



Lake Sunapee from the Gardens of the Hay Estate, circa 1930. For current restoration plans, see page 23.

# the Plant SMAN AUGUST / SEPTEMBER 1994

# What do you want for Christmas?

#### YOU WANT SOMEONE WHO IS RESPONSIVE TO YOUR NEEDS

At Sibgo Tree Company we offer a wide variety of high quality Christmas Trees. Other tree companies can say that too. But, since we also have a retail Christmas Tree business, we know what retailers want. What sets us apart is our understanding of your needs. We know what you want from a supplier.

#### YOU WANT TO KEEP IT SIMPLE.

You are looking for trees that are ready to go. Our trees arrive individually wrapped. All you have to do is remove the wrappers and set the trees out. No broken branches. And since our trees are basal pruned, you and your customers will not have to hassle with any additional trimming to fit the tree to the stand.

#### YOU WANT QUALITY.

We offer heavily needled trees that have been pruned to achieve a traditional, yet natural form. The sturdy branches and carefully shaped profile offer room and support for your customers' valued Christmas ornaments.

You WANT FRESHNESS.
The later a tree is cut, the better

it is able to retain water. (Did you know that if a tree loses 40% of its moisture it will never recover?) Since our trees are grown in New Hampshire and Vermont, they are not shipped long distances. This means that the trees can be cut later in the season. In addition, after cutting, we do everything we can to minimize loss of moisture. For example, we interlock the tops of the trees after cutting to prevent drying.

#### YOU WANT VARIETY.

We grow blue balsam, known for its lovely color, fragrance, and good needle retention. Fraser, another favorite at our plantation, also has good needle retention.

And this year we will be offering something new: fralsam, a fraser-balsam cross. White, scotch, and red pine, and white spruce are also available.

#### YOU WANT ON-TIME DELIVERY.

We guarantee on time delivery on the day you have scheduled to receive your order, not the day before or the day after.

# YOU WANT THE NUMBER OF TREES THAT'S RIGHT FOR YOU.

You can order either 25 trees or a trailer load.

#### Have We Missed Anything? Call 800/694-8722 and ask for

Call 800/694-8722 and ask for Mike Godzyk. He would love to talk to you. And, while you're on the phone, schedule an appointment to visit us and inspect our trees. This summer... or anytime. Or if you don't have time in your busy schedule to visit us, we'd be happy to visit you.



#### Sibgo Tree Company

We know what you want for Christmas! CALL US AT 800/694-8722 FAX 603/237-8439 COLEBROOK, NH

#### August

\*\*AUGUST 17 NHPGA Summer Meeting, Ledgewood Farm, Moultonboro, NH; co-hosted by Spider Web Gardens, Center Tuftonboro; for information: Chris Robarge at (603) 862-1074.

AUGUST 20 Plant Sale, Hay Estate, Route 103-A, Newbury, NH; information: Ann Loeffler at (603) 526-4153.

AUGUST 22 Poinsettia Pest Management School, Pleasant View Gardens, Loudon; for information: Alan Eaton at (603) 862-1159.

AUGUST 24 Vermont Plant Growers' Summer Meeting, South Forty Orchard & Nursery, Shelburne, VT; for more: Tina Nyce at (802) 899-3361.

AUGUST 26-SEPTEMBER 3 Professional Plant Growers Association (PPGA) Technical Tour of Denmark; for information: 1-800-647-PPGA.

#### September

SEPTEMBER 7 CNA Twilight Meeting, Prides Corner Farms, Lebanon, CN; for more: (203) 872-2095.

SEPTEMBER 13 Maine Landscape & Nursery Association Charity Work Project Twilight Meeting, location to be announced; for information: Edith Ellis at (207) 225-3998.

SEPTEMBER 14 NHPGA Twilight Meeting, 5:30-7:30, Gateway Gardens, 430 Loudon Road, Concord, NH; for information: Kirk Weyant and Sue Englund at (603) 229-6655.

SEPTEMBER 16-OCTOBER 1 Eastern States' Big 'E,' West Springfield, MA. SEPTEMBER 17 Florel Garden Mum Workshop, Konjoian's Greenhouses, Andover, MA: information: Peter

Konjoian at (508) 683-0692.

SEPTEMBER 21 Twilight Meeting (4:30 P.M.), Berry Hill Farm, Stratham, NH; for information: Nada Haddad at (603) 679-5616.

SEPTEMBER 22-27 27th International PPGA Conference and Trade Show, Buffalo, NY: for more: 1-800-647-PPGA.

#### October

OCTOBER 7 New England Regional Meeling, International Plant Propagators Society, Arnold Arboretum, Jamaica Plain, MA; information: Kathleen Carroll at (413) 545-0895

OCTOBER 13 Urban Integrated Pest Management Conference, Royal Plaza Motel, Marlborough. MA; Kathleen Carroll at (413) 545-0895.

OCTOBER 17-19 New England Greenhouse Conference, Sheraton Sturbridge Inn, Sturbridge, MA; lor information: Henry Huntington at (603) 435-8361.

OCTOBER 29 UNH FFA Interscholastic Contest, UNH, Durham, NH; for information: Dave Howell at (603) 862-1760

#### November

NOVEMBER 7 Vermont Plant Growers/Department of Parks & Forestry Seminar "Community Tree Care Through an IPM Approach," Vermont Technical College, Randolph, VT; information: Tina Nyce at (802) 899-3361.

NOVEMBER 12 Rhode Island Nurserymen's Association 75th Birthday Celebration, Doubletree Inn, Newport, RI; for information: 15081 761-9260.

NOVEMBER 15-16 Massachuselts Nurserymen's Association/Cooperative Extension Business Short Course, Worcester Marriott, Worcester, MA; information: John Bragg at (508) 534-1775.

#### December

DECEMBER 5-6 Seminar "Tree Hazards: The Ullimate Session" (Shigo & Mattheck), Sturbridge Host Hotel, Sturbridge, MA; information: John Kirkland at (503) 254-0482—PST.

#### Looking Ahead

JANUARY 26-28 New England Grows, Hynes Convention Center, Boston, MA; (508) 534-1775.

FEBRUARY 2-4 New Hampshire Farm & Forest Exposition, The Center of New Hampshire/Holiday Inn, Manchester, NH. information: Mary Ellen Pitman at (603) 271-3788.

# CONTENTS

CONTENTS				
DEPARTMENTS				
FORUM	3			
NH NEWS	5			
ELSEWHERE IN THE NEWS	9			
DIAGNOSTIC UPDATE Dr. Cheryl Smith	14			
MEMBER PROFILE Rye Ridge	17			
PPGA HIGHLIGHTS Growing Basics for Salvia	28			
FEATURES				
A Master Gardener Tells All Carl Deame	13			
Preservation Begins:	23			

#### COLUMNS

The Old Garden at the

Hay Estate

Bill Noble

Z-NOTES Jim Zablocki	6
HOW ABOUT HERBS Tanya Jackson	8
THE GRIFFIN GURU	20
THE GREEN SPOT Mike Cherim	23

#### About Our Cover

Lake Sunapee from the gardens at the Hay Estate in Newbury, New Hampshire, circa 1930.

The Plantsman is published in early February, April, June, August, October, and December with copy deadlines being the first of each prior month. While camera-ready ads are preferred, set-up assistance is available at an ominal fee. Free classified advertising is offered as a member service. We will carry a short message (no artwork or logos) for one or two issues of The Plantsman.

AD SIZE		6x	1×
3 3/8°w x	2 1/4"h	\$120	\$30
3 3/8°w x	4 3/4"h	\$160	\$40
7"w x	2 1/4"h	\$160	\$40
7°w x	4 5/8"h	\$250	\$50
77	0.1/2=4	6400	6100

For further information, please contact the editor: Robert Parker at the UNH Research Greenhouses, Durham, NH 03824, (603) 862-2061; or PO Box 5, Newfields, NH 03856, (603) 778-8353.





Your Double Impatiens Source

240 North Village Road, Loudon, NH 03301 (603) 783-9561 Fax (603) 783-9562

#### Let Rough Brothers' expertise turn your greenhouse into a powerhouse—for profits.

Call the experts at Rough Brothers for information and technical assistance on these quality products

#### Manufacturers of

- WhiteHouse
- · The International
- Harvest House . The "2100" gutter-connected house
- Free-standing poly arch houses
- · Techlite glazing
- Ro-Flo benchesEbb & Flo benches

#### Distributors of

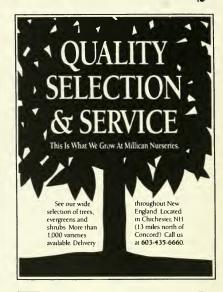
- · Alcoa Aluminum Fin Heating
- · Heating and ventilating equipment
- · Maintenance supplies, glass, parts

and more

**Rough Brothers** P.O. Box 16010, Cincinnati, Ohio 45216



1-800/543-7351



# Northern Grown Trees Evergreens Shrubs

Mon-Sat: 7:00 - 5:30 Sun: 9:00 - 5:00



#### NURSERIES

Located at junction of routes 22 & 114 Gorham, Maine 04038 Phone (207) 839-4262 or 839-6364 Fax 207-839-2290

We specialize in growing specimen plant materials.

#### Thanks Go To ....

The Board would like to thank Doug Cole—and employees—for hosting a twilight meeting for NHPGA members and friends at D.S. Cole Growers in Loudon on lune 16.

It was hot night, but the visitors were comfortable under the overhead shading system of the two four-bay 17,000-square foot Verbakel-Bomkas glass houses.

During the tour—both inside and outside, Doug pointed out the advantages to many of the efficiency-oriented systems (the tagging machine, a bench washer) he's incorporated into his operation. Showing how he moves rolling benches throughout the glass range, Doug said, "it's not that we're lazy. A system like this means that we don't even have to think about this aspect of the operation and can concentrate on other things."

Right now Doug is concentrating on Elatior begonia (Reiger is one series of this type) production and rooting material from specialized Danish growers.

