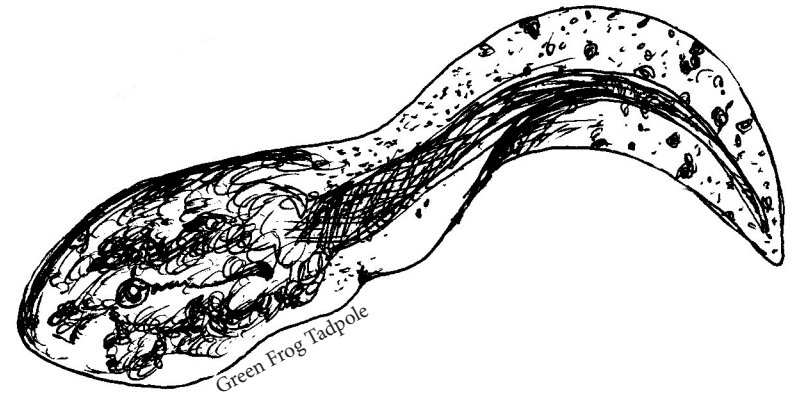

Amphibians of Carleton College Cowling Arboretum



Carleton College's Cowling Arboretum (the Arb) is home to eight species of amphibians, including frogs, toads, and one salamander. They dwell in a variety of habitats throughout the Arb's approximately 880 acres, ranging from ponds to wooded areas to prairie.

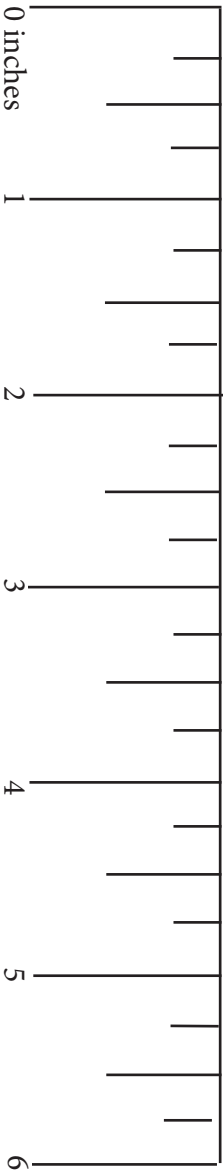
This guide is designed to help the outdoor enthusiast identify species encountered in the field, and locate areas where certain species are most likely to be.

www.carleton.edu/campus/arb

Arboretum Office: 507-222-4543

Table of Contents

Introduction.....	1
American Toad.....	2
Gray and Cope’s Gray Treefrogs.....	3
Bullfrog.....	4
Green Frog.....	5
Arboretum Map.....	6-7
Wood Frog.....	8
Northern Leopard Frog.....	9
Western Chorus Frog.....	10
Eastern Tiger Salamander.....	11
Field Notes.....	12



Illustrations and Pamphlet by
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Field Notes

Introduction

This is a basic guide for the beginning amphibian enthusiast. It is meant to help identify any frogs, toads, or salamanders encountered in the Arb, and offer some helpful identifying characteristics.

Many of the species in this guide are more commonly heard than seen, so a brief description of the call has been included. Each species is active at different times of year, and calls are especially prevalent during breeding periods. These are listed for each species.

Different species are more likely to be encountered in certain arboretum habitats. The specific places listed for likely encounters of certain species are based on results from past Frog and Toad surveys, and correspond with the Arboretum map that can be found on pages 6-7.

Enjoy your time in the Arboretum! Any questions can be directed to the arboretum office, and more information is available on the Arboretum website.

Habitat Descriptions

A brief overview of the primary arboretum wetland habitats and their locations on the Arboretum Map.

Lyman Lakes: created in 1916-1917 as a gift to the college (6E and 5F)

Retention Pond: created to hold water run-off from the newly constructed Recreation Center and parking lot in 1999, surrounded by prairie planting (D7-E7)

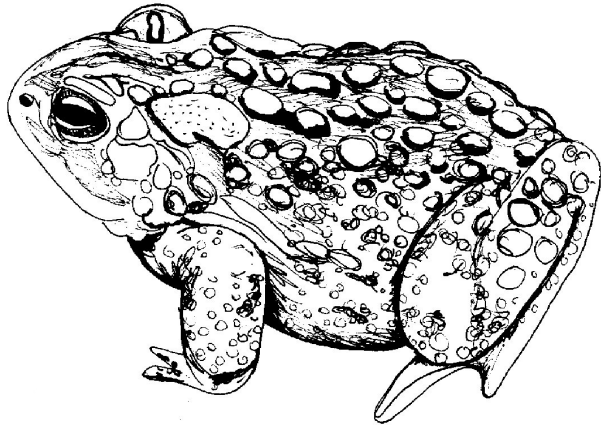
Turtle Pond: created by excavation in 1998 (F12)

