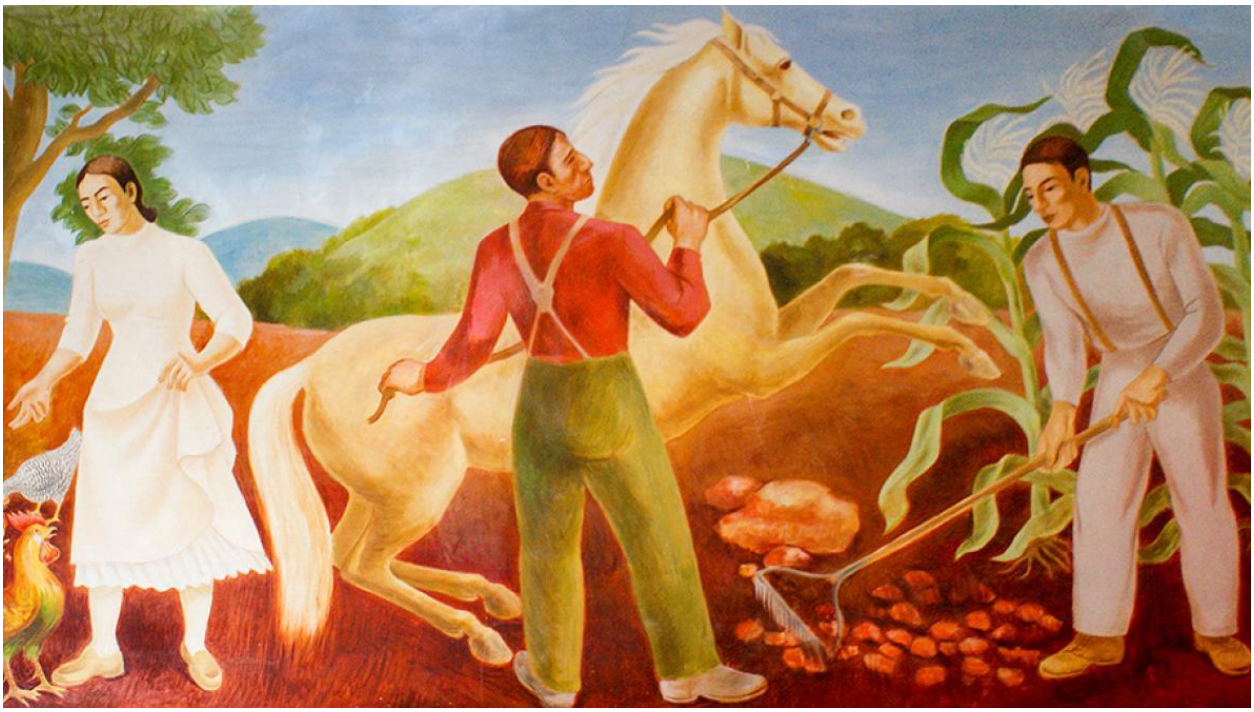
10 Traditional Native American Gardening Techniques



Caption
Cherokee Farming and Animal Husbandry by Olga Mohr
Photo Credit

Employing Age-Old Wisdom to Grow a Better Garden

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As gardeners, we are connected to all people who have come before us, caring for the Earth and learning how to best grow crops. Ready for the best gardening techniques? Let's have a look at some age-old gardening wisdom that's still relevant today.

A Long History of Gardening

Gourds, beans, and peppers were being cultivated in Mexico by 5,500 BC, and by 5,000 BC, maize was being grown in Mesoamerica and potatoes in South America. Success or failure of these crops had a major impact on people's survival. It was

critical not only that the land provided sustenance, but that it sustained them year after year, which required knowledge of sustainable growing techniques to preserve the land for future generations.

We hear buzzwords like “sustainable” or “permaculture” and “organic” today. But these techniques were here long before we started talking about “going green.” Perhaps your grandparents also knew some of the older, gentler ways. Many are simply intuitive and based on fostering a closer relationship with nature and the land. If you don’t already, you might want to think about integrating some of these techniques into your own landscape.

Many of the following practices are often viewed as “new” to the gardening world, but they’ve been around for a long, long time. They have all been traditionally used by Native American peoples, but that is not to say that all of these techniques were used by all Native American cultures. Just like separate countries, indigenous cultures vary widely in their gardening philosophies and techniques. Below are just a few sustainable, Earth-conscious ways to grow a better garden.

