EpiCollect Instructions

EpiCollect is a free software program that allows scientists to organize databases using standardized forms. It is available as an application on apple and android smartphones.

Website Address: http://bitly.com/AlaskaAmphibians

Additional help with the website and smartphone applications is available at:

http://www.epicollect.net/

For students that do not have smart phones, recorded observations can be submitted online at http://www.akherpsociety.org/vouchersubmission.htm. The associated photographs should be emailed to Joshua Ream at jtream@alaska.edu. Vouchers submitted in this way will be periodically added to the EpiCollect database.

Getting Started

1. Download the EpiCollect application to the smartphone.
2. Under settings:
    a. Change the "Update Forms" selection to the "on" position.
    b. Increase jpeg quality to maximum
    c. Insert student email address under "User Email"
    d. Insert "Alaska_Amphibians" under "Project." The two capitalized "A"s are important.
    e. Do not change the "Form URL"
    f. Return to the home screen of the application.

Recording a Voucher

1. Select "New Entry" from the application's home screen.

2. Select the option "Tap to use your current location." For students that do not have GPS on their smartphones, a handheld GPS unit may be used to record the coordinates of the observation in decimal degree format. If a student does not have access to either of these, he/she should include a very detailed description of the place under "Any Additional Notes."

3. Select the camera icon to take a photograph of the specimen. The entire amphibian should be in the picture and the camera should be as close as possible without distorting the image. If there is more than one amphibian of the same species at the same location, the student can take a photo of just

one individual. For a large group of eggs or tadpoles, a picture of the group is fine as long as a few individuals can be seen clearly. Peculiar or different amphibians within a group should be recorded separately. Amphibians in different life stages should also be recorded separately. Remember, students are NOT permitted to handle wild amphibians. This project follows a "leave no trace" ethic and requires the students to leave the animals and their habitats exactly how they were found.

4. Select the type of amphibian found in the "Amphibian Found" field. The options are Frog or Toad, Newt or Salamander, or OTHER. The other selection should only be used if a reptile is found. While we do not expect students to encounter these on the landscape, it is possible and we would very much like to obtain the voucher.

5. Enter the observers name in the "observer name" field. The format should be "first m. last." Students who opt to have their full name withheld from the database can choose to enter only their initials.

6. Enter the observer's email address in the "observer email" field.

7. Select the affiliation of the observer. If you are not affiliated with a state agency, federal agency, the SYSTEMS Program or a University, you should select "Interested Individual."

8. Enter the date in the "date mmddyy" field. As indicated, this should be two digit month, a two digit day and a two digit year all in one string with no hyphens and no slashes.

9. Enter the time in the "time" field. This should be in the format 00:00.

10. Select AM or PM from the menu within the "Time of Day" field.

11. Enter the name of the nearest human inhabited community in the "Nearest Community" field.

12. Briefly describe where the observation location is and how to get there in the "Location" field.

13. Select the appropriate cloud cover from the options within the "Cloud Cover" field.

14. Select the appropriate precipitation from the options within the "Precipitation" field. Snow should be chosen if it is actively snowing, not simply if there is snow on the ground.

15. Select the appropriate wind selection from the options within the "Wind" field.

16. If the student has a thermometer, he/she should allow this to sit on the ground for 3 minutes at the voucher location. The temperature should be read and entered under the "Air Temperature" field. Only numbers should be placed in this field. When possible, students should record the temperature in Celsius. This is not a required field.

17. If the student has a thermometer and the amphibian was found in or near water, he/she should allow this to sit in the water for three minutes. The temperature should be read and entered under the "Water Temperature" field. Only numbers should be placed in this field. When possible, students should record the temperature in Celsius. This is not a required field.

18. Select "Fahrenheit" or "Celsius" from the "Temperature Scale" field. This is not a required field unless temperature is recorded.

19. Select the appropriate frog species from the "Frog Identification" field. If the student cannot accurately identify the frog or if it is a species that is not listed, the student should enter "Unknown or Other Frog." If the voucher is not for a frog, the student should select "Not A Frog." This is a required field.

20. Select the appropriate salamander species from the "Salamander Identification" field. If the student cannot accurately identify the salamander or if it is a species that is not listed, the student should enter "Unknown or Other Salamander." If the voucher is not for a frog, the student should select "Not A Salamander." This is a required field.

21. Select the appropriate life stage from the "Life Stage" field.

22. Insert the approximate number of individuals seen at a specific observation site in the "Approximate number seen at this location" field. Exact numbers are preferred but are not always possible with eggs and tadpoles. Eggs and tadpoles can be estimated by counting the number in a small area then multiplying that number by the size of the larger area occupied. Since frogs lay eggs in masses, all egg observation numbers should be submitted as the "number of masses" rather than the "number of individual eggs." Toads lay long stings of eggs rather than masses so this can aid in species identification.

23. Students should thoroughly describe the habitat within the "Describe the Habitat" field. This description should at a minimum discuss the vegetation and nearby freshwater bodies at the immediate vicinity. It may also indicate if the animal was found in the water, near the water, under a rock, under a rotting log etc.

24. Students should indicate the behavior of the amphibians that were encountered in the "Behavior of the Amphibians" section. Were the moving? Eating? Resting? Fighting? Calling?

25. Students should enter any and all additional information that was not addressed in other fields within the "Any Additional Notes" field. Details are always very important!

26. The student should then be sure to select "save" at the bottom of the screen. Once this is selected the phone will return to the EpiCollect home screen.

Viewing and Editing Vouchers

All vouchers that have been saved in the EpiCollect application can be viewed by selecting "List Entries" from the home screen of the application. The individual observations are listed by date and time. These can be edited by selecting an observation, making the change and then clicking "save." Students should be encouraged to fill in all available information at the site of observation rather than editing later.

Syncing Vouchers With Database

Until a student synchronizes his phone's database with the central database, all vouchers remain local to the phone and are not backed up or viewable elsewhere. For this reason is it important to regularly "sync" observations. Students should "sync" their observations as soon as possible when they are within cell service or wireless internet range in order to prevent loss of information. Individual observations can be deleted from the phone after syncing if space is an issue, but they can only be edited by the site administrator once deleted from the phone. To sync:

1. Select "List Entries" from the home screen of the application.
2. Select "sync" in the upper right hand corner of the screen and wait for the "Sync complete" message to appear.

Viewing the Central Database

The central database compiles all observations made as part of this SLP and allows all users to view and access the information. It can be viewed and downloaded as a worksheet by selecting "Browse Project Data" on the website or on a map by selecting "Show Map." The "Show Map" option also allows the data to be downloaded into Google Earth by selecting the "Google Earth" tab.

Calling Vouchers

Frogs and toads are often very audible during the breeding season and are sometimes mistaken for birds if they are not seen. Sometimes amphibians can be heard even if they cannot be found. Calling vouchers are also important and valid tools in science. Students who have learned frog calls can submit these types of vouchers by recording the calls using the voice memo function on their phones or any other audio recording device. Each sound clip should be at least five seconds long. An observation should be recorded in EpiCollect and if individual specimens cannot be located, a picture of the general area should be attached. The audio file should be emailed to jtream@alaska.edu.