

# Care Cards

## Iguanas



The common green iguana (*Iguana iguana*) is a tree dwelling vegetarian that can reach a length of **6 feet**, and can weigh up to **20 pounds**. Iguanas mature between 2 and 3 years of age and can live up to 15 years. Mature iguanas prefer a solitary existence except during the breeding season. Adult iguanas can be sexed either by probing or by examining the femoral pores located on the underside of the rear legs. When choosing an iguana find one that is active and eating well. The eyes should be alert and clean, and the nose should be free of any discharge. The vent should be clean and free of any fecal material.

### HOUSING

Hatchling and juvenile iguanas can be housed together. As they mature, iguanas will become territorial and should be housed alone except during the breeding season. When housed together, mature iguanas can become very aggressive toward other cagemates and will cause severe damage when fighting.

Ideal housing arrangements for a captive iguana have a ground area where the iguana can eat, drink, and toilet. A sturdy branch or similar structure upon which the lizard can climb and bask should be provided. Other features should include light/temperature control and a hide box for privacy. Any enclosure used to house a reptile needs to have a quality, secure top. The sides of the enclosure should be smooth to prevent rostral abrasions.

Wire cages should not be used. They do not retain heat and can result in foot or nasal damage. Cages made of wood must be sealed with polyurethane and the joints caulked to allow for proper cleaning and disinfecting. With these basic needs in mind, a variety of housing set-ups can be made.

Whatever the accommodations are, there must be a provision for adequate fresh water on a regular basis. My iguanas have access to a large bowl of fresh water daily. Much of the iguana's metabolic requirement for water is obtained from the moisture contained in the leafy vegetation and soft fruits upon which it eats, but they will also drink fresh water.

The cage bottom can be covered with a variety of materials. We suggest butcher's paper, artificial turf-type indoor-outdoor carpeting, newspaper. Avoid using fine sand or small pebbles because they are easily swallowed and may cause an intestinal obstruction. Similarly, ground corn cob, cat litter, and wood shavings can also cause a blockage if swallowed. Whatever material you choose, it must be changed whenever it becomes soiled with fecal material.

Trees, large branches, or artificial trees should be provided so that the iguanas will have ample places to rest, bask, and display social interactions among themselves. The larger the cage, and the more natural the environment inside the cage, the happier the iguana will be.

Iguanas should not be allowed to roam free in the house. They may become chilled due to a lack of access to a heat source. They can suffer trauma from being stepped on, closed in a door, falling off a high shelf, or even attacked by other household pets. They also may be able to escape.

### LIGHTING

All lighting fixtures should be installed to prevent the iguana from coming into direct contact with

them, and so that water cannot accidentally be splashed on hot surfaces. Most iguanas require a photoperiod (light/dark cycle) of approximately 12-14 hours of light daily. We suggest 14 hours during the summer and 12 hours during the winter, each photoperiod should run for 6 months. Iguanas require a minimum of 8 hours of darkness for sleeping each night. This must be kept in mind when locating the enclosure in an area that receives late night activity. Although the cage lights may be off, the room lights, noise, or activity around the enclosure will prevent the pet from quality rest and will lead to unnecessary stress. Automatic timers are ideal for maintaining photoperiod. Several brands of full-spectrum ultraviolet lights are available. We recommend using a combination of both incandescent and fluorescent lights for maximum heat and ultraviolet stimulation.

Additionally, we strongly advise one or two hours of direct, **unfiltered** (not through glass or plastic) sunlight daily. Natural exposure to unfiltered sunlight is the best husbandry practice owners can provide for their reptiles. With artificial lighting the ultraviolet radiation will eventually degrade to the point of being ineffective long before the fluorescent tube burns out. It is essential that these bulbs be changed whenever black bands appear around the ends of the tubes, or about every six to twelve months. Make sure the basking branch is 8 to 12 inches under the artificial light source.

Basking is an important aspect of iguana nutrition. Ultraviolet light, either natural or artificial, is essential in the synthesis of vitamin D3 within the iguana's skin. Vitamin D3 is necessary for the proper absorption of calcium from the digestive system. Inadequate ultraviolet stimulation can lead to metabolic bone disease and possible death.

## TEMPERATURE AND THERMOREGULATION

Reptiles are ectothermic (cold-blooded) and require supplemental heat in captivity to help maintain normal body temperature. Reptiles maintain their preferred body temperature by moving back and forth between sunny and shaded areas, this process is called thermoregulation. Proper body temperature is necessary for optimum metabolic processes including:

digestion, growth, healing, reproduction, and proper immune system function. This is extremely important for sick, stressed, or injured reptiles.

Iguanas should be housed with a temperature range of 78 to 98 degrees Fahrenheit. No object or surface that an iguana may come into contact with should exceed 105 degrees Fahrenheit, because the lizard may be accidentally burned. We suggest hanging a thermometer to monitor housing temperature.

