

Vermont's Disappearing Reptiles and Amphibians



Boreal Chorus Frog



Fowler's Toad

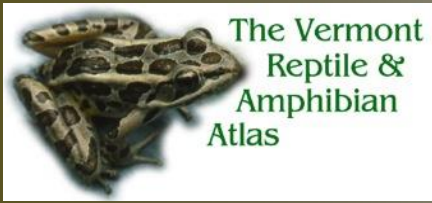


North American Racer

Intensive Amphibian Monitoring Using Drift Fences

(Mt. Mansfield & Lye Brook Wilderness)





Extensive Monitoring

(the entire state)

Goals:

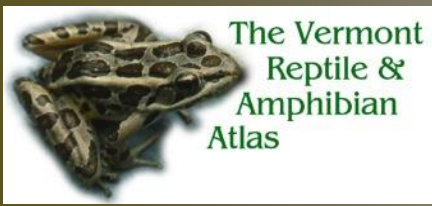
To establish a baseline and look for changes in the:

- Species presence/absence
- Numbers of populations
- Locations and extents of ranges

To gather data on which to base listing and permit decisions

To involve and provide data to the public as well as private and governmental organizations

The 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.



Extensive Monitoring

(the entire state)

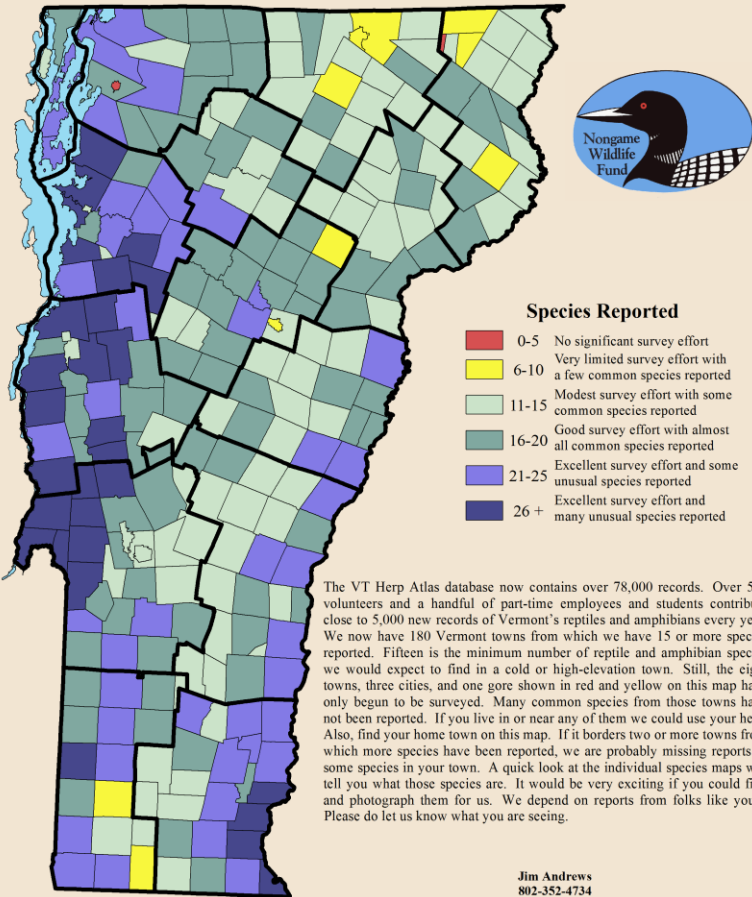
Reflecting:

- The amount of habitat remaining
- Forest health
- Community types & juxtaposition
- Parcel sizes
- Connectivity
- Management-physical and chemical
- Climate Change
- Disease
- Introduced species



Vermont Reptile and Amphibian Atlas

Vermont Reptile and Amphibian Atlas Species Reports as of January 1, 2011



❖ Began in 1994, 19 years ago

❖ More than 500 contributors annually
(including 35 organizations and government entities)

