

**A Preliminary Atlas of the Reptiles  
and  
Amphibians of Vermont**

**April, 1995**



**The Vermont Reptile and Amphibian Scientific  
Advisory Group**

In cooperation with:

The Vermont Field Office of The Nature Conservancy

and

The Vermont Department of Fish and Wildlife  
Nongame and Natural Heritage Program

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The Vermont Department of Fish and Wildlife,  
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The Norcross Wildlife Foundation,

Middlebury College,

Norwich University,

and

Kris Myrick Andrews.

Compiled under contract by James S. Andrews using field notes and museum records generously contributed by many individuals and organizations.

Cartography by Judy LaFavor.

Additional technical assistance contributed by  
Judy LaFavor and Kir Talmage.



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## **The History and Purpose of this Atlas**

Mark P. DesMeules

Former Chair, Reptile and Amphibian Scientific Advisory Group\*

The idea for the this atlas can be traced back nearly 143 years to the publication of Zadock Thompson's Natural History of Vermont in 1853. Included in this natural history treatise was the first list of reptiles and amphibians for Vermont. This information became the baseline to which future inventory work was compared. Beginning with this point in Vermont's natural history, I will share with you the historical perspective describing key events which bring us to where we are today. Today, we finally have Vermont's first species-by-species state-wide distribution maps for all reptiles and amphibians known to occur in Vermont.

During the 143 years between Zadock Thompson's publication and this mapping effort, dozens of amateur and professional herpetologists have been active in Vermont. They traveled to sites throughout the State and much of what they found is reflected in this publication. Some of their work indicates an interest in a specific species as exemplified by the multiple Winooski River records of the Spiny Softshell Turtle collected by Lewis H. Babbitt. Others, in contrast, reflect more of a general interest in recording the presence of whatever species were encountered. Vermont never attracted the degree of interest among herpetologists that other more southern states did. This is reflected in the limited number of collection records prior to 1965. During the late 1960's and 1970's there was almost no collection due in part to the lack of emphasis placed on traditional natural history pursuits such as inventory and taxonomy.

There was no attempt to consolidate Vermont herp knowledge in printed form until Charles Johnson published his book entitled The Nature of Vermont in 1980. This followed Zadock Thompson's publication by 127 years and marked the first of a series of events leading up to and ultimately resulting in this publication. The Nature of Vermont includes a compilation of our knowledge of reptile and amphibian distributions in Vermont. This book also helped to galvanize a great deal of interest among many of us who have had our own field experience with reptiles and amphibians in the State.

Vermont adopted its first endangered species list for plants in 1935. In 1975, for the very first time in this century, a group of zoologists, botanists, and ecologists gathered to discuss species rarity for the purpose of developing Vermont's first comprehensive list of rare, threatened and endangered species. This action marked another step towards improving our knowledge of all Vermont flora and fauna, including reptiles and amphibians.

While State endangered species were being considered, the Nature Conservancy was beginning to develop a process, based on rare species presence, for selecting land conservation projects. This local effort began in 1980 and later became part of the regional Natural Heritage Program. The Conservancy's basic list of rare

plants, animals and natural communities was established by compiling state-wide information using historic records, interviews with knowledgeable individuals, and conducting original field inventories. All of this work led to a better understanding of the distributions of both rare and common occurrences of plants, animals and natural communities.

The Nature Conservancy's Heritage Program methodology was introduced in Vermont and throughout New England in 1983. This program marked a turning point for inventory of not just reptiles and amphibians but for all flora, fauna and natural communities in the state. The Biological Conservation Database, an integral component of the heritage inventory, provides a central location for housing records which were generated by countless hours of work searching the literature, private collections, museum collections, field notes, and an active inventory to fill in the information gaps.

In 1983, public and professional interest spurred the creation of the Vermont Endangered Species Committee. This Committee recognized the value of establishing advisory groups to focus on the status of various taxa in Vermont. The Endangered Species Subcommittee for Reptiles and Amphibians was established in 1983. It was this group, subsequently called the Reptile and Amphibian Advisory Group that recommended the listing of the following species: the Chorus frog (*Pseudacris triseriata*), Timber rattlesnake (*Crotalus horridus*) and the Five-lined skink (*Eumeces fasciatus*), listed as Endangered; the Spiny softshell turtle (*Apalone spiniferus*) and the Spotted turtle (*Clemmys guttata*) listed as Threatened. This Advisory Group also identified the need for a state-wide snapshot in time of reptile and amphibian distributions leading to the decision to compile and publish the Preliminary Atlas of the Reptiles and Amphibians of Vermont.

This publication, for the very first time in the history of Vermont herpetology, provides an important reference for current and future professional and amateur herpetologists in Vermont. It brings together the records of scores of individuals some long since gone, others still living and still roaming the fields and forests, streams and bogs of the Green Mountain state. It is meant to present what we know today about the state-wide distribution of individual species and identify gaps in this knowledge. Beyond this, we hope it will encourage others to step forward and fill in some of the gaps so evident in many of the maps, either through work of their own or through knowledge of collection records which may have been missed during our research. We also hope that it will stimulate research to learn more about even our most common reptiles and amphibians. We wish all of you "good luck in the field."

\*Mark DesMeules was chair of the Reptile and Amphibian Scientific Advisory Group at the time this idea was conceived and while most of the original work was done.

## **The Vermont Reptile and Amphibian Scientific Advisory Group**

James Andrews (Current Chair)  
Biology Department  
Middlebury College  
Middlebury, VT 05753

Dr. William Barnard  
Biology Department  
Norwich University  
Northfield, VT 05663

Mark DesMeules (Former Chair)  
Former Director of Science and Stewardship  
The Nature Conservancy, VT Field Office  
Present Address: P.O. Box 266, Alna, ME 04535

Christopher Fichtel  
Former Zoologist/Inventory Coordinator  
Nongame and Natural Heritage Program  
Vermont Department of Fish and Wildlife  
Currently, Director of Science and Stewardship  
The Nature Conservancy, VT Field Office  
27 State Street, Montpelier VT 05602

Dr. William Kilpatrick  
Department of Zoology  
University of Vermont  
Burlington, VT 05405

Dr. Gordon Nielsen  
RR. 1 Box 1010  
Hinesburg, VT 05461-9714

Dr. Stephen Trombulak  
Biology Department  
Middlebury College  
Middlebury, VT 05753



# Checklist of the Reptiles and Amphibians of Vermont

## Salamanders

<i>Ambystoma jeffersonianum</i> group	Jefferson salamander and its related hybrids
<i>Ambystoma laterale</i> group	Blue-spotted salamander and its related hybrids
<i>Ambystoma maculatum</i>	Spotted salamander
<i>Ambystoma opacum</i>	Marbled salamander*
<i>Desmognathus fuscus</i>	Dusky salamander
<i>Desmognathus ochrophaeus</i>	Mountain dusky salamander **
<i>Eurycea bislineata</i>	Northern two-lined salamander
<i>Gyrinophilus porphyriticus</i>	Spring salamander
<i>Hemidactylium scutatum</i>	Four-toed salamander
<i>Necturus maculosus</i>	Mudpuppy
<i>Notophthalmus viridescens</i>	Eastern newt
<i>Plethodon cinereus</i>	Redback salamander
<i>Plethodon glutinosus</i>	Northern slimy salamander***

## Frogs

<i>Bufo americanus</i>	American toad
<i>Bufo woodhousii fowleri</i>	Fowler's toad
<i>Hyla versicolor</i>	Gray treefrog
<i>Pseudacris (Hyla) crucifer</i>	Spring peeper
<i>Pseudacris triseriata</i>	Western chorus frog
<i>Rana catesbeiana</i>	Bullfrog
<i>Rana clamitans</i>	Green frog
<i>Rana palustris</i>	Pickerel frog
<i>Rana pipiens</i>	Northern leopard frog
<i>Rana septentrionalis</i>	Mink frog
<i>Rana sylvatica</i>	Wood frog

## Turtles

<i>Apalone (Trionyx) spinifera</i>	Spiny softshell
<i>Chelydra serpentina</i>	Snapping turtle
<i>Chrysemys picta</i>	Painted turtle
<i>Clemmys guttata</i>	Spotted turtle
<i>Clemmys insculpta</i>	Wood turtle
<i>Graptemys geographica</i>	Common map turtle
<i>Sternotherus odoratus</i>	Common musk turtle
<i>Terrapene carolina</i>	Eastern box turtle ****

## Lizards

<i>Eumeces fasciatus</i>	Five-lined skink
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## Snakes

<i>Coluber constrictor</i>	Racer
<i>Crotalus horridus</i>	Timber rattlesnake
<i>Diadophis punctatus</i>	Ringneck snake
<i>Elaphe obsoleta</i>	Rat snake
<i>Lampropeltis triangulum</i>	Milk snake
<i>Nerodia sipedon</i>	Northern water snake
<i>Opheodrys vernalis</i>	Smooth green snake
<i>Storeria dekayi</i>	Brown snake
<i>Storeria occipitomaculata</i>	Redbelly snake
<i>Thamnophis sauritus</i>	Eastern ribbon snake
<i>Thamnophis sirtalis</i>	Common garter snake

\*one field record at a disjunct site and one photo with no specific location

\*\*one juvenile specimen from a disjunct site

\*\*\*one disjunct historical site (possible mistake on location of specimens)

\*\*\*\*one specimen from a disjunct site (a released captive?) and one historic record (southern VT?)

## **Contributors**

The data used to generate the following maps of the distribution of amphibians and reptiles in Vermont were generously supplied from the individuals and museums listed. Many other individuals and museums were contacted. Some replied that they did not have records. Others did not reply.

**The following individuals contributed information** about specimens they had collected in Vermont, or sightings from Vermont, recorded in their personal field notes.

James S. Andrews  
Chair, Reptile and Amphibian Scientific Advisory Group  
Biology Department  
Middlebury College  
Middlebury, VT 05753

Dr. William Ballard  
Meadow Brook Road  
Norwich, VT 05055

Dr. William Barnard  
Biology Department  
Norwich University  
Northfield, VT 05663

Mark DesMeules  
Former Director of Science and Stewardship  
The Nature Conservancy, VT Field Office  
Present Address: P.O. Box 266, Alna, ME 04535

Steve Faccio  
Vermont Institute of Natural Science  
RR 2 Box 532  
Woodstock, VT 05091

Christopher Fichtel  
Former Zoologist/Inventory Coordinator  
Nongame and Natural Heritage Program  
Vermont Department of Fish and Wildlife  
Currently, Director of Science and Stewardship  
The Nature Conservancy, VT Field Office  
27 State Street, Montpelier VT 05602

Dr. Terry Graham  
209 Pommagussett Road  
Rutland, MA 01543

Charles Johnson  
State Naturalist  
Department of Forests, Parks, and Recreation  
Waterbury, VT 05676

Dr. William Kilpatrick  
Department of Zoology  
University of Vermont  
Burlington, VT 05405

Dr. Michael W. Klemens  
World Conservation Society  
185th St. and Southern Boulevard  
Bronx, N.Y. 10460-1099

Dr. James D. Lazell  
Conservation Agency  
6 Swinburne Street  
Jamestown, Rhode Island 02835 (Specimens at MCZ)

Dr. Ted Levin  
formerly of the Montshire Museum  
Norwich, VT 05055

Dr. Gordon Nielsen  
RR. 1 Box 1010  
Hinesburg, VT 05461-9714

Steve Parren  
Coordinator, Nongame and Natural Heritage Program  
Vermont Fish and Wildlife Department  
103 Sth. Main St., 10 South  
Waterbury, VT 05671-0501

Dr. Frederick W. Schueler  
Bishops Mills, RR#2 Oxford Station  
Ontario, Canada KOG 1T0

Dr. John Wrazen  
Johnson State College  
Department of Biology  
Johnson, VT 05656

**The following museums and institutions contributed information** about specimens and field records from Vermont.

American Museum of Natural History  
Canadian Museum of Nature  
Carnegie Museum, Pittsburg  
Cornell University  
Harvard University, Museum of Comparative Zoology  
Museum of Zoology, Louisiana State University  
Montshire Museum (Ted Levin)  
Norwich University, Vertebrate Collection  
United States National Museum (Smithsonian)  
University of Connecticut  
University of Michigan, Museum of Zoology  
University of Vermont (Bill Kilpatrick)  
Vermont Institute of Natural Science

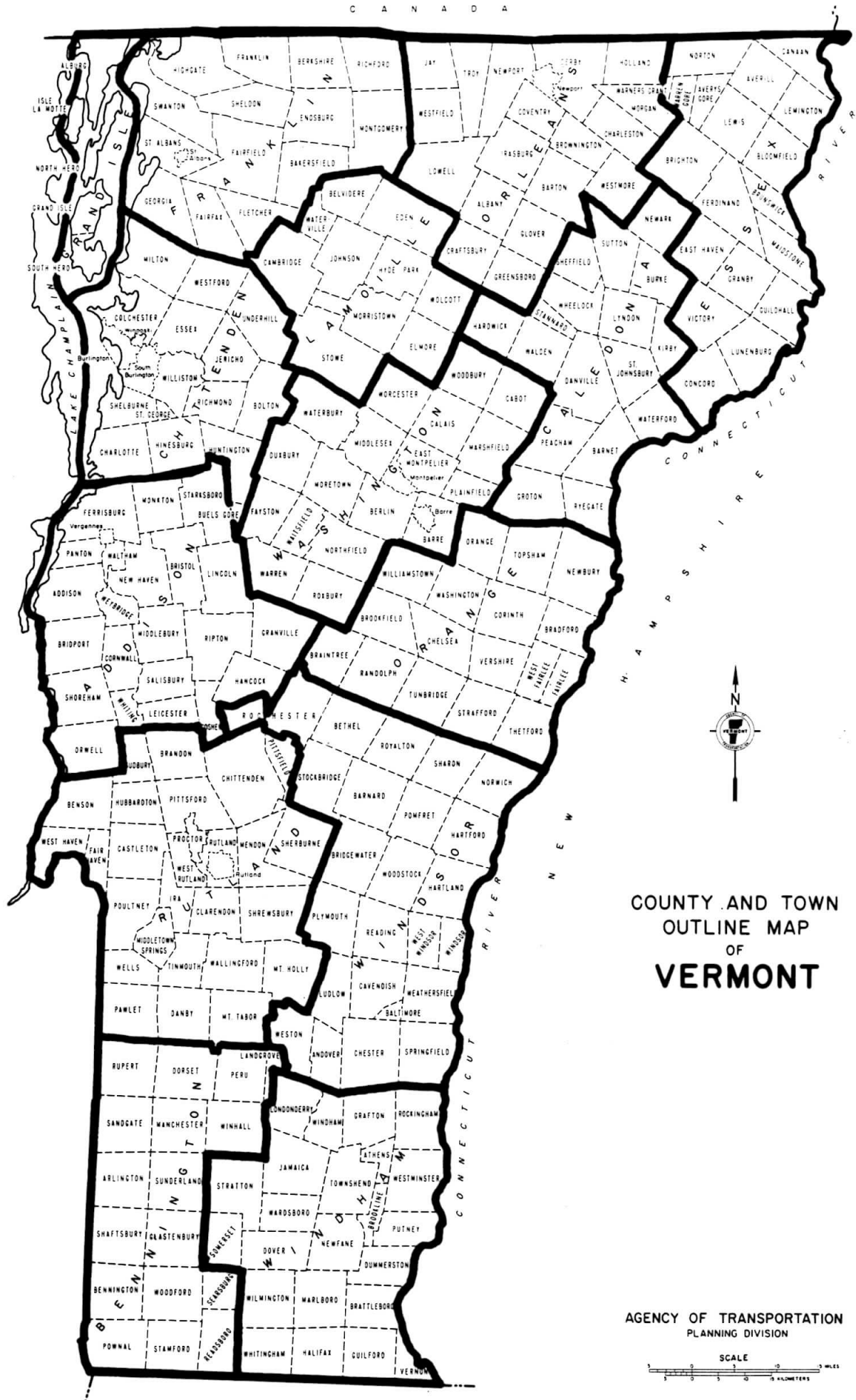
Although the following institutions are no longer operating, records were taken from copies of their files.

Boston Museum of Natural History  
Boston Museum of Science

**Literature records were taken from:**

Barker, M.W., and M.J. Caduto. 1984. *Bufo woodhousii fowleri* (Geographic distribution). Herpetological Review 15(2):51-52.  
Cook, F.C. 1984. A review of: Amphibians and reptiles of New England: habitats and natural history. The Canadian Field Naturalist 98:406-407.  
Thompson, Z. 1853. The Natural History of Vermont. 1972 reprinted edition, Charles E. Tuttle Company, Rutland, Vermont 286 pp.

N E W Y O R K

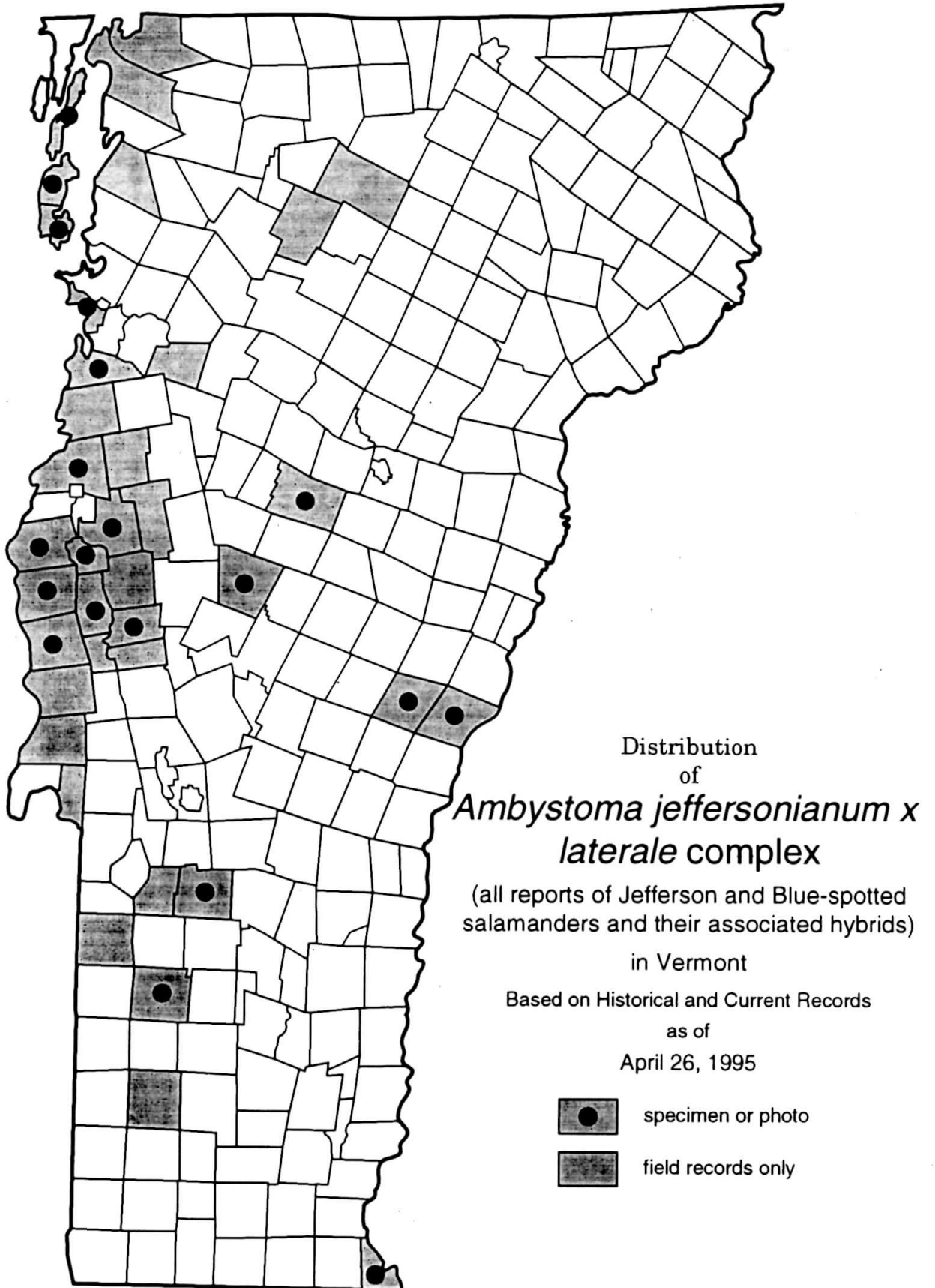


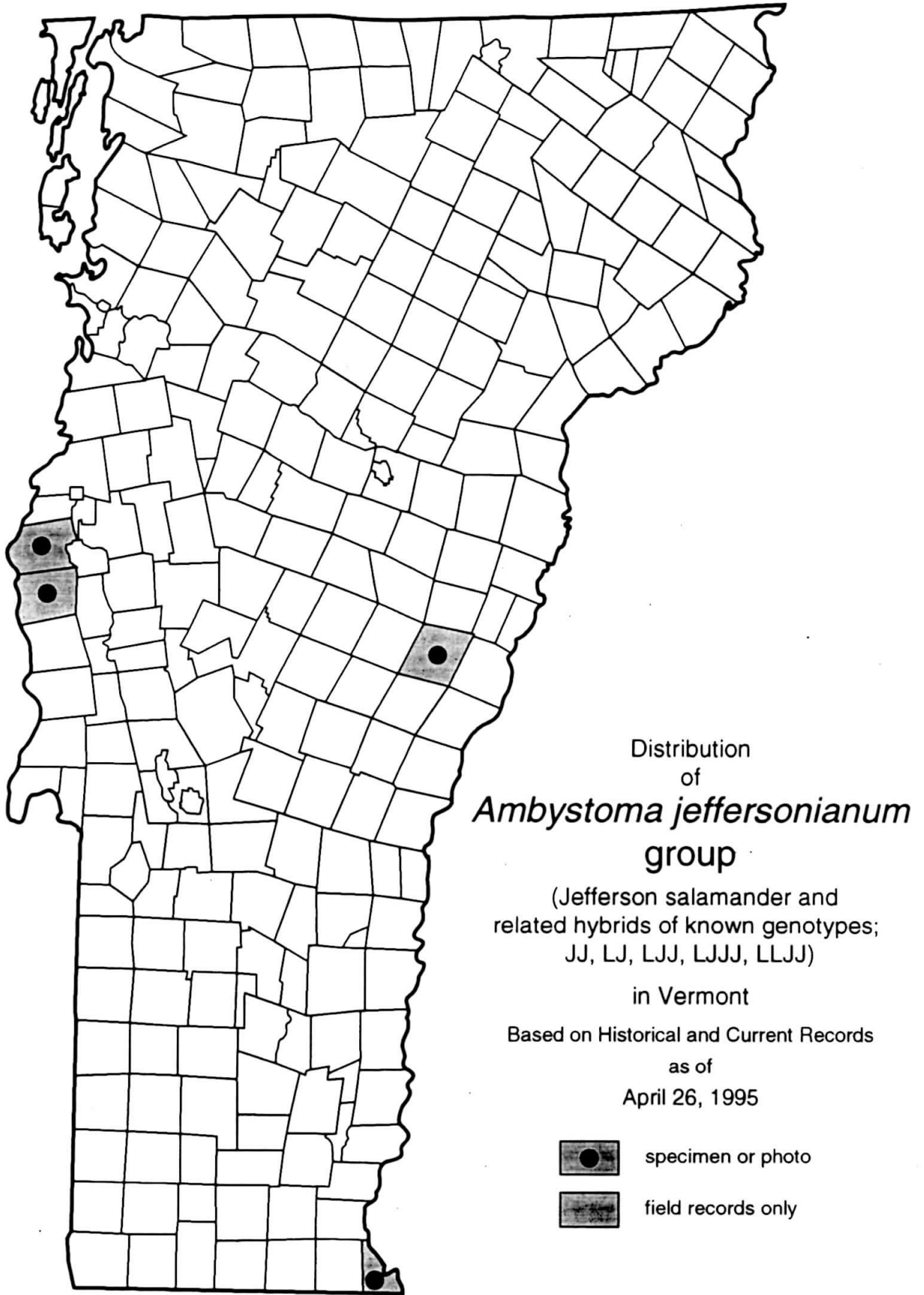
COUNTY AND TOWN  
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**VERMONT**

