

References: U.S. Navy ICEX 2024

- Alaska Department of Fish and Game (ADF&G) 2017. Ice Seal Research: Movements and Habitat Use Studies. Most recent update: July 2017.
<http://www.adfg.alaska.gov/index.cfm?adfg=marinemammalprogram.icesealmovements>
- ANSI (American National Standards Institute). 1986. Methods of measurement for impulse noise 3 (ANSI S12.7-1986). *Acoustical Society of America*, Woodbury, NY.
- American National Standards Institute (ANSI). 1995. Bio-acoustical Terminology (ANSI S3.201995). Acoustical Society of America, Woodbury, NY.
- ANSI, 2005. Measurement of sound pressure levels in air (ANSI S1.13-2005). *Acoustical Society of America*, Woodbury, NY.
- Archer, F.I., S.L. Mesnick, and A.C. Allen. 2010. Variation and predictors of vessel response behavior in a tropical dolphin community. NOAA Technical Memorandum NMFS-SWFSC-457, National Marine Fisheries Service: 60.
- Au, W.W.L. and M.C. Hastings. 2008. Principles of Marine Bioacoustics. Springer, New York
- 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.
- Bejder, L., A. Samuels, H. Whitehead, H. Finn, and S. Allen. 2009. Impact assessment research: Use and misuse of habituation, sensitisation and tolerance in describing wildlife responses to anthropogenic stimuli. *Marine Ecology Progress Series* 395:177-185.
- Bejder, L., A. Samuels, H. Whitehead, N. Gales, J. Mann, R. Connor, et al. 2006. Decline in relative abundance of bottlenose dolphins exposed to long-term disturbance. *Conservation Biology* 20 (6):1791-1798.
- Bengtson, J. L., Hiruki-Raring, L. M., Simpkins, M. A., & Boveng, P. L. 2005. Ringed and bearded seal densities in the eastern Chukchi Sea, 1999–2000. *Polar Biology*, 28, 833-845. doi: 10.1007/s00300-005-0009-1.
- 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. *Journal of the Acoustical Society of America* 115 (5):2346.
- Blecha, F. 2000. Immune system response to stress. Pages 111-122 in G.P. Moberg and J.A. Mench, eds. *The Biology of Animal Stress: Basic Principles and Implications for Animal Welfare*. CABI Publishing, Oxon, United Kingdom.
- Born, E. W., Teilmann, J., & Riget, F. F. (2002). Haul-out Activity of Ringed Seals (*Phoca hispida*) Determined from Satellite Telemetry. *I8(1)*, 167-181.

- Born, E. W., Teilmann, J., Acquarone, M., & Riget, F. F. (2004). Habitat use of ringed seals (*Phoca hispida*) in the North Water area (North Baffin Bay). *Arctic*, 57(2), 129-142.
- Boveng, P., & Cameron, M. F. (2013). *Pinniped movements and foraging: seasonal movements, habitat selection, foraging and haul-out behavior of adult bearded seals in the Chukchi Sea. Final Report*. Anchorage, AK: Bureau of Ocean Energy Management, Alaska Outer Continental Shelf Region., p. 91.
- Bowles, A.E., M. Smultra, B. Wursig, D.P. DeMaster, and D. Palka. 1994. Relative abundance and behavior of marine mammals exposed to transmissions from the Heard Island feasibility test. *Journal of the Acoustical Society of America* 96 (4):2469-2484.
- Bradshaw, C.J.A., 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.
- Braham, H.W., M.A. Fraker, and B.D. Krogman. 1980. Spring migration of the western Arctic population of bowhead whales. *Mar. Fish. Rev.* 42:36-46.
- 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
- Brueggeman, J., Green, G., Grotfendt, R., Smultra, M., Volsen, D., Rowlett, R., . . . Burns, J. (1992). Marine Mammal Monitoring Program (Seals and Whales) Crackerjack and Diamond Prospects Chukchi Sea. *Rep. from EBASCO Environmental, Bellevue, WA, for Shell Western E&P Inc. and Chevron USA Inc*, 62.
- Budelmann, B. U. 1992a. Hearing by crustacea. In Evolutionary Biology of Hearing (pp. 131-139). New York: Springer-Verlag.
- Budelmann, B. U. 1992b. Hearing in nonarthropod invertebrates. In Evolutionary Biology of Hearing (pp. 16). New York: Springer-Verlag.
- Budelmann, B. U. 2010. Cephalopoda. Oxford, UK: Wiley-Blackwell.
- Burns, J. J. 1970. Remarks on the distribution and natural history of pagophilic pinnipeds in the Bering and Chukchi Seas. *J. Mammal*. 51:445-454.
- Burns, J. J., and K. J. Frost. 1979. The natural history and ecology of the bearded seal, *Erignathus barbatus*. 77.
- Cameron, M. F., & Boveng, P. L. (2009). *Habitat use and seasonal movements of adult and sub-adult bearded seals*. *Alaska Fisheries Science Center Quarterly Report* pp. 1-4.

