

# A manual for green space volunteers

Tool safety for community groups volunteering in council parks and open spaces



Basingstoke  
and Deane



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[View an online tutorial in how to care for and sharpen gardening tools](#)

## Acknowledgement

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\*The photographs featured in this booklet were taken before the COVID-19 pandemic.

## Loppers and secateurs



### Tool check:

- Check blades are not cracked/damaged.
- Check locking bolt on secateurs is secure and there is no movement in handles.
- When checking blade on loppers, have handle over shoulder and open blade facing away from you.

### Safety rules:

#### **Loppers**

- Maintain safe working distances (2 x arm plus tool length, or 2 x length of stem being felled).
- Do not cut on the ground, as this might damage the blade.
- No hands should be near the blades and gloves must be worn.
- Use for appropriate-sized branches, up to the thickness of a thumb/two fingers; for larger woody stems, use a pruning saw.
- If the loppers begin to twist or creak, this means the branch is too thick; switch to a pruning saw.
- Put loppers down when clearing away loose cut pieces.
- When not in use, loppers must be closed and put in a safe, clearly visible place.

#### **Secateurs**

- The safety lock should always be on when not in use.
- Use for appropriate-sized branches, up to the thickness of a finger.
- Keep secateurs in a safe place when not using; a belt sheath is ideal.

## Personal Protective Equipment:

- Wear strong, sturdy boots; safety boots offer the most protection.
- Gloves should be worn on both hands to protect from blades and pinching skin in joints.
- When using loppers, wear a hard hat if cutting above head height, or cutting stems that are taller than head height.

## How to carry:

- Carry loppers by your side, with blades pointing downwards and handles closed.
- Carry secateurs with blades pointing downwards and the lock on, preferably in a belt sheath.

## How to maintain, clean and store:

- Wipe clean with a brush after each use and dry with a cloth.
- Treat the blades with vegetable oil.
- Sharpen the blades using a wet stone along the blade edge.
- Store hung on a secure bracket or lay flat in a tool bag.

## How to use loppers and secateurs:

- Place the blades around the stem to be cut.
- Manoeuvre the stem so it sits as deep (as close to the fulcrum) as possible.
- Close the handles as tightly as possible.
- Once the cut is complete, open the handles and move to the next stem.

## Bow saw



### Tool check:

- Check blade is not cracked/damaged.
- Check to see if any teeth are missing and replace blade if so.
- Check tension and tighten if loose.

### Safety rules:

- Maintain safe working distances (2 x arm plus tool length, or 2 x length of stem being felled).
- Do not cut on the ground as this might damage the blade.
- To aid grip, no glove should be worn on the sawing hand, but a glove must be worn on the non-sawing hand to protect it from contact with the blade.
- Do not position non-sawing hand close to the cutting blade, as the saw can easily jump from the cutting groove.
- When sawing, ensure there is enough space to stand securely without obstacles; if sawing a tree, remove smaller branches first using loppers.
- When cutting coppice, consider using a pruning saw for the initial removal of stems, then a bow saw for the final cut to remove any pointed stumps left on the stool.
- When felling a tree, be aware of the likely angle of fall and the safety zones; ensure all people are aware felling is in progress and they are out of the danger areas.
- When felling trees or cross-cutting larger branches, be aware of compression and tension in the wood and the risk of getting the saw stuck (see Figure 1 and 2 opposite).
- If the blade is stuck, do not push, twist or bend; with help from others, take the weight off the saw to release it.
- When not in use, put the blade cover on and store in a safe, clearly visible place; do not hang from branches.

## Personal Protective Equipment:

- Wear strong, sturdy boots; safety boots offer the most protection, particularly if cutting logs that may drop (for example, large logs in a saw horse).
- To aid grip, no glove should be worn on the sawing hand, but a glove must be worn on the non-sawing hand to protect it from contact with the blade.
- Wear a hard hat when working on trees that are taller than head height.

## How to carry:

- Use a blade cover if available and carry by your side with the blade pointing behind you.
- If carrying over distance, place in a tool bag.

## How to maintain, clean and store:

- Wipe clean with a brush after each use and dry with a cloth.
- Check teeth and replace blade if any are damaged/missing.
- Use blade cover when storing.

## How to use a bow saw:

- Plan where to cut (see diagram below for detailed information).
- Rest the blade against the wood and push or pull in one long stroke to make the initial cut.
- Build into a steady sawing rhythm using the full length of the blade on each push and pull.