❖ Over 90,000 records in our database

❖ Website VTHerpAtlas.org

❖ Most Recent Maps went online in 2012

Last Heard in 1999

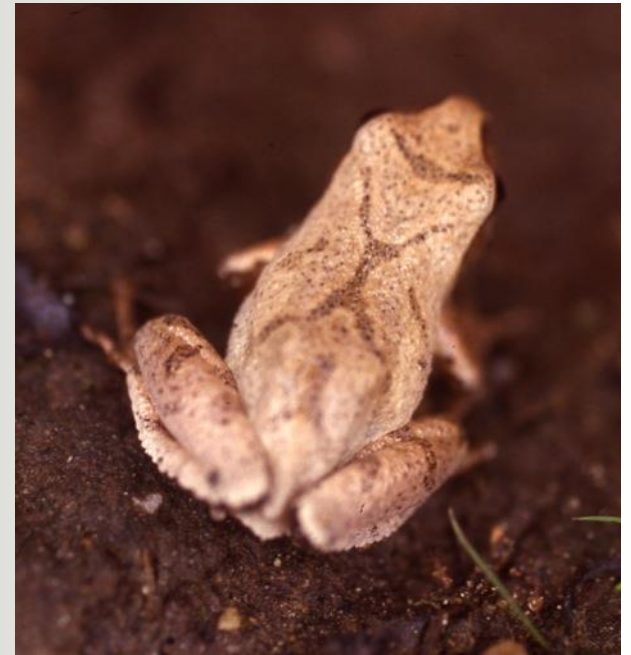
Boreal Chorus Frog
(*Pseudacris maculata*)



S1, E, High Priority SGCN in Vermont

Not to be confused with:

Spring Peeper
(*Pseudacris crucifer*)



