

A brief introduction to housing for snakes and lizards  
Grant Husband Territory Wildlife Park

Glass fronted wooden vivarium:

This type of structure is perhaps the most commonly seen form of reptile enclosure. Can be built by anyone with a bit of practical know how. They can be constructed as single units or in banks. Access can be either front or top opening. Top opening enclosures are recommended for venomous and some of the faster moving species. One benefit with front opening enclosures is that they can be stacked, one on top of the other to save space. Ventilation can be fitted either to the top or the sides. For convenience of cleaning, hygiene and to extend the life of the enclosure, the timber should be sealed with lacquer or painted and left to cure for several days for the fumes to diminish. When building or adapting a box make provisions for lighting and heating. See lighting and heating section later.

Aquaria:

With the addition of a secure lid, aquaria make very simple and convenient reptile holding enclosures. The lid, which can be constructed from, timber, acrylic or aluminium, is the obvious place for ventilation. Metal fly mesh, perforated metal sheeting or a series of holes drilled into a solid top are all acceptable methods of ventilation. If housing insectivorous lizards don't use plastic flyscreen as many insects can chew through this, giving the lizards an avenue of escape. A word of warning: keeping this type of enclosure away from direct sun as it may heat up quite rapidly killing the occupants.

Plastic container:

Commercially available plastic tubs with a little modification make ideal enclosures. Ventilation can be added by cutting out sections of the lid and gluing or melting into place a section of metal flyscreen mesh.

Manufactured cages:

These days the choice of commercially manufactured reptile cages is mind boggling. They vary from fairly simple fish tank like structures to very elaborate furniture like pieces. They can be made from glass, plastic, timber, fibreglass etc. The choice is overwhelming. Some are well designed and others are full of flaws .

Earth ring:

An earth ring is generally one section of corrugated iron water tank, without a top or bottom. The advantage here is that the reptiles are exposed to natural sunlight. For reptiles that like to burrow the bottom of the enclosure may have to be closed in with wire mesh to prevent burrowing and subsequent escape. To prevent predators getting access to the occupants some sort of mesh structure will have to be built over the top. Several dry retreats are also necessary for protection during rainy weather. Provisions can be made for arboreal species with the addition of trees or branches for climbing.

#### Wire enclosure:

An aviary type enclosure is suitable for many species of captive reptile, allowing exposure to the natural elements. When choosing wire, be aware that some of the cheaper wires can be quite rough in texture. The smoother the wire the better as some reptiles are prone to rubbing their snouts in an effort to escape, often causing quite nasty abrasions in the process. A good way of testing the wire is to rub your finger back and forwards on it. An effective remedy is the installation of a smooth surface around the inside perimeter eg. Plastic sheeting, sheet metal or wood panelling. As reptiles are the Houdini's of the animal world be sure there are no gaps around the doors etc. Again several weather proof retreats are recommended.

#### Critter box:

These are by far the cheapest form of reptile enclosure. Most pet shops and many large super market chains supply them. They can be viewed as disposable reptile containers as they are easily broken if dropped and also tend to go opaque after a couple of years use. A variety of shapes and sizes are produced and are suitable for most small snakes and some lizards, particularly geckos.

#### Substrates:

Practicality and aesthetics are two words that come to mind here. Newspaper or leaf litter are two ideal substrates for most snakes and some lizards and are easily replaced when soiled. Some lizards kept long term on paper will suffer toe deformities, so soil, fine sand or leaf litter is probably a better choice. Always avoid coarse sand and gravel as this can be ingested with food and cause severe health complications. When the substrate is soiled the contaminated portion can be easily removed and replaced with fresh material. Pelletized paper seems to be all the rage with many keepers these days. The odd horror story is getting around of accidentally ingested pellets swelling in the stomach and causing serious gut compaction.

#### Lighting:

Depending on the species being maintained there are myriad choices of lighting available today. Natural ultra violet light via the sun is by far the best source and pretty hard to beat! Many captive reptiles, with the exception of most agamid species are able to get by without ultraviolet light providing their diet is supplemented with calcium D3. Even nocturnal species like geckos, occasionally bask in sunlight for short periods. Enclosure lighting can be provided via ultra violet tubes or globes, dichroic globes, fluorescent tubes, blacklight tubes (BLB), incandescent lights or even just a window in the room of which the animals are being held.

#### Heating:

Depending on the species concerned many varieties of artificial heating are available, i.e. monitors and dragons prefer radiant heat, whilst pythons get by with heat via heat pads etc. Hot rocks, heating pads, heat tape, incandescent light globes, infra red globes and ceramic globes are all suitable are all accepted methods of supplying a heat source. Most can be fitted with thermostats or dimmers for temperature control. The heat source should be positioned to one end of the enclosure so the animals can choose suitable temperatures themselves and prevent over heating. Globes should be set up in such a way to prevent snakes coming into contact with them and getting burnt, particularly when connected to thermostats and timers. Here in Darwin some

species of reptiles may be kept for long periods at room temperature without any adverse effects.

#### **Sun Box:**

As mentioned above, the sun is an unbeatable source of ultra violet light. For many species of diurnal lizards some exposure to natural sunlight is beneficial to their overall health and well being. This can be obtained by using a mesh sun-box. A wooden framed box with wire mesh all around makes a suitable vessel for periods in the sun. To prevent overheating place in a position where it gets at least some shade. It also helps to add deep leaf litter and several pieces of bark to enable the lizards to get out of the sunlight if need be.