

WT&T  
PROFILE:

# THE WHOLESALE NURSERY MARKET



# WHOLESALE GROWERS EXCEED ONE BILLION DOLLARS IN SALES

The wholesale grower and the sod producer are the farmers of the Green Industry. Their problems closely resemble those of agriculture; business is weather dependent, cash flow and labor needs are seasonal, and equipment and supply costs are much greater than the average small business.

The wholesale grower, the subject of this survey, is constantly searching for ways to beat mother nature. Mechanization, new plant cultivars, and improved growing techniques are utilized to boost productivity and hold down prices in the face of rising costs.

WEEDS TREES & TURF discovered a number of changes taking place within the wholesale nursery industry. Short digging seasons have plagued northern growers for three years. Consequently, more northern growers see containerizing as a solution to poor field conditions. Research into hardier, more disease resistant species and cultivars is being sought and encouraged. Regional surveys are underway to reveal unpopular varieties and discover new ones so growers can concentrate on popular plants. One result of specialization and identification of popular varieties may be increased competition. However, an increasing demand for plant material appears to be counterbalancing the effects of competition. A national marketing program sponsored by the American Association of Nurserymen has the goal of increasing the demand significantly.

To obtain specific data on the wholesale grower, WEEDS TREES & TURF surveyed 936 firms in the United States. A total of 207 returned the questionnaires for a 22 percent return. The Horticultural Research Institute, Inc., has placed the size of the market at approximately 5,000 firms with 70,000 full-time and an additional 70,000 seasonal employees.

More than 70 percent of the wholesale growers are also involved in retailing. Forty-four percent also do exterior landscaping and 17 per-

## Concerns of wholesale growers.

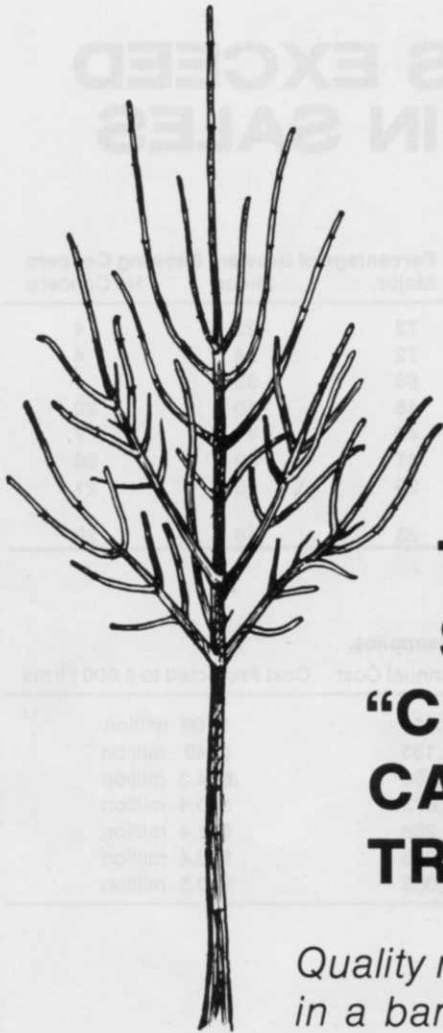
Concern	Percentage of Growers Showing Concern		
	Major	Minor	No Concern
Labor Costs	73	23	4
Government Regulations	72	24	4
Supply Costs	66	33	1
Labor Skill	48	40	20
Property Taxes	48	44	7
Labor Supply	41	39	20
Competition	29	50	21
Local Market Conditions	23	48	29

## Annual expenditures for various types of supplies.

Item	Average Annual Cost	Cost Projected to 5,000 Firms
Containers	\$21,814	\$109 million
Fertilizer	\$ 8,133	\$ 40 million
Soil Amendments	\$ 6,869	\$34.3 million
Seed	\$ 4,073	\$20.4 million
Pesticides	\$ 2,288	\$11.4 million
Herbicides	\$ 2,078	\$10.4 million
Fungicides	\$ 2,055	\$10.3 million

## Involvement with other types of businesses.

Type	Percentage of Respondents
Retail nursery	70.6
Exterior Landscaping	44
Interior Landscaping	17
Lawn Care	15
Tree Care	15
Sod Production	6
Plant Breeding	1



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cent do interior landscaping. Fifteen percent of the firms do lawn care and tree care. Only one percent indicated they do plant propagation.

