

Starting in the Nursery Business

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Are you thinking of starting your own nursery? If so, you are not alone. Many new entrepreneurs are interested in growing and selling herbaceous and woody ornamental plants for profit.

One reason for this interest is that the nursery industry has experienced a steady increase in wholesale and retail sales over the past 40 years. But that's not the only reason. Many people have an interest in the environment and are attracted by the prospect of working outdoors. Others are interested in landscaping to enhance the aesthetics and value of property.

What You'll Need

Whatever your reasons are for thinking about starting in the nursery business, there are a number of things you should know and resources you should have or be able to acquire. First, success in the nursery industry requires expertise in all phases of plant production, from propagation to post-harvest handling. And, like farming, growing nursery crops requires hard work and long hours.

And don't forget the "business end." To make a success of your nursery business you'll need to be able to handle employee management, financial management, marketing, and sales. Finally, all business ventures—including the nursery business—require a large capital investment to cover the cost of land, equipment, buildings, supplies, labor, and stock, in this case the initial purchase of plants for propagation and growing to salable size.

How can you enter the nursery business? If you already have experience and a strong knowledge of plants and plant culture, purchasing an existing business or starting a new one are logical options. You'll find that you can more easily obtain financing for the purchase of an existing nursery, however. You can consult your banker or lending agent about details.

If your experience is limited, you can gain valuable experience by working for a reputable grower. Many well-established nurseries are always looking for good help as full-time, part-time, and seasonal employees.

Deciding to start a nursery is only the first of many decisions facing you. You'll also have to make objective decisions on all the factors affecting the operation of your business. In short, you'll have to develop a business plan or prospectus.

An organized business plan is really a road map to business success, a set of guidelines for operating your nursery business. And your chance of successfully arranging financing from banks, private money-lending institutions, private investors, or government programs will be greatly enhanced if you have an organized, comprehensive business plan.

Developing a Nursery Business Plan

A nursery business plan will help you determine the type, market, location, site, design, and size of your operation. In addition, you'll establish specific details on equipment and employee requirements, operational costs, estimated pricing schemes, projected return on investment, and asset availability.

Type of Business

Many nursery businesses have diversified to provide a variety of products and services to insure rapid return on their investment. There are three basic nursery formats:

- Landscape nurseries, which grow plants for retail sales and for their in-house landscape service;
- Retail nurseries, which include small nurseries and garden centers that grow plants on limited acreage for strictly retail sales to the homeowner and to landscape contractors; and
- Wholesale nurseries, which include contract propagators, contract growers, growers, and distributors (rewholesalers) of nursery stock for wholesale to other nurserymen, landscape contractors, and retail outlets.

In deciding on the type of nursery business, you begin to define the type and form (rooted cuttings, seedlings,

liners, container grown, field-grown ornamentals, or a combination) of nursery stock you will grow. In Indiana, the nursery industry consists of both large wholesale production nurseries and retail/landscape nurseries, with retail and landscape nurseries being the most common. Many of these nurseries operate on less than ten acres of land.

Defining the Market

Defining your market involves answering the question: Who is the customer? This question will be partially answered by the type of business (landscape, retail, or wholesale) you choose and the location of your operation (suburban, urban, or rural).

For wholesale nurseries, the type of customer will depend partly on the characteristics of the nursery location and site (e.g., soil texture, temperature) as they affect the products to be sold (rooted cuttings, liners, balled and burlapped, balled and potted, or container grown ornamentals). The cost of shipping goods will determine a nursery's ability to compete in distant markets and thus affect its customer base. Retail and landscape nurseries, on the other hand, rely more on their proximity to large metropolitan areas and the strength of the landscape industry to define the customer.

Each nursery owner must analyze and organize his or her own marketing channels, develop a sales program, prepare the product for distribution, extend credit, and make collections. There are many resources available through bookstores and libraries which provide tips on marketing and business management techniques. Five possible approaches to defining your market and customers are:

- define the types of customers within your target market (average salary, average number per household) based on census and local Chamber of Commerce data;
- determine customer preferences for products and services through questionnaires and by investigating the local competition;
- use local and national industry association data and commercial publications to determine market trends;
- anticipate future preferences on the types and number of plants to grow; and
- promote plants which you or other colleagues consider outstanding.

