### **IGUANA BE GONNA**

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*Abstract.* Iguanas are no longer just household pets, but are becoming landscape pests in south Florida—eating ornamental landscape plants, burrowing holes next to sea walls, defecating on docks, and swimming with condo residents in the community swimming pool, to name a few problems. A survey was conducted of Florida Extension Agents, University of Florida wildlife researchers, and south Florida botanical gardens that focused on information about: 1) counties that have wild iguana populations; 2) what plants iguana species eat; and 3) what measures are successful for controlling iguanas.

Feral iguanas are a human caused problem that is spreading due to intentional releases of iguanas by pet owners who did not realize how big iguanas can get, by iguanas escaping from defunct zoos or by frustrated homeowners that trap and release problem iguanas into new locations.

According to the Florida Fish and Wildlife Conservation Commission Exotic Wildlife website (http://myfwc.com/critters/exotics/exotics.asp) three lizards from the iguana family (Iguanidae)—the Mexican Spinytail Iguana (*Ctenosaura pectinata*), the Black Spinytail Iguana (*C. similes*), and the Green or Common Iguana (*Iguana iguana*)—have taken up residence in south Florida.

## Where are Feral Iguana Populations Located and What do They Eat?

The Mexican Spinytail Iguana has one confirmed breeding population of 10 years or more in one location on Old Cutler Ridge Road in Miami-Dade County. Reports of this species on Gasparilla Island and elsewhere (Bartlett and Bartlett, 1999; Butterfield et al., 1997; McCoid, 2002; McKercher, 2001) are erroneous and represent the Black Spinytail Iguana instead (Krysko et al., 2003; Townsend et al., 2003). This iguana species is not moving into new territory. The Mexican Spinytail Iguana diet consists of leaves of various types of vegetation as well as mamey fruit (Wilson and Porras, 1983).

The Black Spinytail Iguana has confirmed breeding populations of ten years or more in Miami-Dade, Lee, and Charlotte counties (Krysko et al., 2003; Townsend et al., 2003). This iguana species is expanding into Broward and Collier counties (Krysko et al., 2003; K. Enge, FFWCC, Quincy, pers. comm.). Vegetation presumably composes the bulk of the Black Spinytail Iguana diet. Brazilian Pepper fruits have been found in its feces and they also feed on human garbage (Meshaka, 2004). Black Spinytail Iguana feed opportunistically on small vertebrates such as fishes, rodents, eggs, nestlings of birds and hatchling sea turtles. In Florida, it may pose a threat to eggs and nestlings of shorebirds (Krysko et al., 2003).

The Green Iguana (Fig. 1) has been confirmed to have breeding populations of 10 years or more in Miami-Dade County (Butterfield et al., 1997). This species is expanding into Broward, Lee, Monroe, Palm Beach, St. Lucie (Bartlett and Bartlett, 1999; Krysko et al., in press; Townsend et al., 2002). Green Iguana diet consists of plant material such as hibiscus flowers, bougainvillea and orchids. At this time it is unknown if Green Iguanas pose a threat to native wildlife or habitat.

# What Control Measures are Being Used to Control the Feral Iguanas?

There are a variety of factors, behaviors and control measures that affect feral iguanas: cold weather, human tolerance, exclusion, habitat modification, natural enemies, capture and removal, shooting, and eating the iguana.

*Cold Weather.* When temperatures dip into the 40s and 50s the iguanas become sluggish. To protect themselves from the cold weather they will pile on top of each other or jump into the water. Iguanas in this state can be easily captured and killed humanely.

*Tolerance.* Iguanas have become part of South Florida's coastal landscape. Residents should learn to share their living space with the iguanas. Do not feed the iguanas in your yard because that will keep the iguana population visiting your property for a free meal.

*Exclusion.* Protect plants from being eaten by placing wire cages around or over the plant or by attaching PVC tree guards so that the iguana can't crawl up into the tree.

Habitat Modification. Avoid planting species that are preferred foods, such as hibiscus, orchids, bougainvillea, roses, garden vegetables, and fruits from native and homegrown fruit trees. Instead plant iguana resistant plants (due to their leaf toughness or toxicity to iguanas) such as, milkweed, oleanders, citrus (if not under citrus canker quarantine), and



Fig. 1. The Green Iguana (Fig. 1) an established resident of Monroe County for over 10 years. Photo by Maryann Yentzer.

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crotons. Remove protective cover of landscape plants, such as pandanus, or piles of landscape timbers and rocks. These are perfect hiding places for iguanas of all sizes. Fill in vacant holes and burrows so that iguanas don't take up residence. Provide persistent harassment to the iguanas and they will take up residence elsewhere.

*Natural Enemies.* Raccoons, fish crows, vultures, feral pigs and other predators dig up iguana nests and eat the eggs. Raccoons, snakes, hawks, owls, egrets, herons, cats and dogs kill the majority of hatchling and juvenile iguanas. After young iguanas reach about 2 ft in length, they have fewer natural enemies. Automobiles and people are the main cause of mortality of adult iguanas (Kern, 2004).

*Capture and Removal.* Iguanas can be caught and removed from private property without special permits. Only live traps and snares are legal in the State of Florida. Young iguana can be caught by hand or with thread or monofilament noose on a long pole (Kern, 2004).

*Florida Regulations.* Florida Statute 372.265 "Regulation of Foreign Animals" states: It is unlawful to import for sale or use, or to release within this state, any species of the animal kingdom not indigenous to Florida without having obtained a permit to do so from the Fish and Wildlife Conservation Commission. Fines for this first time misdemeanor can reach \$1,000 and/or one year in jail.

*Egg Removal.* Find nesting areas or create an artificial nesting area (2-ft deep sand pit with hard bottom). Collect eggs and destroy.

Shooting. This method may be effective, but check on your local laws to determine if it is permissible to discharge a firearm in a particular area. Also, Florida law suggests anyone convicted of an act resulting in the "cruel death or excessive or repeated infliction of unnecessary pain or suffering of an animal" could be sentenced to up to five years in jail and a \$5,000 fine or "by a fine of not more than \$10,000, or both." *Eating.* In the iguanas' native habitats of Latin America it is caught and eaten by the local populations. There the meat is a delicacy, a cure-all and an aphrodisiac. In the United States, iguana meat is being sold for \$12.50 a pound at supermarkets that caters to Latin Americans.

Feral iguanas are now a part of the south Florida landscape. Only with further research on their life cycle and the coming together of local governments and citizens will viable long term control measures be developed and implemented.

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