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AGAMAS

Central Netted Dragon

Ctenophorus nuchalis

Ctenophorus nuchalis is a small, diurnal agamid from the arid interior of Australia, with a dark, net-like pattern on a pale, reddish-brown body. It grows to 25-28 cm, digs into sand and is calm enough for gentle handling. The species needs a long, sandy enclosure, strong heat and UVB, and can live 6-10 years in captivity.

Family: Agamidae Former name: *Amphibolurus inermis; Amphibolurus nuchalis; Grammatophora inermis; Macrops nuchalis*

KEY FACTS

THE ANIMAL

Adult size	**25-28 cm** total length incl. tail
Lifespan	**6-10 years**
Active	**By day**
Lifestyle	**Terrestrial and burrowing**
Habitat	**Desert and semi-desert**
Difficulty	**Intermediate**

CARE

Min. enclosure	**100 × 40 × 40 cm** L × W × H for 3 adults
Temperature, day	**25-30 °C**
Basking spot	**35-40 °C**
Temperature, night	**20-25 °C**
Humidity	**20-40%**
Water	**Water dish**
UVB	**Essential** Ferguson zone 3
Diet	**Insects and plants**
Kept	**Singly, in pairs or one male with several females**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**5-6 months**
Clutch size	**2-6 eggs**
Clutches per year	**2-3**
Incubation	**56-77 days** at 28-32 °C

PROTECTION AND PAPERWORK

CITES	**Appendix III**
EU annex	**Annex C**
IUCN	**Least Concern (LC)**

About the species

Ctenophorus nuchalis is a small, terrestrial agamid with a short, rounded head, smooth scales and conspicuous ears. A row of enlarged scales runs under each eye, and small spines of soft skin sit above the ears and on the nape. A low crest runs from the nape, and a narrow, pale stripe runs along the back. The body is pale reddish-brown to orange-brown, with a dark chocolate-brown pattern like a net over the head and body and a pale, unpatterned belly. The pattern is good camouflage on sand.

The sexes differ. The male is 25-28 cm long, of which the body from snout to vent makes up about 10 cm and the tail the rest, and he has a larger head in proportion to his body. The female is slightly smaller. Weight is not documented.

C. nuchalis is short-lived in the wild, where most animals live only one to three years. In captivity it lives much longer: 6-7 years is normal, and some animals reach 10 years or a little more. The closely related *Ctenophorus pictus*, by contrast, lives only about a year, even in captivity. Because Australia does not allow the export of wild reptiles, all animals in the trade are

captive-bred. The species name comes from Latin *nucha*, nape.

Older literature often uses the former names *Amphibolurus nuchalis* and *Amphibolurus inermis*.

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

Distribution and habitat

Ctenophorus nuchalis lives across a large part of arid Australia: the desert plains of Western Australia and the Northern Territory, western Queensland and parts of New South Wales and South Australia. The species is common and is assessed as not threatened.

> **Native range:** Australia.

HABITAT

The species is common on open, sandy flats with sparse vegetation and becomes more numerous where the plants have been cleared. It is diurnal and terrestrial, spending the day on logs, stones and termite mounds, where it basks and keeps watch. It waits for passing insects and runs out after them. Its body temperature averages about 36 °C.

At the hottest time of day the animal retreats into its burrow or climbs up into the vegetation. Each animal has several burrows, typically six to eight, often at the base of spinifex tussocks. They are short dead ends used as night retreats and escape routes, and the entrance is often filled in from behind. In the wild the diet consists of about 72% insects and 24% plant matter such as flowers and leaves.

Care

THE ENCLOSURE

A pair or a small group of up to three adults needs an enclosure of at least 100 × 40 × 40 cm (length × width × height). Larger is better, because the species is terrestrial and runs and digs a great deal; floor area matters more than height. Fit a lid, because the animal is strong and can jump high.

The substrate is sand, so that the animal can dig. Choose clean play sand or filter sand without chemicals, not heavily bleached sand, and make the layer as deep as possible. Furnish with flat stones, cork bark and hides, preferably one per animal, and with one or two tall rocks or branches where the male can sit and look out. Set heavy stones on the floor and pack sand around them, so that the animal cannot dig under them and be crushed. Spinifex and spineless succulents can be used as plants, otherwise artificial plants. Keep males apart, because they are territorial and fight each other. Keep a male with one or more females, or keep only females.

Provide ventilation with mesh in the top, and if wished mesh in one side at the cool end, halfway up the wall. Otherwise the animal rubs its snout on the mesh when it tries to escape. An open mesh top lets light and heat through. Clean out droppings daily.

TEMPERATURE

The air in the enclosure is 25-30 °C by day, and the cool end is about 25 °C. Under the basking spot the surface should be 35-40 °C, and it must not exceed 43 °C. Keep the temperature steady, with small fluctuations. Place a thermometer in both the warm and the cool end and measure the basking spot with an IR thermometer.

