

# Gopher Tortoises

## Keystone Species

### Habitat and Symbiosis



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**Education and Experience Center**  
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# Gopher Tortoises

## Keystone Species, Habitats and Symbiosis

### Standards:

SC.7.L.17.2

Compare and contrast the relationships among organisms such as mutualism, predation, parasitism, competition.

### Objectives:

The Student will be able to define and describe symbiotic relationships, giving examples of each

Students will describe the symbiotic relationships that exist in a gopher tortoise burrow

The Student will be able to describe the importance of the gopher tortoise burrow and explain why the gopher tortoise is considered a keystone species.

In this lesson students will learn about the key terms in symbiotic relationships by exploring Gopher Tortoises and their burrow. The lesson offers an interactive technology component through the use of a Nearpod. The Nearpod may be used independently by students or as a teacher guided activity

For an updated Nearpod code or to see the result from classroom use please email

[April@shywolfsanctuary.org](mailto:April@shywolfsanctuary.org)

The lesson also includes a presentation and video links that may be used without student use of technology.

### Included Resources:

Video links

Notes sheet

Teacher instructions and presentation

Nearpod Code and links

STEAM Enrichment Activity with Rubric

### Topics for further discussion:

Predation and Symbiosis

Endangered Animals

Caring for Habitats



***"TO HEAL HEARTS AND MINDS THROUGH RESCUE, SANCTUARY, AND EDUCATION."***

## Lesson Directions

To access the "The Gopher Tortoise Keystone Species and Symbiosis" Lesson:  
Join with this CODE at [join.nearpod.com](https://join.nearpod.com) or in the app

# OYZSV

Your answer choices are automatically recorded in the lesson. Use the blue arrows to navigate through the Nearpod site and minimize or extend screens. Most importantly relax, have fun and enjoy learning.

A notes page is provided to enhance your engagement with the lesson. Answers are located at the end of the lesson (don't cheat :)

### Additional STEAM Challenge:

If you would like an additional challenge you may use any supplies you have at home to build and design a Gopher Tortoise Habitat. Use what you have learned in the lesson about where and how the tortoise might dig. Depict the depth of the tunnels and illustrate and label the different animals that might be found there. Use the internet for further resources about species that might be found. A rubric can be found at the end of this lesson. Should you choose to complete this activity share pictures of it on social media with the hash tag #ShyWolfEducation so we can share your products.



## NOTES: The Gopher Tortoise Keystone Species and Symbiosis

Gopher tortoises are a \_\_\_\_\_ and \_\_\_\_\_ species

Gopher tortoises can live \_\_\_\_\_ years in the wild and 90 years in captivity  
They have stocky, elephant-like \_\_\_\_\_ feet and flat \_\_\_\_\_ like limbs  
for digging.

Habitat - dry \_\_\_\_\_, low vegetation, pine flatwoods, \_\_\_\_\_, and dunes lives  
in the South East

Burrows - up to \_\_\_\_\_ feet deep and 40 feet long

Herbivores - \_\_\_\_\_ - grass, berries, legumes,

From Video: The further down you go the \_\_\_\_\_ it gets  
Tortoise burrows provide other species protection from the \_\_\_\_\_ and from  
periodic \_\_\_\_\_. These species could not survive without the protection of the  
burrow.

Keystone species

A species whose presence and role within an ecosystem has a great \_\_\_\_\_  
on other organisms within the system.

\_\_\_\_\_ is any relationship or close connection between living  
creatures.

Mutualism - \_\_\_\_\_ organisms benefit in this relationship

Competition- Both organisms in a habitat compete for the same  
\_\_\_\_\_ source, \_\_\_\_\_ space, water.

Parasitism - One organism \_\_\_\_\_, the other organism is \_\_\_\_\_

Commensalism - \_\_\_\_\_ animal benefits, the other is not helped or harmed

Notes blanks:

Native

Protected

40-60

Hind

Shovel

Sandy

Scrub

Ten

Eat plants

Cooler

Heat

Fires

Impact

Symbiosis

Both

Food

Nesting

Benefits

Harmed

One

Challenge activity:  
Create a model or drawing of a gopher tortoise burrow.

No Score 0 pts	Poor 1 pts	Average 2 pts	Good 3 pts	Excellent 5 pts
Animals/ Species	No Score  No animals/species depicted	Poor  A few species are depicted	Average  More than 3 species are identified	Good  More than 5 species are depicted identified
Labels	No Score  No labels used.	Poor  The few labels that were included are inaccurate or not legible.	Average  The student attempted to use multiple labels for species and burrow	Good  The students accurately uses many labels in the diagram to show various relationships, species, burrow specifics
Drawings or Models Other media (clay, dirt, etc.)	No Score  No attempt was made to include drawings or pictures, no model, may have only used words and arrows.	Poor  The drawing, pictures or model are clearly lacking in how realistic the burrow is represented. The science content contains many inaccuracies.	Average  The drawing, pictures or model depict the burrow community. It may contain a few inaccuracies.	Good  The drawing, pictures or model depict the burrow community. The community is accurately represented and is appropriate for the drawing.
Organization	No Score  It is unclear what is being depicted	Poor  The burrow is clear but many of the species are hard to determine.	Average  The burrow is depicted and species are evident	Good  The burrow is depicted and species are identified and are well organized.