1. Companion Planting

Time-honored gardening wisdom says that certain plants, when grown together, improve each other’s health and yields. For instance, some plants attract beneficial insects that help to protect a companion, while other plants (particularly herbs) act as repellents. Learn the basics of Companion Planting.

A commonly cited example is the Three Sisters garden, which has been traditionally practiced by the Wampanoag people of what is now the northeastern United States. A prime demonstration of companion planting at its best, corn provides support for pole beans to climb, the beans add nitrogen to the soil for future crops to use, and squash leaves shade the soil around the taller plants, like a living mulch. Squash’s prickly leaves also deter marauding animal pests. Some would add a fourth sister—a flowering plant such as sunflowers—to draw in pollinators. See more about planting the Three Sisters.

Intercropping or polyculture of plants that have mutual benefits (aka companion planting) mimics the way different species grow together in nature. Monoculture, on the other hand, leads to the exhaustion of soil nutrients. Indigenous people also discovered that plant diversity meant diet diversity. If one crop should fail, the others could fill that void.

Try “intercropping” in your vegetable garden. Sneak small crops in between bigger ones which will be ready before the big ones need the space. See the video below for a demonstration of intercropping.

Intercropping is easy with help from the Almanac Garden Planner.

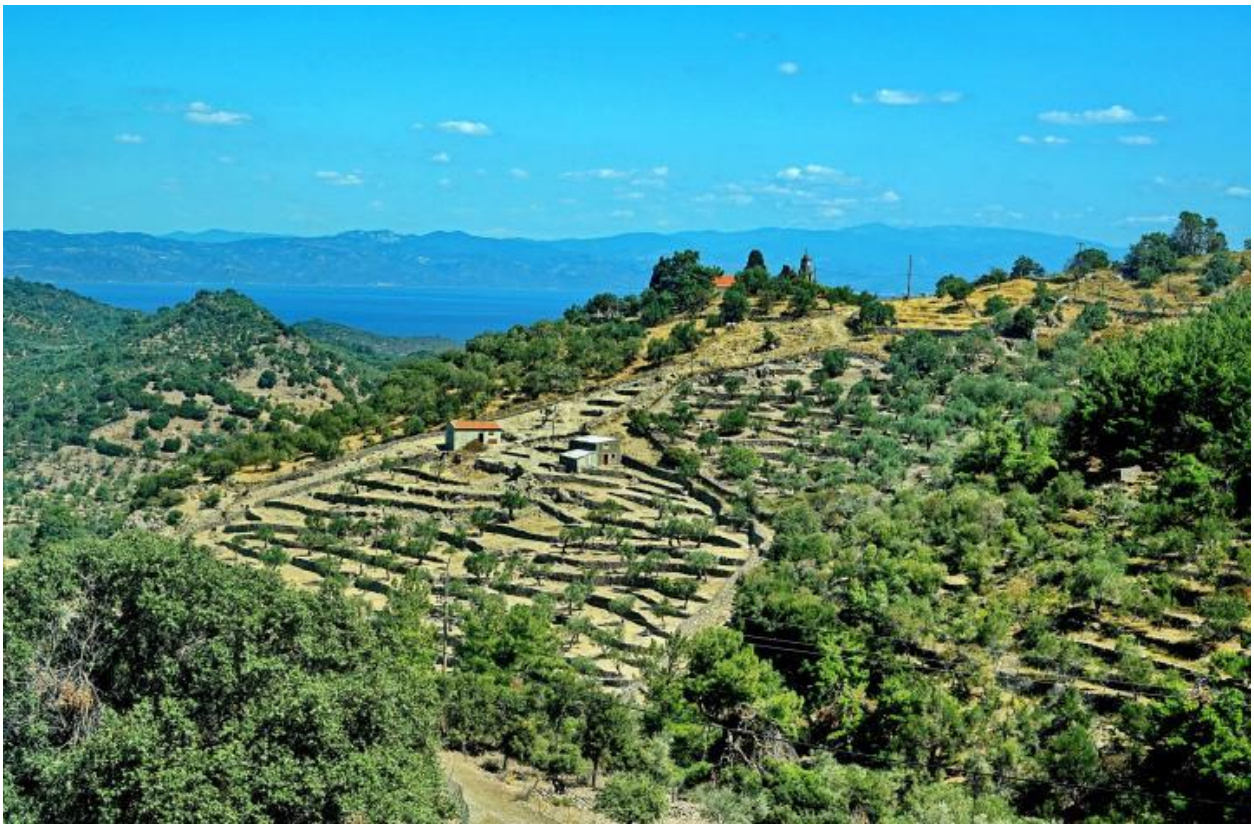
2. Terracing

Terracing creates flat planting beds in hilly terrain. Taming the steep slopes slows runoff, allowing water to seep into the beds, and curbs erosion.