Nearly two-thirds of the respondents distribute products in their region only. The average number of acres in production is 122 with a range of one to 1,600 acres. The average number of acres occupied by greenhouses is 1.5 acres.

The growers were asked what percentage of total acreage is used for container stock, shade and fruit trees, and field grown shrubs and evergreens. They were also asked whether or not they plan to increase, decrease or maintain production in the three areas.

The growers reported an average of 17 percent of their acreage is used for container stock and nearly 60 percent plan to increase this area of their business. Six percent plan to decrease container stock production.

The respondents have an average of 35 percent of their acreage for the production of shade and fruit trees. Only 42 percent said they plan to increase shade and fruit tree production. Another 42 percent plan to maintain production and 16 percent expect to decrease tree production.

The largest amount of acreage is used for growing field-grown shrubs and evergreens, 48 percent. Like container stock, nearly 60 percent of the growers expect to increase production. Twelve percent plan a decrease and 31 percent expect to maintain production.

WEEDS TREES & TURF calculated the average gross revenue of a wholesale grower to be \$519,853 based upon responses ranging from \$1,000 to \$15 million. The median of the range was \$230,000. Projecting a total industry gross from a universe of 5,000 firms and the median gives \$1.15 billion, or projected from the average (mean), \$2.5 billion.

Taking the computation one step further by assuming a markup of 300% at the retail level, growers in the United States produce plant material valued at the retail level for \$3.45 billion (median) or \$7.5 billion (mean). The Horticultural Research Institute, Inc., estimated the value of plant stock at the retail level in 1975 to be \$2.7 billion.

When asked about the direction of profits and sales in 1977, three-fourths of the growers indicated sales had increased, but only 43 percent said profits increased. In fact, 30 percent reported a drop in profits while only 13 percent reported a drop in sales.

Growers say labor costs, supply costs, and government regulations are of most concern. Recent minimum wage legislation is making seasonal labor "more expensive." Labor skill and property taxes are concerns of nearly half the respondents. At the present time, growers do not see competition as a major concern.

Growers described seasonal labor force makeup as 66 percent local labor, 23 percent students, and 11 percent migrant farm workers. Forty-one percent indicated labor supply was a problem.

Expenditures for supplies, based upon averages for various materials, total an average of \$54,125 per year. This figure does not include expenditures for fixtures or equipment. The greatest single expense is for containers, followed by fertilizer, soil amendments, seed, pesticides and herbicides.

The growers listed the average value of greenhouses as \$52,114 and the average value of irrigation systems as \$33,095.

Equipment inventories of growers indicated significant purchases of tractors, mistblowers, boom sprayers, compression sprayers, carts and wagons, and rototillers. Based upon averages, growers own a total of 33,000 tractors, 65,000 carts and wagons, 14,400 rototillers, 10,750 compression sprayers, 8,250 boom sprayers, and 6,500 mistblowers.

The American Association of Nurserymen has recently devised a plan to increase the demand for plant materials on a national scale. It is a voluntary program of contributions based on a percentage of the wholesale growers sales. Called the National Marketing Council (NMC), the group will do basic market research into customer preferences and then create and institute a mass media campaign for the entire Green Industry.

WEEDS TREES & TURF supports the idea and sees it as a program worthy of support. We polled the growers in the survey about the NMC. Unfortunately, only 32 percent said they plan to participate in NMC and only 16 percent thought their customers were interested in contributing to NMC. This hopefully will change as word gets out about NMC. Interested persons should contact the American Association of Nurserymen, 230 Southern Building, Washington, D.C. 20005. The NMC will benefit everyone involved in growing, landscaping and maintaining plants.

