

# Communities

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## 17.4 Invasive Species

When the brown tree snake arrived in Guam from its native New Guinea, it found a snake's paradise—plentiful food in the form of forest birds and their eggs and not a single natural enemy in sight. The snake quickly spread through the small island and now is found in startling numbers; in favorable habitats, there can be as many as 5000 individuals per square kilometer (Figure 17.7). As the brown tree snake thrives, however, it devastates Guam's unique bird fauna. A dozen species are now extinct, and many others are endangered.



**FIGURE 17.8**

Brown tree snake climbing in Guam

An **invasive species** is a species that has moved from its native habitat to a new area, where it proceeds to do a lot of ecological damage. Although many species were purposely introduced in the past, the introduction of nonnative species today is usually accidental, occurring when organisms hitch a ride on a ship or airplane. Many invasive species do a lot of damage to native species by competing with them for resources or by preying on them directly.

Invasive species are responsible for the decline of countless native species worldwide. More than a third of the species listed as endangered under the U.S. Endangered Species Act are threatened wholly or partly because of an invasive species. Some invasive species also have significant economic impact.

The zebra mussel (Figure 16.16) is an invasive species that has spread across the eastern United States since its accidental introduction in 1988. Zebra mussels clog water pipes at power plants and water treatment facilities, causing billions of dollars of damage annually. They also threaten native freshwater bivalves by competing with them for food; most of these native species are now listed as endangered.





**FIGURE 17.9**

Invasive zebra mussels are attached to a freshwater clam from Lake Michigan.

**READING CHECK**

**How do invasive species harm native species?**

**CHECK YOUR ANSWER**

Most often by competing with them for food or other resources or by preying on them directly.

You can read more about invasive species at the following websites:

<https://www.invasive.org>



<https://oceanservice.noaa.gov/facts/invasive.html>



<https://www.nationalgeographic.org/encyclopedia/invasive-species/>