Creating terraces to garden in is an especially good way to garden where rain is seasonal, sporadic, and often comes in heavy downpours. In the southwestern U.S., for example, terracing was key to the agricultural success of the Anasazi and their descendents, the Hopi, who still use terraced gardens today. This can be seen in the village of Hotevilla-Bacavi, in northern Arizona, where traditional terraced gardens were restored in the 1990s.

If you wish to garden sustainably on sloped land for years to come, the use of terracing is essential in avoiding soil erosion that carries your precious topsoil away.

There are different types of terracing. If you have a slope, consider using some rocks or retaining walls to create a series of flattened areas and mitigate runoff.



Ancient terraces are seen all over the steep terrain in Greece, too.

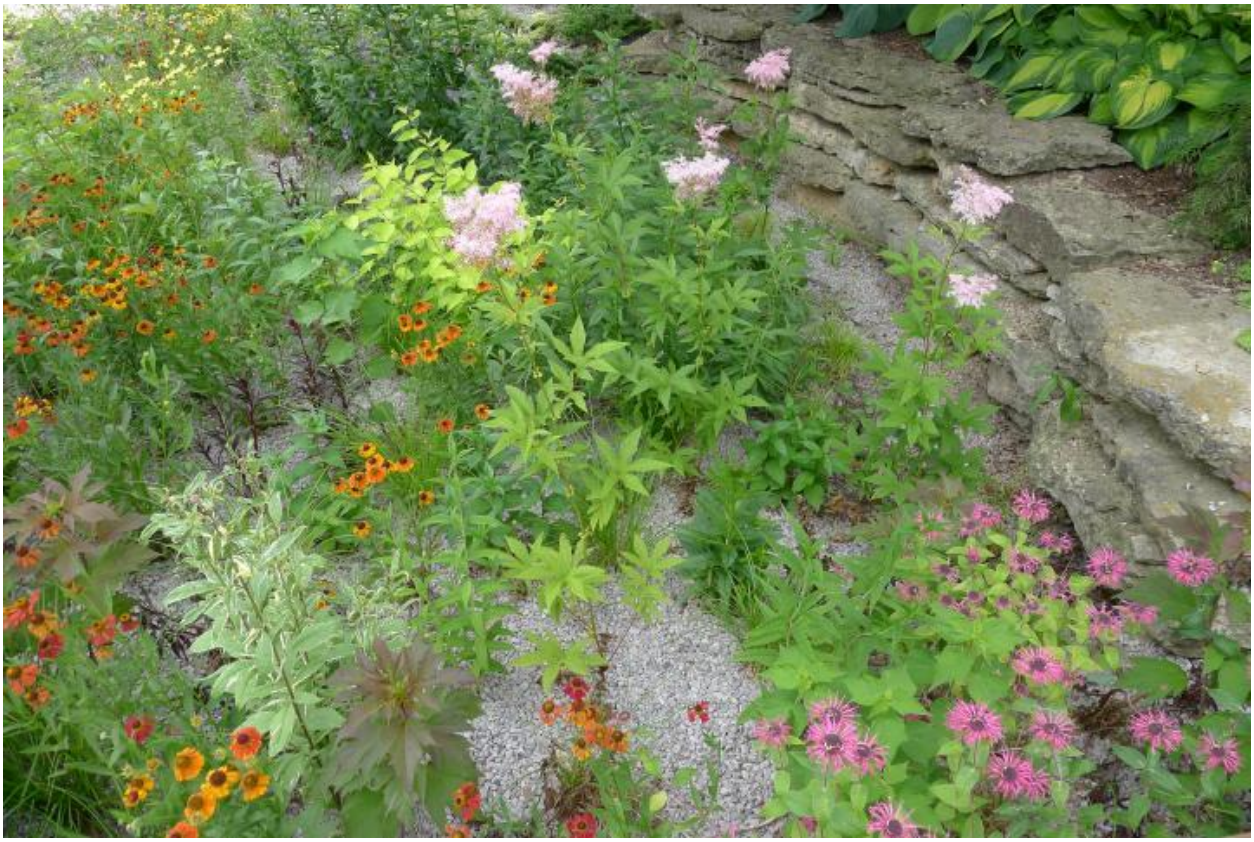
3. Irrigation

Thousands of years ago, the Anasazi people inhabited what is now the Four Corners region of the U.S., an area known for its low annual rainfall. They traditionally built catchments, check-dams (dams made of rock that held onto soil but allowed water to pass through), and reservoirs to collect the infrequent storm water. The Hopi people of northern Arizona also use these age-old techniques to irrigate their gardens in this arid landscape, although modern technology has allowed for expanded water conservation efforts.

If you live in a dry area, storing water in ponds, cisterns, or even a rain barrel is a wise idea, as the reserved water can be used for irrigation as needed.

Conversely, in areas with floods, people learned how to use what could be destructive into a way to boost productivity. For example, one technique was to create shallow depressions so that when the flood waters rose, the water could be stored. Another technique was to use canals near rivers to divert water to nearby farmland.

