As with the acquisition of any childhood pet, it started innocently enough. My neighbor was giving away his three silver dollar-sized red-eared slider turtles for free. FREE! As an 8-year old with an interest in animals, this incredible bargain was simply too good to pass up. They came with their own 8” by 12” plastic enclosure complete with a brown plastic rock for basking that was more functional than aesthetic. Taking care of my new pets couldn’t be easier: feed them pellets once a day and change the water in the small vivarium once a week or so. I couldn’t believe my neighbor gave them up so willingly, these little guys were fun and awesome! What was not to love?

Fast-forward 15 years, roughly $3000, and several reptile-induced migraines later, and I still have those three lovable, fascinating creatures. About 7 years ago I (crazily) added two more babies to the fold, bringing the grand total of shelled residents at my house to five. To state the obvious: baby turtles don’t stay small forever. In fact, they can grow considerably and live for decades. And although some aquatic turtle species, like my red-eared sliders, are generally hardy creatures, they still have very specific housing requirements that when not met can lead to disease and a failure to thrive of the pet. What’s more, turtle feces can carry a myriad of bacteria that are potentially harmful to humans, so changing the water in a turtle habitat or cleaning a soiled tank can have serious consequences if not done properly and safely. They may start out small, but pet turtles are no small commitment.

Turtle housing can vary widely, but there are a few things that every turtle enclosure needs to have. The tank should be primarily filled with water but should include a “haul out” or basking area, which is a dry landing on which the turtle can get himself fully out of the water. This area can be created with rocks or can be purchased from a pet store ready to install into the turtle’s enclosure. It’s important that the entire habitat and everything added into it remains easy to clean; I have learned the hard way that “less is more” when it comes to what I put into my turtle tanks (imagine aquatic plants that were eaten, cage decorations that broken, etc.). One can always start with the basic requirements of the basking area and can expand from there as they see fit.

The size of the enclosure for aquatic turtles is a huge factor in their health and longevity, and often the limiting factor in an owner’s ability to care for their pet. My turtles started in what was essentially a glorified Tupperware container and, after various glass tanks over the years, now currently reside in a 110-gallon stock tank made for the purpose of providing water to livestock. The absolute minimum size requirement for a turtle enclosure is that the length of the turtle’s shell should not exceed 25% of the floor space surface area of the habitat. However, in my experience this is woefully inadequate in maintaining a happy, healthy turtle. Different care-sheets, websites, and forums recommend different amounts of water and space for captive turtles, but a general rule I’ve seen mentioned frequently is “10 gallons of water per inch of turtle shell length.” Age, gender, and number of turtles being housed also needs to be taken into account when constructing a turtle habitat. It’s incredibly important to be aware that even a single juvenile turtle who happily resides in a wide 20-gallon aquarium today will one day require a 75+ gallon tank.

Next is to ensure adequate temperature range for the turtle in the water and on the landing. Common North American turtle species, like the red-eared slider, should have a water temperature of 75-80°F, a temperature range which can be obtained with commercially available water heaters and
monitored with water thermometers. However, it’s essential that you’re aware of the temperature range specific to the species of turtle for which you are taking care.

Temperature on the landing, although important, is secondary to providing the turtles with light from sunlamps and therefore does not need to be monitored as accurately as the water temperature. Turtles require full-spectrum lighting, meaning that they’ll need at least two lamps: one to provide UVA-rays and heat to regulate body temperature, and another to provide UVB rays. UVB rays are crucial for a reptile’s Vitamin-D synthesis and calcium metabolism, and without proper exposure, a captive turtles can develop “soft shell” or metabolic bone disease, two conditions which result in deformities of the shell and can include the skeleton. The best approach I’ve found to lighting a turtle habitat is to set the lights on automatic timers and to have the length of light provided by the lamps to match as closely to natural daylight hours as possible.

Nutrition and diet is something every turtle owner must consider. Many pelleted turtle diets are available and have a good calcium to phosphorus balance, which is critical to take into account when feeding reptiles. However, to ensure that captive turtles have a complete diet, it is beneficial to feed fresh vegetables, fruits, and small prey animals like crickets, goldfish, or minnows, in moderation. Younger turtles can be fed a more carnivorous diet than their adult counterparts.

And finally, what goes in must come out. The number one health concern with owning turtles is the Salmonella spp. bacteria present in their feces. Turtles are asymptomatic carriers of these bacteria, but humans can contract this harmful bug by accidentally ingesting it. In order to control turtle-borne Salmonellosis, public health laws now mandate that no water turtle with a carapace (upper shell) diameter less than 4 inches can be shipped into or sold in the United States. Therefore, washing your hands after touching a turtle or anything that a turtle has touched or has been contaminated with turtle feces is paramount when owning these creatures. Also having a strong water filter will work to clean the turtle’s water, thus reducing potential human infection from bacteria while also keeping the room in which the turtles are housed smelling clean and less “turtley,” as my parents would call it. When changing the filter media, wearing disposable gloves is a good idea, as well as thoroughly disinfecting any surfaces that might have been contaminated in the process.

A turtle can make a wonderful pet that can provide owners with entertaining antics and lots of enjoyment, but the decision to buy one, especially one intended for a child, should not be taken lightly. Be aware of the potential health concerns that come with owning a turtle as well. Turtles require commitment from their owners to provide adequate housing, heating, lighting, filtration, and food, all of which translates to a great deal of time and money invested in turtle husbandry. If you do end up getting a turtle or turtles one day, at least now you won’t be blindsided when 10 years later they’re living in a kiddie pool in your basement.
References: