5.3. Handling Crocodilians (Michael Cherkiss)

Animals that are captured, processed and released quickly show little ill effect from their experience. Cherkiss et al. (2009) briefly describe handling techniques, which will be discussed and expanded upon here. Safe handling techniques are similar whether you are catching from a boat or on land. A difference is the size of crocodilian that can be brought into the boat is dependent upon boat size and experience of the capture crew, whereas on land space might not be an issue.

Securing the Crocodilian

Crocodilians 0.5 m total length (TL) or larger should have their jaws secured shut prior to handling to prevent them from biting hard objects and breaking their teeth as well as to keep them from biting the handler(s). Ropes, nooses (rope and wire), plastic cable ties, and rubber bands can all be used to close the mouth; duct or electrical tape can keep it closed (Cherkiss et al. 2009). Whenever the mouth of an animal is secured shut by any means, having a rope secured to the animal and the boat, vehicle or something stationary is a must. As long as the mouth is held shut, steps must be taken to prevent the animal from escaping.

Once the mouth is shut a crocodilian can be further secured by tying or taping its legs together dorsally (for short periods of time only), covering its eyes and ears to help calm it, and if necessary, fastening the animal to a board, or other suitable hard object. This is all dependent on the size of the animal and the conditions under which the captors are working.

Processing a Crocodilian

During the processing of any animal, it should be under control at all times. For smaller animals this can be accomplished by simply holding the animal in one’s lap. For larger animals, having one or more people sitting on their back and holding the head is suitable.

If the species being handled is too large to control by simply sitting on it, animals can be immobilized for measurement, likewise, if they need to be transported or undergo surgery (Loveridge and Blake 1987). The muscle relaxant Flaxedil (gallamine triethiodide) has been used successfully on Crocodylus niloticus (Loveridge and Blake 1987; Leslie 1997) and C. porosus (Walsh 1987). Neostigmine (neostigmine methyl sulfate) is the antidote for Flaxedil (Loveridge and Blake 1987). Pavulon (pancuronium bromide) is now widely used for the immobilization of C. porosus in Australia (Bates et al. 2004; NRMMC 2009).

It is likely that drug suitability and dosages will differ among species. A pole syringe is the simplest and most effective means of delivering an intramuscular injection. The greatest danger from immobilizing drugs is accidental injection of the person administering them (Buys 1973). Preparation for emergency treatment for accidental injection should be part of any immobilizing procedure.

Releasing the Animal

Prior to release, a rope can be tied to the tape or band that is securing the mouth closed. After release, when the crocodilian is some distance from the captor the elastic can be removed by tugging on the line. Under no circumstances should a crocodilian be allowed to escape or be freed with the mouth still secured. This would be a death sentence for the animal!

Crocodilians that have been immobilized, or that have struggled in a trap or during capture for any length of time need a recovery period. Loveridge and Blake (1987) emphasized the importance of placing crocodilians in shallow water during recovery after using Flaxedil to prevent drowning. Crocodilians that have been handled after trapping should be allowed to recover at their own pace. Crocodilians should not be allowed to get too hot or too cold during handling and recovery.
References


