

shrub and shake the branches to dislodge the nuts.

### 4.3 Post-Harvest Storage and Usage Guidelines

After harvesting, remove the husks from the nuts.

For food storage: Allow the nuts to air-dry for 2-4 weeks in a cool, dry place. Once dried, the nuts can be stored in an airtight container in a cool, dark location for several months. American Hazelnuts are excellent for fresh eating, in baked goods, or for making hazelnut butter or oil.

For seed sprouting: Keep the harvested nuts in a breathable bag or container, and store them in a cool, moist place. The bottom drawer of your refrigerator, for example, is ideal for this. This process is called stratification, and it helps break the seed's dormancy. After a period of cold stratification for about 90-120 days, the seeds should be ready for planting. If the nut shell cracks easily, it's usually a good indication that the seed is ready to sprout.

## 5 Recipes and Usage Ideas

American Hazelnut nuts have numerous culinary uses, from sweet to savory dishes. They're high in healthy

fats, protein, and vitamins, making them a nutritious addition to your diet.

**Fresh Eating:** American Hazelnuts can be eaten fresh after harvest and drying. They have a sweet, slightly buttery flavor that can be enjoyed as is.

**Roasted Hazelnuts:** Roasting enhances the flavor of the nuts. Pre-heat your oven to 180°C, spread the hazelnuts on a baking sheet in a single layer, and roast for 10-15 minutes or until they're golden and fragrant. After roasting, you can remove the skins by rubbing the nuts in a kitchen towel.

**Hazelnut Butter:** Blend roasted hazelnuts in a food processor until they form a smooth, creamy butter. This can be spread on toast or used in cooking and baking.

**Baking and Desserts:** Hazelnuts can be ground into a flour and used in baking. They're a classic ingredient in baked goods like cookies, cakes, and pastries. They also pair well with chocolate, such as in the classic spread, Nutella.

**Savory Dishes:** Chopped hazelnuts add a pleasing crunch and flavor to salads, pastas, or as a crust for fish or poultry.

In terms of medicinal uses, while more research is needed, some studies suggest that eating hazelnuts may support heart health, aid in blood sugar control, and provide anti-inflammatory and antioxidant benefits.

## Lyis: American Hazelnut (*Corylus Americana*)

Nursery in Owen Sound, run by Andrii Logan Zvorygin a Ukrainian-Canadian

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## 1 Introduction to *Corylus Americana*

### 1.1 Description of the Plant

*Corylus americana*, commonly known as the American Hazelnut, is a deciduous shrub native to North America. It typically grows to a height of 2.5-4.5 meters and has a similar spread. This multi-stemmed shrub is recognized by its rounded shape, with leaves that are bright green, rounded to oval, and have doubly serrated edges. During the spring, the American Hazelnut is adorned with yellow male catkins that provide an early source of pollen for bees. By late summer to early autumn, the shrub yields edible nuts encased in a leafy husk, which turn from green to brown as they mature.

### Why Grow It?

Native, tough, and highly nutritious, American hazelnut forms a 2.5-4.5 m multi-stemmed thicket that feeds both wildlife and people. Yellow male catkins brighten late winter; edible nuts ripen August-September, enclosed in leafy husks that brown at maturity.

### 1.2 Historical and Cultural Context

The American Hazelnut has been part of North American ecosystems and

cultures for centuries. Native American tribes, including the Iroquois, Ojibwa, and Potawatomi, valued the plant not only for its edible nuts but also for its medicinal properties. The nuts were a crucial source of food, especially during the winter months. They were often ground into a meal or paste, which could be used to make cakes or added to soups and stews. The wood of *Corylus americana* was used in crafting various tools and baskets due to its flexibility and strength.

### Heritage & Uses

Indigenous nations relied on the nuts for winter calories, grinding them into meal for cakes and stews; bark infusions eased fever and hives. Today the shrub is valued for:

- **Food:** 60 % healthy fats, vitamin E, manganese. Eat fresh, roast, or press for oil.
- **Habitat:** Catkins feed early bees; nuts sustain birds, deer, and squirrels.
- **Craft:** Flexible, strong shoots suit baskets, stakes, and tool handles.

### Planting Essentials

1. **Site** — Full sun = best yields, but shrub tolerates light shade;

any well-drained soil, pH 5.5–7.5 (even mildly alkaline).

- 2. **Hole** — 40 cm wide × 30 cm deep; blend back-fill with 5 com-post.
- 3. **Spacing** — 3–5 m between plants for airflow and easy harvest.
- 4. **Pollination** — Wind-pollinated; two or more shrubs ensure a heavy set.
- 5. **Mulch & fence** — 8 cm wood chips, plus 1 m hardware-cloth guard if rabbits or deer present.

