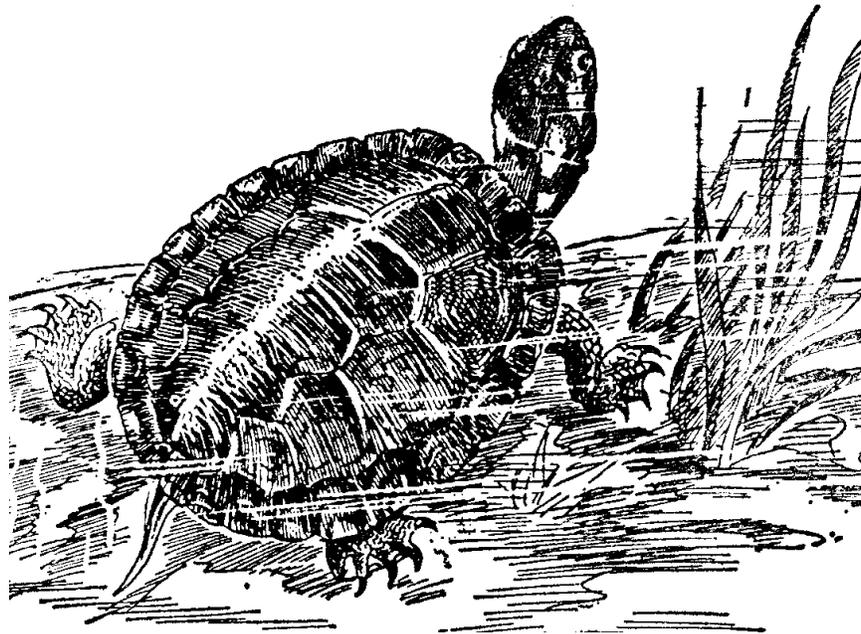


Current Scientific and Standard Common Names of Wisconsin Amphibians and Reptiles



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Summary: We provide an updated checklist of the current scientific and common names of the amphibians and reptiles found in Wisconsin, based on the latest professional society endorsed taxonomy. We identify discrepancies between the endorsed taxonomy and usage by NatureServe. We also include current federal and state conservation status ranks as applied by these agencies. The checklist includes 57 species, with an additional four species noted as hypothetical. No species have been extirpated from the state, and only one species is listed as a federal candidate species. Seven species are listed as state endangered and three as state threatened. Twenty species are listed as species of special concern and 24 are considered species of greatest conservation need in Wisconsin's Wildlife Action Plan. Four species are considered protected wild animals. One turtle and one frog have been introduced in many areas, but also naturally occur. Systematic relationships are constantly being re-evaluated with new techniques, and as a result our understanding of evolutionary relationships and taxonomy constantly changes with no actual on-the-ground change in species populations or distributions. Species may also be added and removed from state and regional faunal lists as populations and range limits fluctuate, and new populations are discovered. As a result, this checklist will inevitably become out-of-date, and the user is well advised to check the primary literature and professional society websites for changes when using current taxonomy.

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Cover Illustration: A Painted Turtle (*Chrysemys picta*), a common Wisconsin reptile.
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Editor: Dreux J. Watermolen

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**Current Scientific and Standard
Common Names of Wisconsin
Amphibians and Reptiles**

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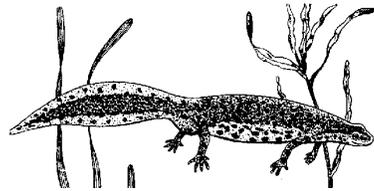
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April 2013

Reptiles and amphibians may be abundant in areas you haunt, but because of their secretive nature they often remain unnoticed. City dwellers strolling the woods watching where they place their feet will often see more of my friends than seasoned ornithologists slipping stealthily through the vegetation with their eyes to the sky. Reptiles and amphibians are much humbler creatures, hopping, crawling, or slithering across the forest floor.

