

## CATEGORY: POPULATIONS/HORTICULTURE PROGRAMS

### Trauma Recovery & Plant-based Programs

Trauma is experienced by individuals and as collective communities and populations spanning a wide range of areas, types of trauma and with complex physical, emotional and cognitive health challenges. These include for example, post-traumatic stress for veterans, women veterans, military sexual trauma, and PTSD, among ethnic minority veterans, psychological trauma for American Indians, Native Hawaiians & Americans of Japanese ancestry who served in Vietnam, and peacekeepers. Trauma can be experienced by people impacted by disaster, weather and climate extremes, and mass violence events, along with terrorist attacks, intimate partner violence, child abuse (sexual, physical), and human trafficking.

Trauma, defined by physician Gábor Maté is “a psychic injury, lodged in [the] nervous system, mind, and body, lasting long past the originating incident(s), triggerable at any moment... trauma is what happens inside the individual not what happens to the individual” (Mate & Mate, 2022). This excerpt from Polacova et al. (2023) paper touches on related and important elements of trauma—trauma-informed care (TIC), core principles of TIC, and health interventions including horticultural therapy, therapeutic horticulture, and nature-based therapies. The literature on trauma identifies resiliency as a significant aspect of addressing trauma of all kinds, which is the capacity to make adaptations that result in positive outcomes in spite of serious experiences or adverse circumstances. Factors that support resiliency include supportive community, feeling of belonging, sense of worth, & caring adults (for children) (Vawnet.org, 2021).

**For related resources refer to category: Populations/Horticulture Programs in Specific Settings – Eating Disorders, Trauma Recovery etc.; category: Horticultural Therapy & Health Services.**

#### Key Organizations

[Alliance to End Trafficking](#) (ATEST)

[American Trauma Society](#)

[Freedom from Torture](#)

[National Center for Trauma-informed Care](#) (NCTIC)

[National Center for PTSD](#)

[National Center on Domestic Violence, Trauma & Mental Health](#)

[National Child Traumatic Stress Network](#) (NCTSN)

[Society of Trauma Nurses](#)

[Substance Abuse and Mental Health Services Administration](#) (SAMHSA)

[The Inter-Agency Coordination Group against Trafficking in Persons](#) (ICAT)

[Trauma Healing Institute](#)

[Wounded Warriors in Action](#)

[U.S. Department of Veterans Affairs: PTSD: National Center for PTSD](#)

#### Books, journals & publications on trauma recovery & plant-based programs

Coverdale, J.H., Gordon, M.R., & Nguyen, P.T. (2020). *Human trafficking - A treatment guide for mental health professionals*. American Psychiatric Association Publishing.

Fisher, J. (2021). *Transforming the living legacy of trauma: A workbook for survivors and therapists*. PESI Publishing & Media.

Grut, J., & Linden, S. (2002). *The healing fields: Working with psychotherapy and nature to rebuild*

shattered lives. Franklin Lincoln.

[Journal of Trauma Nursing](#)

[Journal of Traumatic Stress](#)

[Psychological Trauma: Theory, Research, Practice, and Policy](#) (journal)

Substance Abuse and Mental Health Services Administration (SAMHSA). (2014). *Trauma informed care in behavioral health services. Treatment improvement protocol (TIP) Series 57*. HHS Publication No. (SMA) 13-4801., 63.

[Trauma Care](#) (journal)

Wise, J. (2015). *Digging for victory- horticultural therapy with veterans for post-traumatic growth*. Routledge.

### Research & articles on trauma recovery & plant-based programs

Recently published selected research & articles:

Adams, S., Houston-Kolnik, J., & Reichert, J. (2017). [Trauma-informed and evidence-based practices and programs to address trauma in correctional settings](#). *Illinois Criminal Justice Information Authority*.

Ades, V., Wu, SX., Rabinowitz, E. et al. (2019 April). An integrated, trauma-informed care model for female survivors of sexual violence: The Engage, Motivate, Protect, Organize, Self-Worth, Educate, Respect (EMPOWER) Clinic. *Obstet Gynecol.*, 133(4), 803-809.

American Hospital Association. (2019). [What is trauma-informed care?](#)

Bahamonde, A. (2019). Mental health through the art of gardening. *Journal of Therapeutic Horticulture*, 29(2).

Branco, P. (2018). How can therapeutic horticulture help meet the complex needs of domestic violence survivors and their children? VAWnet – A project of the National Resource Centre on Domestic Violence.

Buffalo Center for Social Research. (2024). [What is trauma-informed Care?](#) University of Buffalo.

Cacciatore, J., Gorman, R., & Thieleman, K. (2020, Mar). Evaluating care farming as a means to care for those in trauma and grief. *Health Place*, 62, 102281.

