



EVERYBODY'S
KNIFE BIBLE

by

Don Paul

The all new way to use and enjoy
your knives in the great outdoors.

3rd Edition

Revised, expanded and illustrated

Path Finder Publications

1296 E. Gibson Rd, Suite 301, Woodland, CA 95695



On the move over obstacles in the Oregon woods. With our Compass system, you can bee-line back to your starting point without having to back track. With our modifications to your knife from this book, life in the woods will be easy.

EVERYBODY'S KNIFE BIBLE

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DonPaul

*All new ways to use and enjoy
your knives in the great outdoors.*

3rd Edition

Revised, expanded and illustrated

Includes: Special instruction on self defense for women.
Latest sharpening tips to make
your knife cut like a razor.

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WHY WE USE "BIBLE" IN OUR TITLE

After reading my Bible, I'm convinced. It's the inspired Word of our Creator, and it teaches men and women how to live successfully—in right relationship to others and to God. The founders of my country believed that too. This book teaches you how to get along in the outdoors successfully with your knife in right relationship with others and Nature, so I called it a bible. But this book doesn't even come close to doing for knives what the real Bible does for people. Read the real Bible; you'll see what I mean.

© Don Paul and Path Finder. *Wir sprechen auch Deutsch, und haben es vor, dieses Buch zu übersetzen. Tambien hablamos Espanol, y lo vamos a traducir.*

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INTRODUCING...

OUTDOOR BOOKS by PATH FINDER PUBLICATIONS

New method books for outdoors people.

Once you own any of our books, you can get a new, updated copy for half price, no matter why. If your book drowns or gets eaten by a goat, send us what's left of your old copy. (we'll pay postage on the new one) Even if you need to use the pages to make a fire in the woods, save a few burnt offerings and get back to us.

Path Finder began over 10 years ago. We first invented a way never to get lost in the woods without using a map; it's called, The Green Beret's Compass Course, Never Get lost. Over 25,000 copies are in print.

Next, we added to our book list and widened our distribution. We published:

Everybody's Outdoor Survival Guide

Great Livin' in Grubby Times

24 + Ways to Use Your Hammock in the Field.

We develop and write about all kinds of new ideas and outdoor methods. We're the innovative people who wrote about:

√A 30¢ two ounce wilderness bed for sleeping above ground.

√The modification for your hunting knife sheath which enables you to see the floor of a jungle at night.

√A new shooting system to give you super bullet placement, day or night.

√Escape and evasion, taught by an honor Army Ranger Grad.

√Life saving, simple procedures for self defense.

√Terrain analysis for saving energy as you travel on foot over rough country.

√A new cold-weather survival method to keep you alive anywhere.

√A guide to water purification for any survivalist.

- √How to use animals to double your survive-ability.
- √Wind reading for super long distance shooting.
- √Green Beret team concepts applied to survival groups so you can enjoy the ultimate life-style outdoors.

All of our books have gone into multiple editions. Most major outdoor magazines have reviewed our books and our systems have been adopted by many outdoor organizations. We've been represented by over 500 dealers and we've supplied our books by mail order to outdoorsmen from all over the world.

We use independent editors and electronic manuscript scrubbers to make our books quick readers. Pictures and illustrations make our concepts easy to understand. We're care about saving your time.

We just don't want to publish words; we want to supply the newest, most innovative information we can. Hopefully, that's what we did in this book.

We plan to publish *AMMO FOREVER*, a simplified reloading guide for survivalists, *THE COMPLETE SELF DEFENSE MANUAL* and a second *EVERYBODY'S KNIFE BIBLE (BOOK II)* featuring over a hundred ways to use your knives during 1992.

(See the order coupons in the back of this book.)

HANG ON NOW, AND LET US SHOW YOU HOW TO USE
YOUR MOST BASIC OUTDOOR TOOLS---
YOUR INDISPENSABLE KNIVES

EVERYBODY'S KNIFE BIBLE

3rd Edition
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INTRODUCTION

WHY A NEW KNIFE BIBLE?

Because today's knives don't do nearly as much as they could and new discoveries in manufacture are newsworthy.

With manufacturers' legal liability making them nail-biting nervous, and with government agencies writing regulations that slow down and impede American production, it doesn't look like we'll see a change in the future. Getting high field performance out of your knives will have to be a do-it-yourself affair.

This is a book about improvement, expansion and new uses in the field of knives. It will make you better than average in the outdoors with a knife. When you read this book, you'll be able to take your knife—any knife, and modify it with unbelievable changes. Your knives will become unique and you'll know how to put them to best use. Pictures and graphic illustrations make this a **quick-reader**. Very few of us have time to dig through complicated pages.

I wrote this book because I've learned enough to produce what might be landmark knowledge about knives. Some friends spent a lot of time with me in the field using these things, and we discovered:

**Compared to what knives should do,
today's knives don't.**

That's too bad. Of all the things you carry into the field with you, your knife is one of the most basic. If it only cuts and slices for you, you're missing a lot of your knife's potential.

