



**\$4.7 Billion & Growing**

*A summary of the impact of the  
Environmental Horticulture Industry  
on the New England economy*

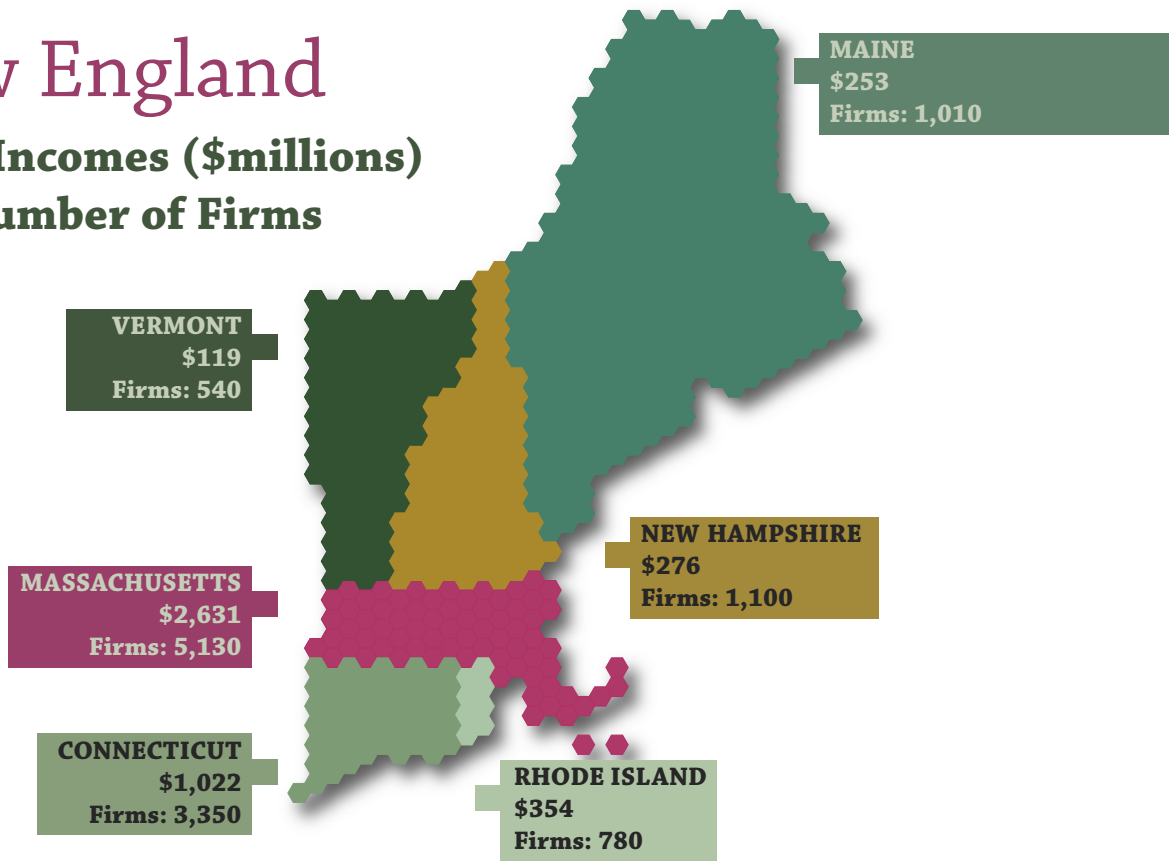
February 2009

Sponsored by: New England Nursery Association

Conducted by: University of Vermont Extension  
University of Maine Cooperative Extension

# New England

## State Incomes (\$millions) and Number of Firms



## \$4.7 Billion & Growing

### Environmental Horticulture in New England

is *many* types of businesses...

There are **more than 11,900 firms** in the region. These include wholesale and retail nurseries and greenhouses, plus retail garden centers and florists. The largest sector comprises those providing landscape, lawn, and tree services. The **industry is diverse**, with over half of firms involved in two or more types of business.

is *growing*...

**Income increased** an average **25 percent per firm**, for over 6000 firms. Over the last three year period, **industry income grew** for 56 percent of firms over the region. Over the last six years, industry income has grown 15 percent.

*produces* and sells plants...

Four out of five firms sell plants, with half the total regional income from plant sales. Half of firms sell plants grown totally or at least partially by them, comprising **60 percent of total plant sale income**.

*provides* many jobs...

