

# A guide to the Reptiles and Amphibians of University Farm

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# Important notes on this guide

- ❖ This is an introductory guide to the reptile and amphibian species of University farm.
- ❖ It lists the species present or possibly present, and attempts to provide baseline information that will be useful to anyone wishing to learn more about the reptiles & amphibians found here.
- ❖ The physical descriptions are of the most common forms, as there is variation within some species.
- ❖ Make sure you have a good field guide in hand before setting off to discover the reptiles & amphibians of the farm!

# Important notes on this guide

- ❖ Throughout this guide you will find notes on the conservation status of species, both in the state of Ohio and worldwide.
  - ❖ Extirpated: A species that occurred in Ohio at the time of European settlement and has since disappeared from the state.
  - ❖ Extinct: A species that occurred in Ohio at the time of European settlement and has since disappeared worldwide.
  - ❖ Endangered: A species in immediate danger of becoming extirpated or extinct.
  - ❖ Threatened: A species that, with increased or continued danger, will become endangered.
  - ❖ Species of Concern: A species that, with increased or continued danger, will become threatened.
- ❖ Currently, there are no reptiles or amphibians of Ohio that are listed as extirpated or extinct.

# Class Reptilia - Reptiles

- ❖ Cold blooded
- ❖ Young hatch from eggs
- ❖ Young are “miniature adults”, resembling adults in appearance from the moment they hatch
- ❖ Skin covered with scales, shields or plates
- ❖ Toes have claws (except the leatherback sea turtle)
- ❖ Includes crocodilians, turtles, lizards, and snakes

# *Chelydra serpentina*

## Snapping turtle

- ❖ Class Reptilia
  - ❖ Order Testudinata
    - ❖ Suborder Cryptodira
      - ❖ Family Chelydridae
- ❖ Found in any permanent body of fresh water
- ❖ Long “saw tooth” tail, pointed carapace
- ❖ Observed in most ponds and the fields between them; common on property



Source: <http://www.naturealmanac.com/archive/snappers/sn.jpg>

# *Chrysemys picta*

## Midland painted turtle

- ❖ Class Reptilia
  - ❖ Order Testudinata
    - ❖ Suborder Cryptodira
      - ❖ Family Emydidae
- ❖ Found in shallow water with soft, muddy bottom
- ❖ Scutes in straight rows on back, yellow spots on side of head
- ❖ Observed in all ponds; abundant on property



Source:<http://www.cortland.edu/herp/keys/images/turtles/cpictalg.jpg>

# *Terrapene carolina carolina*

## Eastern box turtle

Species of concern in Ohio

- ❖ Class Reptilia
  - ❖ Order Testudinata
    - ❖ Suborder Cryptodira
      - ❖ Family Emydidae
- ❖ Found in wooded areas beneath logs, most mobile after rains
- ❖ Variable coloration; “land” turtle with high domed shell
- ❖ One sighting near Wade pond; apparently scarce on property



Source: <http://marriageequalityca.org/events/2004/nationalrally/stories/coyote/img/2004-10-14/eastern-box-turtle-lg.jpg>

# *Eumeces fasciatus*

## Five-lined skink

- ❖ Class Reptilia
  - ❖ Order Squamata
    - ❖ Suborder Sauria
      - ❖ Family Scincidae
- ❖ Commonly found under or around decaying wood
- ❖ Blue tail of juveniles fades in adulthood
- ❖ One possible sighting reported on the property; likely scarce



© John White

Source: [http://fwie.fw.vt.edu/VHS/Southeastern%20Five-lined%20Skink%20\(Eumeces%20inexpectatus\).JPG](http://fwie.fw.vt.edu/VHS/Southeastern%20Five-lined%20Skink%20(Eumeces%20inexpectatus).JPG)

