Introduction

The concept of using masses of green foliage indoors to perform a function has caught fire over the past couple of decades, with many new homes, shopping centers, and offices actually designed with spaces specifically for the placement of plants. Many recent designs have taken into account the environmental needs of the plants — adequate natural or artificial light, good drainage, access to water, and proper ventilation, to name a few.

There is increasing expectation for attractive, live, and healthy plant material to be used in our building and housing interiors, but we fail to realize is that there is no such thing in the ecosystem as a "houseplant." This desire to incorporate a part of nature into our working and living quarters is truly man-made, and with it come some very unique problems. Every building, site, exposure, as well as individual tastes, impact the potential for success or failure in setting up interior plant ecosystems.

What has evolved over the years, in addition to improved interior living conditions for houseplants, is a selection of plants, tropical or desert in origin, that have the ability to more or less put up with an indoor environment. What follows is a select list of plants that will get large or tree-like in our interiors and some recommendations for providing care. Because adequate light is so critical to the success of interior plants, the selected plants will be divided into the categories of: Low-Light, Medium-Light, High-Light, and Very High Light groupings. Also, because common name confusion abounds concerning house plants, they will initially be referred to with the accepted scientific name, along with known or local common name usage.

The consumer is advised to know what is being purchased rather than acquire a houseplant without any identifying label or care information. Try to avoid this, as the plant in question sometimes turns out to be something that you don't want to succeed in your house!

Low-Light Plants: (75 to 150 fc)

These are plants that will grow and thrive on a light regime of 75 - 150 foot candles (fc), with a minimum subsistence of 50 fc. What this actually means is that a plant in this category can tolerate months at this lowest end of the light intensity before deterioration from low light is evident. It must then be cycled to a site where the light intensity is higher for recovery. Keep in mind that plants growing under lower light intensities have reduced inputs for fertilizer than plants grown at a higher level of light.

Aspidistra elatior

Cast Iron Plant, Barroom Plant. This is the champion of low-light green plants, making it an ideal one for massed understory foliage plantings where light tends to be scarce. Move them to a sunless window, and they will thrive and grow. They are temperature indifferent, doing equally well in hot or cold locations. Do not overwater! The top two-thirds to three-quarters of the potting mixture should be allowed to dry before watering again.
Chamaedora elegans
Neanthe Bella Palm; Parlor Palm. This is a shrubby, clump-type plant that grows well in large containers or pots. It has a high moisture requirement (do not allow to dry between waterings), is very slow growing, and has the potential to reach 6 feet in height and 4 feet in spread. The parlor palm and others listed in the low-light group are ideal for office or room situations where essentially no outside light is available, and the prime or only source of illumination is fluorescent lighting from the ceiling. This will give a reading of about 110 fc at desk height directly under the lights.

Dracaena deremensis ‘Janet Craig’ – Janet Craig Dracaena and Dracaena terminalis ‘Ti’
These are erect cane forming type plants, reaching over 6 feet in warm, moist environments. The D terminalis ‘Ti’ is often sold under the scientific name Cordyline terminalis ‘Ti’. Both are quite durable as houseplants, but the Janet Craig is susceptible to fluoride tip burn — a browning of the foliage tips. ‘Baby Ti’ is a rare cultivar of this type. It has foliage edged in red and stays small, usually getting no larger than 3 feet. It is very susceptible to fluoride tip burn, however.

Philodendron miduhoi – Silver Sheen Philodendron, and Philodendron cordatum – Common Philodendron
Both make good vines for massing in planters, or as hanging basket specimens. They are majestic in motel solariums where they can hang from balconies and be allowed to trail down to the lower levels. They would benefit from occasional (usually yearly, depending on growing site) pruning back to thicken and control sometimes rampant growth.

Spathiphyllum spp.
Peace Lilies. These are good massing, ground-cover type plants that will do best when used as understory plantings in a raised, interior planter. They require plenty of moisture and will tolerate low light conditions best of all the low light plants. To get them to show their classic “spath” flower, they will need to have their light requirements kept between 100 to 150 foot-candles.