Rain gardening is an increasingly popular way to garden in a way that captures the rain water runoff which flows from roofs, driveways, patios or lawns. Native shrubs, perennials, and flowers are planted in a small depression to temporarily hold and soak in the excess water flow. Learn how to "catch the rain" and create a rain garden.



4. No-Till (No-Dig) Gardening

No-till farming or gardening—also called no-dig gardening, layer gardening, and lasagna gardening—is a technique that requires no turning over of the soil. You simply spread a new layer of compost on top.

Although tilling chops up weeds and soil clods and leaves an area of flat, bare soil that is easily planted into, the practice has significant downsides.

- Tilling damages the healthy soil structure by breaking up soil aggregates, resulting in powder-like soil particles that are vulnerable to compaction.
- It can create a hardpan layer beneath the tilled area that is impervious to water.

- It devastates soil life. No-till methods allows the beneficial organisms—fungi, bacteria, and other tiny things—in your soil to thrive undisturbed, making it a better place for your plants to grow.

An added bonus for us modern gardeners: No-till gardening helps save your back while boosting your soil's health! Mother Nature does not use a spade, and she does pretty well! So why not follow her example? Learn more about no-till gardening.

5. Phenology

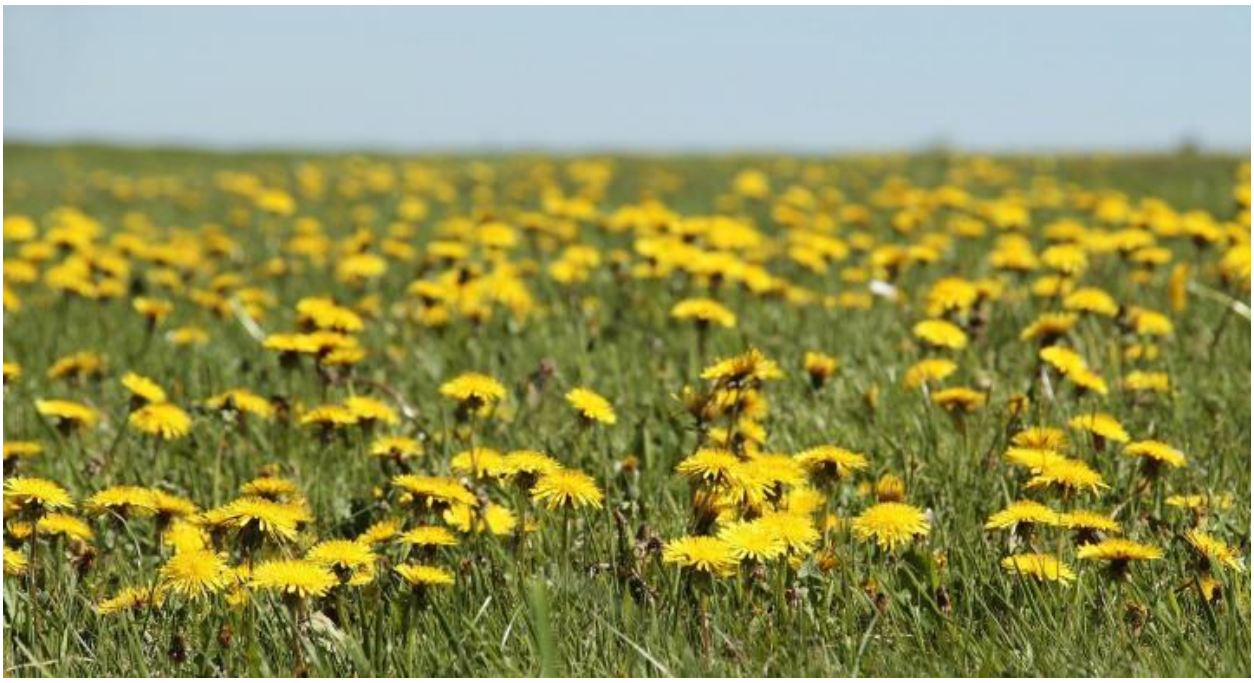
Phenology is the art of simply observing nature for signs that it is safe to plant. Before planting certain crops, native peoples watched for migrating birds and animals to return and for plants and trees to leaf out or flower. This told them that spring weather was here.

