



Nurturing nature

A child's engagement with the environment is viewed by some as an inalienable human right. Yet many children today have little direct contact with nature. **Kumara Tarr** looks at how early childhood educators can teach children about the environment in and outside of the classroom.

IN AUSTRALIA AND WORLDWIDE, there is growing recognition that children need to spend more time outdoors and in unstructured natural environments.

The reasons cited for this range from the need for physical activity to combat obesity and other physiological health issues to the need for the kind of psychological wellbeing that is said to develop through having a connection with the earth.

The work of Tim Gill in the United Kingdom, the Forest Schools in northern Europe, Richard Louv in the United States and groups such as the Early Childhood Environmental Education Network (Australia) and the US-based Nature Action Collaborative for Children (NACC) all advocate for children to spend time outdoors and in the natural world.

Recently, Australia hosted the 'Come and Play Outside Symposium' at the University of Western Australia, said to be the first conference of its kind in the world.

The fact that such a topic can be the focus of two days of international discussion highlights a groundswell of concern about the limited extent to which children can spend unstructured time in the outdoors.

Contrasting childhoods

Children's discretionary time is increasingly scheduled, monitored by adults and spent interacting with technology of one kind or

Lovers

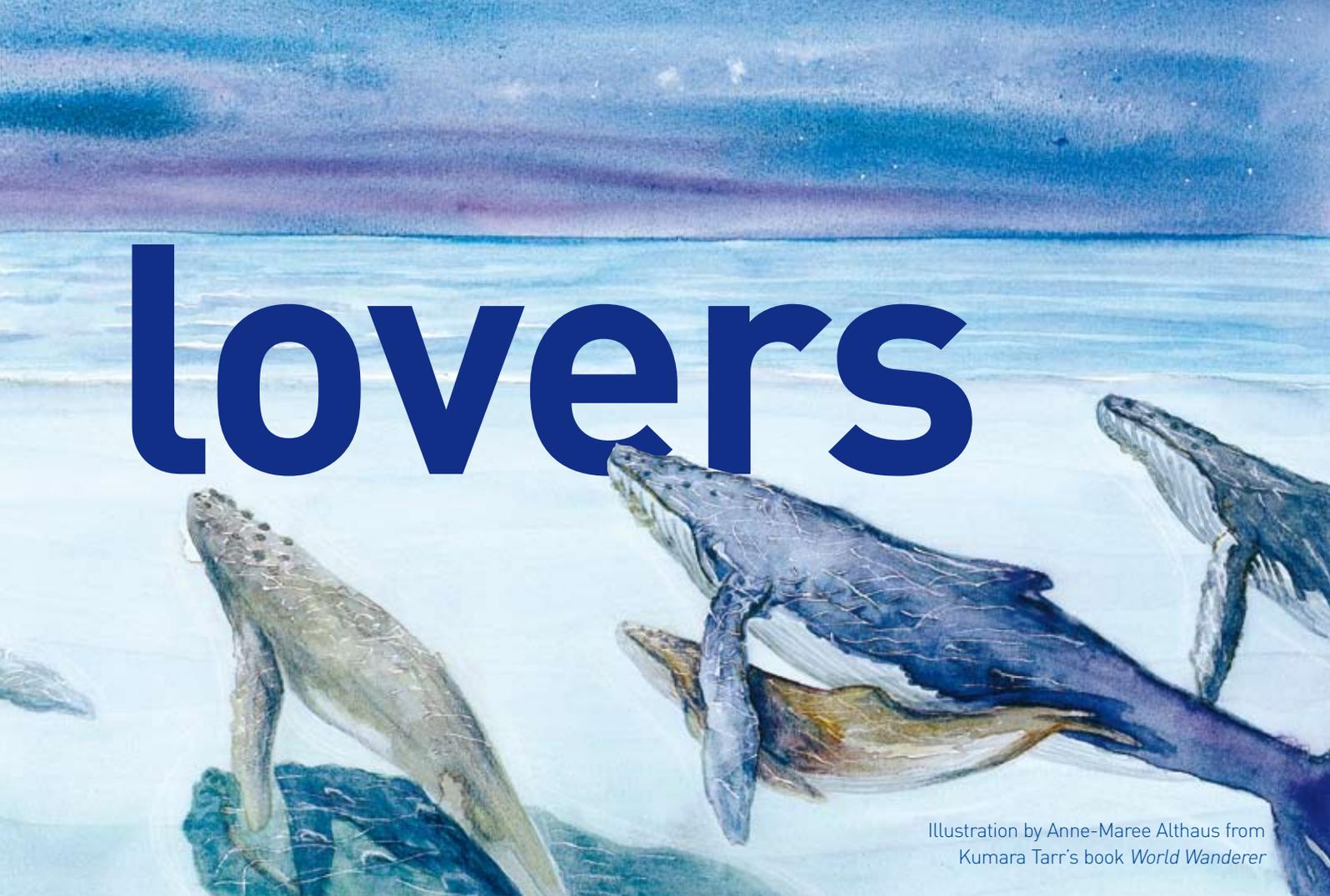


Illustration by Anne-Maree Althaus from
Kumara Tarr's book *World Wanderer*

another—and indoors.^{1,2} By contrast, when we talk to most adults about their own childhoods they will wistfully recount stories of playing outside in ‘wild’ urban or semi rural areas, away from the scrutiny of adults.

They, like Richard Louv, remember the interactions they had with their peers in these environments, the calculated risk taking, the fascination for small pockets of the natural environment, whether it be bird’s nests, frog ponds or wombat holes, and the development of self-management skills, with fondness and satisfaction.³

Tim Gill, the UK’s leading advocate for outdoor play, champions the cause of children to be able to play outside safely, in unstructured environments that provide opportunities for physical challenge, appropriate risk taking and reflection.^{1,2}

He also highlights the dangers of what he calls zero tolerance to risk-taking in childhood—one of the main causes of restricting children’s independent outdoor activity. They include underdeveloped physiology, difficulty in making

decisions and in understanding risk.

The Forest Schools in northern Europe advocate for children to spend time in the natural world—the woods or the forest—and report significant benefits for children such as stress reduction, increased ability to concentrate, improved immune system responses and improved social skills.⁴

