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Horticulture Therapy

Michigan State University

Cooperative Extension Service

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# HORTICULTURAL THERAPY



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## What is Horticultural Therapy?

Horticulture is that area of agriculture that includes fruits, vegetables, woody ornamental plants (trees, shrubs, vines and ground covers), flowers and small ornamental plants. Horticultural therapy involves the use of those plants and related activities as tools to promote healing and rehabilitate people with special needs. The general purpose of horticultural therapy is to improve a person's physical and mental well-being.

Horticultural therapy is effective as an activity therapy because it encompasses a wide range of activities that can be used for recreational, educational and therapeutic purposes. These activities can be adapted to almost all situations, whether indoors or outside, at home or in a rehabilitation center. Horticulture is effective as a therapy in the sense that it uses living plants, which provide a touch of reality: plants need care, they "get sick" and they die. Through work and determination, some ailing plants can be brought back to health. Plants help people become more aware of their environment and the world they live in. Horticultural activities also serve as a source of relaxation, enjoyment, accomplishment and satisfaction.

## A Brief History

Horticultural therapy has been practiced for many years. In 1768, Benjamin Rush declared that digging in the soil had a curative effect on the mentally ill. In the 1950s, the first workshops in horticultural therapy were held at Michigan State University. In the early 1970s, academic programs in horticultural therapy began to be offered at universities. These programs provided background in education, psychology, therapy and horticulture.

In 1972, the American Horticultural Therapy Association (formerly the National Council for Therapy and Rehabilitation through Horticulture) was formed. The association promotes horticulture as a tool for therapy and rehabilitation. The Michigan HTA is one of the many branches of the AHTA. The U.S. Civil Service Commission has recognized the profession of horticultural therapist since 1973.

## What is a Horticultural Therapist?

A horticultural therapist is a person who can assess the therapeutic needs of an individual and apply knowledge in the horticultural area to meet those needs. A horticultural therapist must have compassion and patience when helping people, horticultural knowledge and teaching skills.

## Who Benefits from Horticultural Therapy?

As a preventive and active therapy, horticulture is beneficial to anyone who is interested in plants and nature. Horticultural therapy programs are used with various populations including persons with mental, emotional or physical impairments, and the incarcerated. Horticultural therapy is used in hospitals, schools, rehabilitation and care centers, geriatric facilities and correctional institutions.

## What are the Benefits of Horticultural Therapy?

Horticultural therapy is successful and effective because of its many benefits to people. These benefits include stimulation of intellectual, social, emotional and physical development. Intellectual development can be stimulated by studying and researching such areas as plant propagation, culture and use. Social benefits come through group interaction. Working together toward a common goal can increase levels of cooperation and responsibility, and develop leadership skills. Emotional growth can be seen in increased determination and motivation.

Successful projects and activities lead to improved confidence and self-esteem. Activities that do not end successfully can teach patience and help one learn to deal with frustration and loss. Certain physical activities provide socially acceptable outlets for

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aggressive drives. This can lead to increased self-control. Physical benefits include the development and improvement of muscle coordination and basic motor skills. Increased outdoor activities can provide exercise and help relieve tension and stress.

Additional benefits of horticulture are prevocational and vocational training. Persons with disabilities can be trained to be partially self-supporting, which can also be very important to their self-esteem.

A wide variety of activities can be used in horticultural therapy. Planning is an essential factor in an effective program. The first step is to determine the needs of the individual so that goals and objectives can be established to meet those needs. Then activities should be chosen to accomplish the goals and objectives. Keep in mind that the activity should be fun. An evaluation should follow each activity to determine its effectiveness.

The goals and objectives developed for an individual or group can center around the activities presented in the chart.

## Children's Activities

Plant-related activities selected for children should be fun! The colors selected should be bright and cheery. Yellow flowers look bright even on dull, cloudy days. Let the children choose, with adult help, what they wish to do. Children may be enthusi-

astic about a book they have read, a video or movie just seen. Be imaginative and creative to find a plant-oriented activity related to their daily life. Examples might include designing Aladdin's magic carpet garden, making a small Teddy bear topiary, growing 'Peter Pan' and 'Thumbelina' zinnias, and growing vegetables and herbs for a homemade pizza or spaghetti sauce.