- *Richard C. Vogt, 1981*



Introduction

Amphibian and reptile taxonomy has been undergoing rapid change, largely due to the evolving field of molecular-based systematics. This results in frequent changes to scientific and common names. Since the last published Wisconsin checklist (Casper 2008), a Committee on Standard English and Scientific Names has published a new edition of the *SSAR Herpetological Circular "Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding"* (Crother 2012). The American Society of Ichthyologists and Herpetologists, Canadian Association of Herpetology, Canadian Amphibian and Reptile Conservation Network, Partners in Amphibian and Reptile Conservation, Society for the Study of Amphibians and Reptiles, and The Herpetologists' League have endorsed this list. An online version is revised periodically and maintained at http://www.ssarherps.org/pages/comm_names/Index.php.

Here we present an updated and annotated checklist of the amphibians and reptiles of Wisconsin, addressing changes since Casper (2008). One universal change is the convention that standard English names of species are now capitalized to distinguish them from descriptions and generalized usage (Crother 2012). We also address differences between the professional society endorsed taxonomy and names, and those used by NatureServe (2013), which are typically utilized by Wisconsin's Natural Heritage Inventory program. These differences tend to disappear as NatureServe adopts the society endorsed taxonomy, but there is often a lag time.

No species of amphibian or reptile is known to have disappeared from Wisconsin since settlement (although a few are imperiled), and a history of Wisconsin amphibian and reptile checklists is given in Casper (2008). At that time the list contained 54 species: twelve frogs and toads, seven salamanders (plus a unisexual monophyletic form), four lizards, twenty snakes, and eleven turtles. Here we include one new snake (Raimond and Lorch 2012) and one new turtle (Casper and Anton 2012), and the taxonomy and names of several species have been revised as indicated. This checklist contains 57 species: thirteen frogs and toads, seven salamanders (plus a unisexual monophyletic form), four lizards, twenty-one snakes, and twelve turtles, with subspecies listed. An additional four species are addressed as hypothetical.

We also include federal and state conservation rankings (Table 1, Appendix)¹. As these change periodically, users are advised to check with federal and state agencies for the most current rankings. Of the 57 species included in the checklist, no species have been extirpated from the state. Currently, no species are listed as federally endangered or federally threatened, although the Eastern Massasauga is a candidate species that may be listed as federally threatened in the near future.

¹ These conservation rankings reflect current state and federal laws and planning documents at the time of publication. Inclusion does not necessarily constitute agreement or endorsement of the current rankings by the authors.

Seven species are listed as state endangered (Blanchard’s Cricket Frog, Slender Glass Lizard, Queensnake, Western Ribbonsnake, Eastern Ribbonsnake, Massasauga, and Ornate Box Turtle) and three are listed as state threatened (Butler’s Gartersnake, Blanding’s Turtle, and Wood Turtle). Twenty species are listed as species of special concern on the Wisconsin Natural Heritage Working List and 24 species are considered species of greatest conservation need in the state’s Wildlife Action Plan (see Appendix). In addition to the endangered and threatened species, four species (North American Racer, Gray Ratsnake, Gophersnake, and Timber Rattlesnake) are considered protected wild animals. All species are believed to be native, but two (American Bullfrog, Red-eared Slider) also have established introduced populations.



Table 1. *Symbols used to indicate the conservation status of species.*

- (fe) **federally endangered** – under federal law, any animal or plant in danger of extinction within the foreseeable future throughout all or a significant portion of its range (50 CFR § 17.3).
- (ft) **federally threatened** – under federal law, any animal or plant likely to become endangered within the foreseeable future throughout all or a significant portion of its range (50 CFR § 17.3).
- (se) **state endangered** – under state law, any species whose continued existence as a viable component of this state’s wild animals or wild plants is determined by the Wisconsin DNR to be in jeopardy on the basis of scientific evidence (§ 29.604(2)(a), Wis. Stats.).
- (st) **state threatened** – under state law, any wild animal or plant which appears likely, within the foreseeable future, on the basis of scientific evidence to become endangered (§ 29.604(2)(b), Wis. Stats.).
- (sc) **special concern** – a species, listed on the Wisconsin Natural Heritage Working List, about which some problem of abundance or distribution is suspected but not yet proven. The main purpose of this category is to focus attention on species before they become threatened or endangered; regulations regarding special concern species range from full protection to no protection.
- (sgcn) **species of greatest conservation need** – a species identified in Wisconsin’s Comprehensive Wildlife Conservation Plan (Wildlife Action Plan) as having low and/or declining populations that are in need of conservation action. This category includes species listed as endangered and threatened. See <http://dnr.wi.gov/org/land/er/wwap/> for additional information.

