

TOOLKIT

HOW TO CONNECT WITH NATURE IN CITIES – A FOREST BATHING APPROACH

By Victoria Reynal





This toolkit is inspired by #NatureForAll, a global movement of individuals and organisations who share a similar conviction: the more people experience and share their love of nature, the more support and action there will be for its conservation.

The toolkit was written by Victoria Reynal, with support from Cheryl Charles, co-chair of #NatureForAll, as part of Victoria's thesis project on forest bathing and nature connectedness. Victoria has been working in the environmental field for more than 10 years. She believes in the power of nature contact to help improve human health and foster environmental stewardship.

TABLE OF CONTENTS

3

WHY IS IT IMPORTANT TO CONNECT WITH NATURE?

- Physical and mental health benefits
- Inspiration to care for the Earth

6

WHAT IS FOREST BATHING?

- Definition and a brief history
- Health benefits
- Connection with nature

7

HOW CAN WE CONNECT WITH NATURE IN CITIES WITH A FOREST BATHING APPROACH?

- Concrete advice – from personal to policy



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WHY IS IT IMPORTANT TO CONNECT WITH NATURE?

Human beings have become increasingly disconnected from the natural world.¹⁻⁸ Many of us have less and less direct exposure to, and experiences with, nature.¹⁻⁹

One of the explanations for this estrangement is that more than half of the world population lives in cities, where it can be more challenging to connect with nature. Further, the UN predicts that by 2050, 70% of humanity will reside in urban areas.¹⁰

Being disconnected from nature can negatively impact our health and our relationship with the Earth.^{4,5,6,11} It has led many of us to forget that as human beings we are part of an “interdependent and interconnected web of life”.¹ This forgetting and obliviousness to the importance of nature in our lives is deeply associated with the severe damage we are inflicting on our planet and its ecosystems – putting many of them, and ourselves, at risk. The health of the planet and our own health are linked – our disconnection from nature affects both. When we harm ecosystems, we harm ourselves because we depend on ecosystems to survive. Being disconnected from nature can result in our caring less, becoming less aware and less receptive to noticing the consequences of our environmental footprint.

Considering the dire implications our disconnection from nature can have, and has already proven to have, rekindling our sense of belonging and closeness to nature has become of paramount importance. Not only is connecting with nature necessary to help avoid catastrophic scenarios but, on a more constructive and positive tone, it can positively influence our health. It can help remind us of our place on this Earth, and by doing so, it can lead us to adopt more caring attitudes and actions towards nature.

We don't usually think of cities as places where encounters with nature can occur. However, there is a growing realization that cities can in fact allow people to connect with nature on a daily basis, and their potential and role in doing so is very important.¹





PHYSICAL AND MENTAL HEALTH BENEFITS

Human beings depend on nature to survive: from the air we breathe and the food we eat to our shelter and clothing, including almost everything in between. Spending time in natural environments, being exposed to nature, can affect our health and well-being in significant ways:

Mental Health Benefits

- **Happiness:** We tend to feel happier, with more positive emotions and a mood boost.² For example, the simple fact of viewing natural elements from a window can contribute to our sense of satisfaction with our neighborhood and our well-being.^{9,12}
- **Satisfaction:** Connecting with nature can increase our overall feeling of being more satisfied with life in general.²
- **Attention restoration:** The fascination and awe that nature can awaken in us partly explain how and why we feel like our mind rests and recovers when spending time in nature. This allows us to be able to perform better intellectually, concentrate more and have improved memory.⁹
- **Stress reduction:** Exposure to nature can reduce stress, with evidence showing how nature contact can measurably affect heart rate, blood pressure, skin conductance, cortisol levels, and parasympathetic nervous system. Self-reported impacts of nature on emotions also point to reduced stress levels.¹³⁻¹⁴
- **Alzheimer's disease:** Spending time in nature can help persons with Alzheimer's disease and dementia feel calmer, more relaxed, and less stressed. It can also help reduce agitation and aggressiveness,¹⁵ stimulate the senses, encourage physical activity, and stimulate cognition. It can provide a space for social interactions; it can foster a sense of place in patients, nurturing feelings of belonging and familiarity; and it can positively affect sleep.¹⁶
- **Mental health symptoms:** Nature experiences can help decrease symptoms of anxiety, depression, rumination and negative feelings.⁹
- **Social connectedness:** Exposure to nature can lead us to feel closer and more connected to other people, strengthening social relations and community bonds. It can lead to prosocial behavior, having us feel more empathy towards others and acting with more generosity.²
- **Creativity:** Spending time in nature can promote a rise in our creativity.¹⁷
- **Aliveness:** It can help us feel more alive and energetic.²
- **Nature connectedness:** It can lead to and nurture our emotional connection with nature, helping us in turn be more psychologically resilient.²
- **PTSD symptoms:** It can positively impact Post Traumatic Stress Disorder (PTSD) symptoms of war veterans.²⁰

Physical Health Benefits

- **Obesity:** It can help prevent and fight obesity.¹⁸
- **Immunity:** Nature contact can strengthen our immune system, making us more resistant to disease.^{18,19}
- **Recovery:** Being exposed to nature can help us heal and recover more quickly after surgery, disease or trauma.¹³



Different types and durations of nature contact can bring about positive health impacts.⁹ From looking at pictures or videos of nature to immersing ourselves in a forest, from a few minutes tending plants indoors to spending longer periods of time in nature: all can potentially benefit our health. Getting in direct contact with nature helps increase and optimize its positive impact on our well-being – so even though appreciating nature virtually might be beneficial, it is even better to get outside. Likewise, spending more time and exposing ourselves to nature with more frequency can also lead to more positive effects on our health and well-being.

INSPIRATION TO CARE FOR THE EARTH

Another extremely important impact from human connection with nature is that it can drive us to develop pro-environmental attitudes and eventually to act in favor of the environment. Evidence indicates that spending time in nature can develop feelings of connection with nature, which in turn can lead to environmentally sustainable behaviors.

As Jacques-Yves Cousteau and others have said: “People protect what they love”. Spending time in nature will help us develop an emotional affinity towards it.²² If we grow fond of nature, the chances that we will act to protect it are higher. A healthy relationship with nature is an important prerequisite for us to act on behalf of conservation and sustainability.

Because we have been severely mistreating the Earth and its life-supporting systems, they are now under serious threat.²³⁻²⁵ Climate change, resource overconsumption and depletion, pollution, and mass species extinction are some of the main consequences and symptoms of the overarching crisis of human-nature relations.

Human-nature relations need to be re-balanced if we are to save ourselves and halt environmental destruction. To that end, our personal experiences and connection with nature are crucial. Feelings of connection with – and love for – nature predict pro-environmental attitudes and actions.

Even though almost any kind of exposure to nature can be positive, there are certain factors that can be especially influential. Charles *et al* refer to “meaningful, positive experiences in nature” as pathways to develop a connection with nature.¹





WHAT IS FOREST BATHING?

Imagine taking a bath in the forest – a metaphorical bath or shower in which you open up your senses to receive and absorb all that the forest has to offer. Simply said, that is what forest bathing, shinrin yoku, is about: spending time in a forest, paying special attention to our senses.

Shinrin yoku first appeared in Japan in the 1980s. Members of the Agency of Agriculture, Forestry and Fisheries thought that nature and forests could be therapeutic for the Japanese population. They also believed that if people were attracted to forests because of their healing potential, they would become more willing and likely to want to protect them. Initially, these ideas were mostly based on intuition and common sense. But in time, scientific research started providing evidence to prove these assumptions – especially regarding the potential health benefits.²⁶

With this research and increasing evidence base came a growing interest in shinrin yoku across the world. Translated as forest bathing, it was progressively adopted by different practitioners who saw in it a way to connect people with forests and nature, with all the benefits this can have. Now, there is a growing number of certified guides, associations of forest bathing, courses, books, and resources from all over the world.

