

References: Sitka Seaplane Base

- Ahroon, W.A., Hamernik, R.P. and Lei, S.F., 1996. The effects of reverberant blast waves on the auditory system. *The Journal of the Acoustical Society of America*, 100(4), pp.2247-2257.
- Alaska Department of Fish and Game (ADF&G). 2023. Subsistence Harvest Information for Sitka: 2013. Accessed at <http://www.adfg.alaska.gov/sb/CSIS/index.cfm?ADFG=harvInfo.harvest> on August 24, 2023.
- American National Standards Institute (ANSI). 2013. Acoustic Terminology (ANSI S1.1-2013). New York: Acoustical Society of America.
- ANSI. 2005. Measurement of Sound Pressure Levels in Air (ANSI S1.13-2005). Acoustical Society of America, Woodbury, NY.
- ANSI. 1995. Bioacoustical Terminology (ANSI S3.20-1995). Acoustical Society of America, Woodbury, NY.
- ANSI. 1986. Methods of Measurement for Impulse Noise 3 (ANSI S12.7-1986). Acoustical Society of America, Woodbury, NY.
- Au, W.W. and Hastings, M.C., 2008. *Principles of marine bioacoustics* (Vol. 510). New York: Springer.
- Baker, C.S., Herman, L.M., Perry, A., Lawton, W.S., Straley, J.M., Wolman, A.A., Kaufman, G.D., Winn, H.E., Hall, J.D., Reinke, J.M. and Östman, J., 1986. Migratory movement and population structure of humpback whales (*Megaptera novaeangliae*) in the central and eastern North Pacific. *Marine Ecology Progress Series*, pp.105-119.
- Baker, C.S., Herman, L.M., Perry, A., Lawton, W.S., Straley, J.M. and Straley, J.H., 1985. Population characteristics and migration of summer and late-season humpback whales (*Megaptera novaeangliae*) in southeastern Alaska. *Marine Mammal Science*, 1(4), pp.304-323.
- Blecha, F., 2000. Immune system response to stress. In *The biology of animal stress: basic principles and implications for animal welfare*. (pp. 111-121). Wallingford UK: CABI Publishing.
- Carlson, T.J., D.A. Woodruff, G.E. Johnson, N.P. Kohn, G.R. Plosky, M.A. Weiland, J.A. Southard, and S.L. Southard. 2005. Hydroacoustic Measurements during Pile Driving at the Hood Canal Bridge, September through November. 2004. Prepared for Washington State Department of Transportation by Battelle Marine Sciences Laboratory, Sequim, Washington.
- Casper, B.M., Smith, M.E., Halvorsen, M.B., Sun, H., Carlson, T.J. and Popper, A.N., 2013. Effects of exposure to pile driving sounds on fish inner ear tissues. *Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology*, 166(2), pp.352-360.

- Croll, D.A., Acevedo-Gutiérrez, A., Tershy, B.R. and Urbán-Ramírez, J., 2001. The diving behavior of blue and fin whales: is dive duration shorter than expected based on oxygen stores?. *Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology*, 129(4), pp.797-809.
- Dahlheim, M.E., White, P.A. and Waite, J.M., 2009. Cetaceans of Southeast Alaska: distribution and seasonal occurrence. *Journal of Biogeography*, 36(3), pp.410-426.
- Denes, S., J. Vallarta, and D. Zeddies 2019. Sound source characterization of down-the-hole hammering: Thimble Shoal, Virginia
- Ellison, W.T., Southall, B.L., Clark, C.W. and Frankel, A.S., 2012. A new context-based approach to assess marine mammal behavioral responses to anthropogenic sounds. *Conservation Biology*, 26(1), pp.21-28.
- Everitt, R.D., C.H. Fiscus, and R.L. DeLong. 1980. Northern Puget Sound Marine Mammals. DOC/EPA Interagency Energy/ Environ. R&D Program. Doc. #EPA-6009/7-80-139, U.S. Environmental Protection Agency, Washington, D.C. 134 p.
- Fair, P.A. and Becker, P.R., 2000. Review of stress in marine mammals. *Journal of Aquatic Ecosystem Stress and Recovery*, 7(4), pp.335-354.
- Fay, R., 2009. Soundscapes and the sense of hearing of fishes. *Integrative Zoology*, 4(1), pp.26-32.
- Fay, R.R., Popper, A.N. and Webb, J.F., 2008. Introduction to fish bioacoustics. In *Fish Bioacoustics: With 81 Illustrations* (pp. 1-15). New York, NY: Springer New York.
- Fewtrell, J.L. and McCauley, R.D., 2012. Impact of air gun noise on the behaviour of marine fish and squid. *Marine pollution bulletin*, 64(5), pp.984-993.
- Finneran, J.J. 2015. Noise-induced hearing loss in marine mammals: A review of temporary threshold shift studies from 1996 to 2015. *Journal of the Acoustical Society of America* 138 (3):1702- 1726.
- Finneran, J.J. and Schlundt, C.E., 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), pp.1819-1826.
- Finneran, J.J. and Schlundt, C.E., 2010. Frequency-dependent and longitudinal changes in noise-induced hearing loss in a bottlenose dolphin (*Tursiops truncatus*). *The Journal of the Acoustical Society of America*, 128(2), pp.567-570.
- Finneran, J.J., Schlundt, C.E., Dear, R., Carder, D.A. and Ridgway, S.H., 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), pp.2929-2940.
- Finneran, J.J., Schlundt, C.E., Carder, D.A., Clark, J.A., Young, J.A., Gaspin, J.B. and Ridgway, S.H., 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), pp.417-431.

