

# Feeling Blue?

## Nurture Nature

It is often claimed that conserving nature is good for mental health. Is there solid scientific evidence for this or is it just a green fantasy? **Lee K. Curtis** investigates.

**E**arly this morning, under the sheoaks, I wriggled my toes in sand and watched a dozen shiny fish break the surface and dance like a miniature ballet troupe before sliding back under. My mood lifted.

What do you do when you feel blue? I go for a walk on the beach or in the bush or have a go at my veggie patch. Nature is my anti-depressant. I don't know the intricate physiological mechanisms, but it works – and apparently not just for me and fellow tree huggers.

A growing trend in treating mental illnesses is ecotherapy – exposure to nature as part of treatment for clinical depression, anxiety, stress and other disorders. Some therapies involve only passive absorption of nature – viewing or walking in nature. Others such as wilderness and horticultural therapies require engagement with nature. A third category, one with tantalising potential for conservation, is therapy involving

a reciprocal healing relationship with nature – conservation as therapy, in activities such as bushland restoration.

One theory underpinning many nature-based therapies is that humans are innately inclined to affiliate with nature and that it is important for physical and mental development and wellbeing to do so. According to this biophilia theory, the estrangement from nature common in modern societies deprives us of essential psychological succour.

I know that my elation in natural beauty, the kinship I feel with other beings, and the way nature makes my fretting seem trivial are widely shared. These 'aesthetic', humanistic' and 'symbolic' values of nature are three of a typology of nine universal values identified by social ecologist Stephen Kellert as contributing to physical, emotional and intellectual growth and wellbeing (see *Nine values*). Even the 'negativistic'

Photo: Michael Snedic

## NINE VALUES OF NATURE FOR MENTAL HEALTH



**AESTHETIC (BEAUTY):**  
promotes awareness, delight, curiosity, exploration, creativity and is an antidote to the pressures of modern living. Photo: Tim Low



**DOMINIONISTIC (MASTERY AND CONTROL):**  
promotes mastering adversity, capacity to resolve unexpected problems, leading to self-esteem. Photo: Iwona Erskine-Kellie



**HUMANISTIC (EMOTIONAL ATTACHMENT):**  
promotes care, connection, trust and kinship, co-operation, sociability and the ability to develop allegiances. Photo: Tim Low



**MORALISTIC (SPIRITUAL AND ETHICAL IMPORTANCE OF NATURE):**  
leads to a sense of harmony and motivates action to protect nature. Photo: Lee K. Curtis





Should bush care be promoted as mental health care? Studies in Australia and England have shown that people with mental health problems benefit from involvement in restoration projects.  
Photo: Mark Croker

By working in a relational way with nature, new internal landscapes start to emerge in interaction with external landscapes, which reflect, sustain, challenge and support the person on their therapeutic journey.

UK psychotherapist  
MARTIN JORDAN



Forming relationships of care with wildlife has psychological benefits, boosted by the glow of releasing a healthy animal back to the wild. While there is ample evidence that relationships with pet animals are good for mental health, the value for conservation of promoting native wildlife as pets is highly contentious.  
Photo: Tim Low

values of nature – encounters that generate fear and aversion – can be psychologically valuable, for the opportunity they present to learn how to deal with fears in a constructive way. Overcoming a spider phobia can give a strong psychological boost.

### Accumulating evidence

Although many of us use nature as therapy (without thinking of it in this way), convincing a sceptical health bureaucracy to take ecotherapy seriously requires more than anecdotes and intuitions.

Mardie Townsend, a researcher in public health at Deakin University, has compiled a summary of evidence for the effectiveness of ecotherapy from studies all over the world in a report, *Beyond Blue to Green*.<sup>2</sup> According to *Beyond Blue*, the organisation that commissioned the report, one in five Australians experience a mental illness during their life, and each year one million Australians suffer depression.

Townsend says the evidence is strong that Australia could greatly reduce the \$20 billion annual cost of mental illness by incorporating exposure to nature into therapies. She says our high rates of depression, anxiety and other disorders of the mind are not surprising as humans have increasingly disengaged from

nature. 'The whole health care system, or the sick care system as it is, has operated as completely separate from the natural environment.'

It wasn't always that way. Ecotherapy is not a new concept, just a forgotten one. In Europe from the Middle Ages to the late 1900s, hospitals often featured lush gardens, parks or greenhouses and even small farms. Patients were encouraged to take walks, relax in the natural surroundings or get their hands dirty in the garden as part of their treatment.

But as we have cleaned the dirt from our fingernails and distanced ourselves from our natural origins, nature has been banished from treatment regimes. Ecotherapy is mostly a private treatment – those who know they feel better when they escape bitumen, computers and cars self-dose on nature. In the aftermath of the 9/11 terrorist attacks in the US, visits to local national parks rose dramatically.

Townsend's report documents the current state of evidence. Many studies are small scale and short-term but they are diverse and numerous and show a compellingly consistent pattern of substantial therapeutic benefit from exposure to nature. A sprinkling of the studies summarised in her report show the variety of effects being tested (see *Less Stress*, page 36).



