THAD Therapeutic Horticulture Activity Database

Activity: Planting Goal: Cognitive/Intellectual Populations: All

TH Activity Plan – Building & Planting a Pallet Garden

Text by Kathy Carroll, MS, HTR Photo by K. Carroll & Prudent Penny Pincher Original publication: Carroll, K. (2019). Upcycling: Safe pallet gardening. Digging In, 5(4).



ACTIVITY DESCRIPTION: Participants will learn to make pallet gardens for home use or for use at programs.

THERAPEUTIC GOALS:

Cognitive/Intellectual: Demonstrate strategies for coping with frustration

Physical: Improve self-esteem & confidence by completing task requiring physical skills

Psychological/Emotional: Manage emotions, expressing them in positive & acceptable ways

Sensory: Determine self-selecting appropriate sensory breaks **Social:** Practice relational functioning within group setting

Materials

HT pallets, sandpaper
Safety glasses, gloves
Exterior paint (optional)
Drip irrigation system,
wheels (both optional)
Landscape fabric, staplegun,
nails, hammer
Potting soil, plants
Knife, watering can



STEP-BY-STEP PROCESS:

- Pre-Session Preparation: Gather materials in the quantity required for either a group activity or enough for each participant to make one. Pre-cut fabric for pallet(s).
- 2. Facilitator begins session by presenting project, running through the various steps as an overview. Discuss safety rules for handling, cutting, painting, staining, sanding pallets & tool use.
- 3. Each group (or individual) examines pallet looking for splinters, protruding nails or other things that will make handling it unsafe. Use sandpaper to smooth all surfaces. Decorate pallet at this point if desired & let dry completely.
- 4. Staple landscape fabric around the exterior of the pallet walls & along the bottom footings to prevent soil from washing away. Leave top open for ease of watering & planting. (There are several ways to staple the fabric.)
- 5. Add potting soil. Some projects may consider & install a drip irrigation system. Position the pallet garden in the desired location. Select plants & begin planting, mindful of sun & water requirements. Cut X-shaped slits in fabric & carefully place plants ensuring soil is packed around roots. Water thoroughly.

APPLICATIONS FOR POPULATIONS: This activity can incorporate goals for building self-esteem and confidence by completing a task – the pallet project that becomes a functional and decorative garden. The project has enough complexity to it that therapeutic goals of managing emotions, expressing them appropriately, using coping mechanisms when there is frustration or doubt about tools, steps or plant selection, and practicing appropriate functional interactions with teammates can cover a range of therapeutic

goals and populations. For those with sensory integration challenges, self-selecting when they need a sensory break provides practice for this strategy in a simulated "work" setting. This project has been used with wellness, seniors and school groups and is appropriate for most other populations. It lends itself to integration of educational/environmental lessons related to sound environmental practices (reducing materials going to landfills, use of wood as a natural product), upcycling concepts and making functional products using ingenuity and low-cost materials. Creative expression decorating the pallet garden can include educational or therapeutic focus.

Accommodations for people with physical challenges: use of nonslip cushioned grips, arm-attached braces for paintbrushes or trowel, or tools with long handles or telescoping reach including grabbers can reduce need for hand strength, pincer grip or full extension of arm. Plantings can be undertaken from a seated position or for those more comfortable gardening from a standing position – planting the upper parts of pallet while task sharing or partnering with someone who can plant at lower levels is an option. For those with vision impairments, using sense of touch (after splinters and rough parts have been sanded) to place plants in pallet "pockets" ensuring soil



covers roots and does not overflow shelves, selecting plants based on sensory attributes like soft leaves or upright growth (chives) for example can build confidence.

SAFETY CONSIDERATIONS: Pallets should have information stamping. **Do not use** pallets marked MB (Methyl Bromide) which have been sprayed with pesticide and are unsafe for edible plants. Pallets marked HT (Heat Treated) are safe unless they have been recycled and *possibly* exposed to toxic chemicals. If the source is unknown, do not use; not all harmful substances can be washed off and they may leach into the soil. If painting pallets, use non-toxic exterior paint. Sand off any rough, sharp areas, removing nails or other protrusions. Pallets may become tippy when planted so attaching them securely to walls or posts should be considered. Practice safe tool rules when using hammers, nails, stapleguns; these may not be appropriate for some populations.

NOTES OR OTHER CONSIDERATIONS: Use of potting soil or lighter soil-less mixtures will manage weight. Pallet gardens, especially when thoroughly watered can become heavy and possibly tippy. An option of using rings nailed to pallet, to hold containers with plants may be preferred (see bottom photo on first page). Plant selection – ornamental and edibles with shallow root systems and small growth habits are usually preferred. Edible plants like lettuce and herbs can be harvested and continue to grow and flourish in the pallet garden. Other suggestions: pothos houseplant, *Syngonium*, bromeliads (though some are rough to touch), coral bells, strawberries, coriander, cilantro, chives, spinach, fennel, petunia, begonia and pansies. Regular maintenance helps plants thrive—managing water requirements, sufficient light inputs and overgrowth (prune when necessary). Similarities to vertical gardens can inform facilitator about plants, ideal sun exposure or use of woolly pockets product that can be attached to the pallet frame.

REFERENCES/ RESOURCES:

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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.