BONSAI OUTLET
新英盆栽
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CARE GUIDE

OUTDOOR EVERGREEN CONIFERS

Conifer repotting guide

A practical guide for DIY customers and owners of established outdoor evergreen conifer bonsai



Repotting is part horticulture, part design, and part patience. The goal is not to do something to your tree just because you can. The goal is to do the right work at the right time.

What this guide is designed to do

Whether you're creating your first bonsai from a DIY kit or caring for a tree that's already in a ceramic pot, this guide will help you understand when, why, and how to repot your conifer.

You'll learn how to:

- **Get started with a DIY bonsai kit.** Understand how to move a nursery-grown conifer into its first ceramic bonsai pot, from preparing the pot and roots to securing the tree and providing proper aftercare.
- **Care for an established bonsai.** Recognize the signs that a tree already in a ceramic pot may need repotting, including crowded roots, deteriorating soil, or poor drainage.
- **Decide what to do, and when.** Sometimes it's the right season to repot. Other times, you can work on styling your tree and save the repotting for another season. Sometimes the best choice is to simply let it grow. We'll also cover situations that can't wait, such as replacing a broken pot without unnecessarily disturbing the roots.

One of the most important lessons in bonsai is patience. Just because you have a new tree, a beautiful ceramic pot, and fresh soil does not mean it is time to repot. Even the right technique, performed at the wrong time, can harm a tree. Knowing when to leave your bonsai alone is just as important as knowing how to work on it.

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Before you begin: this guide is for conifers only

Yes, use this guide

- ✓ Juniper (Shimpaku)
- ✓ Hinoki cypress
- ✓ Japanese black pine
- ✓ Japanese white pine
- ✓ Spruce, hemlock, and other outdoor evergreen conifers

Use this guide if you received a DIY conifer kit, bought nursery stock you hope to pot as bonsai, or own an established conifer already in a ceramic pot.

Not this guide

- ✗ Tropical bonsai such as ficus, jade, Fukien tea, schefflera, and bougainvillea
- ✗ Deciduous bonsai such as maple, elm, hornbeam, beech, and similar leaf-dropping trees
- ✗ Larch, a conifer that drops its needles in winter
- ✗ Flowering and broadleaf species that follow different timing

If your tree is tropical or deciduous, stop here and look for the matching guide. The wrong timing can set a tree back.

This guide focuses on outdoor evergreen conifers, including junipers, Hinoki cypress, Japanese black pine, Japanese white pine, spruce, and hemlock. Tropical and broadleaf deciduous bonsai follow different care and timing. Larch is also a conifer, but it loses its needles in winter and has different seasonal cues; it is not covered by these evergreen-specific instructions.

Three common repotting situations

1 A DIY kit or nursery-grown starter tree



You've purchased or received a DIY bonsai kit, or you've selected a nursery-grown conifer and a ceramic pot to begin creating your own bonsai.

It's tempting to begin right away, but the best time to plan a design is not always the best time to repot, or to do heavy styling. If the season isn't suitable, study the tree, choose its front, and make plans while keeping the roots undisturbed. Move it into its bonsai pot when the appropriate repotting window arrives.

2 An established bonsai already in a ceramic pot



Just because your bonsai has been growing in the same pot for several years doesn't mean it automatically needs repotting.

Look at the health of the tree, the condition of the soil, and how well water drains. If the roots have become crowded, the soil is breaking down, or watering has become difficult, it may be time to repot. If the tree is healthy and the soil is functioning properly, there's often no reason to disturb the roots.

3 An unexpected problem that needs attention

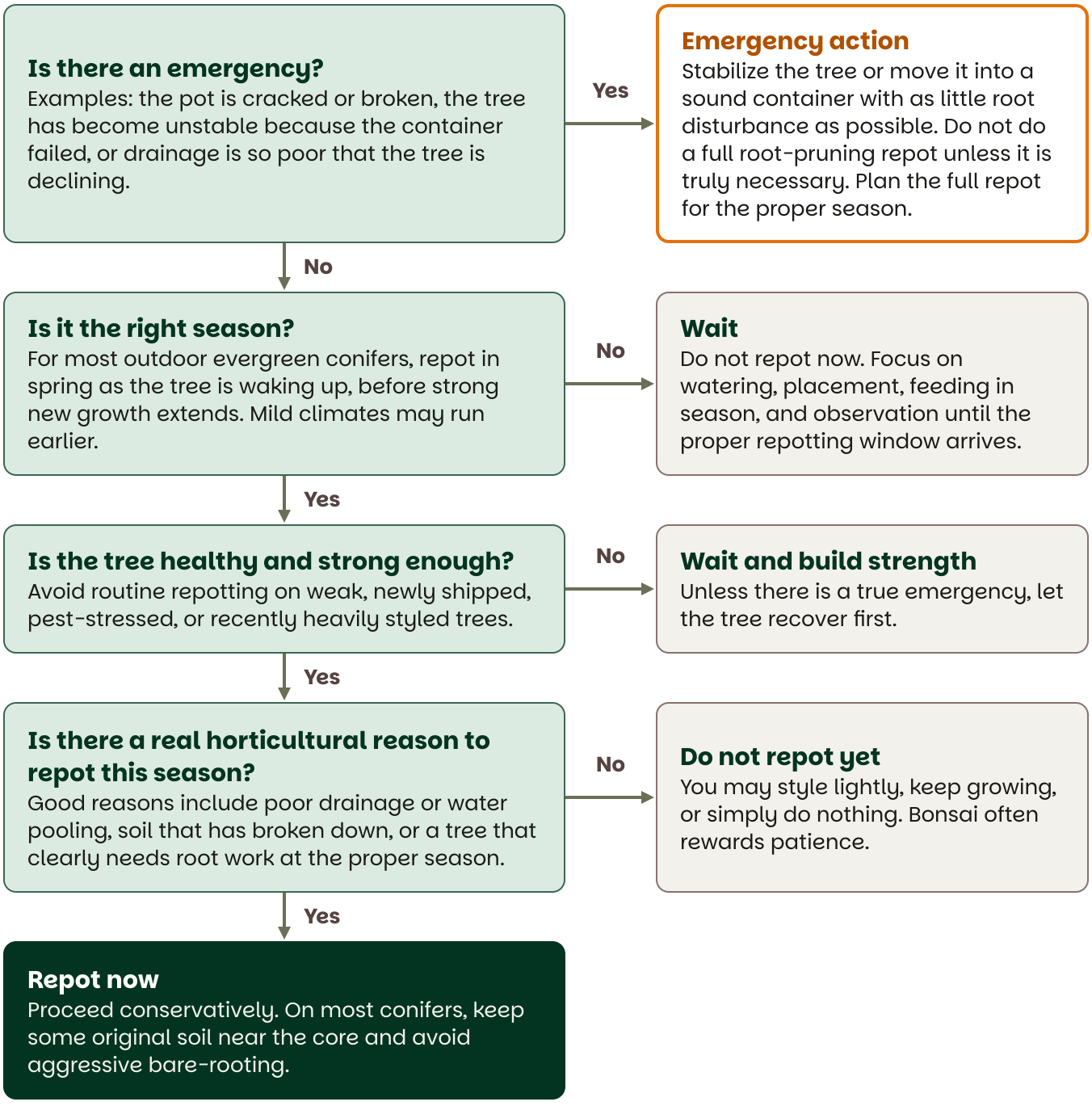
Sometimes you don't have the luxury of waiting for the ideal repotting season. A ceramic pot may crack or break, a tree may become loose in its container, or drainage problems may threaten the health of the roots.

