



Guidance on the keeping of Crocodilians

Dangerous Wild Animals (Northern Ireland) Order 2004

- 1. Species Names of commonly kept Crocodilians**

Alligatoridae - Alligators and caimans

Crocodylidae – Crocodiles and the false gharial
- 2. Additional information**

All crocodilian species are included in the Schedule to the Order.

There are 23 known crocodilian species. This guidance provides basic safety and husbandry information for the group, however it is recommended that keepers research species-specific husbandry information before applying for a licence.

The only living member of the Gavialidae family (the Gharial or Gavial, *Gavialis gangeticus*) is also included in the Schedule to the Order. However, the requirements for this species will be different to those listed here. Please contact the Department of the Environment for further information if you propose to keep this species.
- 3. Conservation status**

Most species of Crocodilian are classified as Annex A species under EC Regulation 338/97 (relating to the Convention on Trade in Endangered Species (CITES)).

Special permits must be obtained to buy, sell, breed or use Annex A species for any commercial purpose.

4. Housing overview

Crocodilians require an enclosure with fresh water, dry land, appropriate heating and of adequate size. Most crocodilians grow longer than 2 metres, and require sufficient water to be able to submerge themselves.

All crocodilians are cold-blooded, which means that they cannot regulate their body temperature internally. This means that enclosures must be heated to a comfortable temperature for the species kept. They are likely to be housed indoors.

Keepers should be able to show that they have adequate space for fully-grown members of the species they plan to keep.

5. Keeping experience

In order to protect the welfare of these animals and to protect keeper and public safety, keepers must be able to demonstrate a good knowledge of husbandry and handling of the species they wish to keep.

There should normally be a second named person nominated and included on the licence who is competent to care for the animals should the owner be absent or incapacitated.

Housing Recommendations

- 6. Construction** A tank with a lid is suitable for hatchlings, however this is only temporary housing and will not remain appropriate for long. Juvenile and adult crocodilians will require a secure enclosure with both water and land.

Crocodilians are strong, and can climb and dig well. Enclosures should be solid enough to cope with this behaviour.

All enclosures should have a smaller holding facility, to allow keepers to safely enter enclosures to clean, and to permit the veterinary treatment of the animals if necessary.

Any concrete or artificial flooring used should be non-slip.

Outdoor enclosures are not suitable for crocodilians in Northern Ireland.

7. Fencing

Fencing or walls of enclosures must be strong enough to withstand the weight of the reptiles climbing on it or jumping against it and, if a mesh is used, its size used must be small enough to prevent the animals becoming entangled. Fence or wall height must be of an adequate height to stop the reptile getting out. Fences of a minimum of 1.5 m (5 foot) high, with 0.5 m (1 foot) inward slant will prevent the escape of all but the largest specimens. Taller enclosures are needed for the larger crocodilians.

The fencing or walls should be set into concrete foundations to prevent the reptiles digging, or pushing underneath.

8. Size

The minimum space required for crocodilians is determined by the size of each animal. For a pair of crocodilians, it is recommended that the minimum area of dry land should be 3 times the final length of the largest animal by 4 times the length of the largest animal. The minimum water area should be 4 times length by 5 times length, and at least 0.3 times the length of the reptile deep.

Example for two crocodiles, each 2 metres long:

Land area – minimum recommended area is 6m x 8m (48m² or 517 ft²)

Water area – 8m x 10m (80m² or 860 ft²) and at least 0.6m (2 ft) deep.

The minimum land space provided should be increased by 10% for each additional reptile in the enclosure, and the minimum water area provided should be increased by 20%.

The enclosure should be large enough to allow the reptiles to walk around, dry themselves, bask in a warmer area, cool off, submerge themselves and swim.

- 9. Temperature and Shelter** The preferred body temperatures of most crocodilians range between 29° and 34°C (84° – 93° F). Enclosures should provide a temperature gradient allowing the reptiles to reach their preferred body temperature, and to cool down if needed. Temperature in the enclosure should range from 26°C to 36°C (80° F to 97° F).

American and Chinese Alligators can tolerate lower temperatures, but are comfortable at the lower end of the range listed.
- 10. Lighting** Crocodilians require a day-light cycle with 11-13 hours of light. If kept indoors, full-spectrum light bulbs are recommended. A spotlight for basking should be provided.
- 11. Ventilation** Enclosed holding quarters should have a suitable form of ventilation.
- 12. Drainage** The drainage must be capable of rapidly removing all excess water, and to prevent flooding of the pool. Drains should be designed to avoid injury to the animals. Any open drains, other than those carrying surface water, should be outside the enclosure. Any faecal material must be disposed of in an environmentally sound manner.

