

To: Jon Kart

From: Jim Andrews
642 Smead Road
Salisbury, VT 05769

Re: **Annual report for my Scientific Collection Permit SR-2015-02(a1)**

Date: January 4, 2017

This is my annual report as required for Scientific Collection Permit SR-2015-02(a1) expiring on 12/31/2019.

The Atlas Project 2016

During 2016 we entered 25 new reports of S1 species, 79 reports of S2 species, 196 reports of S3 species, and a combined total of ~3,656 new verified records. These reports were from all counties and 205 towns, cities, and gores. Reports came for a total of 502 different people, 353 were new reporters.

A sample of interesting reports from 2016

A new town record with a photo of a **Four-toed Salamander** from Shaftsbury is also the first well-documented report of that species in that entire county. It is a species that is often overlooked or misidentified. I am still trying to get more exact location information on that report.

A new town record of a **Mink Frog** in Burke was exciting and two reports of dead single **Mudpuppies** along the Connecticut River in Thetford and Hartland were unusual. We had a report of a new egg-laying site for **Spiny Softshells** on private property in St. Albans and multiple new town reports for Wood Turtles, primarily from a Project Orianne-funded study. These are in addition to new site locations for a variety of other S2 and S3 species, and 98 new town-photo records for S4 & S5 species.

Non-native species or transported individuals

A **Russian Tortoise** (*Agrionemys horsfieldii*) was found in a recreational area in Burlington. This is a common imported pet species and was clearly released at some point, probably this spring. A **Tropical House Gecko** (*Hemidactylia mabouia*) showed up in Middletown Springs. This species is originally from sub-Saharan Africa but it has colonized Florida. The owners of the property had been to Florida a month previously. A **Cope's Gray Treefrog** (*Hyla chrysoscelis*) made the trip from Florida to Essex sealed in a package of bananas. Two **Central Bearded Dragons** (*Pogona vitticeps*) were seen on a tree in Burlington. This is an Australian species that is common in the pet trade. None of these species is likely to survive a winter outdoors in Vermont.

On the other hand, single **Red-eared (Pond) Sliders** (*Trachemys scripta*) were found in three towns (Norwich, Pittsford, & Winooski). This species is also a common turtle in the pet trade, but it can survive our winters and it has established populations in southern New England.

A **Common Five-lined Skink** (*Plestiodon fasciatus*) reported at the Lake Rescue access area in **Ludlow** is a native species, but likely hitchhiked to that location on a boat or vehicle from either West Haven, Vermont or perhaps out of state. One report of a **Box Turtle** (*Terrapene carolina*) is also likely a released pet. We have what appears to be a native population in the Putney area, but not in Woodstock.

Missing Species

Three native species were not reported again this year:

Fowler's Toad (State-Endangered) was last reported from Vermont in 2007; however, as mentioned above, reports of breeding on Stebbin's Island in NH near Vernon have been confirmed.

Boreal Chorus Frog (State-Endangered) was last heard in 1999. Sadly it has also disappeared from the NY Champlain Valley and much of its habitat in Quebec and eastern Ontario. Sadly, we do not know why. We work to remind our fellow Vermonter's that this species has disappeared.

North American Racer (State-Threatened) was reported in 2008, then again in 2014, but not this year.

Outreach and related activities

During 2016, I gave nine presentations/workshops/field trips across the state and a keynote address on the Vermont Herp Atlas for the Northeast Partners in Amphibian and Reptile Conservation annual meeting. Continued press coverage helps to keep the VT Herp Atlas in the public's awareness and we have had regular coverage this past year in newspapers, online, and on radio. Press releases regarding herps from Vermont Fish and Wildlife were very helpful in generating new reports and hopefully, public awareness.

Of course we continue to involve and guide working professionals, students, and lay people in direct experiences as colleagues, volunteers, interns, and by serving as informal or formal advisors. We continue to draw attention to spring summer and fall amphibian migrations and the threats of habitat fragmentation by roads, through promoting and participating in spring amphibian crossing nights. Increased awareness is needed to fund the projects and make the systemic changes needed to move us toward sustainable practices.

Excel files of all verified Hypothetical, S1 and S2 species (and Wood Turtles) found in Vermont and entered into the database between January 1 and December 31 of 2016, have been sent to Jodi Shippee of Vermont Fish and Wildlife.

My targeted survey efforts

Targeted survey efforts this field season included checking on ratsnake dens in Orwell, turtle trapping in new sections of Lake Champlain and other lakes, surveying for road-killed and crossing snakes in towns short on snake data, filling in gap in our knowledge of stream salamander distribution, and a survey visit to Glastenbury to increase our data on its herpetofauna.

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

Drift-fence-monitoring

Funding was reinstated for the Vermont Monitoring Cooperative amphibian drift-fence monitoring on Mt. Mansfield. Consequently we gathered another almost complete year of data (without May) from that site for our long-term monitoring data set. The Snake Mountain fence was also opened for two nights for my UVM class