In these situations, the goal is to correct the immediate problem while disturbing the roots as little as possible. For example, a tree in a broken pot can often be transferred into another suitable container with its root ball intact. This is different from a full repot, where old soil is removed and roots are pruned.

If the tree is declining or the soil is severely compromised, the situation may require additional attention from an experienced bonsai professional.

The important distinction: Not every problem calls for a complete repotting. Sometimes a simple correction is all that's needed to keep your tree healthy until the proper season.

Should you repot now?



If you are not sure, wait rather than force the repot. New customers often assume a bonsai should be repotted because they just bought a pot and soil. In reality, the tree's health and seasonal timing should make that decision.

When to repot conifers: timing by species and climate

For most outdoor evergreen conifers, spring is the primary repotting season. The right window depends on the species, your local climate, and the tree's stage of growth, not a fixed date on the calendar.

In cold-winter climates, including New England, the Great Lakes, and the Upper Midwest, the window generally opens as winter eases and growth begins to resume. In milder climates, including parts of the Southeast and Florida, suitable conditions may arrive earlier. A warm afternoon does not necessarily mean the root ball will be protected from the next cold spell.

Japanese black pines, Japanese white pines, junipers, and Hinoki cypress do not all follow identical schedules. Learn the growth signs of your own species, and make sure you can protect the tree during the weeks after root work.

Look for these signs

- ✓ Winter has eased and hard freezes are becoming less frequent.
- ✓ Buds are swelling or the tree is showing the first signs of spring movement.
- ✓ The tree is healthy, vigorous, and not drought-stressed.
- ✓ You can give the tree several weeks of protected aftercare after the repot.

Usually avoid repotting when

- ✗ The tree is still exposed to hard freezes, especially when its newly worked root ball could freeze.
- ✗ The tree is already pushing strong growth and the season has become hot and windy.
- ✗ The tree was recently styled heavily or is not in strong health.
- ✗ You are simply trying to make the tree look finished instead of responding to a horticultural need.

For beginners, the best lesson is simple: the tree decides when it is time, not the pot you bought on Saturday.

Choosing the right soil for your conifer bonsai

Healthy bonsai starts with healthy roots. Your tree depends on its soil for moisture, oxygen, and a healthy environment for root growth. In a shallow bonsai pot, there's very little room for error. The wrong soil can make watering difficult, restrict airflow around the roots, and eventually weaken an otherwise healthy tree.

One of the most important things you'll learn as a bonsai grower is that not all potting soils are suitable for bonsai.

Why your tree's original soil matters

If you purchased a pre-bonsai from a nursery or garden center, there's a good chance it's growing in a soil mix containing peat, bark, or other organic materials. These mixes are often perfectly suitable for growing young trees in larger nursery containers, where the goal is to produce healthy plants efficiently.

However, moving that same tree into a shallow ceramic bonsai pot changes how the soil behaves. Fine organic materials can become compacted over time, retain excessive moisture, and leave too little air around the roots. Some peat-heavy mixes can also become **hydrophobic when allowed to dry out completely**, meaning they resist absorbing water. Water may run down the sides of the root ball and out of the pot without adequately moistening the roots.

We've encountered similar problems with bonsai purchased from big-box stores, pop-up vendors, and other retailers. A tree may look attractive above the soil while the roots are growing in a mix that isn't ideal for long-term bonsai cultivation.

Be especially careful with products marketed as "100% organic bonsai soil." The word *organic* does not automatically mean better for your bonsai. We've seen products advertised this way that contain little more than finely shredded mulch. In a shallow pot, that material may gradually decompose, compact, and restrict drainage.

That doesn't mean all organic ingredients are bad. Properly sized pine bark, for example, can be a valuable component of a well-designed bonsai mix. What matters is the structure of the soil and how it performs around the roots, not the marketing language on the bag.

What makes a good bonsai soil?

A quality bonsai soil should accomplish four things:

- **Drain freely.** Excess water should move through the pot rather than remain trapped around the roots.
- **Retain enough moisture.** Your tree still needs access to water between waterings. Fast drainage should not mean a completely dry root system.
- **Allow air to reach the roots.** Small spaces between soil particles provide the oxygen that healthy roots need.
- **Maintain its structure.** Properly sized particles help resist compaction and support healthy root development over time.

