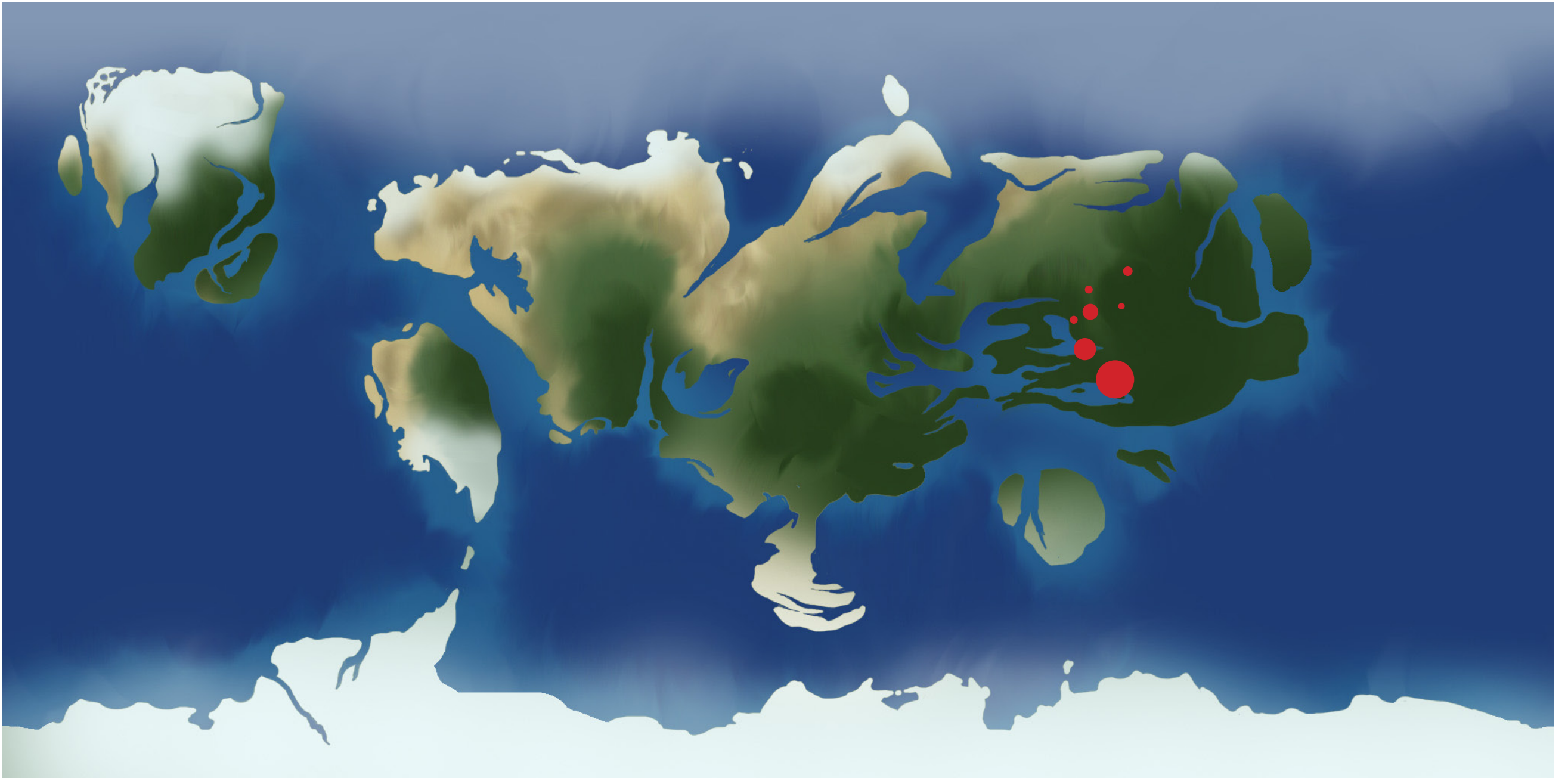


TECTONID COLONY



By Sijbren Reitsma

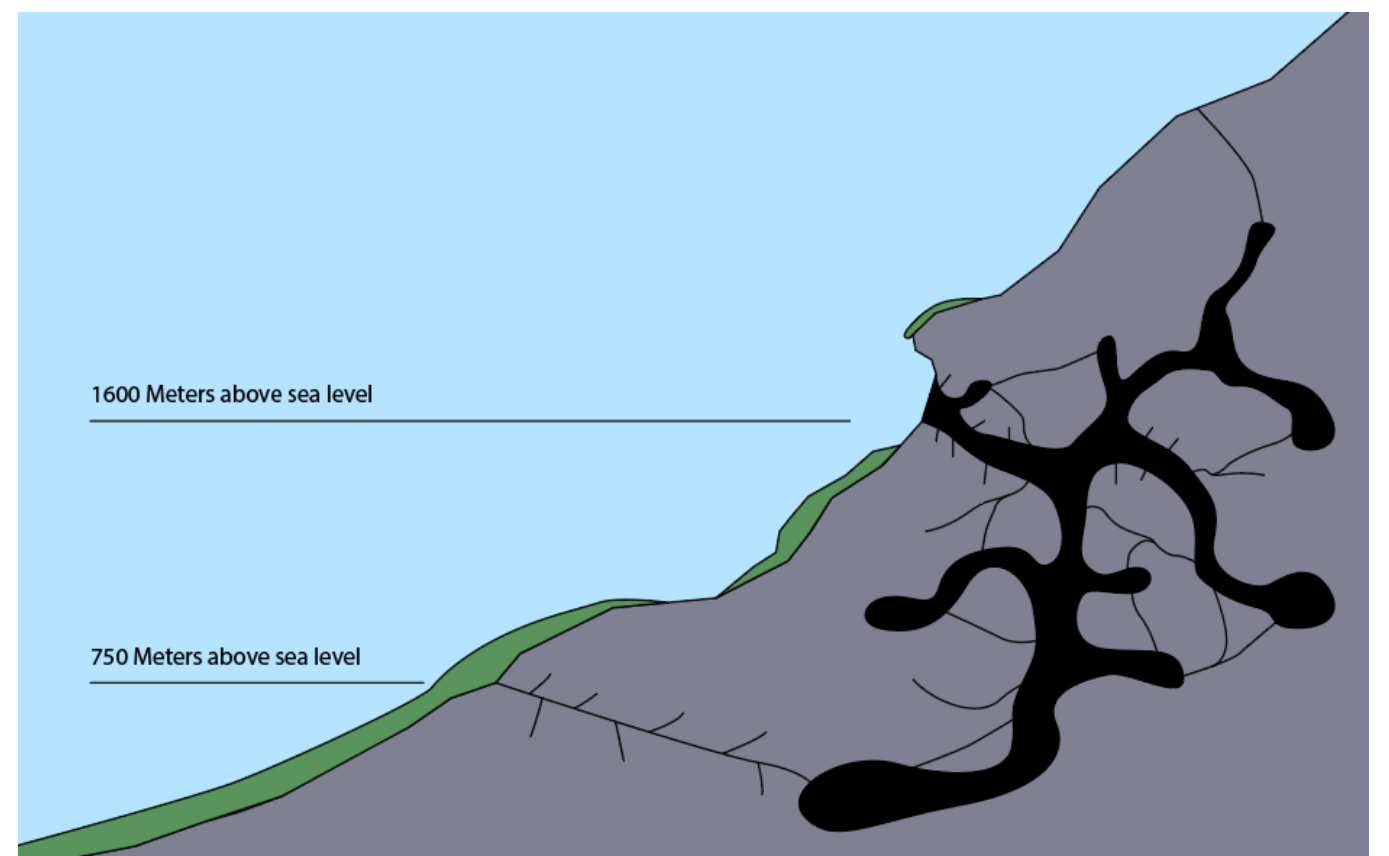
Habitat



On the world of Geparra the Tectonids reside in the more humid areas of the planet along mountain ranges . On the red dots there are multiple colonies. They live in the lush jungle areas where food is plentiful but competition is high.

Because they live in fortified colonies within the mountains the males need to hunt for food. In large packs consisting of hundreds of males they hunt near rivers and in the dense forest.

They have their colonies high enough because of the danger of flooding and near enough to the ground to go on hunting trips.



