The Gopher Tortoise: Ecosystem Engineer Answer Key

1. Based on their diet, gopher tortoises are _____.

- a. carnivores
- b. herbivores
- c. omnivores
- d. none of the above

2. What kind of habitat do gopher tortoises prefer?

- a. wetlands with damp soil and access to water
- b. temperate rainforests with a dense tree canopy
- c. lowland areas with cool temperatures
- d. upland habitats with dry sandy soil

3. Species that are considered ecosystem engineers _____.

- a. live within an ecosystem without making any changes to their surroundings
- b. modify their ecosystem in a significant way through their daily behaviors
- c. are especially lazy
- d. provide no benefit to the ecosystem they occupy
- 4. Gopher tortoise burrows are also utilized by over 350 other species. Which of the following might you find hanging out inside one of these burrows? Choose all that apply.



5. Where do gopher tortoises prefer to lay their eggs?

- a. inside the burrows they dig
- b. on top of rocky soils
- c. at the entrance of their burrows
- d. in bodies of water

6. Like other reptiles, gopher tortoises control their body temperatures through "thermoregulation." Explain what "thermoregulation" means.

Thermoregulation is a process by which an organism uses the environmental

conditions around them to regulate their internal body temperature.

7. As seen in the video, how will a gopher tortoise respond to heavy rainfall?

When they need to be, tortoise's can be excellent swimmers. They will swim

across water bodies to get where they need to go. Even when their burrows are

flooded, they have been known to dive right in and swim under anyways.

8. Since so many species use tortoise burrows, what might happen if gopher tortoise populations started to dwindle? How will this affect the rest of the ecosystem?

If the gopher tortoise went extinct, there would be measurable changes to the

ecosystem. Other native animals that utilize their burrows would gradually lose shelter

options which would likely result in population declines.