



Growing Green – What Does It Mean?

Growing green can mean a future career, more money and more jobs, or new plants and better quality crops. Who knew that growing green could mean so much! Read on to learn more about the importance of 'green' in your life.



For You

There's a good chance you could end up working in the field of horticulture. How so? Horticulture is the science of growing fruits, vegetables, flowers or ornamental plants. It's a huge industry that involves many different careers. You could find yourself as a landscape designer, nursery worker, greenhouse manager, floral designer, plant breeder, research scientist, educator, and so much more!

Horticulture is both a science and an art.

The scientist specializes in growing fruits, vegetables, flowers and ornamental plants – the kind you find in your yard or park. Part of this job includes discovering or breeding new or different types of plants. The artist then puts all of the flowers and plants together to beautify your house and environment.



For Our Economy

The "green industry" refers to those businesses, organizations, and individuals who produce, maintain, use, or sell plants. More than 9,500 product and service businesses are part of Illinois' green industry. There are also more than 52,000 businesses, organizations, and government agencies that offer employment opportunities related to the green industry.

These businesses have an enormous impact on our state's economy. Industry statistics are divided into three segments: product, service, and end-user. In 2003, the green industry brought \$4.72 billion into our economy through products, services, and employment. The combined value of product sales and service receipts amounted to \$3.28 billion, and there were nearly 166,000 people working in the industry, with a combined income of \$2 billion.

In 2004, green industry businesses spent an average of \$129,000 to market and promote their products and services. Everyone from homeowners to businesses, and organizations to government agencies buy from the green industry.





Culture Corner

Fruits, vegetables, nuts, and other foods may not be part of the green industry, but they do grow on plants or trees. Pomology is a branch of botany that involves the study and cultivation of fruits, such as fruit quality, production periods, and cost. Viticulture refers to the cultivation of grapes. Grapes are grown for fresh fruit, dried fruit or for wine. Olericulture deals with the production, storage, processing and marketing of vegetables. Arboriculture is the selection, planting, care, and removal of trees, shrubs, vines, and other perennial plants, and the study of how they grow and respond to the environment. In fact, trees are so important to the environment that Illinois celebrates Arbor Day every year on the last Friday in April.



Wonderful WORLD of GREEN!



Not only is growing green good for the environment and the economy, it's good for you and your future. Find out all the directions a career in horticulture can take you.

Floriculture

Floriculture involves the cultivation of flowering and herbaceous plants. Flowering plants are cultivated around the world in greenhouses and outdoors in ground beds or fields. Most plants are sold at garden centers in the spring so people can landscape their yards, decks, and patios. The sale of annuals (plants that live for a year) and perennials (plants that live for several years) is a big part of this industry. In fact, together, these flowers



Greenhouse Production

Greenhouses may be used to propagate plants, or grow tender vegetable and fruit seedlings and young nursery crops. Most potted plants are grown in greenhouses. The inside climate of a greenhouse can be controlled to improve growing conditions. Most have computers that automatically open vents or turn on the heating systems. Some may have a weather station that keeps track of the temperature, humidity, light intensity, and wind, both inside and outside of the greenhouse, or automatic systems to water and fertilize the plants. Some even have carbon dioxide burners that can be used to increase the amount of the gas so plants grow faster. It's the job of the greenhouse manager to know exactly what a plant needs to grow.

Career Corner

Kristin Ludwig

New Product Manager/

Product Development Specialist

Ball Horticultural Company

West Chicago, IL



Tell us about your job.

For over 100 years, Ball Horticultural Company has provided growers with cutting-edge varieties in seeds, plugs, young plants and cuttings. Ball is a world leader in the research, production and marketing of ornamental crops. My job is to find new plants from the wild and evaluate them for potential commercial introduction. I combine my science and horticulture background in new product development. I travel to other countries to find interesting plants that we may not be using in commercial horticulture here in the United States. At Ball, we want to know if we can market these plants in the U.S., and if these plants will spark enough interest for growers to buy them and gardeners to plant them.

What drew you to this industry?

I became involved in the horticulture industry by working at retail garden centers and wholesale nurseries part-time in the summers. I obtained my associate's degree in horticulture at a junior college, received my bachelor's degree in biology, and finally I pursued my masters in plant physiology.

What's in the future for horticulture?

I think that people are becoming more interested in low-maintenance plants that do not take much time for upkeep. The industry needs to provide plants that are drought tolerant, and do not need special care. I think that people are becoming more conscious in using native plants and sustainable practices (such as organic fertilizer, fewer pesticides, etc.).

Chris Matlock

Lawn Care Manager

Evergreen FS Inc./FS Custom Turf

Bloomington, IL



Why do you like your job?