Casassa, K., Knight, L., & Mengo, C. (2021). Trauma bonding perspectives from service providers and survivors of sex trafficking: A scoping review. *SAGE Journals, Trauma, Violence, & Abuse*, 23(3).

Chaudhury P., & Banerjee, D. (2020). Recovering with nature: A review of ecotherapy and implications for the COVID-19 pandemic. *Front Public Health.*, 8, 604440.

Chen, E.Y., Robichaux, K., Gordon M.R. et al. (2023). A pilot program's healthcare response to human trafficking in Houston, Texas. *Journal of Human Trafficking*, 9(1), 119-129.

Cipriani, J., Benz, A., Holmgren, A. et al. (2022). A systematic review of the effects of horticultural therapy on persons with mental health conditions. *Occupational Therapy Mental Health*, 33(1), 47-69.

Corrigan, F.M., Fisher, I.L., & Nutt, D.J. (2010). Autonomic dysregulation and the Window of Tolerance model of the effects of complex emotional trauma. *Journal of Psychopharmacology*, 25(1).

Department of Health & Human Service USA (DHHS) (nd.). Resources: Common health issues seen in victims of human trafficking.

Detweiler, M.B., Self, J.A., Lane, S. et al. (2015). Horticultural therapy: A pilot study on modulating cortisol levels and indices of substance craving, posttraumatic stress disorder, depression, and quality of life in veterans. *Altern Ther Health Med.*, 21(4), 36-41.

Duquesne University. (2020). [What are the 6 principles of trauma-informed care?](#)

Fleming, L., & Creus, E. (2024). Therapeutic techniques applicable to people-plant programming. *Cultivate*, 4(3).

Fleming, L., Bethel, M., & Roberts, T. (2023). Self-regulation, its neuroscience foundations and

- horticultural therapy: Growing the connections. *Journal of Therapeutic Horticulture*, 33(1).
- Fleming, L., & Wilson, C. (2021). Compassion satisfaction and compassion fatigue. *Digging In*, 7(4), 1-3.
- Gilgoff, R., Singh, L., Koita, K. et al. (2020, April). Adverse childhood experiences, outcomes, and interventions. *Pediatr Clin North Am.*, 67(2), 259-273.
- Grahn, P., Pálsdóttir, A.M., Ottosson, J., & Jonsdóttir, I.H. (2017). Longer nature-based rehabilitation may contribute to a faster return to work in patients with reactions to severe stress and/or depression. *International Journal of Environmental Research and Public Health*, 14(11), 131.
- Hart, B., & Zanskas, S. (2021). Cultivating care: Trauma, homeless veterans, and nature-based therapy. *Journal of Therapeutic Horticulture*, 31(1).
- Hastings, T. (2016). Combining trauma-focused treatments with horticultural therapy. *Pacific Quest*.
- LaRocque, C. (2019). Program example: The interface between horticultural therapy, trauma treatment and somatic-oriented mental health therapy. In Haller, Kennedy & Capra (Eds.), *The profession and practice of horticultural therapy*. CRC Press.
- Lavature, J.L. (2022). [Project HOME: A novel nature-based therapy approach for the treatment of veterans with trauma](#). Psychology Doctoral Specialization Projects. 19.
- McCord, C. (2017). Landscape architecture and neuroplasticity: A role for design in addressing the impact of early childhood trauma. *CELA conference proceedings 2017*.
- Melton, H., Meader, N., Dale, H. et al. (2020). Interventions for adults with a history of complex traumatic events: The INCITE mixed-methods systematic review. *Health Technol Assess.*, 24(43), 1-312.
- Mottershead, R., & Ghisoni, M. (2021). Horticultural therapy, nutrition and post-traumatic stress disorder in post-military veterans: Developing non-pharmaceutical interventions to complement existing therapeutic approaches. *F1000Research*, 10, 885.
- Munson, J. (2023). Therapeutic horticulture: A trauma-informed approach to mental well-being within a psychiatric hospital. *Cultivate*, 3(2), 9-11.
- Nadeau, M. (2019). The role of horticultural therapy in the treatment of refugees with post-traumatic stress disorder. *Digital Commons.liberty.edu*
- Olszewska-Guizzo, A., Fogel, A., Escoffier, N. et al. (2022). Therapeutic garden with contemplative features induce desirable changes in mood and brain activity in depressed adults. *Front Psychiatry.*, 13, 757056.
- Phillips, S.B. (2021). [5 reasons gardening can help to heal trauma](#). *Psychology Today*.
- Poláčková, Z. (2023). Horticultural therapy with female survivors of human trafficking. *Cultivate*, 3(4), 1-6.
- Poláčková, Z., Fleming, L., Brown, J., & Kelejian, H. (20xx). Horticultural therapy health intervention with female survivors of human trafficking: Program models. *Journal of Therapeutic Horticulture* 33(1).
- Poulsen, D.V., Pálsdóttir, A.M., Christensen, S.I. et al. (2020). Therapeutic nature activities: A step toward the labor market for traumatized refugees. *International Journal of Environmental Research and Public Health*, 17(20), 7542.
- Poulsen, D.V., Stigsdotter, U.K., & Refshage, A.D. (2015). Whatever happened to the soldiers? Nature-assisted therapies for veterans diagnosed with post-traumatic stress disorder: A literature review. *Urban Forestry & Urban Greening*, 14(2), 438-445.
- Ramaj, K., (2021). The aftermath of human trafficking: Exploring the Albanian victims' return, rehabilitation, and reintegration challenges. *Journal of Human Trafficking*.
- Renzetti, C.M., & Follingstad, D. (2015). From blue to green: The development and implementation of a therapeutic horticulture program for residents of a battered women's shelter. *Violence and Victims*, 30(4).

