Series*, 413, 163–183.
- Becker, E. A., K. A. Forney, M. C. Ferguson, J. Barlow, & J. V. Redfern. (2012a). *Predictive Modeling of Cetacean Densities in the California Current Ecosystem based on Summer/Fall*

- Ship Surveys in 1991–2008* (NOAA Technical Memorandum NMFS-SWFSC-499). La Jolla, CA: Southwest Fisheries Science Center.
- Becker, E. A., K. A. Forney, D. G. Foley, and J. Barlow. (2012b). Density and Spatial Distribution Patterns of Cetaceans in the Central North Pacific based on Habitat Models (NOAA Technical Memorandum NMFS-SWFSC-490). La Jolla, CA: Southwest Fisheries Science Center.
- Becker, E. A., K. A. Forney, D. G. Foley, R. C. Smith, T. J. Moore, and J. Barlow. (2014). Predicting seasonal density patterns of California cetaceans based on habitat models. *Endangered Species Research*, 23(1), 1–22.
- Becker, E. A., K. A. Forney, P. C. Fiedler, J. Barlow, S. J. Chivers, C. A. Edwards, A. M. Moore, and J. V. Redfern. (2016). Moving Towards Dynamic Ocean Management: How Well Do Modeled Ocean Products Predict Species Distributions? *Remote Sensing*, 8(2), 149.
- Bednekoff, P. A., and S. L. Lima. (1998). Randomness, chaos and confusion in the study of antipredator vigilance. *Trends in Ecology & Evolution*, 13(7), 284–287.
- Bejder, L., A. Samuels, H. Whitehead, and N. Gales. (2006). Interpreting short-term behavioural responses to disturbance within a longitudinal perspective. *Animal Behaviour*, 72, 1149–1158.
- Benoit-Bird, K. J., B. L. Southall, M. A. Moline, D. E. Claridge, C. A. Dunn, K. A. Dolan, and D. J. Moretti. (2020). Critical threshold identified in the functional relationship between beaked whales and their prey. *Marine Ecology Progress Series*, 654, 1–16.
- Berman-Kowalewski, M., F. M. D. Gulland, S. Wilkin, J. Calambokidis, B. Mate, J. Cordaro, D. Rotstein, J. St. Leger, P. Collins, K. Fahy, and S. Dover. (2010). Association between blue whale (*Balaenoptera musculus*) mortality and ship strikes along the California Coast. *Aquatic Mammals*, 36(1), 59–66.
- Bernaldo de Quiros, Y., O. Gonzalez-Diaz, M. Arbelo, E. Sierra, S. Sacchini, and A. Fernandez. (2012). Decompression vs. decomposition: distribution, amount, and gas composition of bubbles in stranded marine mammals. *Frontiers in Physiology*, 3 Article 177, 19.
- Bernaldo de Quiros, Y., A. Fernandez, R. W. Baird, R. L. Brownell Jr, N. Aguilar de Soto, D. Allen, M. Arbelo, M. Arregui, A. Costidis, A. Fahlman, and A. Frantzis. (2019). Advances in research on the impacts of anti-submarine sonar on beaked whales. *Proceedings of the Royal Society B*, 286(1895), p. 20182533.
- Best, P. B. (1982). Whales: Why do they Strand? *African Wildlife*, 36(3), 96-97, 99.
- Bickel, S. L., J. D. Malloy Hammond, and K. W. Tang. (2011). Boat-generated turbulence as a potential source of mortality among copepods. *Journal of Experimental Marine Biology and Ecology*, 401(1–2), 105–109.
- Bishop, M. J. (2008). Displacement of epifauna from seagrass blades by boat wake. *Journal of Experimental Marine Biology and Ecology*, 354(1), 111–118.
- Blackwell, S. B., J. W. Lawson, and M. T. Williams. (2004). Tolerance by ringed seals (*Phoca hispida*) to impact pipe-driving and construction sounds at an oil production island. *The Journal of Acoustical Society of America*, 115(5 (Pt. 1)), 2346–2357.
- Blackwell, S. B., C. S. Nations, T. L. McDonald, C. R. Greene, A. M. Thode, M. Guerra, and A. M. Macrander. (2013). Effects of airgun sounds on bowhead whale calling rates in the Alaskan Beaufort Sea. *Marine Mammal Science*, 29(4), E342–E365.
- Blackwell, S. B., C. S. Nations, T. L. McDonald, A. M. Thode, D. Mathias, K. H. Kim, C. R. Greene, Jr., and A. M. Macrander. (2015). Effects of airgun sounds on bowhead whale calling rates: evidence for two behavioral thresholds. *PLoS ONE*, 10(6), e0125720.

- Blecha, F. (2000). Immune system response to stress. In G. P. Moberg & J. A. Mench (Eds.), *The Biology of Animal Stress* (pp. 111-122): CABI Publishing.
- Bolghasi, A., P. Ghadimi, and M. A. F. Chekab. (2017). Low-frequency sound transmission through rough bubbly air-water interface at the sea surface. *Journal of Low Frequency Noise, Vibration and Active Control*, 36(4), 319–338.
- Born, E. W., F. F. Riget, R. Dietz, and D. Andriashuk. (1999). Escape responses of hauled out ringed seals (*Phoca hispida*) to aircraft disturbance. *Polar Biology*, 21(3), 171-178.
- Bowles, A. E., M. Smultra, B. Würsig, D. P. DeMaster, and D. Palka. (1994). Relative abundance and behavior of marine mammals exposed to transmissions from the Heard Island Feasibility Test. *The Journal of Acoustical Society of America*, 96, 2469–2484.
- Boyd, I., D. Claridge, C. Clark, and B. Southall. (2008). *BRS 2008 Preliminary Report*. U.S. Navy NAVSEA PEO IWS 5, ONR, U.S. Navy Environmental Readiness Division, NOAA, SERDP.
- Bradford, A. L., K. A. Forney, E. M. Oleson, and J. Barlow. (2017). Abundance estimates of cetaceans from a line-transect survey within the U.S. Hawaiian Islands Exclusive Economic Zone. *Fishery Bulletin*, 115(2), 129–142.
- Bradshaw, C. J., S. Boutin, and D. M. Hebert. (1998). Energetic implications of disturbance caused by petroleum exploration to woodland caribou. *Canadian Journal of Zoology*, 76(7), 1319-1324.
- Branstetter, B. K., and J. J. Finneran. (2008). Comodulation masking release in bottlenose dolphins (*Tursiops truncatus*). *The Journal of the Acoustical Society of America*, 1, 625–633.
- Branstetter, B. K., J. S. Trickey, K. Bakhtiari, A. Black, H. Aihara, and J. J. Finneran. (2013). Auditory masking patterns in bottlenose dolphins (*Tursiops truncatus*) with natural, anthropogenic, and synthesized noise. *Journal of the Acoustical Society of America*, 133(3), 1811–1818.
- Branstetter, B. K., K. Bakhtiari, A. Black, J. S. Trickey, J. J. Finneran, and H. Aihara. (2016). Energetic and informational masking of complex sounds by a bottlenose dolphin (*Tursiops truncatus*). *The Journal of the Acoustical Society of America*, 140(3), 1904–1917.
- Braun, C. B., and T. Grande. (2008). Evolution of Peripheral Mechanisms for the Enhancement of Sound Reception. In. In J. F. Webb, A. N. Popper, & R. R. Fay (Eds.), *Fish Bioacoustics* (pp. 99–144). New York, NY: Springer-Verlag.
- Brenowitz, E. A. (1982) The active space of red-winged blackbird song. *Journal of Comparative Physiology*, 147:511–522.
- Brenowitz, E.A. (2004). Plasticity of the adult avian song control system. *Annals of the New York Academy of Science*, 1016, 560–585.
- Briggs, C., S. M. Shjegstad, J. A. K. Silva, and M. H. Edwards. (2016). Distribution of chemical warfare agent, energetics, and metals in sediments at a deep-water discarded military munitions site. Deep Sea Research Part II: Topical Studies in Oceanography, 128, 63–69.
- Brownell, R. L., Jr., K. Ralls, S. Baumann-Pickering, and M. M. Poole. (2009). Behavior of melon-headed whales, *Peponocephala electra*, near oceanic islands. *Marine Mammal Science*, 25(3), 639–658.
- Brownlow, A., J. Baily, M. Dagleish, R. Deaville, G. Foster, S-K. Jensen, E. Krupp, R. Law, R. Penrose, M. Perkins, F. Read, and P. Jepson (2015). Investigation into the long-finned pilot whale mass stranding event, Kyle of Durness, 22 July 2011. Report to Defra and Marine Scotland.

- Brumm, H. (2004). Causes and consequences of song amplitude adjustment in a territorial bird: a case study in nightingales. *Anais da Academia Brasileira de Ciências*, 76(2), 289-295.
- Brumm, H., and H. Slabbekoorn. (2005). Acoustic communication in noise. *Advances in the Study of Behavior*, 35, 151–209.
- Burger, J., and M. Gochfeld. (1990). Risk discrimination of direct versus tangential approach by basking black iguanas (*Ctenosaura similis*): Variation as a function of human exposure. *Journal of Comparative Psychology*, 104(4), 388.
- Burger, J., and M. Gochfeld. (1981). Discrimination of the threat of direct versus tangential approach to the nest by incubating herring and great black-backed gulls. *Journal of Comparative and Physiological Psychology*, 95(5), 676.
- Calambokidis, J., E. A. Falcone, T. J. Quinn, A. M. Burdin, P. J. Clapham, J. K. B. Ford, C. M. Gabriele, R. LeDuc, D. Mattila, L. Rojas-Bracho, J. M. Straley, B. L. Taylor, J. Urbán R., D. Weller, B. H. Witteveen, M. Yamaguchi, A. Bendlin, D. Camacho, K. Flynn, A. Havron, J. Huggins, and N. Maloney. (2008). SPLASH: Structure of Populations, Levels of Abundance and Status of Humpback Whales in the North Pacific. Olympia, WA: Cascadia Research.
- Calambokidis, J. (2012). Summary of Ship-Strike Related Research on Blue Whales in 2011. Committee on Taxonomy. 2016. List of Marine Mammal Species & Subspecies - Society for Marine Mammalogy. Retrieved from <https://www.marinemammalscience.org/species-information/listof-marine-mammal-species-subspecies/>.
- Campbell, G. S., L. Thomas, K. Whitaker, A. B. Douglas, J. Calambokidis, and J. A. Hildebrand. (2014). Inter-annual and Seasonal Trends in Cetacean Distribution Density and Abundance off Southern California. *Deep-Sea Research II*, 112, 143–157.
- Carniel, S., J. Beldowski, and M. Edwards. (2019). Chapter 6: Munitions in the Sea. Energetic Materials and Munitions: Life Cycle Management, Environmental Impact and Demilitarization. Weinheim, Germany: Wiley-VCH Verlag GmbH & Co. KGaA.
- Carretta, J. V., E. Oleson, D. W. Weller, A. R. Lang, K. A. Forney, J. Baker, M. M. Muto, B. Hanson, A. J. Orr, H. Huber, M. S. Lowry, J. Barlow, J. Moore, D. Lynch, L. Carswell, & R. L. Brownell. (2015). *U.S. Pacific Marine Mammal Stock Assessments: 2014* (NOAA Technical Memorandum NMFS-SWFSC-549). La Jolla, CA: Southwest Fisheries Science Center.
- Carretta, J. V., E. Oleson, K. A. Forney, M. M. Muto, D.W. Weller, A.R. Lang, J. Baker, B. Hanson, A.J. Orr, J. Barlow, J.E. Moore, and R.L. Brownell Jr. (2021). U.S. Pacific Marine Mammal Stock Assessments: 2020, U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SWFSC-646.
- Carretta, J. V., K. Danil, S. J. Chivers, D. W. Weller, D. S. Janiger, M. Berman-Kowalewski, K. M. Hernandez, J. T. Harvey, R. C. Dunkin, D. R. Casper, S. Stoudt, M. Flannery, K. Wilkinson, J. Huggins, and D. M. Lambourn. (2016a). Recovery rates of bottlenose dolphin (*Tursiops truncatus*) carcasses estimated from stranding and survival rate data. *Marine Mammal Science*, 32(1), 349–362.
- Carretta, J. V., M. M. Muto, S. Wilkin, J. Greenman, K. Wilkinson, M. DeAngelis, J. Viezbicke, D. Lawson, & J. Jannot. (2016b). *Sources of Human-Related Injury and Mortality for U.S. Pacific West Coast Marine Mammal Stock Assessments, 2010–2014* (NOAA Technical Memorandum NMFS-SWFSC-554). La Jolla, CA: Southwest Fisheries Science Center.
- Carretta, J. V., M. M. Muto, J. Greenman, K. Wilkinson, D. Lawson, J. Viezbicke, and J. Jannot. (2017a). Sources of Human-Related Injury and Mortality for U.S. Pacific West Coast

- Marine Mammal Stock Assessments, 2011–2015 (NOAA Technical Memorandum NMFS-SWFSC-579). La Jolla, CA: Southwest Fisheries Science Center.
- Carretta, J., V. Helker, M. Muto, J. Greenman, K. Wilkinson, D. Lawson, J. Viezbicke, and J. Jannot. (2019a). *Sources of Human-Related Injury and Mortality for U.S. Pacific Coast Marine Mammal Stock Assessments, 2013–2017*. Silver Spring, MD: National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southwest Fisheries Science Center.
- Carretta, J., J. Moore, and K. Forney. (2019b). *Estimates of Marine Mammal, Sea Turtle, and Seabird Bycatch from the California Large-Mesh Drift Gillnet Fishery: 1990-2017*. La Jolla, CA: National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southwest Fisheries Science Center.
- Carretta, J. V., K. A. Forney, E. M. Oleson, D. W. Weller, A. R. Lang, J. Baker, M. M. Muto, B. Hanson, A. J. Orr, H. Huber, M. S. Lowry, J. Barlow, J. E. Moore, D. Lynch, L. Carswell, and R. L. Brownell Jr. (2020b). U.S. Pacific Marine Mammal Stock Assessments: 2019 (NOAA-TM-NMFS-SWFSC-629). La Jolla, CA: U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southwest Fisheries Science Center
- Carretta, J. V., V. Helker, M. M. Muto, J. Greenman, K. Wilkinson, D. Lawson, J. Viezbicke, and J. Jannot. (2018b). Sources of Human-Related Injury and Mortality for U.S. Pacific West Coast Marine Mammal Stock Assessments. (NOAA Technical Memorandum NMFS-SWFSC-601). La Jolla, CA: National Marine Fisheries Service, Southwest Fisheries Science Center.
- Carretta, J. V., B. L. Taylor, and S. J. Chivers. 2001. Abundance and depth distribution of harbor porpoise (*Phocoena phocoena*) in northern California determined from a 1995 ship survey. *Fish. Bull.* 99:29–39.
- Carroll, A. G., R. Przeslawski, A. Duncan, M. Gunning, and B. Bruce. (2017). A Critical Review of the Potential Impacts of Marine Seismic Surveys on Fish & Invertebrates. *Marine Pollution Bulletin*, 114, 16.
- Caruso, F., L. Dong, M. Lin, M. Liu, W. Xu, and S. Li. (2020). Influence of acoustic habitat variation on Indo-Pacific humpback dolphin (*Sousa chinensis*) in shallow waters of Hainan Island, China. *The Journal of the Acoustical Society of America*, 147(6), 3871–3882.
- Castellote, M., C. W. Clark, and M. O. Lammers. (2012). Acoustic and behavioral changes by fin whales (*Balaenoptera physalus*) in responses to shipping and airgun noise. *Biological Conservation*, 147, 115–122.
- Cerchio, S., S. Strindberg, T. Collins, C. Bennett, and H. Rosenbaum. (2014). Seismic surveys negatively affect humpback whale singing activity off northern Angola. *PLoS ONE*, 9(3), e86464.
- Charif, R. A., C. S. Oedekoven, A. Rahaman, B. J. Estabrook, L. Thomas, and A. N. Rice. (2015). Development of Statistical Methods for Assessing Changes in Whale Vocal Behavior in Response to Mid-Frequency Active Sonar. Final Report. Virginia Beach, VA: U.S. Fleet Forces Command.
- Clapham, P. J., C. Good, S. E. Quinn, R. R. Reeves, and J. E. Scarff. (2004). Distribution of North Pacific right whales (*Eubalaena japonica*) as shown by 19th and 20th century whaling catch and sighting records. *Journal of Cetacean and Research and Management*, 6(1), 1–6.

- Cheng, H. K., and J. R. Edwards. (2003). *Underwater Noise and Sound Produced By Aerial Sonic Boom*. Paper presented at the International Conference on Acoustic Communication by Animals [1st]. College Park, MD.
- Cholewiak, D., A. I. DeAngelis, D. Palka, P. J. Corkeron, and S. M. Van Parijs. (2017). Beaked whales demonstrate a marked acoustic response to the use of shipboard echosounders. *Royal Society Open Science*, 4(12), 170940.
- Cholewiak, D., C. W. Clark, D. Ponirakis, A. Frankel, L. T. Hatch, D. Risch, J. E. Stanistreet, M. Thompson, E. Vu, and S. M. Van Parijs. (2018). Communicating amidst the noise: Modeling the aggregate influence of ambient and vessel noise on baleen whale communication space in a national marine sanctuary. *Endangered Species Research*, 36, 59–75.
- Chrousos, G. P. (2000). The stress response and immune function: clinical implications: the 1999 Novera H. Spector lecture. *Annals of the New York Academy of Sciences*, 917(1), 38-67.
- Clapham, P. J. (2016). Managing leviathan: Conservation challenges for the great whales in a postwhaling world. *Oceanography*, 29(3), 214–225.
- Claridge, D., D. Charlotte, and J. Durban. (2009, 7-10 December 2009). *Abundance and movement patterns of Blainville's beaked whales at the Atlantic undersea test and evaluation center (AUTEC)*. Paper presented at the 2009 ONR Marine Mammal Program Review, Alexandria, VA.
- Clark, C. W., P. Tyack, and W. T. Ellison. (1999). Technical Report 1: Low frequency sound scientific research program technical report (responses of four species of whales to sounds of SURTASS LFA sonar transmissions). Report for the U.S. DoN. Included in Overseas environmental impact statement and environmental impact statement for Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) sonar.
- Clark, C. W., W. T. Ellison, B. L. Southall, L. Hatch, S. M. Van Parijs, A. Frankel, and D. Ponirakis. (2009). Acoustic masking in marine ecosystems: Intuitions, analysis, and implication. *Marine Ecology Progress Series*, 395, 201–222.
- Clausen, K.T., Wahlberg, M., Beedholm, K., DeRuiter, S., and Madsen, P.T. 2010. Click communication in harbor porpoises *phocoena phocoena*. *Bioacoustics*. 20. 1-28.
- Clyne H. (1999). Computer simulations of interactions between the North Atlantic right whale (*Eubalaena glacialis*) and shipping. Masters thesis in Software Technology, Napier University, Edinburgh.
- Cochrem, J. (2014). Review of stress and the measurement of stress in marine mammals. Final 2014 Report from ONR Marine Mammal Physiological Stress Response thrust within the Marine Mammals and Biology Program.
- Conn, P. B., and G. K. Silber. (2013). Vessel speed restrictions reduce risk of collision-related mortality for North Atlantic right whales. *Ecosphere*, 4(4).
- Constantine, R., and D. Brunton. (2001). Boats and bottlenose dolphins in the Bay of Islands, New Zealand. Fourteenth Biennial Conference on the Biology of Marine Mammals, Vancouver, Canada.
- Cooper, W. E. Jr. (1997). Factors affecting risk and cost of escape by the broad-headed skink: Predator speed, directness of approach, and female resence. *Herpetologica*, 53(4), 464-474.
- Cooper, W. E., Jr. (1998). Direction of predator turning, a neglected cue to predation risk. *Behavior*, 135(1), 55-64.
- Costa, D. P. (1993). The relationship between reproductive and foraging energetics and the evolution of the Pinnipedia. *Symposium of the Zoological Society of London*, 66, 293–314.