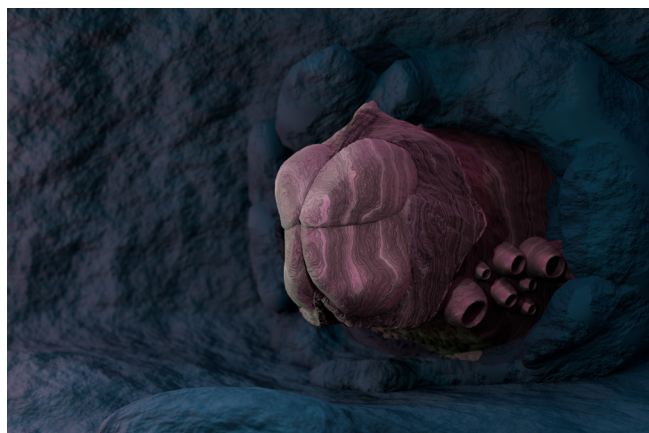
Colony

Tectonids are a species of soft bodied creatures with hardened shells. The strength of this Tectonid species lies in numbers and on their own they are vulnerable, even a queen of a colony, although it's roughly the size of a school bus. It stays its whole life anchored in a cave wall caring for and protecting the offspring.

Within the colony all individuals act as one and each have their own role. The workers make new tunnels providing an efficient infrastructure. For food the colony relies on the hunting lifestyle of the drones or soldiers. The Queens manage resources and care for the larvae and are the only fertile females of this species.

Due to extreme predation the colony has multiple chambers where soldiers Tectonids wait to ambush rival soldiers or predators.

There are often multiple queens in a colony residing in walls with only its tough armored head sticking out. When it's threatened the four plates around its head close, then it's only a matter of time before the attacker gets overrun by soldiers and even workers.



Queen

Length: 10 meters (33 feet)
Weight: 7,000–8,500 kg (15,000–18,700 lbs)

Female

Length: 2.0–2.2 meters (6.5–7.2 feet)
Weight: 45–60 kg (99–132 lbs)