Ford, J.K., Durban, J.W., Ellis, G.M., Towers, J.R., Pilkington, J.F., Barrett-Lennard, L.G. and Andrews, R.D., 2013. New insights into the northward migration route of gray whales between Vancouver Island, British Columbia, and southeastern Alaska. *Marine Mammal Science*, 29(2), pp.325-337.

Guan, S. and Miner, R., 2020. Underwater noise characterization of down-the-hole pile driving activities off Biorka Island, Alaska. *Marine Pollution Bulletin*, 160, p.111664.

Halibut Point Marine Services. 2021. Old Sitka Dock North Dolphins Expansion Project Marine Mammal Monitoring Summary Report.

Halvorsen, M.B., Casper, B.M., Matthews, F., Carlson, T.J. and Popper, A.N., 2012b. Effects of exposure to pile-driving sounds on the lake sturgeon, Nile tilapia and hogchoker. *Proceedings of the Royal Society B: Biological Sciences*, 279(1748), pp.4705-4714.

Halvorsen, M.B., Zeddies, D.G., Ellison, W.T., Chicoine, D.R. and Popper, A.N., 2012a. Effects of mid-frequency active sonar on hearing in fish. *The Journal of the Acoustical Society of America*, 131(1), pp.599-607.

Hastings, K.M., M.J. Rehberg, G.M. O'Corry-Crowe, G.W. Pendleton, L.A. Jemison, and T.S. Gelatt. 2020. Demographic consequences and characteristics of recent population mixing and colonization in Steller sea lions, *Eumetopias jubatus*. *Journal of Mammalogy*, 101(1):107–120. DOI:10.1093/jmammal/gyz192.

Hastings, M.C. and Popper, A.N., 2005. *Effects of sound on fish* (No. CA05-0537). California Department of Transportation.

Hemilä, S., Nummela, S., Berta, A. and Reuter, T., 2006. High-frequency hearing in phocid and otariid pinnipeds: An interpretation based on inertial and cochlear constraints. *The Journal of the Acoustical Society of America*, 120(6), pp.3463-3466.

Henderson, M. and Bradey, S., 2008. Shaping online teaching practices: The influence of professional and academic identities. *Campus-Wide Information Systems*, 25(2), pp.85-92.

Heyvaert, C., and J. Reyff. 2021. Tenakee ferry terminal improvements project pile driving and drilling sound source verification, Tenakee Springs, Alaska. Cotati, CA.

Holberton, R.L., Helmuth, B. and Wingfield, J.C., 1996. The corticosterone stress response in gentoo and king penguins during the non-fasting period. *Condor*, pp.850-854.

Hood, L.C., Boersma, P.D. and Wingfield, J.C., 1998. The adrenocortical response to stress in incubating Magellanic penguins (*Spheniscus magellanicus*). *The Auk*, 115(1), pp.76-84.

