

# ALLIGATOR INFORMATION

## FREQUENTLY ASKED QUESTIONS ABOUT ALLIGATORS

### 1. How many alligators live at Brazos Bend State Park?

We estimate that between 250 – 350 adults (6 feet and over) alligators live at Brazos Bend State Park.

### 2. When is the best time to see alligators?

The best time during the year is March- May and September – November. You can see alligators any other time of the year, depending on temperature. The weather they prefer is sunny mild days. You may see them in the wintertime on such days. Summer days are too hot. During the summer, look for them very early in the morning or late in the evening.

### 3. Where can we go to see an alligator?

This changes depending on season, water levels, etc. You could see an alligator anywhere in the park. Usually the best place is the back side of Elm Lake (where the observation piers are) and 40 Acre Lake.

### 4. When is alligator breeding season?

Breeding season starts in April and will continue until the end of May. Nesting starts in June and the eggs hatch in August and early September, depending on temperature.

### 5. What's the biggest alligator at BBSP?

We don't know. There are some that are between 12 and 13 feet long. We're not sure that we have ever seen the largest one.

### 6. How big do alligators get?

Females usually get to 6 – 8 feet long; Males usually don't get bigger than about 12 – 14 feet long. The world record is 19'2" from Louisiana. Normally they grow about 1 foot per year until they reach about 6 feet long. After that their growth rates slow down and they start getting wider, (just like humans in some cases). Like most reptiles they continue to grow as long as they live.

### 7. What do alligators eat? How often?

Meat, any kind of meat that they can find. This includes birds, fish, turtles, snakes, raccoons, deer, feral hogs, other alligators and more. Since they are cold-blooded they don't need to eat nearly as often as we do. A full grown alligator might survive on one raccoon a week. Alligators stop eating in the winter (probably November – March). It is thought that a substantial portion of the diet of a large alligator may consist of medium and small alligators.

### 8. How fast can alligators run or swim?

I hear lots of figures about how fast they can run or swim. It is safe to say that for the first 30 feet or so that they could outrun or outswim the fastest human. Remember, if you get in a race with an alligator, the alligator is the one that says "GO".

### 9. Are there crocodiles at BBSP?

No, there are no native crocodiles in Texas.

### 10. What's the difference between alligators and crocodiles?

Crocodiles have longer, more pointed snouts, a brown to olive color and generally get larger and more aggressive than alligators. The closest crocodile to BBSP is the American Crocodile which lives in the southern tip of Florida.

### 11. How long can they stay under water?

This depends on size, temperature and other circumstances. On warm days they can probably stay under water for about an hour, 15 – 20 minutes is typical. During cold weather they may stay under for 10 – 12 hours, some reports of up to 24 hours.

### 12. Do we have to hunt or remove alligators to keep them from becoming overpopulated?

No, we have never had alligator hunting at BBSP. If left alone alligators tend to control their own population, as do most large predators. The population of alligators at BBSP has held relatively steady over the last 17 years that we have been counting alligators.

### 13. Can you own alligators as pets?

Without a permit it is currently illegal to own an alligator. They make really bad pets! Pet shops often sell Spectacled Caimans from South America. They are legal to own but don't make good pets and can become dangerous as they grow larger.

### 14. Are alligators aggressive?

Not really, they do become protective when they have nests or young in the area. An alligator that has been fed by humans quickly becomes very aggressive and loses its fear of humans.

### 15. Has anyone ever been hurt by an alligator at BBSP?

NO. Thousands of people visit the park every year and there have been no alligator attacks of humans. In fact, there are no substantiated accounts of human fatalities caused by alligators in Texas. Let's keep it that way.

## GENERAL ALLIGATOR INFORMATION

**Description** - The largest reptile in North America. Females typically reach 6 -8 feet long, males can reach lengths of up to 16 feet. Color is dark green to black with lighter yellow on the ventral side. Back and top side of tail are covered by several rows of keeled scales, called scutes. Scutes serve as an armored plating and play an important role in gather heat from the sun. Head is large with nose and eyes set high on top. Nostrils and ears are equipped with valves to keep them closed while submerged. Legs are short and stout. Five toes can be seen on the front foot and four toes on the hind foot. Its large thick muscular tail makes up about one half of its body length.

