

greenhouse  
GROWER



0 State of the  
2011 **Industry**  
2 **Report**

WHITE PAPER



# The State Of Greenhouse Floriculture

**L**AST year was hardly a cakewalk for growers. In fact, some will argue it was the most challenging they've ever faced. The weather was uncooperative in certain regions, competition became a bigger challenge for more growers, and labor, energy and input costs didn't provide many breaks.

No greenhouse operation is immune to these challenges – although some face them with more ease than others – as we saw El Modeno Gardens, a Top 100 Grower, close its doors along with other operations in 2009. Times are indeed tough, but you can argue our industry is faring better than others. Many growers have found there's still demand for their products – even in a down economy – and there's opportunity to increase demand more if growers listen closely to customers and offer products consumers want.

So will your greenhouse operation survive 2010? Odds are your answer is yes, judging from the responses we got from growers taking our survey on the State Of The Industry in November. In fact, the overwhelming majority of growers anticipate their operation being around in 2011. A few, however, aren't sure they'll be around in another 12 months, and more growers are getting vocal about their uncertainty or displeasure over the state of our industry – and the direction we're headed.

"There is too much competition driving the price down," one small Missouri grower-retailer wrote us. "There is a small selling window and if weather delays that, everyone panics and cuts their prices. Box stores are not doing anyone any favors."

The reality for our industry, according to several growers, isn't all that rosy. As Marc Clark, executive vice president of Rocket Farms put it: The big growers are getting bigger, the mid-sized growers are strug-

gling and the small growers will survive – if they have a good niche.

Big box consolidation stepped it up a notch in recent months, as well, and it's presenting challenges to small and mid-sized operations. Ric Stevens of Nash Greenhouses in Michigan believes we'll begin seeing more smaller greenhouse operations go by the wayside. And knowing the costs of everything you do, he says, is the key to survival.

Of course, there's more to our industry these days than competition and consolidation – and our State Of The Industry Report White Paper is designed to paint a complete picture of all things greenhouse floriculture, including herbs and vegetables grown for the garden. In the following pages, you'll find national statistics based on questions we asked greenhouse growers, essay question responses from growers discussing the opportunities and challenges they face, and a statistical breakdown of the key growing regions in the United States.

## Find Analysis Online

If somehow you missed the coverage from the magazine that focused on demographics, trends, challenges and retail, visit [GreenhouseGrower.com/Magazine](http://GreenhouseGrower.com/Magazine) for additional State Of The Industry coverage in our January 2010 issue.

If you have questions about this White Paper, feel free to e-mail me at [kmyanik@meistermedia.com](mailto:kmyanik@meistermedia.com). We'd love to hear from you, and we offer you our best wishes for 2010.

## Kevin Yanik

Associate Editor, *Greenhouse Grower*

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# The Full Report

**W**E surveyed our full e-mail list of nearly 15,000 people in November for our State Of The Industry Report, asking everything from crops grown, amount of production and an outlook on 2010. We've listed the complete results to the statistical questions here, as well as a sampling of the answers from several open-ended questions. Three hundred growers responded to the survey, and we've edited responses for length and clarity.

The growers surveyed represent 46 of the 50 states, with the majority respectively representing Florida and Ohio. The majority surveyed are also wholesale growers (52 percent), growing under less than 50,000 square feet (46 percent) and primarily serving their own retail shop (26 percent) – although many of those surveyed (22 percent) primarily serve independent garden centers.

The minority surveyed (25 percent) grow under more than 250,000 square feet. Additionally, the majority (39 percent) grow ornamental bedding plants as their primary crop.

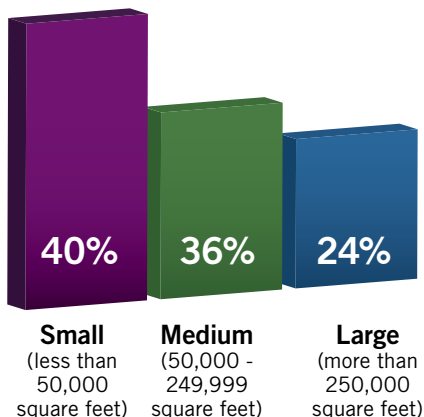
## Which of the following best describes your business?

- Wholesale grower.....52%
- Grower-retailer .....40%
- Young plant grower .....8%

## Where are you located?

- Northeast.....25.4%
- Midwest .....23.4%
- Southeast .....25.8%
- Southwest .....6.1%
- West.....13.9%
- Not In The United States.....5.4%

## What is the size of your greenhouse operation?



## Which of the following is your primary customer?

- Your own retail shop .....25.5%
- Independent garden centers.....22.3%
- Other .....15.1%
- Other growers.....11.9%
- Home improvement chains .....6.8%
- Wholesale florists/brokers.....5.0%
- Mass merchandisers.....4.7%
- Supermarket chains .....4.0%
- E-commerce sites.....2.2%
- Warehouse clubs.....1.4%
- Retail florists .....1.1%

## Which of the following is your primary crop?

- Ornamental bedding plants .....38.6%
- Flowering potted plants.....19.6%
- Container perennials .....10.0%
- Other .....10.0%
- Plugs and propagation material....6.4%
- Herbs and vegetables .....5.7%
- Potted foliage .....3.6%
- Woody ornamentals .....3.6%
- Fresh cut flowers.....2.1%
- Trees .....0.4%

## What was the best cash-savings idea you implemented into your business in 2009?

We were more careful about prices of seed and perennials.