These benefits are evident after a one-semester program where the children spend one morning per week engaged in a learning program in the forest. Children who spend time in an unstructured play environment are also reported to have better motor coordination⁵ and an improved capacity for developing empathy.⁶

Other groups such as the NACC cite engagement with and understanding of the natural world as an inalienable human right. In short, in Australia and internationally, exposure to the environment, and environmental education are now seen as necessary aspects of all children’s lives.

Even the United Nations has made a statement about the importance of environmental

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education as part of a ten-year focus on environmental awareness and action:

‘There can be few more pressing and critical goals for the future of humankind than to ensure steady improvement in the quality of life for this and future generations, in a way that respects our common heritage—the planet we live on... Education for sustainable development is a life-wide and lifelong endeavour which challenges individuals, institutions and societies to view tomorrow as a day that belongs to all of us, or it will not belong to anyone.’⁷

Relevant education

Whilst the underlying premise for this statement is self-evident—and few dispute that we are in the grip of a global environmental crisis—the question remains, how do we, in early childhood settings in Australia, best teach young children about the natural world?

To what extent do we inform them of the pressing need for action as a basis for environmentally sustainable practices? My concern is that when we teach young children about the environment, even with the best of intentions, they will be overwhelmed at the scale of the problem and with the responsibility for remedying it. In saying that, we know we have to



ONE STEP AT A TIME

Building on the success of their *Little Green Steps* program, Wyong Shire and Gosford City Councils have generously pulled together all of their knowledge in a comprehensive manual on sustainability education within early childhood services.

Called *Climbing the Little Green Steps*, the manual primarily targets environmental education officers from local councils, but is also a wonderfully useful resource for preschool and long day care educators. It outlines information, strategies and resources effective in initiating and sustaining change in early childhood services.

Funding for the project was assisted by the NSW Government through the *Our Environment—It's a Living Thing* program.

It is available for download from:

www.livingthing.net.au

www.gosford.nsw.gov.au or

www.wyongsc.nsw.gov.au

Wyong Shire Council also has printed copies of *Climbing the Little Green Steps* available.

