Welcome to the art and culture of bonsai. Practicing bonsai can help us develop a deeper appreciation for the natural world and for our fellow human beings. Bonsai require patience, diligence, responsibility, creativity, and awareness, among other things. It is not always easy, yet bonsai can enrich our lives with beauty and inspiration. If you pay attention to your bonsai and take good care of it, you will enjoy it for many years. It's up to you! We can help you if you have questions.



# TEMPERATE BONSAI

In our New England climate, temperate bonsai are those which qualify as neither exclusively indoor or outdoor trees. They are somewhat winter hardy but are not tolerant of extreme cold. Some trees considered temperate bonsai are Cotoneaster, Pyracantha, Nandina, Camellia, Crape Myrtle, Boxwood varieties, some Azaleas, and more. Most are woody evergreens. Temperate trees tend to have good branch ramification, smooth bark, and many will flower and bear fruit. Some conifers can be grown as temperate (low indoor temperatures for the winter), such as certain cypress and juniper varieties.

## WATER

No single watering schedule can be applied to bonsai. Bonsai can dry out quickly because they are planted in coarse soil and in shallow containers. In some cases, you may need to water every day, *however*, the frequency of watering depends on the type of tree, size of pot, type of soil, climate conditions and more. The best way to tell if the bonsai needs water is to feel the soil. Stick your finger a half inch or so into the soil. Overall, if you do not feel much moisture in the top half inch of the soil, then it's time to water.

You must soak it well. Take the bonsai to the sink and either let it sit in the water for a few minutes (until it has soaked up enough from the drainage holes in the bottom), or shower from above, letting the water drain through several times. *Never* let the soil dry out completely, but don't keep it soaking wet all the time. Base your watering on how the soil feels. If you are not sure if it is wet or dry, take the bonsai to the sink and soak it well. Feel it an hour later, two hours later, four hours later, etc. This can help you understand how the soil dries down.

Check it every day. If you can feel moisture, then you may not need to water. However, if your bonsai is in a very small pot and/or it is a hot or windy day, or if the bonsai is pot-bound, then you may need to water. Better safe than sorry. Feel the soil in several areas. If one part is dry, then you need to water that part.

Never let the bonsai get too dry!

#### LIGHT

Your temperate bonsai should always be in good light. When inside, keep it right near a window, preferably one that gets some direct sun. Most temperate varieties can be acclimated to some direct sun when they are outside. Morning sun is preferable.

#### AIR

Temperate bonsai need good air circulation. This is a critical factor in keeping them strong. Naturally, putting your bonsai outside from spring through fall is very good. If your bonsai is indoors, keep it in an open window when the weather is mild, or set up a small fan to move the air around your tree.

#### FERTILIZING

When your bonsai starts to push out fresh, new growth, it is time to start feeding. Apply mild organic fertilizer in the form of pellets or liquid, usually with equal parts nitrogen, phosphorous, and potassium (NPK) during the growing season, and less nitrogen in the fall. Apply the pellets about once a month, and the liquid about every two weeks. Once the growth of the tree starts to slow down in mid to late summer, you can cut the fertilizer back to once a month for the liquid. When the bonsai is in winter dormancy, there is no need to feed it. Remember, never fertilize a weak tree.

#### LOCATION

Some temperate bonsai can be adapted to indoor growth. But, in general, you do not want to consider your temperate bonsai an exclusively indoor tree. Ideally, you should put the tree outside in the spring when the night temperature is around 45°F consistently. Watch for cold snaps, and if the temperature drops below 45°, you should bring the tree inside for the night. The earlier you can start to put the bonsai outside the better, because as it grows the new growth will become acclimated to the sun and will not burn. Leave your tree outside in a bright place (some direct sun is fine) all through the spring, summer, and fall, until the night temperature drops to about 40°. Then you need to put the tree in its winter location. For the winter, find a place that is cool, bright, and well-ventilated. Between 40° and 50° is ideal. Don't forget to water in the winter. It is helpful to set up a small fan for indirect air circulation. Increasing the humidity by misting and/or using a humidity tray is also a good idea. Remember, these are general recommendations. You can fine-tune your routine according to the specific variety of bonsai.