The Old Farmer's Almanac is famous for taking cues from nature for planting corn, beans, squash, and other crops. It may seem like an old wives' tale, but observing nature is very important during these days of unpredictable weather and climate. Plus, average frost dates are simply that—averages. Avoid a late spring frost or early fall frost surprise by paying attention to Mother Nature's signs—she knows herself better than we do!

Here are a few examples of phenology, though it truly depends on your local area:

- Plant corn when the oak leaves are the size of a mouse's ear.
- Plant peas when the forsythia blooms.
- Plant cucumbers and squash when lilac flowers fade.

Learn more about phenology.



Look for dandelions to bloom before planting potatoes.

6. Seed-Saving

Seed-saving over the centuries helped gardeners to select and breed the best plants to constantly improve the crops they were growing. A prime example is maize, which started out as a wild grain called teosinte—native to Mexico and Central America—and was developed into the hearty corn we love today!

Long before the many seed companies of today even existed, people have been carefully selecting seeds for desirable traits, maintaining species purity by planting different seeds sufficiently far apart to prevent cross-pollination. Were it not for this effort, corn may well have remained but a weedy grass.

Do the same to preserve the most desirable seeds from successful plants in your garden! You'll save money as well as increase the quality and yield of your vegetable and/or flower garden. See how to start saving seeds and our seed-saving guide.

Corn hung to dry.

7. Crop Rotaton

Crop rotation is another idea that has been used by people for thousands of years. It keeps soil nutrients from being depleted and pests and diseases from building up, which often happens when one crop is grown in the same spot year after year.

If you grow your tomatoes in the same garden bed year after year, you will notice an increase in pests and diseases. Break the cycle! Take a moment to learn about the basics of crop rotation. Your plants will thank you with a bigger, healthier harvest.

Photo Credit: Johnbraid/Shutterstock

8. Fertilization

Farming peoples learned early on that if you take from nature, you need to give back, so they routinely returned crop residues to the earth. Where fish were plentiful, they were buried to rot in the soil.

Bones and other scraps thrown into the fire yielded ashes that were scattered in the gardens and fields were burned to remove weeds and brush as well, adding phosphorus and potash to the soil.

Soil fertility could also be maintained not by adding fertilizer, but by planting beans in the same hills as other crops (as seen in the Three Sisters garden). The legumes added nitrogen back into the soil, which crops like corn and squash relished.

9. Microclimates

Microclimates within an area make it possible to start some plants earlier and grow them later into the growing season. Most microclimates occur naturally in protected places, but man can have a hand in creating them, too.

In areas that receive a lot of sunlight, rocks were traditionally placed around a struggling plant to absorb daytime heat and radiate it back at night, evening out temperature swings. Elsewhere, hot stones from a fire pit could be placed in fields or orchards to protect tender crops from frost.

10. Growing Healing Plants

Plants provide more than food. Many indigenous cultures traditionally used—and still use—plants for fuel, construction, tools, fiber, dye, glue, and medicine. The serviceberry, for example, not only provided edible berries, but also raw materials for arrows. The western red cedar tree provided materials for bows, canoes, lodges, baskets, and containers.

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