**WTT**

**Number of pieces of equipment owned by wholesale growers.**

Type	Average Per Firm	Total for 5,000 firms (Projected)
Tractors	6.6	33,000
Wagons	6.1	30,300
Push Carts	4.4	22,000
Motor Carts	2.6	13,000
Rototillers	2.9	14,400
Boom Sprayers	1.7	8,250
Mistblowers	1.3	6,500
Compression Sprayers	2.15	10,750

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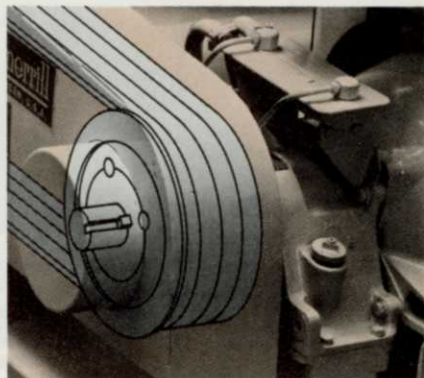


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# CONARD-PYLE COMPANY: GROWING WITH THE ROSE



**Container roses** are grown in covered quonset house. The plastic is removed at the sides to allow free flow of air.

**An aerial view** shows the 22.5 miles of quonset houses at the container production area of The Conard-Pyle Co. A few of the houses are partially covered with plastic.



The Conard-Pyle Company was incorporated in West Grove, Pa., in 1897 as the Conard & Jones Company to sell seeds and plants through a mail-order catalog. Robert Pyle was employed as a helper in 1899, and with his father, purchased a considerable part of Alfred Conard's share of the business upon his death.

Conard's partner, Morris Jones, retired in 1923 and the company name was changed to the Conard-Pyle Company.

Robert Pyle decided that the business would thrive best if it specialized. He thought the specialty should be an item for which there was a fairly steady demand and which was likely to remain popular indefinitely. He fixed upon the rose. In 1908 he trademarked "Star" and Star Roses was born, the chief prod-

# It runs through the briars, it runs through the brambles and it runs through the timber where a rabbit couldn't go.

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uct of Conard-Pyle.

There was a substantial decrease in the mail-order nursery business due to the great depression in the early 1930's and a garden center for retail sales was opened. It grew and prospered and a branch was established adjacent to the rose fields for the summer months when roses were in bloom. In 1961, another branch was opened at Lancaster, 40 miles west of the nursery.

The Conard-Pyle Company owns 550 acres. Of this, 80 acres are devoted to container-grown ornamentals and about 65 acres to field-grown roses. While there is an acre of greenhouses and 1½ acres of cold frames, there are 22.5 miles of plastic-covered quonset huts.

The company employs 80 to 100 field and greenhouse workers and 23 office personnel. Forty-five of Conard-Pyle's employees have 15 or more years with the company.

About 500,000 rose bushes, 500,000 ornamental container plants, 250,000 container roses, 250,000 miniature roses, 75,000 chrysanthemums and 30,000 delphinium are produced yearly. Ninety-five thousand orders are filled yearly and 440 trailer loads of container grown plants go out each year.

Conard-Pyle distributes 400,000 catalogs and 120 million individual sales messages to sell their products. The company is a member of All-American Rose Selections, Inc., American Association of Nurserymen, American Horticultural Society, American Rose Society, Horticultural Research Institute, National Landscape Association, National Association of Plant Patent Owners, the Society of American Florists plus state organizations.

Containers are moved on wagons pulled by one of 20 International 454 tractors that the company owns. The system is palletized for shipping and pallets are placed on wagons. Five larger tractors are used for cultivating the fields and pulling the spray rigs.

Two boom sprayers with 500-gal. tanks and a 500 gal. mist blower are used to apply part of the 1,800 pounds of fungicides and three tons of herbicides the company applies yearly.

A maintenance program was started this year. Two full-time mechanics are employed to work on all of the equipment including preventative maintenance.

A soluble 15-20-24 fertilizer is applied through the computerized, automatic watering system, every



**S. B. Hutton, Jr.**, chairman of the board of The Conard-Pyle Co. inspects stored bare root roses.

time the containers are watered. One hundred and fifty tons of fertilizer are applied yearly. The rose fields are fertilized according to soil test data which calls for about a ton of 10-10-10 per acre in the spring and are then top dressed in the fall.

Quonset huts are fertilized at a rate of 150 parts per million nitrogen, through the irrigation system. When material is spaced out the second year for further growth, a drip tube irrigation system is used. Water is supplied from four lakes on the Conard-Pyle acreage.

The roses are sprayed weekly with fungicide, mainly for mildew and black spot. The containers are sprayed every two weeks and about 150 pounds of fungicide are used per spraying throughout the spray season.