2

Ben Shambaugh, owner of Wayside Farm in North Sandwich, will be resigning from the NHPGA Board because of time commitments to town government. The Board thanks Ben for his year and a half with them. His willingeness to travel the extra

#### CLASSIFIED

HELP WANTED: Retail Garden Center Grower/Manager for a well-established operation. To manage greenhouse production and retail sales operations. Supervise 10 to 25 employees. A full-time position. Contact: Frank Wolfe, Lake Street Garden Center. 37 Lake Street, Salem, NH 03079; telephone: (603) 893-5858.

distance to meetings and his pragmatic analysis of questions under discussion were appreciated.

The Board is currently looking for someone to fill Ben's position. It would be ideal if this person were from the north or west of the state—this would help achieve a geographic balance—but anyone interested should contact Bob Demers, Ir., at (603) 625-8298.

#### Notice

The University of Massachusetts Cooperative Extension System is offering a new inanual—The Professional Turfgrass Management Guide for Massachusetts—1994. Features include a comprehensive key to turfgrass diseases, a list of turfgrass variety characteristics (including potential disease resistance), monitoring techniques, and suggested threshold levels for turfgrass insects. Cultural management of disects.

### TO elcome New Members

Britton's Greenhouse 25 Elm Street Westmorejand, NH 03467

Goudreault Farm & Greenhouses 82 Newton Road Plaistow. NH 03865

> Carlos Silva 3 Crest Street Hampton, NH 03842

eases, as well as environmental considerations in the use of herbicides, are discussed.

Each copy costs \$7.00. To order, send check (payable to University of Massachusetts) to Bulletin Center, Cottage A, Thatcher Way, University of Massachusetts, Amherst, MA 01003.

#### COURSES AT THE THOMPSON SCHOOL

This is a partial listing of horticultural courses offered this fall at the UNH Thompson School. Some courses may have prerequisites (courses or experience). Additional courses are offered at UNH in Plant Biology, Entomology, and other departments. The fall semester runs from August 30 to December 17, 1994.

You may enroll in these courses by phoning the Division of Continuing Education (DCE) at 603-862-2015. For more information on course content, the part-time Associates degree program, or on the Diploma in Landscape Horitculture, call 603-862-1035.

HT247 Intro to Woody Plants, 2 cr. Lecture F 10-11, Lab M 1-3 or F 1-3

HT 248 Applied Soil Technology, 3 cr. Lecture MW 10-11, Lab Th 10-12 or Th 2-4

HT 251 Plant Structure and Function, 4 cr. Lecture MWF 11-12, Lab T 10-12 or T 2-4

HT 254 Landscape Construction and Maintenance, 4 cr. Lecture WF 11-12, Lab W 1-5

HT 255 Fruit Science, 4 cr. Lecture MF 10-11, Lab M 1-4.

HT 259C Pest Management: Weeds, 1 cr. Lecture/Lab F 1-4
(First 7 weeks only)

HT 259D Pest Management: Control Applications, 1 cr. Lecture/Lab F 1-4, (Second 7 weeks only)

HT 263 Floricultural Crop Production, 3 cr. Lecture WF 8-9, Lab T 8-10

HT 265 Woody Landscape Plants, 2 cr. Lecture/Lab Th 9-12

AM261 Small Engines 3 cr. Lecture F 9-10, Lab hours arranged



New England's Leading Full Line Seed House

- · Packet Seeds
- Lawn Seed
- Fertilizer
- · Grounds Maintenance Chemicals

1 (800) 326-HART FAST, COURTEOUS SERVICE

The Chas. C. Hart Seed Co. P.O. BOX 9169 WETHERSFIELD, CT 06129-0169 1(800) 326-HART



#### WINDING BROOK TURF FARM, INC.

240 Griswold Rd Wethersfield, CT 06109 RT 111 Kennebunk, ME 04043

- · QUALITY BLUEGRASS
- · BLUEGRASS FESCUE BLENDS
- · LOW MAINTENANCE BLENDS
- · PENNCROSS BENTGRASS

In CT 203-529-6869 Distributor For Outside CT 1-800-243-0232





Pavers



Lawn & Garden Limestone Decorative Landscape Stone White Playsand Bagged Bark Mulch

Robert F. Myers 28 Horseshoe Drive, Scarborough, ME 04074

(800) 541-9127

# LAN NURSERIES

259 College Street, Magog J1X 2K4 Phone & FAX: (819) 843-5071

Lan is owned by a group of Québec growers in order to present a large variety of hardy flowering shrubs and perennials showing THE NORTHERN BEAUTY

Dogwood - Forsythia -Hydrangea Honeysuckle - Lilacs - Ninebark Potentilla - Rugosa Rose Spirea - Sumac Viburnum - Vine

#### NEW HAMPSHIRE NEWS

#### New Product: Bark Compost-only Medium

(from Greenhouse Manager, July, 1994)

This spring, Jolly Farmer Nurseries, East Lempster, NH. unveiled a growing medium consisting entirely of composted softwood bark cultivated from material supplied by sawmills of Maine. The company grew its entire spring product line in its new Professional Growing Medium (PCM).

"We were looking for a media that would be better than the normal pet-lite mixes, more resistant to soil-born disease, eliminate the surface algae problem that is so common with peat-lite mixes, and in general have a healthier soil." Daniel English, head grower, said. Unlike aged bark, which requires less attention in production, PGM is composted. Regularly watered. the pile of material is turned whenever it reaches a certain temperature, usually once or twice a The aerobic process includes additions of nitrogen and beneficial bacteria. This biological activity heats up the medium, killing undesirable bacteria

"From what we've been told, this is a first," English said, "for 100 percent bark media amended to prime growing levels."

PGM is sold in both 3-cubic foot bags and in bulk.

For more information, contact Daniel English at 1-800-695-8300.



Plant Growers

Association

(800) 647-PPGA • Fax (517) 694-8560

#### UPDATES

#### Pesticide Use Control

State legislators wrapped up this year's debates on pesticides by finding ways to increase local impute into the state's pesticide management program. The legislature stopped short of restoring local control, but voted to create a citizens advisory committee charged with soliciting public opinion and reporting their findings to the state's Pesticide Control Board (HB 1512-FN). The composition of the committee is mandated and would include representatives from a range of interests.

HB 1533 changes the composition of the Board itself by adding one member representing the interests of municipalities.

HB 1185 requires that fees be paid by both private and commercial applicators beginning next January first. And, in a variation of the pesticide theme, Senate Bill 591, which took effect on May 27, requires notification of all aerial pesticide applications in rural areas.

#### EEA

It's never too late to announce a winner. Winners of the FFA Floriculture and Nursery/Landscape Competitions held at UNH in Durham on May 13th are as follows:

Floriculture—First place team: Winnisquam (Vicky Cushing, Jill Ober, Charlle Robinson), second: Coe-Brown (Candy Brown, Correng Bohl, Michelle Dechanel, third: Fall Mountain (Mary Wendell Adams, Bridget Blaine, Breanna Smith); Individual—first place: Mary Wendell Adams, second: Vicky Cushing, third: Candy Brown.

Nursery/Landscape—First place team: Pembroke [Nick Tordoff, David Wilson, Jeremy Lawrence), second: Co-Brown (Kevin deRuyter, Tim Hathorn, Sarah Ykema), third: Somersworth (Matt Long, Joanne Merrill, Ken Dewing); Individual—first place: Nick Tordoff, second: Matt Long, third: Kevin deRuyter.

Eighteen teams competed in the Floriculture competition: 17 in the Nursery/Landscape. Congratulations go to all participants—and thanks to everyone who worked to organize the event.

#### Awards

And on April 23, Frank Collins, of

# WHOLESALE NURSERY

TREES • EVERGREENS • SHRUBS

150 acres of quality plants

Write for catalog

Member MNA, NENA

Millers Falls Road, Turners Falls, MA 01376 Telephone 413-863-2510



- 2a

Collins Flowers, Inc., Nashua, NH, received FTD's John A Valentine Award in Denver. This national award, named after the founder of FTD and given in his hometown, recognizes outstanding leadership in the floral industry. Frank is the father of Peter Collins, who currently operates Collins Flowers. and the son of Frank, who began the business in 1930. He has been active in promoting the industry and in the FTD organization throughout his entire professional life. Nominated by the FTD's local regional chairman, Ray Savage, Collins and Savage were flown to Denver where Collins received a plaque at a banquet in his honor. "The food and hospitality were wonderful-it was a great honor."

FloraStar has named 'Pink Ice,' an impatiens variety developed at D.S. Cole Growers, Loudon, as a Fall, 1994, Winner. The variegated plant with lavender-pink double blossoms is part of an ongoing series.

#### A Sabbatical in Poland

Nancy Adams, the UNH Cooperative Extension Educator in Agricultural Resources in Rockingham County, is currently in Poland participating in the "Polish/American Extension Project." This USDA-sponsored program is helping Poland start its own Extension Service.

Nancy, who left in June, will spend six months in Poland, where she is the member of a team (consisting of a state-level extension educator from Montana and herself, as well as an interpreter) working with Polish officials at a provincial-level advisory center.

Although Nancy is missed in New Hampshire (she will be back in December), it sounds like an opportunity for growth and adventure.



#### Poinsettias...and Water

As you begin this year's poinsettia crop, think about having your water tested. This is important because a proper feed program should be based on the results. Ph, alkalnity, and calcium levels are some of the factors that affect the success of your crop. For example, calcium levels of 80ppm from the very beginning will reduce the chance of bract edge burn later.

October is not the time to be making major nutritional adjustments; plants don't respond well to drastic nutritional or Ph stunting can occur—which could contribute to a pythium problem.

A steady feed of 15-5-15 Excell enables you to give the crop Ca and Mg at appropriate levels, although early test results may require you to alternate with 31-5-20 to adjust the Ph. Start with 350ppm of N at planting, Then lower to 200ppm four to six weeks later.

A fungicide drench (eg. Banroi) immediately at planting will reduce any later infections of pythium or phizoctonia. As the canopy develops, horizontal air movement is imperative to reduce botryits. Should an outbreak occur, an application of Ornalin may be required.

So before you begin, test the water.

Jim Zabocki, Territory Manager, The Scotts Co., Northeast, can be reached at (603) 224-5583.