# *Coluber constrictor constrictor*

## Black racer

- ❖ Class Reptilia
  - ❖ Order Squamata
    - ❖ Suborder Serpentes
      - ❖ Family Colubridae
- ❖ Found in woods and fields, climbs when cornered
- ❖ Plain black on top and bottom
- ❖ One possible sighting reported on the property; likely scarce



Source: <http://www.pitt.edu/~mcs2/herp/snake.pics/racer.jpg>

# *Elaphe obsoleta obsoleta*

## Black rat snake

- ❖ Class Reptilia
  - ❖ Order Squamata
    - ❖ Suborder Serpentes
      - ❖ Family Colubridae
- ❖ Commonly found in virtually any upland site
- ❖ Black top (sometimes mottled) with gray-white bottom
- ❖ One possible sighting reported on the property; likely scarce



Source: <http://www.bio.davidson.edu/people/midorcas/research/Field%20trips/SREL%20'02/Elaphe%20obsoleta%20-%209.20.02%20-%20SREL,%20SC%20-%204.jpg>

# *Nerodia sipedon sipedon*

## Northern water snake

- ❖ Class Reptilia
  - ❖ Order Squamata
    - ❖ Suborder Serpentes
      - ❖ Family Colubridae
- ❖ Found in swamps, marshes & edges of streams, ponds and lakes
- ❖ Variable appearance, but this is the only large water snake in the area
- ❖ Observed in several ponds; likely abundant on the property



Source: [http://rol.freenet.columbus.oh.us/Reptiles\\_NWSnake.gif](http://rol.freenet.columbus.oh.us/Reptiles_NWSnake.gif)

# *Regina septemvittata*

## Queen snake

- ❖ Class Reptilia
  - ❖ Order Squamata
    - ❖ Suborder Serpentes
      - ❖ Family Colubridae
- ❖ Found in small stony creeks and rivers
- ❖ Yellow stripe on side, 4 brown stripes on yellow bottom
- ❖ One possible sighting on the property; likely scarce



© John White

Source: [http://www.neherp.com/img/jw/queen\\_snakeC.jpg](http://www.neherp.com/img/jw/queen_snakeC.jpg)

# *Thamnophis sirtalis sirtalis*

## Eastern garter snake

- ❖ Class Reptilia
  - ❖ Order Squamata
    - ❖ Suborder Serpentes
      - ❖ Family Colubridae
- ❖ Found almost anywhere
- ❖ Variable markings, normally have three yellowish stripes on top/sides with black spots between them
- ❖ Observed in almost every area of property; abundant



Source: <http://www.bio.davidson.edu/people/midorcas/research/Field%20trips/SREL03/Thamnophis%20sirtalis%20sirtalis.JPG>

# *Storeria dekayi dekayi*

## Northern brown snake

- ❖ Class Reptilia
  - ❖ Order Squamata
    - ❖ Suborder Serpentes
      - ❖ Family Colubridae
- ❖ Found in urban and moist rural sites, though often hiding
- ❖ Brown with two parallel rows of black spots on back
- ❖ No verified sightings on property, but is likely abundant



Northern brown snake *Storeria dekayi*

© Eran Kilpatrick

Source: <http://www.clemson.edu/cef/Herp%20Images%20for%20web%20site/Serpentes/Storeria%20dekayi%202.jpg>

# *Lampropeltis triangulum triangulum*

## Eastern milk snake

- ❖ Class Reptilia
  - ❖ Order Squamata
    - ❖ Suborder Serpentes
      - ❖ Family Colubridae
- ❖ Found in rural buildings, fields, rivers and hillsides
- ❖ Strongly patterned; differs from copperhead in that patterns continue onto head
- ❖ No verified sightings on property, but is likely common



Source: [http://www.herpnet.net/IowaHerpetology/images/snakes/eastern\\_milksnake.jpg](http://www.herpnet.net/IowaHerpetology/images/snakes/eastern_milksnake.jpg)