Aphids are the major insect problem in the fields and a spray program is instituted as necessary. Mites then become a problem after the plants are brought in. "We use a disease and insect program because buyers won't accept the plants unless they are disease and insect free," says Betsy Scarborough, assistant vice-president.

A soil mix of hardwood bark is composted and pasteurized, but not sterilized. It kills the weed seeds present, but does not prevent weed seeds from flying in and becoming established. "It gives us maybe a month grace period of no weeds and from then on through the next two years, we do have to combat the weed problem," says Scarborough. "We use approximately eight thousand cubic yards of this soil mix a year." About three tons of herbicides are used yearly. They are applied three times: Spring, Summer, and Fall.

Chemicals are purchased twice a year. Spring chemicals are purchased in March. "Then we'll come back again in July and pick up the rest of the summer supplies," Scarborough adds. "We purchase large quantities at a time and store them securely."

Eleven major horticultural organizations are cooperating in a nationwide campaign to make 1979 the "Year of the Rose," presenting that flower as a living symbol of love, friendship and peace. Thousands of people from throughout the world stop each year to see the Conard-Pyle rose fields blooming. Driveways are maintained through the fields for visitors and a picnic area is adjacent to the Robert Pyle Memorial Rose Garden.

**WTT**



**These container plants** are on pallets ready to be loaded into trailers for shipment.

# SCHMIDT AND SON: PROPAGATORS OF DECIDUOUS TREES

The events and happenings of the past 32 years that formed and shaped J. Frank Schmidt and Son Company of Boring, Oregon are demonstrative of what has and is happening in the bare root shade and flowering tree industry.

The forces and factors were climatic, human and economic. The company grew under the inspiration and directions of J. Frank Schmidt, Jr., the company's president. As in the case of most Northwest nurseries, it began as a family farm-nursery. Each member of the family, three sons and a daughter, branched out into a different aspect of the industry.

Frank, Jr., took the direction of ultra-specialized, mass produced

nursery stock. Ultra-specialization means propagating and growing one line of nursery stock, bare root deciduous shade and flowering trees. Such concentration of effort results in the production of a line of trees that represents a careful balance between conservatism with proven trees and forward thinking with tested new selections. Schmidt states, "By the mid-1940's it was apparent that asexual propagation of cultivars was the only way to assure a uniform, predictable product, rather than depending on seed-produced trees that are like people, each somewhat of an individual."

Mass production, strenuous grading standards and continuous trial and error experimentation set the

**Three quarters** of Schmidt's annual crop is branched two- and three-year-old trees up to two-in. in caliper.





stage for a continuous expansion philosophy. Today the nursery continues to plant approximately 10% more seedlings per year.

"Conditions in the Country were right for this philosophy," comments Schmidt. "Ample production each year beyond experienced sales levels always allowed us to have trees for sale during mid-winter and spring when the specimen tree grower and the retailer discovered the market was going to be stronger than anticipated." As a result, the company's sales graph over the years has been a continuous upswing. "This has permitted us to reinvest in people, equipment, land and facilities," Schmidt states. "It is my belief that a company's purpose for existence is to provide a group of people an enjoyable means of livelihood as they provide for the needs of the customer. The president's main job is to see that the companies policies are maintained in a healthy economic balance."

This spring the company delivered 600,000 trees to customers in 36 northern states and to the Provinces of Canada. The past few years sales increases have averaged around 30 percent. One-third of the crop was sold as one-year whips to specimen treegrowers and two-thirds as branched two and three-year-old trees to retailers and landscapers. Sales Manager, Archie Whiteford, comments, "Each year we seem to sell more trees during the spring months, filling those last minutes needs not anticipated by the customer. Having extra trees dug and held in our new 325,000 ft. cooler is going to increase these sales even more in future years."

"Other factors of the industry have contributed to the growth of this Oregon nursery" states Norbert Kinen, business manager. "Previously, most of the Oregon nursery production was sold both through Oregon-based wholesale brokers and re-wholesaler firms scattered throughout the country. Communication and transportation have shortened the distance between the grower and the ultimate customer, reducing costs."

