

Industry Perspectives  
**Nursery**



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# Nursery/Greenhouse

## Table of Contents

Introduction..... 1

Value chain..... 1

Industry drivers and trends ..... 2

Appendix A - Best practices ..... 5

Appendix B - Glossary..... 6

## Introduction

California is the largest nursery and greenhouse plant producer in the U.S., followed by Florida and Oregon. Within Oregon, it is the top agricultural commodity by value. Washington production is much less, though still maintains the 10<sup>th</sup> highest sales by value nationally.

*Top 10 States in Horticulture Wholesale (thousands of dollars)*

State	2009	2014	2019
California	\$2,048,681	\$2,625,696	\$2,459,682
Florida	\$1,229,897	\$1,699,047	\$1,857,411
Oregon	\$790,646	\$875,225	\$950,631
Michigan	\$458,934	\$545,425	\$566,304
North Carolina	\$457,704	\$506,695	\$498,262
Texas	\$533,362	\$533,768	\$495,362
New Jersey	\$304,989	\$314,123	\$432,646
Ohio	\$273,866	\$313,029	\$387,305
Georgia	\$198,189	\$271,695	\$314,622
Washington	\$216,814	\$326,536	\$258,957

Source: National Agriculture Statistics Service.

Most nurseries and greenhouses in Oregon are concentrated in the northern end of the Willamette Valley, a fertile landscape supporting diverse agricultural commodities from wine to hazelnuts. This part of the Willamette Valley benefits from being close to the population centers of Portland and Salem. Nurseries in Washington are near or north of Seattle.

## Value chain

### Costs

Labor is a significant expense for the nursery and greenhouse industry. With a labor shortage and high competition between industries, many nursery growers pay employees above minimum wage while others have implemented some mechanization through potting machines, pruning and seeders. Other expenses, like fertilizer and plastic pots, are influenced by petroleum markets. Prices for these inputs generally rise, but don't fall, with oil prices.

### Growing methods

The two primary growing methods for the nursery and greenhouse industry are outside grown (in nurseries) and grown in controlled environments (greenhouses). The primary planting styles are bare root, ball and burlap, container and pot-in-pot (see Appendix B for descriptions). A nursery will typically grow inventory using more than one method.

The main purpose of a nursery is to upsize plants to larger containers. The upsizing process can take multiple years. For example, coniferous evergreen trees grow in a nursery for up to 15 years before being sold. Nursery growers often use greenhouses to minimize winter conditions and control the growing environment for young plants, sometimes growing plants in a greenhouse for three to five years. Nurseries mainly grow:

- Coniferous evergreen trees and shrubs
- Deciduous shade trees and shrubs
- Fruit-bearing trees and shrubs
- Broad-leaved evergreen trees and shrubs
- Vines and ground covers

Greenhouses on the other hand, are used for plants that require controlled environments. Unlike nurseries, greenhouses do not hold onto inventory for prolonged periods of time. In a single year, greenhouses can typically turn over inventory one to three times. Greenhouses mainly grow:

- Bedding plants (annuals and perennials)
- Hanging baskets
- Seasonal annuals
- Specialty items (like poinsettias)
- Vegetables

## Marketing infrastructure

The nursery and greenhouse industry sells its products to many end users:

- Retailers
- Direct-to-consumer
- Landscaping businesses
- Wholesale and re-wholesale
- Orchards
- Public contracts

The size of businesses making up the retail market for nursery stock range from big box stores to small garden centers. Not only do the sizes of retailers vary, so do their needs as buyers. Large retailers like big-box stores traditionally offer a generic selection of plants that include dominant varieties and colors. They are selling to consumers seeking quick solutions to landscaping needs and offer an acceptable variety of plants at reasonable prices. This structure allows big box stores to look for growers who can act as a one-stop supplier to fill their inventory. Therefore, growers must have a diverse large mix of products to fill the order to attract a big-box store buyer. If a grower cannot meet the big-box store's expectations, they may have to source supplies from elsewhere, which is difficult in the current tight supply cycle.

Purchase orders (PO) and pay-by-scan (PBS) are two major types of sales to box stores. Under PO arrangements, retailers pay growers once they receive product. This means that PO sales are guaranteed income to growers; however, they generally provide lower premiums than PBS arrangements. With PBS, growers receive payment only for the goods that retailers can sell to consumers. This means that retailers will not compensate producers for inventory not sold. The trade-off between the two arrangements is that sales through PBS will need to exceed a certain threshold before becoming more profitable than PO for growers.

