

THE PATHFINDER SCHOOL &  
BLIND HORSE KNIVES PRESENT

Issue Number 1  
\$6.99 USD



# SELF RELIANCE

*illustrated*

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## Teaching Our Youth & Passing on the Tribal Knowledge





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## Mission Statement

Self Reliance Illustrated, a collaboration between two grassroots companies (Blind Horse Knives, LLC and The Pathfinder School, LLC), will present a new and innovative approach to Self-Reliance, Survival, and Preparedness. Within these pages you will find detailed information on subjects that relate directly to your survivability. The collaboration of The Pathfinder School, LLC and Blind Horse Knives, LLC is one that is heavily focused on the development of the best tool-options for any wilderness situation, as well as the dissemination of information and cross-cultural learning that will truly help us to maintain and pass on the tribal knowledge.

Within these pages you will not find articles that jump from skill to skill or technique to technique. It will not focus on several types of plants for edible or medicinal purposes in the same article, giving you sparse and incomplete information due to restrictions of space. What you will find are detailed descriptions of specific skills and other things provided by nature that affect survivability. These articles will focus on one single skill, e.g. "Using the bow drill to obtain fire" and all that encompasses or "The dandelion, a versatile plant to befriend" with full descriptions and text that cannot be truly absorbed or learned in a scant few sentences before moving on to another method or plant.

What the Pathfinder System symbolizes is learning from everyone around you and valuing everyone's opinion. To that end you will see many articles by people you may have never seen or heard of that will pass on ideas that we believe are worth learning, so that all have the ability to teach and learn from one another.

We will be posting feedback in each issue from our subscribers, both good and bad, so that we may constantly improve on this magazine. In the end, this is not our magazine but your magazine and we want it to be worth your valuable time, energy and money.

Within this magazine, like any other, you will see advertisements from companies selling their wares. However, it is our decision that not just any company will be allowed to advertise with us just because they want to pay for advertising. All advertisers will have to be approved by our board before placing ads, and their goods will have to be something we consider worthwhile for purchase by our valued subscribers.

Lastly, we will not down-grade any individual, business, or company within these pages - so you will only see reviews for equipment that we trust and that you can trust your survivability to. It is our opinion that all publications are learning tools and that we should support those entities wishing to provide quality information on subjects of interest. It is our goal and mission to become the best source of learning and teaching possible, understanding that other publications dealing with the same subject matter are out there and are worthy of your attention as well.

Thank you,  
Dave Canterbury  
James Canterbury  
Dan Coppins  
L.T. Wright.

**Cover Image:** Photograph of The Spider Shelter, taken from article by Rob Considine, beginning on page 27.



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# From the Editors...

## Passing Down the Tribal Knowledge

I always say that Passing on the Tribal Knowledge is the most important thing we can do for our youth! So let's take a look at that statement as it relates to us in the modern era. Tribal knowledge does not necessarily mean Native American or South American Tribal Traditions or Skills, but it can! What I mean by Tribal Knowledge are the things that your Grandfather learned from his grandfather before that. Not just how to behave and conduct ourselves as good people but the little things that we today have lost. What is the Best Moon Phase for Fishing? What does it mean when the Crow alarms as you walk into the woods in the early morning? What natural feathers make the best Flies for taking small mouth bass? These type questions and many more primitive skills like making charred cloth for the next fire, building simple shelters if you get caught in a situation and have to spend a night in the woods, and how do I find direction without a compass. These skills many of us have never learned from our fathers and thus we cannot pass them down and they become lost!

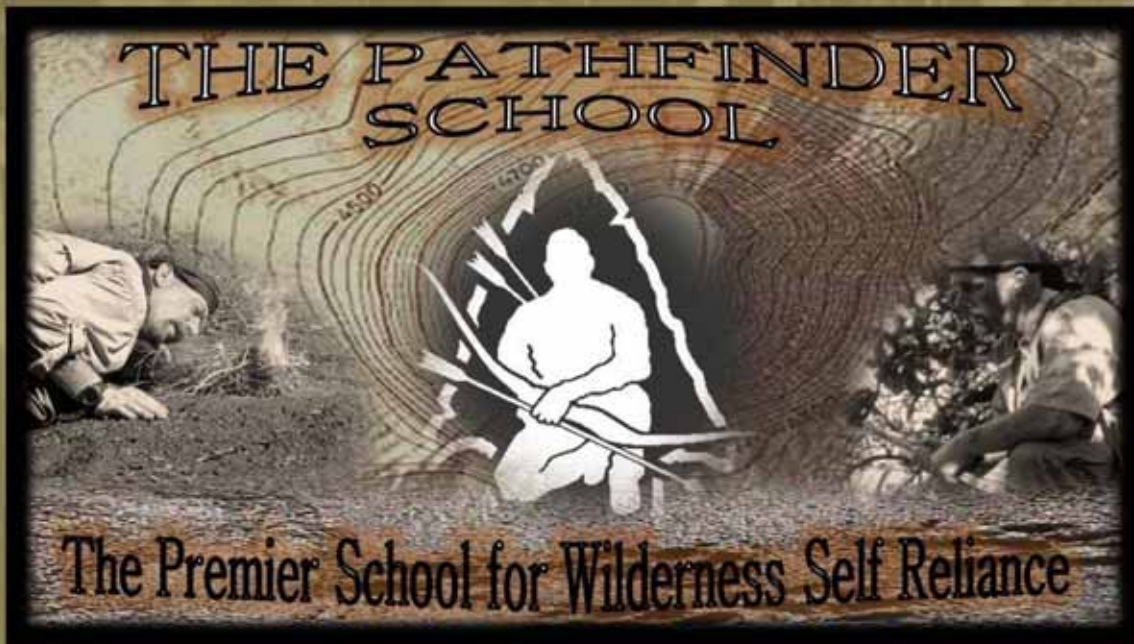
So what are we to do? That is why we strive to learn from each other in the modern day and that is why we go into the woods and spend time in nature to relearn what has been lost or forgotten. But all this is for nothing if we ourselves fail to pass it down. We should strive daily to teach someone something as well as to learn something new. Even if you have no children maybe the person you teach a skill to does. And if you stress this Passing Down of the Tribal Knowledge, maybe they will show their son or daughter. It has been such a goal of mine to make this happen that I started the Pathfinder Youth Organization just for this sole purpose.

This tribal knowledge is not confined to woods lore or gathering game, it is about wild edibles, preserving foods, medicinal plants, gardening, small farming and cooking as well. These topics are not confined to men alone but are more than worthwhile to pass on to all family members by all family members. During the Great Depression many people had to become almost totally self-reliant, in this day and age an event like that would cause chaos because we as a modern society are not prepared for this anymore. It is for these reasons and for the future of our society that we must always strive to continue learning and *passing on the Tribal Knowledge!*

Dave Canterbury







Founded by Dave Canterbury, creator of The Pathfinder System, author of *Survivability For The Common Man*, and co-host of *Dual Survival* on the Discovery network, The Pathfinder School is the premier school for wilderness self reliance. The Pathfinder School offers 3 course levels: Pathfinder Basics, Pathfinder Advanced, and Pathfinder Advanced Scout; for information on our current class schedule and to see the latest Pathfinder School merchandise, please visit our website at [www.thepathfinderschoolllc.com](http://www.thepathfinderschoolllc.com), email us at [pathfinder@thepathfinderschoolllc.com](mailto:pathfinder@thepathfinderschoolllc.com), or contact us by phone at (317) 544-8886.



# To Boil or Not to Boil

By Dave Canterbury

**W**aterborne disease is a risk for travelers who visit countries that have poor hygiene and inadequate sanitation, and for wilderness users relying on surface water in any country, including the United States. In today's world of Large Farms for both Livestock and crops, the threat goes into more than just pathogens it also involves poisons from pesticides and fertilizers. Primarily humans, but also animals, are the source of microorganisms and toxins that contaminate water sources and cause intestinal infections or poisonings.

During excursions into nature as well as times when we are caught in an emergency scenario we must decide what will be the best method to decontaminate our water sources. Carrying water from home is always the best measure of defense in the short term and you should consider that 1 quart or liter will not go far on a hot day or in the event of an overnight stay. Combine this with the fact that we may use water for cooking as well and it is easy to understand that most of us will not leave the road and wander off trail carrying a gallon or more of water but that there may be a realistic need to consume that much in a given 24 hour period.

With the above being said what are we to do in a world filled with the latest techno gadgets and new fangled chemicals to treat our water? **BOIL!** Yes boil, boiling your water is the **ONLY**, and I repeat **ONLY** 100% guarantee you have to kill water borne pathogens in ground source collected water. What about Chemicals you say? Well that is another issue all together as boiling will not remove chemical contaminants. To be as safe as we can we must first filter and then boil water for best and safest results. There are a variety of good filter systems on the market today but we must remember again that no Filter system or Chemical alone is capable of Killing **ALL** water born organisms.

So as far as filtering goes, buy the best one you can afford or something you are comfortable with but do not rely solely on filtration for killing all



**Two different Kit options for consideration to disinfect and store water.**

water borne pathogens cause it ain't happening!

Boiling water is a sure bet when it comes to disinfecting your water, but how long do I need to boil and what is the best way to collect this water to keep from getting the bad with the good? Well there are several collection methods you can use but my favorite is to use one container (Metal) for collecting and then boiling and another container for holding and cooling the potable result. In this manner you are sterilizing the container so to speak by heat. The Wilderness Medical Society and the CDC (Center for Disease Control) agree that temperatures of 140-160 degrees F are sufficient to kill WB Pathogens over time, it is a general rule that that amount of time is the average time taken to reach a rolling boil at normal elevation (below 6,000'). At higher Elevation the time is extended due to the fact that water boils at a lower temperature (about 99-100 F @ 7,000') in less oxygen rich environments. So in this case a 2-3

Dave Canterbury is the owner of The Pathfinder School, LLC. and Co-Host of the television show Dual Survival, which airs on the Discovery Channel, he is an avid woodsman and Hunter, Military Veteran, and Survivalist working with hundreds of people each year to pass on the tribal knowledge. Dave is also one of the Co-Founders of Self Reliance Illustrated.





**Left: The author's stainless bottle and Aquamira water purification tablets.**

**Below: Stainless steel bottle and cup combo works very well to provide two metal containers for disinfection use.**

min boil is recommended.

With all that said there are obvious chemical and filtering methods you can use to kill 98-99% of the nasties just in case you CANNOT boil. Worldwide, Chlorine Bleach is a trusted measure for treating water sources consumed by thousands. However you are still taking that small risk and unless filtered you still must deal with chemical contaminant possibilities. In my Pack when I travel especially overseas and sometimes even on stateside treks I choose a 50 gal "Aquamira" brand water filter and Chlorine Dioxide Tabs, this combination while not 100% effective does at least address both contaminate issues as well as being small and light to carry. If you get stranded and need more than 50 gal of water you probably look like Rip Van winkle upon rescue and the Tabs are packaged in 12 lots so multiple packages are carried but 1 tab is good for 1 US Quart or liter.

This brings up another issue of measurement for tab use? In my opinion any water bottle or canteen device carried should be a standard QT or Liter, and then there is no confusion and no worry. Too many water bottles today are made to be aesthetically pleasing and utterly useless for emergencies. If I have the choice of only 1 Bottle it will always be metal, that way I can at least boil if possible and then let the container cool before consumption, but a US Issue canteen and Cup







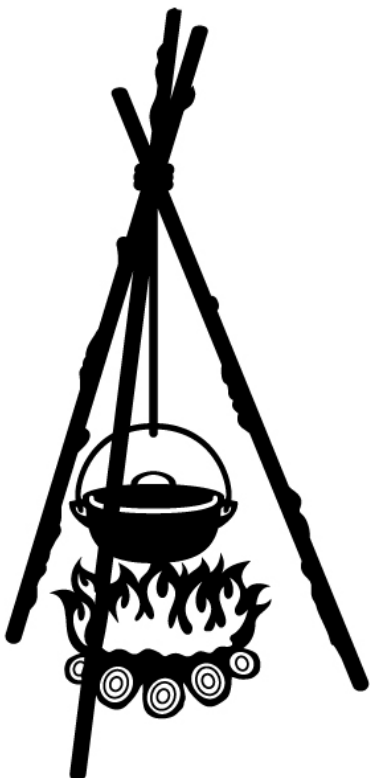
Using the two container method of water collection keeps one container always decontaminated once water is boiled in the collection container.



or simple Nesting cup for the metal bottle is an easy remedy for this problem as well.

At this point you now have an issue with time? It takes a certain amount of time for chemicals to decontaminate water to the best of their abilities so without a watch or sun dial who knows, better safe than sorry, wait as long as you think is 15 or 30 min and then wait twice as long! Or better yet **JUST BOIL!**

Drinking suspected water sources is a serious consideration that must be decided individually but my personal take on this is that if you have no way to build fire, or no way to boil the water, and no chemical or filter items in your situation it is always better to be found or get out alive and get sick later than to be found dead from dehydration (Just food for thought!)



**Canteen and Cup Kit, Cup is the collection and boiling device while the canteen is a storage device.**



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## 2011

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Shamanic Journeys 1 .....	April 16-17
Learn Bee Keeping (in the city or country) .....	April 22
Survival Self Defense (Woodsboro, Maryland) <b>NEW CLASS</b> .....	May 6-8
Spring Edible & Medicinal Plant Class .....	May 14
Wilderness Survival Skills 1 .....	May 22-28
Brain Tanning Deer Hides (hides included) .....	June 3-5
Escape, Evasion & Invisibility .....	June 11-17
Summer Edible & Medicinal Plant Class .....	July 2
Survival Skills Retreat (North Maine Woods) <b>NEW CLASS</b> .....	July 10-16
Survival Skills 1 (weekend class) .....	July 22-24
Maine Survival Skills Adventure (North Maine Woods) <b>NEW CLASS</b> .....	August 6-13
Survival Skills 2 (Applications & Techniques) .....	September 11-17
Fall Edible & Medicinal Plant Class .....	September 25
Advanced Escape, Evasion & Invisibility (Advanced Scout) .....	October 8-14
Canning / Wine / Cheese / Soap and Candle (Homesteading) Skills .....	November 11-13

## 2012

Winter Survival Adventure (Learning and Living with the Cree Indians in Northern Quebec) ..... Jan. 30-Feb. 5

Call for Small Group and Private Classes Availability.



# *Tips & Tricks for the Tee Pee Fire Lay 10 Steps to a "One Match" Fire*

By Tom Laskowski

**W**e all can agree that fire is a key element in wilderness survival but what we may disagree on is the "best" way to start it. Over the years, I have tried most every fire lay, from pyramids to log cabins to a simple pile of small sticks thrown onto the ground. Each works to some degree, especially if the wood and air are bone dry. However, in more realistic conditions when you have unseasoned wood and high humidity in the air, I've found that the Tee Pee fire lay is the most reliable configuration, especially if you know a few tricks to "stack the deck" in your favor. The more things you do to "stack the deck", the higher the chances you will "win" (get a fire).

Fire Volume #1, Midwest Native Skills Institute's (MNSI) highly acclaimed video on primitive fire making, provides detailed instruction on making fire with flint & steel, the bow drill, and the hand drill. But because all fire-starting methods require growing your tiny initial flame into a larger, self-sustaining fire, we start the video with a section on "one match fires." We cover a host of tips and tricks that virtually guarantee that you WILL get a fire started if you meticulously follow each step and use each trick. I will be sharing some of those tricks with you in this article. On a dry summer day, with dry wood and no pressing need to get a fire started, you can skip many of these tips and still get a blaze going. However, keep in mind that you are decreasing your chances of getting the fire started with each step you decide to skip or short cut. On a dreary day, when all the wood you can find is wet



and you're within hours of going into hypothermia, I would strongly suggest you take the time and use each tip and trick to ensure that your fire (and you!) will survive.

## **Tips and Tricks**

1. When talking about fire lays... size matters. Too small of a structure and there won't be enough burning kindling to build your fire up; too large and you'll need massive amounts of tinder to fill it or, more likely, it will "burn hollow" and go out. I found the ideal size to be as tall as your hand. Simply place your fingertips on the ground and



Tom Laskowski is the director and teaches at Midwest Native Skills since 1997. The school is located in Ohio and teaches classes on "non-military" wilderness survival; edible & medicinal plants; escape, evasion and invisibility; and other self-reliance classes. Tom can be reached at 888-886-5592 or through the web site at [www.SurvivalSchool.com](http://www.SurvivalSchool.com)



extend your thumb straight out. The height of your thumb above the ground is about the height your Tee Pee fire structure should be.

2. Collect the driest wood possible. Damp wood doesn't burn easily because the moisture keeps temperatures from rising high enough. The best source of dry wood is dead trees that are still standing (called "standing dead wood"). Since the standing dead wood is vertical (standing), the capillaries in the wood are also vertical, allowing gravity to pull moisture in the wood down to the ground relatively fast, leaving you with dry wood that hasn't had time to rot. Your next best source is "snags" or branches that have broken off of a tree but were tangled up in other branches and still suspended off the ground. Snags can air dry without absorbing ground moisture or rotting.

As a last resort you can use wood off the ground, but remember: the ground holds moisture that is transferred to the wood lying on it. If you do use wood collected off the ground, at least try to avoid pieces that have mosses or fungi growing on them. It's also a good idea to strip off the damper bark and even shave off the moister, outer wood to expose the drier, inner wood. Get the driest wood possible.

### Three tests for dryness that I use are:

- Any stick that is green in color is still alive. Live wood is probably about 70% water, and water doesn't burn.
- If a stick breaks with a "snap", then it's fairly dry. If it only cracks, or bends and then breaks, it is too damp.
- In the summer, you can hold the wood against



your cheek. If it feels warm against your skin after a second or so, then it's fairly dry. If it still feels cool, it's too damp.

3. Get three straight sticks about the diameter of your pinky finger that will serve as the framework for your Tee Pee fire. At least two of these sticks should have a "Y" at the top so that you can use the "Y". It's to lock the framework together.

Using your knife, carve all 3 of these sticks into "fuzz sticks" by shaving into the wood just under the bark and then lifting up the wood sliver (which remains attached). Push these sticks into the ground to form a "tee pee" and interlock their tops to stabilize the structure. You want the structure to be tall and skinny (not short and fat).

4. Determine which way the wind is blowing and choose the side of the Tee Pee structure facing



into the wind to have the opening. This not only allows any wind to help your fire along by blowing the flames into the structure when it is lit, it also pushes the smoke away from your face if you need to blow into the fire lay (through the opening) to help it along.

5. Make a platform inside the structure. You can use small sticks or a piece of bark for this. The platform will keep the tinder you later put into the structure off the ground (and away from the ground's





moisture), plus the platform will raise the tinder up to allow air under it and create a "chimney effect" in your fire lay.

**6. ESPECIALLY IMPORTANT:** Collect thin, straight sticks (kindling) that are as long as your three support sticks from step #3. These kindling sticks should be the diameter of a toothpick. If they will not fit between your teeth (as a toothpick will), they are too big in diameter. This first layer of kindling has to be very thin to ensure that the sticks catch and burn on their own in the few seconds before your tinder burns out. Collect enough of these thin sticks to completely make one full, tight layer around the



structure. Typically, this will take about 50 sticks (10 are too few and 100 are too many).

7. Collect a second layer of kindling sticks that are slightly larger in diameter than the first layer (*see photo comparison of level 1, 2 and 3 stick sizes*). The concept here is to have the first layer ignite the

second layer in less than 20 seconds. If your second layer sticks are significantly larger than those in the first layer, they won't catch before the first layer burns up, breaking the progression, and your fire will go out. Arrange this second layer of sticks evenly around the structure over the first layer. It will take about 30 sticks to complete this layer

8. Collect a third layer of kindling sticks that is slightly thicker than those in your 2nd layer and arrange them evenly



around the structure. This layer should take about 20 sticks.

9. Collect additional wood that you will use after lighting your Tee Pee fire lay to build up your fire into a campfire. Use the concept of gradually increasing the diameter: this wood should include pieces that are slightly thicker than those in your 3rd layer, all the way up to pieces that are the thickest that you intend to burn. The thickest pieces will determine how big your campfire will be and how long it will burn unattended. A small, quick fire may not need sticks any thicker than your

finger, while an evening cooking fire may use sticks as thick as your wrist or upper arm.

10. The last construction step is to fill the inside to the Tee Pee structure with easily ignitable tinder. Tinder is any fine, fluffy material that will ignite easily using a spark (from a Ferro cerium rod) or flame (from a lighter, flint & steel or other primitive technique such as those demonstrated in **Fire Volume #2 - 40 + Ways to Make Fire without Matches**).

The best natural tinder is a mixture of several fluffy materials such as shredded inner bark from a cedar, shredded dry grasses, small bits of cattail down, dandelion clocks, dogbane or milkweed seed fluff, shaved bark from a tulip poplar, pine needles that have been crushed or finely shredded, and fine slivers of white birch bark.

Ideally, you want enough tinder to completely fill the interior of your fire lay. However, don't pack it too tight because you want to keep the tinder fluffy and airy so that it burns well.

Now, I know the tag line of this article is "**10 Steps to a**

*(Continued on page 88)*







# *Proper Bowdrill Form*

## *The Ember is in the Details*

By Dave “Mitch” Mitchell  
Photos by Kristal Mitchell



unfavorable conditions. Common hurdles to overcome are inclement weather, high humidity, cold damp conditions, and fatigue.

**Fundamentals** - Proper Form Fundamentals break down in the Natural Order into 3 Key Parts:

- BODY Form
- HAND Form
- SPINDLE Form

### **Body Form**

Proper Body Form allows you to stay in the optimum position to use your bowdrill set efficiently and effectively as long as necessary to produce your ember. Conversely, if your posture requires you to be constantly “catching your balance” you will be expending calories unnecessarily, jeopardizing your success and survivability. When fatigued, an off-balance foundation can be the only reason you fail at producing an ember, as you will tire more quickly.

**Your Body Form consists of 3 Main Pieces:**

- Front Foot on the Hearth
- Rear Knee
- Rear Toes

This Tripod allows equal weight distribution and a centered, low body mass for stability. It is important your Rear Knee is placed to the right of your Front Hearth Foot, this outside angle will allow you to hold your center of gravity from creeping right. The same is true for your Rear Toes protecting your center from falling left.

**W**hat is the single most contributing factor to success at producing an ember with a Bowdrill set?

Although there are many answers to this question including, materials the set is comprised of, carving techniques used through-out the set, length of the bow, tightness of the bow string, tinder bundle construction etc...When your spindle begins to revolve in its socket, it's your FORM that is the deciding factor in your success.

Great form will also give you the edge needed to push the odds in your favor against

Mitch is a Graduate of the Pathfinder School's First Northeast Advanced Class, Certified in Phase I and Currently working on Phase II of the Pathfinder System. You can find Mitch on his Youtube channel Nativesurvival.

**Hand Form** - Correct Hand Form Relies on 3



Components:

- Front Wrist Locked onto Shin
- Perpendicular Bearing Block Angle
- Level Bow Hand



To stop your spindle from becoming loose or wobbly, you must lock the side of your front wrist onto your shin for stability. This is the “Rock” of your technique. A stable spindle creates more consistent friction, thus generating greater heat in less time.

Perpendicular Bearing Block Angle is incredibly important to controlling your spindle’s

progress. The spindle could slip out of the Bearing Block, or contact the Block’s wall, creating friction, which slows down the spindle, as well as creating an irregular revolution pattern.



Keeping your Bow Hand Level will stop the string from traveling up or down your spindle during its revolutions. Downward pressure comes from the Bearing Block not your bow. Remember to use your larger shoulder muscles while bowing, not just your biceps and triceps.

### Spindle Form

In one word... PLUMB.

When your spindle’s Plumb, 100% of the spindle’s surface area is creating friction simultaneously. Your downward pressure transfers to the whole socket rather than a fragment, generating

*(Continued on page 88)*





# *The Importance of Carrying Pre-made Tinder*

By Mike Lychock



I reviewed the following fire starters (clockwise from top); Pitch Witch tree pitch wrapped in wax paper fire starter, Esbit Stove fuel tablet, Coughlan's firestarter stick, Vaseline soaked cotton ball and a Trioxane fuel tablet.

I just finished reading an article which provided another example of a critically overlooked piece of outdoor equipment, pre-made TINDER. Given a survival scenario, several different pieces of equipment could be needed, but when faced with the need for an immediate warming, snow melting fire, tinder jumps to the top of the list. In the article, a hunter who appeared to have been prepared for a day hunt in Idaho's White Cloud Mountains got lost when his GPS and compass failed. On the second day in the field, the cold and fatigued hunter, realizing his situation attempted to make a fire in the damp, cold mountain conditions. He tried to light wood shavings he made with his knife and then tried to light a dollar bill and toilet paper to no avail. Thirty matches later (the box's striking surface ruined by moisture and matches being lit by a butane lighter), he cut off a piece of cheesecloth game bag as tinder and got a fire going. He eventually walked

out of the forest and rescued himself.

In a second article, an injured skier survived nine days in the backcountry. He was also prepared and when asked about making a fire in wet, cold conditions he suggested "packing smarter not more." He had matches, a lighter and magnesium bar none of which could ignite available tinder (wet leaves). He is quoted as saying "I would have given anything for a long-burning tinder cube."

