

Plants in Winter

IN THE NORTH, sometimes it feels like the world stops when winter arrives. The little animals disappear underground to hibernate or curl up somewhere to stay warm. The tree branches are bare, and the flowers in the garden are gone. But did you know that many plants need this time of cold winter weather to grow and bloom? Buried deep under the snow, there is something happening in roots, bulbs, and seeds.

Why don't plants grow during the winter?


When a plant is growing, it uses its leaves to catch sunlight and make food for energy. If plants tried to grow during the winter, they could freeze and be damaged. It also would be hard for them to get enough sunlight during the short days and enough water when it is frozen. So at the end of the growing season, the food that the plant made is moved out of the leaves down into the roots to be used during the winter. This is why gardeners don't cut the leaves off of tulips right after they bloom. Instead, they let the leaves die as the nutrients go back into the bulb.

How do plants know when it is winter?

Plants can't just look at a calendar. Instead, shorter days and lower temperatures cause chemical changes that prepare the plant to rest, or go dormant. When a bulb's dormant period begins, a chemical stopwatch starts counting. Only after a certain number of chilling hours will the bulb be ready to start growing again. This is so that the bulb isn't fooled into thinking it is spring before it really is. Many bulbs need 10-14 weeks between 32 and 45 degrees Fahrenheit. In places where temperatures don't get cold enough, people give their bulbs a pretend winter by putting them in the refrigerator!

What do plants do during the winter?

When bulbs finish growing above ground, they are busy growing underground—growing roots and even multiplying so that there will be more flowers next year. Depending on the soil temperature, tree roots can continue slowly growing during the winter even while the aboveground part of the tree is dormant.

The next time you see a snow-covered garden or the bare branches of a tree, remember that God is at work even when it seems like there is nothing happening! 



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