Garden centers typically serve consumers who highly value educational benefits, helpful service and quality plant materials when purchasing goods. Smaller retailers are often inclined to shop around for quality materials and educational information to supply their customers. To fulfill this need they are more likely to have multiple nursery and greenhouse suppliers. Therefore, growers supplying products to smaller retailers do not need to fit one specific store's requests. However, this involves many outlets for sales as opposed to getting a large order from a big-box store.

Inhouse direct-to-consumer sales are becoming more common for some mid-sized nurseries and greenhouses. Direct-to-consumer markets are a small part of total industry sales, and most growers still supply to other retail locations.

Landscaping businesses are a mixed lot. For a grower, working with a landscaping business can mean working with them directly or indirectly. Some landscaping businesses will hold their own inventories and place large orders, while others will order only what they need for a specific project and pick up the plants themselves. Landscapers also obtain inventory through plant acquisition companies. These companies act as a middleman working directly with the nursery or greenhouse to supply landscapers with inventory.

Wholesalers work with nurseries and greenhouses as intermediaries between retailers or other end users. Re-wholesalers buy plants to grow them to a bigger size and then sell them. Nurseries often complete the grafting process of tree fruit so that orchards can successfully start fruit trees. Public contracts are another outlet for nursery and greenhouse products (e.g., for roadways, parks, etc.).

## Industry drivers and trends

Single-family home construction, existing home sales and consumer spending are the largest demand drivers for nursery-greenhouse businesses. Two events in recent history exemplify this and have come to define the industry in the Northwest:

- Great Recession – In 2007-09, the housing market collapsed and consumer spending fell drastically following nearly two decades of solid growth. The nursery-greenhouse industry suffered a significant drop in sales followed by business closures and consolidations. Those with low debt loads, manageable operating costs and strong customer relationships survived and picked up market share as the industry slowly recovered.
- COVID-19 Pandemic – Federal and state governments enforced economic lockdowns and implemented historic levels of welfare assistance. Forced to stay home, many people decided to invest their time and resources into gardening. Further, many migrated away from dense urban centers to more rural settings, spurring new home construction and existing home sales. These trends drove large growth in nursery-greenhouse sales and prices.

A smaller production base resulting from the Great Recession, coupled with surging demand from the COVID-19 pandemic, has driven strong sales and profits for most growers. AgWest Farm Credit conducts an annual, informal poll of its nursery and greenhouse customers to gauge industry sales. The poll taken in June 2022 revealed sales continued to rise, with the biggest gain occurring in shade trees (9.3%).

**Survey Results, Changes in Sales for Our Customers**

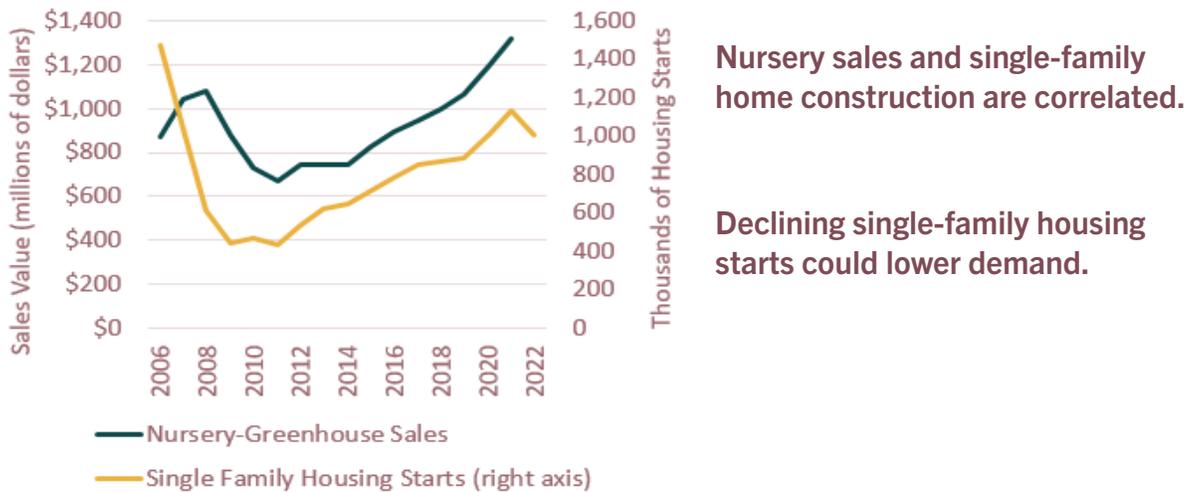
Segment	2016	2017	2018	2019	2020	2021	2022
Greenhouse	-2.64%	-3.18%	11.48%	20.20%	5.06%	2.59%	-3.50%
Shade Tree	22.16%	12.73%	17.40%	46.16%	2.34%	30.37%	9.32%
Container	9.28%	4.38%	-0.30%	14.17%	24.60%	8.56%	0.46%
Total	7.96%	1.29%	5.49%	18.53%	15.35%	13.46%	-1.42%

Source: AgWest Farm Credit.