## Special Child's Garden

The raised bed "Special Child's Garden" in the Michigan 4-H Children's Garden at Michigan State University is a popular spot for able as well as disabled individuals of all ages. It is made entirely of untreated cedar lumber. The three lift doors allow a view of the roots pressed against the slanted glass. (See diagram below.)

The plants on display in this bed may be grouped into three general categories:

1. The "root view" boxes. Large white radishes ('Daikon') and large orange carrots ('Orange Rocket') both display long taproots. Peanuts 'Valencia' or 'Early Spanish' will show a fibrous root system.
2. Scented plants for viewers to sniff: lavender 'Lady', basil 'Window Box' or 'Greek Mini', scented geranium 'Juicy Fruit' and creeping thyme.
3. Miniature vegetables: eggplant 'Bambino', beet 'Little Ball', carrot 'Thumbelina', tomato 'Birdie' or 'Micro Tom', lettuce 'Tom Thumb'

and pepper 'Jingle Bells'. Viewers can "get up close and personal" at this height.

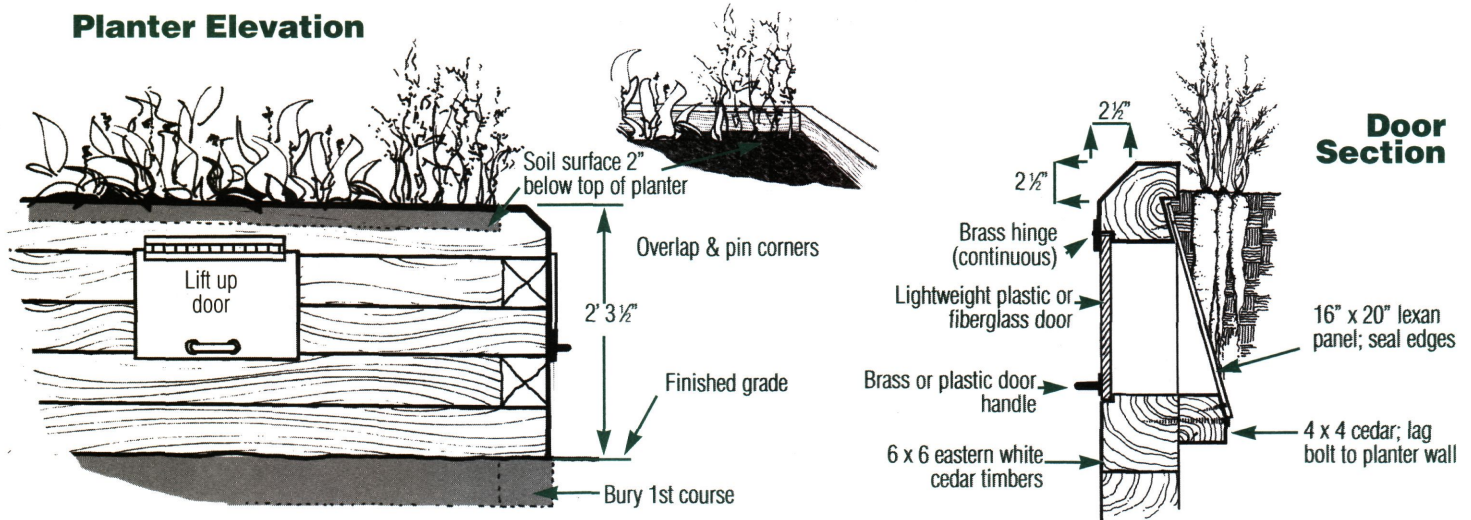
Several mimosa (*Mimosa pudica*) or sensitive plants along the edge are a "must"—visitors love to watch the leaves fold up. (They will recover in about 20 minutes.)



## Conclusion

The main challenge in horticultural therapy is to motivate and stimulate a person through the use of horticulture-related activities and, therefore, to foster, maintain and promote emotional, social and physical health. Horticulture is a valuable medium because it helps people adjust to disabilities, learn new skills, renew confidence, have fun and develop self-esteem, which can lead to new interest in life and improved mental and physical health.

