

## ***Ancient Egyptian Animals***

**An Illustrated Research Report for a Film Production**

**Submitted as a Portfolio for Review**

© 1996 D.D. All Rights Reserved.

### **SAMPLE ENTRY: CROCODILES**

#### **Species**

The Nile Crocodile

#### **Biology**

Related to the dinosaurs (as well as to the birds), the Nile crocodile is the "king of African reptiles".

For most of the day, particularly in the morning and the late afternoon, crocodiles sun themselves onshore. As the temperature rises towards midday, the crocodiles cool themselves by basking with their mouths wide open.

Although they are typically sluggish, crocodiles have "swift feet" (as the ancient Egyptians noted), capable of occasional sprints, probably trotting (apparently only young crocodiles truly gallop). In walking, a crocodile typically raises its body well off the ground, each lower-leg fairly vertical, each upper-leg fairly horizontal. On soft mud, the webbed feet of a crocodile act like snowshoes.

In search of water, crocodiles may travel some distance overland, sometimes wandering into

human settlements; and during cold or hot weather, young crocodiles may dig burrows into riverbanks, by taking mouthfuls of dirt out of the bank and shaking them out underwater.

During the midday heat, crocodiles either walk on their legs into the shade or paddle with their legs and slide on their bellies (down well-polished riverbanks) into the water (in whose insulating environment the cold-blooded creatures also seek refuge at night). In particular, although it could be found under willow trees on the ancient riverbank, the Nile crocodile prefers to hide amongst the floating leaves of pondweed in sluggish areas of the river as well as in swamps and other large, shallow bodies of water. Although it generally avoids open water, the Nile crocodile has been known to swim out to sea.

Crocodiles are well adapted to life in the water, with a streamlined body, webbed feet, and a powerful tail for swimming; closable nostrils, for submerging; and nostrils and eyes high atop the head, for ambushing prey.

With stones lying heavy in its belly, just the top of its head breaking the surface of the water, and the length of its body resembling a harmless piece of driftwood, the Nile crocodile is infamous

for lying in wait and then ambushing thirsty mammals as they come down to the river to drink. Sometimes stunned by a blow from the crocodile's head or tail, the prey is seized by the reptile's jaws, dragged into the water, and drowned before being eaten. Likewise, large prey seized on land, as on game trails, is typically taken back to the water to be eaten.

Although (as the ancient Egyptians noted) crocodiles have "terrible jaws", which seize their prey effectively, their teeth do not tear food well. Small prey is typically swallowed whole, but the skin and flesh of large prey (after its ears and tail have been bitten off) must be softened before it can be torn into: To do so, the crocodile typically stores the kill in a hollow underwater until it is partially decayed. When ready to eat, the large carcass is again seized by the jaws of the crocodile, which then spins underwater violently lengthwise, tearing the cadaver to pieces, each of which it swallows at the surface with a jerky motion of its head. Note, too, that although they can snap a timber in two, the jaws of a crocodile can be held shut by hand (The musculature is leveraged to close, not open) and that unlike alligators, crocodiles have a relatively narrow snout and a prominent fourth tooth on the lower jaw (which fits into a groove in either side of the upper jaw but remains visible even when the jaws are closed).

Although they fulfill a vital niche in the environment, Nile crocodiles are notoriously aggressive, especially when guarding their young (See below) or when cornered in shrinking pools of water (as during a drought or perhaps as the floodwaters of the Nile receded in the fall).

Although "man eating" apparently happens mostly by chance, when people come down to the water, there are isolated reports of crocodiles actually leaving the water to go after people. Most crocodiles, however, feed mainly on fish.

Large crocodiles do feed significantly on other vertebrates (primarily antelope but also such species as cattle, giraffes, young hippos, lions, wild dogs, hyenas, porcupines, birds, and turtles); and young crocodiles feed significantly on invertebrates (although larger prey can be taken, by stalking, then pouncing on the victim, the young crocodile then moving its head sideways as it snaps its jaws).

Crocodiles also feed on carrion in the water, such as bull hippos that have been killed in fights, the crocodiles often feeding together peaceably.

Crocodiles, however, do not feed on "crocodile birds"—typically the Egyptian "plover" (28E) but sometimes such birds as the spur-winged plover (28C) and the common sandpiper (28A)—which feed on parasitic ticks and insects that they find in between the scales on the tough hide of a crocodile, as it basks in the sun. Reportedly, crocodile birds may even venture into the wide-open mouths of the giant reptiles, for leeches and pieces of meat (The crocodiles have no movable tongue with which to clean their own teeth): While sunbathing, crocodiles are apparently not interested in feeding (Moreover, some waterbirds build their nests near those of crocodiles, where they are indirectly protected but not directly threatened by the mother standing guard). In addition to the "cleaning

service" provided by crocodile birds, crocodiles benefit from hearing any warning calls issued by the birds: With such disturbances, the crocodiles immediately slide into the water.

