INVASERS EVERYWHERE!
BY FRANK KRELL, PhD

Sixty live lizards and snakes have invaded the Museum to the delight of our visitors in our latest temporary exhibition. The animals are well confined in pretty little habitats behind glass. Escape, impossible! We keep them controlled and locked up. But not everyone is that careful and responsible.

The Burmese python (pictured above), one of the most spectacular protagonists of the Lizards & Snakes exhibition, is making headlines from Florida. Released by private owners, pythons have thrived in the warm, humid climate of the Sunshine State, so similar to their native Southeast Asian home. An estimated 30,000 to 100,000 pythons have decimated Florida’s mammals.

About 50 years ago, the brown tree snake was accidentally introduced from its native range in Australia and the South Pacific to Guam, where it has since eradicated half of Guam’s native birds and lizards. Military bases in Guam provide plenty of opportunities for snakes to catch a flight off the island. Sightings of live tree snakes in Hawaii, Texas, and Oklahoma understandably have caused some upset, but the Guam catastrophe has yet to be repeated.

These cases made the press, but invaders are everywhere! An estimated 6,000 invasive species of plants and animals have become established in the United States over the years. Some invaders find a new home in our forests or agricultural land and attract our attention as competitors for our harvest. We call them exotic pests. The boll weevil from Central America threatened the U.S. cotton industry in the 20th century. The emerald ash borer beetle from Asia is currently spreading in the Midwest.

Some species now considered pests were deliberately introduced by people. Eugene Schieffelin, chair of the American Acclimatization Society, wanted to establish in the United States all bird species mentioned in Shakespeare’s plays. In the second half of the 19th century, he released European starlings and house sparrows in New York and Brooklyn. Now, hundreds of millions of these European birds are all over the United States. Fortunately, today’s government regulations would prevent the Acclimatization Society from executing their projects.

Most invasive species settle in our environment without much publicity, but often with severe consequences for our native fauna and flora. Parts of the North American prairie are dominated by European plants, such as the Kentucky blue grass, which is not at all native to Kentucky. Between 100,000 and 400,000 acres in Colorado are infested with the Canada thistle, which is native to—no, not Canada!—Europe and northern Asia. Some invasive species are considered useful. The honeybee, for example, is an Old World species that people introduced to North America in the 1600s. If you find a dung beetle in Colorado, chances are that it has European ancestry. They are still coming to the our state.

In March three years ago in Crown Hill Park in Wheat Ridge, I found some little brown dung beetles that looked pretty familiar to me, being a European invader myself. Indeed they were a new invasive species for Colorado, the common European Aphodius prodromus. Several other exotic species have arrived in Colorado during the last decade, and counting. Even useful invaders, such as the honeybee, or possibly those European dung beetles, can cause harm by outcompeting native species using the same resources, often unrecognized until native species become rare or extinct. Invasive beetles are one of the topics of our research program here at the Museum.

Species have always spread and enlarged or changed their ranges. With our ever increasing travel and transportation activities, it is even easier for them to reach new grounds. A warming climate seems to also help some species to spread to new areas, with unpredictable ecological and economic consequences.

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Dr. Frank Krell is the Museum’s curator of entomology and the lead scientist on the Colorado Scarab Survey. Find out more about his research @ www.dmns.org/krelllab.

Find out more about invasive species in a Science Bite by John Demboski, PhD, curator of vertebrate zoology, @ www.dmns.org/sciencebites.

MEMBER ADMISSION IS FREE FOR LIZARDS & SNAKES
See a Burmese python and dozens of other live animals in the Lizards & Snakes exhibition, open daily from 9 a.m. to 5 p.m. until Sunday, July 8. Find out more about Lizards & Snakes and related programs and activities @ www.dmns.org/lizardsandsnakes.