## CLEANLINESS

One of the best things you can do for your temperate bonsai is to keep it clean. This means removing dead leaves from the tree, as well as the top soil. Also, remove any weeds that might grow in the soil. Invest in bonsai tweezers. This handy, inexpensive tool works well for removing dead leaves or spent flowers or fruits from the hard-to-reach places. Since many temperate trees have dense branching and fine foliage, this is particularly important, because insects and disease can thrive in such an environment and it's difficult to notice them.

# PESTS AND DISEASES

The tight growth on temperate bonsai, and the fact that many will fruit and flower, make these varieties particularly susceptible to insects. Just as children can catch a cold, your bonsai are susceptible to the common houseplant pests and diseases. The best defense is to keep your tree clean and healthy. Always observe the bonsai closely. If you notice any abnormal leaf drop, stickiness to the foliage, or visible insects, you need to treat the problem. Start by showering the tree with lukewarm water to thoroughly wash away any insects. Then, spray with a mild insecticidal soap (always follow directions when using any insecticides). One spray is usually not enough. You may need to repeat the treatment once a week for two or three weeks. Insects may be knocked back, but they can reappear in a few weeks or months. Keep a watchful eye and be diligent about treating them. Contrary to popular belief, indoor bonsai are more likely to be affected by insects than outdoor bonsai, so keeping your bonsai outside for the summer will strengthen it and make it more resistant to pests. Indoor trees may also get fungus and other diseases. Please learn to detect and treat these problems. You can always consult with us if stronger measures are necessary.



The best time to repot (root prune and transplant) is when the new leaves are just starting to push out. This will vary from tree to tree, and from year to year. It could be as early as February or as late as June. Watch the tree closely to determine the best time. For temperate trees which are deciduous, like Crape Myrtle and Pomegranate, the only time to safely transplant is when the buds are just starting to swell—just as the bonsai is coming out of dormancy.

#### PRUNING AND SHAPING

Most temperate trees are leafy evergreens, and most temperate bonsai have dense, tight growth, and small leaves. This means that judicious pruning is necessary, especially in the growing season. You should let the foliage grow out a little, then cut it back, leaving (usually) two new sets of leaves. You will want to remove any unwanted "sucker" growth as well. These are small shoots which form at the base of the trunk, or along the trunk and branches, which you do not want to develop into trunks or branches. Use good-quality bonsai shears to do your pruning; they will make your job easier and more enjoyable, and it's better for the tree. Remember, don't cut too much and don't cut too little!

# DESIGN AND STYLING

Most temperate bonsai are well suited to Informal Upright, Slanting, and Semi-Cascade style. Often, glazed pots are used to complement the colorful fruits and flowers. Many temperate trees are cultivated in landscapes, as pruned shrubs and trees, rather than growing as "wild" trees. These trees tend to lend themselves to more sophisticated styling. You can wire-train your temperate bonsai. Some varieties (like Cotoneaster) may be more difficult to wire since the leaves are so close together. Be especially watchful for wire damage, since the smooth bark of many temperate trees will show wire damage easily. If your temperate bonsai is a Cypress or Juniper variety, you can train it in all major styles. For these trees, unglazed containers are preferred. The very best, most beautiful bonsai are those which are healthy and are beautifully styled. Also, if you observe aged trees in their native environments, you can feel their character and strength. These are the ideals we strive for in the art and craft of bonsai: beauty, health, character, and style.



New England Bonsai Gardens is one of the finest, most beautiful bonsai nurseries in America, with a world-class bonsai collection, thousands of bonsai and pre-bonsai, pots, tools, books, and accessories. We want you to succeed with bonsai. We offer workshops, private tutorials, and professional

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