### Vernal Pools of Enfield

#### Moose Mountain I, 2, 3

VP MM1 & MM2 are located along western side of Class VI Road, which heads north from Route 4 in Enfield just opposite of Roller Ring parking. North of power line about one third mile. Hardwood canopy.

VPMM1 is approximately 100 feet long, 30 to 40 feet wide, long and narrow. Lots of brush in middle of pool.

VP MM2 is tear shaped, much smaller, 50 feet by 30 feet. Road cuts through northern tip, where a separate pool, 15 feet by 10 feet exists, and contained one wood frog egg mass.

VP MM3 is in further up the Moose Mountain ridge and in Hanover. It is located on the west side of the trail near the summit of the ridge, about a quarter of a mile from ledges overlooking Mascoma Lake. Pool is approximately 100 feet long by 50 feet wide, circular with lots of brush in the middle. Hemlock and hardwood mixed canopy.

# Goodhue Hill Road 1, 1-A,2, 3

VP GH1-A: is located just to the west of the old log landing before crossing Goodhue Hill Creek. It is a part of the landing, a drainage ditch to divert water away from the landing. It is about 25ft long and 3-4ft wide. Hardwood canopy, 1ft deep.

VP GH1 is located on the west side of the road about a mile and a half from Route 4-A. There is a stone wall that runs through a quarter of it. Vehicles and ATV's like to drive through the pool on the east side of the stone wall. Hardwood, spruce canopy.

VP GH2 is located about a quarter mile south of VP GH1 in a shallow basin about a 100 feet from the east side of the Goodhue Hill Rd.

VP GH3 is further south toward the divide that separates Goodhue Hill drainage and Butternut Pond. It is located just below the divide., and **NEXT TO GOODHUE HILL RD**, Hardwood canopy.

VP GH4 is located just past, about 300 yards, VPGH1, on a skid trail that bears to the east. From junction the skid trail bear east for a third of a mile, reaching a level area just before dropping into a drainage that leads to the Bog Road. On 5/9/16 observed some wood frog eggs masses barely intact and some spotted salamander eggs. ATV traffic had passed through during the weekend.

# **VP Lily Ponds:**

VP LP: is located at west end of lily ponds just east of Smith Pond. Caused by beaver dams. There are two small pools of similar size. 5/14/18 10 salamander egg masses.

## Prospect Point 1, 1-A, 2:

VP PP1 is located just west of small gap on ridge, about one quarter of mile north of summit. Hardwood canopy.

VP PP1-A: is located about 150 feet westward of VP PP1. Very small, 20' x 10'. VP PP2 is located at the base of Prospect Point on the south side overlooking I-89, Croyden, Mount Asctney, and Vermont. Hardwood canopy.

## Shaker Mountain 1, 1-A, 2, 3. 4. 5, 6, 7, 8

VP SM1: Located just south of official F & G trail, not skid trail, on the south side of hay meadow. At the junction of the logging road where the road bears left to F & G clearcuts, the approved trail is to the right. From this junction, the pool is about a quarter mile, just about 100ft from trail. Mixed forest canopy, 30' x 15'

VP SM1-A is located on old trail or logging road that makes a big loop on the Fish & Game property from parking area to top of highest hay meadow. The trail is no longer officially maintained but is still very evident. Pool is located 300ft uphill from high point elevation of the trail. The forest is predominately spruce and fir, some pine. It is about 300 yards from the golf course. It is fairly large, 130 ft x 25ft, no ice, no chorusing, no egg masses 4/13/16. Spruce, pine, and hardwood mix.

VP SM2, VP SM3,VP SM4, VP SM5 are located uphill on skid trail that leads through an old red and white pine plantation. Trail starts just about center on hay meadow's top timbered edge. Follow the trail uphill to its highest point. There is a stonewall just before the high point. The stone wall to the north, uphill, leads to most of the vernal pools.

VP SM2 is located right at highpoint of trail, and at a right angle junction where the trail descends to the south. Pool is very small, and right next to trail. Pine, spruce, hardwood mix.

VP SM3 is located about 100ft along said stone wall on the left as one is walking slightly uphill. It is in a hemlock, spruce, fir forest.

VP SM4 is located a few feet further along said stonewall but on the right. It is in a spruce, hemlock forest.

VP SM5 is just about 150 ft uphill from VP SM4. It is quite large and is in a hemlock / spruce and hardwood mix forest.

