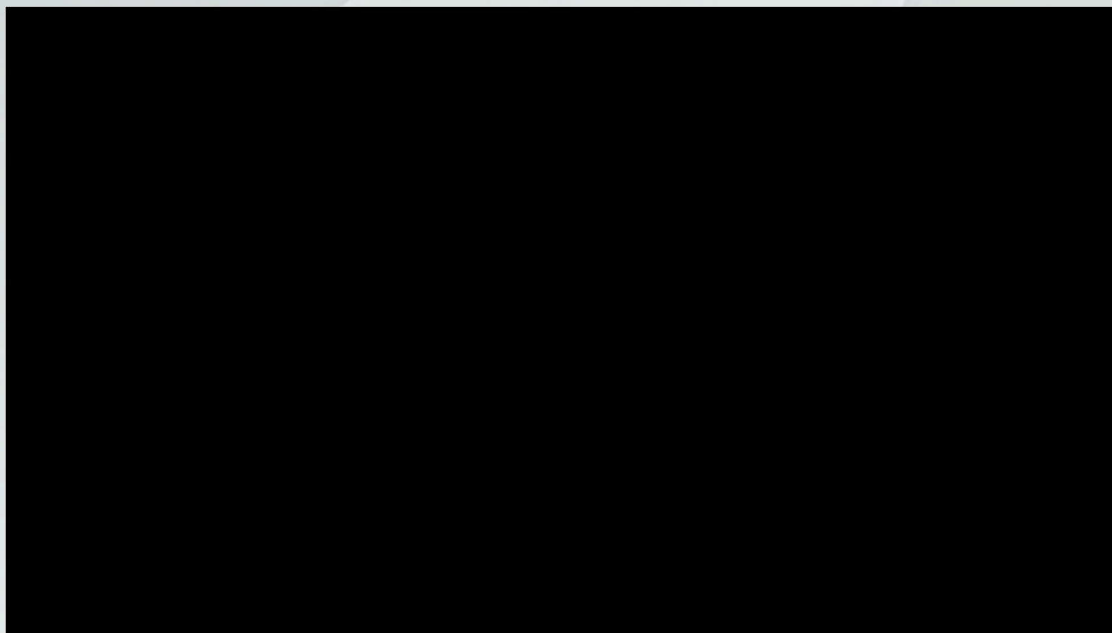


Gardening for the Health of It!



Christopher Imler
MSU Extension
Consumer Horticulture
Veterans Liaison

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Captioning technology available



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mail:
U.S. Department of Agriculture
Office of the Assistant Secretary for Civil Rights
1400 Independence Avenue, SW
Washington, D.C. 20250-9410; or

fax:
(833) 256-1665 or (202) 690-7442;

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Esta institución ofrece igualdad de oportunidades.

Your Instructor



Straight to the Facts!

“Americans face life-altering health challenges over the next 25 years.”

“Access to traditional health care is not projected to keep pace with demand.”

“Gardening as a pastime is more popular than ever.”

Agenda

1. What is EBHT?
2. Which health benefits are supported by conclusive evidence?
3. How do you **do** horticulture therapy?
4. Where is this type of work being done in Michigan and Nationwide?
5. What can I do to stay gardening longer?
6. What resources are available for would-be practitioners?



