

## Chapter 1 : The Coconut Crab in Guam | Scientific Research Diving at USC Dornsife

*The coconut crab (Birgus latro) is a species of terrestrial hermit crab, also known as the robber crab or palm thief. It is the largest land-living arthropod in the world, and is probably at the upper size limit for terrestrial animals with exoskeletons in recent times, with a weight up to kg ( lb).*

June 23, Laura Beauregard, U. Native to islands in the Indian and southern Pacific oceans, these animals are truly humongous. They can weigh 9 pounds and measure 3 feet from leg to leg. Coconut crabs are the largest land-living arthropods—the phylum of joint-legged creatures that includes crabs, insects, spiders, and scorpions. You may have seen smaller hermit crabs on a trip to the beach—or for sale at a pet shop. They take shelter inside abandoned snail shells, carrying them around as portable homes. Like other crabs, hatchling coconut crabs begin their lives floating freely at sea. After about a month of eating and growing, they find a snail shell and move in. The little coconut crabs carry this mobile home as they begin to transition to a land-based life. A seashell is a nice, protected place to live, but it has its drawbacks. The crab needs to find a bigger shell and make a quick switch. And that larger home will be heavier to tote around. So, after a year or so of inhabiting shells, the coconut crab makes a major lifestyle change. It crawls out and hardens the parts of its body that were once protected by the shell by regrowing layers of calcium-based tissues, a process called recalcification. Now, unlike other hermit crabs, it can become enormous. In fact, a lengthy scientific debate once raged about whether coconut crabs were really able to open the fruit. Coconut crabs first use their claws to scrape away the fibrous coating. This can take hours or days. Finally, they stab into the fruit at a weak point and rip it open. This diet helps coconut crabs grow large: So what other items do the largest land-living arthropods shove into their maw? As well as the occasional biscuit, as you can see in the video above. Do not feed biscuits to coconut crabs. In fact, biologist Mark Laidre says they only relatively recently evolved to eat coconuts—a skill unique to modern coconut crabs—which helps them to eat each other less. They also eat their own discarded body parts. As coconut crabs grow, they periodically molt their tough outer layer the exoskeleton and grow a new one. They sniff it out. These animals have a strong, highly efficient [ PDF ] sense of smell. In fact, a large portion of their brain is devoted to detecting odors. Coconut crabs are also known as robber crabs because they snatch silverware and other objects and carry them away. The thievery might be tied to that incredible sense of smell. Coconut crabs ignore objects that have been washed clean of scents, suggesting that they may only abscond with things that carry a faint whiff of food. Adult coconut crabs live alone in crevices or burrows. When coconut crabs emerge to feed, they keep their distance from each other. Laidre sought to find out if coconut crabs ever gathered together to interact beyond mating or eating each other. The scientist tethered coconut crabs to one spot and watched to see if any others came to visit. After coconut crabs mate, females attach their eggs to special appendages and carry them under their abdomens. While the young develop inside the eggs, the females hold onto them, sticking near the edge of the sea so that they can periodically moisten the eggs. But this care ends when the young are ready to hatch. The females release their hatchlings into the ocean waves. Now the tiny, floating babies must fend for themselves—and only a few will survive to return to land. They may be huge and heavily armored, but they can be vulnerable. Coconut crabs take an extremely long time to grow big—they can live more than 40 years—and introduced predators such as rats can harm smaller, younger individuals or those in the process of shedding their exoskeletons when their bodies are soft. Habitat loss has also caused local declines in some areas.

### Chapter 2 : The Grab & Robber! - Crab & Lobster Restaurant, Asenby Traveller Reviews - TripAdvisor

*The robber crab is the nickname of the coconut crab. It gets the robber crab name due to the the belief it often steals shiny, metallic objects from tents. It is currently the largest living land arthropod in the world.*

Share The Coconut Grab, *Nuctoceras litureperus*, is an unusual acanthocertoid ammonite that crawls onto land to eat coconuts, similar to a robber crab, in *The New Dinosaurs*: It is found along the shorelines of tropical islands in Oceania and near Irian. A major predator of it is the shorerunner. Scattered across the vast Pacific Ocean that covers almost half the globe, is a multitude of islands. These are not fragments of any continent, but have grown completely independently of Gondwana. They have appeared mainly through volcanic action, where an underwater volcano has reached the surface and cooled. The flanks of these islands are further extended by reefs built up by corals and other sea creatures. Belonging to no recognized zoogeographic realm, this array of islands is described here as part of the Australasian ecozone. The coiled shell of the coconut grab is flat on the bottom, providing a skid-like surface that allows it to be dragged over the sand. There are eight tentacles. The four at the rear are broad and very muscular. They are used for pulling the animal over the ground and up coconut palms. The front four tentacles are long and delicate, allowing the ammonite to reach for a coconut. The eyes can focus both submerged and out of the water. Coconut grabs usually come ashore at night when it is cooler, and dawn finds the beach crisscrossed by their distinctive trails. At the same time as the dinosaurs developed to be the most significant animals on Earth, other creatures evolved to dominate the seas. A group of animals of some importance were the ammonites, cephalopods that were encased in coiled shells, dating back to the Devonian. The shells consist of empty air chambers that can be used by the animal to regulate its buoyancy. The ammonites evolved into many shapes and sizes during the Mesozoic period and are commonly found as fossils in rocks that date from that time. The coconut grab is an unusual ammonite in that it can spend much of its time out of the water crawling about on land. On many of the tropical islands of the Pacific it can crawl up the beach and eat coconuts, and even climb trees to find the nuts when there are none available lying in the sand or washed up on the shore.

