Coal To Flame

By Steven Dykeman

Be safe
Have fun
Better yourself

Many fire starting methods produce a hot coal which then needs to be used to produce a flame to start your fire. Fire starting methods that produce a coal are: friction fire, solar fire, fire piston, electric spark, and percussion fire. Once the hot coal is produced it is necessary to get a flame from the coal. That is the goal of this article.

Some fire starters produce a flame directly, such as a match or cigarette liter. These fire starters are excellent and are good to have if you find yourself in a difficult situation. More primitive fire making methods should be learned and practiced in case the modern conveniences become unavailable. Having fire is an absolute necessity and is therefore the most important skill you can learn.

Besides having a coal, you need to construct a tinder bundle. The tinder bundle is made from dry fibrous flammable material and most often resembles, and is sometimes called, a “birds nest”. The same idea for three sizes of materials used in making a large campfire is used in making a tinder bundle. Larger materials are used to contain the medium and small materials on the inside. An example of this is shown in the picture to the right. The outer course material can be straw, strips of bark, crushed tumbleweed, etc. The medium materials can be more of the same but finer pieces. Also, small wood shavings can work. Most often the finer materials come from natural materials that are processed fine by crushing, twisting, rolling, pulling, and breaking until very fine. An excellent material for the inside of your tinder bundle is jute or hemp rope fibers if you happen to have some.

Materials

The two most excelent barks to use are the birch (lower), and juniper (right). Birch trees are most common to the central northern U.S. and colder parts of europe. The Juniper tree can be found throught the northern hemisphere.

Either of the trees usually don’t mind if you remove some of its bark. Tear off strips in a manner that causes minimal effect on the look and heath of the tree.

Dry grass can often be found in most parts of the world during much of the year. The grass needs to be very dry. Damp grass found during the early morning or laying on the ground will not do. Tall grass can be dryer near the tops rather than short grass near the damp ground. Pull off the tops of the grass and shape it into a nice nest.

Pine needles can also be used for the course outer material. Be sure the needles are dry. Needles found well above the dirt near the top of a pile or needles that fell on top of a bush are good. Grab a handful and arrange them into a nest-like structure.

Dry grass can be found in most parts of the world Be sure it is verry dry.

Dry pine needles can make a nice outer frame for your tinder nest.

The tall reedy marsh plant to the right is most commonly known as cattail. It looks more like a corn dog to me. The brown part on the end contains many fine seeds that will catch flame easily. If you are lucky enough to be near this plant, you should take advantage of it. Put some inside your tinder bundle and it will catch flame from your coal.

A long, lacy, greenish lichen that grows from tree trunks and branches in forests (often called “Old man’s beard” can also make for tinder. Other species of both beard moss and beard lichens also exist. It is a good idea to try different things for yourself to learn what works. It needs to be dead and dry, unlike what’s in the picture.

Construction

To construct your tinder nest, use your course materials first. Coil them into a round structure to form the outermost layer of the nest. Create an indented area in the center and spread finer material around to make a nice bed. Place a small amount of highly processed tinder material in the center as a place to set your coal or char cloth.

To the left is a picture of an actual pre-owned bird nest; giving proof that any birdbrain can do better than me. A bird will spend a long time making a well-suited nest for her eggs. Your nest that you make can be less elaborate in order to serve a lessor purpose. The nest does not need to look beautiful or be large.

Use

It is very important that you have gathered materials for your fire in advance. It will do no good to have a flaming tinder bundle without a pre-arranged fire lay to place it. This is not beginning fire building. Refer to, and perfect, introduction to fire making before attempting the techniques in this article.

After transferring your coal to the nest, loosely fold it closed being careful not to smother the coal. Now hold it up and begin to blow into the tinder; carefully at first. Once a nice amount of smoke begins to flow upward, increase your force of air upward into the tinder. Blow hard until the tinder bursts into flame. Set the flaming tinder under your prepared pile of kindling.

Blow hard once your bundle begins to smoke. Never blow down into your tinder; the smoke will choke you.

When flame appears, place it under your kindling. I have never been burned doing this. Don't worry that you're holding a flaming bundle in your hands; it is safe.

Conclusion

This is a skill that is easy to learn. I always recommend for those new to any subject to start easy and then move on to more difficult methods and materials after perfecting the easy stuff.

Definitions

I always like to define words. Many people out there on You tube do not know the meaning of words and often misuse them. A bird's nest should somewhat resemble the nest of a bird. A bird's nest is not a pile of tinder laying on the ground. A pile of tinder is intended to be lit from a flame. A tinder bundle or bird's nest is intended to be held so that you can blow upward into it.

Tinder: Highly flammable material which can ignite easily and start the burning of kindling. Tinder can be lit from a match, cigarette lighter or sometimes a shower of sparks from a ferrocerium rod.

Tinder bundle: A small collection of tinder which can be held, ignited, and then transferred to a pile of kindling.

"Bird's nest" (as used for fire starting): a collection of dry fibrous flammable material shaped to resemble a nest made by many species of birds. Most often it is ignited from a hot coal, charred cloth, or burning ember created by one of many primitive fire making skills.

About the author:
Steve Dykeman is an experienced outdoorsman and survivalist. He has written many articles and produced many videos on subjects relating to outdoors and survival. He has been a course director and instructor to both youth and adults. He has also been a technical consultant to manufacturing companies relating to outdoor gear. He has over 40 years of experience working with space and defense related electronics. He brings his advanced technical abilities to the outdoors, exposing the many myths and fallacies.

In recent days he is educating people to survive into our uncertain future.