### NATURALISTIC (INVOLVEMENT IN NATURE):

immersion in natural rhythms and systems, leading to mental acuity and physical fitness.  
Photo: Erica dot net



### NEGATIVISTIC (FEAR OF OR AVERSION TO NATURE):

promotes a healthy respect for risks and learning to deal with them in a constructive way.  
Photo: Vastateparksstaff



### SCIENTIFIC (UNDERSTANDING NATURE):

fosters a capacity for critical thinking, analysis, problem solving skills, leading to competence.  
Photo: Vastateparksstaff



### SYMBOLIC (METAPHORICAL AND FIGURATIVE SIGNIFICANCE):

relational perspective on one's own circumstances leading to cognitive growth and adaptability.  
Photo: Carol Booth



### UTILITARIAN (MATERIAL IMPORTANCE):

appreciation of material benefits including for comfort and survival.  
Photo: OakleyOriginals



# Less Stress

These examples come from the *Beyond Blue to Green* report<sup>2</sup>

A questionnaire survey in Adelaide found that residents who perceived their neighbourhoods as 'very green' had 1.6 times greater likelihood of better mental health than those who perceived their neighbourhoods as lower in greenness. Levels of stress in Danish adults were higher for those living further from accessible green space or with less access to gardens.

Increased access to nearby nature for young children reduced the psychological impact of a stressful life event, such as family relocation, or being bullied or punished at school. This US study showed that those who were experiencing the highest levels of life stress benefited most from a high degree of exposure to nature.

A US study of children with attention deficit disorder found that playing in natural environments lessened their symptoms. Children playing in windowless indoor settings had more severe symptoms than those who played in grassy outdoor spaces.

A study in Chicago found that people living closer to natural settings were more able to deal with important matters in their lives and felt less helpless than those living with minimal or no green vegetation.

A UK study compared the effects of a green walk and an urban walk on self-esteem, mood and enjoyment of 20 people with mental health problems. After a walk around woodlands, grasslands and lakes, 71 percent reported feeling less depressed while 45 percent of the shopping centre walkers were less depressed but 22 percent were more so.



## DOES THIS MAKE YOU SMILE?

The flowers of the lacebark tree (*Brachychiton discolor*) can lift our mood because they are big and showy and appear when the tree is free of distracting leaves. Like cherry blossoms, they are products of a deciduous tree, produced before summer leaves emerge. Australia has so few deciduous trees that we might wonder why this tree is an exception. Deciduous trees are found mainly in the monsoon tropics, where the wet season alternates with a severe dry season when leaves are shed. The lacebark tree grows south of the monsoon belt in eastern Queensland, but might have evolved further north. *Brachychiton* fossils have been found in central Australia, tens of millions of years old, suggesting another possibility – that the genus evolved under a monsoon climate during the Eocene. Wondering about the origins of the lacebark tree can deepen our aesthetic experience of its flowers.

Photo: Tim Low

## Conservation as therapy

Unfortunately, studies on the mental health benefits of conservation activities are as yet scarce. In a pilot study for *Beyond Blue*, Mardie Townsend and Matthew Ebdon found that people suffering from anxiety and depression improved when they worked with a friends of park group, doing planting, weeding and plant propagation.<sup>3</sup> All recorded a positive emotional change. The only negative results were for increased physical pain. But the volunteers thought that was terrific because it meant they must have done something energetic and worthwhile. In interviews, participants highlighted the benefits of building social connections – 'This is good for people who may not have the courage to get involved' – and developing skills. They spoke about feeling happier and more confident: 'I have experienced happiness that I otherwise would have missed out on', 'it takes the tension and focus away from myself and I forget reality ... This natural environment grabs you'.

Initial evaluations of a similar Green Gym initiative by the British Trust for Conservation Volunteers, which encourages people with mental illnesses to participate in local nature conservation activities, found significant improvements in mental health scores and reduced depression.<sup>4</sup>

Probably the largest-scale 'conservation therapy' program ever conducted was in the United States during the Great Depression (1933-1942), when President Franklin D. Roosevelt established the Civilian Conservation Corps. The Great Depression was a time of high unemployment (peaking at about a quarter of the workforce), desperate poverty and high suicide rates. The Corps employed three million young men, who planted more than two billion trees, controlled erosion on 16 million hectares, protected stream and lake banks and built 20 000 km of trails.

Although the program goals were mainly economic and environmental, President Roosevelt emphasised the health and wellbeing benefits of 'taking a vast army of these unemployed out into healthful surroundings'. The Army's *Quartermaster Review* described it as restoration of wellbeing: 'Set adrift by lack of employment, thousands of American youths roved the countryside – sinking deep into the slough of despond. By a plan of our President they at length were led into the Forest, there to regain their self-respect and confidence.'

There weren't any psychologists measuring mental health outcomes but personal accounts tell of benefits. Youths felt healthier because the 'average CCC boy is in an environment that keeps him in contact with nature', wrote one participant. 'Not an artificial mechanical world like that of the modern city but a world alive with beauty more lovely than I had ever known. It was in this country that my health was renewed,' said another. 'This is a training station we're going to leave morally and physically fit to lick "Old Man Depression"', said the newsletter, *Happy Days*, of a corps camp in North Carolina.

The therapeutic benefits of nature, and particularly of conservation activities, could be among the most compelling arguments we have for conservation. Advocates for nature should be campaigning for large-scale studies to prove what we already know – that relationships of care with nature are among the most joyful and beneficial aspects of living on Earth.

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**SOURCES:** 1 Burls A. 2007. *Journal of Public Mental Health* 6(3):24–39. Based on Kellert S, Derr V. 1998. *A national study of outdoor wilderness experience*. Yale University. 2 Townsend M, Weerasuriya R. 2010. *Beyond Blue to Green: The benefits of contact with nature for mental health and well-being*. Beyond Blue Limited, Melbourne. 3 Townsend M, Ebdon M. 2006. *Feel blue, touch green*. Deakin University, Melbourne. 4 Peacock J, et al. 2007. Got the blues, then find some greenspace: The mental health benefits of green exercise activities and green care. *MIND Week Report*, February 2007.