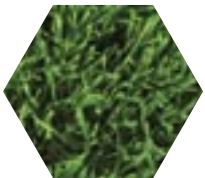
An estimated **156,000 people are employed** in this industry. **An additional 28,000 employees are needed** with 14,000 of those being full time positions. More than half are fully employed, with an estimated **85,000 jobs being full time**. This industry paid an estimated **\$2.0 billion to employees** in 2007 including benefits, almost half (43 percent) of region income. Over a three year period from 2004 to 2007, an average **34 percent more was spent on labor** per firm. More than half the firms spent more on labor.

*supports* the economy...

Businesses in this industry paid almost **\$450 million** in taxes in 2007. Taxes increased for over half the firms. The average increase per firm was 30 percent.

*protects* agricultural land and green space...

This industry is keeping more than **221,000 acres** in agriculture, of which almost half is open space and almost a third is in a land preservation program.



# Environmental Horticulture is a solid part of New England's agriculture sector.

The value added to our local economy through New England's wholesale nursery and greenhouse growers, retail garden centers and florists, landscape and tree care professionals in 2007 reached nearly \$4.7 billion. Additionally, the Environmental Horticulture Industry substantially impacts the region through active stewardship of the environment.

This study surveyed New England's Environmental Horticulture Industry—comprising more than 11,900 businesses that earn at least half their income from green industry activities. The results clearly quantify the many positive ways this industry affects the regional economy including volume of business, cost of doing business, employment opportunities, tax contributions and future growth potential.

The industry is made up of multi-generation, family businesses whose hard work in challenging conditions has put New England on the map as producing the country's hardiest plants. Their success, coupled with that of expert growers, cutting-edge garden centers, innovative landscape contractors and designers, progressive tree care professionals and other visionary members of the regional green industry, promises a continuing bright future for Environmental Horticulture in New England.



## Environmental Horticulture

*We grow, sell, install, maintain and preserve the living landscape.*



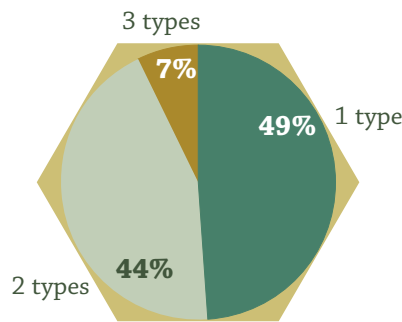
### Table of Contents

- 4 Connecticut**  
More than 3,350 firms are in the industry.
- 6 Maine**  
Over half the firms grow many of their own plants.
- 8 Massachusetts**  
More than 5,130 firms are in the industry.
- 10 New Hampshire**  
A majority of income from plant sales was from plants produced partially or totally by the seller.
- 12 Rhode Island**  
Plant sales make up 82 percent of total state industry income.
- 14 Vermont**  
Over two-thirds of firms paid more taxes over the past three years.



# Connecticut **\$1.0 Billion**

## Percent of firms in one or more types of business



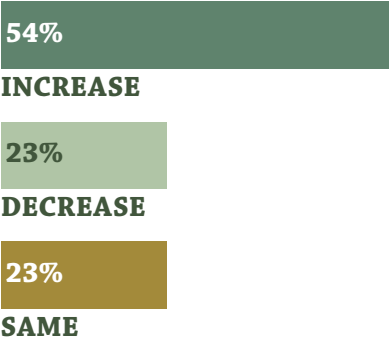
**Environmental Horticulture is a major sector of agriculture in Connecticut. There are more than 3,350 firms in this industry.**

These firms are involved in:

- **PRODUCTION:** nurseries, greenhouses, herbs, cut flowers, turfgrass.
- **RETAIL:** garden centers, florists.
- **LANDSCAPE SERVICES:** landscape design, installation, maintenance, lawn care, tree care.

*Many firms are involved in more than one of these types of business.*

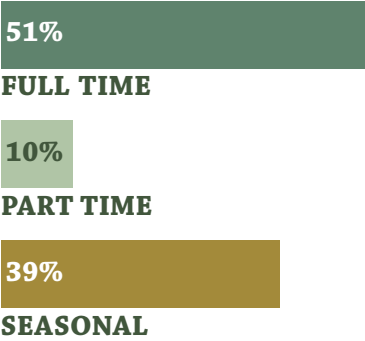
## Income of firms surveyed



**The Environmental Horticulture industry produces income. The estimated value in Connecticut for 2007 is \$1.022 billion in gross income.**

- Similar to the previous survey in 2004, income has grown for more than half of firms.
- Over the three year period, between 2004 and 2007, more than **1,800 firms increased their income**. The average increase per firm was 17 percent.
- Many additional firms, not counted in this survey, derive at least partial income from this industry. These include seasonal outlets such as roadside markets, hardware stores, mass market stores, and property maintenance firms.