HEALTH BENEFITS

As with other approaches to connecting with nature, forest bathing can also positively impact human health and well-being – both physical and mental health.

- **Stress:** it can help reduce stress – studies have found that forest bathing or walks in the forest can reduce cortisol levels, blood pressure and pulse rate, while increasing heart rate variability.²⁷
- **Depression:** spending brief periods of time in forests can reduce symptoms.^{11,28}
- **Prosocial behavior:** time in urban forested parks can affect prosocial attitudes and activities, potentially increasing altruism and willingness to help others.²⁹
- **Sleep:** forest bathing can improve sleep, both in number of hours and the subjective quality of sleep.³⁰
- **Cardiovascular health:** forest bathing can be therapeutic for the cardiovascular system and beneficial to elder populations with chronic heart failure.^{27,31}
- **Chronic pain:** forest bathing can help improve psychological and physiological health of people who suffer chronic pain, helping them feel less pain and more relaxation.²⁸
- **Anxiety:** it can reduce and calm symptoms of anxiety.²⁷
- **Immune system:** forest bathing has been associated with a rise in the activity of natural killer cells, which are important players in our defense against bacteria, viruses and cancer.²⁶
- **Cognitive performance:** it can improve focus and concentration.²⁶
- **Attention restoration:** spending a short time in forests can help restore our attention.^{26,32}

Forest bathing can foster a connection with nature. Considering forest bathing is a particular way of being in nature, it is also capable of nurturing feelings of connection with nature.³³ Its focus on being mindful of the senses and using them to perceive nature is the main pathway to nature connectedness.



HOW CAN WE CONNECT WITH NATURE IN CITIES WITH A FOREST BATHING APPROACH?



Probably THE most important aspect of forest bathing is using and paying special attention to our senses. One of the world's leading experts in forest bathing, Japanese Doctor Qing Li refers to the senses as a bridge that connects us with nature.²⁶ So, when we want to connect with nature, our focus should be on facilitating a sensory experience, in which our senses and the natural environment are center stage. Paying attention to our senses can help us let go of thinking, becoming present in the here and now.³⁴



“The key of unlocking the power of the forest is in the five senses. Let nature enter through your ears, eyes, nose, mouth, hands and feet.”²⁶



Literature that focuses on what leads to nature connectedness also refers to the importance of the senses, together with emotion, meaning, compassion and beauty.¹ These biophilic values can act as pathways to nature connectedness – keeping them in mind while spending time in nature increases the chances that we will experience and develop a connection with nature.¹

ON A PERSONAL LEVEL

Recommendations for connecting with nature through forest bathing in a city:^{1,26,34}

- Leave your cell phone or any technological equipment that might distract you behind. If leaving your cell phone behind is not an option, putting it on airplane mode is recommended.
- Choose a natural area, park or natural element.
- Walk, sit down, read or have a picnic in that place.
- Let go of expectations and/or aims, whatever you decide to do
- Remember you are not going anywhere when walking; try to just walk slowly, without an objective, taking your time.
- Pay special attention to what you are perceiving and feeling through your senses:
 - Listen to crickets, birds, and other animals. Listen to the wind, how it moves the trees and leaves. Listen to your footsteps and any other sounds that surround you.
 - Observe your surroundings – what is there to look at? Appreciate the different shapes, sizes, textures, colors, the light and shadows, the movements. Try to find wild herbs growing in city parks, or even sidewalks.
 - Smell the fresh air, the flowers, the scent of the natural environment you go to.
 - Touch a tree trunk, leaves, soil – connect to what your skin is feeling, sense the temperature, the texture. Put your bare feet on the ground, lie on the ground. Feel the breeze touching your face.