Medium Light Plants: (200+ fc)
Anthurium scherzeranum
Flamingo Flower or Pigtail Plant. This is one of the show-off plants that can be added to an indoor planting. Two other species, A. andraeanum and A. crystallinum, are worthy of consideration as well. Known for their brightly colored spaths (the flower surrounded by a brightly colored leaf), these beautiful, eye-catching plants will require ample amounts of water. Temperature-wise, they like the typical household settings, between 65 and 70 degrees. They are best used as massing plants or individual specimens. The flower stalks may need staking with slim bamboo to provide support. Be sure to mist the plant frequently and provide high humidity.

Aaucaria heterophylla
Norfolk Island Pine. A true tree form that is among the most popular of indoor plants, the lush, supple needle-evergreen foliage, beautiful symmetry of growth, and relatively easy care make this a plant you can “grow up” with. Start as a terrarium plant, and in 12 to 15 years, it could be reaching the 8 foot ceiling of the average home. Uniform moisture and light intensity are important, as well as cooler temperatures. Provide supplemental lighting during long, dark winter months to prevent needle drop.

Brassaia actinophylla
Schefflera; Umbrella Tree. This is another popular houseplant that starts small and grows big. Do not allow foliage to get wet during regular watering as this may encourage fungal diseases. These plants like the warm temperatures and moist soil. Easily propagated via stem cuttings, plants can be kept bushy with regular pruning or propagation.

Chamaedora spp.
Reed and Bamboo Palms. These plants can be useful in low to medium light situations where fullness and height are required. Keep soil moist and air temperature warm.

Chrysalidocarpus lutescens
Areca Palm. This is another good plant where massed effects are needed. Sensitive to light and watering relationships, it is often troubled with foliar yellowing. Avoid any excesses in water or fertilization. Never allow pot to stand in water.

Cycas revoluta and C. circinalis
Japanese Sago and Queen Sago Palms. One of the few cool climate palms. The Japanese Sago has stiff, green foliage, while the Queen Sago has softer foliage and grows more upright. Both species have very stout trunks.
Dieffenbachia amoena

Giant Dumb Cane, Mother-in-Law’s Tongue. The several species and cultivars of this plant are highly decorative foliage plants that can attain a height of 5 to 7 feet.

They will benefit from bright, indirect light during the summer months and can take a direct window location during the weaker light winter months. Dumb canes are susceptible to overwatering, so allowing them to dry before watering will not hurt them. After handling, propagating, or repotting these plants, be sure to wash hands thoroughly as the sap contains large amounts of calcium oxalate that causes swelling, pain, and temporary loss of speech, hence, the origin of one of the common names — “dumb cane.”

Dracaena marginata

Madagascar Dragon Tree; Red-Edged Dracaena. These are used for accent in the interiorscape, or for the unique, grotesque shapes they take. While they may look delicate, they prove to be quite durable, and are able to tolerate low light. Although susceptible to fluoride tip burn, this is the plant of choice if the owner is absent minded about watering, as it prefers a dry soil.

Ficus benjamina

Weeping Fig; Java Fig; Laurel Fig. This nice, durable plant can grow into a head turning tree form. The lustrous, dark green, pointed leaves can densely cover the branches. The plant can survive on benign neglect, such as forgetful watering practices. It is easily rejuvenated by summering outdoors. It can be kept in bounds and in a bushy form with regular pruning.

Ficus lyrata and F. decora

Fiddle-Leaf Fig and Broad-Leaved Indian Rubber Tree. These are real broad-leaved beauties in any home. Both tend to be sensitive to drafts, wide fluctuations in watering, or water that is too cold. Attention to this small detail will produce attractive and otherwise durable plants.

Livistonia chinesis

Chinese Fan Palm. This plant periodically needs higher than average light intensity — up to 500 fc — to look its best. With the gracefully arching fronds and fringed tips, the plant takes on a more graceful look with age. Good for office entrances where a good first impression is desired, it is commonly found in banks and other established successful business operations where a tropical temperature is not required. A similar plant, the Kentia palm (Howea forsterana) is often confused with the Chinese fan palm. But the latter has a deeper cut leaf frond, grows slower, and will eventually require considerably more room, possibly getting 8 feet tall and 10 feet wide.

