

Academic Bibliography relating to Marine Species and Anthropogenic Underwater Noise

Summary up to 2017

Academic Bibliography

- Agardy, T., Aguilar Soto, N., Cañadas, A., Engel, M., Frantzis, A., Hatch, L., Hoyt, E., Kaschner, K., LaBrecque, E., Martin, V., Notarbartolo di Sciara, G., Pavan, G., Servidio, A., Smith, B., Wang, J., Weilgart, L., Wintle, B., and Wright, A. (2007). A global scientific workshop on spatio-temporal management of noise. Report of workshop held in Puerto Calera, Chile, June 4-6, 2007. 25pp.
- Amoser, S., and Ladich, F. 2003. Diversity in noise-induced temporary hearing loss in otophysine fishes. *J. Acoust. Soc. Am.* 113: 2170–2179.
- Andrew, R.K., Howe, B.M., Mercer, J.A., and Dzieciuch, M.A. 2002. Ocean ambient sound: Comparing the 1960s with the 1990s for a receiver off the California coast. *Acoust. Res. Lett. Online* 3(2): 6570.
- Bain, D.E., and Williams, R. 2006. Long range effects of airgun noise on marine mammals: Responses as a function of received sound level and distance. Paper SC/58/E35 presented to the IWC Scientific Committee, June 2006 (unpublished). 13 pp. [Available from the Office of the Journal of Cetacean Research and Management and reported out of the IWC Scientific Committee.]
- Baird, R.W., Webster, D.L., McSweeney, D.J., Ligon, A.D., Schorr, G.S., and Barlow, J. 2006. Diving

- Brownell, R.L., Jr., Ralls, K., Baumann-Pickering, S., and Poole, M.M. 2009. Behavior of melon-headed whales, *Peponocephala electra*, near oceanic islands. *Mar. Mamm. Sci.* **25**: 639-658.
- Brownell, R.L., Jr., Yamada, T., Mead, J., and van Helden, A.L. 2004. Mass strandings of Cuvier's beaked whales in Japan: U.S. Naval acoustic link? Paper SC/56/E37 presented to the IWC Scientific Committee, June 2004 (unpublished). 10 pp. [Available from the Office of the Journal of Cetacean Research and Management and reported out of the IWC Scientific Committee.]

- beaked whales (*Ziphius cavirostris*): implications for threatened populations. *Mol. Ecol.* 14: 3353-3371.
- David, J.A. 2006. Likely sensitivity of bottlenose dolphins to diving noise. *Water and Environment J.* 20: 484.
- Department of Fisheries and Oceans (DFO). 2004. Potential impacts of seismic energy on snow crab. DFO Can. Sci. Advis. Sec. Habitat Status Report 2004/003.
- Dolman, S.J. 2007. Spatiotemporal restrictions as best practice precautionary response to ocean noise. *J. International Wildlife Law and Policy* 10: 219-224.
- Dolman, S.J., Weir, C.R., and Jasny, M. 2009. Comparative review of marine mammal guidance implemented during naval exercises. *Mar. Poll. Bull.* 58: 465-475.
- Dotinga, H.M., and Elferink, A.G.O. 2000. Acoustic pollution in the oceans: The need for legal standards. *Ocean Development and International Law* 31: 821-851.
- Duncan, A.J., Weilgart, L.S., Leaper, R., Jasny, M., and Livermore, S. 2017. A modelling comparison between received sound levels produced by a marine Vibroseis array and those from an airgun array for some typical seismic survey scenarios. *Mar. Poll. Bull.* 199: 287-307.
- Dunlop, R.A., Noad, M.J., McCauley, R.D., Kniest, E., Paton, D., and Cato, D.H. 2015. The Behavioural Response of Humpback Whales (*Megaptera novaeangliae*) to a 2 Inch Air Gun. *Aquatic Mammals* 41(4): 412-433.
- Dunlop, R.A., Noad, M.J., McCauley, R.D., Kniest, E., Slade, R., Paton, D., and Cato, D.H. 2016. Response of humpback whales (*Megaptera novaeangliae*) to a ramp

Finneran, J.J., Schlundt, C.E., Carder, D.A., Clark, J.A., and Young, J.A., Gaspin, J.B., and Ridgway, S.H. 1999. Auditory and behavioral responses of bottlenose dolphins (*Tursiops truncatus*) and a beluga whale (*Delphinapterus leucas*) to impulsive sounds resembling distant signatures of underwater explosions. *J. Acoust. Soc. Am.* 108:417-431.