#### MEETINGS, WORKSHOPS...

#### Poinsettia Pest Management School

UNH Cooperative Extension will run a poinsettia IPM School at Pleasant View Gardens, Loudon, beginning at 9 AM on Monday, August 22. It will take about three hours and will cover such topics as identification of insects on sticky cards, disease management, whitefly management, and insecticide use. For more Information, contact Dr. Alan Eaton at (603) 862-1150

#### Twilight Meeting

#### Nada Haddad

Have you ever considered—or even imagined—using on your farm a vehicle powered by solar energy? A solar-powered vehicle that can be used to transport pickers, workers, or clients to the fields, as well as transport tools and harvested produce? A vehicle that uses no fossil fuels and is nonpolluting?

Caroline and Buck Robinson, Berry Hill Farm. Stratham, New Hampshire, have retrofit a golf cart to be powered with solar energy and have been experimenting with it and using it for their daily transportation needs at their organic farm here in Stratham. If you're excited by the idea and would like to know how it works, join us on September 21 at 4:30 pm at Berry Hill Farm. In addition, there will be a discussion on growing berries.

For directions and more information, call Nada Haddad, UNH Cooperative Extension, Rockingham County, at (603) 679-5616 (Pesticide credits have been requested.)

#### Workshop-Back to Basics

The most serious problem in the SBA tree planting program, according to Mary Reynolds, Urban Forester in charge of the program in New Hampshire, has been improper planting techniques. What are the correct techniques? You'll have an opportunity to find out. Mary's planning to offer a Back-to-Basics Seminar this winter. Dates and details will be forthcoming.

# No Surprises.



EXPERIENCE. At The Conley Farm, we have been growing high quality Balsam and Fraser Christmas Trees since 1968. This year we have 8,000 trees, all marked by grade and size, ready for harvest.

LOCATION. Our regular customers-most of them have been with us for about 15 yearsappreciate our Southern New Hampshire location which allows easy access for inspection of the crops. Plantation visits are welcome anytime.

SERVICE. Our convenient location, an elevator loading system, and roads that are accessible for any size truck in any weather make shipping efficient and cost effective.

QUALITY. As a result of an upgrading program started in 1982 we are now able to grow better trees faster. The freshness of our trees after harvest is insured by a custom designed shaded storage area. And, since we only sell trees grown on our farm what you see is what you get. No surprises.

Call Bill at 603/332-7102, or Marty at 603/332-9942, for more information or to schedule a visit.

The Conley Farm
The wholesale grower of Balsam & Fraser in Southern New Hampshire

## Rhode Island Celebrates

the 75th

The Rhode Island Nurserymen's Association (RINA) will celebrate its 75th anniversary with a banquet and festivities at the Doubletree Hotel in Newport on Saturday, November 12. The day's activities include tours of Newport, wine tasting at the Vineland Wine Cellar, discount shopping in Fall River, and a visit to the Foxwood Casino. In the evening there will be lots of dining and dancing.

Another activity of this anniversary year has been the publication of a wholesale buyer's guide. This

was compiled by Dr. Brian Maynard, Department of Plant Science, University of Rhode Island, Kingston, from catalogs sent to him by companies that responded to his request for information. (Eighteen did so.) The catalog is an alphabetical list of species. Beneath each species and cultivar name is a list of available sizes (limited to four classes) and suppliers (numbered one though 18). Suppliers are identified by number on the inside back cover. The source list, available on computer disk, is updated once a year.

Financial support for the development of the database was provided by RINA and the Rhode Island Urban and Community Forestry Council. Funding for publication was provided by the participating nurseries.

The guide is seen as a useful tool for landscape contractors, garden centers and landscape architects—and a real benefit to the wholesale aspect of Rhode Island's nursery industry.

For more—Ken Lagerquist at (508) 761-9260.

## A Walk through Real Life

Greenhouse Growers' Association
Newsletter, Issue 2, 1994).

The major CGGA event of the summer was an educational evening called 'Real-Life Compliance with Worker Protection.' Officials from the state department of environmental protection walked small groups through Grower Direct in Somers and pointed out how that firm has complied with various regulations. This is the first time an event of this nature has been offered.

The June 23rd event included a picnic and chance to ask questions and closed with a talk on new varieties.

#### Grant Awarded

(from News to Use, the Connecticut Nurserymen's Bulletin, June, 1994)

Dr. Mark Bridgen, UConn, has been awarded a \$10,000 grant to develop and market four new Astroemeria hybrids. Dr. Bridgen has worked since 1985 to improve the breed and speed up its propagation through the use of tissue culture techniques. He'll be working with two CNA firms to make these plants commercially viable. Flowerfield Nursery, Monroe, will produce 2-inch liners from the micro-propagation tubes. White Flower Farm. Litchfield, will pot the liners for retail and feature them in its Spring, 1995, catalog.



#### HOW ABOUT HERBS

#### Herbs to Walk On

An herb garden rich in texture and subtle color can be magnificently pulled together by planting herbs among its pathways' paving stones and bricks. Here are some that are sturdy and fragrant, perfect for scenting and cushloning the steps of a happy gardener taking an evening stroil.

The large group of creeping thymes are mostly forms of Thymus serpyllum, with a few distinct species. Caraway thyme (T. herba-barona) makes a vigorous carpet with tiny white flowers. It's also a useful thyme for cooking, delicious with beef or pork.

Red thyme (T. serpyllum coccineus) has red-magenta flowers in midsummer and very small fragrant leaves. It's very hardy and sturdy, an

excellent variety to walk on.

A more fragile variety (T. albus) with white flowers is lighter green with tiny rounded leaves. I have read that it resents competition, so it might like to rule the walkway by itself. It would do well between wide flat paving stones—if creeping thymes can get a firm grip in the soil, they'll spread out over the stones and look their best.

Woolly thyme (T. serpyllum lanuginosus) has rounded grey leaves that make attractive fuzzy patches in gravelly soil. This one must be well-drained, as it resents any lingering moisture. The flowers are

lavender and appear in July.

Another sturdy woolly thyme is T. lantcaules, which has more widely-spaced leaves on long tralling stems. The habit of this plant is very spreading and allows spring bulbs to come through its cover. Of course, weeds could come through as well and this should be a consideration.

All creeping thymes benefit from rocks, pavers, or bricks over which to spread. These help drainage and provide the warmth the plants need to order to thrive. Overwintering is aided by a light mulch of compost, then a layer of coarse bark, put on the fall and raked off in the spring.

Tanya lackson is a well-known area herbalist. She can be reached at (603) 431-6774.

Ω

#### SEMINARS, CONFERENCES....

#### A First

The first Urban Integrated Pest Management conference in New England for companies and governmental and private agencies interested in IPM will be held on October 13 in Marlborough, Massachusetts.

The conference, sponsored by the New England regional office of the EPA, includes presentations on turf, golf course, ornamental, and structural IPM, panel discussions, and discussion sessions "designed to answer questions about the meaning of IPM in various green industry and related professions, and how we can educate the public about IPM."

Conference co-sponsors include UMass Cooperative Extension, Massachusetts Department of Food and Agriculture, and the Biotechnology Center of Excellence. For registration information, contact Kathleen Carroll at (413) 545-4968.

#### Biology Meets Physics

"For the first time in the United States, the world's premier tree biologist will share the stage with a 
German physicist to give what may 
be the most complete picture of 
tree hazards ever presented to 
American audiences."

The seminar, titled "Tree Hazards: the Ultimate Session," will join Dr. Alex Shigo with physicist Claus Mattheck at the Sturbridge Host Hotel from 9 am to 4 pm on December 5 and 6.

Shigo will examine the tree's biological system and how it adjusts to stress; Mattheck, from the Institute for Material Research in Karlsruhe, Germany, will discuss trees as physical structures and the laws that determine how long and under what pressures they can re-

main standing.

Shigo said that he and Mattheck had been aware of each other's research for years, but didn't meet until last September when both were invited to share the stage at a symposium in Sweden.

"Oddly enough, a lot of people thought we would be in opposition to each other. This was not the case. Our research complemented each other's work; it was the best of all worlds."

The program is being produced by Tree Care Educators in cooperation with the Massachusetts Arborist Association. The cost is \$98 per day, or \$176 for both. (Massachusetts Arborist Association members will receive a 10 percent discount.)

To register or ask for more information, contact John Kirkland at Tree Care Educators, Portland, Oregon, at (503) 254-0482.



### **Newton Greenhouse**

32 Amesbury Road, Newton, NH 03858 603-382-5289

# Quality Plants green and flowering

from 3" to 10" pots
Holiday, bedding plants, & dish gardens
year round cut snaps,
cut tulips and iris in season,
gloxinias and African violets

Licensed propagator of Mikkelsen & Ecke New Guinea Impatiens



"The Geranium Specialists"
Wholesale Growers

2 1/2" Geraniums (year round) 4" Pre-finished Geraniums 2 1/2" lyy Geraniums & Fuchsia Martha Washington Geraniums Spring Hanging Baskets, Lilies/Bulbs Azaleas, Cyclamen, Poinsettias, Foliage

JOHN B. CARPENTER, President ROBERT J. CARPENTER, General Manager

603/659-3391 220 SOUTH MAIN STREET NEWMARKET, NH 03857 109-113 Essex St., Haverhill, Mass. 01830, (508) 373-6838, (800) 322-0332

#### We cater to the small and medium size nursery in any quantity desired:

- New heavy grade domestic burlap sqs.
   untreated & no-rot-treated
- 2. Open burlap bags
- 3. New windbreak burlap
- 4. Balling bags

- 5. Wire baskets
- 6. Flat-folded burlap basket liners
- 7. Truck covers
- 8. Sisal twine & poly twine
- 9. Woven polypropylene sqs.



ROUTE 101 P.O. Box 26 Dublin, N.H. 603-563-8180 PERENNIAL - HERBS - WILDFLOWERS 80 Varieties in 6-cell packs UPS Shipping Available

Annuals bedding Plants (6 cell packs) Zonal Geraniums-4½ "pot Hardy Mums in season 3½ qt.pan Perenials available in 2qt. - 3qt. - 4qt. and 6qt. pots

#### FOR QUALITY SOD AND SERVICE



ROUTE 3A LITCHFIELD, NH 1-800-556-6985

- Big Rolls with Roll-out Service
- Convenient Farm Pick-up
- Prompt Delivery Service

PRUNERS • LADDERS • SPRAYERS • FORKLIFTS • PUMPS



ROUTE 116, P.O. BOX 540 CONWAY, MA 01341 413-369-4335

For Friendly, Courteous, Efficent, Technical Service

CALL US AT 1-800-634-5557 FOR INFORMATION AND CATALOGS

HOSE • TANKS • REELS • MOWERS • SAFETY EQUIPMENT



your pests? Tru IPM school. (See page 6.)

