

SAMPLE COLLECTION AND PRESERVATION

Collections are conducted at the discretion of the Treatment Supervisor. The intent of this section is to provide procedures to collect samples of fish and water in the event that a fish kill occurs under circumstances where the cause is not obvious. Data from the analysis of these samples is intended to assist in determining the cause(s) of the fish kill. Two types of samples will be collected. One set of samples will be collected for chemical toxicant screening. One set will be collected for determining if pathogens contributed to the fish kill. Because these data could potentially be used in litigation, it is critical that the samples be properly collected and that chain of custody is followed to ensure sample integrity. These procedures are not required when it is obvious fish mortality is due to lampricide exposure (toxicity).

I. Collection of samples for chemical toxicant screening

A. Water

1. Collect 200 mL of water from mid-depth at multiple points outside of (control) and in the treatment area(s) using a suitable grab device (Van Dorn or Kemmerer).
 - a. If the treatment area is a granular Bayluscide application, collect sample from each corner and in the center of the plot.
 - b. If the treatment area is a stream lampricide application, collect samples from upstream of the main AP (control), in the section of stream where the fish mortality occurred (upper limit, mid-way, lower limit).
2. Transfer the samples to a suitable container for storage and transport. The containers should be made of an inert substance (Teflon is preferred). The use of glass is discouraged because of the potential for breakage on freezing of the sample.
3. Place the samples in a freezer for storage.

II. Collection of samples for pathogen analysis

- A. Collect the whole fish ($n = 20$) of each fish species.
- B. Place fish into plastic bags with its individual identification tag and secure with a rubber band.
- C. Place fish on ice and deliver to LaCrosse Fish Health Center (LFHC) within 24 hours of collection. Samples collected for pathogenic analysis cannot be frozen or chemically preserved as it will limit analysis options.
- D. Documentation
 1. Assign a unique identifier to each sample collected.
 2. Record data on the Chain of Custody Record forms.
 3. Do not leave sections blank. Mark any sections that do not apply with NA (Not Applicable).
 4. Place forms in a separate plastic bag to keep dry.

III. Delivery

Contact the lab(s) prior to delivery. You must talk with a staff member. Do not leave a message.

A. Toxicant samples

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B. Pathogen samples

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