New boiler and environmental control system.

Fewer employees.

New transplant line.

Less production, therefore less waste.

Lean-flow labor systems.

Revolving temporary layoff of staff.

Buying natural gas last March for this spring.

Shopping for better prices on materials.

Not discounting product at the end of the spring season and continuing to sell throughout the rest of the year. Utilization of rainwater on a larger scale also helped offset water costs.

We attempted to better insulate the greenhouses to save money on heating. Lowering the heat.

Hot water floor heat.

Constantly reviewing labor efficiencies.

Cheaper pots.

We canceled poinsettias.

We cut production and staff and went to four-day work weeks.

Using pre-finished and plug and ship programs.

Switching from natural gas to a renewable fuel.

Energy savings via heat curtains and wood stoves.

Paid bills quicker to take advantage of more prompt pay discounts

Less help and more self service.

Switching to using our own well for irrigation.

Recycling pots.

More crops per square feet.

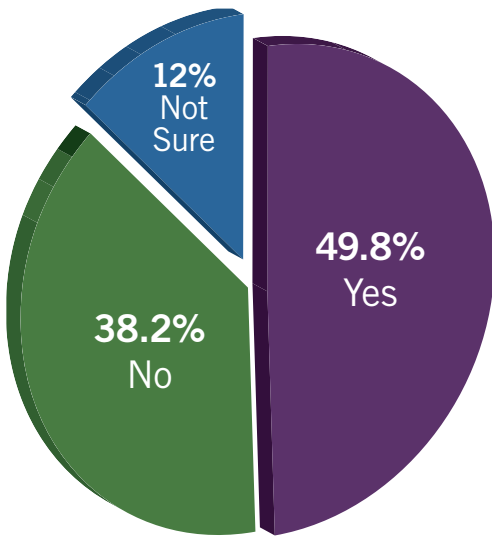
Reduced our wholesale business. We probably can sell everything grown through mail-order retail, so wholesale reduces revenues.

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**Besides the weather, what is the biggest challenge your greenhouse operation is facing?**

Competition .....	21.9%
Labor costs.....	21.9%
Energy costs .....	21.5%
Input costs .....	17.7%
Other.....	12.1%
Transportation costs.....	3.0%
Water.....	1.9%

**Is your greenhouse operation in better financial standing today than it was at this time a year ago?**



**The year isn't over yet, but how do you expect your 2009 sales to compare to your 2008 sales?**

I expect sales to be the same .....	18.4%
I expect sales to increase between 5 and 10 percent.....	17.2%
I expect sales to decrease between 5 and 10 percent.....	14.2%
I expect sales to decrease more than 10 percent .....	14.2%
I expect sales to increase less than 5 percent .....	13.5%
I expect sales to increase more than 10 percent .....	12.7%
I expect sales to decrease less than 5 percent .....	9.7%

**How do you expect your 2010 sales to compare to your 2009 sales?**

I expect sales to increase between 5 and 10 percent.....	26.4%
I expect sales to be the same .....	24.9%
I expect sales to increase less than 5 percent .....	21.6%
I expect sales to increase more than 10 percent .....	18.2%
I expect sales to decrease less than 5 percent .....	4.1%
I expect sales to decrease between 5 and 10 percent.....	2.6%
I expect sales to decrease more than 10 percent .....	2.2%

**How do your 2010 prices generally compare to your 2009 prices?**

We've kept our prices about the same.....	74.3%
We've raised our prices .....	22.6%
We've lowered our prices.....	3.1%

**How will your 2010 production compare to your 2009 production?**

We plan production to be the same.....	25.4%
We plan to increase production between 5 and 10 percent .....	24.3%
We plan to increase production less than 5 percent .....	15.7%
We plan to increase production more than 10 percent .....	15.3%
We plan to decrease production less than 5 percent .....	11.2%
We plan to decrease production between 5 and 10 percent.....	4.9%
We plan to decrease production more than 10 percent .....	3.4%

**Do you plan to add or retrofit a greenhouse structure in 2010?**

No, we see no need to add or retrofit in 2010 .....	42.4%
Yes, we plan to add or retrofit in 2010 .....	35.8%
No, we can't afford to add or retrofit even though a need exists.....	21.8%

► *continued*

Started a lot of our baskets later and added one more plug to make it finish faster.

Bought a used forklift so we don't have to pay lift prices on soil delivery.

Tighter inventory controls.

Bulk buying on containers.

Using larger plugs.

Reduced non-targeted advertising.

Rebuilding our propagation area, which took us from over 50 percent loss to less than 5 percent in one crop cycle.

Doing our own stem cuttings and other propagation techniques.

Dropping the thermostat at night.

