

Send a pdf to scouts@hmns.org. The workbook will be checked that you have met the requirements and a scanned merit badge card will be emailed back.

HOUSTON MUSEUM OF NATURAL SCIENCE

SCOUTS@HMNS

Reptile and Amphibian Study Prerequisite Workbook (2025)

Name: _____ Date: _____

Caring for a living creature is a big responsibility. If scouts are not going to read about the animal they wish to keep *prior to getting it*, then they should choose option B for this requirement. The individuals working at pet store often do not know the full requirements for caring for exotic animals, so they should not serve as your main resource for information. The number one killer of captive reptiles and amphibians is lack of knowledge and proper research before purchasing a reptile or amphibian.

What to consider before purchasing/selecting your animal:

This animal is cold-blooded – what are its lighting/heating requirements?

What is the temperament of this animal? Is it skittish? Aggressive? Will it grow to be aggressive over time?

How large will this animal grow to be? What size container will it need as an adult?

What are the dietary needs of this animal?

Does this animal need a vitamin supplement with its food?

What is the life-span of this animal? Will I keep this animal for life or do I have a plan for it at the end of the 30 days? **Animals bought in a pet store should NEVER be released into the wild.**

Animals that might work for this activity are:

Corn snakes, ball pythons, bearded dragons, Common anoles, leopard geckos, fire bellied toads, American bullfrog tadpoles, wild caught tadpoles (if they are released into the same location they were found in)

Animals that you should absolutely NOT get for this activity are:

Anything toxic (highly toxic toads, venomous snakes), snakes and lizards that will grow much longer than they are in the pet store (red-tail boa constrictors, Burmese pythons, any iguanas), animals with highly specialized environments that are hard to maintain (chameleons, excessively large frogs), animals that are known for their aggressive temperament (almost any lizard, especially monitors), long-lived animals if you are not prepared to keep them for upwards of 80 years sometimes (Russian tortoises and red-footed tortoises live 50+ years, iguanas can live for 20 years)

Requirement 8

Observing Reptiles and Amphibians:

Option A:

Take custody of one or more reptiles or amphibians in a manner approved by your counselor. Maintain one or more reptiles or amphibians for at least a month. Record food accepted, eating methods, changes in coloration, shedding of skins, and general habits; or keep the eggs of a reptile from the time of laying until hatching; or keep the eggs of an amphibian from the time of laying until their transformation into tadpoles (frogs) or larvae (salamanders). Whichever you chose, keep records of and report to your counselor how you cared for your animal/eggs/larvae to include lighting, habitat, temperature and humidity maintenance and any veterinary care requirements. Unless you are the long-term owner, at the conclusion of this study, turn the animal(s) over to another responsible party approved by your counselor.

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Option B:

Choose a reptile or amphibian that you can observe or foster at a local zoo, aquarium, nature center, local rescue, or other such exhibit (such as your classroom or school). Study the specimen weekly for a period of three months. At each visit, sketch the specimen in its captive habitat and note any changes in its coloration, shedding of skins, and general habits and behavior. Discuss with your counselor how the animal you observed was cared for to include its housing and habitat, how the lighting, temperature, and humidity were maintained, and any veterinary care requirements. Find out, either from information you locate on your own or by talking to the caretaker, what this species eats and what are its native habitat and home range, preferred climate, average life expectancy, and natural predators. Also identify any human-caused threats to its population and any laws that protect the species and its habitat. After the observation period, share what you have learned with your counselor.

We will be observing animals on display at the museum to give one example of a specimen scouts are welcome to keep track of. If families have a membership to HMNS, then scouts are able to enter this part of the museum at no additional cost to make their weekly visits. Alternately, this activity might easily be done if a fellow scout or school teacher has a reptile/amphibian of their own.

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Reptile and Amphibian Observation Record

Requirement 8 – Option A and B

Type of Reptile or Amphibian _____

Habitat/Housing

Light, temperature and humidity requirements

Habitat maintenance

Veterinary care requirements

Option B only

What the animal eats

Native habitat and home range

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Preferred climate

Average life expectancy

Natural predators

Human-caused threats to its population

Laws that protect the species and its habitat

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Observation Chart

Use these codes to keep track of your animal's daily activity for 30 days if you are keeping the animal at home or once a week for three months, if you are observing it at a facility.

Food

F1=_____ F2=_____ F3=_____

SH=shed skin R=resting A=active CC=color change B=buried BK=basking

D=drinking S=soaking

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	24
26	27	28	29	30

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Requirement 9

Finding Reptiles and Amphibians in the Wild

Requirement 9 has three options, but only two of them must be done. Option B is covered in class.

Option A: Identifying frogs

This web site lets you listen to frog calls

<https://www.pwrc.usgs.gov/Frogquiz/index.cfm?fuseaction=main.lookup>

The most common frogs in our area are the Gulf Coast toad, American bullfrog, green tree frog, leopard frog, cricket frog, and spring peeper. To learn the calls of these frogs, select them in the common name box on the frog website. Remember frogs love water, so it will help to go to a wetland area like the Armand Bayou Nature Center or Brazos Bend State Park. The most important thing to remember is that frogs usually come out and call during spring rain shows. Take notes of the frogs you hear and locate.

Option B: Identifying by Sight – Done in class

Finding eight reptiles or amphibians in Texas is easier than it sounds. We have 214 reptiles and 71 amphibians – more than any other state! Use the chart on the next page to record your sightings. If you have ever been out in the wild and spotted a reptile or amphibian go ahead and record it as long as you can accurately remember the information. Animals must be in the wild to count, you can't go to the zoo or a pet store. There are many reptiles and amphibians around your house. Look for geckos coming out where you leave lights on at night and the green anoles on fences in the sun.

This is an easy to use reference with common name, region map, and picture in lists.

<http://www.herpssoftexas.org/>

Option C: Give a Talk

This can be done after you've been through the class so you know more to talk about. Ask your scout leaders if you can do a presentation to a group of other scouts. Give a brief talk about three different reptiles and amphibians.

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Animal Identification Record

Common Name _____

Scientific Name _____

- Location (Smith Bayou, 100 North St. Houston) _____
- Habitat (grassy, pine forest, creek in forest) _____
- Time of sighting _____

Common Name _____

Scientific Name _____

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