TORPHINS PATHS GROUP
Registered SCIO SC049120

Hand Tool Usage and Awareness TPG GN3.0

Introduction

The hand tools that we use when working on our local paths are many and varied. They have been around mankind for many years and perhaps we take them for granted. However, if we do not give them respect in the way that we handle them they can be very unforgiving, and can cause serious injury to the operator, or even anybody in close vicinity to where they are being used.

It can be said that the hand tools fall into the following categories:

- Those used for digging
- Tools used for cutting
- Tools used for breaking or erecting posts and fences
- Equipment for movement of material

Tools used for digging include:

- Spades, Shovels, Pick-axes and Mattocks

Tools used for cutting include:

- Bowsaws, Scythes, Axes, Shears, and Loppers

Tools used for breaking or erecting posts and fences include:

- Sledge-hammers, and Pinchbars (sometimes known as Wrecking Bars)

Equipment for movement of materials :

- Wheelbarrows and Buckets

All of the above tools have their place in industry, agriculture and construction.
These tools are valuable implements in the correct hands and deserve respect.

How can we get the maximum benefit from these tools and how do we use them safely ?

First and Foremost:
It is essential to choose the correct tool for the job and that it is in good order

Using the wrong tool can create problems for the person using it and also for those around him / her. Therefore the first objective is to assess the job to be done. If in doubt consult and discuss with a colleague.
It is essential that the operator wears the correct safety equipment including eye protection (goggles or face mask), good quality gloves, and safety footware. All loose clothing can be hazardous and should be removed.

Digging Tools

- Tools mentioned in the Digging category are designed for one person operation. The person operating the tool should work to his or her capabilities and ensure that they are not over stretching themselves.
- When wielding such tools the operator should advise and insist that colleagues are clear of the area and not interfering with work.
- This instruction is even more important when using a pick–axe or mattock. The operator MUST be sure that no one is in front or behind him / her at all times when the implement is being used.
- When the tools are not in use at site they should be stored in a vertical manner, to avoid being stood upon.
- Whilst rakes are technically not digging tools they are used for spreading earth or gravel to create a level bed. If left flat on the ground after usage they are extremely dangerous as when the operating tines are stood upon the shaft rises very dramatically and will strike the person who has inadvertently stood on the opeartional end of the rake. The tines may also penetrate the operators footware.

Cutting Tools

- Ensure that all cutting tools are in good order, and fit for purpose. Wear necessary eye protection and gloves before attempting any cutting operation. Tools should have sharp cutting edges , as there are more accidents attributed to blunt tools than those which are sharp.
- Ensure that Bowsaw blades are correctly tensioned as an untensioned blade will not cut properly, the saw will wobble, and there is a danger of breaking the blade.
- When using Shears or Loppers ensure that each tool is capable of carrying out its function without overloading the tool.
- Axes have very sharp edges and a wayward swing of the tool when being used can cause serious injury. It is essential that the operator maintains a firm grip on the shaft of the axe, keeps his eyes focussed on the work, and ensures that his/ her free hand is well clear of the chopping action.
- Scythes are dangerous in the wrong hands, and have the capability to seriously damage an operators foot or leg. Learn the technique of operating such a tool from someone who has experience before attempting to use it. It is essential to wear safety footware when using a scythe. Others must always approach scyth opertor from front.

Tools for Breaking and Fence Erection Tools

- Such tools are are heavy and unweildy. In operation heavy hammers being used to drive fence posts into the ground contain energy which if misplaced can result in serious injury to the operator.
- Eye protection must be worn when using hammers for breaking or fence post driving.
- Fence posts should be pre-positioned in the hole with the top approximately at operator eye level.
- When swinging the hammer to drive a fence post into the ground, the operator must ensure others are at a safe distance, stand with his / her legs apart on firm ground, and swing the hammer from ground level to a point above his/ her head before swinging the hammer down on the fence post end. A safety holder to keep the user's hands at a safe distance should be used, or a post rammer as an alternative to a hammer.

Pinchbars

- Pinchbars can vary in diameter and length, being sized to suit the application. For Path building a bar would probably be in the region of 1.8 metres in length x 30mm in diameter, and quite heavy.
- Pinchbars are pointed at one end with a forged chisel shape at the other end.
- Pinchbars can be used to start hole preparation by driving the pointed end into the earth, but more often they are used to pry boulders from the earth by using it as a lever over a fulcrum. It is not unusual to utilise spades and shovels to aid in this exercise.
- Being heavy it is essential to be in full control of this tool, as a misplaced thrust by an operator could drive the pointed end or the chisel end into someone's foot or leg. Therefore the operator should be satisfied that personnel are well clear of the area in which he / she is working.
- Pinchbars should be stored in a vertical position at site as lying horizontal they present a danger by rolling if stood upon. This in turn leads to unfortunate injuries.

Working safely

- All hand tools can cause accidents and injuries, no matter how mundane they look. Used improperly they pose a danger to the operator and any colleague in the vicinity.

- Carry out a risk assessment . Work out what might go wrong, then check to make sure that you have thought about how to stop something going wrong. This applies just as much to maintaining tools as it does to using them.

- Make sure that everyone knows what each tool should be used for and how to use it.

- If a tool looks as if it requires some maintenance, it should be put aside and a replacement sourced.

- Inform the Work Party Leader of the reasons for your actions. The offending tool can then be maintained or replaced at a later date.

Trainer Name & Sig.		
Trainee Name	Training date	Trainee Signature