



**DEAKIN  
WEEK**

Ideas from our world to inspire yours

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# **GREEN SPACES AND WELLBEING: SOCIAL INCLUSION VIA NATURE CONNECTIONS**

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# ENVIRONMENT & WELLBEING:

Wellbeing depends on:

the natural environment

the human made environment

social arrangements (families,  
social networks, associations,  
institutions, economies)

human consciousness

(Australian Bureau of Statistics, 2001 p. 6)

Wellbeing includes:

satisfactory human relationships,

meaningful occupation,

opportunities for:

- contact with nature,

- creative expression, &

- making a positive contribution  
to human society (Furnass, 1996)

# THE ENVIRONMENTAL DETERMINANTS OF HEALTH:

Two aspects of environment affecting health:

- Its quality – ‘environmental degradation’
  - WHO claims that > 25% of world’s disease burden is attributable to environmental factors (World Health Organisation, 2005)
- Its accessibility – ‘environmental deprivation’

# ENVIRONMENTAL DEGRADATION & HEALTH:



<http://www.abc.net.au/news/2012-05-14/looming-niger-famine-fails-to-attract-aid/4009242>



<http://scipeeps.com/air-pollution-and-health/>

# ENVIRONMENTAL DEPRIVATION & HEALTH:

“Everybody needs beauty as well as bread, places to play in and pray in, where Nature may heal and cheer and give strength to body and soul alike.”

John Muir (1838-1914)  
Founder of the Sierra Club



# HUMANS' NEED FOR NATURE:

Humans are dependent physiologically on nature (Boyden, 1992)

Humans are dependent psychologically on nature - the 'biophilia hypothesis' (Wilson, 1984; Kellert & Wilson, 1993)

Supported by anecdotal evidence – popularity of pets, flowers

Supported by empirical evidence – e.g. spending on gardens.

# HEALTH BENEFITS OF GREEN SPACES:

- Dutch study of 17,000 patients from >100 GP practices found positive physical & mental health effects & increased physical activity assoc. with ↑ proximal nature (De Vries et al. 2003)
- Dutch study of records of >340,000 people showed lower prevalence of 15 of 24 diseases among participants living within 1km of green spaces (Maas et al. 2009)

# HEALTH BENEFITS OF GREEN SPACES (CTD.):

- Canadian study - neighbourhood green space is important for good mental health (O'Campo et al. 2009)
- Australian study - people perceiving their neighbourhoods as green were 1.6 times more likely to experience better mental health (Sugiyama et al. 2008)



# THE SOCIAL DETERMINANTS OF HEALTH:

**“Life is short where its quality is poor. By causing hardship and resentment, poverty, social exclusion and discrimination cost lives”** (Wilkinson & Marmot 2003 p. 16)

# EVIDENCE OF THE SOCIAL DETERMINANTS OF HEALTH:

- **Indigenous people** are less healthy ... , die at much younger ages, ... have more disability and a lower quality of life.
- **[Economically] disadvantaged** Australians are more likely to have shorter lives.
- **People with disability** are more likely ... to have poor physical and mental health, and higher rates of ... smoking and overweight. (AIHW 2010 p. 228)
- **Refugees** also experience health disadvantage. (AIHW 2010 p. 229)

# WHERE ENVIRONMENTAL & SOCIAL DETERMINANTS COME TOGETHER:



[http://www.videobash.com/photo\\_show/keep-off-the-tiny-patch-of-grass-69295](http://www.videobash.com/photo_show/keep-off-the-tiny-patch-of-grass-69295)

# HANCOCK'S MODEL OF HEALTH & THE COMMUNITY ECOSYSTEM:



Hancock (1993)