Choosing a Business Location

Location of your nursery may be predetermined based on availability of property or for personal reasons. Alternatively, you may be free to choose a location that best suits your needs and goals. In either case, your location

choice will directly affect your decisions on marketing, employee hiring, and future expansion.

In selecting a location you should consider proximity to other nurseries, to major cities, and to highways. Other factors to consider include availability of transportation facilities, distance to market, competition, availability of reliable labor (full-time, part-time, and seasonal), and availability of inexpensive land for future expansion. (You should know that locating near other nurseries may be mutually beneficial for small operators by providing markets for specialty items, sharing transportation services, and increasing the frequency of buyer visits.) Yet another consideration in choosing a location is the present and future regulatory status of the area (e.g., zoning, taxation, labor relations, environmental issues, and product inspections).

Selecting a Specific Nursery Site

Site selection and layout are very important in the early stages of the planning process. Your choices will directly affect your success in growing and selling plants. When purchasing land you should come prepared with questions. Ideal land for the production of ornamental plants may not be available, so be prepared to make intelligent compromises. Prioritize your list of requirements based on what site characteristics are the most difficult and costly to repair after you have purchased the land. Do not purchase land blindly because that will lead to greater cost, reduced plant quality, increased product losses, and reduced profit. As with purchasing a house, certain questions should come to mind. The following are some major topics and specific questions to consider.

What Is The History of The Site?

- If crop land, what crop was grown?
- If non-crop land, what was the land used for previously?
- Has the land been contaminated by pesticide or other toxic chemicals?
- If so, what chemicals and what reclamation efforts were employed?
- Are there underground structures on the property (e.g., utility lines, storage tanks, irrigation lines, and drainage tile)?
- If so, where are they located and what are their sizes and directions?
- Does the land drain poorly or flood?

What Soil Type and Characteristics Are On The Property?

Soil maps are available from the Soil Conservation Service. Contracting for soil testing and a soil survey will help you to determine soil quality and characteristics, which will be useful in determining your nursery layout and production areas.

General characteristics for a good nursery soil include a tillable, well-drained soil with high water-holding capacity. The land should have less than a 5-percent slope to insure good air flow and surface drainage.

Field production requires soils with good fertility, high organic-matter content (3-5%), and without obstacles (e.g., large stones, hardpans, or shale in the root zone). Balled and *burlapped plants* should be planted in a sandy-clay to clay-loam soil which will hold together in a ball. *Bare-root plants* require light-textured soils that are sandy-sandy loam in texture, can be worked easily, and will readily fall away from the roots as the plants are being harvested.

Container production does not necessarily require good soil on site. Container growing medium can be brought from remote locations. However, good soil on site as a resource in media construction may be useful. A firm surface which allows for the placing of containers and insures surface drainage is a must.

What About The Source and Quality of Water?

Of all the needs of plant production, the availability of ample, high-quality water is most important. Potential sources of water include lakes and ponds, streams, wells, and municipal water supplies. Each type has its own characteristics and problems.

Lakes, ponds, and streams are the most inexpensive sources of water. Things to consider are the level of contaminants and debris, storage capacity to fulfill needs during the most demanding time periods (June-August), reliability, and the environmental and legal limitations which may be placed on natural water sources. *Wells and municipal water sources* tend to be expensive, may have quantity restrictions, and tend to have high pH. It is very important to determine your water source and limitations prior to purchasing land and starting in the nursery business.

Since water quality is so vital, testing of the water quality prior to determining your nursery site is critical. Total soluble salts are acceptable between 175-525 ppm, with sodium levels between 20-40% of the total salts. However, the ideal level is less than 175 ppm salts and less than 35 ppm sodium.

Adequate water volume is essential. *Overhead sprinklers* require a maximum of 10 acre feet of water for each acre of plants. *Trickle irrigation systems* are much more efficient than sprinklers. During hot, dry periods, your weekly requirements may reach 3 inches per acre if you use sprinklers. Automated irrigation systems are usually more reliable and consume less water and labor than manual methods. The amounts and distribution of rainfall also help determine irrigation needs.

Nursery Design and Space Requirements

The type and number of plants to be produced and the necessary facilities to produce and sell your product(s) will direct your decision on the space you allocate for the numerous activities within a nursery (propagation, production, storage, soil handling and potting, office space, sales, shipping and receiving, customer and employee parking, and roadways). The ultimate goal of estimating space requirements and nursery design are to maximize efficiency while minimizing capital and labor inputs. With this in mind, your layout should minimize the duplication of areas (e.g., potting and storage) and minimize the distance between work areas (e.g., propagation and growing).

