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TORTOISES AND TURTLES

Painted Wood Turtle

Rhinoclemmys pulcherrima

Rhinoclemmys pulcherrima is a diurnal, colourful turtle from the Pacific side of Mexico and Central America. The shell reaches 15-20 cm in length, and the head, legs and shell have red and yellow markings. The species lives mostly on land in scrub and humid forest and is best kept in a warm, humid terrarium with a shallow water area.

Family: Geoemydidae Former name: *Emys pulcherrimus; Geoemyda pulcherrima; Callopsis pulcherrima*

KEY FACTS

THE ANIMAL

Adult size	**15-20 cm** total length incl. tail
Lifespan	**20-25 years**
Active	**By day**
Lifestyle	**Terrestrial and semi-aquatic**
Habitat	**Savanna, dry forest and wetland**
Difficulty	**Intermediate**

CARE

Min. enclosure	**120 × 60 × 50 cm** L × W × H for 1 adult
Temperature, day	**22-26 °C**
Basking spot	**32-35 °C**
Temperature, night	**20-24 °C**
Humidity	**70-90%**
Water	**Water section** depth 5-10 cm
Water temperature	**24-26 °C**
UVB	**Essential** Ferguson zone 2
Diet	**Insects, fruit, complete diet, plants and worms/snails**
Kept	**Singly or in pairs**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**1-5 eggs**
Incubation	**100-110 days** at 26-30 °C

PROTECTION AND PAPERWORK

CITES	**Appendix II**
EU annex	**Annex B**
IUCN	**Near Threatened (NT)**

About the species

Rhinoclemmys pulcherrima is a small to medium-sized turtle of the family Geoemydidae. All measurements in the text are the shell length (carapace). Males reach 15-18 cm and females up to 20 cm. The shell is light brown with a low keel along the middle and slightly grooved scutes, and in the subspecies *R. p. manni* it is decorated with yellow and red concentric rings and black markings. The plastron is yellowish with red patterns, the skin is dark olive green with red to pink stripes, and the head has fine red lines. The eyes have a blue line on each side of the pupil.

The male has a longer and thicker tail than the female, and his plastron is slightly concave. The female's shell is more domed, and her colours fade with age, while the male's hold up better. Juveniles and subadults have the same pattern as the adults and are especially brightly coloured. Newly hatched young measure 35-50 mm.

The species name comes from the Latin *pulcherrimus*, "the most beautiful", and alludes to the colours of the head and shell of the young turtle from which the species was described.

Four subspecies are recognised: *R. p. pulcherrima*, *R. p. incisa*, *R. p. manni* and *R. p. rogerbarbouri*. *R. p. manni* is the most colourful, and it is the one most often kept in captivity.

The species is curious and not shy as long as it feels secure. It eats greedily and comes out of its hiding place as soon as food is on its way. Of the genus's species, *R. pulcherrima* is regarded as one of the easier to keep when temperature and humidity are right. Newly imported, wild-caught animals, however, often do poorly. The species can live 20 years or more.

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

Distribution and habitat

Rhinoclemmys pulcherrima lives along the Pacific side of Mexico and Central America. From southern Sonora the range runs south through Sinaloa, Nayarit, Jalisco, Colima, Michoacán, Guerrero, Oaxaca and Chiapas to Guatemala, El Salvador, Honduras, Nicaragua and Costa Rica. The species is also reported from Chihuahua.

The subspecies each have their own area. *R. p. rogerbarbouri* is found from southern Sonora to Colima and Sinaloa, *R. p. pulcherrima* in Guerrero and Oaxaca, *R. p. incisa* from Oaxaca through Central America to northern Nicaragua and El Salvador, and *R. p. manni* from southern Nicaragua to northern Costa Rica. Animals in the trade come mainly from Nicaragua.

> **Native range:** Mexico, Guatemala, El Salvador, Honduras, Nicaragua and Costa Rica.

HABITAT

Rhinoclemmys pulcherrima is a tropical lowland species that lives mainly in scrub and humid forest, but also in gallery forest along watercourses. It stays mostly on land and can be found many kilometres from water. Even so, it keeps to damp places, and especially in the dry season it is seen wading and swimming in streams and rainwater puddles. The species tolerates drought and temperatures up to 44 °C.

