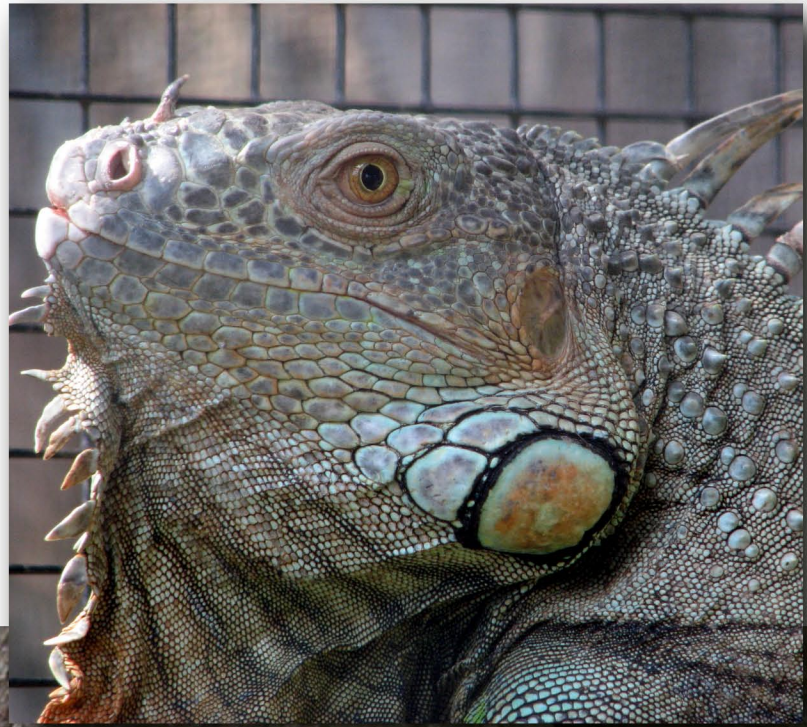


# Saving the Saint Lucia iguana from a new, alien threat

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*opposite: alien iguana  
main picture: Saint Lucia iguana*



*Iconic animals, often particular to a region, country or continent, have been adopted as national treasures the world over. New Zealand has the Kiwi, North America, the American Eagle, the Panda in China, to name but a few. They serve to strengthen cultural identity, act as figureheads for endeavour, and foster national pride in the environment and the diversity of life we share it with. For conservation, they often stand in to represent whole ecosystems and all the other species they give a home too. The Saint Lucia parrot for example, stands proud as the standard bearer for Saint Lucia's mountainous rain forests and all their biodiversity, which has subsequently benefitted from the hugely successful efforts to save the Saint Lucia parrot.*





How special it is then for such a small island as Saint Lucia to boast such an enigmatic, natural icon, in the form of its largest native terrestrial animal, the Saint Lucian iguana. A fact historically recognised by the Amerindians who gave the island the name 'Iyanola', meaning 'land of the iguana'. That historically the island should be so synonymous with the iguana is unfortunately not as apparent today, considering the reduced population and current conservation status of the animal on the island: many Saint Lucians have never seen the animal their island was named after in its natural habitat. However, it is because of this cultural significance that the Saint Lucia iguana is the perfect flagship species for driving the conservation of their habitat, the island's endangered dry forests, which have their own rich biodiversity rivalling that of the rain forests. The successful conservation of the Saint Lucia iguana is therefore significantly far more reaching than the preservation of a single species, but can be seen as an indicator of the sustainability of the island's unique natural history and culture.

*main picture: Saint Lucia iguana*

Due to their low numbers and restricted geographic area, the Saint Lucia iguana is considered as being critically endangered, meaning "at extremely high risk of extinction in the wild." Now restricted to an area in the North East of the island, threats such as habitat loss, introduced predators (cats, dogs, rats, mongoose), introduced competitors, and loss of genetic integrity, have made survival of Saint Lucia iguana a primary conservation concern for the Saint Lucia Forestry Department (SLFD) of the Ministry of Agriculture, Lands, Forestry and Fisheries (MALFF) who have formed a partnership with UK-based Durrell Wildlife Conservation Trust (Durrell) to work on the recovery of this unique population.