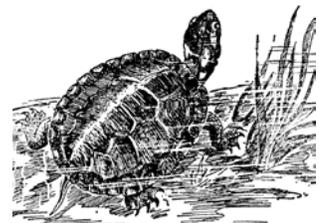
Table 1 Continues...

Table 1, Continued. *Symbols used to indicate the conservation status of species.*

- (ext)** **extirpated** – a species that once occurred naturally within the state's boundary but no longer does even though it may occur elsewhere.
- (int)** **introduced** – a nonindigenous/nonnative species introduced, either intentionally or unintentionally, into an area that is not part of its natural range (in this case Wisconsin).
- (prt)** **protected wild animals** – a species listed, in § NR 10.02, Wis. Adm. Code, as protected. Under this law, no person may take, attempt to take, transport, or possess a protected wild animal unless expressly authorized by the Wisconsin DNR. This category also includes all species listed as endangered and threatened.
-

Naturalists differ most widely in determining what characteristics are of generic value.

- Charles Darwin, 1859



Checklist of the Amphibians and Reptiles of Wisconsin

Class Amphibia: Amphibians

Order Anura: Frogs and Toads

Family Hylidae: Treefrogs

<i>Acris blanchardi</i> ²	Blanchard's Cricket Frog (se) (sgcn)
<i>Hyla chrysoscelis</i> ³	Cope's Gray Treefrog
<i>Hyla versicolor</i> ³	Gray Treefrog
<i>Pseudacris crucifer</i>	Spring Peeper
<i>Pseudacris maculata</i> ⁴	Boreal Chorus Frog (sgcn)
<i>Pseudacris triseriata</i> ⁴	Western Chorus Frog

Family Bufonidae: True Toads

<i>Anaxyrus americanus</i>	American Toad
<i>A. a. americanus</i>	Eastern American Toad



² The distinctiveness of *Acris crepitans blanchardi* from *A. c. crepitans* is now accepted (Crother 2012) based on molecular evidence (Gamble et al. 2008).

³ The *Hyla chrysoscelis/versicolor* complex consists of two reproductively isolated species with differing advertisement call types and ploidy levels (Wasserman 1970). The name *H. versicolor* is assigned to the slow-trilling tetraploids and *H. chrysoscelis* to the fast-trilling diploids. Both species occur in Wisconsin, but differentiating their respective ranges is difficult owing to the need to obtain acoustic or ploidy data to determine species (Vogt 1981, Holloway et al. 2006).

⁴ Once considered separate subspecies of *Pseudacris triseriata* with a hybrid zone described in northwestern Wisconsin (Smith 1956), Platz (1989) elevated *P. maculata* and *P. triseriata* to full specific status based on morphological and mating call differences. Subsequently, Lemmon et al. (2007) revised the geographic ranges for this group based on mitochondrial data, suggesting that all chorus frogs in Wisconsin belong to *P. maculata*, but this study had limited sampling coverage in Wisconsin and the Upper Peninsula of Michigan (UP). There is a large gap in the ranges of these species in the UP with *P. maculata* barely extending east from Wisconsin into the western UP (GSC unpublished data, Harding 1997) and *P. triseriata* occupying roughly the eastern half of the UP and all of Lower Michigan (Harding 1997, Holman 2012). In northwestern Wisconsin, Smith's (1956) hybrid zone deserves additional investigation. Mitochondrial genes are known to cross boundaries between closely related species (Keck and Near 2009), and single genes cannot fully elucidate complex relationships (Good et al. 2008, Row et al. 2011). Therefore, additional investigations are needed before the identities and relationships of these frogs are fully clarified, and we have conservatively retained the geographic division of *P. maculata* and *P. triseriata* in Wisconsin, with *P. maculata* occupying the northwestern corner of Wisconsin, and *P. triseriata* the rest of the state, following Smith (1956), Vogt (1981), and Casper (1996).

