

Vibrant Prairie Ecosystems: Healing ourselves while saving the planet

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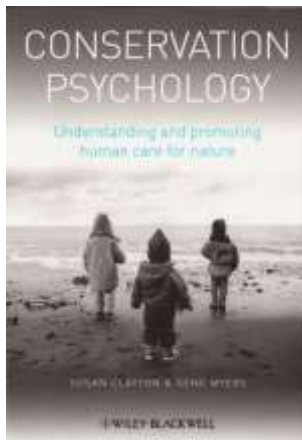
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Conservation Psychology

- Goal: To facilitate healthy association between people and the natural environment
- Human actions cause and maintain current ecosystem problems
 - As a science of human behavior, psychology can help us find pathways to sustainability



Grassland Conservation & Restoration

- Healthy natural ecosystems provide one of the most effective ways to mitigate and adapt to climate change
- Native grasslands can sequester carbon more effectively than forests (Dass et al., 2018)
 - Resilient to various precipitation conditions
 - Less carbon release due to fire





Climate Change Action

- Conversation about why climate change matters to us all is one of the most important actions we can take (e.g., Katharine Hayhoe)
- The most effective strategy for such conversations is to emphasize common goals
- Our **health** is one common goal: research indicates that regular contact with natural environments greatly benefits our health and well-being

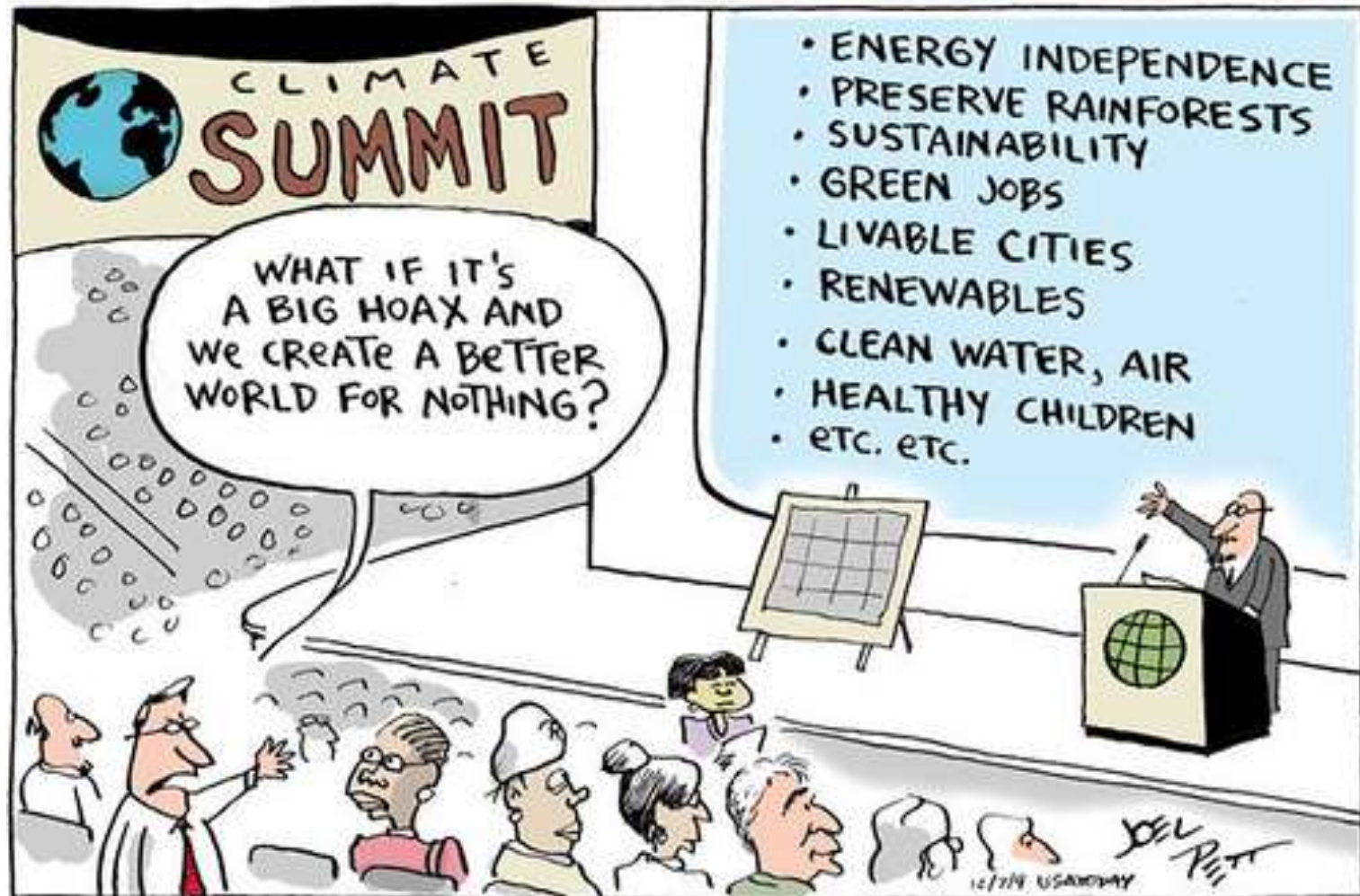
The Future: worse or better?