Finneran, J.J., Schlundt, C.E., Dear, R., Carder, D.A., and Ridgway, S.H. 2002. Temporary shift in

- Hildebrand, J. 2006. Impacts of anthropogenic sound. Pages 201-211. In: Ragen, T.J., Reynolds III, J.E., Perrin, W.F., Reeves, R.R., and Montgomery, S. 2006. Marine Mammal Research: Conservation beyond Crisis. Baltimore: Johns Hopkins.
- Hildebrand, J.A. 2009. Anthropogenic and natural sources of ambient noise in the ocean. Mar. Ecol. Prog. Ser. 395: 20.
- Hohn, A.A., Rotstein, D.S., Harms, C.A., and Southall, B.L. 2006. Report on Marine Mammal Unusual Mortality Event UMESE 0501Sp: Multispecies mass stranding of pilot whales (*Globicephala macrorhynchus*), minke whale (*Balaenoptera acutorostrata*), and dwarf sperm whales (*Kogia sima*) in North Carolina on 16-January 2005. Silver Spring: National Marine Fisheries Service. 230 pp.
- Holt, M.M., Hanson, M.B., Giles, D.A., Emmons, C.K., and Hogan, J.T. 2017. Noise levels received by endangered killer whales *Orcinus orcas* before and after implementations of vessel regulations. *Environ. Species Res.* 34: 265-275.
- Holt, M.M., Noren, D.P., Vogar, D.P., and Fogel, M.L. 2016. Acoustic monitoring of killer whales (*Orcinus orca*) in the western North Pacific Ocean. *J. Cetacean Res. Manage.* 11: 201-211.

- Kastak D., Southall B.L., Schusterman R.J. and Kastak C.R. (2005) Underwater temporary threshold shift in pinnipeds: Effects of noise level and duration, *The Journal of the Acoustical Society of America*. 118, 3154.
- Kastak, D., Mulsow, J., Ghaul, A., Reichmuth, C. 2008. Noise induced permanent threshold shift in a harbor seal. *J. Acoust. Soc. Am.* 123: 2986.
- Kastak, D., Schusterman, R.J., Southall, B.L., and Reichmuth, C.J. 1999. Underwater temporary threshold shift induced by octave band noise in three species of pinniped. *J. Acoust. Soc. Am.* 106: 1142-1148.
- Kastak, D., Southall, B.L., Schusterman, R.J., and Kastak, C.R. 2005. Underwater temporary threshold shift in pinnipeds: Effects of noise level and duration. *J. Acoust. Soc. Am.* 118: 3154-3164.
- Kastelein RA, Mosterd P, Van Santen B, Hagedoorn M, de Haan D. *Underwater* 2.3(.9(f)-4(s)-2.3(h26(i)6.

Lowther AD., Harcourt RG., Hamer DJ., and Goldsworthy SD. (2011) Creatures of habit: foraging habitat fidelity of adult female Australian sea lions, *Mar. Ecol. Prog. Ser.* 442:319-324.