Why don't more people consistently carry fire starters as standard emergency gear? Most survival kit lists include things such as fish hooks, split shot and sewing needles. All of which serve a specific purpose, but when the immediate need is to build a fire, nothing is more important than generating and maintaining a flame. Today's focus appears to be on a means of ignition. Both above mentioned outdoors men had ignition sources. Almost every kit list suggests some form of fire making equipment and usually three be it a lighter, matches, flint stick or magnesium bar. Conventional wisdom must take for granted that people will be able to find viable tinder in any situation under any conditions. I've got news for you, it isn't always so. If you've ever camped, hiked or hunted in wet conditions and tried to start a fire, you will understand the point I'm trying to make. Now, add cold temperatures and possible injury to the mix and you've got trouble. Our hunter and skier were in such conditions. Usually when you realize things have gone bad, it's too late.

I remember an outdoor writer was preparing an on-person survival kit for a northern Canadian canoe trip and included 3 methods of starting a fire, matches, a candle and fire starting paste augmented by a knife and folding saw (fire material gathering and maintenance). It is interesting to note that fire making tools made up the majority of the kit's contents. The author knew the importance of fire for warmth and signaling, not to mention food/water preparation, insect control and general morale

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**The burn after 1:30 min/sec. The cotton ball is second from left and the Pitch Witch is to the extreme right. The Esbit is still maintaining its original shape at left, the Trioxane is burning with an almost invisible flame (center) and the obvious Coughlan's stick in the foreground. All are burning well.**

boosting.

Pre-made tinder has been around for some time in many forms. Outdoorsmen have long used “fire starters” to help start a campfire in less than emergency situations. Pre-made tinder fire starters are manufactured by several companies in many different forms.

For this article, I assembled several fire starters that I presently have in my gear inventory. Most individual items weigh in at half an ounce or less. If you carried 12 fire starters, it would weigh less than 6 ounces. Not a lot of weight or bulk for the possible return on the investment. I utilized the 3 most common sources of ignition to start the fire starters. Butane lighter, Ferro cerium rod and strike anywhere kitchen matches. I was told by a good friend who is a survival instructor that an effective fire starter must be able to light from direct flame or spark. It must also maintain flame for several minutes. Most started with just a spark after a bit of prep work i.e.: scraping or roughing. All started with a light from the lighter or match. The Vaseline cotton ball was the easiest to start from any source.

All of the starters were ignited within seconds of each other. I documented the burns at different intervals.

All starters burned for a minimum time of 5:30 min/sec. with the cotton ball burning out first. Interestingly, the Coughlan stick burned the longest fizzling out at 10:00 minutes. It was however the most difficult to light even by flame. I probably won't include them in my gear from now on. In fact, after this experience and using the advice of several teachers of survival and preparedness, I have settled on Vaseline soaked cotton balls. They are very cheap and easy to produce at home, don't dry out and can be compressed to fit a fair amount into any sized container from match cases to 35mm film containers (what are they?). Though my control sample burned for over five minutes, the time can vary depending on the size of the cotton ball and amount of petroleum jelly applied. Triple size cotton balls are the best to use. I also prefer to smear the petroleum jelly into the fibers rather than soak them.

While there are many natural types of tinder to utilize and I do agree everyone who spends time in the woods should know how to locate and process them. Still, there is simply no substitute for pre-made tinder when the chips are down. Petroleum jelly cotton balls, dryer lint, wax and cardboard makes no difference. A cheaply made abundant fire starter can mean a difference between life and death. I know my kit is well stocked. Is yours?





# Finding Dry Firewood

By G.W. Neal



Here the author is taking a piece of wood and getting to the core by cutting the outer layers off and creating a square piece to work with.

“**B**uild a fire? But we don’t have any dry wood!” I have heard these words time and time again from the mouths of novice young campers to fairly seasoned woodsmen. When the slightest thought of wet firewood enters my mind, those words resound like a broken record. Many a cold and wet Maine night, the fire of ‘wet wood’ has fed, warmed, and kept me dry.

There is always dry firewood, we just have to look to the core of the wood to find it. The areas that we need to target are the inner layers of a piece of firewood. And it’s as easy as it sounds. Think back to the times when you were a child and you counted the rings on a tree stump to estimate the tree’s age. The place where the rings begin is at the center of any piece of wood, and it is this very center that is usually the driest part of the wood. The key to it all is in the laying and the bark of the tree—it’s just nature’s way of protecting the tree’s growth, while keeping the core nice and dry for us!

So when I need to start a fire and wet wood is all there is, I begin my search by reversing my usual routine. Instead of searching out smaller pieces of

G.W. Neal is comfortable in any geographic setting but is most at home in the woods. He spent the past year and a half living off of the grid in a minimalistic two room cabin in the Sebago Lake region of Maine. He has worked extensively as a wilderness adventure guide, leading trips for youth and young adults through most of the mountains and bodies of water that New England has to offer.

kindling first, I look instead for a larger piece of wood that would be a good candidate for splitting. I look for wood that has a decent amount of bark because bark tends to collect moisture and keeps it from being absorbed by the wood’s inner layers as I already mentioned.

Once I have gathered a few larger pieces, I then split the wood by cutting the piece into a square (photo A). From this square I like to split the piece of wood again, only this time into quarters (photo B). I do this because it fully exposes the center allowing the driest part of the wood to be separated into four pieces and gives me the maximum amount of dry, burnable surface area. After I have enough of these dry, larger pieces, I then make my kindling from the drier, left over parts of the wood I have just split (photo C). I also like to use items in nature that can ‘burn wet’—these are pieces that have specific properties that allow them to burn when damp or wet. Drier items that happen to be hidden under layers of rocks or plants also make great kindling. Just look for anything under nature’s umbrella. What these items are exactly varies based on your geographic location. They are mostly types of pine needles, pinecones, and varieties of bark. Most of my outdoor life has been spent in New England. Luckily we are privileged to have an abundance of birch trees. Birch bark can ‘burn wet’, and ignites wet or dry with no problems at all due to the oils that it contains. Once I gather up some of this kindling, I go about building my fire per my usual way. It is important to remember that once your fire is built, it can then be used as a tool itself to dry out any wet firewood that you may want to use later to keep it going.

Even in our modern times, fires aren’t always just luxuries or a means of camp recreation. For many of us folks, they are still a means of home heating, comfort, and food preparation. In these situations, knowing how to build a fire is the truest and indeed most ancient form of survival. Understanding how to do it with ‘wet wood,’ will see you through those cold and damp nights, warm and dry.





Above: The author cuts the square piece into quarters pieces.

Below: The author uses the inner sides of the quartered pieces to make kindling.





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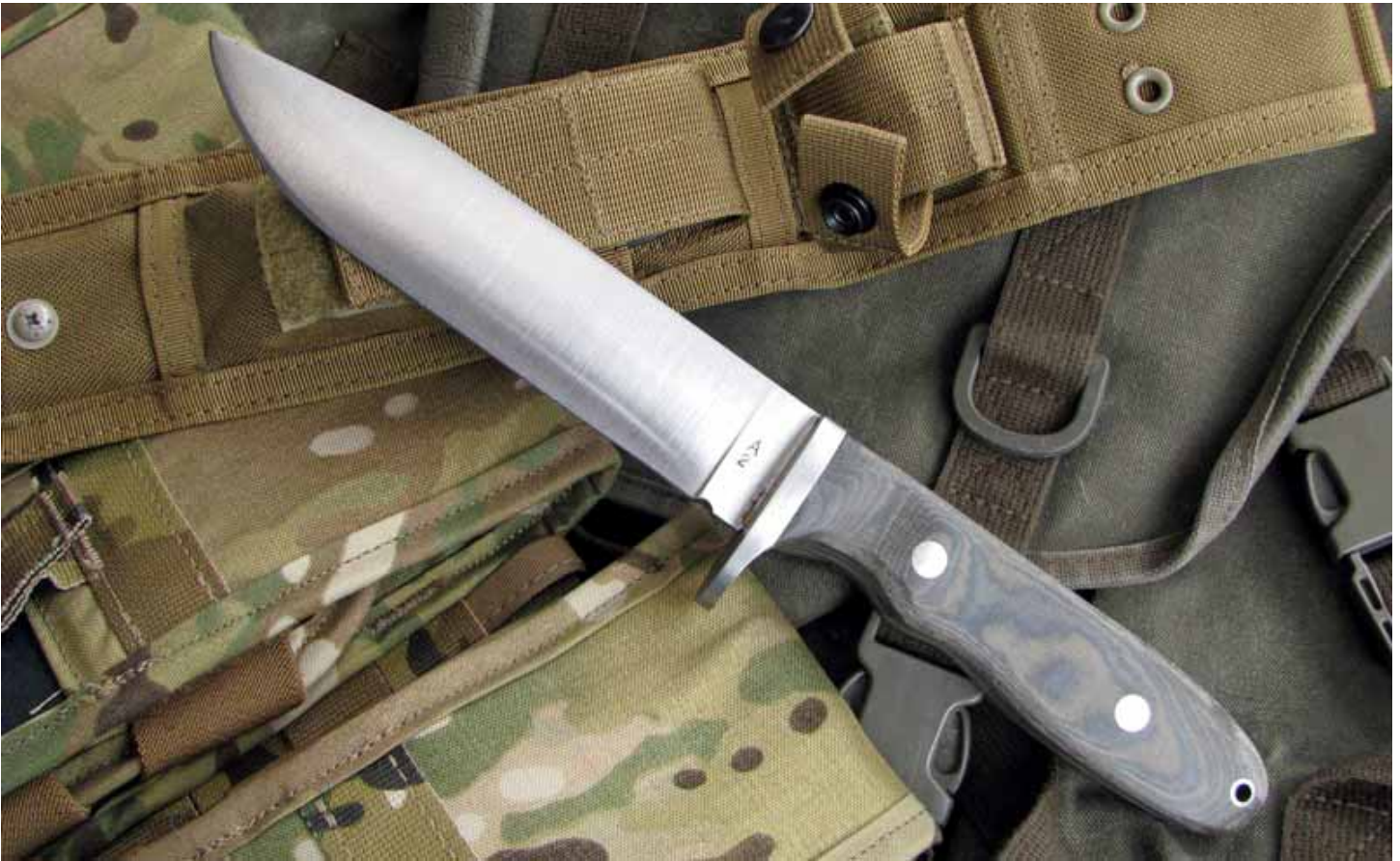
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# *Bare Steel to Full Field:*

## *The Gossman Military and Field Knife (MFK) Evolution*

By Kevin Estela  
Photos by Tim Stetzer



### **Introduction:**

The popularity of the woodsman's trio of tools has helped certain knife designs fall by the wayside. The dedicated chopping tool, small pocketknife and 4 to 5 inch fixed blade belt knife are standard equipment for most seasoned outdoorsmen. However, the luxury of three different dedicated tools is something not everyone can carry. Sometimes, a single knife is all you can fit on your belt, or add to your daily load out gear.

I am a hardened believer in the utility of a 4 inch blade. As a Survival Instructor with the Wilderness Learning

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Center, my 4 inch BRKT Fox River is pushed to the limits in teaching courses, and demonstrating skills. At times though, a larger field knife would make certain tasks easier. A mid-sized knife with some heft could handle fine cutting, while retaining sufficient mass to chop branches and be long enough to perform camp knife duties. Somewhere in between a small utility belt knife and a dedicated chopper exists a perfect mid-size knife. With this length compromise in mind, I contacted Scott Gossman about the possibility of creating a knife equally at home on a woodsman's belt or in the hands of those who go into harms way.

### **The Design and Building Process:**

The design of this knife started with a phone call to Scott Gossman. I've used his custom wilderness tools for over 3 years and I have never once been disappointed with their performance. For well over an hour, Scott and I went back and forth with ideas on how to breathe new life into this often overlooked blade size, length and purpose. We settled on creating a knife that would not only suit a woodsman's needs





**Left: The Gossman MFK fits in a variety of commercially available sheaths like this Eagle Industries Model.**

**Above: The Gossman MFK in a forward grip.**

but be a welcomed companion on a soldier's belt. Harnessing proven military style knives and outdoor favorites, Scott and I designed what he considers his first "tactical" style knife.

I had the distinct pleasure of working with Scott in the new home of Gossman Knives, in Maryland. Our conversation over coffee revolved around outdoors gear, survival skills, and of course, blades. Scott, a master knife maker, taught me the finer points of turning plain steel into a functional knife. In all my years of using knives in the field I've developed an admiration and affinity for a fine blade, but because of this experience, I have even more respect for blade smiths and what they do. Scott grinds his knives with a purpose. As he presses the steel into the belt grinder, you can tell he has an intended use in mind for his knife. His actions are deliberate and well rehearsed. He "hogs off steel" with a heavy grit belt and thins the edge on progressively finer belts. Scott is dedicated in ensuring his blades are efficient cutters and slicers. He describes the geometry of his blades as "70 percent flat grind and about 30 percent convex." Scott routinely checks the thickness of the blade behind the edge with electronic calipers. Despite seemingly endless questions and inquiry, Scott's patience and attention was tested but unwavering. I learned more about knife making in one session with Scott than I did in all the years collecting and reading about knives.

#### **The Testing Phase:**

##### **Field Use:**

The finished Gossman Military and Field Knife handled a multitude of tasks a soldier or outdoorsman may

encounter when in the field. It should be noted that during the entire testing phase of the knife, I chose not to touch up the edge or coat the blade with any protectant. I wanted to simulate what a knife might go through during an extended period of time away from cleaning supplies. On a week long canoeing trip in the Adirondacks, the Gossman MFK was able to withstand the repeated use during firewood gathering and preparation. Light to moderate chopping tasks were easily accomplished and battoning the blade through dry hardwoods left the blade with no visible wear. As a test of tip strength, I drove the blade point first into seasoned maple and torqued the blade free. Again, the properly heat-treated A2 steel was unaffected. The knife was shaving sharp at the end of the week.

During a back to back Basic and Advanced two-week long survival skills course I taught at the Wilderness Learning Center, the knife handled every task given to it. From splitting fire boards for bow drill friction fires, to cutting straight spear shafts to fine carving of triggers for primitive

#### **Chopping may not always occur in the woods. The Gossman MFK can handle 2x4's with ease.**







The Gossman MFK with a timeless classic, the USMC Kabar.



While prying isn't the intended use of the knife, during testing the blade was bent during batoning and returned to true. Gossman's heat treat creates a strong blade.

trapping, the Gossman MFK rose to the challenge. The half guard of the knife, contrary to popular belief, did not greatly impact the ability of the knife to be used with a “choked up” grip. The guard is dehorned and didn’t create any hot spots during use. The ultimate field test of the knife came during the class on vehicle recovery. Few survival schools place emphasis on this skill that can truly save a life. Having a good stout fixed blade makes creating anchors with back braces easy. During this class, the Gossman MFK was used to chop hop hornbeam, a type of ironwood found in the Northeast. This wood has chipped lesser quality blades but not the MFK.

The Gossman MFK was shaving sharp through most of the testing but lost this fine cutting edge during the most severe of tests I put it through, cutting tires. This test is not one that mimics a regular use of a blade but it does simulate what one could do to create a black smoke signal fire.



Tires, oil and birch bark will release black smoke when burnt. An effective signal fire is one that creates contrasting smoke against the backdrop. The MFK cut strips of an old tire, complete with reinforced sidewalls, found along a fire road. This heavy use rid the Gossman blade of its fine edge but it was still workable. Scott Gossman is not a firm believer of shaving sharp in the field. "Most people forget shaving sharp isn't important. A convex edge that isn't shaving sharp can still push cut wood and slice; just not as smoothly." This statement couldn't have been truer. The MFK was used for the duration of the trip and handled wood crafting and shelter construction with a less than shaving sharp edge.

### Self-Defense:

While not originally intended as a "fighter" or "fighting" knife, the Gossman Military Field Knife excels in use as a live blade for martial arts training. As a martial arts student, I could easily manipulate the blade in performing template drills and transitioning from one grip position to another. I hope to never use a knife in defense of my life, I am assured this blade would not fail under extreme use if pressed into that role.

### C o n c l u s i o n s :

The Gossman Military and Field Knife is an excellent alternative to the proven combination of a small utility knife and chopping blade. While not as purpose driven as a fine blade, or larger blade, the MFK handles these tasks like a Jack-of-all-trades blade instead of a master of one. I would recommend pairing this field blade with a quality folding multi-tool to handle wire cutting, lifting pots and any other light duty tasks tightening screws and opening cans. During the entire testing phase, the blade only suffered light surface rusting in some spots and a heavy patina. A2, when properly cared for, will not end up looking the way I made this blade appear after only a short period of time. Then again, I tested this knife harder than I would hope it ever has to experience during



**The MFK is comfortable in reverse grip as well. Note the thumb used to cap the butt of the handle.**

regular field use. I am pleased how this blade held up, and I have total confidence in recommending it to anyone looking for a quality field knife.

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# *The Spider Shelter*

By Rob Considine

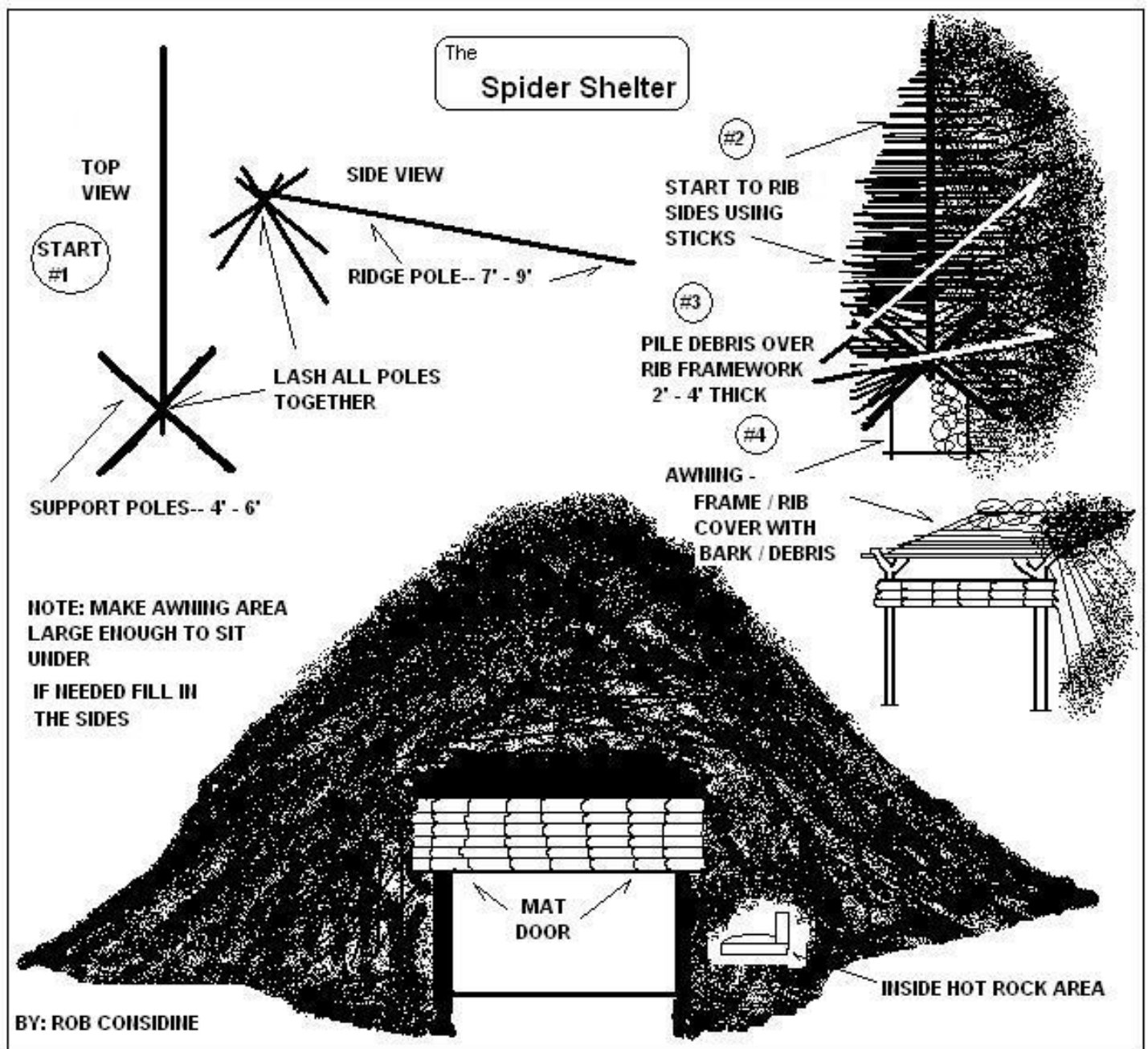
**W**hen we enter the world of nature the trail we take can lead us in many directions. One of the first considerations is to slow down and enjoy the surroundings. You have entered a world that offers so much valuable information. Look, listen, and if needed, feel the new environment. You don't want to miss anything if possible. Using basic observation and applications many wilderness skills can be achieved. One of the first survival needs is possible shelter. On your journey take a look to see what the local animals are using to protect themselves. As you walk see how the rabbits protect not only themselves but also their young from the elements. Peek inside and notice the size of the living area. Check to see if some grass is patted down on the floor. Notice the natural overhead

cover the rabbit has chosen. Look up into the trees to see how the squirrel has built a nest. Notice which way the opening is facing and on what side of the tree it is on. Observe how the forest debris is packed around the framework using the strength of the tree limb and branches. Try to see the small opening just large enough to squeeze into and maybe even a door plug to seal the entryway. Also, notice what type of tree the nest is built around. Is it just a bush or a sturdy deep rooted tree that will withstand many weather changes and strong winds? Let's consider a bird's nest. Would this type of structure be suitable for you if turned upside down and fitted to size? Another beautiful structure is the beaver/muskrat lodge that with its dome top sheds water and holds snow at bay. Not to forget the body warmth that is



View of Spider Shelter at winter campsite.





produced and protected inside by all the occupants. With some of these basic observations and some skills, we can produce a shelter that will work just fine for us. This is the "SPIDER SHELTER", a structure similar to the debris hut, but with the addition of a dome shaped doorway and an optional awning. This is referred to by Dave Canterbury, founder of The Pathfinder School and author of *Survivability For The Common Man*, as the spider shelter due to its custom front and work area.

With all shelters there are a few issues that must be considered before construction, one being, "where should I build it?" When choosing a location remember our goal is to protect our body from the elements. Look for an area where the ground is dry,

bug free, and at least 50 to 75 yards up from water sources. Choose an area that has plenty of sunlight in the winter but shaded in the summer. Face the opening to the south or southeast direction. This will work just fine due to the North American weather patterns and will help in directing campfire smoke. Look around to see the availability of material. It takes a lot of work, energy, and time to build this type of shelter. When you begin keep track of the hours it takes to complete the shelter. Remember the energy that you expend must be replaced to survive. In a self-reliance situation this concept is very important. We are trying to create a "micro climate" for our living and working area. Simply put, a micro climate is a climate within a climate.





**Front view of Spider Shelter with floormat and open door.**

After our location has been chosen, we need to look at the material needed. First, start with four (4) support poles about 4'- 6' (feet) long and about as thick as an adult's arm. Next, search for a top pole or "ridge" pole about 7'- 9' (feet) long and as thick as the supports. Check the wood density for strength. It's not necessary that the support and ridge poles be freshly cut but they must be strong. This is the basic framework to support the total structure. Now take the four support poles and form a small tipi-like frame. Use lashing material such as parachute cord, twine or vine material, to bind the tops together about four (4") inches from the top. Next, adjust the tipi to fit your doorway opening. Place one end of the ridge pole on top of the tipi, lash, and leave the other end on the ground. This is a good time to check inside to see if it feels right and the fit is good. There should be enough room to lie down and turn over if needed.

The front inside doorway area should have enough room to do small projects, have some storage and a hot rock pit. Keep in mind a grass floor mat will be added later. The door should be about three (3") feet high and wide enough to crawl into.

Now is the time to start putting on the "ribs" or

"ribbing". Ribs or ribbing are semi-vertical pieces of wood running from the ridge pole to the ground at about a 45 degree angle. They create the living space area of the inside of the shelter. The diameter of the ribs will vary depending on the material available. But remember these are still supports and should be strong enough to support 2' – 4' (feet) of forest debris. According to length, place ribs from the ridge pole to the ground trying to maintain about a 45 degree angle. The ribbing may sit on the ridge pole with some extension. Longer ribs will be needed around the front area down to the smaller ribs where the ridge pole meets the ground. When ribbing, try to use as many pieces to fill in the gaps around the tipi area and down the ridge pole. Leave the door area open at this point. Again, now is a great time to go inside to make any final adjustments. Next, start collecting forest debris using gloves, a rake and a tarp if



**Close-up of hot rock area.**





Front view of Spider Shelter door being used as an awning.

available. Remember, we will need 2'- 4' (feet) of mixed debris to make the shelter well insulated and waterproof. Start piling a first layer all around the shelter about 6" (inches) thick up to and including the ridge pole. Leave the door area clear at this time. Enter the shelter and take a look around to see if light is showing through the ribbing. If so, fill them in and continue with more debris. At about the one (1) foot mark the shelter really starts to take shape. Light, airy debris should be applied followed by a mixed compound for a little weight. Continue this process until you have enough debris to obtain a layer 2' to 4' (feet) thick dome shape with a 45 degree angle for drainage. If available now place long, branch pieces from the ground to the top of the shelter to keep the debris in place. A few will do the trick and help with drainage, stability and high winds.

