# Bonsai Tools

Why we buy them

* Outdoor gardeners have to deal with tough woody plants; indoor gardeners have to deal with small plants. Bonsai practitioners have to deal with *both at the same time*, and normal gardening tools often can’t cope!
* Bonsai traditions involve aesthetic effects that typical gardeners don’t have to worry about, and that require slightly different tool designs. E.g. sharper bevels on cutting tools to avoid damaging surrounding wood.
* Bonsai practitioners have to do things with wire that would scare the pants off most gardeners.
* Having “real” tools makes us feel more professional… but this is not a *good* reason!

## Tool-buying considerations

* Materials: soft steel needs more sharpening than carbon steel, which needs more cleaning than stainless steel to prevent rust
* Sizes: only buy large tools if you’re dealing with “large” (40cm+) bonsai
* Sources: online suppliers are generally fine – the bonsai market isn’t large enough to be worth scamming – but some have questions around tax ethics
* Substitutes: when starting out, we recommend using cheap alternatives to specialist tools where possible rather than spending a fortune!

## Common plant pests

| Type | Name | Use & notes | Substitute(s) |
| --- | --- | --- | --- |
| **Cleaning** | **Wire brush** | Clean dirt and limescale off bonsai pot  Clean dirt and moss off lower trunk of bonsai  Often comes in sets: steel / brass / nylon | Toothbrush |
| **Coir brush** | Clean litter – dead leaves etc – off soil surface  Clean excess soil off pot and workspace | Chopstick  Dustpan brush |
| **Tweezers** | Remove weeds from soil and trunk  Remove weed roots – esp. pearlwort – from root ball | Beautician’s tweezers |
| **Root work** | **Chopstick** | Scrape unwanted soil away from root ball  Often made of steel or lacquered wood | Takeaway chopstick |
| **Root shears** | Remove excess soil mass  Cut small and medium roots  Root shears are basically the same shape as branch shears, but are used in ways that tend to dirty their blades and damage their edges faster – best to keep separate! | Kitchen scissors  Secateurs |
| **Tri-prong root rake** | Remove excess root-heavy soil when digging down to a new tree’s root flare, or from the unwanted pot sides / bottom  Rectangular cross-section – corners can tear roots! | See: chopstick |
| **Single-prong root hook** | Remove excess soil from between a tree’s roots  Circular cross-section – safe to use near wanted roots | See: chopstick |
| **Soil scoop** | Transport inorganic soils neatly from bag to bonsai pot | Half a drink bottle |
| **Pruning** | **Twig cutter / nipper / foliage shears** | Cut thin twigs, esp. for cypress-like trees (e.g junipers)  Remove heat-damaged leaves (by cutting leaf stem) | Nail scissors  Rose snips  Fingertips |
| **Branch shears** | Cut large twigs and thin branches  Perform rough “silhouette pruning” and bulk reduction for part-trained bonsai  Bonsai shears typically have a sharper edge bevel than non-specialist equivalents, which gives a cleaner cut | Secateurs  Office scissors |
| **Branch cutter** | Cut medium and large branches  Typically available in small and large sizes  Allows branches to be cut even at really awkward angles | Secateurs  Kitchen scissors  Junior hacksaw |
| **Knob cutter** | Remove unwanted knobs and bulges  Dig deeper into an existing flat-cut surface | --- |
| **Wiring** | **Jin pliers** | Twist root anchor wires together  Bend branch / trunk wires around branch / trunk  Jin pliers have a rounded head for better wire control | Needle-nose jewelry pliers |
| **Wire cutters** | Cut lengths of wire and trimming excess wire  Remove branch / trunk wire once shape has set  Bonsai wire cutters are curved or pointed, for cutting next to a hard or vulnerable surface | Precision side cutters |

## Advanced and related practices

* Trunk splitters are used mainly with large cypress-like trees – e.g. junipers – to break a trunk or branch lengthways and thus make it easier to bend. This is not a recommended technique for beginner bonsai practitioners!
* There are a range of specialist tools for working with “deadwood” – e.g. branches that have been deliberately (or accidentally…) killed off. These include both traditional chisels and modern power tools. Not something to muck about with until you’ve got both experience *and* someone to supervise you!
* The Japanese practice of “niwaki” – naturalistic topiary – has its own range of traditional tools. Since there’s some overlap between large bonsai and small niwaki, these can often be useful to us.

## Tools *not* to buy

* “Mini garden tool” sets consisting of e.g. a miniature spade, shovel and rake. These are the bonsai equivalent of a gag gift.
* Convex branch cutters. When removing branches, these create cuts that are deeper in the middle, which were believed to callus over better. The current wisdom seems to be that you’re better off using a straight-edged cutter above the “branch collar”, letting it heal a bit, *then* using a knob cutter or deadwood tools to dig in.

## A minimalist toolkit

* Under £1 / free
  1. Takeaway chopstick – ideally bamboo
  2. Barbecue fork – ~30cm, bamboo or pine
  3. Empty drink bottle – smooth robust plastic (e.g. Innocent smoothie), cut in half 4-5” from the bottom with a diagonal slant
  4. Old toothbrush
* Under £5
  1. Nail scissors – stainless steel
  2. Beautician’s tweezers – ideally pointed tip
* Under £10
  1. Needle-nose pliers – spring-loaded, suitable for jewelry
  2. Kitchen scissors
* Under £20
  1. Side cutters – small (e.g. 1cm blades), flush cut, suitable for jewelry
* Specialist
  1. Branch cutter – small, straight-edged
* Total cost: c. £50-60.

Subsequent priorities are:

* Decent-quality root shears – saves a *lot* of sharpening / cleaning time
* Branch shears – typically give a cleaner cut than kitchen scissors or secateurs
* Root rake and root hook – saves a lot of fiddling and broken chopsticks if you’re frequently working with new trees
* Small knob cutter – no real substitute tool, unless you have hook knives or other deadwood carving tools

## Useful sources

* Popular online suppliers: Kaizen Bonsai, Herons Bonsai, Greenwood Bonsai
* Local suppliers: PlantSocietree (Walworth Road)