



Key to Education Color Plate on Iguana Ecology on Island Ecosystems

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A healthy iguana population makes up a large percent of biomass on an island and affects an ecosystem in many different ways.

Iguanas should be appreciated for the significant impact they have on ecosystem processes. On islands such as the ABC islands, iguanas can be considered keystone species because of the crucial role they play in cycling nutrients through the ecosystem and the fact that they can make up the largest proportion of the native vertebrate biomass.

- A) Iguanas are herbivores that eat fruit, flowers, and leaves. As the primary native herbivores on the island, iguanas make the energy and nutrition in plants available to the many species that cannot eat plants. Through the digestion process, plant matter is converted to usable energy and nutrition for others as iguanas grow, reproduce, or defecate.
- B) By eating fruits, iguanas assist plants in distributing their seeds and facilitate their new growth. When seeds pass through the gut of an iguana, they are stimulated to germinate much better than seeds that have not gone through this important passage. When the seeds are deposited on the ground with the iguana feces, they are provided a nutritious and moist microenvironment within which to sprout.
- C) When female iguanas are creating their nests, they burrow deep into the soil and build long tunnels. This churns the dirt and redistributes nutrients to all of the surrounding plants, microbes, and detritivores, while also letting oxygen into the soil. Once baby iguanas hatch they lie behind eggshells and membranes that provide nutrition for soil microbes and also many insects and scavengers.
- D) Young iguanas are preyed upon by lots of other animals. They are eaten by many birds (eg. falcons, herons, Cara Cara, and raptors), crabs and snakes. Prior to human colonization of Curaçao, adult iguanas were only eaten by very large predators like the white hawk.
- E) When iguanas die, scavengers eat the carcass and decomposers recycle the remaining tissue, its nutrients, and minerals back into the ecosystem.