Coral Snake

Corallilo (Spanish)

Micrurus spp.

Class: Reptilia
Order: Squamata
Suborder: Serpentes
Family: Elapidae
Genus: Micrurus

Distribution
This genus ranges throughout Central America, most of South America, and parts of the southeastern United States

Habitat
It inhabits wet and dry forests. It is found at low and middle elevations. It is also found along riverbanks on Pacific and Caribbean slopes.

Food
Its jaws do not open very wide, restricting its diet to slender prey such as lizards, skinks, eels and other snakes.

Reproduction
The female lays 5 to 14 eggs which hatch after approximately 90 days of incubation. Baby corals are about 18 cm long.

There are more than 50 species of the highly venomous and brightly coloured coral snakes classified in the genera *Micrurus* and *Micruroides*. Five of these, all belonging to the genus *Micrurus*, are found in Costa Rica. The Costa Rican coral (*Micrurus mesquitensis)* is the most common.

This very elusive snake spends the vast majority of its time buried in the ground or in the leaf litter of the rainforest floor. It comes to the surface when it rains and during breeding season. It is active mostly at night and rarely sighted during daylight hours, with most sightings occurring at dusk.

It bites slowly and deliberately, gradually sinking its fangs into its victim. It is one of the few venomous snakes, which do not let go after biting. It swallows food whole, moving it down the esophagus with an undulating motion of its muscles. Separate mandibles allow the mouth to open wide enough for food to fit into the body. Ribs do not connect ventrally, allowing them to expand when eating. Fangs are rear facing, placing limitation on the ability to bite, and subsequently swallow large prey.

They live very solitary lives except during mating season when males fight for mates. Their fighting is usually non-violent. The males intertwine their bodies until one of them gives up. Prior to mating the male will rub his nose on the female's back. During copulation the male intertwines his tail with the females and lifts her tail so that their cloacas match up. After mating the female leaves, possibly never to see the male again. The eggs, which are not cared for by the female after she lays them, are deposited into a burrow that she digs for the purpose.

Development
The young emerge from their eggs with full adult colouring and their venom ready for action. They are independent from birth.

Characteristics
Coral snakes are brightly coloured with alternating bands of red, black and yellow/white, or only red and black. They have small heads and short tails. The head is generally black and yellow, with the snout being all black.

Adaptations
They have aposematic colouration. This conveys a warning of danger to other animals. Venom is neurotoxic. A special scent gland on its cloaca releases a smell used for protection when threatened.

Status/ Threats
This genus has a very wide distribution and is listed as of Least Concern in the IUCN Red Book.

Sightings at Caño Palma
In the compound, canal area, along the trails and in the forest

Adults of this species rarely grow longer than 1 m with females tending to be longer than males. Lengths of 1.52 m have been recorded for *Micrurus spixi*, the longest species of the genus *Micrurus*.

The arrangement of the coloured rings varies in nearly all species of *Micrurus*. The pattern is repeated along the length of the body, generally in groups of three with a different band of colour separating the triad. Their small heads and blunt tails allow them to easily maneuver around leaf litter and rocky regions.
Their many vertebrae – more than any other vertebrate – are connected via ball and socket joints, which allow for greater mobility and provide a stronger connection. Venom is delivered via a pair of small fangs fixed in the front of their top jaw and don't fold back. Due to the time it takes for the venom to take effect, they have a tendency to hold on to a victim, using a chewing motion to inject appropriate amounts of venom to subdue the prey.

Colours are mimicked by other non-venomous snakes. *Micrurus* venom is primarily a neurotoxin, which causes paralysis of muscle tissue, usually in the respiratory system, leading to death. When approached its defense display is to flatten its body in order to appear larger, and snap back and forth while alternately hiding then swinging its head from side to side. It will often curl its tail to form an enlargement that may confuse an attacker as to which end is the head, often holding the curled tail above the ground to further the illusion.

Numerous species exist in this genus and several sub-species are contained within each species. Little is known of the status for all of them. Overall the genus is considered quite common, but some sub-species may be vulnerable.

Three species of coral snake have been observed in the compound area. *M.mipartitus,* a many-banded coral snake was seen eating a caecilian.
One daylight sighting was made of one on the ground underneath the stairs of a cabin across the canal.
These are seen fairly frequently along the trails at night. During a daytime hike a Coterc board member spotted a little glimpse of red under some leaves, which was an unusual daylight sighting.
A Costa Rican coral snake *(M. mestquitensis)* was observed eating a swamp eel several hundred yards away from the canal. It must have pulled the eel out of the mud of a drying pool in the forest.

References
Berenzweig, R. Jay (2001) Final: Venomous Snakes of Costa Rica. Retrieved March 14, 2008 from http://jrscience.wcp.muohio.edu/fieldcourses01/TropEcoCostaRicaArticles/Final.VenomousSnakesofCos.html
Burnett, Madeleine (2007) Venomous Snakes of Costa Rica. Retrieved March 14, 2008 from http://jrscience.wcp.muohio.edu/fieldcourses07/PapersCostaRicaArticles/VenomousReptilesofCostaRi.html