## CAGE CLEANING GUIDELINES

*Salmonella* is perhaps the most recognized zoonosis associated with reptiles. Infected animals shed the organism in their feces. Owners should be aware of this when handling reptiles or their feces. Most infections occur within the first month of exposure to the pet. Contamination usually occurs when owners place objects or food in their mouth after handling contaminated material. Symptoms include fever, diarrhea, vomiting, dehydration, abdominal cramps and in extreme cases, death. In infants and the elderly, Salmonellosis can be a serious infection sometimes requiring hospitalization.

A basic sanitary routine is necessary when owning a reptile. Reptiles should not be housed in the kitchen or any other areas where food may be prepared or eaten. Always thoroughly wash your hands with antibacterial soap after handling the animal, its dishes, the cage or any cage accessories. Never handle your pet while eating, drinking or smoking. Do not kiss your pet or place it in your mouth. Do not rub your eyes or mouth when handling your pet or cleaning any reptile soiled items. Water and fecal material should be placed in the toilet instead of the sink or bathtub. Reptiles should have their own pool for soaking or swimming rather than using your sink or bathtub. If you must use a family sink or bathtub for your pet, be sure to thoroughly clean the area with antibacterial soap and also a diluted (5%) bleach solution after the reptile is finished. Always wear face protection and gloves during any cleaning process. **Make sure small children learn and follow these hygienic guidelines.**

## FEEDING AND NUTRITION

Iguanas are herbivorous and in nature feed on leaves of trees and plants. They digest their food by microbial fermentation similar

to cattle and goats. This process requires high environmental or intestinal temperatures to stimulate microbial activity. Inadequate environmental temperatures will lead to decreased microbial fermentation and poor development.

Consult the following chart for your iguana's diet:

| GOOD                 | MODERATE      | POOR                       |
|----------------------|---------------|----------------------------|
| Turnip Greens        | Carrot Tops   | Lettuce (head, iceberg)*** |
| Mustard Greens       | Green Beans   | Romaine Lettuce***         |
| Collard Greens       | Asparagus     | Zucchini                   |
| Dandelion Greens     | Yellow Squash | Broccoli*                  |
| Broccoli Leaves      | Sweet Potato  | Brussels Sprouts*          |
| Parsley              | Bok Choy*     | Cauliflower*               |
| Endive               | Kale*         | Radish*                    |
| Escarole             | Chard**       | Beets**                    |
| Water Cress          | Yams          | Cucumber                   |
| Kaboucha Squash      | Turnips*      | Spinach**                  |
| Acorn Squash         | Okra          | Carrots***                 |
| Butternut Squash     | Green Peppers | Cabbage*                   |
| Parsnip              | Rutabaga*     | Sprouts*                   |
| Snap Peas            | Daisies       | Mushrooms                  |
| Snow Peas            | Carnations    | Tomatoes                   |
| Hibiscus             | Geraniums     | Celery Stalk**             |
| Rose Petals          | Kiwi          | Frozen Vegetables          |
| Nasturtiums          | Plum          | Tofu                       |
| Despined Cactus Pads | Pear          | Apples                     |
| Figs                 | Apricots      | Watermelon                 |
| Papaya               | Raspberries   | Grapes***                  |
| Mango                | Strawberries  | Banana ***                 |
| Citrus Fruits (Rind) | Cantaloupe    |                            |
|                      | Dates         |                            |

\* - These food items can cause thyroid problems, and if fed, should be fed in small amounts.

\*\* - These items contain oxalic acid, and if fed, should be fed in small amounts.

\*\*\* - These items contain large amounts of tannin, and if fed, should be fed in small amounts.

### Dr. Bruce's Herbivore Diet (Iguanas, Bearded Dragons, Skinks, Chuckwallas)

60% Dark Green Leafy Vegetables (Greens, Broccoli Leaves, Endive, Escarole)

15% Orange-fleshed Squash (Acorn, Butternut, Kaboucha, Pumpkin, Spaghetti)

15% Other Vegetables (Parsnips, Snow Peas, Snap Peas, Green Beans, Carrot Tops)

10% Flowers and Fruits (Hibiscus, Rose, Dandelion, Fig, Papaya, Mango)

I recommend about 60% of any good iguana diet begin with green, leafy, calcium-rich vegetables. My preferred items include collard greens, mustard greens, turnip greens, dandelion greens, broccoli leaves, parsley, escarole, endive, and water cress. I like to mix a couple of these together as the base salad of my iguana's daily diet. Remember to insure proper uptake, do not make the pieces larger than the size of your pet's head. Store the prepared salad in an air-tight container in the refrigerator.

The next 30% of the diet should be other vegetables. I feed a large amount of orange-fleshed squash like acorn, butternut or kabocha squash. Some other good food items that can be fed include yellow squash, parsnip, snap or snow peas, carrot tops, green beans and despined cactus pads. These items can also be stored in the refrigerator once they have been chopped or grated into bite sized pieces. I do not recommend they be stored in the same container as the green, leafy vegetables. I do recommend thoroughly mixing the daily diet to prevent your iguana from picking out certain items and ignoring others. Hand-toss the food for a few minutes to allow your natural body temperature to warm the food. Avoid freezing or microwaving the food.