VP SM6: is located near official trail at the far NW part of the Fish & Game Lower Shaker State Wildlife Management Area. Pool is located 100+ plus yards off trail, in deep Hemlock canopy. It measures 150ft long x 6-15 ft wide. From the highest hay meadow on the right side going uphill, take the logging road to the north and proceed about a mile to the north until makes a junction, just before stream crossing. At the junction, head left following a small stream. Trail is on the edge of Hemlock and Hardwood forest. Take trail about one third mile until trail makes a sharp bend to the right. About a 30ft there is a swampy area. Head uphill, to the left, about 200 yards to find pool. There are small pools near this central pool, dependant on rainfall for a particular year. One of the small pools had 8 salamander egg masses. These may be opportunistic pools for salamanders depending on availability.

VP SM7: is located further along trail, about another one third mile. Terrain is fairly flat with Hemlock and Hardwood mix. Pool is located 200 plus yards off trail following a very slight valley. Pool is near Fish & Game boundary, maybe several hundred feet. Hemlock canopy. 100ft x 30ft at its widest. There is an elaborate hunting stand near the far end of the pool, which is accessed from private property.

VP SM8: Located on private property, Map#10, Lot#11, about 50-75 feet from Fish & Game western property line on Shaker Mountain. Private property has been heavily logged, with skid road cutting vernal pool. All trees surrounding pool have been cut. ATV traffic still uses skid road. No canopy, except for next to Fish & Game line. Pool is just below corner boundary.

## Jim Petryk Preserve 1

VP JPP1 is located on Fish & Game property about mid-point on the property line that that separates Petryk from Fish & Game. Fish & Game just located and blazed this line in winter on 2015. Pool lies about 100 feet to the south of the line. Hardwood canopy.

#### **Bicknell Brook Colette 1**

VP BBC1 is located in the meadow at the beginning of the Colette Trail from Grafton Pond Rd. It was artificially made when the area was a dumping ground for the Town's Highway Department during the 1980's. Very small, 30'x 6', pool may dry out before eggs hatch.

#### **Bicknell Brook Colette 2**

VP BBC 2 is located on the Upper Loop of the Bicknell Brook Trail. After crossing the second small stream the trail follows a flat dry ridge with white pines growing on both sides. About mid-way on the pine dry ridge the pool is located about 200 ft to the North, or downhill or right is traveling on the loop clockwise. The pool is small and very irregular, difficult to get good dimensions, but grossly  $50 \times 20$ . 20 wood frog and three salamander egg masses, 6 inches deep on 4/17/16. Forest is a spruce, hemlock, hardwood mix. Chorusing on 4/17/16

#### **Enfield Post office**

VP EPO is located south on PO and north of Enfield Hardware. 30ft. wide x 50ft. long.

#### Harris Brook

VP HB 1 is located below dam. Pool is caused by a leak in dam. Water does not diminish much in summer. No confirmed egg masses to date. Rusty plume of water from pipe entering pool. Pine, hemlock and hardwood mix canopy, 2ft deep in center.

VP HB 2 is located just across spillway on trail headed north, 100ft. Nothing confirmed at this time, but there are deep pools among large granite squares that may attract wood frog and salamanders. Pine and hardwood mix canopy. There are 3 pools, each about 10ft x 3ft mixes among granite boulders. Depth is 3 to 4 inches.

# **VP Boys Camp Road**

VP BCR 1 is located on Boys Camp Rd, about mid way from Route 4-A and Boys Camp Bridge over Bicknell Brook. The pool is in a swampy area just on the uphill side of the road at a culvert. On 4/29/16 there were about 7 spotted salamander and 20 wood frog egg masses. Drainage on the downhill side is slow. Pool is about 6 inches deep with all egg laying near the culvert.

#### **VP Mount Calm**

VP MC 1 is located just below summit a few feet to the west side. The pool measures  $30 \text{ft} \times 15 \text{ft}$  with tuffs of grass on the edges. It is a classic summit vernal pool with an overstory of spruce and oak. On 5/16/16 there were 9 spotted salamander egg masses. Water depth was about 6 inches.

# VP Crump 52

VP C52 is located on Map#9, Lot#52 on the other side of the Colette Trail and Bicknell Brook. It is about 75 feet from Bicknell Brook. Two small pools linked together kind of like a figure 8. The upper is 25ft x 7ft, the lower a little larger, 30ft x 10ft. Hemlock and hardwood canopy. Pools are about 6-12in deep.

## **VP Drape**

VP D is located just upstream from boardwalk on Bicknell Brook, about mid distance between boardwalk and bridge. It is a small pool about the size of a plastic kiddy pool. It is 2-4 inches deep, hemlock, spruce canopy, with 6 salamander egg masses on 5/16/17. May not be a true vernal pool. It is off trail about 30 ft sloping toward Bicknell Brook.