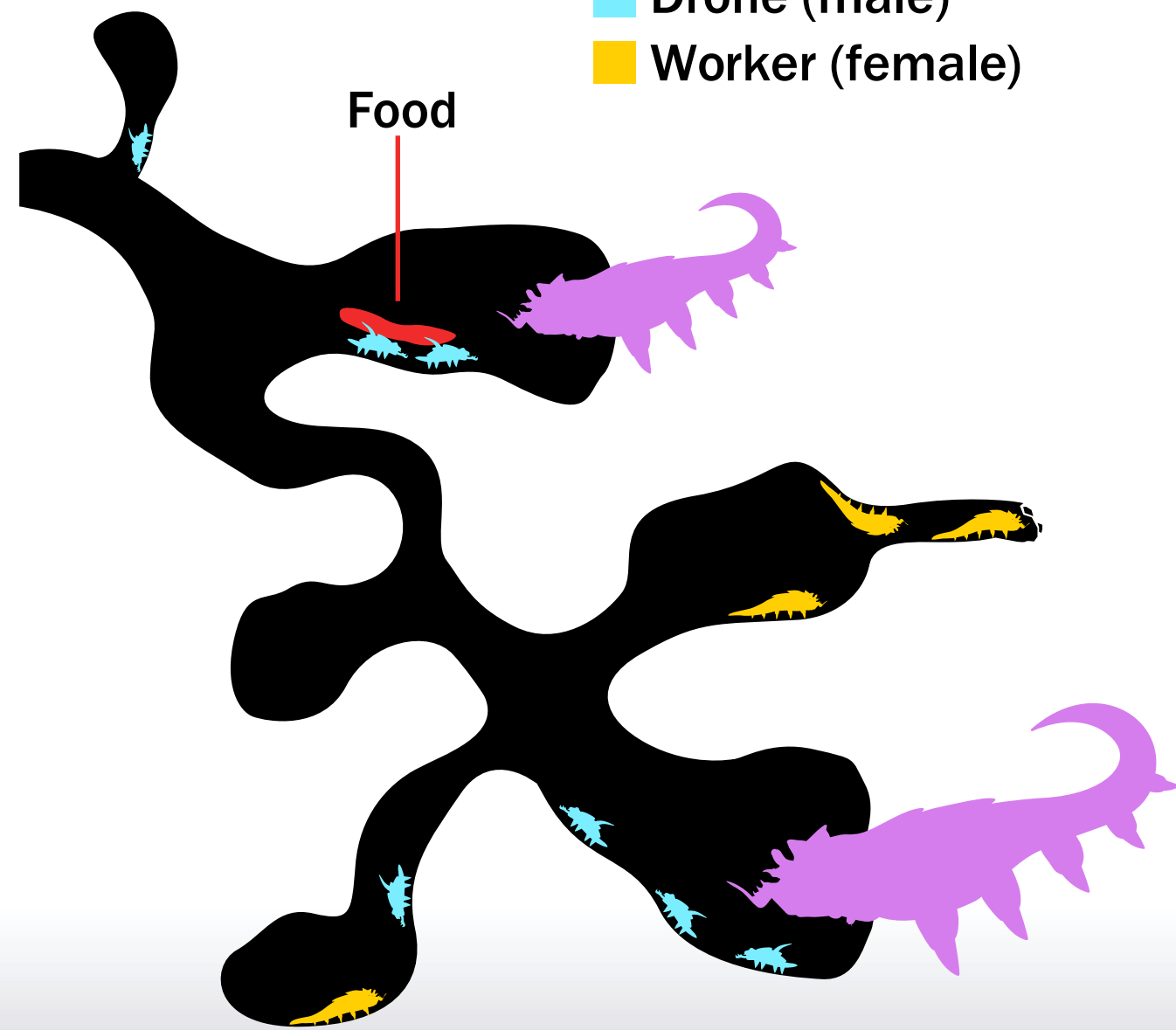
Male

Length: 0.9 meters (3 feet)
Weight: 15–18 kg (33–40 lbs)



The colony nest

- Queen
- Drone (male)
- Worker (female)



Tail for anchoring in cave



Sexual Dimorphism

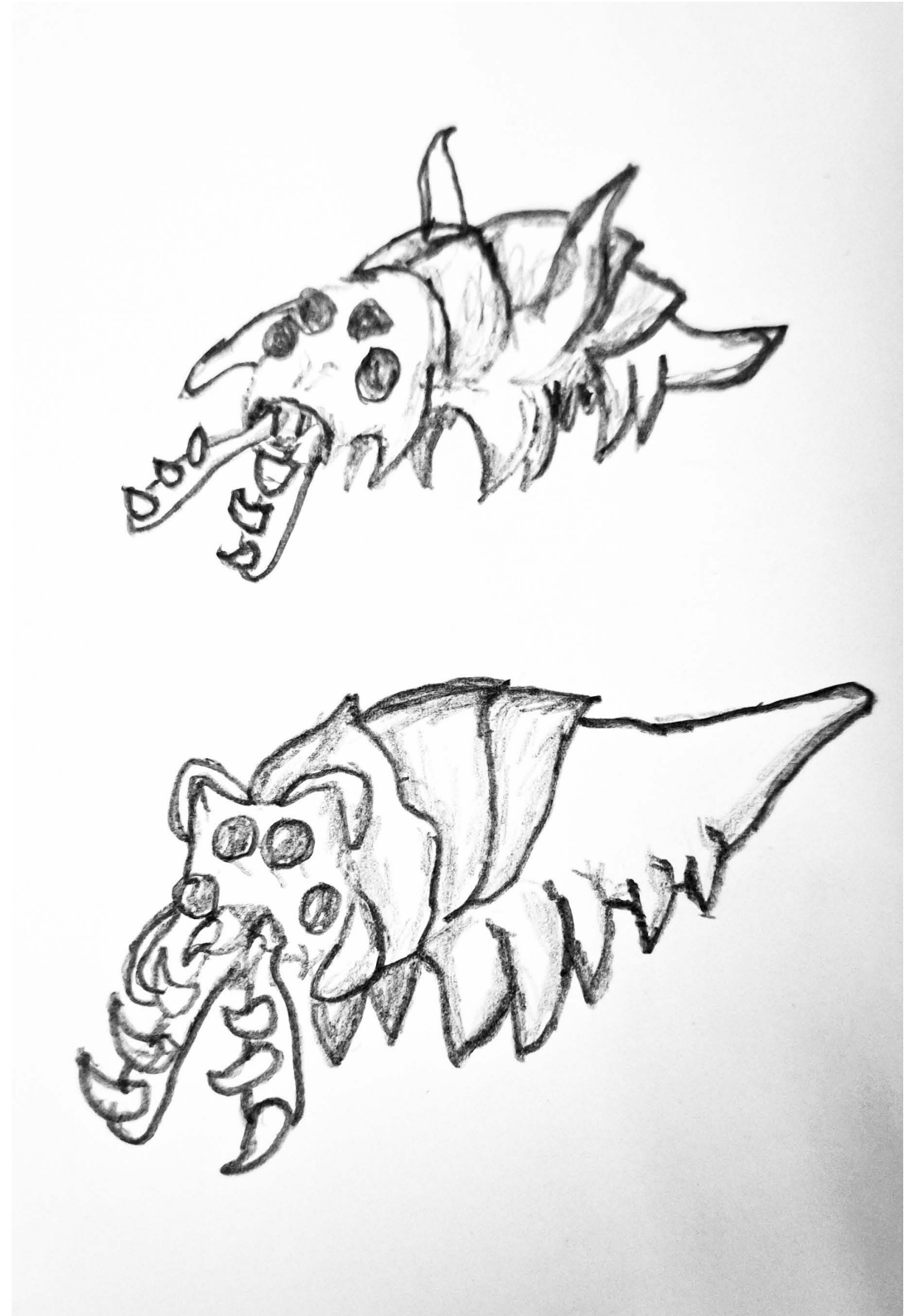
Males and females are extremely different from each other in both appearance and role. With male Tectonids filling the role of soldiers and females are workers and possibly queens. Males reach only on average 0.9 meters in length, females can grow up to 2.2 meters, and queens can reach 10 meters. Drastic difference!

