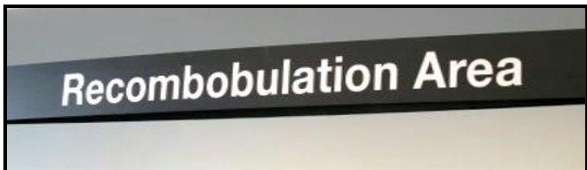


Respite in Shades of Green

Nature May Be the Ultimate Therapist's Couch!

by Ken Finch

For five years now, passengers leaving from Milwaukee's Mitchell International Airport have grinned at a unique sign that says, "Recombobulation Area." Anyone who has flown in the past decade knows the drill at the security check-in: you take off just about everything except your belly button, pass uneventfully through the scanner, and then try to get everything put back on and in its proper place – usually as you're in a rush to catch your flight.



Recombobulation Area

Well, as you come out of the security bottleneck in Milwaukee, you find the official Recombobulation Area where – without holding up the rest of the line – you can refill your pockets, put your shoes back on, and take two or three tries to get your belt through every loop. There's nothing fancy to the space, yet it's a wonderfully simple idea that makes the airport hubbub just a touch more fun and a bit easier to handle.

Flying can be stressful, but so is much of modern life. In our hurried, over-scheduled, never-off-the-grid lives, who couldn't use a time and place for regular bouts of "recombobulating?" Well, good news: you've got it; we all do. It's called nature – and no matter where you live, there's a bit of it nearby that can calm your mind, lower your blood pressure, and make the world seem a little more pleasant and spiritual.

Of course, this is not a new discovery. The positive and restorative effects of nature have been recognized and celebrated for as long as humans have lived on this Earth. Whether in natural haunts like

forests, ocean shores, and mountaintops, or in human-created forms like beautiful gardens and cozy fishing cabins, we have always turned to nature for peace, revitalization, and mindful thinking. Benedictine retreat centers are usually found in lovely and isolated landscapes; Thoreau used his Walden Pond haven for his most famous writing; and uncountable millions of us are drawn to outdoor destinations for rest and renewal – even spaces as simple as a shady backyard hammock or a picnic blanket spread in a local park.

The eminent biologist Edward O. Wilson coined the term "biophilia" to name what he argues is an innate human attraction to nature. Once you start looking for signs of this biophilia, you'll see them often – from how we protect our natural parks to how we design our home landscapes; from how contentedly we linger around a campfire to how often we advertise cars in beautiful outdoor scenes; and even to how we can program digital rainstorms to lull us to sleep. All of

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*The author's favorite place to recombobulate is Bourne Pond in Vermont.
Where is your special place for revitalization?*

Humble Pie

“Ecosystems are not only more complex than we think, they are more complex than we can think. This should lead us to be cautious, and a little bit humble.” So said Jack Ward Thomas 20 years ago. Thomas – a past Chief of the U.S. Forest Service – pointed to a crucial truth: we don’t understand nature well enough to be casually messing with it. My only quarrel with Thomas is that I’d suggest we need to be *massively* humble, not just “a little bit.”

I recently read about the growing loss of Eastern hemlock trees in the Southern Appalachians due to damage from the Hemlock wooly adelgid, an Asian insect accidentally brought to the U.S. This bit of worrisome ecological news reminded me of the cascade effects in nature: a seemingly minor change can set off an unforeseen torrent of ecological mayhem. To wit, killing off the evergreen Hemlocks so greatly affects transpiration (the loss of water from plant leaves and needles) that it changes stream flow -- an important variable in the forest water cycle. Further, the loss of the Hemlocks’ streamside shade causes a rise in water temperatures, endangering aquatic species that require cold water, such as Brook trout. Extending the cascade: as the climate warms, the adelgids are successfully moving farther north, where they now threaten the forest ecology of the Northeast. And the cascade’s next step will be . . . well, actually, we don’t know.

As John Muir famously stated, “When we try to pick out anything by itself, we find it hitched to everything else in the universe.” This is the essence

of ecology: endless layers of intertwined connections and relationships that even our very best minds can not fully understand. Yet still we plunge ahead, modifying and mutilating the ecology of our planet – be it “fracking” for more natural gas, removing entire mountaintops for coal, flooding the Mississippi Delta with farm chemicals, or twiddling our societal thumbs while excessive CO₂ emissions cause the Arctic to melt, the oceans to rise, and dangerous climate extremes to become the new normal.

