



CARE AND HUSBANDRY OF CAPTIVE OBLONG TURTLES

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All animals' welfare should be considered in terms of the five freedoms –

- 1 Freedom from hunger and thirst:** by ready access to fresh water and a diet to maintain full health and vigour.
- 2 Freedom from discomfort:** by providing an appropriate environment including shelter and a comfortable resting area.
- 3 Freedom from pain, injury or disease:** by prevention through rapid diagnosis and treatment.
- 4 Freedom to express normal behaviour:** by providing sufficient space, proper facilities & company of the animal's own kind.
- 5 Freedom from fear and distress:** by ensuring conditions and treatment which avoid mental suffering.

LEGAL ISSUES:

By law no Australian wildlife may be kept as pets. However, some reptiles such as oblong turtles may be kept if a license is obtained from Parks and Wildlife. Such animals may only be purchased from Parks and Wildlife licensed sellers; it is an offence to take animals from the wild.

NAMES: *Chelodina colliei**

Other names: Oblong Turtle, Western Long Necked Turtle, Snake Necked Turtle.

**Chelodina oblonga* was, in May 2013, renamed *Chelodina colliei*. *Chelodina rugosa* from the Kimberley will now be known as *Chelodina oblonga*.

ABOUT OBLONG TURTLES:

Natural Habitat: Oblong turtles occupy shallow areas of fresh-water rivers, lakes and wetlands where the water is still and turbid.

Brumation-Aestivation: (types of dormancy particular to reptiles): In the wild oblong turtles may brumate in Winter, or aestivate in Summer. In a captive situation with controlled temperatures and regular food, this does not occur.

Age: It is not possible to age turtles by their size as, like trees, they grow according to the food sources available from year to year. Generally animals are defined by their shell length as being -

Hatchlings – up to 5cm

Juveniles – between 5cm - 15cm

Adult – from 15cm up to 20cm for females, over 15cm for males

As turtles have a lifespan of around 80 years, it is essential that this be taken into account before you purchase the animal. As well facilities need to be designed with their longevity in mind.

Social Environment: Turtles like every other animal/human on earth are not designed to live a solitary captive-life in an artificial environment. If turtles must be kept captive we feel they must have the company of at least one animal of their own kind.

HEALTH & SAFETY: Practice good hygiene both for your sake, and the sake of the turtles. Wash your hands in warm soapy water and rinse well before and after handling turtles.

HEALTH & DISEASE: Turtles are stoic animals, meaning that they don't display signs of pain; in the wild it's a survival technique not to show any sign of sickness or weakness. As well, turtles are unable to vocalise which in other animals is an indication of pain. In captivity, this is apparent when an owner says the turtle was fine until shortly before death. The reality is that the turtle would have been sick for days, weeks or even months and yet the animal appeared to be healthy until just before it succumbed.

Expenses: There is a misconception that turtles are easy-care animals but nothing could be further from the truth; they are physiologically complicated animals which require expensive equipment and housing to replicate the conditions they need. Turtles don't need much but what they do need, they must have. Without optimum conditions they will become ill; everything required to treat a sick turtle is more expensive, more time consuming and often less successful than for other animals. As well reptile vets are few and far between – all good reasons to ensure you spend time and effort in preventing problems in the first place.

Consumer advice: We recommend that anyone buying a juvenile or adult turtle have it health checked by a reptile vet, ideally on the day of purchase, to establish whether the animal has any health problems. Hatchlings/juveniles may be too small for such checks. Hatchlings may not legally be sold until they are at least three months old. We recommend that the following be included in the health check –

Weight and body scoring

Thorough examination of the plastron

PCV for anaemia

White blood cell count, for signs of infection

Faecal testing for parasites especially if turtle has a poor body score

Microchipping . . . if the animal passes its health check. Ask Parks and Wildlife to record the microchip number on their record of your license details.