#### VP Eric Darmstaedter 1 &2

VP ED 1 &2 are located along property line with Jim Dunkerley. They are about midway to the Town of Enfield's property corner next to swamp. Both pools are small, shallow, but had egg masses 4/29/17.

## VP Oak Hill Road 1 & 2

VP OHR 1 &2 are located on west side of Oak Hill Road. Did not check for egg masses but one is obviously a vernal pool, the other needs further investigation.

**VP Bog Bluffs:** Bog bluffs are a steep series of cliffs and rock over looking the swamps on Bog Road. There is on top a flat overlook in which Cardigan Mountain, Mount Washington and Lafeyette can be seen.

**VP BB1:** is located several hundred yards down, south, along the ridge. It is circular and as on 4/23/18 was almost all ice. Should be revisited to confirm. Mostly spruce / fir canopy with scattered oak.

**VP BB2:** is located at base of cliffy area of Bog Bluff, on the south east side. It is on top on a narrow rocky, canyon. It is quite large, 150 ft long by 25 ft wide. Not much ice on 4/23/18. One salamander egg mass was seen, but this was only a quick look.

I believe that it will contain many frog and salamander egg masses. Will revisit. Hardwood canopy, 1.5 ft deep.

# VP 995 (UVLT), L = logging influenced / VP = vernal pool / 995 = Acres of property

Data collected by Alan Strickland, Enfield Conservation Commission, ex-forester, self-informed naturalist, and has attended several VP workshops (Brett Amy Thelen, Harris Center for Conservation Education)

VP 995 A, B, C, D are located on or near the first log landing. **All are staked**.

VP 995 A L is located at the first log landing just past the gate on Route 4-A. It is on the south side. Irregular shape  $10\text{ft} \times 5\text{ft}$ , 1foot deep, 8+wood frog eggs, but difficult to see as to the murky water. Saw spotted salamander crawling out of pool. Two wood frogs were trying to mate with the salamander. 4/12/16 No canopy, Staked

VP 995 B L is located on the right side, north, of same landing, first. It is in tall grass. Circular pool, 15ft x 20 ft, 1 foot deep, 30+ wood frog egg masses. 4/12/16 No canopy, **Staked** 

VP 995 C L is located further north, 10 ft. x 10 ft., 6 wood frog egg masses, l foot deep. 4/12/16 No canopy, **Staked** 

VP 995 D **is** located further north and is very close to Route 4-A. This pool has not been disturbed by logging. It measures 35ft x 25ft. with 30+ wood frog egg masses. 4/12/16 Mixed hardwoods **Staked** 

VP 995 1 L is located at the beginning of the  $3^{\rm rd}$  log landing to the right (north), 15ft x 4ft, 3 wood frog egg masses, 3ft. deep. 4/12/16 Shrub canopy of young birch, popular with half side of pool open with no canopy. **Staked** Also about 50+ feet to the north there is another pool with salamander eggs found 4/29/18.

VP 995 2 L is located at the beginning of the same log landing,  $3^{rd}$ , but to the south of the road. 9 salamander, 9 wood frog egg masses,  $4ft \times 50ft$ , 2 to 4 ft deep. 4/12/16 Shrub canopy of young birch and pine. **Staked** 

VP 995 3 L is located just about 100 ft further on main road, and is in fact part of the road. Cattails abound. 1 salamander, and 30 wood frog egg masses. Pool is 15ft x 60 ft. Egg masses were also found in drainage ditch of this pool. 4/12/16 No canopy. **Staked** 

VP 995 4 L is located just past the  $3^{rd}$  log landing next to the right side of the road. Pool is 30ft x 8 ft, 6inches deep, 30+ wood frog egg masses 4/12/16 Some hardwood / hemlock canopy. **Staked** 

VP 995 5L is located near the divide of Smith Pond Road on the left side of the road. 3ft x 15ft, 6inches deep, 1salamander egg mass. 4/12/16 Hemlock / hardwood **Staked** 

4/25/16 6 spotted salamander egg masses

VP 995 6 L is located just past VP 995 5 L on the left side of the road, 3ft x 20ft, 1 foot deep, 1 salamander, 2 wood frog egg masses. 4/12/16 Hemlock / Hardwood canopy, **staked** 

VP 995 7 is located at height of land on Smith Pond Road, and follows old canal, 300ft east of road in undisturbed hardwood, hemlock mixed forest. No egg masses were found, must be confirmed. 4/12/16 Pool measures 50ft x 25 ft and 20ft x 10ft 2ft deep at deepest point. 4/20/16 ---- 6 wood frog and 6 salamander egg masses found.

