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SNAKES

## Spotted Python

# *Antaresia maculosa*

*Antaresia maculosa* is a small, nocturnal python from the east coast of Australia. It usually reaches 90-130 cm, is calm and hardy, feeds readily and is among the best-suited pythons for new snake keepers. The pattern is dark, ragged-edged blotches on a light brown ground. It is good at escaping from enclosures that are not completely secure.

Family: Pythonidae  Former name: *Liasis maculosus; Antaresia maculosus*

KEY FACTS

### THE ANIMAL

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|---|---|
| Adult size | **90-130 cm**<br>total length incl. tail |
| Lifespan | **20-30 years** |
| Active | **At night** |
| Lifestyle | **Arboreal and terrestrial** |
| Habitat | **Savanna, rainforest and rocky terrain** |
| Difficulty | **Beginner** |

### CARE

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|---|---|
| Min. enclosure | **90 × 45 × 45 cm**<br>L × W × H for 1 adult |
| Temperature, day | **24-29 °C** |
| Basking spot | **32-35 °C** |
| Temperature, night | **20-24 °C** |
| Humidity | **20-80%** |
| Water | **Water dish** |
| UVB | **Recommended**<br>Ferguson zone 2 |
| Diet | **Vertebrates** |
| Kept | **Singly** |

### BREEDING

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|---|---|
| Reproduction | **Egg-laying** |
| Sexually mature | **18-36 months** |
| Clutch size | **6-15 eggs** |
| Incubation | **50-60 days**<br>at 31-32 °C |

### PROTECTION AND PAPERWORK

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|---|---|
| CITES | **Appendix II** |
| EU annex | **Annex B** |
| IUCN | **Least Concern (LC)** |

## About the species

*Antaresia maculosa* is a slender to moderately stout python with a narrow head, vertical pupil and heat-sensitive pits along the lips. The body is slightly compressed, the tail short, and there are small spurs on each side of the vent. The pattern is irregular and high-contrast: dark brown to black blotches on a lighter brown ground. The edges of the blotches are ragged, because the dark colour sits only on whole scales. The blotches can stand singly or run together into a wavy stripe along the back. The pattern lasts throughout life, unlike *Antaresia childreni*, which is almost without pattern as an adult.

Adults are usually 90-130 cm including the tail, and a few reach about 140 cm. This makes *A. maculosa* the largest species in the genus *Antaresia*. Females become slightly longer and heavier than males, but adult size depends to a large degree on how much the animal is fed, and a few males become larger than females.

In 2021 the population on the Cape York Peninsula was separated as the subspecies *A. m. peninsularis* on the basis of genetic differences. There are no reliable external characters that distinguish the two forms. The population in southern New Guinea has been proposed as a species of its own, *Antaresia papuensis*, but this is not generally accepted, and this guide covers the

Australian species. The species name *maculosa* means "spotted". The species was described in 1873.

In captivity there are several colour variants, for example albino, leucistic and melanistic. This guide deals with the species, not the morphs. *A. maculosa* is the most commonly kept species in the genus and a sensible choice as a first snake.

## Distribution and habitat

*Antaresia maculosa* lives in eastern Australia, from the tip of the Cape York Peninsula in northern Queensland and south along the coast east of the Great Dividing Range to north-eastern New South Wales. It also occurs on several islands along the Queensland coast. The type locality has been fixed as the area around Mackay in Queensland.

There are records from southern New Guinea, but some researchers regard these animals as a separate species. Australia does not permit the export of wild reptiles, so all animals in trade are captive-bred.

Read more: Buying animals: captive-bred, wild-caught and transport

> **Native range:** Australia.

### HABITAT

*Antaresia maculosa* lives in many habitats: rainforest and other forest, open woodland, grassland and rocky areas. It is nocturnal and spends the day hidden in crevices, caves, hollow trees or under rocks. It is partly arboreal, and the youngest animals prefer elevated hiding places more than the adults.

Prey is lizards, frogs, small mammals, birds and bats. Bats are often caught at cave entrances. Young animals take mainly lizards and frogs, while adults also take rodents and birds. The climate in the range is tropical to subtropical with warm, humid summers and cooler, drier winters.

## Care

### THE ENCLOSURE

*Antaresia maculosa* is kept like its close relatives *Antaresia childreni* and *Antaresia stimsoni*, which have the same way of life and requirements. A few figures, especially for breeding, are borrowed from them.