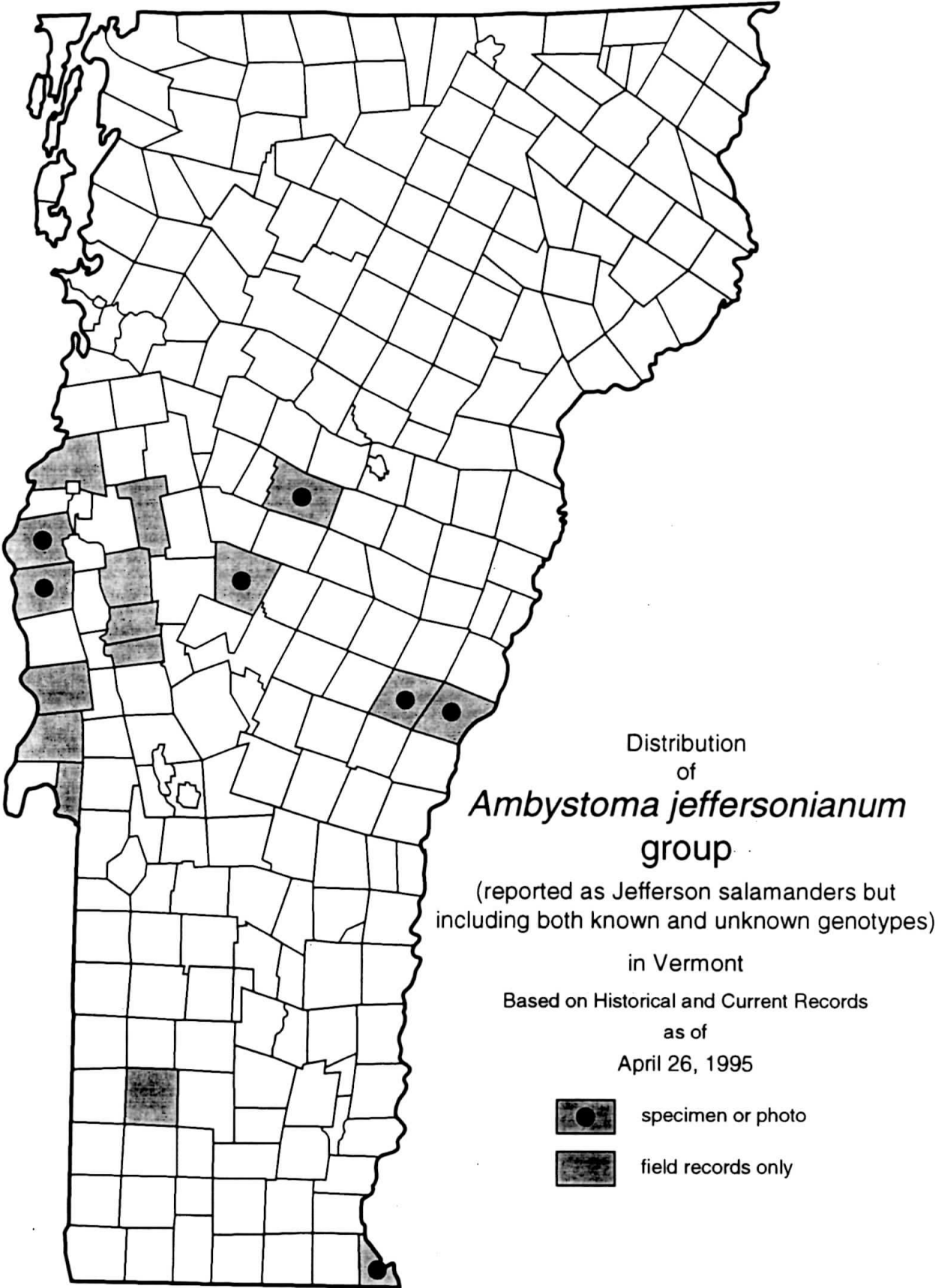
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 PLANNING DIVISION



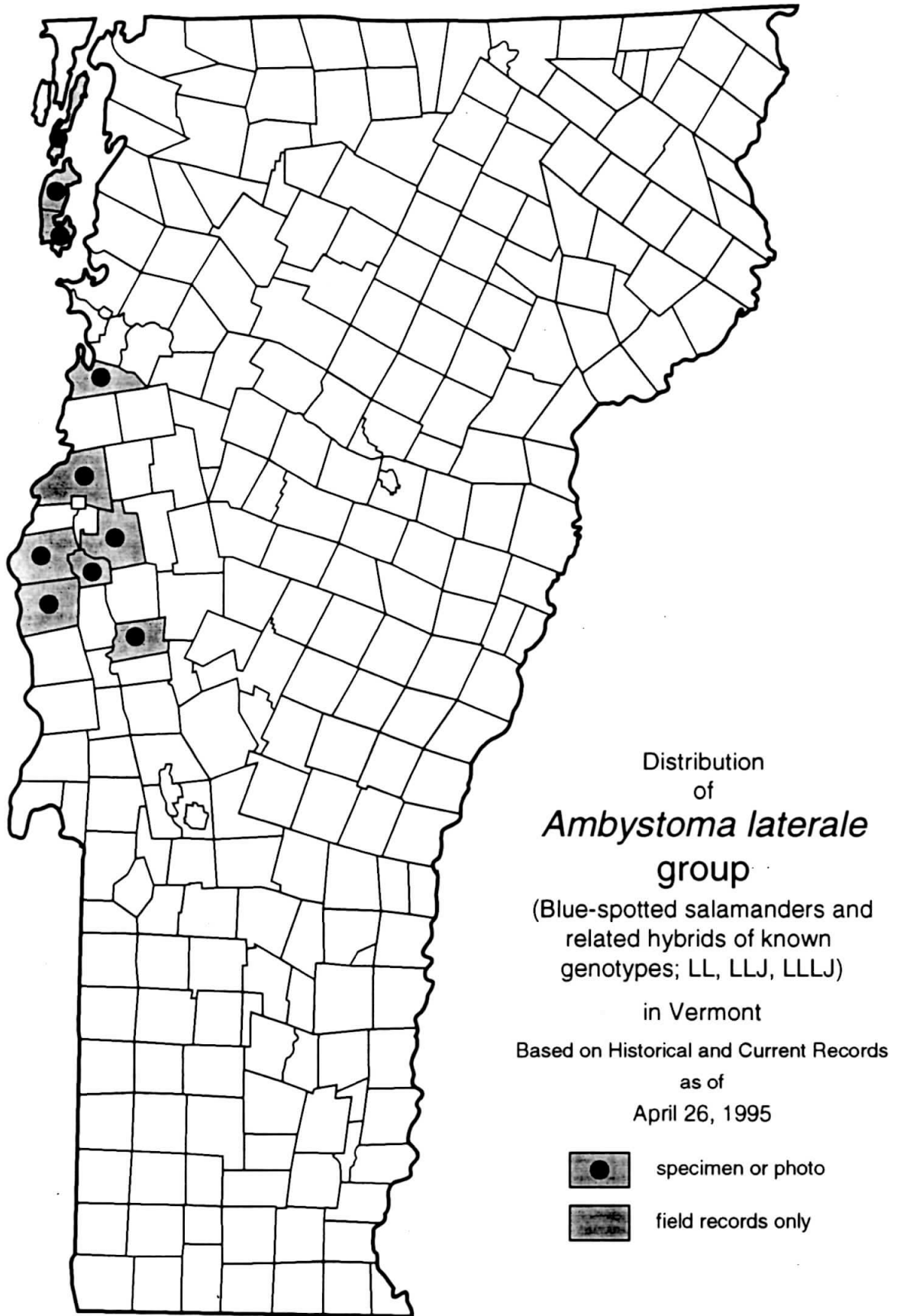
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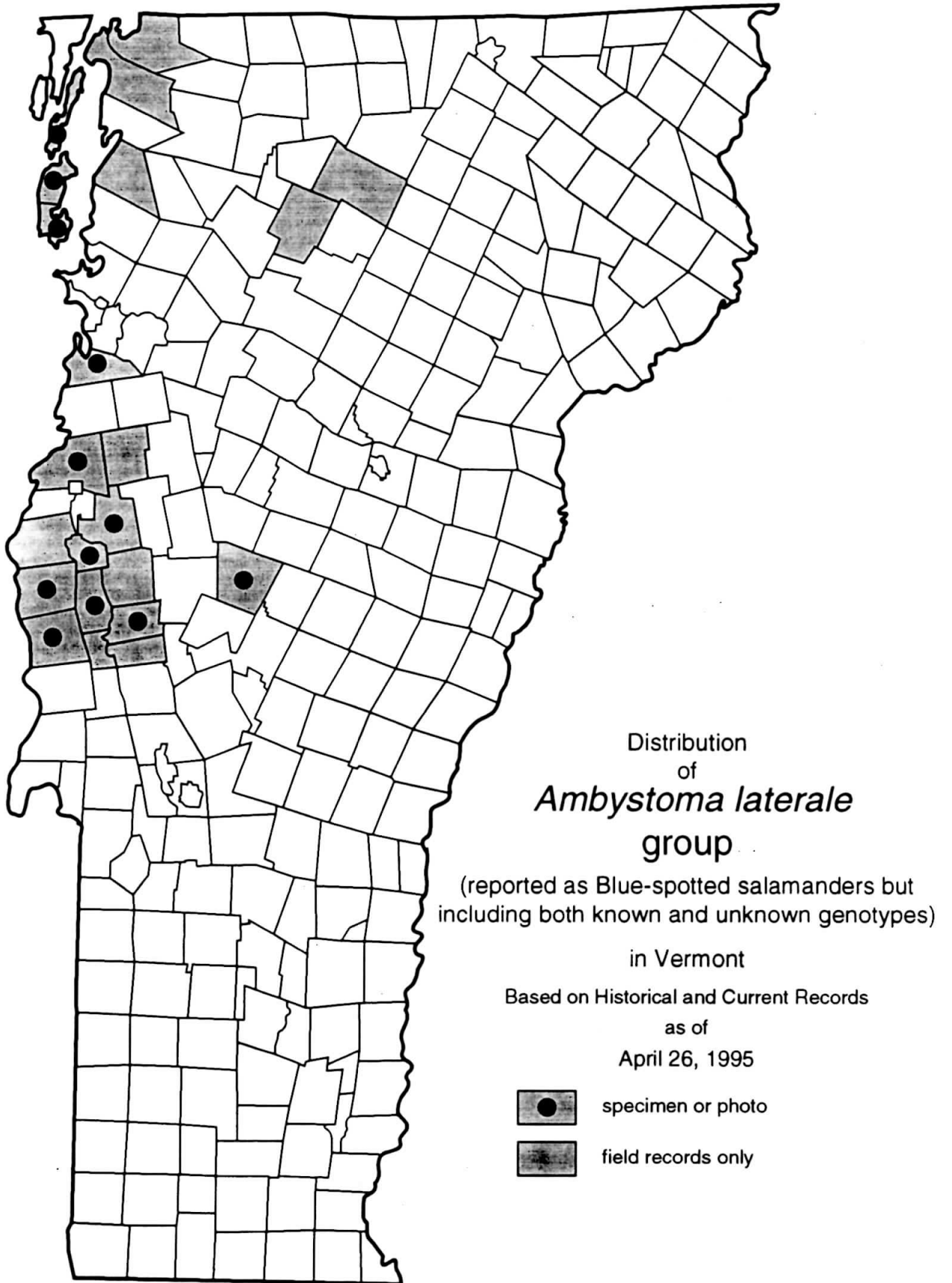


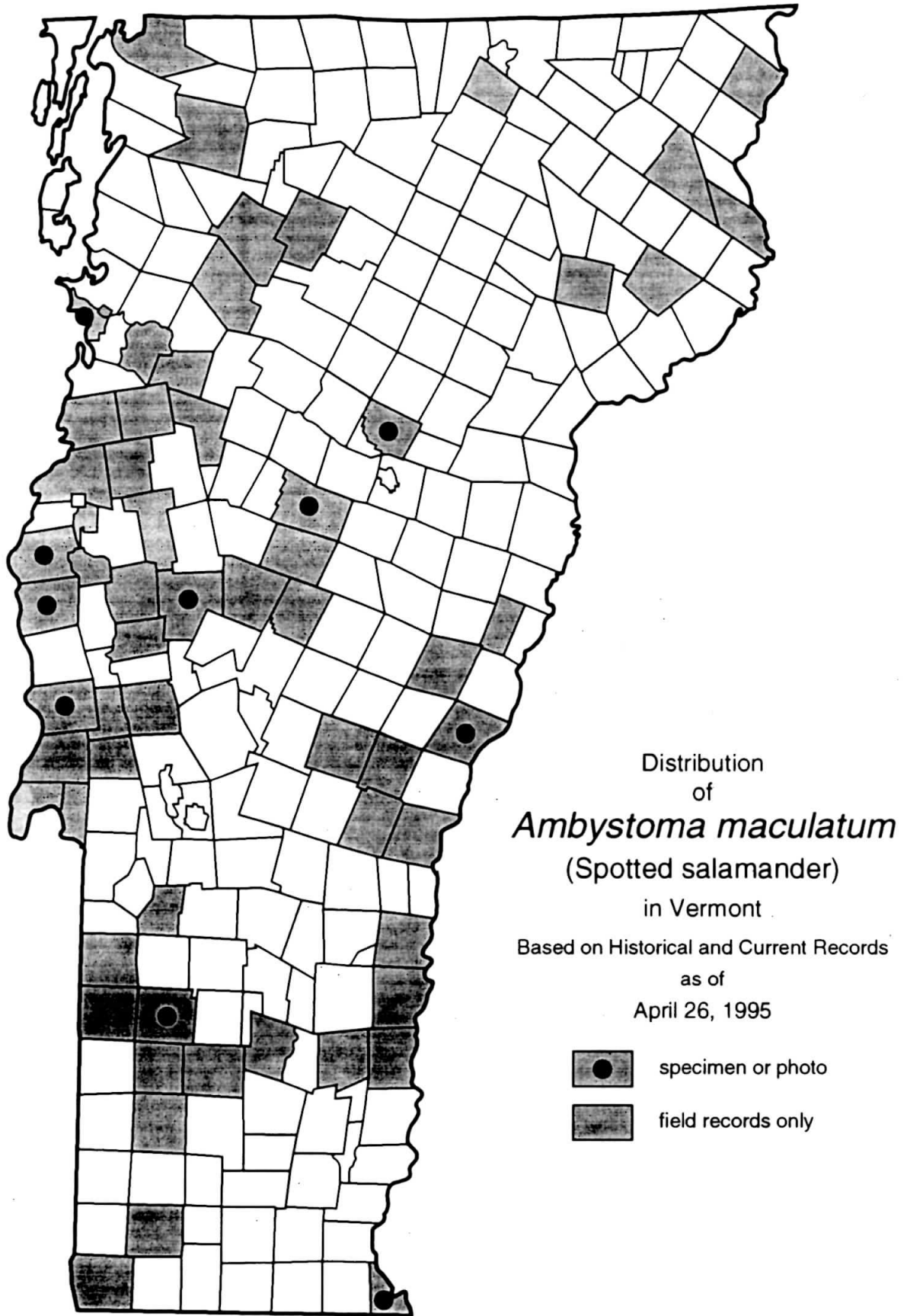


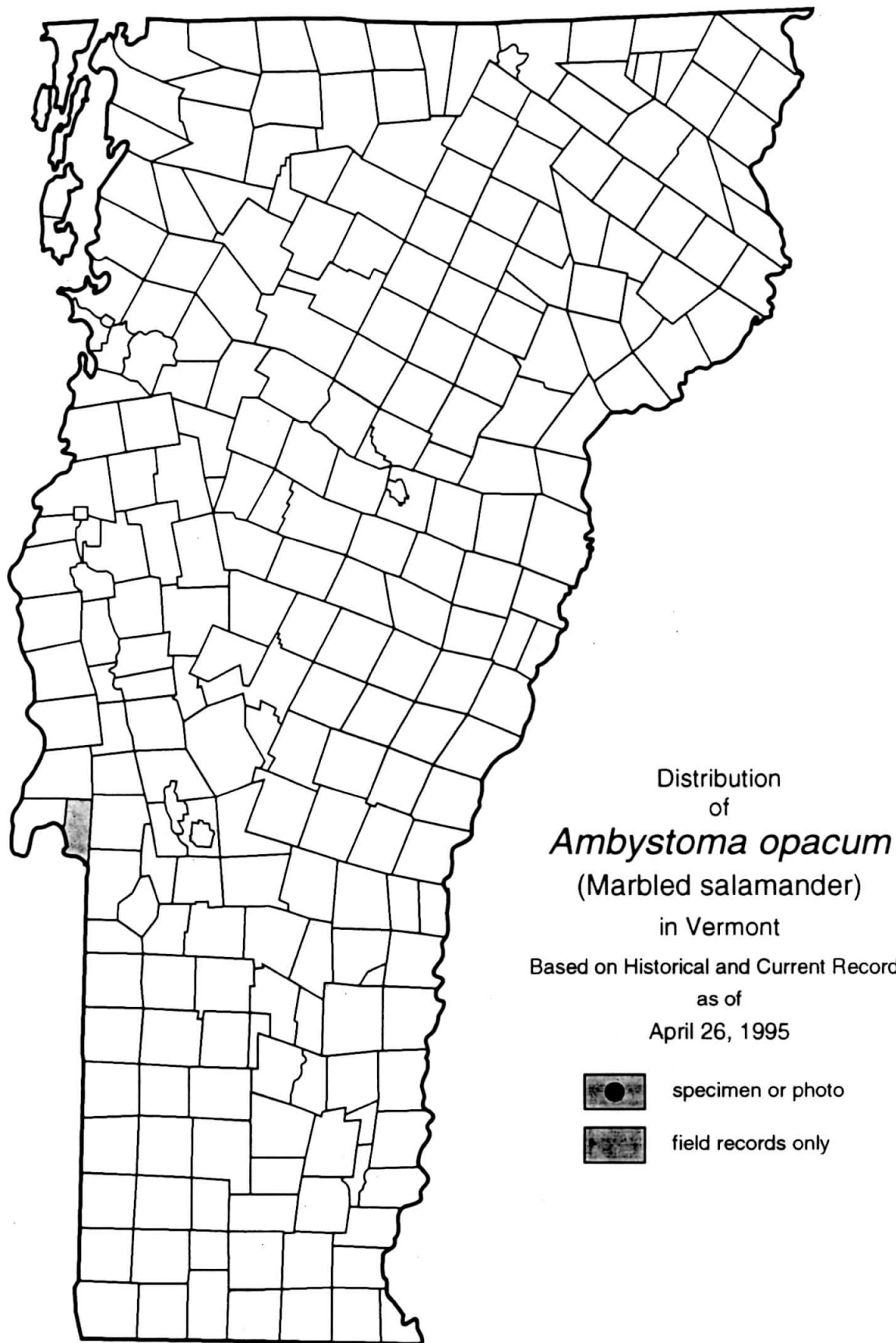


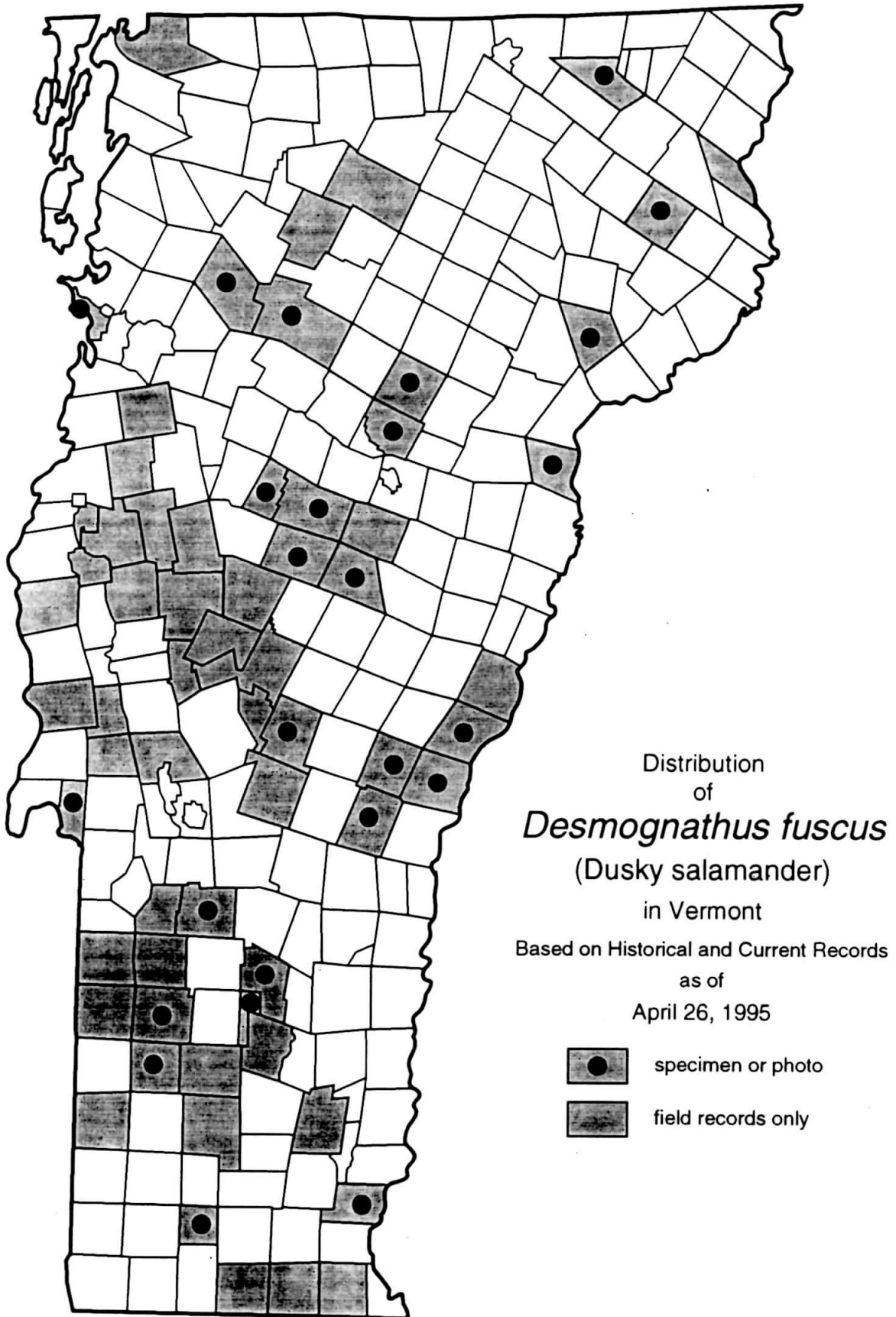


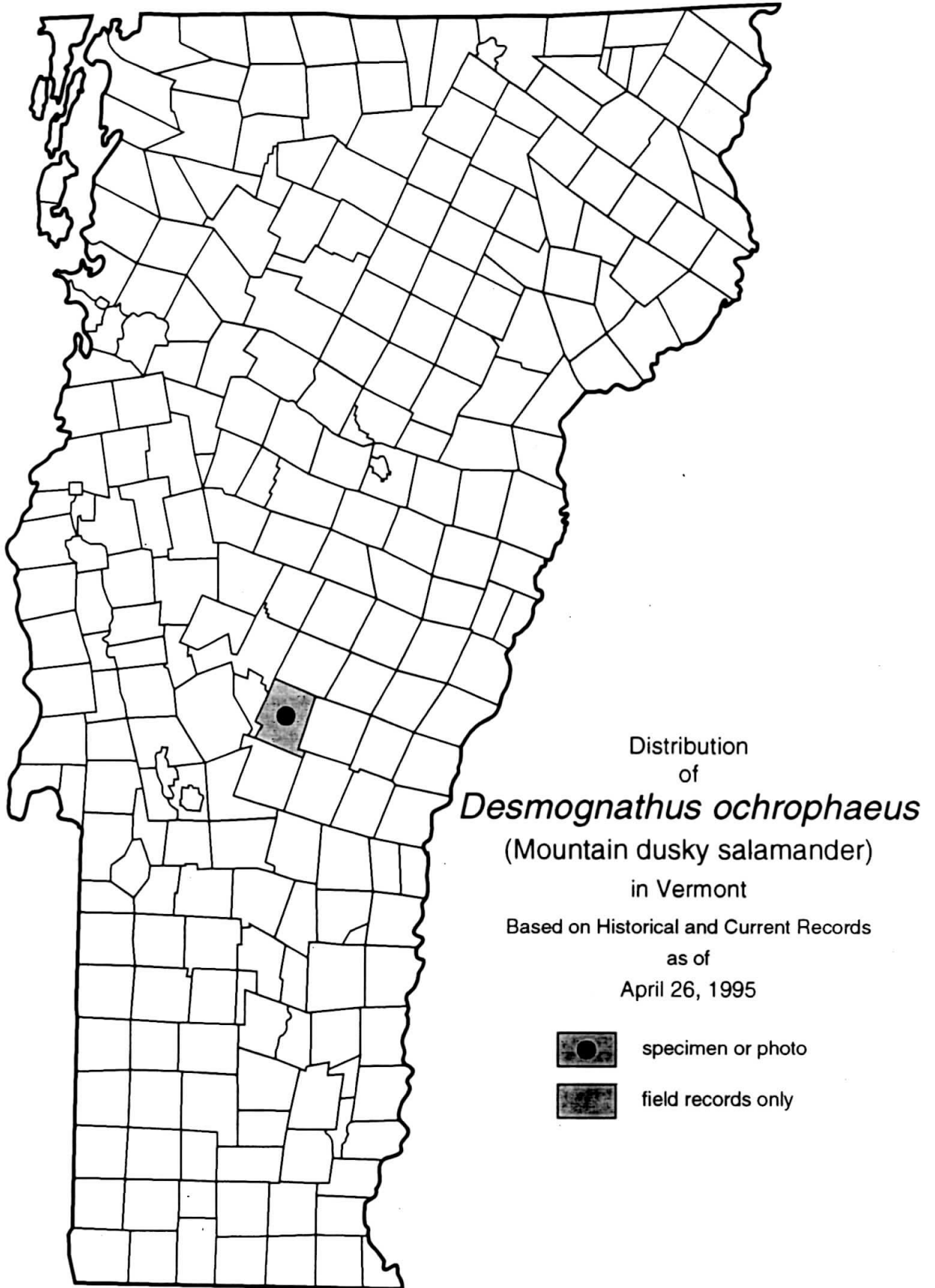


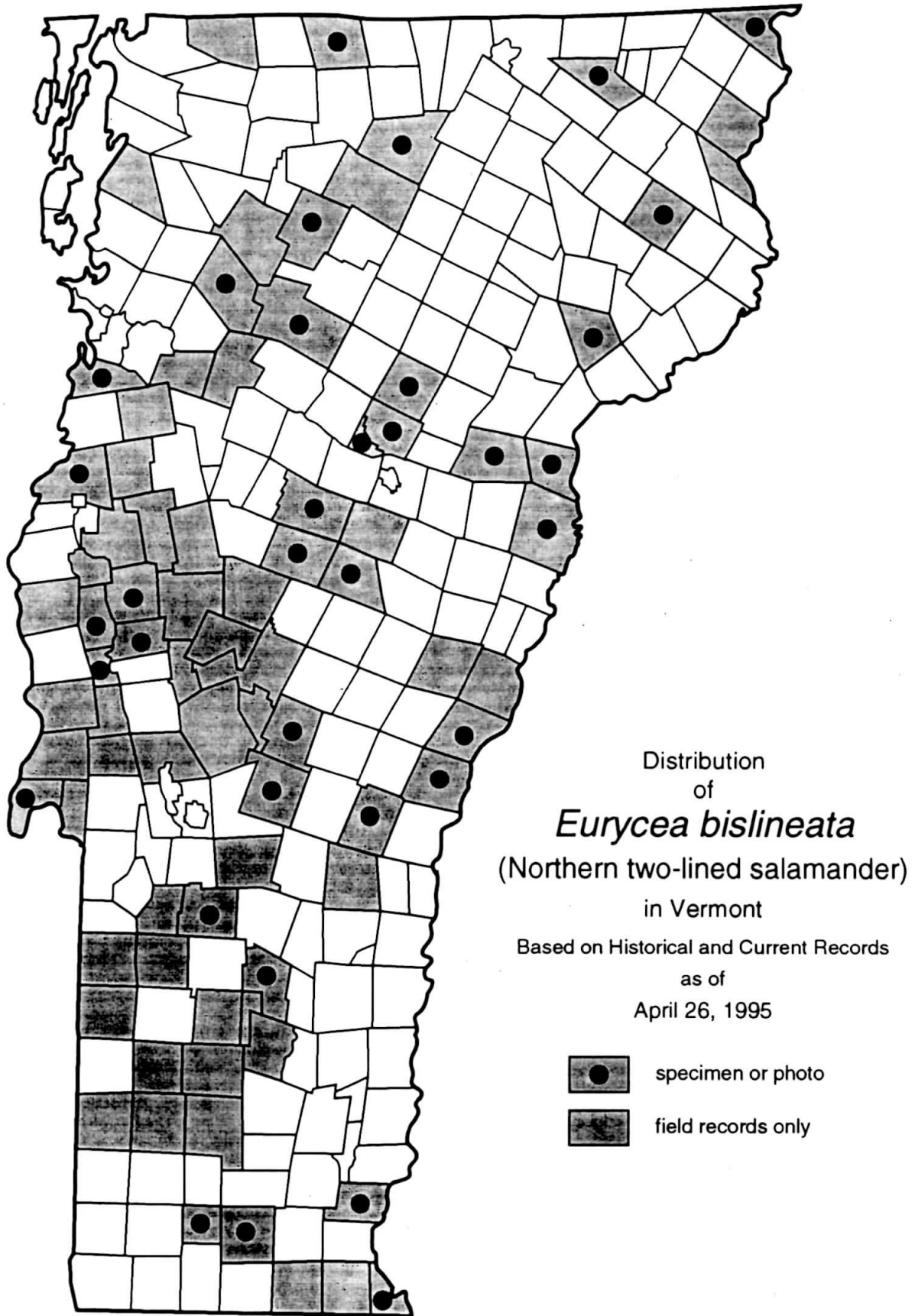


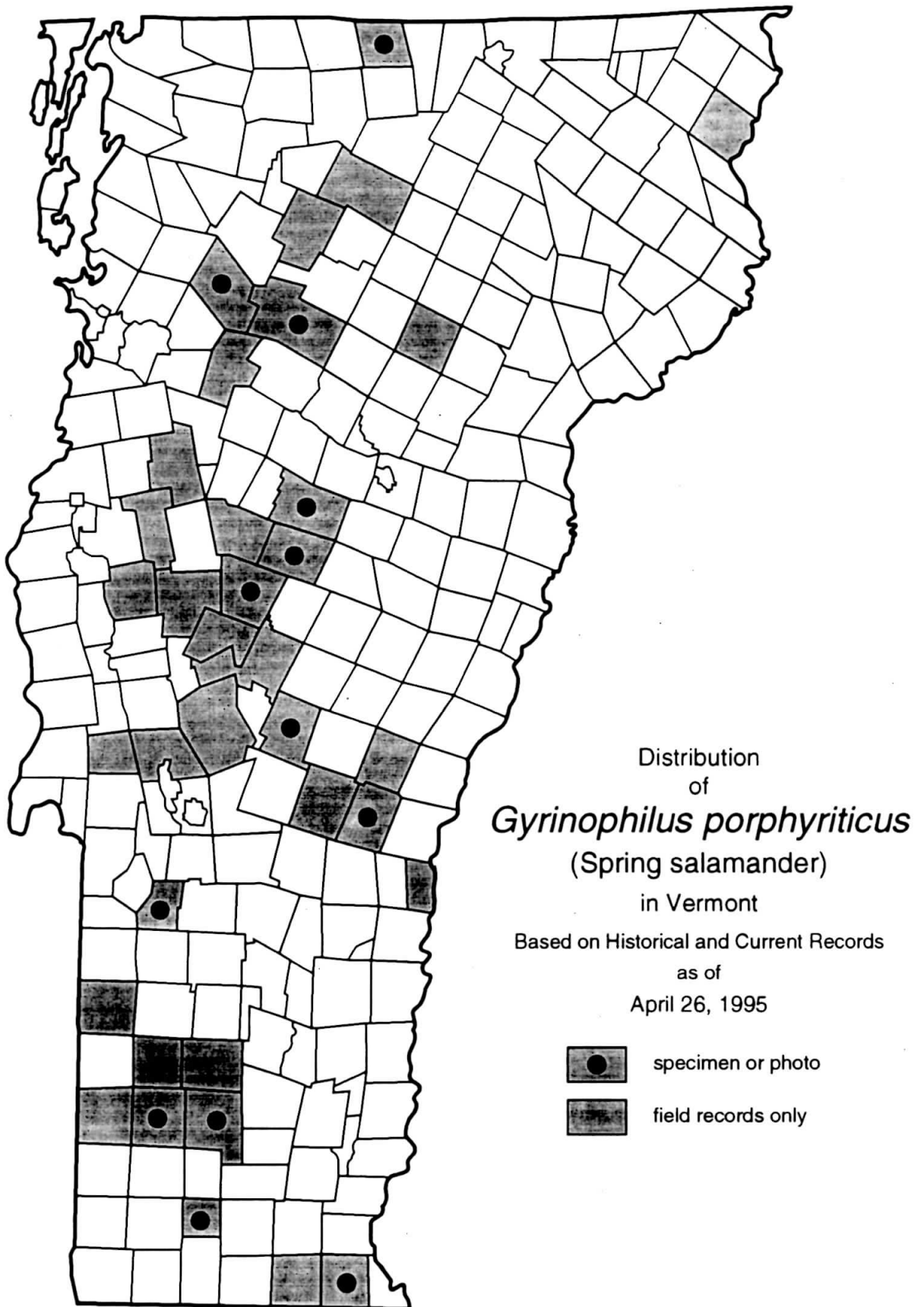