Renzetti, C.M., Follingstad, D., & Fleet, D. (2017). Nine Innovative programs to economically empower women and prevent intimate partner violence revictimization. In Renzetti, Follingstad & Coker (Eds), *Preventing intimate partner violence: Interdisciplinary perspectives* (Bristol, 2017; online ed., *Policy Press Scholarship Online*, 18 Jan. 2018),

Rousseau, D. (2021). Horticultural therapy: Plant care as a means of dealing with stress and trauma? *Boston University*.

Shao, Y., Elsadek, M., & Liu, B. (2020). Horticultural activity: Its contribution to stress recovery and wellbeing for children. *International Journal Environ Res Public Health.*, 17(4), 1229.

Silva-Rodriguez Bonazzi, D., & Febles, A. (2022). Horticultural therapy program for trauma survivors. *Horticultural Therapy Institute Newsletter*.

Sperry, M. (2020). Thyme for kids in Kansas City, MO. *AHTA Magazine*, 48(1), 10.

Stone Rice, J. (2019). Chapter 6 Brain, mind, and relationship implications for horticultural therapy. In Haller, Kennedy & Capra (Eds.), *The profession and practice of horticultural therapy*. CRC Press.

The National Child Traumatic Stress Network. (2012). [TF-CBT: Trauma-focused cognitive behavioral therapy](#).

Trauth, J.N., Harris, K., & Jackson, N. (2023). Using trauma-informed care and horticulture therapy with college students: A counseling approach modeled after a refugee resettlement community. In Alexander-Ashley (Ed.), *Practical strategies to reduce childhood trauma and mitigate exposure to the school-to-prison pipeline*, 66-82. IGI Global.

University of Washington. (2018). Healing & therapy [Crisis recovery & resilience]. *Green Cities: Good Health*.

Varning Poulsen, D., Lygum, V.L., Djernis, H.G., & Stigsdotter, U.K. (2021). Nature is just around us! Development of an educational program for implementation of nature-based activities at a crisis shelter for women and children exposed to domestic violence. *Journal of Social Work Practice*, 35(2), 159-175.

Vavnet. (2021). [Research on resiliency](#). *National Resource Center on Domestic Violence*.

Watkins, M.S., Teh, L.A., & Fernandez, K.T.G. (2019). Exploring the use of therapeutic horticulture to enhance the psychological well-being of female survivors of childhood sexual abuse. *Journal of Therapeutic Horticulture*, 29(1).

Wise, J. (2019). Perspective: Using horticultural therapy to recover from trauma. In Haller, Kennedy & Capra (Eds.), *The profession and practice of horticultural therapy*. CRC Press.

### Examples of trauma recovery & plant-based programs

*Blossom Program UK* is a nature-based 10-week support program for people who have experienced domestic abuse with campfire gathering area, kitchen area, foraging items, mandalas, with outcomes of social connections, well-being & self-esteem, reduced depression symptoms. <https://wildernessfoundation.org.uk/domestic-violence-recovery/>

*Building a Personal Connection with Nature* program for female survivors of human trafficking is delivered by A Safe Place community agency, North Carolina Master Gardeners and the NHC Arboretum In North Carolina with goals of helping women feel safe in a public space, in this case, a public garden, and to foster a sense of resiliency through nature-based activities. <https://nhcgov.com/161/Arboretum-NC-Cooperative-Extension>

*Cornerstones of Care*, Kansas City, MO provides residential inpatient treatment & a therapeutic school for youth with emotional & behavioral challenges due to childhood trauma, with plant-based programs.

<https://kccg.org/two-schools-two-gardens-immeasurable-success-for-at-risk-kids/>

*Healing Garden at Chamchamal, Iraq* run by the Jiyani Foundation for Human Rights provides care for Yazidi & other traumatized individuals, with an international team of HTs providing training to psychotherapists to become registered in HT in the German model.

