The Secret Life of the Winter Garden

It may look like nothing much is happening in the garden this time of year. Many plants have lost their leaves or disappeared altogether, the plants that are still green don’t seem to be growing much, and we see a lot fewer birds, insects, and other wildlife moving around. Even though it’s nice to relax and enjoy the quiet and slower pace, it can also seem sad that the garden looks so lifeless.

But if you look below the surface, you’ll find out that the garden is still very much alive! Different kinds of living things all have their own strategies for surviving the short, cold days of winter. The garden is only resting, not gone. Let’s take a look at some of the secret, quiet life going on outside.

Taking it slow

Do you ever feel like you have less energy in the winter than in the summer? Many garden plants and animals are the same way. For the garden, it’s all about the food chain.

In the end, everything in the garden runs on solar power! You might already know that plants make their own food using energy from sunlight. Animals, fungi, and microbes get energy directly or indirectly from that plant food. When the daylight hours are shorter and the sun energy isn’t as strong, plants can’t make as much food, which means less energy is available for all the other parts of the food chain.

So what’s an organism to do? Many plants and animals respond by slowing way down to conserve what little energy they can find.

Evergreen plants, winter annuals, and overwintering vegetables stay green and healthy but don’t grow much during the winter. They’re still alive, but they’ve slowed their growth so they can survive on only a small amount of sunlight. What evergreen plants grow in your garden or near where you live?

Many animals go into a resting state called torpor during the winter. During torpor, animals can still wake up and move around if they need to, but all their body processes work very slowly, and they sleep most of the time. They don’t need much food because they’re only using a little bit of energy. Some examples of animals that might be in torpor in or near your garden include mice, hummingbirds, and bumblebee queens.

Waiting it out

Other plants and animals seem to disappear entirely during the winter, only to suddenly reappear in the spring as if by magic. Although some kinds of birds and butterflies actually go on vacation (migrate) to warmer places, most of these organisms are still present in your garden, just in a different form.
Deciduous perennials and plants that grow from bulbs are completely invisible during the winter, but they are still alive beneath the soil. They store up energy during the summer in their roots, corms, rhizomes, or bulbs, and then they shut down entirely for the winter, waiting for longer days before they grow again.

*Bulbs springing back to life!*

Annual plants that are adapted for this area use a different strategy: they overwinter as seeds. Seeds are small, hard, well-protected packets that contain everything it takes to grow a new plant. Many kinds of annual seeds stay dormant (inactive) underneath the soil during winter, and then burst into growth as soon as the days become longer and warmer. Lots of garden weeds use this strategy, and so do some kinds of flowers and vegetables.

Some animals do something similar. Even though one generation of adults may die in cold temperatures, the next generation can wait for spring in the forms of eggs or pupae. Both pests like aphids and beneficial garden friends like spiders use this strategy, so you can hope you have a good balance of both hiding under your soil or mulch.

**The secret life of soil**

Besides the animals and plants you can see and the ones that are hiding, the soil in your garden is full of life much too small for a person to see, called microorganisms. Even though they’re very small, these bacteria and fungi are, in many ways, the most important garden organisms of all. Without them, plants would grow very poorly because they wouldn’t be able to use the compost and fertilizer you put into your garden. Your garden would also support fewer animals because garden animals depend on either microorganisms or plants for food. It might seem hard to believe, but these invisible little organisms are the foundation of a healthy garden. In the winter, your garden’s microorganisms slow way down, but they are still alive and working.

**Caring for Winter Life**

Now that you know about the secret life in your winter garden, how do you take the best care of it you can?
The most important thing is to let it rest quietly. Even though there might not be plants growing in your garden beds, it’s more important than ever to avoid walking where your plants usually grow. Microorganisms, roots, seeds, eggs, pupae, and animals in torpor are all waiting for spring underneath the soil, and they don’t like to have their winter beds crushed by human feet.

If you *really* want to keep your beds happy and fluffy, you can cover them with burlap or a thick layer of leaf mulch. This will keep the heavy winter rain from pounding too hard on the soil, and it will keep the temperature underneath just a little bit warmer.

By understanding and caring for all the quiet life of the winter, you can keep your garden healthy all year.