The temperature-controlled tractor-trailer truck has allowed rapid delivery with less handling of the trees. Nursery Trade Shows, ten of which the nursery participates in, have placed the grower and their customers together. "It is one of our major ways to gather feed-back on our trees and address ourselves to

special needs," states Frank Schmidt III, vice-president and production manager. "Customized canopy trees were introduced last year as a result of that communication."

Asked about the future, Frank Jr. displays a confidence in a continued expansion of the shade and flowering tree demand. Quality trees and a wider selection of materials will be part of that demand. The growing interest in environmental quality and energy consciousness accounts for the motivation. He expects the national advertising program being developed by the newly created Nursery Marketing Council will stimulate a momentum that will surprise many. "The question is," he says, "are we going to be prepared when it happens."

Trees are dug, graded, and stored beginning in late October through January and shipped beginning late in February, through March and into April. 133 cultivars and varieties are offered in the company catalog of which 33 are patented trees. Slightly over a million seedlings are being planted this spring.

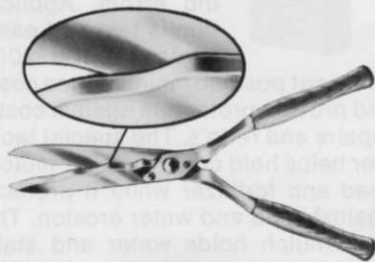
Principal propagating techniques are by budding on a root stock, rooted cuttings. Some are strictly from seed with no asexual propagation and some are grafted. The company produces its own understock in its own seedling department. Seedlings are held in the seedling beds for one to two years, then planted out in fields for one season, at the end of which they are budded. Late the following winter the seedlings are cut off just above the bud of the cultivar and above a good active bud of those that will be grown on their own root. As growth begins in the spring from the selected bud, a device called Grow Straight is placed 1/4-inch away to direct the new growth straight upward avoiding a "dog leg" in the tree stem or trunk. After one season of growth from the selected bud, the tree is termed to be a one-year-old tree having a three to four-year-old root. Approximately one-third of each year's production is sold as one year whips and the remaining two-thirds is sold as two to four-year-old branched trees ranging in size from five to 15-ft. tall and an inch to two inches in caliper.

All of the nursery's production is sold wholesale to customers in hardiness zones two to six throughout the U.S. If you drew a line from Northern California through South-



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## Schmidt and Sons

ern Colorado into Oklahoma, East through Missouri on to Virginia you would establish the Southern boundary of the company's customers. Customers include growers in their local areas for balled and burlapped specimen trees, re-wholesalers and propagating nurseries who resell to retailers, and garden centers and landscape contractors who sell to the commercial and domestic consumer either bare root or by containerizing until the trees are established.

The company holds patents on five trees and the Grow Straight which it produces and sells. Schmidt has established with its employees a joint partnership, a specimen tree nursery called Northwest Shade Trees, Inc. It produces balled and burlapped specimen shade and flowering trees for the West and Northwest U.S.

There are 60 full-time employees, and up to 130 workers are added seasonally. Professional budders are employed, mainly Mexican Nationals who have work permits for this specialized work.

Schmidt spent approximately \$100,000 on new equipment last year. It owns 24 tractors of various sizes for work ranging from plowing, discing and subsoiling to cultivating between rows of trees. Four customized diggers are used during the digging operation which are track machine elevated to go over the top of trees, a U-blade for cutting the roots, and hydraulic shakers to remove the soil. All trees are handled on pallets conveyed on trailers and moved by forklifts.

Much of the equipment is customized after purchase for special tasks such as snow blowers for opening up sawdust trenches for winter storage and a compressor rig and boom to convey workers over each row to operate pneumatic shears for stubbing the seedlings down to the selected bud. Other customizing work is necessary to strengthen or adapt machinery such as planters, cultivators and disks for cultivation between the rows. The shop foreman is hired both for maintenance of equipment as well as customizing equipment. There are other types of

specialized equipment produced for the nursery industry like tree tag printing machines and tree bundling machines.

Despite the machinery, there is still much hand labor in a nursery of this type which increases the labor cost and the cost of trees. Industry has not evidently found it profitable to address themselves to the needs of this type of nursery operation in designing and manufacturing labor saving equipment. As a result, companies are left to their own resources.