The final 10% of the diet can be fruits and flowers. Some commonly fed flowers include squash blossoms, hibiscus, nasturtiums, daisies, roses, carnations, geraniums and dandelions. Fruits that I strongly recommend feeding include figs, mango, papaya, kiwi, melons and any citrus fruits. Citrus fruits have been shown to help increase calcium absorption by the intestines. Many people feed banana, however, I discourage this because it has a poor calcium-to-phosphorous ratio.

Multivitamin and calcium supplementation is essential for proper growth and development of any iguana. Oversupplementation, however, can lead to several health problems. I recommend once a week use of a multivitamin supplement for juveniles and once every 10-14 days for adult iguanas. I recommend daily, or at least every other day, sprinkling of a calcium, **without phosphorus**, supplement for any juvenile or breeding female iguana. For adult iguanas I decrease the frequency to twice a week. All

supplements should be thoroughly mixed with the food to insure proper uptake as the iguana eats.

## WATER AND HUMIDITY

Iguanas will meet most of their water requirements from the moisture inside the fresh vegetables they eat. Most iguanas will drink free standing water if they can identify it. A large, shallow container full of water should be provided at least twice a week (I prefer daily). This will enable the iguana an opportunity to drink, as well as an opportunity to soak. Regular soaking is important to the overall health of an iguana. Soaks will help stimulate normal defecation and urination, as well as prevent constipation, kidney disease, and help loosen the skin during shedding. Although iguanas can not absorb water through their skin, soaking may stimulate them to drink.

## REPRODUCTION

Adult iguanas can be sexed either by probing or by examining the femoral pores located on the underside of their hind legs. Males usually have large, well developed, femoral pores. When multiple males are housed together, the size of the pores will be related to dominance. Less dominant or recessive males will have poorly developed femoral pores, however, they should still be larger than those of a female iguana. Occasionally, when multiple females are housed together, the dominant or alpha female will develop mildly enlarged femoral pores. The tail is essential for male iguanas. It provides storage and location for the hemipenes, as well as a muscular appendage that helps position the male for proper copulation and insemination. Hemipenes are paired, sac-like reproductive organs that do not contain erectile tissue. Only one hemipenis is used at a time during copulation. The presence of hemipenes within the base of the tail will result in a natural enlargement distal to the cloaca. The hemipenes are not involved in urination.

## DR. BRUCE'S WORDS OF WISDOM:

The growth rate of a healthy iguana is dependent on three things: Heat, activity, and food. The warmer they are (over 98°F is too high) the



Feeding iguanas excessive amounts of animal protein has been linked to severe kidney damage. I feel that a juvenile iguana (less than twelve months old) can safely eat animal protein up to, but not exceeding, 3-5% of the total ration. Adult iguanas (over twelve months old) should be raised on strictly plant-based diets with no added animal protein. They should not be fed: cat, dog, rabbit, monkey, or trout chow, beef, chicken, worms, mice, or insects.

**Avoid feeding these toxic items to your iguana:**

- Seeds from Apples, Apricots, Cherries  
Nectarines, Peaches or Pears
- Avocado, Eggplant, Rhubarb, Rosemary or Sage
- Azalea, Buttercup, Daffodil, Lily of the Valley,  
Marijuana or Tulip

**Avoid the following toxic plants found in Florida:**

Bird of Paradise, Bottlebrush, Boxwood, Caladium, Chalice (Trumpet Vine), China Berry Tree, Christmas Cactus, Crocus, Croton, Delphinium, Holly, Hyacinth, Ivy, Jasmine, Milkweed, Mistletoe, Morning Glory, Oleander, Periwinkle, Philodendron, Poinsettia, Rhododendron, Spanish Bayonet, Taro (Elephant Ear), Tomato Plant (Foliage and Vines), Wild Parsnip and Wisteria

Any captive animal that does not adapt to its new living condition, will live in a constant state of stress. An iguana who is not properly socialized will become stressed each time it sees or comes into contact with people. This will create a vicious cycle of running away, scratching, tail-lashing, and even biting whenever it is held. An untamed iguana is no fun to own and most owners will either stop trying to hold them or try using thick gloves or a towel. This not only scares the iguana more, but can lead to broken bones from excess pressure. To help socialize and tame your iguana we recommend handling them twice a day for a minimum of fifteen minutes.



more active they will be, the more they will eat, and the faster they will digest their food, enabling them to eat again much quicker than iguanas kept at below-optimum temperatures.

Mortality rates in iguanas are primarily caused by two main problems: Inadequate temperatures and inappropriate diets. With proper care your iguana should enjoy a long and healthy life. If any of the major, basic necessities are not provided, your iguana may end up stunted, sick, deformed, or dead.

