



OWNING A PET TURTLE

General Information

Several species of turtles are available for purchase as pets. By far the most common species is the popular box turtle, which will be the subject of this discussion. Check with your veterinarian about specific requirements for your pet if you happen to own another species of turtle.

The turtle is a popular reptile pet; the box turtle is probably the most common species of turtle kept as a pet. Due to the high incidence of *Salmonella* poisoning in the 1970's, laws were passed prohibiting the sale of any turtle smaller than 4 inches in diameter. *Salmonella* is a bacterium often implicated in food poisoning. While the disease rarely causes anything more serious than vomiting and diarrhea in adults, young children and people with lowered immune systems can easily develop a fatal disease. Turtles are certainly not the only pet or reptile that can spread *Salmonella*. However, since box turtles were a common children's pet, the danger of infection was very real. Most of the turtles carried the infection asymptotically, which meant that they were never sick. You can imagine how easily the disease, which involves contact with infected feces, could be spread if young children were placing the turtles in their mouths! Common sense and good hygiene are essential in preventing this and really most diseases. After handling any pet, its excrement, or its bedding and toys, **THOROUGHLY WASH YOUR HANDS.**

Most box turtles never get very large (unlike tortoises). The average adult size for box turtles is roughly 5-7 inches in diameter, with females being slightly smaller than males. This adult size is reached at 4-6 years of age. Turtles that are not allowed to hibernate grow at a faster rate. Sexual maturity is reached about the fifth year of life.

With proper diet and housing, many turtles can live 30-40 years or longer.

Turtles have a number of "rings" on their top shells. The number of rings on the shell of the turtle have nothing to do with its age.

The protective shell makes surgery difficult. Two techniques are available for performing internal surgery. One technique is where the shell is cut and then repaired following the procedure; the second technique involves making an incision in front of and through the muscles of the pelvis and hind limbs.

How do turtles differ anatomically from other pets?

Muscling is limited in turtles, and most of their bones are replaced by the protective shells (which are hinged to allow movement). The top, or dorsal shell is called the carapace; the bottom, or ventral shell is called the plastron. In general, males have a more concave plastron than females; this concavity allows for easier mating. Males are also larger than females, and are usually more colorful (having a male and female next to each other makes the comparison easier). Males also usually have a longer and thicker tail, which once again allows for easier intromission of the penis during mating. Finally, the distance between the vent or cloaca (common opening for the digestive, urinary, and reproductive tracts) and the turtle's body is greater in males.

The pectoral or chest muscles are well developed. Despite the obvious lack of muscling, turtles are extremely strong. The strength, manifested by the turtle retracting into its shell when disturbed, is one of the signs to check for when purchasing a turtle.

Turtles lack teeth but have a strong "beak", and turtles can and do bite! The other weapon of the turtle is its claws, which should be periodically trimmed (your veterinarian can show you how).

Turtles have no diaphragm, but rather breath by movements of membranes enclosing their internal organs and by movements of their legs and head.

Turtles have a three-chambered heart, whereas dogs, cats, and people have a four-chambered heart.

Turtles have a renal portal blood system, where blood from the hind limbs is filtered by the kidneys before reaching the general circulation. This means toxins from the rear limbs (as could occur from wounds on the legs) as well as drugs injected into the rear legs would probably be filtered before entering the general circulation.

Turtles excrete uric acid as their main waste product of protein metabolism (dogs, cats, and people excrete urea). This allows them to adapt to desert environments where water supply might be restricted.

Turtles have a cloaca, which is a common opening for the digestive, urinary, and genital systems.

The shell is covered with bony plates called scutes. The scutes are usually shed in large patches, unlike snakes, which usually shed in one piece. The number of scutes has nothing to do with the turtle's age. The top bony plate is the carapace, and the bottom plate (shell) is the plastron. Unlike many reptiles, turtles have a urinary bladder.

How do I select a turtle?

Most owners buy turtles locally from a pet store, although mail ordering from reptile breeders is also common. If you buy a pet through the mail, make sure you know what you're getting! Ask about a guarantee if the pet isn't what you want.

Young, captive-raised animals make the best pets. Older imported animals may harbor internal parasites, and often suffer from the stress of captivity. Avoid sick-looking animals. Don't try to be a "Good Samaritan." Many sickly-looking turtles are terminally ill. Trying to nurse a sick turtle back to health after purchasing it will rarely work. Just the stress of a new environment is often enough to kill a sick turtle.

Start out right with a healthy pet. Avoid turtles that have sunken or closed eyes, have any type of discharge coming from the nostrils or eyes, or appear inactive or lethargic. Eyes that are sunken into the head or swollen shut often indicate dehydration, emaciation, starvation, and Vitamin A deficiency. A healthy turtle is usually active and alert, feels "heavy", and retracts its head and limbs into its shell when handled. Make sure the shell is clean and isn't cracked, missing scutes (plates), or has any signs of infection (often seen as shell discoloration or moldy growth). The vent or cloaca should be clean and free of wetness or stool stuck to it. If you can GENTLY open the mouth (which is difficult in most turtles), there should be a small amount of clear saliva present. Mucus that is cloudy or "cottage cheese" in appearance is a sign of mouth rot, as is redness or pinpoint hemorrhages on the mucus membranes. Always inquire about the guarantee in case the turtle is found to be unhealthy.

My turtle looks healthy? Does he need to see the veterinarian?

Within 48 hours of your purchase, your turtle should be examined by a qualified reptile veterinarian. The visit includes determining the animal's weight, as well as checking for lumps and bumps. The animal is examined for signs of dehydration and starvation. A fecal test is done to check for internal parasites. Many veterinarians consider all turtles (even those bred in captivity) to have internal parasites, so your turtle may be routinely dewormed for parasites. The oral cavity is examined for signs of infectious stomatitis (mouth rot). No vaccines are required for turtles. Your doctor may recommend blood tests, cultures, or radiographs (X-rays) to check for other diseases. If all turns out well, your turtle will be given a clean bill of health. Like all pets, turtles should be examined and have their feces tested for parasites annually.