#### Name Change Approved (from the Massachusetts Nurserymen's Association Nursery News, April, 1994).

On January first, 1995, the Massachusetts Nurserymen's Association will no longer exist. In its place will be the "Massachusetts Nursery & Landscape Association." The name change, approved by members at this year's annual meeting in January, was made simply to better represent the membership: "the name 'MNLA' more clearly defines the diversity we enjoy within our organization."

#### Trends

(from a conversation with Judy Johnson of O'Donal's Nurseries in Maine Landscape & Nursery Association Newsletter, Summer, 1994).

"Perennials, perennials, perennials...not only are people continuing their interest in perennials, they're getting specific: they're buying for a specific purpose." They're more

educated-"They're not just asking for a viburnum; they're asking for a Viburnum opulus...." Water gardens-"Last year the retail customer showed great interest in water features for their yards. This year they're craving the information needed to keep the water garden at its best." There's more interest in landscape lighting and container gardening "is the up-and-coming 'vogue'-easy, quick, with the potential for much creativity and flexibility of design."

The "Instant" garden: "we've noticed at O'Donal's a desire for larger, more well-established plants this spring"...all this, along with requests for low-maintenance plants, green screens, winter-hardy varieties, and longer-lasting bloom.

#### MORE AWARD WINNERS

'Miracle Salmon' Mini-cyclamen (from Greenhouse Manager, July, 1994) FloraStar has named Goldsmith Seed's 'Miracle Salmon' mini-cyclamen as an outstanding new potted

plant cultivar. 'Miracle Salmon' Impressed judges with its uniform centered flowers which were long lasting and did not fade, its light pleasant scent, and its compact habit.

Plants germinate in 3-4 weeks and in 8-10, they reach the two-leaf stage. At this point, growers should transplant seedlings into intermediatesized containers, leaving the corm slightly above soil level to discourage crown rot.

About 16-18 weeks after sowing, they should be transplanted into 3inch containers

Night temperatures of 65-70F are best for the first few weeks with reduced temperatures (60-65F) desirable for intermediate-sized plants.

Finished crops hold at 55-60F. The plant finishes in 23-26 weeks in 3- and 4-inch containers.

For more: FloraStar, PO Box 27517, Lansing, MI 48909; telephone: (517) 694-7700.

#### Waller's Sorbet Violas

(from Greenhouse Grower, June, 1994)

Greenhouse Grower's 1994 Medal of Excellence has gone to the Sorbet Viola cornuta series from Waller Flowerseed Company in Guadalupe, California.

Attributes include "F-1 hybrid vigor, earliness, uniform flowering (within a five-day window across the series), compact and uniform habit, free-flowering ability, "faceup" bloom presentation, good germination rate (85% minimum) and unusual colors ('Blackberry Cream,' Blueberry Cream.' 'Lemon Chiffon.' 'Purple Duet,' 'Yellow Frost'-and Waller expects to add more in the future).

Bred for the spring and fall market, Sorbets are "tolerant of temperature extremes and overwinter well in temperate climates. They've performed well in southern trials and will be undergoing trials in the northern US."

For information, the Greenhouse Grower phone number (Willoughby, Ohio) is (216) 942-2000.



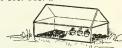
"Designed to bring sunshine into your life"

Throw away that unsightly and inefficient cold frame!

The Humbug Mini Green House is an attractive addition to any yard or deck. It is constructed of lightweight aluminum frame with clear lexon ends to provide rigid support and comes with a greenhouse quality 6 mil polyethylene cover for easy access to your plants.

- Can be set directly on the ground, deck, or patlo.
- Allows unhindered growth up to 24" high.

  Weighs only 12 Lbs.
- ⊕ Accommodates 190 starter pols
   ⊕ Dimensions are 48" L x 24" W x 24"



Wholesale programs tailored to fit your needs. Promotional materials and co-operative advertising programs available. Please call (603) 964 - 1115 and ask for Michael P. Scott for more details or to place an order.

Don't wait for the season to pass call today.

# THE BIOLOGICAL CONTROL OF INSECT PESTS

there are available 39 different species of biological pest control agents—

better known as beneficial insects—suited to most common pest situations on the farm or in the greenhouse.

In addition to the good bugs, this locally owned and operated company has a wide variety of other associated products and a lot of valuable information you will likely need to make it work for you. For more information, please call.



93 PRIEST ROAD, BARRINGTON, NEW HAMPSHIRE 03825...603-942-8925



# A MASTER GARDENER TELLS ALL

CARL DEAME

For the next eighteen weeks,

the group met every Tuesday

and plowed through soil science,

insects, diseases, annuals,

fruit trees, lawns

and a dozen other subjects.

first heard about the Master Gardeners when the program was featured in a National Geographic article about three years ago. The attention getter for me was the chance to do volunteer gardening work in conjunction with some formal university training. At the time, however, New Hampshire happened to be one of two states that had not yet started the program. An inquiry revealed that plans for starting this program were being considered, but that not much headway had ever been made. Finally, in January, 1993, fifty selected candidates from Merrimack, Strafford, Rockingham, and Hillsborough counties gathered in a highway department building in Concord. They became the first Master Gardening class in New Hampshire. For the next eighteen weeks, the group met every Tuesday and plowed through soil science, insects, diseases, annuals, fruit trees, lawns and a dozen other subjects. The courses were taught by UNH Extension specialists who presented information in their own fields.

The first group of trainees was made up of folks who had been gardening most of their lives. Many were earning a living or part-time income from a specific crop (blueberries and perennials seemed to predominate). In some cases, the student knowledge may have equaled the instructor's when the courses switched to their specialties.

Upon graduation in May, the volunteer projects stated. A home for children in Rochester, The Farm Museum in Milton, and the gardens at the Merrimack County Nursing Home were just a few of the places that received Master Gardener attention. A newspaper was organized and published and many of the graduates wrote newspaper articles and did TV spots on various gardening subjects. I ended up answering phone calls from homeowners who had gardening questions. If you want an interesting experience, try answering all the questions that come into a county Extension office in one week.

All things considered, the program has been a success. The first group was joined by the second graduating class in May of this year and Belknap and Carroll counties have been added to the program. There are now over one hundred graduate Master Gardeners in the State of New Hampshire who are offering their talents as volunteers. They have joined the large pool of individuals who give their time to make our state a better place to live. Let's hope the hundred become a thousand in a very short time.

Carl Deame is Program Assistant, Agricultural Resources, Strafford County Cooperative Extension, 259 County Farm Road, Unit 5, Dover, NH 03820-6015. He can be reached at (603) 749-4445.

13

BARK MULCH DIVISION:

P. O. Box 527, Route 122 Poland Spring, Maine 04274



#### NURSERY DIVISION:

P. O. Box 56, Route 10 East Lempster, N.H. 03605

#### WHOLESALE SUPPLIERS

# Jolly Farmer **PRODUCTS**

#### WHOLESALE GROWERS

- · Bark Mulch Hemlock , Mix & Cedar... by the Tractor-Traller load.
- · Bagged Mulch Our own bark mulch now available in 2 and 3 cu.ft. bags...Hemlock. Pine-Spruce, Cedar, Spruce-Hemlock & Dark Bark. Also...Pine Bark Nuggets & Mini Nuggets.
- Bagged Solls & Manures Top Soil. Potting Soli, Peat Humus, Peat Moss, Composted & Dehydrated Cow Manures.
- Cut & Split Firewood

Telephone: 1-800-879-2275 1-207-998-5580 FAX.

1-207-998-2006

Annual Pluga

- Rooted Cuttings Geranlums
- · Bedding Plants
- Potted Annuals
- · Hanging Baskets · Fall Mums
- · Cyclamen...Liners, Finished
- · Poinsettlas...Cuttings, Finished

Telephone: FAX:

1-800-695-8300 1-603-863-3370 1-603-863-7814

"Integrity, quality and reliable service since 1967"

# NORTHERN NURSERIES

WHOLESALE HORTICULTURAL DISTRIBUTION CENTERS U.S. Route 5, White River Junction, VT 05001 16 Pinkham Road West, Barrington, Nh 03825

SERVING THE PROFESSIONAL WITH ABOVE GROUND PLANT MATERIAL

Distributors in the following lines:

- Lofts Seeds
- Birchmeier Sprayers
- DeWitt Weed Barrier
- Corona Hand Tools
- Lebanon Turf Fertilizers

- Earthway Spreaders Nursery & Landscape Supplies

#### Contact:

Jim Babb, Mgr., White River Junction, VT, (802) 295-2117 Bob Averell, Mgr., Barrington, NH, (603) 868-7172

GOOD SERVICE • DEPENDABLE QUALITY • CONVENIENT LOCATION



#### DIAGNOSTIC UPDATE

Well, it certainly looks like the plant pathogens have been busy during the months of May and June as well as

months of May and June, as well as the early part of July. The number of samples submitted to the lab doubled between May and June. Although typical spring and summer diseases of field-grown ornamentals are beginning to show up in the lab, a few diseases continued to plague greenhouse operations. Botrutis and pythium became more problematic as the temperatures (and humidity) increased, and three additional cases of bacterial blight of geranium were confirmed in May (see the diagnostic update in the lune/luly issue).

Symptoms of early winter damage began to appear shortly after our first hot spell in June. Woody shrubs and small trees, particularly those planted within the last two years, began to leaf-out; then the leaves suddenly wilted during the hot weather. The injured tissue is usually at the soil line. The damage likely occurred during the first few bouts of freezing temperatures. before we had any significant snowcover. Since I mentioned snow, it seems appropriate to discuss snow molds on turf. Snow molds were the most frequently diagnosed diseases on turf samples received in the Diagnostic Lab during May and early June. The more 'typical' warm-weather turf diseases, such as brown patch, puthium, and leaf spot (helminthesporium) have begun to show up in the last three weeks throughout the southern half of the state. In addition, anthracnose and ascochyta leaf blight is showing up on turf that was stressed by last summer's drought.