Purchased some equipment rather than renting.

More drip irrigation.

Reducing production to match actual orders.

Shopping suppliers.

A wood chip boiler.

Purchased natural gas futures.

Full truckloads.

Placing potted perennials into sand for the winter.

Making our own bio-mass pellets, which will reduce our fuel costs significantly

Double decking our greenhouse.

Reducing the number of tags we use. Landscapers don't want a lot of tags like garden centers.

Student worker labor.

Installed a biomass boiler system.

We put timers on all electronic items.

Buying pre-finished material.

Reduction of fuel usage through better crop planning.

Applying for an energy conservation grant to upgrade to triple-wall polycarbonate coverings.

We're looking into buying a second delivery truck but instead rented one for the few heavy weeks of delivery in spring.

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**Do you expect your greenhouse operation to survive 2010?**

Yes.....	92%
No.....	1%
Not sure .....	7%

**Which of the following crops are you most optimistic about for the industry in 2010? (Please select one.)**

Herbs and vegetables .....	27.5%
Ornamental bedding plants .....	23.4%
Container perennials .....	14.7%
Flowering potted plants.....	14.7%
Other.....	6.4%
Plugs and propagation material....	5.3%
Potted foliage .....	3.0%
Woody ornamentals .....	3.0%
Fresh cut flowers.....	1.1%
Trees .....	0.8%

**Which of the following crops are you most pessimistic about for the industry in 2010? (Please select one.)**

Trees .....	21.1%
Woody ornamentals .....	15.3%
Fresh cut flowers.....	13.2%
Flowering potted plants.....	12.0%
Container perennials .....	11.6%
Potted foliage .....	11.2%
Other.....	6.2%
Ornamental bedding plants .....	5.8%
Herbs and vegetables .....	2.1%
Plugs and propagation material....	1.7%

**Which of the following inputs is placing the biggest burden on your business financially?**

Energy.....	48.4%
Other.....	13.0%
Pots and trays.....	10.6%
Soil and amendments .....	8.7%
Fertilizers.....	7.5%
Chemicals .....	6.7%
Labels and tags .....	2.8%
Water.....	2.4%

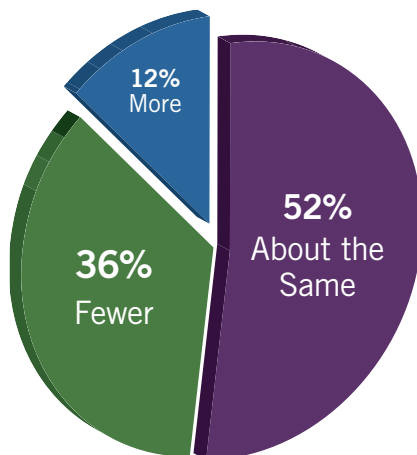
**Which of the following inputs did you cut back on most in 2009?**

Energy.....	32.4%
Other.....	18.7%
Chemicals .....	17.3%
Pots and trays.....	11.6%
Labels and tags .....	7.6%
Soil and amendments .....	6.2%
Water.....	3.6%
Fertilizers.....	2.7%

**What was your best solution to combat increasing transportation costs in 2009? (Check one please)**

We shipped more product with each delivery .....	45.7%
No solutions: We're still looking for ways to combat increasing transportation costs.....	31.8%
We made fewer deliveries.....	11.4%
We cooperated with other growers, who delivered our product for us when it made sense .....	11.0%

**How many year-round workers did you employ in 2009 compared to 2008?**



► continued

A new manufacturing and inventory software program that gave us exact numbers of sales and plants that go to waste.

No more speculation.

Added an automated sticking line.

Added computer-controlled irrigation valves and pressure compensating irrigation emitters.

Cutting back on items that are not strong sellers.

Purchased a new transplanter and paved the whole property to pull trains of product from our outside cold frames.

Growing cooler, labor cuts and giving multiple assignments to workers.

Added a waste oil burner for our boiler. Automating our outdoor production. Transplanting on site rather than carting to the growing area.

Starting the crop later in the spring to conserve on heating costs in the greenhouse.

Built a new loading area, which immediately increased shipping efficiency.

A display garden that doubles as propagation beds.

Wind turbines for energy, cut contributions to retirement, cut labor and increased production of profitable plants. Converting from propane to natural gas.

Mixing own soil.

Firing our worst employees.

Growing more high-end hanging baskets rather than buying them in.

Laid off employees, changed fertilizer schedule.

Getting all of our insurance services under one roof.

More propagation is done in house, and we're making fewer liner purchases.

Maintaining our prices.

Teleconferencing.

Doing more mono-cropping.

Getting four to five quotes on most items purchased. We have saved thousands of dollars by "shopping."



# Essay Question Responses

## Do you have any comments or observations about the current state of the greenhouse industry?

We need to grow our end customer base, especially in the retail market. We're starting to see a lot of landscapers and nurseries growing annuals for sale on the wholesale market. Unfortunately, not all know how to support a marketplace. Some need to take a course in cost accounting. They will be out of business soon.

Watch out for overproduction.

