

# **The Vermont Reptile and Amphibian Atlas**

**Update**

**2018**

**April 4, 2019**

**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 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 active stewards of their habitat. The Atlas has since its inception in 1994 to involve over 7,000 volunteers and thirty private organizations and government agencies. With the help of organizations, agency volunteers, and staff members, we are continuing to collect information and broaden our knowledge regarding the natural history, distribution, and effective conservation of Vermont's reptiles and amphibians. By providing the best and most up-to-date information on the conservation of reptiles in Vermont, we have become a trusted partner in many conservation activities throughout the state.

### Goals for the 2018 work

The goals for the Vermont Reptile and Amphibian Atlas for 2018 were to: (1) to gather data for the Vermont Reptile and Amphibian Atlas; (2) to update and improve the Atlas website, Facebook page, and other outreach efforts (3) to review and enter current and previous years' herpetological reports; (4) to forward electronic files of the most recent calendar year's data to the VT Nongame / Game /



## **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

Rutland City, Shrewsbury, St. Johnsbury, Starksboro, Sudbury, Tunbridge, Vergennes, Victory, Waltham, Warren Gore, Waterford, and Windham in an effort to fill in distribution or photo-documentation gaps. By August of 2018 we had added over 200 new town records (photo or sight) of S4-5 species either from volunteers or our own efforts.

No reptiles or amphibians were killed or harmed during any of these activities.

### **Quality control, maintenance of the Atlas database, data requests**

I reviewed all records, contact was made to all contributors, data were entered into our database and rare species reports have been forwarded to the Wildlife Diversity Program of Vermont Fish and Wildlife. We continually check for mistakes and typos in our database and make corrections and we continue to work to add latitude and longitude for as many of the old S1 through S3 reports as possible as well as all new reports of any species. FEMC funds are being used to pay Kate Kelly for the review and upgrading process.

We also regularly respond to requests for data but are careful not to reveal locations for sensitive species. In 2018, I exported data to NRCS for possible herptile conservation efforts in Salisbury, to the towns of Bolton, Groton, Peacham, and Stowe; The Putney Central School, Lone Rock Point, and a consultant providing conservation guidance for the managers of North Beach in Burlington. Lists of common species in need of documentation

## **Reptile and Amphibian Scientific Advisory Group (RASAG) to the Vermont Endangered Species Committee work that is dependent on Atlas data**

The Vermont Reptile and Amphibian Atlas was begun by the RASAG in an effort to gather the needed data to make more informed decisions regarding conservation action and priorities for reptiles and amphibians in Vermont. Here are three 2018 activities informed by that data.

### Protection of habitat for state listed species.

We have reviewed and forwarded a proposed listing drafted by Steve Parren to protect critical habitat for the Spiny Softshell. The ESC has supported the recommendation and once the nesting-area maps are updated, the recommendation will go to Secretary of the Agency of Natural Resources.

### Recovery Plan

We worked with Vermont Fish and Wildlife to finalize a recovery plan for Spotted Turtle. This plan has been approved by the ESC.

### Mudpuppy

The RASAG proposed listing the Mudpuppy as a threatened species in Vermont. We have done this twice before. We continue to be concerned that populations of Mudpuppies in the major tributaries of Lake Champlain can't sustain the regular (every four years) mortality brought about through the use of the lampricide TFM that is used to control sea lamprey. Data strongly suggest that TFM treatments eliminated populations of Mudpuppy from Lewis Creek and have greatly reduced populations in the Lamoille River. However, since control of sea lamprey through the use of lampricides is a program that Vermont Fish and Wildlife supports, they have not supported the listing in the past. Although supported by the ESC the recommendation was once again denied as a result of fisheries management concerns. This has however gained us some leverage to pursue some conservation actions for this species other than listing. Once again, the Atlas data are key in these efforts.

## **Financial and other support**

The ~~Forest Ecosystem~~ **Fish and Wildlife Monitoring Cooperative**