**Housing sector**

The housing sector faces significant headwinds heading into 2024, including high interest rates and declining affordability. The fallout from the Great Recession remains fresh in the industry’s mind and this, along with labor scarcity, has limited capacity investments and discouraged growers from holding excess inventories. The industry is better positioned heading into an economic and housing slowdown.

**U.S. Single Family Housing Starts and Oregon Nursery and Greenhouse Sales**



Source: U.S. Census Bureau, Oregon Department of Agriculture.

**Consumer confidence**

Consumer sentiment influences demand for nursery and greenhouse plants. While it has improved significantly since June 2022 due to slower inflation growth and a generally strong labor market, it remains low relative to historical averages and this could dampen sales in 2024.



Source: University of Michigan.

## Labor scarcity and input costs

Labor scarcity, resulting from strict immigration standards, lack of interest among American workers and competition from other industries, is a major limiting factor to industry growth. In response, many growers have increased wages, offered year-round work and invested in labor-saving capital projects. Input costs have come down significantly from their pandemic-related heights in 2021-22; however, they remain above their historical averages and have incentivized producers to raise prices.

## Technology

The nursery-greenhouse industry is adopting new technologies to streamline operations, reduce labor demand and improve product consistency. Several advancements taking place include robotic/mechanical weeders, pruners, mowers and planters, drones to support pest and inventory management, and new systems to improve recordkeeping.

## Customers and generational influences

A recent survey conducted by Axiom highlighted several emerging trends, including:

- Younger and male gardeners represent a growth opportunity.
- Younger and male gardeners are spending more money on gardening.
- Big-box retailers are getting a bigger share of plant sales.

The industry witnessed a surge in customers who took on gardening and/or landscaping as a hobby during the pandemic. This new demand base appears to be holding as 80% of new gardeners reported they plan to continue into the future. Top gardening projects include creating vegetable gardens, planting more flowering shrubs and growing new kinds of vegetables and fruits.

Millennials are increasingly important in the marketplace and unlike previous generations, value sharable experiences and knowledge from their purchases. Tools like interactive plant tags that connect to websites showing plant's origin, benefits and care, among other information, are extremely appealing. Additionally, this generational group typically purchases products from companies that align with their values. Locally sourced and earth-friendly are a couple of common values important to millennials.

Demand for specific plant types continues to evolve. Younger generations with little to no experience with growing plants often prefer low maintenance options to ensure success. This preference was particularly true for many who moved out of urban centers during the pandemic. Drought tolerant plants have become more popular as many customers perceive increasingly volatile weather patterns.

## Nursery real estate values

Rising values of irrigated cropland in the Northwest are the result of high demand and limited supply; however, this trend may soften with elevated input costs and interest rates. Based on the last down cycle and more recent transactions, nursery-specific improvements can reflect a 25% to 100% discount after accounting for typical replacement costs and subtracting physical depreciation. Discounts related to depreciation on nursery-specific assets are lower when properties are marketed longer, are part of an ongoing business or have alternative uses. Larger discounts occur when sellers are highly motivated, the property lacks plant inventory, is bank owned or is highly specialized.

# Appendix A

## Best practices

Producers willing and able to make tough decisions and commit to strategic long-term planning will position themselves to ride out economic troughs. These best business practices are based on observation of and feedback from industry leaders.

### Customer service

- Provide unwavering commitment to customer service.
  - Consistently provide customers with product on time and in excellent condition.
- Provide education and information.
  - Educate retailers and the end consumer on caring for plant material to maintain a marketing edge.
    - Garden centers, landscape professionals and retailers prefer doing business with suppliers who provide education for their sales staff and customers.
- Relationships matter.
  - Develop positive relationships with re-wholesalers, garden centers, retailers and mass-market retailers.
  - Commit to quality face time with existing customers to maintain solid business relationships.
  - Communicate openly and honestly with suppliers, creditors and customers (foster relationships built on trust).
- Quality counts.
  - Replace inferior product quickly and consistently to maintain relationships.
  - Maintain the quality of plant material for consistency and satisfaction of consumers' needs.