Even with growing ourselves, the big box stores are killing us with their everyone-expects-a-discount-on-everything approach.

The demand for better merchandising in the home improvement stores has never been greater. There's too much poor quality being delivered and more attention to presentation is needed.

We need to coordinate marketing efforts more effectively.

The weather is either our friend or foe. Cool wet springs lessen shipping time and buyer time.

Our industry is in poor shape. This is led by the structural change to marketing plants to big box stores. There are so few, but with such buying power growers have little or no control over their own businesses. So many of the small independent retailers have gone out of business that there is too much power in the hands of so few, and they are using this power to dictate prices. Many don't honor commitments and this leaves all risk on the growers with no margin to compensate for this extreme risk. This is (and has been) a recipe for disaster.

## If the government imposes more taxes, there will be less disposable income for people to buy plants with.

Times are tough, but quality and advice at a sound price sells.

Energy tax credits are a great idea, but those of us who have already spent thousands of dollars on energy conservation in our operations should be at a lower rate. We need more incentive to do upgrades.

The industry is certainly challenged by the economy but the weather can hurt you more.

Costs are rising way too fast.

Let's promote quality and give value.

Tough times must be seen as an opportunity not an obstacle. People are still spending money, they are just doing it wiser.

Being involved with crops that produce food, I've been made aware of the use of greenhouses overseas for growing food. I think the industry here needs to redirect their efforts to switch away slowly from growing ornamentals to growing food. My newest philosophy is "Don't grow it if you can't eat it."

## What was your most successful product or promotion of 2009?

Heirloom vegetables

Spring and fall pansies

Cyclamen

One-day, half-price sale on July 11 from 7:11 a.m. to 7:11 p.m.

Knock Out roses

Ivy in all sizes

Lantana and ipomoea

Flowering Hanging Baskets

Wave petunias

Geraniums

Confetti liners

Internet ads

Orchids

Vegetable seedlings

Caladiums, bare root perennials and begonias

Cut flower dahlia bouquets

Hybrid euphorbia, angelonia

Exotics and unusuals sold to independents

Organic vegetables

Discounts of smaller orders

Adding a shopping cart to my website

New potted perennial products

Cold-grown perennials and shrubs

Fall mums and a corresponding fundraiser with them

Patio tomatoes

Mums

Bagged trees, annual flats

Seed begonia

Specialty, exhibition chrysanthemums

Patio bowls

Hanging basket combos

Garden mums in decorative containers

Custom containers

Fresh fruits and vegetables

Impatiens

Breast cancer awareness vases

Woody ornamentals

Pennisetum 'Fireworks'

Proven Winners hanging baskets

Miniature hostas and daylilies

An open house

Mixed combo hanging baskets and large mixed planters

More affordable flowering containers and no prices increases

Our 1801 bedding plant tray

Reward card and vegetables

Vegetative Trixie liners

Ananas comosus 'Royale'

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We strive to keep up maintenance on our equipment so it lasts longer and is more efficient.

Sales are flat and costs are rising rapidly.

There is too much competition driving the price down. There is a small selling window and if weather delays that, everyone panics and cuts their prices. Box stores are not doing anyone any favors!

This is a great business to be in, especially in these tough economic times. People turn toward more cost-effective solutions that are also more environmentally friendly for their homes, businesses and the planet.

When pricing could have been raised more in the 1990s, many grew their market share instead. Now, the market is soft and volume has dwindled without an increase in pricing.

Wholesale pricing needs to increase to reflect input costs.

As long as you can keep costs down and continue to provide items that excite customers – and get reasonable weather – our industry should be able to survive the current economic uncertainty.

Our industry has a future, but you have to look at it in a more enlightened way.

Pay more attention to increasing shelf-life at the retail level: Better quality equates to re-bookings and increased sales.

I think this industry is terrific. We brighten lives with our products and help educate people about a healthy lifestyle.

We have to be in one of the most inflationary industries in a deflationary economic environment. All of our input costs – fuel, labor, energy, containers, steel, plastic, etc. – are increasing dramatically. But during this recession consumers expect price stability or reductions. This has the effect of squeezing our margins even tighter. This is a dangerous time for our industry, especially for small and medium-sized enterprises.

It will be very tough for another three years.

The retail garden center is a dinosaur. If it doesn't evolve to accommodate the changes in retail and consumer lifestyle, it will become extinct.

Growers need to be more aware of opportunities and take advantage when the time is right.

Those who think volume and low pricing is the answer are wrong.

Due to government regulations, insurance, taxes, heating costs and hours of operation for retail, there will be smaller operations going out of business.

Bedding plant sales remain strong.

## People are becoming more aware of sustainable practices. Vegetables will be huge again in 2010.

People do love their gardens and containers but will cut back in certain areas if money is tight. We are moving forward cautiously, but we are still optimistic.

I have a small business that can weather storms fairly easy. My business is on my property, so rent or high overhead isn't a main concern. Business is not always about the money. Helping people learn about farming, the appreciation of a single seed and its possibilities and the beauty of our work are lost in the larger greenhouse industry settings. Small isn't always a hindrance.