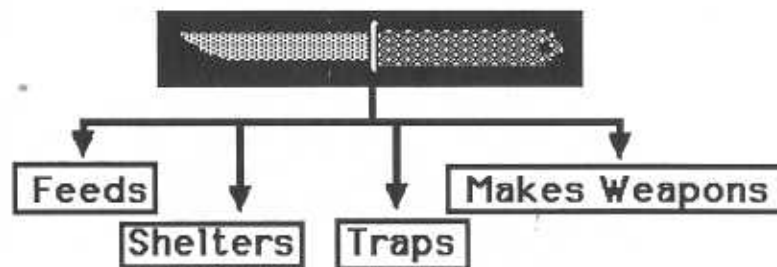
Do the people I consulted really know what a knife should do? When a person spends his life working in the woods and jungles of the world, he learns a lot more about knives than the people who sit at desks and design them. It's not that we have an axe to grind (no pun). It's just that we've used these things so long and so often that we are acutely aware of what a knife ought to do—but won't.

What's the reason for modern knives' complete failure to do so many tricks in the woods and jungle? American manufacturers can no longer be as creative as our ancestors. Even though we might know more, we produce less. Many government officials have **no concept of the value of time** because they have found the great eternal resting place, (their job). To us who produce, time is money; to them, a waste of time means money. Therefore, they write counter-productive regulations and slow down our progress.

Moreover, broadening the use of any product sometimes increases the chance of injury to the user. The company's insurers get nervous; the rates increase. As soon as product liability insurance goes up, the end product becomes costlier and therefore can't compete. In the case of knives, manufacturers can't think about a knife cutting down a tree; that's too risky. Making a knife to get you across a river safely or measure rappelling rope for you could likewise be legally troublesome.

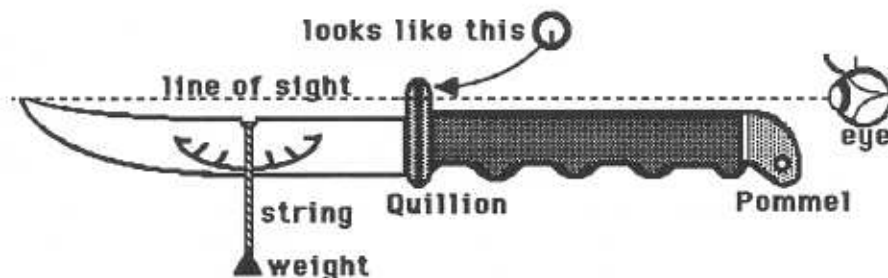
The shortcomings of today's knives can be fixed. But the manufacturers in this country are not about to pioneer anything which could end up in a courtroom. Would you? Even if you would be so bold as to manufacture anything in this country, at all, would you add to the risk by getting creative?

MOST BASIC OUTDOOR TOOL



If you want your knife to do better, **you** fix it. You can make your knife adapt to you—your special outdoor needs, your abilities, and even some wierd uses. You can borrow our ideas—ideas that came about because we sliced, slaughtered, and survived our way out of half the jungles in the world.

We wish you had been with us; probably you do too. But we'll make the best of a lonesome situation and let you borrow from our experience.



One of the many modifications found throughout this book. You'll be able to do dozens of new outdoor tricks with your knife. Note hole in pommel, for example. The hole in the pommel allows you to pull your knife out of anything with a force more than twenty times greater than you could by only gripping the handle. Similar hole in quillion makes knife a sighting device.

Now, your knife will take you to a lot of places other people can't go. It will procure more food, make more things and provide more comfort. From now on, you and your knife will be surer, trickier and craftier. Let us take you far beyond and far above what has ever been accomplished before with this ancient tool.

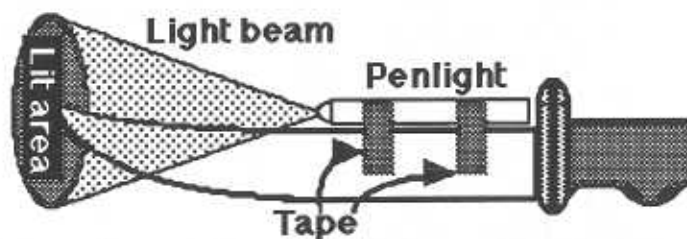
Let's double your knives' usability. Let the knife manufacturers be afraid. It's high time you learned how to let your knives make outdoor magic. And when you do, you'll know that you and your knife together can be the best and most savvy woods and jungle experts in existence. Besides that, you'll learn to carry and use a knife so you can be some of the most secure and safe people in our concrete jungles, too...

Speaking of concrete jungles... Few things are more attractive to a thief than a knife. Plan on keeping your knife for life. Take the time to inscribe your tang (softer metal) with your I.D. number.

DISCLAIMER

On behalf of you, the reader, I wish to thank the framers of our Constitution of giving us the right of free speech. Because of that, I can write a book about knives which dares to take you beyond what ordinary knives do for you. I wrote this because I wanted you to have a better life with your knife. By extending anyone's ability anywhere, however, there may be some danger. Neither the author nor the publisher wishes to assume any liability for any use or misuse of the information in this book. Oh—and one more thing—like the old Sarge on the TV Series, *Hill St Blues* always told us: "Let's be careful out there."

