



Knife Work

In this document we'll have a look at some different ways of using a knife safely.



When you are running a carving activity get everyone to sit in a semicircle. All the scouts must sit on a stable seat with their legs apart and their elbows on their knees. Put a sheet down to catch the wood chip and make tidying up easy.

Look at the picture above to see what I mean.

Knife Safety Check list:

1. First Aid kit
2. Trained First Aider
3. Leader can see everyone (scouts sit in a semi-circle)
4. Everyone seated as in picture to left.
5. Use a ground sheet to catch chips
6. Remember the 'Blood Circle'.
7. 'Never cut toward yourself'.
8. Leader must go through safe carving practices and get scouts to demonstrate they know them every time.

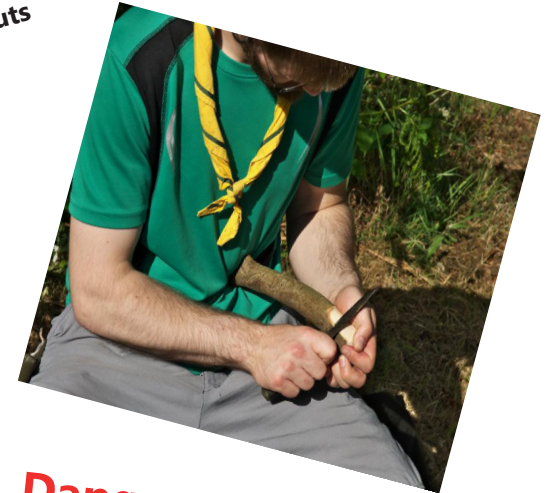
Blood Circle



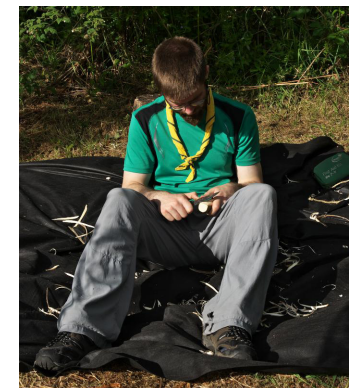
The distance of an arms length around a scout is called a 'blood circle'. No one can be inside a scouts blood circle when they are carving.

Watch Out !!!

These are some common things scouts do with there knives that could get them hurt.



Danger:
Everyone here is cutting towards someone





Carving

Here are some useful carving grips. There are many others but these are safe and easy to do.



Push Cut

With the push cut all the force comes from the thumb of the hand holding the piece of wood.

The hand holding the knife controls the direction of the cut.

This stops the knife flying forward if the knife slips.

To make a Barley Twist carving you only need this cut.

Pivot Cut

The pivot cut lets you do fine curves and to work with more awkward angles.

The thumb of the hand holding the wood stays still on the spine of the knife and acts as a fulcrum.

Pivoting the knife handle upwards makes the knife cut into the wood.



Chest Lever Cut

You use your shoulder muscles for this cut so it is very powerful. It is very useful for younger scouts who might not have much arm strength yet.



Point the edge of your knife at the knuckle of your index finger.

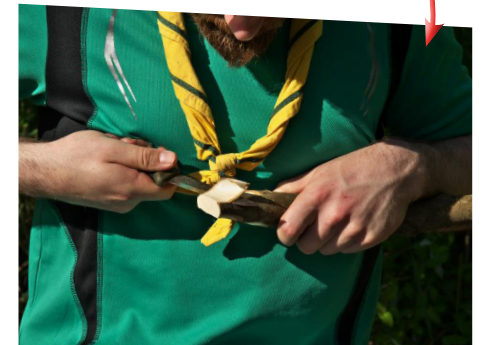
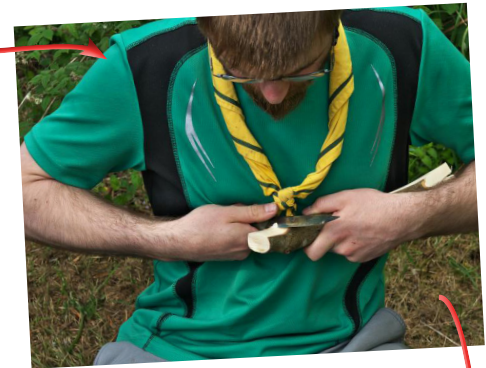
Bring the knife up to the CPR point on your chest (bottom of the breast bone).

Now sit the piece of wood under the knife and lock your arms.

Your arms stay locked and your shoulders provide the force for the cut.

To make the cut you role your shoulders back like when you are warming up for a sports game.

This cut takes some practice but it is one of the most useful you can learn.