- Costa, D. P., and B. A. Block. (2009). *Use of Electronic Tag Data and Associated Analytical Tools to Identify and Predict Habitat Utilization of Marine Predators* (Marine Mammals & Biological Oceanography Annual Reports: FY09). Santa Cruz, CA and Stanford, CA: Office of Naval Research.
- Costa, D. P., D. E. Crocker, J. Gedamke, P. M. Webb, D. S. Houser, S. B. Blackwell, D. Waples, S. A. Hayes, and B. J. Le Boeuf. (2003). The effect of a low-frequency sound source (acoustic thermometry of the ocean climate) on the diving behavior of juvenile northern elephant seals, *Mirounga angustirostris*. *The Journal of Acoustical Society of America*, 113(2), 1155–1165.
- Cowlishaw, G., M. J. Lawes, M. Lightbody, A. Martin, R. Pettifor, and J. M. Rowcliffe. (2004). A simple rule for the costs of vigilance: empirical evidence from a social forager. *Proceedings of the Royal Society of London. Series B: Biological Sciences*, 271(1534), 27–33.
- Cox, T. M., T. J. Ragen, A. J. Read, E. Vox, R. W. Baird, K. Balcomb, J. Barlow, J. Caldwell, T. Cranford, L. Crum, A. D'Amico, G. D'Spain, A. Fernandez, J. Finneran, R. Gentry, W. Gerth, F. Gulland, J. Hildebrand, D. Houser, T. Hullar, P. D. Jepson, D. Ketten, C. D. MacLeod, P. Miller, S. Moore, D. C. Mountain, D. Palka, P. Ponganis, S. Rommel, T. Rowles, B. Taylor, P. Tyack, D. Wartzok, R. Gisiner, J. Mead, and L. Benner. (2006). Understanding the impacts of anthropogenic sound on beaked whales. *Journal of Cetacean Research and Management*, 7(3), 177–187.
- Crance, J.L., K.T. Goetz, R.P. Angliss. 2022. *Report for the Pacific Marine Assessment Program for Protected Species (PacMAPPS) 2021 field survey*. Submitted to the U.S. Navy Marine Species Monitoring Program, MIPR No. N00070-21-MP-0E115. Prepared by Alaska Fisheries Science Center, Seattle, Washington. February 2022. 21 pp.
- Creel, S. (2005). Dominance, aggression, and glucocorticoid levels in social carnivores. *Journal of Mammalogy*, 86(2), 255–264.
- Croll, D. A., C. W. Clark, J. Calambokidis, W. T. Ellison, and B. R. Tershy. (2001). Effect of anthropogenic low-frequency noise on the foraging ecology of *Balaenoptera* whales. *Animal Conservation*, 4, 13–27.
- Crum, L. A., and Y. Mao. (1996). Acoustically enhanced bubble growth at low frequencies and its implications for human diver and marine mammal safety. *Acoustical Society of America*, 99(5), 2898–2907.
- Crum, L. A., M. R. Bailey, J. Guan, P. R. Hilmo, S. G. Kargl, and T. J. Matula. (2005). Monitoring bubble growth in supersaturated blood and tissue *ex vivo* and the relevance to marine mammal bioeffects. *Acoustics Research Letters Online*, 6(3), 214–220.
- Cruz-Uribe, O., D. P. Cheney, and G. L. Rorrer. (2007). Comparison of TNT removal from seawater by three marine macroalgae. *Chemsphere*, 67, 1469–1476.
- Culik, B. M., S. Koschinski, N. Tregenza, and G. M. Ellis. (2001). Reactions of harbor porpoises *Phocoena phocoena* and herring *Clupea harengus* to acoustic alarms. *Marine Ecological Progress Series*, 211, 255–260.
- Cummings, W. C., and P. O. Thompson. (1971). Gray whales, *Eschrichtius robustus*, avoid the underwater sounds of killer whales, *Orcinus orca*. *Fishery Bulletin*, 69(3), 525–530.
- Cunningham, K. A., B. L. Southall, and C. Reichmuth. (2014). Auditory sensitivity of seals and sea lions in complex listening scenarios. *The Journal of the Acoustical Society of America*, 136(6), 3410–3421.

- Curé, C., L. D. Sivle, F. Visser, P. J. Wensveen, S. Isojunno, C. M. Harris, P. H. Kvadsheim, F. P. A. Lam, and P. J. O. Miller. (2015). Predator sound playbacks reveal strong avoidance responses in a fight strategist baleen whale. *Marine Ecology Progress Series*, 526, 267–282.
- Curé, C., S. Isojunno, F. Visser, P. J. Wensveen, L. D. Sivle, P. H. Kvadsheim, F. P. A. Lam, and P. J. O. Miller. (2016). Biological significance of sperm whale responses to sonar: Comparison with antipredator responses. *Endangered Species Research*, 31, 89–102.
- Curé, C., et al. (2021). "Severity scoring of behavioral responses of Sperm Whales (*Physeter macrocephalus*) to novel continuous versus conventional pulsed active sonar." *Journal of Marine Science and Engineering* 9(444).
- Czapanskiy, M. F., Savoca, M.S., Gough, W.T., Segre, P.S., Wisniewska, D.M., Cade, D.E., Goldbogen, J.A. (2021). "Modelling short-term energetic costs of sonar disturbance to cetaceans using high-resolution foraging data." *Journal of Applied Ecology*.
- D'Amico, A., R. C. Gisiner, D. R. Ketten, J. A. Hammock, C. Johnson, P. L. Tyack, and J. Mead. (2009). Beaked whale strandings and naval exercises. *Aquatic Mammals*, 35(4), 452–472.
- D'Amico, A. and Verboom, W.C. (1998). Minutes Bioacoustics Panel, convened at SACLANTCEN, La Spezia, Italy, 15-17 June 1998. NATO-SACLANTCEN report M-133.
- D'Spain, G. L., A. D'Amico, and D. M. Fromm. (2006). Properties of the underwater sound fields during some well documented beaked whale mass stranding events. *Journal of Cetacean Research and Management*, 7(3), 223–238.
- Daan, S., C. Deerenberg, and C. Dijkstra. (1996). Increased daily work precipitates natural death in the kestrel. *Journal of Animal Ecology*, 539–544.
- Deecke, V. B., P. J. B. Slater, and J. K. B. Ford. (2002). Selective habituation shapes acoustic predator recognition in harbour seals. *Nature*, 420(14 November), 171–173.
- Defence Science and Technology Laboratory (DSTL). (2007). *Observations of marine mammal behaviour in response of active sonar*. United Kingdom: Ministry of Defence.
- Delean, B. J., V. T. Helker, M. M. Muto, K. Savage, S. Teerlink, L. A. Jemison, K. Wilkinson, J. Jannot, and N. C. Young. (2020). Human-caused mortality and injury of NMFS-managed Alaska marine mammal stocks 2013-2017 (NOAA Technical Memorandum). Springfield, VA: U.S. Department of Commerce.
- de Soto, N. A. (2016). Peer-Reviewed Studies on the Effects of Anthropogenic Noise on Marine Invertebrates: From Scallop Larvae to Giant Squid. In A. N. Popper & A. Hawkins (Eds.), *The Effects of Noise on Aquatic Life II* (pp. 10). New York: Springer Science.
- DeRuiter SL, Larbi Doukara K (2012) Loggerhead turtles dive in response to airgun sound exposure. *Endang Species Res* 16:55-63. <https://doi.org/10.3354/esr00396>
- DeRuiter, S. L., I. L. Boyd, D. E. Claridge, C. W. Clark, C. Gagon, B. L. Southall, and P. L. Tyack. (2013a). Delphinid whistle production and call matching during playback of simulated military sonar. *Marine Mammal Science*, 29(2), E46–59.
- DeRuiter, S. L., S. B. L., J. Calambokidis, W. M. X. Zimmer, D. Sadykova, E. A. Falcone, A. S. Friedlaender, J. E. Joseph, D. Moretti, G. S. Schorr, L. Thomas, and P. L. Tyack. (2013b). First direct measurements of behavioural responses by Cuvier's beaked whales to mid-frequency active sonar. *Biology Letters*, 9, 201–223.
- DeRuiter, S. L., R. Langrock, T. Skirbutas, J. A. Goldbogen, J. Calambokidis, A. S. Friedlaender, and B. L. Southall. (2017). A multivariate mixed hidden Markov model for blue whale behaviour and responses to sound exposure. *The Annals of Applied Statistics*, 11(1), 362–392.

- DiMarzio, N., S. Watwood, T. Featherston, and D. Moretti. (2018). Marine Mammal Monitoring on Navy Ranges (M3R) on the Southern California Anti-Submarine Warfare Range (SOAR) and the Pacific Missile Range Facility (PMRF). Prepared for: U.S. Navy, U.S. Pacific Fleet, Pearl Harbor, HI. Prepared by: Naval Undersea Warfare Center Newport, Newport, RI. 52 pp.
- Di Iorio, L., and C. W. Clark. (2009/2010). Exposure to seismic survey alters blue whale acoustic communication. *Biology Letters*, 6, 51–54.
- Dooling, R.J. (2004). Audition: Can Birds Hear Everything They Sing? *Nature's Music: The Science of Birdsong*. P. Marler and H. Slabbekoorn, Eds.), pp 206-225. Elseviers-Academic Press, San Diego.
- Douglas, A. B., J. Calambokidis, S. Raverty, S. J. Jeffries, D. M. Lambourn, and S. A. Norman. (2008). Incidence of ship strikes of large whales in Washington State. *Journal of the Marine Biological Association of the United Kingdom*, 88(6), 1121–1132.
- Duarte, C. M., Chapuis, L., Collin, S.P., Costa, D.P., Devassy, R.P., Eguiluz, V.M., Erbe, C., Gordon, T.A.C., Halpern, B.S., Harding, H.R., Havlik, M.N., Meekan, M., Merchant, N.D., Miksis-Olds, J., Parsons, M., Predragovic, M., Radford, A.N., Radford, C.A., Simpson, S.D., Slabbekoorn, H., Staaterman, E., Van Opzeeland, I.C.V., Winderen, J., Zhang, X., and Juanes, F. (2021). The soundscape of the Anthropocene ocean. *Science*. e 371, 583.
- Dukas, R. (2002). Behavioural and ecological consequences of limited attention. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, 357(1427), 1539-1547.
- Dunlop, R. A. (2016). The effect of vessel noise on humpback whale, *Megaptera novaeangliae*, communication behaviour. *Animal Behaviour*, 111, 13–21.
- Dunlop, R. A., D. H. Cato, and M. J. Noad. (2010). Your attention please: Increasing ambient noise levels elicits a change in communication behaviour in humpback whales (*Megaptera novaeangliae*). *Proceedings of the Royal Society B: Biological Sciences*, 277, 2521–2529.
- Dunlop, R. A., D. H. Cato, and M. J. Noad. (2014). Evidence of a Lombard response in migrating humpback whales (*Megaptera novaeangliae*). *The Journal of the Acoustical Society of America*, 136(1), 430–437.
- Dunlop, R. A. (2019). The effects of vessel noise on the communication network of humpback whales. *Royal Society Open Science*, 6(11), p.190967.
- Dunlop, R.A., Braithwaite, J., Mortensen, L.O., and Harris, C.M. (2021). Assessing Population-Level Effects of Anthropogenic Disturbance on a Marine Mammal Population. *Frontiers in Marine Science*. 15. <https://doi.org/10.3389/fmars.2021.624981>
- Eaton, R.L. (1979). Speculations on Strandings as “Burial”, Suicide and Interspecies Communication, *Carnivore*, 3(24).
- Edds-Walton, P. L., and J. J. Finneran. (2006). *Evaluation of Evidence for Altered Behavior and Auditory Deficits in Fishes Due to Human-Generated Noise Sources*. (Technical Report 1939). San Diego, CA: SSC San Diego.
- Edwards, M. H., S. M. Shjegstad, R. Wilkens, J. C. King, G. Carton, D. Bala, B. Bingham, M. C. Bissonnette, C. Briggs, N. S. Bruso, R. Camilli, M. Cremer, R. B. Davis, E. H. DeCarlo, C. DuVal, D. J. Fornari, I. Kaneakua-Pia, C. D. Kelley, S. Koide, C. L. Mah, T. Kerby, G. J. Kurras, M. R. Rognstad, L. Sheild, J. Silva, B. Wellington, and M. V. Woerkom. (2016). The Hawaii undersea military munitions assessment. Deep Sea Research Part II: Topical Studies in Oceanography, 128, 4–13.

- Eguchi, T., Lang, A. R., & Weller, D. W. (2022). Abundance and migratory phenology of eastern North Pacific gray whales 2021/2022. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SWFSC-668. <https://doi.org/10.25923/x88y-8p07>
- Ellison, W. T., B. L. Southall, C. W. Clark, and A. S. Frankel. (2011/2012). A new context-based approach to assess marine mammal behavioral responses to anthropogenic sounds. *Conservation Biology*, 26(1), 21–28.
- Elmegaard, S. L., et al. (2021). "Heart rate and startle responses in diving, captive harbor porpoises (*Phocoena phocoena*) exposed to transient noise and sonar." The Company of Biologists 10.
- Elsasser, T. H., K. C. Klasing, N. Filipov, and F. Thompson. (2000). The metabolic consequences of stress: targets for stress and priorities of nutrient use. In *The biology of animal stress: basic principles and implications for animal welfare* (pp. 77-110). Oxon, UK: CAB International.
- Environmental Science Advisory Committee. (2005). 2005 Annual Report. Victoria, Canada: Department of National Defense, Environmental Science Advisory Committee.
- Erbe, C. (2002). Underwater noise of whale-watching boats and potential effects on killer whales (*Orcinus Orca*), based on an acoustic impact model. *Marine Mammal Science*, 18(2), 394–418.
- Erbe, C. 2008. Critical ratios of beluga whales (*Delphinapterus leucas*) and masked signal duration. *Journal of the Acoustical Society of America*, 124 (4), 2216-2223.
- Erbe, C., and D. M. Farmer. (2000). A software model to estimate zones of impact on marine mammals around anthropogenic noise. *The Journal of the Acoustical Society of America*, 108(3), 1327-1331.
- Erbe, C., C. Reichmuth, K. Cunningham, K. Lucke, and R. Dooling. (2016). Communication masking in marine mammals: a review and research strategy. *Marine Pollution Bulletin*, 103(1-2), 15-38.
- Eschmeyer, W. N., and J. D. Fong. (2016). Species by Family/Subfamily in the Catalog of Fishes. San Francisco, CA: California Academy of Sciences.
- Evans, D.L. and G. R. England, G.R. (2001). Joint Interim Report Bahamas Marine Mammal Stranding Event 15-16 March 2000. US Navy and NMFS Report, Washington, DC and Silver Spring, MD USA.
- Evans, P. G. H., and L. A. Miller. (2003). *Proceedings of the workshop on active sonar and cetaceans* (European cetacean society newsletter, No. 42—Special Issue). Las Palmas, Gran Canaria.
- Fahlman, A., Moore, M. J., & Wells, R. S. (2021). How do marine mammals manage and usually avoid gas emboli formation and gas embolic pathology? Critical clues from studies of wild dolphins. *Frontiers in Marine Science*, 8(25)
- Fahlman, A., P. L. Tyack, P. J. O. Miller, and P. H. Kvadsheim. (2014). How man-made interference might cause gas bubble emboli in deep diving whales. *Frontiers in Physiology*, 5(13), 1–6.
- Fahlman A, Moore M.J. and Wells R.S. (2021). How Do Marine Mammals Manage and Usually Avoid Gas Emboli Formation and Gas Embolic Pathology? Critical Clues From Studies of Wild Dolphins. *Front. Mar. Sci.* 8:598633. doi: 10.3389/fmars.2021.598633
- Fair, P. A., and P. R. Becker. (2000). Review of stress in marine mammals. *Journal of Aquatic Ecosystem Stress and Recovery*, 7(4), 335-354.

- Fair, P. A., A. M. Schaefer, T. A. Romano, G. D. Bossart, S. V. Lamb, and J. S. Reif. (2014). Stress response of wild bottlenose dolphins (*Tursiops truncatus*) during capture-release health assessment studies. *General and Comparative Endocrinology*, 206, 203–212.
- Falcone, E. A., and G. S. Schorr. (2012). *Distribution and demographics of marine mammals in SOCAL through photo-indentification, genetics, and satellite telemetry: a summary of surveys conducted 1 July 2011 - 15 June 2012*. Monterey, CA: U.S. Navy Postgraduate School.
- Falcone, E. A., & G. S. Schorr. (2014). *Distribution and Demographics of Marine Mammals in SOCAL through Photo-Identification, Genetics, and Satellite Telemetry* (Prepared for Chief of Naval Operations Energy and Environmental Readiness Division: NPS-OC-14-005CR). Monterey, CA: U.S. Navy Post Graduate School.
- Falcone, E. A., G. S. Schorr, S. L. Watwood, S. L. DeRuiter, A. N. Zerbini, R. D. Andrews, R. P. Morrissey, and D. J. Moretti. (2017). Diving behaviour of Cuvier's beaked whales exposed to two types of military sonar. *Royal Society Open Science*, 4(170629), 1–21.
- Farmer, N. A., D. P. Noren, E. M. Fougères, A. Machernis, and K. Baker. (2018). Resilience of the endangered sperm whale *Physeter macrocephalus* to foraging disturbance in the Gulf of Mexico, USA: A bioenergetic approach. *Marine Ecology Progress Series*, 589, 241–261.
- Fay, R.R., A.N. Popper, and J.F. Webb. 2008. Introduction to fish bioacoustics. In: Webb, J.F., R.R. Fay, and A.N. Popper, eds. Fish Bioacoustics. Springer Handbook of Auditory Research 32:1-15.
- Fay, R. (2009). Soundscapes and the sense of hearing of fishes. *Integrative Zoology*, 4(1), 26-32.
- Feare, C. J. (1976). Desertion and abnormal development in a colony of Sooty Terns *Sterna fuscata* infested by virus-infected ticks. *Ibis*, 118(1), 112-115.
- Ferguson, M. C., J. Barlow, P. Feidler, S. B. Reilly, and T. Gerrodette. (2006a). Spatial models of delphinid (family *Delphinidae*) encounter rate and group size in the eastern Pacific Ocean. *Ecological Modelling*, 193, 645–662.
- Ferguson, M. C., C. Curtice, and J. Harrison. (2015a). Biologically important areas for cetaceans within U.S. waters – Gulf of Alaska region. *Aquatic Mammals* (Special Issue), 41(1), 65–78.
- Ferguson, M. C., C. Curtice, J. Harrison, and S. M. Van Parijs. (2015b). Biologically important areas for cetaceans within U.S. waters – Overview and rationale. *Aquatic Mammals* (Special Issue), 41(1), 2–16.
- Fernandez, A., J. Edwards, F. Rodriguez, A. Espinosa De Los Monteros, P. Herraez, P. Castro, J. Jaber, V. Martin, and M. Arbelo. (2005). "Gas and fat embolic syndrome" involving a mass stranding of beaked whales (Family *Ziphiidae*) exposed to anthropogenic sonar signals. *Veterinary Pathology*, 42(4), 446–457.
- Fernandez, A. (2006). *Beaked whale (Ziphius cavirostris) mass stranding on Almeria's coasts in southern Spain* (Report of the University of Las Palmas de Gran Canaria, Canary Islands).
- Fernandez, A., M. Arbelo, R. Deaville, I. A. P. Patterson, P. Castro, J. R. Baker, and F. Rodriguez. (2004). Beaked whales, sonar and decompression sickness. *Nature*, 428(6984), U1-2.
- Fernández, A., Sierra, E., Martin, V., Méndez, A., Sacchinni, S., Bernaldo de Quirós, Y., Andrada, M., Rivero, M., Quesada, O., Tejedor, M., and Arbelo, M. (2012). Last "atypical" beaked whales mass stranding in the Canary Islands (July, 2004). *Journal of Marine Science: Research & Development*, 2:2.

- Fewtrell, J. L., and R. D. McCauley. (2012). Impact of air gun noise on the behaviour of marine fish and squid. *Marine Pollution Bulletin*, 64(5), 984–993.
- Finneran, J. J. (2015). Noise-induced hearing loss in marine mammals: a review of temporary threshold shift studies from 1996 to 2015. *The Journal of Acoustical Society of America*, 138(3), 1702–1726.
- Finneran, J. J. (2016). Auditory weighting functions and TTS/PTS exposure functions for marine mammals exposed to underwater noise. Technical REport 3026. SSC Pacific. San Diego, CA.
- Finneran, J. J. (2018). Conditioned attenuation of auditory brainstem responses in dolphins warned of an intense noise exposure: Temporal and spectral patterns. *The Journal of the Acoustical Society of America*, 143(2), 795.
- Finneran, J. J., and B. K. Branstetter. (2013). Effects of Noise on Sound Perception in Marine Mammals Animal Communication and Noise (Vol. 2, pp. 273–308). Springer Berlin Heidelberg.
- Finneran, J. J., D. A. Carder, C. E. Schlundt, and R. L. Dear. (2010a). Growth and recovery of temporary threshold shift at 3 kHz in bottlenose dolphins: Experimental data and mathematical models. *The Journal of the Acoustical Society of America*, 127(5), 3256–3266.
- Finneran, J. J., and C. E. Schlundt. (2013). Effects of fatiguing tone frequency on temporary threshold shift in bottlenose dolphins (*Tursiops truncatus*). *The Journal of the Acoustical Society of America*, 133(3), 1819–1826.
- Finneran, J. J., C. E. Schlundt, D. A. Carder, J. A. Clark, J. A. Young, J. B. Gaspin, and S. H. Ridgway. (2000). Auditory and behavioral responses of bottlenose dolphins (*Tursiops truncatus*) and a beluga whale (*Delphinapterus leucas*) to impulsive sounds resembling distant signatures of underwater explosions. *The Journal of the Acoustical Society of America*, 108(1), 417–431.
- Finneran, J. J., C. E. Schlundt, R. Dear, D. A. Carder, and S. H. Ridgway. (2002). Temporary shift in masked hearing thresholds in odontocetes after exposure to single underwater impulses from a seismic watergun. *The Journal of the Acoustical Society of America*, 111(6), 2929–2940.
- Finneran, J. J., R. Dear, D. A. Carder, and S. H. Ridgway. (2003). Auditory and behavioral responses of California sea lions (*Zalophus californianus*) to single underwater impulses from an arc-gap transducer. *The Journal of Acoustical Society of America*, 114(3), 1667–1677.
- Finneran, J. J., C. E. Schlundt, B. Branstetter, and R. L. Dear. (2007). Assessing temporary threshold shift in a bottlenose dolphin (*Tursiops truncatus*) using multiple simultaneous auditory evoked potentials. *The Journal of the Acoustical Society of America*, 122(2), 1249–1264.
- Finneran, J. J., D. A. Carder, C. E. Schlundt, and R. L. Dear. (2010a). Growth and recovery of temporary threshold shift at 3 kHz in bottlenose dolphins: Experimental data and mathematical models. *The Journal of Acoustical Society of America*, 127(5), 3256–3266.
- Finneran, J. J., D. A. Carder, C. E. Schlundt, and R. L. Dear. (2010b). Temporary threshold shift in a bottlenose dolphin (*Tursiops truncatus*) exposed to intermittent tones. *The Journal of Acoustical Society of America*, 127(5), 3267–3272.
- Fish, J. F., and J. S. Vania. (1971). Killer whale, *Orcinus orca*, sounds repel white whales, *Delphinapterus leucas*. *Fishery Bulletin*, 69(3), 531–535.