Just inside the doorway and in the spider dome section, we can build a hot rock pit. The size of the pit should be about 4" – 6" (inches) and 2" (inches)

deep. Rocks may be used to line the pit and also supply a cover. CAUTION: rocks from any wet area such as a river bank or stream may explode when fired. A small (very, very small) fire inside the rock pit can be started for the purpose of ridding insects, rodents, or making a cup of hot water. CAUTION: never, ever, sleep or close the door when the fire is burning. Remember, you are in a large tinder bundle! Always

extinguish the fire completely after it is used. Keep the pit area clean and all flammable materials away when in use and after. However, the pit can be used to hold hot rocks from the camp fire to warm the shelter. Rotating hot rocks during the day will keep the shelter warm even on the coldest of days.

The door can be made in a number of ways. One of the best is a custom fit woven mat to cover the entrance way. Any material is okay, but reeds, cattails, and long grasses work the best. The mat should be about 2"- 4" (inches) thick and made to length. Attach the mat door horizontally for easy access in and out of the shelter. The door can also be used propped up to create an awning. The same technique can be used to make a sleeping mat. Fit to size but increase the thickness.

If you choose an outside work area, a permanent awning can be built just outside the door. Generally, a distance 3' (feet) away and out from the shelter



Side view of branches holding debris in place.



and a little wider than the door, works well. Put two (2) vertical posts at each 3' (foot) mark about the height of the door. Next, make a framework from the top of the post and connect it to the shelter. Place horizontal pieces of ribbing on top of the framework. Pile debris and tree bark on top of the ribbing about 4" (inches) thick. This is a good area to sit under and if needed fill in one or both sides to make a small addition.

The "SPIDER SHELTER" makes a great family project for everyone to enjoy. The shelter, if built correctly, will last for many years with little maintenance. In a self-reliance situation this is a long stay option for shelter. If you have the time, location, and the abundance of material, the spider shelter is a winner.

**Pictured at Left:**

**Top: Basic framework using tipi supports and ridge pole.**

**Center: Framework being covered with ribbing.**

**Bottom: First layer of debris on developing shelter.**



After a Vision Quest at age 16, Rob became an avid student of the Earth. He was a student and volunteer instructor at Tracker School in the early 1990's. In 2006, he released the DVD "Emergency Awareness: The First Three Days". Presently, Rob is a retired fire Lieutenant and Arson Investigator and spends his time teaching urban and wilderness skills in north central Illinois.



# Choosing the Right Signal Mirror

By John D. McCann

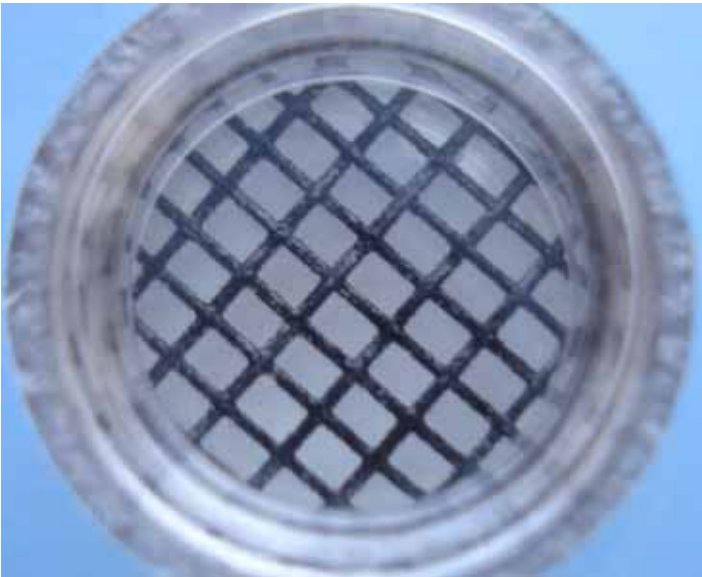


Photo 1 (left) shows the retro-reflective grid in a Vector 1 acrylic cased signal mirror, which does not have a hole in the grid. Photo 2 (right) shows the retro-reflective grid in an AMK Rescue Flash signal mirror which does have a hole in the grid. The hole does not affect the retro-reflectivity of the mirror, it is just a different design.



One of the most important signaling devices you can have in your survival kit is a signal mirror! It is often underrated as a signaling device, but is a very valuable tool for daytime signaling. There are many types of mirrors available on the market, but this a piece of equipment that you should attempt to get the best you can afford.

One of the recommendations I often make in regard to signal mirrors, is get one with a Retro-Reflective grid. A Retro-Reflective grid allows the user of the signal mirror to be very accurate in regard to the aiming of the mirror. This is important, as you want to make sure that the flash from the mirror is aimed directly at the place you want, such as on a rescue aircraft. It is not difficult, but let's first

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explain how a Retro-Reflective grid works.

A signal mirror with a Retro-Reflective grid has a hole in the center for viewing through the mirror. This hole has a small screen mesh type material installed in this center hole. Before the screen mesh is installed, it is first coated with small spherical beads. These beads work on the same principle as the streets signs, which reflect the lights of your car directly back towards you, instead of off at an angle. This technology, allowing a high angularity of reflection, was first invented by 3M and is known as Retro-Reflectivity. The high angularity of the reflection causes the reflected light to return on the same path as originated, as opposed to off at another angle.

So what does all this technical mumbo-jumbo mean? Well the hole in the center of the mirror allows you to look through the center for aiming purposes. The retro-reflective grid catches the sun's rays and creates a small burst of light on the grid.





**Photo 3 shows the Vector 1 Inc. Laminated glass signal mirror, the Vector 1 acrylic encased glass mirror, and the Rescue Flash® signal mirror made by Adventure Medical Kits. You can't go wrong with any of these mirrors.**

This small burst is not the sun, but a reflection on the grid. If you move the mirror and place this small burst directly on your target, and gently move the mirror back and forth, you will be flashing the reflection from the sun, directly on your target. It is that easy and it is very accurate.

There are a few companies that manufacture this type of mirror. The first, is Vector 1 Inc., and they make both a laminated glass signal mirror, and a thin glass signal mirror that is encapsulated in a break resistant acrylic. The first is an Air Force Type signal mirror that is available in both a 2" x 3" and a 3" x 5". The glass is 1/4" laminated glass that is shatter resistant. Each mirror has directions on the back and has a reinforced lanyard hole. Being glass, this mirror is distortion free and allows for reflected sunlight to travel up to 25 miles. This company also makes an acrylic cased mirror, which still uses an actual piece of glass made in Japan, which although thin, is glass. Both mirrors provide a retro-reflective grid, and I personally prefer these mirrors.

The next mirror is the Rescue Flash® which is manufactured by Adventure Medical Kits, but uses the retro-reflective grid made by Vector 1 Inc. It is made from durable LEXAN® polycarbonate that also has directions printed on the back and is an effective mirror. The mirror is provided with a protective cover to prevent scratches when stored in a survival kit or pouch.

There will be occasions when the angle of the

sun will not allow the use of a retro-reflective grid to aim a signal mirror. In this case, you will need to use an alternate aiming method.

In this case you will hold one arm outstretched and spread your index and middle finger, make a "V", like the sign for victory. Hold the signal mirror in the opposite hand. You will then need to get the sunlight to reflect off the mirror. You will manipulate the mirror, until you can reflect the sun onto your outstretched fingers. You want the reflection of the sun to be across both outstretched fingers, so that the reflection of the sun will pass between the two fingers. You then, carefully, must move the outstretched hand, keeping the reflected sunlight between the two finger, until you have your target between your two fingers. At this point, you will move the mirror gently back and forth which will flash your target with the sunlight from the mirror.

As you can see, using a signal mirror is not a difficult. However, it is a skill that you should practice before you need it. Signal on an object other than a plane, as you don't want to give the false impression that you need help. But when you do, knowing how to use a signal mirror quickly and effectively can get you rescued. As always, be prepared to survive.







Photo 4 shows the author demonstrating how to use two fingers as an alternate aiming method with a signal mirror.

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# *Dandelion.. It's Dandy*

By Joshua R. Dick

**D**id you know that those small yellow flowers that infest your lawn and cause so many headaches for so many homeowners the world over are not only nutritious but have medicinal properties as well?

Taraxacum commonly known as dandelion, lion's tooth or blow ball is a small common weed that is native to North America, Eurasia and is found worldwide. The flower ranges in size from one to two inches, is surrounded by small leaflets that arise at the base of the flower, circling the stem. The buds set alone atop a single milky filled stem, which rises from a rosette of lobed leaves.

The Dandelion is a great source of vitamin A, vitamin C, vitamin B6 and potassium. It also contains calcium, folic acid, copper, iron, riboflavin and magnesium.

Dandelions have been used medicinally for ages and were first mentioned in text in the early 1300's. People use dandelions as a tonic, diuretic, decongestant, antacid, cholagogue, aperient and itch reliever. The leaves and roots can be chopped up and boiled then strained to create a tonic to help with decongestion, urine flow, bile discharge from the gallbladder, and neutralize acids in the intestinal tract, help with constipation and flatulence. Some reports state that the root may improve gallbladder and liver function. The dandelion is also believed to help strengthen the immune system. Also it may be used for simple sustenance.

Although the plants may be used to strengthen the body and treat diseases it may also cause allergic reactions in some people and should be used cautiously to prevent severe reactions. If you are allergic to ragweed, iodine, daisies, chamomile or marigolds you should refrain from using dandelions.

As with any other herbs, one should research the plant thoroughly to avoid any unwanted side effect.



So the next time you are in the wild and you know you aren't allergic to the dandelion you should make up a nice salad or soothing tea and reap the awards of the use of this "weed".



**Joshua Dick grew up in a small town in central Illinois. He began to show interest in the outdoors and survival at an early age. He is an avid outdoorsman, paddler, hunter and student of the art of survival. He dedicates everything he does to his son Alexander and his family.**

# *Cold Weather First Aid*

By David Chadwick



**Victim wrapped in a basic emergency blanket.**

**T**here is a saying in emergency medicine that goes, 'You're not dead until you're warm and dead'. However, there is much that can be done to avoid this condition. Therefore, we're going to cover cold weather emergencies and their treatments in this issue, plus we'll look at a few items that you can easily carry with you to help out in an emergency.

The most basic of cold weather maladies is frostbite. However, most people don't realize that it

**David Chadwick has been a career paramedic and volunteer firefighter in the suburban Philadelphia, PA area, for the last 15 years. He has hiked most of the Appalachian Trail in Pennsylvania & New Jersey, and is an avid cyclist on the road, track & trail.**

comes in three different varieties; frost burn, superficial frostbite, and deep frostbite. Typically the extremities are affected first, and this is by design. In cold weather, the body begins to shunt blood flow from the extremities (i.e.: hands and feet) to other areas of the body that are more critical to self preservation. Therefore, fingers, toes, nose and ears that are the most susceptible to frostbite.

The first, frost burn (AKA: frost nip or first degree), is little different than a sun burn. The skin will typically have a pale color. Treatment is as simple as placing affected fingertips in an armpit, or covering a cold nose with a hand or scarf.

Superficial frostbite (AKA: second degree)





**Hot packs placed against the victim’s neck; can also be placed in armpits and groin.**

involves the full thickness of the skin. The skin will begin to have a white, almost waxy appearance, and the extremity will have a numb sensation. The surface layers of the skin will be hard to the touch, but will still be soft and spongy beneath. The treatment of superficial frostbite begins with getting the person to a warmer environment. The affected area can be re-warmed with body heat, just as with frost burn, but the process takes longer.

Finally, deep frostbite (AKA: third degree) is the most serious. The skin is frozen all the way through the outer layer, and into the sub-dermal fatty and muscle layers. The skin may appear anywhere from the white & waxy stage to white/yellow, or even purplish in late stages. The extremity will feel completely solid on palpation and also be completely devoid of sensation.

The treatment of frostbite is very critical. The first thing to remember is that you SHOULD NOT re-warm a frost bitten extremity if there is any chance of refreezing. This will only potentiate the damage that has already been caused, because the ice crystals that form inside the already damaged cells tend to be larger the second time around. Re-

warming for deep layer frostbite is different than the lesser types. Because of the completely frozen nature of the affected area, it needs to be re-warmed slowly. (I will insert my disclaimer here; that this should be done by professionally trained, medically qualified persons.) If the affected area is still frozen when discovered, AND you can reach definitive medical care (such as a hospital or emergency care center) within one hour or less, then LEAVE THE FROZEN PARTS FROZEN! If you are unable to reach medical care within one hour, then you will need to begin treatment. The affected area should be placed in a water bath at a temperature between 38-42°F. IT IS CRITICAL THAT THIS WATER BATH TEMPERATURE BE MAINTAINED.

***The following is treatment for both superficial and deep frostbite.***

- Pad the affected areas with LOOSE bandages, to prevent any further damage. (Frozen tissue is more susceptible to crush injury.)
- Do NOT massage the affected areas. (This will cause the ice crystals in the skin to further

damage the surrounding tissue.)

- Do NOT rub snow on the affected area. (This will only make the person colder.)
- DO NOT rupture any blisters that form.

Once the area is thawed and blistering occurs, treatment becomes a waiting game. Blisters that stay clear have a better chance of recovery, while blistered extremities that turn dark will nearly always be amputated, although this is not always a hard and fast rule.

Remember that frostbite is a serious injury, and the person will need professional medical care, and you should never delay the effort to reach a hospital.

Another cold weather emergency, hypothermia, is commonly referred to as 'the killer of the unprepared.' Typically a condition that follows a prolonged exposure to low temperatures, it can also be attributed to immersion in water below 60°F. Naturally, the colder the water, the shorter the amount of time it takes to become hypothermic.

The human body's normal temperature is 98.6°F. When the core temperature drops below 95°F, the body starts to shut down. Respiratory effort slows, decreasing oxygenated blood flow to the brain, which in turn can only lead to more bad things. The outward signs of this are things like impaired ability to think, act, or talk. In short, it appears as if the person may be having a

stroke. Once the internal body temperature reaches 86°F, the victim will become unconscious.

- Whenever possible, remove the victim from the cold environment. This is the best, first course of action, and should not be delayed.
- Remove any wet clothing, whether it is wet from water or perspiration.
- Redress the person in dry clothing, making sure it is not tight or constricting.
- Cover the victim with other insulating materials, such as blankets, additional coats, even vegetation, such as large pine boughs. (See image 1)
- Warm fluids with sugar in them, such as energy drinks, can help to make the victim feel warm.
- DO NOT give alcoholic beverages. These actually work to constrict the blood vessels, preventing blood flow through the body.

- Hot packs can be placed against the victim's skin around the neck, and in the armpits and groin. (See image 2) These areas have lots of blood vessels, and the hot packs will warm the blood as it passes through these areas.

Remember to check the victim for other injuries, including frostbite, and treat appropriately. The victim will need definitive medical care as soon as possible.

Whatever your preference, camping, hiking, backpacking, or hunting in cold weather is something entirely different than in warm weather, and requires that you carry more equipment to cover the possible contingencies that may occur.





# *Knots*

## *The Clove Hitch*

Welcome back readers to the second knot in series. In the premier issue I went over the fisherman's knot and also some nomenclature of knotting. Bends, bights, loops, etc. I wanted to put together these knots as I use them in camping and everyday use. Sitting back in my sleeping bag, I think about what knots are used and where, in a basic tarp shelter. One that you will use time and time again is the clove hitch. As with most knots, a marine application is where it gets its start and the clove hitch is no different. It was first mentioned as a clove hitch in William Falconer's "Universal Dictionary of the Marine" in 1769. Stated therein, "HITCH, (clef, Fr.) a sort of knot or noose, by which one rope is fastened to another, or to some other object, as a post, ring, timber-head, or mast. Hence we say an half hitch, demi-clef, a clove-hitch, and rolling-hitch." Before that it might have been referred to as a 'builder's knot'.

You may also find the clove hitch called a boatman's knot or peg knot. The clove hitch is simple enough to tie, and I'll get to the mechanics of it in a second, but its value is also held up as the beginning of many other knots. Yet another strong point of this versatile knot is that it can not only be tied at the working end of a piece of rope, it can be formed in the bight. For my main use, it is tied at the working end and either slipped over or tied right onto a peg in the ground. This will secure the corner of a tarp shelter, rain fly on a tent, or from the middle of a tarp to add tension to it and secure it to the ground peg. This light duty application is right up the clove hitches alley as, the tarp corner will have constant tension on it, won't be pulled around the peg, or be worked loose from pulls from different angles. The breaking strength of a clove hitch is around 60-75% so this will be fine for our use here.

Some of the different knots derived from the clove hitch include, clove hitch with slip knot (wherein the last bit of working end is doubled over to act as a quick release tag), the rolling hitch (this is where a variable of the clove hitch is used for a lengthwise pull such as a log), and the constrictor knot (this is another close cousin that grips firmly and stays tied. In some instances, it may have to be cut off if a loop of cord wasn't tucked into the end to act as a quick release).

Ok, onto the tying of this very useful knot. Practice by tying it to a horizontal branch, a small branch now, your not mooring the Queen Mary. Over the top with the working end and under the branch. Now you will have the standing end in your left hand and the working end is hanging over the branch. Grab that with your right hand and bring it up on the right side



**Above: Lay cord over your finger.**

**Below: Up and over.**



Scott Wickham Jr. is an apprentice knifemaker at Blind Horse Knives. In addition to knifemaking he has been writing for ten years now and has had a love for the outdoors since a young age. Scott is also the co-founder of the Fort Pitt Land Rover Group and when he is not making knives or writing can be found in his Land Rover.





of the standing line. Cross it over the standing end and toss it back over the branch (it will now be on the left side of the very first piece of rope you put over the branch). Now continue it up around the branch and tuck it under itself right on top of the branch. Pull it tight. Now practice this so you can do it in your sleep and then move on to doing it on a vertical branch. Then transfer this technique down to a tent peg. The more you tie it of course, the better you'll get at it. You might have better luck tying it around your finger so try that. The advantage here is that once you have this down pat, you can tie it, and just slip it off your finger onto the tent peg. Also, if you ever need to tie the clove hitch in the bight, you'll be happy you practiced on your finger. This is a quick knot to tie, you'll master it soon enough.



Now try it with the quick release tag end, look up the rolling hitch and the constrictor knot. They are too close to this knot for me to go over in future articles so, that'll be your homework assignment. You have them mostly mastered if you have the clove hitch in your repertoire. Thanks for reading. Let's keep tying!

**Top Left: Almost done.**

**Center Left: Make sure you go under.**

**Bottom Left: When it's tight, it should look like the letter "N".**



**Below: Take a turn around a peg.**







**Above Left: Over top of itself. Above Center: Working end under the cross over. Above Right: Tight. From the top.**



**Above Left: From the side. Above Center: Add a half hitch... Above Right: ...or two to add security.**

**Below Left: Fisherman's knot in use on this project too. Below Right: Quickie shelter.**





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# Land Navigation

By Wes Harris

“What’s the most dangerous thing in the world?” the grunts said. “A Second Lieutenant with a map!” This timeworn joke fades, as Global Positioning System (GPS) becomes the preferred method of preventing one from becoming lost in the woods. It’s not hard to see why. GPS receivers become more advanced, feature-filled and cheaper every year with multi-media formats and complete sets of USGS Topographical Maps embedded. With this technical wizardry comes a cost in the form of weight and the limits of battery power. When you lose your juice, you’ve become the owner of an expensive, fancy-looking brick. There is an alternative, something that won’t break the bank or your back, that won’t “lose power” when you most need it, two items that, with a little bit of training and practice, can get you where you need to go. Ladies and Gentlemen, I give you the Map and Compass.

Before we get ahead of ourselves, a few quick and dirty rudiments of Land Navigation need to be discussed. Often, depending upon the situation, the basic-basics can help you get to where you need to be (or, can help you not be where you shouldn’t!). And when I say basic, I mean “The Sun Rises In The East And Sets In The West”. Even while driving this has saved my rear more times than someone writing an article about Land Nav should admit. Consider your position relative to where the sun generally is while taking into account the time of day and you have at the least an idea of where you are heading. It’s sometime in the morning, you say? Well, hero, don’t stare at it but bear in mind that when looking at the sun, you are facing eastward (generally). Your backside points to the west, left-hand north, right-hand... anyone? Now you’ve got it! A step up from the “things I have known since age 6” is the “Shadow Tip” or “Stick-And-Shadow” method, which relates to it directly but it’s orders of magnitude more accurate and useful. Find an open

and comparatively level spot. Find a relatively tall and straight stick or something that is stable and casts a distinct shadow. Make a mark at the tip of the shadow. Wait 10 or 15 minutes. Make another mark (small stones work nicely for this). Do this three or four more times. Make a nice, straight line that connects these points. Guess what you just did? You made a pretty darn accurate East-West line upon which you may base your future move. And the first mark you made? That’s West. The last? East! I knew you’d know it! Right angles to your shadow-line give you North and South. A compromise method between these two requires an analog wristwatch. Aim your hour hand at the sun. Halfway between the hour hand and 12 is south. The watch method is fast but lacks accuracy. If its accuracy you want, and you’ve recently dropped/drowned/left home in your sock drawer that spiffy GPS receiver you got for Christmas - don’t worry! A good topographical map and a compass will further your cause.

Since we’re all probably a little overwhelmed with the East-West’s and Shadow Sticks and sunrises, let’s digress a little and talk a bit about maps and what they can tell us about the journey we face. USGS topographical maps contain a wealth of information. It takes a little practice and abstract thinking to interpret the dots, lines, squiggles and colors but, again, the simple and the obvious rule the day. Look in the marginal lower left for the “contour interval”. It’s generally 20 meters. This measurement refers to the distance between “contour lines” on the map, which are graphic representations of terrain features and elevation. Simply put, the closer they are together, the more your legs will hurt at the end of the hike if you go *that* way. Another logical inference can be drawn from use of the color blue (water) in conjunction with symbols that are meant to look like clumps of grass. If you go *here*, you’re slogging through a swamp. I hope you brought dry socks, pal. Always keep in the back of your mind that the easiest route may not always be the best, depending upon the situation. If you like your solitude, “easiest” can equate to “most choked with loud-mouthed idiots”. In addition, close-together contour lines will probably mean a more

Wes Harris has been a swimming pool builder, student, carpenter, engineering technician, janitor, punk rock guitarist, infantryman, dishwasher, vintage Land-Rover rebuilder, and cavalry scout. He is currently a telephone cable splicer. He is married and has a lovely 4-year old daughter who is smarter and funnier than he will ever be. He lives in Pittsburgh and is not working on his first novel.



picturesque spot for lunch than will “blue-with-clumps-of-grass”.

All of this map stuff is next to useless if two fundamentals aren't observed. The first is the tricky part, the thing that all us GPS users take for granted: where *am I*? This is what we might call *critical* when it comes to navigation with a map. And secondly, once we've determined where we are, how do we know we're heading in the right direction? Let's take this one first because it's pretty simple. Wait a minute - simple? There are three North's. Yes, three. You have your Grid North, your True North and (the North we're after) your Magnetic North. That was the hard part. Lay your map on the ground, away from any large metal things (like the hood of your truck, for example) or power lines, lining your compass's straightedge along the Magnetic North arrow. Turn the map until the compass reads north exactly. Your map is now oriented. Determining your start-point can be easy or brow furrowing, depending upon where you are. On a road, near some buildings, you're in luck! Use these landmarks to begin your endeavor. When you're out in the Great Nowhere, things get a little trickier. You'll need to re-hone your math skills for the “Re-Section”

method. Map is out and oriented? Good. Hopefully, you have two easily discernable terrain (mountains/hills) or man-made (fire tower/cell site) features in front of you that can also be made out on the map. Using your compass, shoot an azimuth at both. If the number you get is 180 degrees or less, add 180. More? Subtract 180 to obtain the “back azimuth”. On your map, from the terrain features you previously located, draw nice straight lines on your back azimuth heading. The lines will cross. Guess what? You Are Here.

Flip comments aside, I hope that I at least whetted some appetites for further study of GPS-less land navigation. Map and compass navigation is at the minimum a good thing to be familiar with and is actually quite gratifying to utilize successfully.



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## A Unique Collection of Products for the Unique Person

# Dress for Winter Success!

By Steve Davis

This issue of Self Reliance Illustrated finds us in the icy grip of winter. Winter is my favorite time to get out to the wild places. The lack of biting insects and thick undergrowth really opens the world up for exploration. To get the fullest enjoyment out of our winter activities, staying warm and dry is paramount. In this article I'd like to discuss the first line of defense against the cold and wet, our clothing. There are many different materials, natural and synthetic, that we'll discuss, as well as their utilization.

Natural and synthetic materials both have an important place in our wardrobe. Because of their varying properties, we can use them in combination to maximize their uses. An under layer of lofty natural material, such as wool, coupled with a waterproof shell, like Gore-Tex, may be the ticket. Let's look at a few of the many materials in outdoor clothing.

Cotton Kills! We've all heard this line. This originated, I think, from cotton being used as a base layer. Cotton easily absorbs water and is slow drying. So after a strenuous activity the body perspires and dampens the cotton. The cotton is slow to dry and being against the skin, creates a chill. The same attribute it has in the summer becomes its downfall in the winter. There are however good uses for cotton in our cold weather clothing. Material such as duck canvas is very tough as an outer shell. And Flannel is a great choice as an insulating layer. You just got to keep it dry.