**Voice** - Males produce a loud, low rumbling noise that is often mistaken for thunder. This roar or "bellow" can be heard up to 1 mile away. Females also make a bellowing noise, but it is softer and does not carry as far. This roar is used to establish territory and to call females for breeding. Young alligators make a chirping noise to alert others, as well as the mother, of approaching danger. They will also make a loud hissing noise by expelling air through their mouth as an aggressive gesture. Alligators will also slap their heads on the water and swish their tails behind them to make a loud splashing noise as a sign of aggression and to claim territory.

**Habitat and Range** - Alligators can be found in swamps, lakes, marshes, creeks and rivers, anywhere water can be found. Any permanent or semi-permanent body of water can potentially play host to an alligator.



### RANGE OF THE AMERICAN ALLIGATOR

Southeastern United States: Alabama, Arkansas, North & South Carolina, Florida, Georgia, Louisiana, Mississippi, Oklahoma, Texas

**Breeding** - Breeding takes place in April and May when males can be heard bellowing. Males will approach females, placing his head or front legs over the top of the female and forcing her under water. This act is thought to be a display of his strength, to impress the female. Often times the male will swim beside the female blowing bubbles from his mouth. If she is receptive she will allow the male to push her under water where breeding takes place. Breeding typically takes about 30 seconds. The male has no role in nest building or raising the young. A male may breed with several females.

**Nesting** - In June the female will choose a nest site near the edge of the water, where she will pile up grass, sticks, leaves and mud into a pile about 3 - 4 feet around and 1 - 2 feet tall. She will then crawl to the top of the nest, excavate a hole in it and lay between 30 - 60 eggs. Eggs are hard shelled and oval shaped, about 1 1/2 by 3 inches long. Eggs incubate in the nest, gathering heat from the sun and the rotting vegetation of the nest. Unlike most other reptiles, the mother alligator stays close to the nest, guarding it from possible predation from raccoons, hogs, skunks, opossums and coyotes. The mother will aggressively defend her nest by hissing, slapping her jaws and charging. Sex of the hatchling alligators is determined by the temperature of the nest. Nests with cooler temperatures, less than 85 degrees F., produce females; nests with warmer temperatures, above 90 degrees F., produce males. Typically the top of the nest is warmer producing males and the bottom of the nest is cooler producing females.

**Hatching** - Incubation period is about 60 - 70 days. At this time the baby alligators break their noses through the end of the shell, aided by an egg tooth, and start chirping. Others will chirp from inside an unopened egg. This is the signal for the mother to open up the nest. The mother will dig the nest open with her front feet and mouth and pick up the eggs in her mouth. She will take the eggs to the waters edge where she will carefully crack the eggs in her mouth. She will then open her mouth, swishing it back and forth in the water to releasing the hatchling. This is repeated over and over again until all young are freed from the nest. The mother will keep the babies together in a group called a "pod".

**Raising Young** - Hatchling alligators are about 6 - 8 inches long marked with black and yellow stripes, to aid in camouflage. They will keep these stripes until they are about 4 years old. A thick, pink yolk sack bulges out of the belly of each hatchling. This will provide food for the young for about the first week. After the yolk sack is absorbed into the stomach the young must

start looking for food. No food will be provided by the mother. Hatchling alligators feed on insects, worms, crustaceans, minnows, frogs, tadpoles or just about anything they can fit in their mouths. The young will remain with their mother for at least the first 6 months and will often remain by her side for several years. The mother does offer protection to her young. If the young are threatened they will make a chirping noise to alert the mother and other hatchlings of danger. Hatchlings will grow about 1 foot per year until they are about 6 feet long, at that point growth rate slows down. Survival rate of hatchling alligators is very low. Only about 3 -4 hatchlings out of a hundred are thought to make it to adulthood. They are preyed upon by fish, wading birds, hawks and owls, river otters and raccoons, turtles and other alligators.

