

Harnessing Nature for Mental Health

Have you ever been for a hike in nature or sat and stared at a sunset and forgotten exactly what it was you were so worried about? Well, turns out you're not alone. In an era when most of us spend more time online than we do in the natural world, people are increasingly adding time in nature to their mental health toolkits.

In recent years, an increasing body of research has highlighted the profound impact nature has on mental health, particularly in helping to manage anxiety and depression. At a time when humanity is more urbanised than ever before, many are rediscovering the mental health benefits of spending time outdoors. From a simple walk in the park to more immersive experiences like hiking or gardening, nature offers a unique and powerful resource for those seeking to boost their mental health.

If you're interested in what the research says on nature and mental health, how it works, or how to get the most from your time in nature, then read on.

Research on Nature and Mental Health

Research on the relationship between nature contact and mental wellbeing has surged in recent years. Alongside the benefits of urbanisation, city living has been associated with increased rates of mental illness and, in particular, anxiety and mood disorders. Conversely, a growing body of evidence suggests even short periods of time in nature can benefit our mental health, especially when it comes to conditions like anxiety and depression. Time in nature has demonstrated a wealth of benefits to human health in various domains including physical, cognitive, and emotional functioning.

Physical benefits of nature include reduced:

- Blood pressure
- Heart rate

Cognitive benefits of nature include improved:

- Working memory
- Attention
- Impulse control



Emotional benefits of nature include reduced:

- Rumination
- Stress
- Depression
- Anxiety

A landmark study published in *Proceedings of the National Academy of Sciences* found that participants who walked for 90 minutes in a natural environment showed a reduction in rumination, a key contributor to depression, when compared to those who walked in an urban environment. The authors suggest reduced rumination as a key mechanism for how nature reduces depression. Further research from the University of Essex has shown that just 5 minutes of green exercise is enough to elicit improvements in self-esteem and mood. Correlational evidence even suggests a link between nature contact and reduced rates of mortality.

The mental health benefits of time in nature are replicated across modalities, from associative studies to experimental studies, meta-analyses, and systematic reviews. For instance, associative studies have shown as urban greenness increases, risk of anxiety, depression, and benzodiazepine use significantly reduces. Supporting these effects, experimental research suggests a brief walk through a natural setting will reduce rumination, anxiety, and depression significantly more than a similar walk in an urban setting. These findings underscore an essential insight: nature contact offers a powerful and accessible tool for improving mental health, especially in an era where anxiety and depression rates are on the rise.

How Nature Improves Mental Health

So how exactly does nature contact help? Research suggests several mechanisms through which nature can benefit mental health:

1. **Restorative environment:** Natural settings provide an environment conducive to mental restoration. The soft, natural stimuli in nature (like birds chirping or the wind in the trees) put less strain on the brain than urban environments, allowing the brain to relax and recover from the stress of daily life. In this way, nature acts as a mental reset, which is especially helpful for individuals with anxiety or depression who often experience mental



exhaustion. Research suggests natural settings have unique characteristics that induce a 'soft fascination' conducive to positive reflection and restoration of attention.

2. **Reduced rumination and worry:** One of the defining features of depression and anxiety is rumination – repetitive, negative thought patterns that trap individuals in a cycle of distress. Nature offers a pleasant environment that gently captures our attention and promotes present-moment awareness, breaking cycles of rumination and worry. Restoration of attention may also reduce rumination and worry, which are fundamentally disorders of attention. Walking through a forest, sitting by a lake, or simply observing the landscape can shift focus away from negative thoughts, put things in perspective, and foster a sense of calm.
3. **Reduced triggers for stress:** Natural environments provide physical and psychological distance from reminders of daily concerns – like emails, bills, appointments – and other triggers for stress common in our daily lives.
4. **Increased physical activity and sunlight:** Engaging with nature often involves physical activity in daylight, whether it's hiking, walking, or even gardening. Exercise and sunlight are two well-established ways to improve mood. Exercise promotes the release of endorphins, which help reduce stress and improve mood. Similarly, sunlight is thought to boost the release of serotonin, a mood regulating neurotransmitter, which in turn boosts mood. Sunlight has the added benefit of regulating melatonin and our Circadian rhythm, helping improve sleep function. If you're in Australia or another area with high UV risk, just be sure to be sensible. Fifteen minutes in the early morning or late afternoon is enough sunlight for the benefits, you don't need to roast for hours in the midday sun. The combination of physical movement in a calming, natural environment is an especially potent means to boost mental health.
5. **Social connection:** Nature can also foster social well-being. People who spend time outdoors with friends or loved ones often experience a sense of bonding, emotional support, connection to community, and shared experience. Social connection is another powerful factor in reducing symptoms of anxiety and depression and boosting mental health and natural spaces are ideal for engaging in quality social interaction.



