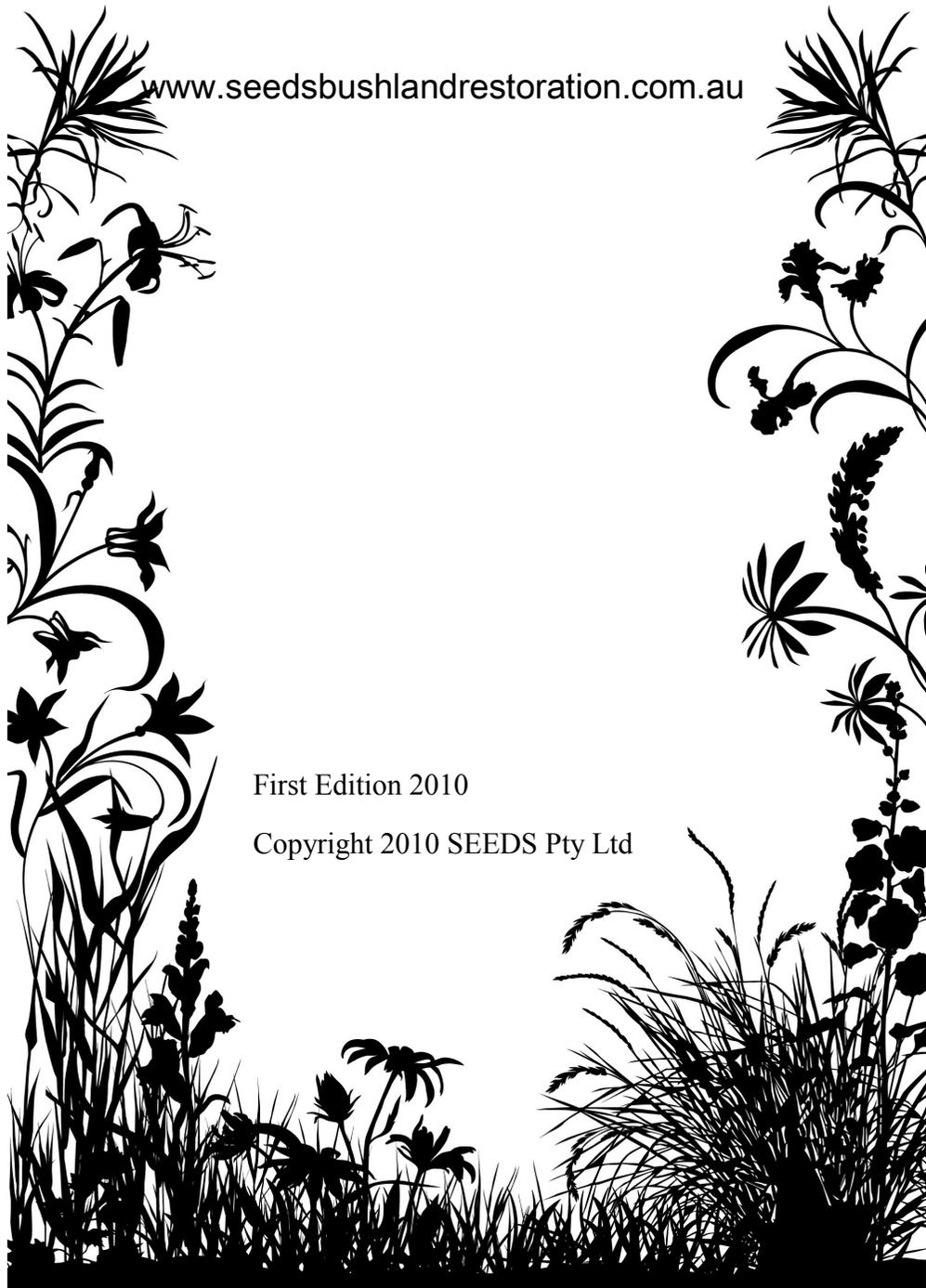


www.seedsbushlandrestoration.com.au



First Edition 2010

Copyright 2010 SEEDS Pty Ltd

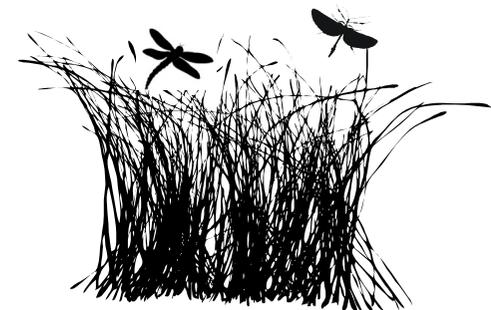
www.teachingoutsidethebox.com.au



WILDTHINGS

Nature-based Learning: How to do it & the health & wellbeing benefits

Nature Journaling, Health Benefits of Spending Time in Nature & Nature Activities for Kids & Families



Kylie Robertson

15. Keep frog or get a tadpole kit. See <http://frogs.org.au/arc/frogs.html> for details. Remember you need a permit, information in on the website

16. Collect stones. Even the youngest children love gathering rocks, shells, and fossils. To polish stones, use an inexpensive lapidary machine—a rock tumbler.

17. For more information, see solutions presented throughout *Last Child in the Woods*. Also, visit the nonprofit [Children & Nature Network](#) for more ideas for your family and community, including an action guide for change as well as to read news and the latest research. Connect with the efforts of others around the world.

18 Make a Nature Journal with your/for your children. Make a cover for a book, nature inspired of course. Sow it, felt it, cut and paste it. This is a special treasure to keep and use as the child likes.

19. Take your nature journal on regular nature walks with family members – stick leaves or feathers in it and try to identify them, do drawings, rubbings or put photos in.



20. Start a nature walk group with family or friends and source and invite local specialist in birds, fungi, plants, geology to take your group on a walk. They are usually very keen to share their passion with others especially children.

