Sustainable Communities and Waste

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The health and wellbeing benefits of caring for nature

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Summary of Report

Participation in caring-for-nature activities generates multiple health and wellbeing benefits for humans. Indirect benefits can result from improving the health of the environment, and resultant ecosystem services – cleaner water and air, biodiversity, urban cooling, climate change mitigation etc. However, there are more direct benefits for humans that relate to the acts of participation in, for example, conservation of landscapes, waterways, wetlands, and seas; increasing biodiversity and resilience in nature; and increasing greenery in urban areas.

This paper reports on the evidence of health and wellbeing benefits for humans from participation in caring-for-nature activities. It speaks to the first goal of Australia's *Strategy for Nature*, which acknowledges the physical and mental health benefits of nature connection. This report starts with an overview of findings from recent, relevant scholarship. Then it takes a closer look at the findings of two population-specific, qualitative place-based studies. The first study concerns newly arrived migrants to Australia participating in urban conservation volunteering programs; the second concerns people from a small rural area who participated in a long-running ecological restoration program. These examples highlight the potential that caring-for-nature activities have to positively influence health and health equities across various social and geographical gradients – and thus impact community-wide health outcomes.

Australia's Strategy for Nature, Goal 1: Connect all Australians with nature.

Connecting Australians with nature is essential to our long-term mental and physical health, economic prosperity and national identity.

Background

Recent debates in Conservation Science have highlighted that humans are key actors in all ecosystems, and some have even argued that human wellbeing should be a goal of conservation activities [1]. This argument has been controversial [2], yet we have seen a range of conservation actors pivot to targeting human wellbeing and environmental justice outcomes in their activities (e.g., the Nature Conservancy). As is the case with environmental management more broadly, the practice of ecological restoration has been grappling with the need to understand how restoration relates to human wellbeing [3]. The rising awareness of the connections between restoration and wellbeing are reflected in the mission statement of the United Nations Decade on Ecosystem Restoration 2021-2031 (UN Decade on Restoration), which aims to prevent, halt and reverse the degradation of ecosystems across the world, and to create:

A world where – for the health and wellbeing of all life on earth and that of future generations – we have restored the relationship between humans and nature, by increasing the area of healthy ecosystems, and by putting a stop to their loss, fragmentation & degradation. UN Decade on Ecological Restoration 2021-31

Snapshot of Health and Wellbeing Benefits from caring-for-nature

The International Standards for the Practice of Ecological Restoration and the World Health Organization (WHO) define wellbeing as having the basic materials for a good life: freedom, choice, health, good social relations, and security. Broadly, research indicates that participation in caring-for-nature activities contributes to these elements through mechanisms including increased physical activity, improved attention restoration, reduction in stress, increased social contact, and improvements in various quality of life indicators such as sense of purpose and pride [3–7]. Physical activity has been identified as a key health outcome of participation in a range of conservation programs and empirical studies have demonstrated that conservation volunteering can lead to improved physical and mental health [8–10]. Ecological restoration volunteers have been shown to have high levels of life satisfaction [11].

Figure 1: Benefits resulting from caring-for-nature

Moreover, caring-for-nature participation engenders new social connections, and develops a place identity and heightened sense of place, which all lead to strengthening individual and community social identity [10,12,13]. People who have participated in nature-based programs and are socially disadvantaged or have mental health disorders have reported improved social relations, employability skills, and beneficial experience in working with others from different walks of life [10].

Improvements to health and social equity: two examples from regional Australia

Case Study One: Conservation activities with migrant communities[14]

Background and Context

Migration comes with a suite of new experiences, and new challenges, not least of which are health and wellbeing issues largely due to social isolation, language barriers, and economic disadvantage. Building connections to the biophysical, green landscapes of the new host country is one means of offsetting some of the negative health and wellbeing impacts. Green spaces on common land, such as community gardens, and public parks and reserves provide opportunities for recent migrants to build social connections with local

people and form positive relationships outside like-cultural groups [15,16]. These cross-cultural interactions can be maximised through structured, purposeful events, designed to facilitate conversation and connection [10,17].