### Chapter 3 : 10 Ginormous Facts About Coconut Crabs | Mental Floss

*Coconut crab, (Birgus latro), also called robber crab, large nocturnal land crab of the southwest Pacific and Indian oceans. It is closely related to the hermit crab and king crab. All are decapod crustaceans (order Decapoda, class Crustacea).*

Description[ edit ] B. The front-most pair of legs has large chelae claws , with the left being larger than the right. The last pair of legs is very small and is used by females to tend their eggs, and by the males in mating. Some difference in color occurs between the animals found on different islands, ranging from orange-red to purplish blue; [12] in most regions, blue is the predominant color, but in some places, including the Seychelles , most individuals are red. Unlike other hermit crabs, the adult coconut crabs do not carry shells, but instead harden their abdominal terga by depositing chitin and chalk. Not being constrained by the physical confines of living in a shell allows this species to grow much larger than other hermit crabs in the family Coenobitidae. This organ can be interpreted as a developmental stage between gills and lungs , and is one of the most significant adaptations of the coconut crab to its habitat. The organs require water to properly function, and the coconut crab provides this by stroking its wet legs over the spongy tissues nearby. Coconut crabs may drink water from small puddles by transferring it from their chelipeds to their maxillipeds. Although these gills are comparable in number to aquatic species from the families Paguridae and Diogenidae , they are reduced in size and have comparatively less surface area. As most crabs live in the water, they have specialised organs called aesthetascs on their antennae to determine both the concentration and the direction of a smell. However, as coconut crabs live on the land, the aesthetascs on their antennae are shorter and blunter than those of other crabs and look more like those of insects. Coconut crabs flick their antennae as insects do to enhance their reception. Their sense of smell can detect interesting odours over large distances. The smells of rotting meat, bananas, and coconuts, all potential food sources, catch their attention especially. At the time of hatching, the female coconut crab releases the eggs into the ocean. The larvae pass through three to five zoea stages before moulting into the postlarval glaucothoe stage; this process takes from 25 to 33 days. Afterwards, they leave the ocean permanently and lose the ability to breathe in water. As with all hermit crabs, they change their shells as they grow. Young coconut crabs that cannot find a seashell of the right size often use broken coconut pieces. When they outgrow their shells, they develop a hardened abdomen. The coconut crab reaches sexual maturity around 5 years after hatching. They occur on most of the islands, and the northern atolls , of the Chagos Archipelago. Charles Darwin believed it was only found on "a single coral island north of the Society group ". These are close to the eastern limit of its range, as are the Line Islands of Kiribati , where the coconut crab is especially frequent on Teraina Washington Island , with its abundant coconut palm forest. Once the pores are visible, the coconut crab bangs its pincers on one of them until it breaks. Afterwards, it turns around and uses the smaller pincers on its other legs to pull out the white flesh of the coconut. Using their strong claws, larger individuals can even break the hard coconut into smaller pieces for easier consumption. Coconut crabs are considered one of the most terrestrial-adapted of the decapods, [44] with most aspects of its life oriented to, and centered around such an existence; they will actually drown in sea water in less than a day. They dig their own burrows in sand or loose soil. During the day, the animal stays hidden to reduce water loss from heat. In areas with a large coconut crab population, some may come out during the day, perhaps to gain an advantage in the search for food. Other times, they emerge if it is moist or raining, since these conditions allow them to breathe more easily. They live almost exclusively on land, returning to the sea only to release their eggs; on Christmas Island , for instance, B. Its large size and the quality of its meat means that the coconut crab is extensively hunted and is very rare on islands with a human population. Thomas Hale Streets reports a trick used by Micronesians of the Line Islands to get a coconut crab to loosen its grip: The bag limit is five coconut crabs on any given day, and 15 across the whole season.