- Cameron, M.F., J. L. Bengtson, P. L. Boveng, J. K. Jansen, B. P. Kelly, S.P. Dahle, E. A. Logerwell, J. E. Overland, C. L. Sabine, G. T. Waring, and J. M. Wilder. 2010. Status review of the bearded seal (*Erignathus barbatus*). U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-211, 246 p.
- Chapskii, K. K. (1940). *The ringed seal of western seas of the Soviet Arctic (The morphological characteristic, biology and hunting production)*. Leningrad, Moscow: Izd. Glavsevmorputi. p. 147.
- Chess, J. R., & Hobson, E. S. 1997. Benthic Invertebrates of Four Southern California Marine Habitats Prior to Onset of Ocean Warming in 1976, with Lists of Fish Predators. . Tiburon, California: National Oceanic and Atmospheric Association. p. 110.
- Clark, C.W., Ellison, W.T., Southall, B.L., Hatch, L., Van Parijs, S.M., Frankel, A., Ponirakis, D., 2009. Acoustic masking in marine ecosystems: intuitions, analysis, and implication. *Marine Ecology Progress Series* 395, 201–222.
- Clarke, J. T., A. A. Brower, M. C. Ferguson, A. S. Kennedy, and A. L. Willoughby. 2015. Distribution and Relative Abundance of Marine Mammals in the Eastern Chukchi and Western Beaufort Seas, 2014.in A. F. S. C. National Marine Mammal Laboratory, NMFS, NOAA, editor., Seattle, WA.
- 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).
- Connor, R.C. and M.R. Heithaus. 1996. Approach by great white shark elicits flight response in bottlenose dolphins. *Marine Mammal Science* 12 (4):602-606.
- Costa, D.P., D.E. Crocker, J. Gedamke, P.M. Webb, D.S. Houser, S.B. Blackwell, et al. 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*. *Journal of the Acoustical Society of America* 113 (2):1155-1165.
- Crawford, J. A., Frost, K. J., Quakenbush, L. T., & Whiting, A. (2012). Different habitat use strategies by subadult and adult ringed seals (*Phoca hispida*) in the Bering and Chukchi seas. *Polar Biology*, 35(2), 241-255. doi: 10.1007/s00300-011-1067-1.
- 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 (1):13-27.
- Daan, S., C. Deerenberg, and C. Dijkstra. 1996. Increased daily work precipitates natural death in the kestrel. *Journal of Animal Ecology* 65 (5):6.
- Di Iorio, L. and C.W. Clark. 2009. Exposure to seismic survey alters blue whale acoustic communication. *Biology Letters* 6 (1):51-54.

- Dugan, J. E., Hubbard, D. M., Martin, D. L., Engle, J. M., Richards, D. M., Davis, G. E., & Ambrose, R. F. 2000. Macrofauna Communities of Exposed Sandy Beaches on the Southern California Mainland and Channel Islands. In. Browne, D. R., Mitchell, K. L. & Chaney, H. W. (Eds.), Proceedings of the Fifth California Islands Symposium, 29 March - 1 April 1999 (pp. 339-346): Minerals Management Service.
- Edmonds, N. J., Firmin, C. J., Goldsmith, D., Faulkner, R. C., & Wood, D. T. 2016. A review of crustacean sensitivity to high amplitude underwater noise: Data needs for effective risk assessment in relation to UK commercial species. *Marine Pollution Bulletin*. doi: 10.1016/j.marpolbul.2016.05.006.
- Ellison, W.T., B.L. Southall, C.W. Clark, and A.S. Frankel. 2012. A new context-based approach to assess marine mammal behavioral responses to anthropogenic sounds. *Conservation Biology* 26 (1):21-28.
- Elsner, R., Wartzok, D., Sonafrank, N. B., & Kelly, B. P. 1989. Behavioral and physiological reactions of Arctic seals during under-ice pilotage. *Canadian Journal of Zoology*, 67(10), 2506- 2513.
- 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.
- Evans, D.L. and G.R. England. 2001. Joint interim report: Bahamas marine mammal stranding event of 15-16 March 2000. U.S. Navy and National Marine Fisheries Service: 66.
- 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.
- Fedoseev, G. A. (1965). *The ecology of the reproduction of seals on the northern part of the Sea of Okhotsk*. (Fisheries and Marine Service Translation Series No. 3369). USSR,: Department of the Environment, Fisheries and Marine Service, Arctic Biological Station. pp. 212-216
- Finneran, J.J. 2015. Noise-induced hearing loss in marine mammals: A review of temporary threshold shift studies from 1996 to 2015. *J Acoust Soc Am*. 2015 Sep;138(3):1702-26.
- Finneran, J. J., Carder, D. A., Schlundt, C. E., & Dear, R. L. 2010. Growth and recovery of temporary threshold shift at 3 kHz in bottlenose dolphins: Experimental data and mathematical models. *Journal of the Acoustical Society of America*, 127(5), 3256–3266.
- 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., & Jenkins, A. K. 2012. Criteria and Thresholds for Navy Acoustic Effects