*Penlight on blade lights up
your night life in the woods.*



Night work is so much easier with the cutting area illuminated. Light should be in handle and shine through quillion. But why wait? Become a woods pro now! You can fix up your own knife with this and loads of other features in this book.

Chapter 1

CONVERTING YOUR KNIFE INTO A SUPER OUTDOOR TOOL

Utility to weight ratio is a concept we came up with when we researched and wrote *24+ WAYS TO USE YOUR HAMMOCK IN THE FIELD*. We were looking for a phrase to describe a ratio of multiple uses on an outdoor item to its weight. The higher the ratio, the better the item for survival.

The more things weigh, the more horse or human-power is required to move them. Also, if every item you need in the outdoors only has one use, you'll need to carry a lot of items.

Whether you're gas-powered mobile or you go into the woods on foot, you'll do better with a lighter load and fewer items. Therefore, fix all your outdoor gear so it makes multiple chore magic. Besides that, try to make each outdoor item do tricks nothing else can do for you.

That's what this chapter is about. We're going to show you how to make your sheath do some outdoor magic. More than that, we'll show you how to make your knife do stuff in the woods nobody else can do. For example:

How to tell time. That would be helpful if you have to meet somebody at 15:30 at a certain spot, and you use our mapless navigation system so you know where to go. Even more important, it's critical to know how much daylight you have left—whether you will set up camp or arrive at some destination at the right time.

Suppose you intend to climb a hill with your backpack. You know your pack's weight, but you need to know the angle of the hill so you can compute your climbing work load. What's that angle? Use your newly changed knife.

You want to fall a tree, but you are not sure how far out it will land from the stump, or whether it will bridge the ravine you need to cross. How high is the tree? Let your knife figure the distance.

You need to walk down the side of a steep mountain and use your 100 ft. rope for support. If the distance down is longer than your rope, you should learn to fly. How high is your starting point from the ground? Again, that's what your knife will tell you.

You know how high a mountain top is because it's labeled on your map. You need to know your personal elevation. How can you figure it? It's knife time.

Suppose you want to cross a river and you don't know if your rope will span the water. You also don't know how far upstream you should enter the water in order to cross safely. What's the distance across the river? Turn your knife flat, stick it into a tree, and line out the distance.

All of the above—and more can be performed by making some changes on your knife. Any old clinometers won't do; they have to be one of our design. We took all the complicated math out of the process and designed a special easy-to-use percentage guide, a protractor for angles and direction measurement, plus a quadrant for using your knife as a time piece. Just put our clinometers on your knife, and make outdoor magic.

Learn to understand the different kinds of blades available. While a high tipped, upswept blade isn't necessary, it works best for our first trick. In order to take accurate angle measurements with your knife, you need to be able to sight it like a weapon. The more accurately you sight, the more accurate will be the angles you shoot. If your own knife is a drop point version, you'll have more trouble, but you can fix it to sight accurately.



Modify your knife so you can aim it up and down. The clinometer plates we designed for the sides of the blade will give you lots of woods information.

Modify your knife so you can aim it, (like a pistol). First, create the back sight. Cut a "V" notch on the top of your quillion or drill a hole. For the front sight, use the tip of the blade. If the tip can't be seen through the peep hole or v-notch, buy a shotgun bead or small sight from a gunsmith and install it on the back of the blade.

If your knife has a dropped point, put a notch on the back of the bolster (folding belt knife), or pommel (hunting knife). Then drill a hole through the quillion large enough to enable you to sight on a landmark. Later, you will be running a piece of thread (glue) from the rear sight to the front sight, because you need to install the clinometer plates with their tops parallel to the sighting line.

Next, use a triangular file, and notch the back of the blade, which will locate the center (top) of the clinometer plates. With the line of sight level, a weighted line from the new notch on the back of your blade will designate zero on the Tangent Plate, and ninety degrees (or East) on the Protractor Plate.

UNDERSTANDING YOUR CLINOMETER AND DEGREE PLATES

To do everything you need to do in the outdoors, put all three of our plates on the sides of your knife. They are:

grind slowly," he says, "otherwise you can generate too much heat and wipe out the blade's temper."

Photocopy copy all the clinometer plates to use on a second knife. Also, this information is critical for a chainsaw. Once installed, you can aim your saw at the top of a tree and tell exactly where the tip will land after you fall it. Drill through the chainsaw's bar at the top center point of the clinometer plate. Thread a plumb line through that hole when you need it.

Plates B and C go on the right side of your blade. If your blade isn't long enough for both B and C, superimpose the two. Engrave the C plate with only the hour indications first, then engrave the B plate right over it; just remember that five degrees equals 20 minutes.