Radermachera sinca

China Doll. This lushly green and nicely symmetrical plant is quite popular since being introduced as a houseplant in the past decade. It is fussy; the watering should be even. It does well in direct light and normal room temperature. If the soil dries, the leaves will drop — almost guaranteed! Keep fertilized during active periods of growth in spring and summer. As this plant rates high on their menu, aphids, mealybugs and the like, may become a problem.

High-Light Plants: (500+ fc)

Beaucarnea recurvata

Pony Tail; Elephant Foot Tree. An interesting, mop-top type tree or shrub form, with a swollen trunk base that is actually a reservoir for storage of water, it has the capability to withstand some extended periods without watering. Consequently, it is no great sin to allow the soil to dry between watering cycles. A slow growing, generally long-lived plant. Keep the temperature on the warm side for best results.

Caryota mitis

Clustered Fishtail Palm. This species originates from Asia, where it grows to 12 feet or more. It is a graceful plant with green arching stems covered with large leaves that have ends resembling fish tails — hence the source of the common name. Keep the soil moist, humidity high, and the light bright, fertilizing monthly from May through September. As a houseplant, this species will grow to 7 feet, making it a good one for screen purposes in a mall or large office setting. A very attractive plant if mealybugs, aphids, and other leaf-chewers are not allowed to get established.

Phoenix roebelenii

Pygmy Date Palm, Minature Date Palm. Another one of the popular feather palms that grows slowly to about 6 feet in height, with a spread of about 3 feet. The leaf or frond is finely divided, giving it a graceful appearance. It requires uniform soil moisture. Temperatures should be tropical — 80+ degrees during the day, and if possible, about 15 degrees cooler at night. This plant is subject to the usual mealybugs, aphids and other pests if the environment isn't right.

Chamaerops humilis

European Fan Palm. This is the only palm native to Europe. Given the care, light intensity and time, this species can fill the space it is in, getting up to 15 feet tall. Keep the soil evenly moist, fertilize monthly during periods of growth and watch for the development of the typical insect pests.
Very High Light Plants: (1000+ fc)

**Arecastrum romanoffianum**
Queen Palm. This plant grows outdoors in Florida. With the proper indoor environment, it can get tree-size to 30+ feet in a relatively short time. This would be an import in the Northern plains, as no local greenhouses would carry it as standard stock.

**Coccoloba uvifera**
Sea Grape. Commonly found along sandy shores, in the sub-tropical regions of America, this plant is rarely found indoors, especially in our region. It has large, stiff, olive-green leaves accented with red veins that turn pale green with age, making this rarity a collector's choice. Sea grape is more suited to a conservatory where environmental conditions can be more precisely controlled.

**Raphis excelsa**
Lady Palm, Slender Lady Palm. A most durable plant, it can grow to 5 feet in height in clumps of stiff stems. Grow it in a humus soil which can be allowed to dry between waterings during a slow-down or rest period. Each frond is divided into five to eight leaves, 2 inches wide and up to 9 inches long.

**Care Advice**

All houseplants are vulnerable to insect problems primarily from mealybugs, scale insects, aphids, and spider mites. Start with clean stock, making your own personal inspection before purchase. Check leaf axils, undersides of leaves, and in any bud clusters. Many problems can be avoided with frequent syringing of the foliage with tepid water. If insecticides are called for, use material that is labeled for use on interior plantings, following instructions carefully. In bad cases, it may be better to dump the infected plants rather than trying to save something beyond hope.

Size can be controlled with pot or container size. The larger the area for the root ball to grow in, the larger the top part of the plant has the potential to become. Do not attempt to force interior plants to grow through fertilization. When they are showing active growth, fertilize with a liquid solution every two to three weeks. Overfertilization could contribute to the death of the plant.

Finally, realize that interior plants need a period of acclimation from one environmental setting to another. If a plant is purchased from a greenhouse operation where direct sunlight and strong artificial light is available, and it is moved into a typical interior location where the light intensity and duration would be different, there will be some leaf drop. Be assured that if plant is otherwise healthy, it wil eventually releaf, adapting to the new setting. Enjoy some interior greenery!