Wool is a gift from the gods in my opinion. It wicks moisture from the skin naturally as a base layer. It retains 65% to 85% of its insulating ability when completely soaked. Wool also has a degree of heat resistance before it melts or burns, unlike some natural and most synthetic materials. Wool is meant to be worn against the skin and can be just as comfortable as cotton or synthetic. Brands such as Wool Power have been using blended Merino wool to increase comfort and performance, so the old wool scratch isn't a factor any longer. The downfall of



**Wicking baselayer for warmth and moisture management.**

some wool clothing is the price. It can be expensive. Wool is long wearing and durable and will last a long time when maintained properly. And deals can be found on military surplus items such as the great 1953 U.S. wool uniform pants, as well as many foreign sources.

The synthetic choices in outdoor wear are staggering. I have a few that I have experience with, mainly polypropylene, nylon, and poly fleece. The great thing about synthetics is there resistance to moisture. Polypropylene has been used as a wicking base layer for a good while now. Its ability to draw perspiration off the skin is phenomenal. Nylon is a great wind resistant and easily waterproofed cloth. And poly fleece holds a nice insulating loft. The attributes of synthetics are numerous. It dries fast is the biggest advantage in my mind. The downfall is it

**Steve Davis is the lead instructor at The Pathfinder School. A hunter, fisherman, and trapper, he has been learning and practicing modern and primitive skills for over twenty years.**





**Shell of Gore-Tex for wind and water resistance.**

melts easily.

The way we use these materials together will spell our success, or frozen appendages. I am going to assume you are hoping for the first choice. We need to start with a base layer; this will be against the skin. First priority is moisture control. So we need to chose something both wicking, and insulating. The next layer will be an insulating layer, which can also be used as an outer layer if conditions warrant. The final step will be an outer shell. This will help stop the wind and rain, as well as let perspiration escape.

Let's get started with the base layer. This, in my opinion, is the most important. This layer is comprised of the undershirt, underwear, and socks. The base needs to hold our body heat, while also keeping it dry. And this is where "Cotton Kills" comes in. Cotton holds the moisture and is slow drying as we discussed earlier. I personally prefer a blended wool product here. The blend has the ability to quickly dry as well as hold heat if it does get soaked. The other choice is a synthetic like

polypropylene. Polypropylene wicks moisture and dries fast. Some synthetics even have the ability to control odor. Which may be of some importance to hunters.

The second layer we'll call the insulating layer. In all actuality it needs to do double duty. During times of strenuous activity, or warmer temps, it needs to also function as an outer layer, or shell. This layer is most likely to be made up of your choice of pants, and shirt. There are too many natural and synthetic choices that are great for this, but I'll list my favorites. For pants I like a cotton duck carpenter style pants such as Dickies. My choice in shirt is usually a button up flannel or wool shirt. I also use a poly fleece occasionally as an over shirt with the button up. Holding pockets of warm air is what this layer is all about.

The third and final layer is the outer layer or shell. As the name "shell" indicates, this is the protection. We will include items such as a coat and bibs, hat, gloves, and boots in this layer. A good shell will stop wind, and moisture from penetrating the warm layer underneath. Also a good shell needs to let body moisture out. Materials such as Gore-Tex are a great choice for this. Also materials such as cotton duck and wool are a durable outer shell. Many coatings and spray on water repellants ad a bit more utility to cotton duck. Your choice is going to be directed by your environment and weather. In a rainy environment I'll chose the Gore-Tex every time. In a place with heavy underbrush or bramble, canvas may be the better choice for its toughness.

Hats, hats, and more hats, that's what I have. To me a good winter hat covers your ears and neck, as well as offers protection from the wet Ohio weather. Wool stocking hats are my choice personally. But synthetics are a good choice as well. As long as it keeps your ears warm and your head dry, it's a good choice. Remember up to 80% of your body heat escapes through your head. Holding this in is very important because heat is also calories!

Gloves and mittens are literally lifesavers. In a cold environment keeping the dexterity in your hands is very important. Being able to manipulate fire starting and cutting tools effectively may be the balance between a nice cup of coffee, and hypothermia. Fingers are also one of the first areas to suffer from frostbite as the body tries to preserve core temperature. Mittens offer a certain advantage over gloves by keeping the fingers in contact sharing



make it.

Put some thought into what you wear on your next outing, and develop a system that works for you in your environment. The comfort and enjoyment level may be the only thing affected on a recreational outing. But the right choice, in a situation when we can't head back to the house, might spell life or death. Most importantly, get out and enjoy what winter has to offer!

Winter boot choices, rubber and neoprene, insulated pac boot, insulated leather hunting boot.



heat. Gloves however offer greater use of the hand for fine task. A good use is a light pair of gloves inside a heavier pair of mittens. Then you can remove the mitten to do finer task with your hand still protected. I prefer a pair of rag wool gloves myself. My gloves always seem to get wet. Wools ability to insulate when wet wins out here. And that explains the back up pair I carry, one pair on, one pair drying out. But there are many choices, find the right one for you.

laced to allow blood to flow freely to the toes, while maintaining the support they offer. Toes are another big frostbite prone area.

Boots are an article all to themselves. Leather, rubber, or a combination of the two is the normal in winter. Boot manufacturers are using all kinds of insulating materials, as well as waterproof membranes. As long as they are warm, dry, and comfortable, you made a good choice. You might look into boots designed for snowshoe use if you plan on doing that down the road. Also keep your boots

This layering system we've discussed has been around a long time, because it works. The ability to add or shed layers to control core temperature is what it's all about. We'll want to shed layers to avoid overheating, and in result becoming damp with perspiration. As well as be able to add a layer when our body starts to cool to preserve heat and the calories it takes to



Insulating layer, also doubles as a secondary outer layer.



# How to Force a Patina for Protection

By Ken Seals III

So I convinced you to go get that carbon steel knife you been eyeballing? Great, because now she is going to rust, and in a few years you're going to have to replace her...unless you take care of her that is. You need to keep her well oiled and dry at all times, no exception, or rust will eat her away like me with a pack of donuts. Rust is the oxidation of the Carbon in the steel. As moisture sets on the unprotected finish of the blade, a cancer starts to form on the carbon molecules, and it time it will destroy the knife. But there are a few ways to prevent this from happening. You can of course oil it down good, but unless you used food grade oil, you're going to contaminate your food when you use the knife to prepare dinner. Paraffin wax is a good safe option for most. You can rub it into the surface and buff off the excess, just like waxing your car. But there is another option that may sound strange at first, but not only will it help prevent rust, but add some style, and personal touches to your blade at the same time. I am going to tell you how to RUST the blade in a controlled way forcing what is called a Patina on the blade. Rust is oxidation, and so is a patina, but instead of leaving red rust, or oxidized layer, it will leave a gray to black, or blue oxidation, depending on the agents used to force the patina. Read along with me here, and I will show you a few of the many options out there, and the results of each.

The first thing we are going to look at is going to sound strange, but if you want to really make your blade different, it's the best. Do ya like mustard on your hot dogs? Well how about your knife blade? That's what we're using, and you will be amazed at what you can do with it. Mustard is an acidic mixture of vinegar, ground dry mustard, and other spices. This forms a tasty condiment as well as a reactive mixture when it comes into contact with carbon steel. While it will not stain the entire blade at once, it will leave a thin line of oxidation on the edges where the mustard stops. That is to say that if

**Ken Seal was born in Sumter South Carolina, and Has lived in Florence South Carolina All of his 42 years. He served in the US Army with the 72nd FA Brigade in Germany, is an avid outdoorsman, a leader in the Pathfinder Youth Organization, and an all around knife fanatic who also enjoys making them from time to time.**



**Above: Mora 840MG soaking in apple cider vinegar.**



**Above: After one hour soaking in apple cider vinegar with half of blade cleaned to show difference.**

you just dropped your blade in a jar of mustard, it will stain...but it will not be a solid color. I'm not saying that's a bad thing, just forewarning you, if you want even and smooth colors, mustard isn't the choice for you. But, if you want something different, and some control over the patina you place on your blade, then mustard is great. I did a tiger stripe design on my Pathfinder knife, so let's look at how we do that. To start you need to have the blade clean, and dry. No oils or fingerprints. Tape off anything you don't want to stain, and then using a toothpick, or just the pour spout on the bottle, draw lines on the blade with the mustard, and lay the blade



**Mustard applied in rain-drop pattern using a toothpick to dip and just lightly touch the blade.**



**Results after letting mustard set for 30 minutes...a longer soak time will result in a blacker, and deeper etched finish.**



**Mustard Applied in a tiger stripe pattern, and a small cross to show some of the designs you can do with this method.**

down flat, and walk away. How dark you want the stain will decide how long you leave it on. I let mine set for 30 minutes and it adds a dark brown looking stain, anything longer than an hour and it will be a



**Results from striping. Again, a longer soak time will yield a deeper etch. This was 30 minutes.**

deep blackish color, and it will etch it into the steel. Once it has set for your desired time, wipe the mustard off with a damp cloth, and flip the knife over so you may do the other side. The designs you use are limited only by the size of your knife, and your imagination. You can also do what is called a raindrop look, by dipping a q-tip, or a fingertip in the mustard, and ever so lightly, touch the blade. Tap the blade as such until one side is covered with the little drops. And when it has set the desired time, it will look as though it set outside and got rained on. This will also add an antique look to the steel as well.

Now the mustard works good. It adds character, and protects the blade some. But it's not going to protect the entire edge, so we need something more. Another option would be Apple cider vinegar. That's right, it's not just for BBQ these days. It will also oxidize the outside of the blade completely, and thus offers a higher level of protection. The good thing about the vinegar is that it can be done after the mustard, or before, if you choose to use both. Why do both you ask? Individuality. Making your blade stand out, while you protect it. Apple cider vinegar is acidic, just like the mustard, but it's in a pure liquid state, so it can be more even in the results. The easiest way to use vinegar is to place the knife in a container, and fill it with vinegar to the desired level, preferably all the





**For an easy to do Patina, slice a potato for a larger knife and slide pieces onto blade, or in the case of a small blade like this mora, just stab it into the potato and let set overnight.**

way up to the handle. Now just let it set. You will see results in as little as an hour, but you will get a very deep and more protecting patina if left on overnight. Unlike the mustard process, using the apple cider vinegar will leave a thin oxidation layer just on the surface. While this means you can buff it off fast if you don't like the results, it also means it can wear off a tad bit easier than the mustard forced patina will. I'm not saying that's a bad thing, because it's easy to redo later if needed. When the desired darkness has been reached, you simply wash off the vinegar, and dry the blade. If you want something a little different you

can now add some stripes, or dots with the mustard mentioned above to add more character, and color to the blade. This is the process I used on the Pathfinder knife with great success. Another option is to take strips of cotton fabric, and soak them in the apple cider vinegar, and then wrap the blade in a tiger stripe pattern. This will leave a stripe effect as well, although since there will be layers of steel that are uncoated, those areas will not benefit from the patina. You can also alternate between strips of mustard and vinegar, for a two-tone stripe effect. The possibilities are endless.

Another natural method is the common potato. A simple Idaho spud, sliced into manageable pieces, and then slid carefully down the blade until all parts are covered. As with the other methods, time determines the finished product. The longer the better, and overnight is best. This will leave a patina that is bluish, with streaks of blue and grey through it. You don't have to slice the potato, but it is easier and safer to get it on the blade

that way, especially if the blade is a little thick. Again, with this method, you can obtain different patterns with different applications. A good friend of mine mashed up a couple of potatoes, and put the knife in a bowl and covered it with the mash...this had a great look to it, and made a blotchy array of colors instead of the streaks.

One more option to mention, though I'm not as fond of it as the others, is cold bluing of the blade. I don't like to use it because it is a chemical and not a natural product like the others, and I use my blades to process food at camp as well as wood. I don't want to put a bunch of chemicals in my food. I'm a bad enough cook without adding to the mix. Cold blue is a product manufactured under many company names, and can be found in many gun shops. It's a very simple process, and while it's not a true patina, it will add a light to dark blue/black color to the steel, and does offer a great level of protection, hence

*(Continued on page 89)*



**The final result after the mustard treatment, and then pushing the blade into a potato and letting it set for 2 hours. Its hard to tell in the picture, but it has a slight blue/gray color overall, with the spots from the raindrop mustard treatment etched in darker.**

# Why are you here?

By Brian Andrews

I have been spending time in the woods for as long as I can remember. Where I grew up, we used to camp in the field out back. Growing up, hunting and trapping were a borderline obsession. I have spent time hiking, backpacking, canoeing, camping and plain old goofing off. Sometimes, I never gave much thought to why I was going outdoors. Other times, I thought about the reasons but convinced myself that the clichéd reasons were the answers. I obviously didn't think that deeply about it.

Perhaps I am just slow; it is quite possible. But, after all these years I feel I am finally starting to get it, to understand my attraction with the outdoors. Come along on my progression of understanding and perhaps you can relate. Either because you can look back and remember your own progression, or it may be that you find yourself somewhere along the same path.

When I was growing up, there was no such thing as the gear craze that we see today. Here I am, sounding like a grandpa relaying stories of walking to school in the snow barefoot. The reality is that this is not that long ago. I am only 35. But consumerism seems to have found out that the outdoor industry is very profitable. Point being, that going to the woods to play with gear was never a consideration in those days. Most outdoor gear was acquired at Kmart, because there was not much else around, and it was pretty crappy stuff at that. But, it sure didn't keep you from going outdoors.

Today, if you discuss the outdoors with someone, read a magazine, or visit a forum, the buzz is all about the latest knife, the coolest tent, and the fanciest clothing. It is very easy to get drawn into this. Let's face it. I personally have more time to daydream about being in the woods than actually being in the woods. If you don't find yourself in that situation, count yourself lucky. For the longest time, I held on to the misconception that dreaming about a piece of gear, put me in the woods using it, and fulfilled my need to actually be in the woods. It did

**Brian Andrews claims that he doesn't have any professional qualifications to be a woods bum but he is a professional photographer, knifemaker, a lover of the outdoors and he enjoys doing things with hand tools - the old fashioned way.**

not take a long time to discover I would much rather be in the woods taking shelter under a plastic trash bag than to be fondling the latest and greatest lightweight, super sleek, sil-nylon tarp in my living room. Or, when I got to the point of taking that fancy tarp in the woods, I would quickly realize that while it may enhance my experience, it is not necessarily what I was there for. The same goes for tents, sleeping bags, clothing, and yes our beloved knives. My point being, there is something bigger at work than gear lust. The more time I spent in the woods, the easier it was to get over the gear obsession.

There is no doubt that spending time in the woods can teach self-sufficiency. If I needed to do something, and did it right, it was very satisfying. If I did something wrong, the feedback is immediate, and the lesson was learned pretty quickly. That is very different than many other activities where there is not so much at stake through not performing something correctly. For a long time, being self-sufficient was a huge draw to the woods for me. Learning how to replace store bought things with natural materials around me. Getting to learn the resource value of the things I would normally take for granted, and saw every time I went to the woods. Or to simply appreciate the beauty of something that has no value to you. In many ways learning that stuff made me appreciate our coexistence with the earth much better. When I would buy a piece of kit off a store shelf, the first thing I realized was that more often than not, it was built in China. It did not take me long to stop seeing this cool and useful little "gadget" and instead the image was transformed into the energy and resources required to make this thing my mind tells me I cannot go to the woods without. I never really put much thought into the energy necessary to create it, because I was never there to witness it. Knowing how international businesses work, it did not take much imagination to figure out at least some of the things required to do so. Petroleum consuming equipment possibly was required to extract material from the ground. Oil was converted into plastics. Energy was necessary for a manufacturing process (that undoubtedly created some nasty byproducts), and yet more energy for the worldwide transportation to bring it to a store near



you. In the woods, it is much simpler. In crafting stuff from nature, it might seem destructive, but there is nothing hidden. All the effort and energy required to create something was witnessed right there in front of you. When the usefulness of your item is done, it will eventually return back to the earth. I could not help but feel closer to the things around me when my time was spent this way. Sure, things are viewed with a resource value, and possibly even consumed. But the awareness of their presence was also greater than ever before and so was the desire to ensure that they flourished.

While self-sufficiency is a good life lesson to learn, it was still not the deep down reason I was heading to the woods. Honestly, I know that if that was my true end goal, that I could learn that lesson in other ways as well. Farming and growing your own crops are a couple of examples as well as preserving your own food. Learning to fix your vehicle or the things in your home without calling upon someone to do it for you. I knew I could be self sufficient out in the woods. At this point, there was still something that I was missing.

It finally hit me when I was not even in the woods. It was our first real snowstorm of the year. Unlike most mornings, I was not in a hurry to go anywhere (which is unfortunate that I seem to be in a hurry most days). I went to a local coffee shop and got a coffee and decided to sit for a few minutes and read a few pages from a book. Turns out, I couldn't focus on the book at all. The coffee shop had big glass windows, and was facing one of the busiest streets in our State. I watched as all the traffic ran along hurriedly on the ice covered street, with everyone realizing that they forgot how to drive in the ice and snow. As these folks are slipping and sliding, and hurrying somewhere, there are still large neighborhood trees in the distance. Since I am facing east, there was also a gorgeous sunrise that morning, shining off all the fresh ice and snow. It was a beautiful morning. I had the feeling you get from watching the sunrise in the woods, yet I was not in the woods. I quickly forgot about the book I brought and just sat there viewing the glory I usually do not take the time to view. All the time thinking, Yes! This is what it is all about.

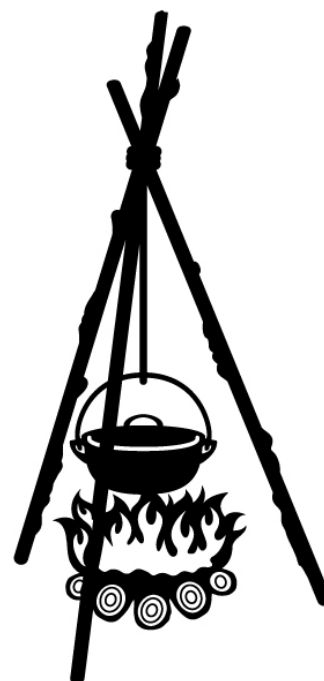
Some folks reading this are probably very religious. Some, probably not so much. And still probably many more falling somewhere in the middle. No matter to me personally. But, one thing that religion provides for people (regardless of which

God you pray to) is that it is a daily reminder that there is more in the world than you. There are things bigger than YOU. That you do not reside at the North Pole and the earth is not revolving around you.

Many have likened the woods to a religious experience. I have never understood that until the last couple of years, and just always thought it was another cliché. I have come to realize that is exactly what the woods are doing for me. They remind me of things greater than myself. If you stare and marvel at an old growth tree for a few moments, you realize that the things it needs are not so different than the things I need; Air, Sunlight, Water and nutrients. This big thing was standing long before I was born, and will be here long after I am gone. How insignificant I must seem in comparison to it! It is a reminder that everything and everyone on the earth has the same basic needs. And many of our daily "wants" that everyone gets so tangled up in, and so stressed out about, are really not as important as they seem.

Long way of saying, the woods offer to me perspective, if I could sum up in one word why it is that I continue to visit the woods, that would be it. Perspective!

I believe I came to this realization long ago. It just hasn't made as much sense until I was actually able to put words to it. Now that I have come to this realization, the perfect knife, the gear craze, or anything else is obsessed about while in front of the computer, just doesn't seem so relevant any more. Pray to the Spirit of the Woods.



# 8-Legged Black Beauties

## An Introduction to the Black Widow and Treatment of the Bite

By Joe Flowers

**T**he fangs curve together in an ominous arc, tucked under the 8 eyes, deadly needles waiting for any haphazard prey item nearby. Unlike other members of its Class, this North American Arachnid has an unusually large venom sac attached to hypodermic fangs called chelicerae. The Black Widow (*Latrodectus mactans* for the more common Northern Black Widow) is a “misunderstood monster” in the US. The alien features and odd movement makes the spider a loathed animal, and the fact that the Black Widow is potentially harmful to humans, doesn’t make it popular among her already unpopular spider friends. Ounce for ounce, black widow venom is 15 times more potent than rattlesnake venom. But why is the black widow so misunderstood? What happens when it bites a human?

*Latrodectus mactans* is found in every state in the US except Alaska. She also finds herself widespread all the way from Africa down to South America (as if those continents didn’t already have enough critters that are dangerous). The Southern black widow is jet black as an adult, and the Northern black widow is known to have small red flecking along its back. There are a total of five species of widows in the US, the brown widow, the red legged widow, western widow in addition to the two more common ones mentioned above. The males of the black widow species have a lighter black/brown banding on the legs and also have some white patterning on their back, and two spherical bulbs on the front leg-like structures near the mouth

Joe Flowers lives in the mountains of North Carolina. Following his love for animals and the outdoors, Joe got a B.S. in Zoology from NC State with a minor and concentration in Entomology. In pursuit of his passions such as reptiles, amphibians, machetes, and bugs, Joe has traveled from the deserts of Utah all the way down to Peru in search of bushcraft skills, friendly people, and not so friendly creepy crawlies. Joe also writes professionally for many outdoor and nature magazines, designs and consults for knife companies, and makes videos on the side for fun. Joe also works at a non-profit center when he isn’t writing, where he teaches survival classes, fitness, and coordinating youth activities for his community. He also has an affinity for Godzilla movies



**The Black Widow is a mysterious spider with a notorious reputation. The unnatural 8 legs and outer skeleton give spiders an unnatural look that scares many people, and the dark black color of the black widow only reinforces the ominous creature.**

(called pedipalps). This is a common feature among males of spider species, so if you see ball like formations on the front of that jumping spider around your house, chances are he is a male. In mating, the male shakes the web of the female to let her know that he isn’t a prey item. Sometimes the female eats the male after mating, but it is rare, and not the rule. The female black widow rarely moves away from her web, a strong structure without much pattern. This web is noticeably stronger than other spider webs, and when clearing out a garage or storage area, it may be identified by strength alone after some experience. Black Widow silk is said to have 10 times the tensile strength of steel of the same diameter! Combine the venom and the strength of the silk, and it is no wonder why there are sometimes lizards, small snakes, and even the occasional small mouse mummified on the web.

The female black widow is a protective mother, and guards the stiff silken white egg sac until the babies are hatched. The female arachnid can store



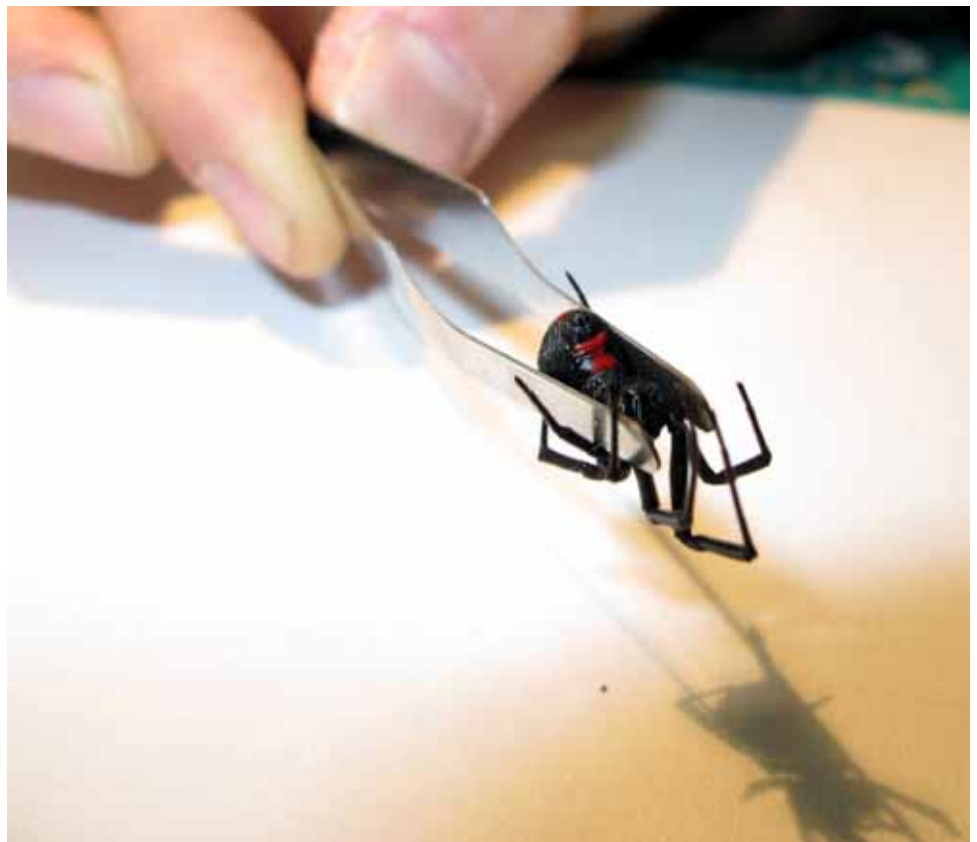


animal is crushed or pinned down with the hands or body. The male black widow has small fangs, and experts say that due to the curve of the fangs and their weakness, it is impossible to bite humans. So it's the bite from the female that we are worried about. The spider doesn't wake up in the morning with "bite a human" on her to do list. Most of the time, the female black widow cowers away to the farthest corner of the web, and curls up her feet to play dead. A black widow will defend her whitish egg sac, but that is probably the only time that the spider will display outright aggressive behavior. The fangs from the female black widow are small and not very strong, so if you think you are near a place where the arachnid may inhabit, long sleeves and leather gloves

**The red hourglass shape on the bottom of the abdomen can be used to identify the black widow. Many toxic animals have bright colors to show that they are not to be messed with. Females usually hang upside-down in the web where this hour glass shaped marking is clearly visible.**

the sperm from the male for a long time, a fact that I discovered in my dorm room in college. For a zoology class, I did an experiment on black widow venom and its reaction to hot or cold prey items. We had a few (5) Black Widows in my dorm room, and eventually one of them laid an egg sac. It was three months since the specimens were captured so I figured I would leave the presumed sterile egg sac in there to feel more secure. I came to the dorm one day after class to find hundreds of the baby black widow spiderlings dangling from the ceiling fan and all over the room. Shop vac to the rescue! There are 300 to 500 eggs within each sac, and when the babies hatch, they stay inside until their first molt, and then use their saliva to exit the sac.

have a more nefarious nature, but bites from a black widow generally occur only when the



Thankfully, despite the venom load, the widow is not an aggressive spider. There are many other spider species which

**A spider normally will not bite unless it is physically grasped or pinned down. Even then, some are still reluctant. During this photograph, the female kept her fangs tucked away, and was content to play possum rather than try to lash out at the forceps.**

go a long way. These secretive spiders frequently inhabit woodpiles, which many of the readers probably have in their yards. Old hunting boots left on the porch, brick piles, PVC pipes, and other trash structures also are common places where this spider inhabits. Garden pots, sheds, outdoor privies, and garages are also hotspots for widow activity. In the US, bites have dropped down dramatically due to the use of indoor privies (bites were common on people's rear-end and surrounding area due to outdoor privies) and electronic or propane heating. In other countries, bites are associated with grain harvesting, grape vine picking, and other agricultural practices.