VP 995 8 is located just further east, about 100ft upstream, 50ft x 15ft, 1wood frog egg mass, chorusing, undisturbed hardwood canopy 4/12/16

VP 995 9 L is located back on Smith Pond Road, just off the east side, NO egg masses, 15ft x 6 ft. Must be confirmed 4/12/16 Mostly open with little hemlock / hardwood canopy 4/20/16 no egg mass or evidence of a vernal pool. Very shallow, 2-4 inches deep. **Probably not a vernal pool.** 4/25/16 2 wood frog egg masses found.

VP 995 10 is located just to the east of Smith Pond Road, maybe 75 ft in an semi-disturbed pocket of hardwood / hemlock forest. It measures 30ft x 20ft, 1.5ft deep. 8 wood frog and 3 salamander egg masses, chorusing. 4/12/16 It is just uphill from VP 995 6 L. **Staked** 

VP 995 11 L is located west of corner just below height of land on Smith Pond Road, perhaps 200 to 300 feet westerly of corner along stonewall. Pool is located a few feet from stone wall and in an area heavily logged. Tall grass abounds. 20ft x 4ft, 20+ wood frog egg masses. Water depth is 1 foot. 4/12/16 light canopy of residual spruce and hardwoods, some pine regeneration. **Staked**VP 995 12 L is located along skid trail that parallels stone wall property line. Going uphill, it is on the right, just off the trail, kind of bathtub size, circular, 3ft diameter, 1 salamander and 2 wood frog egg masses, depth is 1 ft. 4/12/16 Some spruce, beech and birch regeneration on one side, open to skid trail on other side. **Staked** 

VP 995 13 L is located further up the skid trail at a junction with another skid trail. The pool has been created by skidder tracks. It measures 20ft x 3ft, 6inches deep, 2 wood frog egg masses. 4/12/16 No canopy, but some regeneration of pine, spruce, and red maple. **Staked** 

VP 995 14 L is located further up the skid trail on a level section. The VP is located right in the middle of the skid trail. It measures 20 ft x 10ft., 30+ wood frog and 20 salamander egg masses, 18 inches deep. 4/12/16 Not much canopy, there is some spruce and pine regeneration as well as some more distant tall spruce and white birch. **Staked** 

VP 995 15 L is located just a few feet further, at another junction with another skid trail. The skidder tire created this pool. It measures 3ft v 8 ft, 1ft deep. There is another skidder tire pool just uphill which measures 2ft x 10ft with 2 wood frog egg masses, lft deep. 4/12/16 No canopy, some regeneration with a few white birch nearby.

VP 995 16 L is located much further uphill on a skid trail that parallels property line. Again, it is caused by tire tracks, and is small with wood 3 wood frog and 1 salamander egg masses. It measures 3.5ft x 12ft, and 1.5 to 2ft depth. It is not far, 100ft, from property line that runs NE to SW, and below high point on ridge (496 meters). 4/13/16

VP 995 17 Small depression 10ft x 5ft just uphill from NW granite post corner near ridge top, hemlock / hardwood mix, 3-4 inches deep. It is north of "Lost Lake"

several hundred yards to the NE of the dam. No egg masses. Probably not a vernal pool. Need to monitor.

VP 995 18 is a 15ft diameter circular pool, 6 inches deep, that has not been disturbed by the logging. From the iron pin corner marker that is along side of Smith Pond Brook, (between the two waterfalls), the pool is downstream about 300ft and then straight upslope, northerly or right side if one is walking upstream, about 400ft. On 5/7/16 there were at least 5 spotted salamander egg masses and maybe 5 wood frog egg masses. Difficult to see as to a large number of beech leaves in the pool, plus the wood frog eggs masses have just about lost all their shape.

VP 995 19 is located just off logging road where gravel stone was applied. Access is from I-89, walking up to trail beginning to Half Mile Pond. It is just before corner, iron pipe, that is along side the logging road. It is very shallow, less than 6 inched deep, 60ft x 20ft., hardwoods, with only 1 wood frog egg mass, 4/28/17. May not be a true vernal pool.

## **Enfield Land Company**

VP ELC 1 is located below ridge summit (496 meters) and just across property line with UVLT on the NW corner of the 995 acres. It measures 25ft x 25 ft, 5 wood frog eggs, no ice, 6 to 8 inches deep. Mixed hardwood forest 4/13/16

VP ELC 2 is located about 150 ft diagonally uphill. It is slightly larger, 30ft x 30 ft, 8 inches deep, 20+ wood frog eggs, no ice. Mixed hardwood forest. 4/13/16

## Lost Trail (Fish & Game)

VP LT 1 is located along the SW portion of the Lower Shaker State Wildlife Management Area. It is 300+ yards from the golf course boundary line. Hardwood forest. The pool measures 20ft x 30ft, 8 inches deep, no ice, no chorusing, no egg masses on 4/13/16.