Many experienced bonsai growers use granular components such as akadama, pumice, lava rock, expanded slate, and carefully selected bark. Different combinations provide different levels of drainage, moisture retention, and aeration.

There isn't one perfect recipe for every bonsai. The species, size of the pot, stage of development, local climate, and your watering habits all influence which soil will perform best.



Fine, compacted potting mix

Fine particles may pack together, hold excessive water, and restrict air around roots as the mix breaks down.

Structured granular bonsai mix

Stable particles leave air spaces while porous materials hold useful moisture and allow excess water to drain.

Illustrative comparison only. Ingredient names are less important than particle size, drainage, and your watering conditions.

The soil we use at Bonsai Outlet

Bonsai Outlet's roots go back to 1987, when we first opened as New England Bonsai Gardens in Massachusetts. Today, we operate as Bonsai Outlet, caring for thousands of trees across our Massachusetts and Florida nurseries, from young starter trees to established bonsai specimens.

Over the years, we've worked with different soil ingredients and blends, learning how they perform across different species, containers, and growing conditions. That experience is reflected in our Tinyroots bonsai soils.

We offer two ready-to-use blends, each developed for different growing needs. Both provide the drainage, aeration, and moisture retention that healthy bonsai roots require.



All-Purpose Blend

Tinyroots

Recommended for most beginners, DIY kits, and routine repotting

- ✓ More forgiving moisture retention
- ✓ Good balance of drainage, aeration, and water-holding
- ✓ Contains expanded slate, pumice, lava rock, and pine bark fines



Premium Blend

Tinyroots

Best for refined bonsai and growers who prefer a fully inorganic blend

- ✓ Faster draining and highly aerated
- ✓ Excellent for many established conifers
- ✓ Contains akadama, pumice, and lava rock

Our recommendation: For most first-time growers, start with All-Purpose. Choose Premium if you prefer a fully inorganic blend and are comfortable watering more attentively. Both blends support healthy root development when used at the proper time for repotting.

Tinyroots All-Purpose Bonsai Soil

Our recommendation for most beginners, DIY bonsai kits, and everyday bonsai care.

All-Purpose combines expanded slate, pumice, lava rock, and carefully selected pine bark fines. The mineral components provide structure, drainage, and airflow, while the bark helps retain moisture.

This makes All-Purpose a more forgiving choice for beginners who are still learning how often their trees need water. It's also an excellent option for routine repotting and young trees in development.

It's the same soil we use for our tropical bonsai and young conifers at our Massachusetts and Florida nurseries.

Tinyroots Premium Bonsai Soil

Our fully inorganic blend and the soil of choice for most of our established conifer bonsai.

Premium combines Japanese akadama, pumice, and lava rock. These carefully selected aggregates provide excellent drainage, aeration, and moisture retention while maintaining the open soil structure needed for healthy root development.

Approximately 99% of the established conifers in our nurseries grow in Tinyroots Premium Blend. We also use it for potting newly imported bare-root conifers, and it is the blend our bonsai professionals and students at the Kaikou School of Bonsai use during repotting. Bare-root imported stock is handled by experienced nursery staff; it is not a recommendation for beginners to bare-root established conifers.

Premium is particularly well suited for Japanese Black Pines, Japanese White Pines, junipers, Hinoki Cypress, and other established conifers. It's also the preferred blend for many of our customers.

Because Premium is fully inorganic, it generally drains and dries faster than All-Purpose under similar growing conditions. This gives growers greater control over watering and root development, but may require more frequent attention to moisture levels.

While we recommend All-Purpose for most beginners and young trees, **Premium is the blend we rely on for the vast majority of our established conifers.**

A final word about changing soil

Discovering that your bonsai is growing in an unsuitable soil mix doesn't necessarily mean you should repot it immediately.

Repotting should be done during the appropriate season, when your tree is healthy enough to recover from root work. With conifers, especially junipers and pines, we generally recommend preserving part of the original root ball and replacing old soil gradually rather than removing everything at once.

If your tree is healthy and the existing soil is functioning adequately, waiting until the proper repotting window is often the best decision.

There are exceptions. If a ceramic pot breaks, for example, you can often transfer the tree into another suitable container without disturbing the root ball. This is different from a full repot, where soil is removed and roots are pruned.

The right soil is important. So is knowing when to use it.

What you'll need before you begin

Once you've confirmed that it's the right time to repot, gather your supplies:

- **Your conifer bonsai.** Healthy and ready for repotting.
- **An appropriate bonsai pot.** A new or existing pot with drainage holes and enough room for the roots.
- **Quality bonsai soil.** Selected for your tree, pot, and growing conditions.
- **Drainage mesh and anchoring wire.** To cover the drainage holes and secure the tree in its pot.
- **Bonsai pruning shears and wire cutters.** For selective root trimming and cutting anchoring wire.
- **Bamboo chopstick or root tool.** To loosen old soil and settle fresh soil around the roots.
- **Soil scoop.** To add fresh soil neatly and accurately.
- **Watering can or hose with a gentle spray.** To thoroughly water the tree after repotting.
- **A clean, sheltered workspace.** Preferably out of direct sunlight and strong wind.

OPTIONAL

A suitable mycorrhizal inoculant, such as MycoNoX, can be considered for pines and other conifers. It is not required for every tree, and it cannot substitute for good soil, correct timing, or careful aftercare.

Before removing the tree from its current container, prepare the new pot and organize your supplies. Once the roots are exposed, you'll want to work efficiently without rushing. Keeping everything within reach makes the process easier and helps prevent unnecessary stress on your tree.



Correct mesh and anchoring wire setup before the tree goes into the pot.