These are the worst conditions since 1982-83.

Most of us in the industry can struggle through one or two adversities at a time. This past year, we have been inundated with more challenges than ever: poor economy, water restrictions for production, an increasing number of quarantine pests, expensive government mandates and taxes and the constant uncertainty of the weather. It is worrisome what impact this perfect storm of challenges will have on the industry.

► *continued*

Exposure in the greater community through cooperative programs

Branded pots

Hemerocallis

Miniature bromeliads

*Rhus aromatica* 'Gro-Low'

Partnering with local non-profits

*Aesculus hippocastanum*

Pansies

Field-grown boxwood shrubs

'Tiger Eye Gold' rudbeckia

Vista Bubble Gum petunia – all sizes

1-gallon roses

Shipping discounts for larger purchases online

Weekly specials

Custom-order hanging baskets and containers

Double-spiked orchids in ceramic upgrades

Use of peat pots

Red flowering plants



Things aren't bad, it's just that right now people are being more careful with their spending. They are still buying flowers, but the overall amounts are down. It is necessary to work hard at providing a quality product at a fair price to keep the customer's attention. Don't cheapen your product just to make ends meet; look to streamline your operation to cut costs.



This year is going to be tough, but most of our customers are happy and already placing orders. We are seeing some cost cutting in their budgets, but in the long run we will be OK.

We need to find out how to get people gardening. Make it fun and healthy to promote it – just like every other industry does for their product.

Over-production from greenhouse operators who have no bookings leads to panic. Those operations drop prices after bad weather to try to get extra sales. If a store is full after a bad weekend, dropping the price will not get extra sales. It will cost everybody money.

Making our own fuel is the future of our industry.

Everything is cyclical. I believe business will turn around some in 2010 and more in 2011. There may be fewer players, which will make it easier on the survivors.

Only those who are willing to streamline and get lean will survive.

Fight health care legislation and further governmental regulation. In the end, this will raise costs for all of us.

If California does not get rain this winter, look for a mass exit from this industry – both wholesale and retail.

Back to basics is what the consumer wants.

While bedding plants, vegetables and herbs went great last spring, we noticed a decreased supply and demand for fall mums and other products. It also looks like the supply from finish growers and demand from retail customers for poinsettias will be down this holiday season.

Limit overproduction of product. Eliminate discounting because of overages.

We all need to price with accurate costs so we do not lowball and eliminate profits.

Teaching, training and coaching are the tools I will use in my community to encourage consumers to learn how to grow vegetables.

If you are not aggressively trying to build your business, you will lose what you have.

Quality products will always be in demand.

Assets are devaluating because empty greenhouses are not being sold. There are no businesses buying other businesses in our industry. That's a bit scary.

Based on what I hear from my customers and vendors, sales are strong for all the garden centers in my region. This poor economy appears to be a good thing for us growers.

Growers need to continue to raise prices. Retailers need to be aware of overgrown plant material and dump it. Keep smaller fresh displays out front of the store to draw customers in.

Save the independent retailer or the industry will continue to suffer.

The big are getting bigger, the middle is struggling and the small will survive – if they have a good niche.

Between local production and imports, there is an oversupply. This crisis will force necessary adjustments to balance supply and demand.

The industry is in better shape than a year ago, but continues to face challenges like weather and competition

There has been a lot of consolidation in this last 12 months. I think you will see a lot more of the smaller greenhouses go by the wayside. The greenhouse operators who are keeping their finger on the pulse will survive and prosper. You have to know the costs of everything you do and if it all makes sense.

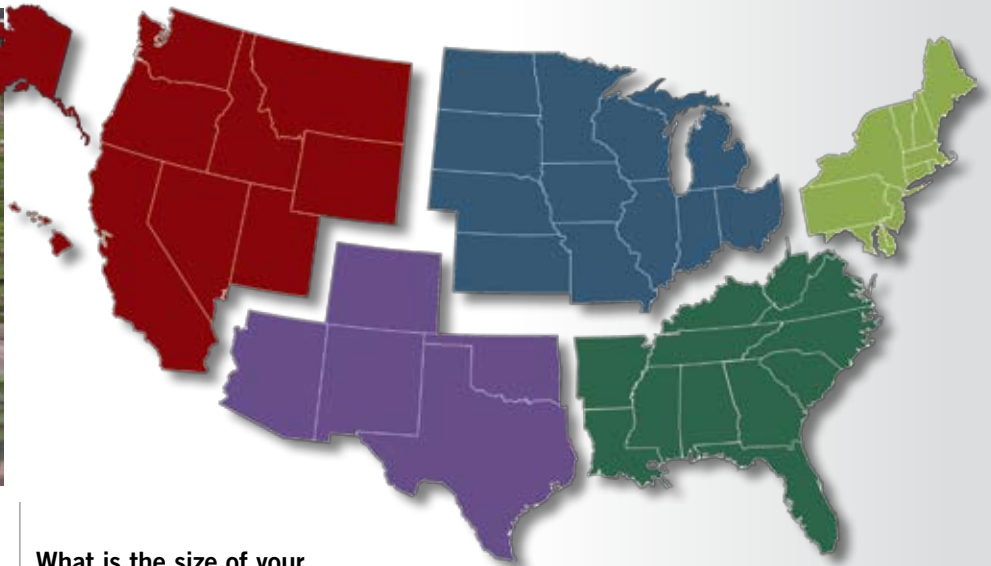
I fear a lot of growers will not be able to survive the current and coming economic downturn. Those who do will be in a better position. Those that don't ...?

