

## SEX AND THE SINGLE SAURIAN

David W. Blair

Iguanas are usually somewhat difficult to sex, particularly when immature. Some of the most distinctive sexual characteristics are applicable only to adults and even then they are sometimes not conclusive. In general, adult male iguanas have larger heads and jowls than females of similar body size. They are often more brightly colored and sport longer crest scales than females which, in most species, also attain a smaller overall size. As male iguanas reach sexual maturity, bulges become prominent on the underside of the base of the tail just posterior to the cloacal opening. These indicate the presence of hemipenes, the male reproductive organs. Femoral pores on the underside of the thighs also become more prominent in males, particularly during the breeding season. Waxy secretions, sometimes over 12mm in length, may form "comb-like" structures from these pores. However, in some species of iguanas within the genus *Cyclura* femoral pores are reduced (*C. ricordi*) or even absent (*C. collei*) in males.

Behavior is also a good indication of the sex in mature iguanas. Males display more often than females, performing slower, more pronounced head bobs often with a rolling side to side motion. After such displays, males will sometimes attempt to mount females with or without actual mating.

An innovative method for sexing some reptiles is to inject a saline solution into the base of the tail. This causes the male's hemipenes to invert and protrude from the cloaca. Unfortunately, this method does not work well on lizards having thick, muscular, or spiny tails such as members of the genera *Ctenosaura* and *Cyclura*.

The most reliable method for sexing iguanas has proved to be by probing. The technique is fairly simple--metal probes are inserted into the cloaca, not at the center, but along either edge of the opening. With light pressure and a rocking back-and-forth motion, the probe is gently directed toward the tip of the tail in an attempt to locate the pockets housing the hemipenes in males. Probes may be inserted dry, but I prefer to use an antibiotic ointment as a lubricant. Probes should be sterilized between use on different animals. Specimens of the same species with comparable snout-vent lengths will probe approximately three times as deep in males as in females. Young animals are more difficult to probe than adults as there is often a constriction at the opening of the hemipenial pocket, making it harder to locate. If the animal in question probes as a male, you can be relatively certain it is a male. Animals probing quite shallow and assumed to be females should be rechecked a second or third time to ensure it is not actually a male in which you were just unable to locate the pockets.

I recommend against probing animals under two or three months old as the membranes within the cloaca are still so delicate that probes may actually puncture through them and slide down the tail between the skin and muscle tissue. I have seen this happen only twice and there has never been any permanent damage or infection resulting, possibly because of the use of antibiotic ointment as the lubricant. The smallest probe (~ 1mm diameter) is normally used on young iguanas. Animals with SVL of 100-125mm will probe approximately 5mm in depth if female and near 12mm if male. Larger diameter probes (2-3mm) are used on older animals from 200-500mm or more SVL. Adult iguanas will usually probe under 15mm in depth if female, and up to 50mm for large males. These figures vary somewhat from species to species, of course, but the ratio of male to female probe depth remains fairly constant.

The ability to accurately sex iguanas is the first important step in establishing compatible groups or breeding pairs of these fascinating saurians. Next to habitat protection, including the removal of feral animals and exotic plants, captive propagation should be one of our most important goals. I hope this information has been helpful and I wish you all great success in your future breeding projects!