

## Position Statement of the IUCN SSC Iguana Specialist Group on Non-Native Invasive Iguanas

The purpose of this Position Statement is to highlight the pest status that non-native iguanas can attain when introduced to tropical and sub-tropical regions outside their native range, and to emphasize the devastating environmental and economic impacts they can cause.

Common Green Iguanas (*Iguana iguana*) and, more recently, Spiny-tailed Iguanas (*Ctenosaura similis* and *C. pectinata*) (Fig. 1) have been moved around the world, primarily for the pet trade. The intentional and unintentional release of iguanas has led to the establishment of uncontrolled invasive populations in more than 19 countries, with subtropical and tropical islands being most vulnerable (Table 1). To date, no country has been able to eradicate these species once a breeding population has become established.

Invasive iguanas can exhibit explosive population growth and reach staggering densities. On the small island of Grand Cayman, Green Iguanas have increased from a few individuals to hundreds-of-thousands within a decade. Invasive iguanas are causing multimillion-dollar impacts on infrastructure, agriculture, tourism, long-term food security, and biodiversity. For example, invasive Green Iguanas are a known airport safety hazard in Florida, Puerto Rico, and The Bahamas. They are also known to short-circuit power lines in cities, and their burrows have caused road collapses and coastal erosion (Fig. 2). Invasive iguanas can cause severe agricultural damage and defoliate native and ornamental plants (Fig. 3). Spiny-tailed Iguanas are a proven nuisance in Gasparilla Island, Florida, defoliating native plants and causing thousands of dollars in damages to homes and landscaping. In places where native and non-native iguanas co-occur, the survival of the natives is threatened through competition for food and space. In addition, hybridization with Green Iguanas is now the main threat to the survival of Lesser Antillean Iguanas (*Iguana delicatissima*) (Fig. 4).

We thus make the following tiered recommendations, which apply to all countries with tropical or sub-tropical regions, and especially islands:

**For countries where non-native iguanas are not present:** Develop and enforce country-specific regulations to ban importation and prevent the accidental introduction of non-native iguanas.

**For countries where non-native iguanas are present in captivity, but have not been detected in the wild:** Implement education programs focused on responsible pet ownership, encourage pet sterilization, ban the release of iguanas into the wild, and provide a sanctioned repository for unwanted captive iguanas.

**For countries where non-native iguanas have been recently detected in the wild, but have yet to establish breeding populations:** Immediately implement well-coordinated and resourced action plans to humanely remove all non-native iguanas before eradication becomes unfeasible (see AVMA guidelines: <https://www.avma.org/KB/Policies/Pages/Euthanasia-Guidelines.aspx>)

**For countries with established breeding populations of non-native invasive iguanas in the wild:** Humanely eradicate existing populations where possible; if eradication is unsuccessful, implement continual management actions to control population growth and prevent further expansion.

Scientific Name	Florida (USA)	Texas (USA)	Hawaii (USA)	Japan	Fiji	The Bahamas	Cayman Islands	Dominican Republic	Puerto Rico	US Virgin Islands	British Virgin Islands	Anguilla	St Maarten/St-Martin	Saint-Barthelemy	Antigua	Barbuda	Guadeloupe	Les Saintes	Marie-Galante	Martinique	Saint Lucia	Maya Cay, Honduras	Colombia	Venezuela
<i>Iguana iguana</i>	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			
<i>Ctenosaura similis</i>	x					x																x	x	x
<i>Ctenosaura pectinata</i>	x	x																						

Table 1. Countries and regions where Common Green, Common Spiny-tailed, and Guerreran Spiny-tailed Iguanas have been introduced and uncontrolled wild populations have established.



Figure 1. Female and male Common Green Iguanas, *Iguana iguana*. Photographed by Rafael Joglar (left). Male Common Spiny-tailed Iguana, *Ctenosaura similis*. Photographed by Joe Wasilewski (middle). Male Guerreran Spiny-tailed Iguana, *Ctenosaura pectinata*. Photographed by John Binns.

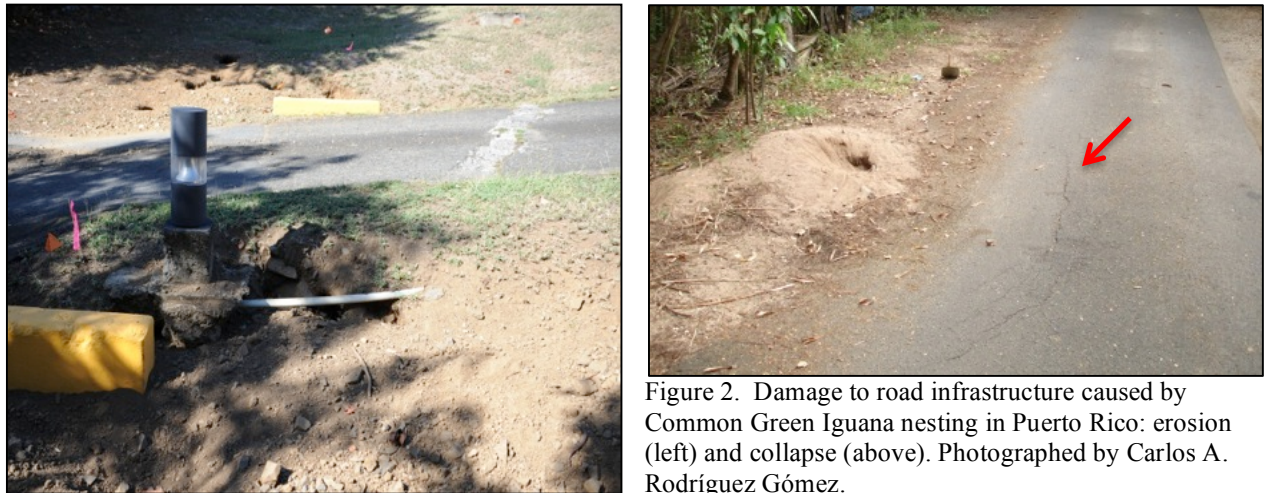


Figure 2. Damage to road infrastructure caused by Common Green Iguana nesting in Puerto Rico: erosion (left) and collapse (above). Photographed by Carlos A. Rodríguez Gómez.



Figure 3. Red Mangrove (*Rhizophora mangle*) mortality caused by Green Iguana damage to leaves, branches, and trunk. Mangrove patch at the onset of iguana herbivory (left), six months after onset showing visible signs of mangrove mortality (middle), and 12 months after first sign of herbivory showing nearly 100% mangrove mortality (right). Photographed by Alberto López Torres.



Figure 4. *Iguana delicatissima* adult. Photographed by G. Moulard (above). Hybrid of *Iguana iguana* and *Iguana delicatissima*. Photographed by Karl Questel (right).