**Amphibians and Reptiles**

The successful keeping of amphibians and reptiles in captivity requires:

* a sound knowledge of the species’ specific needs
* an environment that replicates the features of the animals’ natural environment
* experienced carers that are aware of the signs of health and disease in the species being kept.

### Licensing and acquisition

No species of reptiles or amphibians (except axolotls) are exempt from licensing requirements in Victoria. Licences are issued by the Department of Sustainability and Environment and information regarding licensing requirements can be obtained from DSE or reptile and amphibian dealers.

### General biology

* There are approximately 6,000 species of reptiles and 4,000 species of amphibians.
* Reptiles and amphibians are cold-blooded animals (ectotherms). Their body temperature is determined by the environmental temperature.
* Reptiles and amphibians come from a wide range of environments and are found in almost every habitat on the earth: for example, they can be aquatic, tree dwelling, burrowers or desert dwellers.
* Many reptiles and amphibians are relatively long-lived, surviving for 10 to 20 years or even more. This must be taken into consideration when committing to them as pets.

### Environment

When choosing housing for reptiles and amphibians, consideration needs to be given to the specific requirements of the chosen species. In some cases, simple aquariums may be used.

The size of housing required varies with the species, the expected size at maturity and the degree of activity and territoriality displayed.

Being cold blooded, reptiles and amphibians regulate their body temperature by selecting the appropriate temperature environment. In the wild they increase their body temperature by basking in the sun or lying on heated surfaces such as rocks or paving, while to cool their bodies they may burrow, hide under vegetation or enter water.

It is important therefore that cages have both hot and cool areas. To avoid causing burns, there should be a barrier between the heat source and the animal. Water must always be provided.

Lighting should be appropriate for the species and relate to their natural environment. A definite daylight cycle must be provided and varied manually or automatically to simulate the passage of the seasons. For basking animals, ultraviolet light is very important in inducing induce vitamin D3 production for healthy bone growth. Full-spectrum globes should be used to provide light. For nocturnal animals, red, blue or black lights may be used so they can be viewed without disturbing them.

Reptiles and amphibians need well-ventilated, draught- and fume-free environments. Their humidity and bedding material requirements vary between species. Climbing species require branches and logs on which to climb and bask, while rock-dwelling species need rock surfaces. Refuges must be provided to allow them to hide. Without them, animals can become stressed.

Animals should be checked daily. Cages should be cleaned regularly and the fittings cleaned or exchanged. Cages should be secure and if animals that may bite are being housed, cages should be locked.

### Food and water

Reptiles and amphibians vary in their food requirements. It is important that before acquiring an animal, its food requirements and the availability of this food are assessed. In the wild, these animals often have a varied diet. If it is not possible to provide this variety, nutritional supplementation may be required.

Fresh, cool water must be provided at all times for bathing and consumption.

### Handling

Regular and gentle handling of non-venomous reptiles can make them docile and more accepting of handling procedures. Handling should, however, be kept to a minimum. Amphibians should be handled as little as possible, to reduce the risk of damage to their delicate skins.

Good hygiene after handling and cage cleaning is essential to reduce the risk of transmission of zoonotic diseases.

### Disease prevention

To decrease the incidence of disease, it is vital that the housing, nutritional and environmental requirements of each species are known. All new animals should be kept quarantined until they are proved to be disease and parasite free.

### Signs of illness

It is not easy to recognise the early signs of ill-health in reptiles and amphibians, but possible indications include:

* changes in normal behaviour patterns
* constipation
* decreased appetite and/or activity
* vomiting
* weight loss
* sores, swellings or changes in skin colour
* changes in breathing
* external parasites
* difficulty in moving, lameness

If an animal shows signs of ill health or distress, immediate advice should be sought from veterinarians experienced in reptiles and amphibians. Illnesses, injuries and the treatment given should be documented in the appropriate records.

### Euthanasia

In the case of a reptile or amphibian becoming so sick, diseased or injured that recovery is unlikely or undesirable, on humane grounds euthanasia must be arranged with a veterinarian or a person competent in the technique for reptiles and amphibians. A record of deaths is required for the annual report to VSAEC.

### Fate planning

A fate plan should be considered before using a reptile or amphibian in any program. Animals that are no longer required must be re-homed.

Pet reptiles and amphibians must not be released into the wild.

### More information

* [Amphibian Research Centre](http://frogs.org.au/arc/index.html)
* [Comfortable Quarters for Laboratory Animals, Animal Welfare Institute](http://awionline.org/store/catalog/animal-welfare-publications/animals-laboratories/comfortable-quarters-laboratory-anima)
* [Australian and New Zealand Council for the Care of Animals in Research and Teaching (ANZCCART)](http://www.adelaide.edu.au/ANZCCART/)
* [Department of Environment and Primary Industries, Animal Health and Welfare](http://agriculture.vic.gov.au/agriculture/animal-health-and-welfare)

**Text**
Weigel, J. (1988), Care of Australian Reptiles in Captivity, Gosford, NSW: Reptile Keepers Association