



**HORTICULTURE**  
**FACT SHEET No. 47—1978**  
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## Caring for House Plants in Northern Climates

Although there are many excellent books available on foliage house plants, few address the particulars of plant care in northern climates. Living relatively far north, we experience vast seasonal fluctuations not only in temperature, but in the duration and intensity of daylight as well. Because light, water, temperature, humidity, and nutrient requirements of house plants are all interrelated, these changes must be taken into consideration to keep plants healthy all year round.

### LIGHT

Plants need light for photosynthesis—the food production essential to carrying out growth and maintaining life processes. This amount of light will vary from one species to another. Therefore, it is best to check a reputable reference regarding the individual needs of various plants, and then select plants to fit the available light in your specific locations. The names of some references have been included at the end of this publication.

In winter, days are short and often cloudy with low light intensity. Plants may have to be moved from one window to another, or possibly nearer to the window to get as much light as possible. The reverse is true in summer. Some plants may have to be moved out of a hot south window, or at least pulled back a bit to avoid sunburn. Often a plant can be maintained in one location, but will flourish and grow more vigorously if moved to a brighter spot. When in doubt, always err on the side of additional light. Chances are your plants will be healthier for it.

### WATER

Improper watering is the most common source of house plant problems. Everyone knows that plants demand faithful watering, but how much water and how often they should be watered depends on many factors. Water requirements are partially a function of the type of house plant, the size of the plant, its pot, and soil type. The plant's environment also affects the amount of water it should receive. A plant that is growing vigorously in good light will need more water than one that is growing slowly or is in minimal light.

When you water, do so thoroughly until water flows through the pot's drainholes. After a few minutes, discard any excess water that has collected in the saucer beneath the plant. Learn to recognize when the plant needs to be watered again by feeling the soil. Some plants, such as ferns, should be watered as soon as the soil surface feels dry. Others, such as the rubber tree, should be allowed to dry an inch or more below the soil surface, depending on pot size. Cyperus can actually stand in water, whereas most cacti must be allowed to dry completely between watering. Always check a reliable text for watering instructions, then modify the advice to fit your situation.

### TEMPERATURE

As with the amounts of light and water, optimal temperature ranges vary from plant to plant. Most house plants prefer day

temperatures between 65° and 75°F with a drop of 10 degrees at night. Happily enough, this coincides with our efforts at energy savings in the home. Plants grown under slightly cool conditions are also more tolerant of lower light intensity than those grown at higher temperatures.

In a cooler environment, the plant's rate of transpiration (water loss through the leaves) is slowed. Watering must therefore be reduced to keep pace. Keeping your house excessively warm in winter will result in a loss of relative humidity, in which case transpiration and water loss through evaporation will increase, again necessitating adjustment of watering. Always judge the water needs of your plants by the condition of the soil or plant itself, not by the calendar.

A word of caution: don't put house plants in cold, drafty places or on hot spots, such as a television or radiator. They prefer an even temperature all day.



It is important that house plants get enough light in the winter.

Grouping plants together helps increase humidity.



## HUMIDITY

Many house plants will suffer because of the low humidity found in our heated homes each winter. Insects and mites, on the other hand, will thrive and multiply in such a dry atmosphere. Therefore, it is important to increase the humidity in the vicinity of your plants. Misting is not a good idea since it raises the humidity only momentarily, while setting the stage for fungal or bacterial problems to develop on the foliage. Room humidifiers are helpful in increasing humidity, as is grouping plants together. The moisture lost through their leaves helps to create a more humid mini-environment within the room.

Pebble trays can also be used to increase humidity while keeping the leaves dry. Pots should be set on pebbles in a tray of water with pot bases above the water line. This will avoid wick action drawing excess moisture back into the soil.

## NUTRIENTS

House plants all need nutrients at some time, but people tend to over fertilize. A newly purchased house plant usually will not need fertilizing for 3 or 4 months. During the bright light months, mid-April through mid-September, most plants growing vigorously in well-lit situations should be fertilized every 4 to 6 weeks.

It is best not to fertilize during the low light fall and winter months unless your plants show definite signs of deficiency, or if your plants are in a very large, bright window growing rapidly. If this is the case, one or two applications, mixed half-strength according to the directions, might be in order. Don't try to jolt a plant out of a slow growth period. Fertilizing could only do it harm.

Stores abound with house plant fertilizers. Almost any will do, provided you follow label directions carefully. Never fertilize a dry plant because root injury is possible. Instead, water the plant thoroughly, then follow immediately with a second watering containing the fertilizer solution.

## SUMMER CARE

Most house plants will benefit from spending the summer outdoors, but you must find suitable locations for them. Even plants that thrive in full sunlight in their native habitats can be

damaged by too much sun after having spent the winter indoors. Most plants can take direct sunlight early in the morning or late in the afternoon when the sun's rays are coming in at an angle. They should be protected, however, from the hot, intense, direct mid-day sun.

Plants receive more light in diffused sunlight outside than they do in a bright window indoors, and should be watered and fertilized accordingly. Sinking the pot in soil up to its rim while outdoors will help reduce evaporative water loss, but high temperatures and drying breezes may still necessitate more frequent watering. Twist the pot periodically to prevent rooting through the drainholes into the garden.

Summer is the time to do some pinching and pruning to help shape plants that have grown spindly or lopsided. Vigorous, new growth will develop while the plant is outdoors. Because of this new growth, many plants need shifting into larger pots at the end of the summer. This should be done a week or two before they are due to come indoors to minimize the shock of transplanting.

House plants should be put outside in early summer when night temperatures begin to approximate those indoors. They should be brought in again when nights begin to cool off in late summer or early fall. Inspect your plants carefully for insects before bringing them indoors though, and use an appropriate spray if insects are present. Once you have brought the plants inside, put them in the brightest possible windows to lessen the shock of coming indoors. Gradually move them to their desired locations in your home.

Those of us who live in northern climates count on indoor gardening with house plants to extend the growing season and give continuous pleasure year-round. Keeping seasonal changes in mind maximizes our chances for success.

The following Extension publications will give you additional information on house plant care:

Extension Bulletin 274 [Care of Houseplants](#)

Horticulture Fact Sheet 44 [Cacti and Succulents](#)

Horticulture Fact Sheet 29 [Terrariums](#)

Plant Pathology Fact Sheet 25 [Houseplant Problems](#)

Entomology Fact Sheet 47 [Houseplant Insect Control](#)