Contents

1. Natural Journaling

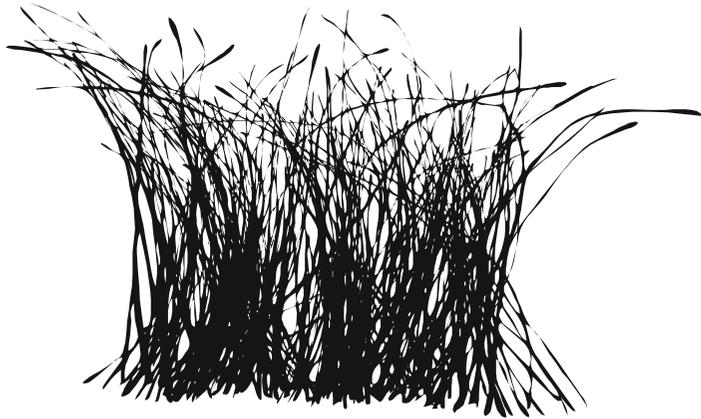
2. Green Time—the benefits of spending time in nature

3. Nature Activities for Kids and Families



1. Natural Journaling

One of the best ways to learn science is to observe the natural world. Nature watching involves walks in the park, hikes in the country, silently observing in the back yard, or even staring out the window. It is the process of really observing the wonders of nature. It is noticing the textures, the shape, the design, and the manner of a specimen. It is science at its best, in the lab or real life.



Journals have for centuries been a way of recording information based on observations and discoveries, be it of nature, a voyage or expedition, of people or a community. Observing patterns in nature is a powerful tool and can be applied to many skills developed later in life.



11. Encourage your kids to build a tree house, fort, or hut. You can provide the raw materials, including sticks, boards, blankets, boxes, ropes, and nails, but it's best if kids are the architects and builders. The older the kids, the more complex the construction can be. For understanding and inspiration, read *Children's Special Places*, by David Sobel. *Treehouses and Playhouses You Can Build*, by David and Jeanie Stiles describes how to erect sturdy structures, from simple platforms to multistory or multitree houses connected by rope bridges.



