

Activity: Nature Goal: Psychological/Emotional Populations: All

TH Activity Plan – Photographing Nature’s Micro Patterns

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ACTIVITY DESCRIPTION: Participants observe, experience and photograph nature’s micro patterns.

THERAPEUTIC GOALS:

Cognitive/Intellectual: Observe the fractal nature of the viewable universe; practice noticing what macro patterns are represented in the micro patterns in nature; promote creative thinking

Physical: Ambulate & exercise walking through a park or nature trail; lift and operate a camera (1/4 lb.); bend, squat & possibly get in prone position

Psychological/Emotional: Recognize nature’s moments of awe; be inspired; promote mindfulness

Sensory: Be aware of sensory engagement, beginning with visual attractions to nature’s elements

Social: Share the end result of the creative process with the group; discuss what was seen & experienced

Materials

Cell phones or tablets

Shared Google photo album

Drinking water

Sunscreen or protective clothing

STEP-BY-STEP PROCESS:

1. **Pre-Session Preparation:** Facilitator comes prepared with examples of pictures of their own ‘microworld’ findings from a nature walk. These pictures can be from the same space that will be utilized for the session or from representative examples elsewhere, depending on the level of assistance needed by participants. If needed, tablets instead of cell phones can be used, provided by the facility. Set up Google photo album or similar digital platform where photos can be added and shared.
2. Facilitator begins session by gathering the participants in a group at the front of the chosen space. Discuss patterns in nature – a river delta meeting the ocean can be seen in the small rivulets leading down to a stream, a small forest seen in a gathering of mosses on a decomposing stump, an earthwork subterranean village in a community of antlions. Include micro-patterns. Let participants verbally describe any examples they can imagine.
3. Review photo protocols: no photos of people & no personal use of or posting people online.
4. Give participants a timeline for their project – meet back in the group in 30 minutes or as appropriate for the setting and population.
5. Participants disperse with digital devices (brought or provided). Facilitator can meander among participants offering assistance with operating the cameras or suggestions for composition.
6. Meet back at determined time and show what was discovered & photographed, discussing what was seen, experienced & what it represented to photographer.
7. Provide access to group’s online share file where participants can share their work. Discuss attributing photos.

8. Follow-up: facilitator can put photos into a slide show to share with participants for future reference and inspiration.

APPLICATIONS FOR POPULATIONS: This TH activity requires cellphones or tablets. Facilities and schools may have devices that can be used by participants. Wellness groups, one population that has done this activity, have been receptive to it and have benefited from health outcomes in all of the health domains including intellectual (observing nature's micro patterns, expanding their creativity), psychological (greater recognition of nature's moments of awe, practice with mindfulness), sensory (expanding visual sense), and social (engaging and sharing photos with others). Additionally, social/wellness programs for people processing difficult emotions, or developing mindfulness strategies using the natural world have improved their health outcomes as evidenced by pre-post retrospective evaluations.

This activity can also be delivered as an educational, science-based project for children, youth or others who would benefit from this format or a combination of educational and therapeutic programming.

Physical therapeutic goals can be a natural fit for this activity across populations. Ambulating and increasing amount of exercise by walking through a park or nature trail can be scaled up (longer) or down (shorter) depending on population. Physical requirements for photographing including lifting and operating a phone/camera (1/4 lb.), using various body positions, muscles and joints to bend, squat or lay flat on the ground to take pictures can work towards improving mobility, flexibility, and vestibular sense of balance. Accommodations can include bringing nature items to the participant (still working towards lifting arms, range of motion etc.), using a nature area that is flat and less demanding for people with mobility challenges, or working with a volunteer who takes the photo after participant describes or points to it. Other therapeutic goals might take priority in this latter scenario like the intellectual or psychological goals identified above.

SAFETY CONSIDERATIONS: Facilitator is responsible for knowing poisonous and toxic plants and plant parts.

Since participants will be working solo during the event, care needs to be taken to ensure they stay within the park or other nature space and do not get lost or separated from the group. Part of the discussion should also be focused on minimizing disturbances of the natural spaces, especially if the subject of the picture is 'off trail.' If plants such as poison ivy are present, participants should be briefed on identifying the plants to avoid. If venomous snakes are present in the area, participants should be reminded of their presence and precautions such as paying careful attention to feet and hands. Photos should not include people (and definitely not distributed or put online).

NOTES OR OTHER CONSIDERATIONS: Discussing photography tips can provide intellectual/cognitive stimulation. For individuals who can benefit from distraction (due to grief, adversity, recent medical diagnosis), nature photography can offer positive leisure activity, a sense of calm, particularly through connections with nature, and distraction, where passage of time outdoors can include other health benefits of increased melatonin production, breathing in fresh air and socializing with other people.

REFERENCES/ RESOURCES:

Gupta, K. (2024). [Smartphone photography: The essential guide \(+ 15 tips\)](#). Digital Photography School.

Heimbuch, J. (2023). [How to photograph patterns in nature: Tips and examples](#). Conservation Visual Storytellers Academy.

Wang, Y., Zheng, G., Jinag, N. et al. (2023). [Nature-inspired micropatterns](#). *Nature Reviews Methods Primers*, 68.

Edits were made for THAD purposes in 2024.

TH Activity Plan form developed by Lesley Fleming, Susan Morgan and Kathy Brechner (2012), revised in 2024.