This difference in appearance is advantageous to the colony structure. Males are more agile compared to the females that have a more sturdy build. Their smaller size allows them to move efficiently in dense jungle environments, searching for food and defending the colony.

Females are built for stability. Workers (non-reproductive females) are larger because they need the strength to create tunnels and maintain colony infrastructure these tectonids have specialized plates that cover their head that protect them from falling debris. Smaller or more juvenile females act as the nurses of the colony removing parasites and other harmful creatures. If a tectonid female exceeds to a size of 3 meters it's safe to say that she will become a new queen. Then she gets the urge to create a hole for herself to settle in.

The queen, being entirely stationary, devotes all energy to reproduction and colony control.

Males from outside colonies are welcomed for reproduction, ensuring genetic diversity. Mating occurs when males use specialized tentacles to fertilize the queen's eggs through openings in her shell, which seal immediately after fertilization.

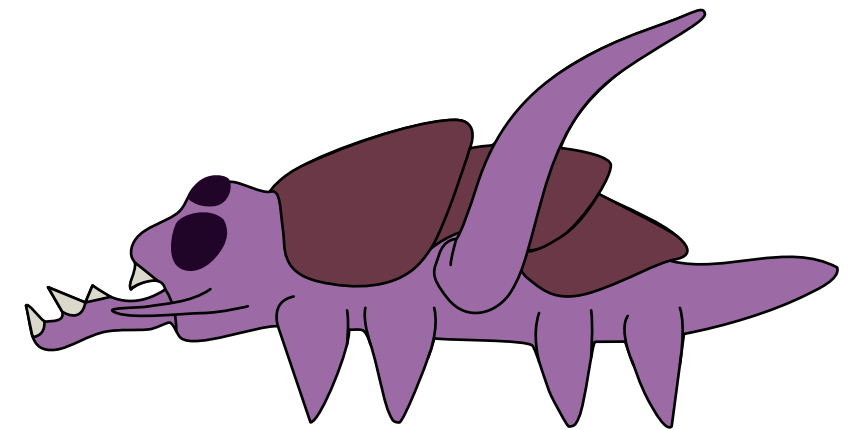


Soldier (male)

Soldier Tectonids are responsible for providing food for the queen and the colony at large. These creatures hunt in large groups and individually, they stand little chance against most creatures in the ecosystem.

Their middle legs have developed into longer tentacles that help them in various ways. The tentacles are used for catching prey, carrying prey back to the nest and helping them fertilize eggs that are within the armor of the Queen. Their mandible-like radulas are smaller than that of a female but are ideal for wounding prey and rival tectonids.

They mostly hunt for Bravik A large omnivore that mostly lives near or on mountains.



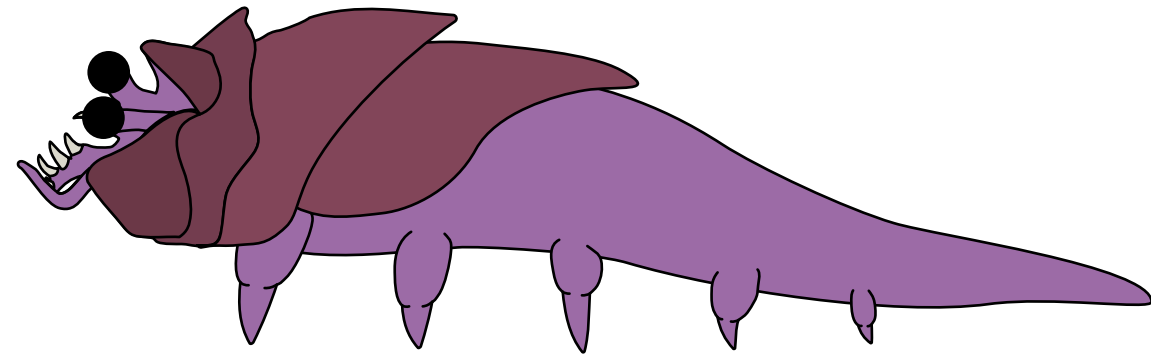
Worker (female)