## People employed by businesses



**Environmental Horticulture provides MANY jobs. At least 48,000 people are employed in this industry. An additional 5,800 are needed.**

- Half of those in this industry are fully employed. An estimated **24,000 jobs are full time**. An additional 3,300 are needed.
- This industry paid an estimated **\$490 million to employees** in 2007 including benefits, almost half (48 percent) of state income.
- More than half the businesses (56 percent) reported an increase in the cost of labor. The average increase per firm from 2004 to 2007 was 15 percent.

## Types of businesses

67%

**LANDSCAPE & TREE SERVICES**

49%

**RETAIL**

39%

**WHOLESALE PRODUCTION/SALES**

14%

**OTHER**

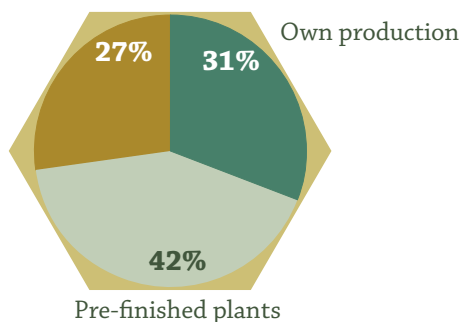
## Environmental Horticulture is diverse.

Three-quarters of firms offer, derive income from, and provide jobs in, landscape and tree services.



## Income from plant sales

Finished plants



**Plant production and sales are a significant part of the Environmental Horticulture industry. Plant sales generate over \$583 million.**

This includes:

- \$181 million from plants produced totally by the seller. Almost a third of firms selling plants grew many from start to finish.
- \$245 million from young plants purchased (“pre-finished”), then grown further prior to selling.
- \$157 million from “finished” plants bought for resale, either wholesale or retail.

***Plant production generates \$426 million. A majority of firms (89 percent) sell plants.***

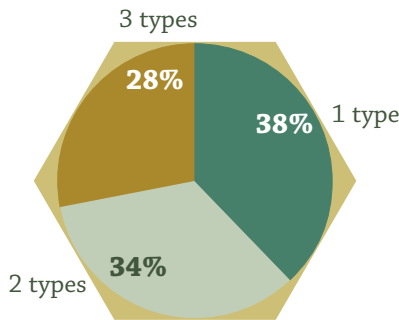
## More facts about Environmental Horticulture in Connecticut



- The industry is keeping more than 46,000 acres in agriculture, of which 23 percent is open space and at least 3 percent is in a land preservation program.
- Businesses in this industry paid an estimated \$150 million in taxes in 2007. Over half the firms (61 percent) reported an increase in taxes paid. The average increase per firm was 19 percent.
- The top three major concerns expressed by a majority of this industry were energy costs, health care costs, and immigration/labor issues.

# Maine \$253 Million

## Percent of firms in one or more types of business



**Environmental Horticulture is a major sector of agriculture in Maine. There are more than 1,010 firms in this industry.**

These firms are involved in:

- ◆ **PRODUCTION:** nurseries, greenhouses, herbs, cut flowers, turfgrass.
- ◆ **RETAIL:** garden centers, florists.
- ◆ **LANDSCAPE SERVICES:** landscape design, installation, maintenance, lawn care, tree care.

*Many firms are involved in more than one of these types of business.*

## Income of firms surveyed

60%

**INCREASE**

16%

**DECREASE**

24%

**SAME**

**The Environmental Horticulture industry produces income. The estimated value in Maine for 2007 is \$253 million in gross income.**

- ◆ Similar to the previous survey in 2004, income has grown for almost two-thirds of firms.
- ◆ Over the three year period, between 2004 and 2007, more than **600 firms increased their income**. The average increase per firm was 25 percent.
- ◆ Many additional firms, not counted in this survey, derive at least partial income from this industry. These include seasonal outlets such as roadside markets, hardware stores, mass market stores, and property maintenance firms.