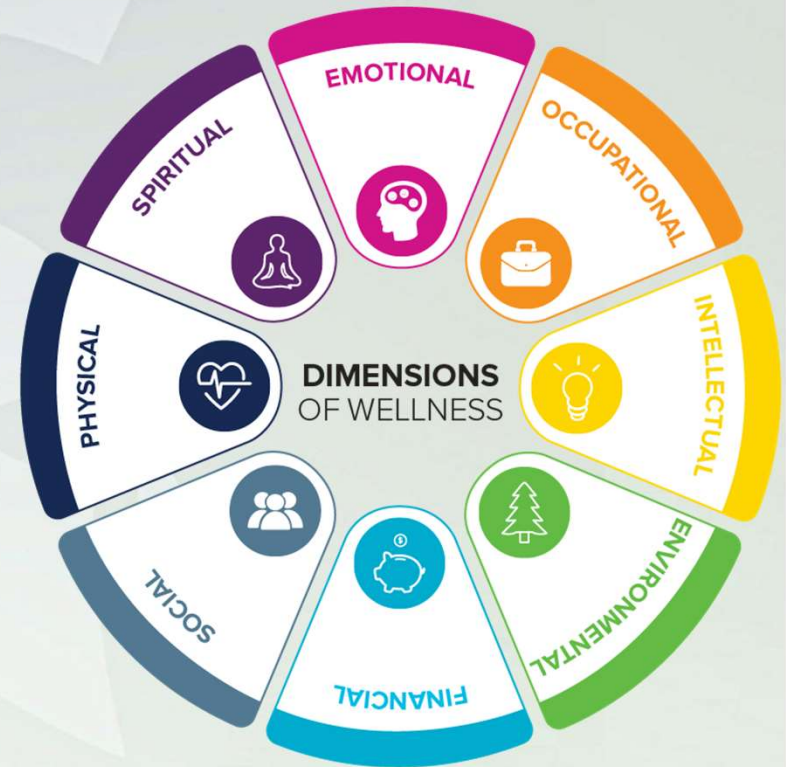
EBHT Explained

E - Evidence
B - Based
H - Horticulture
T - Therapy

“Horticultural therapy is the participation in horticultural activities facilitated by a registered horticultural therapist to achieve specific goals within an established treatment, rehabilitation, or vocational plan.”

– American Horticulture Therapy Association

EBHT Explained



Images by MSU Extension and UC Davis Counseling

EBHT Explained



A Gang of Gardeners Gathered!

EBHT Explained



Photography is a natural pairing with gardening. Exercise your creative muscles!

Benefits of EBHT

Hyperbole

- Reverses terminal illnesses
- Substitutes expert help
- “Just garden!”
- Only for the ill or injured

Data

- Symptom management
- Primarily cognitive benefits
- Works w/ structure & goals
- Recreational therapy builds resilience

EBHT Explained

Evidence-Supported Benefits¹

- Pain Management
- Improved Attention
- Stress Reduction
- Mitigation of Symptoms:
PTSD, TBI, Depression,
Dementia, and GAD



¹(Detweiler et al., 2012)

Benefits of EBHT



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Horticultural Therapy has Beneficial Effects on Brain Functions in Cerebrovascular Diseases

Yuko Mizuno-Matsumoto^{*1}, Syoji Kobashi², Yutaka Hata², Osamu Ishikawa³, and Fusayo Asano⁴

Published in a reputable journal

Indicates what was measured

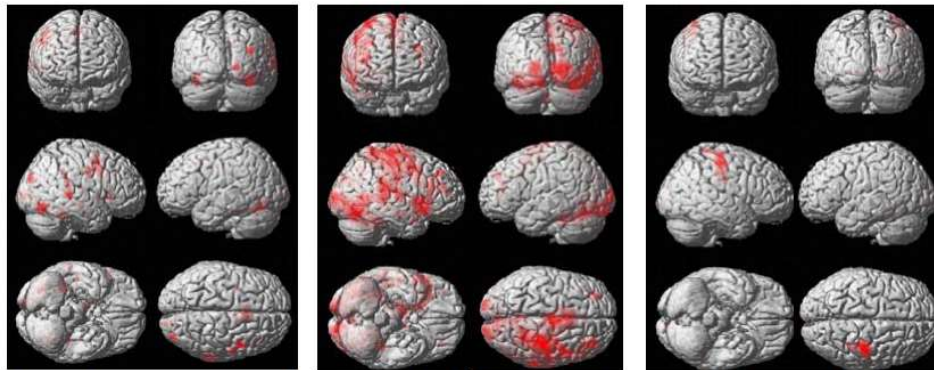


Figure 2. Activated areas of Case #1 before HT (left) and after HT (middle) ($p < 0.05$), and increased areas in activation after HT, compared to the activation level before HT (right) ($p < 0.1$).