<https://jiyani.org/healinggarden/>

*Mensajeros de la Paz* Spanish non-profit in Lima, Peru runs programs including therapeutic horticulture, promoting resilience in children impacted by poverty, domestic violence & other early childhood traumas.

<https://mensajerosdelapaz.com/>

*Refugee Trauma and Resilience Center at Boston Children's Hospital* offers resources for promoting healthy adjustment of refugee children and adolescents who have resettled in the US including research, programs, partnerships in the community & plant-based programming.

<https://www.childrenshospital.org/programs/trauma-and-community-resilience-center>

*The GreenHouse Program* at Rikers Island Correctional Facility NY, in conjunction with the Horticultural Society of NY, uses a restorative garden environment & HT programming working with incarcerated individuals who have experienced trauma & other health challenges.

<https://healinglandscapes.org/pdf-library/jiler.pdf>

*Sanctuary Farm* in Philadelphia addresses health inequities from systemic racial oppression & economic injustice by transforming neglected space into urban green spaces; a therapeutic horticulture program for veterans is also offered.

<https://www.sanctuaryfarmphila.org/>

*Seraaj Family Homes, Inc.* in Waugh Alabama partners with *The Grandma Home House Retreat* providing a therapeutic sanctuary to foster interaction & wellness for foster & adopted children & their families.

<https://seraajfh.com/using-horticulture-as-a-method-of-healing-from-trauma/>

*The Petria's Place Healing Garden*, at the UCAN campus in Chicago, a social service and youth development agency residential youth center addresses unstable living situations, emotional distress or trauma by providing therapeutic support; services include therapeutic horticulture.

<https://blockclubchicago.org/2021/09/23/west-side-garden-is-designed-to-help-youth-heal-from-trauma-a-garden-is-a-friend-you-can-visit-anytime/>

*University of California Irvine (UCI) CARE Therapeutic Horticulture Program* workshop *People & Plant Care*, was a pilot session for UCI CARE for those who identified as survivors of violence and who were seeking tools for personal growth and restoration.

<https://care.uci.edu/services/holistic-healing.html>

*University of Kentucky Center for Research on Violence Against Women (CRVAW)*, with funding from Dept. of Justice are studying the benefits of therapeutic horticulture at Greenhouse 17, Central Kentucky's women's shelter.

<https://www.uky.edu/crvaw/>

Vogel Alcove childcare center in Dallas Tx works with children affected by homelessness including related traumatic experiences in The Backyard garden onsite.

<https://vogelalcove.org/>

### **Videos, websites & webinars on trauma recovery & plant-based programs**

Course PTSD Overview and Treatment from U.S. Dept of Veterans Affairs

[https://www.ptsd.va.gov/professional/continuing\\_ed/ptsd\\_overview\\_tx.asp](https://www.ptsd.va.gov/professional/continuing_ed/ptsd_overview_tx.asp)

Mental Health Center of Denver (MHCD) services incorporate HT for trauma treatment; HT practitioner Carol LaRocque narrates [youTube] video on their HT program.

<https://www.htinstitute.org/blog/horticultural-therapy-connects-with-youth-at-the-mental-health-center-of-denver/>

**Commented [1]:** Perhaps this article will work instead?

ILGA Database - Mental Health and Human Rights Info from Freedom from Torture – Medical Foundation for the Care of Victims of Torture lists resources on this topic.

[https://www.hhri.org/hhri-database?wpv\\_view\\_count=312-](https://www.hhri.org/hhri-database?wpv_view_count=312-TCPID35554&wpv_post_search=trauma%20care&wpv_filter_submit=Search&wpv-post_tag=0&wpv-countries=0)

[TCPID35554&wpv\\_post\\_search=trauma%20care&wpv\\_filter\\_submit=Search&wpv-post\\_tag=0&wpv-countries=0](https://www.hhri.org/hhri-database?wpv_view_count=312-TCPID35554&wpv_post_search=trauma%20care&wpv_filter_submit=Search&wpv-post_tag=0&wpv-countries=0)

PTSD UK website raises awareness of PTSD with resources on causes, triggers, symptoms & treatments including connecting with nature.

<https://www.ptsduk.org/how-gardening-can-help-people-with-ptsd/>

THAD (Therapeutic Horticulture Activity Database) offers TH activities across populations & settings including people with mental health challenges & trauma (activities: care of houseplants, transplanting herbs, things I love tree, teacup planting, exploring renewal & personal growth).

<https://hort.ifas.ufl.edu/therapeutic-horticulture-activities-database/mental-health/>

Types of Trauma website resources from U.S. Dept of Veterans Affairs

<https://www.ptsd.va.gov/professional/treat/type/index.asp>

Vawnet. (2021). Research on resiliency. *National Resource Center on Domestic Violence* has digital resources focused on resiliency.

<https://vawnet.org/sc/research-resilience>

### **Related organizations**

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