

## Processing and stacking wood – a learner's report!

The specific request from Trust members and volunteers is for 8" and 12" logs suitable for wood burning stoves. What faces the group of pupils on a hot June day is a seemingly endless pile of larch tree trunks and smaller pieces of timber known as brash – this is the side branches and tops of the larch trees that were felled. There are also offcuts from the process of milling some of the felled timber into planks. The trainer Paul Hand had the job to take us through the process of conversion from this raw material to usable small logs as per the requested specification. Paul kept up a stream of information throughout the day and kept us to the task.

The first operation was to get the timber into 8" and 12" lengths. To do this we piled the 4' cordwood into a saw horse ensuring that the pieces were lined up at one end. We used a modern foldable metal saw horse although wooden homemade ones are equally appropriate and these can be designed to enable the cutting of specific lengths of wood. Our mathematical prowess was tested as we worked out how many 8" or 12", or 8" and 12", pieces could be cut from the load on the horse! The reason for cutting all brash to a precise 4' length now became very apparent. It is not efficient to end up with small pieces, not 8" or 12" long, which are difficult to stack, do not meet size requirements and awkward to manage. Tree trunks being made into rounds also need to be cut with the same precision.

We also learnt that it is best to trim the saw horse load to a 4' length so small pieces are removed first. Those with chain saw expertise were also reminded that when setting up a saw horse on a slope to always cut from the uphill side for safety. The horse and wood will fall down hill, away from the chainsaw operator, if there is a problem. People working close to the sawing will also need ear protection to prevent hearing loss. The chainsaw work resulted in a satisfying collapse of primarily the right length logs onto the ground. However at this stage most of those pieces were still too big for stoves.

The second operation was therefore to split the logs. A more useable size is achieved and more wood (as opposed to bark) is exposed which leads to quicker drying and a more satisfying burn. Paul's input taught us the importance of a splitting platform at a height that minimises back strain and using the right axe for the purpose. People new to axes were encouraged to: use a shorter handled axe; to practise using the solid rather than the sharp edge; raise the axe centrally to the body and bring down the axe firmly and squarely onto the log. The sharp edge should land horizontally on the log. There is not a need to swing axes and much to our astonishment there is no need to sharpen a splitting axe (as opposed to a felling axe). Where it proves difficult to cut the log a two person approach can be used. Another word for the lexicon is a "blodger". One person holds the axe on the log and the second hits the solid back of the axe with the said blodger. Paul was keen to show us how to make one out of wood as would have been done historically. This piece of art is now in the wood shed.



Before making the blodger we learnt the principle using an inappropriate tool – a too-heavy hammer!

Another historic fact is that splitting platforms were often in fixed positions in the ground and used over long periods. It is consequently best practice to not allow an axe to go into the platform as this wears it out. Despite improvement in our axe technique, as the day progressed, this aspiration was not necessarily achieved! If a group of



Our instructor's axes - these gave us an opportunity to find the right axe for each of us.

people are available for splitting then a semi-circle or circle of splitting platforms can be set up. One person stands in the middle of the circle and uses the axe, while the others manage one splitting platform each. Those managing the platforms place logs for splitting onto it and clear the cut logs away. When placing logs ensure any knots in the logs are at the bottom as this will enable cutting. The axe-person works round the (semi) circle, from one block to the next, with those managing the platforms placing logs for splitting while the axe is cutting on the opposite side of the (semi) circle. In this way a lot of logs can be cut quickly with the least effort.

June 12<sup>th</sup> was a hot day and Paul's exhortations not to double handle the wood for efficiencies sake began to make even more sense. Dances occurred: putting the saw horse close to the wood piles, and bringing splitting platforms close to the saw horse. If the wood shed could have been moved closer to the cutting and splitting area we would have moved it. As it was the logs began to be tipped from the wheelbarrow as close to the stacking platforms as possible.

The third operation was to stack. The important learning was to achieve an understanding of how not to have the stacked pile fall over. Use your eyes, handle each log only once if possible and have the front edge of your stack as even as possible. If anything logs should tilt backwards rather than forward. To help this flatter pieces of wood, known as kicker boards, are placed at 90 degrees within a stack to ensure the wood is tilted slightly backwards. In

addition a small space between rows will maximise circulation which helps to quicken the drying process. Wet wood does not burn well and can cause problems for keeping a chimney clean. Stacking wood above the ground (for example on pallets) helps to achieve the required circulation and stops wood from "wicking up" moisture from the ground.

The next lesson which occurred on the second training day – another hot day in June- was how to split large rounds of tree trunks. In essence the approach is to cut pieces from the face or side of the round until it is possible to split the remaining round in half. The nuances are to appreciate where the round of tree trunk is most



Kickers, placed at 90 degrees within the stack to tilt the wood back

likely to successfully accept the first set of cuts. This is most likely where the 'tension' in the wood is least i.e. where the annual rings are furthest apart. It may be that the most appropriate axe for the purpose is a splitting maul although on the day other axes were used as well. We all began to identify with 'our' favourite axe as the two days wore on. The larch at Greenstreete is mainly straight and relatively knot free. Other types of wood with more twists and knots will present challenges for the axe worker who, over time, will be learning how to identify differences in stresses in the presenting round. Inevitably axes got stuck not only in these rounds but also in the smaller logs that were being split. An essential lesson to get the axe out is to lift axe and wood, bring both firmly down onto the splitting platform pressing down on the axe handle when contact is made. The axe comes out like a knife from butter! To prevent your axe head coming away from the handle (especially on a hot day) soak the axe head in water as this swells the wooden handle, binding it tighter into the head.



Stacking logs in the wood shed.

The processes described above were, in practice, made more complex in that we also learnt how to work as a team. We maximised individual skills, gave space for practice, feedback and individual preferences. Sitting in the sunshine having lunch or a cup of tea and seeing the finished stack at the end of both days only added to the satisfaction of the learning process.

Please come to the next work day ...... There is still plenty of wood to process and stack! The Trust members' requirements and specifications will be finally met through your contribution to accurate sawing, dedicated axe work, precise stack building and creating time for the wood to dry.

NJC and GC 26.6.2014