The worker Tectonids are the terraformers of the colony, they make new pathways for the colony and also create the anchoring spots for the queen.

Another role for these Tectonids is to keep a queen healthy and free from parasites because of the stationary position so they are also the nurses of the colony.

Rarely any of the females are fertile. But every queen starts out as a worker and these are already different from workers and grow out to be massive creatures.

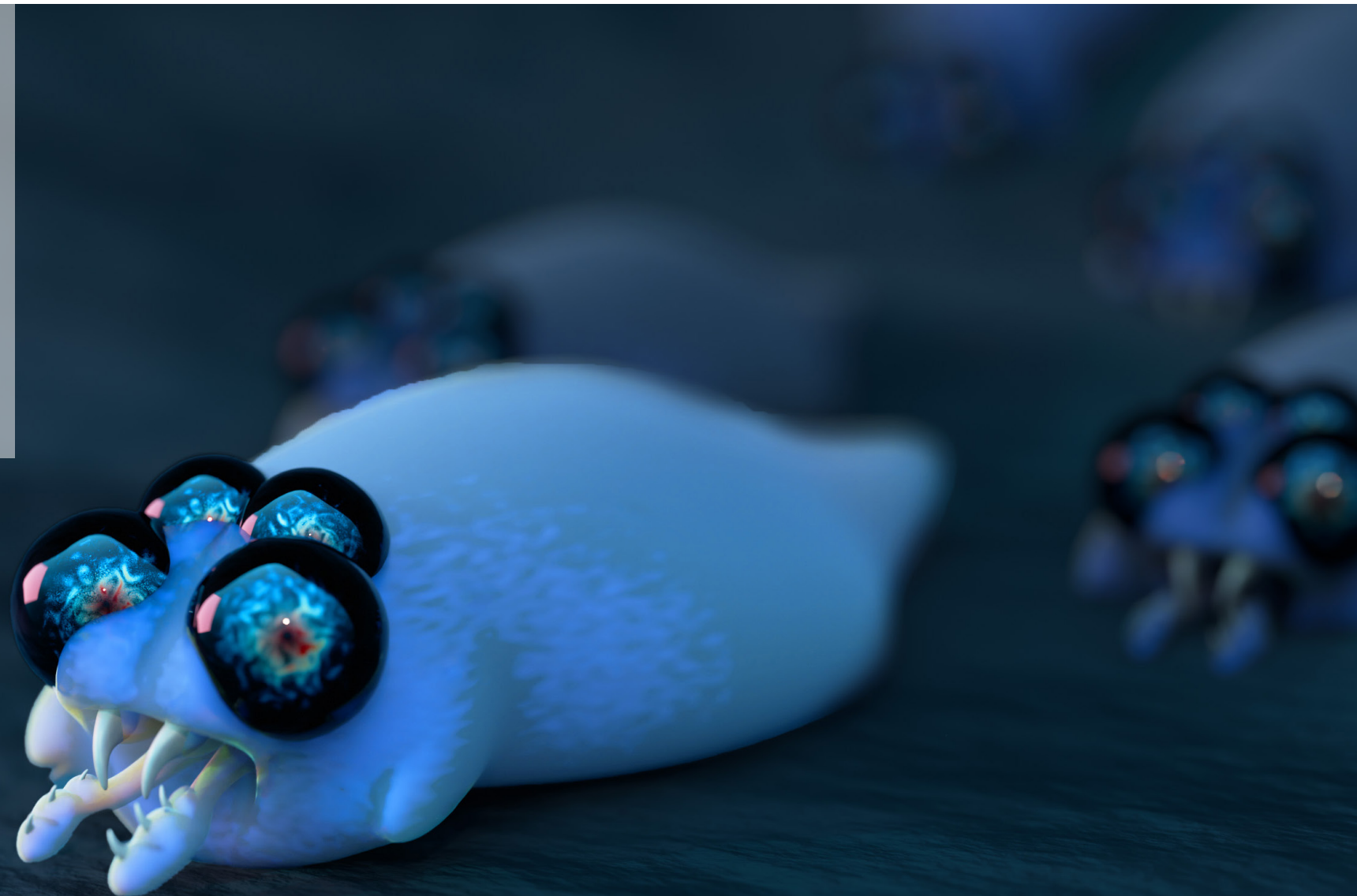
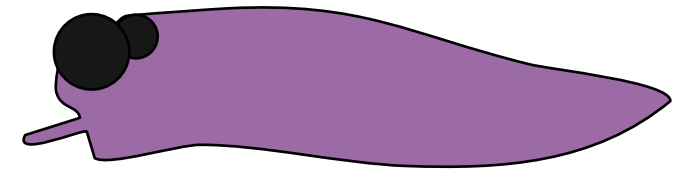
Their radulas are equipped to grind rocks but they also secrete an enzyme that absorbs into rock to make it easier to grind. However, this liquid is often a valuable resource for factions of poachers who sell it for profit to be used in various ways.



