THAD Therapeutic Horticulture Activity Database

Activity: Propagation Goal: Cognitive Populations: All but dementia

TH Activity Plan – Starting Roses in Potatoes

Text by Lesley Fleming, HTR Photos by L. Fleming, S. Pearce, Jackson & Perkins Original publication: Fleming, L. (2018). Digging In 4(4), 8.



Materials

Large whole red or white potato Cuttings from rose bush or bouquet Pencils/knitting needles Rooting hormone Containers Potting medium **ACTIVITY DESCRIPTION:** Propagating roses using potato as rooting medium.

THERAPEUTIC GOALS:

Cognitive/Intellectual: Practice following sequential or instructional steps Physical: Identify & address symptoms of depression or sadness Psychological/Emotional: Observe plant growth & beauty for expanding appreciation of life & own efforts of growing plants; strategies for accept life's setbacks (& if plant doesn't thrive)

Sensory: Enhance mood through sensory stimulation

Social: Create new plants through cuttings as mechanism for social activity

STEP-BY-STEP PROCESS:

- 1. **Pre-Session Prep:** Gather materials & plan session.
- 2. Participants make a hole 1 ½" deep in potato using pencil or knitting needle the diameter of the rose cutting. Multiple cuttings can be inserted.
- 3. Cut a 4-8" stem piece with 4 leaves from mature rose bush that has flowered or from bouquet. Place in water immediately.
- 4. Make a fresh cut on stem and score sides with sharp knife. Rooting hormone can be used.
- 5. Insert the cutting into the potato 1" deep, with a leaf node in potato.
- 6. Plant potato with cutting into soil with top sparsely covered in soil.
- 7. Place in sunny window or under grow light and keep watered. Watch for new leaves at leaf nodes indicating root growth is occurring.
- 8. If potato sends up sprouts, trim or leave as support for rose cutting.
- 9. Transplant rose into ground or container when well-formed new leaves appear, typically in 2 months.

APPLICATIONS FOR POPULATIONS: The rose propagating activity using potatoes can provide opportunities for reminiscing, laughter, and socialization. It is a good wintertime activity that offers extended projects: propagating roses for gifts, transplanting into outdoor garden in warmer seasons, rose-focused activities like

smelling fragrances, touching rose (and other) leaves, and making rose petal sachets. Appropriate for most populations, elder individuals relate well to this activity due to their familiarity with roses grown in their home gardens and roses used for special occasions. The activity lends itself to multiple health goals depending on the participants or population. Seniors & those with mental health challenges can use the beauty of roses to identify sadness or depression, with the plant's sensory appeal of appearance & fragrance offering respite & mood enhancement. Research suggests that exposure to fresh flowers, roses included, provide relaxed feelings measured by heart rate, sympathetic nerve activity & self-identification (Ikei et al., 2023; Song et al., 2017). Observing plant growth & beauty can expand appreciation of life & their own efforts of growing plants including accepting life's capriciousness if the cutting doesn't thrive. It is recommended that several extra propagations

anticipating that some will be unsuccessful. When delivered as a group activity, the uniqueness of this type of propagation can pique interest, questions & interactions. It is best done in programs that work with the same clients over a 2 month period where the propagated plants can be tended to.

SAFETY CONSIDERATIONS: This activity is not recommended for people living with dementia. Roses without thorns are recommended, particularly for clients with skin sensitivity or abrasions, or cognitive impairment. Leader may choose to do the rose cuttings if use of pruners is a safety concern. Sterilized soil should be used to deter transfer of soil borne bacteria. Rooting hormone should not be ingested. Gloves should be available.

NOTES OR OTHER CONSIDERATIONS: Cuttings from miniature roses tend to root well. Labelling rose varieties at time of cutting and then when putting them in potato is a good cultural practice. Note that many rose bushes are patented and are not to be propagated within a specific time period. Some roses do not perform well on their own rootstock; many commercial rose varieties are grafted onto other rootstock. This activity was originally presented by Hank Bruce.



ROSES

Often referred to as "antique" roses and "historic" roses, the Old Garden Rose has been around since before 1867.



MODERN GARDEN ROSES

Where Old Garden Roses bloom once per year, Modern Roses offer a ontinuous bloom, as well as a larger bloom size.



WILD ROSES

Wild Roses, or "species roses," lack the cross-breeding history and hybridization of other modern varieties.

REFERENCES/ RESOURCES:

Bruce, H. & Folk, T. (2004). Gardening Projects for Horticultural Therapy Programs. Petals & Pages. Griep, S. (2018). Rooting rose cuttings: Can you grow rose cuttings in a potato. Gardening Know How.com Ikei, H., Song, C., Himoro, E. & Miyazaki, Y. (2023 April). Physiological adjustment effect of visual stimulation by fresh rose flowers on sympathetic nervous activity. Front. Psychol., 14.

Jackson & Perkins. (n.d.). The Different Types of Roses: An Ultimate Guide.

Song, C., Igarashi, M. & Ikei, H. (2017). Physiological effects of viewing fresh red roses. Complementary Therapies in Medicine 35, 78-84.

Edits were made for THAD purposes in 2023.

TH Activity Plan form developed by Lesley Fleming, Susan Morgan and Kathy Brechner (2012), revised in 2023.