Many times, the site of envenomation may not be apparent. Those little fangs are 1/50<sup>th</sup> of an inch, and unless the bite is witnessed, the symptoms



**This Northern Black Widow is identified by the red flecking on the back of the abdomen, in addition to the red hour glass underneath. Younger black widows can have much more coloration and brown bands on the legs.**

might be mistaken as an improper diagnosis. So what the heck happens when you get bit? If the animal actually injects venom (15% of bites are dry bites), then several changes occur inside the body. The type of venom is a neurotoxin, and it disrupts or induces neurotransmitter release from nerve terminals in the muscle, but to make an incredible long process short: the venom causes muscle

spasms around the body rather than tissue damage (such as in a Brown Recluse) at the bite site. A pale area on the skin with two pin prick fang marks, surrounded by a red border may signify the bite area, but it isn't always that apparent. Within 15 minutes to an hour after the bite, there may be a dull crampy pain. Involuntary muscle spasms occur, especially around the abdomen. This tightening of the abdomen is a classic symptom. Bites along the upper region of the body also have chest tightness and back pain. Muscle pain on the extremity, (like a thigh bite), commonly reaches all the way to the toes or fingers. Hypertension and vomiting may occur as well, and some have reported trouble breathing. There are many other symptoms that can and do occur, but these are



**The Black Widow is in the family Theridiidae, the comb footed spiders. There is a "comb" on the last pairs of legs that they use to drag out silk. When feeding on an insect, they will take long strands of this silk, and ensnare the insect while it is trapped in the web. Here you can see the female tangling up a bee.**

the most common. So does that mean you are going to die? In the most general sense, no, morbidity occurs in 1%-5% of cases. In these rare instances, it is a child (small volume for venom distribution) or the elderly.

Treatment varies from pain medicine (like Valium), muscle relaxers, and other medicines. There is an antivenin available for use, but it isn't used in every instance. Antivenin with many animals (including snakes) should always be tested in small doses prior to injection, to make sure there isn't any hypersensitive reaction. In some cases, the antivenin can be worse than the bite! In most widow bites, the pain and symptoms disappear, with treatment, within 3 days. If you go to the hospital,





often treated with the antivenin. If the cat has ingested the spider, it will most likely vomit it up within the hour. The best method for dealing with a black widow is knowledge and avoidance. Once you learn to recognize the web, or possible habitats, you will be astounded at how often you come across the animal. With little practice, the woods walker can learn to identify the web from 15 to 20 feet away, and it remains easier to give the black widow a wide berth, and the respect this misunderstood animal deserves.

**The web is not pretty and structured like an orb weaver, or other common spiders. It is messy without any defining pattern, but is not particularly dense with webbing. Once the eye is trained to look for this type of web, it becomes much easier to find the spider out in the woods.**

they generally watch you for a few hours to determine if you need more treatment, and many “bite victims” are discharged within a few hours. Others may be held for a day to three days.

affects a smaller area, death can be much more common in companion animals. The bite symptoms are similar to people, with a tight abdomen being the most common. Pets are also



If you are out in the woods, and get bit, a few first aid practices can help with the bite. First remove all jewelry in the event of swelling. Wash the bite area to prevent a secondary infection, and apply a cold compress for short amounts of time, on and off. Benadryl and Tylenol can be taken to help with pain. Immobilize the limb if possible. Seek treatment as soon as possible, but do not over exert yourself. Remember, stay calm, this isn't the type of venom that kills humans easily. It is an emergency, but not the type where you cause car crashes trying to get to the ER. Dogs, however are susceptible to black widow bites, but are considered much more resistant than cats to the venom, and should be treated right away. Since the venom



**Here, the female black widow is shown playing possum. This is a common defense when she is removed from her web.**

# A Hog, a Mountain & Joe Gibbs

By Payge McMahon

*"It is not the mountain we conquer, but ourselves"*

*– Sir Edmund Hillary*



Ken Huff at Barranco Camp, day 3 pointing to the summit of Kilimanjaro.

Its 4am, the rocks are slippery from the earlier snowfall. Dizzy, heart racing, nose running, I looked behind me to see if he was ok. The narrow light from my headlamp cut through the black night, illuminating his tired, green eyes. Like mine, they were watery, tearing from the bitter, cold, winds whipping off the mountain. His cheeks were red and chapped. Mine were numb. "We're almost

Payge McMahon is an adventure athlete, world traveler, writer, fitness coach and popular web personality with sponsors and fans worldwide. She is the 'country girl-next door' from Pennsylvania, with five older brothers and only a few generations removed from being Amish! You can follow her adventures at [www.turnthepayge.com](http://www.turnthepayge.com)

there Kenny!" I gasped, laboring to control my breathing at 18,600 feet. I gave him a smile for encouragement. Turning back to focus what little energy I had left, I slowly lifted my burning thighs and methodically shuffled one foot in front of the other towards the summit of Mt. Kilimanjaro.

My silver-haired travel companion was twenty-one years older than I and keeping up with the pace. This climb was Ken Huff's challenge and gift to himself for his 55<sup>th</sup> birthday. He had been bored with the monotony of everyday life back in North Carolina. He longed for the days he tried new things, lived life with passion and pushed his body to





**Above: Ken Huff climbing on day 2**

**Below: Ken Huff at Shira Plateau Camp, day 2**



its physical limits. Before coming to Africa, the highest altitude he had ever been to was Mile High Stadium in Denver and his biggest challenge was trying to shoot a deer while sitting in a cold tree stand.

He had once been a professional athlete, a former NFL 1<sup>st</sup> round draft pick and one of the Washington Redskins infamous ‘Hogs’. After Super Bowl XVIII , 11 years and 145 games played, he retired in 1986.

Those days were in the past. His body echoed old football injuries including; six concussions (that he remembers), a broken leg, collar bone, toe, shoulder, every finger...twice, a lacerated liver and the lack of ANY cartilage left in his knees. I know he was hurting but he never complained. I truly think he is one of the few men who could handle childbirth. Really!

Ken and I had decided to climb the Machame “Whiskey” route, a challenging 62 miles in 6 days round trip. Upon arrival at the imposing entrance gate, which looked like the one from King Kong, our guide directed us to a small building where he paid



Payge McMahon & Ken Huff at Uhuru Peak and summit of Mt. Kilimanjaro, 19,340 feet.

our permit fees and signed a booklet, giving our names, passport numbers, country of residence, age and occupation. Nosey, I quickly paged through the book and noted that Ken was the oldest person listed in the past few days. I didn't tell him this, but did report I was happy to see there were four German doctors in another group just ahead of us. You never know!

We met our motley crew of six porters who would carry the tents, food and camping equipment. Dark skin, in their twenties and thirties, lean and strong, they looked at Ken and I questionably, said a few things in Swahili to each other and then started laughing. I was to learn from Emmanuel they were

placing bets to see if the "old guy" would make it. Nice.

It was warm and in the mid 80's. We aggressively hiked our way up the dampened dirt trail of the Montane rain forest, easily passing other climbers. We saw a variety of birds and black and white monkeys looking down at us from the trees. I felt good, strong, as did Ken. As we passed one of the porters, he called out in Swahili, "Pole, Pole" (sounds like pole-lay). A common phrase on the mountain and sage advice, he was telling us "slowly, slowly."

By late afternoon we had climbed almost 5,000 feet and reached our campsite for the night. It was chilly now and the

forest was gone. Bushes and bare trees surrounded us. Way off in the distance we could see the summit. We set up our tent, changed into warm long pants, fleece sweatshirts and feasted on a pasta dinner with some type of meat we couldn't identify. Feeling good, a bit tired and cold, we curled up in our sleeping bags and went to sleep as the sun went down.

The next 2 days we followed the climbers' creed, 'climb high, sleep low.' We ascended through the moorland zone and continued up a rocky ridge onto the Shira plateau. Crossing an alpine desert, a barren land filled with charcoal grey lava rocks, we passed 14,800 feet and the Lava Tower,





**Ken Huff & Payge McMahon on the summit with the glaciers in the background.**

nature's monument of the once active volcano. After reaching this peak, the terrain changed once again as we descended down to 13,000 feet to Barranco Valley Camp for our 3<sup>rd</sup> night on the mountain. Raw cold and misty, a dense fog rolled in and you couldn't see more than 10 feet in front of you.

We didn't sleep much that third night in the valley. At one point we heard what sounded like a thunder crack and then a rumbling. It was a small avalanche over on the wall. It was too far away for us to be concerned, but nonetheless, a little nerve wracking.

We were cruising along the first 3 & ½ days and then it got hard. After breaking Barranco Camp, we made our

way up the rocky Barranco wall and then down through the Karanga Valley, scrambling over boulders, intervening ridges and valleys. Ken slipped on one of the boulders and fell about 8 feet, landing like a cat on his feet. He still had good agility. Unfortunately, he tore a hole on the top of one of his boots. We wrapped duct tape around it. It would have to do.

It was getting a little harder to breathe and our thighs started burning for the first time. By the end of the day and a very steep afternoon climb, we passed breathlessly up and over several huge boulders and saw our final base camp, Barafu.

Barafu is the Swahili word for "ice" and the camp is bleak and inhospitable. Sitting at

an elevation of 15,000 feet, 4 miles and over 4,000 feet from the summit, it is cold and completely exposed to the ever-present gales.

Tired and out of breath, we ate dinner and hit the sleeping bags by 6pm.

We awoke just before midnight by the sound of sleet hitting our tent. It was very cold and also snowing. We bundled up; putting on extra layers, drank hot chocolate, ate some granola bars and exited our tent by 1am ready to climb.

In the dark, my foot slips off a snowy wet boulder. I stumble to my right, towards the edge of the mountain. Kenny grabs my coat from behind to steady me. I was tired. Except for the slight awkward gait and

occasional grimace, Ken was focused.

Talking was out of the question. Breathing had become a chore. Climbing only a few steps made us winded and sent our hearts racing. The muscles in our legs and back screamed. I had a whole new appreciation for the mountaineers you see on a Discovery Channel's Everest special. Now I understood why they moved so slowly!

We had been ascending for hours now. It was freezing. Neither of us could feel our feet or hands. Our noses were running making it harder to breathe. The gloves made it difficult to use tissues. It wasn't a pretty sight. I avoided lifting my eyes and focused on my steps. To see other climbers' headlamps way up on the mountain would be too depressing. I couldn't take that kind of rejection right now. All I could think about was it was sleeting in Africa and these were the longest 4 freaking miles of my life. I was twenty years younger than Kenny, and I was wondering if I was going to make it? I had sorely underestimated the difficulty of breathing at these altitudes and the ability to climb the remaining 4 miles and 4,000+ feet to the summit. It couldn't possibly take us more than 3 hours? We're in good shape. Even if we are over 3 miles above sea level, the average person walks 3-4 miles an hour...right?

The physical challenge became purely a mental one. In my head, I was having conversations with myself. I thought, "I could quit now and go back to base camp and curl

up in my cozy sleeping bag...but then I would still be on the mountain and what if I couldn't sleep? I would be sad I didn't push myself more and didn't want to regret quitting!" We pushed onwards and upwards taking short breaks every 15 minutes.

Around 6am yellow and pink rays of sun broke through the clouds. We had made it to Stella Peak, a plateau just a 1/2 mile away from Uhuru Peak, the summit. It was a beautiful sight. It took another hour trudging through the snow and up an embankment but we made it! At 7:12am we summited Mt. Kilimanjaro. Hugging each other, Emmanuel, and another guide, we thanked them both for getting us here. Ken's eyes were tired yet his smile radiated accomplishment. He did it, making the summit by sunrise, just 8 days shy of his 55<sup>th</sup> birthday.

We stayed at the top no more than 10 minutes. It was the most physically, mentally, exhausting and challenging thing either of us had ever done. After taking a few pictures including one next to the wooden, weather beaten sign marking the 19,340 feet summit we headed down.

It took us 2 & 1/2 hours to descend to Barafu Base Camp. Taking a different route than the one we came up, it was a steep decline on mostly loose dirt and stones. Ken doubled up his neoprene knee braces. He was hurting. Bone crunched upon bone where cartilage had worn away in his knee. He just grimaced and kept going. The downhill jarring was by far worse than the climb for him.

Having already climbed 10 miles to the peak and back to Barafu camp, where we had left our tents and the porters, we broke camp and descended another 10 miles down the mountain. The terrain changed as did the weather. Rain turned to hail pelting us through the ponchos we had now put on over our coats. After hiking 15 exhausting hours, we made it to Mweka camp situated in the upper forest amongst the trees. We set up camp, begged off dinner, too tired to eat and passed out for the night.

The next morning we awoke early and descended another 3 hours and 10 miles through the forest. We reached the end. At the Mweka gate registration hut, we signed in and received our 'official' certificates for reaching the summit.

Tired and dirty, we were now very hungry. On the way back to Arusha, we stopped at a restaurant in the town of Moshi. While waiting for our first full meal in almost a week, I asked Ken how climbing Mt. Kilimanjaro compared to a Joe Gibb's August 2-a-day training camp and he chuckled. "Compared to what we just did? Training camp was a piece of cake! That was the hardest thing I have ever done in my life. I'm glad I did it and I don't ever want to do it again!" I laughed as our food arrived. In a very American stereotype, we devoured cheeseburgers, fries and cokes. Yummy!!

Remember folks, age is just a number. Determination goes a long way!



# Camping with Kids

By Alicia McQuain

**W**e all know the joys and stress of raising children. My husband John and I have two boys, Caleb 7 and Austin 4. From the time our boys were born they did everything with us and went everywhere with us. We found that the more fun things we did outside with them, like camping the more they wanted to do things for themselves and the more they wanted to be a part of what we were doing. So we started letting them help, yes it may take longer to set up the tent but it gives them something to do and a sense of accomplishment. We let our boys get the tent poles out and hold them up when we set up our tent. They get to set up their beds with their pillow and sleeping bag, and then help gather sticks for our fire. This makes sure they are not bored when we are trying to get everything set up and it also sets the stage for later in life when they will need to help do the bigger chores.

You should plan some games or activities to do with your children. One thing we like to do as a

family is carving. With my husband and father being knife makers from Blind Horse Knives, it is no surprise we like to test out our knives and teach our boys knife safety. If you think your children are responsible enough to handle a knife, it is a lot of fun to sit around the campfire with a stick or block of wood. We practice making feather sticks, hotdog roasting sticks, or go more into more detail and carve spoons that you can use for eating or cooking dinner. This is a great way to show your children that they can make something that they can also use. It is fun to see what your children come up with and how long they can sit still.

My oldest Son Caleb really enjoyed himself at the Pathfinder Gathering trying to start a fire with the Ferro cerium rod that Dave Canterbury gave him; I told Caleb he couldn't tell anyone he could start a fire with a Ferro rod until he had started 3 fires in a row (something I was once told) so the fire making began. This was a challenge he was more than up for; he did end up starting 3 fires in a row, in fact he



Caleb and Austin get to see the end result of all their work as they hook the last of the tent to the poles.



**Both of our boys and one marshmellow. I wonder who will claim it!**

started 8 in a very short amount of time, he also had 3 fires going at the same time. What a sense of accomplishment he felt; he must have told everyone he saw that day about the fires he had started. With your supervision, and again if you think your child is responsible enough to handle making fire with a Ferro rod, show them how. You will teach them the importance of having the right tinder and also the importance of having fire in a camping or survival situation - this is knowledge they will always remember.

Having been to many camping events as a family we have taken many classes that are available; I really recommend doing these classes with your children if they are able to sit and listen for

a period of time. I took my oldest son Caleb to a shelter building class where they made a lean-to out of sticks and tree branches. With the knowledge he learned from that class he has built a lean-to on our property that he is very proud of. He really wants to sleep in it sometime, this is not the most waterproof shelter but he built it all by himself and is very proud of the fact that he didn't need our help. This is a great activity to do with your children if you think they are old enough let them build one all by themselves and see what potential they have. If they are still too young you can help them, let them pick out the sticks they want to use and you can cut them down for them, let them help lay the branches for the roof and let them do anything that they are able to do. It doesn't have to be perfect and it won't be but the fun





**Above:** Caleb enjoys the sweet fruits of his labor!

**Right:** Austin wonders why we don't do this every day of the week!

and laughs you will have doing it is priceless!

Our youngest son Austin is 4 so he can't do a lot of the things Caleb can but the way to his heart is by food. Austin loves his snacks, especially when camping. Everyone knows the good old snack s'mores, you can let your child put the marshmallow on the stick and get their graham cracker and chocolate ready themselves, it is okay if they take a little too much chocolate that's the fun in camping right? You can help them hold your marshmallow roasting stick and teach them how to roast it without catching it on fire, your child will enjoy you spending the time with them and teaching them things and also eating the end result. You can also make grilled cheese sandwiches, If you have a pie iron you can let your child butter the bread, and lay it in the pie iron and then add the cheese, You can cook it because it does get extremely hot but they will

enjoy eating it. Again the fun is doing it with you and showing them how.

Camping is a fun family activity and is something that we will be doing for a long time to come. It will bring your family closer together. The greatest part is that your children are never too old for camping, the older they get the more activities they will enjoy. If you start camping when your children are young you will all enjoy finding fun things to do together. Letting the kids help will excite them and let them feel like they are a big help and an important part of the family, and having everyone away from the everyday distractions, be it work, cell phones, video games, television, will show you all that family is important, fun and exciting

Alicia McQuain is a wife to John McQuain and the mother of Caleb and Austin McQuain, She is also a member on a board in her church. Alicia works at Blind Horse Knives and is the Daughter of Dan and Judy Coppins. She also runs the BHK Outdoors site and you will see her in some videos for BHK and BHK Outdoors. Alicia enjoys doing anything outdoors as long as its with her family. She enjoys camping, fishing, hiking, canoing, and sitting by the fire with her friends and family. Alicia strives to learn more about survival and self reliance so she attends classes at events any chance she gets.







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**Q: It is hard to find free rural camping these days. Any idea on where I can look? – Ron, WI**

A: Boon docking, ‘dispersed camping’, call it what you will, free camping is hard to find if you don’t know where to look. In the U.S., we have 155 National Forests spread out over 190 million acres (the size of TX) with 87% west of the Mississippi. Joe Walsh, spokesman for the US Forest Service, told me “while there are free backcountry places to camp in our national forests, its best to contact the specific forest you are interested in as policies, permits and passes vary”. He also recommends [www.recreation.gov](http://www.recreation.gov) to help in your search.

I found a couple additional websites to be helpful including, [www.boondocking.org](http://www.boondocking.org) and [www.freecampgrounds.com](http://www.freecampgrounds.com). There are two books, ‘Don Wright’s Guide to Free Campgrounds’ (east & west editions) you may want to peruse as well. As always, minimize your environmental impact and follow Leave No Trace guidelines.

**Q: What kind of stove do you use when backpacking? – Donna, GA**

A: Outside of building a campfire to roast meat from an animal kill, I just want to boil water to mix in packaged freeze dried meals, soup or oatmeal. I love the 3.25 ounce, size of a pack of cards, Esbit®





Stove & Fuel Cells. Named for the 1936 German inventor of the hexamine fuel tablets, Esbit stands for, ‘*Erich Schumms Brennstoff in Tablettenform*’ (Erich Schumm's Fuel in Tablets). The non-toxic, fuel does not liquefy or give off smoke. A single fuel cell will boil 2 cups of water, burn up to 15 minutes (depending on altitude & weather conditions) and temperatures can reach up to 1,400 °F (760 °C).

Along with the Esbit® Stove & Fuel Cells, I use a standard, lightweight, military issue canteen cup/pot and simple tin foil for a lid and/or wind breaker.

**Q: What is a Shewee and does it hurt? – Stephanie, AZ**

A: Men have it SO much easier in the outdoors when nature calls! A Shewee is a portable urinating device for women and no, it does not hurt. It is a molded plastic funnel, designed to use while standing up or sitting down. All you have to do is unzip, put the wide opening of the funnel in place against your body and you’re in business. A favorite among mountaineers, cold weather campers and backpackers it allows you to keep on your backpack and clothes. Get the extension tube accessory or use a bottle and you won’t have to leave your tent in the middle of a cold, rainy night anymore. Be sure to practice with it at home first and you’ll be good to go

in the outdoors!

**Q: What is the one item you never leave home without and why? – Joseph, IL**

A: I literally never leave home without a Nalgene wide-mouth liter bottle. It is easy to clean and durable. Backpacking, grocery shopping, hunting, exercising etc., I am obsessed with drinking water and staying hydrated. I do not believe in buying bottled water. It is a waste to the environment, and of money, when tap or running water will do and is easily accessible. You can pack snow and melt it by using your body heat when keeping the bottle tucked in your sleeping bag over night. Out in the wilderness or traveling abroad, I’ll bring purification pills or a SteriPEN, before I buy bottled water. Add a packet of powdered Gatorade or PowerAde for flavor and electrolytes.

Do you have a question for Payge? Send it to [payge@turnthepayge.com](mailto:payge@turnthepayge.com)

Payge McMahon is an adventure athlete, world traveler, writer, fitness coach and popular web personality with sponsors and fans worldwide. She is the ‘country girl-next door’ from Pennsylvania, with five older brothers and only a few generations removed from being Amish! You can follow her adventures at [www.turnthepayge.com](http://www.turnthepayge.com)

# What's in My Pack?

By Doug Jeffries

**M**y pack and its contents are a work in progress, but for now it works for me. The pack is a surplus molle II assault pack and I use a mil spec butt pack strapped to the outside as a removable storage or extra space when I need it. The pack is a little on the small side for winter camping but I make it work.

My sleep system is a surplus mash up of an old German bivy bag, a Swiss mummy bag and an Italian wool blanket; very heavy and bulky but it works. It's my version of a modular system and it will work for me (at least until I get the real deal).

For shelter I have a poncho, a couple of lawn bags and two heavy duty space blankets; one is OD for when I don't want to stand out and the other is bright red that I use when it doesn't matter. Some times I take both or just one depending on conditions. The trash bags are multi use items but I use them a lot for what I call woods-bum bag chairs: Take a trash bag fill it with leaves ferns and anything that won't put holes in the bag, tie it off and sit. I have also recently made (well my mom made it for me, but hey I helped) a wool blanket pull over jacket. It hasn't been taken on any trips to the woods yet but it will soon. It's pretty much a shelter on the move. Depending on the weather, I also carry a Eureka two-person tent. I'd really like to get a hammock to try out for spring and summer use, maybe next year.

For my clothing I usually wear cargo pants and an old shirt, so I keep a pair of polypro long underwear with my gear in case of cold weather. They wick moisture and keep my body warm and dry. These stay in the pack all year round. I also carry a couple pairs of wool socks to keep my feet warm and dry. To keep my head and ears warm I have wool, fleece lined watch cap. It's really warm

**Doug is a family man and human jungle gym. He collects and uses knives (mostly BHK's) and wishes he could use them for more than just work. At play he has been known to sleep in a debris shelter, hike and carve spoons.**



and it breathes really well, but the best thing about it is it doesn't overheat. The fleece is only a "sweat band" it's just big enough to cover my ears. For hot sunny weather I have a cotton brimmed hat that keeps the sun off my head and ears, because burnt ears suck. Your hands are your body's tools and need to be protected, so I have a pair of leather work gloves that I rotate out seasonally; lined pair for winter and unlined for every other season. Finally the multi tool of clothing, this item can be used for





almost every type of survival or even everyday task. Yes I'm talking about the bandanna. This item is so great that I carry a normal bandanna and a bandanna on steroids known as a shemagh. For those not familiar with this, it's a 46 inch x 46 inch bandanna used by the troops in the Middle East to keep sand out of their face and mouth. I use it for a scarf when it's cold and a sweat rag when it's hot.

