

## IACUC Guidelines on Survival Surgery for Aquatic Species at UWM

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### **Survival Surgery:**

The area in which the surgery will be conducted should be a dedicated space that is easily sanitized, uncluttered and away from the flow of traffic to minimize contamination from other laboratory activities. The work surface should be thoroughly cleaned and disinfected prior to and after each procedure. Surgical instruments must be sterilized prior to use. If repetitive surgery is being performed and only one set of instruments is available, the instruments should be sterilized between animals. Disinfectants are not recommended as they may damage skin and cause an exuberant response of the mucus-producing glands. If disinfectants are used the instruments must be thoroughly rinsed prior to use.

Animals should be kept moist during surgery. If anesthesia is not maintained with the animal immersed or partially submerged in water, water should be dripped onto the skin or soft moist drape or gauze may be kept in contact with the skin. It is recommended to soak frogs in water for 1 hour prior to surgery. For procedures in which fish are operated on while out of water for lengthy procedures, delivery of oxygenated water to the fish must be maintained for respiration. Systems that deliver water to the mouth or gills also keep fish moist.

### **Post-Anesthetic Care:**

Place fish/amphibians in un-medicated water in a holding tank for recovery. Closely monitor fish/amphibians recovering from anesthesia until they are swimming/moving normally and have completely regained their righting response. The animals should be monitored frequently for at least 24 hours after recovery from anesthesia. For lengthy anesthetic periods, recovery may be prolonged.

### **Record Keeping (Surgical):**

Describe and record associated clinical signs of affected fish and note disposition (treated, euthanized, submitted for diagnostic testing, etc.). Detailed records of individual animals should be kept for all animals undergoing surgical procedures and should include details of anesthetics (agent, dose, duration of event), procedures performed, monitoring of anesthetic depth during procedures and postoperative recovery and care.

Describe and record associated clinical signs of animals post-operatively for at least three days and note disposition (treated, euthanized, submitted for diagnostic testing, etc.).