For more information, contact: American Horticultural Therapy Association (AHTA), 362A Christopher Avenue, Gaithersburg, MD 20879 (tel: 1-800-634-1603). AHTA can provide information on the contact persons for the Michigan chapter and other state and regional chapters. The Michigan chapter usually has its annual conference during Agriculture and Natural Resources Week in March at Michigan State University in East Lansing.



## PARTIAL LISTING OF HORTICULTURAL THERAPY ACTIVITIES

### **TIME: Winter**

*(December through February)*

Care for indoor plants  
Crack and use walnuts, hickory nuts, etc.  
Discuss indoor plant care  
Force flowering branches  
Get garden tools ready  
Grow pineapple tops, citrus seeds, avocado pits, sweet potatoes, ginger and other interesting plants  
Grow sprouts for a salad  
Look at a computer program on plants  
Make a garden bingo identification game  
Make a sand design (terrarium, planter, etc.)  
Make birdhouses using birdhouse gourds  
Make catnip mice for cats and other herbal crafts  
Make collages (with pictures from seed catalogs)  
Make holiday decorations (wreaths, door swags or similar items)  
Make ivy topiary using coat hangers for shapes  
Make macramé plant hangers  
Make plant labels using plastic milk cartons  
Make pomander balls  
Make seed tapes  
Make wind chimes (use clay pot pieces or other materials)  
Order seed catalogs and seeds  
Paint or glaze flower pots  
Plan gardens (vegetables, flowers, herbs, etc.)  
Propagate indoor plants  
Prune fruit and ornamental trees  
Test leftover seeds for germination  
Trade or exchange indoor plants  
Watch a video or TV show on plants

### **TIME: Early Spring**

*(March and April)*

Construct dish gardens and terrariums  
Continue planning gardens  
Continue starting seeds indoors  
Get containers ready for container gardening  
Have a plant identification contest using pictures, plants and seeds  
Identify spring wildflowers  
Make a garden planting board

Make a grass basket and grow spring wheat  
Make garden planting stakes and labels  
Make mini-grow chambers with pop bottles  
Plant hardy seeds and plants outdoors  
Propagate indoor plants  
Take care of yard, trees, shrubs, perennials, bulbs, beds  
Transplant cool-season plants to garden  
Visit a greenhouse, garden center, florist  
Watch popcorn grow in a glass

### **TIME: Spring/ Early Summer**

*(May and June)*

Collect materials for wall plaques  
Design and make your own garden art  
Go on a nature walk  
Grow a potato plant in a bag, bushel basket, tire or bucket  
Grow sunflowers for the "tallest" contest  
Harvest vegetables and herbs from garden  
Make a scarecrow  
Make hanging baskets  
Plant a pizza or spaghetti garden  
Plant a salsa garden  
Plant a sunflower house  
Plant a tepee garden using pole beans  
Plant a tree during Arbor Week  
Plant print T-shirts  
Plant some herbs and flowers in an old boot or shoe  
Preserve vegetables and herbs  
Sow seeds of warm-season plants outdoors  
Transplant warm-season plants to garden  
Visit a garden, nursery or roadside stand  
Visit a pick-your-own operation

### **TIME: Summer**

*(July and August)*

Collect flowers or plants for potpourri  
Collect materials for wall plaques  
Cook with vegetables and herbs  
Go on a garden tour  
Have a flower show  
Have a garden fair or exhibit  
Have a garden produce sale  
Make animal figures from garden

vegetables  
Make book markers with pressed plant materials  
Make herb vinegars, teas and soaps  
Make floral windows  
Make mint sun tea  
Make zucchini boats  
Prepare for fall plantings  
Preserve vegetables, herbs and flowers  
Press flowers to use later for crafts  
Take care of yard, gardens and beds  
Try cooking with edible flowers  
Visit a garden or roadside stand  
Visit a pick-your-own operation  
Visit a public garden or arboretum  
Visit various types of gardens— container, vertical, raised beds, native plant, ethnic, Bible, railroad, theme, etc.

