Nature hacks for life

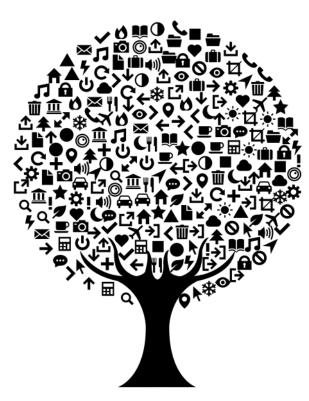
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Sustainability



This is the $\mathbf{prework}$ before we meet.

Context

Nature deficit disorder is an experiential hypothesis for behavioral ecology. It proposes that humans spending too little time outdoors are more likely to experience behavioral challenges and reductions in cognition and mental well-being. Richard Louv first developed these ideas formally in the book entitled 'Last child in the woods' in 2008. A more recent and expansive book was published in 2012 entitled 'The nature principle' and another in 2019 entitled 'Our wild calling'. These works precipitated a movement to better support programs for outdoor activities for children and stimulated incredible (but not without controversy) scientific evidence that reconnecting with nature can enhance many performance measures in people - adult and children alike. Here, we can take a sensible perspective that tracking and enhancing simple interactions in natural systems, outdoors, like provides an opportunity to explore personal performance and develop new mental and emotional skills.

There is excellent evidence in many domains of science that bridge human interaction theory with complex systems that active versus passive approaches generate different outcomes. The most effective interventions are often relatively more active, directed, and intentional depending on the field of study. Within the nature-deficit disorder framework, research that examines hands-on, active interactions with natural systems suggests that returns are significantly greater relative to passive approaches to natural systems. For instance, the Microbiome Rewilding Hypothesis (MRH) and Psycho-Evolutionary Restoration Hypothesis (PERH) suggests that nature-based health interventions that include people fixing nature (via planting, gardening, etc) generates reciprocal restoration feedbacks between the people and the ecosystems. This win-win science of reciprocity between other natural systems and the actions of people is relatively well established. This is an opportunity to be mutualistically enhance two systems in need of support - you and the natural communities we inhabit and share. A simple eudaemonic feedback loop can begin with an examination of sustainability of life choices.

Learning outcomes

- 1. Examine decisions that have impact globally.
- 2. Track smaller decisions that influence sustainability.
- 3. Explore whether changes that enhance sustainability can also promote deeper and more frequent connections with other natural systems.
- 4. Appreciate the limitations associated with existing and assumed norms.

Schedule

Here is an outline of the challenges proposed to explore these principles over the course of several weeks. The first week is prework, second week is a deck and reflection on meaning and nature backs, the third week is direct practice, and finally, the consolidation is a resolution or decision to commit some changes that are potential win-win scenarios.

week	challenge	tasks
1	Explore sustainability and reciprocity with natural systems	take ecological footprint quiz, track simple li
2	Nature hacks deck and discussion	reflect on meaning, list purpose, match challe
3	Practice	explore nature practice, track creativity, trac
4	Next steps	future proof daily practice, identify resolution

Citation

Lortie, CJ (2021): Nature hack for life. figshare. Book.

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Challenge time

Do the ecological footprint quiz.

Report your findings here.

Track frictions and points of resistance to your daily happiness and productivity. Read this paper: On sustainability interpretations of the Ecological Footprint.

- 1. Did your assumptions about sustainable living reconcile with estimated global costing?
- 2. Are the decisions that drive footprint mostly 'big' or 'little' ones defined as large actions such as travel and trips or more by daily activities?
- 3. Did the concepts of biocapacity and ecological deficits resonante with your life decisions?
- 4. Are there individual or institutional-level changes that can be subtly nudged to increase capacity, capital, and resilience in sustainability?

Nature hacks



Context

Humans can be pretty absurd. This is not a necessarily criticism or limitation. Our capacity and desire to seek reason with meaning and suspend belief can be powerful tools for good. If we can leverage the evolutionary drives emergent from absurdity (including legacy and leisure) to promote and enable decisions that connect us with other natural systems, we benefit and those systems can be sustained. This absurdity has been captured in the hypothesis and satirical nomenclature of humans as Homo absurdus. The opportunity and challenge herein is to leverage deep thinking, capacity for the abstract, and drive to create

through connections with nature. Build your own new narrative. Include a nature identity, a sense of place, and active connectivity with nature. These new narratives of connectivity conservation resonate with communities provided there is an openness to observe and be mindful of the natural systems that we co-inhabit. Storytelling is a means to make science more accessible to everyone and to combat disinformation. We will tell stories and use narratives, and we thus need to co-opt this cognition heuristic for leadership as individuals that decide our own lives and more widely as facilitators in organizations and teams. The scientific evidence supporting the benefits of nature connectedness through narratives in particular is compelling and extensive. Natural rewards have also been proposed as major driver of life advancement.

Learning outcomes

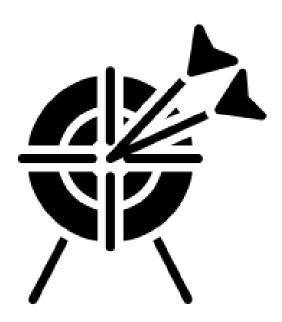
- 1. Explore a checklist of tools or hacks from nature for performance.
- 2. Challenge your own absurdity and drives.
- 3. Develop a nature identity that includes active engagement with an outdoor pursuit or place.

Challenge time

- 1. Review this slide deck and attend discussion.
- 2. Read 'The Little Prince is an ecologist'.
- 3. Test your creativity and connectedness with nature now.

- 1. Interactions are fundamental to all living organisms. To what extent does interaction theory, very broadly speaking, inform the ecology of your life?
- 2. Do you have an outdoor identity? If you could change this view, what would you innovate or augment for this self-vision? Even one mountain climbed makes you a climber. Or one bird spotted and identified a small step to becoming a birder.
- 3. Are there some of the nature hacks proposed (or new alternatives you envision) that can be used to restore, recharge, or rev up your creative performance and cognitive clarity?

Daily practice



Context

Exploratory data analyses is everything we have done. This is a primary approach to better understanding your evidence without introducing bias. Transparency is key.

Learning outcomes

1. Practice your critical workflow for data and statistics that is replicable and literate.

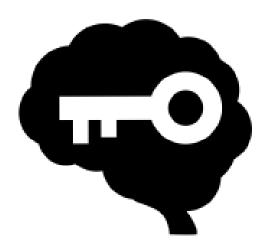
- 2. Appreciate the value of generalized statistical models that connect to one another conceptually.
- 3. Do a GLM.

Challenge time

Here is an impressive \dots

- 1. When do you move from EDA to model fitting?
- 2. Are there ways to mitigate bias and p-hacking through formal workflows?
- 3. Did building a model such as GLM align with critical thinking and intuition, i.e from critical thinking was it accurate and fair? Did the EDA-to-model process legitimately represent the patterns in the observations recorded.

Consolidate



Context

Learning outcomes

- 1. Practice your critical workflow for data and statistics that is replicable and literate.
- 2. Appreciate the value of generalized statistical models that connect to one another conceptually.
- 3. Do a GLM.

Challenge time

Here is an impressive

- 1. When do you move from EDA to model fitting?
- 2. Are there ways to mitigate bias and p-hacking through formal workflows?
- 3. Did building a model such as GLM align with critical thinking and intuition, i.e from critical thinking was it accurate and fair? Did the EDA-to-model process legitimately represent the patterns in the observations recorded.