



Vermont Vernal Pool Data Form

Instructions v0.2

1a) Observer Information

The phone and email are required in case we need to ask you questions about the data form or the pool.

Date of Visit: please enter the date of the site visit. For multiple visits to the same pool, please fill out a new form for each visit.

Data from this form entered in online database. Check this box if you entered the data on this form into the online database. This database is available at www.vtecostudies.org/VPMP/dataentry.html This is the state-wide repository for all vernal pool data. Whether or not the data is entered into the online database, please send the paper data form to the address in the header of the form.

1b) Credentials

Please check the one that applies. Consider yourself a Trained Citizen Scientist if you have attended a Vernal Pool Training Workshop.

2a) Vernal Pool Location Information

VT Vernal Pool Mapping Project ID: Enter this ID number if this was a previously mapped pool from the VT Vernal Pool Mapping Project. The ID will be 3 letters followed by numbers. For example SDF34 or MLS23. If this was a previously unmapped pool, or if this is not known, leave this space blank.

Brief directions to pool: This is a space for written directions that may help to locate the pool. This section is especially helpful if there is a problem with the GPS coordinates.

Location Comments: This space is intended for notes on any ambiguity in mapping the location of the pool or other data that will help locate the pool.

2b) Location of the Pool

Format from GPS unit. Enter the latitude and longitude coordinates in the decimal degrees, decimal minutes or degrees-minutes-seconds.

2c) Landowner Contact Information

Self explanatory.

3. Vernal Pool Field-Verification Information

3a) Pool Type

Is this a Vernal Pool? If the following conditions are met, check “Yes”: 1) at least one of the indicator species is present, 2) the site does not contain fish, 3) the site is not a permanent water body, and 4) there is no permanent inlet or outlet. However, if these conditions are met, but the site is obviously not adequate habitat for the species present (e.g. eggs laid in skidder ruts or a ditch), check “No”. If unsure, check “Unsure”. Comments can be made at the bottom of the form.

Isolated Forest Depression: Check this box for the typical Vernal Pool: no permanent hydrologic connection with other wetlands and the surrounding area is >50% forest. This includes areas that have been heavily logged but will revert back to forest.

Floodplain Depression: Check this box if it appears that the pool is influenced by floodwaters from a stream or river at any time of the year.

Manmade Impoundment: Check this box if the pool originated from human activity. This type should not include natural pools that have been impacted by human activity

Isolated Non-Forest Depression: Check this box if the site has no permanent hydrologic connection with other wetlands and the pool is located in open habitat or in an area <50% forest.

Pool associated with larger wetland complex: Check this box if the pool is hydrologically connected to a wetland type other than another vernal pool. If it is connected to another vernal pool, check whichever box above is appropriate.

3b) Presence of Inlet and/or Outlet

No Inlet/Outlet. Check these boxes if there is no evidence of any channelized water entering or exiting the pool.

Ephemeral/Seasonal Inlet/Outlet. Check these boxes if there is evidence of channelized water entering or exiting the pool, but it doesn’t appear to run continuously. Many vernal pools, for example, have an outlet that functions if the water level in the pool reaches a certain level.

Permanent Inlet/Outlet. Check this box if there is channelized water continuously running into or out of the site. These sites are typically not vernal pools.

3c) Surrounding Forest

Deciduous%-Coniferous %: The numbers entered should reflect absolute percent cover of each type of tree in the surrounding habitat. For example, if total forest cover (entered in Surrounding Land Cover) is 70%, the sum of the deciduous and coniferous percentages should be 70%.

Surrounding Land Cover: Enter the percent cover of each cover type within 250 feet of the pool. The sum of the percentages should equal 100%.

Surrounding Habitat Comments: Use this section for notes on the condition of the surrounding habitat. Pay particular attention to forest condition, logging history and obstructions to amphibian movement.

4. Pool Characteristics

4a) Approximate Maximum Pool Depth. This is an approximate depth at the deepest part of the pool. Use a stick or other measure device.

4b) Substrate Check the one appropriate box for the dominant substrate present in the pool.

4c) Hydroperiod. Permanent: Check this box for sites (like ponds) that appear to retain water throughout the year. **Semi-permanent:** Check this box for sites that appear to retain at least some water in most years. These sites may dry completely, but only in drought years. **Ephemeral:** Check this box for sites that appear to dry completely most years. Most “typical” vernal pools fall into this category.

4d) Approximate Size of Pool (at maximum capacity). Using a measuring tape to obtain the dimensions is preferable. Pacing or estimating the dimensions are also acceptable. To obtain these measurements when the pool is not completely full, examine the immediate pool basin for evidence of high water. Signs include water-stained leaves, sediment deposits on the leaf litter, and water marks on tree trunks.

4e) Water Level at Time of Survey. In order to estimate this and **4d**, examine the edges of the pool for signs of high water (see comments under **4d**).

4f) Veg in Pool. Estimate the percentage of the pool that is occupied by the different types of vegetation. This includes only vegetation growing in the pool. Fill in a % cover estimate for each type of vegetation present. These % cover estimates should be absolute cover (can therefore total greater than 100%).

Canopy Cover: This section refers to the canopy cover present over the pool. Estimate the tree and shrub cover over the pool as if you were standing in the center of the pool and looking up.

4g) Disturbance. Check all forms of disturbance that have affected the pool.

Hydroperiod Comments. Use this space to make notes on indicators of hydroperiod determination and/or confidence of this determination.

5. Indicator Species

Species Observed:

Adults. Please place an “X” in the checkbox if any of the species listed are present.

Tadpoles/Larvae. Mark an “X” in this column to indicate the presence of tadpoles or larvae of each species present.

Egg Masses. Please enter the number of egg masses (not individual eggs) of each species present in the pool. Use the check boxes to indicate if the number entered was derived from an actual count or an estimate.

Pool area surveyed. Use the appropriate checkbox to indicate if the egg mass data was derived from an entire pool survey or a partial survey.

Other. Presence of other amphibians such as green frogs and eastern newts are noteworthy and can be included here. This space can also be used for documenting the presence of other invertebrates

Photo? Please take a photograph of the whole pool and a photograph documenting the presence of each indicator species at the pool (egg masses, tadpoles, metamorphs or adults) if there is a question about identification.

Were Fish Observed? Because vernal pool-dependant wildlife have no adaptations against predatory fish, it is important to know if fish were observed. Complete this section, being careful to avoid confusing fairy shrimp and other aquatic invertebrates with small fish.

Comments. Use this section to make notes on the overall vernal pool or any other comments that do not fit elsewhere on the data form.