Tools are kind of self-explanatory. I carry a Fiskars folding saw, a small folding shovel, and a pair of needle nose vice-grips. The vice grips are used for pulling things off the fire or any thing a pair of pliers is needed for. The knife, well it varies from what ever knife I want to use at the moment; most are O1 steel, full tang knives. I always keep one in the pack no matter what I'm carrying on my hip. Hopefully soon I will add an axe to the winter load and my machete to the summer load. To maintain my tools, I have a JRE strop, coarse & fine diamond stone. One of my weird tools is a broken off piece of antenna to a RC car, I use this as a blow tube for burning out bowls and spoons. I also carry a

Princeton Tec headlamp and spare batteries. I prefer a headlamp to a hand held for the hands free factor. Last but not least, the multi-tool of cordage, the king of string, 550 cord. Seven strands of tan goodness, that can lash, tie, sew, repair, and knot just about anything.

For my mess kit I have a Guyot stainless steel bottle with nesting cup, a MSR pot with lid, a titanium spork and whatever food I'm in the mood for. The pot holds about 2 liters and gets filled with the food and drink mixes for the trip. I really want to try a GI canteen kit and a billycan with a bail as my containers. I'm also a little curious about alcohol stoves but don't really have any experience with one; might have to look one up and add it to my kit.

My First aid kit is also a small kit in itself. Its base is an Adventure medical kits Trail kit; minor cuts scrapes, burns, blisters and sore muscles. I've added a few chem. lights (glow sticks), a Fresnel lens magnifier, an AMK heat sheet, spark-lite tinder, a small fishing kit, some duct tape, pea less whistle and a Bic lighter.

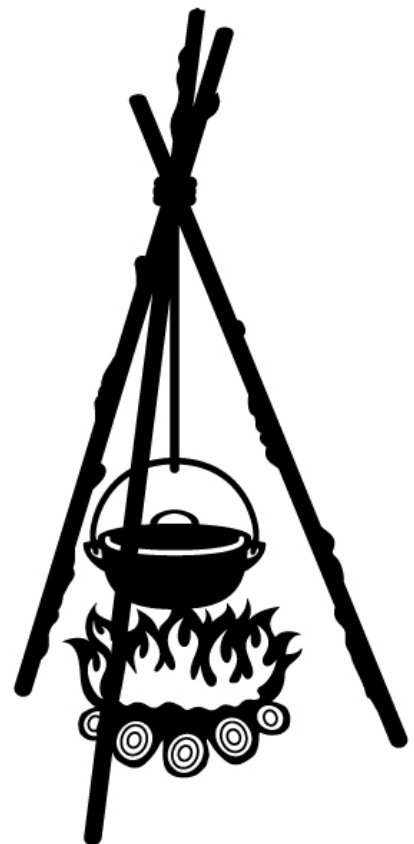


My fire kit is a small bag I found lying around the house. It holds a zip lock bag of tinder from the field (holds a wad of cat tail fluff now), some jute twine, a small container of char cloth, flint and steel, cotton balls with petroleum jelly and a Doan magnesium bar with hack saw striker. The container for the char cloth is a small tin I can use to make more. A candle rounds out the package. I also carry Bic lighters stashed all over the kit.

For navigation I have a Silva Explorer on a piece of 550 with a fox 40 whistle and a small squeeze light. I usually keep this dummy corded to something and I pull it out of the hole for hydration tube. Also have my GPS and extra batteries. These

along with a current map of the area should help get me where I need to go, or get me home in the event of an emergency.

Over all my kit is pretty complete and I think it's well rounded enough to help support me for what ever adventure I can get myself into. With every thing attached and packed up the weight is around 30 pounds, could be lighter or a whole lot heavier. Like I said it's a work in progress, always changing, adding and subtracting. The only way to see what works is to use it. So get out and use your gear, that's what its there for.







# *Fishing Well in Freshwater With (Almost) No Gear*

By Jason Akers

I've watched this scenario play out many times: Man in forty thousand dollar bass boat and \$300 rod and reel setups juxtaposed by a kid fishing nearby. The man is zipping a ten-dollar lure out repeatedly and catching nothing. Meanwhile, the kid with laughably simple equipment is slaughtering the fish, pulling them in with reckless abandon.

The scene is instructive but the instruction is rarely heeded. Catching fish need not require a lot of equipment.

Stuck in the wild by choice or chance we could find ourselves in a situation less prepared than the barefoot kid with the basic equipment. Yet there are small bodies of water virtually everywhere in the US that isn't desert. It's shocking how few people pack basic fishing gear in their kits.

There can literally be fish swimming at your feet. However, without a small bit of equipment or the knowledge and ability to improvise the gear, the fish might as well be on the moon!

Fishing gear need not take a lot of space or consume a lot of thought. When we cut through the luxuries of gear we find that for fishing we need very few things. We need line, a hook and bait. Certain situations may call for extras but with these three basic items, almost 90% of fishing can successfully be handled.

Disclaimer: Check all regulations in your area and follow all game laws.

## **Line**

Of the three essential components of fishing gear, this is the most essential. Modern fishing line

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comes in three varieties these days. Monofilament is just like it sounds, one continuous synthetic filament of extruded polymers. Its commonly called "mono" for short. Braided line made a comeback a few years ago when materials advanced sufficiently. Braid is simply man-made fibers joined in a way to make them stronger. A newer type of line to emerge in the last few years is called fluorocarbon. It is simply composed of one extruded fiber from a fluoropolymer. Then, of course, some of these line types are mixed to form hybrid lines.

So with so many choices, what does one pick for a kit and why? I immediately rule out fluorocarbons. Fluorocarbons are great for fisherman because they are very difficult for the fish to see, more so than the other lines. However they are very brittle and it seems to me that the quality from batch to batch can produce widely varying results. Fluoro snaps very easy and it is not very flexible.

That leaves mono and braid. Mono has the clearness of fluoro but is more flexible, easier to use and less prone to snapping. Its disadvantages are susceptibility to light degradation and lack of abrasion resistance. However, it's very good for hand lining. I keep a small spool of mono in my kits.

Braid is stronger by diameter than either of the other two lines. It is abrasion resistant, has medium stretch and is flexible. It's almost perfect except for the fact that braid is quite easy for finicky fish to spot. However, for makeshift trot lines it is just about perfect. I also carry a spool of this.

When picking test diameters (breaking point) of the lines I take with me, I usually go with a small test for the mono and a larger test for the braid. Six pounds is just about right for mono. This will allow you to catch fish as small as bait sized bluegill up to large bass and catfish. For the braid I choose 20-30 pound test. It's still quite small and very tough.

If you find yourself without line in your kit





**The author's fishing kit side A.**

it's going to be very hard to improvise this component in any way that will fool fish effectively. However, if you are willing to sacrifice a boot string or a length of paracord you will sometimes find that inside are small fibers similar to mono. These fibers may vary from brand to brand of the cord. In dire circumstances you could braid a small length. A length as short as 4 feet could prove to be effective.

## **Hooks**

Like line, it could be hard to improvise a hook. That's why it pays to have them in your kit in the first place.

There are tons of types of hooks and styles and colors and brands. I won't summarize all of the types. Instead I'll give you a basic approach to what works for kits and what I use. I pack 3-4 hooks in a few different sizes. The first type and size of hook I pack is a number 6 or number 8 Aberdeen long shank wire hook. This is a thin, small hook for bluegill, crappie, etc. It holds bait well but is also tough for the fish to see. The next hooks I carry are larger 3/0 or 4/0 circle hooks for catfish and trotlines. These are brawny hooks designed for fish that eat by smell and taste rather than sight.

The hook brand matters; do not buy cheap

hooks. Hooks are not pricey anyway. Buy the best brand with the best finish. The Aberdeen style is usually not finished well in any brand but buy ones that look shiny. Shiny is a good indication of the metal's ability to resist rust. For the larger circle hooks I try to find those with a stainless steel finish. It's important to check the hooks in your kit often. Smaller hooks are made from thin wire that can quickly turn into small brittle pieces of red frustration.

Hooks can be improvised out of thin wire if you can find some. For ladies, bra underwire would work. For men, most shoes today have some type of metal in them. A kit with any amount of equipment at all is sure to have something that can be fashioned into a hook. Copper wire from electronic equipment would work. Given time and a small bit of equipment, many pieces of metal, bone and sometimes wood can be fashioned into hooks. I wouldn't want to try it but it helps to know it just in case.

It is possible to fish without a hook but you'd need bait that can be tied to your line. This is a case where a grasshopper or Japanese beetle would be superior bait. Simply tie the insect around a hard part of its body where the line won't slip and fish as normal. However, when you get a bite you will have



**The author's fishing kit side B.**

to let the fish completely swallow the bait – about 30 seconds or longer. Once this occurs, a slow retrieve can put this fish into your hands. This method can be extremely frustrating though.

### **Bait/Lure**

This is the one item that can be improvised very quickly with live bait in the surrounding wilderness.

When I begin to look for bait I have a priority list in my head of what I'd like to find first. The bait I like first requires little energy and is most effective. The list works down from there, decreasing in effectiveness and increasing in energy expenditure.

The top bait in my book

is a worm. I speak broadly of worms to include larval insects as well. For my time, a night crawler, redworm, small grub, maggot or wax worm are equally reliable and require the least amount of energy. The best places to find them are anywhere wood is rotting. You can simply lift the chunk of rotting wood and usually find a few grubs. Dig deeper into the soil and the moisture held by the wood will usually make prime earthworm habitat. Lacking rotten wood look for deep leaf cover or moist areas on the ground where anything natural or manmade has covered the soil for some time.

Second on my list are any above ground insect such as crickets, grasshoppers and other insects. I never pass any insect up if they are in abundance but if they prove to be ineffective I

have no problem moving on. Crickets and grasshoppers just about always work somewhat well. I've used Japanese beetles to good effect as well.

Last on my list is any water dwelling creature. The time and energy is just not worth it. Minnows are tough to catch. However, in a worst case scenario a small minnow trap can be made of a plastic pop bottle. Simply remove the cap, cut off the upper "funnel" portion. Reverse it and pop it into the body of the bottle. Poke some holes in the body; secure the funnel with ties, wire or string. Tie a piece of cord to it and put something in the bottle for bait and toss it a few feet out. This trap will also catch crayfish, which make good bait (or good eats!).

That being said, I pack a few old standby lures just in



case. It always seems like bait can sense hunger and quickly retreat to safer ground. The first standby lure is a lure called a Rooster tail. The Rooster tail is a small spinner shaft with a feather dressed treble hook at the end. In between is a lead weight that is usually colorfully decorated and then a spinning clevis attached to a small Indiana style leaf blade. The blade spins even at slow speeds and the flash and vibration attracts fish. Everyone has their favorite color but it seems like for them only that color works. I've tried at least 20 of the colors but the only color that consistently works for me is the white minnow pattern with the white feather tail (not the light grey tail!). This lure is fragile however they are not expensive. The wire bends, the clevis fouls, the feathers come off and the paint chips. But at a few bucks it is safe insurance.

The next lure I like is a curly tailed grub on a jig head. Like the Rooster tail you just cast and retrieve at varying speeds. The swirly tail creates the action. Great colors are whites and chartreuses.

Why is white a good color for lures? In the water they look like minnows or other baitfish. Despite what lure makers tell you, fish eat other fish the majority of the time simply because terrestrial creatures seldom make it into the water. It helps to know what lures work for which fish in your areas of frequent occupation. Pick accordingly.

In the rare occasion that bait cannot be found and lures are unavailable, simple items can be fashioned into effective lures.

Examples include but are not limited to, small clothing threads, tufts of cotton, bubble gum, small bits of plastic and much more. Anything brightly colored and/or able to create movement in the water can be considered.

### Accessories and Setup

As I said before, I consider hook, line and bait to be the three essentials. Sometimes you may need to keep bait from sinking or help promote sinking in order to get the bait into the feeding zone of the fish (strike zone). Sticks make decent floats and small rocks can make decent sinkers. It never hurts to include some of these in a kit though. They are small and light. Be sure to keep sinkers and floats at least a few inches away from the bait as fish can sometimes spot them.

Along the same line, a green branch makes a passable rod. A piece of river cane makes an outstanding rod. The rod can help extend a short piece of line and they provide some give to allow the fish to be hooked easier. I know that sounds contradictory but smooth pressure is what hooks fish, not sharp jerks.

For a knot I always use a palomar knot that is simply a loop passed through the hook or



Roostertail

lure eye, formed into another loop and passed through and then the lure is passed through the original loop. When tying line to a branch rod or somewhere I can't tie a Palomar I always use an improved clinch knot. Diagrams on how to tie these knots can be found easily on the web.

### Application

It's usually not reasonable to start fishing and catch fish. Even the best indicators of behavior can sometimes be unreliable. The first step in application is to determine what fish you will target. I really break this up into two categories: catfish and everything else. For people in different climates and locations

it helps to familiarize yourself with what fish can be found in your area or area of travel.

## No Gear

But what would one do if they found themselves without any of the basic equipment to even improvise the equipment I spoke about? If you have a knife you can fashion a fish spear from a branch. However, don't let Hollywood concepts of fish spearing sway you into carving a sharp point and trying your luck. The best fish spears have multiple prongs. If you watch *Dual Survival*, you've seen Dave spear piranhas in the Amazon with a multi-pronged spear.

You'll need to split the end into three points and wedge some cordage or some other material between the prongs to keep them separate. Then sharpen each point.

The technique is pretty simple although I think Dave explained it best as he speared the piranha. The surface of the water refracts the light and you have to aim lower. A good rule of thumb is to aim at the bottom of the fish's belly. Then throw the spear or jab it if the fish is in range. Just like shooting a deer, it helps if the fish is looking away when you take your shot.

## How – The Technique

Your technique will vary depending on your own individual conditions but some things always remain the same. In order to maximize fish you need to minimize movement. Eyes of most fish are on the top of their head because they

commonly feed upward. Therefore they have great peripheral vision in that direction. They can contrast a man standing on the bank quickly against the sky. Therefore you either need a long line or a small profile. If you find yourself with a short line it will help to lay prostrate upon the ground and fish by feel. As I mentioned, a rod extends the line and helps hide your profile.

Once you've found a spot (I cover that in a moment) and your equipment is ready simply toss the bait or lure out. With bait you want to leave the line still for a few minutes and then you can jiggle it a bit or move it closer. You may find that sinking through the strike zone will produce a hit.

Each lure requires unique movement but the two I chose to talk about here generally work best with constant retrieves. Of course you should vary your retrieve until you find a pace that produces bites.

If you find yourself with an abundance of hooks, line, bait and lures you can always tie off a baited hook to a limb and make a limb line or simply to a cane or green branch stuck into the ground. Then you can also cast a lure and double your results with little extra effort.

When the fish take the bait it's important to resist the urge to jerk the line as hard as you can. Just pull up sharply and smoothly but not too hard. Bluegills have small mouths and you can pull the bait out of their mouth. Crappies have paper-thin mouths. You can rip a lure right through them. If you are using a lure and retrieving at a

decent rate then you don't really need to set the hook at all. Different fish sometimes require different hook sets so experiment if the standard approach doesn't work.

Getting hung up is just part of fishing. Chances are likely that the curved part of the hook caught an underwater branch or the point snagged a rock. Slowly pull the line taut and release it suddenly. Occasionally the lure will backpedal free. If that fails after a few attempts pull directly back, slowly and keep increasing pull. Pull the line directly or with a stick. It is sometimes possible to bend the hook free (this is another place where light wire hooks come in handy). In that case, once the lure is retrieved the hook can be bent back into reasonable shape.

## Where to Fish

Fish do not commonly frequent open water. They only use it to get from one feeding spot or breeding spot to another. Most fish stick close to transition points. From the bank, with no sonar it will be difficult to find all the transition points but it can be done. The first step is to make use of the transition points you can see. These include bank edges (especially cut-ins), half submerged logs, man-made semi-submerged structures and more. Your ability to take risks may be lessened by the equipment you have but it's best to throw as close to these transition points as possible. The important point is to not throw in open water if you can avoid it.

That being said, there are instances when panfish such as



bluegill will come to shallow open flats to spawn (breed and lay eggs). These “beds” are generally recognizable as light colored circles on the muddy bottom. You should always cast to these, as the fish will strike to protect the eggs or young fry.

There may simply be times where you can't locate the fish. In those instances you have to conduct a methodical search called “fan” casting. Fan casting is simply cutting the arc of water in front of you into a pie and casting in 10 degree increments. So the first cast is just off the bank then 10 degrees to the right and so on until you have covered the complete arc. Then move down well past your first arc and repeat.

You may need to also vary your retrieve or use a sinker or float depending on where the fish are in the water column. This can be tricky but it is mostly a function of temperature. During the warmer and cooler times of the year the fish will go deep where the temperature is more constant. During spawn, the fish will go to shallow water to breed and lay eggs. During the lead-up to the spawn and during the fall, the fish will go shallow to feed.

It also helps to know where fish like to feed. As I mentioned above, I will set up completely different for catfish than all other fish. This is because catfish use their whiskers and olfactory senses to feed along the bottom even though their eyes are on top of their head. Other fish generally feed upward as I mentioned above. Therefore if you are fishing for catfish it makes sense to use a sinker and get the bait

down quick, for other fish you might want to use a small float to keep the bait just off the bottom.

### When to Fish

A general rule of thumb for when to fish is this: weather that people don't like, fish will. A bright, sunny day is what fisherman call a “bluebird” day. But don't let the name fool you; it will be dang tough to catch fish during those times. The best times for fishing are before and after a storm or during heavy cloud cover. It is not easy to hunt in the bright light of day. Fish instinctively know this and they rarely try to feed when it is bright out. The hours right before and after dusk and dawn (even on bluebird days) are usually superb.

### After the Catch

Once you've caught your fish you will obviously want to eat your catch. The simplest way with 99% of panfish and bass is to make an insertion on the belly below the gills and run it just under the skin all the way to the tail. Pull the guts out and wash out the cavity.

Next you will need to scale the fish (if the variety you caught has scales). Take the dull side of a knife and while holding it perpendicular to the fish, run it from the tail to the eyes. The scales should loosen easily. Leaving a few on won't matter much but scales are made of the same stuff as fingernails and you wouldn't want to burn fingernails next to your food.

A fish in this shape is pretty easy to cook if you simply sharpen a stick and spit-roast the

fish.

You can filet the fish of course but that method generally wastes a lot of meat and is generally not a good idea if the fish is small. It's also hard to do with any knife that isn't made for that job. The filet method also leaves the meat exposed and unless you have a pan and some oil its going to make it tough to cook and less tasty.

Filleting a fish is pretty easy though. You simply make a cut behind the pectoral fin (the one right behind the gill). Make the cut from back to belly and bone deep. Then rotate the knife so the sharp edge faces the tail. Holding the knife against the bones run it toward the tail and remove the filet. Then you can run the knife between the skin and the meat or if you've scaled the fish you can leave the skin on.

### Conclusion

With prevalence of freshwater that contains fish in this country (and the world) it really pays to know how to catch fish to gain another measure of self-reliance. As I've demonstrated, it's very easy to put together a simple fishing kit for your travels. In addition, if you find yourself without these supplies, it's not impossible to still harvest fish to sustain yourself in your time in the wild.



# Hunting Whitetail Deer

By Dan Coppins



**Above: Deer Rubs can be helpful in determining the line of travel for bucks. This rub was found near a bedding area.**

**S**o, you want to hunt whitetails huh? Having hunted whitetails for over 40 years I feel there are some things you should know. First of all, you should know it won't be easy at first but will get easier as you gain knowledge and understanding of this great animal.

When I was 9 I got my first chance to go on a hunt with my dad and my uncle, as well as brothers and cousins. The anticipation and preparation leading up to this hunt was so exciting! We were going to get to be a part of the tribe. It caused me and one of my cousins to stay up all night, which resulted in us falling asleep on the way to the hunting grounds. Next, we hit the woods. I can still see the look on my dad's face as he looks back at me trying to walk in his footsteps without making any noise. Wow, a look can say it all. When I became old enough to hunt on my own I remember reading a story about Fred Bear

Dan Coppins is co-owner of Blind Horse Knives and has been hunting for over forty years. Dan has dashing good looks and is not afraid to tell you about them. Dan is also one of the Co-Founders of Self Reliance Illustrated.

and how he hunted with a bow and arrow and that was all it took, I was hooked. I bought a Fred Bear bow and began to shoot. Then came my first chance to try what Fred had taught me, it worked. I moved so slow through the woods that I was able to sneak up on a deer that was bedded down and put an arrow in him at 17 yards with a recurve; a feat I would never again duplicate. But as life happens sometimes, work led me far from home and any chance of getting to hunt. It happened that I saw a magazine in a store and on the cover was a huge buck they called the "Hole in the Horn Buck" from Ohio. After reading the story of that buck, the excitement grew in me again. I began to buy more magazines and read more articles. I started buying books and video tapes and began to teach myself how to apply what I read and what I saw on tape to my hunting grounds. Some of it worked and some of it did not. The point here is to never give up and keep

**Below: Tracks found going both ways are a good sign that the trail is used a lot. This trail was found in a bottle neck area. Sitting here the author saw a lot of deer move through this area.**





trying.

One of the first things I learned was that a lot of the stuff that I was reading would not be things that would work for me in the areas that I hunted. That's when I started asking myself why not? That became a key word for me. That simple word "why?" was just what it took to help me solve the puzzle of how to shoot a whitetail buck in any state that I hunted and in any habitat. I started asking myself things like, "why is that deer track pointing that way, why are their deer tracks going both ways, why was that tree rubbed and on that side of the tree, why was that scrape there?" These are the questions that will help you figure out and understand the whitetail deer. You will soon learn where they bed, where they feed, what they feed on, and how they move through the woods. If you know some of these things it gets easier to figure out where to set up your stand to get a shot at one. Let's look at the nature of the animal for a moment, as they are creatures of habit and curiosity. These are



**This deer bed was found in the bedding area near the deer rub the author had found earlier.**



**This deer scat was found on the trail that was coming from the food source.**

things that we can use against them as we hunt. For example, I was hunting a buck one time in the North East kingdom of Vermont. There was snow on the ground and I was tracking him. The deer made a circle and led me right back over my own tracks then jumped off its tracks with three big bounds, and started walking again. Next it went into a brook, walked up the brook 50 yards then jumped out, zig zagged across a large flat, and climbed half way up the mountain. It bedded down watching over its back trail. Wow! When I asked myself "why" to all of this I learned it thought I was tracking it by smell, not by sight. Now I know I can use this to help me hunt them. I tracked this deer for over eight hours never seeing it. I lost it when it swam the Connecticut river into New Hampshire though. This was one of my best hunting experiences ever.

Now If you look at the deer's habits





**You have to love it when a plan comes together. For the author it was this 151" 8-point with three stickers.**

and its behavior patterns you will start to learn things. Like, when a whitetail deer gets up from its bed it goes to the bathroom shortly there after. When you ask yourself why there was deer scat found here, it might be because it's near bedding or near food. A thick area of heavy cover, it could be bedding. If it's near a bean field, cornfield or mast crops, it could be its food source. If you find scat on a trail it could be from a deer leaving its bed OR food source. If you find a trail with

tracks going one way, follow them, and see where they lead. It could lead to food, water or bedding. If you find tracks going both ways on a trail, ask yourself why? This could be a better choice for tree stand placement to increase your odds of having a successful hunt. When you see a rub mark on a tree where a buck has rubbed the bark off of one side, ask yourself why this side? Sometimes this can clue you in as to the direction the deer is moving. Seeing more than one rub in a row gives you a line of

travel the buck uses. He could be going to food, or he could be going to bed. This is why you ask the question "why?" to every bit of sign you find. If you jump deer in your travels through the woods, take note of the time of day and why were they there at that time. If it's early in the morning they could be on their way back from the food source or they could be in a bedding area. If you find them there once at that time of day, chances are good that you will find them there the same time another day. I have found over the years that making notes of the signs and the deer I encounter and/or the time of day, it won't take you long to figure out how the deer move through and around your hunting area.

Also take note of wind direction. Sometimes that will tell you why things are where they are. Example: trails, bedding, rubs, and tracks. Once you learn more about the deer, their habits, and the area they live in, then it will be time to pull out the tricks. Simple thread, trail cameras, scents, and sounds. Knowledge of wind and where to use these tricks will come to you after practice. Ask yourself why do deer pay more attention to scent at certain times of the year? Ask yourself why certain times of the year you see bucks you have never seen before. Keep asking yourself questions because doing this will teach you a lot about the woods and the animals that live in them.

Some times the hunt can be short and simple; some times it can be long and hard. Last year for me it was short and simple. I saw a nice buck walk

*(Continued on page 89)*



# Wild Edible Plants: The DANDELION (*Taraxacum*)

By Rob Considine

*Safety First! Always identify every plant with 100% certainty before eating or handling. In some cases wild edible plants grow next to the poisonous ones. Until you are comfortable and confident with the identification, always use reference books or seek a professional plant expert. Remember to learn not only the common name but also the scientific, universal name as well. If possible, pick plants that are in a safe area, away from traffic and bad water. However, in a survival situation this may not be possible. When foraging, look for the most common and easily identified plants in the area.*

In today's modern society one of the most interesting wild edible plants is the one we try the hardest to destroy. Generally speaking, most home owners dislike the dandelion because it disfigures their lawn. The more the plant is weeded, picked and cut, it just seems to grow faster and even multiply. For them, what a nightmare it is to see this beautiful yellow flower collecting sunlight on their lawn. If they only knew what a wonderful and useful plant the Dandelion (*Taraxacum*) really is.