Family Ranidae: True Frogs

<i>Lithobates catesbeianus</i>	American Bullfrog (sc)
<i>Lithobates clamitans</i> ⁵	Green Frog
<i>Lithobates palustris</i>	Pickerel Frog (sc) (sgcn)
<i>Lithobates pipiens</i>	Northern Leopard Frog (sc)
<i>Lithobates septentrionalis</i>	Mink Frog (sc) (sgcn)
<i>Lithobates sylvaticus</i>	Wood Frog

Order: Caudata: Salamanders

Family Ambystomatidae: Mole Salamanders

<i>Ambystoma laterale</i> ⁶	Blue-spotted Salamander
<i>Ambystoma maculatum</i>	Spotted Salamander
<i>Ambystoma tigrinum</i> ⁷	Eastern Tiger Salamander

Family Plethodontidae: Lungless Salamanders

<i>Hemidactylium scutatum</i>	Four-toed Salamander (sc) (sgcn)
<i>Plethodon cinereus</i>	Eastern Red-backed Salamander ⁸

Family Proteidae: Mudpuppies and Waterdogs

<i>Necturus maculosus</i>	Mudpuppy (sc) (sgcn)
<i>N. m. maculosus</i>	Common Mudpuppy ⁹ (sc) (sgcn)

Family Salamandridae: Newts

<i>Notophthalmus viridescens</i>	Eastern Newt
<i>N. v. louisianensis</i>	Central Newt



⁵ Recent evidence of interpopulational variation at the molecular level suggests an historical structure inconsistent with the formerly recognized subspecies (Austin and Zamudio 2008), including *Lithobates clamitans melanota* in Wisconsin, and therefore subspecies are now rejected pending further investigation (Crother 2012). NatureServe (2013) still recognizes *L. c. melanota*, but not in Wisconsin and recognizes that distribution data are incomplete or have not been reviewed.

⁶ Unisexual forms of *Ambystoma laterale* and *A. jeffersonianum* (i.e., the triploid form referred to as *A. tremblayi* in Wisconsin) have been recognized and raise complex evolutionary questions (Crother 2012, Bi and Bogart 2012). These unisexual populations form an ancient monophyletic group (Bi and Bogart 2012) and always coexist with populations of *A. laterale* in Wisconsin, whose sperm is required to initiate egg development and whose genome may or may not be incorporated into the developing zygote. This bizarre arrangement usually results in polyploid offspring, which are not hybrids in the normal sense of the word. They might be thought of as parasitizing *A. laterale* for sperm. We conservatively lump all salamanders in this group into *A. laterale* in Wisconsin, until a proper taxonomy for unisexual forms is achieved.

⁷ NatureServe (2013) still recognizes *A. t. tigrinum* in Wisconsin, but this is rejected by Crother (2012).

⁸ NatureServe (2013) uses the old common name Redback Salamander.

⁹ NatureServe (2013) uses the old common name Mudpuppy.

Class Reptilia: Reptiles



Order Squamata (Suborder Lacertilia): Lizards

Family Teiidae: Whiptail Lizards

<i>Aspidoscelis sexlineata</i>	Six-lined Racerunner (sc) (sgcn)
<i>A. s. viridis</i>	Prairie Racerunner (sc) (sgcn)

Family Anguillidae: Slowworms, Glass Lizards, Alligator Lizards

<i>Ophisaurus attenuatus</i>	Slender Glass Lizard (se) (sgcn)
<i>O. a. attenuatus</i>	Western Slender Glass Lizard (se) (sgcn)

Family Scincidae: Skinks

<i>Plestiodon fasciatus</i>	Common Five-lined Skink ¹⁰ (sc)
<i>Plestiodon septentrionalis</i>	Prairie Skink (sc) (sgcn)
<i>P. s. septentrionalis</i>	Northern Prairie Skink (sc) (sgcn)