# EXAMPLE 1 – NATURE CONNECTIONS & DISADVANTAGE:





**Once a place of community, pride, and leisure**



**But decades of abandonment made it one of DC's worst parks.**



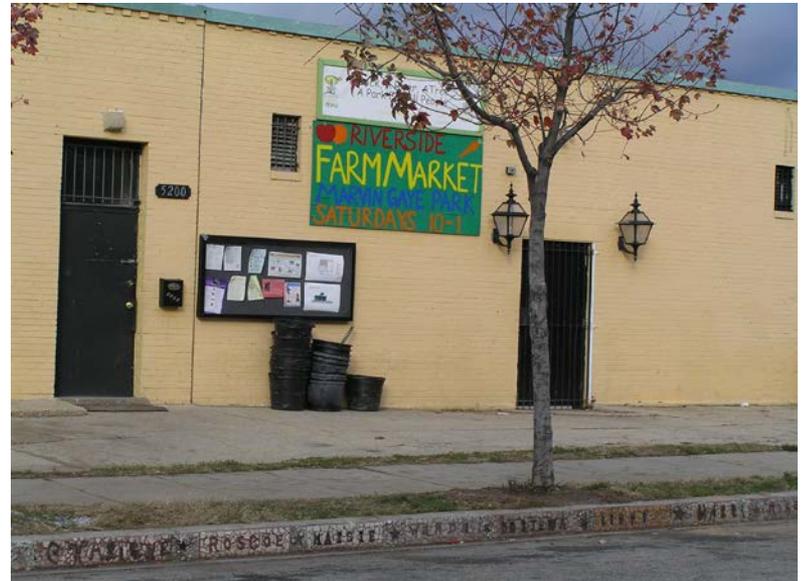
# **IMPACT AT MARVIN GAYE PARK:**

- **200 partners and 50,000 volunteers:**
- **Removed 5,000,000 pounds of rubbish & debris**
- **Re-opened and rebuilt two miles of trail**
- **Replaced invasive groves with thousands of native trees**
- **Dramatically cut crime in and along the park**
- **Re-opened Washington DC's longest city park**
- **Made park come alive for jobs, health, and community**
- **Raised \$5 million and leveraged over \$500 million for broad community renewal**

# PHYSICAL & MENTAL HEALTH:

Improved physical & mental health as a result of improved access to:

- Nature contact
- Physical activity & play
- Nutrition/fresh food
- Stress reduction
- Spiritual renewal
- Social connections



# ECONOMIC HEALTH:

Improved economic circumstances through:

- Job training, access, & retention
- New housing & business investment
- Tourism, green infrastructure, green energy



# SOCIAL HEALTH:

The work at Marvin Gaye Park & in the surrounding community resulted in improvements in social health:

- Enhanced cultural understanding
- Community revitalization
- Crime prevention
- Civic empowerment
- Child development
- Connections

# EXAMPLE 2 - NATURE CONNECTIONS & MENTAL ILLNESS:

- **'Feel Blue, Touch Green':**
  - Nature-based intervention for people suffering anxiety & depression
  - Collaboration b/w. Deakin Univ., Parks Victoria, Barwon Health, Alcoa & Surf Coast Shire (funding brokered by People & Parks Foundation)



# 'FEEL BLUE, TOUCH GREEN' (FBTG):

- Pilot study - 10 participants with mental health problems:
  - 'Single-case design' (participants = own controls)
  - 10+ hours of nature-based activities over 6-12 weeks
  - Activities supported by Angair volunteers
  - Evaluation using a range of scales plus in-depth interviews

(Townsend & Ebdon, 2006)

# FINDINGS FROM FBTG:

- Emotional State Scale (ESS) indicated a positive emotional change in all participants



# BUILDING SOCIAL CONNECTIONS:

- “This [FBTG] is good for people who may not have the courage to get involved ... People were accepting and this broke down the stigma.”
- “It’s been good to be with each other.”

# DEVELOPING SKILLS, TAKING RISKS & CONFRONTING CHALLENGES:

- “I developed new skills and acquired knowledge in [plant] propagation and in [identifying] noxious weeds”
- “I have been able to participate even when I’m not well”

# IMPROVING MENTAL HEALTH, CONFIDENCE & SELF-WORTH:

- “by taking part in ‘Feel Blue, Touch Green’ I have experienced happiness that I otherwise would have missed out on.”
- “I developed confidence in [this] supportive environment ...They [project partners] offered gentle encouragement and were supportive”

# MANAGING DEPRESSION & DEPRESSED MOOD:

- “Being involved in Feel Blue, Touch Green helps [me] manage depression”
- “[I] demonstrated that I could do it today [weeding] even though I had doubts that I can do it”