**Behavior** - Alligators are aquatic, spending their time in or near the water. Alligators use the water to control their body temperature. During warm days they can be found laying out absorbing heat from the sun on logs and low banks. During the hottest parts of the summer the alligator spends most of its time in the water to keep cool. During cold weather alligators will stay in areas of deep water or they will excavate a den. These dens are normally dug back and up under the bank, almost like an underwater cave that the alligator can use to keep warmer in cold weather. During cold weather alligators can hold their breath for up to 12 hours or longer. During warm weather this drops to about 15 - 20 minutes on average. These dens or "Gator Holes" are also used in periods of drought were they remain wet long after other areas have dried up.

Although they might appear slow and clumsy on land, the alligator is capable of incredible bursts of speed over short distances. Alligators are not aggressive animals and will normally choose to flee when approached by humans. Alligators are opportunistic feeders, patiently waiting for an easy meal to come to them. Since alligators, like all reptiles, are cold blooded it is not necessary for them to eat everyday. A full grown alligator could survive on something the size of a raccoon once a week. They are capable of going for long periods of time without eating anything. In experiments alligators have survived a full year without food.

Adult alligators feed on fish, turtles, snakes, birds, raccoons, deer and any kind of meat that they can get a hold of, including other alligators. It is thought that a major portion of a large alligator's diet consists of smaller alligators. Alligators can live to be between 25 - 35 years old in the wild, up to 70 years in captivity.

**Alligators versus Crocodiles** - There are no crocodiles in Texas. There is one species of crocodile that lives in the southern tip of Florida, the American Crocodile. For the most part crocodiles live in places like Africa, Asia, Australia and South America. The shape of the crocodile's snout is much more pointed then that of the alligator. There is also a difference in their teeth. The top teeth of the alligator hang over the bottom jaw when the mouth is closed. On the crocodile some of the teeth from the bottom jaw protrude above the top jaw. The coloration of crocodiles is generally lighter, almost a yellow - green, where alligators are green to black. Some species of crocodiles get much larger and much more aggressive than alligators.

**Alligator research at Brazos Bend State Park** - Every year alligator nest are monitored to record number of eggs, location, date of hatching, and females are sometimes captured and tagged. This is in an attempt to determine the age of the females and previous nesting history of the individual.

In summer of 1999 a new research project was started to look at the immune system of the alligator. This involves capturing and collecting blood and tissue samples, tagging and releasing a large number of alligators. Hopes are that if we kind find out why these animals seem to be immune to infection, maybe this information could be applied to the human medical field. No alligators have ever been harmed during these projects.

**Conservation** - American alligators are probably the best studied species of crocodylian, and there is a large amount of literature available on most aspects of its biology, behavior and ecology. Population surveys are extensive and ongoing, and data are available throughout the alligators' range due to links with management and harvest programs. While populations were severely affected in the early parts of the century (with protection occurring in the early 1960's), the recovery of this species has been remarkable in most areas thanks mainly due to properly controlled and monitored conservation and sustainable use (e.g. tourism, harvesting) programs. The belly skin of the alligator produces a generally high-quality leather, and this resulted in considerable hunting pressure earlier in the 20th century, particularly in Louisiana and Florida. Even after hunting was prohibited in Florida, illegal poaching continued into the 1970s. Were it not for additional changes in the law to control the movement of hides, many think extinction may have been possible. Since then, populations have improved considerably and are now only considered to be threatened in a few areas by habitat degradation (including water management programs).