Our dandelion is an imported plant from Europe used to provide food to honeybees in the spring and early summer. The French referred to the plant "Dent-de-Lion" or "lion's tooth" due to the shape of the leaves. These leaves are lance-shaped, about 3" to 12" inches long and 1" to 2" inches wide, forming a basal rosette with a green color. When in bloom, it's easy to spot due to the yellow composite flower measuring 1" to 2" inches wide. The beautiful flower sits upon a hollow stalk with milky juice (generally white in color) measuring 2" to 18" inches tall. When the flower goes to seed the wind carries each section as a parachute that can travel great distances. Below the surface line rests the root system, growing down and sometimes out to about 10" inches. The root consists of a beige taproot which also emits a white, milky sap when broken or cut.

After a Vision Quest at age 16, Rob became an avid student of the Earth. He was a student and volunteer instructor at Tracker School in the early 1990's. In 2006, he released the DVD "Emergency Awareness: The First Three Days". Presently, Rob is a retired fire Lieutenant and Arson Investigator and spends his time teaching urban and wilderness skills in north central Illinois.

Due to the white seed head and root system; the dandelion is a perennial plant, growing back each year.

This is a great year-long plant to be harvested. However, with most wild edibles, the season and location will dictate the flavor. Early spring is probably the best time of year to collect the leaves. The harvesting is best done before some of the first flowers appear. Even after the flowers appear the leaves are still good but can take on a bitter taste. In a self-reliance situation the young leaves can be eaten raw or added to other wild greens. When the leaves become older you may boil them once or twice in water to suit your taste. The leaves supply vitamin A and are very nutritious. They also supply calcium and iron. At home try preparing them by frying in a little olive oil with onions, garlic and shaved carrots. Ten to fifteen minutes will do the trick.

World-wide, the yellow flower heads are used to make dandelion wine. I have found that eating the raw yellow flower head is a short-term appetite suppressant. At home or in the field, if butter is available, dip the gathered flower heads and fry in butter or olive oil. These make wonderful fritter-like treats. Again, add yellow flowers to a salad and season as needed. Boiling leaves can also make a mild bitter tea. This may be an option to flavor that nasty pond water during purification.

The dandelion root system consists of a branching beige taproot that may grow 10" inches deep. The best way to harvest is to use a digging stick and proceed down along the sides, loosen the

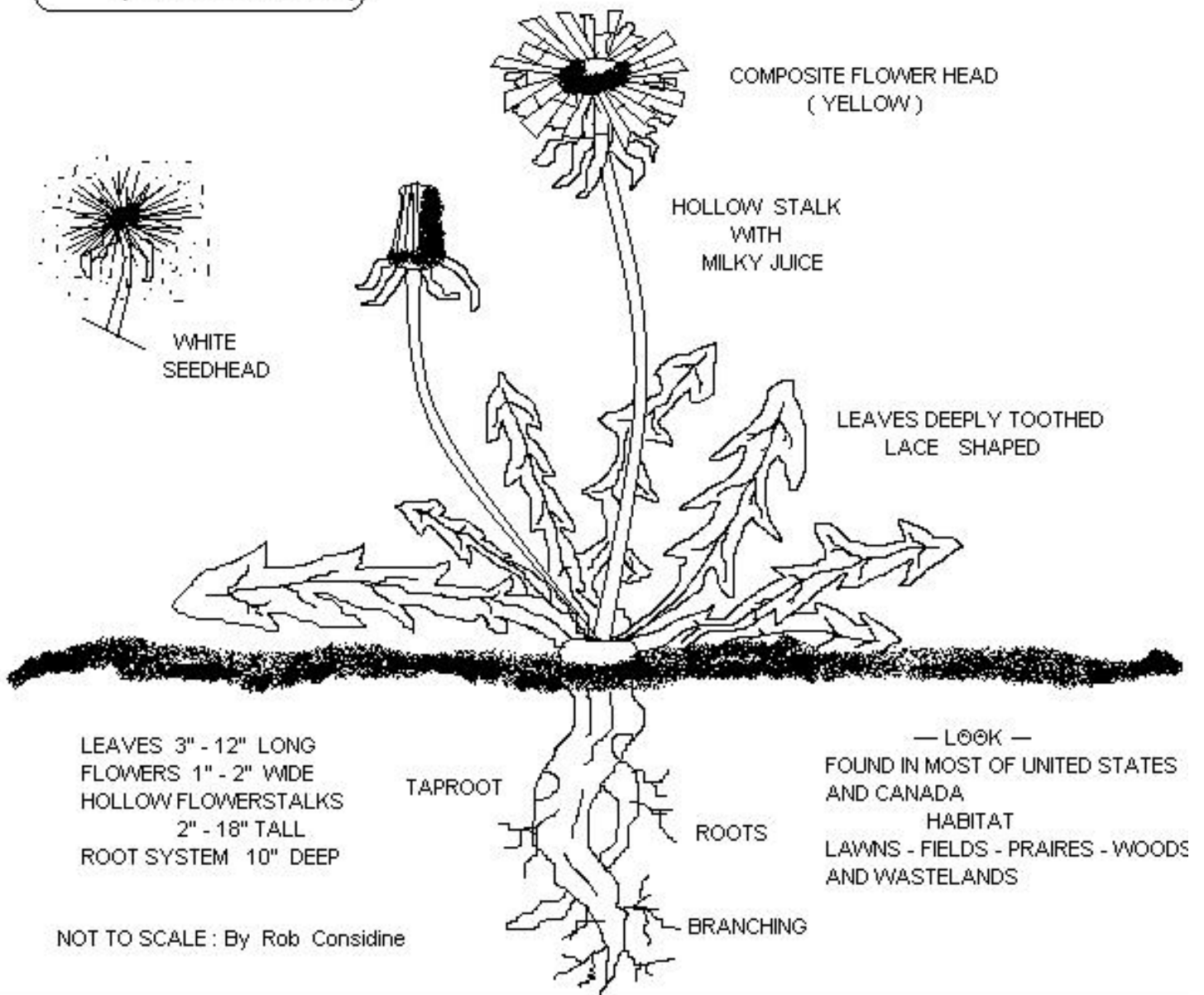
dirt, and pry up. Some of the root will remain for next year's growth. The root is considered to be an herbal remedy and good for blood circulation. Cooked as a vegetable and added to soup is a good option. Cut parts of the root into small pieces, air dry or place them by the fire. This makes a wonderful tea or coffee substitute by roasting then grinding the root pieces and adding to hot water. Filtering root particles is optional (to taste). Experiment; a little goes a long way. Dandelion root can

also be used as a laxative! The issue here is to hydrate and nourish not de-hydrate, especially in a self-reliance situation. All parts of the dandelion have been used as an edible, but due to the latex (white, milky juice) in most of the plant, contact dermatitis may appear when handled.

The dandelion is truly a wonderful find in our outdoor endeavors. First and most importantly, it is easy to identify all year long. In a self-reliance situation, this is one of those

plants that may be needed to take the edge off a bad situation. Experiment with different parts of the plant at various times of year. See what works for you now, not later under adverse conditions. Man may try to destroy the dandelion, but the more he does the faster they grow. Whether growing in the woods or in your beautiful city lawn, try to save a little patch of dandelions!

**DANDELION  
(TARAXACUM)**





# R. Murphy Sportsman

## *A Traditional Budget Bushcraft Alternative*

By Tim Stetzer

The R. Murphy large Sportsman's knife is the old Herter's "Improved Bowie" model from the Herter's catalog of the 50's and 60's.



**W**hile working on a recent article on budget bushcraft blades there was one more brand of knife that I wanted to talk about but that I didn't cover and that's R. Murphy Knives. R. Murphy is an American cutlery company established way back in 1850. They made knives for the old Herter's company and some of those are still available today. My hesitation for putting those in the other piece was that I wasn't sure about the long term availability of the pieces. I picked up my

examples from Bens Backwoods a while back but he doesn't list them anymore. R. Murphy still catalogs some models but lists them as original Herter's stock and only available while supplies last. The model in particular that I considered was the large Sportsman model. This is the old Herter's "Improved Bowie" pattern and it's just as viable a field knife today as it was back when it was being sold through the Herter's mail order catalog.

The Sportsman, or Improved Bowie as Herter's called it, is more of a butcher or trade knife pattern than a Jim Bowie type fighter. It features a 5 inch drop point blade of high carbon steel that R. Murphy lists as 12 gauge in thickness which puts it right between 3/32 and 1/8 of an inch. The blade has a saber grind with a secondary bevel. That's mated to a large Rosewood handle held on by brass rivets

Tim Stetzer was born and raised in Western Pennsylvania, an avid camper since the age of 12. Tim has served in the US Army, the Air Force Reserves and is now a Police Detective and enjoys shooting, knife collecting and hiking. Tim has been writing professionally since 2006 and helped found the online outdoor magazine, [Woodsmoney.com](http://Woodsmoney.com) in 2008. Tim is currently Associate Editor of [Woodsmoney.com](http://Woodsmoney.com)



**Left:** The R. Murphy comes with a basic but sturdy leather belt sheath. The author supplemented this with a deep pouch sheath from JRE Industries as well.

**Below:** The Sportsman model features a thin, 5 inch blade of carbon steel. It makes for an excellent slicer and takes a very good edge.

**Middle:** The Sportsman's sheath is stitched and riveted and features a retention strap with a snap closure.

**Bottom:** The R. Murphy Sportsman would make a great 1/3 to a classic Nessmuk Trio. Couple it with a chopping tool for rough work, and a folder for fine work and you'd have a set that could tackle most anything.

complete with lanyard hole in the rear. It's a simple design, almost kitchen knife like in appearance except for the distinctive hump on the rear of the blade which acts as a thumb ramp. Simple though it may be, it's a time proven design that gets the job done. The knife comes with a stitched and riveted leather sheath with a leather retention strap that secures the handle with a snap. Weight without sheath is 4.1 ounces so despite being a fair sized knife it's pretty light to carry.

The Sportsman doesn't have the mass or weight to be a chopper but it does take a keen edge and is a great slicer. It does nice work on wood and is a great camp kitchen knife. It's the kind of knife that would go great in a Nessmuk Trio paired up with a small hatchet and a multiblade folder. The big Rosewood handle is comfortable to use and keeps the hand from cramping up. Your thumb tends to fall naturally on the hump on the spine when the Sportsman is held in a saber grip. The Murphy is another nice option if you like simple traditional styles and wood and carbon steel. It'll require a little more maintenance than the stainless and synthetic knives, but it'll also develop a nice patina and some character as it ages. I upgraded the sheath on mine to a sturdier JRE Industries pouch style sheath but that was more because I had a spare lying around and because I prefer that style than because there was anything wrong with the factory sheath. The R. Murphy large Sportsman runs for the oddball price of \$26.67 with sheath while supplies last. The smaller Sportsman, which follows the same general lines and has a 4 inch blade, runs a couple bucks less at \$24.89. Whichever version you choose, you're getting a U.S. made knife with some neat history behind it that will still serve the outdoorsman today just fine.

[www.rmurphyknives.com](http://www.rmurphyknives.com)





# *Landi Knives...*

## *Bushcraft Simplified*

By L.T. Wright  
Photos by Tim Stetzer



**W**hat do you like in a knife? Fair question, I think. When we are shopping for a new knife what are the criteria used. I for one look for a knife that fits the hand well, has enough blade to get the job done and feels like an extension of my arm when I'm using it. The tasks I would expect the knife to perform are first EDC, because I carry everyday...I want a knife that carries well for me. Secondly woods ability, because the second most use for my knives would be woods time. Thirdly and just as important is game/food prep. There is not a kitchen or campsite that does not use a knife for game or food prep...making this a high priority.

John Landi of Landi knives has introduced a knife he calls his Bushcrafter that is simple in design

L.T. Wright is co-owner of Blind Horse Knives and comes from a very diverse background and has a strong passion for knife making. L.T., along with Dan Coppins formed Blind Horse Knives five years ago. L.T. is also one of the Co-Founders of Self Reliance Illustrated.

and a good overall choice for your go to piece. I recently acquired one of his bushcrafter models for review. The review knife is made from A2 steel and has an olive wood handle. It came in a leather pouch style sheath. I do believe that John would also build a kydex rig for this knife upon request. Having not had much experience with A2...I was excited to get and use this knife.

OK...back to my criteria.

**EDC:** I carried this knife in the shop and out and about for around a Month. I found the leather hip sheath to serve well in my EDC experience. I had the opportunity to open packages that were sent to the shop, I sharpened pencils quite often. (This is one of my main edc chores is sharpening pencils, a habit I got into from my old carpenter days.) And used it to cut strings off my buffing wheels as well as scraping burrs off of material. I used the knife for anything that was needed during that time. One day during my month long test period our shop air compressor died.



It required us to get a new one. Well it came in a double thick cardboard box...yep; I saw this as an opportunity to work this knife. Anyone who has spent time opening heavy cardboard boxes will tell you that it will work the knife hard. This box was 6 foot tall and 2-½ ft square double walled. This was a good chance to test out the wear and tear on my hands. The knife performed well, It felt comfortable in the different grips I used and after I found a good cutting technique to use over and over...it was off to the races. Remember I like it to feel like it is an extension of my arm, I was doing long push cuts with little effort. The knife being fully flat ground top to bottom lent itself well to going through that double thick cardboard. I successfully cut that whole box into 6 or 8-inch pieces. I was pleased with the performance of the knife. A quick touch up and stropping and it was back to razor sharp.

**Woods time:** I recently had the pleasure of doing a little trip to Vermont with some of my closest friends. We packed in for an overnighter up

the Longtrail to Breadloaf Mountain. The Landi Bushcrafter was my knife companion for the trip. Again I chose to wear the standard leather hip sheath for this trip. The sheath rides below the waist strap on my pack making it easily accessible when needed. During the long up hill trip I never once had the knife feel uncomfortable or catch on any limbs. When we took a break or two on the climb...it didn't poke me in the side while sitting or squatting. The sheath rode nicely and kept the knife secure. On all my carry knives I would add a lanyard and a ranger band to the sheath for added retention, however this is up to the end user as to how they like to retain their knives.

Getting to camp we had the chance to do a little fire prep. I feel this is a great test for a knife as we are all apt to start a fire on most of our trips. I used it to fray up the jute twine into a bird's nest for getting a fire started. I would place the knife edge down on the jute and pull the jute across the knife edge...I also found with the back of the knife





squared off, it too would fray the jute fairly well and would aid it keeping your edge in good condition. The knife made quick work of the jute while not creating any hot spots on my hands. I then used it to make a few feather sticks and cut up some kindling. I was anxious to see how the knife batoned, We gathered up some dry wood and put the knife through it's paces. I felt the knife batoned well and it quickly gave us a small pile of kindling. Any time using a knife to baton, remember to use appropriate sized wood. Try not to exceed the ability of the knife and expect it to perform like an axe. I also used it to cross cut some sticks. I batoned it against the grain of the wood to cut our sticks to a smaller size, again the knife performed well. I feel cross cutting sticks really lets you get a feel for the geometry of the knife. The knife is sharpened all the way back to the handle allowing you to have a great grip and full use of the blade. Push cutting through the sticks was a pleasant experience. I felt I had good overall control of the knife. The knife has a great point that lends itself well to drilling for your fireboards as well as opening game or digging out splinters. The back of the knife is squared off nicely; this thing was a flame-thrower off the Ferro rod. I really enjoyed the way it sparked and could not help but wearing out my Ferro rod watching the sparks fly. The handle has a 1/4" lanyard hole that can be utilized for a number of paracord configurations to aid in your grip or retention.

**Game or food prep:** The knife is a great size for food prep, with the 4 1/2" cutting edge

it allows you to have plenty of cutting surface available to you. The full flat grind lends itself well to cutting nice sized slices of vegetables, meats and cheeses. The length lends itself well to opening and reaching







*(Continued from page 13)*

One Match Fire”, but everybody likes a bargain. So, here’s a bonus 11<sup>th</sup> tip that works for lighting most any fire lay:

11. To start the fire, ignite your match, lighter, or primitive tinder bundle as close as practical to your fire lay and use it to light the tinder inside the fire lay structure. If the tinder doesn’t immediately flare up and catch the first layer of kindling, or if the flames start to die down before your fire is well-established, get your face down low to the ground and blow into the struggling flames, adding oxygen to help the fire grow. Until the fire is burning well on its own, place additional small sticks anywhere that flames try to rise above the structure. As the fire grows,

gradually increase the thickness of the sticks that you add. When the fire is established and you have a bed of coals, you can allow the fire lay to collapse or knock it down, and convert the fire to a form that suits your needs, whether it be for boiling, cooking, warming, or simply comfort and enjoyment.

Having a fire at your campsite will provide you with warmth, light, and a way to cook food or purify water. In dicey situations, an even more important benefit is that a campfire can soothe and calm people who are stressed. The smell, warmth, and glow of a campfire can make any situation more enjoyable, whether you’re simply on a weekend campout or in a real survival emergency.



**Credits: Glen Monaghan, Editing  
Cheryl Laskowski, Photos**



*(Continued from page 15)*

complete socket heat. This is the most important element to Bowdrill success. You generate more heat allowing you to “force” an ember with a less than ideal set or less than ideal conditions.

As we all know, the greater your need for fire, the harder it is to make. Proper form will give you the edge you need for success with a Bowdrill Fire. Now get out there and practice your form!



*(Continued from page 50)*

the reason so many shotguns, and other firearms are coated in it. Read the directions on the bottle to be sure, but most of them are applied as such. Using a mild detergent and fine steel wool, scrub the item to be blued to remove all surface rust and contaminates. Dry thoroughly, and then with gloves on, and using a cotton rag, apply the cold blue solution to the entire surface of the blade. You will see a reaction almost immediately with most brands of bluing, but its best to let it set for a few minutes. Rinse the blade off, and dry. If the results are not dark enough, or even enough...a LIGHT buffing of steel wool, and re-apply the blue. This process can be done until the metal is as dark as you like, then lightly buff with steel wool,

and oil. You're done. As I said, this may be the easiest, and offer the most protection of all the methods we spoke about, but it will leave a funny taste to any fruits or meats you cut with it, and in my experience, it wears off faster with use. You can have the blade hot blued, which is a process most common people cannot do at home, but be warned, some hot blue tanks are hot enough to change the temper of the blade being treated. Not all, but some, so cold bluing is the best method if this is your choice of patina.

As with all the above-mentioned Patinas, imagination is key. You can add any design, shape, or combination to the blade, making your knife yours. You will be customizing, and protecting your gear all in one easy step. A light coat of

mineral oil when being put away for storage is still a good option. And never store your knife in a leather sheath for long periods, as the tannins in the leather can stain the blade. A little time spent on forcing a patina can not only add some character to a blade, but also give you something to talk about around the campfire, and protect it for generations to come.



*(Continued from page 79)*

the edge of a bean field from a long way off and knew he would most likely do it again if he was not disturbed so my plan was to set a stand the next afternoon down wind of the spot I saw him. I set the stand and as planned, the buck did the same thing as the night before. Shortly after I had my buck. It doesn't always work like that but it's nice when it does. Having raised whitetails for more than seven years I was able to learn a lot about them in a short amount of time. There is no way I can tell you every thing I have learned in this short article but the most important thing I can teach is, you can teach yourself with the simple question "why?" Most importantly as you gather knowledge about the deer and their habits, they become tools

you can use so keep them in your toolbox. Get them out, as you need them. A simple thing like a piece of thread stretched out across a trail can teach you a lot about deer movement and the time of day or night the trail is used. I have even used this method on people to find out things about hunting pressure and how to use this pressure to move deer to me. Learning about the woods and animals is a lot more fun than just sitting on a log and hoping one will come by. Don't be fooled by what you see on TV. Some of these hunts are done on private hunting lands and are strictly controlled so the odds are in the favor of the hunter. There is no substitute for knowledge and scouting time in the woods. Remember, you can scout all year round as I do. With all the hunting wisdom I

possess I must remember this; we are nothing more than a lot of bits and pieces of things we have learned from other people who were willing to share. There should be no secrets in life, just people helping people. What a better world it would be if we all did this. So get out there and learn. Then pass down the tribal knowledge, take someone to the woods and waters, pass on what you know and see how good it feels knowing that a part of you will live on forever in them and who they pass it down to. Don't forget to keep asking yourself why? Why? Why? and become a part of the tribe. May GOD Bless you for doing so.





# *Field Lasagna: Easy Italian in the Outback*

By Ian Fielder  
Photos by Tim Stetzer



Three brands of lasagna discussed in article and cooking gear used in its preparation.  
(Can of pasta included for size comparison)

**G**ood food to eat while hiking or backpacking is something that can often be overlooked. Navigating complex nutritional and dietary requirements can be a daunting task. The vast majority of people in my opinion want food that is easy to prepare, tasty and readily available. This article will focus on three different manufacturer's

prepackaged vegetarian lasagna. Up front I am not a vegetarian but selected it as a menu choice because it is one of the more common entrees offered by outdoor food manufacturers and it is popular dish on restaurant menus and in the frozen food aisle. I was also looking for products that could be purchased locally through retail stores. All of the food company's products used in this article are available for purchase directly from the manufacturer as well as from many other retailers' on the Internet.

When I was younger packing food for a hiking trip wasn't that sophisticated, or important to me. For a weekend camping trip I would usually take some toaster pastries, some beef jerky, cheese, a can of soup or ravioli, a can of tuna and occasionally one

Ian Fielder resides in Western Pennsylvania and has been hiking and backpacking since he was a teenager. His passion for the outdoors developed while participating in the Civil Air Patrol where he learned the basics of outdoor survival and search and rescue. He is currently a high school history teacher. His interests include knife making, leather working, target shooting, video games, military and art history. Ian is a regular contributor to the Woods Monkey Online Magazine.



**Preparation is easy. Simply pour boiling water into pouch of lasagna, reseal and wait approximately ten minutes to eat.**

MRE when I had the extra cash or if they were available. Added to this was a simple collapsible stove, a bar of Sterno, a lighter, a military surplus mess kit and a canteen cup. It was not the best of gear but I survived numerous hiking trips in Pennsylvania, Maryland, and Virginia. Most of the gear I carried back then was military surplus and not in the best of condition or design when compared to the equipment that I have today. Looking back I barely used the stove and ate mostly cold uncooked food that probably didn't have the optimal nutrition for a weekend hike. Now that I am older and a bit more conscious of nutrition and have the resources for better gear, packing food for a weekend trip requires some thought and planning. Equally important is the gear used to prepare and consume food. In addition, I consulted numerous survival books and Internet resources on food that gave me a lot of things to think about in terms of the food and gear packed for a trip. The preparation and research for this article was a real learning experience for me and it gave me the chance to use some newly gained

knowledge and gear that I had acquired but hadn't had the chance to use.

The equipment I used to prepare the vegetarian lasagna was all purchased at local REI store in Western Pennsylvania. I selected the MSR Pocket Rocket ultra light canister stove based on recommendations from friends. It is extremely lightweight at 3.9 oz and comes with a hard plastic protective case. The stove takes up minimal space in my gear. The MSR Iso Pro fuel container which serves as the base of the stove weighs 12.7 ounces and simply screws into the bottom of the stove. The fuel canister has burn time of 1-2 hours and a single canister is probably all that is needed for a weekend trip. To boil water I purchased a GSI Outdoors Halulite Ketalist Kettle kit that includes a two plastic bowls, a collapsible spoon and a carry sack that weighs a total of 11.3 ounces. I chose an aluminum kettle over a more traditional pot simple because I felt the kettle more practical for pouring boiling water into pouches of dehydrated food. The kettle holds a full liter of water. Rather than eat lasagna straight from the package I used a Light My Fire Mess kit that is made entirely from plastic and weighs 11.1 ounces and a CRKT Eat N' Tool (1.4 ounces.). Each package of food used between 2 and 2 ¼ cups of water which I pre-measured into 16 oz. plastic Nalgene bottle. Two cups of water in a 16 oz. bottle weighs 18.9 ounces.

The total weight of all my cooking gear is 2.5 pounds (40.4 oz.). Water is pretty heavy and the total weight of water needed to cook three prepackaged meals is approximately 60 ounces. My set of cooking tools as a package is extremely light and easy to pack in my gear. Where weight becomes an issue is when you consider how many meals will need to be cooked over the course of a hike, and how much water needed to cook said meals in addition to regular hydration during the course of the backpacking trip. If hiking in areas with little to no access to water you will need to pack more water in and should influence the type of food and equipment carried. Please see sidebar for more discussion about the pros and cons of dehydrated food vs. other forms of packaged foods.