Analysis Technical Report. SPAWAR Marine Mammal Program

- Foote, A.D., R.W. Osborne, and A.R. Hoelzel. 2004. Whale-call response to masking boat noise. *Nature* 428:910
- Ford, J.K. and Reeves, R.R., 2008. Fight or flight: antipredator strategies of baleen whale. *Mammal Review*, 38(1), pp.50-86.
- Frankel, A.S. and C.W. Clark. 2000. Behavioral responses of humpback whales (*Megaptera novaeangliae*) to full-scale ATOC signals. *Journal of the Acoustical Society of America* 108 (4):1930-1937.
- Fristrup, K.M., Hatch, L.T. & Clark, C.W. 2003. Variation in humpback whale (*Megaptera novaeangliae*) song length in relation to low-frequency sound broadcasts. *Journal of the Acoustical Society of America*, 113, 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 and Evolution* 14 (2):91-97.
- Frost, K. J. (1985). The ringed seal (*Phoca hispida*). In. Burns, J. J., Frost, K. J. & Lowry, L. F. (Eds.), *Marine Mammals Species Accounts*. Juneau, AK: Alaska Department of Fish and Game.
- Frost, K. and S. Karpovich. 2008. Gray Whale: Wildlife Notebook Series. A laska Department of Fish & Game. Available at:
https://www.adfg.alaska.gov/static/education/wns/gray_whale.pdf
- Frost, K. J., & Lowry, L. F. (1984). Trophic relationships of vertebrate consumers in the Alaskan Beaufort Sea. In *The Alaskan Beaufort Sea -- Ecosystems and Environments* (pp. 381-401). New York, NY: Academic Press, Inc.
- Frost, K. J., A. Whiting, M. F. Cameron, and M. A. Simpkins. 2008. Habitat use, seasonal movements and stock structure of bearded seals in Kotzebue Sound, Alaska. Tribal Wildlife Grants Program, Fish and Wildlife Service, Anchorage, AK.
- Gailey, G., B. Wursig, 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 (1-3):75-91.
- 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.
- Gjertz, I., Kovacs, K. M., Lydersen, C., & Wiig, O. (2000). Movements and Diving of Adult Ringed Seals (*Phoca hispida*) in Svalbard. *Polar Biology*, 23(9), 651-656.

Goldbogen, J.A., J. Calambokidis, A.S. Friedlaender, J. Francis, S.L. Deruiter, A.K. Stimpert, et al. 2013. Underwater acrobatics by the world's largest predator: 360° rolling manoeuvres by lunge-feeding blue whales. *Biology Letters* 9 (1):Article 20120986.

Goodall, C., Chapman, C., & Neil, D. 1990. The Acoustic Response Threshold of Norway Lobster *Nephrops norvegicus* (L.) in a Free Sound Field. In. Weise, K., Krenz, W. D., Tauntz, J., Reichert, H. & Mulloney, B. (Eds.), *Frontiers in Crustacean Neurobiology* (pp. 106-113). Basel: Birkhauser.

Goold, J. 1996. Acoustic Assessment Of Populations Of Common Dolphin *Delphinus Delphis* In Conjunction With Seismic Surveying. *J. mar. biol. Ass. U.K.* 76, 811-820.

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.

Götz, T., Janik, V. M. G., T., & Janik, V. M. (2010). Aversiveness of sounds in phocid seals: psycho-physiological factors, learning processes and motivation. *The Journal of Experimental Biology*, 213, 1536-1548.

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

Hanlon, R. T. 1987. Why Cephalopods Are Probably Not Deaf. *The American Naturalist*, 129(2), 312 - 317.

Hamilton, C., Kovacs, K.M., Lydersen, C. 2018. Individual variability in diving, movement and activity patterns of adult bearded seals in Svalbard, Norway. *Scientific Reports*. 8:16988 | DOI:10.1038/s41598-018-35306-6

Hammill, M. O. (2008). Ringed seal *Pusa hispida*. In. Perrin, W. F., Wursig, B. & Thewissen, J. G. M. (Eds.), *Encyclopedia of Marine Mammals* (Second Edition ed., pp. 972-974). San Diego, CA: Academic Press.

Harrington, F.H. and A.M. Veitch. 1992. Calving success of woodland caribou exposed to low-level jet fighter overflights. *Arctic* 45 (3):213-218.

Harris, C.M. (ed.). 1998. Handbook of Acoustical Measurements and Noise Control. Acoustical Society of America, Woodbury, NY.

