Leopard Geckos are one of the most popular lizards in the pet trade. They have been bred for well over 30 years, resulting in many beautiful color varieties including: tangerines, blizzards, albinos, stripes, jungles, snows, and others. New ones seem to pop up every year. They are among the easiest lizards to care for and breed, which adds to their popularity. Leopard Geckos are a perfect lizard for beginners, although advanced keepers are usually addicted to them, too. The following is a brief guideline for their care:

**Acclimating New Geckos:** When you receive your new leopard gecko, it may take some time for it to adjust to its new surroundings. Geckos can get stressed from being shipped, then placed in a strange environment. This may cause them to go off-feed for several days or more. As long as you set the environment up properly, the gecko should settle in after awhile. One stress factor is the cage type. Most breeders keep their geckos in plastic boxes in a rack system. There is no overhead light other than the ambient room light. Their hot spot comes from heat tape underneath their box. Geckos raised under these conditions usually do very well. The problem is that most pet owners prefer to keep their geckos in a glass tank. They can be decorated much nicer and are better for viewing the animals. The problem is that geckos don't like change. They may be stressed by the glass. The stress level may go up even more if a bright daytime bulb is being used as the primary heat source. Leopard Geckos don't like bright light. It will cause them to hide whenever it is on. The best way to acclimate geckos to a glass tank is to do the following: 1: If you use a bulb, make sure it is a red or blue bulb designed for low light emissions such as a nocturnal reptile bulb. A heat pad can also be used to provide "belly heat". 2: Make sure the gecko has a warm, dark, and somewhat humid hiding place. Geckos need to hide to feel secure. 3: Handle them very infrequently, if at all, for at least the first 2 weeks. 4: Tape black construction paper or cardboard to all four sides of the outside of the tank. Every week, remove one side of cardboard. After a month, all four sides will be removed. This will give the gecko time to adjust to the new cage. 5: Try to feed it the same food type it was eating at the breeder's. Leopard Geckos that are raised on mealworms may not view crickets as a food source and vice versa. On the other hand, some will eat any insect that they come in contact with. 6: If you have geckos and you want to add a new one, keep the new gecko separate for at least 30 days to let it acclimate, and to watch for signs of health concerns. 7: If you put several geckos in one cage, make
sure they are approximately the same size. Keep an eye on their food intake to make sure they are all feeding and maintaining good bodyweight. Never, ever put more than one male in a cage, no matter how big the cage is.

**Cage Setup:** Leopard Geckos can be kept in a variety of enclosures, depending on several factors. Breeders keeping large numbers of geckos usually prefer a simple, low maintenance setup. A large rubbermaid box, measuring approximately 16x22x6 inches can house up to five geckos. Newspaper is usually used as the substrate because it is inexpensive and easy to replace. A food dish, water bowl, and a hiding place are also placed in the cage with little or no other furnishings.

Most hobbyists keeping only a single, or perhaps several geckos, prefer to have a more naturalistic setup. Glass aquariums and other cages designed specifically for reptiles work well. The size of the enclosure depends on the number of geckos to be housed in it. Keep in mind that although females generally get along, no more than one male can be kept in each enclosure. A single gecko can be housed in a 10 gallon size aquarium. Three to five geckos can be kept in a 20-30 gallon aquarium. There is a lot of debate over which substrate should be used with these geckos. We've used a variety including sand, calci-sand, cypress mulch, cage carpet, newspaper, paper towel, and others. Be very careful when using any sand type of bedding. Leopard Geckos have been known to consume it and become impacted, which may lead to death. Newspaper is the safest substrate for leopard geckos. They won't accidentally ingest any when feeding. Its also easy to clean and inexpensive to replace. Leopard Geckos also need a humid hiding place. Although they come from a dry, desert environment, they usually spend the hot daytime hours in rodent burrows and under rocks where the humidity is much higher. The best way to provide a humid hiding place is to use a small plastic box with a hole cut in the top that is just large enough for the gecko to climb in and out. We don't put our openings on the side of the box because the geckos tend to kick the bedding out into the cage. Put between one and two inches of slightly damp peat moss in the container. This will keep the humidity high and will also serve as an egg laying container for females. Add a little water once a week or so to keep the peat moss damp. Keep the box on the cooler side of the cage. Other decorations can include driftwood, cork bark, and rocks. Any items placed in the cage should be resting directly on the bottom of the cage, not on top of the substrate. Leopard Geckos like to dig and can easily collapse a rock or piece of wood on top of them.