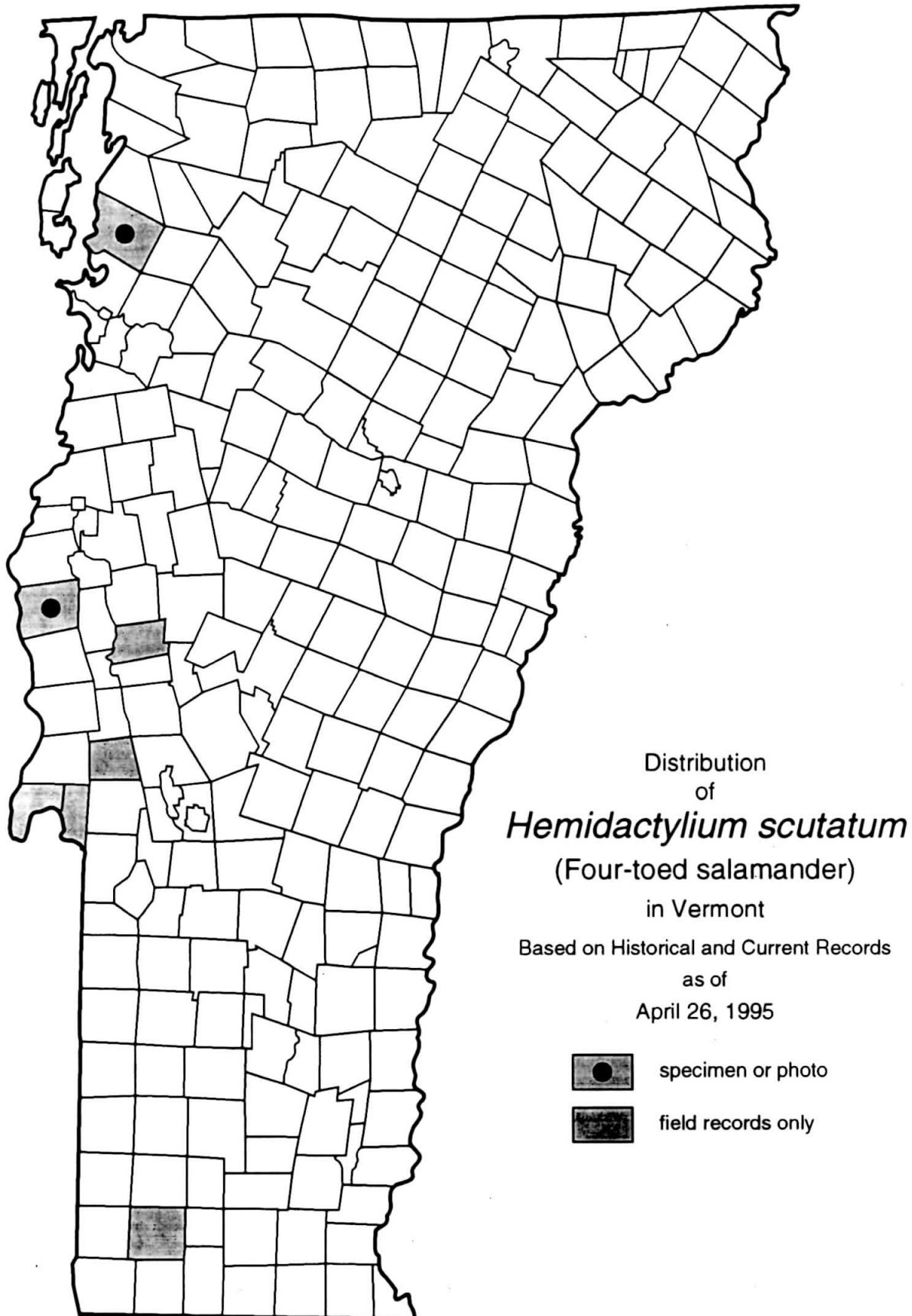


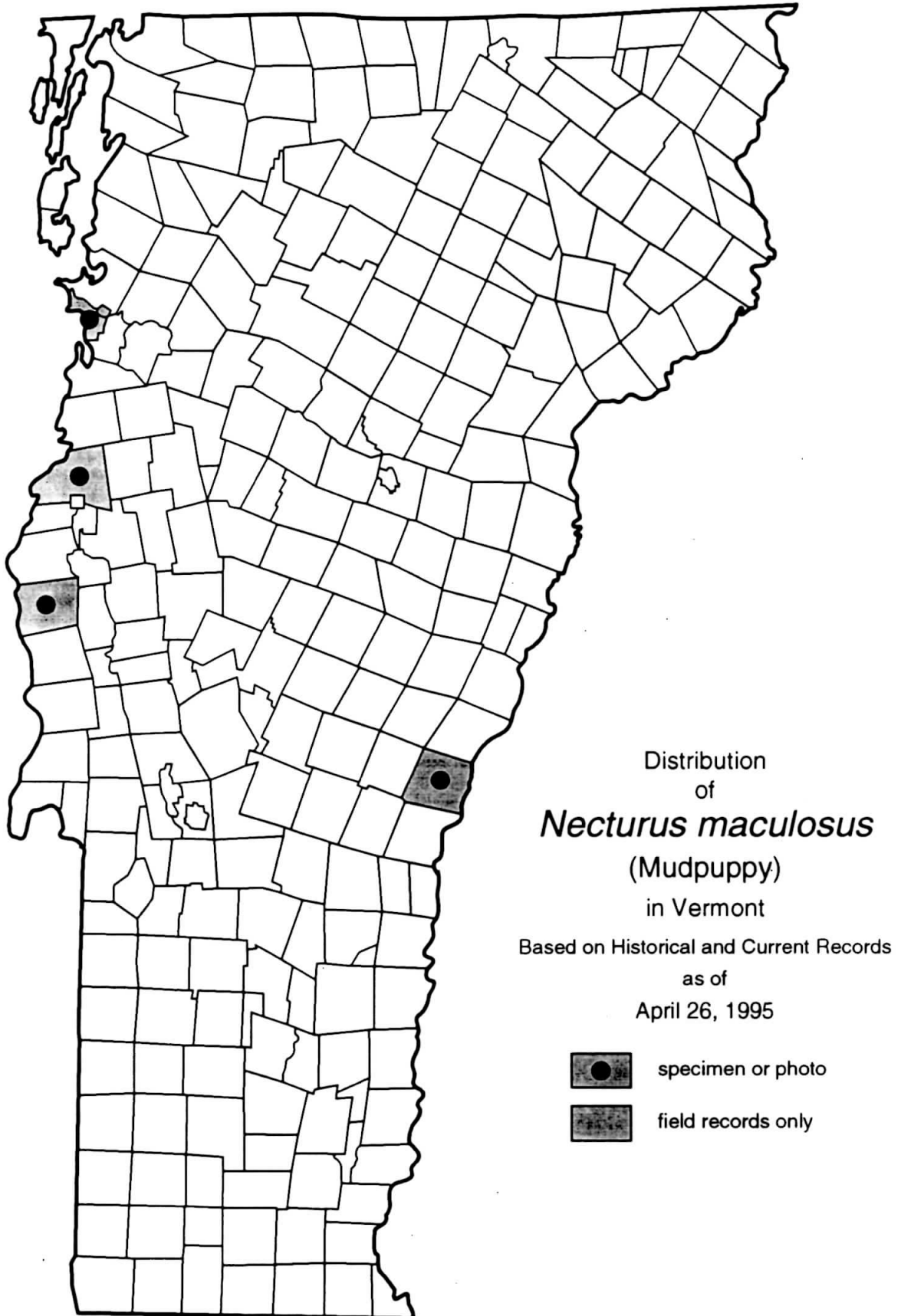


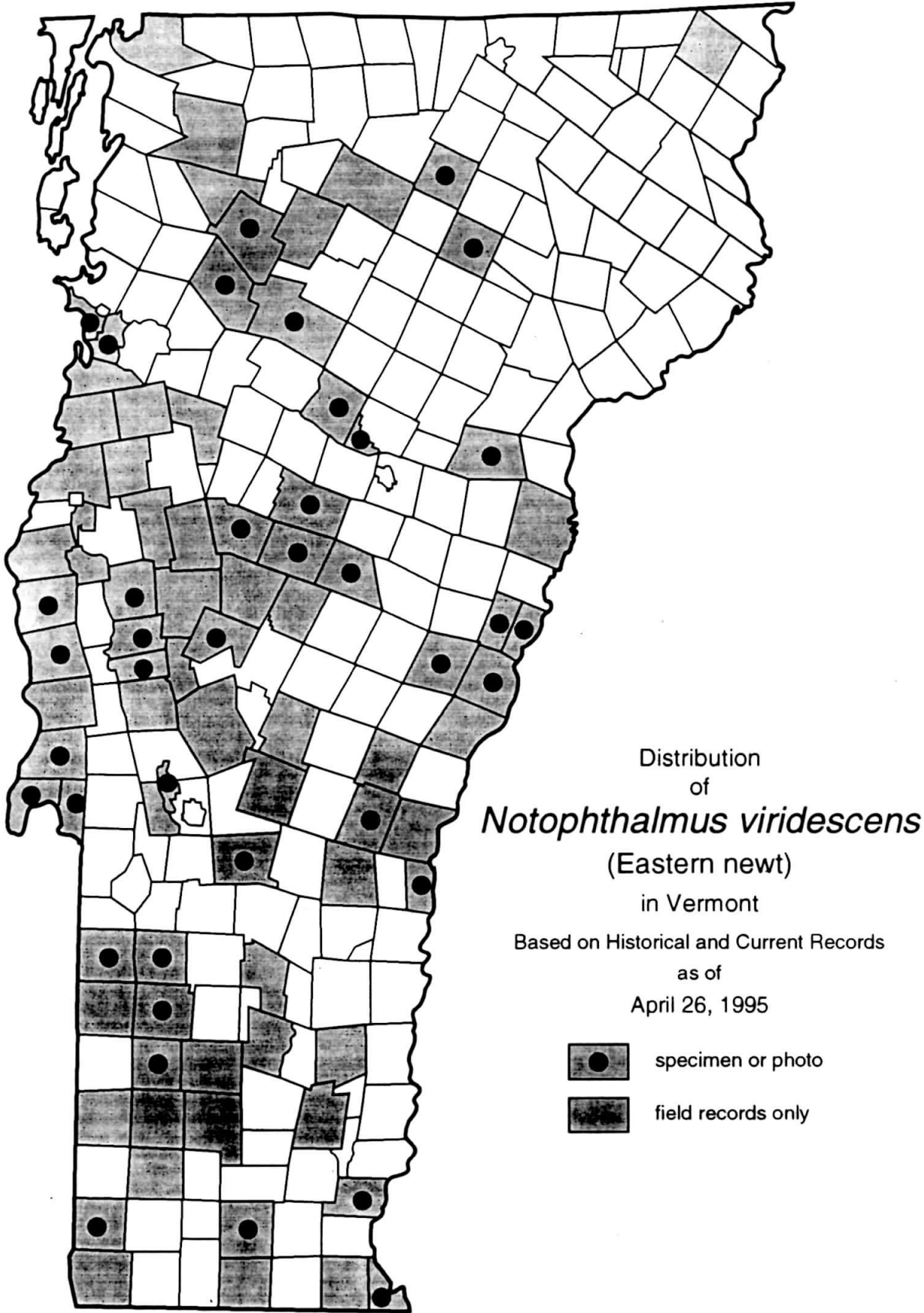


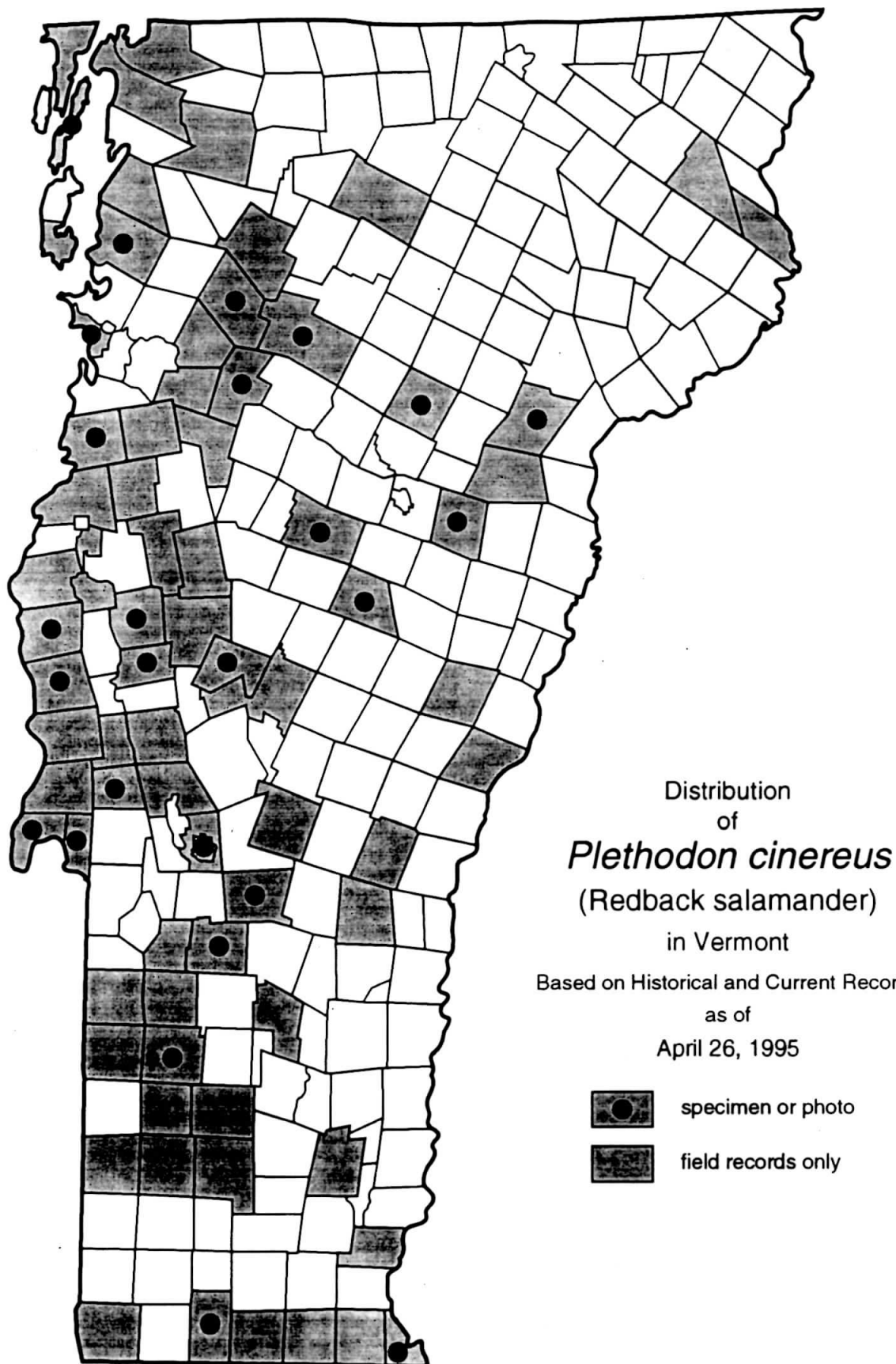


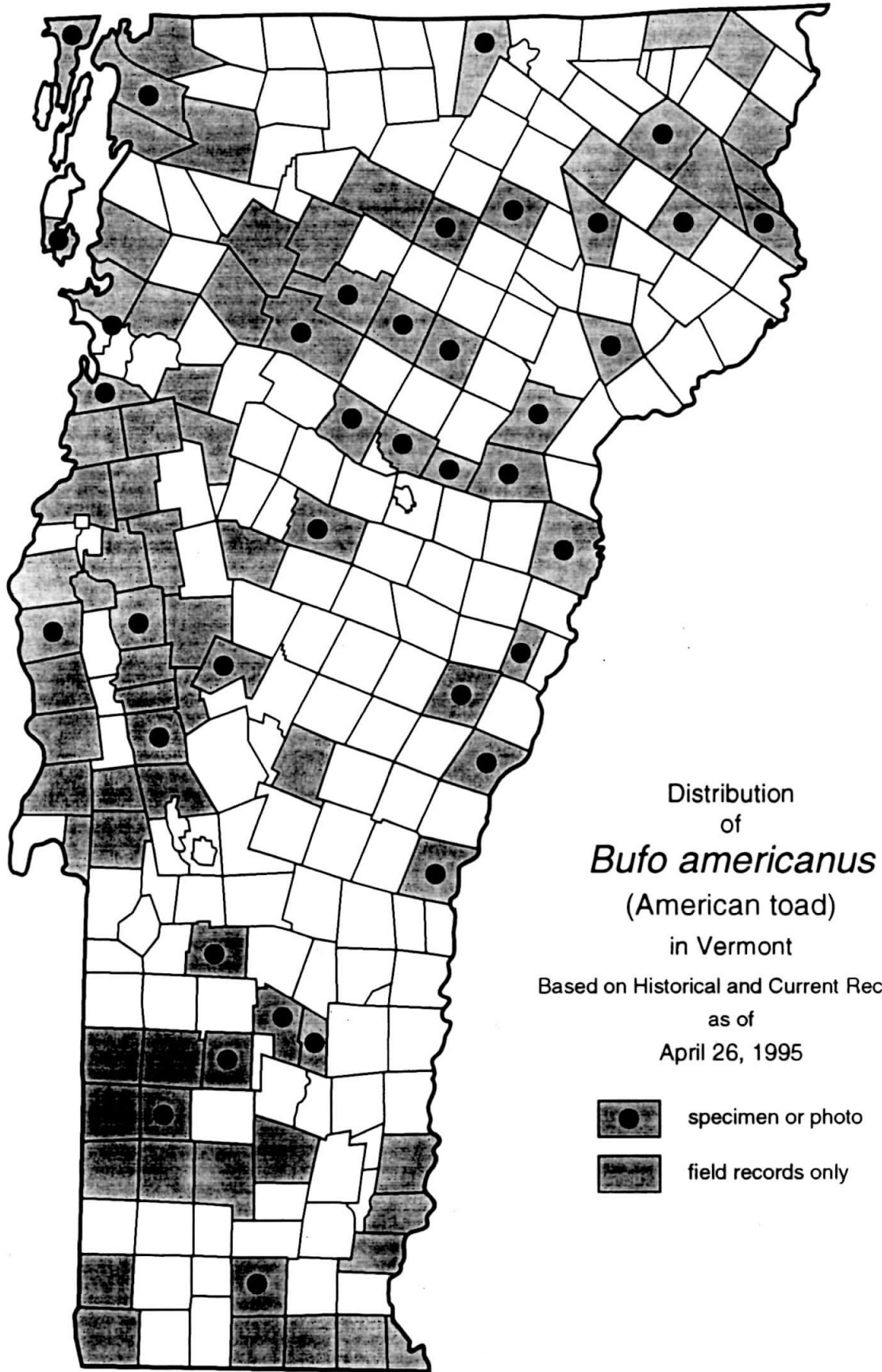


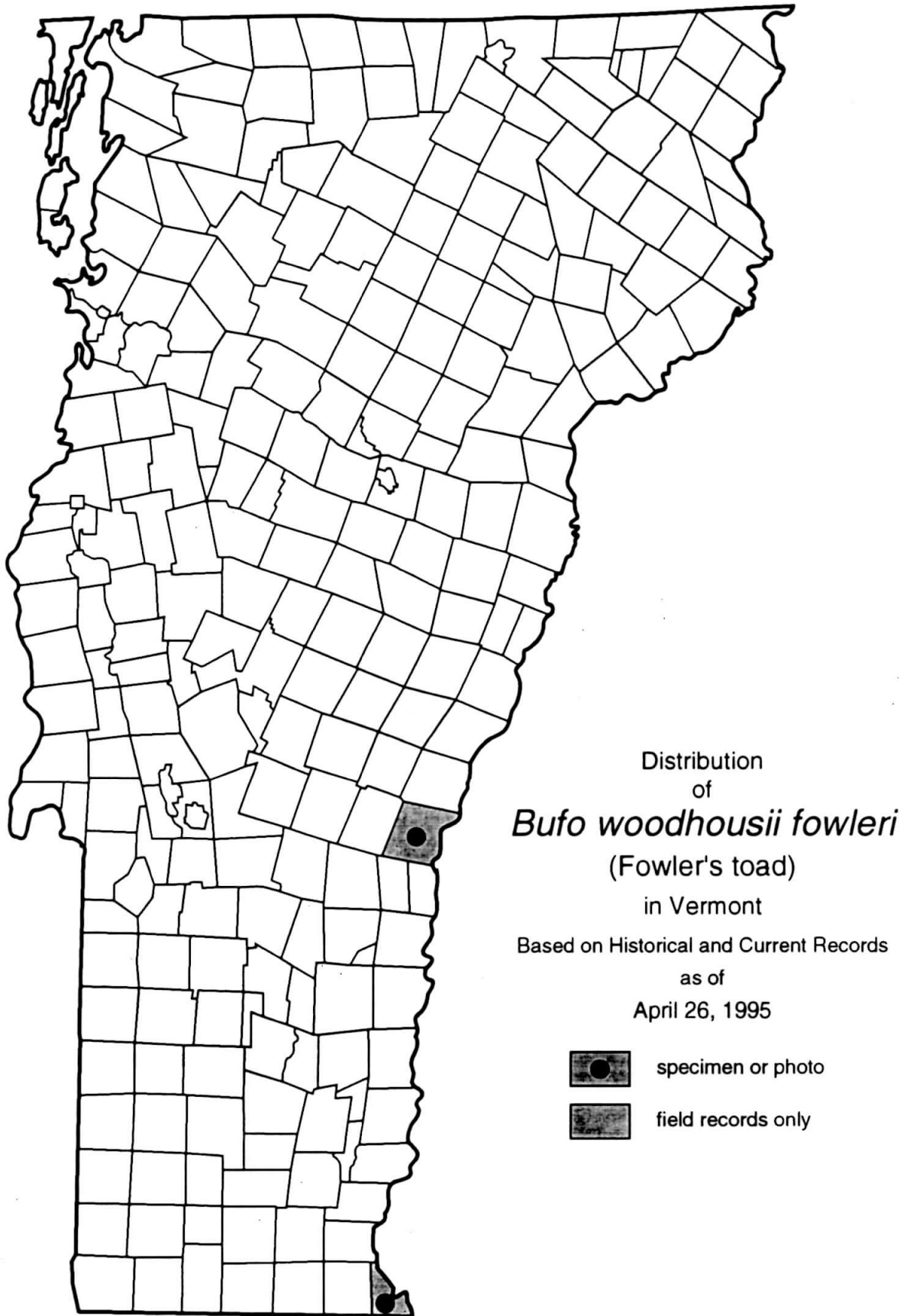


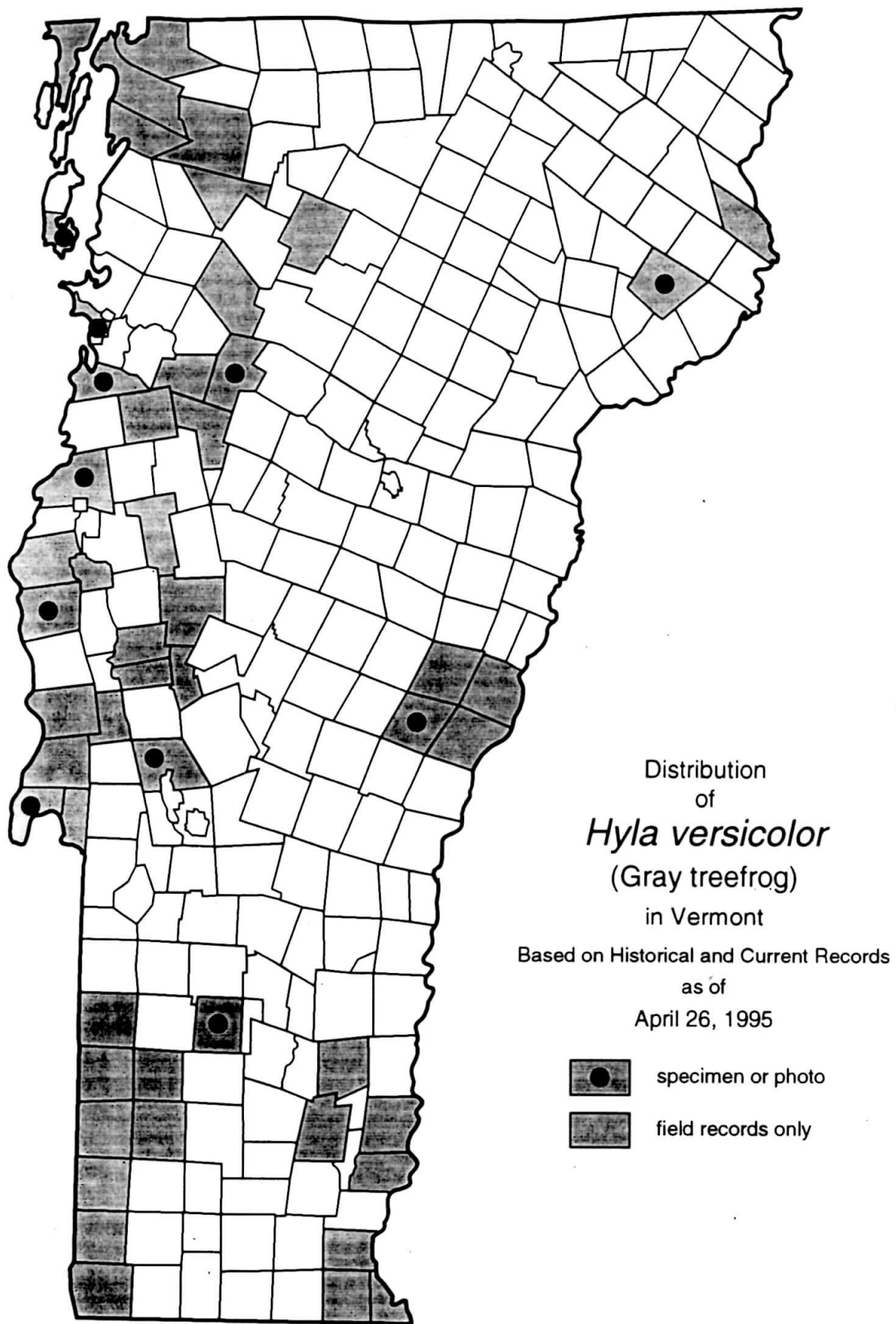


