

# The Dakota Fire Hole

## Survival Topics Firesteels

Firesteels are one of the Most Reliable Ways to Start a Fire in the Wilderness, even when wet!

We offer 4-sizes - From HUGE to small enough to fit comfortably in your wallet.

Users report these firesteels give the largest sparks they have ever seen.

Help support Survival Topics.com: purchase your Swedish Firesteels at our Survival Supply Store.

A little known survival aid related to wilderness fire making skills is the Dakota Fire Hole, also known as the Dakota Fire Pit. This handy device is easy to construct and has marked advantages over other types of camp fire constructs. Once you make a Dakota fire hole and try it out, you may choose to use this method on a regular basis.

Making a Dakota Fire Hole is initially more labor intensive than simply building a fire on the surface of the ground. However the outlay in energy required to make a Dakota fire hole is more than offset by its efficient consumption of fuel; it greatly reduces the amount of firewood required to cook meals,

treat water to destroy pathogens, or warm your body.

The Dakota fire hole is a valuable wilderness survival aid because it burns fuel more efficiently, producing hotter fires with less wood. In many areas firewood is scarce or requires a large amount of time and expenditure of energy in foraging to obtain it. Once you build a fire, efforts are better spent attending to your other wilderness survival needs rather than in the constant gathering of firewood



Dakota Firehole

Other advantages of the Dakota fire hole are that it creates a kind of woodstove with a stable platform that is very convenient to cook over.

Should you need to conceal your fire, the fire hole will limit the amount of visible smoke that rises from the fire, since the fuel wood is burning hotter and more efficiently. The pit will also help

conceal the light emitted from your fire, especially at night when even a single candle flame can be seen from miles away.

## Where to Build a Dakota Fire Hole

Before you start to dig your Dakota fire hole you should scout out an area where soil conditions are conducive to its proper construction. You will want to avoid areas

that are rocky and difficult to dig.  
with thick tree roots that require cutting.  
that are wet or where a dug hole will fill with water.  
With soil conditions such as dry loose sand that will not hold shape as it is dug into.

The usual requirements related to general fire craft and care always apply. As always, treat the wilderness areas you enjoy and count on to survive with respect. Be sure you do not make a Dakota Fire Hole in conditions where out of control wild fires are a possibility and avoid ecologically sensitive areas. Try not to injure the roots of trees and plants.

Follow local ordinances regarding the making of fires; these rules are in place for good reason.

## Making a Dakota Fire Hole

Now that we have the introduction taken care of, we can make a Dakota Fire Hole. As shown in the picture, I am using an army folding shovel to dig with. Many wilderness survivors carry a small hand trowel for the burying of human wastes and this also works well. A strong stick or part from your mess kit can also be utilized for digging holes in a pinch; survival experts are experts at innovation so use whatever means you have available.



Making a Dakota Fire Hole

To make a Dakota Fire Hole first remove a plug of soil about 12 inches in diameter and dig down one foot.

## Making the Fire Pit Chamber

Having selected a likely area in which to dig the fire hole, first remove a plug of soil and plant roots in the form of a circle about 10 or 12 inches in diameter. Continue digging straight down to a

depth of about one-foot being sure to save the plug and the soil you removed for replacement later on.

This part of the Dakota fire hole will serve as the main chamber that contains the fire. I prefer to extend the base of the fire chamber outward a couple of inches in all directions so that it can accommodate longer pieces of firewood. This saves time and energy in breaking up firewood into suitable lengths, and also has the effect of allowing larger and therefore hotter fires.



#### Making the Airway

Starting about one-foot away from the edge of the fire pit, dig a 6-inch diameter air tunnel at an angle so that it intersects with the base of the fire pit.

The prevailing wind is moving from in back back of me in the upper left corner of the picture.

The effect is a jug-shaped hole at the base of which you place firewood. The neck of the jug will serve as a chimney of sorts the function of which is to increase the draft and concentrate the heat of the fire into the small opening.

## Making the Fire Hole Airway

Now comes the key component of the Dakota hole that makes this fire making method so effective; the airway.

Before you start on the airway tunnel, determine the general direction of the wind. If the wind is too light to easily ascertain its direction you can often lick a finger and hold it up, being sure it is away from any obstructions. Evaporative cooling on one side or the other of your appendage will be felt from which direction the wind, however light, is blowing. That is the side of the fire hole on which to construct the airway.