**Temperature:** Leopard Geckos like a fairly warm environment. Ambient cage temperatures should be in the low 80s. During the day, they should have a "hot spot" of about 85-88 degrees. A heat pad made for reptiles can be placed under no more than 1/3 of the cage to provide this warm area. Heat lamps can also be used, but keep in mind that these geckos are nocturnal and do not like bright light. A red or blue colored nocturnal bulb is a better choice than a daylight bulb. It is important that the entire cage is not kept hot. They need to be able to move away from the heat source if they feel the need to do so. At night, the warm side of the cage can drop down to the mid to upper 70s.
Food and Feeding: Leopard Geckos will grow extremely fast under ideal temperature conditions and a good feeding schedule. A diet including mealworms and crickets is ideal. Keep a shallow bowl with several mealworms available at all times. Most leopard geckos will be able to live exclusively on mealworms, however, you can also feed each gecko a few crickets several times a week. Be sure not to leave extra crickets roaming in the cage as these will cause the stress to the gecko. All food items should be dusted with calcium powder every other feeding. A multivitamin powder should also be used once or twice a week. Be sure to have both a calcium and multivitamin powder as these provide different vitamins and minerals to the animal. The most simple way to provide all the supplementation is to use T Rex Leopard Gecko ICB Dust. It contains vitamins, calcium, protein, bee pollen, spirulina, and many other ingredients essential to keeping your gecko healthy. In addition to supplementing the food, a shallow bowl of calcium powder can be left in the cage at all times. The geckos will actually eat the calcium right out of the bowl. Provide a shallow bowl of clean water at all times.

Longevity: Under proper conditions, these geckos will reach maturity in less than one year. Leopard Geckos are very long lived, commonly reaching 10-15 years of age. There are even reports of Leopard Geckos over 30 years old!

Sexing: Leopard geckos cannot be accurately sexed as babies or young juveniles. By the time they are 5-6 inches long, males develop hemipenal bulges at the base of the tail, and a "V" shaped row of pre-anal pores between the hind legs. See the photos below for examples.

Breeding: Breeding Leopard Geckos is extremely easy. You need to start out with at least a pair of healthy geckos with good body weight. Males should be 50 grams or larger. Females should be 40 grams or larger. It is best to raise your male in his own cage, away from the females, until they are ready to breed. That way, they won't try to breed before you want them to. Once your geckos are large enough, you may want to put them through a winter cool-down. In late fall or early winter, turn their heat source down or off so that the ambient temperature is in the upper 60s to low 70s. This is helpful in stimulating the geckos to breed. Leave them like this for about 6-8 weeks, offering food once or twice a week. Don't be suprised if your geckos do not feed during this time. A healthy gecko will maintain bodyweight during the cool-down. If your geckos begin to lose weight in the tail, heat them back up. That could be a sign of a parasite or other health problem. You can put your male in with your female(s) towards the end of the cool-down. After 6-8 weeks, turn their temperatures back up to optimal levels. Usually, they will start laying eggs in the humid nestbox approximately 4-6 weeks after their temperatures are turned up. Female Leopard Geckos can lay up to 18 eggs per year, but that number is usually closer to 10. Females usually produce the best during their 2nd, 3rd, and 4th years of their lives. After that, production drops.

Incubation/Hatching: Check your nest boxes every other day for eggs. If you find eggs, you'll want to get them into an incubator asap. They should be placed in a deli
cup or small plastic box that has about 1-2 inches of perlite or coarse-grade vermiculite. This should be mixed with water in about a 1:1 ratio by weight. It should be moist enough so that if you take some in your hand and squeeze, it will pack, but no water will drip out. It should easily crumble when running your fingers through it. It does take time to get the consistency right. If it is too damp, the eggs will drown and mold. If it is too dry, the eggs will shrivel. Place the lid of the deli cup. For ventilation, poke one or two tiny holes in the side of the cup. That is enough oxygen movement for the eggs. A good incubator for a small number of eggs is the Hovabator, that can be purchased at most reptile supply companies. You'll want to have one of these set up, with the temperature calibrated, before you get eggs. Leopard Gecko eggs can be incubated at 80-90 degrees. The sex of the baby will be determined by the temperature you incubate the eggs at. Low temperatures will produce nearly all females, high temperatures will produce mostly males. If you want to hatch mostly females and a few males, incubate all of your eggs at 83-84 degrees. Eggs take 6-9 weeks to hatch depending on the temperature. High temps will result in quicker hatching. When it nears hatching time, check the eggs daily. Do not rotate the eggs once they are in the incubator. If the eggs are rolled or flipped during incubation, you may kill the embryo. Once the babies hatch and leave the egg, they can be placed in a simple setup as described above. Plastic shoeboxes are the best cages for single hatchling geckos. Babies will not feed until 3-4 days after hatching. They can be offered 1/4 inch crickets or small mealworms at that time.

This information should give you a good start on keeping and breeding your leopard geckos. For more information, especially on genetics and color morphs, we high recommend the book "The Herpetoculture of Leopard Geckos- Twenty Seven Generations of Living Art" by Ron Tremper, Philippe de Vosjoli, and Roger Kingenburg, D.V.M.