Kettlehole Marsh: natural water habitat, mostly undisturbed and important breeding site, surrounded by oak savanna (J13)

Oxbow Pond: natural pond, surrounded by woodland (J17)

unnamed pond: natural pond, surrounded by woodland (M18)

American Toad
Bufo Americanus



Size: 2-3 ½ inches

Appearance: usually plain brown base color with brown/black spots and 1-2 warts in large dark spots, yellow, orange, red or brown (color typically matches environment)

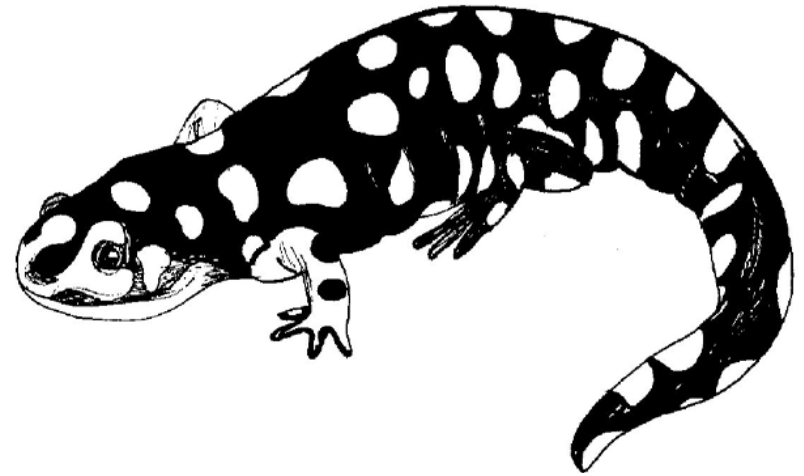
Habitat: forests, woodlands, prairies, oak savannas with shallow pools of water

Possible Arb Locations: (numerous locations) near Lyman Lakes, Retention Pond, Turtle Pond, Oxbow Pond, and the unnamed pond, Kettle Hole Marsh

Call: long trill (up to 30 sec) and short squeaks

Breeding: May through June

Eastern Tiger Salamander
Ambystoma tigrinum



Size: 7-8 ½ inches

Appearance: Dull black to dark brown body with light, irregular spots (olive or yellow-brown), olive-yellowish belly with darker marbling

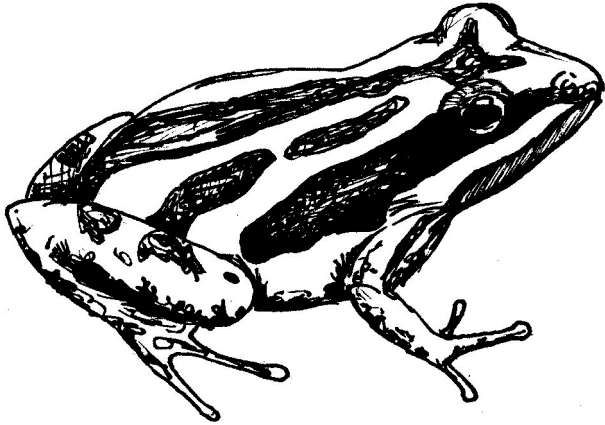
Habitat: woods and open areas, breed in ponds

Possible Arb Locations: This species has only been sighted a few times in the Arboretum, in the vicinity of Kettle Hole Marsh. Report to Arboretum office if seen.

Call: none

Breeding: begins late winter/early spring

Western Chorus Frog
Pseudacris triseriata



Size: $\frac{3}{4}$ - 1 $\frac{1}{2}$ inches

Appearance: Pale gray to dark brown, can be olive or gray-green, typically has 3 dark stripes on back

Habitat: Prairie with shallow bodies of water, marshes, swamps

Possible Arb Locations: Turtle Pond, Oxbow Pond and unnamed pond, Kettle Hole Marsh

Call: metallic clicks, like running finger over comb teeth

Breeding: March through April

Gray and Cope's Gray Treefrog
Hyla versicolor and Hyla chrysoscelis



Size: 1 $\frac{1}{4}$ -2 inches

Appearance: Gray to green, often blotchy, with yellow or orange between hind legs

Habitat: Forested areas, prairie/forest interfaces (Cope's Gray more on edge of wooded areas)

Possible Arb Locations: near Turtle Pond, Oxbow Pond and unnamed pond, Kettle Hole Marsh, near entrance to lower Arb across from Arb Office