- Harwood, L. A., Smith, T. G., Auld, J., Melling, H., & Yurkowski, D. J. (2015). Seasonal movements and diving of ringed seals, *Pusa hispida*, in the Western Canadian Arctic, 1999-2001 and 2010-11. *Arctic*, 193-209.
- Harwood, L. A., Smith, T. G., & Auld, J. C. (2012). Fall migration of ringed seals (*Phoca hispida*) through the Beaufort and Chukchi Seas, 2001 - 02. *Arctic*, 65(1), 35-44.
- Hastings, M. C., & Popper, A. N. 2005. Effects of Sound on Fish. (Contract No. 43A0139, Task Order 1). Sacramento, CA: California Department of Transportation. Prepared by P.C. Jones and Stokes.
- 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. Henninger, H. P., & Watson, W. H. I. 2005. Mechanisms underlying the production of carapace vibrations and associated waterborne sounds in the American lobster, *Homarus americanus*. *The Journal of Experimental Biology*, 208, 3421-3429. doi: 10.1242/jeb.01771.
- Henderson, E.E., Joseph, J., Reeder, D.B. 2021. Summary Report on Fleet Forces ICEX Acoustic Monitoring. Naval Information Warfare Center. Available at https://navymarinespeciesmonitoring.us/files/9616/1713/4924/ICEX_Acoustic_Monitoring_2020.pdf
- Henninger, H. P., & Watson, W. H. I. 2005. Mechanisms underlying the production of carapace vibrations and associated waterborne sounds in the American lobster, *Homarus americanus*. *The Journal of Experimental Biology*, 208, 3421-3429. doi: 10.1242/jeb.01771.
- Hildebrand, J. A. (2009). Anthropogenic and natural sources of ambient noise in the ocean. *Marine Ecology Progress Series*, 395, 5–20.
- Hill, P. S. M. 2009. How do animals use substrate-borne vibrations as an information source? *Naturwissenschaften*, 96, 1355-1371. doi: 10.1007/s00114-009-0588-8.
- Hjelset, A.M., M. Andersen, I. Gjertz, C. Lydersen, B. Gulliksen. 1999. Feeding habits of bearded seals (*Erignathus barbatus*) from the Svalbard area, Norway. *Polar Biology*. 21, 186-193.
- Holberton, R.L., B. Helmuth, and J.C. Wingfield. 1996. The corticosterone stress response in gentoo and king penguins during the non-fasting period. *Condor* 98 (4):850-854.
- 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. *Journal of the Acoustical Society of America* 125 (1):EL27-32.
- Hood, L.C., P.D. Boersma, and J.C. Wingfield. 1998. The adrenocortical response to stress in

incubating Magellanic penguins (*Spheniscus magellanicus*). *Auk* 115 (1):76-84.

Houser, D. S., Martin, S. W., & Finneran, J. J. 2013a. Behavioral responses of California sea lions to mid-frequency (3250-3450 Hz) sonar signals. *Marine Environmental Research*, 92, 268- 278.

Houser, D.S. and P.W. Moore. 2014. Report on the current and future status of underwater hearing research. Report NMMF-001-14, National Marine Mammal Foundation: 46.

Hu, Y. H., Yan, H. Y., Chung, W. S., Shiao, J. C., & Hwang, P. P. 2009. Acoustically Evoked Potentials in Two Cephalopods inferred using the Auditory Brainstem Response (ABR) Approach. *Comparative Biochemistry and Physiology*, 153, 278-283.

ISO (International Organization for Standardization). 2016. Acoustics – Description, measurement and assessment of environmental noise – Part 1: Basic quantities and assessment procedures (ISO 1996-1:2003(E)). International Organization for Standardization, Geneva.

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.

Jones, J. M., Thayre, B. J., Roth, E. H., Mahoney, M., Sia, I., Merculief, K., . . . Bacon, A. (2014). Ringed, bearded, and ribbon seal vocalizations north of Barrow, Alaska: Seasonal presence and relationship with sea ice. *Arctic*, 67(2), 203–222.

Josefson, A. B., Mokievsky, V., Bergmann, M., Blicher, M. E., Bluhm, B., Cochrane, S., . . . Włodarska-Kowalcuk, M. 2013. Marine invertebrates. In. Meltofte, H. (Ed.), Arctic biodiversity assessment (pp. 225-257). Denmark: Conservation of Arctic Flora and Fauna (CAFF), Arctic Council.

Kaifu, K., Akamatsu, T., & Segawa, S. 2008. Underwater sound detection by cephalopod statocyst. *Fisheries Science*, 74, 781-786.

Kastak, D., J. Mulsow, A. Ghoul, and C. Reichmuth. 2008. Noise-induced permanent threshold shift in a harbor seal. *Journal of the Acoustical Society of America* 123:2986.

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.

Kaschner, K. 2004. Modelling and mapping resource overlap between marine mammals and fisheries on a global scale. PhD, University of British Columbia.