Lucke, K., Siebert, U., Lepper, P.A., and Blanchet, A.M. (2009). Temporary shift in masked hearing

Moein Bartol, S. and Ketten, DR. (2006) Turtle and tuna hearing. Sea turtle and pelagic fish sensory

- Parsons, E.C.M., Dolman, S.J., Wright, A.J., Rose, N.A., and Burns, W.C.G. 2008. Navy sonar and cetaceans: Just how much does the gun to smoke before we act? *Mar. Poll. Bull.* 56:257-248-
- Pearson, W.H., Skalski, J.R., and Malme, C.I. 1992. Effects of sounds from a geophysical survey device on behavior of captive rockfish (*Sebastes* spp.). *Can. J. Fish. Aquat. Sci.* 49:563-43-
- Popper AN, Hawkins AD, Fay RR, Mann D, Bartol S, Carlson T, Coombs S, Ellison WT, Gentry R, Halvorsen MB (2014) *Sound Exposure Guidelines for Fishes and Sea Turtles: A Technical Report prepared by ANSI Accredited Standards Committee S3/SC1 and registered with ANSI.* Springer
- Popper, A.N. 2003. The effects of anthropogenic sounds on fishes. *Fisheries* 28(10): 24
- Potter, J.R. 2004. A possible mechanism for acoustic triggering of decompression sickness symptoms. Pages 365-371 in: *Proceedings of the 2004 International Symposium on Underwater Technology.*
- Prideaux, G. and Prideaux, M., 2015. Environmental impact assessment guidelines for offshore petroleum exploration seismic surveys. *Impact Assessment and Project Appraisal* 1-11.
- Régnault, M.R., and Lagardère, P.J. 1983. Effects of ambient noise on the metabolic level of Crangon crangon (Decapoda, Nanantia). *Mar. Ecol. Prog. Ser.* 71:77-8.
- Reichmuth C., Holt M., Mulsow J., Sills J. and Southall B. (2013) Comparative assessment of amphibious hearing in pinnipeds. *Journal of Comparative Physiology A*. 199:4791-
- Rendell, L.E., and Gordon, J.C.D. 1999. Vocal responses of female pilot whales (*Globicephala melas*) to military sonar in the Ligurian Sea. *Mar. Mammal Sci.* 15:2038-
- Renouf D. (1979) Preliminary measurements of the sensitivity of the vibrissae of Harbour seals (*Phoca vitulina*) to low frequency vibrations, *Journal of Zoology*. 188:450-
- Richardson, W.J., and Würsig, B. 1997. Influences of man-made noise and other human actions on cetacean behaviour. *Mar. Fresh. Behav. Physiol.* 29:2093-
- Richardson, W.J., Greene, C.R., Jr., Malme, C.I., and Thomson, D.H. 1995. *Marine Mammals and Noise*. New York: Academic Press. 576 pp.
- Richardson, W.J., Miller, G.W., and Greene, C.R. 1999. Displacement of migrating bowhead whales by sounds from seismic surveys in shallow waters of the Beaufort Sea [abstract]. *J. Acoust. Soc. Am.* 106: 2281.
- Ridgway, S.H., and Howard, R. 1979. Dolphin lung collapse and intramuscular circulation during deep diving: Evidence from nitrogen washout. *Science* 206:333-332
- Romano, T.A., Keogh, M.J., Kelly, C., Feng, P., Berk, L., Schlundt, C.E., Carder, D.A., and Finneran, J.J. 2004. Anthropogenic sound and marine mammal health: Measures of the nervous and immune systems before and after intense sound exposure. *Can. J. Fish. Aquat. Sci.* 61: 1124-1134.
- Rommel, S.A., Costidis, A.M., Fernández, A., P.D. Jepson, D.A. Pabst, W.A. McLellan, D.S. Houser, T.W. Cranford, A.L. van Helden, D.M. Allen, and N.B. Barros. 2006. Elements of beaked whale anatomy and diving physiology and some hypothetical causes of related stranding. *J. Cetacean Res. Manage.* 7: 289.
- Roussel, E. 2002. Disturbance to Mediterranean cetaceans caused by noise. In: di Sciara, G.N. ed., *Cetaceans of the Mediterranean and Black Seas: State of knowledge and conservation strategies.* A report to the ACCOBAMS Secretariat. Monaco: ACCOBAMS.
- Russel, D.J.F, Hastie, G.D., Thompson, D., Janik, V.M., Hammond, P.S., Scott

