REFERENCES

ANSI (American National Standards Institute). 1986. Methods of Measurement for Impulse Noise 3 (ANSI S12.7-1986). Acoustical Society of America, Woodbury, NY

ANSI. 1995. Bioacoustical Terminology (ANSI S3.20-1995). Acoustical Society of America, Woodbury, NY.

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.

Astrup, J., and B. Mohl. 1993. Detection of Intense Ultrasound by the Cod *Gadus Morhua*. *Journal of Experimental Biology*, 182, 71–80.

Au, W. W., and M. C. Hastings. 2008. *Principles of Marine Bioacoustics* (pp. 121-174). New York: Springer.

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.

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.

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.

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. Vol. 128. pp. 63–69.

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.

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.

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

Dunlop, R. A., M. J. Noad, R. D. McCauley, E. Kniest, R. Slade, D. Paton, & D. H. Cato. (2016). Response of humpback whales (Megaptera novaeangliae) to ramp-up of a small experimental air gun array. Marine Pollution Bulletin, 103(1–2), 72–83.

Dunlop, R. A., M. J. Noad, R. D. McCauley, E. Kniest, R. Slade, D. Paton, & D. H. Cato. (2018). A behavioural dose-response model for migrating humpback whales and seismic air gun noise. Marine Pollution Bulletin, 133, 506–516.

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.

Elsasser TH, Klasing KC, Filipov N and Thompson F 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 (eds. GP Moberg and JA Mench), pp. 77-110. CAB International, Wallingford.

Ellison, W. T., B. L. Southall, C. W. Clark, and A. S. Frankel. (2011). A new context-based approach to assess marine mammal behavioral responses to anthropogenic sounds. *Conservation Biology*, 26(1), 21–28.

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.

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. (2009). Soundscapes and the sense of hearing of fishes. *Integrative Zoology*, 4(1), 26-32.

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.

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., 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 Heidelb.

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, 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., 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.

Finneran, J.J., C.E. Schlundt, B. Branstetter, and R.L. Dear. 2007a. Assessing temporary threshold shift in a bottlenose dolphin (*Tursiops truncatus*) using multiple simultaneous auditory evoked potentials. Journal of the Acoustical Society of America 122:1249–1264.

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–

Finneran, J.J., Mulsow, J., Jones, R. *et al.* Non-auditory, electrophysiological potentials preceding dolphin biosonar click production. *J Comp Physiol A* **204**, 271–283 (2018). https://doi.org/10.1007/s00359-017-1234-0

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,

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

Fulling, G.L., K.D. Mullin, and C.W. Hubard. 2003. Abundance and distribution of cetaceans in outer continental shelf waters of the US Gulf of Mexico. Fishery Bulletin 101 (4):923-932.

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.

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

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.

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

Greene, C. R., Jr., & Richardson, W. J. (1988). Characteristics of marine seismic survey sounds in the Beaufort Sea. Journal of the Acoustical Society of America, 83, 2246- 2254.

Hansen, L. J., K. D. Mullin, and C. L. Roden. 1995. *Estimates of cetacean abundance in the northern Gulf of Mexico from vessel surveys*. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southeast Fisheries Science Center, Miami, FL, Pascagoula, MS.

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

Hastings, M.C., and A.N. Popper. 2005. Effects of sound on fish. Prepared by Jones & Stokes for the California Department of Transportation: 82.

Hayes *et al.* 2022. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments 2021. *https://media.fisheries.noaa.gov/2022-08/U.S.%20Atlantic%20and%20Gulf%20of%20Mexico%202021%20Stock%20Assessment%20Report.pdf*

Hawkins, A. D., and A. D. F. Johnstone. (1978). The hearing of the Atlantic salmon, *Salmo salar*. *Journal of Fish Biology*, 13, 655–673.

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., J. Aschettino, M. Deakos, G. Alongi, & T. Leota. (2019). Quantifying the behavior of humpback whales (Megaptera novaeangliae) and potential responses to sonar. Aquatic Mammals, 45(6), 612-631.

Hoelzel A. R., C. W. Potter, and P. B. Best. 1998. "Genetic differentiation between parapatric 'nearshore' and 'offshore' populations of the bottlenose dolphin." *Proceedings of the Royal Society B: Biological Sciences.*Vol. 265, No. 1402. pp. 1177–1183.

ISO (International Organization for Standardization). 2003. 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.

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).

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., 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., 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., 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., 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 et al. (2017). Temporary hearing threshold shift in a harbor porpoise (Phocoena phocoena) after exposure to multiple airgun sounds. Journal of the Acoustical Society of America 142, 2430

Kastelein, R. A., L. Helder-Hoek, and R. Gransier. (2019c). 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. (2019a). 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. (2019b). 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., J. Schop, R. Gransier, and L. Hoek. 2014b. Frequency of greatest temporary hearing threshold shift in harbor porpoise (*Phocoena phocoena*) depends on the noise level. Journal of the Acoustical Society of America 136:1410-1418.