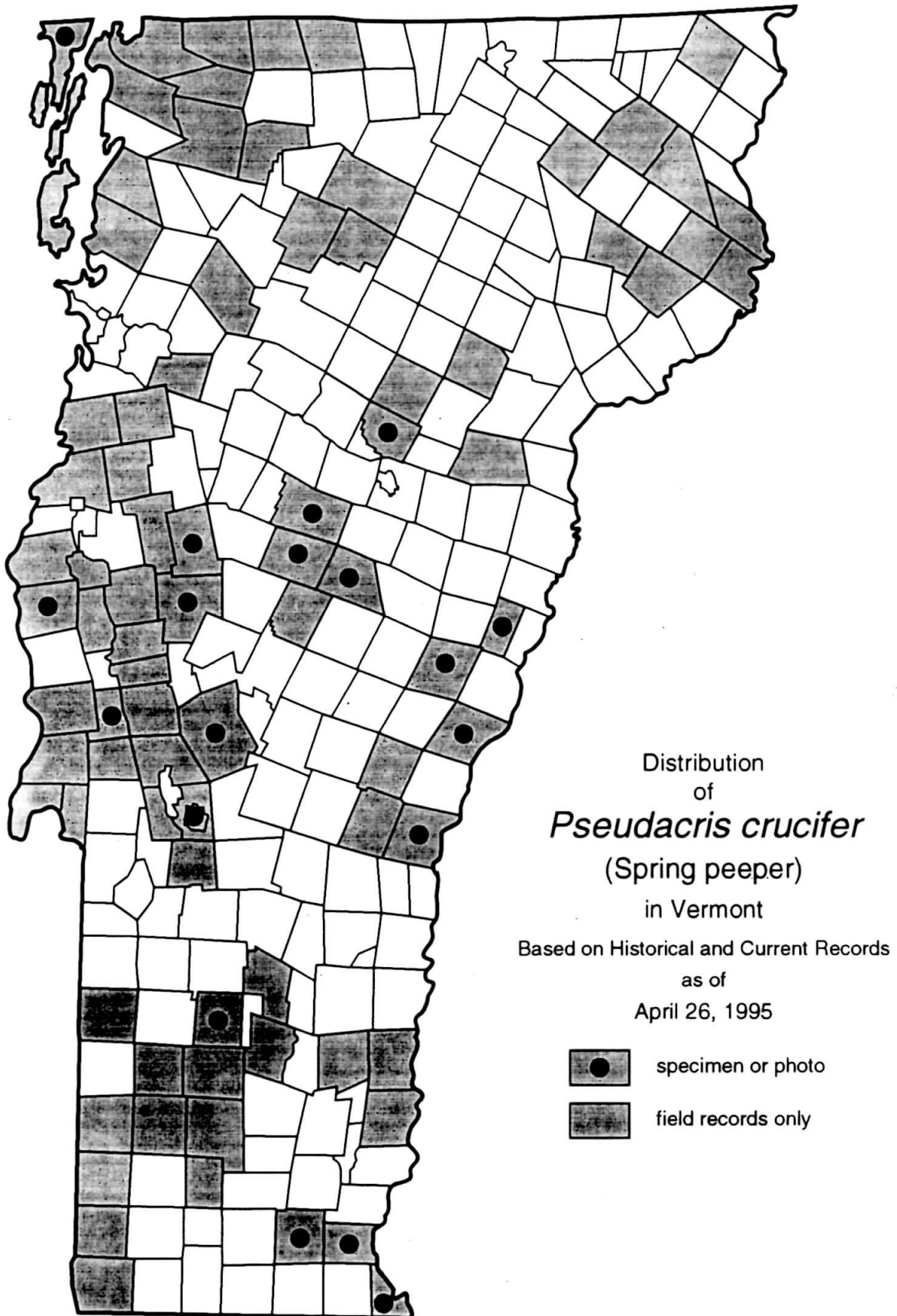




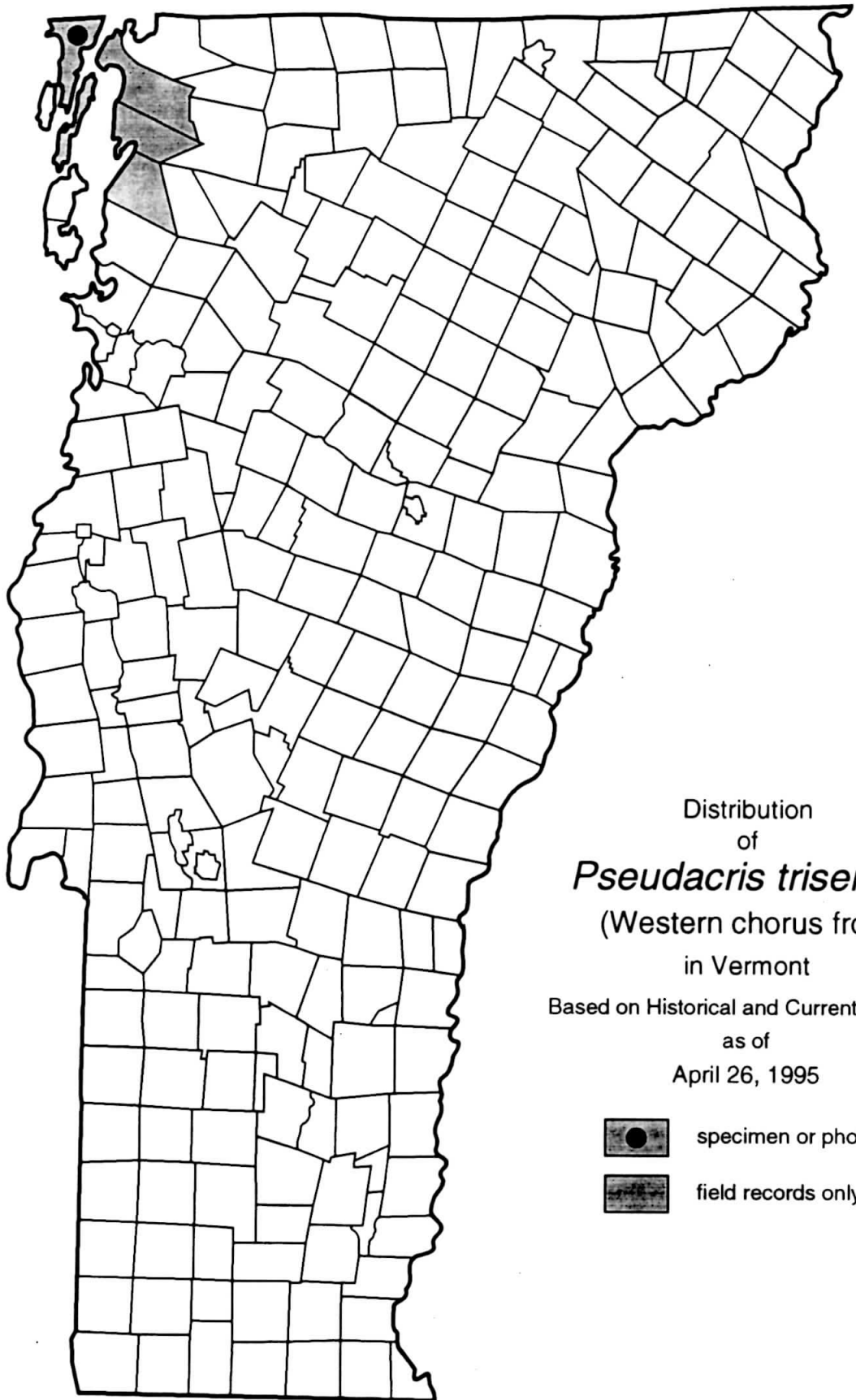




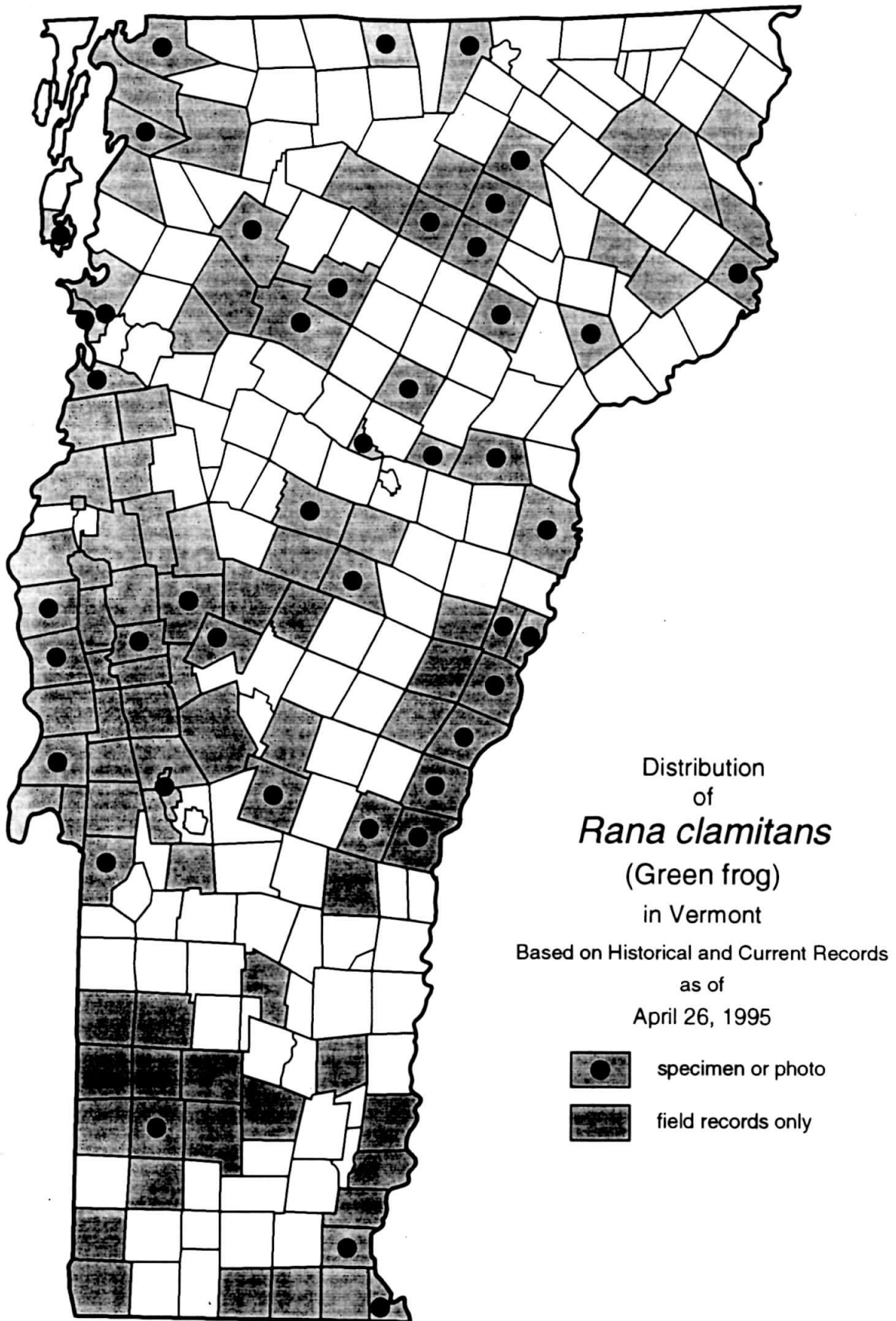


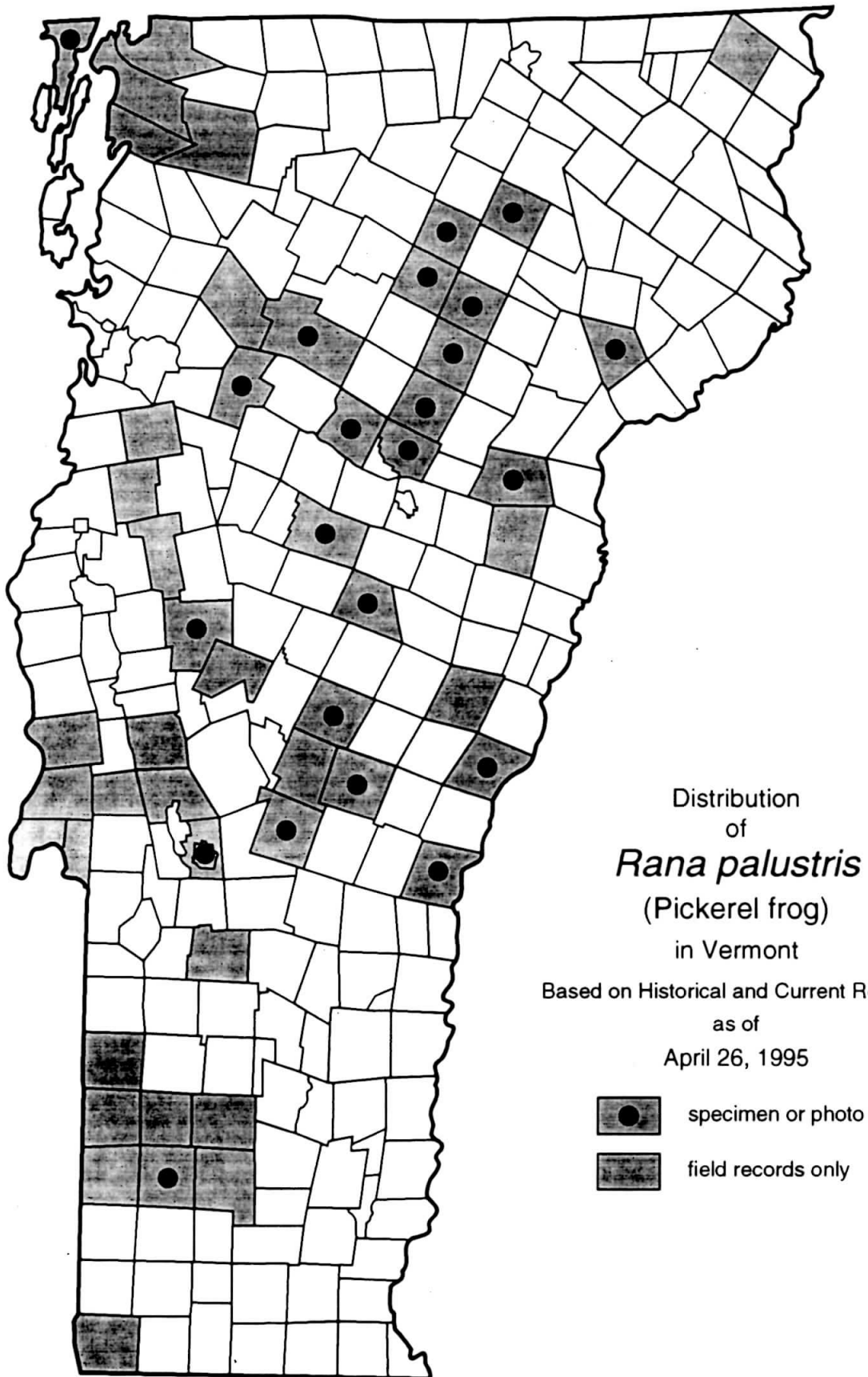


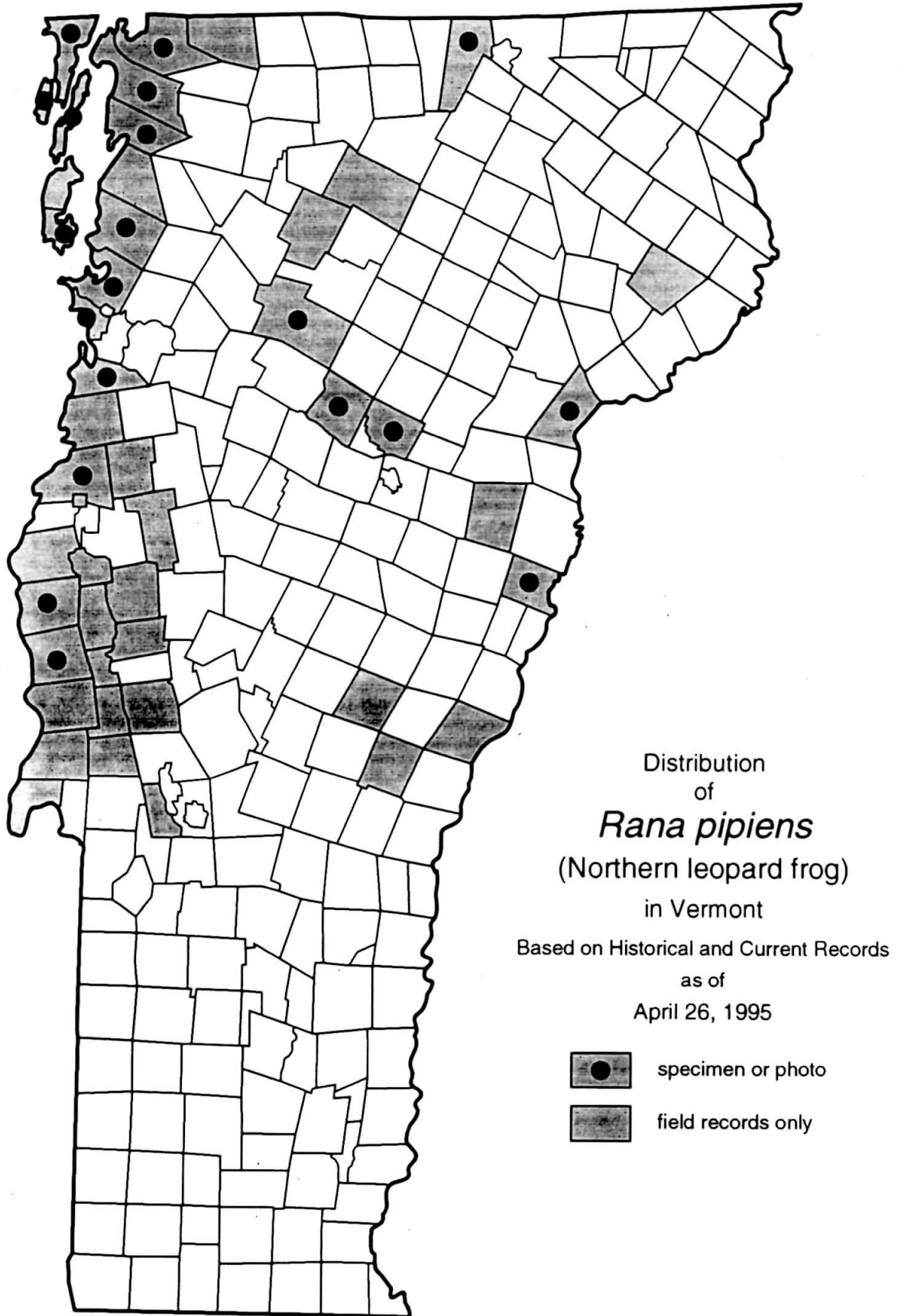


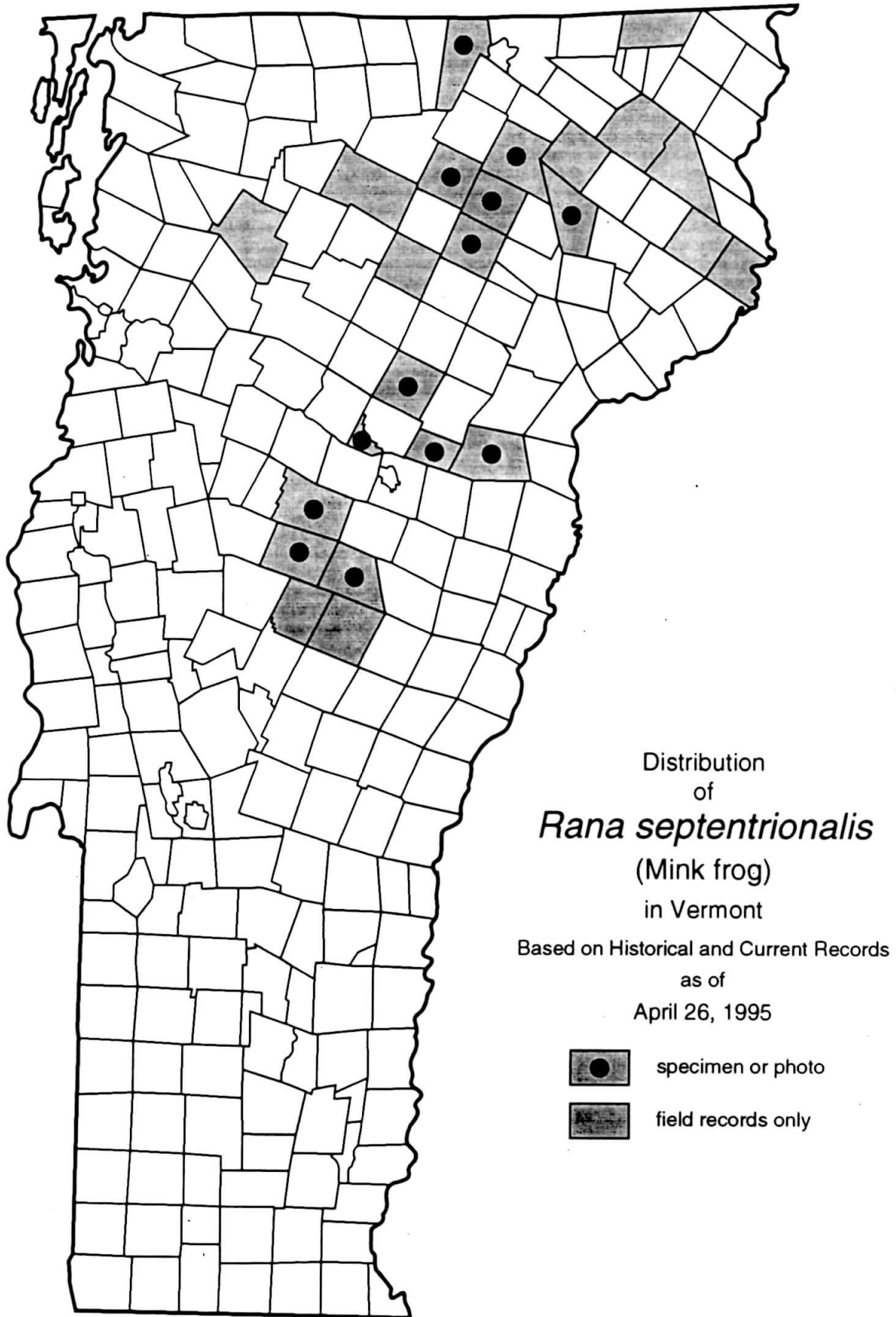