A beginner-safe approach to root work

When repotting conifers such as junipers, pines, and Hinoki Cypress, **the goal is to improve the root system without removing more healthy roots than necessary.**

After removing the tree from its pot, examine the root ball. Using a bamboo chopstick or root tool, gently loosen some of the old soil around the outside and bottom. Carefully separate roots where needed, taking care not to tear away the fine feeder roots that absorb water and nutrients.

Trim excessively long or circling roots only when necessary. If substantial root reduction would be needed to fit the tree into your chosen pot, consider a larger pot instead.

For most beginners, we recommend leaving a substantial portion of the original root ball undisturbed, particularly when working with established pines and junipers. If the old soil needs to be replaced, this can often be accomplished gradually over successive repottings, allowing the tree time to recover between sessions.

Avoid removing all the original soil or washing the roots clean unless you are following a species-specific technique under experienced guidance. More extensive root work is sometimes appropriate, but it's not where beginners should start.

Keep exposed roots moist throughout the process, and never remove healthy roots simply to make the tree fit a smaller pot.

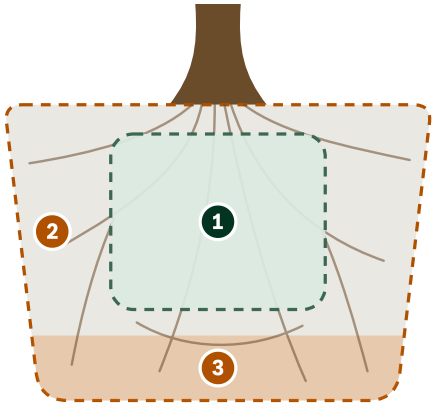
PROFESSIONAL NOTE

Some newly imported conifers arrive bare-root by necessity and are potted by experienced nursery staff. That is a different situation from washing or fully bare-rooting an established tree during routine beginner repotting.

Remember: Successful repotting isn't about how much soil you remove. It's about maintaining a healthy root system while improving its growing conditions.

Where the work happens

For conifers such as junipers, pines, and Hinoki cypress



1. **Keep part of the original root ball intact.**
   Do not strip away all of the old soil.
2. **Loosen old soil gradually from the outer edge.**
3. **Remove soil from the bottom as needed to fit the new pot.**

1	2	3	4	5
Work from the outside inward.	Untangle circling roots carefully.	Shorten long roots only as needed.	Keep root work conservative.	Improve the soil gradually over future repottings.

BEGINNER GUIDELINES

- ✓ As a beginner, do not bare-root an established conifer.
- ✓ Preserve part of the original root ball.
- ✓ Most root work happens at the outside and bottom.
- ✓ If the tree is weak or the timing is wrong, wait.

The goal is not to remove all the old soil at once. The goal is to improve the root system safely over time.

Step-by-step conifer repotting

1 Prepare the pot
2 Remove the tree and inspect the root ball
3 Loosen the soil and work through the outer roots
4 Prune the roots conservatively
5 Add soil and position the tree
6 Secure the tree and work fresh soil around the roots
7 Water thoroughly
8 Protect the tree and monitor recovery

STEP 1 OF 8

1 Prepare the pot



Before removing your bonsai from its current container, prepare the new pot. This includes covering the drainage holes with mesh and installing wire to hold the tree securely in place.

These two materials serve different purposes. **Drainage mesh keeps the soil from washing out of the pot, while anchoring wire prevents the tree from moving as new roots develop.** A freshly repotted bonsai may not have enough roots to hold itself securely in the container, so anchoring is especially important.

1 Check the drainage and wire holes

Turn the pot over and look at the bottom. Most bonsai pots have one or more large drainage holes. Some also have smaller holes specifically designed for anchoring wire.

Make sure all holes are open and free of debris. If you're reusing an old pot, clean it before proceeding.

2 Cut the drainage mesh to size

Using scissors, cut a square or rectangle of plastic bonsai drainage mesh for each large drainage hole.

Each piece should extend approximately ¼ to ½ inch beyond the opening on all sides. The mesh needs to be large enough that it cannot slip through the hole, but it should lie flat against the inside bottom of the pot.

The openings in the mesh should be small enough to retain your bonsai soil while still allowing water to drain freely.

3 Secure the mesh in place

Don't simply lay the mesh over the holes. It can shift while you're filling the pot with soil.

A simple way to secure it is with a short piece of aluminum wire:

- Cut a piece of thin wire approximately 2–3 inches long.
- Bend it into a narrow U shape, similar to a staple.
- Place the mesh over the drainage hole from inside the pot.
- Push the two ends of the U-shaped wire down through separate openings in the mesh and then through the drainage hole.
- Turn the pot over and bend the wire ends outward against the underside of the pot.

The wire should hold the mesh firmly in place without blocking the drainage opening.

Repeat for each drainage hole.

4 Install the anchoring wire

Next, prepare the wire that will eventually secure your bonsai's root ball to the pot.

We generally use aluminum bonsai wire for this purpose. Approximately 2 mm wire works for many small and medium bonsai, although heavier trees may require thicker wire or additional anchoring points.

If your pot has smaller anchoring holes:

- Cut a length of wire long enough to pass through two suitable anchoring holes, extend upward on both sides of the root ball, and leave extra length for twisting the ends together.
- Feed the wire through the anchoring holes from underneath the pot so that both ends emerge inside the container.
- For pots with four anchoring holes, you can install two lengths of wire to provide additional stability.
- Gently bend the loose ends toward the sides of the pot to keep them out of your way.

Do not twist the wires together yet. You'll use them to secure the tree after positioning it in the pot.

5 What if your pot only has drainage holes?

Many traditional bonsai pots have two large drainage holes but no separate holes for anchoring wire. You can still secure your tree.

