

International Forest Company: Helping People Grow Trees

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Abstract

International Forest Company (IFCO), which started in 1971 as a forest seed company, has grown into the largest container seedling company in the United States. IFCO is one of many container seedling producers that make up more than 20 percent of the total seedling production in the Southeastern United States. Southern pine species are the predominant crop produced by IFCO. Through hard work, production efficiency, investment in great people, and proper planning, the company continues to grow today and into the future. This paper was presented at a joint meeting of the Northeast Forest and Conservation Nursery Association and Southern Forest Nursery Association (Williamsburg, VA, July 21–24, 2014).

Introduction

International Forest Company (IFCO) started in the tree seed-processing business in 1971 and developed a number of seed-processing machines and various technologies for improving seed quality and yield. IFCO's first commercial-scale nursery operation began in 1983 in Odenville, AL. At that time, Hillehog, A.B., from Landskrona, Sweden, owned the company. Most of the infrastructure and machinery used at the first nursery was developed in Sweden (figure 1).

From that beginning, IFCO went on to operate four bareroot nurseries and three additional container operations, with a peak production of more than 140 million total seedlings

annually. Seedlings were shipped throughout the Southeastern United States from Texas to Virginia. IFCO was purchased by management in 1993 and was sold to Mobley Plant Company in 2003, with the headquarters moving from Odenville, AL, to Moultrie, GA. Today, IFCO is a privately owned company and operates three container nurseries in Georgia, Louisiana, and Florida (figure 2).

IFCO has developed its own systems for seedling production, including an exclusive growing tray (figure 3), and has entered the genetic development field for the species it grows. IFCO is currently the largest producer of container tree seedlings in the United States, with a production of more than 72 million seedlings during the 2014–15 season (table 1). IFCO produces loblolly pine (*Pinus taeda* L.), longleaf pine (*P. palustris* Mill.), slash pine (*P. elliottii* Engelm.), shortleaf pine (*P. echinata* Mill.), and Virginia pine (*P. virginiana* Mill.). IFCO also produces eucalyptus species and a number of native plant species for ecological restoration.

The current total seedling production for the Southern United States is 190 million (Enebak 2012). IFCO's annual production of container seedling stock has steadily increased during the past 7 years (figure 4a) and follows the same increasing trend evident in the Southern States (figure 4b). IFCO's mission is to be the leading producer of high-end genetic seeds and container seedlings for establishing managed forests in the Southeastern United States.

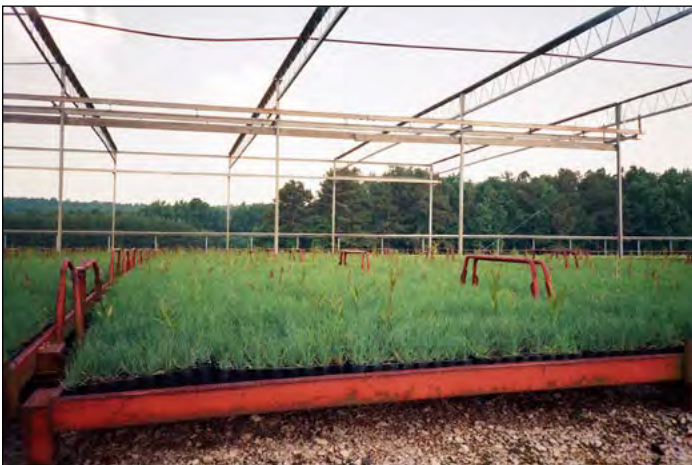


Figure 1. When International Forest Company (IFCO) was first established, most of its equipment and infrastructure were from Sweden. (Photo by Wayne Bell, 1986)



Figure 2. Moultrie Nursery (Moultrie, GA) is one of three container nurseries that International Forest Company (IFCO) operates. (Photo by Wayne Bell, 2010)



Figure 3. International Forest Company's exclusive 128 tray with side air pruning. (Photo by Wayne Bell, 2010)

Table 1. IFCO production by species.

Species	Annual production (millions)
Loblolly pine	40
Longleaf pine	24
Slash pine	5
Shortleaf pine	2
Other	1

IFCO = International Forest Company.