How to Get More Nature Contact

Given the compelling evidence supporting the mental health benefits of nature, it's worth considering how to incorporate more of it into your daily life. While not everyone has easy access to vast wilderness areas, there are many ways to bring nature into your routine:

- 1. Take a walk:** If you live in an urban environment, local parks can serve as a quick escape. A short walk among the trees or along the creek can provide a welcome break from the stresses of daily life. If you have time, visiting one of our many national parks can offer some awe-inspiring hikes, waterfalls, and vistas. If venturing into wilderness, make sure to check park alerts and weather forecasts for extreme weather and take plenty of water and other essentials to ensure a stress relieving, rather than a stress inducing time.
- 2. Start a garden:** Gardening is a wonderful way to connect with nature while reaping the benefits of physical activity. Even if you don't have a yard, container gardening or planting indoor plants can have therapeutic effects. Alternatively, consider joining the local community garden.
- 3. Join a nature group:** Combine the benefits of nature with social connection and join a nature-based group. Most areas have local groups for bushwalking, bush and catchment care, and spotting and documenting the local flora, fauna, and funga. Consider searching online or checking local council and university noticeboards or websites for local nature groups to connect with like-minded people in nature.
- 4. Nature-based exercise:** Consider joining outdoor exercise groups like hiking clubs or yoga classes in the park. Or for the solo exercise enthusiast, break out the running shoes or bike for a more meditative experience. These activities combine physical exercise with the healing power of nature.
- 5. Create a nature space at home or in the office:** If you can't get outside regularly, bring nature indoors. Plants, water features, and natural light can transform your home, office, or therapy room into a restorative space. Research suggests that even potted plants, natural sounds, and natural images can benefit our mental health.
- 6. Digital detox in nature:** Unplugging from technology during nature walks or hikes allows you to fully immerse yourself in the environment, enhancing the restorative



benefits. Though be safe if you're going into the wilderness and make sure to take a fully charged phone. Conversely, combine time in nature with a nature-based app like iNaturalist to help identify and document plants and wildlife. This can help share the experience and can combine nature with the benefits of learning, meaning, and values, not to mention make a meaningful contribution to science.

7. **Mindfulness in nature:** Mindfulness and nature are a match made in heaven, each potentially amplifying the other. This is particularly true if you find other forms of mindfulness difficult, as nature naturally captures our attention and can provide an accessible starting point for anchoring our attention. Further, time in nature will not necessarily be restorative, especially when we are particularly down and spend the time ruminating or worrying. Mindfulness can help remedy this providing a platform for bringing our attention back to the present moment and our natural surrounds and stepping out of our thinking mind. Trying sitting or walking in nature and focusing your mind on the physical sensations – what you can see, hear, smell, and feel. And *when* the mind wanders, gently bring it back to the physical sensation. This can help maximise the benefits of nature.

The relationship between nature and mental health is clear – time spent in natural environments can play a critical role in alleviating the symptoms of anxiety and depression and boosting mental health. Whether it's the physical benefits of outdoor exercise, the restorative effects on mental fatigue, or the power of social connections, nature offers a wide range of positive effects.

Incorporating more nature time into our routines – whether that be walks in local parks, gardening, or more immersive experiences – can be a simple yet effective strategy for improving mental health and emotional well-being. If you happen to be in therapy – or a therapist – it can be a great way to augment CBT strategies like behavioural activation, ACT strategies like values and meaning, or mindfulness-based interventions. So, next time you're feeling stressed, step outside and let nature work its healing magic.



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