- Fonnesbeck, C. J., L. P. Garrison, L. I. Ward-Geiger, and R. D. Baumstark. (2008). Bayesian hierarchical model for evaluating the risk of vessel strikes on North Atlantic right whales in the SE United States. *Endangered Species Research*, 6(1), 87-94.
- Foote, A. D., R. W. Osborne, and A. R. Hoelzel. (2004). Whale-call response to masking boat noise. *Nature*, 428, 910.
- Fournet, M.E., L. P. Matthews, C. M. Gabriele, S. Haver, D. K. Mellinger, and H. Klinck. (2018). Humpback whales *Megaptera novaeangliae* alter calling behavior in response to natural sounds and vessel noise. *Marine Ecology Progress Series*, 607, pp.251-268.
- Forney, K. A., M. C. Ferguson, E. A. Becker, P. C. Fiedler, J. V. Redfern, J. Barlow, I. L. Vilchis, and L. T. Ballance. (2012). Habitat-based spatial models of cetacean density in the eastern Pacific Ocean. *Endangered Species Research*, 16(2), 113–133.
- Forney, K. A., E. A. Becker, D. G. Foley, J. Barlow, and E. M. Oleson. (2015). Habitat-based Models of Cetacean Density and Distribution in the Central North Pacific. *Endangered Species Research*, 27, 1–20.
- Forney, K. A., B. L. Southall, E. Slooten, S. Dawson, A. J. Read, R. W. Baird, and R. L. Brownell, Jr. (2017). Nowhere to go: noise impact assessments for marine mammal populations with high site fidelity. *Endangered Species Research*, 32, 391–413.
- Francis, C. and J. Barber. (2013). A framework for understanding noise impacts on wildlife: An urgent conservation priority. *Frontiers in Ecology and the Environment*, 11, 10.1890/120183.
- Frankel, A. S., and C. W. Clark. (2000). Behavioral responses of humpback whales (*Megaptera novaeangliae*) to full-scale ATOC signals. *The Journal of Acoustical Society of America*, 108(4), 1930–1937.
- Frantzis, A. (1998). Does acoustic testing strand whales? *Nature*, 392, 29.
- Frantzis, A. (2004). The first mass stranding that was associated with the use of active sonar (Kyparissiakos Gulf, Greece, 1996). *ECS Newsletter*, 42(Special Issue), 14-20.
- Freitas, L. 2004. The stranding of three Cuvier's beaked whales *Ziphius cavirostris* in Madeira archipelago – May 2000. *ECS Newsletter*, 42(Special Issue), 28-32.
- Frid, A., and L. Dill. (2002). Human-caused disturbance stimuli as a form of predation risk. *Conservation Ecology*, 6(1).
- Frid, A. (2003). Dall's sheep responses to overflights by helicopter and fixed-wing aircraft. *Biological Conservation*, 110(3), 387-399.
- Friedlaender, A. S., E. L. Hazen, J. A. Goldbogen, A. K. Stimpert, J. Calambokidis, and B. L. Southall. (2016). Prey-mediated behavioral responses of feeding blue whales in controlled sound exposure experiments. *Ecological Applications*, 26(4), 1075–1085.
- Fristrup, K. M., L. T. Hatch, and C. W. Clark. (2003). Variation in humpback whale (*Megaptera novaeangliae*) song length in relation to low-frequency sound broadcasts. *The Journal of Acoustical Society of America*, 113(6), 3411–3424.
- Fritz, H., M. Guillemain, and D. Durant. (2002). The cost of vigilance for intake rate in the mallard (*Anas platyrhynchos*): an approach through foraging experiments. *Ethology Ecology & Evolution*, 14(2), 91-97.
- Fritz, L., K. Sweeney, R. Towell, and T. Gelatt. (2016). Aerial and Ship-Based Surveys of Stellar Sea Lions (*Eumetopias jubatus*) Conducted in Alaska in June–July 2013 through 2015, and an Update on the Status and Trend of the Western Distinct Population Segment in Alaska (National Oceanic and Atmospheric Administration Technical Memorandum

- NMFS-AFSC-321). Seattle, WA: National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Alaska Fisheries Science Center.
- Gabriele, C. M., D. W. Ponirakis, C. W. Clark, J. N. Womble, and P. Vanselow. (2018). Underwater acoustic ecology metrics in an Alaska marine protected area reveal marine mammal communication masking and management alternatives. *Frontiers in Marine Science*, 5, 270.
- Gailey, G., B. Würsig, and T. L. McDonald. (2007). Abundance, behavior, and movement patterns of western gray whales in relation to a 3-D seismic survey, Northeast Sakhalin Island, Russia. *Environmental Monitoring and Assessment*, 134, 75–91.
- Gailey, G., O. Sychenko, T. McDonald, R. Racca, A. Rutenko, and K. Bröker. (2016). Behavioural responses of western gray whales to a 4-D seismic survey off northeastern Sakhalin Island, Russia. *Endangered Species Research*, 30, 53–71.
- Gallagher, C.A., Grimm, V., Kyhn, L.A., Kinze, C.C. and Nabe-Nielsen, J. 2021. Movement and Seasonal Energetics Mediate Vulnerability to Disturbance in Marine Mammal Populations. *The American Naturalist*. 197(3).
- Gaspin, J. B. (1975). Experimental Investigations of the Effects of Underwater Explosions on Swimbladder Fish, I: 1973 Chesapeake Bay Tests. Naval Surface Weapons Center, White Oak Laboratory, Silver Spring, MD.
- Gaspin, J. B., G. B. Peters, and M. L. Wisely. (1976). Experimental investigations of the effects of underwater explosions on swimbladder fish. Naval Ordnance Lab, Silver Spring, MD.
- Gende, S. M., A. N. Hendrix, K. R. Harris, B. Eichenlaub, J. Nielsen, and S. Pyare. (2011). A Bayesian approach for understanding the role of ship speed in whale-ship encounters. *Ecological Applications*, 21(6), 2232–2240.
- Geraci, J. R., S. A. Testaverde, D. J. St Aubin, and T. H. Loop. (1976). A mass stranding of the Atlantic white-sided dolphin. *Lagenorhynchus acutus*. A Study into Pathobiology and Life History. Marine Mammal Commission Report Number MMC 75/12.
- Gervaise, C., Y. Simard, N. Roy, B. Kinda, and N. Menard. (2012). Shipping noise in whale habitat: Characteristics, sources, budget, and impact on belugas in Saguenay–St. Lawrence Marine Park hub. *The Journal of the Acoustical Society of America*, 132(1), 76–89.
- Goertner, J. F. (1982). *Prediction of Underwater Explosion Safe Ranges for Sea Mammals*. Dahlgren, VA: Naval Surface Weapons Center.
- Goertner, J. F., M. L. Wiley, G. A. Young, and W. W. McDonald. (1994). *Effects of underwater explosions on fish without swimbladders*. Silver Spring, MD: Naval Surface Warfare Center.
- Goldbogen, J. A., Southall, B. L., DeRuiter, S. L., Calambokidis, J., Friedlaender, A. S., Hazen, E. L., Falcone, E. A., Schorr, G. S., Douglas, A., Moretti, D. J., Kyburg, C., McKenna, M. F. and Tyack, P. L. (2013a). Blue whales respond to simulated mid-frequency military sonar. *Proc. Biol. Sci.* **280** 20130657.
- Goldbogen, J. A., Friedlaender, A. S., Calambokidis, J., McKenna, M. F., Simon, M. and Nowacek, D. P. (2013b). Integrative approaches to the study of baleen whale diving behavior, feeding performance, and foraging ecology. *Bioscience* **63** 90–100.
- Gomez, C., J. W. Lawson, A. J. Wright, A. D. Buren, D. Tollit, and V. Lesaged. (2016). A systematic review on the behavioural responses of wild marine mammals to noise: the disparity between science and policy. *Canadian Journal of Zoology*, 2016, 94(12): 801-819.
- Goold, J. C., and P. J. Fish. (1998). Broadband spectra of seismic survey air-gun emissions, with reference to dolphin auditory thresholds. *The Journal of the Acoustical Society of America*, 103(4), 2177-2184.

- Goold, J. C. (1996). Acoustic assessment of populations of common dolphin *Delphinus delphis* in conjunction with seismic surveying. *Journal of the Marine Biological Association of the United Kingdom*, 76(3), 811-820.
- Gordon, J., D. Gillespie, J. Potter, A. Frantzis, M. P. Simmonds, R. Swift, and D. Thompson. (2003). A review of the effects of seismic surveys on marine mammals. *Marine Technology Society Journal*, 37(4), 16–34.
- Gordon J., Gillespie D., Potter J., Frantzis A., Simmonds M. P., Swift R., Thompson D. 2004. A review of the effects of seismic surveys on marine mammals. *Mar. Tech. Soc. J.* 37, 16–34
- Götz, T., G. Hastie, L.T. Hatch, O. Raustein, B.L. Southall, M. Tasker, and F. Thomsen. (2009). Overview of the impacts of anthropogenic underwater sound in the marine environment. OSPAR Commission: 134.
- Harris, R. E., G. W. Miller, and W. J. Richardson. (2001). Seal responses to airgun sounds during summer seismic surveys in the Alaskan Beaufort Sea. *Marine Mammal Science*, 17: 795–812.
- Harris, C. M., L. Thomas, E. A. Falcone, J. Hildebrand, D. Houser, P. H. Kvadsheim, Frans-Peter A. Lam, P. J. O. Miller, D. J. Moretti, A. J. Read, H. Slabbekoorn, B. L. Southall, P. L. Tyack, D. Wartzok, and V. N. Janik. (2017/2018). Marine mammals and sonar: Dose-response studies, the risk-disturbance hypothesis and the role of exposure context. *Journal of Ecology* 55, 396–404.
- Harris, C. M., S. W. Martin, C. Martin, T. A. Helble, E. E. Henderson, C. G. M. Paxton, and L. Thomas. (2019b). Changes in the spatial distribution of acoustically derived minke whale (*Balaenoptera acutorostrata*) tracks in response to Navy training. *Aquatic Mammals*, 45(6), 661-674.
- Harrington, F. H., and A. M. Veitch. (1992). Calving success of woodland caribou exposed to low-level jet fighter overflights. *Arctic*, 213-218.
- Hatch, L. T., C. W. Clark, S. M. Van Parijs, A. S. Frankel, and D. W. Ponirakis. (2012). Quantifying loss of acoustic communication space for right whales in and around a U.S. National Marine Sanctuary. *Conservation Biology*, 26(6), 983–994.
- Hatch, L.T., Wahle, C.M., Gedamke, J., Harrison, J., Laws, B., Moore, S.E., Stadler, J.H., Van Parijs, S. 2016. Can you hear me here? Managing acoustic habitat in US waters. *Endangered Species Research*. 30.
- Haviland-Howell, G., A. S. Frankel, C. M. Powell, A. Bocconcelli, R. L. Herman, and L. S. Sayigh. (2007). Recreational boating traffic: a chronic source of anthropogenic noise in the Wilmington, North Carolina Intracoastal Waterway. *The Journal of the Acoustical Society of America*, 122(1), 151-160.
- Hawaii Undersea Military Munitions Assessment. (2010). Final Investigation Report HI-05 South of Pearl Harbor, O'ahu, Hawaii. Honolulu, HI: University of Hawaii at Manoa and Environet Inc.
- Hawkins, A. D., and A. D. F. Johnstone. (1978). The hearing of the Atlantic salmon, *Salmo salar*. *Journal of Fish Biology*, 13, 655–673.
- Heenehan, H. L., J. A. Tyne, L. Bejder, S. M. Van Parijs, and D. W. Johnston. (2016). Passive acoustic monitoring of coastally associated Hawaiian spinner dolphins, *Stenella longirostris*, ground-truthed through visual surveys. *The Journal of the Acoustical Society of America*, 140(1), 206.
- Helble, T. A., R. A. Guazzo, C. R. Martin, I. N. Durbach, G. C. Alongi, S. W. Martin, J. K. Boyle, and E. E. Henderson. (2020). Lombard effect: Minke whale boing call source levels

- vary with natural variations in ocean noise. *The Journal of the Acoustical Society of America*, 147(2), 698–712.
- Helker, V. T., M. M. Muto, K. Savage, S. Teerlink, L. A. Jemison, K. Wilkinson, and J. Jannot. (2017). Human-Caused Mortality and Injury of NMFS-Managed Alaska Marine Mammal Stocks, 2011–2015 (NOAA Technical Memorandum NMFS-AFSC-354). Seattle, WA: Alaska Fisheries Science Center.
- Helker, V., M. Muto, K. Savage, S. Teerlink, L. Jemison, K. Wilkinson, and J. Jannot. (2019). Human-Caused Mortality and Injury of NMFS-Managed Alaska Marine Mammal Stocks, 2012–2016. Silver Spring, MD: National Oceanic and Atmospheric Administration.
- Hemilä, S., S. Nummela, A. Berta, and T. Reuter. (2006). High-frequency hearing in phocid and otariid pinnipeds: An interpretation based on inertial and cochlear constraints (L). *Journal of the Acoustical Society of America*, 120(6), 3463–3466.
- Henderson, E.E., Martin, S.W., Manzano-Roth, R. and Matsuyama, B.M., (2016). Occurrence and habitat use of foraging Blainville's beaked whales (*Mesoplodon densirostris*) on a US Navy range in Hawaii. *Aquatic Mammals*, 42(4), p.54.
- Hermannsen, L., K. Beedholm, J. Tougaard, and P. T. Madsen. (2014). High frequency components of ship noise in shallow water with a discussion of implications for harbor porpoises (*Phocoena phocoena*). *The Journal of the Acoustical Society of America*, 136(4), 1640–1653.
- Hildebrand, J. (2004). Impacts of anthropogenic sound on cetaceans. Unpublished paper submitted to the International Whaling Commission Scientific Committee SC/56 E 13.
- Hildebrand, J. A. (2009). Anthropogenic and natural sources of ambient noise in the ocean. *Marine Ecology Progress Series*, 395, 5–20.
- Hildebrand, J. A., and M. A. McDonald. (2009). Beaked Whale Presence, Habitat, and Sound Production in the North Pacific. Unpublished technical report on file. 5 pp.
- Hiley, H. M., Janik, V., Gotz, T. (2021). Behavioral reactions of harbor porpoises *Phocoena phocoena* to startle-eliciting stimuli: movement responses and practical applications. *Marine Ecology Progress Series* 672: 223–241.
- Hill, S. H. (1978). A guide to the effects of underwater shock waves on arctic marine mammals and fish. *Pacific Marine Science Report 78–26*: Institute of Ocean Sciences, Patricia Bay BC.
- Hin, V., Harwood, J., de Roos, A.M. (2021). Density dependence can obscure nonlethal effects of disturbance on life history of medium-sized cetaceans. *PLoS ONE* 16(6).
- Holberton, R. L., B. Helmuth, and J. C. Wingfield. (1996). The corticosterone stress response in gentoo and king penguins during the non-fasting period. *The Condor*, 98(4), 850–854.
- Holt, M. M., D. P. Noren, V. Veirs, C. K. Emmons, and S. Veirs. (2008). Speaking up: Killer whales (*Orcinus orca*) increase their call amplitude in response to vessel noise. *The Journal of the Acoustical Society of America*, 125(1), EL27–EL32.
- Holt, M. M., D. P. Noren, V. Veirs, C. K. Emmons, and S. Veirs. (2009). Speaking up: Killer whales (*Orcinus orca*) increase their call amplitude in response to vessel noise. *The Journal of the Acoustical Society of America*, 125(1), EL27–EL32.
- Holt, M. M., D. P. Noren, and C. K. Emmons. (2011). Effects of noise levels and call types on the source levels of killer whale calls. *The Journal of the Acoustical Society of America*, 130(5), 3100–3106.

- Holt, M. M., D. P. Noren, R. C. Dunkin, and T. M. Williams. (2015). Vocal performance affects metabolic rate in dolphins: implications for animals communicating in noisy environments. *The Journal of Experimental Biology*, 218(Pt 11), 1647–1654.
- Hood, L. C., P. D. Boersma, and J. C. Wingfield. (1998). The adrenocortical response to stress in incubating Magellanic penguins (*Spheniscus magellanicus*). *The Auk*, 76-84.
- Hooker, S. K., and R. W. Baird. (1999). Deep-diving behaviour of the northern bottlenose whale, *Hyperoodon ampullatus* (Cetacea: *Ziphiidae*). *Proceedings of the Royal Society of London. Series B: Biological Sciences*, 266(1420), 671-676.
- Hooker, S. K., R. W. Baird, and A. Fahlman. (2009). Could beaked whales get the bends? Effect of diving behaviour and physiology on modelled gas exchange for three species: *Ziphius cavirostris*, *Mesoplodon densirostris* and *Hyperoodon ampullatus*. *Respiratory Physiology & Neurobiology*, 167(3), 235-46
- Hooker, S. K., A. Fahlman, M. J. Moore, N. A. de Soto, Y. B. de Quiros, A. O. Brubakk, D. P. Costa, A. M. Costidis, S. Dennison, K. J. Falke, A. Fernandez, M. Ferrigno, J. R. Fitz-Clarke, M. M. Garner, D. S. Houser, P. D. Jepson, D. R. Ketten, P. H. Kvadsheim, P. T. Madsen, N. W. Pollock, D. S. Rotstein, T. K. Rowles, S. E. Simmons, W. Van Bonn, P. K. Weathersby, M. J. Weise, T. M. Williams, and P. L. Tyack. (2012). Deadly diving? Physiological and behavioural management of decompression stress in diving mammals. *Proceedings of the Royal Society B: Biological Sciences*, 279(1731), 1041–1050.
- Hotchkin, C., and S. Parks. (2013). The Lombard effect and other noise-induced vocal modifications: Insight from mammalian communication systems. *Biological Reviews of the Cambridge Philosophical Society*, 88(4), 809–824.
- Houser, D. S., D. A. Helweg, and P. W. B. Moore. (2001). A bandpass filter-bank model of auditory sensitivity in the humpback whale. *Aquatic Mammals*, 27(2), 82-91.
- Houser, D. S., R. Howard, and S. Ridgway. (2001b). Can diving-induced tissue nitrogen supersaturation increase the chance of acoustically driven bubble growth in marine mammals? *Journal of Theoretical Biology*, 213, 183–195.
- Houser, D. S., S. W. Martin, and J. J. Finneran. (2013b). Exposure amplitude and repetition affect bottlenose dolphin behavioral responses to simulated mid-frequency sonar signals. *Journal of Experimental Marine Biology and Ecology*, 443, 123–133.
- Houser, D. S. (2007). Current research trends in cetacean bioacoustics. Proceedings of the Institute of Acoustics Fourth International Conference on Bio-Acoustics. Eds. Dible, S., Dobbins, P., Flint, J., Harland, E. and Lepper, P. April 10-12, Hollywell, Park, Loughborough University. Pp.249-259.
- Houser, D.S., Moore, P.W. (2014) Report on the current status and future of underwater hearing research. National Marine Mammal Foundation, San Diego, CA.
- Houser, D. S., S. Martin, D. E. Crocker, and J. J. Finneran. (2020). Endocrine response to simulated U.S. Navy mid-frequency sonar exposures in the bottlenose dolphin (*Tursiops truncatus*). *The Journal of the Acoustical Society of America*, 147(3), 1681–1687.
- Hu, M., H. Y. Yan, W. S. Chung, J. C. Shiao, and P. P. Hwang. 2009. Acoustical evoked potentials in two cephalopods inferred using the auditory brainstem response (ABR) approach. *Comparative Biochemistry and Physiology Part A: Molecular and Integrative Physiology*, 153, 278-283.
- Huber, H. R., S. J. Jeffries, R. F. Brown, R. L. DeLong, and G. VanBlaricom. (2001). Correcting aerial survey counts of harbor seals (*Phoca vitulina richardsi*) in Washington and Oregon. *Marine Mammal Science*, 17(2), 276–293.

