

## List of Selected Endangered or Threatened Species

| Species                      | Where found                     | Teacher's notes   |
|------------------------------|---------------------------------|---|
| Alabama cave shrimp          | U.S. (Alabama)                  | <b>Indicator species</b> for water quality  |
| American burying beetle      | U.S.                            | Decomposer: helps remove decaying animals   |
| Asian elephant               | Southeast Asia                  | Important for domesticated use  |
| Attwater's prairie chicken   | U.S. (Texas/Louisiana)          | <b>Indicator species</b> for healthy coastal prairie, potential game animal                   |
| Black rhinoceros             | Africa                          | <b>Keystone species:</b> play a pivotal role in maintaining savanna grasslands; megaherbivore |
| California condor            | U.S. (California)               | Carrion eater: helps remove decaying animals  |
| Cheetah                      | Africa                          | World's fastest land animal   |
| Chinchilla                   | Bolivia                         | Valuable fur species  |
| Chinook salmon               | U.S.                            | Important food species for humans   |
| Cracking pearly mussel       | U.S. (Tennessee/Virginia)       | <b>Indicator species</b> for clean water  |
| Everglade kite               | U.S. (Florida)                  | <b>Umbrella species:</b> eats snails, snails need healthy everglades                          |
| Giant panda                  | China                           | <b>Umbrella species:</b> undisturbed bamboo forest  |
| Grizzly bear                 | U.S., Canada                    | <b>Umbrella species:</b> needs wilderness   |
| Humpback whale               | Oceania                         | <b>Indicator species</b> for marine biodiversity and health                                   |
| Indiana bat                  | U.S. (Indiana)                  | Eats mosquitos and other insects  |
| Karner blue butterfly        | U.S.                            | <b>Umbrella species:</b> endangered savanna/barrens ecosystem                                 |
| Kirtland's warbler           | U.S., Canada                    | <b>Umbrella species:</b> scrub pine habitat, valuable for tourism                             |
| Mexican long-nosed bat       | U.S., Mexico                    | <b>Keystone species:</b> important pollinator for cactus species                              |
| Mountain gorilla             | Uganda, Rwanda, Burundi         | One of homo sapiens closest relatives   |
| Mountain sweet pitcher plant | U.S. (Carolinas)                | <b>Indicator species</b> for healthy wetlands, valuable for collectors                        |
| Nene goose                   | Hawaii                          | State bird of Hawaii  |
| Piping plover                | U.S., Canada                    | Requires undisturbed beaches for nesting  |
| Przewalski's horse           | Mongolia, China, and Kazakhstan | Domesticated horses are descendants of this species   |
| Red wolf                     | U.S.                            | Important predator  |
| Scrub mint                   | U.S. (Florida)                  | Potentially valuable for medicinal use  |
| Snow leopard                 | Asia                            | Threatened by poachers  |
| Utah prairie dog             | U.S. (Utah)                     | <b>Keystone species:</b> their towns offer habitat for other species                          |
| Vernal pool tadpole shrimp   | U.S. (California)               | A living fossil: it has been around over 70 million years                                     |
| West Indian manatee          | U.S., Caribbean                 | Helps keep sea beds from becoming overgrown   |
| Whooping crane               | U.S., Canada                    | Largest North American bird, important for tourism  |
| Wood bison                   | Canada, U.S. (Alaska)           | Numerous historical uses for food, clothing, etc.   |

Source: U.S. Fish & Wildlife Service. 2017. *Environmental Conservation Online System: Threatened & Endangered Species*

## vocabulary in table defined

An **indicator species** is one that shows the effects of habitat alteration before others. Miners used to bring canaries into coal mines because they acted as an indicator species. If the canary died, the miners knew the air was bad and that they should vacate the mine.

By protecting an **umbrella species**, ecologists are able to protect many other species that share the ecosystem. This is usually because the umbrella species requires a large area of undisturbed habitat, which is also good for the other species that share the habitat.

A **keystone species** is one whose presence is necessary for other species to survive and thrive. Often, the keystone species provides some ecological service that no other species can provide, such as pollinating a certain type of plant.