The shoot blight phase of brown rot (monilinia) was a problem on Prunus species again this spring, particularly flowering almond and ornamental cherries. The symptoms are usually blighted blossoms, but in severe cases, entire twigs may be killed. Crabapples have been hit hard by apple scab this spring. The youngest 7-to-8 leaves on a shoot are often completely blighted, and in severe cases defoliation has already begun. Sanitation (removal of infected leaves after they fall in the autumn) is a very effective means of control for apple scab. Numerous cases of anthracnose on maples and ash have been diagnosed in the lab in the last few weeks. During my recent travels around the southern part of the state. I have noticed significant twig death and dieback on svcamore trees that were hit with anthracnose last year. I haven't yet received any sycamore samples this year, so hopefully we've escaped at least one problem.

Botrylis blight and leaf spots have been showing up on annuals and perennials for the last few weeks. During the last week of June, two cases of fusarium wilt were diagnosed on china asters. The fungus is soil-borne and may also be seed-borne. The symptoms of the disease include stunted growth (often one-sided), wilt, and black streaks that extend up the stem

from the soil line. Infected plants should be removed and destroyed (do not compost them).

Most of the diseases we are seeing now will continue to plague us for the rest of the growing season. Hazy, hot, and humid weather (affectionately called the 'three H's' by the weather forecasters) will favor brown patch and pythium on turf, botrulis blight, and the progression of wilt diseases (such as Dutch elm disease and verticillium). By the beginning of August, powdery mildews should be appearing on a wide range of hosts (I have already seen some growth on a few lilacs around campus). Sanitation in the autumn is also effective in reducing the incidence of powdery mildew. If our summer is hot and dry, as it was last year, expect to see spider mite feeding damage on a wide range of hosts. Many conifer species were particularly hard-hit by spider mites last summer. To check for mites, place a white piece of paper beneath a branch and tap the branch a few times. If the specks on the paper begin to crawl around you have a potential mite problem.

If you wish to submit plant material to the PDL for diagnosis, send samples to: Dr. Cheryl Smith, Plant Diagnostic Lab, Nesmith Hall, UNH, Durham, NH 03824. Samples should be accompanied by an identification form (available from your county Cooperative Extension office). There is no fee (at this time). Cheryl Smith is the UNH Cooperative Extension Specialist in Plant Health, and can be reached at (603) 862-3841.

# The More You Grow, The More You Know.

We've been in this business a long time. We know our customer's needs and demands. It dosen't make a difference of the time of year or the size of the project, Northeast Nursery covers it all. With the widest selection in wholesale plant materials and landscape supplies in all of New England it's no wonder many consider Northeast Nursery the best One-Stop shopping for all your landscape and green supplies.

Northeast Nursery, Inc.

Supplying Fine Plant Material & Landscape Supplies

234 Newbury Street, Rt. 1 South Peabody, MA 01960 Tel. (508) 535-6550 Fax (508) 535-5247

AUGUST / SEPTEMBER 1994

107 WHITEHALL ROAD, ROCHESTER, NH 03868 TEL. 1-603-332-9195

Wholesalers of Pre-finished Geraniums, Ivie Geraniums, Fuchsias, Geranium Ivie, Vinca, Dracaena

he heart of our own rapidly expanding retail business is our lavish display of the best geranium, ivie geranium and fuchsia varieties on the market today. Many of these are new Oglevee varieties that clearly out-perform the old standbys. We dazzle our retail customers with color, growing plants in all popular sizes, including spectacular big planters priced to sell in volume. Let us help you increase your sales and profit by helping you custom design just such a sales program.

Available Varieties (Ogl = Oglevee patented)

ZONAL GERANIUM Kim, Red, Ogl Sassy, Dk Red, Ogl Veronica, Rose, Ogl Melody, Pink, Ogl Pink Expectations, Ogl Snow White, Ogl Aurora (violet) Beth, (light pink)

IVIE GERANIUM Sybil Holmes (rosebud pink) Amethyst (violet) Bluebeard (deep burgundy) Beauty of Eastbourne (rose) Simone, Red, Ogl Nicole, Pink, Ogl Minicascade (red)

FUCHSIAS Swingtime (red/white) Dark Eyes (red/purple) Blue Eyes (red/blue) Starry Trail (purple/white) Southgate (pink) Pink Marshmallow

Additional varieties may be introduced. We ship rooted cuttings in 806 Packs, 4 1/2", 6", 8" and 10" pre-finished zonal geraniums, and 8" or 10" pre-finished ivie geraniums and fuchsias We may also be able to custom grow some selected annuals in 800 packs (pre-finished).

"Helping You To Grow"

# B.E. SUPPLY

GREENHOUSE SUPPLIES & EQUIPMENT

Hemlock Rd. - Langdon Mailing Address: P.O. Box 0 Charlestown, New Hampshire 03603

· Nu-Form Products Restricted Pesticides · Pre-filled Flats & Pots ·Fertilizers

· Kord Products · Distributors for Plasti Form & Plasti Vac · Distributors for Hyde Park & Sunshine Soils

603-835-6930

fax: 603-835-2180



# Rye Ridge

### A Lot in Two Acres

A fter fifteen years as a dental technician, Barbara O'Brien figured out what she wanted to do with her life. Plants had been one constant—she remembered growing them when she was a child—she decided to become a grower.

She enrolled in the four-year plant science program at UNH, but while getting her degree, realized "you really learn by doing."

She began growing cut flowers on the two acres she and her husband own on Washington Road in Rye. She grew a lot—of all kinds—and harvested them and delivered to local florists. She sold bouquets at the Farmers' Market in Portsmouth, doing "very well: I usually sold out in a couple hours." She expanded and leased land from a neighbor.

In 1983, she found a glass house—an 18x32 Lord and Bumham—glass, crank-operated top vent—in pieces on the ground in Bedford. She bought what was there, figured out what was missing, ordered the needed parts, and, with the help of her husband (a forest pathologist for the US Forest Service—"people

think our work connects, but it doesn't really.") and Charlie Nurn-berger from New England Green-house Construction, assembled it in February, 1984, in time to produce a spring bedding plant crop. She added a 4x20 cold frame to the back, then began expanding down the slope.

EVEN AFTER ten years in business, Barbara still gets first-time customers telling her, "we always thought it was a private greenhouse." One reason for this is the contour of the land Washington Road is built on a ridge line—the land slopes downward on either side—which is why the homes are built so close to the road. At Rye Ridge, you look down from the road onto the glass house, but see nothing behind it.

But there's more. The business

is on several levels. Parking is at street level. On the second level are the glass house and shop, as well as work and storage areas. Display gardens alongside stonedust path descend a steep slope to a third level (not level at all, but a long gradual slope). A 8x100 cold frame (the next structure put up after the glass house) runs parallel with the slope and becomes an axis off of which smaller units are placed. On the left are three 22x48 hoop houses and, between them, two cold frames (14x48 and 17x48). Beyond these are cut flower beds. On the right, the main features are two square display gardens. Display benches (wood frame, wire tops) are set up throughout all this. Some benches follow the line of the axis; others are perpendicular to it. These geometric underpinnings give a sense of order to the great variety of plants displayed. The area is framed by woods.

THIS SMALL intensely-used area continues to evolve. This year there's improved parking. There

# WHOLESALE PRICE LIST 1/5

This fall we have over lifty varieties of Container-grown Mums. All varieties are Yoder stock and include many of the new introductions as of January 1994.

- Delivery is included in price (minimum \$200 order) Sold First Come-First Served
- High Quality / Reasonable Prices
   Grown in combination mix of
- Grown in combination mix of Sunshine Mix, Sand & Horse Manure w/ Osmocote top dressing
- Soil weighs more to prevent drying out and tipping over
   No cherry picking

ROUTE 28 • ALTON, NH 603-569-2127 or 603-875-4444

FAX 603-569-3964



Special Offer

PREFINISHED MUMS
Take delivery of any Mums before Aug. 15th
& TAKE 10% OFF THESE PRICES!

(Plants will be budded w/ no color showing)

We Offer Three Sizes
(largest size is limited in production)

#### **PRICES**

CLASSIC CUSTOM 2000 12" x 11" - 3 Plants per Pot 200 Available - 4 ea. of 50 varieties \$10 Each

> CLASSIC CUSTOM 600 8 1/2" x 8 1/2" - 1 Plant per Pot 6000 Available - 50+ varieties \$1.95 Each

CLASSIC CUSTOM 400 7 3/4" x 7" - 1 Plant per Pot 12,000 Available - 50+ varieties \$1.25 Each

Please Phone or FAX for further information. Thank you

are three areas—a 60x20 area of crushed stone; and an area for three cars marked off on the house driveway; also, the lawn has been shortened and the area next to the road asphalted, giving a place for delivery trucks to unload.

The largest area is the most changed. Before this year, it was a gravel strip next to the road—"so narrow that if you parked beside a van, you'd have to pull out into the road in order to see around it. There were never any accidents, but I worried." A display garden was on the slope below it.

Now there's a dry retaining wall—maybe five feet high—built of Diamond Stone—70-pound interlocking cement blocks, tiered (battered) slightly. The slope and most of the garden are gone, although a jog in the wall accommodates a good specimen of pinus strobus nana, which will be the centerpiece of a smaller display.

A climbing rose ("We saved out a 'New Dawn'") will grow up the wall; terracotta pots filled with annuals are already on top. Another change was that the steps from the street to the second level are no longer there: a walk of bluestone leads into the sales area. The railing of steel pipe—repeating the curve of the walk—was made by a local welder. (For a quick, clean installation, Barbara recommends 'drive-in fence posts'—metal squares with pointed bottoms. These were driven into the ground: the railing supports were placed inside and welded to them—"a lot neater than using a post hole digeer.")

People like the changes—older people in particular appreciate the gentler slope of the walk, as well as the solid railing.

The cut-flower bed to the right of the axis wasn't planted this year, but covered with sawdust—it's square shape is crisp against the grass—and used for display. The four corners of the square are planted; groups of potted plants are placed in geometric configurations around them and lead to a focal point—one of Monet's luleur if illed with ivy geraniums (a luleur is a three-legged iron stand with sev-

eral shelves on which to place trailing plants—a device used by Monet at Giverny—"a blacksmith up in Maine makes them—I liked the design"). There's space to walk around. It's not complicated, but Barbara says it's made a difference—sales have been stronger from this particular area.