The process, therefore, of merchandising the shade tree industry has been slow. Costs could be cut considerably if there was a means of conveying trees from behind the digger onto pallets without damaging them. Conveying systems for grading trees and handling then in the warehouse in preparation for storage and shipment would also reduce costs a great deal.

The nursery has two acres of humidified warehouses for short term storage and processing of trees, six acres of outdoor sawdust bins for

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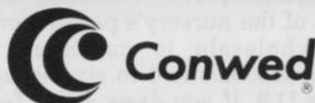


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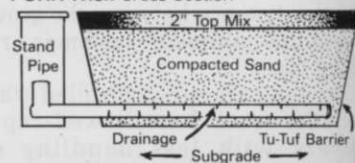
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## Schmidt and Sons

tree storage, and 475,000 cubic feet of cold storage for seedling and tree storage.

Nearly all irrigation is done by sprinklers, the Rainbird type. The nursery has eleven wells and three ponds. Normally in the area, trees will consume 3/10 of an inch of moisture per day. The nursery has a system of moisture plugs which electronically monitor the moisture content of the soil at various depths. The moisture plugs indicate when to irrigate and how much water to sprinkle on the field to keep the moisture content above 50 percent of field capacity.

Generally, four herbicides are used for special purposes. Simazine, enide and paraquat are used to maintain control of weeds down the rows. Roundup is used to clean a field before replanting. A wide variety of insecticides is used depending upon the type of insect that is being combatted.

Western Oregon soil is acid. Before planting, approximately every five years, up to three tons of lime must be worked into the soil one year before, to give it time to react.

In our climate, trees do not do well unless they have at least 100 pounds of each of the three major elements per acre. There is no standard fertilization practice in the sense that all fertilizing is done based upon either soil or tissue analysis. Fertilization is done just before planting a field followed by both ground and air applications according to season, the variety of the trees, and soil and tissue analysis. Aerial spraying is necessary in late winter when the fields are too wet for standard ground equipment.

Between crops, soil is built by one year of green cropping to develop humus in the soil and one year of summer fallow to clean the field of any weeds. Weeds are a concern not for the competition that they might

give to the trees, but the fact that they become hosts to various types of insects.

Advertising is done in two major horticultural publications in the United States and one major publication in Canada. A second source of advertising is attendance and display at the major trade shows and conventions throughout the sales area. The company attends ten such shows each year. Schmidt has many visitors and at those times when there are special meetings in this area an effort is made to bring visitors to the nursery. For instance, during the A.A.N. Convention in Seattle last year, visitors were brought from Seattle to Portland and given a tour of the nursery's fields and facilities.

The company also publishes a monthly newsletter to inform the customer about various factors of weather, cultural practices, and the outcome for the upcoming crop. Further, it serves to acquaint the



**A specialized blower** used to weed between the trees and to remove soil build-up around the stems of the seedlings in preparation for the budders.

prospective customer with the company. Beginning in September, a stock available list is published once each month, until January when two stock available lists are published each month until late spring.

Until recently visiting customers was done by staff members from the home office periodically through the summer. Now regional sales representatives are being contracted who will visit each customer periodically.

There has been a gradual evolution from complete use of rail car to tractor-trailer truck. This has permitted more rapid transportation, the customer to get last minute needs, to-the-door delivery, and less of handling the trees. All shipping is done by temperature-controlled trucks contracted with independent carriers through a shipping brokerage firm.

There are several problems, or challenges, to be overcome to keep a healthy shade and flowering tree industry. Labor costs, both direct and indirect, plus inflation are causing sharp rises in the cost of production which must be passed on to the wholesale customer and eventually to the consumer. The minimum wage law is not only effecting the lower portion of the wage scale, but all the way up the line. Indirect costs such as workman's compensation insurance and now the Oregon agriculture unemployment tax have increased our labor costs between 15 and 20%. Furthermore, the agriculture labor supply appears to be dropping as we are expanding.

Absenteeism and turnover are resulting in the need for more supervisory personnel and training time. This fact, coupled with the lack of equipment engineered for the nursery industry, makes us very dependent on a large labor supply. Therefore, a second problem, or challenge, is the development of equipment, either by the manufacturers or by the nurseries themselves.

