

ROSENBERG'S GOANNA (*Varanus rosenbergi*) FACT SHEET

General Information

- Rosenberg's goanna (*Varanus rosenbergi*) is a monitor lizard.
- In recent years it has been popularly known as "heath" monitor. This name is erroneous as this species occupies at least 30 habitats in addition to heath.
- Monitor lizards date back to the age of the dinosaurs (Upper Cretaceous).
- Rosenberg's is the only monitor species found on Kangaroo Island.
- Rosenberg's goanna is a distinct species from Gould's sand goanna for which it was previously mistaken.
- On KI, Rosenberg's do not usually climb trees, but there are always exceptions.*
- Rosenberg's play an important role in the cultivation of native ecosystems.*
- Rosenberg's is the Australian goanna that has been studied in the most detail.
- Adult Rosenberg's have few natural predators
- Rosenberg's was once common across the southern coast of Australia. Today there are small isolated populations of Rosenberg's goanna in SW Western Australia, coastal regions of SA, Victoria, Canberra and the sandstone country of NSW.
- **Kangaroo Island is the last stronghold for Rosenberg's goanna**
- In 1993 Rosenberg's was listed as rare or insufficiently known and in 2008 it was declared a vulnerable species.

Natural History

- Rosenberg's goannas are territorial.
- Within an individual territory, home ranges can vary between 85 to 320 hectares.*
- Life ranges of male Rosenberg's can extend up to 1000 hectares.*
- Rosenberg's are capable navigators and if relocated will travel many kilometres back to their home range.*
- Males (up to 1.9 kg) can be twice the body weight of females.
- Rosenberg's is the monitor species that has adapted well to living in cooler climates.
- Rosenberg's are heterotherms, have a variable body temperature, that can range from 10 to 40°C. Their preferred active body temperature is 36-38°C. *
- Adult Rosenberg's are active predators as well as scavengers
- Natural life span of wild Rosenberg's is still unknown, but there are known individuals in the study population thirty years plus in age.*
- Males and females are solitary living except during the courtship/breeding period

Reproduction*

- Rosenberg's are seasonal breeders
- Courtship begins close to the longest day of the year.
- Courtship and mating can last between four and six weeks
- Rosenberg's do not always remain monogamous during a breeding season
- Mating with multiple copulations occurs over a 7 to 14 day period
- Rosenberg's goanna only lay their eggs in termite mounds
- Females lay up to 13 soft shelled eggs
- Eggs are laid approximately 21 days after the last mating.
- It takes two days for the female to excavate a suitable egg chamber within a termite mound
- Rosenberg's are considered day active, but egg laying begins in late afternoon to early evening and is usually finished before midnight.

- If termites do not seal the egg chamber during the night, the female returns the next day and backfills the chamber.
- Eggs become encapsulated in the termite mound as the termites repair disturbance cause by the goanna egg laying.
- Energy expenditure for the female is so great that she seldom mates in consecutive years.
- Eggs remain in the termite mound through the winter months.

Young and Recruitment*

- First sign of young hatching occurs approximately 8 months after egg laying.
- Young dig unassisted out of the egg chamber following the same path the female dug in.
- The young make an emergence hole but remain inside the mound for several days.
- While living in the mound, the young feed on termites.
- Young Rosenberg's begin to actively emerge from the mound when the mound surface temperature equals that of the internal temperature (approximately 32°C).
- Young continue to use the egg mound for up to five months after hatching.
- One young in thirteen is likely to survive the first 12 months of life.
- Native birds and feral cats are major predators of hatchlings.
- It is still unknown how many young survive to sexual maturity.
- Rosenberg's are sexual maturity at 8 years of age.

Threats

- Loss of native habitats with suitable incubation chambers for the eggs (ie, termite mounds).
- Increased pressure from feral predators including cats, dogs, foxes, dingos, peacocks and turkeys.
- Road kills are a major impact on the Kangaroo Island goanna population.*

*Facts from © field research data by Green, King, McKelvey, Rismiller
Pelican Lagoon Research & Wildlife Centre, Penneshaw, Kangaroo Island 5222
e-mail: rismac@kin.net.au

