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ANGUIDS

Wiegmann's Alligator Lizard

Gerrhonotus liocephalus

Gerrhonotus liocephalus is a sturdy, brownish alligator lizard with pale crossbands, found in forest and scrub in the highlands of southern Mexico. It grows to 30-50 cm, is active by day, climbs well and lays eggs. Little is known about the care of this particular species, and most of what follows is based on its close relative *Gerrhonotus infernalis* from Texas and north-eastern Mexico.

Family: Anguidae

KEY FACTS

THE ANIMAL

Adult size	**30-50 cm** total length incl. tail
Lifespan	**10-15 years**
Active	**By day**
Lifestyle	**Arboreal and terrestrial**
Habitat	**Montane forest**
Difficulty	**Intermediate**

CARE

Min. enclosure	**90 × 60 × 60 cm** L × W × H for 2 adults
Temperature, day	**24-29 °C**
Basking spot	**35-40 °C**
Temperature, night	**15-21 °C**
Humidity	**40-70%**
Water	**Water dish**
UVB	**Recommended** Ferguson zone 2
Diet	**Insects and worms/snails**
Kept	**Singly or in pairs**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**18-36 months**
Clutch size	**5-31 eggs**
Clutches per year	**1**
Incubation	**50-70 days** at 24-26 °C

PROTECTION AND PAPERWORK

CITES	**Not listed**
EU annex	**Not listed**
IUCN	**Least Concern (LC)**

About the species

Gerrhonotus liocephalus is a sturdy alligator lizard with a broad, wedge-shaped head, short limbs, large keeled dorsal scales and a long tail. The back is brown with pale crossbands that run clearly across the middle of the back, and the lateral fold along the side, from the corner of the mouth to the tail, has distinct dark crossbars. A dark mark from the snout across the temple is retained in adults. The belly is pale and usually unmarked.

The head and body measure up to about 20 cm, and with the tail the animal reaches 30-50 cm. Males have a larger, broader head than females, and females have a longer body between the limbs. At the base of the tail the male has a distinct bulge from the hemipenes.

The species was described by Arend Friedrich August Wiegmann in 1828 and is the type species of the genus. Formerly almost all *Gerrhonotus* from Texas to Chiapas were counted as *G. liocephalus*. Today the populations in Texas and north-eastern Mexico are separated as *Gerrhonotus infernalis*, the eastern populations from San Luis Potosí to Veracruz as *Gerrhonotus*

ophiurus, and the populations on the Pacific slope of western Mexico were described in 2025 as *Gerrhonotus occidentalis*. The English name "Texas alligator lizard" and most care information found under that name therefore refer to *G. infernalis*. Three subspecies have been described, but the genetic variation suggests that the species may contain several.

The animal is shy but bites hard if grasped. It can shed its tail as a distraction, and the tail only partly regrows. Lifespan in captivity is not documented; 10-15 years is an estimate.

Distribution and habitat

Gerrhonotus liocephalus occurs only in Mexico: from central Guerrero and central Puebla south and east through Oaxaca to south-eastern Chiapas. The type locality is restricted to Tlapancingo in Oaxaca. The subspecies *G. l. austrinus* is from Chiapas, where the type locality lies at 3,200 m on Cerro Malé.

The northern and western limits of the range are unclear. Older records from Texas, northern and western Mexico and Guatemala refer to other species in the genus and are not included on the map.

> **Native range:** Mexico.

HABITAT

Gerrhonotus liocephalus lives in forest and scrub in the highlands, from mid-elevation slopes up to above 3,000 m. It is active by day and lives both on the ground and in vegetation: it climbs in bushes and trees and uses its tail as a support. It shelters in crevices, under stones and in leaf litter, and hunts actively for prey.

The highlands have a rainy season in summer and a dry, cooler winter. The diet is insects, spiders, snails and other arthropods and occasionally small vertebrates. Females in the genus lay their eggs in moist soil under logs or flat stones and guard them.

The species is assessed as Least Concern (LC) by the IUCN, and the population is considered stable.

Care

THE ENCLOSURE

Little is known about the care of *Gerrhonotus liocephalus*. The species lives in a highland with warm days, rain in summer and a dry, cooler winter, and its close relative *Gerrhonotus infernalis* has the same way of life and is better known in captivity. The figures for enclosure, temperature, lighting and breeding are borrowed from *G. infernalis*. A pair needs an enclosure of at least 90 × 60 × 60 cm (length × width × height). Bigger is better, as the animals use all the space.

The substrate is a deep mixture of sand, granite grit and garden soil or peat, covered with a thick layer of leaves, which encourages the animals to dig and forage. Furnish with branches at several heights, flat stones, bark and slate as hides, and live plants such as grasses, agaves, ferns and tillandsias. A back wall of artificial stone gives extra climbing surface. Damp substrate under a water bowl provides a humid hide.

The enclosure can be made of glass, wood, mesh or PVC, depending on the climate in the room. Choose a material that keeps temperature and humidity stable. Males are territorial, so keep them separately, or keep a pair together if there is enough space.

Read more: Humidity, misting and ventilation

TEMPERATURE

The air in the enclosure should be 24-29 °C by day, with a basking spot of 35-40 °C under halogen spots where the animal can warm up. At night it should be cooler, around 15-21 °C. Measure with digital thermometers.