"I LOVE PERENNIALS—and I'm a reader—I'm constantly reading about them and finding new ones I want to try. And in the last few years, there have been a remarkable number of exciting introductions."

For several years, Barbara has had problems with the town over zoning, but these have been resolved. Expansion will occur in unobtrusive ways—Rye Ridge has collected, grown, experimented with, and overwintered garden material for ten years now and today offers 600 varieties of perennials (as well as several hundred annuals) to its customers: Barbara's own enthusiasm, now fueled by the expectations of her customers (from Maine and Massachusetts, as well as lo-



#### **GREENHOUSE & NURSERY SUPPLIES**

# TAKE A 3-MONTH VACATION FROM INSECT CONTROL

MARATHON™ insecticide offers residual control lasting 12 weeks or more, thanks to a revolutionary new family of chemistry. That means you can control whiteflies, thrips, aphids, mealybugs and other pests for at least six times longer than most conventional insecticides. You'll save time Labor. And reduce worker exposure. Use MARATHON on poinsettias, mums, bedding plants, roses, cut flowers, foliage plants, cuttings, flowering plants and more. It's the only 1 % systemic granular insecticide available.

For more information, call 508-851-4346.



cal), will continue to expand the

Barbara's favorites this year (they change from year to year) include Lithodora ("long blooming; a gorgeous blue"); Saxifraga x endressii 'Red Carpet,' Salvia 'Cherry Blossom,' 'Peach Melba' nasturtiums; Nicoliana sulvestris...

Along with the new, she likes the old-fashioned: Calliopsis and Osteospermum are two of this year's reintroductions.

"Everything we can grow, we do. We can't expand because of the limited area, but we can buy in. Last year (under the old zoning regulations) it was 13%.

Are there trends? "People are into everything," she says. "They read more and come in with articles about plants that interest them."

Barbara still grows cut flowers less than when she was wholesaling, but enough to keep customers coming back in the quieter months of July and August. She tried offering cut-your-own, but people wanted completed arrangements and were willing to pay the additional cost. She sells no shrubs and, with the exception of the tuleurs and a selection of decorative pots, no hardgoods. Rye Ridge has one specialty: high-quality and unusual plants for the garden. These—along with the individualized service and lots of information—give it its niche.

MARKETING is done in two ways Although its roadside presence is very low-key, advertising is something Barbara strongly believes in "It's important to get the word out. When sales are down, it's easy to rationalize cutting costs, but that may be the time you should spend some money selling your product."

She advertises weekly in three or four local newspapers—and once the people are there, she relies on the display gardens ('seeing the plant growing helps people envision it in their own yards") and signage. "It's hard to convince people to try new plants—good signage is one way of getting the word out to them—we just don't have the time to talk to everyone."

The signs give a lot of informa-

tion. The sign for Sanvitalia, for example, gives its common name (Creeping Zinnia) and species (Mandarin Orange) and tells the readers that the plant is low, likes sun and high temperatures, is drought resistant, blooms early summer until frost and "is great in rock gardens." There is also a color picture of the plant. The sign format is set up on her computer, the signs are printed out and taken to a local copy center where they are printed on thicker stock; then the photo is added and the whole thing is laminated (Barbara has a laminator). Even with this, Barbara feels more signage is needed.

The information offered has led to another aspect of Rye Ridge—garden design and landscaping. Barbara does the design work (she likes the "English cottage garden" look) and she and a crew do jobs throughout-the summer until hard frost in the fall. These are smaller jobs—no heavy equipment is involved, but they allow her to see just how some of the newer material works out in practice. And it

gives new ideas she can pass on to her customers.

All this variety and information is labor intensive—eight or nine people can be working there during the height of the season. Automatic watering doesn't work well because "with that number of varieties, a lot of them in fairly small quantities, there's a wide range of requirements—some need watering, some don't...." A lot of individual attention is given.

"WE TRY to be as up-to-date as possible. We try to do the things a big grower would do, even if we do it on a small scale. We use a seeder—li's a hand seeder, but we use it. And when plugs came out, we used them immediately—ahead of some of the larger growers. I'm constantly reading about the industry..."

...and coming up with new ways to improve Rye Ridge—another new walkway up the hill; a shade garden near the pines; maybe another glass house replacing one of the plastics....

In winter, she needs to keep the heat on in the glass house in order to prevent the pipes from freezing. She grows one cool crop—Martha Washingtons—to wholesale. This done, she starts her pansy crop at the beginning of lanuary. The house—parallel to the road—becomes an advertisement. "People driving by can watch the progress of the crops and begin counting the days to the first of May." And every May there'll be new varieties and innovations. A lot can be done on two acres. (B.P.)

Rye Ridge Greenery is at 630 Washington Road, Rye, New Hampshire. It's open every day May 1-August 31 from 10 until five. The phone number there is (603) 964-5339.

#### TIPS

#### from the Griffin Guru



#### Ready to Go Gutter-connected?

Why should you start thinking about going to a gutter-connected greenhouse? Although factors and costs vary, the reason is still the same and can be summed up in one word efficiency.

When you decide you need increased efficiency in the production of your crop, gutter-connected structures may help you achieve this goal. Large block growing areas are most desirable when growing a single crop or several with similar requirements. Large block framing allows better temperature control with less surface heat loss and is ideal for boom watering systems which give uniform watering labor-free. Rolling benches—maximum growing surface without any sacrifice in crop handling ease—are also easily fitted in. These can be quickly expanded by elther widening or lengthening.

All in all, the gutter-connected greenhouse offers many benefits that should be looked into when thinking about your growing needs.

#### JOSEPH GIANNINO

Greenhouse Plants Unrooted • Rooted Prefinished Finished 56 Tuscano Avenue Revere, MA 02151 Home: 617-286-6541 Fax: 617-289-9412

Nursery Stock B & B Container Bare Root





600 Mamaroneck Ave. Harrison, NY 10528

Richard C. Zoerb

72 Hawkstead Hollow Nashua, NH 03063 603 886-8665

# STEENBURG & CALLIORAS THE AUCTION PROFESSIONALS, INC. TM

AUCTIONEERS:

Archie Steenburgh 603/989-5690 Route 10, Haverhill, NH 03765

Peter Callioras, C.A.I. 603/868-1070 Calef Highway (Lee), Dover, NH 03820

### Bemers Barden Center Inc.

656 South Mammoth Road (Rte. 28A) Manchester, NH 03109-5049 (603) 625-8298 • Fax (603) 622-4073

> Nursery • Greenhouses Craft & Christmas Shop

We Support The Plantsman



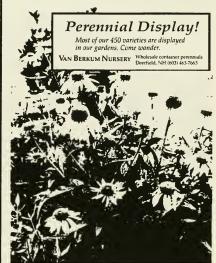
Box 250, One Evergreen Dr., Fryeburg, Maine 04037

The proof is in the planting.

We could turn blue in the face trying to tell you about the superiority of our service and conifer seedlings & transplants. Here's a better idea—call in your order and prove it to yourself.
Oh, remember to ask about our written warranty!

Place your order or receive our free catalog by calling: 1-800-447-4745 (or Fax 1-207-935-2043)

The been a completely happy customer for IS years. In my opinion, no better planting stock is available anywhere and the never dealt with any organization more devoted to customer satisfaction."—Peter Mollica Christmas Trees of Vermont, Springfield. VT



# GREEN THUMB FARMS NURSERY

Specializing in Evergreens

### Fall Listing

Pinus Mugo (Mugo Pine)	2-2 1/2	\$22.00	Taxus Capitata (Capitata Yew)	2 1/2-3	24.00
	2 1/2-3	30.00		3-3 1/2	32.00
	3-3 1/2	38.00		3 1/2-4	42.00
	3 1/2-4	45.00	Thuia Occidentalis-Woodwardi		
Pinus Strobus (White Pine)			(Globe Arborvitae)	1824	10.00
Lightly sheared	3-4	16.00	,	2-2 1/2	13.00
	45	22.00		2 1/2-3	17.00
	5—6	28.00	Tsuga Canadensis		
	6—7	35.00	(Canadian Hemlock)	2-3	18.00
Heavy plants	4-5	25.00	,	3-4	24.00
	56	42.00			

Route 113 — P.O Box 347 Fryeburg, Maine 04037



(207) 935-3341 Fax: (207) 935-3318

AUGUST / SEPTEMBER 21

Marse Bros. is offering very special pricing on our guaranteed Hemlock Bark Mulch from Maine Deluxe Burgundy Hemlock Hemlock Hemlock Call for Details All prices FOB Windham. Effective Date: 5/23

> 1-800-866-4991 MORSE RROS.

> > 32 Gambo Rd., Windham, ME 04062 (Tel) 207-892-1400 (Fax) 207-892-3400



## HARNESS THE SUN!!!

SUN-MATE FOR THE 90'S!

1, 2, 3 TEMPERED GLASS SKINS OR G.E. LEXAN OR ACRYLIC PLASTIC PANEL SKINS. SINGLE TEMPERED GLASS LEAST COSTLY AND PERMANENT.

TEMPERED GLASS ARCH RE-SKIN A SPECIALTY

See our tempered glass re-skin at UNH. We were chosen for high light, low maintenance, and permanent performance re-skin.

G.E. LEXAN AND ACRYLIC PLASTIC PANELS
NEW OR RENEW, 10 YEAR
WARRANTY BY MFGR,

Lexan Re-skin packages for old glass or plastic re-skin, prefabbed, instructions, and plans for easy installation or labor installed.

935-2111



THIS IS THE HEART OF SUN-MATE

SINGLE TEMPERED GLASS LOWEST COST AND PERMANENT!! ADD 2ND OR 3RD SKIN LATERII

"PIGGYBACK" Re-skin 1, 2, 3 tempered glass skins on old alum. glass greenhouses. Prefabricated package easy to install with plans & instructions or labor installed.

