

## Tuatara (Two species: *Sphenodon punctatus* / *S. guntheri*)

### Introduction:

The tuatara is the last representative on Earth of a group of reptiles that appeared at the same time the dinosaurs were evolving. There are two species of tuataras, the common tuatara (*Sphenodon punctatus*) and Günther's tuatara (*S. guntheri*). Best estimates of the total tuatara population are around 100,000 individuals.



### Vital Statistics:

Tuataras generally live for between 60 and 100 years. As is common with cold-blooded creatures they do many things slowly. This is especially true for breeding. Females take on average 4 years to produce their soft-shelled eggs, they do not lay the eggs until 8-9 months after mating and the eggs take a further 11-16 months to hatch. Juvenile tuatara take anywhere from 9-13 years to mature. They will then grow for a further 15 years or so until they reach their full size. At 25-35 years of age males (which are generally larger) may weigh up to 600gms and reach 550mm in length. Females may get up to 350gms and reach 450mm in length. Their diet includes beetles, weta, worms and spiders.

### What makes it unique?

The tuatara has been described as a living fossil. They have remained, more or less, unchanged for the past 200 million years and are the only representatives of the order Sphenodontida, one of the four orders of animals to which modern day reptiles belong. Interestingly scientists have discovered that the sex of the animals is strongly influenced by soil temperature. It appears that tuatara eggs incubated at cool temperatures are almost always female while eggs incubated at warmer temperatures are almost always male. Another curious feature of tuatara is their so-called "third eye". This third eye, located on the top of their head, contains a retina and has nerve connections to the brain. One popular theory is that the eye somehow functions as a biological clock – the part of the brain that controls things such as sleep cycles and hibernation.

### Conservation:

Tuataras are endemic to New Zealand where they are restricted to offshore islands. Günther's tuatara is more or less restricted to two offshore islands in Cook's Strait - North Brother Island and an unnamed island in Pelorus Sound. The common tuatara is found on Stephen's Island in Cook Strait and islands off Whangarei, the Hauraki Gulf, islands off Coromandel and islands in the Bay of Plenty. Threats to tuataras come from cats and mustelids (who will predate adults and young) and from rats who will eat eggs.