The climate has a distinct rainy season and dry season. The turtle eats on land, even though it spends time in the water. Its diet consists of wild flowers, grass, fruit such as guava and mango, insects, worms, snails and fish.

Eggs are laid in soil or leaf litter. The threats are deforestation and collection for food and the pet trade. Predators such as crocodiles, birds of prey and mammals take mainly eggs and young.

Care

THE ENCLOSURE

Little is known about keeping *Rhinoclemmys pulcherrima*, and several figures are borrowed from related turtles with the same way of life. The species is kept in a large, warm and humid terrarium with a deep substrate and a shallow water area, not in an aquatic set-up. A single adult needs at least 120 × 60 × 50 cm. A pair needs at least 150 × 70 × 50 cm, and several animals require more floor area. Floor area is more important than height.

The substrate must be deep, moist and soft, because the turtle digs itself right down with only the head showing. A mixture of equal parts bark chips, live sphagnum and coconut fibre to a depth of about 12 cm holds moisture, does not stick to the animal and keeps the water clean. Keep the substrate moist but not waterlogged, and replace it at most a couple of times a year.

The water area is a shallow, wide tray with 5-10 cm of water, which the animal can easily get in and out of. The turtle passes its droppings in the water, so the tray must be changed at least once a week. Use three identical trays: two sit inside each other in the terrarium, and the third is filled with fresh water. Lift the upper one out and put the clean one in, so that the substrate is not disturbed.

The species feels secure with hiding places. Stand large flat pieces of cork bark vertically along the back wall, hang plants down from the sides, and place robust plants in pots and driftwood. If the animal feels insecure, it does not use the basking spot. Cover the back and sides on the outside with a plain background. Close off part of the ventilation to keep the humidity up.

Keeping outdoors requires a heated, dry shelter and is relevant only in the warmest summer months. The enclosure must be escape-proof and have sun, shade and a shallow water tray. A female needs a place with soil or sand for egg laying.

Read more: Heat and temperature

TEMPERATURE

By day the terrarium should be 22-26 °C, with 32-35 °C at the basking spot. The basking spot must be open and secure, so that the animal uses it. The night temperature is not documented; 20-24 °C suits a tropical climate, and the species does not tolerate cold nights.

The heat lamp above the basking spot is controlled by a dimming thermostat. If the room is cool, a weak aquarium heater in the water tray or a heat mat with a thermostat on the outside of the terrarium wall can be added.

The animal is in the water more in spring and summer and only a little in autumn and winter. The species does not hibernate.

HUMIDITY AND WATER

Humidity should be high, 70-90 %. Mist the terrarium heavily with lukewarm water every evening, and keep the substrate moist. Glass and plants should be able to dry between mistings, while the deep substrate holds the moisture.

The turtle is semi-terrestrial and uses the water tray, so the water must be fresh. It passes droppings in the water, so the tray is disinfected regularly with a product intended for animal keeping and rinsed well.

WATER AND WATER QUALITY

The water area is a shallow tray with 5-10 cm of water and a ramp, so that the animal can easily get in and out. The temperature is 24-26 °C. The species spends more time on land than in the water and uses the water mostly in spring and summer.

The water is changed at least once a week and more often when it is dirty. For mating and for feeding with insects, a large tub with 25 cm of water at 26 °C is used, where the animal can swim. Juveniles are kept in a shallow tray with 2 cm of water and aquatic plants.

LIGHTING AND UVB

Above the basking spot there must be a UVB tube and a heat spot in the same place, so that the animal gets both heat and UVB when it basks. A T5 UVB tube with 5 % UVB and a heat spot of about 60 watts, connected to a dimming thermostat, suits a terrarium of that size. Zone 2 suits a species from forest and forest edge.

UVB tubes lose strength and must be replaced regularly, and glass and plastic block UVB, so there must be nothing between the tube and the animal. The light should be on for about 12 hours a day, controlled by a timer. UVB allows the animal to form D3 and absorb calcium.