Kastelein, R. A., Helder-Hoek, L., Defillet, L. N., Huijser, L. A. E., Terhune, J. M., & Gransier, R. (2021b). Temporary hearing threshold shift in California sea lions 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. https://doi.org/10.1578/AM.47.4.2021.394

Kastelein, R.A., Helder-Hoek, L., Defillet, L.N., Kuiphof, F., Huijser, L.A.E. and Terhune, J.M. (2022) '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*, 48(1), 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.

Ketten DR, Simmons JA, Riquimaroux H and Simmons AM (2021) Functional Analyses of Peripheral Auditory System Adaptations for Echolocation in Air vs. Water. Front. Ecol. Evol. 9:661216. doi: 10.3389/fevo.2021.661216

LaBrecque, Erin & Curtice, Corrie & Harrison, Jolie & Van Parijs, Sofie & Halpin, Patrick. (2015). Biologically Important Areas for Cetaceans Within U.S. Waters – East Coast Region. Aquatic Mammals. 41. 17-29. 10.1578/AM.41.1.2015.17.

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.

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.

Lucke K., Siebert U., Lepper P.A., Blanchet M.-A. 2009.Temporary shift in masked hearing thresholds in a harbor porpoise (Phocoena phocoena) after exposure to seismic airgun stimuli. J. Acoust. Soc. Am. 2009;

Malme, C. I., P. R. Miles, P. Tyack, C. W. Clark, & J. E. Bird. (1985). Investigation of the Potential Effects of Underwater Noise from Petroleum Industry Activities on Feeding Humpback Whale Behavior. (Report No. 5851). Anchorage, AK: Minerals Management Service, Alaska OCS Office.

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.

Maze-Foley, K., and K. D. Mullin. 2006. "Cetaceans of the oceanic northern Gulf of Mexico: Distributions,group sizes and interspecific associations." *Journal of Cetacean Research and Management.* Vol. 8, No. 2.pp. 203-213.

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). 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.

Mooney, T. A., P. E. Nachtigall, and S. Vlachos. (2009b). Sonar-induced temporary hearing loss in dolphins. *Biology Letters*, 5(4), 565–567.

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.

Moore, J. E., and J. P. Barlow. (2013). Declining abundance of beaked whales (Family Ziphiidae) in the California Current Large Marine Ecosystem. *PLoS ONE*, 8(1), e52770.

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.

Mullin, K. D., and G. L. Fulling. 2004. "Abundance of cetaceans in the oceanic northern Gulf of Mexico1996-2001." *Marine Mammal Science*. Vol. 20, No. 4. pp. 787–807.

Mullin, K .D. and W. Hoggard. 2000. Visual surveys of cetaceans and sea turtles from aircraft and ships. Pages 111- 172. In: R. W. Davis, W. E. Evans, and B. Würsig (editors), Cetaceans,

sea turtles and seabirds in the northern Gulf of Mexico: Distribution, abundance and habitat associations. Volume II: Technical report. OCS Study MMS 96-0027. Minerals Management Service, Gulf of Mexico OCS Region, New Orleans.

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. Integr. Zool. 13(2):160-165.

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 (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.

National Marine Fisheries Service (NMFS). 2016. *Status Review of Bryde's Whales (Balaenoptera edeni) in the Gulf of Mexico under the Endangered Species Act.* NOAA Technical Memorandum NMFS-SEFSC-692.December.

National Marine Fisheries Service (NMFS). 2021a. "Gulf of Mexico, Threatened and Endangered Species and Critical Habitats Under NOAA Fisheries Jurisdiction." National Oceanic and AtmosphericAdministration. *https://www.fisheries.noaa.gov/southeast/consultations/gulf-mexico.*

National Marine Fisheries Service (NMFS). 2021b. "Species Directory. Atlantic Spotted Dolphin." NationalOceanic and Atmospheric Administration. *https://www.fisheries.noaa.gov/species/atlantic-spotted-dolphin.*

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 Oceanic and Atmospheric Administration (NOAA). 2022. *Cetacean and sea turtle spatial density model outputs from visual observations using line-transect survey methods aboard NOAA vessel and aircraft platforms in the Gulf of Mexico from 2003-06-12 to 2019-07-31 (NCEI Accession 0256800).* https://www.ncei.noaa.gov/access/metadata/landing-page/bin/iso?id=gov.noaa.nodc:0256800.

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). Hamphire, 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.

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.