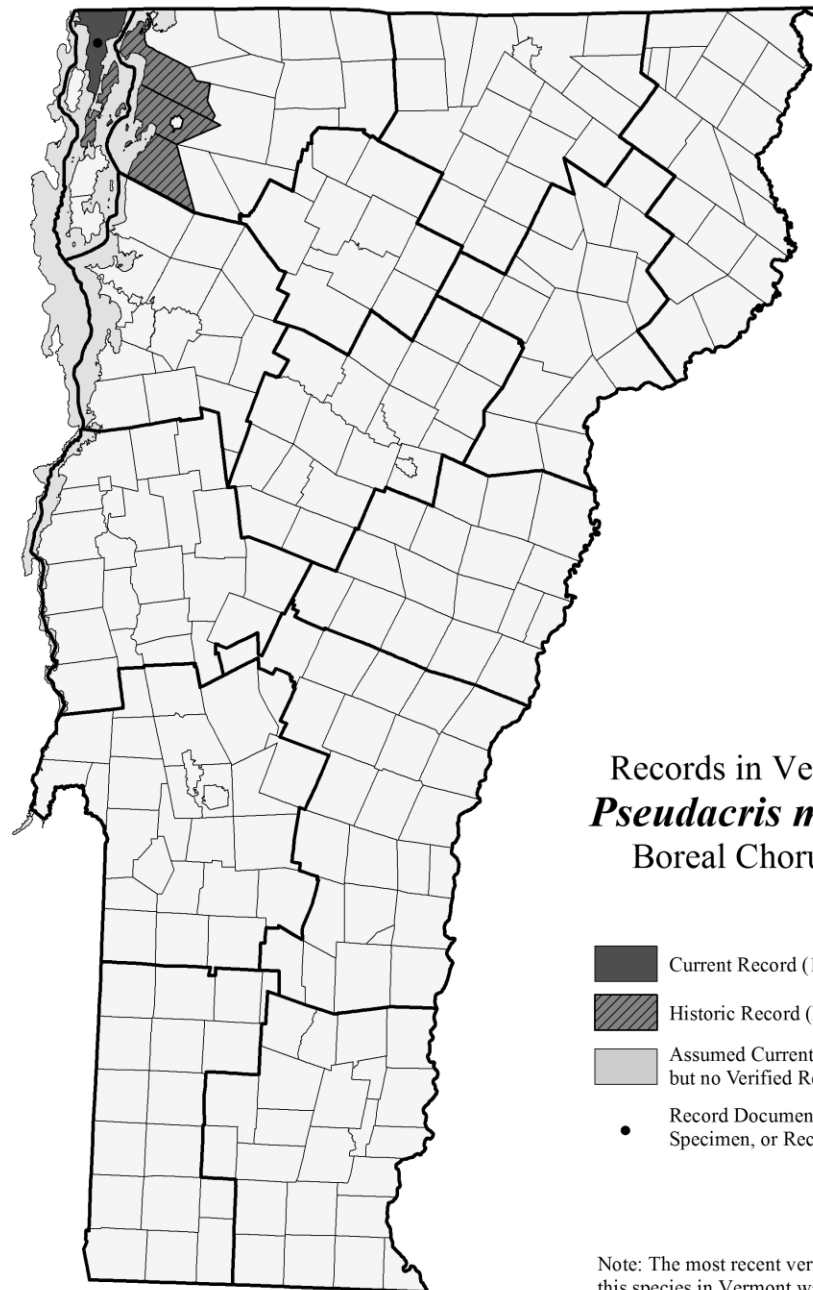
S5

Lake Champlain Basin reports from 1956-1999

Last heard in Alburgh in 1999
by Mark Ferguson

Also Disappeared from:
the Lake Champlain Basin of NY
much of Quebec
and
Eastern Ontario

Frogs & Toads



Records in Vermont of *Pseudacris maculata* Boreal Chorus Frog

- Current Record (1986 through 2010)
- Historic Record (Prior to 1986)
- Assumed Current Presence but no Verified Records
- Record Documented with Photo, Specimen, or Recording

Note: The most recent verified report of this species in Vermont was in 1999.

Reasons for Disappearance Unknown

Possible Causes:

Habitat Loss

(open grassy temporary pools in lowlands)

Habitat Fragmentation

(inability to recolonize)

Weather Event

(lack of spring rains for multiple years)

Disease

(ranavirus)

Farm Practices

(atrazine or other chemicals)



Last seen in 2007

Fowler's Toad
(*Anaxyrus fowleri*)



S1, Proposed for Endangered,
High Priority SGCN
in Vermont

Not to be confused with:
American Toad
(*Anaxyrus americanus*)