Check out your consumer rights here -

http://www.commerce.wa.gov.au/ConsumerProtection/PDF/Publications/A_consumers_guide_to_buying_a_pet.pdf

Common illnesses:

Common illnesses in captive turtles are –

Soft Shell	caused by improper or unhealthy conditions
Skin infections	caused by improper or unhealthy conditions
Shell infections	caused by improper or unhealthy conditions
Bacterial infections	caused by improper or unhealthy conditions
Respiratory problems	caused by improper or unhealthy conditions
Swollen eyes	caused by improper or unhealthy conditions

What's the secret to good turtle health ? Water quality, water quality, water quality, water temperature and diet ! Almost all captive turtle health problems are due to poor water quality and those problems are costly and time-consuming to treat.

Veterinary Care:

If your turtle develops health problems, please take it to a vet who specialises in reptiles. The place where you purchased your turtle should be able to advise you. Alternatively, you could use our vets at Wattle Grove Veterinary Hospital.

If you think your turtle is sick, make a vet appointment immediately; turtles do not show symptoms until they are extremely ill. Please don't rely on friends, reptile forums and the internet; only a qualified vet can diagnose the problem and only a qualified vet can prescribe essential drugs such as the antibiotics which will probably be required to treat your turtle.

Prevention is better than cure is never truer than for turtles.

Record Keeping:

It is recommended that you keep monthly records (weekly for hatchlings) of your turtle's growth – its straight carapace length and weight – to monitor its progress. Additionally, you should keep a record of your feeding, cleaning and water testing schedule/results. These records may help pinpoint the possible cause health problems which arise.

HOUSING: As a precaution, turtles being housed together should be monitored for any aggression. Oblong turtles have a life-span of around 80 years so their housing needs to be designed with this in mind. Housing should endeavour to replicate natural conditions. Outdoor housing is preferred as it suits the animals' aquatic lifestyle and behavioural needs, as well as contributing toward good physical and mental health. There should be no abrasive surfaces anywhere in the enclosure or pond as any breach of the skin or shell is an avenue for infection.

We don't utilise aquariums because of their poor thermal qualities.

Hatchlings should be kept in shallow water >10cm with plenty of non-abrasive haul-out areas for basking, and hides and/or floating plastic vegetation and/or branches of dead gum leaves which will create tannin water. Hatchlings should also be exposed to sunlight on a daily basis to ensure shell/bone health – when outside ensure that the hatchling's enclosure is covered with fine, well-secured mesh to prevent attack by birds.

Although costlier than an aquarium, an outdoor pool is less work if it's set up properly. We recommend a pond with natural surroundings enclosed within a secure, locked aviary-like structure – one which is big enough to include seating for viewing, a head-height roof with a full-height wider-than-normal door to allow for easy maintenance. The lower 50cm of the structure should be lined with a non-abrasive solid material such as Colorbond®. The "walls" and roof should be of strong predator-proof mesh. The mesh should extend 50cm into the ground below. Some form of shading/wind protection may be necessary by utilising shadecloth, depending on orientation, on part of the structure.

Depending on how secure your garden is, the enclosure may need to be padlocked.

Our recommendations are that the pond should be a minimum of 60cm deep and as big as possible (think of their natural habitat). Deeper / larger water bodies help minimise temperature fluctuations. Our rule of thumb for a pond for two turtles is 10 times their mature age length (head to tail: 40cm) wide, by 5 times their mature-age length (40cm) long ie 4m long x 2m wide . . . think of the biggest pond, and then double it.

In addition to the pond area, a land area of at least half the size of the pond required.

Ponds can be made from plastic pond-sheeting, or a pre-formed plastic pond. Concrete and/or rough fibreglass are not recommended because of their abrasive qualities and, in the case of concrete, the possibility of it leaching of harmful substances. A painted non-toxic rubberised coating such as that used in childrens' playgrounds is necessary for such ponds. Although more work, utilising a hole in the ground and pool liner will allow you to create a larger pond for less financial outlay.

Bioactive substrates contain good bacteria that recycle toxic nitrogenous wastes. Just as natural ponds have dead leaf litter and sediment, your pond needs these elements to provide a balanced ecosystem for the turtle. Avoid abrasive substrates, or fine gravel which may be ingested.