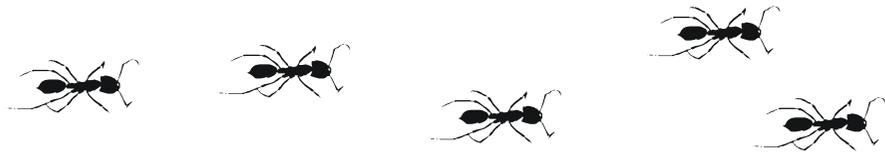
12. Plant a garden. If your children are little, choose seeds large enough for them to handle and that mature quickly, including vegetables. Whether teenagers or toddlers, young gardeners can help feed the family, and if your community has a farmers' market, encourage them to sell their extra produce. Alternatively, share it with the neighbors or donate it to a food bank. If you live in an urban neighborhood, create a high-rise garden. A landing, deck, terrace, or flat roof typically can accommodate several large pots, and even trees can thrive in containers if given proper care.

13. Keep a minibeast check out www.minibeastwildlife.com.au

14. Raise butterflies-from egg to caterpillar to chrysalis to emerging monarch. The website [www.zoo.org.au/Learning/Resources/Butterfly Eggs](http://www.zoo.org.au/Learning/Resources/ButterflyEggs) sells them and tells how to do it.



8. Make the "green hour" a new family tradition. NWF recommends that parents give their kids a daily [green hour](#), a time for unstructured play and interaction with the natural world. Even fifteen minutes is a good start. "Imagine a map with your home in the center. Draw ever-widening circles around it, each representing a successively older child's realm of experience," NWF suggests. "Whenever possible, encourage some independent exploration as your child develops new skills and greater confidence."



9. Take a hike. With younger children, choose easier, shorter routes and prepare to stop often. Or be a stroller explorer. Involve your teen in planning hikes; prepare yourselves physically for hikes, and stay within your limits (start with short day hikes); keep pack weight down.

10. Invent your own nature game. One mother's suggestion: "We help our kids pay attention during longer hikes by playing 'find ten critters'—mammals, birds, insects, reptiles, snails, other creatures. Finding a critter can also mean discovering footprints, scratching, scats and other signs that an animal has passed by or lives there." Check out "Tracks, Scats and Other Traces: A Field Guide to Australian Mammals, by Barbara Triggs."

Nature Journals are diaries or notebooks recording your findings. It can be as detailed, colorful, and poetic as you desire. It may contain pictures, notes, poems, plant pressings or bird feathers. It becomes a record of our discoveries, memories, and an extension of oneself. Some ideas for nature journaling include:

- Plant and animal observations
- Weather observations
- Stories, songs or poetry
- Drawings or paintings of what you see
- Collections of natural materials found in your travels
- How you feel at a particular time.



2. Green Time—the benefits of spending time in nature



*Research evidence shows that close proximity to green spaces is clearly associated with reduced prevalence of depression, anxiety and other health problems. The relationship has been shown to be strongest for children and people with low incomes.**

The outdoors is believed to be one of the most suitable and favourite places for children to indulge in free play and gross motor activity, due to the presence of trees and flowers, among other features. This type of setting is described as an enriched environment and is believed to have multiple functions by providing both a platform for play, as well as objects to interact and play with.

An enriched environment opens avenues for developmental benefits in older children including learning and memory; opportunities to accrue and display decision-making skills; and problem solving and creative thinking. Younger children can engage in imaginative play, which is considered a foundation of social and cognitive development. Many researchers believe that playing in outdoor settings at home, camps and schools has long-term benefits for physical, social, emotional and cognitive development in children.^{9,10,11} It is understood that key elements of child development are fostered through contact with nature such as:

- developing a sense of identity
- autonomy
- psychological resilience
- learning healthy behaviours.^{12,13}



3. View nature as an antidote to stress. All the health benefits that come to a child come to the adult who takes that child into nature. Children and parents feel better after spending time in the natural world—even if it's in their own backyard.

4. Help your child discover a hidden universe. Find a scrap board and place it on bare dirt. Come back in a day or two, lift the board, and see how many species have found shelter there. Identify these creatures with the help of a field guide. Return to this universe once a month, lift the board and discover who's new.

