

# **Modeling the Growth and Spread of Burmese Pythons in Florida**

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Burmese pythons have invaded the Florida Everglades as a result of being released as unwanted pets. They were first sighted in the 1990s and then in 2006 the first nest of eggs was found. Burmese pythons are one of the largest snake species in the world which puts them at the top of the food chain in Florida, with possibly only the alligator above them. There are concerns as to what effect they'll have on many of Florida's native species. They have been consuming endangered species in Key Largo and competing for food and space with other threatened native species. It is also a concern as to what will happen if they keep spreading throughout Florida and to possibly more of the southern United States. They have already been spotted as far north as Sarasota and Manatee Counties. The current population of Burmese pythons in Florida is estimated to be anywhere between 30,000 and 150,000. This paper uses the logistic and stable age models to predict their growth in Florida. Also, a C program is introduced that stochastically predicts their growth and spread throughout Florida.