

The Giant Invasive Iguana (GII) or *Iguana iguana* as it is scientifically known is a declared pest in Fiji. It is Omnivorous invasive pest brought illegally on Qamea Island in early 2000. GII is also found on the Matagi, Laucala and Taveuni islands.

About Giant Invasive Iguanas

GII is a large arboreal (tree-dwelling) species of lizard and is native to Central, South America and the Caribbean. It can reach a total length of 2 meters and weigh an average of 9 kilograms. Most GIIs are predominantly green in colour. However, the coloration is variable including black, grey, white, bluish, green or brown GII. GII has very long tail which is 2 or 3 times the length of the body. The toes are long with thin curved claws for climbing. GII has spines along the head, neck and back, reaching up to its tail. It has a fold of loose skin hanging below the throat which is called the dewlap. GII also has large scale (leathery covering of their eardrums) on both sides of the neck. The large scale and the dewlap are key ways to differentiate between the GII and the native Fijian iguanas.

GII spends most of its time on trees amongst the canopy, descending only to mate, lay eggs or change trees. It also inhabits mangrove forests and saltwater habitats too. GII also digs burrows into the ground usually close to the seashores or close to water. Although they prefer sun and seashores, they can invade inner lands and forests. GII can also sleep in available vegetation and occasionally they are seen sleeping in tunnels constructed in the ground. This may also cause damages to the infrastructure including seawall, concrete road damages and landslides causing damages to buildings. GII prefer a tropical to subtropical climate. They are excellent swimmers and can remain submerged in water for a long time.

GII has excellent ability to migrate and multiply. GII breeds rapidly and a female can lay 17 to 76 eggs in any nesting period. As herbivores, GII mainly eats a wide variety of plant foods. It has very sharp teeth and is able to shred leaves and branches with great ease. GII has the ability to escape predators or captivity. They are hard to spot since they camouflage well, capable of running fast and can dive into water to escape predators. These features make it difficult to capture and eradicate. GII has become popular in the pet trade.

Fijian Native Iguanas

There are 3 different types of Fijian native Iguana which includes Fiji Crested iguana (*Brachylophus vitiensis*), Lau Banded iguana (*Brachylophus fasciatus*) and Fiji Banded iguana (*Brachylophus bulabula*). Iguanas are herbivorous which prefer to eat leaves, fruits, flowers and buds. All the *Brachylophus* iguanas are very difficult to observe during the day and occupy the highest levels of the tree canopy on the islands. Fiji crested iguana are reported to be found

on Yadua Taba, Macuata, Yasawa group, Mamanuca group. They are the largest South Pacific iguanas, maximum snout vent length of 25cm, has the large spines on back as opposed to two species of banded iguana. Both male and female has the dorsal spines. Females lay 2-4 eggs in single clutch and their eggs are known to have the longest incubation times than any other lizards, taking approximately nine months to hatch.



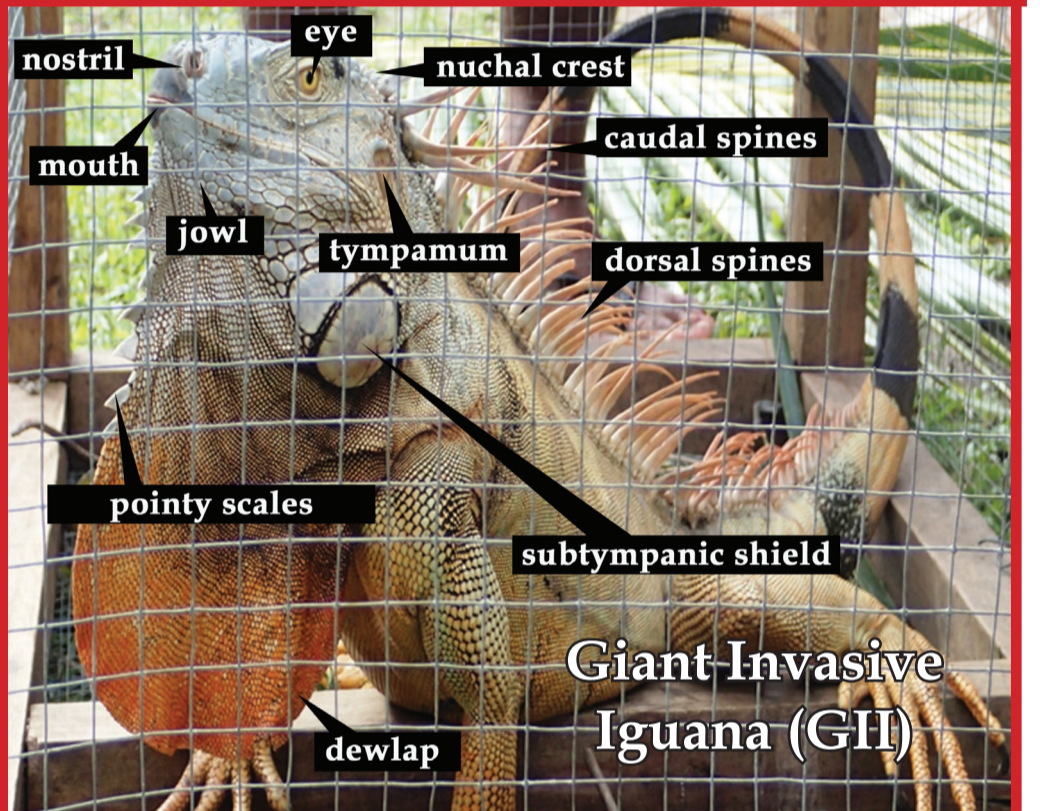
Lau Banded iguana (*Brachylophus fasciatus*) are found on Lau group of eastern Fiji and as with most iguanas, this species is herbivorous, although a comprehensive study of its diet in the wild has never been studied as it is so rare. They are the smallest South Pacific iguana with snout to vent length of 18cm thus different from other two *Brachylophus* iguanas genetically, and body size, higher number of dorsal crest spines and low number of femoral spines, nostril colour, shape and overall colour pattern. Females lay an average of 5 eggs per clutch.