Order Squamata (Suborder Serpentes): Snakes

Family Colubridae: Typical Snakes ¹¹

<i>Carphophis vermis</i>	Western Wormsnake (sc) (sgcn)
<i>Coluber constrictor</i> ¹²	North American Racer (sc) (sgcn) (prt)
<i>Diadophis punctatus</i>	Ring-necked Snake
<i>D. p. arnyi</i>	Prairie Ring-necked Snake (sc) (sgcn)
<i>D. p. edwardsii</i>	Northern Ring-necked Snake (sc)
<i>Heterodon platirhinos</i>	Eastern Hog-nosed Snake (sc)
<i>Lampropeltis triangulum</i>	Milksnake
<i>L. t. triangulum</i>	Eastern Milksnake
<i>Nerodia sipedon</i>	Common Watersnake
<i>N. s. sipedon</i>	Northern Watersnake
<i>Opheodrys vernalis</i>	Smooth Greensnake

¹⁰ NatureServe (2013) uses the old common name Five-lined Skink.

¹¹ Colubridae is not a natural group, currently including about two-thirds of all known snake species, and is undoubtedly polyphyletic (Lawson et al. 2005). This family has been used as a taxonomic dumping ground for snakes that do not fit elsewhere (Fry et al. 2009). It is hoped that ongoing research will sort out the relations within this group.

¹² The assignment of subspecies to Wisconsin populations of *Coluber constrictor* remains unclear, with both *C. c. flaviventris* and *C. c. foxii*, or intergrades of them, possible (Burbrink et al. 2008, Crother 2012). We await future research to resolve this taxonomy. NatureServe (2013) uses the old common name Racer.

<i>Pantherophis spiloides</i> ¹³	Gray Ratsnake (sc) (sgcn) (prt)
<i>Pantherophis vulpinus</i> ¹⁴	Western Foxsnake
<i>Pituophis catenifer</i>	Gophersnake (sc) (sgcn) (prt)
<i>P. c. sayi</i>	Bullsnake (sc) (sgcn) (prt)
<i>Regina septemvittata</i>	Queensnake ¹⁵ (se) (sgcn)
<i>Storeria dekayi</i>	Dekay's Brownsnake ¹⁶
<i>S. d. texana</i>	Texas Brownsnake
<i>S. d. wrightorum</i>	Midland Brownsnake
<i>Storeria occipitomaculata</i>	Red-bellied Snake
<i>S. o. occipitomaculata</i>	Northern Red-bellied Snake
<i>Thamnophis butleri</i>	Butler's Gartersnake (st) (sgcn)
<i>Thamnophis proximus</i>	Western Ribbonsnake (se) (sgcn)
<i>T. p. proximus</i>	Orange-striped Ribbonsnake ¹⁷ (se) (sgcn)
<i>Thamnophis radix</i>	Plains Gartersnake ¹⁸ (sc)
<i>Thamnophis sauritus</i>	Eastern Ribbonsnake (se) (sgcn)
<i>T. s. septentrionalis</i>	Northern Ribbonsnake (se) (sgcn)
<i>Thamnophis sirtalis</i> ¹⁹	Common Gartersnake
<i>Tropidoclonion lineatum</i>	Lined Snake ²⁰ (sc)



¹³ The former *Elaphe obsoleta* has been divided into three species (Burbrink et al. 2000; Burbrink 2001), of which *Pantherophis spiloides* is now considered to be the species occupying Wisconsin. NatureServe (2013) uses an alternative common name Central Rat Snake.

