Outdoor Paragraphs

**How to Build a Campfire**

For many, the campfire is a beloved and indispensable outdoor tradition—a kinetic, luminous, dreamlike force of nature that for generations has served as the centerpiece of backwoods gatherings.

This article explains the key steps for building a successful campfire, as well as fire etiquette tips, whether you’re car camping or backpacking.

1. Find or Build a Fire Ring

Campgrounds: Build fires only in designated fire rings, grills or fireplaces. Most developed campgrounds have some version of these. Using a fire ring will lesson your impact and keep your fire contained.

Always check with the campground operator to make sure fires are permitted. In some areas, severe dry periods can cause campfires to be prohibited even in campgrounds.

If you’re car camping in an undeveloped site, check in advance with the agency that administers the land (U.S. Forest Service, Bureau of Land Management, etc.). A campfire permit may be required.

Evaluate the site before starting a fire. If the site is brushy or has low-hanging branches, keep your fire small or skip it altogether. In dry conditions, fly-away embers could easily ignite a wildfire.

Backcountry: In backcountry areas where fires are permitted, use an existing fire ring if one has been left behind. Build a new one only in emergency situations and, if the situation permits, dismantle it when you are done. If one already exists, clean it out before you depart.

Clear away all flammable material from your fire pit. Ideally, the base of your fire should be sand or gravel or mineral soil (often found in streambeds or on gravel bars). Intense heat can sterlize healthy soil, so choose your site conscientiously.

An alternative to a fire ring is a mound fire. Using your sanitation trowel, build a circular, flat platform of mineral soil (sandy, light-colored, nonfertile dirt) about 6-8 inches high. Use this as the base for your fire. Ideally, build this platform on a flat rock. You can easily disperse the mound when you're finished.

2. Gather Fire Wood

To burn a successful fire, you’ll need three types fuel: tinder, kindling and firewood.

Tinder includes small twigs, dry leaves, needles or forest duff.

Kindling consists of small sticks, typically less than one inch around.

Firewood is any larger piece of wood and is what will keep your fire going long into the night.

Campgrounds: Use only local firewood. Nearby stores often carry firewood, and sometimes campground hosts offer bundles of firewood or kindling for sale.

Do not bring wood with you if you’re traveling from more than 50 miles away. Campgrounds may even ban bring-your-own firewood regardless of the distance you travel. Why? To avoid introducing troublesome insects into a forest.

Call the campground or a local ranger office in advance for information and advice.

Backcountry: If you forage for firewood, gather only downed wood far from your site. Never cut live trees or break off branches from standing trees, even dead trees. Birds and wildlife make use of dead branches and snags.

Do not gather or burn pieces thicker than an adult's wrist. This is because thick chunks of wood are rarely allowed to burn completely and are typically left behind as blackened, unsightly scraps.

Remember to follow [Leave No Trace](https://lnt.org/learn/7-principles) principles when gathering wood.

3. Build the Campfire

Cone: Start with a small cone of kindling around a few handfuls of tinder that are loosely piled in the center of the fire ring. Once the fire is going strong and the temperature increases, you can add larger logs a few at a time as needed.

Log cabin: Place two larger pieces of firewood parrallel to each other and with some room in between to form the base of your structure. Then, turn 90 degrees and place two slightly smaller pieces on top and perpendicular to form a square. Place plenty of tinder inside the square. Continue adding a few more layers of firewood around the perimeter, getting a little bit smaller with each layer. Finish with a layer of kindling and tinder across the top. Remember to leave space between logs so the fire can get plenty of oxygen.

Upside down (pyramid): Start with three or four of your largest logs side-by-side on the bottom layer. Turn 90 degrees and then add a second layer of slightly smaller logs on top. Continue alternating a few more layers in this manner, getting smaller as you go. Place your kindling and tinder on top.

4. Light the Campfire

Light the tinder with a match or lighter. Using fire starter that is designed to easily ignite can help the tinder catch the flame. (Be sure to carry waterproof matches and firestarter. Fire-making materials are considered one of the [Ten Essentials](https://www.rei.com/learn/expert-advice/ten-essentials.html).)

After lighting the tinder, blow lightly at the base of the fire to provide oxygen, which will help increase the intensity of the flame and further ignite the wood.

As the fire burns, move embers to the center to burn them completely. Ideally, you should reduce them to white ash.

