An Evening of Bonsai Session A: Background to Bonsai

Alex Labram

September 2025





Learning Outcomes

Theory

- ▶ Be aware of the history and culture of bonsai
- Understand (at a high level) how a bonsai is produced
- Understand (at a high level) what distinguishes good and bad bonsai
- Know how to maintain a bonsai on a day-to-day basis
- Experience the key activities of re-potting, pruning and wiring
- Be aware of inexpensive options for further learning and practice

Practical

- Watering bonsai
- Wiring a bonsai pot for re-potting
- Exposing the nebari
- Potting the prepared tree
- Pruning for bulk, congestion and taper
- Wiring for shape

Bonsai: What & Why

Defining bonsai

- A bonsai is a living trompe-l'oeil: a small tree that appears to be a scaled-down large tree.
- Almost any kind of tree can become a bonsai (plus a few things that aren't trees!)
- "Bonsai" traditionally referred to Japanese schools, but has become a generic term

Why 'Sai?

- Hands-on education in plant science!
- Learn to see extra layers of beauty in nature
- Good practical hobby with interesting culture
- Sense of control and responsibility

To see a World in a Grain of Sand
And a Heaven in a Wild Flower
Hold Infinity in the palm of your hand
And Eternity in an hour

- William Blake

Bonsai: A Potted History

China

- Daoist mysticism: recreation of magical sites in miniature
- Penjing (盆景) / Penzei (盆栽) = the art of miniature landscapes (pre 600AD)
- Popular amongst Buddhist monks, and later aristocracy
- ► Heavily impacted by Mao's Cultural Revolution: seen as a bourgeois pastime

Japan

- First records c. 1200AD; known as Hachi-no-Ki ("potted trees" also the name of a famous play!)
- Heavy Zen / Chan Buddhist influence: beauty through austerity, sophistication in simplicity and perfection from imperfection ("wabi-sabi")
- Increasingly popular from 1800s onwards; term "bonsai" (盆栽 "tray planting") adopted
- Development of distinct styles (dramatic archetypes)
- ► Hit hard by World War 2, but revived in the aftermath (partly from enthusiasm of GIs)
- Exported to West from 1960s onwards, in parallel with Japan's "economic miracle"

Bonsai: Art & Science

Good bonsai practice is:

- <u>Authentic</u> makes you think "tree"
 Tree as biological / ecological process
- <u>Dramatic</u> makes you think "TREE"Tree as compositional element
- Pragmatic doesn't make you think "dead tree"...

Tree as living clay



Pragmatism 1

How Not To Kill Your Tree

What Kind Of Tree Is A "Bonsai", Anyway? Trick question alert!

- ► Tree: "a large, tall, woody, perennial plant with a single, unbranched, erect, self-supporting stem holding an elevated and distinct crown of branches with a total height greater than ten feet and a diameter greater than three inches" oy vey!
- Almost any tree species can be trained into a bonsai; many smaller plants can too
- Requirements for bonsai-ing:
 - Vascular plant (no mosses!)
 - Woody growth / "lignification" (no daisies!)
 - Secondary growth of trunk (no palms!)
 - Free-standing (no lianas!)
 - Deep roots (no grasses!)

- Desirable features
 - Attractive / interesting species
 - Small or pinnate leaves
 - Long-lived
 - Reasonably fast-growing
 - Easy to maintain / shape
- "Honorary" bonsai species
 - Woody climbers: ivy, wisteria, honeysuckle
 - Succulent / fleshy: dwarf jade, geranium
 - Chrysanthemum

I Had One Once, But It Died What a bonsai needs to survive

- Environment
 - Indoor vs Outdoor
- Watering!!!!!
 - ► Single biggest killer of bonsai
 - ► "Root hairs" die easily in drought
 - Over-watering is also dangerous!
- Light
- Heat
 - Dormancy
- Airflow

- Pest Control
 - Animals: spider mites, scale bugs, aphids, caterpillars, vine weevil, squirrels
 - Plants etc: pearlwort, liverwort, wood sorrel, pennywort, nostoc
 - ► Caution: environmental issues!
- Fertiliser
 - ► "Balanced": roughly even NPK
 - Organic => micronutrients
 - Caution: environmental & ethical issues!
- Bonsai are <u>far</u> harder to keep alive than most common pot plants!

Watering Your Bonsai No, seriously, this is important

Why so serious?

- Trees usually have deep tap-roots to draw water; they don't handle drying out well
 - ...Especially conifers, for some reason
- 2. Good-quality bonsai soils / pots have really good drainage... so can dry off quickly
- Bonsai soil is very compact and often mosscovered... so water tends to run off the surface
- 4. Traditional bonsai soil is inorganic, so lacks the "capillaries" of plant fibre that let water rise up through the pot
- 5. Even gardening experts routinely kill their first bonsai!

Watering methods

- Put in bucket of water (to just below brim) and wait for water to bubble up
 - ...Then take out and allow to drain fully.Never leave standing in water for long periodsroots need oxygen too!
- Water from above three times, allowing the water to sink in between passes

Is it watered enough?

- Surface feels damp to back of hand
- Pot significantly heavier
- Water running out of hole in bottom

Appendices

Miscellaneous Technical Notes

How Often To Water Some key factors

Pot

- ▶ Depth: deep → less frequent
- ► Shape: bulbous \rightarrow less, fluting \rightarrow more
- Inner surface: glazed → more

Soil

- ▶ Drainage: well-draining → more
- ▶ Degradation: older → harder to water
- Dressing: dead sphagnum and/or live moss covering → harder to water but less frequent

Tree

- Maturity: older → less (in theory)
- ► Fertilisation: heavy → more
- ► Re-potting: recent → more

Environment

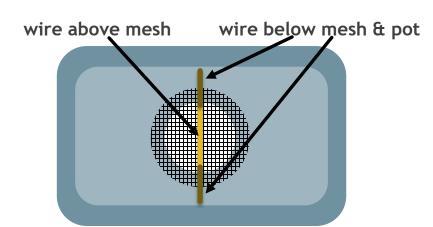
- Wind: windier → more
- \triangleright Sun: sunny \rightarrow more, shady \rightarrow less
- ► Heat: hotter \rightarrow more, colder \rightarrow less
- Season: Winter = least, Summer = most
- Warning: these factors are "nonlinear"! A small increase in e.g. sun can mean a big increase in watering.

...Mostly it's not worth the effort to figure out the "right" watering frequency. Just keep checking the pot every day!

Wiring a Bonsai Pot What could go wrong?

Mesh & Staple

(Plastic mesh, 2mm alum. wire)



Guy wires

(1.5 mm alum. wire x 2)