Due to their abrasive nature avoid using rocks and bricks in both the pond and its surrounds. Untreated Jarrah decking or soft artificial turf (some are quite abrasive) are better choices.

The turtle must be able to enter and exit the pond easily without the risk of abrading its plastron or heels.

Turtles need to bask on a regular basis for their shell and skin health. Ideally, they should bask daily – at least long enough for their shell to dry. Turtles can bask just below the surface of the water, or out of the water.

WATER :

A good biological UV filtration system is needed. Weekly (at least) water testing is essential. Test, at least weekly, for pH, Ammonia and Nitrogen wastes; familiarise yourself with the *Nitrogen cycle*. Water plants will assist with water quality and contribute to a more natural habitat. Some feral *Gambusia* fish in the pond will help dispose of food debris, and may even be an additional food source for the turtles. Filters should be cleaned weekly with the filter sponge cleaned in cold-boiled water so as not to destroy its beneficial bacteria.

Water plants create a more natural pond environment for the turtle and a visually more attractive environment for you. Water plants will also assist with water quality by absorbing nitrogenous wastes. Many attractive native water plants are now available although they do need to be repotted from their plastic pots into new-unused terracotta pots to ensure they remain on the bottom of the pond. Use the cheapest potting mix available as these usually contain no additives such as fertilisers and insecticides. Stand in several changes of water over several days to leach out any

fertiliser etc. Small floating plant- islands assist with water quality whilst also providing combined hide-basking opportunities. Bog type plants and grasses can be planted around the pond along with non-toxic ground covers. Use taller non-toxic plants in the enclosure to provide shade and hiding places.

Water temperature: Turtles should be kept in water at a temperature of 18 -26°C. Below 18°C turtles do not function at their optimum level (digestion, etc). Heating pads are not as effective as submersible water heaters which are now available with thermostats and heat guards. Submersible water heaters must be covered with a plastic heater guard to prevent burn injuries.

Caution ! Water heaters are made of glass and as such must be placed in the tank for **15 minutes before switching on**, and left **for 15 minutes after switching off** before removing from the water to avoid the glass shattering. Heaters also need to be cleaned weekly.

LIGHTING: UV light is particularly important to captive turtles for bone and shell health. **Artificial UV light is no substitute for natural sunlight.** Bright sunlight provides illuminance of approximately 100,000 lux or lumens per square meter, artificial lights can only provide a small fraction of illuminance when compared to sunlight. A 40W incandescent lamp typically produces less than 50 lux. The matter of UV light cannot be resolved with more lights; more is not better!

Note: UV light does not penetrate glass or perspex

It is essential that animals be exposed to sunlight and basking opportunities to maintain bone and skin health.

Note: Sunlight doesn't mean sunbaking in direct sun unless the animal chooses to do so of its own accord, and has the option of a cooler shaded area.

All enclosures whether indoor or outdoor should have a temperature gradient to give the animal the option of moving into different temperature zones (basking light/sunlight and basking platform at one end). Indoors, ceramic heat emitters are recommended for their longevity and lack of interruption to the daily daylight/night cycle.

As well turtles should have a normal daylight/night cycle; they should not be kept where lights, televisions and domestic machinery are operating after sunset. Don't treat your turtles as an on-call entertainment system.

DIET:

Natural diet. Oblong turtles are carnivores whose diet is made up of freshwater fish, freshwater crustaceans, freshwater shrimp, snails, dragon flies, insects, ducklings, frogs, tadpoles and invertebrates. They do not eat vegetation although in the wild this may be consumed incidentally when striking at food.

Where possible use whole foods which include bones, shells, guts, etc should be used.

Diet for captive adults: The diet should be as varied as possible with the turtles fed only every three days or so. Unfortunately, for many captive turtles, feeding is their only form of enrichment and enjoyment which can lead to overfeeding and obesity. We feed adults individually, in a separate container to minimise the risk of bites and scratches due to competition for food. Any breach of the skin or shell is an avenue for infection. A separate feeding container assists with the water quality in the main water body, and allows the consumption of food to be monitored.

We suggest a different food type every three days to eliminate the possibility of an unhealthy habituation to one food type.