At night the temperature can fall to 20-25 °C; the figure is an estimate. In winter both day length and temperature are reduced. The whole enclosure must not be too warm, and the animal must always be able to get away from the heat.

Read more: Heat and temperature

HUMIDITY AND WATER

Humidity should be low, about 20-40%; the figure is an estimate based on the habitat. The enclosure is dry and well ventilated, and the sand must not become damp, except in the egg-laying area. Provide fresh drinking water in a shallow, heavy, stable dish, changed every day. The animal can swim, but the dish should have a gentle slope or a stone so that it can climb out. The dish must not stand where a gravid female digs.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

The species is diurnal and needs strong light and UVB. Ferguson zone 3 is a good starting point; the zone is borrowed from other diurnal desert agamids. Use a high-output UVB tube or a mercury vapour lamp over the basking spot, so that the animal can get close. In summer the light is on for about 13 hours and in winter for 8-10 hours. UVB tubes are replaced every 6-12 months, mercury vapour lamps every 12-18 months. Without UVB and calcium the animal develops metabolic bone disease.

Read more: Lighting and UVB Read more: Calcium, vitamins and supplements Read more: Common diseases and signs of illness

FEEDING

The species is an insectivore that also takes a good deal of plant matter. In the enclosure, crickets and cockroaches are the staple, with mealworms and silkworms for variety. Offer only insects that have not been exposed to pesticides, and gut-load them well before feeding. Feeder insects must not be larger than the width of the animal's head. Dust the feeders with calcium at every feed and with a multivitamin once a week, no more often.

Adults are fed two to three times a week with as much as they can eat in about 20 minutes. Growing young animals are fed up to five times a week. Feeding adults more often leads to obesity and fatty liver. Remove uneaten food, because crickets and cockroaches hide and attack the animal at night, causing open sores, especially in young animals. Offer plant matter such as dandelion leaves and buds, pak choi and hibiscus flowers; not all animals accept them. Avoid iceberg lettuce, and use only plants that have not been sprayed.

Read more: Feeder animals: keeping and breeding

BEHAVIOUR AND HANDLING

The animal is energetic and curious, but calm in temperament and tolerates gentle handling. Keep handling short. New animals often rub their snouts on the glass and try to escape for the first while.

The male marks his territory with head bobs and waves of the forelimbs and chases the female before biting her on the nape and mating. The female responds with subdued head bobbing and slow arm waves. Two males in the same enclosure fight and can injure each other. Give each animal its own hide. Young animals are kept apart from adults, which may take them for food.

Breeding

SEXUAL MATURITY AND SEXING

The male has a larger head in proportion to his body and larger, more distinct femoral pores on the underside of the hind legs than the female. The male's tail tapers evenly to the tip, whereas the female's tail is thick at the vent and then thins out quickly. Sex is difficult to see in young animals; the only reliable method is an examination by a veterinarian. In the wild the animals mature after the first winter at about 5-6 months of age; the age in captivity is not documented.

MATING

The breeding season falls in spring and summer. The animals must be healthy and have been kept as naturally as possible. The male displays with vigorous head bobbing and chases the female around the enclosure before biting her on the nape and mating.

EGG-LAYING AND CLUTCHES

The female lays 2-3 clutches of 2-6 eggs over the course of spring and summer. Gravid females need warm summer temperatures to develop the eggs. A defined, covered area with moist sand or vermiculite is the right laying site, and it feels safer to the female when it is covered. Do not place the water dish where she can dig, because she may lay eggs in it, and then they are lost. Before laying she is restless, digs all over the enclosure and often eats less in the weeks before. After laying she suddenly looks thinner; then search the enclosure carefully for eggs.

INCUBATION

Carefully dig out the soft, leathery, white eggs and place them in the incubation medium in the same orientation in which they were found, without turning them. Use moist sand or vermiculite. Incubate the eggs at 28-32 °C; they hatch after 8-11 weeks. It can take several hours, often more than a day, for a hatchling to emerge fully from the egg.

Read more: Incubating eggs

REARING THE YOUNG

The hatchlings are very small and need a simple enclosure with damp kitchen paper as flooring, a basking spot and several hides at different temperatures. Mist with filtered water several times a day in the first week and then once a day. Offer food straight away: small crickets and very small cockroaches, plus finely chopped dandelion leaves. The hatchlings quickly form a hierarchy, so sort them by size and keep them apart from the adults, which will eat them.

Health and common mistakes

Most illnesses are caused by errors in husbandry. Typical problems are:

- Metabolic bone disease from too little UVB and calcium. Insects are poor in calcium, so supplements are necessary.
- Digestive stasis and constipation from feeders that are too large or temperatures that are too low.
- Snout injuries when the animal rubs against glass or mesh while trying to escape.
- Obesity and fatty liver from feeding too often.
- Bites and sores from feeder insects left in the enclosure overnight.
- Egg-laying problems and lost eggs in females without a suitable laying site.
- Vitamin excess from supplements given too often.

See a veterinarian with reptile experience if the animal stops eating, is lethargic or has a swollen belly.

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.