VP LT 2 is located just 100+ft to the south. Hardwood, Spruce and Hemlock mix forest, circular pool, 50ft x30ft, 1 foot deep, no ice, no chorusing, 50+ wood frog eggs. Also 300 yards from golf course. 4/13/16

VP LT 3 is located a quarter mile south from the top of clear-cut, old Shaker potato field, in heavily shaded hemlock forest, some spruce and hardwood as well, near ridge top. It is to date Enfield's largest vernal pool, measuring 150+ft x 50ft. 95% ice on 4/13/16 but was able to see 2 Jefferson salamander egg masses.

VP LT 4, 5, and 6, are located just uphill, east, on a slightly higher ledge in heavy hemlock and spruce flat plane.

VP LT 4 measures 50ft x 70ft, 90% ice on 4/13/16, no egg masses seen. 4/13/16

VP LT 5 measures 20ft x40ft, no ice, 6 inches deep, no egg masses 4/13/16 Pool was completely dry on 4/22/16. **May not be vernal pool.** 

VP LT 6 measures 40ft x 40ft, no ice, no eggs, 6 inches deep. 4/13/16 Completely dry on 4/22/16. **May not be vernal pool**.

VP LT 7 is located on Fish & Game property between the SE corners separating the Fish & Game Lower Shaker State Wildlife Management Area from the UVLT measures 50ft x 20ft, mix forest of hemlock, spruce and Hardwood. No ice on 4/13/16. No egg masses found, but one wood frog was seen in the water. Water depth is about 6 inches

#### Lost Lake

LL 1 is not a vernal pool. There is water year round with a stream coming in and a stream coming out. However, there appears to be spotted salamander egg masses, 17 or so, mostly toward the deep end. Observed white spermatophores. There are also quite a few Pickerel Frog? egg masses, 30+ submerged in water attached to twigs or limbs. Depth in lake is 6-7ft deep. Observed lots of newts and large tadpoles swimming. 4/24/16

#### Mill Pond

MP 1 is the small pond just adjacent to the Fish & Game parking area. This is not a vernal pool as water is there all year long with an inlet and outlet of water. However amongst the cattails there is 30 wood frog egg masses. 4/24/16 Observed newts clustered around egg masses eating the eggs. A few days before chorusing was heard in the cattail area.

#### **Russell Trust**

VP RT 1L is located at height of land on west side of Smith Pond Road about 100 yards from large beaver meadow where trail makes a right angle turn. It is a skidder track, bathtub size. Chorusing was heard here about a week earlier. Wood frog egg masses present.

VP RT 2L and 3L are located just across stonewall property line with UVLT. They are both small, but fairly deep. Caused by logging, open with no canopy. Wood frog egg masses. Too late in season to count accurately.

VP RT 4, 5L, and 6L are further up along stonewall, westerly. There is a skid trail that goes through the stonewall from the UVLT property to the Russell Trust. About 100 yards into the Russell property there is a collection of pools. Pool 4 is semi-disturbed in a pocket of spruce, 3 inches deep, 6+ wood frog egg masses. Pool 6 is a narrow skidder track that is 50ft long x 2.5ft wide. There are other skidder tracks where eggs have been laid, but pool is completely dry with eggs totally out of water. Kind of a mess.

# **VP Pete Thompson 1, 2, 2-A. 3,4, 5**

VP PT 1 is located just west off property line between Fish & Game and UVLT. It is large, measuring100ft long and 25ft wide. Spruce and hardwood overstory, 12-18 inches deep. 4/28/17 there were 40+ WF and 30+salamander egg masses.

VP PT 2 is located along same line, again just to the west of line on Fish & Game property. Smaller, circular with a radius of 15ft, 6 inches deep, with a hardwood canopy. 4/28/17 there were 20 WF egg masses.

VP PT 2-A is along same line but 300ft to the west. It is located in between these two pools. Circular, 20 radius, spruce and hardwood canopy, 6 inches deep. 4/28/17 there were 30 WF and 4 salamander egg masses.

VP PT 3 is located just west off property line of the 995 of the UVLT. Up Smith Pond Road to property line of the 995, just before reaching the trails for Smith and Half Mile Ponds. Uphill, heading south until about mid way on property line there is a large pool, circular, 25ft radius, 6-8 inches deep, hardwood canopy. 4/28/17 there were 50+WF, 25 salamander, and 1 Jefferson salamander egg mass.