# Summary of Reptiles at the University Farm

## ❖ Class Reptilia

### ❖ Order Testudinata

#### ❖ Suborder Cryptodira

##### ❖ Family Chelydridae

❖ *Chelydra serpentina* C

##### ❖ Family Emydidae

❖ *Chrysemys picta* A

❖ *Terrapene carolina carolina* S

### ❖ Order Squamata

#### ❖ Suborder Sauria

##### ❖ Family Scincidae

❖ *Eumeces fasciatus* S

### ❖ Order Squamata (contd.)

#### ❖ Suborder Serpentes

##### ❖ Family Colubridae

❖ *Coluber constrictor constrictor* S

❖ *Elaphe obsoleta obsoleta* S

❖ *Nerodia sipedon sipedon* A

❖ *Regina septemvittata* S

❖ *Thamnophis sirtalis sirtalis* A

❖ *Storeria dekayi dekayi* P

❖ *Lampropeltis triangulum triangulum* P

A = abundant      C = common      S = scarce  
P = possible to see, though not previously reported

# Class Amphibia - Amphibians

- ❖ Cold blooded
- ❖ Young hatch from eggs
- ❖ Young are in a larval (usually aquatic) stage, and metamorphose into adults
- ❖ Skin moist and glandular
- ❖ Toes without claws
- ❖ Includes salamanders, toads and frogs

# *Notophthalmus viridescens viridescens*

## Red-spotted newt, Red eft

- ❖ Class Amphibia
  - ❖ Order Urodela
    - ❖ Family Salamandridae
- ❖ Found in permanent and semi permanent unpolluted bodies of water
- ❖ Bright red spots of variable number and position
- ❖ Observed in wooded ravines and wetlands; abundant



Source: [http://www.keiriosity.com/other\\_pictures/salamanders/notophthalmus\\_viridescens\\_viridescens.jpg](http://www.keiriosity.com/other_pictures/salamanders/notophthalmus_viridescens_viridescens.jpg)

# *Desmognathus fuscus fuscus*

## Northern dusky salamander

- ❖ Class Amphibia
  - ❖ Order Urodela
    - ❖ Family Plethodontidae
- ❖ Found along the edges of woodland streams
- ❖ Dorsal keel on tail; gray or brown in color
- ❖ One possible observation in wooded ravine; likely scarce on property



Source: [http://www.agurodela.de/daten\\_arten/desmognathus/fuscus/desmognathus\\_fuscus3.jpg](http://www.agurodela.de/daten_arten/desmognathus/fuscus/desmognathus_fuscus3.jpg)

# *Desmognathus ochrophaeus*

## Mountain dusky salamander

- ❖ Class Amphibia
  - ❖ Order Urodela
    - ❖ Family Plethodontidae
- ❖ Found along the edges of woodland streams
- ❖ Round tail; stripe of varying colors down back and tail; black chevrons down back; fade from orange to brown as adults
- ❖ Observed in many ravines and streams; abundant



Source: <http://www.brevard.edu/science/MtnDusky4.jpg>

# *Eurycea bislineata*

## Northern two-lined salamander

- ❖ Class Amphibia
  - ❖ Order Urodela
    - ❖ Family Plethodontidae
- ❖ Found around the edges of woodland streams
- ❖ Two dark dorsal lines; dorsal coloration is variable shades of yellow
- ❖ Observed in many ravines and streams; abundant



Source: [http://www.agurodela.de/daten\\_arten/eurycea/bislineata/eurycea\\_bislineata.jp](http://www.agurodela.de/daten_arten/eurycea/bislineata/eurycea_bislineata.jp)

# *Plethodon cinereus*

## Red-backed salamander

- ❖ Class Amphibia
  - ❖ Order Urodela
    - ❖ Family Plethodontidae
- ❖ Commonly found in moist, undisturbed wooded areas
- ❖ Large red stripe from head to tail, though some individuals are solid gray/black
- ❖ Observed in wet areas of arboretum woods; abundant