During the mating season, bull crocodiles lift their heads, open their mouths, and let out long, rolling bellows. Full-grown male crocodiles stake-out territories; and although they tolerate females and younger males, they fight rival males, sometimes to the death.

During the dry season, a female Nile crocodile uses her forefeet to dig a pit 8 to 20 inches deep (the sand pushed away by her hindlegs) perhaps 30 feet from the water on a sandy beach; and in it, at night, she lays over 40 eggs, which she then covers with grass or with the soil she had dug-out of the hole. The mother then guards her nest, by lying atop, moving only during periods of extreme heat, to cool herself in nearby shade or to briefly immerse herself in nearby water. During the rainy season (teeming with insects), the young—still within the eggs underground—grunt or squeak loudly enough for their mother to hear them; and she promptly digs them out. At this critical time, the mother will even attack people on land who venture too near (an otherwise uncharacteristic behavior). During their first week or so of life, the foot-long hatchlings (retaining their yolk sacs) closely follow their mother, like ducklings after a mother duck: They greet their mother with grunts; climb onto her head and snout; swim after her if she submerges; yap if they get lost; forage for insects everywhere, even up into trees; and boisterously squeak, grunt, and snap at one another.

Despite the growling, snapping protection of their mother, many of the eggs and hatchlings of the Nile crocodile are eaten by such predators as ants, catfish, soft-shelled turtles, herons, storks, eagles, ospreys, and baboons by day and owls, mongooses, and hyenas at night. The #1 nest-robbbers, however, are monitor lizards, which boldly dig-up the eggs (sometimes right under the body of the mother), take them to cover (one by one), break them open, and eat their contents. Although crocodiles sometimes nest close together and although mother crocodiles often protect 2- to 3-week-old young from several nests that have come together (before they go out on their own, under cover), crocodiles occasionally raid each other's nests; and given their cannibalistic habits, growing crocodiles bask or otherwise associate only with others of their own size!

Mortal enemies of adult crocodiles are few but include leopards, lions, and elephants; and hippos will vigorously defend their young against the hungry reptiles.

Living up to a century or more, the Nile crocodile may grow to 20 feet or more long!

### **Egyptology**

"Crocodile" was a given name, presumably implying formidability. Such items as wax toys were shaped like crocodiles, and such a toy was even the subject of a popular story.

The Nile crocodile was "The Aggressor", attacking bathers, women filling waterpots, laundrymen (a very undesirable occupation),

herdsmen and their herds drinking or crossing water, survivors of shipwrecks, and anyone else who came down to the otherwise life-giving Nile (along stretches of which barriers were probably erected). Such ever-present threats from crocodiles were "abetted" by magicians.

To appease its hunger for human flesh and to appreciate that—like the sun—it arose out of the waters each morning, the crocodile was worshipped as Sobek—god of the sun, earth, and water—typically depicted wearing the crown of Osiris, adorned with reeds, ostrich feathers, and ram's horns (although the worshippers of Osiris and Horus often deemed this "Rapacious Creature" an ally of their immortal enemy Seth, typically represented by that other denizen of the waters, the hippopotamus). To the dismay of the many who worshipped various fish, those who worshipped the crocodile considered fish "rebellious" and fishing holy! Moreover, as the provider of water, Sobek was the patron god of such oasis-cities as Crocodilopolis, in whose temple pools select crocodiles were worshiped by priests: The lucky reptiles were presented with regular gifts of cakes and honey wine and annual sacrifices of beautiful virgins; they were adorned with such jewelry as pendants of gemstones or gold for their ears and bracelets

for their forelegs; and upon their death, these chosen crocodiles were mummified and laid to eternal rest in sacred coffins. Other Egyptians, however, as in Elephantine, despised crocodiles and even ate their flesh!

Finally, the goddess Ammut—with the head of a crocodile, the body of a lioness, and the hindquarters of a hippo—was the Devourer of the Dead, who would eat the heart of any of the deceased judged unworthy for the afterlife (See also the jackal (39C), as Anubis).

### **Bibliology**

Ezekiel mentions (in Hebrew) a great, fearsome "tannim" as living in the rivers of Egypt—probably the Nile crocodile (although sometimes translated as a "dragon"). In several passages (as in Job), the Old Testament mentions a "livyatan", an aquatic leviathan with massive jaws, terrible teeth, closefitting scales, and sharp claws—probably a crocodile (although sometimes translated as a whale).

After crossing the Mediterranean, the Nile crocodile at one time lived in the coastal waterways of Israel.