### Inventory management

- Adopt a consistent methodology for inventory valuation.
  - Valuation methodology should remain consistent year after year although this may be challenging on a multi-year inventory.
- Maintain high-quality inventory.
- Maintain a diverse product mix.
  - Producers able to fill orders with a diverse mix of products are best positioned to hold onto market share and to withstand economic downturns.
- Reduce excess inventory to cover cash needs and limit unnecessary expenses.
  - Be realistic in your assessment of future inventory requirements, pricing and market demand.

### Marketing plan

- Develop or maintain a marketing plan that matches the business plan.
- Maintain and build market share.
  - Attend trade shows.
  - Maintain frequent contact with customers.
  - Bundle products and services.
- Understand market limitations and opportunities.
  - Producers who best adjust production to market demand have the greatest chance of long-term survival.
- Establish and maintain digital marketing.
  - Attract new consumer bases using social media.
  - Constantly contact marketing brokers to ensure growers' product stays at the top of the list.
  - Keep price lists and availability lists up to date.

### Business planning

- Develop, maintain and execute a business plan tailored to the business.
  - Focus on activities that maximize returns.
  - Position the business to take advantage of opportunities by "right sizing" for the future.
    - Identify the correct size and scope for the next several years.
    - Make sure labor and staff levels match business plan and operational needs.
  - Attend financial workshops and seminars sponsored by AgWest Farm Credit.
- Develop budgets to contain costs.
  - Differentiate needs versus wants.
  - Manage cash reserves.
  - Set liquidity goals that target adequate current assets to cover current liabilities without liquidating inventory.
- Establish roles and responsibilities for all employees.
  - Define management responsibilities, authorities and chain of command.
  - Make sure the right people are employed in the right positions.
  - Rely on your team to execute day-to-day operations.

# Appendix B

## Glossary

**Ball & burlap (B&B):** Plant material is grown in the soil until maturity when it is dug in a root ball (soil is left on the roots) and covered with a burlap cloth or placed in a pot for shipping. B&B material can be grown larger and more cost effectively than yard or pot-in-pot. However, B&B has more exposure to weather-related stress and requires more space per unit and high-quality soils. Additionally, shipping costs are higher because the root ball is heavier than the medium used in pot-grown material.

**Bare-root segment:** Represents all growers that ship plant material without any soil medium. Inventories consist primarily of shade trees and fruit trees. Desired species of trees are generally grafted onto a rootstock that is grown out to a 1- to 3-inch-caliper tree. Those trees are dug out of the ground and all soil is shaken from the root ball. They are then shipped to other nurseries, landscapers or retailers.

- Bare-root material typically has a three- to four-year turnover and has a lower cost in shipping than container/B&B.
- Shipping season is typically January through March.
- Markets are national.

**Can yard:** A large, graveled area used to grow plants in plastic pots.

**Container/B&B segment:** Section of the industry that raises perennial plant material in can yards, greenhouses, pot-in-pot and/or field-grown material that is dug (B&B). Most plant material is for use in landscapes, but food-bearing plants are increasing in popularity.

- Plant material has a two- to seven-year turnover.
- Primary shipping season is late February through May.
- Markets are national.

**Floriculture plants:** Grown primarily for ornamental and decorative purposes and typically live one season (annual). Examples are cut flowers, cut cultivated greens, potted flowering plants, potted foliage plants and bedding and garden plants. Crops are predominantly grown under protective cover such as plastic or glass greenhouses.

**Greenhouse segment:** Growers that focus on annual/perennial bedding plants, hanging baskets and garden starts. Operations require smaller land masses and frequently include temperature-controlled greenhouses.

- Plant material typically has a four- to six-month turnover.
- Shipping season is focused April through June. Secondary seasons are June through Labor Day and November through December (mostly poinsettias).
- Market focus is generally regional.

**Greenhouse structure:** Large hoop structures typically covered with a shade cloth year-round and with plastic in the late fall through early spring. Some are heated, but the primary purpose of the structure is to protect plant material from extreme cold in winter and excess heat and light in spring and summer. Permanent greenhouse structures are square or rectangular buildings with retractable roofs to allow for natural sunlight and an enhanced growing environment for plants.

**Nursery crops:** Plants grown for environmental and ornamental purposes, generally lasting many seasons. Consist primarily of:

- Outdoor landscaping plants including trees, shrubs and ground cover
- Unfinished plant materials such as seedlings, plugs, cuttings and young plants
- Bulbs including corms, rhizomes and tubers
- Sod (turf grass)
- Plants sold as nursery stock for ornamental, environmental or food-production purposes

**Pot-in-pot:** Large permanent pots buried in dirt or gravel yards that hold smaller-diameter pots similar to those used in can yards. Commonly using drip irrigation, this setup can accommodate larger-volume pots than seen in can yards.