The first package prepared was Mountain House's Vegetarian Lasagna that was purchased at REI for less than seven dollars. This lasagna had good tomato sauce and hearty chunks of vegetables that really stood out amongst the three brands tested. This one reminded me the most of lasagna that can





All three products prepared and served. Top left, Wise's Cheesy Lasagna. Top right, Backpackers Pantry Lasagna, and on the bottom Mountain House's Vegetarian Lasagna.

be purchased in a restaurant or the grocery store. While I am more of an omnivore, this lasagna was decent. The package precooked was the lightest of the three at 4.7 ounces and produced two 10 ounce servings. Each serving had 210 calories, 4 grams of fat, 9 grams of protein, 34 grams of carbohydrates and 430mg of salt. Mountain House's Lasagna was the healthiest selection overall. It had the lowest calories and the least amount of fat and salt content. For those of you who are looking for a healthy choice when backpacking consider this product. When I went to REI to purchase this product I also found a pamphlet that details all of food they sell with specific nutritional information set up in comparative charts. The last page of the pamphlet also had a well-designed meal planner that will find use the next time I get out the woods for a weekend trip.

The second selection prepared was Wise Foods' Cheesy Lasagna. This selection is also clearly marked as a vegetarian entree. Nutritionally, each serving had 260 calories, 6 grams of fat, 41 grams of carbohydrates and 13 grams of protein. The package weighs 6 ounces and makes two 10 ounce servings. Of the three brands Wise's Lasagna had the most appealing texture and seemed to be the least vegetarian of the bunch. If someone handed me a bowl of their product I would not immediately identify it as a vegetarian dish. While I really liked the texture there was something a little odd about the flavor of this Lasagna when compared to the other two and the pasta didn't get soft enough even letting it sit for longer than the suggested time. I use very little salt in my diet regularly and of the three brands this one had the highest salt content at 1240 milligrams per serving. I am not entirely sure that the salt

content contributed to the flavor and when I compared ingredients between the three lasagnas they are very similar. Overall it was definitely edible and the most affordable at only \$5 dollars purchased at a local gun show. The Wise brand is also available widely online. One of the standout features of this product is its 25 year shelf life. None of the other manufacturer's put this long a shelf life on their products.

The third dehydrated entree prepared for this article is produced by Backpacker's Pantry and was purchased at Cabelas in West Virginia. Their take on lasagna was extremely tasty and flavorful. From a nutritional standpoint this package had the most amount of food when reconstituted at two 13 ounce servings. Nutritionally this offering has 380 calories, 55 grams of carbohydrates, 9 grams of fat, 22 grams of protein and 690 milligrams of salt per serving. Comparatively Backpacker's Pantry has significantly higher protein per serving. According to the US government men and women should consume between 50-80 grams of protein each day depending on an individual's weight. The reason for the higher protein content in this lasagna is due to the fact that they use a hamburger meat substitute. The lasagna is still considered a vegetarian entree with the meat substitute. The precooked weight of the lasagna was the heaviest of the three tested at 7.8 ounces and required an additional quarter cup of water for boiling. Since it is a larger entree it requires a little longer preparation time in the package.

I let it sit for twenty minutes in the pouch after pouring in the boiling water and even then the pasta was still moderately crunchy. Considering that the air temperature was hovering near freezing, that may have contributed to the fact that the pasta was under done.

Overall, I thought all three meals were tasty and very easy to prepare. The Wise Foods Cheesy Lasagna and Backpacker's Pantry Lasagna will require a longer sit time in the pouch to get the pasta fully reconstituted and soft. Each brand had its own highlights. The Mountain House had the best tomato flavoring and large chunks of vegetables. Wise Food's lasagna had great consistency and the best texture even though I found the flavor just a bit off. However, for me

the Backpacker's Pantry meal had the best overall taste and flavor, even if it could use a little more tomato flavor or sauce to its recipe. In addition, the higher protein content of the Backpacker's Pantry meal has greater appeal to me over the other two brands.

All three companies' products are well manufactured with clear instructions, nutritional information, relevant food warnings and resealable pouch. Each brand had its own distinct flavor, texture and recipe. I recommend trying each brand ahead of time, or on your next hike, to find the one that most appeals to your palate and suits your individual nutritional needs. Food selection is definitely a personal choice and the best way to accomplish that is to try them out. As this was

my first foray into dehydrated packaged foods I wasn't disappointed and would continue to use products from all three companies. I was also glad that they are available at local retailers so that I didn't have to rely on the Internet. That was a plus to me. The ability to prepare hot food while backpacking is extremely easy with simple gear and can be a real psychological boost when out in the elements or in a survival situation.

For more info of the brands used in this article:

- [www.mountainhouse.com](http://www.mountainhouse.com)
- [www.wisefoodstorage.com](http://www.wisefoodstorage.com)
- [www.backpackerspantry.com](http://www.backpackerspantry.com)

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## Dehydrated vs. Non Dehydrated Foods by Ian Fielder

**W**hile researching and preparing to write the article on lasagna I had several discussions with a couple of veteran outdoorsmen and close friends about the kinds of food, and gear used to prepare that food, while backpacking. There are number of opinions based on experience about food and cooking gear when backpacking or in a survival situation. This sidebar will address some of those discussions that took place.

Many survival manuals discuss the psychological importance of having hot food to eat when in a survival situation or backpacking. Commercially, there are many manufacturers of cook sets and dehydrated meals. Clearly there is a demand for these products and research to back it up. However, all of the conversation comes back to either packing water in with you to prepare these meals or making sure you have an available water source along the way or at your destination. To utilize the popular backpacker meals one has to make the investment into cook sets that are not always affordable as well as pack additional water to cook with over and above water used for hydration. You can certainly boil water over an open fire, with a basic pot, but it depends on the area you're traveling in, available fuel and other factors. It isn't always possible so if you plan on packing food that needs cooked or at least boiled water you'd best plan on having a stove. I do not want my gear any heavier than it needs to be so the kind of food and amount of water I pack for a trip is dependent on the environment. However, in the event of a survival emergency the amount of food and water packed, as well as type of food, can mean the difference between life and death.

In the beginning of my

article I discussed how when I was younger that I would often take canned food or an MRE when backpacking. Despite the availability and appeal of dehydrated meals you still need more gear and water to prepare them than you do a simple can or MRE entree. A can of soup doesn't need additional water (depending on the type) nor does it need to be cooked in order to be consumed. A can of soup can be cooked over a fire and certainly an empty can may be an extremely useful tool in a survival situation. It can be used to collect and boil water, or as something to make noise to scare off predators or to signal rescuers. In addition an empty can could be used in a pinch to dig with. One of the first criticisms you hear comes up with canned food is weight. A can of Chef Boyardee pasta weighs 16.8 ounces and is listed as having a serving size of 2. Consider that a dehydrated meal, which is also said to have 2 servings, weighs between 4 to 7 ounces and requires 19 ounces of water to prepare, totaling anywhere from 23 to 26 ounces. You can't put a plastic pouch near an open fire to cook in either like you can do with a can. So on top of those 23 to 26 ounces you have to add in the weight of your cooking gear as well. Many cans produced today are pop tops and do not require a can opener making them even easier to access food and thus not requiring you even having a can opener with you. If the backpacking trip is in an area with little access to water canned food might actually be a good choice. I know several veteran backpackers that regularly pack canned food when hiking. One last thing to consider with canned food is that it is significantly cheaper to buy cans than popular packaged camping food, and if you are in a situation where a fire cannot be made you still have ready to eat sustenance. It is for this reason that I hesitated to purchase a

decent camp stove and cook set for so long. They were not an inexpensive investment.

Another item to consider is the military MRE's (Meals Ready to Eat). When I was a teenager getting access to these was difficult and expensive. However, they are totally self-contained and offer more to eat than just an entrée. They typically come with a side dish, desert, drink powder and condiments. Although somewhat bulky in size, and weighing in around 23 ounces, they also make a great choice. Modern MRE's come with a heating pouch but can also be consumed cold and don't need additional water. From a nutritional standpoint MRE's range from 500 to 1,200 calories depending on brand and whether the civilian version or military issue versions are purchased. When I go backpacking I usually like to take at least one MRE with me for the unexpected survival situation or cooking gear malfunction. They vary in price and a search of the Internet yields better prices when bought in bulk.

To conclude, the type of food and gear used when backpacking should fit the situation. In my opinion flexibility is the best practice. Good research and preparation are also important. I think there is a place for each type of food in my kit and its use has to fit the environment. The benefits of hot food cannot be understated. However, the ability to access food with no preparation and no additional water cannot be overlooked either. In the end your decision comes down to personal preference and experience, but it's good to know what your options are and to see that sometimes the conventional wisdom, like cans are too heavy and dehydrated foods are the smarter choice, may not always be the case!



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# Pathfinder Youth Fall Campout

By Joe Kellam



**The author teaching at the Pathfinder Youth Organization Fall Campout**

Laying there in my bedroll, I am not sure if I am dreaming or not. I feel a drip of condensation on my face and my clarity begins to focus as I hear an unfamiliar noise that I am not accustomed to when sleeping outdoors. At first, I cannot recognize the barely audible sound then it clicks in. It is laughter and whispering, young men

chiding each other awake in the predawn darkness. I peel back by blanket and tarp and feel the ice formed from my condensation hitting me in the face. I peek out and see several of the students making their way to the community fire.

Allow me to go back in time and take you on the journey that led up to this moment. My son Garrett and I were active in a Cub Scout pack with me as the den leader. We were approaching the crossover point to Boy Scouts and began looking for something that focused more consistently on time out of doors, wilderness self reliance was what we were after. What we found was the Pathfinder Youth Program in its infancy. After meeting with the Pathfinder Youth Staff at the gathering in 2010 and volunteering to be a leader, I set out to find a few students with the proper attitude and more

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**The sustainable fire starting contest.**

importantly the desire to learn and have fun in the process. What I started with were several local young men from my son's 5<sup>th</sup> grade class that were full of enthusiasm. There was nothing of this sort in the state to my knowledge. Our group consists of Garrett, Brock, Joel, Grant, Brayden, Tray, Seth, and Cort.

I was asked along with the rest of the Pathfinder Youth Board of Directors mentioned in the previous article to help develop the course content for the teaching portion of the program. Several conference calls later, the outline was set. With the Pathfinder School's guidance and approval, we were ready to kick the program off.

We started the meetings mid summer and focused on the basics such as what to do if lost and how to start and maintain a fire. Shelter, water, and knife safety soon followed. Each meeting started the same way. The students arrived, set up a reusable space blanket shelter, started their individual fire by ferro rod, gathered and boiled their water in a canteen cup from the Canteen Shop.com, and grabbed a packet of hot cocoa before sitting down for the day's lesson. We planned a campout for each season and with the first one only two months away we started right away on two man debris shelters for the semi-permanent shelter. We chose to double the students up in the shelters to begin building teamwork and emphasize the buddy system

anytime they were outdoors. November rolled around quickly and the shelters were taking shape but lacked the insulation needed.

The campout weekend finally arrived and as the students rolled in they went straight to work on raking piles of leaves and dumping them onto and inside of the shelters. As one team stuffed a tarp full into a shelter, another team crawled in to compress the layers. I took the opportunity to discuss work ethics and teamwork and saw the pace

of the progress pick up. Within an hour, the students looked like squirrels buried in a winter nest. Sleeping bags were unrolled in place and the students placed their issued reusable space blankets on top of the sleeping bags and used the other as a doorway covering.

With shelter checked off the list, we turned to the day's lesson, which was making a combination frog gig/hardened spear. A discussion about managing their resources and when it is acceptable to cut down live trees was next. I reminded them that selecting a tree was a lot like our food motto of "If you kill it, you will eat it", they had one chance to select and harvest the right sapling. The boys were sent on their way and carefully picked out their trees. A mixture of woods was selected, from Ironwood and Hickory to Hard Maple and Ash. The trees were cut down and dragged back to camp for processing. We practiced batoning scrap ends and carving the barbs before they worked on the actual spear. We were fortunate to have gained possession of a Habilis Bush tool set and placed it into service for the splitting of the ends and roughing off the bark. They carved the wedges and opposite spear end with their individual Mora knives, and after a brief class on lashing they secured the gig points in place.

Now if you recall your



**Pathfinder Youth Organization boys with a temporary shelter.**



childhood or have children of your own you know you cannot put a weapon into the hands of 11 year olds and expect them not to want to kill, stab, or gore something, even if it is only a nearby rotten stump. Therefore, we proceeded to teach the proper use and safety techniques and enjoyed a little target practice with their improvised spears. They were amazed on how tough the spears were. It was getting close to dark, but they wanted to go hunting. We proceeded to the river area and looked for anything we could call dinner. A few attempts were made on various amphibians, real and imagined. The mighty hunters learned a valuable lesson on how difficult it is to secure a meat source with primitive means. Another discussion was started on the necessity of proper planning of what to take with them into the woods on their adventures and to practice with their kit items.

As we returned to the camp the dads that volunteered to help were busy getting the nights meal of hotdogs and chips opened up for the students to cook. Each one cut a branch from the tops of their spear shaft tree and whittled it down to spear the hot dog, at least that way they were able to have some meat for their efforts. Some fruit and a quick wash down with hot cocoa and they were ready for the next adventure.

The campfire stories started



**Making a frog gig spear.**

going around and eventually came to the subject of Old Henry (A local hermit who walks the river system). My son, Garrett and one of the students saw him a while back and the students started adding to the original story. By the end of dinner, there were a couple of concerned young men. I assured them there was nothing to worry about and sent the whole crew out into the woods for a game of flashlight tag. The fun part about these games is it teaches them skills such as stalking and

tracking while still keeping their attention. The dads and I had just settled back into our camp chairs when several of the students came running back into camp yelling that they had just seen Old Henry walking in the adjoining field. We kept the laughter to ourselves and went to check it out. A thorough search of the perimeter confirmed we had no extra visitors in our midst. I walked around quietly and was impressed to see how far the young men had advanced in their comfort level of being in the dark in the wilderness.

It was nearing 9:00 pm and I took the opportunity to teach a class on lunar navigation. The students were instructed to cut two poles from their remaining treetops and follow me into the field. We were about half way through the LURD lesson when I noticed some very sleepy eyes. I completed the short version and it was back to camp for s'mores.

Time to turn in had come and I informed the group that I had set up a canvas wall tent with a small heater in the event anyone became cold during the night. The jokes went around about who would be in the "condo" first. Soon the guys were crawling into the shelters and snoring away despite the 25 degree temperatures. The remaining dads decided to try out their hunting suits and sleep in their folding chairs,



**Garrett and Seth finishing up a shelter.**





**Brock and Garrett after the creek jumping contest.**

while I bedded down near the fire in an attempt to keep it going. Needless to say, the only ones that got cold were the dads, the upside is that they kept the fire stoked while I was accused of snoring the night away. The heated tent remained unused, a couple of the students made their way to the fire and back during the night, and some told of four legged visitors they saw or heard. This brings us to the beginning paragraph. When I crawled out of my bedroll, two of the students were at the fire; two more were waking another shelter and the fourth shelter occupants were trying their best to stay asleep. It was 6:30 am and most were rearing to go.

We started the day with a hearty breakfast of pancakes, syrup, sausage patties and links, Gatorade, hot cocoa and plenty of coffee for the adults. After a quick clean up it was time for some fun. I had planned for a sustainable fire contest. A twine was stretched eighteen inches off the ground. Each of the students were told that at the signal they were to gather the tinder and wood necessary to start a fire using only their ferro rod and one cotton ball and be able to burn through the string. At the whistle, they were off like a busted flock of turkeys. Soon fire lays were forming and within a couple minutes, the first flames were visible. Did I mention it was still below freezing with a frost covering everything? The guys were huffing and

puffing and doing all they could to increase all the elements of the triangle of fire. It was great fun and the activity continued until everyone had completed the task.

It was nearing the noon hour and the camp was pretty much packed up when the students asked if they could go back down by the stream to see if anything was moving. They were not there long when I hear one of the students yelling, "It's Old Henry It's Old Henry". I walked down in time to

see our nearest neighbor, Bill, walking over to see what all the commotion was near the river. He had been mistaken for Old Henry, We all had a good laugh and the students kept exploring the stream. I was back in camp enjoying the now 50degrees and sunshine, welcoming the arriving parents when my son Garrett and Brock came walking back into camp. I just smiled when they started explaining the contest they all had to see who could jump the widest part of the stream. Of course, they had to keep going until all of them were wet and muddy. The accompanying photos show the smiles on their faces and the mud on their clothes. The event was summed up by a comment from Cort. As we were hiking out, he asked "Can we do this every weekend" I just smiled.

If you have never had the pleasure of passing on the tribal knowledge to today's youth, I challenge you to do yourself and them a favor. Take some time and teach them a skill. You may never know what the seed of that skill may grow into or whose life it may save one day. We are losing on average six percent of participants in the hunting sports alone each year. This is our youth and our heritage at stake, so remember it does not matter how much knowledge you accumulate it matters how much you pass on. In the end, you cannot take it with you.



**Discovering a newt.**



# What's New at Blind Horse Knives



By Scott Wickham Jr.

no different. A custom Bush Baby in pink G10 with thick black liners went out, along with a custom 5" bladed Bushcrafter. Those were fun to build!

The Cambridge shop is busy with the January Special, the above-mentioned stainless Bush Baby. This is a great little special with options aplenty. I personally like the neck sheath option this month, great job by Judy. The bigger news is that the BHK Outdoors Machete is getting closer to completion. This will be the first blade coming out on that site and will be popular I hope! There are a few that will undergo serious testing around the world to prove their mettle.

Along with all that's going on at the shops, we have needed more help and there are some new faces at the shops. We have G.W. and Jay at the

**H**ello readers, welcome to another installment of "What's Happening at Blind Horse Knives". I'll try to give you a little window into the shops and what is going on without giving away too many secrets.

Both shops are still busy after Christmas and New Year's and looking forward to another season of shows, trips, and meeting new customers. We will be having our yearly meeting soon to plan for 2011 and look back at 2010 and see how we can improve as a company. I think we did pretty well with some new knife models coming out, most recently the first Bush Baby knives using Sandvik stainless steel. We have had continuing good sales with the PLSK-1 and 2. These are quite stout bush knives and our customers seem to really like them.

Over at the Steubenville shop we have just got a couple

big orders for more knives from the Friends of the NRA. There will be a NEW design for some of those, along with the ever-popular Frontier First. They all get some cool laser etching to really set them apart from anything else we make. The custom orders are always getting worked on here and there as the orders come in and this month is



Mike works on the magazine.

Steubenville shop along with Mike Henninger as SRI Production Assistant; he works out of the Steubenville shop as well. We also have a new Office Assistant, Joan, to help. She helps keep L.T. and I on the current project and getting them to completion as soon as we can.

Our Editor puts Self Reliance Illustrated together of course but a lot of the work happens in Steubenville. Since Mike works out of that shop, he's there two days a week putting things in order. He is also our in-house IT guy and puts together the monthly email newsletter that some of you get.

There has been some nice growth on the BHK Underground group as well. This is our special inner circle group. A \$25 a year membership gets you in on some great giveaways, chances to be involved on pass around knives, and deals on special one-off knives that we only advertise for sale on the Underground. There is a cool laminate badge that goes along with your membership too you can wear to knife shows to let the world know you're involved with a grass roots company that is growing by leaps and bounds!

Thanks and let's stay sharp out there.

Scooter

**Upper Right: G.W. creating a choil.**

**Center Right: Jay profiling a knife.**

**Lower Right: The Cambridge shop hard at work**





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## Snow Walker's Companion

### Winter Camping Skills for the North

How to sleep warm, travel safe and enjoy the white season  
By Garrett & Alexandra Conover

Reviewed by Kerry Jelovich

Inspired by Calvin Rustrum's *Paradise Below Zero*, the Conovers began an adventure that has enabled them to become proficient winter wilderness travelers. As Maine Guides they have safely escorted thousands of adventurers on trips in Quebec, Labrador and their native state using traditional travel methods and equipment.

With over 15 years of experience, they have created a detailed "How to" book.

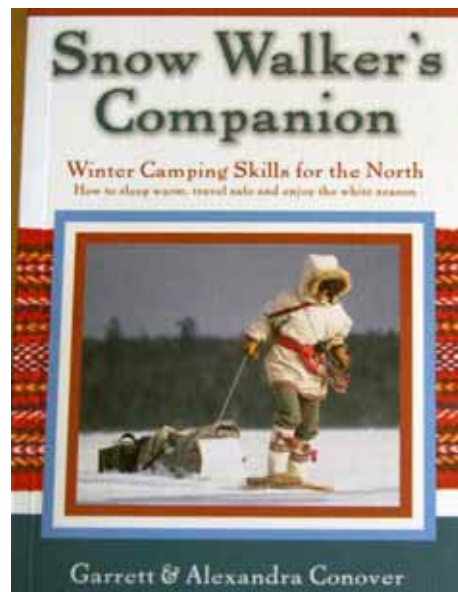
It consists of 10 chapters covering:

- The selection of footwear, clothing and sleeping bags appropriate for cold conditions
- Types of traditional snowshoes, which to choose for different areas and snow conditions, and techniques of use
- Types of tents and trail stoves, with suggestions for making camp
- A discussion of tools needed for the trail and for camp
- How to select and use hand-hauled toboggans
- Choosing appropriate foods, menu suggestions, recipes, and provisioning on the trail
- How to navigate in featureless terrain
- How to travel safely on ice
- Cold weather hygiene and the psychology of dealing with the wilderness
- The use of snowmobiles and komatiks (sleds)

Included in each chapter is contact information for the manufacturer or source of the equipment, clothing, etc discussed.

Of additional benefit are appendices of patterns and instructions for making anoraks, wind pants, snowshoeing moccasins and mittens; plus plans for making your own tents.

If you have any interest in winter wilderness camping and traveling, this is a well-written book that should prove to be a valuable resource.



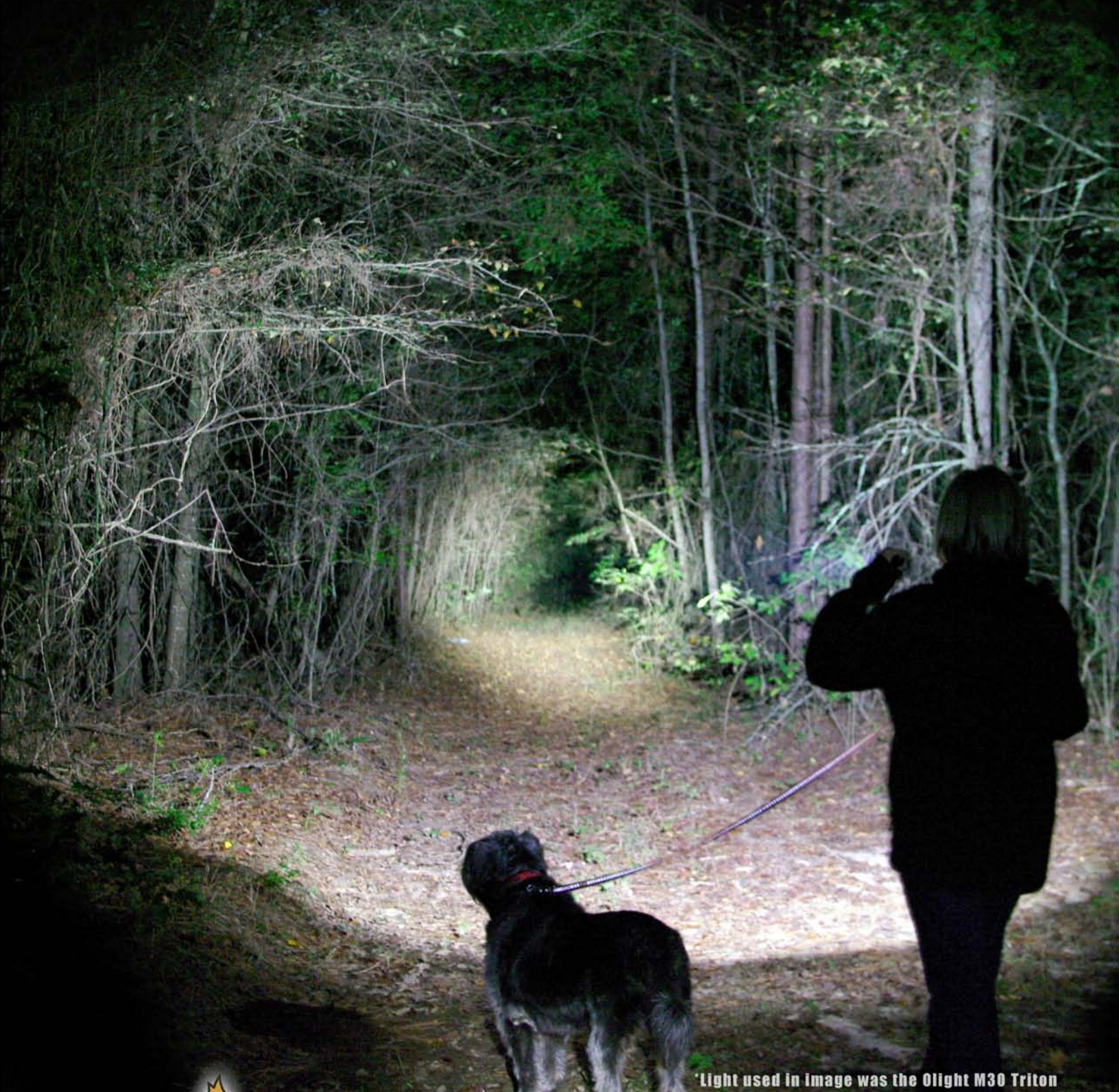
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\*Light used in image was the Olight M30 Triton



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