5. Extinguish the Campfire

Extinguish all fires by pouring water on them, stirring the ashes, then applying more water. Repeat as often as needed. Ashes should be cool to the touch before you leave the site. Be utterly certain a fire and its embers are out and cold before you depart.

Never leave a campfire unattended!

6. Clean up the Campfire

Burn trash items only if they can be fully consumed by fire and turned to ash. Do not attempt to burn plastic, cans or foil. If you do burn something that's not fully consumed, collect the remains when the fire is out and either pack it out or put it in a trash receptacle.

When you’re in the backcountry, pack out any trash found in your pit. Extract any charcoal pieces left inside your ring, carry them away from your site, crush the chunks, then scatter the remnants and dust throughout a broad area. Dismantle any structure you might have built.

Retrieved from <https://www.rei.com/learn/expert-advice/campfire-basics.html?series=intro-to-camping>

**Terms and Definition**

**Acidic:** A soil, compost, or liquid with a pH between 0 and 7.0 (on a scale of 0.0-14.0). Often referred to as “sour” soil by gardeners.

**Aeration:** Any method of loosening soil or compost to allow air to circulate.

**Aerobic:** Describes organisms living or occurring only when oxygen is present.

**Alkaline:** A soil with a pH between 7.0 and 14 (on a scale of 0.0-14.0). Often referred to as “sweet” soil by gardeners.

**Anaerobic:** Describes organisms living or occurring where there is no oxygen.

**Annual:** A plant that blooms, produces seed, and dies in one year.

**Beneficial Insect:** An insect that benefits your garden by eating or laying its eggs in other insects, thereby controlling their population.

**Biennial:** A plant that completes its full life-cycle in two growing seasons. It produces leaves in the first and flowers in the second.

**Biodegradable:** Able to decompose or break down through natural bacterial or fungal action. Substances made of organic matter are biodegradable.

**Biological Pest Control:** Using living organisms such as beneficial insects or parasites to destroy garden pests.

**Bolt:** A term used to describe a plant that has gone to seed prematurely.

**Bone Meal:** Finely ground fertilizer composed of white or light gray bone that adds phosphorus to the soil.

**Calcitic Limestone:** A common material used for “liming” soil that has an acid level that is too high. This type is most commonly used and contains calcium carbonate.

**Chelation:** The formation of bonds between organic compounds and metals, some of which are insoluble, as in humus. Soluble chelates are used in fertilizers to help keep nutrient metals, such as iron, mobile in the soil and thus available to plants rather than locked up in insoluble mineral salts.

**Chlorosis:** A yellowing or blanching of the leaves due to lack of chlorophyll, nutrient deficiencies or disease.

**Cold Frame:** An unheated structure usually made of wood and covered with glass or plastic. Cold frames are used to protect plants from frost and are helpful season extenders.

**Companion Planting:** The sowing of seeds in the garden in such a way that plants help each other grow instead of competing against each other.

**Compost:** Completely decayed organic matter used for conditioning soil. It is dark, odorless and rich in nutrients.

**Cover Crop:** Vegetation grown to protect and build the soil during an interval when the area would otherwise lie fallow.

**Crop Rotation:** The planting of a specific crop in a site different from the previous year.

**Cutting:** A vegetative method of plant propagation whereby a piece of plant leaf, stem, root or bud is cut from a parent plant. It is then inserted into a growing medium to form roots, thus developing a new plant.

**Damping Off:** Decay of young seedlings at ground level following fungal attack. Often the result of soil borne diseases and over watering.

**Dead Heading:** The act of removing spent flowers or flowerheads for aesthetics, to prolong bloom for up to several weeks or promote re-bloom, or to prevent seeding.

**Deep Shade:** A plant requiring less than 2 hours of dappled sun a day.

**Desiccate:** Cause to dry up. Insecticidal soap desiccates its victims.

**Direct Seed:** To seed directly into the soil instead of starting your seeds indoors.

**Double Digging:** A method of preparing the soil by digging a trench then putting the soil from one row into the next row.

**Fertilizer:** An organic or synthetic material added to the soil or the plant, that is important for its nutrient value.

**Foliar Fertilizing:** A technique of feeding plants by applying liquid fertilizer directly to plant leaves.

**Frost Date:** This is the average expected last frost date for your area. Frost dates are important to know for your gardening zone or planting area.