An adult *A. maculosa* needs an enclosure of at least 90 × 45 × 45 cm (length × width × height). The enclosure must be at least as long as the snake, so it can stretch out fully, wide enough for it to turn round, and high enough for heat lamps and UVB tubes to be used safely. Larger is better, as long as the furnishing is good. Young can be kept in small, escape-proof boxes with several hides.

Furnish with at least two hides that fit snugly around the snake, one at the warm end and one at the cool end. Give the snake a humid hide with lightly dampened sphagnum, as well as flat stones, cork bark and sturdy branches. The species is partly arboreal and likes to climb a little, so the branches must be secure. Stacks of stones must be glued together and fixed so they cannot shift and crush the snake, and the snake must always be reachable, even in among the stones. Avoid glue traps in the enclosure.

Use a loose substrate of 5-8 cm, for example aspen shavings, sand or a mixture of soil, sand and clay. The snake likes to burrow into it. Kitchen paper and newspaper are practical in quarantine.

The enclosure must be completely escape-proof, preferably with front doors and tight joints. The young are very small and escape through the smallest gaps. Mesh and wire fronts are not suitable for snakes. The snake is kept alone outside the mating season, and two males must never be together.

Read more: Lighting and UVB Read more: Quarantine and hygiene

### TEMPERATURE

The enclosure must have a clear gradient. The basking spot and the warm hide must be 32-35 °C. The cool side must be 24-29 °C. At night the temperature must be 20-24 °C and must not stay below 20 °C for long periods. Young under one year need warmth around the clock and a smaller gradient of about 25-34 °C.

Use a heat lamp to make a basking spot, preferably two lamps, so the whole coiled snake can be heated evenly. A warm hide can be made with a heat mat under a stone, controlled by a thermostat with the probe in the hide. The snake must never be able to wrap itself around or touch a heat source, because this causes serious burns. Measure temperatures with an infrared thermometer and digital probes.

A cool period in winter, in which the night temperature is lowered gradually over 6-8 weeks, gives better breeding results but is not strictly necessary. Sick or underweight snakes must not be put through a winter rest.

Read more: Heat and temperature

### HUMIDITY AND WATER

*A. maculosa* is not fussy about humidity and tolerates 20-80 %. Poor sheds are usually caused by the wrong temperature, not the wrong humidity. Humidity is highest on the cool side and at night and lowest at the heat.

A humid hide at the cool end and a little misting in the morning are enough. Fresh water must be available at all times in a heavy bowl that will not tip over. The water is changed daily, and the bowl is scrubbed weekly with animal-safe disinfectant.

Read more: Humidity, misting and ventilation

### LIGHTING AND UVB

The species is nocturnal but needs a fixed day-night rhythm. The light is on for 12 hours a day in summer and reduced to about 10 hours in winter, controlled by a timer.

The species can survive without UVB, but UVB is recommended, because it supports the daily rhythm and the snake's own production of vitamin D. The species belongs to Ferguson zone 2. Use a T5 HO tube of 5-6 % covering the whole basking spot and placed over the warm end. Aim for a UV index of 2-3 at the snake's back on the basking spot. With the tube over a mesh the distance is about 25-33 cm, without a mesh about 35-43 cm. Replace the tube every 12 months, even if it still lights.

### FEEDING

*Antaresia maculosa* eats mice and small rats of a size that suits the snake. The prey must be thawed and warmed to 32-38 °C in a bag in warm water. Use feeding tongs with soft tips, because the snake strikes hard. Offer frozen and thawed animals rather than live ones.

Young are fed every 7-10 days, adults every 2-3 weeks. The prey should weigh about 10 % of the snake's weight or be 1-1.5 times as wide as the snake at its widest point. If the snake is too fat, smaller prey is used; if it is too thin, it is fed more often. Many animals accept all the food they are offered and become fat, so weigh and look at the body shape regularly. Adult animals can stop eating for weeks, sometimes up to six months, especially in winter. Avoid feeding a snake that has been too cold or that cannot get warmth after the meal, because the food can rot in the stomach and cause regurgitation or gastrointestinal disease.

Young often have to be coaxed to take mice and may need small lizards at first, because in the wild they live on lizards and frogs. Adults also take rodents and birds. Males often stop eating during the mating season. Every 4th-6th meal the prey can be lightly dusted with a combined calcium and vitamin supplement.