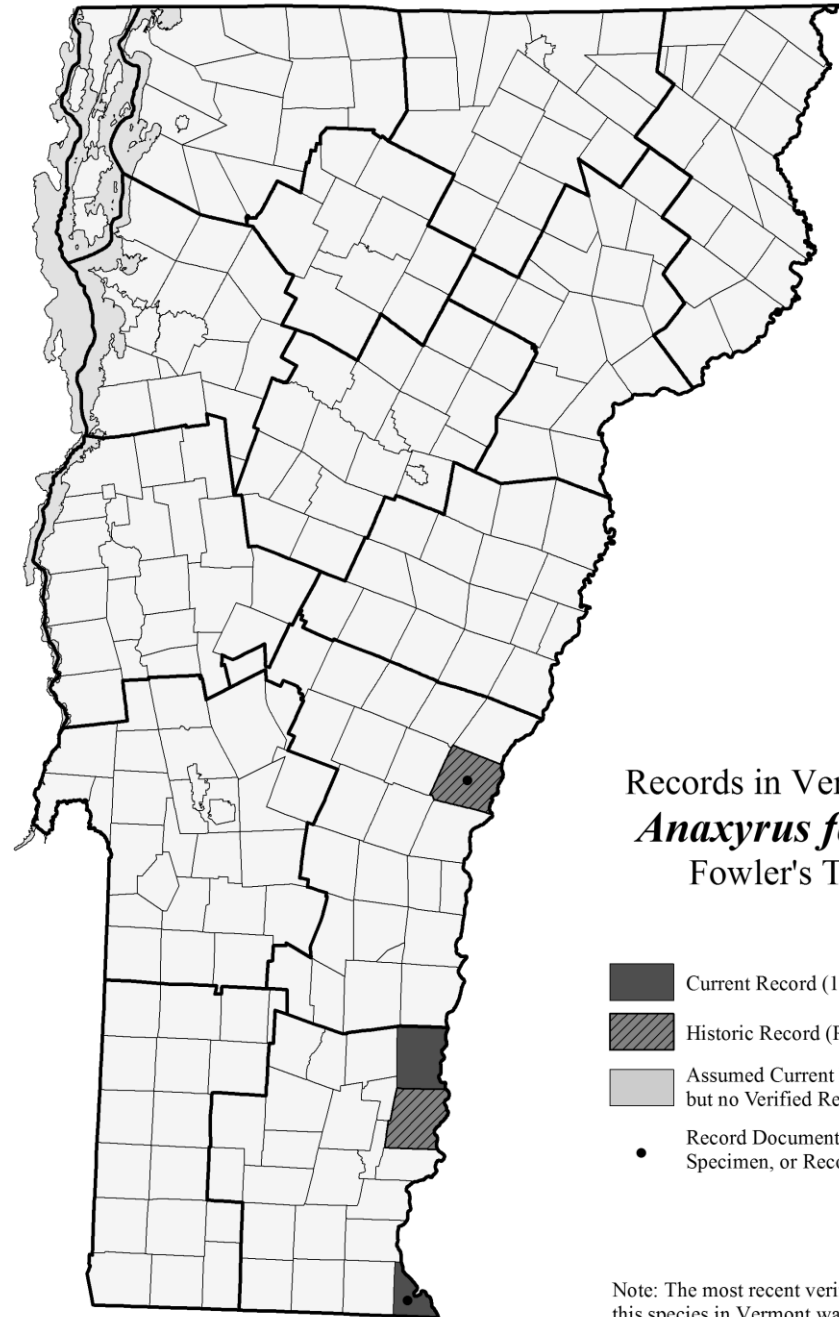


S5

Connecticut River Valley Reports from 1983-2007

Last seen in Vernon in 2007
by Dr. Elizabeth Colburn,
Vince Franke,
Jerry Jenkins,
&
Patti Smith

Still Reported in 2011
from Gill, Mass
&
Boscawen, NH



Records in Vermont of
Anaxyrus fowleri
Fowler's Toad

- Current Record (1986 through 2010)
- ▨ Historic Record (Prior to 1986)
- Assumed Current Presence but no Verified Records
- Record Documented with Photo, Specimen, or Recording

Note: The most recent verified report of this species in Vermont was in 2007.

Reasons for Disappearance Unknown

Possible Causes:

Habitat Loss

(prefers scoured and open shorelines, sandy soils, regular flooding of the Connecticut River may have provided this habitat)

Habitat Fragmentation (road kill)

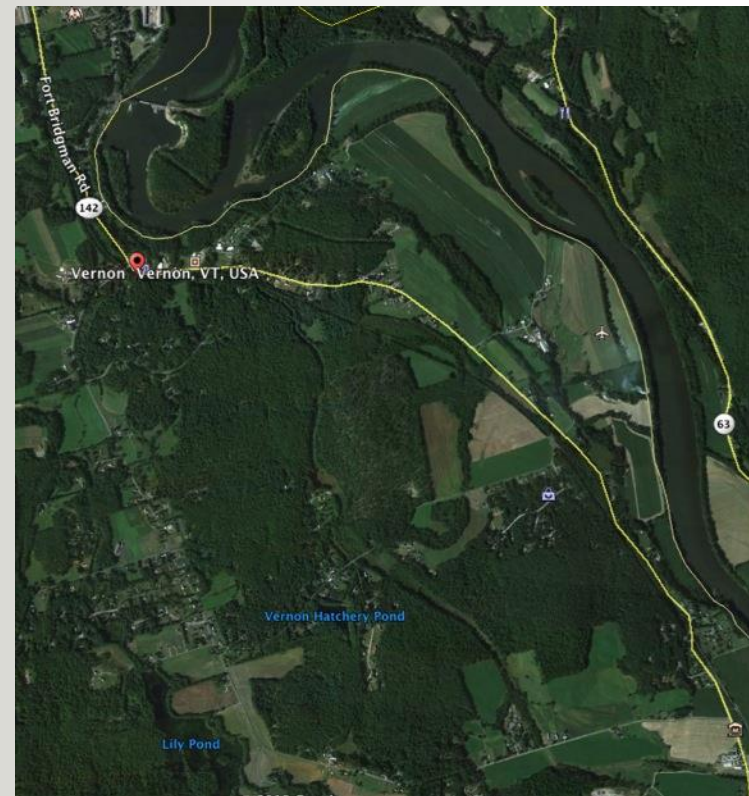
Weather Event

(deep winter freeze without snow cover)

Disease (ranavirus)

Synergisms

(natural population fluctuations with limits to recolonization)



Last verified report in 2008

North American Racer
(*Coluber constrictor*)



S1, Threatened,
High Priority SGCN
in Vermont

Not to be confused with:

Eastern Ratsnake
(*Pantherophis alleghaniensis*)



