

REPORT ON THE PILOT PROGRAM
TRAINING STREAM INVENTORY CREWS FOR AMPHIBIAN DATA COLLECTION

Charlotte Corkran and Chris Thoms
Northwest Ecological Research Institute
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Introduction

The population status of native amphibians that occur on Forest Service lands in the Pacific Northwest is inadequately known. Several species are included on state and federal lists as Sensitive, and better information on all species would be helpful to both biologists and land management planners.

Because stream inventories, which are carried out annually to assess fish populations and habitat, consistently involve field work in important amphibian habitat as well, there is an opportunity for survey crews to record data on amphibian sightings simultaneously with fish and habitat data. This report evaluates a pilot training program for stream survey crews and examines the feasibility of incorporating amphibian data collection into the stream inventory program.

One-day training session

On August 13, 1992, an amphibian survey training session was held for a 2-person stream survey crew from the Mt. Hood National Forest Supervisor's Office. Two people from the Region 6 Division of Fish, Wildlife, and Botany also attended as observers. Each person was provided with a packet of handouts. The session was divided into 3 parts: slide program, examination of live captive specimens, and field training.

The slide program reviewed the basic biology of amphibians and the life stages of frogs and salamanders. It then presented some of the species most likely to be encountered in stream surveys within the range of the attending crew. The handout "First questions to ask in identifying an amphibian" was used to orient attendees to a protocol to follow once an amphibian has been captured.

Live specimens of some pond-dwelling larvae were examined with hand lenses. Development stages were briefly discussed, and key features to note in the identification process were pointed out. Non-damaging techniques for surveying and handling amphibians were introduced.

Field training concentrated on methods of finding amphibians in streams without damaging habitat, and on the process of identifying amphibians in the field so that they can be released unharmed at capture sites. The association of species in different stream habitats was also stressed. Trainees had opportunities to capture amphibians and work through the identification process with both frogs and salamanders.

Follow-up session

On September 17, 1992, we spent an additional day in the field with the same stream survey crew and 2 observers from the Regional Office. In the interim, the crew had had the

opportunity to include amphibians in their stream surveys, and could report on their experience and problems encountered. The crew performed their normal survey on a section of stream so that trainers and observers could better understand how amphibian surveys might be incorporated. Other sites were sampled for amphibians in order to provide further training and experience with additional species. At the conclusion of the training, the crew members were asked to fill out an evaluation form on the content and format of the training session, and to provide their ideas on the efficacy of the program.

Evaluation of training session

The crew members reported that they were satisfied with the format of the training session, although they felt the need for more than one day of field training. They recommended scheduling the training session at the beginning of the field season. They provided several suggestions for improving the content of the session:

1. Include slides of more species than the ones that crews are most likely to encounter,
2. Make it clearer what data to record when an amphibian is found, perhaps by providing a form or checklist.

Both suggested changes will be made. A separate form for amphibians was not created because we had originally planned to train fish survey (rather than stream survey) crews, and had made modifications to the form that they already use.

Potential for intregation into the stream survey program

Both the trainees and the fish biologist for the Mt. Hood NF indicated that they felt there was no major obstacle to integrating amphibian data collection into the stream inventory program. On the other hand, the trainees reported that it was not feasible for them to survey for amphibians in every unit that they measured, due to constraints of time, other duties of the 2-person crews, and brush which made surveying difficult. They provided 3 alternative suggestions, the first of which they tested in their work:

1. A crew would only sample for amphibians in the most likely locations rather than every measured unit of a stream.
2. Each crew would include a third person specifically to sample for amphibians.
3. Amphibians would be surveyed by the monitoring and evaluation (M & E) crews, rather than by the stream survey crews.

The first alternative was used by the trainees for the remainder of the field season. They reported that they spent 15 to 30 minutes on amphibian surveys, out of a normal 6 hour survey day, plus about 15 minutes per stream writing up the amphibian data in their report. This was felt to be a reasonable addition to their other duties, and apparently would require no additional funding. Utilizing this alternative suggestion would require slightly more training in recognizing habitat features with the most potential for searching.

The second alternative, to include a third person on stream

survey crews, would increase the cost of the surveys significantly, but would provide more detailed information on numbers of amphibians.

We are unable to assess the third alternative because we are not familiar with the differences in the work carried out by the various types of crews. If the M & E crews survey or count fish, and spend more time at each measured unit than the stream survey crews, then perhaps it would be reasonable for them to survey for amphibians at the same time.

Conclusion and recommendations

The crew that received training provided excellent suggestions for refining the training sessions, as well as for implementing the program. We feel that the pilot session was adequate for the Regional Office and the Mt. Hood NF to assess the feasibility of incorporating amphibian surveys into the stream inventory program, although an additional pilot session using an M & E crew would have been good. Based on the suggestions of the trainees, their supervisor, and our thoughts, we make the following recommendations:

1. Test the program for 1 year and evaluate the actual costs and benefits.
2. Start the program at the beginning of the field season.
3. Train M & E crews rather than stream survey crews, if it is considered preferable.
4. Provide a one-day training session for each group of crews (maximum of 10 trainees per session, preferably 6).
5. Provide a one-day follow-up session for each crew, within a month of the original training, and preferably within 2 weeks.
6. Ensure that trainees get to observe a variety of species, even if it is necessary to visit other districts.
7. Request crews to report incidentally observed amphibians from every measured unit, but to only actively search a sample of units. This should be a combination of regular samples and most likely spots.
8. Assign one person on each district to be the coordinator of amphibian data. This person should collect data from all crews, and eventually should be trained to do the training of crews at the beginning of each season.
9. All amphibian data (or at least an annual summary) should be made available to the state Natural Heritage Data Base, the state Department of Fish and Wildlife, and the Pacific Northwest Declining Amphibian Populations Task Force.