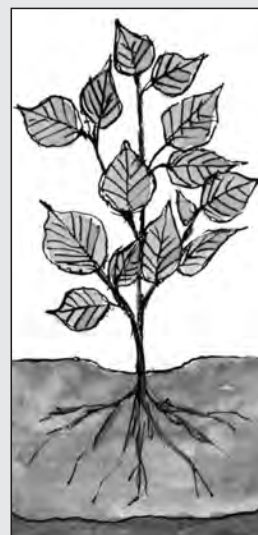


Planting Instructions

In order to provide the best possible chance of success with your new hazels, please read and follow the instructions below:

Care before planting

Remove your seedlings from the package and examine your new hazelnuts. **Please try to plant them immediately to ensure their health.** The hazels are dormant bare root stock. If you can't plant them right away it is important to store them in a cool moist place no colder than 38 degrees. Don't let them freeze. Most importantly, be sure to *keep their roots damp.*



Bare-root seedling

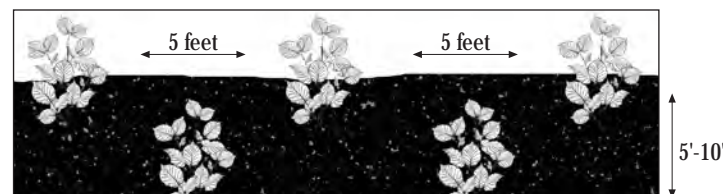
After you have moistened the roots, reseal the package for temporary storage in your garage or on an unheated porch. They could also be placed in a protected site outdoors on the north side of your house.

If you must keep the shrubs for more than a few days protect them by "healing-in" the stock. Select a shady spot with moist soil. Dig a v-shaped trench about one spade head deep. Bury the roots and water thoroughly. Before their buds swell (breaking dormancy) move them to their permanent location.

Tip: Let water in a garden hose run long enough to remove hot water trapped inside before watering your hazels.

Choosing the planting site

There are many criteria to consider when choosing the best location for your hazels. Since these plants may live for 30-100 years or more, it is important to choose the proper site. Hazelnuts are self-infertile and wind pollinated. These plants are ready for use in windbreaks, living snowfences, wildlife plantings, and as a pick-your-own crop. These various uses will affect the spacing and location.



Suggested spacing for windbreak

WINDBREAK. Most of the hybrids used will reach a maximum height of 8-10'. The bushes are quite dense, making an effective windbreak both summer and winter. Plant spacing within rows depends on your primary goal; hazels will tolerate spacing as tight as 3' between bushes and still bear nuts; 3-4' spacing will give a very tight windbreak. (They will bear better with more space, however.) Our general recommendation would be to space the bushes 5-6' apart in a row, and have two rows 5-10' apart. Stagger the rows to create a more effective wind barrier.

LIVING SNOWFENCE. A living snowfence can be cheaper to maintain than traditional kinds, and provides year-round wind protection, and wildlife cover. We highly recommend the two-row spacing shown above. Snow will accumulate on the downwind side of the plant rows, so use proper distance from roads, etc.

WILDLIFE PLANTINGS. These bushes will provide year-round cover for many kinds of wildlife, from songbirds to deer. The nuts will be eaten by many animals, including turkeys, bluejays, deer, raccoons, bear, and of course, squirrels. Windbreak and snowfence plantings serve wildlife well, and provide travel lanes. Consider planting single bushes across a meadow, or a thicket with an interior opening.

PICK-YOUR-OWN. These hybrid hazels are the perfect solution for pick-your-own. Nuts can be picked standing on the ground, with no danger of falling. They are easy to pick, don't stain clothes, and are easy to crack and eat. Better light availability will reward you with more nuts, so we recommend spacing 8' apart within rows, and 10-15' between rows.



Photo courtesy Badgensett Research Farm

Choosing the planting site (cont.)

ASPECT AND SOIL CONSIDERATIONS. Hazels will grow on north or south slopes, in partial shade or full sun. Best nut production requires full sun. Hazels have deep, fibrous roots, and grow in most soils. Try to avoid very heavy clays, shallow hardpan, and marshy soils. They dislike having overly wet feet, so make sure the drainage is good.

WEATHER, WATER. Expect hazels to grow in areas with 20" of annual rainfall or more. In areas of lower rainfall, irrigation during dry periods may be necessary. Otherwise, water only if needed the first growing season to establish the plants. Wind damage is rare.

Planting Your Seedlings

Unpack and soak the hazel's root systems in water for 1-3 hours.

Bare root seedlings with proper care have a good survival rate, but weed control can help them to a better start. Remove all weeds, grass, and duff from a 3' circle around your planting site. Dig a saucer shaped hole wider than necessary, so the roots can spread without crowding. Turn the soil and break up any large clods. Rough up the sides of the hole to aid in root penetration.

Be sure to plant only one hazel at a time keeping the rest of the plants roots soaking as you work. Carefully determine where the soil line is on each hazel and plant it no deeper than it was grown at the nursery. Partially fill the hole, firming the soil around the lower roots. Don't add soil amendments to the hole, such as peat or bark.

Wear a pair of gardening gloves to avoid touching the roots directly with your bare hands. Oils on your finger can sometimes harm sensitive roots. Plant with the sun at your back so your body casts shade and shields the roots from the damaging rays of the sun.

Shovel in the remaining soil. Water immediately to settle the soil, and remove excessive air pockets by gently tamping. The soil should be firmly, but not tightly packed. Make sure all the roots are completely covered with soil.

Now place organic mulch such as wood chips, pine needles, or bark pieces 2-4" deep within the 3' planting circle. Keep the mulch from touching the plants. **Bare root plants shouldn't be fertilized at planting time.**

On Going Care

Cultivate shallowly for the first 2 or 3 years. It is normal for suckers to appear and form a multi-stemmed bush. After a few years periodic pruning and shaping is necessary. Pruning should be done in late winter to open up the plant to summer sunlight.

Hazels are relatively pest free. Although they are not favorite browse, deer will sometimes hit fast-growing young plants. Consider wire barriers, or spray egg solution on as a repellent at the following rate: Liquefy 1 dozen eggs in a blender, mix into 5 gallons of water, and spray to wet. This is effective for about 2-4 weeks. Use all of the egg spray, as it does not store well!

Mice and rabbits may eat stems in winter, but the plants recover very quickly. In fact, hazels are invigorated by pruning to the ground to encourage growth of new stems.

Squirrels and chipmunks will steal nuts, particularly if planted near the woods, but not so much if planted in fields. Mowing grass short can discourage mice.

Insects cause few problems to the plants, but several kinds of weevils can attack the nuts. This may be worse following a mild winter. The main disease of concern is Eastern Filbert Blight, which is attacking the European species. Our hybrids are resistant to this malady.

FERTILIZER. Studies conducted in Minnesota have shown that the fall application (early September) of 15-5-20 at a rate of 20 lbs./1000 square feet to *established* plants resulted in consistently better nut crops and more vigorous hazels. Wait until your plants have grown at least one season before you apply any fertilizer. Your local County Cooperative Extension Agent can help you test your soil to determine the correct ratio for your area.



Photo courtesy Badgensett Research Farm