Table 3. Scores of FIM

		Case #1	Case #2	Case #3	Case #4	Case #5
Before HT	Total score	62	91	86	64	59
	Motor items	38	72	53	39	33
	Cognitive items	24	19	33	25	26
After HT	Total score	92	89	116	114	104
	Motor items	68	71	81	85	75
	Cognitive items	24	18	35	29	29

* $p < 0.03$

Includes data set or summary

EBHT Techniques

Clinically Recognized Activities

Session	Description of Programs
1	Flowerbed preparation (weeding)
2	Flowerbed preparation (weeding)
3	Readying the soil
4	Creating a planting plan for flowerbeds
5	Briefing on future activities and selecting seedling
6	Cultivating
7	Terrarium making
8	Planting to the flowerbed according to plan
9	Planting seedling to flowerbed
10	Soil readying, watering, and dividing seedling
11	Watering, and picking up withered flowers
12	Doing crafts using moss, and watering
13	Watering
14	Planting vegetables, weeding, dividing
15	Making name plates for the flowerbeds
16	Watering and weeding
17	Watering, weeding, and appreciating other patients' flowerbeds
18	Making a container garden
19	Making pressed flowers
20	Working in the garden

(Kobashi and Hata, 2008)



Garden time can be family time!

EBHT Techniques



Q: What benefits can be realized during fall cleanup?

A:

Healthy cardiovascular stress

Mobility practice: reaching, stretching, pulling

Opportunity for mindfulness or reflection

Self-Guided Horticulture Therapy

Step 1

Set a
measurable
goal

Example: I want to
improve stress
management

Step 2

Identify
appropriate
activities

- Write in the garden
- Photograph garden

Step 3

Evaluate
progress,
adapt

- Journal entries
- Photos taken
- Blood pressure

Therapy Garden Design

Informal,
Organic



Least



Moderately

Formal,
Structured



Least

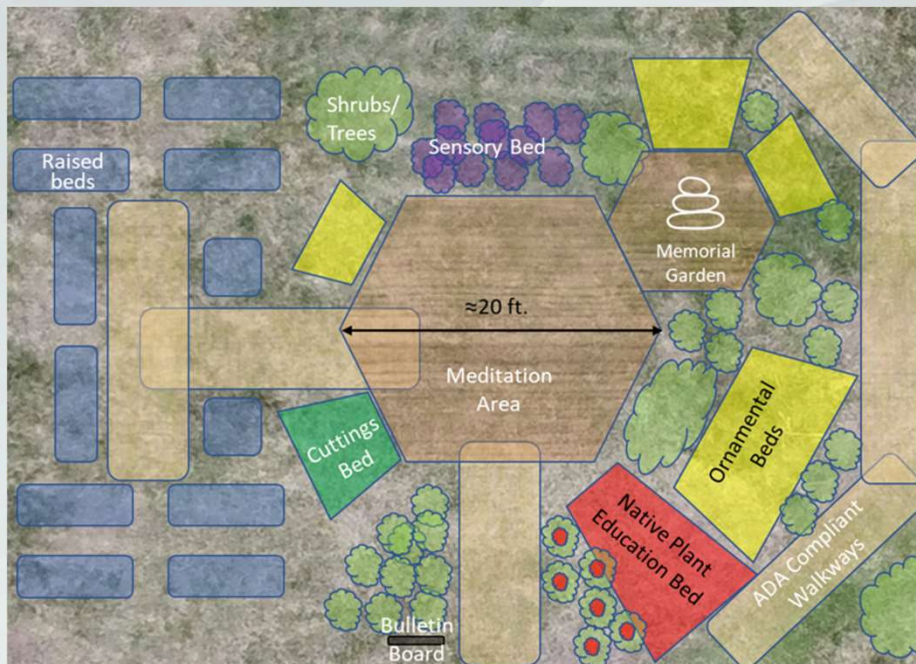


Moderately

Sensory Elements

- Harmony, color, texture
- Defined features/areas
- Privacy features
- Gentle noises and movement
- Late-day light dynamics
- Incorporating wildlife

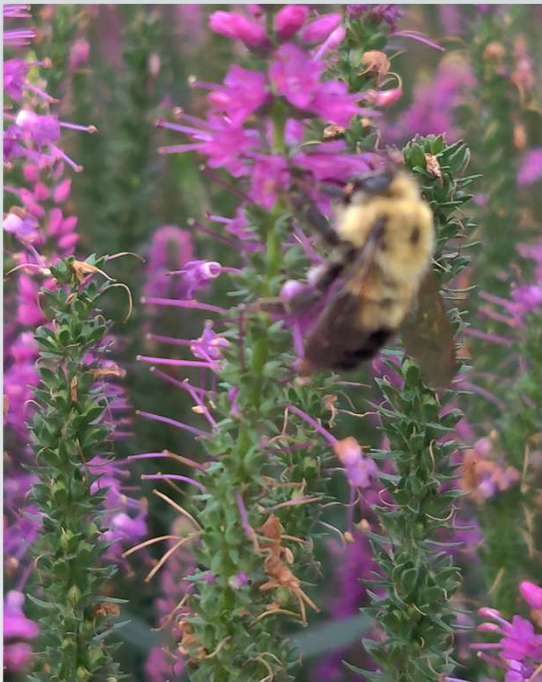
Therapy Garden Design



Sensory Elements

- Harmony, color, texture
- Defined features/areas
- Privacy features
- Gentle noises and movement
- Late-day light dynamics
- Incorporating wildlife

Therapy Garden Design



What's your favorite garden visitor?