IFCO's Decision Pyramid for Landowners

IFCO recently introduced the slogan, "Be Smart Before You Start." This concept was built around the idea that the seedling has a huge influence on what a landowner will grow in the next 20 to 100 years of a chosen rotation.

IFCO's sales team follows the steps in the company's decision pyramid (figure 5) to help landowners make the best decisions when starting to grow a forest. The foundation of the pyramid is the market in which landowners will sell their products. Timber traditionally has been the primary market in the South and still is today. The timber market includes pulpwood, chip-n-saw, sawtimber, or poles. New markets such as pine straw, hunting habitat, biomass pellets, carbon sequestration, endangered species habitat, and others are also emerging. The quality of the plant that landowners start with will significantly influence yields for these various markets.

Climate is the next building block on the decision pyramid for growing a successful forest. A landowner's climatic zone

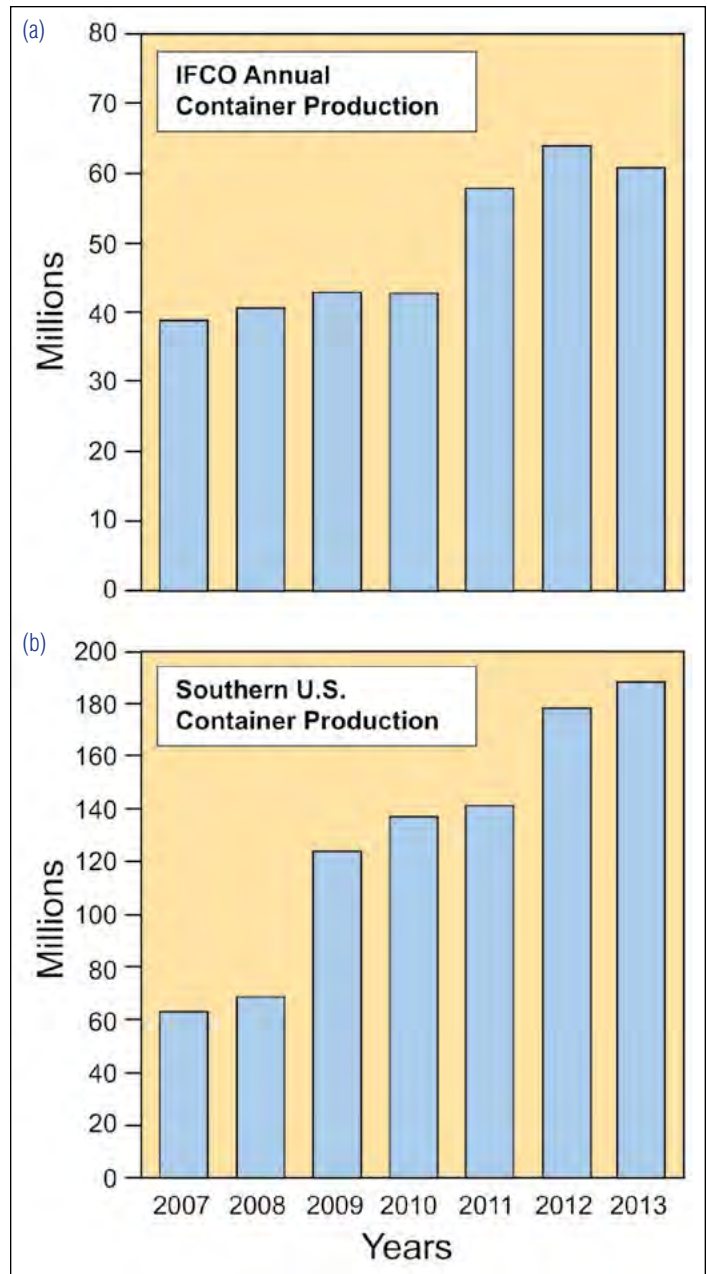


Figure 4. International Forest Company (IFCO) seedling production (a) has increased during the past several years and (b) parallels the overall seedling production in the Southern States. Source for b: Enebak (2012)

influences the choice of species and seed sources that can best flourish in particular growing conditions (e.g., temperature and length of growing season).