No species has ever caused so much harm to the ecology of Earth, and that harm is accelerating, not slowing. Do we care? The bulk of Americans do not. At least, not enough to demand the difficult actions needed to reverse the trends. We love nature, but not to the point of inconveniencing ourselves. And we just cannot seem to comprehend that our own fate is inextricably tied to the rest of the ecological world.

Alas, even if we did understand, knowledge alone will not be enough. It will take caring – *way* more caring – and colossal doses of humility. Humility to accept that we do not understand the full impacts of our actions. Humility to understand that we are not the primo species on Earth – in fact, that there is no primo species, because we are all interdependent. Humility to admit that we contemporary humans cannot indulge in our every consumptive whim without threatening the health and happiness of our own descendants. And humility enough to see that science alone cannot solve all ecological issues; that science must be accompanied by deep spirituality that embraces the web of life beyond just *homo sapiens*.

I don’t often wallow in such sobering thoughts. Indeed, Green Hearts’ work is focused on children, because in them lies ecological hope and salvation. Children do not need to be coerced into conservation by bad news; instead, they need to be loved and amazed into it. They need to observe, awestruck, as a tiger-striped caterpillar weaves a green-and-gold chrysalis, liquefies itself inside its pendulant pod, and then re-emerges as a gorgeous Monarch butterfly. They need to watch a Pronghorn run the prairie at 55 miles per hour, and feel the spray from a breaching Humpback whale. They need to find shapes in the clouds and daydream away sunny hours under a blue sky, with a whiff of lilac sifting through their brain. For in those quiet, joyful actions are planted the seeds of humility: an emergent grasp of the wisdom, genius, and beauty of nature. And in that humility lies hope for the future.

Green Hearts

Institute for Nature in Childhood

A 501(c)(3) nonprofit organization incorporated in Nebraska.

Mission Statement

Green Hearts’ mission is to restore and strengthen the bonds between children and nature.

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these reflect our attraction to the natural world and how we turn to it for wisdom and revitalization. Why do you suppose ol' Isaac Newton was sitting under that famous apple tree to begin with? It's powerful stuff, this nature!

The comfort, peace, and renewal of time spent in green spaces is easy to dismiss as a “duh!” realization, since it is such a widely shared human perception. In recent years, though, rigorous, quantitative, international research has been validating and extending our understandings about the beneficial effects of time spent in nature. The scope of these research findings is dramatic – in fact, so much so that it is hard to capsuleize, and almost overwhelming when it is assembled effectively, as in Frances Kuo's “Parks and Other Green Environments: Essential Components of a Healthy Human Habitat.” (Published by the National Recreation and Park Association; see http://www.nrpa.org/uploadedFiles/nrpa.org/Publications_and_Research/Research/Papers/MingKuo-Summary.PDF)

In short, time spent in nature supports a wide range of factors that are vital to psychological, social, and physical health. Research-demonstrated positive effects have been found on depression, resiliency, mood, cognition, healing, stress, anxiety, classroom performance, attention deficit disorder, and conservation values – among others! Here's just a small sampling.

- Kuo's own research found that public housing residents who live in buildings surrounded by trees experience fewer incidents of violence than do residents living in identical buildings with very few trees. (1)
- Two studies compared hospital patients with the same afflictions and prognoses, but while some patients had natural views from their rooms' windows, the others could see only streets and buildings. On average, the patients with natural views requested less pain medication and were released from the hospital earlier. (2)
- Researchers from Herriot-Watt University (Edinburg, UK) “outfitted a group of test subjects with mobile electrodes fastened to their heads. The subjects then took programmed walks in three different environments – an urban shopping district, a park with a lush green environment, and a busy commercial zone. The

The Peace of Wild Things

by Wendell Berry

When despair for the world grows in me
and I wake in the night at the least sound
in fear of what my life and my children's lives may be,
I go and lie down where the wood drake
rests in his beauty on the water, and the great heron feeds.
I come into the peace of wild things
who do not tax their lives with forethought
of grief. I come into the presence of still water.
And I feel above me the day-blind stars
waiting with their light. For a time
I rest in the grace of the world, and am free.