Dig a 6-inch diameter airway tunnel starting about one foot away from the edge of the fire hole. Angle its construction so that the tunnel intersects with the base of the fire chamber as shown in the diagram and picture. As when you

made the fire hole section, be sure to save the plug containing the vegetation and roots as well as the loose soil you remove.

## Using the Dakota Fire Hole

Now that the Dakota Fire Hole is properly constructed, you can partially fill the fire pit chamber with dry combustible kindling materials and light the fire.

To start the fire I am using a Swedish Firesteel, the kind Survival Topics highly recommends to be included in every survival kit. These firesteels work even when wet and will literally light thousands of fires before wearing out – try doing that with matches or a lighter! We sell high quality Swedish Firesteels at the lowest prices in the Survival Supplies section of this website. Help support this website and buy them here - I guarantee a quality product.

Once the flame is going strong, drop it into the fire pit so that it catches the kindling on fire; gradually add sticks so that a strong hot fire is maintained.

## How a Dakota Fire Hole Works

The accompanying diagram shows the secret of what makes the Dakota Firehole so effective. As the fire burns, the hot air that is created goes up through the fire hole “chimney”. This creates a suction action that forcefully draws air down through the tunnel and into the base of the fire. The draft is increased even more by your having constructed the tunnel on the side from which the prevailing wind is coming.

Acting as a kind of bellows, the flames are continuously fanned and the fire burns hotter and more efficiently than a fire that is simply made on the surface to the ground. Hotter fires mean less smoke. In addition, the heat of the fire is concentrated into an upward direction where you can better capture it for use. This allows you to do more with less wood – an excellent survival fire by any measure.



### Light the Fire

Using a Survival Topics firesteel I am lighting the fire.

These firesteels always work, no matter how wet the conditions. Able to start thousands of fires, you can buy your own firesteels at the Survival Topics Survival Supply store.

## Fire Hole Improvements

Once you have made the Dakota fire hole you can easily set up a cooking surface for pots and pans by laying several parallel green sticks across the fire pit as show in the picture. Lacking camp cooking gear you can also find a flat rock that only partially covers the hole – and use it as a sort of hobo frying pan.

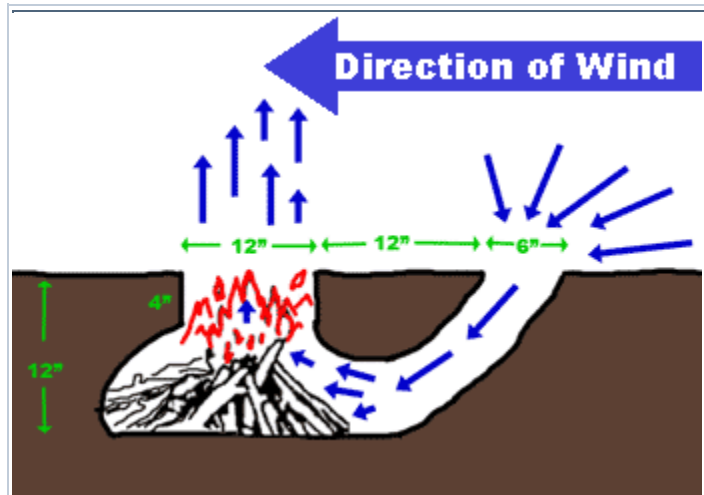
It is also an easy matter to set a “Y” shaped stick into the ground onto which is rested a green pole with bannock dough, fish, or other outdoor meal. For more information on the wilderness survival staple known as bannock read the Survival Topic on How to Make Bannock.

## Campfire Cleanup

When it is time to leave the area, be a responsible wilderness survivor who values the land you need for survival. Fill in the Dakota fire hole with the dirt you removed and saved when you were constructing it. Then replace the cap of vegetation. Doing so serves the double purpose of extinguishing the fire and leaving as little trace of your visit as possible.

In summary, the main advantages of using a Dakota Fire Hole include:

- burns hotter
- with less fuel
- producing less smoke
- less light visible to those you do not want to find you
- providing a stable cooking surface
- easy extinguishing of the fire
- and removal of evidence you have been there when you are preparing to leave.



Dakota Fire Pit Diagram

This is how a Dakota Fire Hole works.

As hot air from the fire exits through the top of the fire pit, a suction is created that draws fresh air down through the tunnel and into the base of the fire. This brings in plenty of fresh oxygen for combustion.

A cycle develops: The hotter the fire gets, the more air is drawn down into the fire pit - making the fire hotter.

There can be no doubt, making the Dakota Fire Hole one of the best types of survival fires you can make when surviving in the wilderness.

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