- International Council for Exploration of the Sea (ICES). (2005). Report of the ad-hoc group on the impacts of sonar on cetaceans and fish (AGISC). International Council for the Exploration of the Sea. Accessed:
<http://www.ices.dk/advice/Request/EC/DG±20Env/sonar/agisc05.pdf>.
- International Whaling Commission (IWC). (2005). Report on the Scientific Committee. Annex K. Report of the Standing Working Group on Environmental Concerns. *Journal of Cetacean Research and Management*, (Suppl) 7, 267-305.
- Irvine, L.M., Winsor, M.H., Follett, T.M., Mate, B.R., Palacios, D.M. 2020. Animal Biotelemetry 8, 20.
- Isojunno, S., K. Aoki, C. Cure, P. H. Kvadsheim, and P. J. O. Miller. (2018). Breathing patterns indicate cost of exercise during diving and response to experimental sound exposures in Long-Finned Pilot Whales. *Frontiers in Physiology*, 9, 1462.
- Isojunno, S., C. Curé, P. H. Kvadsheim, F. A. Lam, P. L. Tyack, P. Jacobus, P. J. Wensveen, and P. J. O. Miller. (2016). Sperm whales reduce foraging effort during exposure to 1–2 kHz sonar and killer whale sounds. *Ecological Applications*, 26(1), 77–93.
- Isojunno, S., P. J. Wensveen, F. P. A. Lam, P. H. Kvadsheim, A. M. Von Benda-Beckmann, L. M. M. Lopez, L. Kleivane, E. M. Siegal, and P. J. O. Miller. (2020). When the noise goes on: Received sound energy predicts sperm whale responses to both intermittent and continuous navy sonar. *Journal of Experimental Biology*, 223(7).
- Jacobs, S. R., and Terhune, J. M. (2002), "The effectiveness of acoustic harassment devices in the Bay of Fundy, Canada: seal reactions and a noise exposure model." *Aquatic Mammals* 28, 147-158.
- Jansen, G. (1998). Chapter 25: Physiological Effects of Noise. *Handbook of Acoustical Measurements and Noise Control* (C. Harris, Ed.), Third Edition.
- Jansen, J. K., P. L. Boveng, S. P. Dahle, and J. L. Bengtson. (2010). Reaction of harbor seals to cruise ships. *Journal of Wildlife Management*, 74(6), 1186–1194.
- Jefferson, T. A., D. Fertl, M. Michael, and T. D. Fagin. (2006). An unusual encounter with a mixed school of melon-headed whales (*Peponocephala electra*) and rough-toothed dolphins (*Steno bredanensis*) at Rota, Northern Mariana Islands. *Micronesica*, 38(2), 23–244.
- Jefferson, T. A., M. A. Smultea, & C. A. Bacon. (2014). Southern California Bight marine mammal density and abundance from aerial surveys, 2008–2013. *Journal of Marine Animals and Their Ecology*, 7(2), 14–30.
- Jensen, A. S., and G. K. Silber. (2003). *Large Whale Ship Strike Database*. Retrieved from:
<http://www.nmfs.noaa.gov/pr/overview/publicat.html>
- Jepson, P. D., M. Arbelo, R. Deaville, I. A. R. Patterson, P. Castro, J. R. Baker, E. Degollada, H. M. Ross, P. Herráez, A. M. Pocknell, F. Rodriguez, F. E. Howie, A. Espinosa, R. J. Reid, J. R. Jaber, V. Martin, A. A. Cunningham, and A. Fernandez. (2003). Gas-bubble lesions in stranded cetaceans: Was sonar responsible for a spate of whale deaths after an Atlantic military exercise? *Nature*, 425, 575–576.
- Jepson, P. D., P. M. Bennett, R. Deaville, C. R. Allchin, J. R. Baker, and R. J. Law. (2005). Relationships between polychlorinated biphenyls and health status in harbor porpoises (*Phocoena Phocoena*) stranded in the United Kingdom. *Environmental Toxicology and Chemistry*, 24(1), 238–248.
- Jepson P. D., and R. Deaville. (2009). Investigation of the common dolphin mass stranding event in Cornwall, 9th June 2008. Report to the Department for Environment, Food and Rural Affairs (under a variation to Contract CR0364). Defra website. Available:

http://randd.defra.gov.uk/Document.aspx?Document=WC0601_8031_TRP.pdf Accessed 2013 Mar 11.

- Jessop, T. S., A. D. Tucker, C. J. Limpus, and J. M. Whittier. (2003). Interactions between ecology, demography, capture stress, and profiles of corticosterone and glucose in a free-living population of Australian freshwater crocodiles. *General and Comparative Endocrinology*, 132(1), 161-170.
- Johnson, C. S., M. W. McManus, and D. Skaar. (1989). Masked tonal hearing thresholds in the beluga whale. *The Journal of the Acoustical Society of America*, 85(6), 2651–2654.
- Johnson, S.R., W.J. Richardson, S.B. Yazvenko, S.A. Blokhin, G. Gailey, M.R. Jenkerson, et al. (2007). A western gray whale mitigation and monitoring program for a 3-D seismic survey, Sakhalin Island, Russia. *Environmental Monitoring and Assessment*, 134 (1-3), 1-19.
- Jones, D.M., and D.E. Broadbent. (1998). Chapter 24: Human Performance and Noise. *Handbook of Acoustical Measurements and Noise Control*. Acoustical Society of America, Woodbury, NY USA.
- Jones-Todd, C. M., Pirotta, E., Durban, J.W., Claridge, D.E., Baird, R.W., Falcone, E.A., Schorr, G.S., Watwood, S., Thomas, L. (2021). Discrete-space continuous-time models of marine mammal exposure to Navy sonar. *Ecological Applications*.
- Joyce, T. W., J. W. Durban, D. E. Claridge, C. A. Dunn, L. S. Hickmott, H. Fearnbach, K. Dolan, K. and D. Moretti. (2019). Behavioral responses of satellite tracked Blainville's beaked whales (*Mesoplodon densirostris*) to mid-frequency active sonar. *Marine Mammal Science*.
- Juanes, F., K. Cox, and L. Brennan. (2017). The effect of anthropogenic and biological noise on fish behavior and physiology: A meta-analysis. *Journal of the Acoustic Society of America*, 141(3862).
- Juhasz, A. L., and R. Naidu. (2007). Explosives: Fate, dynamics, and ecological impact in terrestrial and marine environments. *Reviews of Environmental Contamination and Toxicology*, 191, 163–215.
- Kastak, D., B. L. Southall, R. J. Schusterman, and C. R. Kastak. (2005). Underwater temporary threshold shift in pinnipeds: Effects of noise level and duration. *The Journal of the Acoustical Society of America*, 118(5), 3154–3163.
- Kastak, D., C. Reichmuth, M. M. Holt, J. Mulsow, B. L. Southall, and R. J. Schusterman. (2007). Onset, growth, and recovery of in-air temporary threshold shift in a California sea lion (*Zalophus californianus*). *The Journal of Acoustical Society of America*, 122(5), 2916–2924.
- Kastelein, R. A., D. de Haan, N. Vaughan, C. Staal, and N. M. Schooneman. (2001). The influence of three acoustic alarms on the behaviour of harbour porpoises (*Phocoena phocoena*) in a floating pen. *Marine Environmental Research*, 52, 351-371.
- Kastelein, R. A., W. C. Verboom, M. Muijsers, N. V. Jennings, & S. van der Heul. (2005). Influence of acoustic emissions for underwater data transmission on the behaviour of harbour porpoises (*Phocoena phocoena*) in a floating pen. *Marine Environmental Research*, 59, 287–307.
- Kastelein, R. A., N. Jennings, W. C. Verboom, D. De Haan, and N. M. Schooneman. (2006a). Differences in the response of a striped dolphin (*Stenella coeruleoalba*) and a harbour porpoise (*Phocoena phocoena*) to an acoustic alarm. *Marine Environmental Research*, 61(3), 363-378.
- Kastelein, R. A., S. van der Heul, W. C. Verboom, R. J. Triesscheijn, and N. V. Jennings. (2006b). The influence of underwater data transmission sounds on the displacement

- behaviour of captive harbour seals (*Phoca vitulina*). *Marine Environmental Research*, 61(1), 19–39.
- Kastelein, R. A., P. J. Wensveen, L. Hoek, L., and J. M. Terhune. (2009). Underwater hearing sensitivity of harbor seals (*Phoca vitulina*) for narrow noise bands between 0.2 and 80 kHz. *Journal of the Acoustical Society of America*, 126(1), 476–483.
- Kastelein, R. A., R. Gransier, L. Hoek, A. Macleod, and J. M. Terhune. (2012a). Hearing threshold shifts and recovery in harbor seals (*Phoca vitulina*) after octave-band noise exposure at 4 kHz. *The Journal of the Acoustical Society of America*, 132(4), 2745–2761.
- Kastelein, R. A., R. Gransier, L. Hoek, and J. Olthuis. (2012b). Temporary threshold shifts and recovery in a harbor porpoise (*Phocoena phocoena*) after octave-band noise at 4 kHz. *The Journal of the Acoustical Society of America*, 132(5), 3525–3537.
- Kastelein, R. A., R. Gransier, L. Hoek, and M. Rambags. (2013a). Hearing frequency thresholds of a harbor porpoise (*Phocoena phocoena*) temporarily affected by a continuous 1.5 kHz tone. *The Journal of the Acoustical Society of America*, 134(3), 2286–2292.
- Kastelein, R. A., L. Hoek, R. Gransier, M. Rambags, and N. Claeys. (2014b). Effect of level, duration, and inter-pulse interval of 1–2 kHz sonar signal exposures on harbor porpoise hearing. *The Journal of the Acoustical Society of America*, 136(1), 412–422.
- Kastelein, R. A., J. Schop, R. Gransier, and L. Hoek. (2014c). Frequency of greatest temporary hearing threshold shift in harbor porpoises (*Phocoena phocoena*) depends on the noise level. *The Journal of the Acoustical Society of America*, 136(3), 1410–1418.
- Kastelein, R. A., R. Gransier, J. Schop, and L. Hoek. (2015b). Effects of exposure to intermittent and continuous 6–7 kHz sonar sweeps on harbor porpoise (*Phocoena phocoena*) hearing. *The Journal of the Acoustical Society of America*, 137(4), 1623–1633.
- Kastelein, R. A., L. Helder-Hoek, G. Janssens, R. Gransier, and T. Johansson. (2015d). Behavioral responses of harbor seals (*Phoca vitulina*) to sonar signals in the 25-kHz range. *Aquatic Mammals*, 41(4), 388–399.
- Kastelein, R. A., L. Hoek, R. Gransier, C. A. F. de Jong, J. M. Terhune, and N. Jennings. (2015e). Hearing thresholds of a harbor porpoise (*Phocoena phocoena*) for playbacks of seal scarer signals, and effects of the signals on behavior. *Hydrobiologia*, 756(1), 89–103.
- Kastelein, R. A., L. Helder-Hoek, S. Van de Voorde, S. de Winter, S. Janssen, and M. A. Ainslie. (2018b). Behavioral responses of harbor porpoises (*Phocoena phocoena*) to sonar playback sequences of sweeps and tones (3.5–4.1 kHz). *Aquatic Mammals*, 44(4), 389–404.
- Kastelein, R. A., L. Helder-Hoek, and R. Gransier. (2019e). Frequency of greatest temporary hearing threshold shift in harbor seals (*Phoca vitulina*) depends on fatiguing sound level. *The Journal of the Acoustical Society of America*, 145(3), 1353–1362.
- Kastelein, R. A., L. Helder-Hoek, R. van Kester, R. Huisman, and R. Gransier. (2019f). Temporary hearing threshold shift in harbor porpoises (*Phocoena phocoena*) due to one-sixth octave noise band at 16 kHz. *Aquatic Mammals*, 45(3), 280–292.
- Kastelein, R. A., L. Helder-Hoek, S. Cornelisse, L. A. E. Huijser, and R. Gransier. (2019d). Temporary hearing threshold shift in harbor porpoises (*Phocoena phocoena*) due to one-sixth octave noise band at 32 kHz. *Aquatic Mammals*, 45(5), 549–562.
- Kastelein, R. A., S. A. Cornelisse, L. A. Huijser, and L. Helder-Hoek. (2020a). Temporary hearing threshold shift in harbor porpoises (*Phocoena phocoena*) due to one-sixth-octave noise bands at 63 kHz. *Aquatic Mammals*, 46(2), 167–182.

- Kastelein, R. A., L. Helder-Hoek, S. A. Cornelisse, L. A. E. Huijser, and J. M. Terhune. (2020b). Temporary hearing threshold shift in harbor seals (*Phoca vitulina*) due to a one-sixth-octave noise band centered at 32 kHz. *The Journal of the Acoustical Society of America*, 147(3).
- Kastelein, R. A., L. Helder-Hoek, S.A. Cornelisse, L. Huijser, R. Gransier. (2020c). Temporary Hearing Threshold Shift at Ecologically Relevant Frequencies in a Harbor Porpoise (*Phocoena phocoena*) Due to Exposure to a Noise Band Centered at 88.4 kHz. *Aquatic Mammals*. 46. 444-453. 10.1578/AM.46.5.2020.444.)
- Kastelein, R. A., C. Parlog, L. Helder-Hoek, S.A. Cornelisse, L.A.E. Huijser, and J.M. Terhune. (2020d). Temporary hearing threshold shift in harbor seals (*Phoca vitulina*) due to a one-sixth octave noise band centered at 40 kHz. *The Journal of the Acoustical Society of America* 147(3):1966–1976.
- Kastelein, R. A., L. Helder-Hoek, S. A. Cornelisse, L. N. Defillet, L. A. E. Huijser, and R. Gransier. (2021a). Temporary hearing threshold shift in a harbor porpoise (*Phocoena phocoena*) due to exposure to a continuous one-sixth-octave noise band centered at 0.5 kHz. *Aquatic Mammals*, 47(2), 135–145.
- Kastelein, R. A., L. Helder-Hoek, L. N. Defillet, L. A. E. Huijser, J. M. Terhune, and R. Gransier. (2021b). Temporary hearing threshold shift in California Sea Lions (*Zalophus californianus*) due to one-sixth-octave noise bands centered at 2 and 4 kHz: Effect of duty cycle and testing the equal-energy hypothesis. *Aquatic Mammals*, 47(4), 394–418. DOI:10.1578/AM.47.4.2021.394
- Kastelein, Ronald A., Helder-Hoek, L., Defillet, L.N., Kuiphof, F., Huijser, L.A.E., and Terhune, J.M. "Temporary Hearing Threshold Shift in California Sea Lions (*Zalophus californianus*) Due to One-Sixth-Octave Noise Bands Centered at 8 and 16 kHz: Effect of Duty Cycle and Testing the Equal-Energy Hypothesis." *Aquatic Mammals*, vol. 48, no. 1, Jan. 2022, pp. 36+.
- Keevin, T. M., and G. L. Hempen. (1997). *The Environmental Effects of Underwater Explosions with Methods to Mitigate Impacts*. St. Louis, MO: U.S. Army Corps of Engineers.
- Kelley, C., G. Carton, M. Tomlinson, and A. Gleason. (2016). Analysis of towed camera images to determine the effects of disposed mustard-filled bombs on the deep water benthic community off south Oahu. *Deep Sea Research Part II: Topical Studies in Oceanography*, 128, 34–42.
- Ketten, D. R. (1995). Estimates of blast injury and acoustic trauma zones for marine mammals from underwater explosions. Pages 391-407 In R. A. Kastelein, J. A. Thomas, and P. E. Nachtigall, editors. *Sensory Systems of Aquatic Mammals*. De Spil Publishers, Woerden.
- Ketten, D. R. (2000). Cetacean Ears. In W. Au, A. N. Popper & R. R. Fay (Eds.), *Hearing by Whales and Dolphins* (1st ed., pp. 43–108). New York, NY: Springer-Verlag.
- Ketten, D. R., Simmons, J.A., Riquimaroux, H., Simmons, A.M. (2021). Functional analyses of peripheral auditory system adaptations for echolocation in air vs. water. *Frontiers in Ecology and Evolution* 9.
- King, S. L., R. S. Schick, C. Donovan, C. G. Booth, M. Burgman, L. Thomas, and J. Harwood. (2015). An interim framework for assessing the population consequences of disturbance. *Methods in Ecology and Evolution*, 6(10), 1150–1158.
- Kinney, G. F., and K. J. Graham. (1985). *Explosive Shocks in Air* (2nd ed.). New York, NY: Springer-Verlag.

- Knowlton, A.R. and S.D. Kraus. 2001. Mortality and serious injury of northern right whales (*Eubalaena glacialis*) in the western North Atlantic Ocean. *Journal of Cetacean Research and Management Special Issue* 2:193-208.
- Klinck, H., S. L. Niekirk, S. Fregosi, K. Klinck, D. K. Mellinger, S. Lastuka, G. B. Shilling, and J. C. Luby. (2016). Cetacean Studies in the Gulf of Alaska Temporary Maritime Activities Area in July-August 2015: Passive Acoustic Monitoring of Marine Mammals Using Gliders. Final Report. Honolulu, HI: Naval Facilities Engineering Command.
- Koide, S., J. A. K. Silva, V. Dupra, and M. Edwards. (2016). Bioaccumulation of chemical warfare agents, energetic materials, and metals in deep-sea shrimp from discarded military munitions sites off Pearl Harbor. *Deep Sea Research Part II: Topical Studies in Oceanography*, 128, 53–62.
- Kooyman, G. L., J. P. Schroeder, D. M. Denison, D. D. Hammond, J. J. Wright, and W. P. Bergman. (1972). Blood nitrogen tensions of seals during simulated deep dives. *American Journal of Physiology*, 223(5), 1016–1020.
- Krausman, P. R., L. K. Harris, C. L. Blasch, K. K. G. Koenen, and J. Francine. 2004. Effects of military operations on behavior and hearing of endangered Sonoran pronghorn. *Wildlife Monographs*, 157, 1-41.
- Kryter, K.D. (1985). *The Effects of Noise on Man*. Academic Press.
- Kvadsheim, P., Benders, F., Miller, P., Doksaeter, L., Knudsen, F., Tyack, P. and Godø, O. R. (2007). *Herring (sild), killer whales (spekkhogger) and sonar: The 3S-2006 cruise report with preliminary results*. Kjeller: Forsvarets forskningsinstitutt/Norwegian Defence Research Establishment (FFI).
- Kvadsheim, P. H., E. M. Sevaldsen, D. Scheie, L. P. Folkow, and A. S. Blix. (2010). Effects of naval sonar on seals. Kjeller, Norway: Norwegian Defense Research Establishment.
- Kvadsheim, P. H., P. J. O. Miller, P. L. Tyack, L. D. Sivle, F. P. A. Lam, and A. Fahlman. (2012). Estimated tissue and blood N2 levels and risk of decompression sickness in deep-, intermediate-, and shallow-diving toothed whales during exposure to naval sonar. *Frontiers in Physiology*, 3(Article 125).
- Kvadsheim, P. H., S. DeRuiter, L. D. Sivle, J. Goldbogen, R. Roland-Hansen, P. J. O. Miller, F. A. Lam, J. Calambokidis, A. Friedlaender, F. Visser, P. L. Tyack, L. Kleivane, and B. Southall. (2017). Avoidance responses of minke whales to 1-4 kHz naval sonar. *Marine Pollution Bulletin*, 121(1–2), 60–68.
- Ladich, F., and A. N. Popper. (2004). Parallel Evolution in Fish Hearing Organs. In G. A. Manley, A. N. Popper & R. R. Fay (Eds.), *Evolution of the Vertebrate Auditory System, Springer Handbook of Auditory Research*. New York, NY: Springer-Verlag.
- Ladich, F., and T. Schulz-Mirbach. (2016). Diversity in Fish Auditory Systems: One of the Riddles of Sensory Biology. *Frontiers in Ecology and Evolution*, 4, 26.
- Lagerquist, B. A., B. R. Mate, J. G. Ortega-Ortiz, M. Winsor, and J. Urbán-Ramirez. (2008). Migratory movements and surfacing rates of humpback whales (*Megaptera novaeangliae*) satellite tagged at Socorro Island, Mexico. *Marine Mammal Science*, 24(4), 815–830.
- Laggner, D. (2009). Blue whale (*Baleanoptera musculus*) ship strike threat assessment in the Santa Barbara Channel, California. (Master's Thesis). Evergreen State College.
- Laidre, K. L. and Shelden, K. E.W. and Rugh, D.J. and Mahoney, B.A. (2000) *Beluga, Delphinapterus leucas, Distribution and Survey Effort in the Gulf of Alaska*. Marine Fisheries Review, 62(3), pp. 27-36.

- Laist, D. W., A. R. Knowlton, J. G. Mead, A. S. Collet, and M. Podesta. (2001). Collisions between ships and whales. *Marine Mammal Science*, 17(1), 35–75.
- Lambrechts, M. M. (1996). Organization of bird song and constraints on performance. - In: Kroodsma, D. E. and Miller, E. H. (eds). *Ecology and evolution of acoustic communication in birds*. Cornell University Press, Ithaca and London, pp. 305-320.
- Lammers, M. O., A. A. Pack, and L. Davis. (2003). Historical evidence of whale/vessel collisions in Hawaiian waters (1975—Present). OSI Technical Report 2003-01. 25 pp.
- Landsberg, P.G. (2000). Underwater blast injuries. *Trauma Ener Med.* 17(2).
- Lankford, S. E., T. E. Adams, R. A. Miller, and J. J. Cech Jr. (2005). The cost of chronic stress: impacts of a nonhabituated stress response on metabolic variables and swimming performance in sturgeon. *Physiological and Biochemical Zoology*, 78(4), 599-609.
- Lesage, V., C. Barrette, M. C. S. Kingsley, and B. Sjare. (1999). The effect of vessel noise on the vocal behavior of belugas in the St. Lawrence River estuary, Canada. *Marine Mammal Science*, 15(1), 65–84.
- Lignon, A.D., R. W. Baird, D. L. Webster, D. J. McSweeney, and G. S. Schorr. (2007). Habitat preferences of melon-headed whales (*Peponocephala electra*) around the main Hawaiian Islands: Implications for interpretation of the 2004 Hanalei Bay stranding event. Abstract, 17th Biennial Conference on the Biology of Marine Mammals, Society of Marine Mammalogy, Cape Town, South Africa, 29 November–3 December 2008.
- Lillis, A., D. D. Bohnenstiehl, and D. Eggleston. (2014). Soundscape manipulation enhances larval recruitment of a reef-building mollusk. *PeerJ*, 3, 10.7717/peerj.999.
- Liu, M., L. Dong, M. Lin, and S. Li. (2017). Broadband ship noise and its potential impacts on Indo-Pacific humpback dolphins: Implications for conservation and management. *The Journal of the Acoustical Society of America*, 142(5), 2766.
- Lohr, B., T. F. Wright, and R. J. Dooling. (2003). Detection and discrimination of natural calls in masking noise by birds: estimating the active space of a signal. *Animal Behaviour*, 65(4), 763-777.
- Lonsbury-Martin, B. L., G. K. Martin, and B. A. Bohne. (1987). Repeated TTS exposures in monkeys: Alterations in hearing, cochlear structure, and single-unit thresholds. *The Journal of the Acoustical Society of America*, 81(5), 1507-1518.
- Lozano, E. and M. Hente. (2014). The Effects of Disturbances on Harbor Seals on a Haul-Out site Off Yellow Island, Washington. Ecology and Conservation of Marine Birds and Mammals. Friday Harbor Laboratories, University of Washington.
- Luick, B. R., J. A. Kitchens, R. G. White, and S. M. Murphy. (1996). Modeling energy and reproductive costs in caribou exposed to low flying military jet aircraft. *Rangifer*, 16(4), 209-212.
- Lusseau, D. (2006). The short-term behavioral reactions of bottlenose dolphins to interactions with boats in Doubtful Sound, New Zealand. *Marine Mammal Science*, 22(4), 802–818.
- Lusseau, D., and L. Bejder. (2007). The Long-term Consequences of Short-term Responses to Disturbance Experiences from Whalewatching Impact Assessment. *International Journal of Comparative Psychology*, 20, 228-236.
- Lyamin, O. I., S. M. Korneva, V. V. Rozhnov, and L. M. Mukhametov. (2011). Cardiorespiratory changes in beluga in response to acoustic noise. *Doklady Biological Sciences*, 440(5), 704–707.
- Madsen, J. (1994). Impacts on disturbance on migratory waterfowl. *IBIS* 137, S67-S74.