## People employed by businesses

40%

**FULL TIME**

8%

**PART TIME**

52%

**SEASONAL**

**Environmental Horticulture provides MANY jobs. At least 12,000 people are employed in this industry. An additional 1,300 are needed.**

- ◆ Almost half of those in this industry are fully employed. An estimated **4,800 jobs are full time**. An additional 240 are needed.
- ◆ This industry paid an estimated **\$110 million to employees** in 2007 including benefits, almost half (43 percent) of state income.
- ◆ Two-thirds of the businesses (68 percent) reported an increase in the cost of labor. The average increase per firm from 2004 to 2007 was 15 percent.

## Types of businesses

76%

**LANDSCAPE & TREE SERVICES**

66%

**RETAIL**

48%

**WHOLESALE PRODUCTION/SALES**

10%

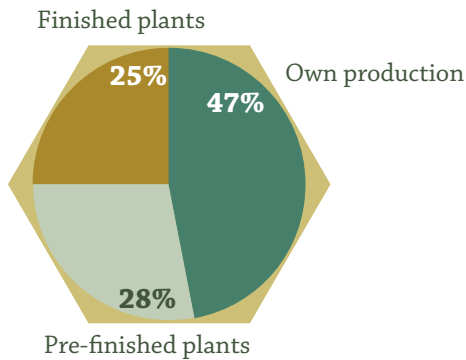
**OTHER**

## Environmental Horticulture is diverse.

Three-quarters of firms offer, derive income from, and provide jobs in, landscape and tree services.



## Income from plant sales



**Plant production and sales are a significant part of the Environmental Horticulture industry. Plant sales generate over \$101 million.**

This includes:

- ◆ \$47 million from plants produced totally by the seller. Over half of firms selling plants grew many from start to finish.
- ◆ \$28 million from young plants purchased (“pre-finished”), then grown further prior to selling.
- ◆ \$25 million from “finished” plants bought for resale, either wholesale or retail.

***Plant production generates \$75 million. A majority of firms (83 percent) sell plants.***

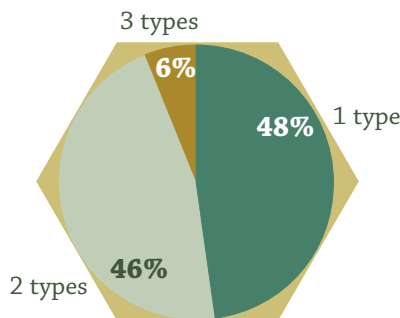
## More facts about Environmental Horticulture in Maine



- ◆ The industry is keeping an estimated 17,200 acres in agriculture, of which 47 percent is open space and 36 percent is in a land preservation program.
- ◆ Businesses in this industry paid an estimated \$21 million in taxes in 2007. Over half the firms (61 percent) reported an increase in taxes paid. The average increase per firm was 32 percent.
- ◆ The top three major concerns as expressed by this industry were energy costs, health care costs, and immigration/labor issues.

# Massachusetts \$2.6 Billion

## Percent of firms in one or more types of business



**Environmental Horticulture is a major sector of agriculture in Massachusetts. There are more than 5,130 firms in this industry.**

These firms are involved in:

- **PRODUCTION:** nurseries, greenhouses, herbs, cut flowers, turfgrass.
- **RETAIL:** garden centers, florists.
- **LANDSCAPE SERVICES:** landscape design, installation, maintenance, lawn care, tree care.

*Many firms are involved in more than one of these types of business.*

## Income of firms surveyed

50%

**INCREASE**

24%

**DECREASE**

26%

**SAME**

**The Environmental Horticulture industry produces income. The estimated value in Massachusetts for 2007 is \$2.631 billion in gross income.**

- Similar to the previous survey in 2004, income has grown for at least half of firms.
- Over the three year period, between 2004 and 2007, more than **2,600 firms increased their income**. The average increase per firm was 31 percent.
- Many additional firms, not counted in this survey, derive at least partial income from this industry. These include seasonal outlets such as roadside markets, hardware stores, mass market stores, and property maintenance firms.

## People employed by businesses

63%

**FULL TIME**

18%

**PART TIME**

19%

**SEASONAL**

**Environmental Horticulture provides MANY jobs. At least 68,000 people are employed in this industry. An additional 14,000 are needed.**

- Almost two-thirds of those in this industry are fully employed. An estimated **43,000 jobs are full time**. An additional 7,500 are needed.
- This industry paid an estimated **\$1.03 billion to employees** in 2007 including benefits, over a third (39 percent) of state income.
- Almost half the businesses (46 percent) reported an increase in the cost of labor. The average increase per firm from 2004 to 2007 was 40 percent.



