

Human Impact Lab: Gopher Tortoises

Loggerhead Marineline Center

Loggerhead Marineline Center is an ocean conservation organization and sea turtle hospital located adjacent to one of the most important sea turtle nesting beaches in the world. The Center features an on-site campus hospital, research laboratory, educational exhibits and aquariums, and also operates the Juno Beach Pier, which hosts world-class angling and sightseeing. The Center's conservation team works with 76 local and international organizations across six continents to form partnerships and share conservation initiatives and best practices that are core to its mission of ocean conservation. The Center is expanding and has launched its Waves of Progress capital expansion campaign, designed to accelerate and amplify LMC's conservation and education impact.

Our mission is to promote conservation of ocean ecosystems with a special focus on threatened and endangered sea turtles. Our vision is to be recognized locally and internationally as the leading authority in sea turtle education, research and rehabilitation.



Lesson Objectives

- I can describe the difference between a commensal and a keystone species.
- I can describe the reasons why the gopher tortoise is a keystone species.

Vocab

- **Tortoise:** a turtle, typically an herbivorous one that lives on land.
- **Keystone species:** a species on which other species in an ecosystem largely depend, such that if it were removed the ecosystem would change drastically.
- **Burrow:** a hole or tunnel dug by an animal as a dwelling/home.
- **Commensal species:** a species that benefits from another species by obtaining locomotion, shelter, food, or support from the host species, which neither benefits nor is harmed.

Resources

Test Your Knowledge!

<https://www.iotform.com/build/200885533642154>



Visit Marinelife.org to learn more about Loggerhead Marineline Center!

At-home Gopher Tortoise Burrow

The gopher tortoise belongs to a group of land tortoises that originated in North America 60 million years ago, thus making it one of the oldest living species. They are found in dry, sand uplands, such as the coastal dunes that are found in Florida. Gopher Tortoises are known as both a **keystone species** and a **commensal species** due to the burrows that they dig in their habitats. It is estimated that over **350** species benefit from the shelter and food that the gopher tortoise burrows provide. These burrows can be as short as 6-10 feet long, but they average around 30 feet long. Without these burrows, animals like snakes, rabbits, mice, insects and more would not have shelter or food!

Through this activity, you will be able to replicate a gopher tortoise burrow with items found around your house! Follow the directions below to make an at-home burrow.

Materials:

- Trash can , recycling bin, or bucket
- Brown colored towel/table cloth
 - Foliage from outside
 - Stuffed animal toys

Directions:

1. Take the bin/bucket you have and lay in on the ground with the hole facing you.
2. Place the towels/table cloth to cover the bin/bucket and the surrounding area.
3. Use foliage from outside to camouflage the burrow.
4. Inhabit the burrow with stuffed animal toys!



*model turtle in burrow

Extension:

Using chair, tables, and other objects around your house, make a human-sized burrow with sheets and towels