

Fire

In the Autumn 2011 edition of *The Quiver* I wrote an article touching on the topic of survival as it applies to the bowhunter. In this article I want to talk about fire specifically and the different types of firestarters and techniques available.

Fire is an important element in a survival situation as it provides heat for warmth, drying clothes or cooking as well as a psychological boost and if you're hunting in a spot where you are one of the prey species it can keep predators away as well. There are many ways to start a fire; some ways relatively easy and some that would only be used as a last resort. There are pros and cons to most of these techniques.



The most obvious tool for starting a fire is a match. While this is a great way to start a fire in your fireplace or fire pit I personally don't like to carry matches in my pack or on my person. They are hard to keep dry and you are limited to one fire per match IF you can light a one match fire every time. It would be easy to run out of matches in a hurry as you are limited in how many you could reasonably carry.

A Bic lighter or one of the more expensive windproof lighters is a slightly better choice for the bowhunter to carry. They are easy to use, easy to carry, fairly compact, and last for a reasonable amount of "lights". They don't work well when wet but can be dried out fairly easily. One of the drawbacks of lighters is the fact that they don't light well when cold so it is best to keep them in a pocket close to your body. The possibility exists of the lighter exploding in your pocket if it is crushed although I believe this would be a rare occurrence. While lighters have a fair amount of "lights" in them compared to matches they don't have as many as other fire starters.

I carry a lighter in my pocket or pack on most of my trips afield but recently I've started carrying a Firesteel brand striker on a neck lanyard.



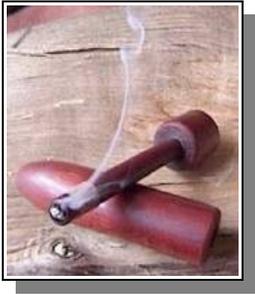
The Firesteel is basically a Ferrocium Rod that is scraped with a steel striker or the back of your carbon knife blade to create sparks of up to 3000⁰ C (5500⁰F). They are easy to use and carry, have a huge amount of "lights", come in different sizes, work while cold or wet and are relatively inexpensive. They do require you to carry some sort of tinder to catch the spark and produce a flame. For tinder I carry Vaseline soaked cotton balls. These are inexpensive and easy to make. They catch a spark very well and burn for a decent amount of time. Char cloth, which is basically cotton cloth burned without oxygen, can be used but it only produces an ember so needs to be used in conjunction with some other type of tinder. Other tinder includes: steel wool, (I haven't had much success with this) magnesium, FatWood (wood impregnated with resin) and dryer lint.

While I carry the cotton balls, I have also tested some "native" tinder in case I ever run out in the field. The two items that work pretty well and are available in most parts of Alberta are birch bark and cattails. I have found that the very fine outside part of bark from a live birch tree works much better than that from a dead tree. Live birch trees usually "shed" some bark and this is what I use. There is no need to cut the bark from a live tree. Birch bark and cattails take some practice to use but will work in a pinch.

A flint and steel is a very traditional way of making a fire. It is similar to a Firesteel. It consists of a piece of flint and a steel striker. The flint and steel are struck together to produce sparks. This method also requires the use of some sort of tinder and I'm sure most of the tinder used with the Firesteel would work. I have no experience with the flint and steel other than what I've read and seen. At our HCJ this past summer I was fortunate enough to witness ATBA member Roger Murray (Bear) use a fire and steel to light a couple of campfires. He used a combination of char cloth and jute and made it look easy, but I know it takes some practice. Roger uses the flint and steel exclusively to light his campfires. If you

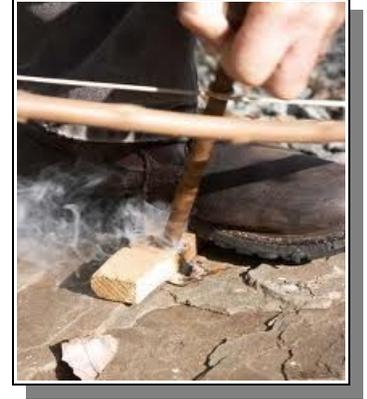


ever have questions he would be the man to ask.



The fire piston is an ancient tool used to kindle fires. When a gas (air) is compressed rapidly its temperature increases greatly and this heat and oxygen are used to ignite a small piece of tinder in the fire piston. Fire pistons can be bought commercially or they can be homemade. They can be manufactured of wood, copper, aluminum or other materials. Tinder that can be used with the fire piston include: char cloth, cotton fibres, amadou, and even punky wood. The great thing about fire pistons is they have an infinite number of “lights”. They are somewhat bigger to carry than other fire making tools but not substantially. They do tend to be a little pricey as well but they would probably last a lifetime for the average outdoorsman. I intend to get one for my pack.

Two other methods for starting fires include the bow drill and the hand drill. In my opinion these are for advanced fire makers. I have literally spent hours trying to build a fire using a bow drill and have had no success. I have made a lot of smoke but never been able to get an ember going. These methods should be used only if you have no other choice. It may be a good idea to practice them if for no other reason than to convince you to carry another type of fire making tool! The principal behind the bow drill and hand drill uses friction to make an ember which in turn is used to light tinder. The bow drill is the “easier” method of the two. The components of the bow drill method are a bow, spindle, the heartboard, and a bearing block. The bow is used to rotate the spindle on the heartboard using the bearing block to put downward pressure onto the spindle and heartboard, thereby creating friction and an ember.



The hand drill method is similar but using only a spindle and heartboard, the rotation and pressure being provided by your hands. The type of wood you use for the spindle and heartboard are important. These methods are somewhat complicated to explain. If you are interested in this primitive way of making fire there are many good articles and videos available on the internet.

These are some of the more common alternatives to matches or lighters. Whichever method you choose be sure to practice it when your life isn't on the line so that you are comfortable and competent if the need ever arises for you to use these skills in a survival situation. When you head out this fall on your hunting adventures remember to be safe and be prepared.



Keep the wind in your face,
Randy Hermann
Vice president, ATBA

Author's Note:

Since writing this article I have “discovered” a few more tricks in regard to native tinder (tinder that is collected in the environment you happen to be in). 1) I mentioned in the article that I use the “shed” bark from live birch trees. I have since learned a trick to be able to use bark from a live or dead birch. Take your knife and scrape the bark to make super fine shavings. This will make lighting the bark very easy. 2) I always wondered if there was anything I could use for native tinder in the mountains since both birch and cattails don't exist in the mountains where I hunt. I make sure I have lots of tinder on any mountain trip since I didn't want to run out. Due to my addiction to youtube.com I have “discovered” tinder commonly found in the mountains. The sap found in the blisters of the balsam fir when used in conjunction with a wick of lichen lights very easily from the spark of a firesteel. Use your knife or a small sharpened stick to puncture the blisters, then smear the sap that collects on your knife or stick on a piece of flat, dry wood. Once you have a liberal amount of sap on your piece of wood simply roll a small piece of lichen, which grows on the lower branches of evergreens, between your fingers to create the wick and add it to the sap. Throw your spark into this wick and you will quickly get a flame.