Before sawing larger branches, it is important to think about where the tension and compression is in the wood first to avoid trapping the saw. To prevent this from happening, you should aim to do two cuts where possible:

1. The first cut is the relieving cut, which relieves the tension and prevents the saw from getting stuck; it should go to a depth of no more than a third of the thickness of the branch.
2. The second cut is the cross cut, the main and final cut which will result in the branch being sawn in two; it should line up with the initial relieving cut. If done accurately, then the cross cut should go straight through the branch without the saw getting jammed.

The tension and compression in branches varies depending on where the branch is supported. This means your relieving and cross cuts can start either above or below the branch as explained in Figure 1 and 2 below.

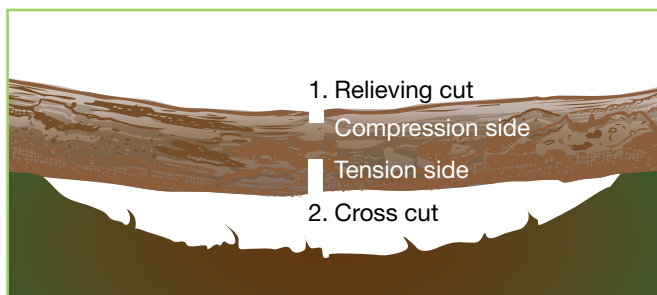


Figure 1: Compression/tension in a branch supported on both ends and where to cut first.

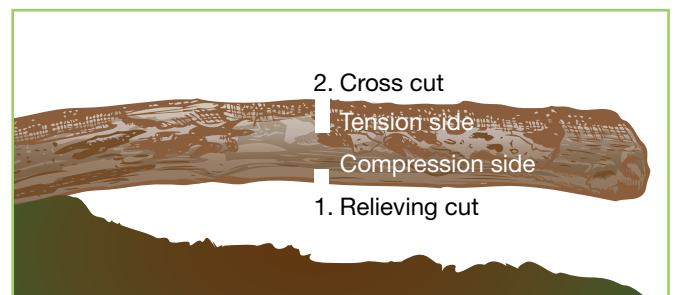


Figure 2: Compression/tension in a branch supported on one end and where to cut first.

## Pruning saw



### Tool check:

- Check blade is not cracked/damaged.
- Check to see if any teeth are missing and replace blade if so.

### Safety rules:

- Maintain safe working distances (2 x arm plus tool length, or 2 x length of stem being felled).
- Do not cut on the ground as this might damage the blade.
- Wear gloves when opening/closing a folding pruning saw, keeping fingers away from the blade and hinge; ensure blade clicks securely into position before use.
- To aid grip, no glove should be worn on the sawing hand, but a glove must be worn on the non-sawing hand to protect it from contact with the blade.
- Do not position non-sawing hand close to the cutting blade, as the saw can easily jump from the cutting groove.
- When sawing, ensure there is enough space to stand securely without obstacles; if sawing a tree, remove smaller branches first using loppers.
- When cutting coppice, consider using a pruning saw for the initial removal of stems, then a bow saw for the final cut to remove any pointed stumps left on the stool.
- When felling a tree, be aware of the likely angle of fall and the safety zones; ensure all people are aware felling is in progress and they are out of the danger areas.
- When felling trees or cross-cutting larger branches, be aware of compression and tension in the wood and the risk of getting the saw stuck (see Figure 1 and 2 on page 5).
- If the blade is stuck, do not push, twist or bend; with help from others, take the weight off the saw to release it.
- When not in use, place in a protective case/sheath or put the blade cover on and store in a safe, clearly visible place.

## Personal Protective Equipment:

- Wear strong, sturdy boots; safety boots offer the most protection.
- To aid grip, no glove should be worn on the sawing hand, but a glove must be worn on the non-sawing hand to protect it from contact with the blade.
- Wear a hard hat when working on trees that are taller than head height.

## How to carry:

- Close tool if folding pruning saw.
- Place in protective case/sheath or use blade cover if non-folding pruning saw.

## How to maintain, clean and store:

- Wipe clean with a brush after each use and dry with a cloth.
- Check teeth and replace blade if any are damaged/missing.
- Place in protective sheath, or use blade cover when storing.