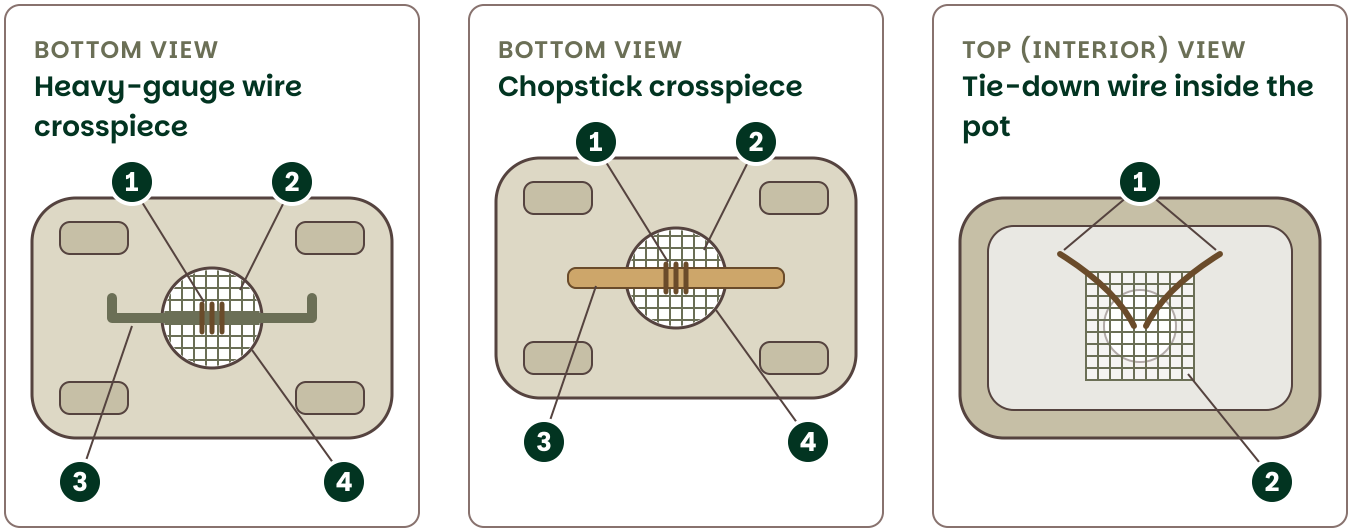
For a typical two-hole pot, run a sufficiently long piece of anchoring wire along the underside of the pot, bringing one end upward through each drainage hole and its mesh. The wire spanning the underside connects the two holes and provides the anchoring point.

Leave enough wire inside the pot to reach over the root ball when you're ready to secure the tree.

If your pot has only one drainage hole and no separate anchoring holes, use a sturdy crosspiece beneath the opening. A short length of heavy-gauge wire or a suitable wooden dowel can span the hole. Wrap the tie-down wire around the crosspiece, feed both ends up through the opening and mesh, and leave enough length to secure the root ball. The crosspiece must extend beyond both sides of the hole, sit firmly against the pot, and leave room for water to drain. If you are unfamiliar with the method, ask for guidance rather than leaving the tree unsecured.

Alternate anchoring method

For pots with one drainage hole and no separate anchoring holes. A sturdy crosspiece under the hole anchors the tie-down wire.



1. Tie-down wire. It passes up through the hole, and its ends wait inside the pot, ready to secure the root ball.
2. Drainage mesh
3. Crosspiece: heavy-gauge wire (such as thick aluminum wire), a chopstick, or a wooden dowel
4. Single drainage hole

BEGINNER TIP

Keep the anchoring wire and the wire holding the mesh separate in your mind. The mesh keeps soil in the pot. The anchoring wire holds your tree in place. Both are important, but they do different jobs.

STEP 2 OF 8

2 Remove the tree and inspect the root ball

Before removing the tree, make sure your new pot, soil, and tools are ready. Work in a sheltered area, away from direct sunlight and strong wind, to keep the roots from drying out.

Remove the tree carefully

If the tree is already in a bonsai pot, check underneath for anchoring wires. Cut or untwist these wires before attempting to remove the tree.

Gently loosen the root ball from the container. If it doesn't slide out easily, work a root tool around the inside edge of the pot to separate the roots and soil from the container. For a flexible nursery pot, gently squeeze the sides to loosen the root ball.

Support the tree near the base of the trunk and underneath the root ball as you lift it out. Avoid pulling forcefully on the trunk or branches, which could damage the roots.

Take a good look before you start cutting

With the tree removed, examine the root system and the soil surrounding it.

Look for:

- **Dense, circling roots:** Roots growing around the outside or bottom of the container may indicate the tree has outgrown its available space.
- **Healthy feeder roots:** Fine roots throughout the soil are a good sign. These are the roots responsible for absorbing water and nutrients, and we want to preserve as many as possible.
- **Old or compacted soil:** Is the soil loose and granular, or has it become a dense mass that holds too much water?
- **Damaged or decaying roots:** Soft, mushy roots or a foul-smelling root ball may indicate a problem. Healthy conifer roots are not necessarily white, so don't remove roots simply because they're dark.
- **Surface roots:** Look near the base of the trunk for the beginning of the surface root structure, known as the *nebari*. This can help you determine the tree's proper planting height.

Consider the soil your tree is already growing in

If your bonsai has been growing in a good granular mix, such as Tinyroots Premium, you may only need to loosen the outer roots and replace some of the older soil.

If it came from a nursery, garden center, or another grower, you may find a much denser soil mix. Don't assume you need to remove all of it during this repotting. With conifers, changing unsuitable soil often takes more than one repotting.

BEGINNER TIP

The purpose of this inspection is to understand what your tree needs. Not every root ball requires extensive cleaning or pruning.

STEP 3 OF 8

3 Loosen the soil and work through the outer roots

Once you've inspected the root ball, begin loosening the old soil to make room for fresh bonsai soil and healthy new root growth.





Start at the outside and bottom

Using a bamboo chopstick, root rake, or suitable bonsai root tool, gently work through the outer edge of the root ball.