### **TIME: Fall**

*(September through November)*

Carve or paint pumpkins  
Clean up yard and garden  
Collect apples and make cider  
Collect seeds to germinate (honey locust, white oak, nuts, etc.)  
Collect seeds, fruits and cones for plaques, etc.  
Create "cracked pots" for decorations  
Decorate garden tools for gifts  
Divide spring-flowering perennials  
Force hardy bulbs (tulips, daffodils, crocus, hyacinths)  
Force tender bulbs (amaryllis, paperwhite narcissus)  
Go on a color tour  
Harvest vegetables, herbs and flowers and have a party  
Have a garden fair or exhibit  
Have a garden produce sale  
Have a gourd contest (most unusual, most colorful, smallest, best for birdhouses, etc.)  
Have a pumpkin contest (largest, smallest, best-shaped, most unusual, etc.)  
Make holiday decorations  
Make potpourri and other herbal crafts  
Preserve vegetables, herbs and flowers  
Stencil or plant print a garden apron

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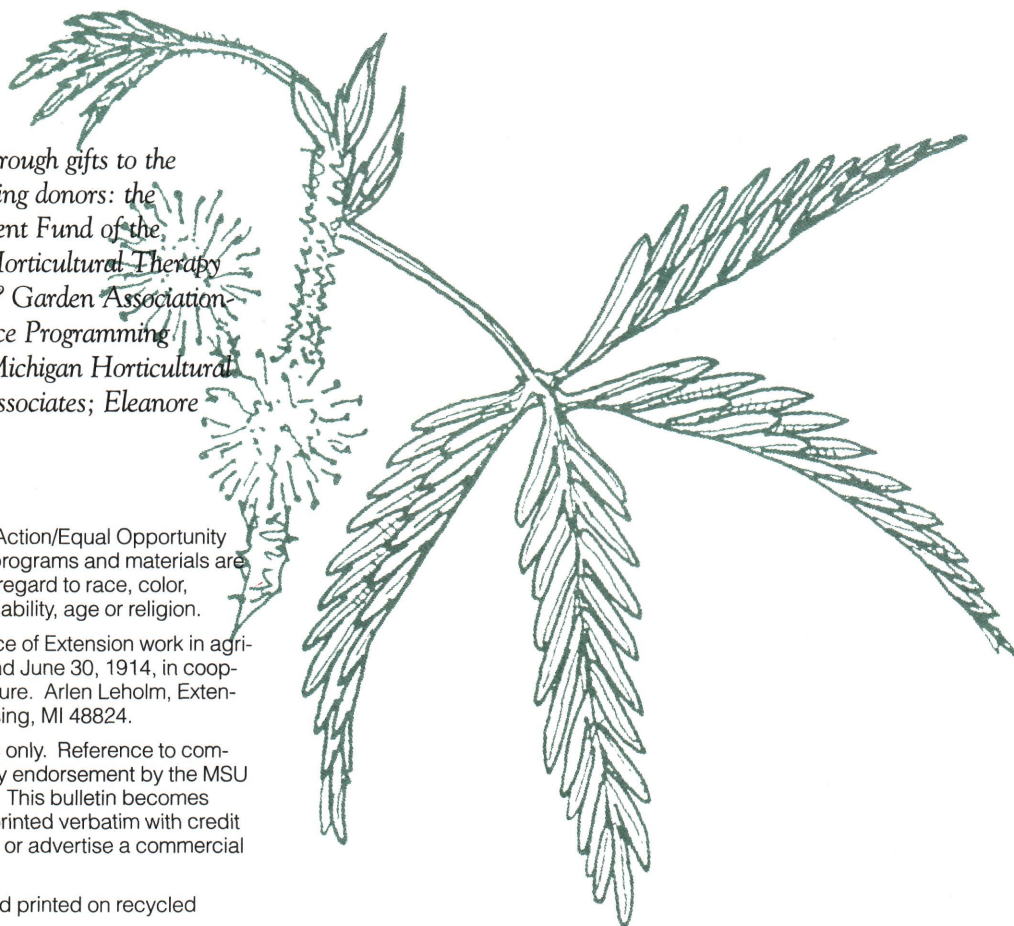
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