results showed evidence of brain-wave activity indicating relaxed states – lower frustration, lower ‘engagement and arousal,’ and higher meditative states – when moving in the green space, and just the reverse when moving out of it.” (3)

- The Japanese have a long cultural practice of visiting woods for relaxation, which is known (translated) as “forest bathing.” Experiments found that 15 minute walks in the forest reduced stress more than the same time walking in urban environments, as revealed by measures including lower pulse rates, lower blood pressure, and lower concentrations of cortisol. (4)
- Recent studies have found that treating depression with a soil bacterium, *Mycobacterium vaccae*, can have a very similar effect to taking the drug Prozac, since they affect the same neurons. Thus, taking a walk in nature or digging in a garden can offer people a natural mood lift. (5)

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The list of similar studies and other beneficial effects of “nature time” is already long, and it is growing rapidly. But even without this data, most adults instinctively grasp that time spent in nature can rejuvenate their energy and emotions. And they certainly have no trouble understanding the hectic, multi-tasking life pace which makes such doses of “vitamin N” (for Nature) valuable to them.

But what of children? They’re just kids, right? How much more easy-going could their lives be? In truth, modern children’s lives may be every bit as frenzied as their parents’ and caregivers.’ The days of carefree after-school play and free-roaming weekends have been largely extinguished – replaced by longer schooldays, more homework, soccer leagues, tutoring, gymnastics, music lessons, play dates, church groups, pre-dawn hockey practices, band camps, theater rehearsals, and countless other scheduled activities crammed into nearly every once-free moment of their lives.

Childhood has never been like this before. Is there any doubt that stress, mental exhaustion, and performance anxiety are now a huge, on-going challenge for our children – even if they can’t clearly express it?

So can nature help children, too? The answer is absolutely “yes” – so long as we can get them back outside into more natural settings. The experience of nature offers truly significant therapeutic benefits for children, just as it does for adults.

For instance, Wells and Evans found that children with nature nearby their homes are more resistant to stress; have lower incidence of behavior disorders, anxiety, and depression; and have a higher measure of self-worth. This research studied over 300 American kids, 8 to 11 years-old, and found that greener home surroundings made them more resilient against the effects of stress and adversity, regardless of socioeconomic status. And the greatest benefits accrued to the most vulnerable children! (6)

Another study found that in Swedish day care centers that devoted a lot of time to play in more natural settings, the children showed greater ability to concentrate and pay attention than did children in child care centers that spent less time outdoors and had only a manufactured playground. (7)

Nature experiences have also been found to lessen the symptoms of attention deficit disorder and attention deficit hyperactivity disorder in children –



Comfy? Centered? Seems likely!

and the greener the kids’ play surroundings, the fewer symptoms they displayed. (8)

Just as with adults, the research findings about children and nature are both expansive and expanding. They deserve our attention, and our action!

So what can we do? First comes awareness: we must sincerely value children’s quiet time in the outdoors. Amidst all the deserved hype about the need to get our children more physically active, we also should also respect their need for slow, peaceful, reflective moments when their brains and their spirits can process their busy lives, and they can simply enjoy the beauty and rejuvenation that nature offers.

How can we foster these quiet, contemplative moments? Create sheltered, private outdoor niches for kids to relax in – like a tall tree swing, a playhouse hidden amidst shrubs, a hammock chair tucked away in a quiet corner of the yard, or a soft bed of grass to just lie on and watch the swallows spinning overhead. And then – *imperatively!* – give them plenty of free time to enjoy their special outdoor places.

Whether raising your own child or working to bring hundreds of children back outside, remember that just as active nature play can fortify growing bodies and spark momentous adventures, quiet and reflective time in nature can calm and mend young spirits. Children need their own time and natural places to recombobulate. And they don’t even have to take off their belts.

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What is Green Hearts Doing for Nature Play?

Green Hearts speaks, teaches, consults, and writes about nature play and how it can be restored to childhood. Our work takes us around the country, and even around the world. Here's what we've been up to recently.

Educational Advocacy

A key part of Green Hearts' mission is teaching about the value of nature-based play and how we can bring it back.