Sensory Elements

- Harmony, color, texture
- Defined features/areas
- Privacy features
- Gentle noises and movement
- Late-day light dynamics
- Incorporating wildlife

Therapy Garden Design

Enabling Elements

- Plentiful seating
- Accessible beds
- Wheelchair friendly paths
- Braille plant tags
- Picture signage



Raised bed construction can help to accommodate a wide range of users

Therapy Garden Design

Enabling Elements

- Plentiful seating
- Accessible beds
- Wheelchair friendly paths
- Braille plant tags
- Picture signage



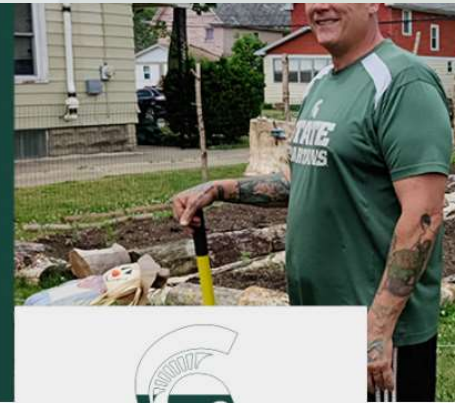
How would you build this path differently?

EBHT in the United States



EBHT in Michigan

MSU EXTENSION VETERANS THERAPY GARDEN KALAMAZOO, MI



HOME / CROWDPOWER / MSU EXTENSION VETERANS THERAPY GARDEN

Support the MSU Extension Veterans Therapy Garden Project

The Centers for Disease Control and Prevention reported in 2020 that demand for mental healthcare had drastically increased both over the last 10 years and especially within the last three years. Availability of these services has not increased proportionally and has not been projected to meet or exceed demand past 2025.

For many military veterans, this disparity in mental health services is often even more pronounced. Finding quality mental health resources can be a critical problem for veterans returning to civilian life. Whether it's dealing with gaps in the VA healthcare system or financial barriers, too many veterans are unable to access the care they need. The **MSU Extension Veterans Therapy Garden Project (VTGP)** addresses the



44%
FUNDED

GIVE NOW

\$2,240
RAISED OF \$5,000 GOAL

31
PARTICIPANTS

Creating Programming

AHTA Program Guidelines

1. Engagement in horticultural-related activities.
2. Participant has identified disability, illness, or life circumstance requiring services
3. Activity facilitated by registered horticultural therapist
4. Context of established treatment, rehabilitation, or vocational plan

Lifelong Gardening

Protect Hands and Wrists



Protect Back & Knees

1. Maintain broad base of support.
2. Bend at hips and knees; get close to object.
3. Use stronger (larger) muscles.
4. Use your body weight to push/pull.
5. Carry heavy objects close/next to your body.
6. Avoid twisting your body as you work.
7. Avoid bending for long lengths of time.
8. For heavy objects get help; use devices/tools.

STRESS



BEST



Protect Face, Neck, & Eyes



Hat

**UV
Filter
Lens**

**SPF
30**

Authorities and Resources

- [Therapy Garden Design Considerations](#)
- [Tools for Reduced Mobility Gardening](#)
- [Ideas for EBHT Programming](#)
- [Formal Training for EBHT Certification](#)



*Mike Maddox, Certified Horticulture
Therapist, University of Wisconsin
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Q&A

- Contact Me
 - imlchr@msu.edu
 - **269-779-8750**
- MSU Extension Ask-an-Expert
 - canr.msu.edu/outreach/ask-an-expert
- Gardening in Michigan Website
 - canr.msu.edu/home_gardening/
- Donate to the Veterans Therapy Garden Project
 - <https://givingto.msu.edu/crowdpower/veterans-therapy-garden>