Although the past few years have been tough, we are faring much better than other industries and are counting our blessings.



# Regional Breakdown

**W**E break down responses to our State Of The Industry survey into five regions – the Northeast, Midwest, Southeast, Southwest and West. Our survey generated the most responses from growers in premier growing states like Florida, Ohio, California, Pennsylvania.



## Which of the following best describes your business?

### Northeast

Grower-retailer ..... 40.0%  
 Wholesale grower..... 48.9%  
 Young plant grower ..... 11.1%

### Midwest

Grower-retailer ..... 50.0%  
 Wholesale grower..... 46.4%  
 Young plant grower ..... 3.6%

### Southeast

Grower-retailer ..... 21.4%  
 Wholesale grower..... 66.7%  
 Young plant grower ..... 11.9%

### Southwest

Grower-retailer ..... 13.3%  
 Wholesale grower..... 80.0%  
 Young plant grower ..... 6.7%

### West

Grower-retailer ..... 29.6%  
 Wholesale grower..... 63.0%  
 Young plant grower ..... 7.4%

## What is the size of your greenhouse operation?

### Northeast

Small  
 (Less than 50,000 square feet) ..... 46.9%  
 Medium  
 (50,000 to 249,999 square feet) ..... 32.7%  
 Large  
 (More than 250,000 square feet) ... 20.4%

### Midwest

Small  
 (Less than 50,000 square feet) ..... 45.2%  
 Medium  
 (50,000 to 249,999 square feet) ..... 32.3%  
 Large  
 (More than 250,000 square feet) ... 22.6%

### Southeast

Small  
 (Less than 50,000 square feet) ..... 36.7%  
 Medium  
 (50,000 to 249,999 square feet) ..... 30.6%  
 Large  
 (More than 250,000 square feet) ... 32.7%

### Southwest

Small  
 (Less than 50,000 square feet) ..... 29.4%  
 Medium  
 (50,000 to 249,999 square feet) ..... 35.3%  
 Large  
 (More than 250,000 square feet) ... 35.3%

### West

Small  
 (Less than 50,000 square feet) ..... 41.9%  
 Medium  
 (50,000 to 249,999 square feet) ..... 29.0%  
 Large  
 (More than 250,000 square feet) ... 29.0%



Competition is a major challenge along with weather and energy costs.

**Which of the following is your primary customer?**

**Northeast**

E-commerce sites.....	2.0%
Home improvement chains.....	4.0%
Independent garden centers.....	34.0%
Mass merchandisers.....	2.0%
Other growers.....	12.0%
Retail florists.....	2.0%
Supermarket chains.....	0
Warehouse clubs.....	2.0%
Wholesale florists/brokers.....	0
Your own retail shop.....	34.0%
Other.....	8.0%

**Midwest**

E-commerce sites.....	1.6%
Home improvement chains.....	8.2%
Independent garden center.....	23.0%
Mass merchandisers.....	4.9%
Other growers.....	6.6%
Retail florists.....	0
Supermarket chains.....	1.6%
Warehouse clubs.....	4.9%
Wholesale florists/brokers.....	3.3%
Your own retail shop.....	27.9%
Other.....	18.0%

**Southeast**

E-commerce sites.....	2.0%
Home improvement chains.....	16.3%
Independent garden centers.....	20.4%
Mass merchandisers.....	4.1%
Other growers.....	20.4%
Retail florists.....	2.0%
Supermarket chains.....	0
Warehouse clubs.....	0
Wholesale florists/brokers.....	10.2%
Your own retail shop.....	14.3%
Other.....	10.2%

**Southwest**

E-commerce sites.....	0
Home improvement chains.....	0
Independent garden centers.....	37.5%
Mass merchandisers.....	0
Other growers.....	6.3%
Retail florists.....	6.3%

Supermarket chains.....	18.8%
Warehouse clubs.....	0
Wholesale florists/brokers.....	6.3%
Your own retail shop.....	12.5%
Other.....	12.5%

**West**

E-commerce sites.....	3.3%
Home improvement chains.....	3.3%
Independent garden centers.....	10.0%
Mass merchandisers.....	13.3%
Other growers.....	16.7%
Retail florists.....	0
Supermarket chains.....	10.0%
Warehouse clubs.....	0
Wholesale florists/brokers.....	10.0%
Your own retail shop.....	6.7%
Other.....	26.7%

**Besides the weather, what is the biggest challenge your greenhouse operation is facing?**

**Northeast**

Competition.....	19.6%
Energy costs.....	39.1%
Input costs.....	17.4%
Labor costs.....	8.7%
Transportation costs.....	4.3%
Water.....	0
Other.....	10.9%