Nowacek, D., L. H. Thorne, D. Johnston, and P. Tyack. (2007). Responses of cetaceans to anthropogenic noise. *Mammal Review*, 37(2), 81-115.

Pait, A. S., A. L. Mason, D. R. Whitall, J. D. Christensen, and S. I. Hartwell. 2010. "Assessment of Chemical Contaminants in Sediments and Corals in Vieques." *An Ecological Characterization of the Marine Resources of Vieques, Puerto Rico*. L. J. Bauer and M. S. Kendall, eds. Silver Spring, MD: National Oceanic and Atmospheric Administration.

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.2011.61.3.6w

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., Supin, A. Y., Rozhnov, V. V., Nechaev, D. I., & Sysueva, E. V. (2014). The limits of applicability of the sound exposure level (SEL) metric to temporal threshold shifts (TTS) in beluga whales, Delphinapterus leucas. *Journal of Experimental Biology*, *217*(10), 1804-1810.

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., 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., 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.

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 *and* Jillian M. Sills. 2019. Long-term evidence of noise-induced permanent threshold shift in a harbor seal (*Phoca vitulina*). Journal of the Acoustical Society of America 146, 2552

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.

Richmond, D. R., J. T. Yelverton and E. R. Fletcher. 1973. Far-field underwaterblast injuries produced by small charges. Defense Nuclear Agency, Department of Defense, Washington, D. C. Technical Progress Report, DNA 3081 T.

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.

Roberts, J. J., B. D. Best, L. Mannocci, E. Fujioka, P. N. Halpin, D. L. Palka, L. P. Garrison, K. D. Mullin, T. V. N.Cole, C. B. Khan, W. A. McLellan, D. A. Pabst, and G. G. Lockhart. 2016. "Habitat-based cetacean densitymodels for the U.S. Atlantic and Gulf of Mexico." *Scientific Reports*. March 3.

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.

Rosel, P. E., and L. A. Wilcox. 2014. "Genetic evidence reveals a unique lineage of Bryde's whales in thnorthern Gulf of Mexico." *Endangered Species Research.* Vol. 25. pp. 19–34.Rosel, P. E., P. Corkeron, L. Engleby, D. Epperson, K. D. Mullin, M. S. Soldevilla, and B. L. Taylor. 2016.

Rosel, P. E., L. A. Wilcox, T. K. Yamada, and K. D. Mullin. 2021. "A new species of baleen whale(*Balaenoptera*) from the Gulf of Mexico, with a review of its geographic distribution." *Marine MammalScience*. Vol. 37, No. 2. pp. 577–610.

Sapolsky, R. M. (2005). The influence of social hierarchy on primate health. *Science*, 308(5722), 648-652.

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.

Seyle, H. (1950). *The Physiology and Pathology of Exposure to Stress.* Oxford, England: Acta, Inc. 203 pp.

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 andBiotechnology. Vol. 25. pp. 269–275.

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.

Sole, M., P. Sigray, M. Lenoir, M. Van der Schaar, 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.

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, Finneran J J, Reichmuth C, Nachtigall P E, Ketten D R, Bowles A E, Ellison W T, Nowacek D P, Tyack P L (2019). Marine Mammal Noise Exposure Criteria: Updated Scientific Recommendations for Residual Hearing Effects. Aquatic Mammals 2019, 45(2), 125-232, DOI 10.1578/AM.45.2.2019.125.

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, JanuarySeptember 2006. Prepared by SRS Technologies and Illingworth & Rodkin, Inc. for the California Department of Transportation, 51 p.

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.

U.S. Air Force (USAF). 2015. Range Environmental Assessment for Eglin Gulf Test and Training Range, Eglin Air Force Base, Florida. October.

U.S. Air Force (USAF). 2022. Range Environmental Assessment for Eglin Gulf Test and Training Range, Eglin Air Force Base, Florida. Draft. December. *https://www.eglin.af.mil/Portals/56/documents/eglin_docs/EGTTR%20Draft%20REA.pdf?ver=OfwxuE85iUg71J6SUUataw%3d%3d*

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.

Urick, R. J. (1983). *Principles of Underwater Sound* (3rd ed.). Los Altos, CA: Peninsula Publishing.

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.

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.

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.

Walsh, M. R., M. E. Walsh, I. Poulin, S. Taylor, and T. A. Douglas. 2011. "Energetic residues from the detonation of common US ordnance." *International Journal of Munitions Constituents and Chemical Propulsion.* Vol. 10, No. 2.

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

Waring, G. T., E. Josephson, K. Maze-Foley, and P. E. Rosel, eds. 2016. *U.S. Atlantic and Gulf of MexicoMarine Mammal Stock Assessments – 2015*. NOAA Technical Memorandum NMFS-NE-238. Departmentof Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service,

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.

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

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.

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