¹⁴ Harding (1997) placed *P. vulpinus* in all of Wisconsin and Michigan's Upper Peninsula and the Eastern Foxsnake (*P. gloydi*) in Lower Michigan. While Crother et al. (2011) proposed that Wisconsin populations be lumped with the disjunct eastern *P. gloydi* in Lower Michigan and the name replaced with *P. ramspotti*, this conclusion was based solely on mitochondrial genes, which can cross species boundaries (Keck and Near 2009), and is not concordant with morphological analyses (Conant 1940). Row et al. (2011) concluded that sequence data from the cytochrome *b* region of mtDNA showed minimal variation and patterns were not consistent with nuclear DNA analysis nor corresponded with the current distribution of fragmented populations. They identified a clear split between the currently recognized ranges of *P. gloydi* and *P. vulpinus*. Holman (2012) placed *P. vulpinus* in Michigan's Upper Peninsula and *P. gloydi* in Lower Michigan, while recognizing that the matter remains unresolved. We conservatively retain *P. vulpinus* for the form occupying Wisconsin following Row et al. (2011). NatureServe (2013) applies the common name Eastern Foxsnake to both *P. gloydi* and *P. vulpinus*, which we suspect is an error.

¹⁵ NatureServe (2013) uses the common name Queen Snake.

¹⁶ NatureServe (2013) uses the common name Brownsnake.

¹⁷ NatureServe (2013) uses the common name Western Ribbonsnake.

¹⁸ NatureServe (2013) still recognizes suppressed subspecies (Rossman et al. 1996).

¹⁹ The subspecies of this widespread taxon likely require revision and are sure to change in the future (Mooi et al. 2011). Individuals conforming to descriptions of three subspecies have been recorded in Wisconsin (Casper 1996): Red-sided Gartersnake (*Thamnophis sirtalis parietalis*), Chicago Gartersnake (*T. s. semifasciatus*), and Eastern Gartersnake (*T. s. sirtalis*).

²⁰ An isolated population was recently discovered in Iowa County, Wisconsin, at a prairie preserve (Raimond and Lorch 2012). This is disjunct from the nearest other known population in Illinois, and we currently view it as a relic population, from a time when the species had a more widespread distribution.

Family Viperidae: Viperids

<i>Crotalus horridus</i>	Timber Rattlesnake (sc) (sgcn) (prt)
<i>Sistrurus catenatus</i>	Massasauga (se) (sgcn)
<i>S. c. catenatus</i>	Eastern Massasauga (se) (sgcn)

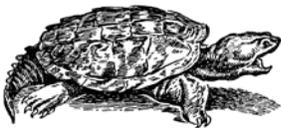
Order Testudines: Turtles

Family Chelydridae: Snapping Turtles

<i>Chelydra serpentina</i> ²¹	Snapping Turtle
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Family Emydidae: Pond and Marsh Turtles

<i>Chrysemys picta</i>	Painted Turtle ²²
<i>C. p. bellii</i>	Western Painted Turtle
<i>C. p. marginata</i>	Midland Painted Turtle
<i>Emydoidea blandingii</i>	Blanding's Turtle (st) (sgcn)
<i>Glyptemys insculpta</i>	Wood Turtle (st) (sgcn)
<i>Graptemys geographica</i>	Northern Map Turtle ²³
<i>Graptemys ouachitensis</i>	Southern Map Turtle ²⁴
<i>G. o. ouachitensis</i>	Ouachita Map Turtle
<i>Graptemys pseudogeographica</i>	False Map Turtle (sc)
<i>G. p. pseudogeographica</i>	Northern False Map Turtle ²⁵ (sc)
<i>Terrapene ornata</i>	Ornate Box Turtle (se) (sgcn)
<i>T. o. ornata</i>	Plains Box Turtle ²⁶ (se) (sgcn)



²¹ Shaffer et al. (2008) concluded that *Chelydra serpentina* is a "single, virtually invariant lineage" and hence the recognition of subspecies has been abandoned (Crother 2012). NatureServe (2013) still recognizes the suppressed subspecies.

²² NatureServe (2013) uses the common name Northern Painted Turtle.

²³ NatureServe (2013) uses the common name Common Map Turtle.

²⁴ NatureServe (2013) uses the common name Ouachita Map Turtle.

²⁵ NatureServe (2013) uses the common name False Map Turtle.

²⁶ No explanation is provided for the common name change from Ornate to Plains, but this distinguishes the subspecies from the species common names (Crother 2012). NatureServe (2013) uses the common name Ornate Box Turtle for both the species and subspecies.