VP PT 5: (Henry Laramie WMA, Bohlen Trust) is located off Smith Pond Road from I-89. It is between the two boundary lines going uphill, about 400 ft the road. It is  $40 \text{ft} \times 15 \text{ft}$ , 12 inches deep, hardwood canopy with some White Pine present,  $4/30/17\ 20+\text{WF}$  and 7+salamander egg masses.

## Vernal Pool Smith Pond Rd, I-89

VP SMRI-89 is located on Smith Pond Road in drainage ditch a few hundred yards from locked gate on the I-89 side. There were 4 salamander egg masses on 5/1/18

#### **VP Smith Pond Trail I-89:**

VP SPT89 is located just off "new trail" close to trail junction to go descend to go to Route 4-A. It is a backwash from stream, and on 5/14/18 had 5 to 6 salamander egg masses.

**VP Greg Baker Drive:** is located past the locked gate at the height of land just before dropping down to the cabin. It is on the south side of the road, on right as approaching cabin. To late in year to do inspection, 6/6/18.

#### **Site Visits**

**VP GH1, 3:** Both wood frog eggs and salamander eggs observed in pool since 2013.

**4/19/15**: VP GH1—50% ice. Notice moderate chorusing when approaching. No egg masses present. Saw one wood frog hopping on ice.

VP GH3, 50% ice, no chorusing, no egg masses.

# 4/20/15:

VP GH1--Cold, rainy, and raw, high temperature of 40 degrees. Not much change. No chorusing and no egg masses.

# 4/21/15:

VP SM1—40% ice, no egg masses or chorusing

VP SM2—20% ice, no egg masses or chorusing

VP SM3—90% ice, nothing

VP SM4—80% ice, nothing

VP SM5—70% ice, nothing

## 4/23/15:

VP PP1—50% ice, no chorusing, no egg masses VP PP2—No ice, no chorusing, no egg masses

## 4/24/15:

VP JPP1---40% ice, no chorusing, no egg masses

# 4/26/15:

VPGH1—no ice, no chorusing, no egg masses

VPGH2—no ice, no chorusing, 20 wood frog eggs located in some unknown green aquatic vegetation, west side of pool Noticed some algae looking growth in water.

VP GH3: 20% ice, no chorusing, 40 wood frog egg masses on north side of pool. Saw a dead female wood frog floating in water.

## 4/27/15:

VP JPP1—no ice, no chorusing, no egg masses

# 4/28/15:

VP MM1-- no ice, chorusing and 50+ wood frog egg masses on southern end.

VP MM2—no ice, chorusing, and 40+ wood frog eggs masses toward northern—and central end.

VP MM3—15% ice, chorusing, and 60+ wood frog egg masses at northern end.

Observed one dead female floating in northern end. Bard owl heard lurking nearby.

# 4/29/15:

VP SM6—80% ice, no chorusing, no egg masses.

VP SM7---50% ice, no chorusing, no egg masses

VP SM8---no ice, chorusing, wood frog eggs, 40+, one dead female seen in separate pool next to Fish & Game property line, along with one egg mass.

## 4/30/15:

VP PP1---No ice, no chorusing, no wood frog eggs, 1 spotted salamander egg mass.

VP PP1-A---no ice, no chorusing, 1 wood frog egg mass.

VP PP2---no ice, no chorusing, 6 wood frog egg masses.

#### 5/02/15:

VP SM1---No chorusing, 3 separate salamander egg masses

VP SM2---No chorusing, 2 clustered salamander egg masses

VP SM3---chorusing, 15 wood frog eggs

VP SM4---No chorusing, 1 wood frog egg mass, 15% ice

 $$\operatorname{VP}\xspace$  SM5---No chorusing, 25 wood frog egg masses, 5 salamander egg masses, 10% ice.

## 5/03/15:

VP JPP1---No chorusing, 1 salamander egg mass, 1 wood frog seen in water, pool heavily covered in beech leaves, difficult to see. Depth of pool is about 18inches in middle. Very dry spring.

## 5/04/15:

VP BB1---no chorusing, 2 wood frog egg masses.

# 5/05/15:

VP SM6---no chorusing, 40+ wood frog eggs, 1 salamander egg mass, heard Bard owl lurking nearby. Some wood frog eggs had just been laid as evidenced by the white dots on the underside of some of the egg masses. Dry, only 1ft deep.

VP SM7---no chorusing, 20 wood frog egg masses, 3 spotted salamander egg masses, very dry, 6" to 1ft deep.

# 5/06/15:

VP GH1---40+ wood frog egg masses, 15 spotted salamander egg masses, had to walk into pool to determine count.