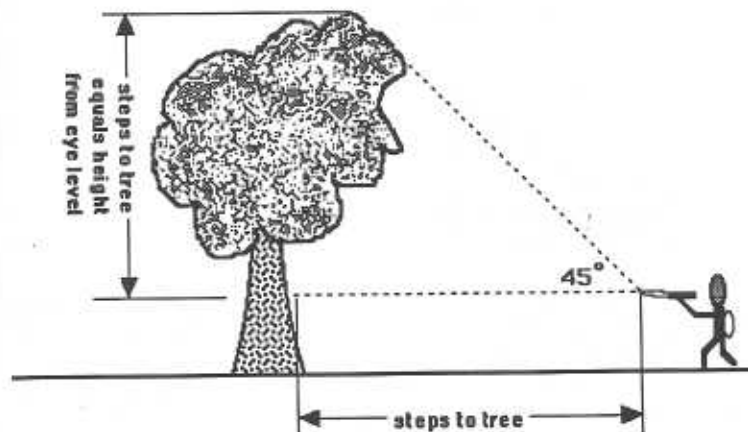
Years ago, history's scholars determined that distances should be measured in common units—first yards, feet, and now, meters and centimeters etc. In the woods, those units of measure don't work. Who carries a tape measure? Use steps. With minimal practice, you'll become consistent. With a tree, for example, count any number of the steps away from the base, then stand there. Aim your knife, multiply the indicated percentage times the number of steps you took and you determine how many steps high it is from your eyeball level.

Step off any length of rope on the ground to determine how it will relate to the rest of the measurements you'll take in the woods.

All you have to do in order to determine the height of anything is sight on it, pinch off the weighted line-indicator, and read the percentage on your clinometer scale. Then, multiply that percentage number by the distance to the object and you determine the object's height.

So, questions such as, "Where will the top land?" And "Will it bridge a river for you?" Or, "How much rope will you need to tie it off?" Are all found by stepping off the distance. Because of this, all the measuring tools you will ever need will always be with you—your legs.

Your knife finds tree height at 45 degrees



This book applies the math science of trigonometry to find various heights and distances in the woods. You don't have to do that because the percentages you measure are already a computed result of a trig function. Your new clinometer is calibrated to keep things simple and easy. If you want to understand the math behind the development, any trigonometry course will lay it all out for you.

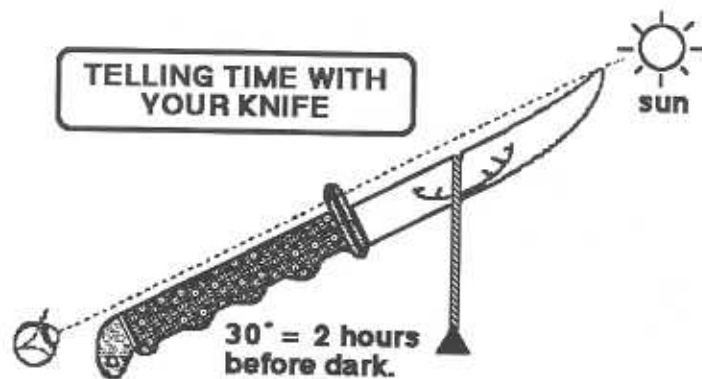
TELLING TIME WITH YOUR KNIFE

For the indicated time before sunset, read the right (C) side of your knife. We figured out a way to point your knife at the sun and tell what time it is. More critical for outdoor persons, however, is knowing how much time is left before dark.

With variations on the theme, outdoor sports people fit one of three categories: Beginners, Outdoorsmen, and Master Woodsmen. Beginners stay on the trails, travel by day, and sleep in a camp during the night.

Outdoorsmen go off trails a lot, and navigate with map and compass during the day. At night, they generally camp.

Master outdoorsmen travel anytime, anywhere, and sleep when they feel like it. Some of these have a lot of night travel experience (military patrols abroad or night hunting). Scars on thier shins remind them to avoid it when possible.



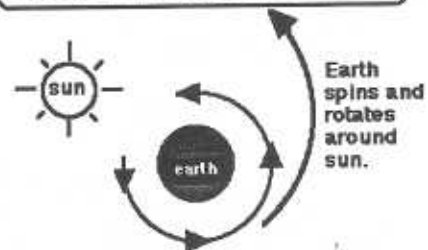
No matter what category you belong to, life in the woods will be much sweeter if darkness does not fall as a surprise. Good gardeners are said to have green thumbs. Purple thumbs belong to campers who pound tent stakes after dark. Even on a Pacific Island, you plan your last few hours of daylight activity by preparing to enjoy a good night's sleep. In cold country, however, failure to plan and prepare your camp in daylight can be disastrous. Knowing how much more daylight you have in cold climate is also-freezing-lutely critical.

If you use the P.A.U.L. system of navigation, (*Green Beret's Compass Course*), you'll know when you should arrive at your starting point because the system converts time as it relates to how fast you travel and you don't wander all over the forest looking for a backtrail or landmark way home. The system bee-lines you the fastest way, by straight line, back to camp, base, or home.

Think about it. One day contains 24 hours; one circle contains 360 degrees. So, every hour, the sun sweeps through 15 degrees of vertical angle. Therefore, five degrees equal twenty minutes. Likewise, in a 90 degree quadrant, you have six hours of time to measure. Of course, six hours before sunset, the sun will be ninety degrees—overhead.

There's a problem. If you look directly at God's sun, you will do damage to your (only human) eyes. Wear sunglasses or make a pair of slit glasses out of tree bark. Either way, you cut down on the amount of sunlight to which your eyes are exposed.

