

Standard Operating Procedure #2: Training and Safety for Field Personnel

Version 1.1

In GLKN Amphibian Monitoring Protocol

Prepared by:

Kenneth D. Bowen
National Park Service
Great Lakes Inventory and Monitoring Network
2800 Lakeshore Drive East
Ashland, Wisconsin 54806

and

Gary S. Casper
Great Lakes Ecological Services, LLC
P.O. Box 375
Slinger, Wisconsin 53086

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Revision History Log

The following table lists all edits and amendments to this document since the original publication date. Information entered in the log must be complete and concise. Users of this standard operating procedure will promptly notify the program manager and/or the Great Lakes Network (GLKN) data manager about recommended and required changes. The program manager must review and incorporate all changes, complete the revision history log, and change the date and version number on the title page and in the header of the document file. For complete instructions, please refer to Revising the Protocol, SOP #10.

Previous Version #	Revision Date	Author (with title and affiliation)	Location in Document and Concise Description of Revision	Reason for Change	New Version #
Add rows as needed for each change or set of changes tied to an updated version number					

Acknowledgements

The safety related portions of this standard operating procedure are adapted from the SOP on safety for the GLKN water quality monitoring protocol for inland lakes (Elias 2008), which in turn is based partially on the safety SOP for the Greater Yellowstone Network (O’Ney 2005). This SOP was updated in March 2013 by Bill Route to include additional safety information.

2.0 Introduction

Before field work can be performed in the field, each member of the field crew must be familiar with the required methodology, equipment and safety procedures. Proficiency in these areas is critical to the success of the amphibian monitoring program and the wellbeing of the field crew. The subsequent sections outline the procedure for training field personnel to deploy, check and retrieve Automated Recording System (ARS) units for amphibian call surveys. Also included are basic instructions for field safety.

2.1 Training

Training should begin well before the field season. Ideally, time will be available for cleaning of and inspection of equipment, and examination of safety procedures. All members of the field crew must complete the following training.

2.1.1 Review Protocol and SOPs

Review the protocol and SOPs and become familiar with the background of and procedures for amphibian monitoring using ARS. Review the frog call quiz for species likely to be present in the sampling region before each season begins: <http://www.pwrc.usgs.gov/frogquiz/>. The program manager should make certain that members of the field crew have adequate time to complete this step. The most opportune time for field personnel to raise questions or concerns regarding methodology is prior to the field season.

Great Lakes Network staff and contractors are required to read and follow the latest version of the Great Lakes Network Health and Safety Plan (GLNO 2012).

2.1.2 First Aid and Cardio-Pulmonary Resuscitation (CPR)

Training in the basic medic/first aid and Heartsaver AED, which includes CPR and use of an automated external defibrillator (AED), may be required for field personnel depending on park-specific policies and guidelines. Training and certification should be acquired prior to the field season. Every effort should be made to coordinate this training with that of other field crews.

2.1.3 Data Entry

Training on entering field data into the amphibian monitoring database may be required of field personnel. This will include basic data entry techniques, QA/QC, and troubleshooting the database. Complete data entry procedures are outlined in SOP #6.

2.2 Field Training

2.2.1 Equipment

Amphibian call surveys by ARS require few pieces of equipment. However, all members of the field crew must become proficient with the ARS units, microphones and temperature sensors and handheld GPS units. The field crew must be able to perform the following tasks on the ARS:

1. Calibrate
2. Re-set
3. Clean
4. Download data

Refer to the manufacturer's instructions for details on all of the above steps for the ARS units, microphones and temperature sensors.

All members of the field crew must be able to perform the following with handheld GPS:

1. Navigate to a site
2. Create a new site/waypoint
3. Create a route
4. Store information
5. Download information

For more details on use of a GPS, see SOP #6.

2.3 Safety

Safety of field personnel must be the primary concern when selecting field sites and performing field work. A number of potential hazards are associated with amphibian field work. Members of the field crew may be operating out of radio or cellular phone range, and can encounter potentially hazardous ice conditions, poisonous plants, infectious insects, and other wildlife and people. Field work requires an awareness of potential hazards and knowledge of basic safety procedures. Advanced planning can reduce or eliminate many safety hazards.

Guiding Principles:

- Most injuries in the field can be prevented or mitigated.
- Safety must be adopted as a core operational and personal value for all employees.

