

Nurturing Resilience in Gardens — and Kids

Anyone who has planted and tended a garden knows to expect the unexpected. After all, even the most meticulously planned and planted gardens are subject to the whims of nature — downpours, wind, pests and diseases, drought, etc. Now, climate change is exacerbating these challenges. How can we foster resilience in gardens so that they can endure and recover? Can kids build their own resilience to challenges by nurturing this quality in their garden plants? This article explores both questions.



Defining Resilience

One dictionary defines resilience as "tending to recover from or adjust easily to misfortune or change." In the garden, this might manifest as plants that can withstand weather extremes and other environmental stressors. In kids, it can indicate their ability to process thoughts and feelings after a difficult time. In both cases, building resilience requires conscious actions to nurture this quality.

Resilience in garden plants. Some types of plants are notably adaptable; they thrive in a range of conditions and tolerate setbacks with ease (so-called weeds exhibit these qualities). Other plants are deemed "fussy" (think hybrid roses that are susceptible to various diseases) and intolerant of less-than-ideal conditions. Gardeners can maximize their plants' resilience by choosing well-adapted plants, providing the best growing conditions, and being prepared for challenges, such as having row covers handy if a cold spell threatens. Below are tips for creating a resilient garden.

Steps to a Resilient Garden

Here are some ways to foster a weather-resilient garden:

Select the best planting site: If you're planning a new vegetable garden, choose a spot in full sun — ideally in a place that's protected from strong winds and near a water source. If you're planting perennials or woody plants, research each plants' sunlight needs and choose their spot accordingly. Learn more: [Designing and Placing the Garden](#)

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Nurture the soil ecosystem. Healthy soil, with its abundant populations of beneficial microorganisms, helps provide a steady supply of nutrients to plants. It also has the capacity to store, or "sequester" carbon. Rototilling and plowing damage the underground ecosystem, reducing the soil's ability to provide these services. It also exposes buried carbon (old plant roots, soil organisms, and other organic matter) to the air, releasing carbon dioxide. Protect soil by disturbing as little as possible; no-till gardening and [lasagna gardening](#) are two good options. Learn more: [Soil is Alive](#)

Add compost to soil. Not only does compost and other organic matter feed soil inhabitants, it also increases the soil's drainage *and* its water-holding capacity, building resilience to both prolonged rainy spells and drought. Plus, the carbon in the organic matter is held in the soil rather than being released to the atmosphere.

Choose varieties wisely. Frequent rain and humidity can exacerbate disease problems, so look for plant varieties described as disease resistant. Allow adequate space between plants to ensure good air circulation — also important for preventing diseases. Learn more: [Choosing What to Grow](#)

Use organic mulches. Covering soil with compost, shredded leaves, bark mulch, or pine straw helps insulate the soil, reducing temperature fluctuations that stress plant roots and soil life. It also conserves moisture, reducing the need for watering during dry spells. And it adds organic matter to the soil as it decomposes.

Compost plant waste. Food scraps and weeds tossed in the trash end up in landfills, where the buried waste contributes to emissions, notably methane, a potent greenhouse gas. In contrast, in a well-maintained compost bin these materials break down in the presence of oxygen, resulting in little to no methane productions. Learn more: [Compost Your Way](#)

Water wisely. Slow, deep watering encourages plants to develop deep, extensive root systems — in contrast to frequent light sprinkles that force roots to grow near the soil surface where they're prone to drying out. Soaker hoses and drip irrigation apply water to the soil where roots can access it and keeps foliage dry to minimize disease problems. Learn more: [Wise Watering](#)

Grow native plants. Plants that are native to your region are well adapted to your local conditions. They also provide food and shelter for native insects and [birds](#), fostering a healthy ecosystem and supporting [pollinators](#). Learn more: [Wonderful Wildflowers](#)

Be prepared. Have a stash of row covers to protect plants against unseasonal cold spells, as well as shade cloths to protect plants during hot, sunny weather. Invite kids to brainstorm creative

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solutions to weather challenges. For example, what else can be used to cover plants to protect them from frost and downpours? What can we use as a windbreak? Learn more: [Extend the Season with Plant Cover-ups](#)

Gardens and Climate Change

Late spring frosts, torrential rains, strong winds, drought, heat waves — climate change is making extreme weather events more common. Climate change is also highlighting the urgent need to reduce the emissions that contribute to global warming. Fortunately, some techniques that promote plants' resilience also reduce emissions, giving kids the chance to help in the battle against climate change. Learn more: [Carbon Cycle and Carbon Sequestration](#)

Resilience in Kids

Participating in youth gardens helps kids build resilience too! Here are some ways garden programming can contribute to their social and emotional development:

- When kids get physical activity through the garden their bodies and minds are more calm and able to cope with daily stressors.
- Youth gardens invite kids to connect with peers and meet new friends; these relationships provide a network of support kids can rely on..
- Nurturing plants fosters empathy, which can, in turn, help kids learn empathy for themselves and others.
- When kids help each other with tasks, they learn that they have much to offer; this agency and ability to make positive contributions to their communities gives kids a sense of control.
- Observing and tending a garden can involve a mindfulness practice where kids can learn emotional regulation and problem-solving skills.
- Gardening helps kids accept change, learn to be flexible, and adapt.
- Garden leaders can help kids redefine "success" by reframing challenges into learning opportunities and instilling a "growth mindset."

These are all building blocks of resilience.