## Types of businesses

78%

**LANDSCAPE & TREE SERVICES**

48%

**RETAIL**

28%

**WHOLESALE PRODUCTION/SALES**

16%

**OTHER**

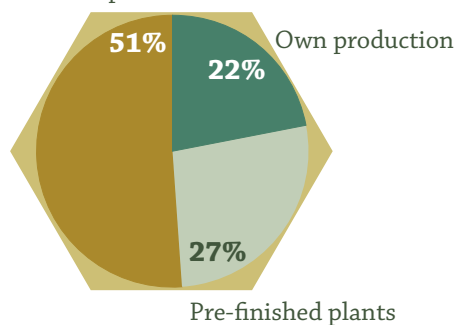
## Environmental Horticulture is diverse.

Three-quarters of firms offer, derive income from, and provide jobs in, landscape and tree services.



## Income from plant sales

Finished plants



**Plant production and sales are a significant part of the Environmental Horticulture industry. Plant sales generate over \$1.3 billion.**

This includes:

- \$284 million from plants produced totally by the seller. Almost a third of firms selling plants grew many from start to finish.
- \$348 million from young plants purchased (“pre-finished”), then grown further prior to selling.
- \$657 million from “finished” plants bought for resale, either wholesale or retail.

**Plant production generates \$632 million.** A majority of firms (74 percent) sell plants.

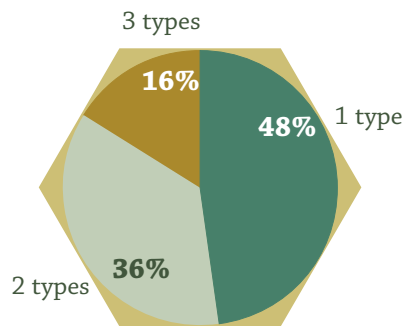
## More facts about Environmental Horticulture in Massachusetts



- The industry is keeping an estimated 90,000 acres in agriculture, of which 38 percent is open space and 40 percent is in a land preservation program.
- Businesses in this industry paid an estimated \$225 million in taxes in 2007. Almost half the firms (43 percent) reported an increase in taxes paid. The average increase per firm was 18 percent.
- The top three major concerns as expressed by this industry were energy costs, health care costs, and immigration/labor issues.

# New Hampshire \$276 Million

## Percent of firms in one or more types of business



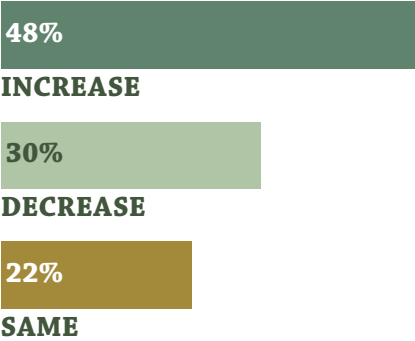
**Environmental Horticulture is a major sector of agriculture in New Hampshire. There are more than 1,100 firms in this industry.**

These firms are involved in:

- **PRODUCTION:** nurseries, greenhouses, herbs, cut flowers, turfgrass.
- **RETAIL:** garden centers, florists.
- **LANDSCAPE SERVICES:** landscape design, installation, maintenance, lawn care, tree care.

*Many firms are involved in more than one of these types of business.*

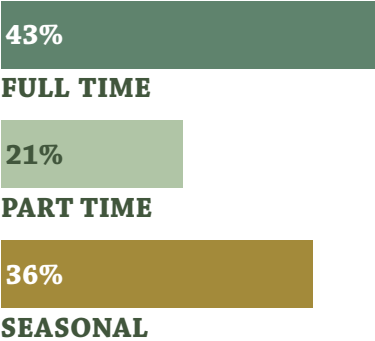
## Income of firms surveyed



**The Environmental Horticulture industry produces income. The estimated value in New Hampshire for 2007 is \$276 million in gross income.**

- Similar to the previous survey in 2004, income has grown for at least half of firms.
- Over the three year period, between 2004 and 2007, more than **530 firms increased their income.** The average increase per firm was 17 percent.
- Many additional firms, not counted in this survey, derive at least partial income from this industry. These include seasonal outlets such as roadside markets, hardware stores, mass market stores, and property maintenance firms.