Recent Presentations:

- Schuylkill Center for Environmental Education, Philadelphia, PA – 2nd Annual Richard James Lecture: *Go Out and Play: Restoring the Nature of Childhood*
- Chicago Metro Association for the Education of Young Children, Chicago, IL – featured conference presentation and workshop: *Restoring the Nature of Childhood*
- National Recreation & Park Association Green School, Wheeling, WV – two classes: *Ya Gotta Have Heart ... and Hands... and the Head*; and *Got Mud? Creating Great Spaces for Nature Play*
- Antioch University New England, Keene, NH – full-day workshop: *Starting Off Right: Creating Nature Preschools and Forest Kindergartens*
- Pennsylvania Association for Environmental Education conference, Bushkill, PA – keynote: *Playing for Conservation: What Do We Know? What Should We Do?* plus a workshop: *The Nuts and Bolts of Natural Playspaces*
- Pennsylvania Land Trust Association conference, State College, PA – keynote: *Restoring the Nature of Childhood*, plus a workshop: *Land Trusts and the Next Generation – Forging a Bond Between Children and Nature*
- York College, York, PA – two guest class lectures on nature play
- York County Parks, York, PA – public presentation: *Restoring the Nature of Childhood*, plus a full-day workshop: *The Nuts and Bolts of Natural Play Spaces*
- Holden Arboretum, Kirtland, OH – public presentation: *Go Outside and Play! – Why Our Parents Had it Right*, plus a workshop: *Creating a Nature Play Space: Big or Small*

Consulting

Green Hearts has been working with these clients that want to bring more nature play to their audiences.

- Hartley Nature Center, Duluth, MN – business planning for a nature preschool
- Delaware Valley Association for the Education of Young Children and the Smith Memorial Playground, Philadelphia, PA – staff and Board training, plus planning for a nature preschool in Fairmount Park
- National Wildlife Federation – Steering Committee member, Natural Play and Learning Areas Guidelines project
- Pennsylvania Land Trust Association – writing a manuscript, “Restoring the Nature of Childhood: A Guide for Conservation Organizations and Others Concerned with the Great Outdoors”

Supporting Green Hearts

If you believe in Green Hearts' mission to restore and strengthen the bonds between children and nature, and you appreciate the work we're doing, please support us with a contribution! Every gift truly helps, no matter what size!

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You may also make an electronic contribution to Green Hearts by using your PayPal account.

Thank you!

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More Nature Play Tips for Your Yard

Children don't need spectacular vistas or miles of trails to enjoy nature. Instead, they can be engaged for hours with the tiny wonders right in your own yard – like sticks, pine cones, earthworms, rocks, beetles, or small “landscapes” like rock gardens and shrub hideaways. In this recurring column we offer simple ideas for “kidscaping” your yard.

For past issues, visit Green Hearts' website: www.greenheartsinc.org

Rather than more ideas for tangible nature play features, in this issue we're sharing suggestions for how parents can best facilitate their children's nature play – in your backyard, in the neighborhood park, or wherever you find yourselves in nature!

- ♥ **Travel down memory lane:** Use your own good memories of childhood nature play to guide the experiences you'd like your children to enjoy.
- ♥ **Plan on no plan:** Forget structured activities. Get your kids to a rich nature area and let them decide what to do, where to explore, and how to play.
- ♥ **Trust in nature:** No fancy equipment or instruction is needed. If you hear, “I'm bored,” just be patient. Kids will soon start exploring on their own.
- ♥ **Embrace flex time:** Watch your kids' play, not your watch. Let their discoveries and active engagement determine the schedule.
- ♥ **Be a lifeguard, not a teacher:** This is crucial! The best nature play is unstructured – i.e., without plans or pre-determined activities. The play can still be supervised, but a light touch is vital! Let nature be the children's play partner, not you. Intervene only if danger seems imminent, or if you're asked to help.
- ♥ **All kids come in wash and dry:** Dirt don't hurt, and don't sweat the wet! So what if nature play is messy? Just hose 'em down at the end. Keep plastic bags in your car to protect seats from wet kids.
- ♥ **Wash, rinse, repeat:** Frequent nature play is what best builds kids' lasting bonds with the nature world – even if it's only in small and familiar spaces. Make nature a favorite play friend for them, time and time again!

For more tips on nurturing nature play, visit our home page at www.greenheartsinc.org and click on *Nurturing Nature Play – Ten Tips for Parents*



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