- Jemison L.A., G.W. Pendleton, L.W. Fritz, K.K. Hastings, J.M Maniscalco, A.W. Trites, and T.S. Gelatt. 2013. Inter-population movements of Steller sea lions in Alaska with implications for population separation. *PLoS ONE* 8:e70167.
- Jessop, T.S., Tucker, A.D., Limpus, C.J. and Whittier, J.M., 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), pp.161-170.
- Jorgenson, J.K. and Gyselman, E.C., 2009. Hydroacoustic measurements of the behavioral response of arctic riverine fishes to seismic airguns. *The Journal of the Acoustical Society of America*, 126(3), pp.1598-1606.
- Jones, M.L., S.L. Swartz, and S. Leatherwood. 1984. The gray whale: *Eschrichtius robustus*. Academic Press. 600p.
- Kastak, D., Mulsow, J., Ghoul, A. and Reichmuth, C., 2008. Noise-induced permanent threshold shift in a harbor seal. *The Journal of the Acoustical Society of America*, 123(5), pp.2986-2986.
- Kastelein, R.A., Helder-Hoek, L., Jennings, N., van Kester, R. and Huisman, R., 2019a. Reduction in Body Mass and Blubber Thickness of Harbor Porpoises (*Phocoena phocoena*) Due to Near-Fasting for 24 Hours in Four Seasons. *Aquatic mammals*, 45(1).
- Kastelein, R.A., Helder-Hoek, L., van Kester, R., Huisman, R. and Gransier, R., 2019b. Temporary Hearing Threshold Shift in Harbor Porpoises (*Phocoena phocoena*) Due to One-Sixth Octave Noise Band at 16 kHz. *Aquatic Mammals*, 45(3).
- Kastelein, R.A., Helder-Hoek, L., Gransier, R., Terhune, J.M., Jennings, N. and de Jong, C.A., 2015. Hearing thresholds of harbor seals (*Phoca vitulina*) for playbacks of seal scarer signals, and effects of the signals on behavior. *Hydrobiologia*, 756, pp.75-88.
- Kastelein, R.A., Schop, J., Gransier, R. and Hoek, L., 2014. 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), pp.1410-1418.
- Kastelein, R.A., Wensveen, P., Hoek, L., and Terhune, J.M. (2009). "Underwater hearing sensitivity of harbor seals (*Phoca vitulina*) for narrow noise bands between 0.2 and 80 kHz," *J. Acoust. Soc. Am.* 126, 476–483.
- Ketten, D.R., Simmons, J.A., Riquimaroux, H. and Simmons, A.M., 2021. Functional analyses of peripheral auditory system adaptations for echolocation in air vs. water. *Frontiers in Ecology and Evolution*, 9, p.661216.
- Kryter, K.D., Ward, W.D., Miller, J.D. and Eldredge, D.H., 1966. Hazardous exposure to intermittent and steady-state noise. *The Journal of the Acoustical Society of America*, 39(3), pp.451-464.
- Lankford, S.E., Adams, T.E., Miller, R.A. and Cech Jr, J.J., 2005. The cost of chronic stress: impacts of a nonhabituating stress response on metabolic variables and swimming performance in sturgeon. *Physiological and Biochemical Zoology*, 78(4), pp.599-609.

