

# Cardisoma guanhumi

*Cardisoma guanhumi*, also known as the **blue land crab**, is a species of **land crab** found in tropical and subtropical estuaries and other maritime areas of land along the **Atlantic coast of the Americas**, from **Brazil**<sup>[1]</sup> and **Colombia**, through the **Caribbean**, to the **Bahamas**, and as far north as **Vero Beach, Florida**.<sup>[2]</sup> The species varies in colour from dark blue to brown or pale grey, and may grow to 11 centimetres (4.3 in) in width and weigh over 500 grams (18 oz).<sup>[2]</sup>



*A group of blue land crabs*

## 1 Description

The carapace of *C. guanhumi* can reach sizes up to around 11 cm (4.3 in) and individuals can reach sizes of up to 35 cm (14 in). As with many crab species, males possess dimorphic claws: the larger claw can grow up to around 15 cm (5.9 in) in length, eventually becoming larger than the carapace itself. The eyes are stalked and their colour ranges from a deep blue to a pale grey. Juveniles generally have a brown carapace with orange coloured legs. Females usually appear light gray or white. Adult colours are usually present between 80 g (2.8 oz) and 180 g (6.3 oz). Individuals of the species can weigh over 500 g (18 oz).<sup>[2]</sup>

## 2 Distribution

*Cardisoma guanhumi* is found throughout estuarine and other coastal regions of the Caribbean, and along the Atlantic coast of Central and South America. In the United

States it can be found in the **Gulf of Mexico** and coastal areas of Florida, and as far north as St. Augustine.

## 3 Diet

*Cardisoma guanhumi* is omnivorous, collecting and eating leaves and fruits close to its burrow whilst also eating insects and carrion. Like many crabs, this species is cannibalistic. They move in the shade during the day and will eschew moving in prolonged direct sunlight to feed at night instead.<sup>[2]</sup>

## 4 Senses

*Cardisoma guanhumi* finds its food using light and sound detectors. Experiments show that crabs can be drawn out of their burrows to investigate the sound of falling fruit, once out they initiate a search for food. Predatory behavior is released in these crabs by detection of small moving objects. Crabs in the genus *Cardisoma* are able to detect small vibrations on the ground within the range of 10–1500 Hz and 70 dB. Visual acuity increases with body size due to an increase in both the number and diameter of ommatidia.<sup>[2]</sup>

## 5 Life cycle



*Guarding the burrow*

The reproductive cycle is closely linked to seasonal weather patterns and lunar phase. Heavy rains in the spring initiate migrations. When this occurs, *C. guanhumi* begins to gain weight, as more food is consumed



*A juvenile blue land crab showing a different coloring*

- Media related to *Cardisoma guanhumi* at Wikimedia Commons

and gathered for the first few weeks of the migratory period. Males mate with mature females during this time. Fertilization is internal, and throughout July and August most females carry the eggs externally. After approximately 2 weeks the eggs will hatch and must be released into saltwater for the larvae to survive. Several spawns per year may occur with spawning season varying with location within the range. In Florida, spawning season lasts from June to December and reaches its peak in October and November. In the Bahamas the season extends from July to September, while in Venezuela spawning lasts from July to November. Eggs hatch into free swimming larvae with 5 zoeal stages and 1 postlarval or megalopa stage. Typical development time from hatching to the first crabs stage is 42 days under laboratory conditions; however, this time may be much shorter in wild specimens.<sup>[2]</sup>

*C. guanhumi* is a slow-growing species compared to most other crabs. It requires more than 60 molts – roughly three times more than other species of crab - to reach its full size. The crab will generally seal the exit to their burrow using mud, 6–10 days before they molt to protect themselves from predators. (After molting they become more vulnerable to attack as their shell has not yet hardened.)<sup>[2]</sup>

## 6 References

- [1] Helmut Debelius (2001). *Crustacea - Guide of the World* (2nd ed.). Frankfurt: IKAN Unterwasserarchiv.
- [2] K. Hill (July 25, 2001). "*Cardisoma guanhumi*". Smithsonian Marine Station at Fort Pierce.

## 7 External links

- "Land crabs". StJohnBeachGuide.com. Retrieved June 19, 2007.

## 8 Text and image sources, contributors, and licenses

### 8.1 Text

- **Cardisoma guanhumi** *Source:* <http://en.wikipedia.org/wiki/Cardisoma%20guanhumi?oldid=628342436> *Contributors:* Stemonitis, Eubot, Apokryltaros, Abune, SmackBot, Dantadd, Hlucho, GrahamBould, AlaiBOT, Nick Number, Ianare, ShadowKnight, R'n'B, Crustacean-guy, Phe-bot, Invertzoo, WikHead, Addbot, RN1970, Lightbot, Yobot, Yngvadottir, DeVerm, EmausBot, Stackdeck, John of Reading, Andy Temperley, Alexb18, Krotera, Tropical Bob, Laheyth and Anonymous: 11

### 8.2 Images

- **File:Blue\_Landcrab.jpg** *Source:* [http://upload.wikimedia.org/wikipedia/commons/7/76/Blue\\_Landcrab.jpg](http://upload.wikimedia.org/wikipedia/commons/7/76/Blue_Landcrab.jpg) *License:* CC BY-SA 3.0 *Contributors:* Own work *Original artist:* DeVerm
- **File:Blue\_land\_crab\_group.JPG** *Source:* [http://upload.wikimedia.org/wikipedia/commons/7/78/Blue\\_land\\_crab\\_group.JPG](http://upload.wikimedia.org/wikipedia/commons/7/78/Blue_land_crab_group.JPG) *License:* CC BY 2.5 *Contributors:* Personal photo *Original artist:* Ianaré Sévi
- **File:Cardisoma\_guanhumi\_juvenile.jpg** *Source:* [http://upload.wikimedia.org/wikipedia/commons/3/3a/Cardisoma\\_guanhumi\\_juvenile.jpg](http://upload.wikimedia.org/wikipedia/commons/3/3a/Cardisoma_guanhumi_juvenile.jpg) *License:* CC BY-SA 3.0 *Contributors:* <http://nemcok.sk/?pic=15688> *Original artist:* Jaro Nemčok

### 8.3 Content license

- Creative Commons Attribution-Share Alike 3.0