## People employed by businesses



**Environmental Horticulture provides MANY jobs. At least 12,000 people are employed in this industry. An additional 1,100 are needed.**

- Almost half of those in this industry are fully employed. An estimated **5,000 jobs are full time.** An additional 400 are needed.
- This industry paid an estimated **\$140 million to employees** in 2007 including benefits, almost half (46 percent) of state income.
- Two-thirds of the businesses (53 percent) reported an increase in the cost of labor. The average increase per firm from 2004 to 2007 was 23 percent.

## Types of businesses

72%

LANDSCAPE & TREE SERVICES

56%

RETAIL

40%

WHOLESALE PRODUCTION/SALES

24%

OTHER

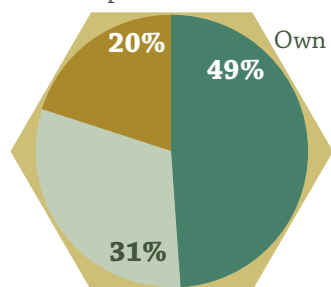
## Environmental Horticulture is diverse.

Three-quarters of firms offer, derive income from, and provide jobs in, landscape and tree services.



## Income from plant sales

Finished plants



Own production

Pre-finished plants

**Plant production and sales are a significant part of the Environmental Horticulture industry. Plant sales generate over \$146 million.**

This includes:

- ◆ \$72 million from plants produced totally by the seller. Almost half of firms selling plants grew many from start to finish.
- ◆ \$45 million from young plants purchased (“pre-finished”), then grown further prior to selling.
- ◆ \$29 million from “finished” plants bought for resale, either wholesale or retail.

***Plant production generates \$117 million. A majority of firms (84 percent) sell plants.***

## More facts about Environmental Horticulture in New Hampshire

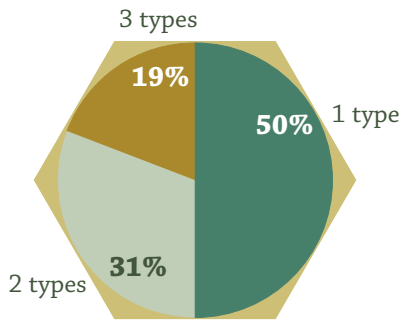


- ◆ The industry is keeping an estimated 25,000 acres in agriculture, of which 68 percent is open space and 36 percent is in a land preservation program.
- ◆ Businesses in this industry paid an estimated \$15 million in taxes in 2007. Over one third of the firms (36 percent) reported an increase in taxes paid. The average increase per firm was 39 percent.
- ◆ The top three major concerns as expressed by this industry were energy costs, health care costs, and immigration/labor issues.

# Rhode Island

# \$354 Million

## Percent of firms in one or more types of business



**Environmental Horticulture is a major sector of agriculture in Rhode Island. There are more than 780 firms in this industry.**

These firms are involved in:

- **PRODUCTION:** nurseries, greenhouses, herbs, cut flowers, turfgrass.
- **RETAIL:** garden centers, florists.
- **LANDSCAPE SERVICES:** landscape design, installation, maintenance, lawn care, tree care.

*Many firms are involved in more than one of these types of business.*

## Income of firms surveyed

69%

**INCREASE**

12%

**DECREASE**

19%

**SAME**

**The Environmental Horticulture industry produces income. The estimated value in Rhode Island for 2007 is \$354 million in gross income.**

- Similar to the previous survey in 2004, income has grown for about two-thirds of firms.
- Over the three year period, between 2004 and 2007, more than **540 firms increased their income.** The average increase per firm was 23 percent.
- Many additional firms, not counted in this survey, derive at least partial income from this industry. These include seasonal outlets such as roadside markets, hardware stores, mass market stores, and property maintenance firms.

## People employed by businesses

51%

**FULL TIME**

14%

**PART TIME**

35%

**SEASONAL**

**Environmental Horticulture provides MANY jobs. At least 11,000 people are employed in this industry. An additional 4,000 are needed.**

- Half of those in this industry are fully employed. An estimated **5,600 jobs are full time.** An additional 1,800 are needed.
- This industry paid an estimated **\$150 million to employees** in 2007 including benefits, almost half (42 percent) of state income.
- Three-quarters of businesses (73 percent) reported an increase in the cost of labor. The average increase per firm from 2004 to 2007 was 40 percent.