- Lusseau, D. and Bejder, L., 2007. The long-term consequences of short-term responses to disturbance experiences from whalewatching impact assessment. *International Journal of Comparative Psychology*, 20(2).
- Madsen, P.T., Wahlberg, M., Tougaard, J., Lucke, K. and Tyack, P., 2006. Wind turbine underwater noise and marine mammals: implications of current knowledge and data needs. *Marine ecology progress series*, 309, pp.279-295.
- Miller, J.D. 1974. Effects of noise on people. *Journal of the Acoustical Society of America* 56:729-764
- Moberg, Gary P. "Biological response to stress: implications for animal welfare." 2000. In *The biology of animal stress: Basic principles and implications for animal welfare.*, pp. 1-21. Wallingford UK: CABI publishing, 2000.
- Moberg, G.P., 1987. A model for assessing the impact of behavioral stress on domestic animals. *Journal of Animal Science*, 65(5), pp.1228-1235.
- Mooney, T.A., Nachtigall, P.E., and Vlachos, S., 2009. Sonar-induced temporary hearing loss in dolphins. *Biology letters*, 5(4), pp.565-567.
- Mooney, T. A., Nachtigall, P. E., & Vlachos, S. (2009). Sonar-induced temporary hearing loss in dolphins. *Biology letters*, 5(4), 565-567.
- 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., Supin, A.Y., Pacini, A.F. and Kastelein, R.A., 2018. Four odontocete species change hearing levels when warned of impending loud sound. *Integrative zoology*, 13(2), pp.160-165.
- National Institute for Occupational Safety and Health, NIOSH (1998) Criteria for a recommended standard. Occupational exposure to noise. Revised Criteria. Cincinnati: USDHHS, PHS, CDC, NIOSH, publication no.98-126.
- NMFS. 2018. 2018 Revision to: Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (Version 2.0): Underwater Acoustic Thresholds for Onset of Permanent and Temporary Threshold Shifts. U.S. Dept. of Commer., NOAA Technical Memorandum NMFS-OPR-59, 167 p.
- NMFS. 2013. Occurrence of western distinct population segment Steller sea lions East of 144° W. longitude. NOAA, National Marine Fisheries Service, Alaska Region, Juneau, AK. 3 pp.
- National Research Council. (2003). *Ocean Noise and Marine Mammals*. Washington, DC: National Academies Press.