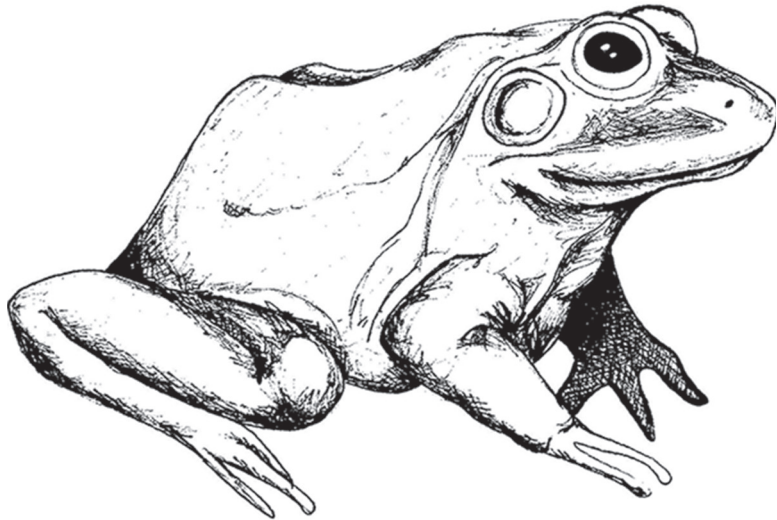
Calls: Gray - short, musical trill

Cope's - fast, high-pitched, buzzy trill

Breeding: May through June

Note: the two species only be accurately distinguished in the field by calls

Bullfrog
Rana catesbeiana



Size: 3 ½-6 inches

Appearance: green, green/yellow or brown, may have brown splotches, male has yellow throat

Habitat: aquatic, large, permanent bodies of water

Possible Arb Locations: Lyman Lakes, Retention and Ox-bow ponds

Call: low, vibrating “rrrrruuuuummm”, fog horn

Breeding: late June through July

Note: This species is invading our area of Minnesota after being introduced by humans into yards and ponds, or as escaped pets. It is only native to the very southeast corner of MN. Bullfrogs eat other frogs, so there is potential impact to local frog populations.

Northern Leopard Frog
Rana pipiens



Size: 2-3 ½ inches

Appearance: Brown or green, 2-3 rows of irregular spots, rounded with light borders

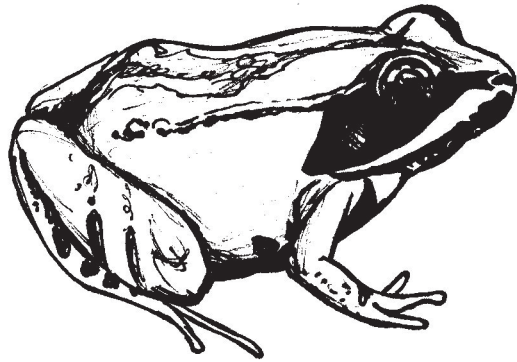
Habitat: grassy areas near water, prairies, may move far from water to hunt

Possible Arb Locations: Turtle pond, unnamed pond, Kettle-hole Marsh

Call: series of clicks/taps, grunts/chuckles/rumbles

Breeding: early April through May

Wood Frog
Rana sylvatica



Size: 1 3/8 – 2 3/4 inches

Appearance: Base color varies, pink to brown to black, characteristic dark patch behind eye

Habitat: moist wooded areas, may wander far from water source

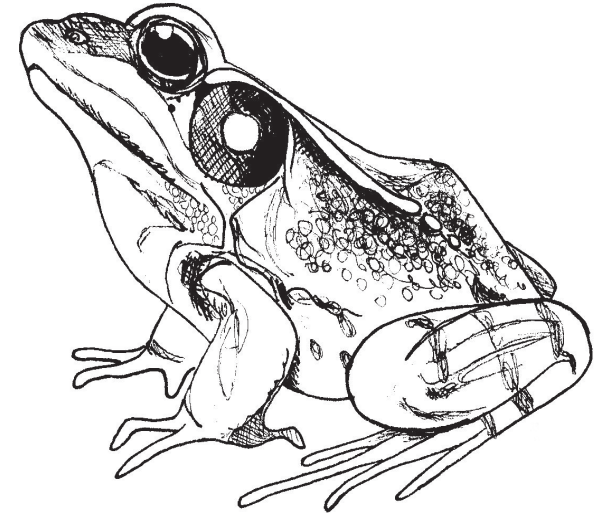
Possible Arb Locations: Oxbow Pond and unnamed pond, Kettlehole Marsh

Call: cackle-like call

Breeding: end of March through April

Note: This is the Arboretum's earliest breeder; ice may still be present at the beginning of mating season

Green Frog
Rana clamitans



Size: 2 1/4-3 1/2 inches

Appearance: Most often green, can be brown, usually has dark brown/gray spots or blotches, adult males have bright yellow throats

Habitat: along shores of permanent bodies of water (lakes/ponds)

Possible Arb Locations: Oxbow Pond, unnamed uond

Call: like pluck of a banjo string, “glunk”, repeated calls drop in pitch/volume

Breeding: mid-June through July