IF THE SUN CIRCLES THE EARTH EVERY 24 HOURS...



... THEN $360^\circ \div 24 = 15^\circ$ PER HOUR
SO, 45° IS THREE HOURS

Sight your knife on the top of the sun. Sunset refers to the time the sun disappears. The graduations on our time quadrant will tell you how much daylight you have to work with.

In the event you will be doing anything that requires full sunlight, measure the time before the sun drops behind the highest

Take care of your eyes. Don't look directly at the sun.



mountain. Sight on the mountain top, and then the sun. The elapsed time (on the plate) between the two measurements gives you the duration of dusk.

In the first *Crocodile Dundee*, Mick wants to impress his guest, the newspaper writer, so he takes her into the wilds of the Northern Territory. They get out of the boat, and he looks at Wally's watch, then checks the sun. He then says that it's two o'clock, and the woman is impressed. If you put our clinometer plates on the side of your knife, you won't have to look at Wally's watch before you tell time by the sun. Since the local media will publish the exact time of sunset, and it hardly changes as each day gets shorter or longer, you can shoot the sun, subtract that time from sunset, and impress any greenhorn by telling them what time it is.

HEIGHT OF ANYTHING

Given that you know how far away you are from an object, you can measure its height. Sight to the top, pinch off the weighted line at the cutting edge of your blade. Then multiply the stepped-off ground distance by the indicated percentage.

Thus you can find:

The height of a tree when you need a certain length pole.
Where a fallen tree top will land.



Elevation of an unmapped mountain top.
Height of intended tree house location.
Your precise elevation from map info.
The bullet drop distance down a mountain side.

As we mentioned earlier, this last item is critical if you are working with ropes. When you are dropping down the side of a cliff and discover you have another 40 ft. to go, the old saying, "I am at the end of my rope," has fatal implications.

LINEAR DISTANCE DOWN A MOUNTAIN

From the top of a mountain, the linear distance down the side of that mountain can be valuable, especially to a hunter, because guess-timating those distances is rarely accurate, so you go home hungry. To do this trick, you need to use a UTM map, (Universal Transverse Mercator) because it's contoured with vertical elevation data. Read the straight down distance by counting contour lines from your target's level to yours.

Then, merely aim your knife down toward the target, and read the percentage off the forward quadrant on the left side of your knife. Multiply the vertical elevation distance by that percentage. Convert

Horizontal angles play a big part in helping you get around in the woods like a pro. Stick your knife in some wood sideways, and measure off the blade.



feet to yards or meters for your rifle sights. Precision long-range bullet placement is covered extensively in *THE GREEN BERETS' GUIDE TO OUTDOOR SURVIVAL*.

MEASUREMENT OF ANGLES

Our first innovative outdoor book is all about never getting lost anywhere. Basically, the book teaches you how to bee-line back to any starting point **without using a map** or back-tracking. Even so, maps have several outdoor uses.

Using the protractor plate, (B) on the right side, you can extend any angle measurement with string, and then transfer that angle to a map.

Lots of outdoor persons like to have magnetic azimuths drawn on their maps. Use the protractor plate (B) to remodel your map by transferring the legend's declination data to the map grids. Block off the correct angle on your knife, then move the knife on the map and retrace the angle.

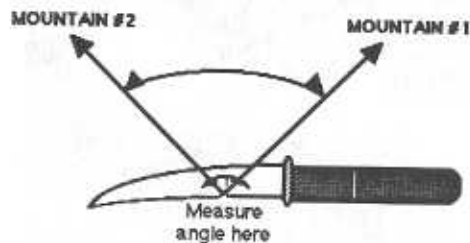
RESECTION

If you can recognize two monuments and identify these on your map, you can find your location. All the other books teach you to use a compass for this and mathematically declinate. A much better way is to use your knife so you don't have to mess around with math.

Stick your knife in a tree or lay it on a flat surface (right side of the blade up) so the knife blade is flat. Now, take sighting shots at the monuments you recognized on your map by stretching strings in their direction.

Lay your knife flat on the map and extend those same angled lines to the mapped landmarks.

FINDING YOUR LOCATION FROM TWO OBJECTS ON YOUR MAP



You'll find your location on your map at the place where those two lines cross.

DISTANCE ACROSS WATER OBSTACLES

River crossings can be dangerous. Without any planning, you go into the water and try to swim for it, but the current carries you past your intended landing spot, down to a place in the river where you can't get out of the water. To prevent this, you need to know:

- A. Distance from river bank to the other side.
- B. Distance to the tie-off anchors for your rope. Is your rope long enough?
- C. Speed of the water's current.
- D. How fast your designated swimmer swims.

Let's find the river crossing distance. Find an easy landing, a place on the other side where you can get out of the water easily. That's where we will plan to land your cold, water-logged body.