- Begin at the outside edge, using short, controlled movements to loosen the soil.
- Work gradually around the root ball rather than aggressively digging into one area.
- Turn the tree carefully to access the bottom and gently loosen roots growing along the base.
- Remove soil as it becomes loose, taking care not to tear away fine roots unnecessarily.
- Where possible, gently separate longer roots so you can see their direction and determine whether they need trimming.

A bamboo chopstick is particularly useful for beginners because it offers more control than a heavy metal root hook.

How much old soil should you remove?

That depends on the tree.

For a healthy, established conifer already growing in granular bonsai soil, you may only need to refresh portions of the outside and bottom of the root ball.

For a nursery-grown tree in dense organic soil, the long-term goal is to transition the roots into a better-draining bonsai mix. However, removing too much soil at once can seriously stress a conifer.

With pines, junipers, and Hinoki Cypress, **we generally recommend preserving a substantial portion of the existing root ball**, especially for beginners. More extensive soil replacement can be completed during future repottings as the tree develops.

Pines also benefit from beneficial fungi associated with their roots, known as *mycorrhizae*. Preserving part of the established root environment helps avoid unnecessary disturbance.

Don’t force your way into a hard root ball

If you encounter an extremely dense center that is difficult to loosen, don’t keep digging until you’ve exposed every root. Stop and evaluate how much root disturbance has already occurred.

Severely compacted or waterlogged nursery soil may require a planned, staged replacement rather than simply adding fresh soil around an untouched core.

Keep the roots moist

Exposed roots can dry out surprisingly quickly. Keep a spray bottle handy and lightly mist exposed roots when necessary. You can also cover the root ball with a damp towel during interruptions.

Never leave the tree sitting in the sun or wind while you prepare other supplies.

BEGINNER TIP

Removing old soil and pruning roots are two different jobs. The goal at this stage is to loosen soil and expose enough roots to make good decisions, not to remove as much material as possible.

STEP 4 OF 8

4 Prune the roots conservatively

After loosening the outer soil, you should have a clearer view of the roots and how they will fit into the new pot.

Root pruning helps maintain a manageable root system and creates room for fresh soil and future root growth. But with conifers, removing too many roots can weaken the tree or cause serious damage.



Start with the roots that actually need attention

Using sharp bonsai root shears or root cutters:

- **Trim excessively long roots** that extend well beyond the root ball and cannot be positioned properly in the pot.
- **Shorten roots circling tightly around the outside or bottom** when they prevent the root system from developing properly.
- **Remove clearly dead or decaying roots** where you can identify them confidently.
- **Preserve healthy fine feeder roots** wherever possible. These roots are essential to the tree's recovery.

Make clean cuts rather than pulling or tearing roots away. Use appropriate root-cutting tools for larger roots instead of forcing them through small pruning shears.

Pay attention to the bottom of the root ball

Roots frequently grow in a thick mat at the bottom of a nursery container or bonsai pot. Gently comb out this area and remove only what is necessary.

The objective is to create enough space for fresh soil beneath and around the remaining roots, not to flatten the root ball or remove its entire lower section.

Don’t force a tree into a pot that’s too small



Before making additional cuts, check whether the root ball will fit comfortably into the prepared pot.

If fitting the tree requires removing a large amount of healthy root mass, reconsider your pot choice. A slightly larger bonsai pot or an appropriate training container may be a much better option.

You can reduce the root system gradually over future repottings as the tree develops.

How much root pruning is safe?

There isn’t one percentage that applies to every conifer. The amount depends on the species, age, health, existing root system, and how much soil you’ve already removed.

For beginners, our recommendation is simple: **remove only what is necessary, preserve as many healthy feeder roots as possible, and avoid making major changes to the root system all at once.**

If you’ve already disturbed a significant amount of old soil, be especially conservative with additional root pruning.

Experienced bonsai professionals may perform more extensive work on strong, well-established trees. Those techniques require an understanding of the particular species and aren’t appropriate for every beginner.

Before moving to the next step

Take one final look at the root ball. It should fit into the prepared container without being crushed or forced into position. You should have enough room to work fresh bonsai soil around the roots, while retaining a healthy, stable root system.

BEGINNER TIP

A successful repotting doesn't require dramatic root pruning. The goal is to improve the tree's growing conditions while preserving the roots it needs to recover.

STEP 5 OF 8

5 Add soil and position the tree

Add a shallow layer of your chosen bonsai soil to the bottom of the pot, making sure it covers the area beneath the root ball.

Next, create a small mound of soil where the base of the tree will sit. This mound helps support the tree and allows fresh soil to settle beneath the roots, preventing empty spaces under the root ball.

The size of the mound depends on the shape of the roots. A tree with a flat, compact root ball may need very little additional soil underneath it.



Position the tree in the pot



Carefully lower the tree onto the soil mound, keeping the anchoring wires accessible.

Gently move the tree from side to side to help settle the roots into the soil. You want the root ball supported by the soil beneath it, rather than resting over an empty space.

Before continuing, step back and look at the tree from several angles.

Consider three things:

1 The front of the tree

Most bonsai have a preferred viewing side, commonly called the *front*. This is usually the angle that best shows the trunk, surface roots, and branch structure.

Rotate the tree and determine which side looks best. Once you've selected the front, align it with the front of the pot.

2 The planting angle

Look at the direction and movement of the trunk. Some bonsai look best growing nearly upright, while others have a natural lean.

Small adjustments in planting angle can make a significant difference in the appearance of the tree.

However, this isn't the time to make dramatic changes that require additional root pruning or force the roots into an unnatural position.

3 The planting height

The base of the trunk and any established surface roots should remain visible at the appropriate soil level. Avoid burying the lower trunk or covering an established root flare with fresh soil.

At the same time, don't position the tree so high that its healthy roots will be left exposed.

Remember that the soil level will rise as you fill the pot. Leave enough room below the rim to accommodate the final layer of soil and make watering easier.