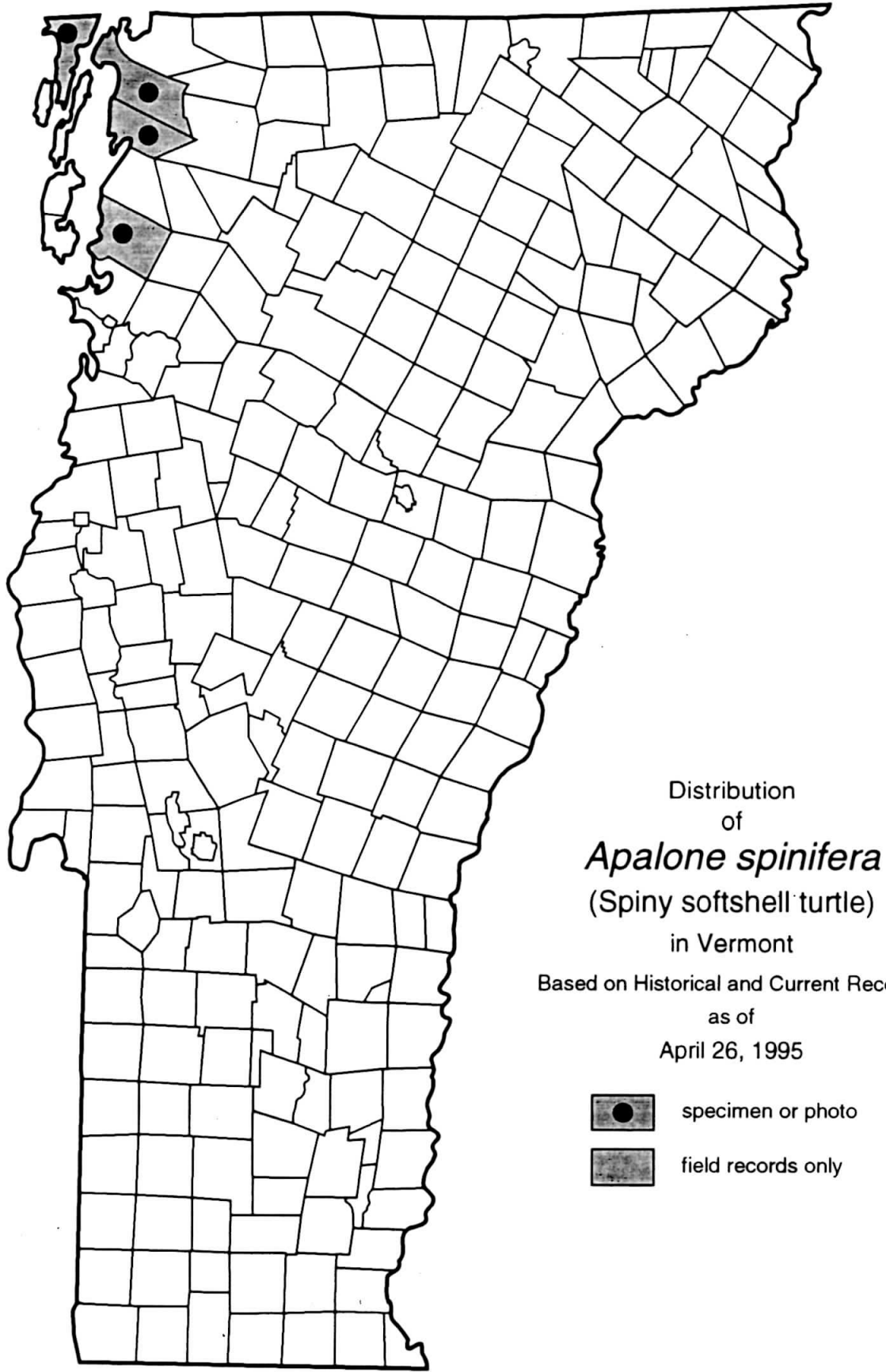




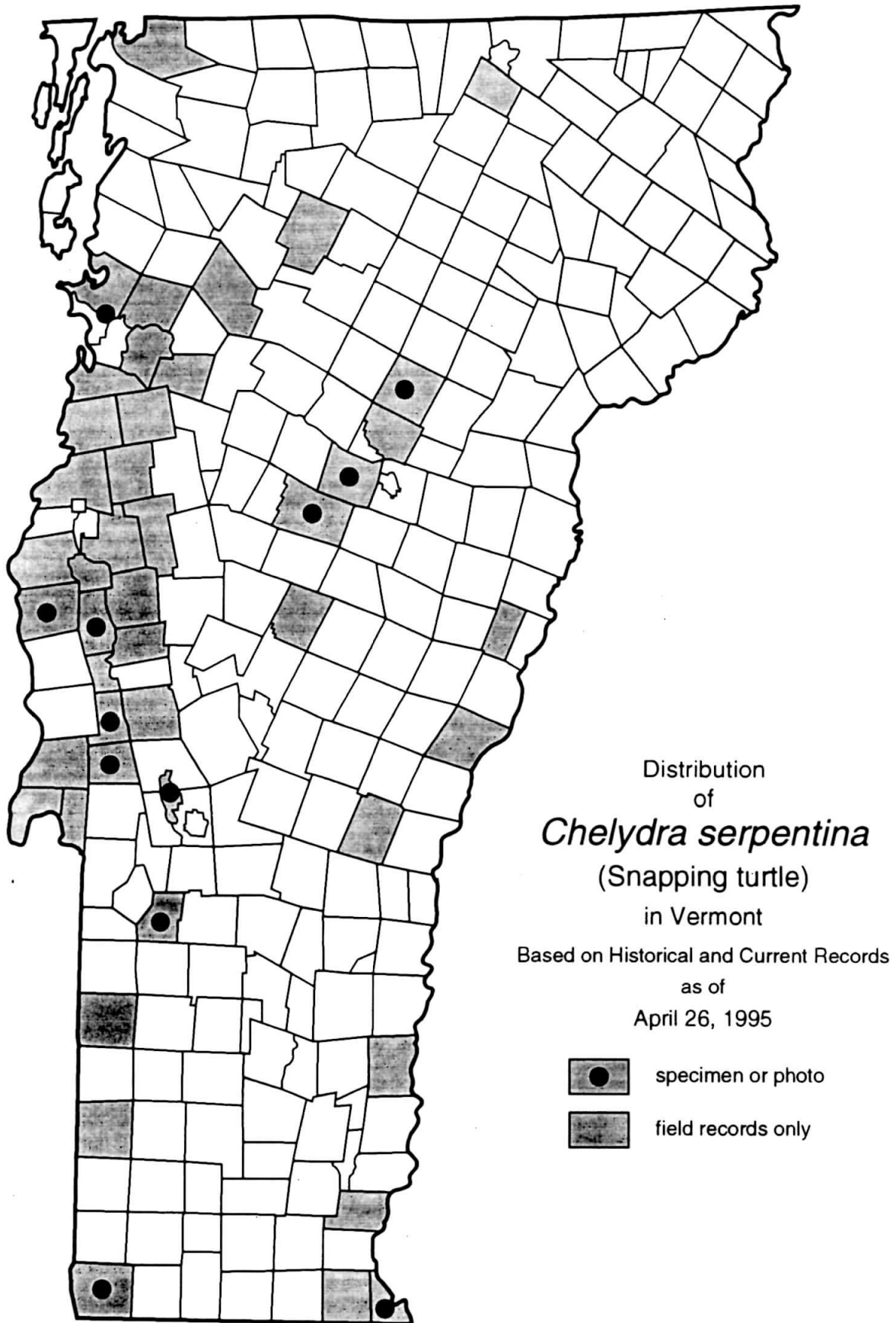




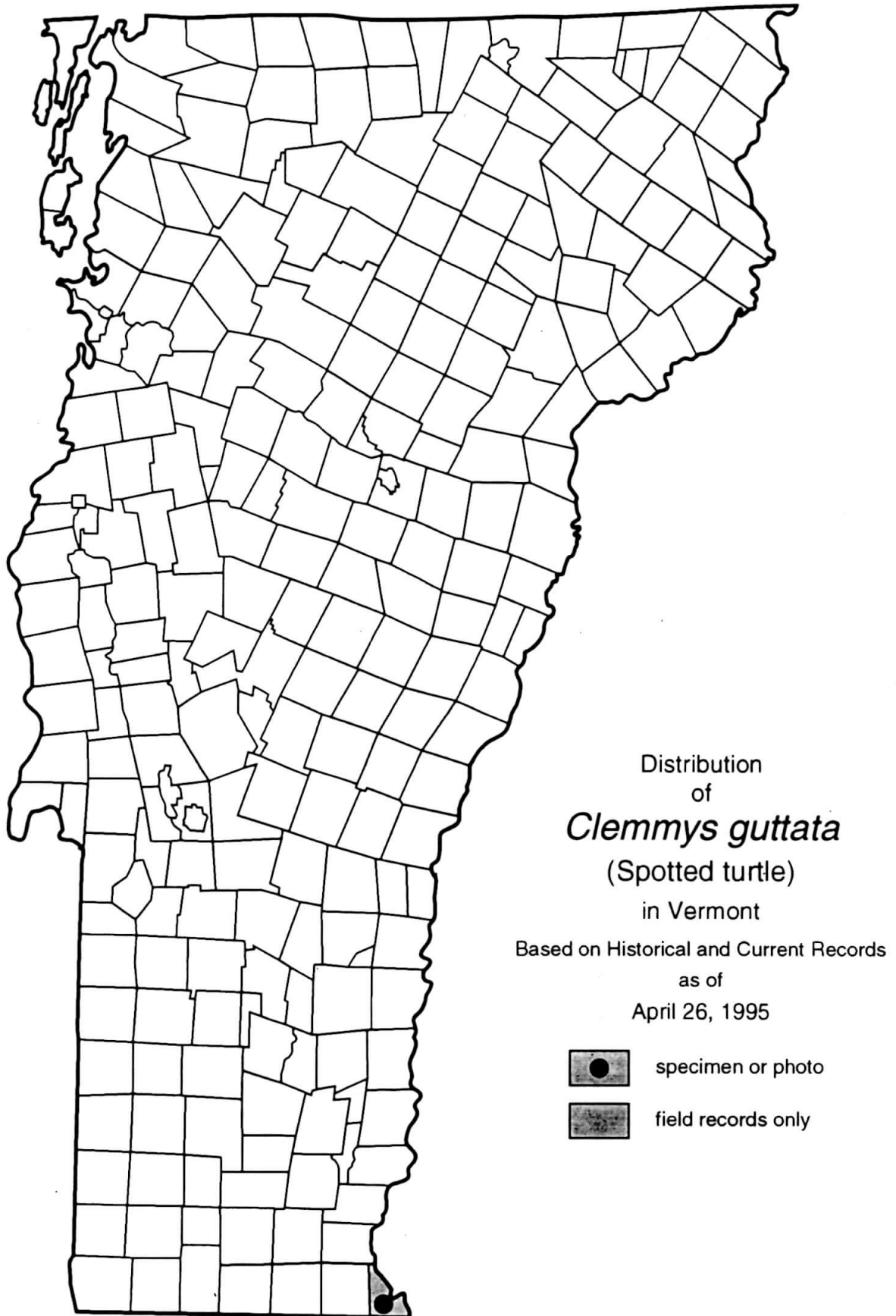


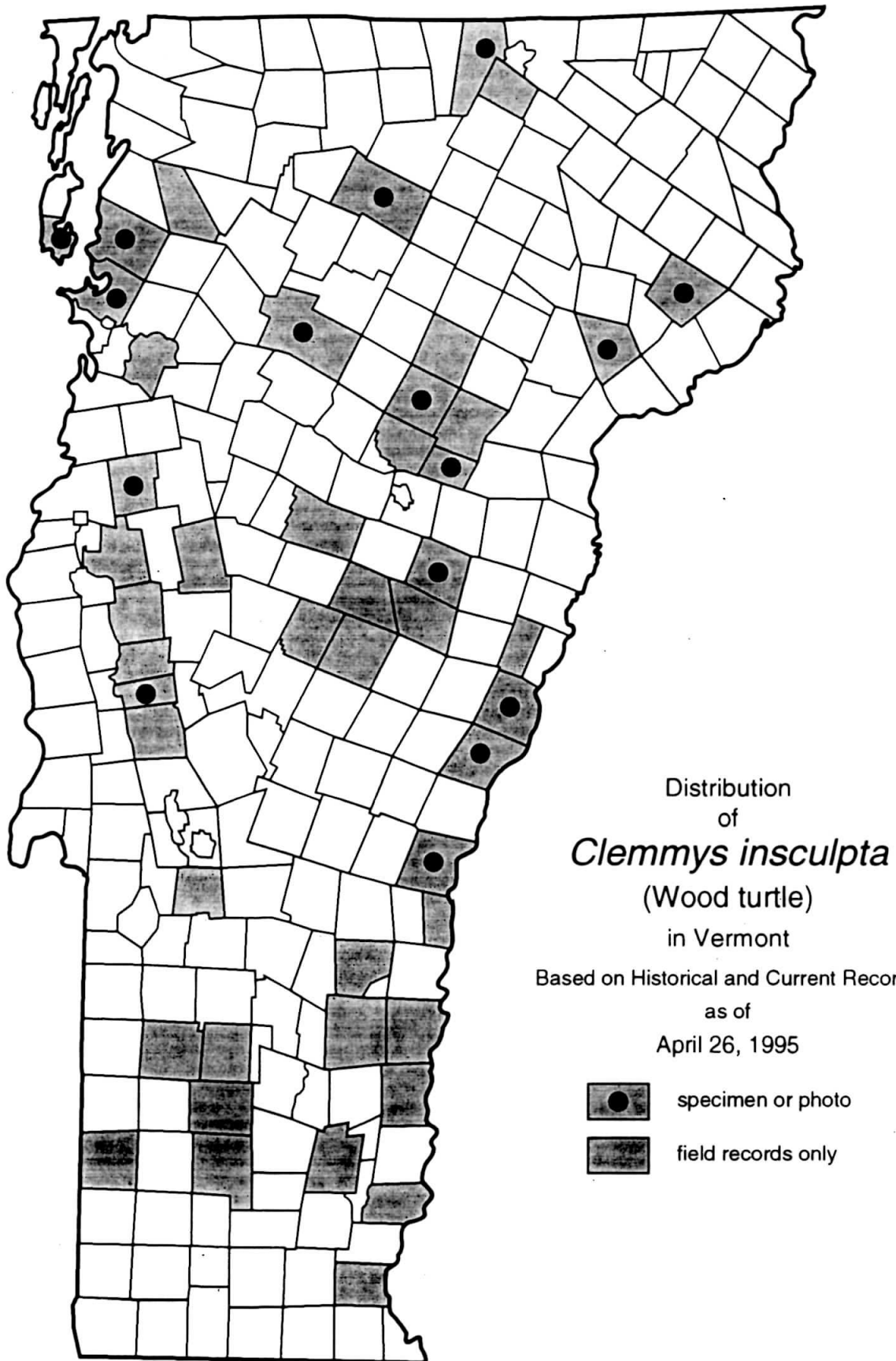


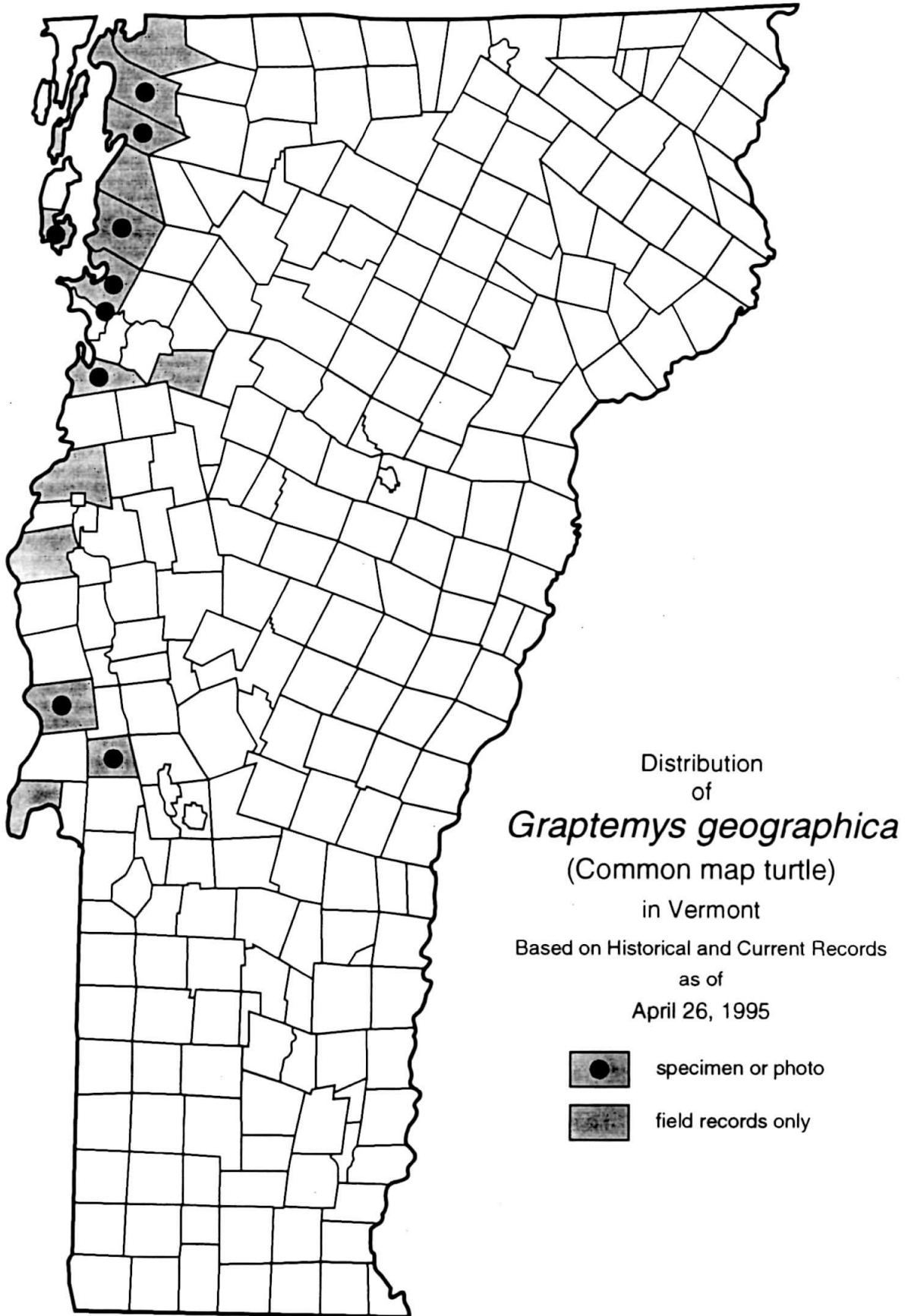


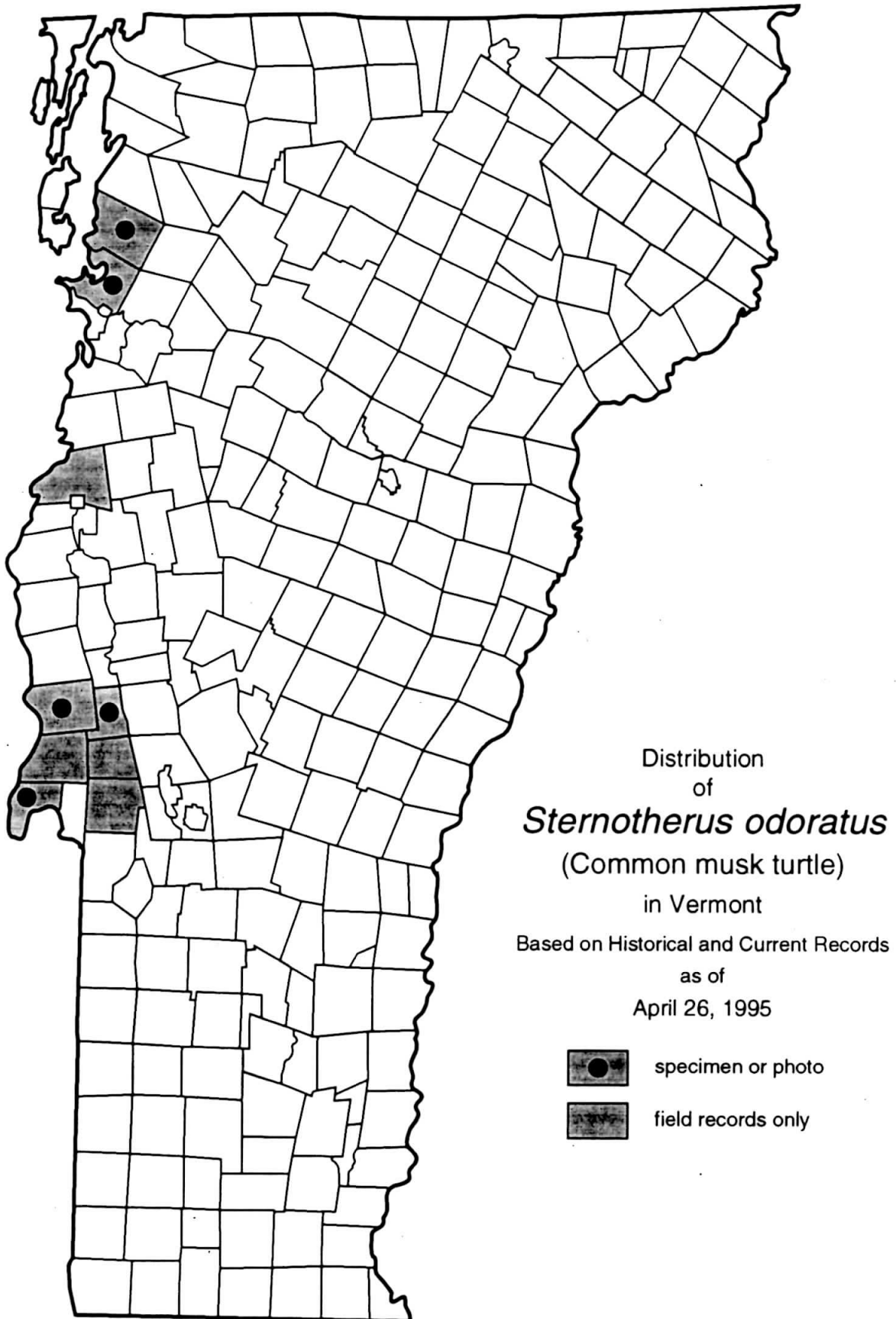


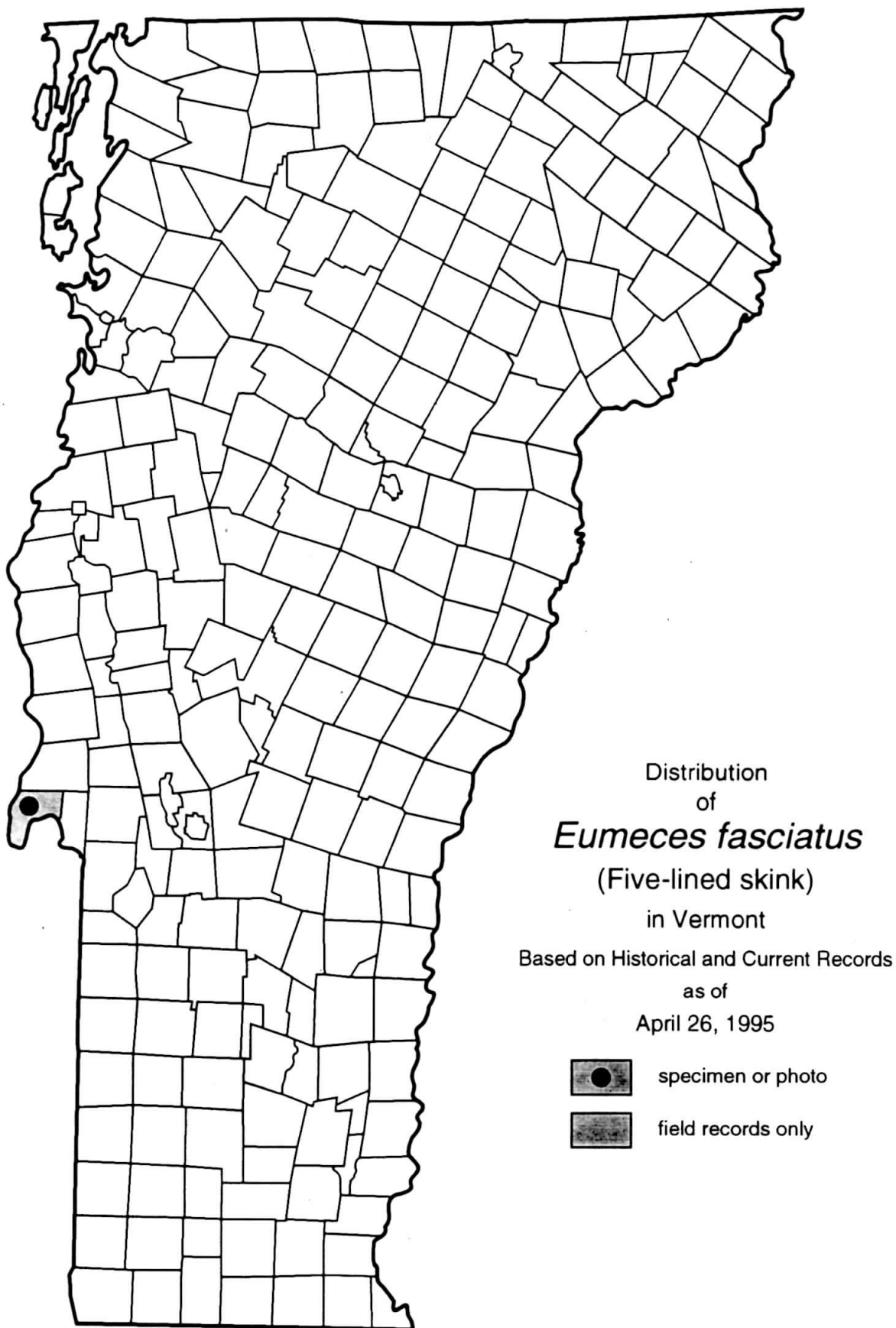