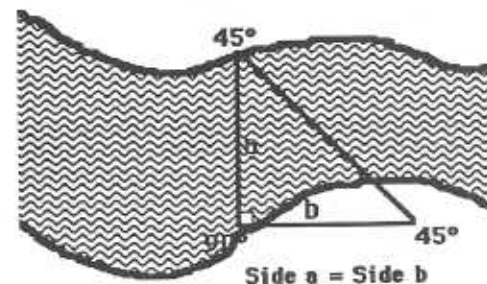
We assume that the river is roughly the same width throughout its course, especially the part that you've elected to swim in. If it isn't or you have any doubts about your swimmer's stamina, add a safety factor to your distance data.

With your knife flat, (stuck in the side of a tree) take two sightings. The first measures across the river to a landing point. The second measures ninety degrees upstream on your side of the river to the end of an isosceles triangle. Once you know where these two places are, mark your position. Perhaps tie a handkerchief on a branch, or hack a blaze mark in the side of a tree.

Now go upstream until you can read 45 degrees to your intended landing spot across the river, and 45 degrees back to the position you just marked. It should look like the following:

SAFE RIVER CROSSING

Measure the current first



Side A = side B because you just made an isosceles triangle, with the triangle's 90 degree angle where you first marked your position (handkerchief or blaze mark).

Step off the distance back to the handkerchief, and that distance will be equal to the distance across the river.

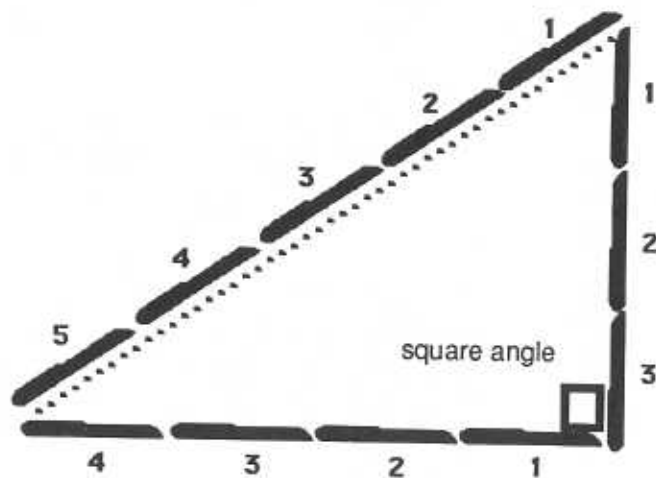
Now, think about the current. You know how fast you swim the distance you just measured. Is the water moving faster? Toss in a floater (piece of wood) and use a stop watch to measure how fast it travels a distance equal to the river's width. If the current is moving faster than you can swim, (maybe twice as fast), go into the water twice as far upstream.

Finally, modify your knife to use as:

A MEASURING TOOL FOR DEVELOPING A SQUARE ANGLE

Even if your knife's overall measurement is 13 1/8 inches, call that one unit of length, and lay out the sides of a triangle in a ratio of 3, 4 and 5, to create a right angle accurate enough to be used for construction. For any structure in the middle of the wilderness, square corners are important if you want the roof to fit.

Once modified with our clinometers, you and your knife will do a lot better in the woods.



Chapter 2

MULTI-PURPOSE CONVERSIONS FOR SHEATH AND KNIFE

You could live like an absolute king in the woods if you could take everything with you. But to take it all along, you would need a Mac truck. So the key to better outdoor life is to learn how to use one thing in a variety of ways.

Of course, we'll fix up your knife to do a lot of chores it never did before. Even before we start on your knife, though, let's...

IMPROVE THE SHEATH

I wonder if the people who make sheaths ever think about how you'll be using them. Wouldn't you guess, that with the abundant blessings in brain power God brought into America, somebody would think, "Gee, these things have been the same for a long time now. Maybe we could think of an improvement?" Nope. Sheath makers show me all the innovative imagination of a country cafe owner who names his place, "EAT." Their sheaths hang down straight, flop all over your belt and do almost nothing besides contain the blade—right side up—of course.

That pretty much states the problem. You can be part of the solution. Let's make some make improvements.

The sheath on most knives comes with a giant belt loop so your knife hangs loosely on your belt, and changes location often. Don't put up with it. Customize. Think about having your knife hang high on your belt so it doesn't slice rump as you slide into your truck. Move your knife where you want it, and aim it between 15 and 25 degrees forward. Put two beads of leather glue where you want your belt to fit snugly. Once the sheath's loop is tightened to fit, you can reach for your knife confidently because it will stay where you put it. The forward aim will allow you to draw your knife to the rear (quicker and easier) and later, after you add a light, it will shine forward to illuminate your walking path.

ANGLED GLUE LINES FOR KNIFE SHEATH LOOP

Glue lines for knife sheath so belt slides in to hold knife and light tightly at forward angle.



When carving up your winter's meat supply, your blade will go dull. You really need to carry a diamond impregnated paddle. Where? On the leg side of your sheath. Don't build a little pouch for it, merely glue it on with epoxy. Then you don't have to dig it out to use it, and the sheath can act as a holding paddle.