- IPCC reports highlight the possibility of a much worse future for human life
 - Climate change, biodiversity loss



- Conversely, mitigation-based changes could lead to a future much better for human well-being than our present

The Future: worse or better?



Summary: Conversation for Conservation

- Can build public support for grassland preservation & restoration
 - Improve health & well-being
 - Future gains, as well as avoiding losses
- Can create collaborative groups
 - Diverse perspectives, talents, resources necessary for creative problem-solving
- Common goals key to success

Challenges to Collaboration

- Identity threats (stereotypes)
 - Rugged individualism
 - Modernity: Industrial, market economy
- Potential ‘landmines’ to avoid in productive conversations
 - Evoke ‘existence panic’
- Health conversations can sidestep such issues

Nature & Human Health

- One of the most effective health practices is to spend time in nature
 - Observed with all landscapes, not just forests
- Frequent contact is best, so the preservation of local natural landscapes is important



Physical Health

- Living closer to natural areas increases lifespan and improves health during those extra years
 - Differences in infectious, cardiovascular, metabolic, respiratory, & other chronic diseases
- Observed in comparisons between countries, provinces, municipalities, and neighbourhoods
- The presence of ‘nearby nature’ reduces health inequalities associated with poverty



Emotional Health

- Time in a natural landscape improves mood almost immediately, even for those with depression & anxiety
- The improvement is larger for more biodiverse landscapes
- Living closer to natural areas decreases risk of mental health diagnoses
 - E.g., Danish children who spent their 1st 10 years close to natural landscapes were less likely to suffer from emotional & psychiatric illnesses in adolescence & adulthood (Engemann et al., 2019)



Emotional Health

Research shows that nature based interventions for mental healthcare, such as Care Farming, have multiple benefits*:

Reduction in depression, stress & anxiety



Increased social contact, inclusion & feeling of belonging



Improved self esteem, confidence & mood



Increase in meaningful activity & personal achievement



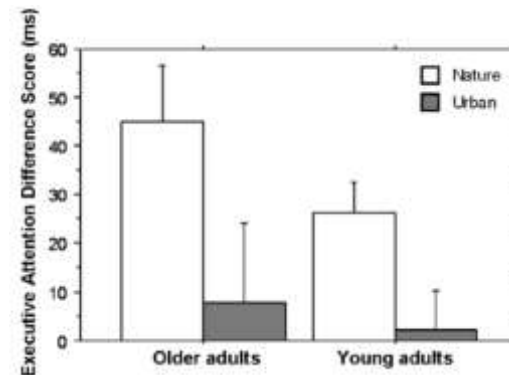
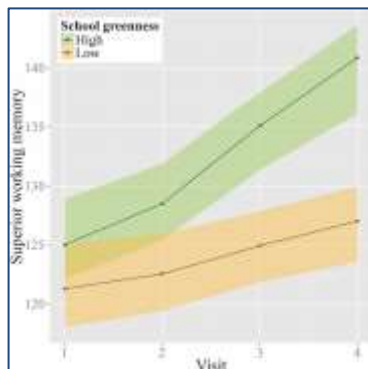
Transforming Mental Health & Dementia Provision with the Natural Environment, National Outdoors for All Working Group. Report due January 2017.

*Ref NECR204 www.gov.uk

Cognitive Health



- Time in nature improves our attention and self-control
- Children: schools close to natural landscapes have higher graduation rates & students with better grades on standardized tests (Kuo et al., 2019)
- Seniors: time in nature improves attention; slows decline for those with Alzheimer's disease



Social Health

- Contact with nature improves generosity and helpfulness (Guéguen & Stefan, 2016)
- Living near natural areas reduces aggression and crime rates (Weinstein et al., 2015)



Grasslands: Getting others to care

- Best strategy: conversations
- Common goal: Preserving & restoring native grasslands can improve our health
 - Bonus: Lower health care costs, especially for elderly & low-income citizens
- Challenges: Livelihood & identity threats
- Be curious & compassionate + brave & persistent