- Madsen, P. T., M. Johnson, P. J. O. Miller, N. A. Soto, J. Lynch, and P. Tyack. (2006a). Quantitative measures of air-gun pulses recorded on sperm whales (*Physeter macrocephalus*) using acoustic tags during controlled exposure experiments. *The Journal of Acoustical Society of America*, 120(4), 2366–2379.
- Malme, C. I., P. R. Miles, C. W. Clark, P. Tyack, and J. E. Bird. (1984). Investigations of the potential effects of underwater noise from petroleum industry activities on migrating gray whale behavior/Phase II: January 1984 migration. BBN Rep. 5586. Rep. from Bolt Beranek & Newman Inc., Cambridge, MA, for MMS, Alaska OCS Region, Anchorage, AK. NTIS PB86-218377.
- Malme, C. I., B. Würsig, J. E. Bird, and P. Tyack. (1986). *Behavioral responses of gray whales to industrial noise: Feeding observations and predictive modelling* (Outer Continental Shelf Environmental Assessment Program, Final Report of Principal Investigators MMS 88-0048). Anchorage, AK: Bolt Beranek, & Newman, Inc.
- Malme, C. I., B. Würsig, J. E. Bird, and P. Tyack. (1988). Observations of feeding gray whale responses to controlled industrial noise exposure. In W. M. Sackinger, M. O. Jeffries, J. L. Imm & S. D. Tracey (Eds.), *Port and Ocean Engineering Under Arctic Conditions* (Vol. 2, pp. 55–73). Fairbanks, AK: Geophysical Institute, University of Alaska.
- Mann, D. A. (2016). Acoustic Communications in Fishes and Potential Effects of Noise. In A. N. Popper & A. D. Hawkins (Eds.), *The Effects of Noise on Aquatic Life II* (pp. 673–678). New York, NY: Springer.
- Manzano-Roth, R. A., E. A. Henderson, S. W. Martin, and B. Matsuyama. (2013). *Impacts of a U.S. Navy training event on beaked whale dives in Hawaiian waters*. Pearl Harbor, HI: U.S. Navy Pacific Fleet.
- Manzano-Roth, R., E. E. Henderson, S. W. Martin, C. Martin, and B. M. Matsuyama. (2016). Impacts of U.S. Navy Training Events on Blainville's Beaked Whale (*Mesoplodon densirostris*) Foraging Dives in Hawaiian Waters. *Aquatic Mammals*, 42(4), 507–518.
- Marten, K., and P. Marler. (1977). Sound transmission and its significance for animal vocalization. *Behavioral ecology and sociobiology*, 2(3), 271–290.
- Martin, S. W., C. R. Martin, B. M. Matsuyama, and E. E. Henderson. (2015). Minke whales (*Balaenoptera acutorostrata*) respond to navy training. *The Journal of the Acoustical Society of America*, 137(5), 2533–2541.
- Mate, B. R., D. M. Palacios, C. S. Baker, B. A. Lagerquist, L. M. Irvine, T. Follett, D. Steel, C. Hayslip, and M. H. Winsor. (2017). Baleen Whale Tagging in Support of Marine Mammal Monitoring Across Multiple Navy Training Areas Covering the Years 2014, 2015, and 2016. Final Report. Pearl Harbor, HI: Naval Facilities Engineering Command, Pacific.
- Mate, B.R., D.M. Palacios, C.S. Baker, B.A. Lagerequist, L.M. Irvine, T.M. Follett, D. Steel, C.E. Hayslip. 2020. Humpback Whale Tagging in Support of Marine Mammal Monitoring Across Multiple Navy Training Areas in the Pacific Ocean: Preliminary Summary of Field Tagging Effort in Washington in September-October 2019. Newport, OR: Oregon State University, Marine Mammal Institute.
- Mate, B.R., D.M. Palacios, C.S. Baker, B.A. Lagerquist, L.M. Irvine, T. Follett, D. Steel, C.E. Hayslip, and M.H. Winsor. 2019. Humpback Whale Tagging in Support of Marine Mammal Monitoring Across Multiple Navy Training Areas in the Pacific Ocean: Final Report for the Hawaiian Breeding Area in Spring 2018, Including Historical Data from Previous Tagging Efforts. Prepared for Commander, US Pacific Fleet, and Commander, Naval Sea Systems Command. Submitted to Naval Facilities Engineering Command Southwest, San Diego, Calif

- ornia, under Cooperative Ecosystem Studies Unit, Department of the Navy Cooperative Agreement No. N62473-17-2-0001. 25 April 2019. 106 pp.
- Mate, B.R., D.M. Palacios, C.S. Baker, B.A. Lagerquist, L.M. Irvine, T. Follett, and D. Steel. 2019. Humpback Whale Tagging in Support of Marine Mammal Monitoring Across Multiple Navy Training Areas in the Pacific Ocean: Preliminary Summary of Field Tagging Efforts off the Pacific Northwest in Summer 2018. Prepared for Commander, U.S. Pacific Fleet, and Commander, Naval Sea Systems Command. Submitted to Naval Facilities Engineering Command Southwest, San Diego, California, under Cooperative Ecosystem Studies Unit (CESU), Department of the Navy (DON) Cooperative Agreement No. N62473-17-2-0001. 27 March 2019.
- Mate, B.R., D.M. Palacios, C.S. Baker, B.A. Lagerquist, L.M. Irvine, T.M. Follett, D. Steel, and C.E. Hayslip. 2019. Humpback Whale Tagging in Support of Marine Mammal Monitoring Across Multiple Navy Training Areas in the Pacific Ocean: Preliminary Summary of Field Tagging Effort in Hawaii in March 2019. Prepared for Commander, U.S. Pacific Fleet, and Commander, Naval Sea Systems Command. Submitted to Naval Facilities Engineering Command, Southwest, under Cooperative Ecosystem Studies Unit, Department of the Navy Cooperative Agreement No. N62473-19-2-0002. Oregon State University, Newport, Oregon, 15 August 2019. 14 pp.
- Mate, B. R., D. M. Palacios, C. S. Baker, B. A. Lagerquist, L. M. Irvine, T. Follett, D. Steel, C. E. Hayslip, and M. H. Winsor. (2018). Humpback Whale Tagging in Support of Marine Mammal Monitoring Across Multiple Navy Training Areas in the Pacific Ocean: Final Report for Feeding Areas off the US West Coast in Summer-Fall 2017, Including Historical Data from Previous Tagging Efforts. San Diego, CA: Naval Facilities Engineering Command Southwest.
- Mate, B.R., D.M. Palacios, C.S. Baker, L.M. Irvine, B.A. Lagerquist, T. Follett, D. Steel, and C.E. Hayslip. 2017 Humpback Whale Tagging in Support of Marine Mammal Monitoring Across Multiple Navy Training Areas in the Pacific Ocean: Preliminary Summary of Field Tagging Effort off the US West Coast in Summer-Fall 2017. Prepared for Commander, U.S. Pacific Fleet. Submitted to Naval Facilities Engineering Command Southwest, San Diego, California, under Cooperative Ecosystem Studies Unit (CESU), Department of the Navy (DON) Cooperative Agreement No. N62473-17-2-0001. 22 December 2017.
- Mate, B.R., D.M. Palacios, C.S. Baker, B.A. Lagerquist, L.M. Irvine, T. Follett, D. Steel, C. Hayslip, and M.H. Winsor. 2017. Baleen Whale Tagging in Support of Marine Mammal Monitoring Across Multiple Navy Training Areas. Preliminary Report. Prepared for Commander, U.S. Pacific Fleet. Submitted to Naval Facilities Engineering Command Pacific, Pearl Harbor, Hawaii under Contract No. N62470-15-8006 (FZN1) issued to HDR, Inc., San Diego, California. January 2017.
- Mate, B.R., D.M. Palacios, C.S. Baker, B.A. Lagerquist, L.M. Irvine, T.M. Follett, D. Steel, and C.E. Hayslip. 2020. Humpback Whale Tagging in Support of Marine Mammal Monitoring Across Multiple Navy Training Areas in the Pacific Ocean: Preliminary Summary of Field Tagging Effort in Washington in September-October 2019. Prepared for Commander, U.S. Pacific Fleet. Submitted to Naval Facilities Engineering Command, Southwest, under Cooperative Ecosystem Studies Unit, Department of the Navy Cooperative Agreement No. N62473-19-2-0002. Oregon State University, Newport, Oregon, 9 January 2020. 23 pp.
- Matthews, M.-N.R., A. Schlesinger, and D. Hannay. (2016). Cumulative and Chronic Effects in the Beaufort and Chukchi Seas: Estimating Reduction of Listening Area and

- Communication Space Due to Seismic and Exploratory Drilling Activities in Support of the NMFS PEIS. JASCO Doc. #01072. Tech. Rep. by JASCO Appl. Sci. AECOM. JASCO Document #01072. Technical Report by JASCO Applied Sciences for AECOM
- Maybaum, H. L. (1993). Responses of humpback whales to sonar sounds. *The Journal of the Acoustical Society of America*, 94(3), 1848-1849.
- McCarthy, E., D. Moretti, L. Thomas, N. DiMarzio, R. Morrissey, S. Jarvis, J. Ward, A. Izzi, and A. Dilley. (2011). Changes in spatial and temporal distribution and vocal behavior of Blainville's beaked whales (*Mesoplodon densirostris*) during multiship exercises with mid-frequency sonar. *Marine Mammal Science*, 27(3), E206–E226.
- McCauley, R. D., M. N. Jenner, C. Jenner, K. A. McCabe, and J. Murdoch. (1998). The response of humpback whales (*Megaptera novaeangliae*) to offshore seismic survey noise: Preliminary results of observations about a working seismic vessel and experimental exposures. *APPEA Journal*, 692–706.
- McCauley, R. D., J. Fewtrell, A. J. Duncan, C. Jenner, M. N. Jenner, J. D. Penrose, R. I. T. Prince, A. Adhitya, J. Murdoch, & K. McCabe. (2000a). Marine seismic surveys—A study of environmental implications. *Australian Petroleum Production Exploration Association Journal*, 692–708.
- McDonald, M. A., J. A. Hildebrand, and S. C. Webb. (1995). Blue and fin whales observed on a seafloor array in the Northeast Pacific. *The Journal of Acoustical Society of America*, 98(2), 712–721.
- McDonald, M. A., J. A. Hildebrand, S. M. Wiggins, D. W. Johnston, and J. J. Polovina. (2009). An acoustic survey of beaked whales at Cross Seamount near Hawaii. *The Journal of the Acoustical Society of America*, 125(2), 624–627.
- McEwen, B. S., and J. C. Wingfield. (2003). The concept of allostatic in biology and biomedicine. *Hormones and Behavior*, 43(1), 2-15.
- McHuron, E. A., L. K. Schwarz, D. P. Costa, and M. Mangel. (2018). A state-dependent model for assessing the population consequences of disturbance on income-breeding mammals. *Ecological Modelling*, 385, 133–144.
- McHuron, E. A., et al. (2021). Predicting the population consequences of acoustic disturbance, with application to an endangered gray whale population. *Ecological Applications*: e02440.
- Melcón, M. L., A. J. Cummins, S. M. Kerosky, L. K. Roche, S. M. Wiggins, and J. A. Hildebrand. (2012). Blue whales respond to anthropogenic noise. *PLoS ONE*, 7(2).
- Meissner, A. M., F. Christiansen, E. Martinez, M. D. Pawley, M. B. Orams, and K. A. Stockin. (2015). Behavioural effects of tourism on oceanic common dolphins, *Delphinus* sp., in New Zealand: The effects of Markov analysis variations and current tour operator compliance with regulations. *PLoS ONE*, 10(1), e0116962.
- Miksis, J. L., R. C. Connor, M. D. Grund, D. P. Nowacek, A. R. Solow, and P. L. Tyack. (2001). Cardiac responses to acoustic playback experiments in the captive bottlenose dolphin (*Tursiops truncatus*). *Journal of Comparative Psychology*, 115(3), 227–232.
- Miksis-Olds, J.L. (2006). Manatee Response to Environmental Noise. A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy in Oceanography. University of Rhode Island, 2006.
- Miksis-Olds, J. L., P. L. Donaghay, J. H. Miller, and P. L. Tyack. (2005). Environmental noise levels affect the activity budget of the Florida manatee. *The Journal of the Acoustical Society of America*, 118(3), 1910-1910.

- Miksis-Olds, J. L., P. L. Donaghay, J. H. Miller, P. L. Tyack, and J. A. Nystuen. (2007). Noise level correlates with manatee use of foraging habitats. *The Journal of the Acoustical Society of America*, 121(5), 3011-3020.
- Miller, P. J. O., N. Biassoni, A. Samuels, and P. L. Tyack. (2000). Whale songs lengthen in response to sonar. *Nature*, 405(6789), 903.
- Miller, P. J. O., M. P. Johnson, P. T. Madsen, N. Biassoni, M. Quero, and P. L. Tyack. (2009). Using at-sea experiments to study the effects of airguns on the foraging behavior of sperm whales in the Gulf of Mexico. *Deep Sea Research I*, 56(7), 1168–1181.
- Miller, P., R. Antunes, A. C. Alves, P. Wensveen, P. Kvadsheim, L. Kleivane, N. Nordlund, F.-P. Lam, S. van IJsselmuiden, F. Visser, and P. Tyack. (2011). *The 3S experiments: studying the behavioural effects of naval sonar on killer whales (Orcinus orca), sperm whales (Physeter macrocephalus), and long-finned pilot whales (Globicephala melas) in Norwegian waters* (Scottish Oceans Inst. Tech. Rept., SOI-2011-001).
- Miller, P. J. O., P. H. Kvadsheim, F.-P. A. Lam, P. J. Wensveen, R. Antunes, A. C. Alves, F. Visser, L. Kleivane, P. L. Tyack, and L. D. Sivle. (2012). The severity of behavioral changes observed during experimental exposures of killer (*Orcinus orca*), long-finned pilot (*Globicephala melas*), and sperm (*Physeter macrocephalus*) whales to naval sonar. *Aquatic Mammals*, 38(4), 362–401.
- Miller, P. J., P. H. Kvadsheim, F. P. Lam, P. L. Tyack, C. Cure, S. L. DeRuiter, L. Kleivane, L. D. Sivle, I. S. P. van, F. Visser, P. J. Wensveen, A. M. von Benda-Beckmann, L. M. Martin Lopez, T. Narazaki, and S. K. Hooker. (2015). First indications that northern bottlenose whales are sensitive to behavioural disturbance from anthropogenic noise. *Royal Society Open Science*, 2(6), 140484.
- Moberg, G. P. (1987). A model for assessing the impact of behavioral stress on domestic animals. *Journal of Animal Science*, 65(5), 1228-1235.
- Moberg, G. P., and J. A. Mench. (2000). *The Biology of Animal Stress: Basic Principles and Implications for Animal Welfare*. London, UK: CAB International.
- Mobley, J. R. (2007). Marine Mammal Monitoring Surveys in Support of "Valiant Shield" Training Exercises (Aug. 13-17, 2007)—Final Report. Pearl Harbor, HI: Commander, U.S. Pacific Fleet.
- Moody, D. M. (2006). Three-dimensional underwater sound pressure field due to sonic boom. *The Journal of the Acoustical Society of America*, 119(3), 1368–1372.
- Mooney, T. A., P. E. Nachtigall, M. Breese, S. Vlachos, and W. W. L. Au. (2009a). Predicting temporary threshold shifts in a bottlenose dolphin (*Tursiops truncatus*): The effects of noise level and duration. *Journal of Acoustical Society of America*, 125(3), 1816–1826.
- Mooney, T. A., P. E. Nachtigall, and S. Vlachos. (2009b). Sonar-induced temporary hearing loss in dolphins. *Biology Letters*, 5(4), 565–567.
- Moore, J. E., and J. P. Barlow. (2013). Declining abundance of beaked whales (Family Ziphidae) in the California Current Large Marine Ecosystem. *PLoS ONE*, 8(1), e52770.
- Morete, M. E., T. L. Bisi, and S. Rosso. (2007). Mother and calf humpback whale responses to vessels around the Abrolhos Archipelago, Bahia, Brazil. *Journal of Cetacean Research Management*, 9(3), 241-248.
- Moretti, D., N. DiMarzio, R. Morrissey, E. McCarthy, and S. Jarvis. (2009, 7-10 December). *An opportunistic study of the effect of sonar on marine mammals, marine mammal monitoring on navy ranges (M3R)*. Paper presented at the 2009 ONR Marine Mammal Program Review, Alexandria, VA.

- Moretti, D. Marques T.A., Thomas, L., DiMarzio, N., Dilley, A., Morrissey, R., McCarthy, E., Ward, J., and Jarvis, S. (2010). A dive counting density estimation method for Blainville's beaked whale (*Mesoplodon densirostris*) using a bottom-mounted hydrophone field as applied to a Mid-Frequency Active (MFA) sonar operation. *Applied Acoustics*. 71(11). 1036-1042.
- Moretti, D., L. Thomas, T. Marques, J. Harwood, A. Dilley, B. Neales, J. Shaffer, E. McCarthy, L. New, S. Jarvis, and R. Morrissey. (2014). A risk function for behavioral disruption of Blainville's beaked whales (*Mesoplodon densirostris*) from mid-frequency active sonar. *PLoS ONE*, 9(1), e85064.
- Morton, A. B., and H. K. Symond. (2002). Displacement of *Orcinus orca* (L.) by high amplitude sound in British Columbia, Canada. *ICES Journal of Marine Science*, 59(1), 71-80.
- Müllner, A., K. E. Linsenmair, and M. Wikelski. (2004). Exposure to ecotourism reduces survival and affects stress response in hoatzin chicks (*Opisthocomus hoazin*). *Biological Conservation*, 118(4), 549-558.
- Murray, C. C., L.C. Hannah, T. Doniol-Valcroze, B.M. Wright, E.H. Stredulinsky, J.C. Nelson, A. Locke, R.C. Lacy. (2021). A cumulative effects model for population trajectories of resident killer whales in the Northeast Pacific. *Biological Conservation* 257.
- 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. Ivashchenko, 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. R. Zerbini. (2017). Alaska Marine Mammal Stock Assessments, 2016 (NOAA Technical Memorandum NMFS-AFSC-323). Seattle, WA: National Marine Mammal Laboratory.
- Muto, M. M., V. T. Helker, R. P. Angliss, 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. Ivashchenko, A. S. Kennedy, J. M. London, S. A. Mizroch, R. R. Ream, E. L. Richmond, K. E. W. Shelden, K. L. Sweeney, R. G. Towell, P. R. Wade, J. M. Waite, and A. N. Zerbini. (2018b). Alaska Marine Mammal Stock Assessments, 2018. Draft. Seattle, WA: National Marine Fisheries Service, Alaska Fisheries Science Center.
- Muto, M. M., V. T. Helker, B. J. Delean, R. P. Angliss, P. L. Boveng, J. M. Breiwick, B. M. Brost, 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. Ivashchenko, A. S. Kennedy, J. M. London, S. A. Mizroch, R. R. Ream, E. L. Richmond, K. E. W. Shelden, K. L. Sweeney, R. G. Towell, P. R. Wade, J. M. Waite, and A. N. Zerbini. (2020). Alaska Marine Mammal Stock Assessments, 2019 (NOAA Technical Memorandum NMFS-AFSC-404). Juneau, AK: U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Alaska Fisheries Science Center
- Muto, M. M., V. T. Helker, B. J. Delean, N. C. Young, J. C. Freed, R. P. Angliss, N. A. Friday, P. L. Boveng, J. M. Breiwick, B. M. Brost, M. F. Cameron, P. J. Clapham, J. L. Crance, S. P. Dahle, M. E. Dahlheim, B. S. Fadely, M. C. Ferguson, L. W. Fritz, K. T. Goetz, R. C. Hobbs, Y. V. Ivashchenko, A. S. Kennedy, J. M. London, S. A. Mizroch, R. R. Ream, E. L. Richmond, K. E. W. Shelden, K. L. Sweeney, R. G. Towell, P. R. Wade, J. M. Waite, and A. N. Zerbini. (2021). Alaska marine mammal stock assessments, 2020. U.S. Dep. Commer., NOAA Tech. Memo. NMFS AFSC-421, 398 p.
- Muto, M. M., V. T. Helker, B. J. Delean, N. C. Young, J. C. Freed, R. P. Angliss, N. A. Friday, P. L. Boveng, J. M. Breiwick, B. M. Brost, M. F. Cameron, P. J. Clapham, J. L. Crance, S.