While you have the glue in your hand, cut the wrist straps off an L.E.D. watch and attach the time piece to your sheath also. If you get a cheapo high-quality Timex, you can use your watch at night. That's important if you are recording travel vectors so you can bee-line back without a map. Close one eye when noting the time

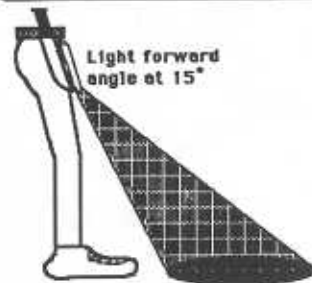


Huge loops on your sheath allow your knife to slide all over. Your knife is hard to find if it keeps changing addresses. Glue the sheath to make your knife stay at home where you can always locate it.

to make sure you preserve your night vision. Flat-file the back of the watch so it won't catch on your pants. If you are doing a lot of woods-engineering, buy a watch that incorporates a calculator. You can use the storage room you created in your loop to carry a spare battery.

Night travel is necessary in most of the outdoor terrain you will visit. In the desert during the summer, of course, you need to hole up during the day and move at night. In cold weather, you may not have enough gear with you to bed down at night, but you can sleep in the sun during the day. Of course, if you're tactical, you move at night because we have NVG's, (Night Vision Goggles) and the other side's best night trick is an Iraqi match soaked in vaseline. In any of the above cases, you travel

FORWARD LIGHT FROM YOUR KNIFE SHEATH LIGHTS YOUR PATH



after dark. Night travel is difficult, though. Snakes are out feeding at night and you can't see trip lines and traps.

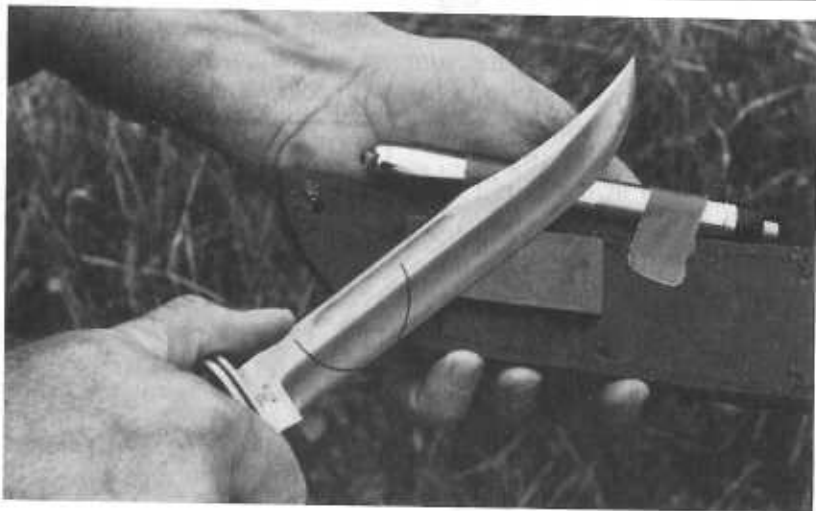
Buy a penlight and tape it to the forward part of the sheath. With the sheath tied down to your thigh, you can flip the penlight on and every time you step forward in pitch dark, it will be like The Word in Psalms 119:105—"a lamp unto your feet and a light unto your path."

Anyway, you'll thank God for the light at your feet if you have to carry 200 lbs. of meat out in the woods after night falls. A fan beam is best for civilian use, but if you're tactical for any reason, tunnel the light. Tape a piece of cardboard around the penlight to contain the light beam. That way, others can't see you walking in the dark.

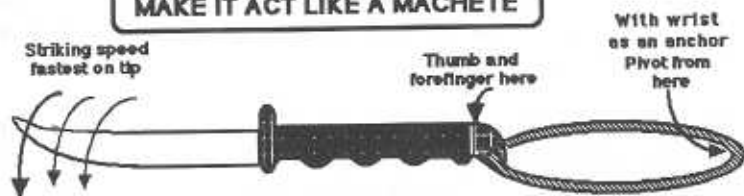
IMPROVING YOUR KNIVES

In addition to keeping your knife edge sharp, you need to swing it faster for chopping. Speed only helps a little, so add weight to the tip.

Why not make use of the back of your sheath? It can sharpen your knife and do outdoor math for you. With a little glue and know-how from this book, you'll become the master of the outdoors.



MOVING THE PIVOT POINT BEHIND YOUR KNIFE TO MAKE IT ACT LIKE A MACHETE



First, though, let's pick up the speed. Drill the pommel to receive a thong or lanyard. The thong needs to be just large enough to wrap around the wrist. With the thong snugly attached, you can strike with your knife by holding it loosely and letting the top of your wrist (to the rear of your pommel) act as the pivot point.

The rotation speed stays the same, but you lengthen the radius of the swing so that the velocity on the new, outside arc increases substantially. With such a trick you can convert your knife into a mini-machete, and notch wood a lot faster to make shelter or a weapon in a hurry.

First knife I ever drilled. A lanyard costs nothing, and gave me security when the knife was open. Besides, I could use the lanyard to pry my knife back out of anything. Without one, the best I could do was grip & pull.



Be careful not to let the rough hole edge cut your parachute cord or lanyard. Counter sink the hole, then ream or file the rough edges. If you buy a knife with the hole already there, check to see that its edges are smooth.

