Some plants have their roots in the tropics, which means they require semitropical conditions. Others resemble relatives from the desert or cool, moist woodlands. The temperature needs of plants are divided into three categories:

Cool

40 to 45 degrees Fahrenheit (minimum temperature at night); 55 to 60 degrees Fahrenheit (maximum temperature during the day)

Temperate

50 to 55 degrees Fahrenheit (minimum temperature at night); 65 to 70 degrees Fahrenheit (maximum temperature during the day)

Warm

62 to 65 degrees Fahrenheit (minimum temperature at night); 80 to 85 degrees Fahrenheit (maximum temperature during the day)

Seldom is the greenhouse temperature so uniform that only one group of plants can be grown. Through trial and error--combined with careful observation--you can identify cool and warm spots, or microclimates, which are suitable to a wide variety of plants. The northwest corner, for example, is bound to be considerably cooler than an elevated shelf centered on the south wall. Cooler areas under the growing benches can be a perfect starting place for forcing spring bulbs. Or plan on a cascading vine that will provide attractive leaf patterns and, at the same time, protect your favorite foliage plant from searing rays of the sun.