- Kaschner, K., Watson, R., Trites, A. W., & Pauly, D. 2006. Mapping world-wide distributions of marine mammal species using a relative environmental suitability (RES) model. *Marine Ecology Progress Series*, 316, 285-310.
- 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 (4):351-371.
- Kastelein, R. A., N. Jennings, W. C. Verboom, D. De Haan, and N. M. Schooneman. (2006). 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., W.C. Verboom, M. Muijsers, N.V. Jennings, and S. Van der Heul. 2005b. The influence of acoustic emissions for underwater data transmission on the behavior of harbour porpoises (*Phocoena phocoena*) in a floating pen. *Marine Environmental Research* 59:287-307.
- Kastelein, R.A., P. Wensveen, L. Hoek, 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.
- Kelly, B. P. (1988b). *Locating and characterizing ringed seal lairs and breathing holes in coordination with surveys using forward looking infra-red sensors* Fisheries and Oceans Freshwater Institute Final Report. p. 17.
- Kelly, B. P. (1988c). Ringed Seal, *Phoca hispida*. In. Lentfer, J. W. (Ed.), *Selected Marine Mammals of Alaska: Species Accounts with Research and Management Recommendations* (pp. 57-75). Washington, D.C.: Marine Mammal Commission.
- Kelly, B. P., Badajos, O. H., Kunnasranta, M., Moran, J. R., Martinez-Bakker, M., Wartzok, D., & Boveng, P. L. 2010a. Seasonal home ranges and fidelity to breeding sites among ringed seals. *Polar Biology*, 33, 1095-1109.
- Kelly, B. P., J. L. Bengtson, P. L. Boveng, M. F. Cameron, S. P. Dahle, J. K. Jansen, E. A. Logerwell, J. E. Overland, C. L. Sabine, G. T. Waring, and J. M. Wilder. 2010b. Status review of the ringed seal (*Phoca hispida*). U.S. Department of Commerce, Seattle, WA.
- Kovacs, K. M. 2002. Bearded seal. In. Perrin, W. F., Würsig, B. & Thewissen, J. G. M. (Eds.), *Encyclopedia of Marine Mammals* (pp. 84-87). San Diego, CA: Academic Press.
- 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, New York.

- 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), 451-464. Kvadsheim, P. H., Sevaldsen, E. M., Folkow, L. P., & Blix, A. S. 2010. Behavioural and physiological responses of hooded seals (*Cystophora cristata*) to 1 to 7 kHz sonar signals. *Aquatic Mammals*, 36(3), 239-247.
- Kvadsheim, P. H., Sevaldsen, E. M., Folkow, L. P., & Blix, A. S. 2010. Behavioural and physiological responses of hooded seals (*Cystophora cristata*) to 1 to 7 kHz sonar signals. *Aquatic Mammals*, 36(3), 239-247.
- Lankford, S.E., T.E. Adams, R.A. Miller, and J.J. Cech. 2005. The cost of chronic stress: Impacts of a nonhabituating stress response on metabolic variables and swimming performance in sturgeon. *Physiological and Biochemical Zoology* 78:599-609.
- Lentfer, J. W. 1972. *Alaska Polar Bear Research and Management, 1970-1971*. Alaska Department of Fish and Game. pp. 21-39.
- Lombarte, A., Yan, H. Y., Popper, A. N., Chang, J. C., & Platt, C. 1993. Damage and Regeneration of Hair Cell Ciliary Bundles in a Fish ear Following Treatment with Gentamicin. *Hearing Research*, 66, 166-174.
- Lovell, J. M., Findlay, M. M., Moate, R. M., & Yan, H. Y. 2005. The Hearing Abilities of the Prawn Palaemon serratus. *Comparative Biochemistry and Physiology*, 140, 89-100.
- Lovell, J. M., Findlay, M. M., Nedwell, J. R., & Pegg, M. A. 2006. The Hearing Abilities of the Silver Carp (*Hypophthalmichthys molitrix*) and Bighead Carp (*Aristichthys nobilis*). *Comparative Biochemistry and Physiology*, 143, 268-291.
- 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* 201 (2-3):228-236.
- Lydersen, C. 1998. Status and biology of ringed seals (*Phoca hispida*) in Svalbard. In. Heide-Jørgensen, M. P. & Lydersen, C. (Eds.), *Ringed Seals in the North Atlantic* (Vol. 1, pp. 46-62). Tromsø, Norway: NAMMCO Scientific Publications.
- Lydersen, C., & Gjertz, I. (1986). Studies of the ringed seal (*Phoca hispida* Schreber 1775) in its breeding habitat in Kongsfjorden, Svalbard. *Polar Research*, 4(1), 57-63.
- Lydersen, C., & Hammill, M. O. 1993. Diving in ringed seal (*Phoca hispida*) pups during the nursing period. *Canadian Journal of Zoology*, 71(5), 991-996.
- Lydersen, C., Jensen, P. M., & Lydersen, E. (1990). A survey of the Van Mijen Fiord, Svalbard, as habitat for ringed seals, *Phoca hispida*. *Ecography*, 13(2), 130-133.