Office Phone Area Code 317 WINAND SF COMPANY INC. No. 4,658,339

> 2211 Peacock Road, Richmond, Indiana 47374 SUN-MATE TEMPERED GLASS "LOW SNOW" GREENHOUSES

NFW YOU CAN RE-SKIN OR ERECT WITH INEXPERIENCED LABOR AND "SAVE"III

EASY TO ERECT AND LIVE WITHII COMPLETE PREFAB. AND INSTRUCTIONS RENEW

SUN-MATE RE-SKIN AND REPLACEMENT VENTS LESS INVESTMENT THAN WOOD



PRESERVATION BEGINS:

# The Old Garden at the Hay Estate

Bill Noble



he gardens and landscape of The Fells, the former summer home of the Hay family and now a National Wildlife Refuge, State Historic Site, and project of The Garden Con-

toric site, and project of the Garden Conservancy, offer exciting opportunities for gardeners and others interested in landscape history and garden design. As John Hay, naturalist and author, observes, "This location has remained true to the integrity of the New Hampshire landscape, never having overwhelmed it. There is a balance between the wild and the tamed. Trees climb the hills and encourage one to feel that there are greater distances to find, out beyond the horizon." An example of this balance is found in the Old Garden, the first garden built on

the site and one that deserves a sensitive approach to its preservation in a cultural and natural setting.

During the late 1880s, John Hay combined nine farms into a single estate and built a cottage under hundred-year-old sugar maples. The Hays enjoyed the scenery, fresh air, and open fields above the lake in the company of family and friends. After John Hay's death in 1905, The Fells passed to his son Clarence, who soon began to alter it to suit his tastes. While still a student at Harvard. Clarence built the formal walled garden and a log cabin which he used for hunting and fishing trips. In 1914, he married the young Alice Appleton. She was more accustomed to the cultivated farmland of Ipswich, Mas-

AUGUST / SEPTEMBER 23

R\_\_\_\_\_\_\_\_\_



sachusetts, and felt daunted by the dark pines and boulder-strewn fields of Newbury. The young couple enlisted the aid of landscape architect Prentice Sanger to help them improve the house and gardens. In courting his wife, Clarence Hay had promised her that together they would build beautiful gardens, and so they did, dynamiting the rocks in the lawn and cutting down trees for the view. Over the next forty years, they pursued their horticultural interests with passion. They visited Europe, where they were particularly inspired by older gardens and the landscape of the Italian lakes. Alice Hay had a series of walls, courts and fountains designed as the set-

ting for a rose garden, a perennial border, and the display of choice plants. Clarence Hay became absorbed with the building and tending of the rock garden and gardening with native plants. Today many of the more ephemeral elements of these gardens are lost, but the structure provided by the architecture and plants remains. Many of the more successful plantings have matured and are now some of the best examples of their kind to be found in New Hampshire.

The story of the Old Garden provides a glimpse into Clarence Hay's gardening style and his interest in plants. Although the details of its history are not yet fully understood, it appears he laid out a garden bounded by stone walls along the edge of the woods north of the house. The garden was built along an east-west axis that on one end encompassed a sugar maple within a niche, and on the other a bust of Pan within a hedge of Abies concolor. The north side of the

"This location has remained true to the integrity of the New Hampshire landscape, never having overwhelmed it." main walled room was finished with a wooden bench and arbor, the south entry with a wooden trellis and gate. The intersection of the main axis was marked with a small statue on a pedestal: the intersection of the axis in the second room, with a fountain. Flower beds filled the quadrants in both garden rooms. The formal walled structure and its white painted wooden arbors and trellises were set amid the trees and accented with flowering vines, shrubs and perennials. Garden ornaments, many of them gifts of Chinese, Japanese and Mexican origin, were displayed in niches and on the walls. Outside the walled garden,

the walk up to the log cabin was bordered with lilacs and columbine. The Old Garden, sometimes called the Pan Garden, was exemplary of the formal garden style of the first decades of the twentieth century.

Over the years, the style and plants employed in the garden changed as the Hay family's tastes and interests changed and their interests in plants matured. The formal beds of annuals and perennials gave way to plantings of wild cardinal flower and choice trees and shrubs. Clarence Hay noted in his copy of L.H. Bailey's New Cyclopedia of American Horticulture a number of the different azaleas and rhododendrons which are still found in this garden today. In the middle 1920s, a rhododendron walk was under the high pines to the south and west of the garden. Dozens of catawba hybrids ('Boule de Neige' and R. maximum), along with Torch and Flame Azaleas and the native Mountain Pink still bloom from late May into July. Soon after a

1934 trip to Colonial Williamsburg, the couple added low boxwood edging to the garden. Photographs and an undated watercolor depict this garden as a happy combination of the architectural and ornamental.

The Old Garden was the focus of horticultural activity at the Fells into the 1920s and has retained much of its structure from those days. In subsequent years, the Hays turned their attention to such projects as the Rock Garden. The Old Garden became less of a focus and began to acquire the grace and inattention of age. A combination of formal structure and neglect gives it the flavor of archeology and romance. Narrow paths lead visitors through rhododendrons into the unexpected ruins of the walled garden. The combination of Italian-style masonry and the Colonial Revival woodwork, the vandalized statue of Pan, and the overscaled yews and rhododendrons remind one of the ultimate decadence of most gardens, but the keen plantsperson is able to see into its history. Beneath tall trees and among the rhododendrons are found mature Chinese dogwood. Andromeda, Leucothoe, Enkianthus, Fringetree, and-on the floor-bunchberry, heather and ferns.

As preservation plans begin to develop at The Fells, these gardens become more and more of a challenge and opportunity. Under the active direction of the Garden Conservancy, a dedicated corps of local volunteers have devoted the years 1993 and 1994 to stabilizing plants and structures, pruning trees, and painting woodwork. A plant inventory, survey of existing conditions, and historical research are the next stages of the preservation process to be undertaken. In 1995, we hope to be able to develop a preservation treatment plan for this garden with the cooperation of the preservation, horticultural, and design communities. The Old Garden has been a most challenging place to begin our efforts.

The Hay Estate is operated as The Fells State Historic Site at the John Hay National Wildlife Refuge in Newbury, NH and is a project of The Garden Conservancy. The gardens and grounds are open to visitors daylight hours year round. For more information or to volunteer or contribute please contact: Bill Noble, Director of Landscapes, The Garden Conservancy at The Hay Estate, P.O. Box 276, Newbury, NH 03255; (603) 763-4789.



75 CHESTNUT HILL, RTE 190 STAFFORD SPRINGS, CT 06076

W. H. MILIKOWSKI. INC.

GREENHOUSE SUPPLIES & EQUIPMENT PLANTS BULBS SEEDS ALL YOUR GREENHOUSE NEEDS

GROW WITH US

Conn. 203-684-5811 Out of State 800-243-7170



popular misconception regarding biological A pest control is that the only weapon at the grower's disposal is beneficial insects. This is not the case. All tools normally used in an Integrated Pest Management (IPM) program-with the exception of chemical substances-are available. And their use is highly recommended.

The weapons in the arsenal include: traps, lures, trap crops (crops that lure and sustain beneficials while diverting pests), physical barriers, environmental barriers and controls, cultural manipulation, soapy sprays, horticultural oils, Bacillus thuringiensis formulations, vacuuming (this works well on whitefly adults), safe botanical insecticides (such as Neem), and even hand-picking.

Just because the grower is committed to using beneficials, that doesn't mean he or she should stop being interactive. The grower should utilize the controls available and not be content to watch fate run its course. In the greenhouse, the grower is still who's in charge.

Mike Cherim, owner of the Green Spot, a company supplying biological pest control agents and associated products, can be reached at 603-942-8925



# MICHAUD

Nurseries & Greenhouses, Inc. Route 85, PO Box 334, Exeter, NH 03833 (603) 772-3698

Wholesale & Retail Annuals, Perennials, Nursery Stock, Landscape Supplies

#### Since 1890

- all your needs:
- e Seeds
- Foliage & Ferna
- · Nursery Stock
- · Potting Mixes Containers
- e Greenhouses
- e Geraniuma & Muma
- Perenniale

P.O. Box 160, King of Prussia, PA 19406 (215) 265-4200

> SCOTT A. STEWART 421 Park Street West North Reading, MA 01864 Phone: 508-664-0096 FAY: 508-884-4076

# Best conventional medium duty truck in customer satisfaction.





LIBERTY INTERNATIONAL TRUCKS, INC. 1400 South Willow Street, Manchester, NH 03103 (603) 623-8873 NE WATS: 1-800-562-3814 Fax #1-603-641-9486

### **CD OWNERS!**

Are You Earning



%

Interest Rate
Guaranteed
For One Year?

No Annual Fees!

Guaranteed Return of Principal! Multiple Income Features!

Call Now For More Information On Tax-deferred Annuities

MICHAEL BARNEA

Wageman Ins. Inc.

1-800-439-2451

Golden Rule Insurance Company. Rated "A+" (Superior) by A.M. Best. This rating indicates financial strength and stability.

This annuity includes a 3% first-year bonus. Rate as of 1-3-94, subject to change.

221A-1093

Form GRI-AN-10

# Our strength, our employees"

FOR A GREENHOUSE DEFINITLY
DIFFERENT CONTACT:

ELLIS B.SPRAGUE
Manufacturer representative



ORONO, MAINE

TEL: 207-866-7919 FAX: 207-866-4747

HARNOIS

## Produce healthier lawns, gardens, trees and shrubs with AllGro''compost.

- Increase nutrient and water retention.
- m Provide natural fertilization for long
- Increase organic matter to reduce compaction and erosion.
- empaction and erosion.

  Provide slow release of
- nitrogen and trace minerals.

term growth.

- Prevent turf diseases from forming.
- Improve soil aeration and consistant root development.
- Be assured that it is a weed free product.
- Save money over using topsoils, peatmoss and manures.

Bulk delivery throughout the Northeast. For price and information on AllGro<sup>19</sup> products, please contact:



The Compost Company

AllGro Inc., Liberty Lane, Hampton, NH 03842 800.662.2440

#### BOARD HIGHLIGHTS

JUNE 7

Andrea, Bob, Chris, Henry, and Peter met at Pleasant View.

Ben is resigning from the Board because of commitments in town government.

Henry reported on the NE Greenhouse Conference, saying that the program looked strong and that this and some new ideas (a bus tour of nearby nurseries and garden centers) promise a good show.