Trachemys scripta
T. s. elegans

Pond Slider ²⁷
Red-eared Slider ²⁷

Family Kinosternidae: Mud and Musk Turtles

Sternotherus odoratus Eastern Musk Turtle ²⁸

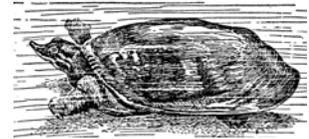
Family Trionychidae: Softshells

Apalone mutica
A. m. mutica

Smooth Softshell **(sc) (sgcn)**
Midland Smooth Softshell **(sc)**
(sgcn)

Apalone spinifera
A. s. spinifera ²⁹

Spiny Softshell
Eastern Spiny Softshell



²⁷ This species is common in the pet trade and has become established in many United States and foreign locations outside of its natural range, which extends north to northern Illinois in the western Great Lakes region (Ernst and Lovich 2009). In Wisconsin, records exist from Bayfield, Brown, Buffalo, Dane, Kenosha, Milwaukee, and Pierce counties (Cochran et al. 1987, Casper and Anton 2012, Wisconsin Herp Atlas 2012), which are often presumed to be escaped or released pets. Adler (1968) and Holman (1990, 1992, 1994, 2012), however, postulated that *Trachemys scripta* occupied Wisconsin and Michigan in the recent past, based on archeological records from central Sauk County, Wisconsin (ca. 800 ybp; Parmalee 1960) and Saginaw County, Michigan (ca. 2,500 to 1,600 ybp; Cleland 1966). These specimens were interpreted as locally collected, rather than originating from inter-tribal trade, by both Adler (1968) and Holman (*op. cit.*). Holman (1994, 2012) further hypothesized that some modern northern populations actually may be relicts from warmer mid-Holocene times when the species was distributed more widely, rather than recent introductions. In Wisconsin, breeding is suspected at some locations and unassisted immigration into Wisconsin via rivers shared with Illinois and Iowa is occurring (i.e. the Des Plaines, Fox, Illinois, Kankakee and Mississippi rivers). It likely will continue to expand northward with ongoing climate change. Based on these recent observations, ongoing unassisted immigration from Illinois and Iowa, archeological evidence for past occurrence, and evidence of established (albeit sometimes introduced) populations, we now recognize *T. scripta* as part of Wisconsin's evolving herpetofauna. Questions over origins and status await resolution through future research. NatureServe (2013) uses the common name Slider for *T. scripta*.

²⁸ The name Common has been changed to Eastern to avoid implying this turtle is abundant (Crother 2012). We preferred the more colorful but now abandoned name Stinkpot. NatureServe (2013) still uses the common name Common Musk Turtle.

²⁹ The former Western Spiny Softshell (*Apalone spinifera hartwegi*) has been synonymized with *A. s. spinifera* (McGaugh et al. 2008), which is the subspecies in all of Wisconsin.

Hypothetical and Potentially Occurring Species

Class Amphibia: Amphibians

Order Anura: Frogs & Toads

Family Bufonidae: Toads

Anaxyrus fowleri

Fowler's Toad ³⁰

Class Reptilia: Reptiles

Order Squamata (Suborder Serpentes): Snakes

Family Colubridae: Typical Snakes ¹¹

Heterodon nasicus
Virginia valeriae

Plains Hog-nosed Snake ³¹
Smooth Earthsnake ³²

Order Testudines: Turtles

Family Emydidae: Pond and Marsh Turtles

Terrapene carolina
T. c. carolina

Eastern Box Turtle ³³
Eastern Box Turtle ³³



³⁰ This species historically ranged close to the extreme southeastern Wisconsin state line in Lake and Cook counties, Illinois (Phillips et al. 1999). Specimens (FMNH 2247, 3249, 8300) were collected from "Beach" near Waukegan between 1907 and 1925. The most likely place for this toad to appear in Wisconsin would be at Chiwaukee Prairie, a large coastal prairie wetland complex with undulating ridges and swales, just north of the state line in Kenosha County, where suitable habitat exists but the species has not yet been found (Wisconsin Herp Atlas 2012).