For more information contact Maree Whelan on (02) 4350 5555.

teach children about the environment; indeed we find it as a key topic in our guidelines for education.⁸

Commenting on the exponential decline in environmental sensitivity due to ongoing development, Robert Pyle suggests that children have a reduced environmental exposure due to urban and inner city living. The limited amount of discretionary time that children spend in the environment creates a ‘diminished base-line’ in terms of environmental awareness and leads to a ‘generational environmental amnesia’⁹.

Commentators such as Theodore Roszack^{10,11}, Joanna Macy¹² and Randy White¹³ advocate for the need for children to spend time in the environment, to develop a relationship with it, in order for any awareness of sustainable practice to be meaningful.

‘We need to allow children to develop their love for the earth, before we ask them to save it.’¹³

Joanna Macy goes further and says that children and young people (and adults) can be frozen in state of dysfunctional despair when they understand the extent of environmental degradation.

With these cautionary warnings in mind, it seems that it is important to teach young children about the natural environment in a manner that is positive and apposite with their emotional and cognitive development, and in a manner that allows them to develop a sense of wonder and delight in the natural world.

The early childhood setting

It is important to note at this point that there are many early childhood teachers and services that are implementing environmentally sustainable practices as daily, integrated aspects of their program.

They often include innovative water, recycling or gardening projects or teaching children about minimising the consumption of resources.

While this is commendable, I believe we can and should expand children’s awareness of the natural world beyond the responsible use of resources and help them to create an understanding of and regard for the environment that makes the implementation of these practices second nature.

Environmental understandings can become the basis for the everyday program and support the children’s awareness of their local environment, the flora and fauna, social dynamics of animal species and their habitat. The following story gives an example:

Jason arrives at kindergarten one Monday morning and at news time, tells the group about



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PHOTOGRAPH: SUSAN KELLY

his trip to the beach the previous day. The teacher asks what he saw there. He replies that he saw seagulls, jellyfish, and in the distance a whale, but they couldn't see it very well.

This leads to general discussion about the whales (humpbacks) and to a number of children recounting things that they had seen at the beach, driftwood, seaweed, crabs etc.

The following morning, after some home research, the teacher arrived with a story prepared about a mother whale, who was swimming with all her friends from the cold waters of the land of ice and snow, to the warm waters where there were colour coral fish.

She tells the story gradually over the next several days (this stretched into weeks) and includes the differing seascapes through which the mother whale passes. Eventually, the story encompasses the birth of the baby whale, the experiences of the baby as it learns about its environment, the different sea creatures that it meets and finally, the long journey home to the land of ice and snow.

The narrative is full of descriptions of creatures from the sea that the children have shown an interest in. Over the weeks of the telling

of the story, the teacher develops verses and songs about the aspects of the story that the children identify with and ask for. She speaks and sings them with the children who ask for them often.

From these stories also come visual and three dimensional art experiences such as painting, drawing, sculpture, and a number of craft experiences. The children incorporate many aspects of this content into their play and tell each other stories about the creatures that live in the sea, their habitats, and the social dynamics of the characters in the story.

Because the teacher has researched her topic and all of the characters (sea animals and plants) included in the story, the information that the children have about them is all based on fact, although creatively rendered.

The examples of social dynamics and personality traits they have gleaned have worked their way into the children's framework for understanding their own social relationships— they can be heard making comments such as 'I am cranky today like crotchety crab' or 'I just feel like floating around like jingle jolly jellyfish'.

They even have a model for symbiotic rela-



Another illustration by Anne-Maree Althaus from Kumara Tarr's book *World Wanderer*

Every time [the children] see a dolphin, a manta ray, a turtle or a jellyfish, they break into song or verse and tell the adults on board stories about what these animals do.

tionships in the Super Sucker fish helping Big Blue (whale) to get rid of the itchy barnacles. The journey through the sea has taken on a life of its own. The children continue to build on it with the help of their teacher and explore it through all available artistic media.

After three months, with the support of the children's families, an excursion to the sea is conducted. The children are loaded into boats (all appropriate safety precautions are taken) and taken out onto the bay to see the migrating humpback whales.