## How to use a pruning saw:

- Plan where to cut (see Figure 1 and 2 on page 5).
- Rest the blade against the wood and push or pull in one long stroke to make the initial cut.
- Build into a steady sawing rhythm using the full length of the blade on each push and pull.

## Hedge shears



### Tool check:

- Check blades are sharp and not cracked/damaged.
- Check wooden handles for splits/splinters.

### Safety rules:

- Maintain safe working distances (2 x arm plus tool length, or 2 x length of stem being felled).
- No hands should be near the blades and gloves must be worn.
- Do not cut on the ground, as this might damage the blade.
- Use for appropriate material – soft, non-woody stems only.
- Do not twist the shears to get through a stubborn stem; this indicates the stem is too woody and loppers should be used instead.
- When clearing away loose cut pieces, put shears down.
- When not in use, shears need to be closed and put in a safe clearly visible place.

### Personal Protective Equipment:

- Wear strong, sturdy boots; safety boots offer the most protection.
- Gloves should be worn on both hands to protect from blades.

### How to carry:

- Carry with the blades closed and pointing down by your side.

## How to maintain, clean and store:

- Wipe clean with a brush after each use and dry with a cloth.
- Treat the blades with vegetable oil.
- Sharpen the blades using a wet stone along the blade edge.
- Treat wooden handles with linseed oil.
- Store hung on a secure bracket or lay flat in a tool bag.

## How to use hedge shears:

- Identify the depth of foliage that you want to remove, making sure the growth does not contain woody stems.
- Use the shears like large scissors and trim along the hedge/plant.
- Move along the plant in sections, trimming back as far as required.
- Unlike other pruning tools, you do not need to aim to cut above the nodes of the plant, but rather shape to create lines.

# Billhook



## Tool check:

- Check tang (part of blade inside handle) is secure in shaft.
- Check the blade is sharp by looking along blade edge; any flat spots or nicks indicate it needs sharpening.
- Check wooden handle for splits/splinters.

## Safety rules:

- Maintain safe working distances (2 x arm plus tool length, or 2 x length of stem being felled).
- Ensure proper instructions/demonstrations have been given for a swinging tool.
- To aid grip, no glove should be worn on the tool hand, as it is a swinging tool, but a glove must be worn on the non-tool hand to protect it from contact with the blade.
- Always swing away from your body and, when snedding, stand at the opposite side of the branch to the stems you are cutting.
- When not in use, place in a sheath or block of wood and store in a safe, clearly visible place.

## Personal Protective Equipment:

- Wear strong, sturdy boots; safety boots offer the most protection.
- To aid grip, no glove should be worn on the tool hand, as it is a swinging tool, but a glove must be worn on the non-tool hand to protect it from contact with the blade.

## How to carry:

- Transport to site in a safe cover, for example in a sheath or container.
- Carry with blade facing down and backwards.

## How to maintain, clean and store:

- Wipe clean with a brush after each use and dry with a cloth.
- Clean the blade with wire wool if getting rusty.
- Sharpen the blade using a wet stone along the blade edge.
- Treat wooden handle with linseed oil.
- Treat the blade with vegetable oil.
- Store laying flat in a sheath.

## How to use a billhook:

- The billhook is used primarily for coppicing, hedge-laying and snedding (stripping the side shoots from a branch).
- When coppicing, cut the stem on the upward stroke – Figure 1.
- When snedding, cut up the stem towards the tip, not down into the 'V' where branches join the main stem – Figure 2.
- When producing pleachers for hedge-laying (stems that are cut and laid), swing downwards into the stem – Figure 3.



Figure 1: Coppicing with a billhook.

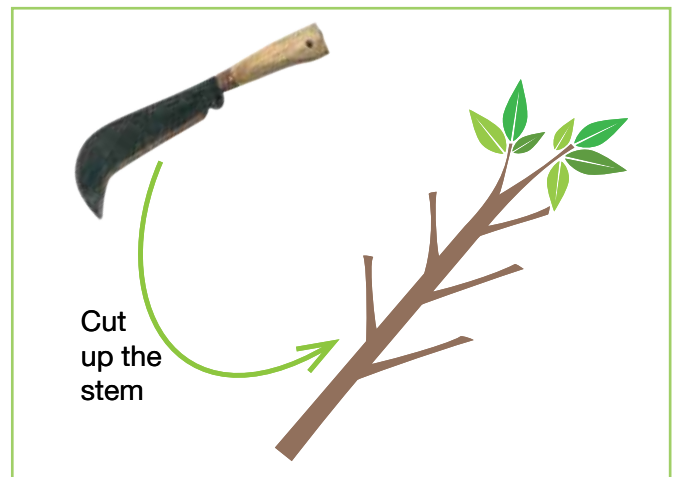


Figure 2: Snedding with a billhook.