- Lydersen, C., & Ryg, M. 1991. Evaluating breeding habitat and populations of ringed seals *Phoca hispida* in Svalbard fjords. *Polar Record*, 27(162), 223-228.
- MacIntyre, K. Q., K. M. Stafford, C. L. Berchok, and P. L. Boveng. 2013. Year-round acoustic detection of bearded seals (*Erignathus barbatus*) in the Beaufort Sea relative to changing environmental conditions, 2008–2010. *Polar Biology* 36.
- MacIntyre, K. Q., K. M. Stafford, P. B. Conn, K. L. Laidre, and P. L. Boveng. 2015. The relationship between sea ice concentration and the spatio-temporal distribution of vocalizing bearded seals (*Erignathus barbatus*) in the Bering, Chukchi, and Beaufort Seas from 2008 to 2011. *Progress in Oceanography* 136:241-249.
- Madsen, P. T., M. Johnson, P. J. O. Miller, N. A. Soto, J. Lynch, and P. Tyack. (2006). 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.
- McLaren, I. A. (1958). The biology of the ringed seal (*Phoca hispida* Schreber) in the eastern Canadian Arctic. *Fisheries Research Board of Canada*, 118, 97.
- Mecklenburg, C. W., Møller, P. R., & Steinke, D. 2011. Biodiversity of arctic marine fishes: taxonomy and zoogeography. *Marine Biodiversity*, 41(1), 109-140. doi: 10.1007/s12526-010-0070-z.
- Miller, J. D. 1974. Effects of noise on people. *Journal of Acoustical Society of America*, 56(3), 729-764.
- Miller, P.J.O., N. Biassoni, A. Samuels, and P.L. Tyack. 2000. Whale songs lengthen in response to sonar. *Nature* 405 (6789):903.
- Mitson, R.B (ed.). 1995. Underwater noise of research vessels: Review and recommendations. Cooperative Research Report No. 209, *International Council for the Exploration of the Sea*: 65.
- Moberg, G.P. 1987. Influence of the adrenal axis upon the gonads. Pages 456-496 in J. Clarke, ed. *Oxford Reviews in Reproductive Biology*. Oxford University Press, New York, New York.
- Moberg, G.P. 2000. Biological response to stress: Implications for animal welfare. Pages 1-21 in G.P. Moberg and J.A. Mench, eds. *The Biology of Animal Stress: Basic Principles and*

Implications for Animal Welfare. CABI Publishing, Oxon, United Kingdom.

Montgomery, J. C., Jeffs, A., Simpson, S. D., Meekan, M., & Tindle, C. 2006. Sound as an Orientation cue for the Pelagic Larvae of Reef Fishes and Decapod Crustaceans. *Advanced Marine Biology*, 51, 143-196.

Mooney, T. A., Hanlon, R. T., Christensen-Dalsgaard, J., Madsen, P. T., Ketten, D., & Nachtigall, P. E. (2010). Sound Detection by the Longfin Squid (*Loligo pealeii*) Studied with Auditory Evoked Potentials: Sensitivity to Low-Frequency Particle Motion and Not Pressure. *Journal of Experimental Biology*, 213, 3748-3759.

Mooney, T. A., Nachtigall, P. E., Breese, M., Vlachos, S., & Au, W. W. L. 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. doi: 10.1121/1.3068456.

Morton, A.B. and H.K. Symonds. 2002. Displacement of *Orcinus orca* (L.) by high amplitude sound in British Columbia, Canada. *ICES Journal of Marine Science* 59 (1):71-80.

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

National Marine Fisheries Service (NMFS). 2018. 2018 Revisions 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. U.S. Dept. of Commer., NOAA. NOAA Technical Memorandum NMFS-OPR-59, 167 p.

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.

NIOSH (National Institute for Occupational Safety and Health). 1998. Criteria for a recommended standard: Occupational noise exposure. United States Department of Health and Human Services, Cincinnati, OH.

North Atlantic Marine Mammal Commission. 2004. *The ringed seal*. Tromso, Norway: North Atlantic Marine Mammal Commission (NAMMCO).

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 B: Biological Sciences*, 271(1536), pp.227-231.

- Nowacek, D., L. H. Thorne, D. Johnston, and P. Tyack. (2007). Responses of cetaceans to anthropogenic noise. *Mammal Review*, 37(2), 81-115.
- NRC (National Research Council). (2003). Ocean noise and marine mammals. National Academy of Sciences: 220.
- Offutt, G. C. 1970. Acoustic Stimulus Perception by the American Lobster *Homarus americanus* (Decapoda). *Experientia*, 26, 1276-1278.
- Parks, S.E., Ketten, D.R., O'Malley, J.T. and Arruda, J., 2007. Anatomical predictions of hearing in the North Atlantic right whale. *The Anatomical Record*, 290(6), pp.734-744.
- Patek, S. N., & Caldwell, R. L. 2006. The stomatopod rumble: Low frequency sound production in *Hemisquilla californiensis*. *Marine and Freshwater Behaviour and Physiology*, 39(2), 99-111.
- Pike, G.C. 1962. Migration and Feeding of the Gray Whale (*Eschrichtius gibbosus*). *Journal of the Fisheries Research Board of Canada*, 19(5), 815-838. <https://doi.org/10.1139/f62-051>
- Popper, A. N. 2003. Effects of Anthropogenic Sounds of Fishes. *Fisheries Bulletin*, 28(10), 24-31.
- Popper, A. N. (2008). *Effects of mid- and high-frequency sonars on fish*. Newport, RI: Department of the Navy (DoN). p. 52.
- Popper, A. N., & Fay, R. R. 2010. Rethinking sound detection by fishes. *Hearing Research*, 273, 1-12.
- Popper, A. N., Hawkins, A. D., Fay, R. R., Mann, D., Bartol, S., Carlson, T., . . . Tavolga, W. N. 2014. Sound Exposure Guidelines for Fishes and Sea Turtles: A Technical Report prepared by ANSI-Accredited Standards Committee S3/SC1 and registered with ANSI. Cham, Switzerland.
- Popper, A. N., Salmon, M., & Horch, K. W. 2001. Acoustic Detection and Communication by Decapod Crustaceans. *Journal of Comparative Physiology A*, 187, 83-89.
- Popper, A. N., & Schilt, C. R. 2008. Hearing and acoustic behavior: Basic and applied considerations. In *Fish Bioacoustics* (pp. 17-48). New York, NY: Springer.
- Proctor, C. M., Garcia, J. C., Galvin, D. V., Joyner, T., Lewis, G. B., Loehr, L. C., & Massa, A. M. 1980. An Ecological Characterization of the Pacific Northwest Coastal Region. U.S. Fish and Wildlife Service, Biological Services Program.
- Purser, J., & Radford, A. N. 2011. Acoustic noise induces attention shifts and reduces foraging performance in three-spined sticklebacks (*Gasterosteus aculeatus*). *PLoS One*, 6, e17478.

