

Sharpening Garden Tools

Introduction

Garden tools work best when they are sharp. Hand cutting tools such as pruners, loppers and hedge clippers are made of soft steel and can be sharpened with a file or hand stone. Shovels are made of hard steel and require a file to sharpen.

It is not necessary to take the tool apart each time you sharpen, however, it is a good idea to take apart, clean, sharpen and readjust each tool at the start, middle and end of your pruning season. Whether you disassemble the tool or simply sharpen it, clamp the tool securely. If the blade moves while being sharpened, severe injury can result.

Tools

- 6" smooth file* (for smaller blades, e.g. hand pruners), flat on one side, curved on the other
- 8" to 10" mill file* (for larger blades, e.g. shovels, loppers), flat on one side, curved on the other
- Diamond or ceramic hone (optional – for harder steel in high quality pruners)
- File card (for cleaning files)
- Light machine oil (e.g. 3-in-1 Oil) for lubricating joints and coating metal surfaces to protect from rust.
- Shop rags (2 or more dry, 1 oily)
- Wire brush and 400 to 600 grit sand paper (for removing rust)
- Table vise to secure the tool

*If your file has an exposed tang (a pointed end where you hold it during use) also purchase a handle for the file. NEVER use a file with an exposed tang – severe injury can result. Some files have a broad handle instead of a tang. Handles are unnecessary for these files.

How to Sharpen

1. Determine which surface needs sharpening.

Tool	Number of blade need sharpening	Sides of blade need sharpening
Hand pruner	One	One
Lopper	One	One
Grass shear	One	Both
Shovel	One	One
Hoe	One	One
Picks, mattocks, axe	One	Both
Hay fork	Many	Each tine sharpened to a dull point

2. Clean tools

Remove soil and pitch to clean the surface of the each tool, realign tines of forks, and check the file(s) for materials stuck between the teeth. If found, clean the file with the file card by wiping the file card across the file in line with the teeth. For a double-cut file, work the file card across the file in line with each angle. DO NOT use soap or water on a file.

3. Use a vise to steady the tool

Put your tool in the vise on the flattest portion of the blade base. If you tighten the vise in the wrong location, you can bend your pruning tool.

4. Set sharpening angle
A 20° to 25° sharpening angle is desired. How do you determine this? Hold your file across the blade perpendicular to it. That will make a 90-degree angle. Now turn the file downward 1/2 the distance to the blade. That is 45 degrees. Now turn it 1/2 the remaining distance again. That puts you at about 22.5 degrees, which gets you to where you can begin sharpening.
5. Begin to sharpen
Each filing stroke must run parallel to the blade and run the full length of the blade. Apply even pressure from the tip to the base and only on the forward stroke. As you file, the blade will become shiny. This is the bevel. If you are holding the file correctly, this shiny portion should be of even width along the whole blade. As the edge sharpens, burrs will develop on the backside of the blade. To remove these, hold the file flat against the blade and stroke the file toward the tip.
On loppers out of adjustment, you will notice shiny metal on the base of the anvil blade indicating the cutting blade is slicing too tightly against or, even into, the anvil. Readjust blades immediately.
6. Add finishing touches
For hard metal blades, use a medium carborundum type sharpening stone as the final step in your sharpening process. If you have Felco, ARS or other hard steel blades, you may also finish sharpening them with a fine diamond or ultra-fine ceramic hone. This step takes only one or two passes.

Cautions

- Protect your eyes with safety glasses during sharpening.
- If you have a Hickok Lopper, the manufacturer recommends using a medium or fine grade carborundum sharpening stone, diamond or ceramic stone. Any hollow ground blade should be sharpened with one of these tools and not a file.
- The triangular ceramic stones are excellent for touching up the blades of better steel hand pruners like Felco and ARS when you cannot take the tool apart.

Additional information

The following are just a few of the OSU Publications available online at

<http://extension.oregonstate.edu/catalog>

Practical Tools for the Vegetable Gardener

<http://extension.oregonstate.edu/gardening/practical-tools-vegetable-gardener>

Take Good Care of Hard-working Garden Tools

<http://extension.oregonstate.edu/gardening/take-good-care-hard-working-garden-tools>

Sharpening Your Garden Tools

http://extension.oregonstate.edu/benton/sites/default/files/sharpgdn_insights2012.pdf

Master Gardener™ advice

- Call Home Horticulture Helpline: 503-655-8631 (Clackamas County), 503-821-1150 (Washington County), or 503-445-4608 (Multnomah County).
- For 10-Minute University™ handouts and class schedule, visit www.metromastergardeners.org.
- Look for Master Gardeners at area Farmers' Markets.

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