13. Cleanliness

Enclosures should be maintained in a clean state, with faeces and food debris being removed on a regular basis. A water filtration system appropriate to the size of the water pool and animal stock is necessary to keep the water clean. No matter what size of filter is used, the pool should be emptied and cleaned at least once every two weeks.

Water quality should be tested regularly to prevent ammonia build-up, and appropriate measures should be taken to maintain a reasonable water quality.

A separate holding enclosure should be incorporated that allows the keeper to enter safely to clean and maintain the main enclosure.

14. Social dynamics and behavioural considerations

Caiman and other crocodilians can be kept in groups, however it is important to have enough room for the whole group. Species should not be mixed.

In the wild, these reptiles will form loose social groups, often dominated by one male that excludes other males.

If more than one animal is kept, some provision should be made to separate them if necessary. This would normally be in the form of a divider in the holding enclosure.

- 15. Prevention of escape** Crocodilians can climb well, therefore the inside surface of enclosure walls should be smooth. Items in the enclosure must be placed far enough away from the walls that they cannot be used as steps.
- Crocodilians can move surprisingly quickly over land. It is therefore strongly recommended that keepers do not enter the enclosure on their own, or without some way of fending off the reptiles.
- 16. Food, drink and bedding** These reptiles require a meat diet. Fish can also be fed, but must be supplemented appropriately with vitamins. Whole prey items should preferably be fed, including the skin and bones, however chicken portions including the bones are suitable. Adult crocodilians do not require feeding every day. If food is left uneaten, it should be removed from the enclosure.
- Bedding material for these animals is not normally required.
- 17. Visiting interval** The animals must be monitored at appropriate intervals, normally at least once every 24 hours.
- 18. Exercise and enrichment** Crocodilians tend not to be very active, however sufficient pool space must be available to allow the animals to swim, and sufficient land space to allow the animals to bask and to move around.

- 19. Provision for capture and transportation** For large crocodilians, there should be some method of enclosing the animals into a holding pen, to allow the safe cleaning of the enclosure and the administration of veterinary treatment. It is recommended that the door mechanisms for these holding pens should be operable from outside the enclosure.

Veterinary treatment should be provided on-site.

A licence, issued by the Department of the Environment, for the keeping of these animals may specify restrictions on the movement of these animals and procedures to be followed. Specially constructed transport crates will be required.

- 20. Emergency planning** There should be a written contingency plan in place to be used in the event of an emergency, for example fire, flood, animal escape or injury to the keeper.

- 21. Notification Requirements** A licence, issued by the Department of the Environment, for the keeping of these animals may specify procedures to be followed in the event of an escape and on the provision of information to the Emergency Services (e.g. the Fire Service) on the dangerous wild animals being kept.

You are required to notify the Department of the Environment of any intentions to breed the animals.

22. Prevention and control of spread of infectious disease

Some provision should be made to allow the separation of sick or injured animals if a group is kept.

The keeper should provide details of their veterinary arrangements with a practice prepared to treat these animals. A schedule of veterinary care, including routine parasite control is required, and the keeping of records of veterinary attention is essential.

There are no transmissible diseases carried by these animals that pose a risk to the general public if they do not directly handle the animals or their by-products. Keepers should be aware of the risk of salmonellosis from handling reptiles, which they in turn could pass on to family members if good hygiene is not observed. Thorough hand washing following the handling or cleaning out of any reptile is recommended.

Explanatory Notes

These notes have been produced to provide people wishing to keep dangerous wild animals with guidance on the requirements they may have to meet. In determining whether or not a licence should be issued, the Department of the Environment will consider the information provided by the applicant when applying for a licence. The Department will also arrange for a suitably qualified person to carry out an inspection of the premises at which the animal or animals will be kept and the inspector's report will also be taken into consideration. It is at the Department's discretion to waive certain recommendations, or add additional ones, to the guidance provided in this document. There is a right to appeal within 21 days if a licence is refused or if the applicant contests conditions applied to a licence.

Contact Information

For further information on the Dangerous Wild Animals (Northern Ireland) Order 2004, contact the Department of the Environment, Northern Ireland Environment Agency, Biodiversity Unit on (028) 9056 9557

For CITES enquiries:

Wildlife Licensing and Registration
Service
Global Wildlife Division
**Department for Environment,
Food and Rural Affairs**
Zone 1/17 Temple Quay House
2 The Square, Temple Quay
Bristol BS1 6EB

Tel 0117 372 8691

For rabies quarantine enquiries:

Quarantine Section
**Department for Environment,
Food and Rural Affairs**
Area 209
1a Page Street
London SW1P 4PQ

Tel 020 7904 6918

Northern Ireland Environment Agency
Klondyke Building
Cromac Avenue
Gasworks Business Park
Belfast BT7 2JA
T. 0845 302 0008
www.ni-environment.gov.uk

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