Should your bonsai be centered?

Not necessarily.

In many traditional bonsai compositions, the tree is positioned slightly off-center, particularly in oval and rectangular pots. This often creates a more natural, balanced appearance.

However, the appropriate placement depends on the tree's style, trunk movement, root structure, and the shape of the pot.

For beginners, the most important consideration is that the tree looks balanced and the root system fits comfortably.

Check the fit before continuing

Once you're happy with the position, make sure:

- [ ] The root ball rests securely on fresh soil.
- [ ] There is adequate room for soil around the sides and beneath the roots.
- [ ] The trunk and established surface roots are at the intended planting height.
- [ ] The tree is facing the direction you want.
- [ ] The anchoring wires can reach across the root ball without damaging the trunk or important surface roots.

BEGINNER TIP

If the tree doesn't fit comfortably, don't force it. A slightly larger pot is a better choice than removing additional healthy roots simply to make the tree fit.

STEP 6 OF 8

6 Secure the tree and work fresh soil around the roots



A newly repotted bonsai must be held securely in its pot while new roots establish themselves.

If the tree moves every time it's watered, bumped, or exposed to wind, delicate new roots can be damaged before they have a chance to grow.

This is why we installed anchoring wires in Step 1.

1 Add soil around any exposed roots



Before tightening the wires, add a little fresh bonsai soil around the lower roots and beneath any open sections of the root ball.

Use a bamboo chopstick to guide the soil into these areas.

This is particularly important if you've loosened a substantial amount of old soil. The fresh soil helps support the exposed roots so they aren't pulled together or crushed when the anchoring wires are tightened.

You don't need to fill the entire pot yet. Just provide enough support to keep the root ball in its intended position.

2 Bring the anchoring wires across the root ball



Locate the wires you installed earlier. They should extend upward from the bottom of the pot.

Carefully bring the wires across the top or sides of the root ball, choosing locations where they can hold the tree securely without damaging important roots.

For a typical pot with four anchoring wires, bring together two wires from opposite sides of the root ball and twist them together. Repeat with the remaining pair.

The exact arrangement depends on the number and location of the anchoring holes.

Avoid wrapping wire directly around the trunk. The wires should hold the root ball in place, not constrict the living trunk or damage prominent surface roots.

If a wire must cross an exposed root, protect it with a short piece of plastic tubing or use an appropriate support to spread the pressure.

3 Tighten the wires carefully



Hold the tree in its chosen position while bringing the wire ends together.

Using your fingers or bonsai pliers:

- Pull the two wire ends snug.
- Twist them together carefully, keeping the connection close to the root ball.
- Check that the tree hasn't shifted or changed its planting angle.
- Continue tightening only until the root ball is held securely.
- Repeat with the remaining anchoring wires.

The goal is a firm connection, not excessive pressure.

Do not keep twisting until the wire is extremely tight. Aluminum wire can break if overtwisted, and too much pressure can damage roots.

Once secure, cut off the excess wire and bend the twisted ends down so they can be covered with soil. Avoid leaving sharp ends exposed.

4 Check that the tree is secure

Gently hold the pot and test the base of the trunk for movement.

The root ball should remain stable without rocking from side to side.

If the tree moves, check your anchoring wires and adjust them before continuing. Don't rely on tightly packed soil alone to hold an unstable tree in place.

5 Add fresh bonsai soil around the root ball



Using a soil scoop, gradually add fresh bonsai soil around the tree.

Start at the outer edges of the root ball, filling the spaces between the roots and the sides of the pot.

Work in small amounts rather than pouring all the soil in at once.

Pay particular attention to the corners of rectangular pots and any spaces underneath or between exposed roots.

6 Use a chopstick to settle the soil



This is an important step that beginners sometimes overlook.

Fresh bonsai soil can bridge across roots, creating hidden spaces where the soil hasn't settled properly. We want the soil particles to fill these spaces and surround the roots.

Using a bamboo chopstick:

- Insert the chopstick gently into the newly added soil near the outside of the root ball.
- Move it slightly from side to side or in small circular motions.
- Allow the soil particles to fall into the spaces around the roots.
- Add more soil wherever the surface settles.
- Continue around the pot, working gradually toward the root ball.

You are settling the soil, not packing it tightly.

Avoid stabbing aggressively into the roots or repeatedly forcing the chopstick into the undisturbed center of the root ball. The goal is to distribute soil into open spaces without breaking healthy roots.

If you've preserved a substantial portion of the original root ball, concentrate on the areas where you've introduced new soil.

7 Finish the soil surface



Continue adding and settling soil until the root system is properly covered and the soil reaches the intended level.

For most bonsai pots, the finished soil surface should sit slightly below the rim, leaving enough room for thorough watering.

Keep the base of the trunk and established surface roots visible where appropriate. Avoid burying them beneath a thick layer of new soil.

Gently level the surface with your fingers or a small brush. You can lightly firm the surface, but don't compress the soil into a dense layer.

Final check

Before watering, make sure:

- [ ] The tree remains firmly anchored in its intended position.
- [ ] The root ball doesn't move when the pot is gently handled.
- [ ] Fresh soil has been worked around the roots and into open spaces.
- [ ] The drainage holes remain unobstructed.
- [ ] The soil surface is level and slightly below the pot rim.
- [ ] The trunk base and established surface roots haven't been buried unnecessarily.

BEGINNER TIP

A properly repotted bonsai should feel secure in its pot, with fresh soil surrounding the roots, not simply poured around the outside. Take your time with the anchoring wires and chopstick work. These details make a real difference in how well the tree becomes established.

7

STEP 7 OF 8

Water thoroughly

Water the newly repotted tree thoroughly with a watering can or hose fitted with a gentle rose. Apply water evenly across the soil surface, allowing it to soak in and drain from the holes below. Repeat as needed so the fresh soil is wetted throughout, not just on the surface. Do not blast the soil with a strong jet of water.