The temperature can follow the seasons: warmest in summer and cooler in winter, when the day length is also shortened so that the animal is less active and eats less. A true brumation has not been documented for *G. liocephalus*, so lower the temperature gradually and carefully, and never use frost.

Replace the bulbs when they lose output, and make sure the animal can always move away from the heat.

Read more: Heat and temperature Read more: Brumation and the seasons

HUMIDITY AND WATER

Humidity should be moderate, around 40-70 %, with higher humidity in the hides. The figure is an estimate based on the climate. Mist the enclosure three to four times a week in summer to imitate the rainy season, and less often in the dry season. Always keep a shallow bowl of fresh water in the enclosure, and let it overflow now and then so that the substrate around it becomes damp. The animal rarely drinks from the bowl and covers a large part of its water needs through its food and damp hides.

The enclosure should dry out between mistings so that mould does not develop.

LIGHTING AND UVB

The species is active by day and needs strong light and UVB. Use a T5 HO tube for UVB, so that the UV index runs from 0 to 3 through the enclosure, corresponding to Ferguson zone 2, and so that the animal can move out of the UV light. The distance between tube and basking spot depends on the strength of the tube and on any mesh, and it should be checked with a UV meter. Supplement with LED light of around 6,000 K if there are live plants.

Connect the lighting to a timer that follows the seasons: about 14 hours in summer and about 10 hours in winter.

Read more: Lighting and UVB

FEEDING

Gerrhonotus liocephalus feeds on insects and other small animals and hunts actively. Offer a varied diet of crickets, cockroaches, grasshoppers, mantids, stick insects, woodlice, snails, spiders, fly larvae, beetles and caterpillars. A newborn mouse can be given occasionally as a supplement, but sparingly. Feeder insects should be no larger than the animal's head and should have been gut-loaded for at least a day.

The animal readily takes food from tweezers, and this gives good exercise. Feed juveniles every other day and adults 2-3 times a week. Dust the food with calcium and a multivitamin without D3, because UVB covers the need for D3. Females that are about to lay eggs need extra calcium.

Read more: Feeder animals: keeping and breeding Read more: Calcium, vitamins and supplements

BEHAVIOUR AND HANDLING

The species is shy but curious and can become very calm. It basks on branches and stones and hunts by creeping up on its prey, bending the front of the body into an S-shape and striking. Just before the attack it sometimes twitches its tail like a cat.

A wild or frightened animal bites hard, and a bite can hurt, so handle the animal only when necessary. Captive-bred animals are calmer than wild-caught ones. Males are territorial and may fight, so they must be kept separately. A pair can usually be kept together all year round if there is room to avoid each other. Wash your hands after contact with the animals and the enclosure, because reptiles can carry salmonella.

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

Breeding

SEXUAL MATURITY AND SEXING

Males have a larger, broader head and a distinct bulge at the base of the tail. Females are slimmer with a longer body between the limbs. With regular feeding the animals become fully grown and sexually mature after about 18 months in captivity; in the wild it takes 2-3 years or more.

MATING

Mating normally takes place in autumn. The male grips the female by the neck with his mouth, and mating can last several hours. More rain, cooler weather and plentiful food trigger mating, so mist more often and feed 3-4 times a week in late summer. Separate the animals if the female gets wounds.

EGG-LAYING AND CLUTCHES

The female lays once a year, preferably somewhere the substrate is cool and moist: under a water bowl, a piece of bark or a flat stone. A clutch is 5-31 eggs, on average about 11. The female stays with the eggs and defends them, so she must not be startled. Give her extra calcium and food both before and after laying.

INCUBATION

Carefully dig up the eggs and place them in a closed, ventilated container, on a grid over a damp medium, for example expanded clay or perlite, with a layer of wrung-out sphagnum on top. Incubation takes 50-70 days. The incubation temperature is not documented for the species. 24-26 °C is an estimate: eggs at 26-27 °C hatch poorly, and lower temperatures give better results. Keep humidity high, but avoid letting the eggs get wet.

Read more: Incubating eggs

REARING THE YOUNG

The hatchlings are beautifully marked with distinct pale bands and are about 10 cm long. Their requirements are similar to those of the adults. After a few days they take small insects such as fly larvae, small crickets, cockroach nymphs and fruit flies. They can be kept in groups of 5-7 in an enclosure of about 60 × 45 × 45 cm with many hides. Feed every other day so that they do not nip each other. Separate the males as they approach sexual maturity.

Health and common mistakes

The species is hardy and tolerates a good deal when the basic requirements are met. The typical problems are:

- Metabolic bone disease from too little UVB and calcium, especially in juveniles and egg-laying females.
- Obesity from fatty feeder animals and too little exercise.
- Mites and internal parasites. New animals should be quarantined for at least three months.
- Mould and respiratory infection from damp, stagnant air.
- Bite and tail injuries between males kept together.
- Egg binding in females without a suitable place to lay.

A healthy animal has clear eyes and a plump tail and eats regularly. If the animal loses weight, stops eating or breathes with its mouth open, it should see a vet experienced with reptiles.

Read more: Common diseases and signs of illness

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.