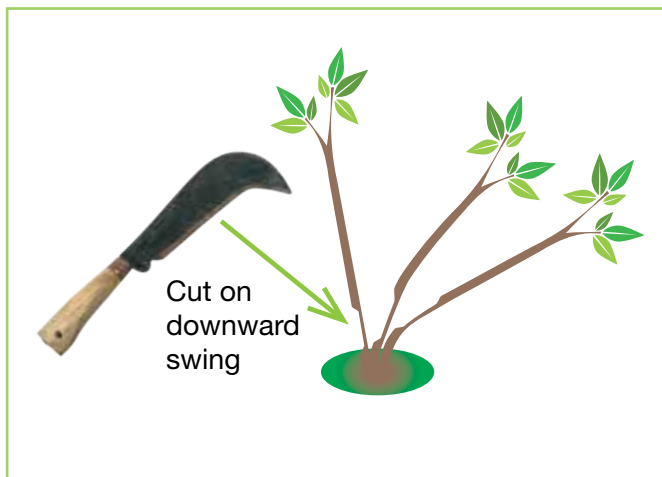


Figure 3: Producing pleachers for hedge-laying with a billhook.

## Garden spade, fork and shovel



### Tool check:

- Check handle is secure.
- Check blade/prongs are not bent.
- Check wooden handle for splits/splinters.

### Safety rules:

- Maintain safe working distances (2 x arm plus tool length, or 2 x length of stem being felled).
- Before digging, check the area for obstructions such as cables or pipes.
- Work in a radius close to your body to avoid stretching.
- Do not lift too much weight with the tool.
- Do not stab the blade into the ground with force as this can cause injury.
- When using your foot for added pressure, use the ball or heel of your foot and not the middle area, which has tendons that can be easily damaged if you slip.
- Face toward the direction you will throw the shovelled load; this will keep you from twisting and lessen the strain on your back.
- If you have to turn with a loaded shovel, move your feet to turn your body without twisting.
- Take short breaks after 20 to 30 minutes of continuous shovelling or digging.
- When not in use, lean the tool against a solid object with the blade/prongs pointing downwards, or push the blade/prongs into the ground securely.

## Personal Protective Equipment:

- Wear strong, sturdy boots; safety boots offer the most protection.
- Gloves should be worn on both hands to protect from splinters and blisters.

## How to carry:

- Carry by your side with the tool pointing downwards, holding the shaft close to the tool head.

## How to maintain, clean and store:

- Wipe clean with a brush after each use and dry with a cloth.
- Sharpen the edge using a file.
- Treat wooden handle with linseed oil.
- Ideally, store hung on a secure bracket.

## How to use a garden spade, fork and shovel:

- Choose the correct tool; use a shovel when lifting and moving loose material, a spade for digging and a fork for breaking up/turning over soil or weeding.
- When digging or breaking up soil, hold the handle and use the ball of the foot to push the blade/prongs into the ground.
- Keep a straight back while carefully levering the blade/prongs by lowering the handle towards you.
- When shovelling, bend your knees and slide one hand down the handle in a palm up position then lift the soil on the blade and deposit it nearby as per the safety guidelines.
- Always move with the tool, using your whole body to smoothly follow-through in the shovelling motion and lift using your legs.

# Mattock



## Tool check:

- Check wooden handle for splits/splinters.
- Check the head is firmly attached to the shaft by hitting the top of the shaft (tool end down) on solid ground.

## Safety rules:

- Maintain safe working distances (2 x arm plus tool length, or 2 x length of stem being felled).
- Ensure proper instructions/demonstrations have been given for a swinging tool.
- To aid grip, no gloves should be worn when using a swinging tool.
- When not in use, lay flat on the ground with the head horizontal and store in a safe, clearly visible place.

## Personal Protective Equipment:

- Wear strong, sturdy boots; safety boots offer the most protection.
- To aid grip, no gloves should be worn when using a swinging tool.

## How to carry:

- Carry by your side with the tool pointing downwards, holding the shaft close to the mattock head.
- Do not swing the tool when carrying.