Since 2008, a new and very worrying threat to Saint Lucia's iguana was identified with the confirmation that an iguana population not from Saint Lucia was living free, and breeding, around Soufrière. At present, this 'alien' population is separated from Saint Lucia's native population, but if the alien population grows and spreads, the two will meet and interbreed. All genetic uniqueness that makes the Saint Lucia iguana what it is will be lost – in effect, the Saint Lucia iguana will cease to exist. In recognition of this grave threat, SLFD and Durrell are directing efforts to halt the spread and eventually eradicate these non native iguana from Saint Lucia. It is understood that in the late 1980s these alien iguanas were brought into Saint Lucia from Canada as pets - and without a permit. It is thought that the original iguanas bred in captivity and the hatchlings escaped from the cage, or the adults escaped and bred in the wild. Reports of sightings gathered from questionnaires suggest that the young iguanas may have escaped before 2002. It is these iguanas that have gone on to breed and disperse around the Soufrière area, where sightings by the public seem to be getting more and more common.

Although there is evidence from other countries that, once established, non native iguana on their own have negative impacts on crops, drainage systems and become a nuisance through sheer numbers, concern primarily lies with any future interaction between Saint Lucia's native iguana population and those introduced animals in the South of the island. Although geographically separated by distance, there are several negative implications associated with the two populations coming into contact. Firstly, the likelihood of hybridisation between native and alien iguana would compromise the unique identity of the Saint Lucia population. It is also likely, and often observed where introduced species have become invasive, that the non-native species will have a competitive advantage over native species in seizing resources such as food and nest sites. Through the work of Durrell and SLFD it has been observed that the alien iguana attain a larger body mass and produce twice as many eggs as the Saint Lucia iguana, suggesting a competitive bias in favour of the non-Saint Lucian population should the two meet.

A meeting of the two populations could happen by natural dispersion of the alien iguanas, or even more worryingly, by people transporting them, for example as pets. Transporting alien iguanas outside of the Soufrière area without a permit from MALFF is a criminal offence under the 1980 Wildlife Protection Act of Saint Lucia. There is a need to strongly discourage any such attempts at doing this and the public's cooperation is vital in making sure this does not happen. Unregulated importation of iguanas as pets is the root cause of this threat. Further unregulated pet trade in this alien species has the potential to make the threat very much worse. In every single country in the world (and there are many) where alien iguanas have become a problem, it started with people keeping the alien iguanas as pets.



main picture: The Pitons, Soufriere

inset: alien iguana hatchling





The day to day activities of workers on the current project are focussed on the permanent removal of alien iguanas. These are tasks that are, to be honest, thankless and depressing to conservationists. But we know that this work is first and last about trying to save iguanas. We believe the Saint Lucia iguana is now, as throughout history, of great value to the island. It is sad that we currently have to focus on removing another, non Saint Lucian iguana, but our goal is always the protection – and ultimately the recovery – of the Saint Lucia iguana.

In other countries, cases of introduced iguanas, and other invasive alien species, have shown that huge problems were created due to a delay or inadequate intervention early on after the escape. It is essential to act quickly and decisively. The SLFD and Durrell are doing their best to prevent the same problems occurring in Saint Lucia. Left unchecked, the introduced iguana population may rapidly increase in both number and area. In 2009, the SLFD and Durrell established a four year collaborative partnership under the Saint Lucian component of a regional, GEF-funded project to eradicate the alien iguana population with a view to saving the Saint Lucia iguana and to prevent potential problems caused by alien iguanas from occurring.

Relying heavily on a workforce of local conservationists and volunteers from overseas, the management operation largely entails conducting intensive visual searches throughout the known range of the introduced population with the aim of capturing individuals for humane euthanasia. In addition, raising public awareness for the issues and encouraging the public to report sightings of iguana, as well as building a knowledge base through questionnaires, is helping to establish the extent of the spread of alien iguana and direct our search efforts.

We have a difficult task in simply finding a cryptic (good at hiding) animal that spends most of its life high in trees and is still, thankfully, rather rare on Saint Lucia. We need to deploy as many methods as we can to improve our search efficiency. Recently, some trial work using tracker dog searches to assist locating iguana in the field has been very encouraging. It is hoped that initial results can be built on in the future for what could be an extremely useful tool in achieving the projects aims. But, above all, help from the public is what will make this work a success: we need people living in and around the Soufrière area to report iguana sightings to the iguana removal team. And we need the public to report these sightings as soon as they see an iguana to minimize the chances of the animal escaping.

Despite the huge efforts of the individuals and organisations involved in undertaking this project, it is through public awareness, support from Saint Lucia's communities, and renewed pride in the islands unique natural history that the Saint Lucia iguana and other species will be saved.



top picture: the iguana hotline on cards handed out to the public  
bottom picture: Saint Lucia iguana hatching