Read more: Calcium, vitamins and supplements

### BEHAVIOUR AND HANDLING

*A. maculosa* is calm, has a strong feeding response and tolerates handling well. Young animals are more nervous and may bite or rear up and strike, but they get used to handling. Leave a new snake in peace for about two weeks, and begin handling only when it is feeding regularly. Start with 5 minutes at a time at most, and put the snake back in the enclosure only when it is calm. Thereafter handle at least once a week and at most once a day.

Let the snake crawl onto your hand rather than grabbing it, and lift from below so as much of the body as possible is supported. Use slow movements. Do not handle it in the first days after a meal or when it is shedding and has milky blue eyes. The snake rarely bites, but wash your hands first so they do not smell of prey.

Snakes hide illness. A check-up by a vet with reptile experience every 6-12 months is a good habit.

## Breeding

### SEXUAL MATURITY AND SEXING

Sexing is done with a probe and must be carried out by an experienced person or a vet, because incorrect use can cause serious injuries. The difference between the sexes is small: females are usually slightly longer and heavier, but a few males become larger than females. Males are sexually mature after about 18 months, and females rarely lay eggs for the first time before they are 3 years old and weigh 350-500 g; the figures are borrowed from the close relatives.

### MATING

The species breeds readily. A cool period in winter improves breeding: the night temperature is lowered gradually to about 22 °C for 6-8 weeks, while the day temperature is kept at about 27 °C. The pairs are put together a couple of weeks into the period, and the night temperature is then raised gradually again. Mating takes place in winter, and the eggs are laid in late spring or early summer.

Males must not be kept together during the mating season, because they fight and can injure each other by striking, biting and wrapping around each other. Many males stop eating for a few weeks during the mating season.

### EGG-LAYING AND CLUTCHES

Ovulation shows as a distinct swelling in the rear part of the body and is brief, so it is easily missed. The female sheds shortly afterwards, and the eggs are laid a few weeks after the shed. The female usually stops eating when she is carrying eggs.

The clutch is up to 15 eggs; the typical number is not documented for the species, but in *Antaresia childreni* the clutch is usually 8-12 eggs. In the wild the female coils around the eggs and stays with them until the young hatch.

### INCUBATION

The eggs can stay with the female or be moved to an incubator. If they are moved, the eggs are placed with the same side up as when they were laid, and they must never be turned. Mark the top with a pencil. The eggs can be candled with a small lamp for a few seconds at a time: live eggs show red blood vessels, dead eggs do not. Hold the lamp against the egg only briefly, so the heat does not harm the embryo.

The eggs are incubated at 31-32 °C and high humidity, so that there is condensation on the walls of the incubator; air it out once a day. Incubation takes about 50-60 days.

Read more: Incubating eggs

### REARING THE YOUNG

Newly hatched young are very small. Keep them singly in small, escape-proof boxes with several hides and kitchen paper as the substrate, and keep a little of the paper damp so the first shed goes well. Young of the genus can eat each other, so they must be separated immediately.

The first feeding begins when the young have shed for the first time. The hardest part of rearing is getting the young to take mice, because in the wild they eat lizards and frogs. Small lizards or frogs, and the scent of these on the mice, may be necessary at first. Give them mice of increasing size, from pinkies up to adult mice and small rats.

## Health and common mistakes

*Antaresia maculosa* is hardy, and most problems are caused by the wrong temperature or feeding. Typical problems are:

- Wheezing breathing, mucus or an open mouth. This requires a vet.
- Poor sheds. They are usually caused by the wrong temperature, less often by the wrong humidity.
- Regurgitation, when the snake is fed without enough warmth afterwards or handled too soon after a meal.
- Obesity, because many animals accept all the food they are offered.
- Longer periods without appetite outside the cool months, lethargy, diarrhoea and abnormal movements.
- Burns from direct contact with a heat source.
- Serpentovirus (formerly called nidovirus), which is widespread among captive pythons. It causes respiratory disease with mucus and an open mouth, the infection does not go away again, and many infected animals die. Quarantine new animals, and have them tested by a vet before they come near other pythons.

Contact a vet with reptile experience if the snake shows any of the signs above or loses noticeable weight. New animals are quarantined for at least six months in a separate room that does not share air with the other reptiles. Tend them last, and wash hands and equipment thoroughly afterwards.

## Always ask someone who knows

This guide is a good place to start, but it cannot replace experience. Animals differ, and much of what matters most is learned from people who have kept the species for years. Talk to a breeder, an experienced keeper or a vet who knows reptiles and amphibians before you get the animal - and again if anything looks wrong.