## How to maintain, clean and store:

- Wipe clean with a brush after each use and dry with a cloth.
- Sharpen the edge using a file.
- Treat wooden handle with linseed oil.
- Ideally, store hung on a secure bracket.

## How to use a mattock:

- A mattock can be used for digging hard soil, breaking up soil and chopping through tree roots.
- Hold the handle about halfway up with your dominant hand and place the other at the base of the shaft.
- Bend at the waist, keeping your back straight, knees flexed, and feet shoulder-width apart, with one foot slightly forward.
- Raise the head of the mattock up to just above waist height and let the weight of the tool bring the head falling onto the ground in an arc.
- The vertical axe blade of a cutter mattock is used to cut through roots and the adze/grubber end to remove earth.
- To break up or dislodge objects, such as rocks in the ground where you are working, the pick end on a pick mattock should be used.

## Tree popper



### Tool check:

- Check hinge area is clear of debris and moves freely.
- If additional footplate is fitted, check bolts are secure.

### Safety rules:

- Maintain safe working distances (2 x arm plus tool length, or 2 x length of stem being felled).
- Do not strain when pulling on handle or applying downward pressure.
- Be aware of the weight and size of each tool and personal strength and fitness.
- When not in use, lay flat on the ground with the head horizontal and store in a safe, clearly visible place.

### Personal Protective Equipment:

- Wear strong, sturdy boots; safety boots offer the most protection.
- Gloves should be worn on both hands to protect from blisters.
- Wear a hard hat when working on trees that are taller than head height.

### How to carry:

- Carry close to the body with foot piece towards the ground.
- Do not swing the tool when carrying.
- Only carry if physically able to do so over distance.

## How to maintain, clean and store:

- Clean jaws after use using a point or blade.
- Rinse in water if unable to brush the dirt off and dry with a cloth.
- If the footplate becomes stiff, take it off by removing the circlip and clean the axle and housing with emery paper.
- Store with the footplate on the ground, secured so it can't fall over.

## How to use a tree popper:

- Clamp the jaws of the tree popper on either side of the stem at the base.
- Ensure the footplate is level with the ground to improve leverage.
- Push the popper handle down towards the ground like a lever to pop the tree.
- For stubborn saplings, use a mattock first (or work in pairs) to loosen roots.



Figure 1: Using a tree popper.

# Rake



## Tool check:

- Check handle is secure.
- Check prongs are not bent.
- Check wooden handle for splits/splinters.

## Safety rules:

- Maintain safe working distances (2 x arm plus tool length, or 2 x length of stem being felled).
- Before raking, remove any obstructions.
- Keep a balanced stance, bend at the knees and do not overstretch.
- Do not leave tool on the ground with the prongs facing up.
- When not in use, lean the tool against a solid object, prongs facing inwards, or lay on the ground with prongs into the soil.

## Personal Protective Equipment:

- Wear strong, sturdy boots; safety boots offer the most protection.
- Gloves should be worn on both hands to protect from splinters and blisters.

## How to carry:

- Carry by your side with the tool pointing downwards, holding the middle of the shaft with the prongs facing away from you.

## How to maintain, clean and store:

- Wipe clean with a brush after each use and dry with a cloth.
- Treat wooden handle with linseed oil.
- Ideally, store hung on a secure bracket.

## How to use a rake:

- Use the right rake for the job: a soil rake to break soil up into a fine tilth; a wooden hay rake to gather meadow cuttings; a landscaping rake for moving aggregate, or raking up large amounts of woody green material; a leaf rake for clearing up fallen leaves and small amounts of green waste.
- Stand with your back straight and one foot in front of the other for balance.
- Drag the rake prongs down towards your body, gathering the material into a pile.
- The flat side of soil rakes can also be used to break up chunks of earth and to smooth over raked soil.

# Pitchfork



## Tool check:

- Check handle is secure.
- Check prongs are not bent.
- Check wooden handle for splits/splinters.

## Safety rules:

- Maintain safe working distances (2 x arm plus tool length, or 2 x length of stem being felled).
- Face towards the direction you will throw the load; this will keep you from twisting and lessen the strain on your back.
- Work in a radius close to your body to avoid stretching.
- Do not lift too much weight with the tool.
- When not in use, lean the tool against a solid object with the tines downward or push the tines into soft ground securely.

## Personal Protective Equipment:

- Wear strong, sturdy boots; safety boots offer the most protection.
- Gloves should be worn on both hands to protect from splinters and blisters.