**Midwest**

Competition.....	22.0%
Energy costs.....	20.3%
Input costs.....	20.3%
Labor costs.....	25.4%
Transportation costs.....	0
Water.....	0
Other.....	11.9%

**Southeast**

Competition.....	23.9%
Energy costs.....	10.9%
Input costs.....	26.1%
Labor costs.....	23.9%
Transportation costs.....	2.2%
Water.....	2.2%
Other.....	10.9%

**Southwest**

Competition.....	26.7%
Energy costs.....	0
Input costs.....	0
Labor costs.....	40.0%
Transportation costs.....	13.3%
Water.....	6.7%
Other.....	13.3%

**West**

Competition.....	22.6%
Energy costs.....	9.7%
Input costs.....	9.7%
Labor costs.....	29.0%
Transportation costs.....	6.5%
Water.....	9.7%
Other.....	12.9%

**Is your greenhouse operation in better financial standing today than it was at this time a year ago?**

**Northeast**

Yes.....	55.3%
No.....	34.0%
Not sure.....	10.6%

**Midwest**

Yes.....	52.5%
No.....	34.4%
Not sure.....	13.1%

**Southeast**

Yes.....	43.8%
No.....	45.8%
Not sure.....	10.4%

**Southwest**

Yes.....	50.0%
No.....	50.0%
Not sure.....	0

**West**

Yes.....	42.4%
No.....	42.4%
Not sure.....	15.2%

**The year isn't over yet, but how do you expect your 2009 sales to compare to your 2008 sales?**

**Northeast**

I expect sales to increase more than 10 percent ..... 8.9%  
 I expect sales to increase between 5 and 10 percent..... 13.3%  
 I expect sales to increase less than 5 percent ..... 13.3%  
 I expect sales to be the same ..... 24.4%  
 I expect sales to decrease less than 5 percent ..... 4.4%  
 I expect sales to decrease between 5 and 10 percent..... 24.4%  
 I expect sales to decrease more than 10 percent ..... 11.1%

**Midwest**

I expect sales to increase more than 10 percent ..... 18.3%  
 I expect sales to increase between 5 and 10 percent..... 13.3%  
 I expect sales to increase less than 5 percent ..... 16.7%  
 I expect sales to be the same ..... 25.0%  
 I expect sales to decrease less than 5 percent ..... 10.0%  
 I expect sales to decrease between 5 and 10 percent..... 11.7%  
 I expect sales to decrease more than 10 percent ..... 5.0%

**Southeast**

I expect sales to increase more than 10 percent ..... 10.9%  
 I expect sales to increase between 5 and 10 percent..... 13.0%  
 I expect sales to increase less than 5 percent ..... 13.0%  
 I expect sales to be the same ..... 15.2%  
 I expect sales to decrease less than 5 percent ..... 4.3%  
 I expect sales to decrease between 5 and 10 percent..... 21.7%  
 I expect sales to decrease more than 10 percent ..... 21.7%

**Southwest**

I expect sales to increase more than 10 percent ..... 6.3%  
 I expect sales to increase between 5 and 10 percent..... 12.5%

I expect sales to increase less than 5 percent ..... 18.8%  
 I expect sales to be the same ..... 12.5%  
 I expect sales to decrease less than 5 percent ..... 18.8%  
 I expect sales to decrease between 5 and 10 percent..... 12.5%  
 I expect sales to decrease more than 10 percent ..... 18.8%

**West**

I expect sales to increase more than 10 percent ..... 18.8%  
 I expect sales to increase between 5 and 10 percent..... 15.6%  
 I expect sales to increase less than 5 percent ..... 9.4%  
 I expect sales to be the same ..... 15.6%  
 I expect sales to decrease less than 5 percent ..... 9.4%  
 I expect sales to decrease between 5 and 10 percent..... 9.4%  
 I expect sales to decrease more than 10 percent ..... 21.9%

**How do you expect your 2010 sales to compare to your 2009 sales?**

**Northeast**

I expect sales to increase more than 10 percent ..... 21.7%  
 I expect sales to increase between 5 and 10 percent..... 19.6%  
 I expect sales to increase less than 5 percent ..... 17.4%  
 I expect sales to be the same ..... 30.4%  
 I expect sales to decrease less than 5 percent ..... 2.2%  
 I expect sales to decrease between 5 and 10 percent..... 4.3%  
 I expect sales to decrease more than 10 percent ..... 4.3%

**Midwest**

I expect sales to increase more than 10 percent ..... 15.0%  
 I expect sales to increase between 5 and 10 percent..... 26.7%  
 I expect sales to increase less than 5 percent ..... 28.3%  
 I expect sales to be the same ..... 21.7%

I expect sales to decrease less than 5 percent ..... 5.0%  
 I expect sales to decrease between 5 and 10 percent..... 0  
 I expect sales to decrease more than 10 percent ..... 3.3%