Larvae

The larvae of the Tectonids always reside in a special chamber within the queen for protection. Because they haven't developed legs and shells yet they are an easy target for any invaders and parasites. By developing within the queen's armor they are far more likely to survive and become important to the colony.

Outside of the nurturing area they don't stand much of a chance only in dire situations larvae leave their mothers care early.



The Queen

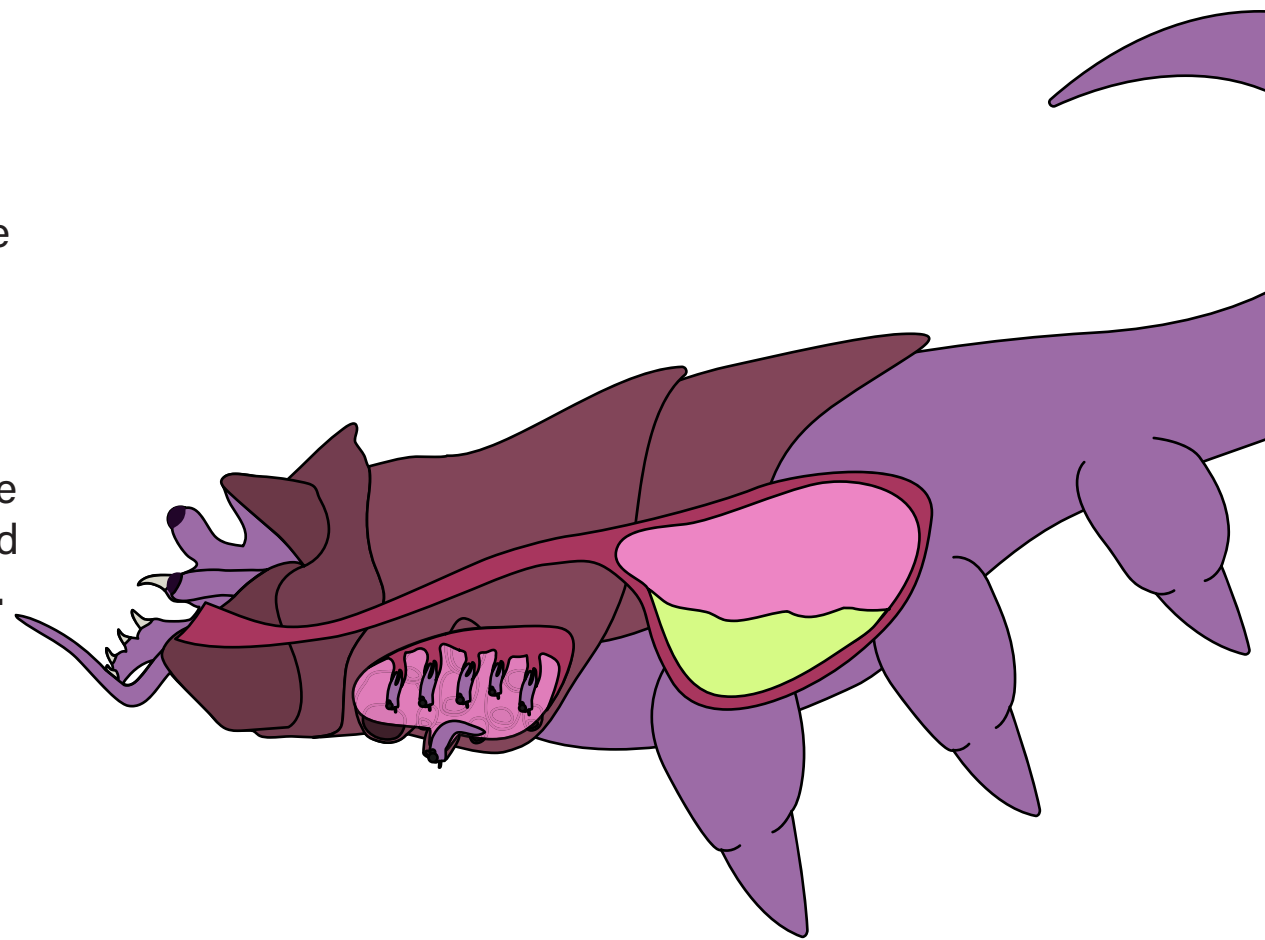
On average a 10 meters long, highly armored creature. Positioned within the rock walls it serves as the main protector of the colony due to extreme competition she is the reason colonies grow out to become huge armies.