In some areas, increasing alligator populations cause problems with human populations on the edge of alligator habitat, and 'nuisance alligator' programs are required to deal with them. These involve catching and removing animals which have roamed too far into human habitation, or which pose a potential threat to people. Some animals are relocated, but this has generally been shown to be ineffective as alligators often return to their home range within a matter of days. Most recent "nuisance alligator" programs either sell the animals to a farm, or use their skins to help fund the program. Given the high degree of human-alligator contact, some attacks have been reported, but these are very rarely serious. There have only been a handful of

alligator-related fatalities recorded in the USA since the 1950s, and improved education and awareness is the best long-term way to avoid future incidents. There is no substantiated accounts of human fatalities caused by alligators in Texas.

Large-scale captive and wild sustainable harvest programs are well established in several states including Florida, Louisiana, Texas and Colorado, yes, I said Colorado). This involves captive rearing, ranching and direct cropping of wild populations (eggs and adults), but all linked to proper monitoring programs. The difference between the historical hunting that nearly led to extinction and modern harvest programs is simple: today, there are very strict quotas and controls that prevent wild populations from being adversely affected. Alligators have proven themselves to be highly resilient to both natural and induced mortality, and harvest has many indirect conservation benefits not just for alligators but for entire habitats. Cropping is only allowed from certain populations, protecting peripheral populations that are still recovering. Ranching programs usually have to return a high percentage (17% in Louisiana) of juveniles back into wild populations, although recovery in these areas has now been documented and further reintroduction is likely unnecessary. Alligators have been successfully reintroduced or restocked in several states (e.g. Arkansas, Mississippi). Alligator hunting is allowed in several states, including Texas, under strict quota or license guidelines. In Florida, the results of harvesting have shown that up to 13% of sub adult to adult animals, plus all the eggs from 50% of all located nests, can be safely removed from the alligator population annually without affecting population stability. These kinds of figures are vitally important for proper management programs for alligators and other species.

Several areas of research still require attention, including more work on population dynamics. Much has been learned in the last few years, but management programs rely upon a sound grasp of what populations do in the wild under different circumstances. The state of the wild alligator populations provides ample opportunity for such research to be undertaken. An examination of the effects of cropping and ranching is also possible. Other research taking place involves looking at captive husbandry techniques. These findings have implications for other crocodylian species. Although habitat modification is often to the detriment of crocodylians, proper management can benefit local populations.

Alligators have been shown to be an important part of their ecosystem, and are thus regarded by many as a 'keystone' species. The creation of 'alligator holes' is of great value not only to the alligators, but to the other species of animals which use them. For these animals, the value of the refuge outweighs any additional risks from their creators.

(Some of the information on conservation and range was taken from [www.crocodylian.com](http://www.crocodylian.com))

### **“Alligator Etiquette”**

- 1. Absolutely do not feed or harass alligators.**
2. Pets on leash only. Leash may be no longer than 6 feet at all times. Bring water for your pet when you walk the trails. Under no circumstances should you allow your pet to drink from or enter the lakes.
3. At all times, keep a safe distance of at least 30 feet. Do not assume the animals are slow and sluggish. Remember that they can move at speeds up to 30 mph for the first thirty feet.
4. If you hook a fish, an alligator may go after your catch. Do not continue to fish near an alligator that displays interest in your fishing line or catch. Do not use a stringer for your fish. Keep them in a bucket.
5. Avoid any alligator sunny itself on the trail. The animal has the right-of-way. You turn around and go back the way you came.
6. If you see a pile of twigs, grasses and/or soil near the lakeside or side of the trail avoid it. It could be a nest and the mother alligator is probably close by guarding it. This also goes for any group of small alligators, 1 ft. in length or smaller. This is what we call a “pod” and they are still under the protection of their mother. Mother alligators can be very aggressive if they feel their nest or pod is in danger!
7. When an alligator stands it’s ground and hisses, you have come too close. This is a warning! You need to slowly back away until the alligator no longer demonstrates this behavior.

Remember that the alligator has the right-of-way. When you visit the park you are the guest in this wild habitat and should treat all wildlife with respect. All wildlife in the park is protected. Feeding, harassment, injury, or removal of wildlife is prohibited.