³¹ There is a single known record from Wisconsin in 1946, and a population may yet be discovered in prairies along the Mississippi River (Casper 1996). The species occurs in Minnesota just across the Mississippi River from Wisconsin (Oldfield and Moriarty 1994). NatureServe (2013) uses the common name Western Hog-nosed Snake.

³² Casper (1996) discusses the single known Wisconsin record, possibly a displaced individual.

³³ A common species in the pet trade, several observations are known from east-central Wisconsin (Wisconsin Herp Atlas 2012). This species is a resident at similar latitudes on the east coast of Lake Michigan (Harding 1997, Holman 2012), and in northeastern Illinois (Lake, Cook, and Will counties; Phillips et al. 1999), suggesting that introduced individuals or relict populations may exist in or near Wisconsin. Until specimens are obtained and origins derived, we consider this species to be hypothetical in Wisconsin.

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Appendix: Species Included in Each Conservation Status Category (for category definitions, see Table 1)

Federally Endangered Species

None

Federally Threatened Species

None (but one candidate species, Eastern Massasauga)

State Endangered Species

Blanchard's Cricket Frog
Slender Glass Lizard
Queensnake
Western Ribbonsnake
Eastern Ribbonsnake
Massasauga
Ornate Box Turtle

State Threatened Species

Butler's Gartersnake
Blanding's Turtle
Wood Turtle

Species of Special Concern

American Bullfrog
Pickerel Frog
Northern Leopard frog
Mink Frog
Four-toed Salamander
Mudpuppy
Six-lined Racerunner
Common Five-lined Skink
Prairie Skink
Western Wormsnake
North American Racer
Ring-necked Snake
Eastern Hog-nosed Snake
Gray Ratsnake
Gophersnake
Plains Gartersnake
Lined Snake
Timber Rattlesnake
False Map Turtle
Smooth Softshell

Species of Greatest Conservation Need

Blanchard's Cricket Frog
Boreal Chorus Frog
Pickerel Frog
Mink Frog
Four-toed Salamander
Mudpuppy
Six-lined Racerunner
Slender Glass Lizard
Prairie Skink
Western Wormsnake
North American Racer
Prairie Ring-necked Snake
Gray Ratsnake
Gophersnake
Queensnake
Butler's Gartersnake
Western Ribbonsnake
Eastern Ribbonsnake
Timber Rattlesnake
Massasauga
Blanding's Turtle
Wood Turtle
Ornate Box Turtle
Smooth Softshell

Extirpated Species

None

Introduced Species

None (but American Bullfrog and Red-eared Slider have established introduced populations)

Protected Wild Animals

North American Racer
Gray Ratsnake
Gophersnake
Timber Rattlesnake



About the Authors

Gary S. Casper spent most of his career at the Milwaukee Public Museum, where he managed amphibian and reptile collections, started the first herptile photo voucher collection for Wisconsin, and launched the Wisconsin Herp Atlas. He obtained his Ph.D. in Biological Sciences from the University of Wisconsin-Milwaukee with a dissertation on herptile biogeography. He is currently an Associate Scientist with the UW-M Field Station in Saukville and is president of Great Lakes Ecological Services, LLC. Gary's current research focuses on wildlife habitat restoration planning, distribution and monitoring of primary burrowing crayfish in Wisconsin, and conservation and monitoring of herptiles in the western Great Lakes region.

Thomas G. Anton spent most of his career at the Field Museum of Natural History in Chicago, where he managed amphibian, reptile, fish, and insect collections. He has worked as a wildlife biologist for county wildlife agencies in northeastern Illinois as both an employee and a private contractor/consultant. Thomas holds a B.S. in Environmental Biology and an M.A. in History. He is president of the Ecological Consulting Group, LLC, a consulting firm focused on the inventory, management, and monitoring of amphibians, reptiles, native fishes, and crayfishes in the Chicago region. He is a Field Research Associate in the Division of Amphibians and Reptiles at the Field Museum in Chicago.

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 - collaborating with local, state, regional, and federal agencies and academic institutions in Wisconsin and around the world.
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