- Quakenbush, L., J. Citta, and J. Crawford. 2011. Biology of the ringed seal (*Phoca hispida*) in Alaska, 1960-2010. Final Report to: National Marine Fisheries Service.
- Reichmuth, C. and M.M. Holt. 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., Ghoul, A., Sills, J.M. 2016. Low-frequency temporary threshold shift not observed in spotted or ringed seals exposed to single air gun impulses. *The Journal of the Acoustical Society of America*. 140, 2646. DOI: <https://doi.org/10.1121/1.4964470>
- Richardson, W. J. 1995. Marine Mammal Hearing. In. Richardson, W. J., Greene Jr., C. R., Malme, C. I. & Thomson, D. H. (Eds.), *Marine Mammals and Noise* (pp. 205-240). San Diego, CA: Academic Press.
- Ridgway, S.H., D.A. Carder, R.R. Smith, T. Kamolnick, C.E. Schlundt, and W.R. Elsberry. 1997. Behavioral responses and temporary shift in masked hearing threshold of bottlenose dolphins, *Tursiops truncatus*, to 1-second tones of 141 to 201 dB re 1 µPa. Technical Report 1751, Naval Command, Control and Ocean Surveillance Center: 32.
- 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.
- Roberts, L., & Breithaupt, T. 2016. Sensitivity of crustaceans to substrate-borne vibration: Springer.
- Romano, T., K. Abella, D. Cowan, and B. Curry, 2002b Investigation of the morphology and autonomic innervation of the lymphoid organs in the pantropical spotted, spinner, and common dolphins (*Stenella attenuata*, *Stenella longirostris* and *Delphinus delphis*) incidentally entangled and drowned in the tuna purse-seine fishery in the eastern tropical Pacific. Administrative Report LJ-02-25C, NMFS, Southwest Fisheries Science Center, 8604 La Jolla Shores Drive, La Jolla, CA 92037.
- Romano, T., M. Keogh, and K. Danil. 2002a. Investigation of the Effects of Repeated Chase and Capture on the Immune System of dolphins (*Stenella attenuata* and *Stenella longirostris*) in the Eastern Tropical Pacific. Administrative Report LJ-02-35C, NMFS, Southwest Fisheries Science Center, 8604 La Jolla Shores Drive, La Jolla, CA 92037.
- 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.

- Roth, E.H., Hildebrand, J.A., Wiggins, S.A., Ross, D. 2012. Underwater ambient noise on the Chukchi Sea continental slope from 2006–2009. *The Journal of the Acoustical Society of America*. 131(1).
- Salmon, M. 1971. Signal characteristics and acoustic detection by the fiddler crabs, Uca rapax and Uca pugilator. *Physiological Zoology*, 44, 210-224.
- Savage, K. (2021). *2020 Alaska Region Marine Mammal Stranding Summary*. Juneau, AK: National Marine Fisheries Service.
- Seyle, H. 1950. Stress and the general adaptation syndrome. *British Medical Journal* June 17:1383-1392.
- 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.
- Simpkins, M. A., Hiruki-Raring, L. M., Sheffield, G., Grebmeier, J. M., & Bengston, J. L. 2003. Habitat selection by ice-associated pinnipeds near St. Lawrence Island, Alaska in March 2001. *Polar Biology*, 26, 577-586.
- Smith, M. E., Coffin, A. B., Miller, D. L., & Popper, A. N. 2006. Anatomical and Functional Recovery of the Goldfish (*Carassius auratus*) Ear following Noise Exposure. *Journal of Experimental Biology*, 209, 4193-4202.
- Smith, T. G. (1987). *The ringed seal, Phoca hispida, of the Canadian western Arctic*. Bulletin Fisheries Research Board of Canada. p. 81.
- Smith, T. G., & Hammill, M. O. (1981). Ecology of the ringed seal, *Phoca hispida*, in its fast ice breeding habitat. *Canadian Journal of Zoology*, 59, 966-981.
- Smith, T. G., & Lydersen, C. (1991). Availability of suitable land-fast ice and predation as factors limiting ringed seal populations, *Phoca hispida*, in Svalbard. *Polar Research*, 10(2), 585-594.
- Smith, T. G., & Stirling, I. (1975). The breeding habitat of the ringed seal (*Phoca hispida*). The birth lair and associated structures. *Canadian Journal of Zoology*, 53, 1297-1305.
- Southall, B. L., Bowles, A. E., Ellison, W. T., Finneran, J. J., Gentry, R. L., Greene Jr., C. R., . . . Tyack, P. L. (2007). Marine Mammal Noise Exposure Criteria: Initial Scientific Recommendations. *Aquatic Mammals*, 33(4), 411-521.
- Southall, B.L. 2021. Evolutions in Marine Mammal Noise Exposure Criteria. *Acoustics Today*. 17(2). <https://doi.org/10.1121/AT.2021.17.2.52>
- Southall, B.L., Finneran, J.J., Reichmuth, C., Nachtigall, P.E., Ketten, D.R., Bowles, A.E., Ellison, W.T., Nowace, D.P., Tyack, P.L. 2019. Marine Mammal Noise Exposure

