



Amphibian Survey Methodology & Safety Guidelines



Call survey protocol:

- To conduct a call survey, visit your selected wetland at least ½ hour after dusk. Position yourself to achieve the best vantage point to detect calling amphibians at a site. For example:
 - Standing down-wind of the waterbody being monitored will allow the wind to carry the sound of the calling frogs and toads in your direction.
 - When listening for calling amphibians ensure that you are far enough away from the water's edge to avoid disturbing the animals.
- After arriving at a potential breeding site it is a good practice to wait for a few minutes before you begin monitoring. This will allow for the disturbance of your arrival to subside, allowing amphibians to resume calling.
- It is generally recommended that you spend at least 20 minutes (you can move around the wetland but please remain still in one location for up to 5 minutes) listening for frogs and toads at a given site. If no amphibians are detected after 20 minutes of listening, and if you feel weather conditions were not entirely optimal, consider revisiting the site under more favourable weather conditions that support amphibian activity.
- Report your results via the Call of the Wetland app. Remember zero values (when you did not hear anything) are just as important as reporting you heard calls. Be sure to submit every time you visit a survey wetland!
- You will need to enter observations using the call of the wetland form for each species heard during the survey. For example, if you hear both chorus frogs and wood frogs calling, you would enter these separately and submit each observation during the survey.

- If you see amphibians, eggs or tadpoles make sure you enter them using the call of the wetland app, following visual observation survey protocol.

Visual observation survey protocol:

- Walk slowly around the wetland or survey defined area stopping frequently to visually scan for amphibians.
- As you search the habitat, visually scan for basking amphibians in open habitats, such as shorelines, with binoculars or your naked eye, especially during cool but sunny weather.
- Record observations of eggs masses, tadpole or juvenile/adult frogs using the call of the wetland app.
- Remember submitting the zero values (when you did not see anything) is as important as an observation.
- Record each species observed separately using the smartphone application
- If you hear amphibians calling, make sure you enter them using the call of the wetland app, following the Call survey protocol.

App Information

- The app relies on the GPS in your smartphone to record location, so this feature must be turned on, along with other permissions the app requests.
- You do NOT need internet access to use the app, data is stored on your smartphone and then uploaded once you are in a service area.
- Your app needs to be open for data to upload, so remember to keep it open once you are in a service area or connected to wifi.
- If you submit your report at a later time and not at the wetland you made the observation, please include the correct date, time, and wetland location information in the notes section prior to submitting.

Safety Guidelines

Call of the wetland wants to ensure both human and amphibian safety; please abide by the following program guidelines:

- Always go out in pairs, no lone rangers in this program please. No dogs. Do not enter the water, but walk around the edge and position yourself in a safe distance from the water edge for call surveys.
- Always look where you are going and be aware of your surroundings, there are hazards such as barbed wire and holes to look out for.
- Please check your-self for ticks after visiting a wetland.
- Do not touch the amphibians, do not pick up frogs, disturb egg masses or capture tadpoles.

- Remember amphibians breathe partially through their skin and insect repellent, suntan lotion and other chemicals found on your hands can be harmful. It is illegal to touch a sensitive species such as the Northern leopard frog.
- Avoid disturbing or moving cover objects, such as rocks, logs, and other debris.
- If you see a number of dead amphibians, make sure you remove mud and disinfect (with a 10% bleach diluted solution for 15 minutes) any item (rubber boots) that has come into contact with the wetland so we do not inadvertently spread diseases between wetlands.
 - Remember to rinse well with water after bleaching and allow items to dry before surveying another wetland.
 - If you travel outside of Calgary with your gear, please disinfect gear before and after travel.
- If you observe a mass die off of amphibians please notify 311.
- Be aware of weather conditions, if it seems unsafe, do not conduct the survey.

References

Alberta Conservation Association and Alberta Environment and Sustainable Resource Development. 2013.

Alberta Volunteer Amphibian Monitoring Program -Participants Guide. Alberta Conservation Association, Edmonton, AB. 46 pp.

Government of Alberta. 2012. Integrated Standards and Guidelines, Enhanced Approval Process. Sustainable Resource Development, Lands Division. Edmonton, AB. [Online]
<http://srd.alberta.ca/FormsOnlineServices/EnhancedApprovalProcess/EAPManualsGuides/documents/EAP-IntegratedStandardsGuide-Jul16-2012.pdf>. Accessed August 15th, 2012.

United States Geological Survey (USGS) 2012. North American Amphibian Monitoring Program: Protocol Description. 9 pp.