### Chapter 4 : coconut crab | Habitat & Facts | [www.nxgvision.com](http://www.nxgvision.com)

*Giant Monster Crab climbs everything! The coconut crab is the largest land-living arthropod in the world. Also known as the robber crab, the coconut crab is a species of terrestrial hermit crab.*

It is more commonly known as the coconut crab, due to its diet. Coconut crabs are mainly scavengers, feeding on various tropical fruits including coconuts. Their two powerful front chelipeds allow them to tear through the tough husk of a coconut and feed on the flesh. In addition, they can climb trees up to 20 feet high just to reach growing coconuts. During World War II, these clever coconut crabs gained a reputation for stealing items from the trenches of American marines. The coconut crab is found in abundance on islands throughout the western Pacific and eastern Indian oceans. However, on the island of Guam, the coconut crab has faced a huge decline in numbers. Coconut crab populations across oceanic islands are heavily correlated with the level of human activity. On island nations with larger human populations, coconut crabs are very scarce. On Guam, coconut crab sightings have become very rare. Coconut crabs can climb up to 20 feet to reach coconuts Image courtesy of public-image-domain. Guamanians consider coconut crab meat a delicacy. The local Chamorro people have eaten them for centuries, and the meat holds special significance at important events such as weddings Fletcher The local demand for coconut crab meat is so high that the crab population on Guam cannot sustain it alone. Amesbury reports they were once commonly imported from the Northern Mariana Islands. Their shells also are commonly sold as tourist souvenirs. They are typically found within a few miles of the ocean, where females have adequate access to the ocean to release their eggs, which hatch only upon contact with saltwater. Ultimately, such changes further contribute to the decreasing population of coconut crabs on Guam by reducing the number of breeding individuals Amesbury It is imperative that the coconut crab population on Guam be preserved both for its economic and cultural value. Currently, several measures are in place to protect the crabs: However, more needs to be done to protect these unique and valuable creatures. At present, the highest crab densities on Guam can be found on military installations, where limited civilian access makes it difficult to hunt crabs Amesbury More areas specifically designed to protect the crabs can be created, especially in locations that can protect females and their eggs. Furthermore, establishing moratoriums on crab hunting would allow the dwindling population to regain momentum. A moratorium would also allow larger crabs to flourish, because the larger crabs are targeted first for harvest. While a complete ban on crab hunting is not practical because use of the crab is deeply ingrained in local Chamorro and Guam culture, effective use of these two methods could significantly help reestablish a thriving coconut crab population for the island, and ensure the sustainable relationship between the coconut crab and the people of Guam. Author photo by Jim Haw. Emily has a strong interest in sustainable business and through her participation in the Guam and Palau course she looks forward to learning more about ecologically sustainable development. Coconut Crabs, *Birgus latro* Anomura: Coenobitidae , of Sorol Atoll, Yap, with remarks on the status of B. Nearshore Marine Resources of the South Pacific: Information for Fisheries Development and Management. International Centre for Ocean Development. Assessment of the status of the coconut crab *Birgus latro* on Niue Island with recommendations regarding an appropriate resource management strategy. Students investigate important environmental issues such as ecologically sustainable development, fisheries management, protected-area planning and assessment, and human health issues. During the course of the program, the student team will dive and collect data to support conservation and management strategies to protect the fragile coral reefs of Guam and Palau in Micronesia.

### Chapter 5 : Want to try Coconut Crab? think again! - Port Vila Forum - TripAdvisor

*Imagine a crab that can crawl into your home and shoplift silverware! No wonder they're called "robber" crabs. From the Show: Smithsonian's Weirdest [www.nxgvision.com](http://www.nxgvision.com)*

### Chapter 6 : Christmas Island robber crabs - Australia Post

## DOWNLOAD PDF WHO GRABS ROBBER CRABS?

*Take a look at this photo of the Christmas island robber crab (another name for coconut crab). It was taken at the Detention Centre construction site. The coconut crab is a large edible land crab.*

### Chapter 7 : Coconut crab - Wikipedia

*Christmas Island Robber Crabs. Release date: 26 April While Christmas Island is famous for its endemic red crabs (the migration of which was the subject of a Christmas Island stamp issue), it is also home to the largest terrestrial arthropod on earth - the Robber Crab (*Birgus latro*), also known as the Coconut Crab.*

### Chapter 8 : BBC - Earth - Coconut crabs are the biggest arthropods living on land

*Tourist grabs giant 'rat-eating' coconut crab for incredible photo while visiting Christmas Island. The beasts, also known as robber crabs, can grow up to one metre long and feast on the dead.*

### Chapter 9 : Coconut Crab | Fanon Wiki | FANDOM powered by Wikia

*It's huge, antisocial, will steal your silverware, and can rip apart whole coconuts with its claws. Grab a piña colada and enjoy these 10 ginormous facts about the amazing coconut crab.*