The Ball or Royal python (Python regius) is the most common python in the pet trade. Unfortunately, they are one of the more difficult pythons to adapt to captivity and is definitely not a snake for the beginner snake keeper unless it is a captive born, very young or well-established specimen. Let's look at the natural history of these fascinating snakes to see how we can improve their captive care.

The Ball python is native to one of the poorer areas of the planet, equatorial West Africa (from Senegal all the way south to Angola and inland to Sudan and Uganda). This has several consequences all of which are detrimental to the diminutive Ball python. Yearly income for most people in this heavily populated area is less than $400 per annum; consequently, Ball pythons are actively sought for food, their skins, and by enterprising West Africans for the pet trade. Although a common reptile little information has been published on, Ball pythons because few herpetologists go into this area for study and even fewer originate from it. They are very popular as pets because of their cheap price and total reluctance to bite. When intimidated they coil into a tight ball with their head in the center rather than fighting or trying to flee.

The proximity of the equator allows average temperatures to hover from 75 to 85 F with little seasonal variation over most of the Ball python's range. Ball pythons are believed to be less active during the dry season when they seek underground retreats or rodent burrows and undergo prolonged fasts or estivate. During the rainy season (September to March in Senegal), gerbils, the primary prey of the Ball python, greatly increase in number. It is believed Ball pythons feed more frequently at this time. The thick body and cryptic coloration suggest Ball Pythons ambush prey rather than actively seeking it. Gerbils are primarily nocturnal and excavate burrows in sandy plains, grasslands, savannahs, cultivated areas and open forests. Naturally, this is very similar to the habitat of the Ball python.
So how does one keep Ball Pythons in captivity? Since Ball pythons reach 4 to 5 feet (rarely 6 feet) select at least a twenty-gallon aquarium to house adults, smaller aquariums work well for smaller specimens. Always house them individually. Astroturf, newspaper, bark chips, aspen shavings, or gravel can be used as a substrate. Ball pythons spend a lot of time in and around gerbil burrows so it is important that they have areas where they can get completely out of sight such as in a hide box. Hide boxes should be just large enough for the snake to coil up in; extra space is not necessary or appreciated. A minimum of two hide boxes at each end of the cage seems best and partially burying them would enhance the appearance of being a burrow. Hide boxes can be made from a clay flower pot cracked in half with the overlapping halves forming a narrower flowerpot, a clay flower pot saucer with a hole chipped in one side, a section of pipe, or commercial hide boxes. A bowl of fresh clean water large enough for the snake to soak should constantly be available. Since Ball pythons are largely terrestrial low branches or no branches at all is all else that is needed.

The cage temperature should range from a low of 75 F at night to a high of 85 F during the day. Out of tank heat sources such as heating pads or heat tape with or without an overhead lamp is preferable to heating sources within the cage. The photoperiod should include 12 to 14 hours of light with 10 to 12 hours of darkness (use a timer to control this). Keep the cage clean but try not disturb the snake too much.

Once the Ball python is properly set up we can begin the difficult task of getting it to eat. Because Ball pythons are very specialized predators (they feed on several species of gerbils unrelated to the gerbils you see in pet stores) they can be extremely difficult to get to feed in captivity. The first thing we always do with a Ball python that is not eating (one of hundreds!) is to check it's feces for parasites. We typically find heavy loads of two to four different parasites. Obviously, this is not good in an animal that is not eating and under stress. Once wormed we instruct clients not to handle or disturb the snake at all because this is an additional stress to an already timid snake. Heavily misting the cage with warm (80 F) water from a spray bottle twice a day for several weeks simulates a rainy season. One wants the cage humid but not wet.

Fuzzy gerbils (young gerbils without their eyes open) can be placed overnight in the snake's cage after misting. Try to disturb the snake as little as possible when putting in the gerbil and slowly withdraw from the room and do not return until the next day. Don't try and watch the snake eat! Any movement outside the cage is enough disturbances to make the snake not want to eat that night. As long as the gerbil is well fed and the snake has a hide box the gerbil should not attack the snake but don't leave the gerbil in the cage for more than 12 hours. If the snake has not eaten by morning, remove the gerbil and try again a few days later. If the snake has not eaten, live gerbils try leaving a freshly killed gerbil in
the cage overnight. Fuzzy black rats also seem to be a favored food item. Try a wide variety of sizes of gerbils or black rats or mice and offer food when the snake seems active or just after shedding. Another technique, which sometimes works, is to create a rodent nest. Gather some rodent nest material and feces and place it in the unoccupied hide box with a few baby rodents. At night when the Ball python is active it may discover the nest and feel that it is too good an opportunity to pass up. Above all one must have patience; it may be many months before the Ball python begins feeding. Well-fleshed, healthy ball pythons can easily fast for 6 months without adverse health affects as long as they have water. Remember ball pythons are ambushers so they can not be enticed into an aggressive strike to initiate the feeding process; they have to feed on their own when they feel comfortable. If your Ball python does start feeding feed it as much as possible while it is eating because they often will eat for a while then begin another fast. When a snake that was consistently feeding suddenly refuses food repeatedly we instruct the owner to stop spraying the cage altogether. After several months twice daily spraying can resume and the snake can be soaked several times each week in a half inch of warm (80 F) water for a few hours. After a week or two of this offer some food. This mimics the dry season followed by a rainy season that many wild caught snakes are accustomed to and may stimulate them to feed again. Periodic feasting then fasting is not unusual in Ball pythons although some specimens feed regularly all their lives.

We now know why appreciation of the natural history of Ball pythons is important for their captive care. Set your Ball python up correctly to begin with and keep the cage 75 to 85 F. Do not handle the snake and mist the cage twice a day to simulate the rainy season. Have your veterinarian check it's feces for eggs of parasites and worm the snake if necessary. Offer gerbils at night without disturbing the snake. Be patient and most Ball pythons will begin feeding within 3 to 6 months after they are properly cared for but some may not. If, after trying all the above techniques, your snake hasn't eaten for six months or looks thin see your veterinarian again, an appetite stimulant or force feeding may be necessary. Most importantly, if you have never kept snakes don't buy a wild caught adult Ball python!