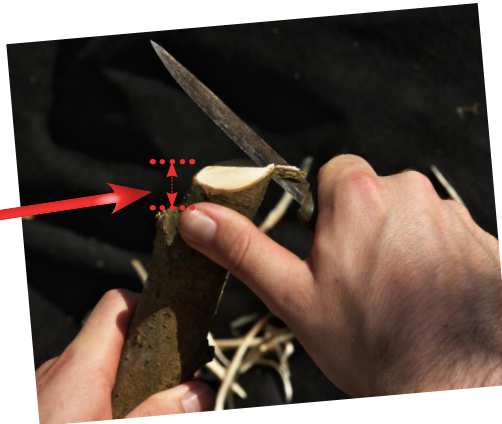


Paring Cut

To round the top of tent pegs we often use the paring cut.

Sit your thumb below the top of the wood so it can't get cut.
Then point the edge of the knife toward the thumb.

You cut by closing your grip.



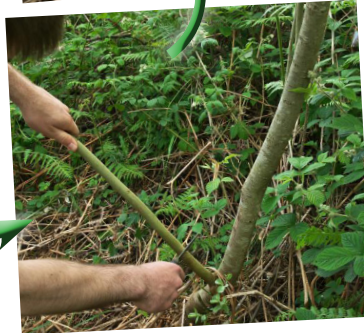
Branch Cut



To cut small branches we can push the branch down and then slice the branch with our knife.



Pushing the branch down means the fibres in the top of the branch are pulled apart so they cut very easily.



Pull Cut



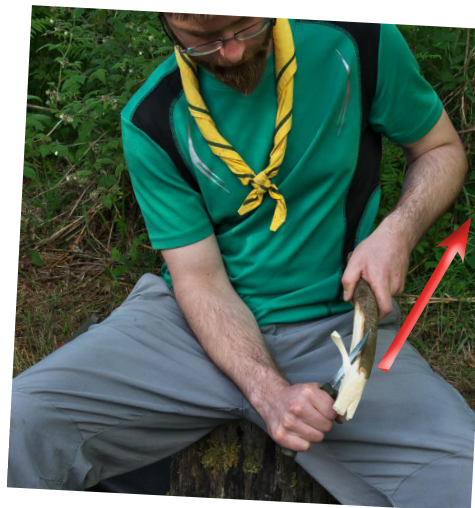
Whenever we want to remove slivers of wood most scouts push the knife into the wood with their arm. This is hard on your elbow and means the knife is flying around a lot and could hurt people.

Instead of this we use the pull cut. Brace the wrist of the knife hand against your knee.

Bring the wood underneath the knife edge and pull the wood back and across your body.

The knife stays anchored to your knee and does not move.

The wood should slide along the edge of the knife as you cut to give a slicing action that is much more effective for cutting.



Another way of doing the same thing is to brace the elbow of your knife hand into your hip and pull back the wood as before.



Batoning Cut



To make a cut straight into wood we can use a baton.

We sit the knife against the wood where we want our cut and hit the spine (back) of the knife with a piece of wood.

Be aware that this method puts a lot of force on the knife and can break it.

Collar Cut

When we want to make a clean break in a length of wood we can cut a collar (or ring) around the circumference of the branch.

To form the collar we make 'push cuts' all around the branch where you want it to break.

When we bend the branch it will snap at the collar.



Try Stick

The 'Try Stick', developed by Mors Kochanski, is a way of seeing if a scout has the skills they need with a knife.

Make up one specific to your group's needs, for instance if there is a pot hanging set up you use a lot.



Rounded top.

Pot hanger notch, tooth version.

Square hole in the middle of concave grooves.

Bowl or Dish shaped groove.

Square, triangular, and circular sections with abrupt ends.

The point of this activity is to test competence so it is important that the fit and finish is good.

Sand paper should not be allowed and all of the surfaces must have a smooth appearance.

The reason for the smoothness requirement is it tests if the scout has a good understanding of grain direction in the wood and how it effects carving.



Some Tips

Some things that make carving easier and safer

Many little Cuts



This is one heavy cut, it took a lot of force and would be very tiring.



Here we can see many little cuts adding up to a bigger cut. This took very little force or energy and is much safer.

Slicing Cuts



We start our cut with the part of the knife edge closest to the handle (yellow) and as we cut the wood slides along the edge toward the tip (red) giving a slicing action. (Red arrow gives the line of travel). This is much more powerful than pushing the knife straight through the wood.

Slicing is very effective and useful for all of the carving cuts shown here.

General Use Notes

A knife not in use is always in its sheath



Even if we are stopping for 30 seconds we put our knife back in its sheath.

Getting some shock cord and tying a loop to hold the knife in its sheath is very useful for some knives.

Handing over a Knife

We always try to avoid handing over an unsheathed knife but sometimes it will happen.

Before we hand over the knife we ask if the person is right or left handed. Hand the knife to the scouts dominant hand.

To hand over the knife (see pictures)



This way the knife ends up with the handle pointing at the scout taking the knife and the cutting edge is up where it can be seen.



The person taking the knife says 'thank you' before the other scout lets go of the knife.



This makes handing over tools much safer.



We must make sure our fingers stay behind the edge of the blade when we hold it or we could get cut!