**Fungicides:** Compounds used to prevent the spread of fungi in gardens and crops, which can cause serious damage to plants.

**Germinate:** The beginning of growth in seeds, the action of sprouting, budding or shooting, above the soil. This occurs whenever a plant or seed begins to vegetate into leafy young plants. The breaking of dormancy in seeds or the sprouting of pollen grains deposited on a stigma.

**Green Manure:** A crop that is grown and then incorporated into the soil to increase soil fertility or organic matter content. Usually turned over into the soil a few weeks before new planting begins.

**Hardening Off:** The process of acclimatizing plants grown under protection, in the greenhouse for example, to cooler conditions outdoors.

**Heavy Soil:** A soil that contains a high proportion of clay and is poorly drained.

**Humus:** A fairly stable, complex group of nutrient-storing molecules created by microbes and other forces of decomposition by the conversion of organic matter. Typically its dark loamy earth.

**Integrated Pest Management (IPM):** A pest control strategy that uses an array of complementary methods: natural predators and parasites, pest-resistant varieties, cultural practices, biological controls, various physical techniques, and pesticides as a last resort. It is an ecological approach that can significantly reduce or eliminate the use of pesticides.

**Micro-Nutrients:** Some mineral elements are needed by plants in very small quantities. If the plants you are growing require specific “trace elements” and they are not getting them through the soil, they must be added.

**Mulch:** Any organic material, such as wood chips, grass clippings, compost, straw, or leaves that is spread over the soil surface (around plants) to hold in moisture and help control weeds.

**No-Till-Gardening:** This type of gardening calls for no cultivation (or tilling) of the soil after the initial tilling. In its place, regular mulches are added and plants are planted through the mulch. This saves on labor and eliminates weeds, which might germinate as a result of tilling.

**N-P-K:** An abbreviation for the three main nutrients that have been identified as absolutely necessary for plants are nitrogen (N), phosphorus (P) and potassium (K). These three are also known as “macronutrients,” and are the source of the three numbers commonly found on fertilizer labels.

**Organic:** Refers to something derived from living organisms and is made up of carbon-based compounds. It is also a general term used for a type of gardening using no chemical or synthetic fertilizers or pesticides.

**Organic Gardening:** This method of gardening is based on building a healthy, living soil through composting and using supplemental nutrients from naturally occurring deposits. The basic principle is to feed the soil so the soil will feed the plants. Healthy plants are better able to resist pests and disease thus reducing the need for control. If control is needed, cultural and mechanical methods are used first. Naturally derived pesticides are used only as a last resort.

**Perennial:** A plant that grows and flowers for years. They are either evergreens or may die back to the ground but will grow again the following season.

**pH:** A scale from 0-14 that explains the degree of acidity or alkalinity of the water or soil. Soil pH is very important because it affects the availability of nutrients to plants and the activity of microorganisms in the soil.

**Rhizome:** A fleshy underground stem or runner. Creeping grasses spread by rhizomes.

**Season Extender:** Any technique or piece of equipment used to extend the growing season in both spring and fall. Examples include; row covers, greenhouses, hotbeds, cold frames, and products such as Wall O’ Waters.

**Soil Amendment:** Material added to the soil to improve its properties. This may include; water retention, permeability, water infiltration, drainage, aeration and structure. Soil amendments are mostly organic matter or very slow release minerals and are typically worked into the topsoil.

**Soil Test:** A measurement of the major nutrients (nitrogen, phosphorous, and potassium) and pH levels in the soil.

**Tilth:** Describes the general health of the soil including a balance of nutrients, water, and air. Soil that is healthy and has good physical qualities is in good tilth.

**Topdressing:** Applying fertilizers or some kind of soil amendment after seeding, transplanting or once the crop has been established.

**Transplanting:** The moving of a plant from one growth medium to another.

**Vermicomposting:** The use of red worms to convert food scraps or other organic materials into worm castings.

**Worm Casting:** The digested organic waste of red worms. Gardeners consider them the most nutrient dense organic compost available.

**Xeriscaping:** To create a low maintenance landscape with native plants and small or non-existent areas of turf grass. One of the primary goals of xeriscaping is to reduce landscape water use.

Retrieved from https://www.planetnatural.com/vegetable-gardening-guru/garden-terms/