# EXAMPLE 3 – ENVIRONMENTAL VOLUNTEERING AS A MECHANISM FOR INCLUSION:

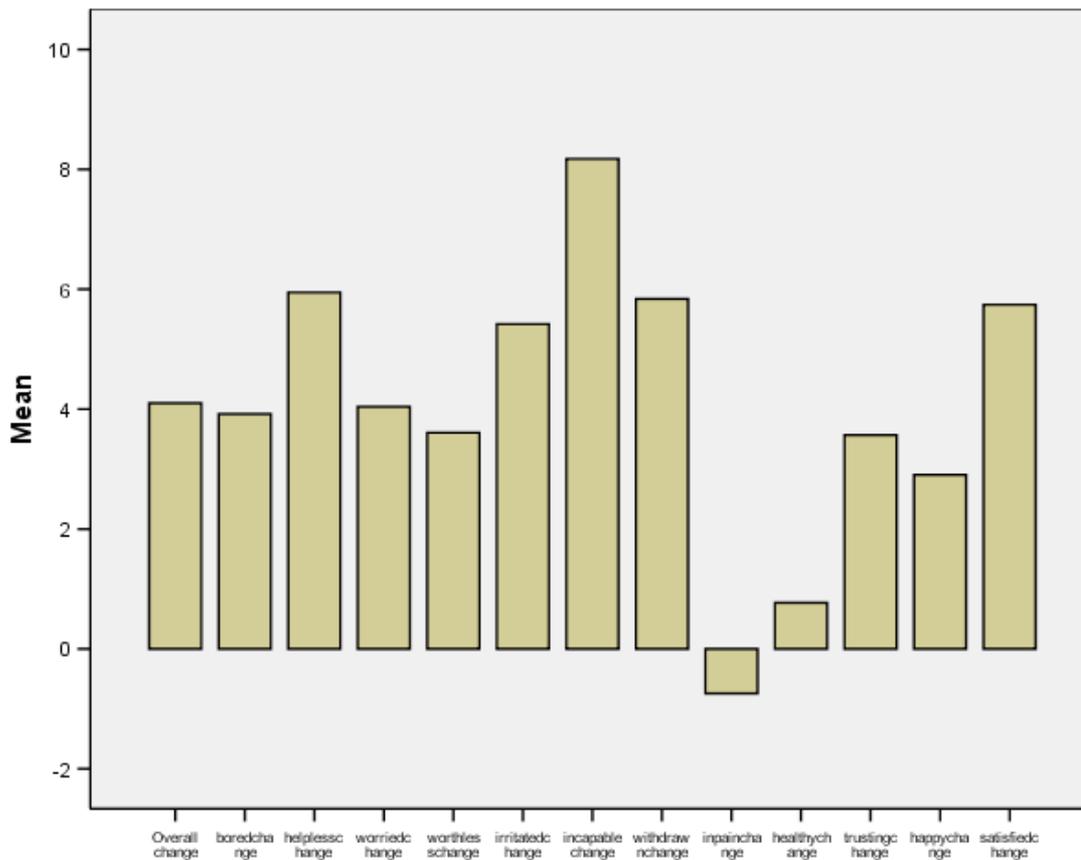
- Forestry UK study of environmental volunteering
  - People of low SES
  - Young offenders
  - People with developmental delays/disabilities

# THIS STUDY:

- To understand motivations, barriers & benefits of volunteering in woodlands and green spaces
- Involved 88 volunteers across 10 organisations
- Data collected via scales & indices, & through interviews



# EMOTIONAL STATE SCALE:



- Increased pain for some volunteers, but overall positive change
- volunteers felt more capable, more in control, more satisfied and sociable

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# EXAMPLE 4 – NATURE CONNECTIONS FOR INDIGENOUS WELLBEING

- research in 2005/6 with members of three Indigenous groups in Victoria
- explored the health & wellbeing implications of caring for Country
- Interviews with 13 traditional custodians & local Indigenous environmental workers

# BENEFITS OF 'CARING FOR COUNTRY':

- Feelings of 'being required/needed', 'pride', 'self-worth', 'responsibility' & 'achievement'
- Enhanced ability to feel good about themselves, "giving them ownership ... before they were unhappy and disenfranchised"
- Preservation of cultural heritage
- Increased education and employment opportunities
- Motivation, empowerment & nurturing for youth who were 'numb from the city', 'dislocated from society', 'in violent situations' (Kingsley et al. 2009)

# AND YET ...

- We still permit, ignore, perhaps even encourage policies & practices which diminish access to green spaces:
  - Incursion of development into the green wedges on Melbourne's urban fringe
  - Sell off and redevelopment of Shannon Park (for people with significant disabilities) → the only grassed area being a sloping site

# BUT THERE ARE SOME 'GREEN SHOOTS':

- Barwon region's 'Active in Parks' program
- Research by HNS group in the School of Health & Social Development at Deakin
- Potential new major in the Bachelor of Health Sciences (Health & Sustainability)
- Growing interest in nature-health connections from local government, academia, health sector, community

**“I only went out for a walk, and finally concluded to stay out till sundown, for going out, I found, was really going in.”**

John Muir