5. Revive old traditions. Collect bugs and watch, draw or photograph them before releasing them. Make a leaf collection. Keep a terrarium or aquarium. Go yabbying—tie a piece of liver or bacon to a string, drop it into a creek or pond, wait until a yabby tugs.



6. Encourage your kids to go camping in the backyard. Buy them a tent or help them make a canvas tepee, and leave it up all summer.

7. Be a cloudspotter; build a backyard weather station. No special shoes or drive to the soccer field is required for "clouding." A young person just needs a view of the sky (even if it's from a bedroom window) and a guidebook. Cirrostratus, cumulonimbus, or lenticularis, shaped like flying saucers, "come to remind us that the clouds are Nature's poetry, spoken in a whisper in the rarefied air between crest and crag," writes Gavin Pretor-Pinney in his wonderful book *The Cloudspotter's Guide*. To build a backyard weather station, read *The Kid's Book of Weather Forecasting*, by Mark Breen, Kathleen Friestad, and Michael Kline.

3. Nature Activities for Kids and Families

Parents, grandparents, and other relatives are the first responders, but they cannot resolve society's nature-deficit disorder by themselves. Educators, health care professionals, policy-makers, business people, urban designers—all must lend a hand. Many of the activities presented here are adult-supervised, but it's important to remember that one of the most important goals is for our children to experience joy and wonder everyday, and for them to be encouraged to create their *own* nature experiences. As they grow older they will expand the boundaries of their exploration.

No list of nature activities and community actions can be complete, but here are a few suggestions that may stimulate your own creativity.

1. Invite native flora and fauna into your life. Maintain a birdbath. Replace part of your lawn with native plants. Build a bat house. Many local councils have free booklets or posters on the indigenous plants and animals of the area, ask them to send you some, also ask them where your local indigenous nursery is.

2. Visit your local indigenous nursery, the vast majority of them are not for profit and welcome volunteers, they will show how it all works and share their knowledge in exchange for some help.



Children who experience high levels of contact with nature are reported to have higher levels of self-worth and higher cognitive function.¹⁴

An Australian investigation conducted in Melbourne primary schools identified principals' and teachers'

perceptions of the benefits of nature-based activities in primary schools.¹⁵ Social and mental health

benefits were identified and related to:

- caring for living things which assists the development of empathy
- seeing the changes taking place in the cycle of life, such as growth and change which builds resilience
- improvements in neuro-behavioural disorders in children (e.g. ADD and ADHD)
- improved attitudes towards school and relationships with peers and adults
- greater calmness and reduced disruptive behaviour
- giving children a sense of freedom to be creative and make discoveries which enhanced their self-esteem and self confidence
- increased perceptions of wellness and sense of achievement.

From: Beyond Blue to Green: The benefits of Contact with Nature for mental health & Wellbeing. Deakin Uni 2010

One repercussion of the restricted access to nature is the potential for serious negative effects on physical, emotional and cognitive development.

It has been shown that children from ethnic minorities, children with disabilities and females are represented in lower proportions among children who have access to nature.

Not only are the benefits for children but for all people that spend time in nature

The range of psychological benefits for people who visit green, open spaces is vast. They include:

- a place to escape to away from school/university or workplace
- changes of scenery
- improvements in mood
- lower levels of anxiety
- lower stress levels
- lower levels of depression
- increased physical activity.



Recent studies at the School of Forest Medicine, Nippon Medical School, Japan display scientific evidence. They have found that spending time in nature reduce the concentrations of cortisol (stress hormone) in saliva, reduce the concentrations of urinary adrenaline and noradrenaline, reduce prefrontal cerebral activity, reduce blood pressure and stabilise autonomic nervous activity in humans.

They have also found conclusive evidence that a 30% increase in NK cells (kill tumour cells by releasing anticancer proteins) occurs in humans after spending time in nature and as such spending time in nature could assist in preventing cancer.

What are you waiting for? Start growing greener.