Fiji Banded iguanas (*Brachylophus bulabula*) are usually found on Mali and Cikobia, verbal reports of presence on smaller islands. As with most iguanas, this species is herbivorous, although a comprehensive study of its diet in the wild has never been studied as it is so rare. They are assumed to prefer the same food plants as the better studied *Brachylophus vitiensis*, as many or most of these same plants occur on the islands occupied by *B. bulabula*. In wild they are not successful in reproduction until they are four years of age and lay 5 eggs per clutch on average.



All the native iguanas are at risk of extinction and the numbers are rapidly declining. They are threatened by wild goats, feral cats, mongoose, black rats, forest burning and logging, invasive species and competition of food, illegal smuggle and trade, tourism development,



- GII has longer caudal spines.
- GII has longer dorsal spines.
- The Fijian Crested Iguana (*Brachylophus vitiensis*), which usually has one horizontal band that runs from the tympanum to the dorsal crest fold.
- Fiji Crested Iguana has no pointy scales on the Dewlap.
- Fiji Crested Iguana has no Subtympamic Shields.

plantation agriculture. Conservation practices to save these endangered species are through conservation action plan, designation of national park, education programmes/ awareness to local community on importance of the role of iguanas in the ecosystem and emphasising the difference between native and invasive iguana. Moreover, there is need for collaborative related stakeholder species recovery plan workshop, removal of feral goats and cats and conducting surveys to confirm the presence. All of the *Brachylophus* iguanas are protected from international trade by Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Impact of GII Internationally

The Giant Invasive Iguana or the Green Iguana as it is commonly known in most places has been introduced to many countries around the world, mainly through pet trade. The introduced GII populations in countries like Florida, Puerto Rico and other Caribbean islands have brought serious economic and ecological impacts. Some of these negative impacts are on agriculture, tourism, infrastructure and biodiversity. In Florida, GII is regarded as a public nuisance and health risk, particularly to the food and hotel industries, where they are known to scare and steal food from guests and defecate on tables, chairs, swimming pools and their surroundings. In Puerto Rico, the GIIs are said to increasingly disrupt airfield operation at the international airport and become a serious hazard to road users, particularly in the breeding season. While road embankments may suit the GII for

nesting burrows, however, road collapses require expensive repair. With increasing population numbers in the introduced habitats, GII has shown to become a significant pest in a wide variety of agricultural, ornamental, park and horticultural settings. GII is also said to pose a threat to a variety of native animals through direct competition, predation and the introduction and spread of disease and parasites which may affect vulnerable native reptile species. GII can spread salmonella disease. Both in Florida and Puerto Rico, the authorities realised very late the negative impacts of the GII. This had long past any opportunity to control or eradicate the pest.

What Can You Do to Help BAF

You can help BAF in stopping the spread of GII and eradicating the pest by:

- Reporting any sighting of GII to BAF
- Seafarers and boat operators who service the Northern Division to monitor their vessels and ensure that there are no GII on board either accidentally or deliberately. Boat operators and seafarers play a very important role in containment of GII and prevention of its spread to other parts of Fiji.
- Do not release any captured GII into forests or any places

For Further Information Please Contact:

Biosecurity Authority of Fiji on 3312512 or Short Codes : General Enquiries -5994 Giant Invasive Iguana (GII)-5995 or Termites-5996 or Animal Disease Surveillance-5997 or Email-info@baf.com.fj or visit BAF website www.baf.com.fj

Please do not kill any Iguana without confirming its species first with the Biosecurity Officials- call on 5995