

Dear Students,

We here at Everglades National Park in South Florida have a very big problem on our hands and we need your help. There is an invader, the Burmese Python (see below), wreaking havoc on the Everglades ecosystem and its native species. Native species are plants and animals that are naturally found in a particular area.

The Everglades is a vast area of wetland (1.5 million acres) and is a national wildlife sanctuary that provides a safe habitat or home for many native species, including threatened and endangered ones like the manatee, American Alligator, and the elusive Florida panther. The Burmese Python, however, is threatening the populations of these native species.



Large Burmese Pythons are regularly encountered in the Everglades. (Source: National Park Service)

NOTE: This material is based upon work supported by the National Science foundation under Grant No. 1542842 and 1440821. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

The Burmese Python, a non-native, or invasive species has entered this ecosystem and is now upsetting its delicate balance. The Burmese Python is considered non-native to Florida because it is not naturally found in Florida or the Everglades. The Burmese Python is naturally found in Southeast Asia.



The Burmese Python is a predator that eats lots of native species in the Everglades. Since the Burmese Python appeared in the Everglades, the population of some native species has been declining, or going down. We need to figure out exactly how the Burmese Python is affecting the Everglades ecosystem and determine what we should do to try to solve this problem.

We have assembled a team of engineers, scientists, activists, and local government officials to tackle the problem of the invasive Burmese Python in the Florida Everglades. This team will be working together to research and understand the problem as well as brainstorm possible solutions. We would you to work as part of this team.

As part of the team, we need you to work in groups to do some research about the questions below to help us understand more about this problem.

- How did the Burmese Python get in the Everglades?
- What are the native species in the Everglades and how is the Burmese Python affecting them?
- What is currently being done to solve the problem of the invasive Burmese Python?

After researching this problem, you will be presenting to the Florida Legislature and Governor as well as local citizens at a town hall meeting to help them understand the severity of the problem and propose laws and government interventions that will help to solve it. This presentation will be in the form of a debate. The government officials will listen to all the proposed solutions and choose the team that makes the best argument.

To help the government officials and local citizens understand the problem, we are asking that you develop/design a Simulation game that will accurately model how the introduction of an invasive species (such as the Burmese Python) into the Everglades can affect the populations of native species (such as the American Alligator or Marsh Rabbit). We have included an example for you to view: <https://scratch.mit.edu/projects/133121464/>

We look forward to hearing your team debate its proposed solution as well as viewing your Everglades invasion simulation game.

Thanks again for your help,

M.S. Douglas

Park Ranger

Everglades National Park Service