- P. Dahle, M. E. Dahlheim, B. S. Fadely, M. C. Ferguson, L. W. Fritz, K. T. Goetz, R. C. Hobbs, Y. V. Ivashchenko, A. S. Kennedy, J. M. London, S. A. Mizroch, R. R. Ream, E. L. Richmond, K. E. W. Shelden, K. L. Sweeney, R. G. Towell, P. R. Wade, J. M. Waite, and A. N. Zerbini. 2022. Alaska marine mammal stock assessments, 2021. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-441, 295 p.
- Nachtigall, P. E., A. Y. Supin, J. Pawloski, and W. W. L. Au. (2004). Temporary threshold shifts after noise exposure in the bottlenose dolphin (*Tursiops truncatus*) measured using evoked auditory potentials. *Marine Mammal Science*, 20(4), 673–687.
- Nachtigall, P. E., A. Y. Supin, A. F. Pacini, and R. A. Kastelein. (2018). Four odontocete species change hearing levels when warned of impending loud sound. *Integrative Zoology*, 13, 2–20.
- National Academies of Sciences Engineering and Medicine (NAS). (2017). *Approaches to Understanding the Cumulative Effects of Stressors on Marine Mammals*. Washington, DC: The National Academies Press Series.
- National Marine Fisheries Service, Alaska Region. Retrieved from <https://media.fisheries.noaa.gov/2021-02/2020-ak-mm-stranding-summary-013121.pdf?null>
- National Marine Fisheries Service (NMFS). (2018). Revision to Technical Guidance for Assessing Effects of Anthropogenic Sound on Marine Mammal Hearing. Office of Protected Resources, National Marine Fisheries Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, Silver Spring, Maryland.
- NMFS. (2020). Final Biological Report for the Proposed Designation of Critical Habitat for the Central America, Mexico, and Western North Pacific Distinct Population Segments of Humpback Whales (*Megaptera novaeangliae*). July 2020.
- NMFS. (2013a). Final Recovery Plan for the North Pacific Right Whale (*Eubalaena japonica*). Silver Spring, MD: National Marine Fisheries Service, Office of Protected Resources.
- NMFS. (2017c). North Pacific Right Whale (*Eubalaena japonica*) Five-Year Review: Summary and Evaluation. Silver Spring, MD: Office of Protected Resources, Alaska Region.
- National Oceanic and Atmospheric Administration (NOAA). (2002). Report of the Workshop on acoustic resonance as a source of tissue trauma in cetaceans. Silver Spring, MD: U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service.
- National Oceanic and Atmospheric Administration. (2014). Southern Resident Killer Whales: 10 Years of Research & Conservation. Seattle, WA: Northwest Fisheries Science Center West Coast Region.
- National Marine Fisheries Service. (2018). 2018 Revision to: Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (Version 2.0): Underwater Thresholds for Onset of Permanent and Temporary Threshold Shifts. Silver Spring, MD: National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Protected Resources.
- National Marine Fisheries Service. (2019a). 2019 Gray Whale Unusual Mortality Event Along the West Coast. Retrieved from <https://www.fisheries.noaa.gov/national/marine-life-distress/2019-graywhale-unusual-mortality-event-along-west-coast>
- National Oceanic and Atmospheric Administration. (2012). Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to a Pile Replacement Project Federal Register, 77(83), 25408-25435.

- National Research Council. (2003). *Ocean Noise and Marine Mammals*. Washington, DC: National Academies Press.
- National Research Council. (2005). *Marine Mammal Populations and Ocean Noise*. Washington, DC: National Academies Press.
- Nedelec, S. L., Simpson, S. D., Morley, E. L., Nedelec, B., and Radford, A. N. (2015). Impacts of regular and random noise on the behaviour, growth and development of larval Atlantic cod (*Gadus morhua*). *Proceedings of the Royal Society B*, 282(1817), 20151943.
- Nedwell, J. R., B. Edwards, A. W. H. Turnpenny, and J. Gordon. (2004). *Fish and marine mammal audiograms: A summary of available information* (Subacoustech Report ref: 534R0214). Hampshire, UK.
- New, L. F., J. S. Clark, D. P. Costa, E. Fleishman, M. A. Hindell, T. Klanjšček, D. Lusseau, S. Kraus, C. R. McMahon, P. W. Robinson, R. S. Schick, L. K. Schwarz, S. E. Simmons, L. Thomas, P. Tyack, and J. Harwood. (2014). Using short-term measures of behaviour to estimate long-term fitness of southern elephant seals. *Marine Ecology Progress Series*, 496, 99–108.
- New, L. F., J. Harwood, L. Thomas, C. Donovan, J. S. Clark, G. Hastie, P. M. Thompson, B. Cheney, L. Scott-Hayward, D. Lusseau, and D. Costa. (2013a). Modelling the biological significance of behavioural change in coastal bottlenose dolphins in response to disturbance. *Functional Ecology*, 27(2), 314–322.
- New, L., Lusseau, D., & Harcourt, R. (2020). Dolphins and Boats: When Is a Disturbance, Disturbing?. *Frontiers in Marine Science*, 7, 353
- New, L. F., D. J. Moretti, S. K. Hooker, D. P. Costa, and S. E. Simmons. (2013b). Using energetic models to investigate the survival and reproduction of beaked whales (family *Ziphiidae*). *PLoS One*, 8(7), e68725.
- Ng, S. L., and S. Leung. (2003). Behavioral response of Indo-Pacific humpback dolphin (*Sousa chinensis*) to vessel traffic. *Marine Environmental Research*, 56(5), 555-567.
- Noren, D. P., A. H. Johnson, D. Rehder, and A. Larson. (2009). Close approaches by vessels elicit surface active behaviors by southern resident killer whales. *Endangered Species Research*, 8(3), 179–192.
- Norman, S. A., S. Raverty, B. McClellan, A. Pabst, D. Ketten, M. Fleetwood, J. K. Gaydos, B. Norberg, L. Barre, T. Cox, B. Hanson, and S. Jeffries. (2004). Multidisciplinary investigation of stranded harbor porpoises (*Phocoena phocoena*) in Washington State with an assessment of acoustic trauma as a contributory factor (2 May–2 June 2003). United States Department of Commerce.
- Nowacek, D., L. H. Thorne, D. Johnston, and P. Tyack. (2007). Responses of cetaceans to anthropogenic noise. *Mammal Review*, 37(2), 81-115.
- Nowacek, D. P., M. P. Johnson, and P. L. Tyack. (2004). North Atlantic right whales (*Eubalaena glacialis*) ignore ships but respond to alerting stimuli. *Proceedings of the Royal Society of London*, 271(B), 227–231.
- O'Keeffe, D. J. (1984). Guidelines for Predicting the Effects of Underwater Explosions on Swimbladder Fish. Dahlgren, VA.
- O'Keeffe, D. J., and G. A. Young. (1984). Handbook on the Environmental Effects of Underwater Explosions. Silver Spring, MD: U.S. Navy, Naval Surface Weapons Center (Code R14).
- Odell, D.K., E. D. Asper, J. Baucom, and L. H. Cornell. (1980). A recurrent mass stranding of false killer whales in Florida. *Fishery Bulletin*, 78(1), 171-177.

- Office of Naval Research (ONR). (2009). Workshop: Effects of Stress on Marine Mammals. Arlington, VA, 4-5 November, 2009.
- Pace, R., and G. Silber. (2005). Simple analyses of ship and large whale collisions: Does speed kill? Pages 1 In National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Protected Resources.
- Palacios, D.M., B.A. Lagerquist, T.M. Follett, C.E. Hayslip, and B.R. Mate. 2021. Large Whale Tagging in Support of Marine Mammal Monitoring Access Across Multiple Navy Training Areas in the Pacific Ocean: A Supplemental Synopsis of Whale Tracking Data in the Vicinity of the Gulf of Alaska Temporary Maritime Activities Area. Prepared for Commander, U.S. Pacific Fleet. Submitted to Naval Facilities Engineering Command Southwest, San Diego, California, under Cooperative Ecosystem Studies Unit, Department of the Navy Cooperative Agreement No. N62473-19-2-0002. 18 February 2021. 16 pp.
- Palacios, D.M., B.A Lagerquist, T.M. Follett, C.E. Hayslip, and B.R. Mate, 2021. Large Whale Tagging in Support of Marine Mammal Monitoring Across Multiple Navy Training Areas in the Pacific Ocean: A Supplemental Synopsis of Whale Tracking Data in the Vicinity of the Gulf of Alaska Temporary Maritime Activities Area. Prepared for Commander, U.S. Pacific Fleet. Submitted to Naval Facilities Engineering Command Southwest, San Diego, California, under Cooperative Ecosystem Studies Unit, Department of the Navy Cooperative Agreement No. N62473-19-2-0002. 18 February 2021. 16 pp.
- Palacios, D.M., B.R. Mate, C.S. Baker, B.A. Lagerquist, L.M. Irvine, T. Follett, D. Steel, and C.E. Hayslip. 2020. Humpback Whale Tagging in Support of Marine Mammal Monitoring Across Multiple Navy Training Areas in the Pacific Ocean: Final Report for the Hawaiian Breeding Area in Spring 2019, Including Historical Data from Previous Tagging Efforts. Prepared for Commander, US Pacific Fleet, and Commander, Naval Sea Systems Command. Submitted to Naval Facilities Engineering Command Southwest, San Diego, California, under Cooperative Ecosystem Studies Unit, Department of the Navy Cooperative Agreement No. N62473-19-2-0002. 15 May 2020. 122 pp.
- Palacios, D.M., B.R. Mate, C.S. Baker, B.A. Lagerquist, L.M. Irvine, T.M. Follett, C.E. Hayslip, and D. Steel. 2020. Humpback Whale Tagging in Support of Marine Mammal Monitoring Across Multiple Navy Training Areas in the Pacific Ocean: Final Report for the Pacific Northwest Feeding Area in Summer/Fall 2019, Including Historical Data from Previous Tagging Efforts off the US West Coast. Prepared for Commander, U.S. Pacific Fleet. Submitted to Naval Facilities Engineering Command Southwest, under Cooperative Ecosystem Studies Unit, Department of the Navy Cooperative Agreement No. N62473-19-2-0002. Oregon State University, Newport, Oregon, 13 November 2020. 153 pp.
- Papale, E., M. Gamba, M. Perez-Gil, V. M. Martin, and C. Giacoma. (2015). Dolphins adjust species specific frequency parameters to compensate for increasing background noise. *PLoS ONE*, 10(4), e0121711.
- Parks, S. E., C. W. Clark, and P. L. Tyack. (2007). Short- and long-term changes in right whale calling behavior: The potential effects of noise on acoustic communication. *The Journal of Acoustical Society of America*, 122(6), 3725–3731.
- Parks, S. E. (2009). Assessment of acoustic adaptations for noise compensation in marine mammals. Paper presented at the 2009 Office of Naval Research Marine Mammal Program Review. Alexandria, VA.
- Parks, S. E., M. Johnson, D. Nowacek, and P. L. Tyack. (2011). Individual right whales call louder in increased environmental noise. *Biology Letters*, 7, 33–35.

- Patricelli, G. L., and J. L. Blickley. (2006). Avian communication in urban noise: causes and consequences of vocal adjustment. *The Auk*, 123(3), 639–649.
- Pavlostathis, S. G., and G. H. Jackson. (2002). Biotransformation of 2, 4, 6-trinitrotoluene in a continuous-flow *Anabaena* sp. system. *Water Research*, 36, 1699–1706.
- Peterson, S. H., J. T. Ackerman, and D. P. Costa. (2015). Marine foraging ecology influences mercury bioaccumulation in deep-diving northern elephant seals. *Proceedings of the Royal Society B: Biological Sciences*, 282(20150710), 10. DOI:10.1098/rspb.2015.0710
- Phillips, G. E., and A. W. Alldredge. (2000). Reproductive success of elk following disturbance by humans during calving season. *The Journal of Wildlife Management*, 521–530.
- Piantadosi, C. A., and E. D. Thalmann. (2004). Whales, sonar and decompression sickness. *Nature*, 1.
- Pijanowski, B., L. Villanueva-Rivera, S. Dumyahn, A. Farina, B. Krause, B. Napoletano, . . . N. Pieretti. (2011). Soundscape Ecology: The Science of Sound in the Landscape. *BioScience*, 61(3), 203–216. doi:10.1525/bio.2011.61.3.6
- Pine, M. K., L. Wilson, A.G. Jeffs, L. McWhinnie, F. Juanes, A. Scuderi, C.A. Radford. 2021. A Gulf in lockdown: How an enforced ban on recreational vessels increased dolphin and fish communication ranges. *Global Change Biology* 27(19): 4839–4848.
- Pirotta, E., Milor, R., Quick, N., Moretti, D., Di Marzio, N., Tyack, P., Boyd, I., & Hastie, G. (2012). Vessel Noise Affects Beaked Whale Behavior: Results of a Dedicated Acoustic Response Study.
- Pirotta, E., J. Harwood, P. M. Thompson, L. New, B. Cheney, M. Arso, P. S. Hammond, C. Donovan, and D. Lusseau. (2015a). Predicting the effects of human developments on individual dolphins to understand potential long-term population consequences. *Proceedings of the Royal Society B: Biological Sciences*, 282(1818), 20152109.
- Pirotta, E., N. D. Merchant, P. M. Thompson, T. R. Barton, & D. Lusseau. (2015b). Quantifying the effect of boat disturbance on bottlenose dolphin foraging activity. *Biological Conservation*, 181, 82–89.
- Popov, V. V., A. Y. Supin, D. Wang, K. Wang, L. Dong, and S. Wang. (2011). Noise-induced temporary threshold shift and recovery in Yangtze finless porpoises, *Neophocaena phocaenoides asiaeorientalis*. *The Journal of the Acoustical Society of America*, 130(1), 574–584.
- Popov, V. V., A. Y. Supin, V. V. Rozhnov, D. I. Nechaev, E. V. Sysuyeva, V. O. Klishin, M. G. Pletenko, and M. B. Tarakanov. (2013). Hearing threshold shifts and recovery after noise exposure in beluga whales, *Delphinapterus leucas*. *The Journal of Experimental Biology*, 216(9), 1587–1596.
- Popov, V. V., A. Y. Supin, V. V. Rozhnov, D. I. Nechaev, and E. V. Sysueva. (2014). The limits of applicability of the sound exposure level (SEL) metric to temporal threshold shifts (TTS) in beluga whales, *Delphinapterus leucas*. *The Journal of Experimental Biology*, 217(Pt 10), 1804–1810.
- Popper, A. N., R. R. Fay, C. Platt, and O. Sand. (2003). Sound detection mechanisms and capabilities of teleost fishes. In S. P. Collin & N. J. Marshall (Eds.), *Sensory Processing in Aquatic Environment*. New York, NY: Springer-Verlag.
- Popper, A. N., J. Ramcharitar, and S. E. Campana. (2005). Why Otoliths? Insights from Inner Ear Physiology and Fisheries Biology. *Marine and Freshwater Research*, 56, 8.
- Popper, A. N., and M. C. Hastings. (2009a). The effects of anthropogenic sources of sound on fishes. *Journal of Fish Biology*, 75(3), 455–489.

- Popper, A. N., and R. R. Fay. (2011). Rethinking sound detection by fishes. *Hearing Research*, 273(1–2), 25–36.
- Popper, A. N., A. D. Hawkins, R. R. Fay, D. A. Mann, S. M. Bartol, T. J. Carlson, S. Coombs, W. T. Ellison, R. L. Gentry, M. B. Halvorsen, S. Løkkeborg, P. H. Rogers, B. L. Southall, D. G. Zeddes, and W. N. Tavolga. (2014). *ASA S3/SC1. 4 TR-2014 Sound exposure guidelines for fishes and sea turtles: A technical report prepared by ANSI-Accredited standards committee S3/SC1 and registered with ANSI*. Springer.
- Posner, M. I. (1994). Attention: the mechanisms of consciousness. *Proceedings of the National Academy of Sciences*, 91(16), 7398–7403.
- Pirotta, E., C. G. Booth, D. P. Costa, E. Fleishman, S. D. Kraus, D. Lusseau, D. Moretti, L. F. New, R. S. Schick, L. K. Schwarz, S. E. Simmons, L. Thomas, P. L. Tyack, M. J. Weise, R. S. Wells, and J. Harwood. (2018a). Understanding the population consequences of disturbance. *Ecology and Evolution*, 8(19), 9934–9946.
- Pirotta, E., C. G. Booth, D. E. Cade, J. Calambokidis, D. P. Costa, J. A. Fahlebusch, A. S. Friedlaender, J. A. Goldbogen, J. Harwood, E. L. Hazen, L. New, and B. L. Southall. (2021). Context-dependent variability in the predicted daily energetic costs of disturbance for blue whales. *Conservation Physiology*, 9(1).
- Purser, J. and A.N. Radford. 2011. Acoustic noise induces attention shifts and reduces foraging performance in three-spined sticklebacks (*Gasterosteus aculeatus*). *PLoS ONE*, 6, (2):e17478.
- Read, A. J., S. Barco, J. Bell, D. L. Borchers, M. L. Burt, E. W. Cummings, J. Dunn, E. M. Fougeres, L. Hazen, and L. E. W. Hodge. (2014). Occurrence, distribution and abundance of cetaceans in Onslow Bay, North Carolina, USA. *Journal of Cetacean Research Management*, 14, 23–35.
- Redfern, J. V., Ferguson, M. C., Becker, E. A., Hyrenbach, K. D., Good, C., Barlow, J., ... & Fauchald, P. (2006). Techniques for cetacean-habitat modeling. *Marine Ecology Progress Series*, 310, 271–295.
- Reed, J., Harcourt, R., New, L., Bilgmann, K., 2020. Extreme Effects of Extreme Disturbances: A Simulation Approach to Assess Population Specific Responses. *Frontiers in Marine Science*. 7:519845. <https://doi.org/10.3389/fmars.2020.519845>
- Reeves, R. (2005). Impacts of Sakhalin II Phase 2 on western North Pacific gray whales and related biodiversity. Independent Scientific Review Panel: 129.
- Reichmuth, C., M. M. Holt, J. M. Mulsow, J. M. Sills, and B. L. Southall. (2013). Comparative assessment of amphibious hearing in pinnipeds. *Journal of Comparative Physiology A: Neuroethology, Sensory Neural, and Behavioral Physiology*, 199(6), 491–507.
- Reichmuth, C., J. M. Sills, J. Mulsow, and A. Ghoul. 2019. Long-term evidence of noise-induced permanent threshold shift in a harbor seal (*Phoca vitulina*). *The Journal of the Acoustical Society of America*, 146(4), 2552–2561.
- Relyea, R. A. (2005a). The impact of insecticides and herbicides on the biodiversity and productivity of aquatic communities. *Ecological applications*, 15(2), 618–627.
- Relyea, R. A. (2005b). The lethal impacts of Roundup and predatory stress on six species of North American tadpoles. *Archives of Environmental Contamination and Toxicology*, 48(3), 351–357.
- Reneerkens, J., R. G. Morrison, M. Ramenofsky, T. Piersma, and J. C. Wingfield. (2002). Baseline and stress-induced levels of corticosterone during different life cycle substages in a

- shorebird on the high arctic breeding grounds. *Physiological and Biochemical Zoology*, 75(2), 200-208.
- Rice, A. C., S. Baumann-Pickering, A. Širović, J. A. Hildebrand, A. M. Brewer, A. J. Debich, S. T. Herbert, B. J. Thayre, J. S. Trickey, and S. M. Wiggins. (2015). Passive Acoustic Monitoring for Marine Mammals in the Gulf of Alaska Temporary Maritime Activities Area 2014-2015. (W9126G-14-2- 0040). La Jolla, CA: Whale Acoustics Laboratory, Marine Physical Laboratory, Scripps Institution of Oceanography.
- Rice, A. C., N. Posdaljian, M. A. Rafter, J. S. Trickey, S. M. Wiggins, S. Baumann-Pickering, and J. A. Hildebrand. (2020). *Passive Acoustic Monitoring for Marine Mammals in the Gulf of Alaska Temporary Maritime Activities Area September 2017 to September 2019*. La Jolla, CA: University of California San Diego, Scripps Institution of Oceanography, Marine Physical Laboratory, Scripps Institution of Oceanography, University of California San Diego, La Jolla, CA, MPL Technical Memorandum #646 under Cooperative Ecosystems Study Unit Cooperative Agreement N62473-18-2-0016 for U.S. Navy, U.S. Pacific Fleet, Pearl Harbor, HI.
- Rice, A. C., A. S. Berga, N. Posdaljian, M. Rafter, B. J. Thayre, J. S. Trickey, S. M. Wiggins, S. Baumann-Pickering, A. Sirovic, and J. A. Hildebrand. (2018b). Passive Acoustic Monitoring for Marine Mammals in the Gulf of Alaska Temporary Maritime Activities Area May to September 2015 and April to September 2017. La Jolla, CA: Marine Physical Laboratory, Scripps Institute of Oceanography, University of California San Diego.
- Rice, A., A. Sirovic, J.S. Trickey, A.J. Debich, R.S. Gottlieb, S.M. Wiggins, Hildebrand, J.A., Baumann-Pickering, S. 2021. Cetacean occurrence in the Gulf of Alaska from long-term passive acoustic monitoring. *Marine Biology* 168:72.
- Rice, A.C., Solsona Berga, A., Posdaljian, N., Rafter, M., Thayre, B.J., Trickey, J.S., and Wiggins, S.M., Baumann-Pickering, S., Širović, A., Hildebrand, J.A. (2018) "Passive Acoustic Monitoring for Marine Mammals in the Gulf of Alaska Temporary Maritime Activities Area May to September 2015 and April to September 2017," Marine Physical Laboratory, Scripps Institution of Oceanography, University of California San Diego, La Jolla, CA, MPL Technical Memorandum #627 under Cooperative Ecosystems Study Unit Cooperative Agreement N62473-17-2-0014 for U.S. Navy, U.S. Pacific Fleet, Pearl Harbor, HI.
- Rice, A.C., Posdaljian, N., Rafter, M., Trickey, J.S., and Wiggins, S.M., Baumann-Pickering, S., Hildebrand, J.A. (2019) "Passive Acoustic Monitoring for Marine Mammals in the Gulf of Alaska Temporary Maritime Activities Area September 2017 to September 2019, Interim Report," Marine Physical Laboratory, Scripps Institution of Oceanography, University of California San Diego, La Jolla, CA, MPL Technical Memorandum #642 under Cooperative Ecosystems Study Unit Cooperative Agreement N62473-18-2-0016 for U.S. Navy, U.S. Pacific Fleet, Pearl Harbor, HI.
- Richardson, W. J., C. R. Greene, Jr., C. I. Malme, and D. H. Thomson. (1995). *Marine Mammals and Noise*. San Diego, CA: Academic Press.
- Richardson, W. J., K. J. Finley, G. W. Miller, R. A. Davis, and W. R. Koski. (1995b). Feeding, social and migration behavior of bowhead whales, *Balaena mysticetus*, in Baffin Bay vs. the Beaufort Sea—regions with different amounts of human activity. *Marine mammal science*, 11(1), 1-45.

