

Lab 2:

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Recreational boating is a highly valued and popular activity in Canada and the USA. Many freshwater ecosystems are thus used extensively for recreational boating. In Canada, there are approximately 2.5 million recreational boats while there are over 12 million registered powerboats in the USA. Powerboats, which include outboards, inboards, and personal watercraft, are the most common type. In Canada and the USA, power boating is increasing at compound average annual rates of 2.6% and 8%, respectively. This growing use of motorized watercraft is likely to compromise the physical, chemical, and biological integrity of aquatic ecosystems (1). Indirect impacts of power boating on aquatic wildlife include disturbance during reproductive activities (2), interference with intraspecific sound communication (3), physiological disturbances such as increased cardiac output (4), and altered auditory sensitivity.

1. K. J. Killgore, S. T. Maynard, M. D. Chan, R. P. M. Li, "Evaluation of Propeller-Induced Mortality on Early Life Stages of Selected Fish Species" (2001), (available at [https://journals.scholarsportal.info/pdf/02755947/v21i0004/947\\_eopmoelsosfs.xml](https://journals.scholarsportal.info/pdf/02755947/v21i0004/947_eopmoelsosfs.xml)).
2. M. J. C. Moore, R. A. Seigel, No place to nest or bask: Effects of human disturbance on the nesting and basking habits of yellow-blotched map turtles (*Graptemys flavimaculata*) (2006), doi:10.1016/j.biocon.2006.01.001.
3. R. O. Vasconcelos, M. C. P. Amorim, F. Ladich, Effects of ship noise on the detectability of communication signals in the Lusitanian toadfish. *J. Exp. Biol.* (2007), doi:10.1242/jeb.004317.
4. A. L. Graham, S. J. Cooke, S. J. Cooke, The effects of noise disturbance from various recreational boating activities common to inland waters on the cardiac physiology of a freshwater fish, the largemouth bass (*Micropterus salmoides*) (2008), doi:10.1002/aqc.941.