I am the manager of a large lawn company. Our company has 7 full-time employees and 6 part-time employees. We specialize in fertilizer and chemical applications to lawns and landscapes. We are able to spray and fertilize both residential and commercial properties. I like working with the customer to improve the quality and value of their landscaping on his or her property. I take pride in knowing that I helped the customer improve the appearance of their lawn and landscape around their home and/or business.

Where do you see the green industry going?

The demand for landscapers will increase greatly over the next five to ten years. With the aging population unable to care for their own property, they will hire landscape maintenance companies to

Kim Kaczmarek

Garden Center Sales

Representative

Midwest Groundcovers, LLC

St. Charles, IL



Tell us what you do.

I work for a wholesale nursery called Midwest Groundcovers. Our nursery was started in 1969 on 5 acres and today we have nearly 700 acres. We grow close to 700 different varieties of plants, including perennials, ornamental grasses, roses, shrubs and groundcovers. My job is to sell our plants to garden centers. I visit garden centers and work with the buyers to provide the plants they need. I like that I get to work with a lot of different people such as garden center buyers, inventory personnel, growers, sales people, order pullers, truck drivers and plant health experts.

Where do you see horticulture heading in the future?

There is a lot of interest and work being done to plan landscapes that can help us conserve resources, especially water. Using native plants, in combination with other suitable plants, we will not need heavy watering once the plants are established. Our company works with rooftop gardens. They help cut heating and cooling costs, and they also collect rain water that would otherwise be lost to runoff.

How does horticulture impact our world?

Horticulture plays an important role in recreational spaces like parks and golf courses, and simply adds beauty to our homes and communities. It can also have a big impact on preventing soil erosion and improving air and water quality. All plants help to clean our air, produce oxygen, and provide habitat and food for wildlife.

do the work for them. I believe the future landscaper needs to be well educated and fluent in Spanish. The green industry is going to get big fast and it will become heavily regulated. This will especially be true for the chemical companies. Fewer products will be available to the homeowner and they will rely more on the chemical lawn care companies. Landscaping and landscape maintenance will keep growing rapidly and it will become very expensive with the increasing fuel and labor costs.

How will these changes affect us?

Horticulture will become a very critical part of the overall health of our planet. A balance of green space in the urban areas and the reforestation of the rural areas will be very important in reducing air, water, and noise pollution. Because of this, there will be many opportunities world wide in horticulture.





Roses Are Blue, Violets Are Red?

We know how the saying really goes, but could this be the case? It could be! You can make your flowers whatever colors you want with strawberries, blueberries, raspberries and more. Try mixing two berries together for a new color! Everyday, scientists develop flowers in new colors. Now you can, too. What kind of flowers would you grow in your nursery? Pick your favorites, and make a beautiful bouquet by painting them with your berry watercolors.

Materials Needed:

- Newspaper
- Apron
- Black magic marker or pen
- Watercolor art paper
- Cup of fresh berries, or frozen ones that have been thawed for each color of paint. (softer berries work best: strawberries, blueberries, or raspberries)
- 1/4 cup of water for each type of berry
- Potato masher or fork
- Small bowl
- Small strainer
- Clean paintbrush
- Water
- One small plastic container for each type of berry used

1. Cover your work area with the newspaper and put on the apron.
2. Using the magic marker or pen, draw a picture on the watercolor art paper. Set it aside to dry.
3. Put cup of one type of berries into the bowl and add 1/4 cup water.
4. Mash with the potato masher until everything is juicy.
5. Set the strainer across the top of the tub. Strain the juice through it and into the tub. This is the berry watercolor.
6. Repeat the water, mashing and straining steps with the other types of berries.
7. Dip the paintbrush into one of the berry colors and brush it across a part of your picture.
8. Then, rinse the paintbrush in the water and try another watercolor.
9. When you are finished painting, let your picture dry.
10. Throw away any extra water colors.

(Activity can be found in *Berries, Nuts, and Seeds*; ISBN 1-55971-573-1)



Now and in the Future

There are many advances being made in the field of horticulture, and for some very important reasons. Scientists are constantly trying to improve crop yield, quality, nutritional value, and resistance to insects, diseases, and environmental stress. Scientists work to make plants more adaptable to different climates and soils, and fit for food uses or processes. Researchers also grow and improve plants used for medicines or spices.

Biotechnology allows scientists to study genes of a plant and how they affect growth, flowering, and seed yield. Scientists are breeding ornamental trees that do not have messy fruits or flowers. Breeders are also working on improving flower color, fragrance, and how long flowers last.

Scientists can alter or change the genetic code to enhance traits of a plant. Geneticists are able to grow a better quality crop through selective breeding (they pick specific traits in order to grow the "perfect" plant). Private corporations hire geneticists to develop such things as new seeds and new varieties of fruit trees, vegetables, grains, and trees.

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