

Egg Mass Survey Timing Guide

Two of the four required visits to your adopted vernal pool involve egg mass surveys, but the ideal day on which to conduct these surveys will vary from year to year and from pool to pool. The map and figure below can help you roughly estimate when to time your visit, **however if the microclimate at your adopted pool is affected by any of the geographic or meteorological factors listed below, amphibian breeding—and thus egg mass counts—will be delayed.** As well, posting the conditions of your adopted pool on the VPMon Google Group is highly encouraged, as it will give other monitors a sense of when to time their own visits.

Delaying Geographic Factors

- Elevation (>1000 ft)
- North-facing slopes
- Extensive conifer shading

Delaying Meteorological Factors

- Late snowmelt / deep snowpack
- Dry conditions / low rainfall
- Cold temperatures (below 40°F)

Generally, the first egg mass survey (Visit 2) should occur 1-2 weeks after the peak of the Wood Frog breeding period. The second egg mass survey (Visit 3) should happen about 2-3 weeks later, which is also about 2-3 weeks after the peak of Spotted Salamander breeding.

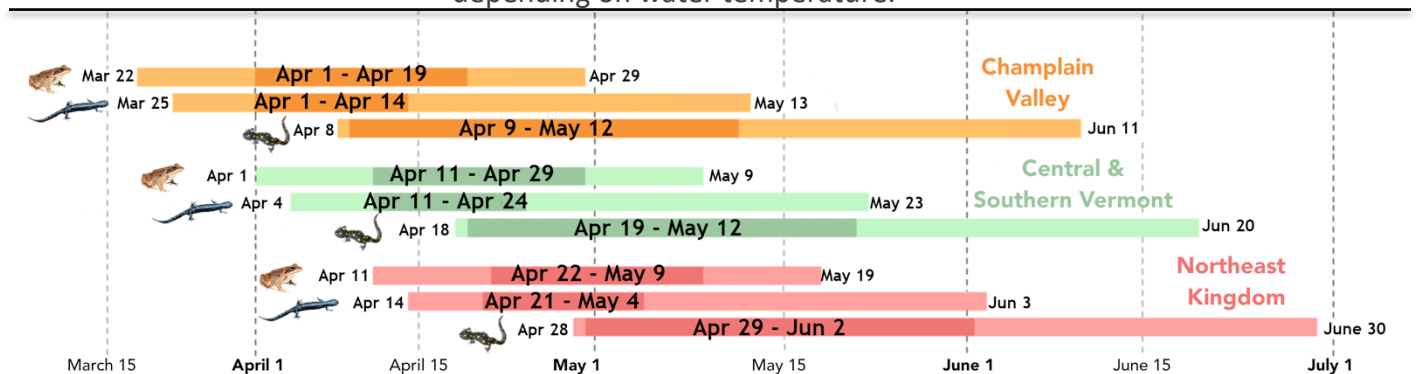


The breeding patterns of the amphibian species monitored by VPMon differ in several ways, which influences the timing of egg mass surveys.

Wood Frog migration is triggered by warmth and humidity. They tend to migrate to pools on the first night with warm rains (>40° F), but some may migrate on warm, sunny days. There may still be some snow on the ground. The breeding season lasts only a few days to a week, and the eggs hatch after 2-4 weeks, depending on water temperature.

Jefferson / Blue-Spotted Salamanders generally the first to arrive at vernal pools, often when just the edges of the pool are thawed.

Spotted Salamanders begin migrating at the same time as Wood Frogs, but they are more dependent on warm nighttime rains. Their breeding season is prolonged, and their eggs take about 3-6 weeks to hatch, depending on water temperature.



Egg Mass Survey Timing Guide: Monitors can use this diagram and its accompanying map to estimate the ideal time to visit an adopted vernal pool. Each bar represents the potential range of ideal surveying dates for each species in a region of Vermont. **The darker section within each bar shows the typical peak (e.g. the best time to survey if conditions are average in that spring and at that pool).** Each region is signified by a color, which correspond with the colors on the map. Remember that the presence and severity of the listed geographic and meteorological factors may call for a visit to be delayed.