- Sarà, G., Dean, J.M., D'Amato, D., Buscaino, G., Oliveri, A., Genovese, S., Ferro, S., Buffa, G., Lo Martire, M., and Mazzola, S. 2007. Effect of boat noise on the behaviour of bluefin tuna *Thunnus thynnus* in the Mediterranean Sea. *Mar. Ecol. Prog. Ser.* 331:243-252
- Schick, R.S., and Urban, D.L. 2000. Spatial components of bowhead whale (*Balaena mysticetus*) distribution in the Alaskan Beaufort Sea. *Can. J. Fish. Aquat. Sci.* 57:2003-2013
- Schlundt, C.E., Finneran, J.J., Carder, D.A., and Ridgway, S.H. 2000. Temporary shifted hearing thresholds of bottlenose dolphins, *Tursiops truncatus*, and white whales, *Delphinapterus leucas*, after exposure to intense tones. *J. Acoust. Soc. Am.* 107:3086-3096

Southall, B.L.. 2005. Final Report of the National Oceanic and Atmospheric Administration (NOAA) International Symposium: 'Shipping Noise and Marine Mammals: A Forum for Science, Policy and Management'. [http://www.noaa.gov/education/oc/shipnoise/](#)

- Weilgart, L.S. 2007. The need for precaution in the regulation and management of undersea noise. *J. Int. Wildlife Law and Policy* 10:3, 242-253.
- Weir, C.R., and Dolman, S.J. 2007. Comparative review of the regional marine mammal mitigation guidelines implemented during industrial seismic surveys, and guidance towards a worldwide standard. *J. International Wildlife Law and Pol.* 10:271-280.
- Williams, R., Bain, D.E., and Trites, A. 2002b. Behavioural responses of killer whales (*Orcinus orca*) to whalewatching boats: Opportunistic observations and experimental approaches. *J. Zool. (London)* 256: 255-270.
- Williams, R., Bain, D.E., Ford, J.K.B., and Trites, A.W. 2002. Behavioural responses of male killer whales to a "leapfrogging" vessel. *Cetacean Res. Manage.* 4: 305.
- Williams, R., Lusseau, D., and Hammond, P.S. 2006. Estimating relative energetic costs of human disturbance to killer whales (*Orcinus orca*). *Biol. Conserv.* 133:3301-3311.
- Wimmer, T., and Whitehead, H. 2004. Movement and distribution of northern bottlenose whales, *Hyperoodon ampullatus*, on the Scotian Slope and in adjacent waters. *Can. J. Zool.* 82: 1782.
- Wright, A.J. ed. 2008. International workshop on shipping noise and marine mammals. Proceedings of workshop held by Okeanos Foundation for the Sea, Hamburg, Germany 22-24 April 2008. Darmstadt: Okeanos Foundation for the Sea.
- Wright, A.J., and Highfill, L. eds. 2007. Considerations of the effects of noise on marine mammals and other animals. *International J. of Comp. Psychology* 20:169-189.
- Wright, A.J., Dolman, S.J., Jasny, M., Parsons, E.C.M., Schiedek, D. and Young, S.B. 2013. Myth and Momentum: A Critique of Environmental Impact Assessments. *Journal of Environmental Protection.* 4: 727-77.
- Wright, A.J., Rose, N.A., Parsons, E.C.M., and Dolman, S.J. 2009. Urging cautious policy applications of captive research data is not the same as rejecting those data. *Mar. Poll. Bull.* 58: 314-316.
- Wysocki, L.E., Dittami, J.P., and Ladich, F. 2006. Ship noise and cortisol secretion in European freshwater fishes. *Bio. Conserv.* 128: 500-508.
- Yang, W.C., Chou, L.S., Jepson, P.D., Brownell, R.L., Jr., Cowan, D., Chang, J.F., Chiou, H.I., Yao, C.J., Yamada, T.K., Chiu, J., Wang, P.J., Fernández. 2008. Unusual cetacean mortality event in Taiwan, possibly linked to naval activities. *Veterinary Record* 162: 868-874.
- Zimmer, W.M.X., and Tyack, P.L. 2007. Repetitive shallow dives pose decompression risk in deep-diving beaked whales. *Mar. Mamm. Sci.* 23: 825-835.