The Summer Meeting was discussed. Andrea and Henry will look into hus rental

Andrea will also look into attractive Lakes Region bed-and- breakfasts. A weekend for two at one of these is being considered for the main door prize. Bob has donated two pairs of tickets to a Red Sox ball game as another. Chris will look into a dinner cruise on the Mount Washington for a third

The Board is redefining the application guidelines for the NHPGA Scholarships. These would make the scholarships available to any NHPGA member or family member studying an agriculturally related subject at a school of higher learning. (Currently scholarships are given each year to one student at the Thompson School and one at the four-year school at UNH. Durham.) The format for applying (a letter to the Board) would be the same. This should increase the number of applicants (the dwindling number has been a concern), as well as give an additional benefit to being a member. Chris will write up the rule changes and these will be refined and approved at the next board meeting.

It was also decided that any money from the auction not given as scholarships would be put into the Research Fund (right now about \$5000) established last year. (The interest from this would eventually sponsor research the Board feels would be useful to New Hampshire horticulture.) Peter and Henry will look into finding a financial manager to oversee this fund.

**IULY 5** Andrea, Bob, Chris, Henry, Peter, Roger, and Tammu attended.

There's the possibility of a garden & flower show being organized in Rochester next year. Details seem unclear. The NHPGA was asked for its support; the Board will allow its membership lists to be used for promotional activities.

The NE Greenhouse Conference looks solid and full of useful information. Henry was optimistic.

Summer Meeting:

Things seem in place-Bill and Ed are ready. Ed will furnish fresh New Hampshire-grown corn and lettuce for the noon meal.

Andrea had looked into door prize possibilities and offered sev-

eral suggestions. It was decided to give a weekend at Christmas Tree Farm in lackson as the main prize. Tickets to a Red Sox game will also be given

Pleasant View will be sponsoring the bus taking people to Spider Web from Ledgewood. This generous assistance is appreciated.

Roger has planned a questionnaire soliciting information to be used in next year's Farm & Forest flier. This will be at or near the registration desk

It was decided to give three honorary memberships (and plaques) at the meeting.

Peter announced that the 1995 Winter Meeting will be a joint meeting with the New Hampshire Landscape Association held at the Granite Street Bar & Grill, Manchester, on lanuary 18. There will be separate early morning sessions to allow the organizations to conduct business meetings and have maybe one speaker very specific to their own interests. The rest of the day will be joint sessions.

It was voted to open the scholarship fund to NHPGA members and their families without changing the present rules and application procedures.

Tammy will arrange a third twilight meeting for 1995. When all three are in place, a single flier will be sent to members.

Laughton's Garden Center Inc. Cal Laughton, Florist

NURSERY STOCK . ANNUALS PERENNIALS FERTILIZERS • INSECTICIDES CHARLES LAUGHTON, PRESIDENT DAVE POLGREEN, NURSERY SALES

Distributors of Nursery Overwintering Blankets

#### WHOLESALE AND RETAIL NURSERY

Tel. 1-800-633-0159 155-165 Princeton Blvd. No. Chelmsford, MA 01863

#### PPGA HIGHLIGHTS

### Growing Basics for Salvia

Salvia splendens, Salvia, Lamiaceae

The genus contains over 500 species and many are grown as garden plants. Ornamental plant breeders have concentrated their efforts on the red bedding salvia but plants are now available in lavender, pink, white, purple and bicolors in a range of heights.

#### Forms Available

DWARF (10-12"), medium (12-25") and tall (>25") cultivars are available in a wide range of colors.

#### Cultivars

DWARF: 'Fuego' (red), 'Hot Stuff' (red), Sizzler series.

MEDIUM: Carabiniere series, 'Pharaoh' (red), 'Red Pillar' (red), 'St John's Fire' (red), Top series.

TALL: 'America' (red), 'Early Bonfire' (red), 'Rambo' (red).

#### Propagation

Propagated by seed; cleaned & graded seed are available from distributors.

TEMPERATURE: Seeds are initially germinated at 75-79°F (24-26°C), then reduced to 70-72°F (21-22°C) after about 1 week. Germination is complete around 14 days.

LIGHT: Salvia benefits from light during germination. Seeds should only be lightly covered to maintain high moisture around the seeds. Supplemental light is useful at the earliest stages of germination.

#### Growing on

#### TRANSPLANTING

Traditional: Seedlings are transplanted as soon as they can be handled. Transplanting occurs 3-4 weeks after sowing. Plugs: Seedlings remain for 5-6 weeks in plugs.

TEMPERATURE: In plugs, stage 3 and 4 are grown around 59-63°F (15-17°C) until transplanting. After transplanting (traditional or plugs), night temperatures of 55-59°F (13-15°C), day temperatures 70-75°F (21-24°C) result in good growth.

PHOTOPERIOD: Photoperiod is cultivar dependent, i.e. 'America' is SD, 'Carabiniere Red' is day-neutral and 'St. John's Fire' is LD. In general, growers do not apply specific photoperiod unless growing for a early or late market.

LIGHT: In the greenhouse, Salvia is a high-light plant. Supplemental light while plants are in the seedling stage accelerates growth. Low light levels cause plant stretch

CARBON DIOXIDE: Young Salvia plants respond well to 1000-1500 ppm CO2.

FERTILIZATION: Fertilization of 50-75 ppm N of KNO, benefits plugs in stage 2 and 3 and once plants are transplanted and actively growing, 100-150 ppm from a complete fertilizer is sufficient. Maintain pH between 5.5 and 6.2.

HEIGHT CONTROL: Chemical height control by daminozide (5000 ppm, 2 times) and chlomequat (750-1000 ppm, 2-4 times) is effective. DIF is

#### also used.

#### Common Problems

PHYSIOLOGICAL: Seedlings are highly sensitive to methyl bromide and will be distorted and stunted if germinated in soil contaminated with even minute amounts of the chemical. High soluble salts result in necrotic foliage. Leaf drop is common when plants are stressed. PESTS: Aphids, whiteflies and spider

mites are common pests of Salvia.

DISEASES: Botrytis under cool, moist conditions can be a problem. Rhizoctonia and Pythium are responsible for damping off of seedlings.

#### Postharvest Concerns

Plants should be placed in a shady spot of the retail area. They are tolerant of cool weather, although some reddening of foliage may occur when temperatures fall below 50°F (10°C).

#### Schedule

TRADITIONAL: Approximately 10 weeks are required from seed to flower, although faster flowering may occur if supplemental light, photoperiod and CO2 are used.

PLUGS: 5-6 weeks in the plugs, followed by about 5 weeks in the final container.

Adapted from a Bedding Plant Seminar presented by Allan Armitage. Tron Dudek, Scott Gortsema & Bruce Knox during the PPGA Conference & Trade Show in Tamp, Florda, 1993. This was printed in PPGA NEWS, May 1994, and is the seventh in a series of crop production guidelines aimed at helping growers gain a thorough understanding of bedding plant basics. For more: 1-800-647-7742



# Wholesale

Gold Star Wholesale Nursery is a family owned business. Since 1952 we have been offering the finest wholesale planting materials to landscape contractors throughout the N.E. area along with the one element that truly sets us apart from the competition..service.

Gold Star welcomes your comments and suggestions.

Make us your one-stop for the best in wholesale landscape supplies.

Canterbury, New Hampshire 03224 Exit 18, 1-93, 1/2 mile = Tel: 800-287-4716

# Rathan Fardens

#### Wholesalers & Retailers



- Annuals
- Perennials



Visit our 12 Greenhouses & Garden Center Claremont Hill, Newport, New Hampshire (603) 863-1089 OPÈN YEAR ROUND



- ·Seasonal Crops
- Supplies





#### **AUSTRIAN PINE, 5-8' height**

Beautiful, Heavy, Connecticut Valley Nursery Grown. Growing 500 Acres of New England's Finest Trees & Shrubs



604 MAIN STREET, CROMWELL CONNECTICUT 06416 / PHONE (203) 635-5500 / FAX (203) 635-3685



#### TWILIGHT MEETINGS

# Gateway Gardens

430 LOUDON ROAD, CONCORD

On Wednesday, September 14, from 5:30-7:70 P.M., NHPGA members and friends will have a chance to tour one of the Concord area's newer and larger garden centers.

What's interesting about Gateway Gardens is that it didn't develop over a long period of time, but appeared suddenly in finished form on what used to be field this spring. The buildings include a big barn (40x70; 35 feet to the peak) and two Rough Brothers houses (30x70 and 30x80). There's a nursery yard and parking for 30 cars.

So what has the first five months been like? Did reality live up to expectations? Will the marketplace modify the original design?

Come and find out. Owners Kirk Weyant and Sue Englund will give a tour and talk about (among other things) the initial planning—how Gateway evolved on paper, some of its innovative features (a children's section, for example), and some of the strategies used to quickly create a customer base large enough to support an operation of this size.

And there'll be refreshments and a chance to socialize. Gateway Gardens is located on Route 9 about a half mile from where it turns off from Route 393/4/202. The phone number there is (603) 229-0655.

#### ASSOCIATION OFFICERS

President
BOB DEMERS, IR.
Demers Nursery & Garden Center
656 South Mammoth Road
Manchester, NH 03103
625-8298

Secretatry / Treasurer CHRISTOPHER ROBARGE UNH/TSAS Horticultural Facilities Manager Durham, NH 03824 862-1074

Directors

ANDREA CAPRON Box 332 Center Ossipee, NH 03814 539-6030

> TAMMY HATHAWAY 61 Squamscott Road Stratham, NH 03885 778-3912

HENRY HUNTINGTON Pleasant View Gardens RFD #3, PO Box 3701 Pittsfield, NH 03263 435-8361

PETER VAN BERKUM 4 James Road Deerfield, NH 03037 463-7663

ROGER WARREN Box 318 Meriden, NH 03770 469-3226 (H); 448-6110 (W)

RICHARD ZOERB Gloeckner & Company, Inc. 72 Hawkstead Hollow Nashua, NH 03063 886-8665



NON-PROFIT ORGANIZATION US POSTAGE PAID PERMIT NO. 43

NH PLANT GROWERS ASSOCIATION The Plantsman Editor UNH Research Greenhouses Durham, NH 03824