THAD Therapeutic Horticulture Activity Database

Activity: Creative Expression Goal: Psychological/Emotional Populations: All but children, dementia

TH Activity Plan – Making Black Walnut Ink

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Materials

black walnuts-6 for small batch adding cloves is optional non-reactive pot reserved for dying projects gloves cheese cloth & metal sieve rubbing alcohol, wipes glass jars/dropper bottles



ACTIVITY DESCRIPTION: Preparing black walnut ink for use in art projects.

THERAPEUTIC GOALS:

Cognitive/Intellectual: Practice following sequential steps; practice safety precautions during activity; comparison of current day practices to historical eras – preparation of functional materials like ink

Physical: Maintain physical activity harvesting walnuts **Psychological/Emotional:** Reminisce & reflect on past activities as a means of joy, passage of time, history

Sensory: Enhance mood through the sensory elements of activity **Social:** Create art/cards for personal use or as gifts for others

STEP-BY-STEP PROCESS:

- Pre-Session Prep: Harvest black walnuts (Juglans nigra) in green husks in the fall. Allow them to soften, letting them sit out or be cooked in husks, then removing the nut.
- 2. Facilitator begins activity which can include participants harvesting walnuts either just before the activity in fall or as a fall activity in preparation for making ink.
- 3. Cover fruit & simmer medium-low for entire day, then cool. Strong odor & staining requires proper ventilation & stain protection for hands & surfaces. This step can be started ahead of session so it is ready for participants.
- 4. Strain using cheesecloth & fine mesh metal sieve to remove solids. Use gloves & surface protection. Suggestion do small batches.
- 5. Discard solids: black walnuts contain high levels of toxic juglane so use caution when handling & composting solids.
- 6. Simmer liquid for several hours in a non-reactive pot until thick & golden brown or darker. Test with a paintbrush it should be thick enough to write with.
- 7. Once cooled, strain liquid again to remove the remaining sediment.
- 8. Pour into glass jar (partially full) and add rubbing alcohol (20% of the walnut ink's volume) as a preservative. For darker color add rusted iron.

Store ink in small bottles; tinted dropper bottles are recommended.
Optional to add a whole clove to each bottle as additional preservative.

APPLICATIONS FOR POPULATIONS: This therapeutic horticulture activity is more complex than others with the need to use heating elements, hot liquids & high levels of toxic juglane. Due to the strong natural chemicals of black walnuts, this activity is not recommended for all populations (see safety considerations). Strong odor & staining requires proper ventilation & stain protection for hands & surfaces. The activity has been effective with wellness populations & seniors, along with high school students who may undertake it as an art education/environmental lesson or fundraising activity creating cards with black walnut ink. Integrating therapeutic goals related to memory, past life experiences, reflection, passage of time & reminiscing can be effective for senior populations. Integrating creative expression using the ink – making cards, writing letters, journalling—can provide a multi-health domain activity. Options for delivering the activity include demonstrating how the ink is made so that participants are not exposed or near heating elements or hot liquids or ink can be made prior to session. The session might then focus on creative expression which can be a platform for the goals stated above. Additionally, this activity can include harvesting black walnuts, nature walks, history of quill pens, and ink brush art from other cultures.

SAFETY CONSIDERATIONS: Black walnuts/ink will stain once fruit blackens. Wear gloves. May not be appropriate for young populations or those with cognitive deficits, self-harm tendencies, skin sensitivities or populations with challenges being around or using stove tops. Some facilities discourage use of glass bottles.

NOTES OR OTHER CONSIDERATIONS: Black walnut trees have a long & important American history dating back to pioneer times with strong connections to Native American natural resources & food culture; walnut was used for soups, breads & beverages (Indiana Nature, 2023). Black walnut is one of the most valuable wood in Indiana presently (& other locations) with historic use for furniture, ship parts & husks used as hair dye. Contemporary use of walnut wood is popular for veneers & cabinetry. Black walnut trees can be damaged by Thousand Cankers Disease. Medicinal usage, some myth, some empirically proven, is now understood to contain antiseptic agents with connections to neurological & prostate health (Kim et al. 2017).

Making black walnut ink may be appropriate for themes & activities related to history, Native American culture, reminiscing, nature's bounty, ecology, upcycling & can be used for art projects or for card making in conjunction with pressed flowers or other embellishments.

REFERENCES/ RESOURCES:

Indiana Nature. (2023). Juglans nigra – Black Walnut.

https://www.indiananature.net/pages/taxa/Plantae/j/Juglans_nigra.php

Jyotsna, A. (n.d.). Black walnut ink. Lost in Colors Reconnect with the natural world through creativity. https://www.lostincolours.com/black-walnut-ink/

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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.