- Ridgway, S., D. Carder, J. Finneran, M. Keogh, T. Kamolnick, M. Todd, and A. Goldblatt. (2006). Dolphin continuous auditory vigilance for five days. *Journal of Experimental Biology*, 209(18), 3621-3628.
- Ridgway, S. H., and R. Howard. (1979). Dolphin lung collapse and intramuscular circulation during free diving: Evidence from nitrogen washout. *Science*, 206, 1182–1183.
- Risch, D., P. J. Corkeron, W. T. Ellison, and S. M. Van Parijs. (2012). Changes in humpback whale song occurrence in response to an acoustic source 200 km away. *PLoS ONE*, 7(1), e29741.
- Rivier, C., and S. Rivest. (1991). Effect of stress on the activity of the hypothalamic-pituitary-gonadal axis: peripheral and central mechanisms. *Biology of Reproduction*, 45(4), 523-532.
- Robinson, P. W., D. P. Costa, D. E. Crocker, J. P. Gallo-Reynoso, C. D. Champagne, M. A. Fowler, C. Goetsch, K. T. Goetz, J. L. Hassrick, L. A. Huckstadt, C. E. Kuhn, J. L. Maresh, S. M. Maxwell, B. I. McDonald, S. H. Peterson, S. E. Simmons, N. M. Teutschel, S. Villegas-Amtmann, and K. Yoda. (2012). Foraging behavior and success of a mesopelagic predator in the northeast Pacific Ocean: Insights from a data-rich species, the northern elephant seal. *PLoS ONE*, 7(5), e36728. DOI:10.1371/journal.pone.0036728
- Rolland, R. M., S. E. Parks, K. E. Hunt, M. Castellote, P. J. Corkeron, D. P. Nowacek, S. K. Wasser, and S. D. Kraus. (2012). Evidence that ship noise increases stress in right whales. *Proceedings of the Royal Society B: Biological Sciences*, 279(1737), 2363–2368.
- Rolland, R. et al., The inner whale: hormones, biotoxins and parasites. In: Kraus S.D. and R.M. Rolland, (eds.). *The Urban Whale: North Atlantic Right Whales at the Crossroads*. Harvard University Press, Cambridge, MA (2007).
- Romano, T., M. Keogh, and K. Danil. (2002a). Investigation of the effects of repeated chase and encirclement on the immune system of spotted dolphins (*Stenella attenuata*) in the eastern tropical Pacific. Administrative Report LJ-02-35C, National Marine Fisheries Service: 37.
- Romano, T. A., J. A. Olschowka, S. Y. Felten, V. Quaranta, S. H. Ridgway, and D. L. Felten. (2002b). Immune response, stress, and environment: Implications for cetaceans. Pages 253-279 In: *Molecular and Cell Biology of Marine Mammals*. Krieger Publishing Co., Malabar, Florida.
- Romano, T. A., M. J. Keogh, C. Kelly, P. Feng, L. Berk, C. E. Schlundt, D. A. Carder, and J. J. Finneran. (2004). Anthropogenic sound and marine mammal health: Measures of the nervous and immune systems before and after intense sound exposures. *Canadian Journal of Fisheries and Aquatic Sciences*, 61, 1124–1134.
- Romero, L. M. (2004). Physiological stress in ecology: lessons from biomedical research. *Trends in Ecology & Evolution*, 19(5), 249-255.
- Rommel, S. A., A. M. Costidis, A. Fernandez, P. D. Jepson, D. A. Pabst, D. S. Houser, ... and N. B. Barros. (2006). Elements of beaked whale anatomy and diving physiology and some hypothetical causes of sonar-related stranding. *Journal of Cetacean Research and Management*, 7(3), 189-209
- Rone, B. K., P. J. Clapham, D. W. Weller, J. L. Crance, and A. R. Lang. (2015). North Pacific right whale visual and acoustic survey in the northwestern Gulf of Alaska. Final Report. Bethesda, MD: Marine Mammal Commission.
- Rone, B. K., A. B. Douglas, P. Clapham, A. Martinez, L. J. Morse, and J. Calambokidis. (2009). Cruise Report for the April 2009 Gulf of Alaska Line-Transect Survey (GOALS) in the Navy Training Exercise Area. Monterey, CA: Naval Post Graduate School.
- Rone, B. K., A. B. Douglas, T. M. Yack, A. N. Zerbini, T. N. Norris, E. Ferguson, and J. Calambokidis. (2014). Report for the Gulf of Alaska Line-Transect Survey (GOALS) II:

- Marine Mammal Occurrence in the Temporary Maritime Activities Area (TMAA). Submitted to Naval Facilities Engineering Command (NAVFAC) Pacific, Honolulu, Hawaii under Contract No. N62470-10-D-3011, Task Order 0022, issued to HDR Inc., San Diego, California. Prepared by Cascadia Research Collective, Olympia, Washington; Alaska Fisheries Science Center, Seattle, Washington; and Bio-Waves, Inc., Encinitas, California. April 2014.
- Rone, B. K., A. N. Zerbini, A. B. Douglas, D. W. Weller, and P. J. Clapham. (2017). Abundance and distribution of cetaceans in the Gulf of Alaska. *Marine Biology*, 164(23), 1–23.
- Rosen, G., and G. R. Lotufo. (2010). Fate and effects of composition B in multispecies marine exposures. *Environmental Toxicology and Chemistry*, 29(12), 1–8.
- Saino, N. (1994). Time budget variation in relation to flock size in carrion crows, *Corvus corone corone*. *Animal Behaviour*, 47(5), 1189–1196.
- Sapolsky, R. M. (2005). The influence of social hierarchy on primate health. *Science*, 308(5722), 648–652.
- Saunders, K. J., P. R. White, and T. G. Leighton. (2008). Models for predicting Nitrogen tensions and decompression sickness risk in diving beaked whales. *Proceedings of the Institute of Acoustics*, 30(5).
- Savage, K. (2021). 2020 Alaska Region Marine Mammal Stranding Summary.
- Sawyers, K. N. (1968). Underwater sound pressure from sonic booms. *The Journal of the Acoustical Society of America*, 44(2), 523–524.
- Scheidat, M., C. Castro, J. Gonzalez, and R. Williams. (2004). Behavioural responses of humpback whales (*Megaptera novaeangliae*) to whale watching boats near Isla de la Plata, Machalilla National Park, Ecuador. *Journal of Cetacean Research and Management*, 6(1), 63–68.
- Scheifele, P. M., S. Andrew, R. A. Cooper, M. Darre, F. E. Musiek, and L. Max. (2005). Indication of a Lombard vocal response in the St. Lawrence River beluga. *The Journal of the Acoustical Society of America*, 117(3), 1486–1492.
- Schorr, G. S., E. A. Falcone, D. J. Moretti, and R. D. Andrews. (2014). First long-term behavioral records from Cuvier's beaked whales (*Ziphius cavirostris*) reveal record-breaking dives. *PLoS ONE*, 9(3), e92633.
- Schorr, G.S., E.A. Falcone, B.K. Rone, and E.L. Keene. (2019). Distribution and demographics of Cuvier's beaked whales and fin whales in the Southern California Bight. Annual Report for 2018. Prepared by: Marine Ecology and Telemetry Research, Cascadia WA. Contract N66604-18-Q-2187. Prepared for: US Pacific Fleet, Pearl Harbor, HI. 30 pp.
- Schorr , G.S., Rone, B.K., Falcone, E.A., Keene, E.L., Sweeney, D.A., Coates, S.N. 2022. Cuvier's beaked whale and fin whale surveys at the Southern California Offshore Anti-Submarine Warfare Range (SOAR). Annual Report to the Cooperative Agreement Studies Unit, Award No. N62473-19-2-0025 for U.S. Navy Pacific Fleet. 42 Pg.
- Schlundt, C. E., J. J. Finneran, D. A. Carder, and S. H. Ridgway. (2000). Temporary shift in masked hearing thresholds of bottlenose dolphins, *Tursiops truncatus*, and white whales, *Delphinapterus leucas*, after exposure to intense tones. *The Journal of the Acoustical Society of America*, 107(6), 3496–3508.
- Seitz, A.C., and M.B. Courtney. 2021. Telemetry and Genetic Identity of Chinook salmon in Alaska. Prepared for: U.S. Navy, Commander Pacific Fleet. Prepared by: College of Fisheries and Ocean Sciences, University of Alaska Fairbanks under Cooperative Agreement #N62473-20-2-0001. 29 January 2021. 13 pp.

- Seitz, A.C., and M.B. Courtney. 2022. Telemetry and Genetic Identity of Chinook Salmon in Alaska. Prepared for: U.S. Navy, Commander Pacific Fleet. Prepared by: College of Fisheries and Ocean Sciences, University of Alaska Fairbanks under Cooperative Agreement #N62473-20-2-0001. February 2022. 41 pp
- Seyle, H. (1950). *The Physiology and Pathology of Exposure to Stress*. Oxford, England: Acta, Inc. 203 pp.
- Silber, G. K., J. Slutsky, and S. Bettridge. (2010). Hydrodynamics of a ship/whale collision. *Journal of Experimental Marine Biology and Ecology*, 391, 10–19.
- Sills, J. M., B. Ruscher, R. Nichols, B. L. Southall, and C. Reichmuth. (2020). Evaluating temporary threshold shift onset levels for impulsive noise in seals. *The Journal of the Acoustical Society of America*, 148(5), 2973–2986.
- Sih, A., A. M. Bell, and J. L. Kerby. (2004). Two stressors are far deadlier than one. *Trends in Ecology & Evolution*, 19(6), 274-276.
- Simeone, C. A., F. M. Gulland, T. Norris, and T. K. Rowles. (2015). A systematic review of changes in marine mammal health in North America, 1972–2012: The need for a novel integrated approach. *PLoS ONE*, 10(11), e0142105.
- Simeone, C and Moore K. (2017). Stranding response, and Appendix 5. In: *CRC Handbook of Marine Mammal Medicine*. Third edition, eds Gulland, FMD, Dierauf and Whitman KL, CRC Pres, Boca Raton, FL. USA.
- Similä, T. (1997). Sonar observations of killer whales (*Orcinus orca*) feeding on herring schools. *Aquatic Mammals*, 23, 119-126.
- Simmonds, M. P., and L. F. Lopez-Jurado. (1991). Whales and the military. *Nature*, 351, 448.
- Simpson S. D., J. Purser and A. N. Radford. (2014). Anthropogenic noise compromises antipredator behaviour in European eels. *Global Change Biology*, 21, 586– 593.
- Singh, R., P. Soni, P. Kumar, S. Purohit, and A. Singh. (2009). Biodegradation of high explosive production effluent containing RDX and HMX by denitrifying bacteria. *World Journal of Microbiology and Biotechnology*, 25, 269–275.
- Sivle, L. D., P. H. Kvadsheim, C. Curé, S. Isojunno, P. J. Wensveen, F. A. Lam, F. Visser, L. Kleivane, P. L. Tyack, C. M. Harris, and P. J. O. Miller. (2015). Severity of expert-identified behavioural responses of humpback whale, minke whale, and northern bottlenose whale to naval sonar. *Aquatic Mammals*, 41(4), 469–502.
- Sivle, L. D., P. J. Wensveen, P. H. Kvadsheim, F. P. A. Lam, F. Visser, C. Curé, C. M. Harris, P. L. Tyack, and P. J. O. Miller. (2016). Naval sonar disrupts foraging in humpback whales. *Marine Ecology Progress Series*, 562, 211–220.
- Slabbekoorn, H., N. Bouton, I. van Opzeeland, A. Coers, C. ten Cate, and A. N. Popper, A. N. (2010). A noisy spring: the impact of globally rising underwater sound levels on fish. *Trends in Ecology & Evolution*, 25(7), 419-427.
- Smith, J. M. and D. D. Huff. 2019. Characterizing the Distribution of ESA listed Salmonids in the Northwest Training and Testing Area with Acoustic and Pop-up Satellite Tags. Prepared by NOAA Northwest Fisheries Science Center under MIPR N00070-18-MP-4C592 to Commander, U.S. Pacific Fleet. 9 pp. January.
- Smith, J. M. and D. D. Huff. 2020. Characterizing the distribution of ESA listed salmonids in the Northwest Training and Testing Area with acoustic and pop-up satellite tags. Prepared for: U.S. Navy, U.S. Pacific Fleet, Pearl Harbor, HI. Prepared by: National Oceanic and Atmospheric Administration, Northwest Fisheries Science Center under MIPR N00070-19-MP-001OJ. 09 April 2020.

- Smith, J. M. and D. D. Huff. 2021. Characterizing the distribution of ESA listed salmonids in the Northwest Training and Testing Area with acoustic and pop-up satellite tags. Prepared for: U.S. Navy, U.S. Pacific Fleet, Pearl Harbor, HI. Prepared by: National Oceanic and Atmospheric Administration, Northwest Fisheries Science Center under MIPR N00070-20-IP-0EQ8Q. 05 February 2021.
- Smith, J. M. and D. D. Huff. 2022. Characterizing the distribution of ESA listed salmonids in the Northwest Training and Testing Area with acoustic and pop-up satellite tags. Prepared for: U.S. Navy, U.S. Pacific Fleet, Pearl Harbor, HI. Prepared by: National Oceanic and Atmospheric Administration, Northwest Fisheries Science Center under MIPR N00070-21-MP-0EQ8Q. 05 February 2022.
- Smith, M. E., A. S. Kane, and A. N. Popper. (2004a). Acoustical stress and hearing sensitivity in fishes: does the linear threshold shift hypothesis hold water? *Journal of Experimental Biology*, 207(20), 3591-3602.
- Smith, M. E., A. S. Kane, and A. N. Popper. (2004b). Noise-induced stress response and hearing loss in goldfish (*Carassius auratus*). *Journal of Experimental Biology*, 207(3), 427-435.
- Smith, M. E., Coffin, A. B., Miller, D. L., and Popper, A. N. (2006). Anatomical and functional recovery of the goldfish (*Carassius auratus*) ear following noise exposure. *Journal of Experimental Biology*, 209(21), 4193-4202.
- Sohn, R. A., F. Vernon, J. A. Hildebrand, and S. C. Webb. (2000). Field measurements of sonic boom penetration into the ocean. *The Journal of the Acoustical Society of America*, 107(6), 3073–3083.
- Sole, M., P. Sigray, M. Lenoir, M. Van der Schaer, E. Lalander, and M. André. (2017). Offshore exposure experiments on cuttlefish indicate received sound pressure and particle motion levels associated with acoustic trauma. *Scientific Reports*, 7(45899), 1–13.
- Soerensen, P.M., Wisniewska, D.M., Jensen, F.H., Johnson, M., Teilmann, J., and Madsen, P.T. 2018. Click communication in wild harbour porpoises (*Phocoena phocoena*). *Scientific Reports*. 8:9702.
- Soto, N.A., M. Johnson, P.T. Madsen, P.L. Tyack, A. Bocconcelli, and J.F. Borsani. (2006). Does intense ship noise disrupt foraging in deep-diving Cuvier's beaked whales (*Ziphius cavirostris*)? *Marine Mammal Science*, 22(3):690-699.
- Southall, B. L., K. J. Benoit-Bird, M. A. Moline, and D. Moretti. (2019a). Quantifying deep-sea predator-prey dynamics: Implications of biological heterogeneity for beaked whale conservation. *Journal of Applied Ecology*, 2019, 1–10.
- Southall, B. L., A. E. Bowles, W. T. Ellison, J. J. Finneran, R. L. Gentry, C. R. Greene, Jr., D. Kastak, D. R. Ketten, J. H. Miller, P. E. Nachtigall, W. J. Richardson, J. A. Thomas, and P. L. Tyack. (2007). Marine mammal noise exposure criteria: Initial scientific recommendations. *Aquatic Mammals*, 33(4), 411–521.
- Southall, B. L., P. L. Tyack, D. Moretti, C. Clark, D. Claridge, and I. Boyd. (2009). *Behavioral responses of beaked whales and other cetaceans to controlled exposures of simulated sonar and other sounds*. Paper presented at the 18th Biennial Conference on the Biology of Marine Mammals, Quebec City, Canada.
- Southall, B., J. Calambokidis, P. Tyack, D. Moretti, J. Hildebrand, C. Kyburg, R. Carson, A. Friedlaender, E. Falcone, G. Schorr, A. Douglas, S. DeRuiter, J. Goldbogen, and J. Barlow. (2011). *Biological and Behavioral Response Studies of Marine Mammals in Southern California, 2010 (“SOCAL-10”)*. Pearl Harbor, HI: U.S. Navy Pacific Fleet.

- Southall, B., Calambokidis, J., Tyack, P., Moretti, D., Friedlaender, A., De Ruiter, S., Goldbogen, J., Falcone, E., Schorr, G., Douglas, A., Stimpert, A., Hildebrand, J., Kyburg, C., Carlson, R., Yack, T., and Barlow, J. (2012a). Biological and Behavioral Response Studies of Marine Mammals in Southern California, 2011 (“SOCAL-11”), Final Project Report, 8 March 2012.
- Southall, B. L., D. Moretti, B. Abraham, J. Calambokidis, S. L. DeRuiter, and P. L. Tyack. (2012b). Marine Mammal Behavioral Response Studies in Southern California: Advances in Technology and Experimental Methods. *Marine Technology Society Journal*, 46(4), 46-59.
- Southall, B., J. Calambokidis, J. Barlow, D. Moretti, A. Friedlaender, A. Stimpert, A. Douglas, K. Southall, S. Arranz, S. DeRuiter, E. Hazen, J. Goldbogen, E. Falcone, and G. Schorr. (2013). Biological and Behavioral Response Studies of Marine Mammals in Southern California, 2012 (“SOCAL-12”).
- Southall, B., J. Calambokidis, J. Barlow, D. Moretti, A. Friedlaender, A. Stimpert, A. Douglas, K. Southall, P. Arranz, S. DeRuiter, J. Goldbogen, E. Falcone, and G. Schorr. (2014). *Biological and Behavioral Response Studies of Marine Mammals in Southern California, 2013 (“SOCAL-13”)*. Pearl Harbor, HI: U.S. Navy Pacific Fleet.
- Southall, B. L., D. P. Nowacek, P. J. O. Miller, and P. L. Tyack. (2016). Experimental field studies to measure behavioral responses of cetaceans to sonar. *Endangered Species Research*, 31, 293–315.
- Southall, B. L., J. J. Finneran, C. Reichmuth, P. E. Nachtigall, D. R. Ketten, A. E. Bowles, W. T. Ellison, D. P. Nowacek, and P. L. Tyack. (2019a). Marine Mammal Noise Exposure Criteria: Updated Scientific Recommendations for Residual Hearing Effects. *Aquatic Mammals*, 45(2), 125-232.
- Southall, B. L., S. L. DeRuiter, A. Friedlaender, A. K. Stimpert, J. A. Goldbogen, E. Hazen, C. Casey, S. Fregosi, D. E. Cade, A. N. Allen, and C. M. Harris. (2019b). Behavioral responses of individual blue whales (*Balaenoptera musculus*). *Journal of Experimental Biology*, 222(5), p.jeb190637.
- Southall, B. L., R. J. Schusterman, and D. Kastak. (2000). Masking in three pinnipeds: Underwater, low-frequency critical ratios. *The Journal of the Acoustical Society of America*, 108(3), 1322–1326.
- Southall, B. L., D.P. Nowacek, A.E. Bowles, V. Senigaglia, L. Bejder, P.L. Tayak. (2021). Marine mammal noise exposure criteria: Assessing the severity of marine mammal behavioral responses to human noise. *Aquatic Mammals* 47(5): 421–464.
- Stanistreet, J. E., et al. (2022). Changes in the acoustic activity of beaked whales and sperm whales recorded during a naval training exercise off eastern Canada. *Scientific Reports* 12(1).
- St. Aubin, D. J., S. H. Ridgway, R. S. Wells, and H. Rhinehart. (1996). Dolphin thyroid and adrenal hormones: Circulating levels in wild and semi-domesticated *Tursiops truncatus*, and influence of sex, age, and season. *Marine Mammal Science*, 12(1), 1–13.
- St. Aubin, D., and L. A. Dierauf. (2001). Stress and Marine Mammals. In L. A. Dierauf & F. M. D. Gulland (Eds.), *Marine Mammal Medicine* (2nd ed., pp. 253–269). Boca Raton, FL: CRC Press
- Steidl, R. J., and R. G. Anthony. (1996). Responses of bald eagles to human activity during the summer in interior Alaska. *Ecological Applications*, 6(2), 482-491.
- Stimpert, A.K., S.L. DeRuiter, B.L. Southall, D.J. Moretti, E.A. Falcone, J.A Godbogen, A. Friedlaender, G.S. Schorr, and J. Calambokidis. 2014. Acoustic and foraging behavior of a