Soil characteristics also influence reforestation decisions. Limitations in soil nutrition, drainage, preparation, depth, and other physical and chemical characteristics can greatly influence what to plant on a given site. For example, loblolly pine requires excellent available nutrients to perform at a maximum production, and some soils are severely limited on nutrients. Longleaf pine does not grow particularly well on soils that are not well drained and may require bedding.

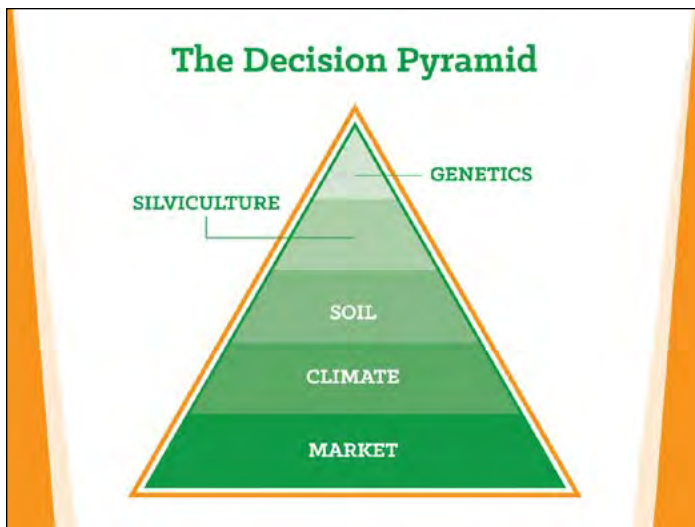


Figure 5. The decision pyramid developed by International Forest Company (IFCO) is used to help landowners with decisionmaking for growing a forest.

Silviculture is a critical factor for growing a forest. Silviculture is the art and science of growing trees and includes activities such as control of competing vegetation, fertilization, soil preparation, planting density, and bedding for excessively wet conditions. Silviculture has a huge effect on how a forest grows over time. An example of silvicultural influence is planting density; the ideal density per acre allows trees to achieve sufficient diameter growth for high-quality sawtimber.

The final component of the decision pyramid is the choice of genetics used to grow a forest. Genetic choices can affect volume growth, disease resistance, bole straightness, wood quality, and incidence of forking. All these aspects will have a significant effect on what products can be sold from the forest. All major southern pine species currently have some level of genetic improvement available.

IFCO's Future

IFCO has worked hard to increase and expand its production. The first key to increased production is hard work; nursery work is 24 hours a day, 7 days a week and requires commitment to do what it takes to deliver superior products and service. The second key is production efficiency, which is improved by continuous attention to find processes and equipment that optimize the operation. The third key is the importance of investing in great people capable of growing individually and as a team. The fourth key is planning ahead, which helps secure the proper resources and seed supply necessary for production and sales. The fifth and final key is investing time and energy into learning and applying the latest scientific knowledge, both of which are imperative to increased production. This approach led to starting a second

company, International Forest Genetics and Seed Company in Moultrie, GA, in 2012, which focuses on producing seed for IFCO, with the possibility of outside seed sales in the future.

IFCO's latest addition is a 400-ac (162-ha) seed orchard complex in DeRidder, LA, where the top Western Gulf Tree Improvement Cooperative genetic material has been established. In January and February 2014, IFCO constructed a nursery-growing area at the orchard facility to produce 8 million seedlings and sowed the seed in April of the same year (figure 6).

As production capabilities grow and improve, company growth must also include market expansion. IFCO personnel attend and exhibit at more than 20 forestry and landowner conferences per year and stay active in professional societies and associations. Most important to the company's growth, however, is the company's policy of telling the customer what can be delivered and doing it, treating customers with respect, and helping others in the business along the way.

IFCO's distinguishing attributes are its highly efficient production of container seedlings, extensive experience with container seedling development, focus on genotype development, and its goal to be the most transparent seedling grower in the South so that all landowners gain the knowledge as soon as it is developed.



Figure 6. International Forest Company's (IFCO's) newest facility in DeRidder, LA, consists of a seed orchard complex and a container seedling growing area. (Photo by Jim Tule, 2013)

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REFERENCES

Enebak, S.A. 2012. 2012 nursery production report. Auburn, AL: Auburn University, Southern Forest Nursery Research Cooperative. 16 p.