- Try to adopt a beginner's mind, perceive nature with fresh eyes, with curiosity and with the least preconceptions possible. Try to savor all that you perceive with your senses.³⁴
- Stay in tune with your body and your feelings – let them guide you. Emotions can awaken a desire to care for the Earth. Some examples: awe, curiosity, peacefulness, admiration, excitement, relaxation, gratitude, joy.¹

Look for green spaces in these city locations:³⁵

- | | | |
|---------------------|---------------------|-----------------|
| • Parks | • Sidewalks | • Urban forests |
| • Backyards | • Schoolyards | • Ponds |
| • Balconies | • Botanical gardens | • Rivers |
| • Green rooftops | • Public libraries | • Canals |
| • Community gardens | • Playgrounds | • Coasts |

ON A SOCIETAL LEVEL^{1,35}

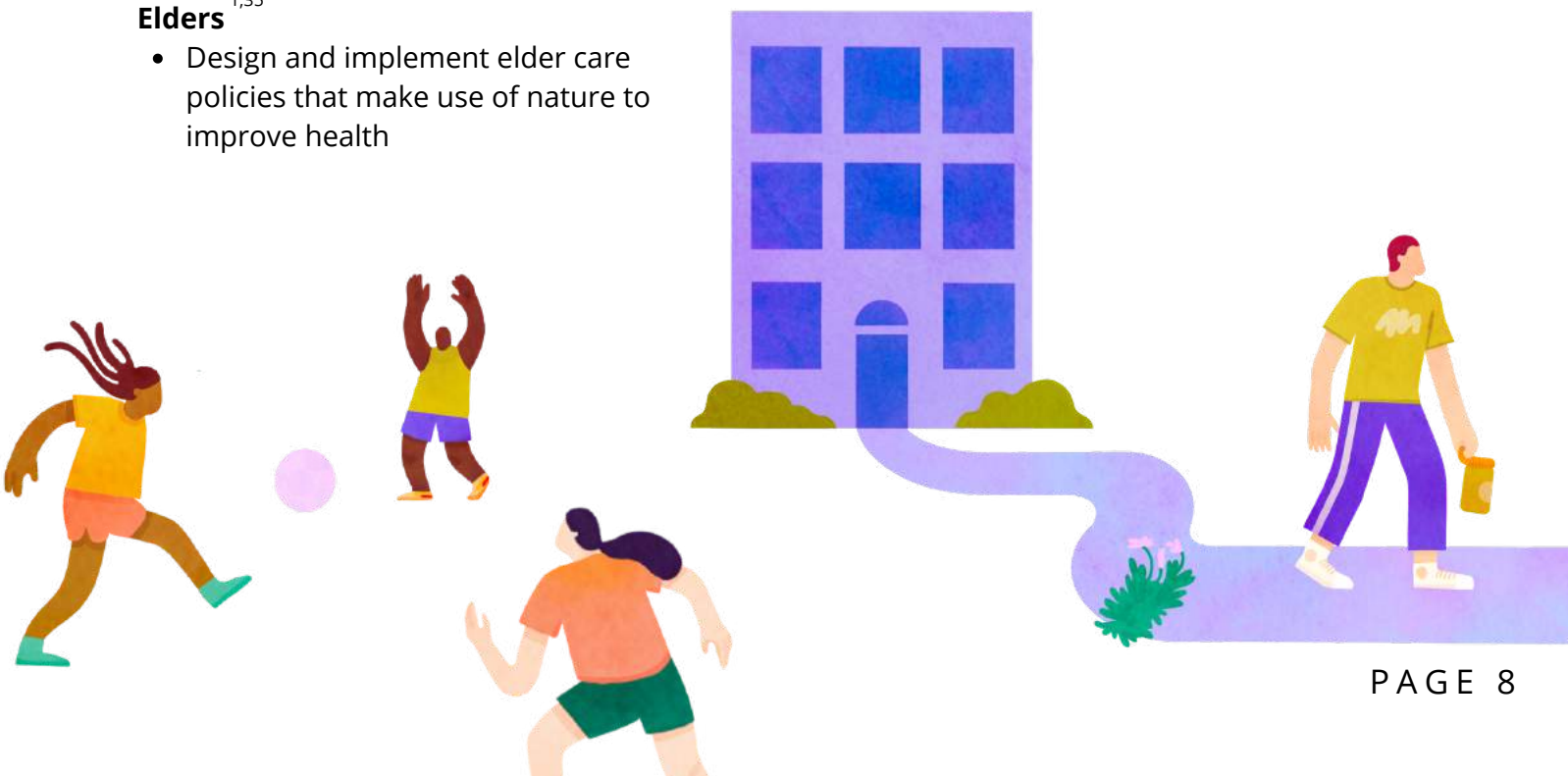
Recommendations for promoting a connection with nature in cities - through policies and practices:

Children^{1,35}

- Get children close to nature and to spend time outdoors, through education, unstructured play, afterschool and summer activities and childcare.
- Increase the amount of time and the frequency children spend in nature.
- Consider it an investment – children who grow up close to nature are more likely to remain connected with nature when they become adults, to have better health, to seek nature contact and to act in pro-environmental ways.
- Encourage outdoor and nature-based education.
- Turn schoolyards into green schoolyards, which can include trees, trails, vegetable gardens, native vegetation.
- Add greenery and/or green spaces to childcare facilities.
- Promote a connection with nature through art and culture.

Elders^{1,35}

- Design and implement elder care policies that make use of nature to improve health





General policies and practices^{1,35}

- Know where you currently stand – having a baseline will help design appropriate policies and practices. It might be a good idea to measure how much green spaces are available, their distribution, how and how much they are being used, whether there are any differences based on ethnicity, income or place of residence. It's also advisable to assess the existing policies aimed at bringing people closer to nature. This information can help obtain valuable insights, and eventually implement policies to encourage everyone to spend (more) time in green spaces – taking into account the importance of promoting an equitable access.
- Create a vision and set specific goals of stimulating a connection with nature. For example, increasing the number of green spaces or making existing green spaces more accessible. Turn it into a priority.
- Integrate nature connection visions, goals and policies with other sectors, such as health, education, tourism and sustainability.
- Involve the community in the development of the vision and goals, in the planning process, in establishing priorities.
- To make cities as nature rich as possible, starting from urban parks and urban protected areas to additional green spaces. Innovation is key in finding ways to add greenery to cities. For example, vacant lots can be converted into green areas.
- Design, plan and adapt cities so that opportunities to connect with nature abound.
- Make green spaces easily accessible, welcoming and diverse.
- To be most attractive, green spaces should encourage social interaction and participation.
- Design and implement policies to help people overcome barriers to connection with nature:
 - facilitating access and transportation
 - helping people overcome fears
 - giving people different opportunities to experience nature in cities: green schoolyards, community gardens, wildlife corridors, rooftop gardens, etc.
- Offer opportunities to come into contact with nature in the places where people live, learn, work, play, heal. Adding vegetation and/ or green spaces to schools, hospitals, universities, prisons, workplaces is a straightforward strategy. Likewise, inspire people to carry on doing what they currently do, but in natural environments – exercising, playing, reading, and meeting friends or colleagues can be done outdoors.
- Tap into the potential of businesses, places of worship, schools, care centers, hospitals, shops, museums, zoos, aquariums, botanical gardens, community centers, parks, public areas: they can act as “urban gateways to nature”¹
- Communicate: let people know the benefits of being in nature and how they can connect with it, inspire them, give them ideas of how to connect with nature. People who already feel very connected with nature can inspire others – share their experiences through social media and media in general. Technology can be used as a means to connect people with nature.
- Work with others, collaborate, build agreements and partnerships with different institutions, from schools, to private companies to government agencies. For example, through agreements between schools and communities, green schoolyards can be used by citizens when children are not present.

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