If possible the diet should consist whole foods such as fresh (not frozen) freshwater-fish pieces, freshwater river prawns (remove sharp pieces on head), garden snails provided you and your neighbours don't use snail bait, live crickets, skinned mice (not pinkies) and small freshwater crustaceans.

NOTE: All food of marine origin should be thawed (if frozen) in **cold** water and soaked through two water changes over at least half an hour to reduce the salt content. Seafood loses nutrient and vitamin content during the freezing process. As well, the need to soak the seafood to remove salt contributes to further leaching of nutrients and vitamins. It is for this reason, seafood should be enriched with reptile-supplement-mix.

Alternatively, although not ideal, the following foods can be used. Salt-water prawns (remove sharp pieces on head), Mulies (enriched with reptile-supplement-mix), home-made reptile-supplement-mix jellies and Whitebait. Feed a variety of food ie prawn one day, fish three days later, etc – this is to avoid habituation to one type of food. Avoid fatty foods such as feeder fish, along with frozen bloodworms and turtle dinners. Whole foods (and exposure to sunlight) are needed for calcium uptake – turtles are composed of a lot of bone so calcium is an important component of their diet. Some feral Gambusia fish in the pond will help dispose of food debris, and may even be an additional food source for the turtles along with a source of environmental enrichment.

Diet for captive for hatchlings: Brine shrimp (in moderation), live mosquito larvae and live bloodworms (midge larvae) are ideal for hatchlings. As hatchlings grow, small Gambusia fish will be preferred. Hatchlings should be fed at least twice daily. Hatchlings should be weighed weekly to ensure that they are either maintaining their weight or, preferably, gaining weight. Pocket scales are required to accurately weight hatchlings.

Adequate calcium and sunlight are critical to hatchlings' health during this fast-growing time of their lives.

DISCLAIMER

We are in the business of rescuing, rehabilitating and conserving wild oblong turtles.

We do not support the licensing of wildlife as pets, or wildlife being kept as pets.

As an animal welfare issue we feel that, as we have the knowledge, we should provide accurate and reliable information on oblong turtle care for the benefit of the captive animals being kept by license holders.

We do not believe that *Chelodina colliei**(formerly *Chelodina oblonga*) is a suitable species for licensing due to their temperament and the high level of care required to keep them healthy and happy.

CONSULTANCY SERVICES

As we have acquired our knowledge and expertise of these unique animals through the support of the community, we believe that we should utilise this experience to benefit the welfare of licensed oblong turtles.

Licensed turtle owners are passionate about their animals but, in many cases, lack the knowledge needed to provide their turtles with a healthy and happy life.

We offer one hour on-site appraisals to assist licensed turtle owners improve their turtles' living conditions. These appraisals look at all conditions involved – water quality and temperature, enclosure size and suitability, lighting conditions, and diet. A written report with recommendations including recommendations for equipment upgrades is included.

DONATIONS TO THE NETWORK

Our unfunded Network is made up of volunteers; we rely on sporadic grants, grass-roots fundraising, donations and, mostly, our household budgets to fund our volunteer work. All donations are gratefully received.

If you have found this document helpful, you may wish to make a tax-deductible donation toward our work, donations may be paid directly into our bank account. Please drop us an email so that we can track your payment through the system and send you a tax deductible receipt.

Account name - Turtle *Oblonga* Public Fund, Bankwest Booragoon Branch, BSB 306-066, Account Number 2732950

or, by cheque made out to Turtle *Oblonga* Network and mailed to C/- 9 Lindsay Street, Kalamunda, 6076, WA

If you would like to contribute hands-on toward our work, please take the time to look at our website which includes a downloadable membership application. <http://www.turtleoblonganetwork.org.au>

Turtle *Oblonga* Rescue and Rehabilitation Network Inc

ABN 9329 3911 718

For help, rescue and advice with wild turtle issues

0424 727 411 Perth East Metro • 0424 727 624 Perth South Metro • 0414 476 867 Perth North Metro

*If, for any reason, the Turtle Oblonga Network number in your area doesn't answer,
please call one of the other numbers.*

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