## Types of businesses

56%

LANDSCAPE & TREE SERVICES

63%

RETAIL

50%

WHOLESALE PRODUCTION/SALES

19%

OTHER

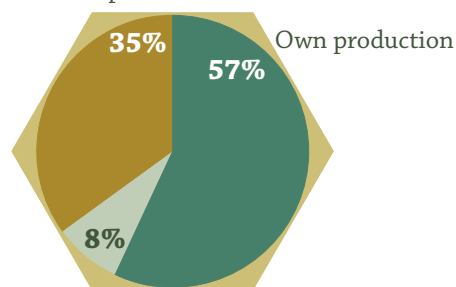
## Environmental Horticulture is diverse.

More than half of firms offer, derive income from, and provide jobs in, landscape and tree services.



## Income from plant sales

Finished plants



Pre-finished plants

**Plant production and sales are a significant part of the Environmental Horticulture industry. Plant sales generate over \$290 million.**

This includes:

- ◆ \$165 million from plants produced totally by the seller. Half of firms selling plants grew many from start to finish.
- ◆ \$23 million from young plants purchased (“pre-finished”), then grown further prior to selling.
- ◆ \$102 million from “finished” plants bought for resale, either wholesale or retail.

**Plant production generates \$188 million.** A majority of firms (75 percent) sell plants.

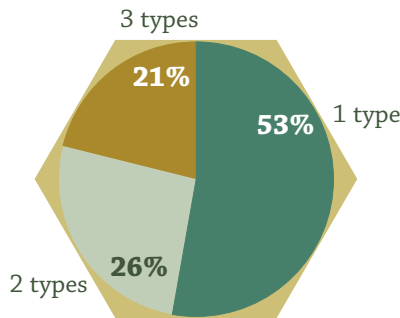
## More facts about Environmental Horticulture in Rhode Island



- ◆ The industry is keeping an estimated 31,000 acres in agriculture, of which 41 percent is open space and 21 percent is in a land preservation program.
- ◆ Businesses in this industry paid an estimated \$26 million in taxes in 2007. Over two-thirds of the firms (69 percent) reported an increase in taxes paid. The average increase per firm was 32 percent.
- ◆ The top three major concerns as expressed by a majority of this industry were health care costs, energy costs, and immigration/labor issues.

# Vermont \$119 Million

## Percent of firms in one or more types of business



**Environmental Horticulture is a major sector of agriculture in Vermont. There are more than 540 firms in this industry.**

These firms are involved in:

- ◆ **PRODUCTION:** nurseries, greenhouses, herbs, cut flowers, turfgrass.
- ◆ **RETAIL:** garden centers, florists.
- ◆ **LANDSCAPE SERVICES:** landscape design, installation, maintenance, lawn care, tree care.

*Many firms are involved in more than one of these types of business.*

## Income of firms surveyed

53%

**INCREASE**

12%

**DECREASE**

35%

**SAME**

**The Environmental Horticulture industry produces income. The estimated value in Vermont for 2007 is \$119 million in gross income.**

- ◆ Similar to the previous survey in 2004, income has grown for at least half of firms.
- ◆ Over the three year period, between 2004 and 2007, more than **290 firms increased their income.** The average increase per firm was 35 percent.
- ◆ Many additional firms, not counted in this survey, derive at least partial income from this industry. These include seasonal outlets such as roadside markets, hardware stores, mass market stores, and property maintenance firms.

## People employed by businesses

56%

**FULL TIME**

12%

**PART TIME**

32%

**SEASONAL**

**Environmental Horticulture provides MANY jobs. At least 5,000 people are employed in this industry. An additional 1,400 are needed.**

- ◆ Over half of those in this industry are fully employed. An estimated **2,800 jobs are full time.** An additional 550 are needed.
- ◆ This industry paid an estimated **\$50 million to employees** in 2007 including benefits, almost half (41 percent) of state income.
- ◆ Half of businesses (47 percent) reported an increase in the cost of labor. The average increase per firm from 2004 to 2007 was 34 percent.

## Types of businesses

68%

LANDSCAPE & TREE SERVICES

58%

RETAIL

42%

WHOLESALE PRODUCTION/SALES

26%

OTHER

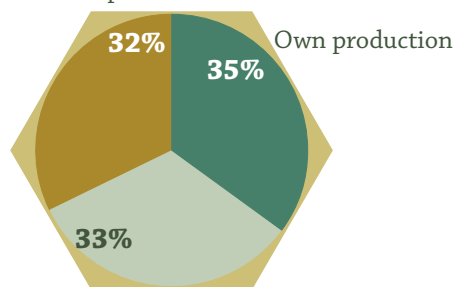
## Environmental Horticulture is diverse.