Check for even wetting

If your tree retains a dense nursery-soil core inside fresh granular soil, remember that the two mixes may take up water differently. Water exiting the drainage holes does not always mean the center of the old root ball has become moist. Check the original root area carefully with a wooden chopstick or by assessing its moisture; do not repeatedly soak a persistently waterlogged root ball.

Watch for settling and drainage

As you water, the fresh soil may settle into spaces around the roots. Add a little more mix where needed, keeping the root flare visible and the soil surface below the rim. Confirm that water drains freely and that the tree remains firmly tied in. Never leave the pot standing in a saucer of water.

BEGINNER TIP

Water the entire root zone, not just until the first water appears under the pot. At the same time, avoid automatically watering again while the root ball remains wet.

STEP 8 OF 8

8 Protect the tree and monitor recovery



Move your bonsai to a sheltered outdoor location appropriate for the species and local conditions. For the first days after substantial root work, protect it from strong wind, drying afternoon sun, and hard freezes. Bright shade or gentle morning light is often useful at first; gradually return the tree to its normal light exposure as it stabilizes.

Monitor moisture rather than following a schedule

Fresh bonsai soil often dries differently from the soil your tree was growing in before. Check the moisture daily at first, but water only as needed. Keep the root ball adequately moist, not constantly saturated. If part of the old soil remains, check that area as well as the new soil around it.

Avoid additional stress

Give the tree time to reestablish roots. Do not combine a fresh repot with heavy branch pruning, major bending, or other demanding work. Hold off on routine fertilizing until recovery is underway and the tree resumes healthy growth. Do not use a fixed number of weeks as the only signal.

Know when to seek help

It may take time for a conifer to show noticeable new growth, so do not expect an immediate change. Continue to watch drainage, moisture, stability, and foliage condition. If the soil stays soggy, the tree becomes loose, or foliage deteriorates noticeably, contact an experienced bonsai professional rather than attempting another major root operation.

BEGINNER TIP

Your job after repotting is to provide stable conditions. Protect the roots, monitor moisture, and resist the temptation to keep working on the tree.

Aftercare: what to do after repotting

Aftercare timeline: the first month after repotting

Repotting success depends as much on aftercare as it does on the repot itself. Good aftercare protects the roots while the tree rebuilds strength.

Repot day

Water thoroughly until the water runs clear. Make sure the tree is tied in firmly.

Days 1–7

Keep in bright shade or gentle morning sun. Protect from hard wind and late frosts.

Week 2

Continue watching moisture closely. Fresh soil may dry differently than old soil.

Weeks 3–4

Avoid extra stress. No heavy styling, no hard pruning, and no fertilizer yet.

After recovery starts

When the tree is pushing healthy growth again, begin feeding lightly. Ease the tree back into normal sun exposure.

In cold-winter climates, protect freshly repotted conifers from late frosts and strong spring wind. Wait to fertilize until recovery is underway. These timings are a guide: recovery varies by species and weather.

- Protect the tree from strong wind and hard afternoon sun while it recovers.
- In cold-winter climates, be especially careful with late frosts after root work; the newly disturbed roots need protection even if the foliage is cold hardy.
- Water thoroughly after repotting, then water based on the tree's needs rather than on a fixed schedule.
- Do not fertilize immediately. Wait until the tree is clearly recovering or beginning to push healthy growth again.
- Avoid stacking major stresses. A freshly repotted tree usually does not need heavy pruning, bending, or wiring at the same time.

Frequently asked questions

Do I remove all of the soil from the roots?

Usually not. With most established conifers, especially pines and junipers, keep a substantial portion of the original root ball and improve the soil gradually. Imported bare-root stock is a separate, professional nursery procedure, not a routine technique for beginners.

How much root can I remove?

There is no safe percentage that applies to every species and every tree. The amount depends on tree health, season, species, and how much soil has already been removed. For beginners, trim only what is necessary and preserve healthy fine roots. If major root reduction is needed to fit the tree, choose a larger or deeper container instead.

Should I use MycoNoX mycorrhizal inoculant?

MycoNoX is optional, not essential. It may be used during repotting where its labeled organisms are suitable, particularly with pines. It is not a fertilizer, and using it does not replace appropriate timing, soil, and aftercare.

Do I fertilize right after repotting?

Usually, wait until the tree is clearly recovering and has resumed active growth before returning to normal feeding. Exact timing varies with species, root work, weather, and fertilizer type; do not use the timeline as a rigid deadline.

Can I style and repot on the same day?

Sometimes light cleanup is fine, but beginners should avoid combining heavy root work with major styling, bending, or pruning unless the tree is very vigorous and the work is modest.

What if I bought a pot and soil but it is not the right season?

Keep the tree healthy where it is and wait. Buying supplies does not create a repotting need. The tree will tell you when the timing is right.

What if my new bonsai already came in a ceramic pot?

Check the health and drainage first. If the tree is strong and the soil drains well, it may not need repotting yet.

Which soil should I use for a first repot?

For most first-time DIY growers and many young conifers, Tinyroots All-Purpose is a forgiving starting point. For established conifers, including most of the pines and junipers in our nurseries, we generally use Tinyroots Premium. The right choice depends on the root system, stage of development, local conditions, and your watering habits.

Should I put a larger tree straight into a shallow show pot?

Usually not. If the root system or the tree is not ready, a more practical training pot or deeper bonsai pot is often the better first step. Health comes before presentation.

How do I know the repot went well?

The tree stays secure in the pot, the soil drains evenly, and over time the tree resumes healthy growth. Recovery may be subtle on conifers, so patience is important.

Final reminders for beginners

1

Repotting is a horticultural job, not just a design decision.

2

Healthy timing matters more than having the perfect pot on hand.

3

Conifers generally prefer gradual improvement over aggressive root work.

4

If you are unsure, it is usually safer to wait and learn than to rush.