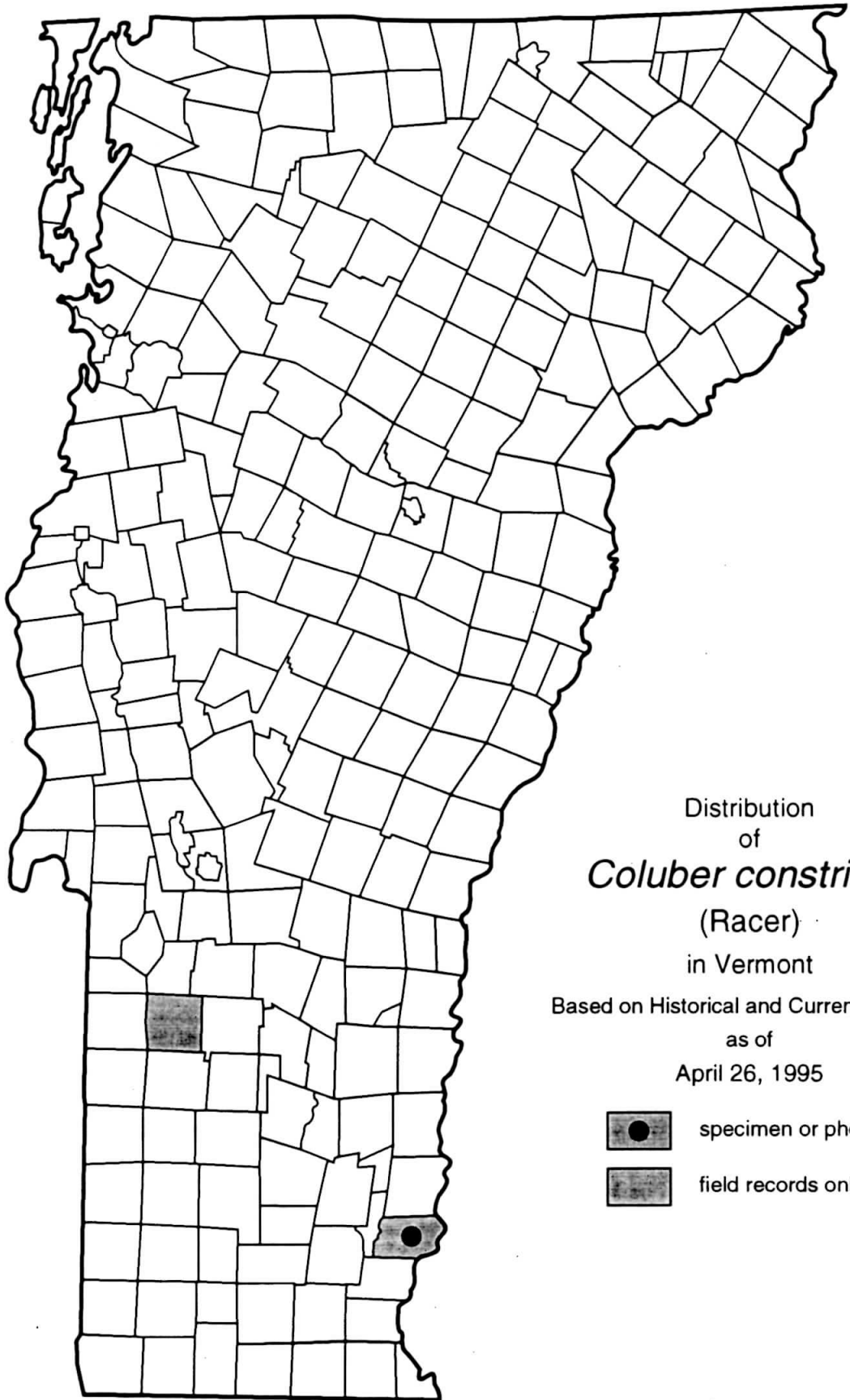














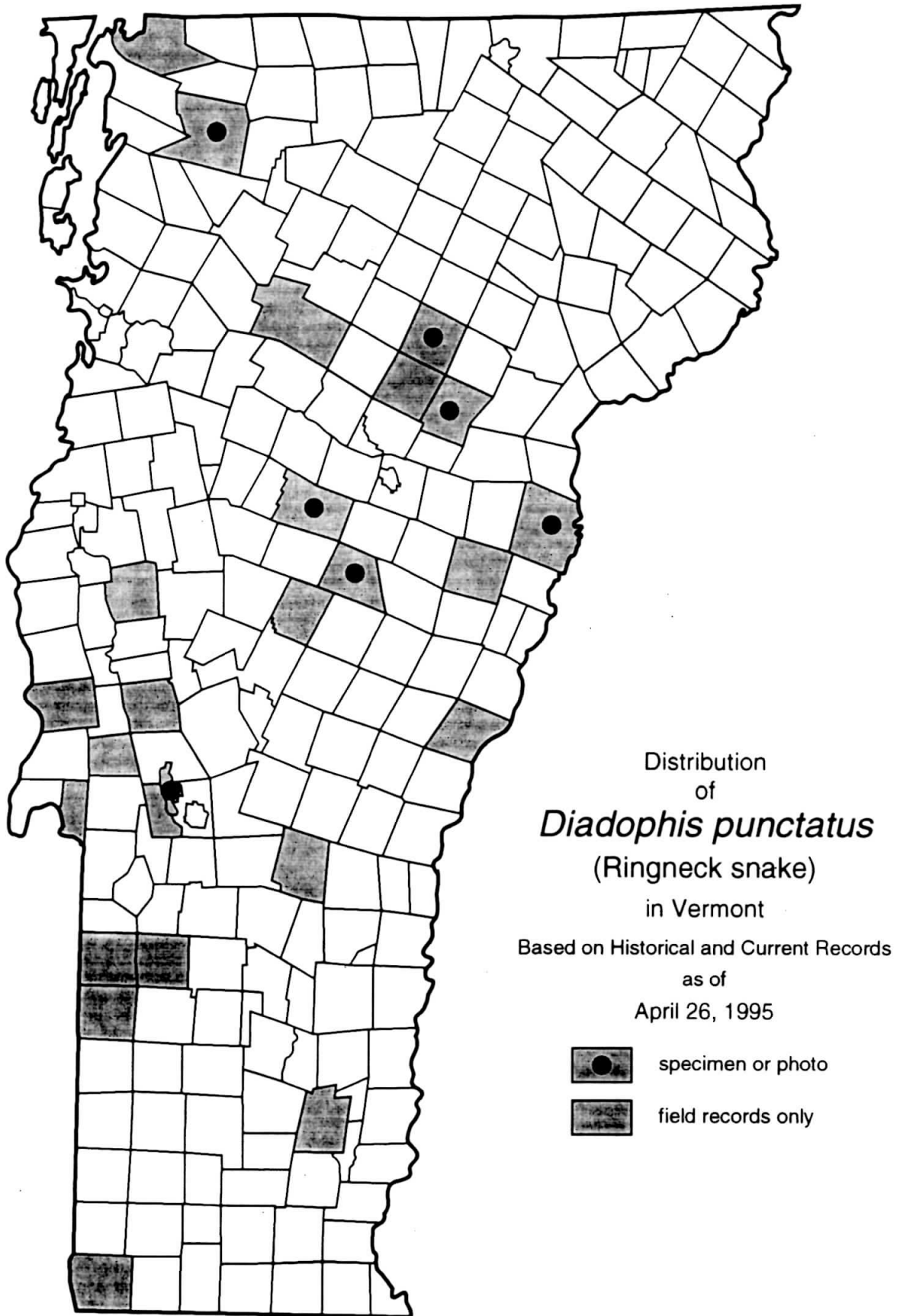
Distribution  
of  
*Coluber constrictor*  
(Racer)  
in Vermont

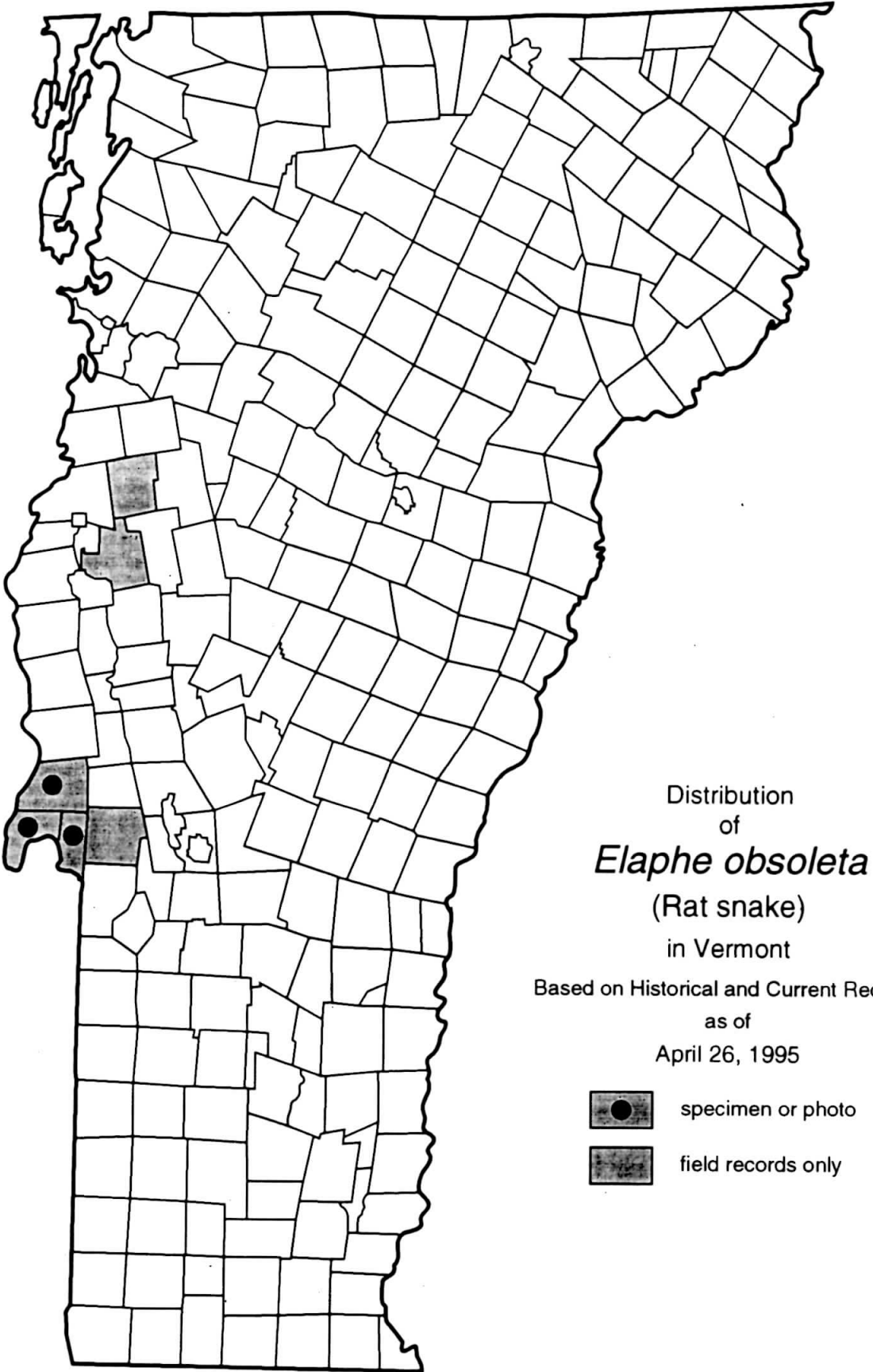
Based on Historical and Current Records  
as of  
April 26, 1995