Two-thirds of firms offer, derive income from, and provide jobs in, landscape and tree services.



## Income from plant sales

Finished plants



Pre-finished plants

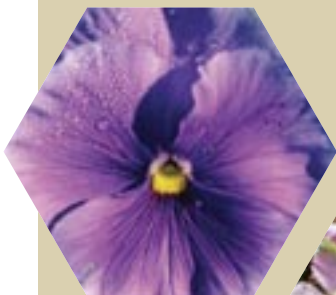
**Plant production and sales are a significant part of the Environmental Horticulture industry. Plant sales generate more than \$33 million.**

This includes:

- ◆ \$12 million from plants produced totally by the seller. Over half of firms selling plants grew many from start to finish.
- ◆ \$11 million from young plants purchased (“pre-finished”), then grown further prior to selling.
- ◆ \$10 million from “finished” plants bought for resale, either wholesale or retail.

**Plant production generates \$23 million.** A majority of firms (84 percent) sell plants.

## More facts about Environmental Horticulture in Vermont



- ◆ The industry is keeping an estimated 11,500 acres in agriculture, of which 32 percent is open space and 19 percent is in a land preservation program.
- ◆ Businesses in this industry paid an estimated \$8 million in taxes in 2007. Over two-thirds of the firms (69 percent) reported an increase in taxes paid. The average increase per firm was 40 percent.
- ◆ The top three major concerns as expressed by a majority of this industry were energy costs, health care costs, and immigration/labor issues.

# *A summary of the impact of the Environmental Horticulture Industry on the New England economy*

## **\$4.7 Billion & Growing**



The New England Nursery Association recognizes Dr. Leonard Perry, University of Vermont Extension, and Dr. Lois Berg Stack, University of Maine Cooperative Extension, for their efforts in conducting the survey. We are grateful to New England Grows, Inc. for the grant award that helped support the publication of this study. Special thanks are extended to the leaders of the New England state nursery and landscape associations for their vision and financial support. And, finally, many thanks to the thousands of industry professionals who participated in the study.

**[www.NEnsyAssn.org](http://www.NEnsyAssn.org)**

**Additional details about this survey are  
available at <http://pss.uvm.edu/ppp/nesurvey/index.htm>**

### ◆ **Connecticut Nursery & Landscape Association**

600 Main Street  
Bart Center, 2nd Floor, Room 4  
Monroe, CT 06468  
(203) 454-0110  
**[www.FlowersPlantsinCT.com](http://www.FlowersPlantsinCT.com)**

### ◆ **Maine Landscape & Nursery Association**

500 North Parish Road  
Turner, ME 04282  
(207) 225-3767  
**[www.melna.org](http://www.melna.org)**

### ◆ **Massachusetts Nursery & Landscape Association**

PO Box 387  
Conway, MA 01341  
(413) 369-4731  
**[www.mnla.com](http://www.mnla.com)**

### ◆ **New England Nursery Association**

8-D Pleasant Street  
South Natick, MA 01760  
(508) 653-3112  
**[www.NEnsyAssn.org](http://www.NEnsyAssn.org)**

### ◆ **New England Grows, Inc.**

8-D Pleasant Street  
South Natick, MA 01760  
(508) 653-3009  
**[www.NEGrows.org](http://www.NEGrows.org)**

### ◆ **New Hampshire Plant Growers Association**

4 Karacull Lane  
Pittsfield, NH 03263  
(603) 435-6785  
**[www.nhpga.org](http://www.nhpga.org)**

### ◆ **Rhode Island Nursery & Landscape Association**

64 Bittersweet Drive  
Seekonk, MA 02771  
(508) 761-7960  
**[www.rinla.org](http://www.rinla.org)**

### ◆ **University of Maine Cooperative Extension**

495 College Avenue  
Orono, ME 04469-0001  
(207) 581-2949  
**[lstack@umext.maine.edu](mailto:lstack@umext.maine.edu)**

### ◆ **University of Vermont Extension**

Department of Plant & Soil Science  
Burlington, VT 05405  
(802) 656-0479  
**[leonard.perry@uvm.edu](mailto:leonard.perry@uvm.edu)**

### ◆ **Vermont Nursery & Landscape Association**

PO Box 92  
North Ferrisburg, VT 05473  
(802) 425-5117  
**[www.greenworksvermont.org](http://www.greenworksvermont.org)**