In use, let the knife slide forward out of your grip until only the index finger and thumb are left to guide it as you whip the blade downward. Be careful. If you miss the target, the knife can come back at you. Therefore, **make sure not to let blade rotation ever be in line with your body.** Jerry Younkings, (author of *Combat and Survival Knives*) has a much more effective way to cut thick pieces of wood. Set the knife edge on the material and tap the back of the blade. He calls it his, "chisel cutting technique." It's much more effective.

If you're chopping into a tree, you need a heavier blade (like an axe) so that the faster swinging blade sinks into the target. Velocity is desirable, but wood and bone are chopped successfully because of the moment of inertia your blade delivers. You might want to think of inertia as clout; that's why axes are used for chopping; the head of the axe weighs more. If you swing with the same speed, but double the head weight, the blade will bite far deeper in a tree.

Since

$$I = M \times V$$

Inertia equals Mass times Velocity

you get much more penetrating knife strikes by adding weight (Mass) to the front of the blade (the highest velocity area).

Here's how: It's almost impossible to drill a hard blade, (the Buck factory said I might try a laser) so you may have to grind a few notches in the clip. Watch the heat when you do this; let's not screw up the temper on the whole blade. Knives and drunkards have something in common. They both become pretty useless when they blow their cool and lose their temper. If the blade can be ground (use cutting oil) however, you can add clamp-on fishing sinkers with a pair of pliers. Pry the weights apart first by wedging down hard into the sinker with your knife. Another way: Use a small screw clamp with sticky rubber on the faces. Then attach the weights to the clamp.

Adding an ounce of weight at the tip of the knife is the same as adding two ounces halfway back to the pivot point. The increase in weight-leverage gives you added inertia. With an ounce of weight at the tip, plus the change of pivot point to a place behind the knife's pommel, you convert your knife into an axe-like machete, and you can chop a lot thicker branch, or cut down a tree.

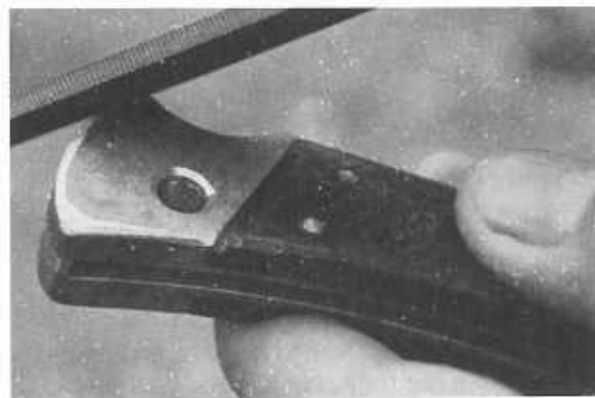
Put a hole through the tip of the sheath, and attach a thong. Knife writer Jerry Younkings (he also writes for *Blade Magazine*) likes a thong hole too because it lets water drain out of the sheath. He wrote:

"Water on wood no good.
Water on steel, bad deal."

With the hole through the tip of the sheath, you move the pivot point forward beyond the tip of the knife. Then, with the knife snapped in the sheath, you can thong your wrist again, and pound with the pommel. If your pommel is made of aluminum (Buck), flatten out a spot on the bottom with a file and drill into it. Tap the hole and thread it. A machine screw will then hold the head on—but don't trust the screw alone; use metal glue also. Incidentally, a corrugated head won't slip off a nail as easily, so cross-file that hammer striking surface with a good triangular file.

While you're grinding or filing, take off all the sharp edges on the handle. Your knife is supposed to dig into something other than

You and your file can make most knives friendlier.
Don't let your knife handle cut into your hand.



your hand. Sure, it costs money to bend metal quillions, and nobody's hand will fit it the same when you do.

But you can fix this problem. What you want is a knife with no rough edges, and nothing on or near the handle that could hurt you if you're using the knife in difficult circumstances. Almost all quillions can be improved by grinding the upper part at a forty-five degree angle so your thumb rests there comfortably.

On some of the old models, (such as Buck's) you need to round off so the hand grip to make it lighter and more comfortable. So file some of the brass off when rounding it.



MAKE YOUR KNIFE A LIFE-SAVER

Just about every year, somebody gets lost in the woods. But a wife or mother figures out they should have been back so a search

plane is sent. The plane never sees the lost party though, and they die from exposure. If only they had a way to signal the plane!

Put one side of your blade on a buffing wheel. With lots of jeweler's rouge, bring up a shiny surface and convert the concave (blood groove) surface into a signal mirror.

For signal accuracy, cut another groove across the back of the blade with a triangular file. Tape or glue anything flat over the notch to make a sighting hole. First, aim at the sun, then rotate the knife so the hole aims at the target you want to signal. The curved surface inside the blood groove will provide you with a good, long, flash message. If you use your knife for dressing game and you don't want the reflected sun to broadcast your position all over the woods, simply cover the polished area with a piece of tape.

THE ESSENCE OF SAFE COMBAT. INCREASING RANGE.

If you watched our Apache gunships knock out Hussein's Russian T-72 tanks, you saw the principle of Range in action. The helicopters were too far away for the tanks to shoot, and the tanks were well within missile range. Result—Adios, Saddam.

