# CASE STUDY: GREEN IGUANA

#### A case study of a high risk species illegally smuggled into Australia.

#### **Species**

Green iguana (Iguana iguana).

#### Origin

Central and South America. Naturalised populations exist in the United States (including Hawaii and the Virgin Islands) Grand Cayman, Puerto Rico and Fiji.<sup>1</sup>

### Potential environmental impacts

Green iguanas can grow up to 2 metres long. They are agile climbers and live in trees. A habit of diving into water (and staying submerged while swimming) makes them difficult to capture.<sup>2</sup> Large areas in Australia, particularly across the north and down the east coast are considered climatically suitable for green iguanas.<sup>3</sup> It is difficult to predict what their environmental impacts will be but a Queensland government risk assessment found they are a high risk species due to several attributes:<sup>4</sup>

- A history as a pest overseas (Florida, Hawaii, etc.).
- A preference for tropical and subtropical climates.
- An extensive native range.
- A broad, non-specialised diet (mainly herbivores).
- A relatively high fecundity.

### **BIOSECURITY ISSUES**

#### Summary

Despite the high risks of green iguanas establishing in Australia due to illegal pet-keeping, there has been little focus on prevention. Australian needs a strategy to respond more effectively to the biosecurity risks of illegal pets.

#### Interceptions and incursions

Green iguanas are not permitted in Australia. They have frequently been intercepted: from 1999-2010, 17 animals in 10 incidents were seized, stolen or UPDATED: NOVEMBER 2017



A green iguana. Photo: Artur Pedziwilk | CC BY-NC-ND 2.0

surrendered from illegal keeping in NSW, South Australia and Victoria, and five animals in two incidents were intercepted as illegal imports into NSW.<sup>5</sup> From 2003–2010 at least one green iguana was intercepted as a stowaway (in the Northern Territory). In 2011 a female, probably an escaped or released pet, was captured at large in Townsville.<sup>6</sup>

## Risk assessment and contingency planning

Green iguanas have been assessed as having an extreme risk of establishing in Australia.<sup>7</sup> A Queensland risk assessment concluded they were a high risk species.<sup>8</sup> Despite the acknowledged risks, there is no contingency plan to guide a national response to an incursion.

#### **Quarantine and enforcement**

Eradication of a naturalised population of green iguanas would probably be

difficult, given their ability to escape capture by swimming underwater, and because they are well camouflaged in trees. So there needs to be a strong focus on prevention, including effective quarantine to detect illegal imports and stowaways and enforcement of regulations against possession and sale. There is a strong commercial incentive to smuggle green iguanas.<sup>9</sup> Like crocodiles, green iguanas make appealing pets when young, but grow to an inconvenient size, increasing the risk that illegal pets will be liberated.<sup>5</sup>

#### CHANGES NEEDED Risk reduction

• A national strategy is needed to limit the risk of green iguanas and other species likely to be illegally kept as pets from establishing in Australia.





A national strategy is needed to limit the risk of green iguanas likely to be illegally kept as pets from establishing in Australia. Photo: Juvenile green iguana, Alex Popovkin | Flickr | CC BY-SA 2.0

#### **Contingency planning**

• A contingency plan should be developed to maximise the prospects of a prompt effective response if an incursion of green iguanas occurs.

#### **ABOUT OUR CASE STUDIES**

Our case studies illustrate the need for changes in how Australia prevents the establishment of new invasive species. They were compiled using publicly available information at the time of the last update. We would welcome new information or updates to biosecurity response for inclusion in future updates.

### **CONTACT US**

• Visit invasives.org.au for more information about the Invasive Species Council and to get in touch.

#### REFERENCES

Cshures S. 2011. Green iguana. Pest animal risk assessment. Biosecurity Queensland.

Henderson W, Bomford M. 2011. Detecting and preventing new incursions of exotic animals in Australia. Invasive Animals Cooperative Research Centre, Canberra.

Roznik E. 2011. Observations and capture of

an introduced Green Iguana, Iguana iguana (Linnaeus, 1758), in tropical Queensland, Australia. Herpetofauna 41: 25-27.

#### **ENDNOTES**

- 1 Cshures (2011).
- 2 Cshures (2011).
- 3 Henderson and Bomford (2011).
- 4 Cshures (2011).
- 5 Henderson and Bomford (2011).
- 6 Roznik (2011).
- 7 Henderson and Bomford (2011).
- 8 Cshures (2011).
- 9 Cshures (2011).

To protect the environment from harmful new invasive species through prevention and early action.



Stronger biosecurity is vital to protect the highly endemic wildlife of Australia and its many special wild places. This is Lord Howe Island, where invasive species have already caused several extinctions.