In starting the design process, you must decide whether you will propagate your own materials or purchase nursery stock (liners) to grow for sale as finished field- or container-grown plants. Propagation is a time-, money-, and space-consuming venture. Many nurseries choose to start by purchasing liners to grow on to finished size to quickly recover part of the original investment and to establish a customer base. Once this has occurred (after approximately 5 years), you can implement a plan to establish propagation facilities (cold frames and greenhouses) with less financial and time risk.

In designing the nursery, you should leave space for the addition of propagation facilities, for specialized growing areas for propagules, and for future expansion. In all cases, when you estimate the size of growing areas and the number of plants you expect to grow you should include space for liner production, growing plants on as finished products, sales lots and walkways and roadways.

Also include provisions for basic equipment and supplies in the initial planning stages. This will include the design and installation of an irrigation system, incorporation of injectors for fertilizer applications, tractors, trailers, trucks, soil sterilization equipment, pesticide spraying equipment, soil mixing equipment, chemical and tool storage, and office supplies and equipment.

Labor Requirements

The number of employees you need in the nursery will depend on the size of your operation. Starting with fewer personnel gives more time for training and requires less financing. Mistakes will also be less likely and less costly. The nursery business is inherently a seasonal activity with extended labor needs during the fall and spring. By diversifying the types of products (e.g., container-grown plants) and services (e.g., landscaping) offered, you can increase sales and reduce down-time of seasonal and part-time labor (e.g., migrant workers and students).

Remember, personnel planning includes complying with Social Security, insurance, wage and hour, and income tax requirements for each of your employees.

Capital Requirements

Your initial investment beyond land, buildings, equipment, supplies, and labor will also include utilities, insurance, interest on loans, taxes, licenses, and inspections. Plan carefully when establishing projected budgets and financial needs to include these expenses. (If you'd like to know where to go to get help in these areas, consult the publications cited in the last section.)

There are many types of nursery operations, and your choice of operation and your market plan will greatly affect your initial investment. Two to four years of operation are usually required before you can expect significant returns. And you may not realize maximum returns for 6 years or longer. Therefore, you must have access to sufficient funds or credit to operate your business during the establishment period.

Nursery Business Prospectus Checklist

By this point, you should have a good idea of the many factors involved in starting a nursery operation. This publication has discussed many factors which affect the starting of a nursery business. The following checklist should help you prepare the kind of organized, comprehensive business you'll need before you can arrange financing.

- Size of operation
- Location
- Type of operation (products to be offered)
- Assets
- Cost of equipment and employees (number and type)
- Market (source and dependability)
- Estimated returns
- References (from other business operators and community leaders)

You can obtain further information and tips for developing a business plan from lending institutions, your local Chamber of Commerce, and the resources listed in the last section of this publication.

Where to Go for Help

The best approach to starting in the nursery business is to acquire as much knowledge and information as possible on business management, plant production, and marketing.

Many resources are available to aid you in this process. The following publications available from the Purdue University Cooperative Extension Service contain helpful information: HO-213, *Guide to Information for Starting in the Nursery Business*, HO-214, *List of Assistance and Regulatory Agencies for Starting in the Nursery Business*, HO-215, *Guide to Production Information for the Commercial Nursery Crop Grower*, and HO-216, *List of Local and Regional Bare-Root and Liner Dealers*. In addition, the Indiana Association of Nurserymen (2635 Yeager Rd., Suite B, West Lafayette IN 47906, (317-497-1100) and the American Association of Nurserymen (1250 I Street NW Suite 500, Washington DC 20006, (202 789-2900) are excellent resources for up-to-date information on marketing, advertising opportunities, suppliers, plant material, production advice, and for meeting leaders in the industry.

Starting a nursery business is an exciting and complex process. And it can be personally and financially rewarding—if you take the time and make the effort to learn the business and develop a closely reasoned and comprehensive business plan. In other words, you'll be much more likely to achieve success in the nursery business when you look before you leap.

For more information on the subject discussed in this publication, consult your local office of the Purdue University Cooperative Extension Service.
