Care For Us

Reticulated Python (*Python reticulatus*)
Animal Welfare

Animal welfare refers to an animal’s state or feelings. An animal’s welfare state can be positive, neutral or negative.

An animal’s welfare has the potential to differ on a daily basis. When an animal’s needs - nutritional, behavioural, health and environmental - are met, they will have positive welfare.

A good life in captivity might be one where animals can consistently experience good welfare - throughout their entire life.
Understanding that animals have both sentient and cognitive abilities as well as pain perception, reinforces the need to provide appropriate husbandry for all captive animals, to ensure positive welfare.

In captivity, the welfare of an animal is dependent on the environment provided for them and the daily care and veterinary treatment they receive.

It is therefore very important we understand their behavioural and physiological needs, so we can meet those needs in captivity.
Reticulated pythons are found throughout Southeast Asia, Indonesia, New Guinea, and the Philippines and vary in size and colouration throughout their range. They are very long-lived animals and you can expect them to live more than 40 years.

In the wild the species usually breeds September/November when the dry season is over and the wet season is about to start.

The IUCN Red List of Threatened Species classes the species as of Least Concern.
This species is thought to be the longest snake in the world, reaching roughly five metres - with one individual reaching a record-breaking nine metres. Adult females are usually larger and longer than males. Hatchling reticulated pythons are 40-50cm in length and grow very quickly, reaching three metres in a year.

Pythons can be very active at night and male pythons in particular travel large distances in search of females.

**Positive Behaviours to Encourage**
In captivity, an enclosure should be provided that has both horizontal and vertical space of a length at least as long as the snake itself, to allow it to stretch out to its full length and large enough for the snake to carry out normal behaviours such as climbing, bathing and hunting.
Pythons Use Camouflage

In the wild pythons are masters of concealment and are actually quite hard to spot. Their name is derived from the beautiful 'reticulated' colour pattern on their bodies. Although it appears to be bright and garish, in the tropical jungles where this snake is found, their colouration blends them in perfectly in the mottled shadows of the forest.

Positive Behaviours to Encourage

Provide an interesting and dynamic environment that allows snakes to hide within an enclosure. Dens, hides, natural branches and fresh leaves will all help create an interesting environment.
Pythons Need To Thermoregulate

This species occurs in tropical rainforests, and pythons have an ectothermic metabolism. They will regulate their body temperature largely by exchanging heat with their surrounding environment. Unlike mammals, reptiles cannot generate their own internal heat and instead are reliant on external sources to acquire heat.

Positive Behaviours to Encourage

In captivity, sources of heat have to be made available for snakes. These may take the form of heat lamps and substrate heaters, however, they also need to be able to lose heat as much as gain it. As a result, ensure snakes are exposed to a 'thermal gradient' or 'thermal mosaic', with warm and cool areas within their enclosures.

A minimum temperature should not drop below 22 degrees centigrade, and the maximum temperatures should not exceed 38 degrees centigrade. It is very important for snakes to be able to choose what temperature they want to be exposed to and when.
Pythons Like to Bathe

Being the large, heavy-bodied snakes they are, pythons like to spend a great deal of time submerging themselves in water - as water is a denser medium than air, it supports them. Being underwater also helps conceal them and their large size from potential predators.

Positive Behaviours to Encourage

Captive pythons must have sufficiently large ponds in their enclosure to allow them to completely immerse themselves in water when they choose. This can be provided through a natural pond or large bowl that allows for complete submersion.
Pythons Like to Climb & Hide

Pythons are predators and will waylay their prey not only from water bodies, but similarly from tree branches, as they are accomplished climbers. They also hide, waiting to ambush passing prey.

Positive Behaviours to Encourage
It is important to ensure enclosures have sufficient branches, trees and plants that are robust enough for snakes to climb up into them. Piles of leaf litter, straw or cut grass to hide beneath and hollow logs to hide within will allow for their natural ambush behaviours to be carried out. Like all other snakes, pythons derive a strong sense of security when their bodies are in contact with surfaces above, below and to the sides of them.
Pythons are Solitary

In the wild, pythons lead mostly solitary lives and only come together under the breeding season, where males will compete with each other in bouts of combat wrestling - the objective appears to be to pin the rival male to the ground and assert dominance. Several males may attempt to court the same female and this can involve several weeks of cohabitation with multiple individuals in the same vicinity. However, this generally accounts for a short period of time and after mating the individual pythons disperse.

In captivity there is a tendency to exhibit several pythons in the same enclosure. This is not a normal or natural social grouping for these animals and over-crowding in the same space will cause considerable stress as individuals compete for the enclosure’s environmental resources, such as heat, shelter, bathing and food. Unless there is an intention to breed the species, pythons should ideally be kept on their own.
To Breed or Not to Breed?

Reticulated pythons are oviparous (egg-laying) and the female will coil around the eggs to brood them. The eggs usually take about 90 days to hatch at 30 degrees centigrade. Males become sexually mature at about 18 months, at a length of about three metres, while females take much longer - up to three years - and have to be at least four metres long. An adult female will indicate a readiness to be mated when she consistently refuses to feed and this may occur when environmental conditions are of shortening day length period, and lower night-time temperatures.

Think carefully before considering breeding. Reticulated pythons within their range appear to be a fairly common species, so there is no conservation drive to breed the species. A large female can produce upwards of 60 eggs, which will mean 60 young pythons needing to be appropriately cared for. Males will also combat with each other – quite fiercely – so they should be kept apart.
Pythons Like To Eat

Pythons have infrared heat sensing pits in the scales of their upper lips. This allows them to track warm-blooded prey in complete darkness and detect warm-blooded predators. In their natural habitat, pythons will mainly feed on warm-blooded prey such as nesting birds, waterfowl, deer, pigs, rodents and other mammals. They are also opportunistic eaters that will devour recently deceased animals.

Positive Behaviours to Encourage

Provide foods that are appropriate and interesting. Try offering different types of prey of different sizes and use different feeding methods, however, DO NOT USE LIVE PREY. This is unnecessary, as freshly killed prey will normally be acceptable. Offer food in the evening or at night when pythons are most active, or keep low light conditions in the enclosure.
Rescued Pythons

Often in range states, zoos and rescue centres will be presented with pythons that have originated directly from the wild. Frequently, these wild-caught snakes will refuse to feed or settle down. They should be returned to the wild as soon as possible. However, if the zoo must keep the python, here are some recommendations:

- **Do not put the python on exhibit, to allow for it to settle into the captive environment without further stress.**
- **Ensure the enclosure has several options for the snake to completely hide itself with thermal gradients, warm and cool spots.**
- **Limit any handling time of the snake, and no handling before or after feeding.**
- **Do not house wild-caught pythons together due to potential parasite and disease transmission. Adult males will also potentially fight each other.**
Pythons Enjoy...

Having lots of space to rest, hunt and bathe.

In captivity we should always try and replicate their natural and normal behaviours, so they are happy and healthy throughout their lives.