Quick Care Calendar

- **Spring** — Soil test; broadcast 100 g balanced organic fertiliser per shrub if needed. Prune out dead or crossing stems.
- **Summer** — Deep water in drought; keep weeds down.
- **Autumn** — Harvest when husks brown; air-dry nuts 2–4 weeks.
- **Winter** — Add mulch, remove fallen debris; wrap trunk with hardware cloth where voles are a problem.

2 Pollination

American Hazelnut (Corylus americana) Pollination & Fruiting Guide

Plants Planted	Pollination Reliability	Expected Yield	Years to First Crop
1	✗ Very poor (0–10%)	Almost none	4–6 years
2	⚠ Moderate (50–60%)	Light crop	4–6 years
3	✓ Good (75–85%)	Medium crop	4–6 years
4	✓✓ Very good (90–95%)	Strong crop	4–6 years
5+	✓✓✓ Excellent (98–99%)	Full crop potential	4–6 years

Notes:

- Hazelnuts are **self-incompatible** and **wind-pollinated**, so they **must cross-pollinate** with genetically different plants.
- Seedlings from diverse parents (like yours) provide excellent compatibility and resilience.
- Spacing: **1.5–3 m apart** in hedgerows or clusters.

3 Pot up or Plant Out

Updated Hazelnut Pot-Up & Plant-Out Schedule with Emphasis on Animal Protection

Stage	Pot Size	Typical Duration	Next Step Options	Detailed Plant-Out Instructions
1	250 ml plug	0–6 months	🌱 Pot Up → 1 L 🌱 Plant Out	<b>Planting Site Prep:</b> Loosen soil <b>30 cm deep × 30 cm wide</b> . <b>Soil:</b> Light loam or well-drained clay-loam. <b>Add:</b> Mycorrhizal inoculant or compost (not manure). <b>Protection:</b> Mulch 5–10 cm thick, keep 5 cm from stem. <b>Use mesh guard</b> if planting out.
2	1 L	3–12 months	🌱 Pot Up → 3 L 🌱 Plant Out	<b>Planting Site Prep:</b> Loosen <b>40 cm deep × 40–50 cm wide</b> . <b>Soil:</b> Should not be hardpan or waterlogged. <b>Planting Tip:</b> Slightly deeper than pot line if soil is loose. <b>Protection:</b> Mesh guard or fencing <b>mandatory</b> if herbivores present.
3	3 L	6–18 months	🌱 Pot Up → 7–10 L 🌱 Plant Out	<b>Planting Site Prep:</b> Loosen <b>50 cm deep × 60 cm wide</b> . <b>Spacing:</b> ~1.5–2 m between shrubs for production. <b>Protection:</b> Still vulnerable — maintain fencing or guards until stems lignify. <b>Watering:</b> Soak rootball and water in well.
4	7–10 L	12–30 months	✓ Plant Out (preferred)	<b>Ideal Final Planting Setup:</b> Loosen <b>60 cm deep × 60–75 cm wide</b> . <b>Add:</b> Light compost, bone meal if needed. <b>Mulch:</b> ≥10 cm thick around base, not touching stem. <b>Animal Protection:</b> Use tree guards until main stem is woody and 1 cm+ thick.
5	≥30 L or Ground	18+ months	✓ Permanent Site	<b>Full production space:</b> ~2 m apart. Best in full sun, though light shade tolerated. Final site should never flood or compact. <b>Long-Term:</b> Most animal protection can be removed once bark is tough and branching is well established.

4 Harvesting and Storage

4.1 Signs of Maturity for Harvest

American Hazelnuts typically start bearing fruit in their 3rd year, with female flowers forming that will produce nuts if successfully pollinated. Male catkins, which provide the pollen, appear around the 5th year, meaning successful pollination and nut production typically begin in the 6th year. Nuts are ready for harvest when the husks turn brown and start to crack open, generally in late summer to early fall.

Beating the Squirrels

If local squirrels raid hazelnuts before the husks brown, try one (or a combination) of these tactics — they all work with American hazelnut:

- 1. **Early Pick & Cure** — Clip clusters when the husks just start to yellow (nuts taste “milky” if too green). Spread them in a single

layer indoors; the husks dry and open within 10–14 days, and kernels finish sweetening off-plant.

- 2. **Daily Tarp Shake** — Lay a tarp under the shrub and give the stems a quick shake every evening; collect fallen nuts before night creatures arrive.
- 3. **Bird-Net “Bagging”** — Slip mesh produce bags or sections of bird net over ripening clusters and cinch with a twist-tie. Lightweight and reusable.
- 4. **Whole-Shrub Net** — Drape 2 cm bird net over the entire shrub, securing edges to the ground with pins; remove after harvest.
- 5. **Diversion Planting** — A sacrificial hazelnut or oak 5–10 m away can keep squirrels busy while your main crop finishes.

4.2 How to Harvest (Method and Tools)

To harvest, simply pluck the ripe nuts from the branches. Alternatively, you can place a tarp or cloth beneath the