- Nedwell, J. and Edwards, B., 2002. Measurements of underwater noise in the Arun River during piling at County Wharf, Littlehampton. *Report by Subacoustech, Ltd. to David Wilson Homes Ltd.*
- Nowacek, D.P., Johnson, M.P. and Tyack, P.L., 2004. North Atlantic right whales (*Eubalaena glacialis*) ignore ships but respond to alerting stimuli. *Proceedings of the Royal Society of London. Series B: Biological Sciences*, 271(1536), pp.227-231.
- Oestman, R., D. Buehler, J. Reyff, and R. Rodkin. 2009. Technical guidance for assessment and mitigation of the hydroacoustic effects of pile driving on fish. Prepared by ICF Jones & Stokes and Illingworth & Rodkin, Inc. for the California Department of Transportation: 298.
- Paxton, A. B., Taylor, J. C., Nowacek, D. P., Dale, J., Cole, E., Voss, C. M., & Peterson, C. H. (2017). Seismic survey noise disrupted fish use of a temperate reef. *Marine Policy*, 78, 68-73.
- Pearson, W.H., J.R. Salski, and C.I. Malme. 1992. Effects of sounds from geophysical survey devices on behavior of captive rockfish. *Canadian Journal of Fisheries and Aquatic Sciences* 49: 1343-1356.
- Popper, A.N. and Hastings, M.C., 2009. The effects of anthropogenic sources of sound on fishes. *Journal of fish biology*, 75(3), pp.455-489.
- Reichmuth, C., M.M. Holt, J. Mulsow, J.M. Sills, and B.L. Southall. 2013. Comparative assessment of amphibious hearing in pinnipeds. *Journal of Comparative Physiology A*. Vol. 199(6): 491-507. <https://doi.org/10.1007/s00359-013-0813-y>.
- Reyff, J., 2020. Review of Down-the-Hole Rock Socket Drilling Acoustic Data Measured for White Pass & Yukon Route (WP&YR) Mooring Dolphins (Illingworth & Rodkin, Inc., Cotati, CA). *Inc.: Cotati, CA, USA*, 8.
- Reyff, J. and Heyvaert, C., 2019. White Pass and Yukon Railroad mooring dolphin installation: pile driving and drilling sound source verification, Skagway, AK, Prepared by Illingworth and Rodkin, Inc. for PND Engineers. *Inc., Job*, (18-221).
- Richardson, W. J., Greene, C. R. Jr, Malme, C. I., and Thomson, D. H. 1995. *Marine mammals and Noise*. Academic Press, San Diego, California. 576 pp
- Rolland, R.M., Parks, S.E., Hunt, K.E., Castellote, M., Corkeron, P.J., Nowacek, D.P., Wasser, S.K. and Kraus, S.D., 2012. Evidence that ship noise increases stress in right whales. *Proceedings of the Royal Society B: Biological Sciences*, 279(1737), pp.2363-2368.
- Romano, T.A., M.J. Keogh, C. Kelly, P. Feng, L. Berk, C.R. Schlundt, et al. 2004. Anthropogenic sound and marine mammal health: Measures of the nervous and immune systems before and after intense sound exposure. *Canadian Journal of Fisheries and Aquatic Sciences* 61:1124-1134.
- 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., Olschowka, J.A., Felten, S.Y., Quaranta, V., Ridgway, S.H. and Felten, D.L., 2002b. Immune response, stress, and environment: Implications for cetaceans. *Cell and Molecular Biology of Marine Mammals; CJ Pfeiffer, ed. Krieger Publishing Co., Inc.*
- Santulli, A., Modica, A., Messina, C., Ceffa, L., Curatolo, A., Rivas, G., Fabi, G. and D'amelio, V., 1999. Biochemical responses of European sea bass (*Dicentrarchus labrax* L.) to the stress induced by off shore experimental seismic prospecting. *Marine Pollution Bulletin*, 38(12), pp.1105-1114.
- Schlundt, C.E., Finneran, J.J., Carder, D.A. and Ridgway, S.H., 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), pp.3496-3508.
- Scholik, A.R. and Yan, H.Y., 2002. Effects of boat engine noise on the auditory sensitivity of the fathead minnow, *Pimephales promelas*. *Environmental Biology of Fishes*, 63, pp.203-209.
- Scholik, A.R. and Yan, H.Y., 2001. The effects of underwater noise on auditory sensitivity of fish. *Proceedings of the Institute of Acoustics*, 23, pp.27-36.
- Seyle H (1950) Stress and the general adaptation syndrome. *J Brit Med* 1:1383–1392
- Skalski, J.R., Pearson, W.H. and Malme, C.I., 1992. Effects of sounds from a geophysical survey device on catch-per-unit-effort in a hook-and-line fishery for rockfish (*Sebastodes* spp.). *Canadian Journal of Fisheries and Aquatic Sciences*, 49(7), pp.1357-1365.
- Solstice Alaska Consulting, Inc (SolsticeAK). 2022. Marine Mammal Observations from in the Sitka Seaplane Base Geotechnical Survey in March 2022.
- SolsticeAK. 2020. Marine Mammal Observations from Crescent Harbor Float Replacement Project in 2020.
- SolsticeAK. 2019. Marine Mammal Observations from O'Connell Bridge Lightering Float in September 2018.
- Southall, B.L., Nowacek, D.P., Bowles, A.E., Senigaglia, V., Bejder, L. and Tyack, P.L., 2021. Marine mammal noise exposure criteria: assessing the severity of marine mammal behavioral responses to human noise. *Aquatic Mammals*, 47(5), pp.421-464.
- Southall, B.L., Finneran, J.J., Reichmuth, C., Nachtigall, P.E., Ketten, D.R., Bowles, A.E., Ellison, W.T., Nowacek, D.P. and Tyack, P.L., 2019. Marine mammal noise exposure criteria: Updated scientific recommendations for residual hearing effects. *Aquatic Mammals*, 45(2), pp.125-232.
- Southall, B., A. Bowles, W. Ellison, J. Finneran, R. Gentry, C. Greene, Jr., D. Kastak, D. Ketten, J. Miller, P. Nachtigall, W. Richardson, J. Thomas, and P. Tyack. 2007. Marine mammal noise exposure criteria: initial scientific recommendations. *Aquatic Mammals* 33:411-521.
- Straley, J. M., J. R. Moran, K. M. Boswell, J. J. Vollenweider, R. A. Heintz, T. J. Quinn II, B. H. Witteveen, and S. D. Rice. 2018. Seasonal presence and potential influence of humpback

