Vernal Pool Monitoring

Surveyor's Name: _____ Survey Date: _____

Teacher's Name/Hour: _____ Visit #:_____

Vernal Pool Location:

County:_____ Pool ID #: _____

Preserve/other location name (if available):_____

Section 1:

Pool Type:
Use the picture guides to help you determine the type of vernal pool.

Is this a vernal pool? Yes_____   No_____   Not Sure _____

What type? (Circle one below)

Open Pool   Sparsely Vegetated Pool   Shrubby Pool

Forested Pool   Marsh Pool   Other (Describe below)

_____

Pool Isolation / Connectivity:
Is this pool isolated or connected to another wetland or water feature?

Isolated _____ Connected to another wetland/water feature _____ (describe below)

_____

Presence of inlet or outlet / channel with water:

Does the pool have an inlet/outlet or a channel with water flowing into or out of the pool? You may have to walk around the entire pool to answer this question.

Please check one of the following:

_____ Yes, there is a channel and there is water flowing in it right now.

_____ Yes, there is a channel but it is dry right now.

_____ No, there is no channel.

_____ Not sure

Pool Photos:

Please take a photo of the pool from each side of the pool for a total of four photos. Please also take some photos of the habitat surrounding the pool.

Pool photo numbers: _____

Surrounding Habitat: (within 100 feet of pool)

(Circle all that apply)

Deciduous Forest   Coniferous Forest   Mixed Forest   Other

(Circle all that apply)

Upland - dry to moist, higher ground   Lowland - wet, low, flat or level ground

Briefly describe in words and draw a sketch of the habitat of the area around the pool.

List types of plants and animals in the surrounding habitat you or the group identified:

Any human activities or non-natural disturbances in the surrounding habitat?   Yes / No
If yes, describe here.

Section 3:

Pool Size, Depth, and Temperature:

Length _____feet (measure at maximum length)

Width _____ feet (measure at maximum width)

Maximum Depth _____ record unit of measurement (inches, cm, or feet)

If you don't know where the deepest part of the pool is, take several pool depth measurements near the center of the pool, and record the deepest water depth.

Water Temperature (°F) _____

Take three water temperature readings along the length of the pool. Record them below, calculate the average, and record the average water temperature above.

Water temperature reading 1 (at edge of pool): _____

Water temperature reading 2 (at center of pool): _____

Water temperature reading 3 (at other edge of pool): _____

Water Level at time of survey (circle one below)

Full/nearly full   Partially full   Less than half full   Dry/mostly dry

Pool Substrate / Soils (when pool is dry) (optional):

Soil pH: _____

Soil moisture (circle one):   Wet   Moist   Dry

Substrate / soil type (circle ALL that apply):

Silt – Clay   Sand   Gravel   Unknown

Muck – Peat   Loam   Bedrock   Other (describe below)

Section 4:

Pool Vegetation:

Are trees present in or along the pool?   (Only trees with trunks at least 4 inches wide)

_____ Yes, inside the pool.

_____ Yes, but only along the edge of the pool.

_____ No trees are present in or along the edge of the pool.

Approximate # of trees inside the pool: _____   Along edge of pool: _____

How much of the pool is covered by the following types of vegetation?

Estimate using the following categories: 0%   1-9%   10-25%   26-50%   >50%

Floating plants (floating in water or on surface): _____

Emergent plants (sticking up out of the water): _____

Shrubs (woody shrubs and trees with trunks < 4 inches wide): _____

Tree canopy over pool (when trees are fully leafed out): _____

Additional cover for animals (circle all that apply):

Leaf Litter   Logs   Branches/twigs   Moss   Algae

Submergent Plants (fully submerged in the water)   Other (describe below)

Pool Disturbance:

Do you see any human disturbance or invasive plants in or along the edge of the pool? Yes / No (circle one)   If yes, describe here.

<u>Sketch of Pool:</u>

Sketch the pool including labels and detail as necessary to show its features.

<u>Indicator Species and Additional Species:</u>

List animal species observed or collected. Put a ***star** by those species that are vernal pool *indicator* species (fairy shrimp, wood frog, spotted salamander, blue-spotted salamander, fingernail clams). Photograph species if possible.

Create a detailed sketch of at least one of the species collected and label your drawing with the correct name. If you have time, use the back of this sheet to sketch and label more of the species collected.