**Southeast**

I expect sales to increase more than 10 percent ..... 14.6%  
 I expect sales to increase between 5 and 10 percent..... 20.8%  
 I expect sales to increase less than 5 percent ..... 25.0%  
 I expect sales to be the same ..... 27.1%  
 I expect sales to decrease less than 5 percent ..... 4.2  
 I expect sales to decrease between 5 and 10 percent..... 6.3%  
 I expect sales to decrease more than 10 percent ..... 2.1%

**Southwest**

I expect sales to increase more than 10 percent ..... 6.3%  
 I expect sales to increase between 5 and 10 percent..... 18.8%  
 I expect sales to increase less than 5 percent ..... 25.0%  
 I expect sales to be the same ..... 37.5%  
 I expect sales to decrease less than 5 percent ..... 12.5%  
 I expect sales to decrease between 5 and 10 percent..... 0  
 I expect sales to decrease more than 10 percent ..... 0

**West**

I expect sales to increase more than 10 percent ..... 21.9%  
 I expect sales to increase between 5 and 10 percent..... 37.5%  
 I expect sales to increase less than 5 percent ..... 18.8%  
 I expect sales to be the same ..... 9.4%  
 I expect sales to decrease less than 5 percent ..... 6.3%  
 I expect sales to decrease between 5 and 10 percent..... 6.3%  
 I expect sales to decrease more than 10 percent ..... 0

## How do your 2010 prices generally compare to your 2009 prices?

### Northeast

We will raise our prices in 2010 ..... 21.7%  
 We will lower our prices in 2010 .... 8.7%  
 We will keep our prices about the same..... 69.6%

### Midwest

We will raise our prices in 2010 ..... 21.8%  
 We will lower our prices in 2010 .... 1.8%  
 We will keep our prices about the same..... 76.4%

### Southeast

We will raise our prices in 2010 ..... 17.4%  
 We will lower our prices in 2010 .... 2.2%  
 We will keep our prices about the same..... 80.4%

### Southwest

We will raise our prices in 2010 ..... 43.8%  
 We will lower our prices in 2010 .... 0  
 We will keep our prices about the same..... 56.3%

### West

We will raise our prices in 2010 ..... 19.4%  
 We will lower our prices in 2010 .... 3.2%  
 We will keep our prices about the same..... 77.4%

## How will your 2010 production compare to your 2009 production?

### Northeast

We plan to increase production more than 10 percent ..... 8.9%  
 We plan to increase production between 5 and 10 percent..... 31.1%  
 We plan to increase production less than 5 percent ..... 13.3%  
 We plan production to be the same ..... 17.8%  
 We plan to decrease production less than 5 percent ..... 24.4%  
 We plan to decrease production between 5 and 10 percent..... 2.2%  
 We plan to decrease production more than 10 percent ..... 2.2%

### Midwest

We plan to increase production more than 10 percent ..... 13.3%  
 We plan to increase production between 5 and 10 percent ..... 23.3%  
 We plan to increase production less than 5 percent ..... 20.0%  
 We plan production to be the same . 31.7%  
 We plan to decrease production less than 5 percent ..... 8.3%  
 We plan to decrease production between 5 and 10 percent ..... 0  
 We plan to decrease production more than 10 percent ..... 3.3%

### Southeast

We plan to increase production more than 10 percent ..... 8.3%  
 We plan to increase production between 5 and 10 percent ..... 27.1%  
 We plan to increase production less than 5 percent ..... 16.7%  
 We plan production to be the same 29.2%  
 We plan to decrease production less than 5 percent ..... 6.3%  
 We plan to decrease production between 5 and 10 percent ..... 12.5%  
 We plan to decrease production more than 10 percent ..... 0

### Southwest

We plan to increase production more than 10 percent ..... 13.3%  
 We plan to increase production between 5 and 10 percent ..... 13.3%  
 We plan to increase production less than 5 percent ..... 20.0%  
 We plan production to be the same 33.3%  
 We plan to decrease production less than 5 percent ..... 6.7%  
 We plan to decrease production between 5 and 10 percent ..... 13.3%  
 We plan to decrease production more than 10 percent ..... 0%

### West

We plan to increase production more than 10 percent ..... 26.7%  
 We plan to increase production between 5 and 10 percent ..... 13.3%  
 We plan to increase production less than 5 percent ..... 13.3%  
 We plan production to be the same 30.0%  
 We plan to decrease production less than 5 percent. .... 10.0%

We plan to decrease production between 5 and 10 percent ..... 6.7%  
 We plan to decrease production more than 10 percent ..... 0

## Do you expect your greenhouse operation to survive 2010?

### Northeast

Yes..... 89.4%  
 No ..... 0  
 Not sure ..... 10.6%

### Midwest

Yes..... 91.8%  
 No ..... 0  
 Not sure ..... 8.2%

### Southeast

Yes..... 95.8%  
 No ..... 0  
 Not sure ..... 4.2%

### Southwest

Yes..... 93.8%  
 No ..... 0  
 Not sure ..... 6.3%

### West

Yes..... 90.6%  
 No ..... 0  
 Not sure ..... 9.4%

Many growers expect sales increases to exceed 10 percent over 2009 in 2010.

