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HORTICULTURAL THERAPY



Cathy Fredenburg Leavey, J. Lee Taylor and Jane L. Taylor*

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 enthusiastic 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'

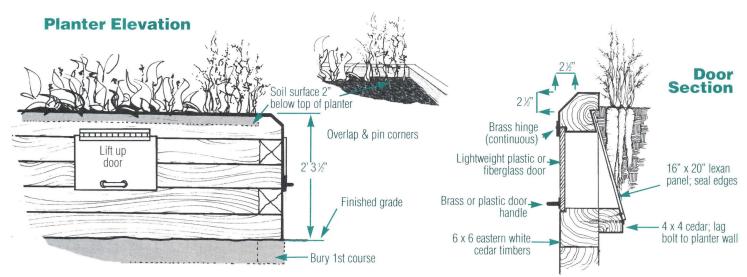
and pepper 'Jingle Bells'. Viewers can "get up close and personal" at this height.

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.



Drawings by Deborah Kinney, landscape architect, MSU Division of Campus Park and Planning

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

herbal crafts

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

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,

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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