- whales on 130 Draft Biological Report – Humpback Whale Critical Habitat wintering Pacific herring populations in the Gulf of Alaska. Deep Sea Research Part II: Topical Studies in Oceanography 147:173-186.
- Straley, J., Pendell, K., and Ganey, G. 2017. Marine Mammal Report- Silver Bay Project. J. Straley Investigations, Sitka AK 99835.
- Thorson, P. and J.A. Reyff. 2006. San Francisco-Oakland Bay Bridge East Span Seismic Safety Project: marine mammal and acoustic monitoring for the marine foundations at piers E2 and T1, January September 2006. Prepared by SRS Technologies and Illingworth & Rodkin, Inc. for the California Department of Transportation, 51 p.
- Turnagain Marine Construction (Turnagain). 2018. Monthly Marine Mammal Monitoring Reports from monitoring at Biorka Island in June, July, and August during construction of the Federal Aviation Administration's Biorka Dock Replacement Project. Logs submitted to National Marine Fisheries Service by Turnagain Marine Construction.
- Turnagain. 2017. Marine Mammal Monitoring Forms from monitoring of Silver Bay in October and November 2017 during construction of the City and Borough of Sitka's Gary Paxton Industrial Park (GPIP) Dock. Logs submitted to National Marine Fisheries Service by Turnagain Marine Construction.
- Wade, P. R., T. J. Quinn II, J. Barlow, C. S. Baker, A. M. Burdin, J. Calambokidis, P. J. Clapham, E. Falcone, J. K. B. Ford, C. M. Gabriele, R. Leduc, D. K. Mattila, L. RojasBracho, J. Straley, B. L. Taylor, J. Urbán R., D. Weller, B. H. Witteveen, and M. Yamaguchi. 2016. Estimates of abundance and migratory destination for North Pacific humpback whales in both summer feeding areas and winter mating and calving areas. Paper SC/66b/IA21 submitted to the Scientific Committee of the International Whaling Commission, June 2016, Bled, Slovenia. Available at <https://archive.iwc.int/>.
- Ward, W. D. (1997). Effects of high intensity sound. In M. J. Crocker (Ed.) Encyclopedia of acoustics, (Volume III, pp. 1497–1507). New York: John Wiley & Sons.
- Ward, W.D., 1960. A comment on Kylin's monograph on temporary threshold shift. *Acta Oto-Laryngologica*, 52(1-6), pp.281-282.
- Ward, W. D., Glorig, A., and Sklar, D. L. (1958) "Dependence of Temporary Threshold Shift at 4 kc on Intensity and Time," *J. Acoust. Soc. Am.* 30, 944-954.
- Ward, W. D., Glorig, A., and Sklar, D. L. (1959) "Temporary Threshold shift from Octave-band Noise: Applications to Damage-risk Criteria," *J. Acoust. Soc. Am.* 31, 522-528.
- Wardle, C.S., Carter, T.J., Urquhart, G.G., Johnstone, A.D.F., Ziolkowski, A.M., Hampson, G. and Mackie, D., 2001. Effects of seismic air guns on marine fish. *Continental shelf research*, 21(8-10), pp.1005-1027.
- Wartzok, D., Poppper, A.N., Gordon, J. and Merrill, J., 2004. Factors affecting the responses of marine mammals to acoustic disturbance. *Marine Technology Society Journal*, 37(4).
- Wartzok, D., A.N. Popper, J. Gordon, and J. Merrill. (2003). Factors affecting the responses of marine mammals to acoustic disturbance. *Marine Technology Society Journal*, 37(4), 6-15.

- Wartzok, D. and Ketten, D.R., 1999. Marine mammal sensory systems. *Biology of marine mammals, 1*, pp.117-175.
- Weilgart, L.S., 2007. The impacts of anthropogenic ocean noise on cetaceans and implications for management. *Canadian journal of zoology*, 85(11), pp.1091-1116.
- Wild, L.A., Riley, H.E., Pearson, H.C., Gabriele, C.M., Neilson, J.L., Szabo, A., Moran, J., Straley, J.M. and DeLand, S., 2023. Biologically Important Areas II for cetaceans within US and adjacent waters—Gulf of Alaska Region. *Frontiers in Marine Science*, 10, p.763.
- Windward Project Solutions (Windward). 2017. Marine Mammal Monitoring Forms from monitoring of Sitka Channel and Middle Channel in January 2017 during replacement of Petro Marine's South Sitka Channel Fuel Dock. Report submitted to National Marine Fisheries Service on November 7, 2017.
- Yazvenko, S.B., McDonald, T.L., Blokhin, S.A., Johnson, S.R., Melton, H.R., Newcomer, M.W., Nielson, R. and Wainwright, P.W., 2007. Feeding of western gray whales during a seismic survey near Sakhalin Island, Russia. *Environmental Monitoring and Assessment*, 134, pp.93-106.
- Zelick, R., Mann, D.A. and Popper, A.N., 1999. Acoustic communication in fishes and frogs. *Comparative hearing: fish and amphibians*, pp.363-411.