- Baird's beaked whale, *Berardius bairdii*, exposed to simulated sonar. *Sci Rep* 4:7031. DOI: 10.1038/srep07031
- Stockwell, C. A., G. C. Bateman, and J. Berger. (1991). Conflicts in National Parks: a case study of helicopters and bighorn sheep time budgets at the Grand Canyon. *Biological Conservation*, 56, 317-328.
- Stone, C. J. (2015). Marine mammal observations during seismic surveys from 1994–2010. *JNCC Rep.* No. 463a. 64 p.
- Stone, G. S., L. Cavagnaro, A. Hutt, S. Kraus, K. Baldwin, and J. Brown. (2000). Reactions of Hector's dolphins to acoustic gillnet pingers. New Zealand Department of Conservation: 28.
- Sutherland, W. J., and N. J. Crockford. (1993). Factors affecting the feeding distribution of red-breasted geese *Branta ruficollis* wintering in Romania. *Biological Conservation*, 63(1), 61-65.
- Swingle, W. M., S. G. Barco, T. D. Pitchford, W. A. Mclellan, and D. A. Pabst. (1993). Appearance of juvenile humpback whales feeding in the nearshore waters of Virginia. *Marine Mammal Science*, 9(3), 309-315.
- Swisdak, J., M. M. (1975). *Explosion Effects and Properties; Part I - Explosion Effects in Air* (Technical Report). Silver Spring, MD: Naval Surface Weapons Center.
- Tal, D., H. Shachar-Bener, D. Hershkovitz, Y. Arieli, and A. Shupak. (2015). Evidence for the initiation of decompression sickness by exposure to intense underwater sound. *Journal of Neurophysiology*, 114(3), 1521-1529.
- Taylor, B., Barlow, J., Pitman, R., Ballance, L., Klinger, T., DeMaster, D., ... and Mead, J. (2004, July). A call for research to assess risk of acoustic impact on beaked whale populations. In *Scientific Committee at the 56th Meeting of the International Whaling Commission* (Vol. 29).
- Teilmann, J., J. Tougaard, L. A. Miller, T. Kirketerp, K. Hansen, and S. Brando. (2006). Reactions of captive harbor porpoises (*Phocoena phocoena*) to pinger-like sounds. *Marine Mammal Science*, 22(2), 240–260.
- Tennessen, J. B., and S. E. Parks. (2016). Acoustic propagation modeling indicates vocal compensation in noise improves communication range for North Atlantic right whales. *Endangered Species Research*, 30, 225–237.
- Thomas, J. A., R. A. Kastelein, and F. T. Awbrey. (1990). Behavior and blood catecholamines of captive belugas during playbacks of noise from an oil drilling platform. *Zoo Biology*, 9(5), 393–402.
- Thompson, D. R., and K. C. Hamer. (2000). Stress in seabirds: causes, consequences and diagnostic value. *Journal of Aquatic Ecosystem Stress and Recovery*, 7(1), 91-109.
- Thompson, D., M. Sjoberg, M. E. Bryant, P. Lovell, and A. Bjorge. (1998). Behavioral and physiological responses of harbour (*Phoca vitulina*) and grey (*Halichoerus grypus*) seals to seismic surveys (Report to European Commission of BROMMAD Project. MAS2 C7940098). Brussels, Belgium: European Commission.
- Todd, S., P. Stevick, J. Lien, F. Marques, and D. Ketten. (1996). Behavioural effects of exposure to underwater explosions in humpback whales (*Megaptera novaeangliae*). *Canadian Journal of Zoology*, 74, 1661–1672.
- Treves, A. (2000). Theory and method in studies of vigilance and aggregation. *Animal Behaviour*, 60(6), 711-722.

- Trimper, P. G., Standen, N. M., Lye, L. M., Lemon, D., Chubbs, T. E., and Humphries, G. W. (1998). Effects of low-level jet aircraft noise on the behaviour of nesting osprey. *Journal of Applied Ecology*, 35(1), 122–130.
- Tyack, P. L. (2000). Functional aspects of cetacean communication. In: J. Mann, R. C. Connor, P. L. Tyack, and H. Whitehead (Eds.), *Cetacean societies: Field studies of dolphins and whales*. Chicago, IL: University of Chicago Press.
- Tyack, P. L., M. Johnson, N. A. Soto, A. Sturlese, and P. T. Madsen. (2006). Extreme diving of beaked whales. *Journal of Experimental Biology*, 209(21), 4238–4253.
- Tyack, P. L., W. M. X. Zimmer, D. Moretti, B. L. Southall, D. E. Claridge, J. W. Durban, C. W. Clark, A. D'Amico, N. DiMarzio, S. Jarvis, E. McCarthy, R. Morrissey, J. Ward, and I. L. Boyd. (2011). Beaked whales respond to simulated and actual Navy sonar. *PLoS ONE*, 6(3), 15.
- Urick, R. J. (1983). *Principles of Underwater Sound* (3rd ed.). Los Altos, CA: Peninsula Publishing.
- U.S. Department of Commerce, and U.S. Department of the Navy. (2001). *Joint Interim Report Bahamas Marine Mammal Stranding Event of 15–16 March 2000*. Washington, DC: Department of Commerce.
- U.S. Department of the Navy. (2006). Marine Resources Assessment for the Gulf of Alaska Operating Area. Pacific Division. Naval Facilities Engineering Command, Pearl Harbor, Hawaii. Prepared by Geo-Marine, Inc. Plano, Texas.
- U.S. Department of the Navy. (2008a). Hawaii Range Complex, Final Environmental Impact Statement/Overseas Environmental Impact Statement. Pearl Harbor, HI: Hawaii Range Complex.
- U.S. Department of the Navy. (2008b). Southern California Range Complex Environmental Impact Statement/Overseas Environmental Impact Statement. San Diego, CA: Naval Facilities Engineering Command Southwest.
- U.S. Department of the Navy. (2011). Scientific Advisory Group for Navy Marine Species Monitoring - Workshop Report and Recommendations. Washington, DC: U.S. Department of the Navy.
- U.S. Department of the Navy. (2012). Criteria and Criteria and Thresholds for U.S. Navy Acoustic and Explosive Effects Analysis Technical Report.
- U.S. Department of the Navy. (2013b). Comprehensive Exercise and Marine Species Monitoring Report for the U.S. Navy's Atlantic Fleet Active Sonar Training (AFAST) and Virginia Capes, Cherry Point, Jacksonville, and Gulf of Mexico Range Complexes 2009–2012. Norfolk, VA: United States Fleet Forces Command.
- U.S. Department of the Navy. (2017a). U.S. Navy Marine Species Density Database Phase III for the Hawaii-Southern California Training and Testing Study Area (Naval Facilities Engineering Command Pacific Technical Report). Pearl Harbor, HI: Naval Facilities Engineering Command Pacific.
- U.S. Department of the Navy. (2017b). Marine Mammal Strandings Associated with U.S. Navy Sonar Activities. San Diego, CA: U.S. Navy Marine Mammal Program and SPAWAR Naval Facilities Engineering Command.
- U.S. Department of the Navy. (2017c). Criteria and Thresholds for U.S. Navy Acoustic and Explosive Effects Analysis (Phase III) San Diego, CA: Space and Naval Warfare System Command, Pacific.

- U.S. Department of the Navy. (2018). Quantifying Acoustic Impacts on Marine Mammals and Sea Turtles: Methods and Analytical Approach for Phase III Training and Testing (Technical Report prepared by NUWC Division Newport, Space and Naval Warfare Systems Center Pacific, G2 Software Systems, and the National Marine Mammal Foundation). Newport, RI: Naval Undersea Warfare Center.
- U.S. Department of the Navy. (2021). U.S. Navy Marine Species Density Database Phase III for the Gulf of Alaska Temporary Maritime Activities Area. NAVFAC Pacific Technical Report. Naval Facilities Engineering Command Pacific, Pearl Harbor, HI. 160 pp.
- Van der Hoop, J. M., A. S. M. Vanderlaan, and C. T. Taggart. (2012). Absolute probability estimates of lethal vessel strikes to North Atlantic right whales in Roseway Basin, Scotian Shelf. *Ecological Applications*, 22(7), 2021–2033.
- Van der Hoop, J. M., M. J. Moore, S. G. Barco, T. V. Cole, P. Y. Daoust, A. G. Henry, D. F. McAlpine, W. A. McLellan, T. Wimmer, and A. R. Solow. (2013). Assessment of management to mitigate anthropogenic effects on large whales. *Conservation biology : the journal of the Society for Conservation Biology*, 27(1), 121–133.
- Vanderlaan, M. S. A., and T. C. Taggart. (2007). Vessel collisions with whales: the probability of lethal injury based on vessel speed. *Marine Mammal Science*, 23(1), 144–156.
- Vanderlaan, A.S.M., C.T. Taggart, A.R. Serdynska, R.D. Kenney, and M.W. Brown. (2008). Reducing the risk of lethal encounters: Vessels and right whales in the Bay of Fundy and on the Scotian Shelf. *Endangered Species Research*, 4(3), 283-283.
- Van Parijs, S. M. (2015). Letter of Introduction to the Biologically Important Areas issue. In: S. M. Van Parijs, C. Curtice, & M. C. Ferguson (Eds.), Biologically Important Areas for cetaceans within U.S. waters (p. 1). *Aquatic Mammals (Special Issue)*, 41(1). 128 pp.
- van Rij, N. G. (2007). Implicit and explicit capture of attention: what it takes to be noticed. Thesis. University of Canterbury.
- Villegas-Amtmann, S., L. K. Schwarz, J. L. Sumich, and D. P. Costa. (2015). A bioenergetics model to evaluate demographic consequences of disturbance in marine mammals applied to gray whales. *Ecosphere*, 6(10), 1-19.
- Visser, F., C. Cure, P. H. Kvadsheim, F. P. Lam, P. L. Tyack, and P. J. Miller. (2016). Disturbance-specific social responses in long-finned pilot whales, *Globicephala melas*. *Scientific Reports*, 6, 28641.
- von Benda-Beckmann, A. M., S. Isojunno, M. Zandvliet, A. Ainslie, P. J. Wensveen, P. L. Tyack, P. H. Kvadsheim, P. A. Lam, and P. J. O. Miller. (2021). Modeling potential masking of echolocating sperm whales exposed to continuous 1–2 kHz naval sonar. *The Journal of the Acoustical Society of America*, 149, 2908–2925. DOI:10.1121/10.0004769
- Wade, P. R., A. Kennedy, R. LeDuc, J. Barlow, J. Carretta, K. Shelden, W. Perryman, R. Pitman, K. Robertson, B. Rone, J. C. Salinas, A. Zerbini, R. L. Brownell, Jr., and P. J. Clapham. (2010). The world's smallest whale population? *Biology Letters*, 7(1), 83–85.
- Walker, S. W., C. L. Osburn, T. J. Boyd, L. J. Hamdan, R. B. Coffin, M. T. Montgomery, J. P. Smith, Q. X. Li, C. Hennessee, F. Monteil, and J. Hawari. (2006). *Mineralization of 2, 4, 6-Trinitrotoluene (TNT) in Coastal Waters and Sediments*. Washington, DC: U.S. Department of the Navy, Naval Research Laboratory.
- Ward, W. D. (1997). Effects of high-intensity sound, In: M. J. Crocker (Ed.), *Encyclopedia of Acoustics* (pp. 1497-1507). New York, NY: Wiley.

- Ward, D. H., R. A. Stehn, W. P. Erickson, and D. V. Derksen. (1999). Response of fall-staging brant and Canada geese to aircraft overflights in southwestern Alaska. *The Journal of Wildlife Management*, 373-381.
- Wartzok, D., and D. R. Ketten. (1999). Marine Mammal Sensory Systems. In J. E. Reynolds, III & S. A. Rommel (Eds.), *Biology of Marine Mammals* (pp. 117–175). Washington, DC: Smithsonian Institution Press.
- Waters, J. F., and R. E. Glass. (1970). *Penetration of Sonic Boom Energy into the Ocean: An Experimental Simulation* (HRC TR 288). Washington, DC: Federal Aviation Administration, Office of Noise Abatement.
- Watkins, W. A., K. E. Moore, and P. Tyack. (1985). Sperm whale acoustic behavior in the southeast Caribbean. *Cetology*, 49, 1–15.
- Watkins, W. A. (1986). Whale reactions to human activities in Cape Cod waters. *Marine Mammal Science*, 2(4), 251–262.
- Welch, B.L. and A.S.Welch. (1970). *Physiological Effects of Noise*. Plenum Press.
- Weller, D. W., A. M. Burdin, B. Würsig, B. L. Taylor, and R. L. Brownell, Jr. (2002). The western gray whale: A review of past exploitation, current status and potential threats. *Journal of Cetacean Research and Management*, 4(1), 7–12.
- Weller, D. W., G. A. Tsidulko, Y. V. Ivashchenko, A. M. Burdin, and R. L. Brownell Jr. (2006). A re-evaluation of the influence of 2001 seismic surveys on western gray whales off Sakhalin Island, Russia. International Whaling Commission Scientific Committee: 9.
- Wensveen, P. J., P. H. Kvadsheim, F.-P. A. Lam, A. M. Von Benda-Beckmann, L. D. Sivle, F. Visser, C. Curé, P. Tyack, and P. J. O. Miller. (2017). Lack of behavioural responses of humpback whales (*Megaptera novaeangliae*) indicate limited effectiveness of sonar mitigation. *The Journal of Experimental Biology*, 220, 1–12.
- Wensveen, P. J., S. Isojunno, R. R. Hansen, A. M. von Benda-Beckmann, L. Kleivane, S. van IJsselmuiden, F. P. A. Lam, P. H. Kvadsheim, S. L. DeRuiter, C. Curé, and T. Narazaki. (2019). Northern bottlenose whales in a pristine environment respond strongly to close and distant navy sonar signals. *Proceedings of the Royal Society B*, 286(1899), p.20182592.
- White Jr, D., K. C. Kendall, and H. D. Picton. (1999). Potential energetic effects of mountain climbers on foraging grizzly bears. *Wildlife Society Bulletin*, 146-151.
- Wiggins, S.M., Debich, A.J., Trickey, J.S., Rice, A.C., Thayre, B.J., Baumann-Pickering, S., Širović, A., Hildebrand, J.A. 2017. Summary of Ambient and Anthropogenic Sound in the Gulf of Alaska and Northwest Coast. Marine Physical Laboratory Scripps Institution of Oceanography. Available at https://www.navymarinespeciesmonitoring.us/files/3414/9072/4865/Wiggins_et_al._2017_Ambient_Soundscape_in_GOA_TMAA_and_NWTRC_Mar2017.pdf
- Wiggins, S.M., Hildebrand, J.A. 2018. Gulf of Alaska fin whale calling behavior studied with acoustic tracking. Marine Physical Laboratory Scripps Institution of Oceanography. Available at https://www.navymarinespeciesmonitoring.us/files/1315/3140/5501/Wiggins_and_Hildebrand_2018_Fin_Whale_Calling_Behavior_in_GOA.pdf
- Wiley, M. L., J. B. Gaspin, and J. F. Goertner. (1981). Effects of underwater explosions on fish with a dynamical model to predict fishkill. *Ocean Science and Engineering*, 6(2), 223–284.
- Wiley, D. N., & Asmutis, R. A. (1995). Stranding and mortality of humpback whales, *Megaptera novaeangliae*. *Fishery Bulletin*, 93, 196-205.

- Wiley, D. N., C. A. Mayo, E. M. Maloney, and M. J. Moore. (2016). Vessel strike mitigation lessons from direct observations involving two collisions between noncommercial vessels and North Atlantic right whales (*Eubalaena glacialis*). *Marine Mammal Science*, 32(4), 1501–1509.
- Williams, R., D. Lusseau, and P. S. Hammond. (2006). Estimating relative energetic costs of human disturbance to killer whales (*Orcinus orca*). *Biological Conservation*, 133, 301–311.
- Williams, R., D. E. Bain, J. C. Smith, and D. Lusseau. (2009). Effects of vessels on behaviour patterns of individual southern resident killer whales, *Orcinus orca*. *Endangered Species Research*, 6, 199–209.
- Williams, R., Clark, C.W., Ponirakis, D., & Ashe, E. (2013). Acoustic quality of critical habitats for three threatened whale populations. *Animal Conservation* 17:174-185.
- Williams, R., C. W. Clark, D. Ponirakis, and E. Ashe. (2014a). Acoustic quality of critical habitats for three threatened whale populations. *Animal Conservation*, 17(2), 174–185.
- Williams, R., C. Erbe, E. Ashe, A. Beerman, and J. Smith. (2014b). Severity of killer whale behavioral responses to ship noise: a dose-response study. *Marine Pollution Bulletin*, 79(1-2), 254–260.
- Williams, T. M., T. L. Kendall, B. P. Richter, C. R. Ribeiro-French, J. S. John, K. L. Odell, B. A. Losch, D. A. Feuerbach, and M. A. Stamper. (2017). Swimming and diving energetics in dolphins: A stroke-by-stroke analysis for predicting the cost of flight responses in wild odontocetes. *The Journal of Experimental Biology*, 220(6), 1135–1145.
- Wood, W. E., and S. M. Yezerinac. (2006). Song sparrow (*Melospiza melodia*) song varies with urban noise. *The Auk*, 123(3), 650-659.
- Woods, D. C., J. S. Bolton, and J. F. Rhoads. (2015). On the use of evanescent plane waves for low-frequency energy transmission across material interfaces. *The Journal of the Acoustical Society of America*, 138(4), 2062–2078.
- Woods Hole Oceanographic Institution, 2005 – Portugal stranding
- Wright A.J., Maar M, Mohn C, Nabe-Nielsen J, Siebert U, Jensen LF, et al. (2013) Possible Causes of a Harbour Porpoise Mass Stranding in Danish Waters in 2005. *PLoS ONE* 8(2): e55553. <https://doi.org/10.1371/journal.pone.0055553>
- Wright, D. G. (1982). *A discussion paper on the effects of explosives on fish and marine mammals in the waters of the Northwest Territories* (Canadian Technical Report of Fisheries and Aquatic Sciences). Winnipeg, Manitoba: Western Region Department of Fisheries and Oceans.
- Wursig, B., S. K. Lynn, T. A. Jefferson, and K. D. Mullin. (1998). Behaviour of cetaceans in the northern Gulf of Mexico relative to survey ships and aircraft. *Aquatic Mammals*, 24.1:41-50.
- Yagla, J., and R. Stiegler. (2003). *Gun blast noise transmission across the air-sea interface*. Paper presented at the 5th European Conference on Noise Control. Naples, Italy.
- Yang, W. C., et al. (2021). "Anthropogenic sound exposure-induced stress in captive dolphins and implications for cetacean health." *Frontiers in Marine Science* 8.
- Yarmoloy, C., M. Bayer, and V. Geist. (1988). Behavior responses and reproduction of mule deer, *Odocoileus hemionus*, does following experimental harassment with an all-terrain vehicle. *Canadian field-naturalist*. Ottawa ON, 102(3), 425-429.
- Yazvenko, S. B., T. L. McDonald, S. A. Blokhin, S. R. Johnson, H. R. Melton, M. W. Newcomer, R. Nielson, and P. W. Wainwright. (2007). Feeding of western gray whales during a seismic survey near Sakhalin Island, Russia. *Environmental Monitoring and Assessment*, 134(1–3), 93–106.

- Velazquez-Wallraf, A. A. Fernandez, M.J. Caballero, A. Mollerlokken, P.D. Jepson, M. Andrade, Y.B. de Quiros, 2021. Decompressive Pathology in Cetaceans Based on an Experimental Pathological Model. *Frontiers in Veterinary Science*. p. 1-9.
- Yelverton, J. T., D. R. Richmond, E. R. Fletcher, and R. K. Jones. (1973). Safe distances from underwater explosions for mammals and birds. Albuquerque, NM: Lovelace Foundation for Medical Education and Research.
- Yelverton, J. T., D. R. Richmond, W. Hicks, K. Saunders, and E. R. Fletcher. (1975). *The relationship between fish size and their response to underwater blast*. Washington, DC: Lovelace Foundation for Medical Education and Research.
- Zaitseva, K. A., V. P. Morozov, A. I. and Akopian. (1980). Comparative characteristics of spatial hearing in the dolphin *Tursiops truncatus* and man. *Neuroscience and behavioral physiology*, 10(2), 180-182.
- Zelick R., D. A. Mann, and A. N. Popper. (1999). Acoustic communication in fishes and frogs. In: *Comparative hearing: fish and amphibians*. New York (NY): Springer
- Zimmer, W. M. X., and P. L. Tyack. (2007). Repetitive shallow dives pose decompression risk in deep-diving beaked whales. *Marine Mammal Science*, 23(4), 888–925.