Read more: Lighting and UVB Read more: Calcium, vitamins and supplements

FEEDING

Rhinoclemmys pulcherrima is omnivorous and eats with great appetite. Adults are fed two to three times a week with a mixture of about 60 % greens, 30 % fruit and vegetables and 10 % prepared turtle food. Greens are dandelion, chicory, watercress, spinach, rocket and endive. Fruit and vegetables can be mushrooms, cucumber, tomato, peas, sweetcorn, grapes, melon, kiwi, apple, blueberries and strawberries, and everything is cut coarsely and dusted generously with calcium. Every second to third week the animal is placed in a tub of water (see Water) and given live feeder insects such as giant mealworms (*Zophobas*) and *Blaptica dubia*, as many as it eats in half an hour.

The plant food is served on land. Do not give a female extra food when she is carrying eggs or has just laid, because it encourages more frequent egg laying. Both greens and insects are dusted with calcium and vitamins.

Juveniles at first take only live food. Small mealworms and newly hatched cockroaches are suitable. After a few weeks they begin to eat aquatic plants, and after that they eat almost anything edible.

BEHAVIOUR AND HANDLING

Rhinoclemmys pulcherrima is curious, active and not shy as long as it has hiding places. It digs down into the substrate and comes out when there is food. It likes to throw soil and sand onto its back with its forelimbs.

Preferably keep one animal or a pair. The male can stress the female with his attention. If the animals mate only when put together in a deep tub of water, the male often leaves the female alone the rest of the time, and they can be kept together. If the female is stressed or lays infertile eggs, the male must be kept separately.

Newly imported, wild-caught animals often adapt poorly, and captive-bred animals are far preferable. Wash your hands before and after handling.

Breeding

SEXUAL MATURITY AND SEXING

The male has a longer, thicker tail with the vent beyond the edge of the shell and a slightly concave plastron. The female is larger, has a flat plastron that is slightly turned up at the front, and a shorter tail with the vent beneath the edge of the shell. Size and age at sexual maturity are not documented.

MATING

During mating the male nods his head, follows the female and touches her tail and shell with his snout. Later the female makes snout-to-snout contact and nods back. Mating succeeds best in deep, warm water, about 25 cm and 26 °C. If the male is kept with the female all the time, he can stress her, and she lays infertile eggs. They must then be kept separately. A cool resting period is not documented.

EGG-LAYING AND CLUTCHES

The female lays 1-5 elongated, hard-shelled eggs per clutch, often 1-2 large eggs at intervals of 6-8 weeks. The eggs measure 37-52 mm in length and 24-32 mm in width. In the wild laying takes place from May to December, in captivity most often from October to April. The female buries the eggs in soil or leaf litter, so give her a tray of moist soil or sand.

INCUBATION

The eggs are taken up immediately after they are laid and placed half-buried in moist substrate in an incubator. At 28 °C they hatch after about 105 days. If the eggs lie for more than 24-48 hours at the bottom, the embryos can go dormant (diapause) for up to six months, and hatching can then be drawn out for up to nine and a half months. Eggs that look bad are not discarded until they have hatched or collapsed completely.

Sex depends on temperature: at 24-27 °C all become males, at 30 °C about a quarter are males, and above 30 °C all become females.

Read more: Incubating eggs

REARING THE YOUNG

The young are taken out of the incubator when the yolk sac has been absorbed and are placed in a shallow tray of about 25 × 20 cm with 2 cm of water at 26 °C. Give them aquatic plants, a small flat stone as a basking spot and a lamp that gives about 28 °C. The first few times they eat only live food, served with tweezers. Once they have got used to the plants, they become hardy. After 12-18 months they are moved to a terrarium like the adults'.

Health and common mistakes

Turtles hide illness, so watch for changes in appetite and behaviour. Weigh the animal regularly, and keep a logbook.

Typical problems and mistakes in care: - Nights that are too cold and humidity that is too low, which cause lethargy and respiratory infections. - Lack of UVB or calcium, which causes a soft and deformed shell. - Parasites: blood parasites of the genus *Hemolivia* occur in about a third of newly imported animals, and intestinal parasites occur in wild-caught animals. Have a faecal sample examined by a vet when the animal is new. - Poor water quality, which causes shell and skin infections.

All reptiles can be symptom-free carriers of *Salmonella*. Wash your hands before and after contact with the animal, water and equipment, and do not let children under 5 handle the animal. See a vet with experience in reptiles if the animal loses weight, does not eat or seems listless.

Read more: Quarantine and hygiene

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.