## How to carry:

- Carry by your side with the tool pointing downwards, holding the middle of the shaft with the prongs facing away from you.

## How to maintain, clean and store:

- Wipe clean with a brush after each use and dry with a cloth.
- Treat wooden handle with linseed oil.
- Ideally, store hung on a secure bracket.

## How to use a pitchfork:

- Hold the handle and push the tines into the material.
- Keep a straight back, bend your knees and slide one hand down the shaft in a palm up position; lift the material on the fork and deposit it nearby as per the safety guidelines.
- Always move with the tool, using your whole body to smoothly follow-through in the shovelling motion.
- Lift using your legs.

# Slasher



## Tool check:

- Check handle is secure.
- Check wooden handle for splits/splinters.
- Check the blade is sharp by looking along the blade edge; any flat spots or nicks indicate it needs sharpening.

## Safety rules:

- Maintain safe working distances (2 x arm plus tool length, or 2 x length of stem being felled).
- Ensure proper instructions/demonstrations have been given for a swinging tool.
- To aid grip, no gloves should be worn when using a swinging tool.
- Always swing away from your body so the blade is never coming towards you.
- When not in use, lay flat on the ground with the blade horizontal and store in a safe, clearly visible place.

## Personal Protective Equipment:

- Wear strong, sturdy boots; safety boots offer the most protection.
- To aid grip, no gloves should be worn when using a swinging tool.

## How to carry:

- Carry by your side with the tool pointing downwards, holding the middle of the shaft with the blade pointing behind you.

## How to maintain, clean and store:

- Wipe clean with a brush after each use and dry with a cloth.
- Clean the blade with wire wool if getting rusty.
- Sharpen the blade using a wet stone along the blade edge.
- Treat wooden handle with linseed oil.
- Treat the blade with vegetable oil.
- Store with the blade pointing downwards, secured so it can't fall over.

## How to use a slasher:

- Used to clear large patches of non-woody growth, such as nettles and bramble.
- Ensure your footing is secure and people are at a safe distance before swinging.
- Cutting is more effective using an upward stroke so swing the tool in a smooth arc ideally connecting with stems at a 45 degree upward angle.



Figure 1: Using a slasher.

# Personal Protective Equipment



## Hard hats:

- Valid for five years from manufacture, if they have been stored away from direct sunlight and have not had a heavy knock/fall from height.
- The date of manufacture can be found inside the hat rim; look for a clock which will have the year in the middle and an arrow pointing to the month.
- Check for any marks/dents before using; damaged hats should be disposed of.
- Store in a dark place or bag, on a low shelf where they can't fall.



## Safety glasses:

- There is no expiry date on safety glasses.
- Check for damage; replace when the lenses become scratched or broken.
- Where possible, store in original bag or covering to protect lenses.



## High vis:

- Worn in areas of high foot traffic (for example, when working along footpaths or cycle routes) to alert the public to your presence, or when working close to road verges.
- Worn by front and back markers on guided walks.
- Can be worn as a jacket or vest; vests are more versatile for different body sizes and seasons.



## Gloves:

- Check for damage and replace if ripped or worn through.
- Ensure gloves are dried before storage to prevent mould.
- Gloves must provide protection against the hazards you are most likely to be exposed to.
- For conservation groups, the most common types of gloves to use are:
  - Builders gloves: These have knitted, elasticated cuffs and a breathable back, with a plastic or latex coating on the palm and inside the fingers. These provide good grip when using tools and are for general use. They are comfortable to wear, even in wet conditions and dry easily.
  - Rigger gloves: These are tough, hard-wearing gloves made from leather and cotton. They provide good protection against hardcore and rough surfaces but are loose fitting and provide little grip when using tools. They are less suitable in wet conditions and can become quite firm after drying.
  - Gauntlet gloves: Welding gauntlet gloves are made from thick leather which covers the hand and part of the forearm, providing excellent protection against thorny vegetation. They are heat resistant and therefore also used when tending to bonfires. They come in one size but can be worn with builders gloves underneath by those with smaller hands. The thickness of the material means they take a long time to dry out if used in wet conditions.
  - Nitrile gloves: These are a type of disposable glove made from synthetic rubber, meaning there is no risk of latex allergies. Nitrile gloves protect against most chemicals and infectious agents and should be worn when administering first aid or handling oil and other lubricants.

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