She anchors herself inside the walls, with legs adapted to keep her locked in place, her powerful tail has an upward coiled resting position to stay in place with ease. Due to the sheer mass movement on land is quite lumbering and slow but it's in the best interest of the colony to feed and groom the queens. So only in rare events the queen will leave her place.

Reproduction

Males of other colonies are welcomed in the colony. Inside the shell is the womb the queen makes eggs that are fertilized by the male's tentacles through the many holes. These holes seal right after fertilization. In 10-12 months the larvae develop to juvenile Tectonids full capable to fill their role within the colony.

A mass birth will happen and the openings unseal themselves. A new generation is born.



Animals with similar adaptations

Although frogs lay tiny eggs called frogspawn, the pipa pipa (surinam toad) does it a little bit differently.

As the female lays eggs, the male fertilizes them and presses them into her skin. The eggs become embedded in the female's spongy, honeycomb-like skin, which swells around them, forming individual pockets.

Over the next 12–20 weeks, the embryos develop inside these pockets, undergoing metamorphosis from eggs to tadpoles to juvenile frogs.

This way they emerge fully formed and are less vulnerable.



Ants live the ultimate colony lifestyle, terraforming the environment around them. What I find particularly interesting is that ants don't really have self interest, they act as one colony and that's why they thrive.

Larger colonies have multiple queens just like Tectonids.

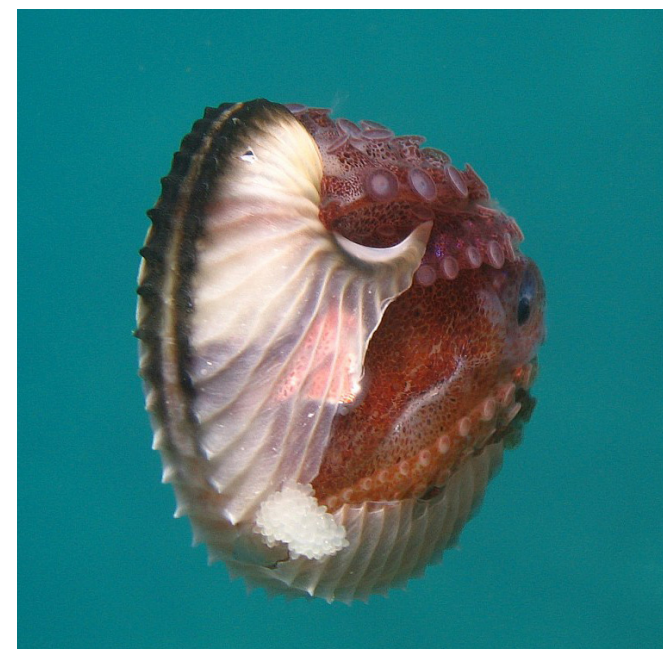


Argonauts are a type of pelagic octopus. The sexual dimorphism in this species is bizarre, females are up to 20 times larger than males!

Females are significantly larger than males and secrete a delicate, unchambered shell where they brood their eggs. In contrast, males are much smaller, typically not exceeding 2 cm in length.

Like the Tectonid males the argonaut males have a specialized tentacle that helps them in reproduction.

The hectocotylyzed left arm III, which is used for sperm transfer. This specialized arm can be autotomized, meaning it detaches and remains inside the female's mantle cavity long after mating.



Made By Sijbren