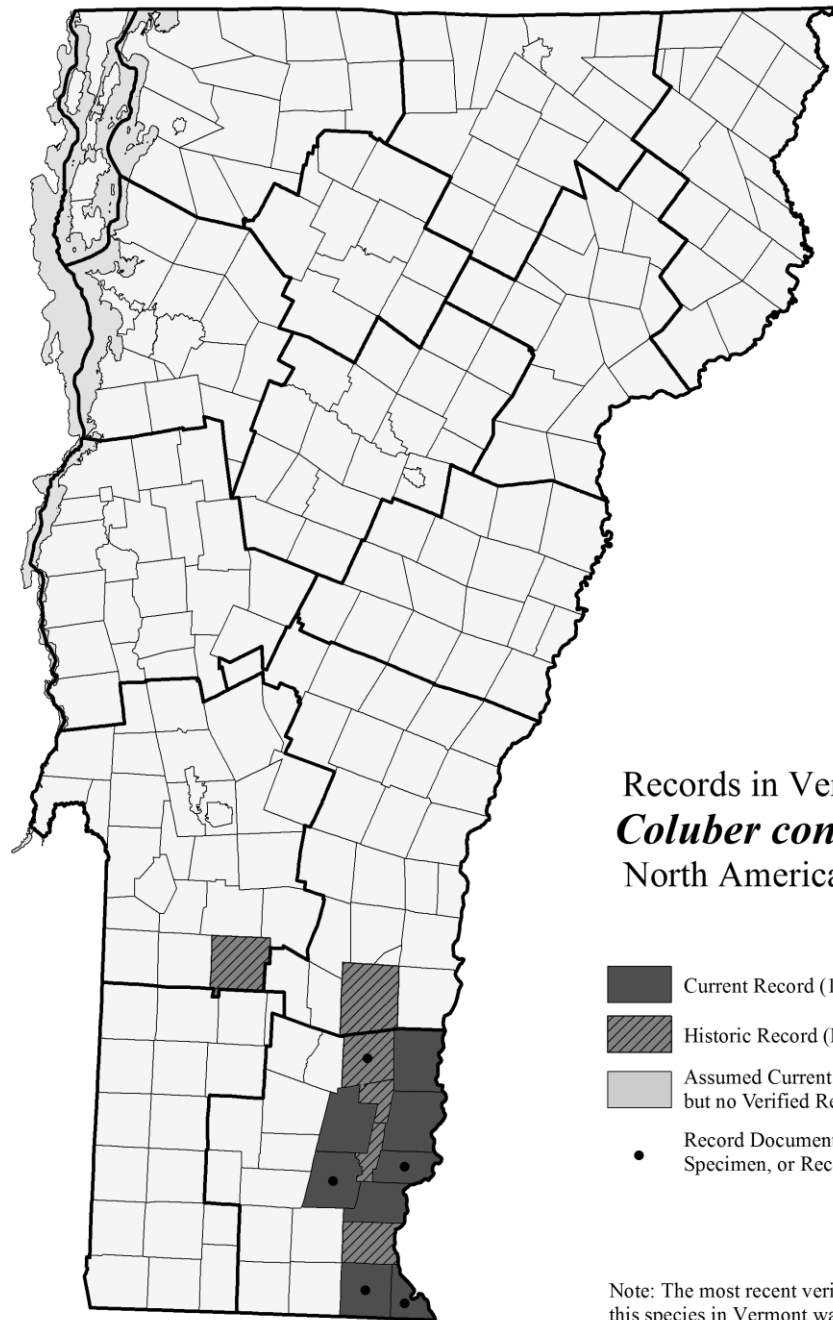
S2, Threatened,
High Priority SGCN

Connecticut River Valley Reports from 1829-2010

Last verified report in Guilford in 2008
by J. Andrews et al.

Last unverified report in Vernon in 2010
By Susan Miller

Still Reported in 2012
from Holyoke, Mass



Records in Vermont of
Coluber constrictor
North American Racer

- Current Record (1986 through 2010)
- ▨ Historic Record (Prior to 1986)
- Assumed Current Presence but no Verified Records
- Record Documented with Photo, Specimen, or Recording

Note: The most recent verified report of this species in Vermont was in 2008.

Reason for Disappearance Unknown

Possible Causes:

Habitat Loss
(early successional or open woods)

Habitat Fragmentation
(large range-3 miles, recolonization hurdles)

Weather Event
(den mishap-rain and freeze)

Disease
(snake fungal disease)

Predation
(very limited population of 8-10 could have been depleted by one family of predators)



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The Norcross Foundation