Source: <http://www.cortland.edu/herp/keys/images/salamand/pcinelg1.jpg>

# *Plethodon glutinosus*

## Slimy salamander

- ❖ Class Amphibia
  - ❖ Order Urodela
    - ❖ Family Plethodontidae
- ❖ Commonly found on wooded ravines and hillsides
- ❖ Black with white or brass colored spots
- ❖ Observed in one ravine; likely common



Source: <http://www.tiherp.org/pix/Caudata/Plethodon%20glutinosus.jpg>

# *Bufo americanus*

## American toad

- ❖ Class Amphibia
  - ❖ Order Anura
    - ❖ Family Bufonidae
- ❖ Found anywhere relatively close to shallow water for breeding
- ❖ Most are brown with highly warted skin
- ❖ Observed virtually everywhere on the property; abundant



Source: <http://www.cortland.edu/herp/keys/images/frogs/bamerilg.jpg>

# *Pseudacris cricifer*

## Spring peeper

- ❖ Class Amphibia
  - ❖ Order Anura
    - ❖ Family Hylidae
- ❖ Found in forests, typically in secondary growth areas
- ❖ Brown with imperfect, dark “X” on back
- ❖ Observed in the field by the experimental pond; abundant



Source: <http://www.kbs.msu.edu/ACWA/natres/natgrh/frogtoad/speeper.gif>

# *Rana catesbeiana*

## Bull frog

- ❖ Class Amphibia
  - ❖ Order Anura
    - ❖ Family Ranidae
- ❖ Found along the edges of bodies of water, prefers large bodies of water
- ❖ “Mesh” gray/brown pattern on green back
- ❖ Observed in the insect, upper and wade ponds; abundant



Source: [http://deathvalley.us/amphibians/rana\\_catesbeiana\\_1.jpg](http://deathvalley.us/amphibians/rana_catesbeiana_1.jpg)

# *Rana clamitans melanota*

## Green frog

- ❖ Class Amphibia
  - ❖ Order Anura
    - ❖ Family Ranidae
- ❖ Found in shallow, fresh water
- ❖ Variable coloration; green/brown above, brown/gray below
- ❖ Observed in all ponds and several ravines; abundant



Source: <http://www.kbs.msu.edu/ACWA/natres/natrgrh/frogtoad/green.gif>

# *Rana palustris*

## Pickerel frog

- ❖ Class Amphibia
  - ❖ Order Anura
    - ❖ Family Ranidae
- ❖ Found in bogs, rocky ravines and shallow streams
- ❖ Tan with two lines of dark, square spots down back
- ❖ Observed in several ravines, ponds and marshy areas; abundant



Source: [http://www.herpnet.net/IowaHerpetology/images/Frogs\\_Toads/Pickerel\\_frog.jpg](http://www.herpnet.net/IowaHerpetology/images/Frogs_Toads/Pickerel_frog.jpg)

# Summary of Amphibians at the University Farm

## ❖ Class Amphibia

### ❖ Order Urodela

#### ❖ Family Salamandridae

❖ *Notophthalmus viridescens viridescens* A

#### ❖ Family Plethodontidae

❖ *Desmognathus fuscus fuscus* S

❖ *Desmognathus ochrophaeus* A

❖ *Eurycea bislineata* A

❖ *Plethodon cinereus* A

❖ *Plethodon glutinosus* C

### ❖ Order Anura

#### ❖ Family Bufonidae

❖ *Bufo americanus* A

#### ❖ Family Hylidae

❖ *Pseudacris cricifer* A

#### ❖ Family Ranidae

❖ *Rana catesbeiana* A

❖ *Rana clamitans melanota* A

❖ *Rana palustris* A

A = abundant      C = common      S = scarce  
P = possible to see, though not previously reported

# References

- ❖ A Field Guide to Reptiles and Amphibians of Eastern and Central North America. Third Edition, expanded.
- ❖ Case Western Reserve University Farm Inventory and Analysis. 1983