Criteria: Updated Scientific Recommendations for Residual Hearing Effects. *Aquatic Mammals* 45(2), 125-232, DOI 10.1578/AM.45.2.2019.125

Staaterman, E. R., Clark, C. W., Gallagher, A. J., DeVries, M. S., Claverie, T., & Patek, S. N. (2016). Rumbling in the benthos: Acoustic ecology of the California mantis shrimp *Hemisquilla californiensis*. *Aquatic Biology*, 13, 97-105. doi: 10.3354/ab00361.

Stafford, K. M., Moore, S. E., Spillane, M., & Wiggins, S. (2007). Gray Whale Calls Recorded near Barrow, Alaska, throughout the Winter of 2003-04. *Arctic*, 60(2), 167–172.
<http://www.jstor.org/stable/40513132>

Swartz, S., B. Taylor, and D. Rugh. Gray whale *Eschrichtius robustus* population and stock identity. 2006. *Mammal Review*. 36(1): 66-84.

Urick, R.J. 1983. Principles of Underwater Sound. Peninsula Publishing, Los Altos, CA.

U.S. Department of the Navy. 2013. Atlantic Fleet Training and Testing Environmental Impact Statement/Overseas Environmental Impact Statement. Norfolk, VA: Naval Facilities Engineering Command Atlantic.

U.S. Department of the Navy. 2017. *Dive distribution and group size parameters for marine species occurring in the U.S. Navy's Atlantic and Hawaii-Southern California training and testing Study Areas*.

U.S. Department of the Navy. 2020. ICEX 2020 Monitoring Report. Available at
https://media.fisheries.noaa.gov/2021-03/NavyICEX_2020IHA_MonRep_OPR1.pdf?null=

U.S. Department of the Navy. 2022. ICEX 2022 Monitoring Report. Available at
https://media.fisheries.noaa.gov/2022-07/Navy_ICEX22_MonRep_OPR1.pdf

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

Ward, W. D. (1997). Effects of high-intensity sound. In. Crocker, M. J. (Ed.), *Encyclopedia of Acoustics* (pp. 1497–1507). New York, NY: Wiley.

Wartzok, D., Elsner, R., Stone, H., Kelly, B. P., & Davis, R. W. (1992a). Under-ice movements and the sensory basis of hole finding by ringed and Weddell seals. *Canadian Journal of Zoology*, 70(9), 1712-1722.

Wartzok, D., & Ketten, D. R. (1999). *Marine mammal sensory systems*. Washington, DC: Smithsonian Institution Press.

Wartzok, D., Popper, A. N., Gordon, J., & Merrill, J. 2003. Factors affecting the responses of marine mammals to acoustic disturbance. *Marine Technology Society Journal*, 37(4), 6-

15.

Wartzok, D., Sayegh, S., Stone, H., Barchak, J., & Barnes, W. (1992b). Acoustic tracking system for monitoring under-ice movements of polar seals. *Journal of the Acoustical Society of America*, 92, 682-687.

Weilgart, L.S. 2007. A brief review of known effects of noise on marine mammals. *International Journal of Comparative Psychology* 201 (2-3):159-168.

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.

Yazvenko, S.B., T.L. McDonald, S.A. Blokhin, S.R. Johnson, H.R. Melton, M.W. Newcomer, et al. 2007. Feeding of western gray whales during a seismic survey near Sakhalin Island, Russia. *Environmental Monitoring and Assessment* 134 (1-3):93-106.

Young, N.C, A.A. Brower, M.M. Muto, J.C. Freed, R.P. Angliss, N.A. Friday, P.L. Boveng, B.M. Brost, M.F. Cameron, J.L. Crance, S.P Dahle, B.S. Fadely, M.C. Ferguson, K.T. Goetz, J.M. London, E.M. Oleson, R.R. Ream, E.L. Richmond, K.E.W. Shelden, K.L. Sweeney, R.G. Towell, P.R. Wade, J.M Waite, A.N. Zerbini. 2023. Alaska Stock Assessments, 2022. U.S. Dep. Commer., NOAA Technical Memo NOAA-TM-AFSC-474.