

The Vermont Reptile and Amphibian Atlas

Update

2018

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**For the Forest Ecosystem Monitoring Cooperative
(FEMC)**

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Vermont Reptile and Amphibian Atlas (2018)

Background

Localized intensive monitoring

Amphibian monitoring at Mt. Mansfield provides locally intensive data on a subset of amphibian species. While these data are particularly valuable and allow us to see year-to-year population changes of the monitored species at Mt. Mansfield and provide local information on abnormalities, and natural history; they do not allow us to see more widespread changes in the distribution and/or natural history (calling times, migration dates, etc.) of the full range of reptiles and amphibians statewide. Nor do they allow us to see changes in forest health, or the impacts of forest fragmentation and consumption on a larger scale. In addition, there is a real need to get reptile and amphibian natural history and management information out to a wide variety of landowners, land managers, and other natural resource professionals.

Statewide extensive monitoring

The Vermont Reptile and Amphibian Atlas is an effort begun in 1994 by the Reptile and Amphibian Scientific Advisory Group for the Vermont Endangered Species Committee. The atlas project initially began as an effort to gather data for use by this committee. Data were needed in order to make informed recommendations regarding the appropriate status and conservation of these species. Since then, the goals have widened to incorporate education, citizen involvement, and dissemination of information. The ultimate goal of the Atlas is to gather and disseminate data on the reptiles and amphibians of Vermont in a way that involves and informs Vermont individuals and organizations so that they will become more informed and effective stewards of wildlife habitat. The Atlas has grown since its inception in 1994 to involve over 7,000 volunteers and thirty-five private organizations and government agencies. With the help o

Archiving Records

The Vermont Reptile and Amphibian Atlas is the primary repository for reptile and amphibian records from Vermont. Our data have been used for almost all recent publications covering this area and we provide records of rarities to Vermont Fish and Wildlife's Nongame and Natural Heritage Program annually. We will start providing records to the Global Biodiversity Information Facility (GBIF) and other repositories over the coming years. We currently have over 104,000 records in our database. These days voucher specimens come in the form of digital photographs that can be kept in container fields in the database. However, we have an archive of 5,000-10,000 slides, hundreds of old photos, and tens of thousands (140 3-ring binders) of original hard-copy reports that need to be scanned, labelled, and

Hypothetical species

We received a report and photos of a **Blanding s Turtle** (*Emydoidea blandingii*) laying eggs in Norwich. This species has populations south and northwest of us, so it could potentially be native and breeding here. It is also a popular pet turtle. We monitored the nest (none hatched), did some limited turtle trapping in the most likely home wetland, and spread the word to locals to be on the lookout for the species, but I suspect it is a released pet.

Outside-of-range reports for S1 species

We received another odd report of an S1 species outside of where we would expect it. A **Common Five-lined Skink** (*Plestiodon fasciatus*) was described but not photographed from along the Long Trail in the Manchester portion of the GMNF. It makes me wonder if a skink could have traveled as an egg or captive adult with a backpacker. I asked the GMNF biologist to check out the site, but he changed jobs before he had a chance to do that, so the report has not been followed up on.

Unusually late records gathered by or contributed to the Atlas Project during the fall and early winter of 2018/19

As was the case over the last two falls, some of the most unusual verified reports of 2018 have been the late-season reports of amphibians. **Four-toed Salamanders** (*Hemidactylium scutatum*), **Blue-spotted Salamanders** (*Ambystoma laterale* group), **Eastern Red-backed Salamanders** (*Plethodon cinereus*) and **Northern Leopard Frogs** (*Lithobates pipiens*) were seen moving on a warm wet night in Salisbury on November 26. Another significant amphibian movement was seen on North Street in New Haven on December 21 with **Eastern Red-backed, Four-toed, and Blue-spotted Salamanders** reported along with **Spring Peepers** (*Pseudacris crucifer*) and even a **Gray Treefrog** (*Hyla versicolor*). Gray Treefrogs are almost never seen past October. **Common Gartersnakes** (*Thamnophis sirtalis*) were reported as late as December 29th in two locations.

Interesting reports from earlier in 2018

Among the most interesting of the reports were the first report of **Eastern Musk Turtle** (*Sternotherus odoratus*) from Glen Lake in Castleton. Nearby Lakes Hortonia and Bomoseen were both known to have populations of this species, but not Glen Lake.

We received another report of **Common Five-lined Skink** from Benson on Lake Road. This is the third report from the same area of Lake Road and is one of only two known sites in Benson for this species.

We continue to confirm and extend the known range of the **Blue-spotted Salamander** in the northern Connecticut River Valley with additional reports in Canaan and new town records from Guildhall. The valley of the Connecticut River in that area has oxbows within the floodplain that serve as breeding habitat for this species.

Cindy Sprague's data on **Eastern Ratsnakes** (*Pantherophis alleghaniensis*) in the Bristol/New Haven area continue to show how chicken coops (they love eggs) are preferred feeding habitats for this species. We also now know that multiple snakes are using the same denning area.

We continue to receive many new **Wood Turtle** (*Glyptemys insculpta*) records as well as multiple reports from previously known sites from the ongoing studies of Mark Powell and the Orienne Society's Kiley Briggs. Steve Parren's reports of **Wood Turtle**, **Spotted Turtle** (*Clemmys guttata*), and **Spiny Softshell** (*Apalone spinifera*) studies in 2018 have been received and entered into our database.

Targeted survey efforts

This year I personally took employees or volunteers to Addison, Brookfield, Brookline, Buels Gore, Chester, Clarendon, Colchester, Concord, Dover, East Haven, Ferrisburgh, Granby, Guildhall, Hancock, Isle La Motte, Leicester, Londonderry, Lunenburg, Marshfield, Morgan, Norton, Norwich, Orwell, Panton, Plainfield, Rupert,

Rutland City, Shrewsbury, St. Johnsbury

Reptile and Amphi