VP GH2---too hard to see anything

VPGH3---40+ wood frog eggs masses, 60+ spotted salamander egg masses, had to walk in pool to determine count.

#### 2016

# 4/01/16:

VPJPP1---No chorusing, 30% thin ice, no egg masses

# 4/11/16:

VPJPP1---No ice, no chorusing, no egg masses

# 4/11/16

VP EPO---No ice, no chorusing, several wood frog egg masses in center of pool.

VP HB 1---Roundish in shape, 30 ft in diameter, 40% ice, no chorusing, no egg masses. Plume of rusty colored water from dam entering pool. Need to verify.

VP HB2---small pockets of water under hemlock, pine canopy. 100% frozen, no chorusing, no egg masses. Need to verify.

4/13/16 VP SM1---no ice, no chorusing, no egg masses.

# 4/17/16

VP BB 1---Pool is almost dry, 4 inches of water in deepest part. 3 wood frog and 1 salamander egg masses. One wood frog egg mass is hanging on a branch and is completely out of the water. No much hope of eggs making it through the cycle.

# 4/18/16

VP HB 1 only 1 wood frog egg mass.

VP HB 2 no ice, no egg masses, no sign that it is used as a vernal pool.

VP SM 1 No ice, no egg masses

# 4/19/16

VP SM 1 No ice, no egg masses

VP SM 6 No ice, 30+ wood frog egg masses, 6-8 inches water depth.

VP SM 7 No ice, 14 wood frog egg masses, 6 inches deep

VP SM 2 No ice, no egg masses

VP SM3 No ice, 40 wood frog eggs masses, chorusing, 1ft water depth.

VP SM 4 No ice, very shallow 6 inches. There are two spots deep enough to support egg masses. Southern end 3 wood frog, and northern end 2 wood frog egg masses.

VP SM 5 No ice, chorusing, 40 + wood frog eggs, 9 spotted salamander egg masses. 1ft water depth.

## 4/21/16

VP JPP 1 1 wood frog egg mass, lots of mosquitoes larvae, 2 newts, and a bit of spermatophores on leaves on pool bottom. Depth of pool is about 1ft.

# 4/22/16

- VP HB 1 Found an additional 6 wood frog and 3 spotted salamander egg masses, plus 1 very large snapping turtle, 18+inches long and 12 inches wide.
- VP HB 2 Found 3 spotted salamander egg masses in one of the pools. Plus observed a quite large dead female wood frog in one of the others.
  - VP LT 1 This pool was completely dry today. May not be a vernal pool.
- VP LT 3 Ice is completely gone. Found 50+ wood frog egg masses, as well as 6 spotted salamander egg masses. Found 1 additional Jefferson salamander egg mass. Also there was a pair of Mallard ducks in pool.
- VP LT 4 There was a small portion of ice that remained. Found 30+ wood frog egg masses, 6 inches deep.
  - VP LT 5 This pool was completely dry. **May not be a vernal pool.**
  - VP LT 6 This pool was completely dry. **May not be a vernal pool.**
  - VP LT 7 Shallow, depth is 4 to 6 inches. Found 17 wood frog egg masses.

# 4/24/16

VP SM 1 No egg masses.

VP SM1-A---1 spotted salamander egg mass, spermatophores, pool has shrunken by at least half, 6 inches deep.

#### 5/1/16

VP HB 1 Picker frog egg masses(3) plus 4 or 5 wood frog egg masses.

8/18/16: VP HB 1 Not much drop in water level despite being a very dry summer. Not truly a vernal pool by definition, but remains in grey area. Still functions as a source for wildlife.

#### 2017

**4/4/17:** All land is snow covered. Streams are just starting to flow.

**4/25/17:** VP C52: 7 spotted salamander egg masses in lower pool, 3 in upper pool.

**4/25/17:** VP BBC2: 10 salamander egg masses, 40+ wf egg masses.

4/26/17: VP LT3: 100+ WF egg masses, 10 salamander, 40% thin ice, chorusing. A lot of the egg masses were in shallow water, may not survive, 4 inches. 1 Bluespotted salamander egg mass?

4/26/17: VP LT4: 40 WF egg masses, 1 salamander egg mass, 10% thin ice, two mating couples of WF seen mating in water.

4/27/17: VP GH 1-A: 3 salamander egg masses 4/27/17: VP 995 19: 1 wood frog egg mass.

5/8/17: VP SM1: 18 salamander egg masses, NO wood frog eggs.

#### 2018

VP GH1: 4/23/18, 100% ice.

VP GH3: 4/23/18, 50% ice, nothing

VP GH4: 5/10/18, 4 to 5 salamander egg masses observed.