A 2022 study explored the impacts of engagement in a "Cross-Cultural Conservation" (CCC) program specifically for adult migrants who were studying English. Delivered by Conservation Volunteers Australia, it provided hands-on experience, aligned with curriculum aims, in 15 industry and community project activities, including work in a plant nursery and community gardens and on land care and bush care projects. The activities were compatible with the objectives of the English language course, to ensure students gained general skills and experience to help them obtain employment, expand their social participation, and improve English language skills.

Aims and methods

The study aimed to explore the experiences and understand the impacts of participation in conservation activities in the CCC program, as well as evaluate the success and impacts of the process and outcomes. It used methods of participant observation, postcard feedback (n = 71) and in-depth interviews (n = 16).

Findings

This research demonstrates that structured, community-based conservation activities, including work in community gardens, plant nurseries, and land care and bush care projects, can deliver on upstream health and wellbeing factors for migrants, including work skills, language acquisition and social interaction.

Overall, the benefits of participating in the CCC Program included:

- improving English language acquisition
- increasing conservation and workplace skills and knowledge
- improving wellbeing
- building social and cultural interaction and connection
- developing a sense of contribution from volunteering
- experiencing gratitude and optimism.

The purposeful program enabled environmental 'placemaking' by bringing migrants into contact with nature, and allowing them to contribute to the design, maintenance and enhancement of the natural environment. The integration of English speaking 'locals' into the program further augmented its therapeutic capacity, as people developed confidence to speak with others, meet new people, and prepare for employment in the new home country. This research confirms the findings of other studies on environmental volunteering of the important contribution that programs of this nature can generate for students from migrant, refugee and asylum-seeking backgrounds, and for the environment broadly. This suggests that active, facilitated, cross-cultural participation in the management of local natural landscapes could improve health and wellbeing for migrant communities – an intervention and outcome for which there is great demand.

Case Study Two: Employment and respect in ecological restoration work[18]

Background and Context

Many rural areas are adversely affected by a combination of environmental degradation and poor health outcomes. At the commencement of the UN Decade on Ecosystem Restoration, the second study, a qualitative, descriptive research project, was undertaken to investigate the wellbeing impacts of participating in ecological restoration activities in a rural community. Ecological restoration is often a paid work practice, and this context opens the possibility for benefits derived from employment, such as increased income and sense of purpose – part of the suite of wellbeing indicators. Work and wellbeing are intricately linked: when people experience wellbeing, they can realise their potential, cope with daily stresses, work productively, and contribute to society more broadly. Meaningful work and a positive working environment can also contribute to increased wellbeing, creating the potential for a positive feedback loop.

Aims and methods

The study aimed to understand the characteristics of ecological restoration practices that support health and wellbeing. The research took place in North East Tasmania, involving people who had participated in a longstanding ecological restoration program to regenerate large areas of bushland cleared through forestry practices. Study participants included past and current restoration workers (including volunteers) and were recruited via phone and email invitation. Participants also included local health workers to ascertain their perspectives on the links between ecological restoration work and wellbeing.

Findings

Ecological restoration workers appreciated working in nature, felt satisfaction from things like having fresh air and manual work, learning about the environment, and being fascinated by what was around them. Participants made connections between the work, their engagement with nature, their personal living circumstances, and their physical and mental health.

Figure 2: Benefits of ecological restoration work

The study found a mix of direct and indirect benefits from participation:

- physical fitness
- friends, company
- hope, positivity about the future
- pride, esteem
- employment (training)
- education
- income
- clean water
- a healthy environment

Understanding the lived experiences of restoration workers and local health and wellbeing service providers illuminates the complex relationships between ecological restoration activities and health and wellbeing. It also provides important information that can shape future ecological restoration program design and rural community health provision to optimise these health benefits.