-  specimen or photo
-  field records only

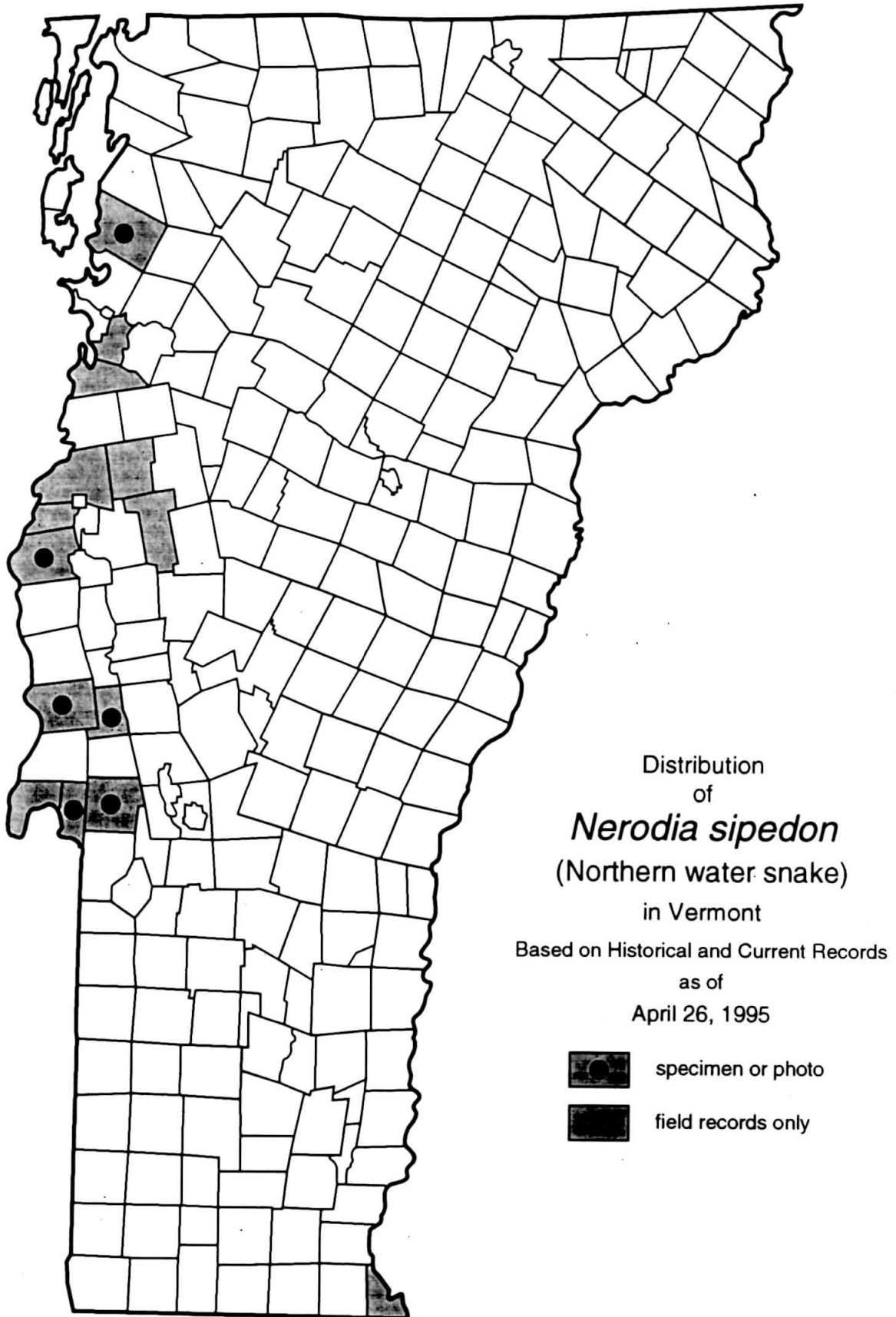


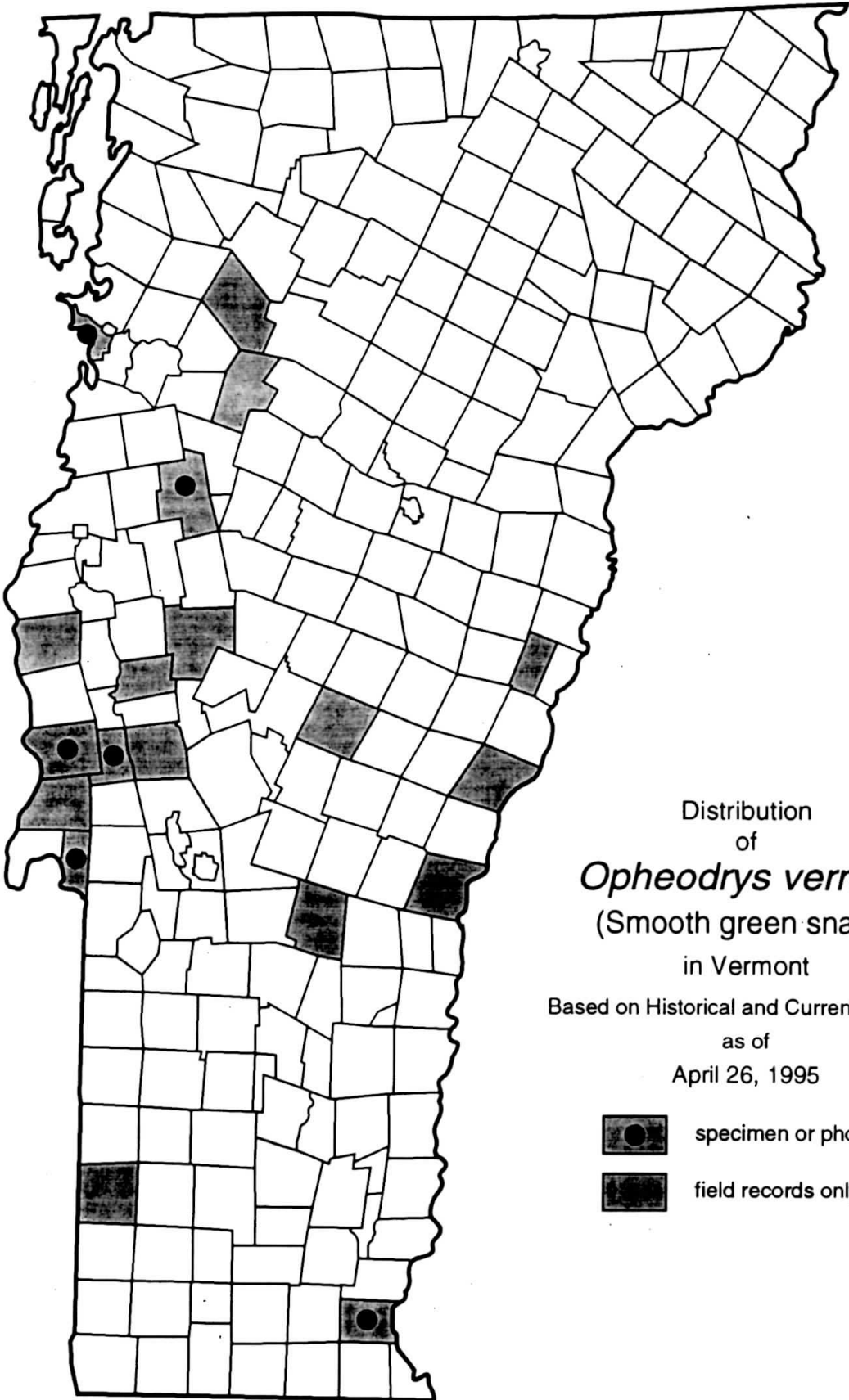










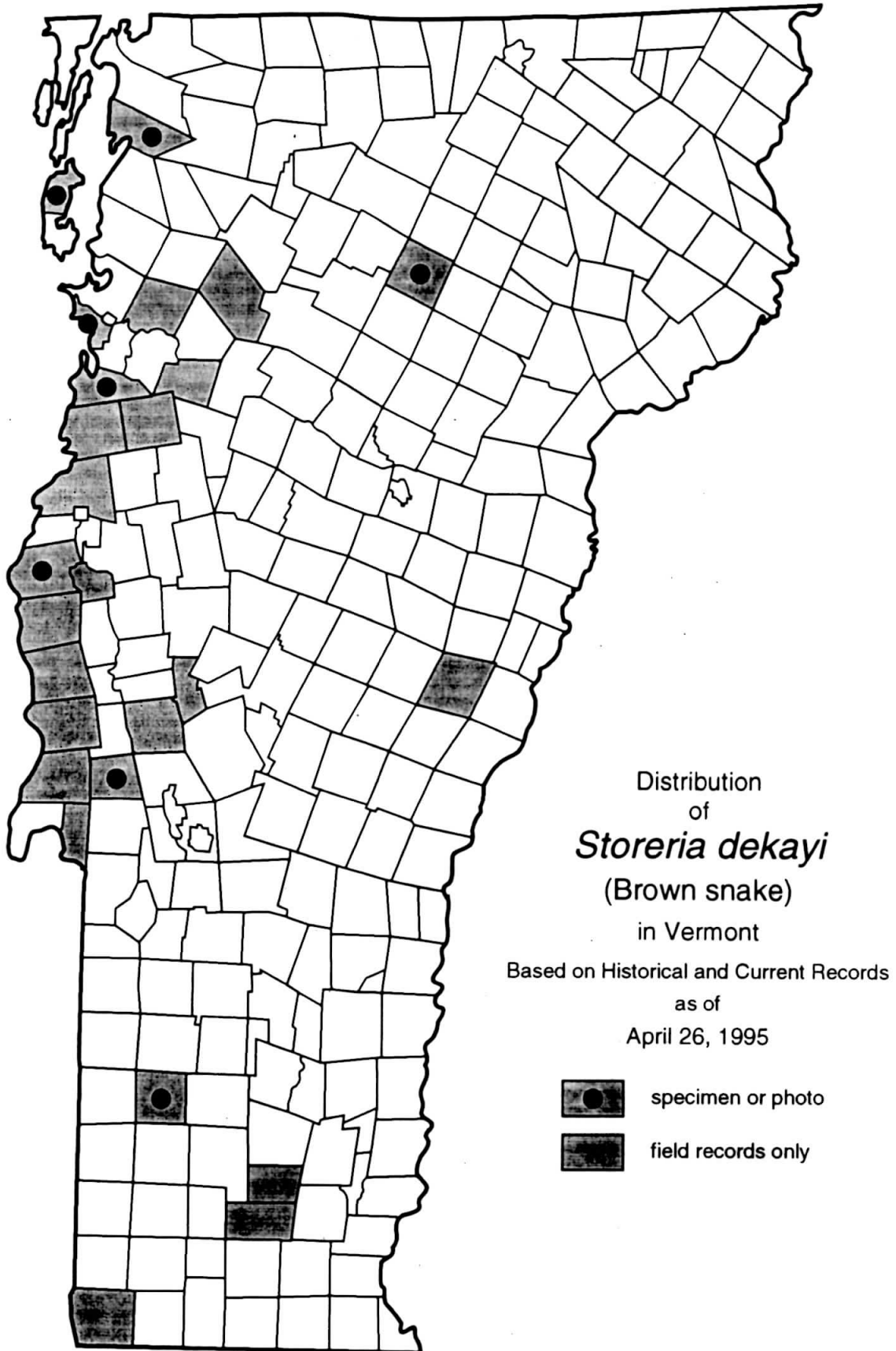




Distribution  
of  
*Opheodrys vernalis*  
(Smooth green snake)  
in Vermont

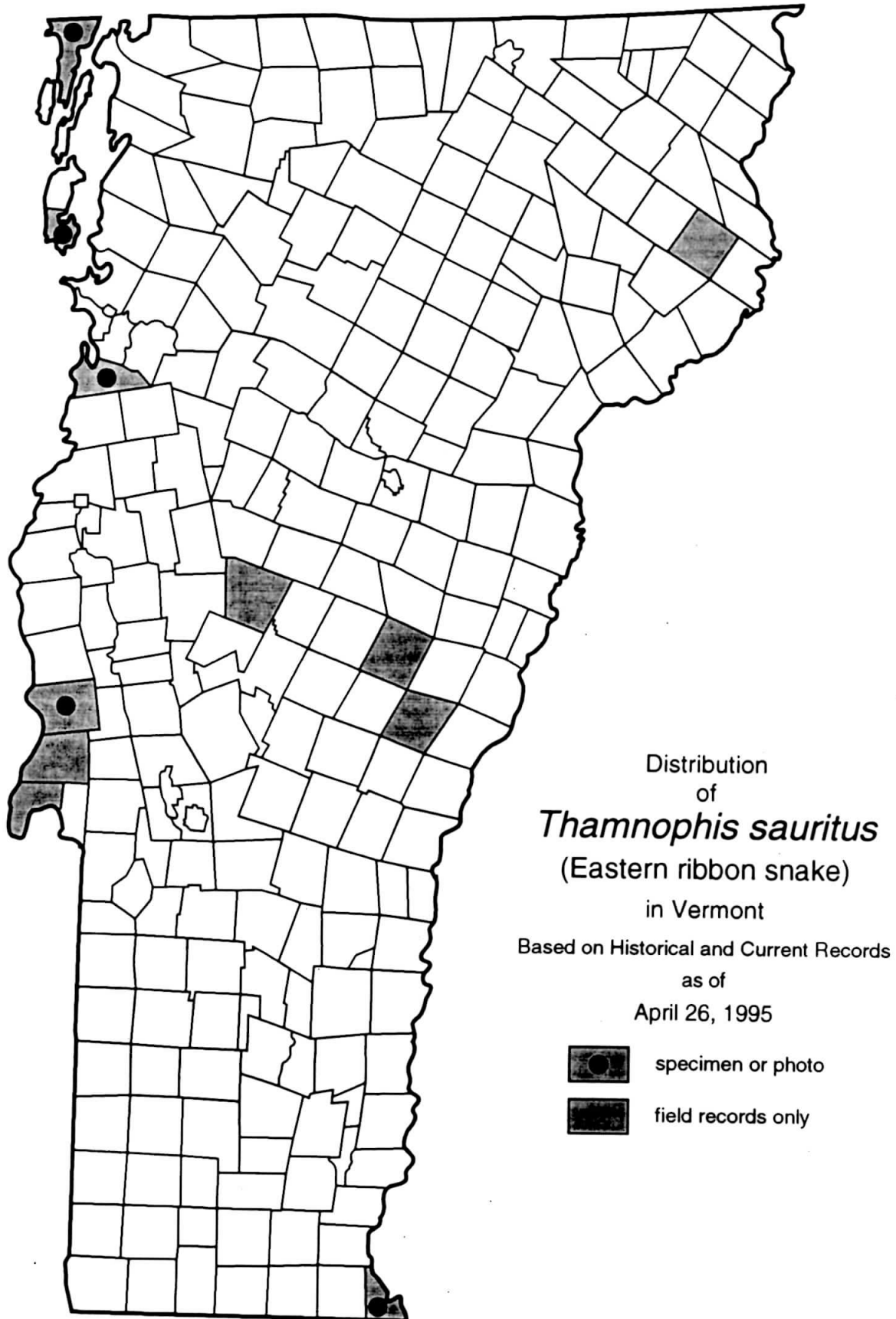
Based on Historical and Current Records  
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-  field records only











## Subspecies and Hybrid Types of the Reptiles and Amphibians of Vermont

### AMPHIBIANS

<u>Scientific Name</u>	<u>Common Name</u>	<u>Subspecies &amp; Hybrids</u>
<b>Caudata</b>		
<b>Salamanders</b>		
<i>Ambystoma jeffersonianum</i> group	Jefferson salamander & related hybrids	(JJ, LJ, LJJ, LJJJ, LLJJ)*
<i>Ambystoma laterale</i> group	Blue-spotted salamander & related hybrids	(LL, LLJ, LLLJ)*
<i>Ambystoma maculatum</i>	Spotted salamander	
<i>Ambystoma opacum</i> **	Marbled salamander	
<i>Desmognathus fuscus</i>	Dusky salamander	<i>Desmognathus f. fuscus</i> (Northern dusky salamander)
<i>Desmognathus ochrophaeus</i> ***	Mountain dusky salamander	
<i>Eurycea bislineata</i>	Northern two-lined salamander	
<i>Gyrinophilus porphyriticus</i>	Spring salamander	
<i>Hemidactylium scutatum</i>	Four-toed salamander	
<i>Necturus maculosus</i>	Mudpuppy	<i>Necturus m. maculosus</i> (Mudpuppy)
<i>Notophthalmus viridescens</i>	Eastern newt	<i>Notophthalmus v. viridescens</i> (Red-spotted newt)
<i>Plethodon cinereus</i>	Redback salamander	
<i>Plethodon glutinosus</i> ****	Northern slimy salamander	
<b>Salientia</b>		
<b>Frogs &amp; Toads</b>		
<i>Bufo americanus</i>	American toad	<i>Bufo a. americanus</i> (Eastern American toad)
<i>Bufo woodhousii</i>	Woodhouse's toad	<i>Bufo w. fowleri</i> (Fowler's toad)
<i>Hyla versicolor</i>	Gray treefrog	
<i>Pseudacris (Hyla) crucifer</i>	Spring peeper	<i>Pseudacris c. crucifer</i> (Northern spring peeper)
<i>Pseudacris triseriata</i>	Western chorus frog	

**Scientific Name**

**Common Name**

**Subspecies & Hybrids**

**Salientia cont.**

**Frogs & Toads**

*Rana catesbeiana*

Bullfrog

*Rana clamitans*

Green frog

*Rana c. melanota*  
(Green frog)

*Rana palustris*

Pickerel frog

*Rana pipiens*

Northern leopard frog

*Rana septentrionalis*

Mink frog

*Rana sylvatica*

Wood frog

**REPTILES**

**Testudines**

**Turtles**

*Apalone (Trionyx) spinifera*

Spiny softshell

*Apalone s. spinifera*  
(Eastern spiny softshell)

*Chelydra serpentina*

Snapping turtle

*Chelydra s. serpentina*  
(Common snapping turtle)

*Chrysemys picta*

Painted turtle

*Chrysemys p. picta*  
(Eastern painted turtle)

*Chrysemys p. marginata*  
(Midland painted turtle)

intergrades

*Clemmys guttata*

Spotted turtle

*Clemmys insculpta*

Wood turtle

*Graptemys geographica*

Common map turtle

*Sternotherus odoratus*

Common musk turtle

*Terrapene carolina\*\*\*\*\**

Eastern box turtle

*Terrapene c. carolina*  
(Eastern box turtle)

**Lacertilia**

**Lizards**

*Eumeces fasciatus*

Five-lined skink

<u>Scientific Name</u>	<u>Common Name</u>	<u>Subspecies &amp; Hybrids</u>
<b>Serpentes</b>	<b>Snakes</b>	
<i>Coluber constrictor</i>	Racer	<i>Coluber c. constrictor</i> (Northern black racer)
<i>Crotalus horridus</i>	Timber rattlesnake	
<i>Diadophis punctatus</i>	Ringneck snake	<i>Diadophis p. edwardsii</i> (Northern ringneck snake)
<i>Elaphe obsoleta</i>	Rat snake	<i>Elaphe o. obsoleta</i> (Black rat snake)
<i>Lampropeltis triangulum</i>	Milk snake	<i>Lampropeltis p. triangulum</i> (Eastern milk snake)
<i>Nerodia sipedon</i>	Northern water snake	<i>Nerodia s. sipedon</i> (Northern water snake)
<i>Opheodrys vernalis</i>	Smooth green snake	
<i>Storeria dekayi</i>	Brown snake	<i>Storeria d. dekayi</i> (Northern brown snake)
<i>Storeria occipitomaculata</i>	Redbelly snake	<i>Storeria o. occipitomaculata</i> (Northern redbelly snake)
<i>Thamnophis sauritus</i>	Eastern ribbon snake	<i>T. s. sauritus</i> ? (Eastern ribbon snake)  <i>T. s. septentrionalis</i> ? (Northern ribbon snake)  intergrades?
<i>Thamnophis sirtalis</i>	Common garter snake	<i>Thamnophis s. sirtalis</i> ? (Eastern garter snake)  <i>Thamnophis s. pallidulus</i> ? (Maritime garter snake)  intergrades?

\*Each letter represents a set of chromosomes from one of the two parent species: J = *A. jeffersonianum*, L = *A. laterale*. Individuals may have more than the usual two sets of chromosomes.

\*\*one field record at a disjunct site and one photo with no specific location

\*\*\*one juvenile specimen from a disjunct site

\*\*\*\*one disjunct historical site (possible mistake on location of specimens)

\*\*\*\*\*one specimen from a disjunct site (a released captive?) and one historic record (southern VT?)

J.S. Andrews 4/1995

## Your Help Is Requested

James S. Andrews  
Current Chair, Reptile and Amphibian Scientific Advisory Group

### We still have much to learn

I suspect that many people had assumed that the distributions of the reptiles and amphibians of Vermont were already well known. A look at the maps of any of the more common species should make it clear that we are missing records from many areas in Vermont. Not only do we not know the ranges of some species, we may not even have a complete list of all the species that occur within Vermont.

The Vermont portion of the distribution maps that you may have seen in field guides to reptiles and amphibians are primarily based on educated guesses. Generating those maps is an exercise not unlike connecting the dots. The dots are the original locations of museum specimens or records which have been well described in the scientific literature. The lack of records outside of that drawn boundary may be simply because no one ever looked in the right habitat at the right time of year and under the right weather conditions to locate that species. Reptiles and amphibians can be difficult to locate. Even if they were located and identified by people who live and work in a given area, frequently this information was never given to the people making the maps.

The maps included in this document are far from complete. They raise as many questions as they answer. Are the Northern leopard frog and Common musk turtle really absent from southern Vermont? Are there Blue-spotted salamanders along the Connecticut River Valley? Can the Mountain dusky salamander be relocated anywhere in Vermont? Is the Black racer as rare as it seems? Is the Jefferson salamander found at elevations above 1500 ft. in the Green Mountains? There are a great many questions to be answered.

One of the primary purposes of this document is to motivate readers to learn about reptiles and amphibians and encourage them to report their own sightings. **I hope readers will realize how easy it is to make a significant contribution to our knowledge of the distribution of these species in Vermont.** Hopefully, in four or five years, with all the new records that you have sent to us, the Reptile and Amphibian Scientific Advisory Group will print a more comprehensive version of this document.

I hope you will get excited about contributing records. **Make lots of copies of the Reptile and Amphibian Report Form at the back of this document. Get in the habit of filling them out and sending them in!**

## Search tips

Turtles. Although you might stumble upon a turtle at any time of the year, the best time to look for most of them is in the spring as they bask on logs or along the shore of lakes, rivers, ponds, and marshes. In spring the water is still cold and on sunny days turtles bask to raise their body temperatures. An added bonus at this time of year is that much of the annual vegetation has not yet started growing, leaving the turtles much more exposed and easier to see and identify. You will probably need binoculars to see them well enough to make an identification.

Snakes and Lizards. Snakes bask most often in the spring and fall to raise their body temperatures. It is during these two time periods that they are easiest to locate. During the summer you often have to look under rocks and logs or in the shade to find them. May is the month that many snake species first become active. They can often be found basking in open areas (roads, rock ledges, lawns, etc.) particularly on sunny mornings after a cold night. In the fall many young snakes have been added to the population. This increases your chances of finding one. In late September or early October search along small roads that travel between swamps, marshes, and overgrown fields and rocky wooded hillsides. You can often find snakes as they stop to bask in the roads on their way to a denning site.

Frogs and salamanders. All amphibians need to stay moist. The best time to find them is during or immediately after a hard rain. Searching along roads at any time of the year during or after a heavy rain should locate a few species. In the spring many species of frog and salamander migrate to nearby ponds and vernal pools to breed. At this time of year they can often be found in and around small ponds at night with a flashlight. Frogs are easier to locate if you learn their calls. On almost any warm evening between April and July some species of frog will be calling. During summer days you will need to look for them in their moist hiding places. Many salamander species can be found under stones and logs or under the bark of logs and dead trees that hold some moisture. Some frogs stay close to water during summer days to retain their moisture. Search the edges of ponds, streams, and marshes to locate them at this time of year.

## Handling

Don't disturb any reptile and amphibian any more than is necessary. If you need to handle them, do so gently. Keep in mind that **amphibians need to stay moist** and that **both reptiles and amphibians can overheat easily**. Once you have identified them, return them to exactly where you found them. If they were under a piece of cover, return the cover to its place first, then place the animal next to it. In this way you will avoid the chance of injuring the animal when you put the cover on top of them. Return all pieces of cover to their original positions. Leave the woods looking as close as possible to the way you found them.

Permits. The use of live traps or drift fences can be very effective. Use of these methods requires a permit from the Vermont Department of Fish and Wildlife. Any time a reptile or amphibian is to be trapped, extensively handled, experimented with, or removed from its environment, a permit must be obtained. Contact the Vermont Department of Fish and Wildlife, 103 South Main Street, Waterbury, Vermont 05761-0501, phone 241-3700 to request an application form.

### **Documenting records**

Rationale. In order for the Reptile and Amphibian Scientific Advisory Group to produce reliable species distribution maps, we must be absolutely certain of the correct identification of the species and where it was located. The basic idea is that anyone questioning the validity of a report now or twenty years from now could check a photograph or listen to a tape and from that information alone confirm your identification. Many people report rattlesnakes. Upon investigation these snakes usually turn out to be milk snakes or one of the other snake species which mimic rattlesnakes by shaking their tails. This is just one example of the sort of misidentifications which occur. Unfortunately we can not afford the time to check up on all of these reports. So, the Advisory Group decided that future records for the next set of maps should be accompanied by a recognizable photograph or set of photographs. In the case of frogs and toads they should be accompanied either by a photograph or by a cassette of the breeding chorus or individual that you heard. **If you were unable to photograph or tape record the animal, you may still send in a report of it.** If the accompanying details are convincing, the record may be included in the next atlas. Even if it is not included, it may lead someone else to the spot, who can then document the record. The Vermont Reptile and Amphibian Report form asks you for all the necessary information.

Photographs. Often taking a photograph that clearly shows the field marks of a reptile or amphibian is a challenge. I have taken photographs of animals that were recognizable as a snake or a salamander but did not show enough detail to identify the species. When using photos, we need clear photos (prints or slides) showing the field marks necessary to identify the species **from the photograph. On the back of the photograph or casing of the slide write:** your name, the date, the town, the county and the species. In addition if you send in more than one photo, number each one so that they can be referred to on the accompanying data sheet. Use indelible ink. **Keep your camera and flash handy when you are looking for reptiles and amphibians so that you can photograph and release them immediately.**

Cassette tape recordings. If possible, record a number of repeat calls of the frogs and toads on cassette. Usually 30 seconds is long enough, but tape longer if the frog is calling infrequently. Your name, the date, the town, the county, and the species need to be recorded on the tape and written on the cassette. In addition, if you record more than one call on the same tape, number each one so that they can be referred to on the accompanying data sheet. If you have



trouble getting a clear sounding tape, try to catch one of the chorusing frogs. Usually with patience, waterproof boots, and a good flashlight, you can find and catch one of the calling frogs. Once caught you can photograph or carefully describe the animal.

Necessary information. Fill out a Vermont Reptile and Amphibian Report form for each species at each site. If you don't have one, on an accompanying data sheet write: your name, the date, the town, the county, and the species scientific name (look it up in a field guide if you don't know it). Add your address and phone number so that we can contact you if necessary. Make sure you refer to the number of the recorded call, slide or slides that go along with your report. Also, add the exact site where the specimen was located. Use permanent landmarks for this. For example, "Joan DuFresnes' farm" alone would not be enough, but "Joan Dufresnes' farm on rte 7a, .8 miles north of the Battenkill River crossing" would. Use intersections, rivers, lakes, mountains, compass headings, etc. Exact locations are important. Remember to fill out this information as soon as possible. While you are still in the field is best. Don't wait until you get your developed photos back. It is easy to forget details about locations, etc. if you wait before writing them down.

Optional information. If you want to include other natural history notes, please do. Information on the weather conditions, what the animal was doing, if it was dead in the road, how many you saw, what it was eating, how large it was, actual measurements, etc. are all useful pieces of information but not necessary for the report.

Send reports to: Vermont Amphibian and Reptile Project, c/o The Nongame and Natural Heritage Program, Vermont Department of Fish and Wildlife, 103 South Main Street, Waterbury, VT, 05671-0501.

### **Useful sources of information**

Identification. A few good field guides to reptiles and amphibians exist. One that is easy to find, and up to date is:

Conant, R., and J.T. Collins. 1991. A field guide to reptiles and amphibians of Eastern and Central North America. Third Edition, Houghton Mifflin Company, Boston Massachusetts 450 pp.

Natural History. Other excellent sources of local natural history information about New England's reptiles and amphibians are:

DeGraaf, R.M., and D.D. Rudis. 1983. Amphibians and reptiles of New England. The University of Massachusetts Press, Amherst, Massachusetts 85 pp.

Hunter, M.L., J. Albright, and J. Arbuckle (eds.). 1992. The amphibians and reptiles of Maine. Bulletin 838, The Maine Agricultural Experiment Station, University of Maine, Orono, Maine 188 pp.

Klemens, M.K. 1993. Amphibians and reptiles of Connecticut and adjacent regions. State Geological and Natural History Survey of Connecticut, Bulletin No. 112 318 pp.

Tyning, T.F. 1990. A guide to amphibians and reptiles. Little, Brown and Company. Boston Massachusetts 400 pp.

Calls. A very useful tape to help you learn the calls of frogs and toads is:

Eliot, L. 1992. The calls of frogs and toads; Eastern and Central North America. Nature Sound Studio. Ithaca New York.



## Vermont Reptile and Amphibian Report

Please fill out both sides of this report as completely as you can.

Species common name \_\_\_\_\_

Latin name \_\_\_\_\_

Date of sighting \_\_\_\_\_ State \_\_\_\_\_ County \_\_\_\_\_

Town \_\_\_\_\_ Specific location \_\_\_\_\_

Directions to the location \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Describe the habitat (e.g., meadow, marsh, woods). \_\_\_\_\_

\_\_\_\_\_

Who owns the land where this animal was found? \_\_\_\_\_

Good quality photographs or tapes allow others to verify your report. Include copies of them if at all possible. List the tapes and photographs which accompany this record. Be sure to label each tape or photograph.

\_\_\_\_\_

How did you observe the animal? Naked eye? Binoculars? Did you hear it? How far away was it? How long did you observe or hear it? How clearly did you see or hear it?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

What field marks did you use to identify it?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Additional details are needed on the back of this sheet. ---> ---> ---> ---> ---> --->

How familiar are you with this species? Have you identified it before? How many times?

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What field marks did you use to rule out similar species? **This is the most important question. Answer it carefully!**

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Miscellaneous additional information (numbers, lengths, behavior, sex, weather, other species that it was found with, etc.)

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Observers' names, addresses and phone numbers

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SEND REPORTS TO:

**Vermont Amphibian and Reptile Project  
c/o The Nongame and Natural Heritage Program  
Vermont Department of Fish and Wildlife  
103 South Main Street, Waterbury, VT  
05671-0501**

THANKS FOR YOUR HELP!

J.S. Andrews 4/1995