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Outline

- Some comments on the 'ecological crisis'
- different perceptions of ecology, environment and possibly 'nature' as well
- Nodes of activities in the health sector for the ecological crisis
- A story about the Gnangara Mound (if time)
- Some general and specific suggestions for VicHealth

Some comments on ecological thought

Barry Commoner's five laws of ecology:

- Everything is connected to everything else.
- There is no such thing as free lunch
- Nature knows best.
- Everything must go somewhere.
- If you don't put something in the ecology, it's not there

Matching systems attributes:

- Interconnectedness and complexity
- inter-relationships and reciprocity
- Integration; a state of knowing comes from the whole as much as the parts; Self organisation. (not the naturalistic fallacy)
- interdependence, cycling, non-linearity
- there is nothing that exists outside of [its] 'ecology'

In what sense is there an 'ecological crisis'?

We don't recognise these 'laws', and don't
behave as if systems have some sort of
primacy...

A crisis of 'ecological consciousness'

Comments on different perceptions of ecology, environment and 'nature'

Environmentalism is not human ecology (Rees 2001).

mainstream fallacy that we are facing an 'environmental' crisis rather than a human ecological crisis.

the psychological barrier that exists between humans and the rest: their 'environment'; 'nature' as 'other'

Nodes of activities in the health sector where the ecological crisis is being, or could be, addressed

- I. Environmental health
- II. Ecological psychology
- III. Ecosystem approaches
- IV. Organisational (political) ecology
- V. Ecological public health

Environmental health

“the theory and practice of assessing and controlling factors in the environment that can potentially affect adversely the health of present and future generations”
[World Health Organization (WHO) 1993, p. 18].

- biophysical effects of the environment on human health
- social epidemiology
- dichotomizing
- Connected and dependent factors that lead to “hazardous environmental exposures”
- Sees ‘environment’ as ‘surroundings’, ‘other’ and ‘external’, social/economic/built/biophysical, and driving or mediating exposure and thereby human health;
- health promotion addresses cause and effect, linear, direct proximal, agent-host-environment triad for health protection
- more sophisticated treatment as social eco-epidemiology

'Ecological psychology'

- primacy given to the 'ecological self', a sense of one-ness with 'nature'
- primacy given to 'nature':
 - Many hypotheses: Nature Benefits, Biophilia, Preferred Nature Aesthetics, Restorative Environment, Human Nature Interaction ...
 - 'exposure' to 'nature' in sufficient 'doses' as recuperative, restorative, rehabilitative, due to: clean air, water, aesthetic appreciation, spiritual benefits
 - and its relationship with sense of community

Health and ecology, human ecology, ecosystem health, conservation medicine

“By investigating the reciprocal relationships among and between humans and their biotic and abiotic environment, human ecology must also engage with the role of social, cultural, and economic development as a driving force behind ecosystem changes at all scales”
(Parkes et al 2003)

- from the interconnected to the interdependent and contextual; complex systems, non-linearity, nestedness of scales: social ecology, socio-ecology
 - sees the process of dealing with downstream, proximal, direct effects as part of the ‘problem’, thereby explanations for emerging infectious diseases, disease re-emergence, anti-microbial resistance
 - infectious diseases as parasite-host relationships waltzing, embedded within an ecosystem that is constantly changing and affecting the waltz

Ecological public health

- ‘Holistic integrative multisectorial’ view of human health
- Settings approach (coordination framework)
- Hancock’s Mandala of Health
- Alma-Ata Declaration
- Ottawa Charter: Five major strategies for promoting health
 - ‘create supportive environments’ – reciprocal maintenance (take care of each other, communities, natural environment); protection of natural and built envs; conservation of natural resources

Organisational ecology

- ecology as a way of thinking about governance relationships; systems thinking applied to the disciplines and structures in government
- the 'environment' as other organisations and their milieu

Health promotion and the ecological crisis

Arguably there is activity in many parts of the health sector, perhaps little of it is focused on ecological consciousness, despite a moderately clear intention?

With this intention plus *organisational interest*, what now?

Organisational ecology

Ashby's law of requisite variety:
“only variety can absorb variety”

A Principle based on Ashby's 'Law'

Organisations dealing with sustainability and health must develop sufficient personnel, information management and decision-making capacity to cope with the complexity and diversity they encounter in the environment in which they operate



Organisational adoption of requisite variety – cross-sectoral approaches

Key interested, talented organisational personnel;
outreach, giving, sharing, leaking, different performance indicators, personal rewards, incentives

Recognizing the dominant paradigms in health, and adding: no regrets policies, adaptive management, changing burden of proof and evidence, precautionary principle

Redesigning workplaces

Being tolerant of the languages of other sectors

Leadership issues: mentoring, creating climates for the above to occur