The third challenge is the need for continuous study to select new cultivars for asexual propagation. There are presently several standard plant materials with undesirable qualities such as disease tendencies and undesirable growth characteristics. Continuous study should go on to provide a wider selection of deciduous plant materials.

The consumer is awakening to his broad range of plant needs. Much time and effort must be expended

to provide the consumer with reliable information about the many cultivars that are presently being produced. There is need for a broad range study throughout the United States to observe the cultivars which have now been planted under various climatic conditions. To date, standard manuals have not been published containing this information. Studies by Dr. Phillip Kozel at Ohio State University, are recording the desirability of many cultivars now on the market for street and home planting. Similar studies need to be made in many areas. Another important study is the one being carried out by Dr. Lester Nichols at Pennsylvania State University. This one has a broad spectrum of observation of Crabapple trees and their resistance or susceptibility to the five major diseases that effect this group of trees. Observation is going on in many locations. Yearly results on over 600 varieties and cultivars are being summarized by use of a computer. This type of study will establish credibility for the B & B grower to buy and to produce a wider selection of materials. Likewise better credibility will be established for the garden center to stock, sell, and educate the consumer. The same would apply for the landscape contractor and the landscape architect. The next challenge is the need for a forum between the landscape architect and contractors and the growers of tree materials. Future tree needs need to be discussed since it is nearly five years from the time a root stock is developed before a finished bare root tree is ready for sale, or eight years or more before that tree becomes available as a specimen B&B tree for landscape purposes. There is a need for consumer research as basic information for all the various elements of the nursery.

There is a definite trend in demand for higher quality shade and flowering plant materials. The demand and the willingness to pay a higher price for well-grown nursery stock is strongly evident. The consumer is also looking for a wider range of tree characteristics; blossom and color, growth habit, size and general form.

The consumer is probably more open to education now that he has ever been. Efforts are being made for consumer education. It is quite evident that the garden center operators and the landscapers are all beefing up this process in their individual businesses. **WTT**

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Wight is a wholesale nursery, specializing in evergreens. About 60 percent is broadleaf evergreens while the remaining 40 percent is coniferous.

The nursery requires approximately 225 full time employees. Because they are far enough south, seasonal turnover is quite small, not over 10 percent.

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are used for pulling wagons. Four hundred wagons are used for moving the container stock around. Each wagon holds 361 cans and the wagons are usually pulled in tandem, two to a tractor. Equipment replacement includes about five pick-ups and 10 to 15 tractors a year.

Most of the irrigation system is permanent set, except for some in the field, according to Wight. "It is in



Acres of plants are grown under plastic.

beds 100 ft. wide and there's a row every 100 ft. We've probably got 50 miles of rows," he estimates. Water comes from eight lakes on the property and three deep wells that give 700 gallons per minute. All of the containers are irrigated with an inch of water every other day.

Equipment maintenance at the nursery is limited. The heavier jobs are sent to shops. "Equipment quality is good," says Wight, "The price has just gone up, up, up. We're buying all American-made tractors now and they are about 150 percent up from what we were buying them for six or eight years ago."

Most of the chemicals necessary are purchased near the beginning of the year. "In some instance we get bids on large quantities and base it on a year's supply," Wight says. "Lesser quantities we just buy when needed."

Containers are probably the major expense at Wight Nurseries. "We're using primarily one supplier," according to Wight, "and are spending a great deal with them, probably over half a million dollars."

Ninety-five percent of the plants are shipped by refrigerated semi. They are mainly shipped east of the Mississippi River, with occasional shipments into Arkansas and Texas. March and April are the nurseries' biggest months for shipping. We probably ship 40 percent then, says Wight. November through February, we have very little going into the North, but we also ship into Tampa and Jacksonville, Florida, New Orleans and other areas where there's no frost." About forty percent of the northern shipments go in August and September.

"We don't own our own trucks," Wight says, "and we have to compete with Florida produce. If they have a perishable item, they'll outbid you for trucks and then you get into a hell of a problem."

Advertising is done on the back page of "Nursery Business" and a couple of other trade papers with full page ads on occasion.

As far as trends in the nursery business, Wright predicts: "The big ones are going to get bigger. It's getting much more competitive and will continue to do so." **WTT**

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