VP BB1: 5/10/18, no ice, very shallow but with 4 to 5 salamander egg masses. Two of the egg masses were half exposed above water line.

VP BB2: 5/09/18, numerous salamander egg masses seen, no wood frog.

VP 995-18: 5/11/18, 9 salamander egg masses, No wood frog egg masses.

VP Crump 52: 5/12/18, 30+Salamandar egg masses, no frog eggs.

VP BBC2: Woodfrog and numerous salamandar egg masses.

VP HB2: 5/17/18: Masses of wood frog eggs exposed to air. Probably not going to make it. Rain is forecast for 5/19/18.

## 2019

(Ice out much earlier this year)

4/13/19: VP EPO: No ice, no egg masses

4//14/19: VP Lilly Ponds, no ice, no egg masses

4/14/19: VP GH1-A: no ice, no egg masses

4/20/19: VP EPO: 20+/- egg masses

4/22/19: VP 995 18: no ice, 3 wood frog egg masses

4/23/19: VP GH 1: 13+ salamander egg masses, no wood frog egg masses seen, no

ice

4/23/19: VP GH4: 1 salamander egg mass, no ice

4/23/19: VP GH1-A: no ice, no egg masses

4/23/19: VP BB2: no ice, 40+salamander egg masses, 20+wood frog egg masses.

4/24/19: VP C52: no ice, 5 salamander egg masses in lower pool. Nothing in upper pool.

4/25/19: VP 995 A, B, C are very shallow this year. Nothing seen, may have been too dry.

VP 995 D had good water depth, 8 wood frog egg masses, 2 salamander egg masses with very casual observation.

4/26/19: VP GH1-A: Nothing seen, rainy, cold and raw.

4/28/19: VP GH1-A: Nothing seen

4/28/19: VP LP: 6 salamander egg masses found in eastern pool, 1 salamander and wood frog egg mass, in western pool.

4/30/19: VP SM1: No ice, 20 salamander egg masses

4/30/19: VP LT3: 40% ice, 150+ salamander egg masses, 50+ Wood Frog egg masses. Wood frog eggs were badly laid. Expect high mortality as they were laid in too shallow water.

4/30/19: VP LT4: 20% ice, 30 salamander egg masses, 30 wood frog egg masses

4/30/19: VP LT5: Nothing, probably not a vernal pool.

4/30/19: VP LT6: 6 salamander egg masses

5/1/19: VP SM6: No ice, 25+ wood frog egg masses, 110+ salamander egg masses

5/1/19: VP SM7: No ice, 25+ wood frog, 20 salamander egg masses

5/2/19: VP SM2: No ice, 4 salamander egg masses

5/2/19: VP SM3, No ice, 35 salamander egg masses, 2 Wood frog egg masses

5/2/19: VP SM4, 15% ice, 16 salamander egg masses, 14 wood frog egg masses. 1 dead female wood frog seen floating on surface.

5/2/19: VP SM 5, 5% ice, 300+ salamander egg masses, 25 wood frog egg masses.

5/6/16: VP 995 19: 6 Wood frog egg masses, 3 salamander egg masses.

**VP GH1:** 4/10/20: Almost no ice, just a thin sheet of newly formed ice. No sign of any egg masses.

**VP GH3:** 4/10/20: About 20% ice with some newly formed ice. No sign of egg masses.

**VP GH1-A:** 4/7/20: No ice, no egg masses.

**VP JPP1:** 4/8/20: 40% ice, did not check.

**VP GH1:** 4/14/20: No ice, chorusing

**VP: GH2:** 4/14/20: No ice, chorusing, WF egg masses?

**VP GH3:** 4/14/20: No ice, chorusing,

**VP GH1-A:** 4/21/20: Three milky blue salamander egg masses

**VP SM1:** 4/23/20: No ice, 2 salamander egg masses.

**VP SM6:** 4/23/20: 85% new ice,: too difficult to see

**VP SM7:** 4/23/20: 85% new ice, too difficult to see.

**VP HB1:** 4/28/20: 2 salamander egg masses and about 20 WF egg masses

**VP HB2:** 4/28/20: 20 salamander egg masses, 2 WF

**VP PP 1:** 4/29/20: 6 salamander egg masses, 4 WF (Fresh wet snow, 1", on ground)

**VP PP 1-A:** 4/29/20: 3 salamander egg masses (Fresh wet snow, 1", on ground)

**VP GH4:** 4/30/20: 3 salamander egg masses, cold, rainy, difficult to see.

**VP SM2:** 5/14/2020: 2 salamander egg masses

**VP SM3, 4, 5:** 5/14/2020: Lots of both WF and salamander egg masses in all pools.