- It is every employee's responsibility to evaluate and improve safety.
- All safety and health concerns must be reported and addressed promptly.

2.3.1 Basic Safety Preparation

A trip leader should always be designated. It is the trip leader's responsibility to inform his/her supervisor, park dispatch, or other park-designated employees of field trip plans (See Appendix A for a printable trip plan template). Trip plans and communications will vary by park. Check with your immediate park supervisor or contact about specific policies. At a minimum, at least one other person, who is not part of the field crew, should know when the fieldwork will take place, what mode of transportation is being used, where the work will be performed, and how you can be communicated with. Field personnel should be aware of areas of the park that are off-limits, or if there are other safety concerns to be aware of. A park radio, list of call numbers, and phone contact numbers should be provided for each member of the field crew. The location and contact information for local emergency facilities (police, fire, hospital) should be determined.

Basic safety preparations should be part of the pre-field work routine. At a minimum, safety preparations should include the following:

1. Identifying the trip leader.
2. Establishing the methods and chain of communications.
3. Designating a time and place to meet upon completion of field work.
4. Ensuring that each field crew member knows the location(s) that the other member(s) might be visiting.
5. Checking radios, including ensuring that each member has appropriate cellular phone numbers and radio call numbers.
6. Checking vehicles, including gas, tire pressure, and basic functionality (i.e., check to make sure that there is no noticeable damage such as leaking radiator fluid).
7. Making sure that maps and first aid kits are carried, as well as compasses and handheld GPS units.

2.3.2 Medical Forms

Appendix B contains a medical form for field personnel. Complete as much of the medical information as possible prior to the field season. Confirm all contact information annually. Medical information sheets should be completed for each individual in the field crew.

Appendix A. Trip Plan.

Minimum (in bold) and suggested additional information (*) to be filed with the host park and GLKN supervisor prior to backcountry fieldwork.

Date filed:

Description and general location of field work:

Inclusive dates:

Trip members and important contacts:

Name	Role	Office phone #	Cell phone #	Radio/other
	Trip leader			
	Supervisor			
	Park contact			

Primary methods of communication (must have two; include type, model and other necessary information for ensuring emergency responders can make contact. Should include SPOT Locator, Sat Phone, cell phone, radios, etc.):

Description of vehicle(s) or boat(s):

Description of lodging and contact information:

*Important notes (medical issues):

*Check-in schedule and method as required by the host park:

*Daily itinerary, if applicable:

*Agreed to date, time, and action to be taken if check-in is missed:

Appendix B. Medical Information Form.

Name

Date of birth

Local mailing address

Local phone number

Cell phone number

**Emergency contact
information #1**

Relationship:

**Emergency contact
information #2**

Relationship:

Allergies and medical
issues of concern

Medications currently
being taken

☐ Check here and provide additional information on the back or on attached sheets if there are other issues you feel emergency personnel need to know to properly care for you in an emergency.

☐ By checking this box and signing below, the employee indicates their preference to not share personal medical information with the National Park Service, Great Lakes Network Office. The employee understands that his/her refusal may delay or hinder necessary care if he/she has an undisclosed underlying medical condition or drug allergy. The employee is free to change their mind at any time and submit a completed form.

Employee

Completion of this form is voluntary and does not influence any hiring decision or performance evaluation. It is strictly to be used in case of an emergency when the person named above is unable to provide such information to emergency personnel. This form will be kept in a locked file at the network office and will be destroyed by the employee at the end of their term of employment.

Literature Cited

- Elias, J.E. 2008. Standard operating procedure #2: Training and safety. in Elias, J.E., R. Axler, and E. Ruzycki. 2008. Water quality monitoring protocol for inland lakes, Version 1.0. National Park Service, Great Lakes Network, Ashland, Wisconsin. Natural Resources Technical Report NPS/MWR/GLKN/NRTR—2008/109. National Park Service, Fort Collins, Colorado.
- GLNO. 2012. Great Lakes Network Health and Safety Plan, Version 1.0. U.S. Department of Interior, National Park Service, Great Lakes Network Office, Ashland, WI.
- O’Ney, S.E.. 2005. Standard operating procedure #3: Safety and health, Version 1.0. *In* Regulatory water quality monitoring protocol, Version 1.0, Appendix E. National Park Service, Greater Yellowstone Network, Bozeman, Montana.