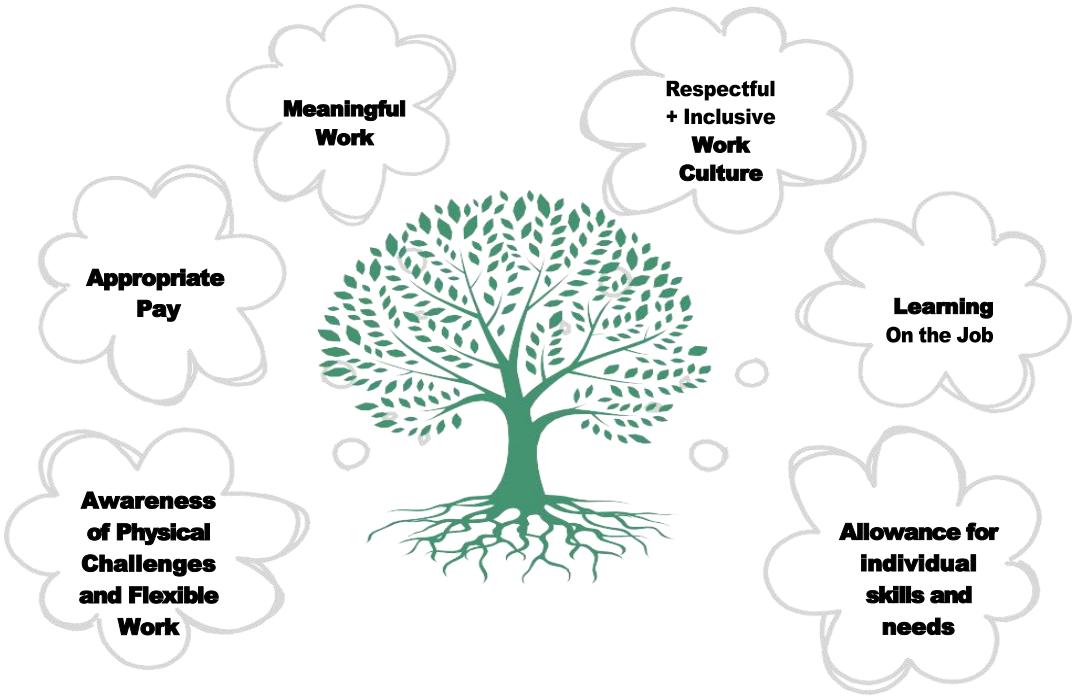

Figure 3: Workplace structure and culture in case study

The wellbeing benefits of ecological restoration are not a given. Ecological restoration work often involves hard manual labour like digging holes, planting trees or other vegetation, pulling weeds, and cutting and chain-sawing invasive species. If not done well, and when the work is undervalued, it can have negative wellbeing impacts and quickly lead to burnout. However, ecological restoration, and similar 'green jobs' programs, can be intentionally designed in ways that restore ecosystems **and** contribute to individual and community wellbeing. In this study, the workplace structure and culture (Fig. 3) played an important part in optimising the health benefits that come from being in nature. Aligning ecological, social, ethical, and economic elements is an important step in ensuring that the work leads to human health and wellbeing benefits.

Conclusion

These two case studies highlight that programs providing quality and structured experiences with nature can have a beneficial impact on a diverse range of communities such as migrants, and rural workers in ecological restoration programs. Nature's benefits go beyond many of the well-researched services such as water filtration, and reduced noise and air pollution. Participating in nature-based programs also contributes to less well understood wellbeing benefits for diverse individuals and communities, which requires more research to understand. Many of these benefits are highly nuanced and context-specific, requiring an understanding of the relationship between individuals and communities, local environments and these programs. Place-making programs can enhance inclusivity across urban and

regional landscapes, while ecological restoration provides an opportunity to not only work with nature but also provides spaces that enhance the lives of others. For such programs to create wellbeing benefits, they should be thoughtfully designed and evidence based. There is still much to be learned about the multitude of ways that nature can benefit diverse people; such learning can help us create programs that support the nature-connected society sought by Australia's *Strategy for Nature*.

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