Every time they see a dolphin, a manta ray, a turtle or a jellyfish, they break into song or verse and tell the adults on board stories about what these animals do. Finally, they see the whales: a mother and her calf playing in the shallow waters of the bay. It seems as if they are breaching and tail slapping just to show us what they can do. The day finally comes to an end with children and adults alike declaring it a meaningful and moving experience.

These children are now about 23 years old. Those I am still in contact with remember this part of the kindergarten year well. They also remember the stories, songs, verses and art

experiences that taught them about the local animals, insects and plants on a daily basis.

They remember the facts about these things but they also remember the qualities of them, how they move and what makes them interesting, clever, wise or beautiful to look at. They remember the interactions between species and the social dynamics that prevail. They know that these animals, insects or plants are worth preserving for their own sake—that the world would be diminished without them.

Intrinsic values

When these young people find themselves making decisions about the resources they consume or the way in which their work or living circumstances impact on their environment, they will incorporate their natural respect for the environment into their decision-making processes.

While the above story gives an insight into how I conducted my kindergarten program and indicates my belief in this approach, I am also passionate about exploring the relevance of this type of environmental education with others.

With this in mind, I conducted a pilot research project in a Sydney CBD childcare service in 2006. The children (18 months to three years) had no outdoor space and their teachers wanted to incorporate additional environmental content into the program and this we did, through the arts.

After two months, the children, showed a greatly increased understanding of the natural world, told stories about it, sang songs and incorporated aspects of it into their play. The teachers noticed significant changes in the social dynamics and found that that by building on the children's awareness and interests they had unlimited content for their program. This research project was the subject of my report at the *Education for Sustainability in Early Childhood* conference in Sydney last November.

My PhD research focuses on the questions raised during the pilot research project. It will concentrate on the effects of presenting information about the natural world through the arts, as core curriculum in early childhood. ✨

Kumara Tarr works for the National Childcare Accreditation Council (although her views do not represent the NCAC in any way). Kumara taught kindergarten, infants and primary classes for 15 years in Steiner schools in rural settings, which formed the backdrop for thousands of creative program experiences based on the natural environment. She is the author of four children's storybooks about Australian flora and fauna and a PhD candidate with the University of Western Sydney.

Footnotes

1. Gill, Tim (2007). *Can I Play Out: Lessons From London Plays*, Home Zones Project. In. London, London Play.
2. Gill, Tim (2007). *Growing Up in a Risk Averse Society*.

Come and Play Outside Symposium, University of Western Australia.

3. Louv, Richard (2006). *Last Child in the Woods: Saving Our Children from Nature Deficit Disorder*. Chapel Hill, Algonquin Books of Chapel Hill.
4. Archimedes Training LTD. (2007) <http://www.forest-schools.com> Retrieved 28/7/2007, 2007.
5. Phenice, Lillian, A. and Griffore, Robert, J. (2003). 'Young Children and the Natural World.' *Contemporary Issues in Early Childhood* 4(2): 167-171.
6. Feral, Crystal-Helen (1999), *Connectedness and Development: A Theory. Is Ecopsychology the Answer to Emotional Well-Being?* Annual Convention of the National Association of School Psychologists. New Orleans, LA.
7. *United Nations Decade of Education for Sustainable Development 2005-2014*.
8. Australian Government (2005), *Educating for a Sustainable Future: A National Environmental Education Statement for Australian Schools*, Department of the Environment and Heritage, Curriculum Corporation.
9. Pyle, Robert (2007). *Losers, Weepers: The Extinction of Experience and the Dimishing Baseline. Come and Play Outside: a Multidisciplinary Symposium*, University of Western Australia.
10. Roszak, Theodore (1992). *The Voice of the Earth: An Exploration of Ecopsychology*. New York, Touchstone.
11. Roszak, Theodore, Gomes, Mary, E., and Kanner, Allen, D., Eds. (1995). *Ecopsychology: Restoring the Mind, Healing the Mind*. San Francisco, Sierra Club Books.
12. Macy, Joanna (1995). *Working Through Environmental Despair*, Ecopsychology: Restoring the Earth, Healing the Mind. *ibid*.
13. Carrol, Kathleen (2007), *A Guide to Great Field Trips*, Chicago, Chicago Review Press.

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