

TIME | MAGAZINE | SUBSCRIBE | PHOTOS | VIDEOS | LISTS | APPS | LIFE.COM | STYLE | Follow TIME | f | t | g+

NewsFeed | U.S. | Politics | World | Business | Money | Tech | Health | Science | Entertainment | Opinion

TIME Science
Ecocentric
A blog about all things green, from conservation to Capitol Hill

SEARCH TIME.COM

Science Main | Ecocentric | Going Green | Space & Astronomy | Oceans | Videos

INVASIVE SPECIES

Invaders: How Burmese Pythons Are Devouring the Everglades

By **BRYAN WALSH** | @bryanwalsh | January 31, 2012 | 16

COURTESY U.S. GEOLOGICAL SURVEY/PHOTO BY LORI OBERHOFER, NATIONAL PARK SERVICE

A Burmese python and an alligator fight in the Florida Everglades. The snakes are native to India and Southeast Asia, but they've established themselves in the wetlands of southern Florida, where they're causing havoc with local wildlife

Burmese pythons are **eating machines**. An adult snake can grow to nearly 20 ft., and it can eat everything from raccoons to bobcats to deer to alligators, killing its prey by constriction and then swallowing them whole. On the jungle food chain, Burmese pythons rest near the top.

Burmese pythons are also — as the name might suggest — not local to the U.S. But they are a popular pet, imported to this country from their native habitat in India and Southeast Asia. And sometimes those pets escape from their owners or are simply let go — especially in Florida, a nexus of the imported wildlife trade and one of the few parts of the U.S. with a climate and landscape to which the pythons can easily adapt. That's how hundreds or even thousands of Burmese pythons have **managed to establish themselves** in the Florida Everglades — the vast protected wetlands in the southern Florida — where they've become a persistent challenge for local officials tasked with protecting endangered wildlife.

Now a **new study published** in this week's *Proceedings of the National Academy of Sciences (PNAS)* suggests just how big a threat the invasive Burmese pythons have become. Researchers led by Michael Dorcas of Davidson College in North Carolina looked at the distribution of mammals in the Everglades nearly 20 years ago — before Burmese pythons established themselves in the area — and then more recently. They found a drastic reduction in the number of small mammals that are typically part of a python's diet, and they also discovered that the remaining mammals tend to be most abundant in areas that are either clear of pythons or where the snakes have only recently been spotted. The evidence is strong enough to

suggest that invasive Burmese pythons are causing significant wildlife loss in the Everglades — and that the problem could worsen as the snakes continues to grow.

(MORE: [Lake Invaders](#))

Dorcas told the BBC that the Burmese pythons are rearranging the **food chain in the Everglades**:

Any snake population — you are only seeing a small fraction of the numbers that are actually out there. They are a new top predator in Everglades National Park — one that shouldn't be there.

We have documented pythons eating alligators, we have also documented alligators eating pythons. It depends on who is biggest during the encounter.

While the snakes have been spotted in the Everglades for at least the past 20 years, they were only recognized as fully established in 2000. Wildlife officials have tried to remove the snakes — 400 were taken out in 2009 — but the damage may already be done. The *PNAS* researchers looked at data from detailed nighttime road surveys of the Everglades between 2003 and '11, and compared that data with similar roadkill surveys taken between 1993 and '99 and road surveys done in '96 and '97. They found:

- A 99.3% decrease in the frequency of raccoon observations.
- A 98.9% decrease in the frequency of opossum observations.
- A 87.5% decrease in the frequency of bobcat observations.
- A total failure to detect any rabbits.

(MORE: [The Benefits of Stopping Invasive Species Before They Invade](#))

Since all of those animals can serve as a python's dinner — and given the fact that the mammals were more common in areas where the pythons hadn't been seen — it's reasonable to infer that the Burmese pythons are treating the Everglades as an all-you-can-eat buffet. Here's U.S. Geological Survey director **Marcia McNutt**:

Pythons are wreaking havoc on one of America's most beautiful, treasured and naturally bountiful ecosystems. Right now, the only hope to halt further python invasion into new areas is swift, decisive and deliberate human action.

The trouble is that it's much easier to prevent invasive species from establishing themselves in new territory than it is to root them out once they've gotten comfortable. The Obama Administration **recently banned** the import and interstate commerce of Burmese pythons and a few other foreign snakes, but under pressure from the pet industry, other snakes including the boa constrictor are still allowed to be imported into the U.S.

The wildlife trade is big business, and importers will resist any new rules. Reptiles alone are worth more than \$2 billion, and according to American Pet Products Manufacturers Association, some 11 million reptiles were kept as pets as recently as 2005. Andrew Wyatt, the head of the U.S. Association of Reptile Keepers, a trade group, **told the *Washington Post*** that the study's authors had jumped to conclusions, and that other work had shown that mercury pollution in the water might be playing a major role in the deaths of small mammals.

Perhaps — though the study is backed up by years of data and is published in one of the most reputable peer-reviewed journals in the world. In any case, invasive species pose a major threat to the U.S. — as I learned when I visited the Illinois River to **see *invasive Asian carp*** — costing the country some \$120 billion a year. And those pythons may not be standing still — the U.S. Fish and Wildlife Service reports that they're adapting to colder climates and may be expanding their range. Watch out — after all, humans are small mammals too.

(MORE: [Mississippi Floods Could Spread Invasive Carp](#))

Walsh is a senior writer at TIME. Find him on Twitter at [@bryanrwalsh](#). You can also continue the discussion on TIME's [Facebook page](#) and on Twitter at [@TIME](#).

Stay Connected with TIME.com



Subscribe to



Sign Up for Newsletters



Get the TIME Magazine iPad



Read TIME Mobile



Become a Fan of



Get TIME Twitter



[NewsFeed](#) | [U.S.](#) | [Politics](#) | [World](#) | [Business](#) | [Money](#) | [Health](#) | [Science](#) | [Entertainment](#) | [Photos](#) | [Videos](#) | [Specials](#) | [Magazine](#)

© 2012 Time Inc. All rights reserved | [Privacy Policy](#) | [RSS](#) | [Newsletter](#) | [Mobile](#) | [TIME For Kids](#)
[Subscribe](#) | [Contact Us](#) | [Terms of Use](#) | [Media Kit](#) | [Reprints & Permissions](#) | [Help](#) | [Site Map](#) | [Ad Choices](#) ▶

TIME

OUR PARTNERS



CNNMoney