

THE FIRST OFFICIAL FOREST MIND TRAIL IN THE CZECH REPUBLIC – KŘTINY ARBORETUM

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Abstract

The forest can do wonders for us. We all have our own experiences with it. It is an environment that becomes a contrast to today's hectic times full of sensations, noise, information overload. The aim of this route is to point out the importance of trees, which is mostly hidden, to offer visitors simple relaxation techniques that they can take back to their lives, to allow visitors to stop, rest and relax among the trees, to popularize scientific research concerning the importance of being in the forest on the physical psychological side of man, to communicate to visitors the importance of the arboretum and the Training forest enterprise Masaryk Forest Křtiny as its manager. The Forest Mind Route, which is the first of its kind in the Czech Republic, is appreciated by experts not only in the Czech Republic but also abroad.

Key words: wish tree, binocular, trees, health, mindfulness

Introduction

The forest can do wonders for us. We all have our own experiences with it. It is an environment that becomes a contrast to today's hectic times full of sensations, noise, information overload. After being in the forest for a while, your eyes relax, inner peace gradually comes, stress and tension recede, your mind becomes clearer... and you don't have to do anything. Nature, the forest can do magic. Many of today's researches show in numbers what we suspect - that nature has an influence on our mental and physical health. (lesnimysl.cz)

Introducing Forest Mind by Sirpa Arvonen (founder of Forest Mind):

"Spending time in nature has been found to promote health. Forest Mind is an innovative mental skills training system designed to harness and deepen the natural healing benefits of forests. This method utilizes the latest, most widely accepted trends in psychology, therapy and coaching, including mindfulness and life coaching, in natural settings or with natural imagination. Forest Mind is a mental skills training program designed to harness and deepen the natural healing powers of the forest. Forest Mind is ideal for promoting self-awareness, relaxation, stress relief and refreshment. The method uses psychology, mindfulness, in a natural setting or with imagination." (taken from lesnimysl.cz)

The prevalence of ill health in urbanised societies has increased due to expanding urbanisation and modern lifestyles associated with increasing sedentary work and stress. Increasing stress is related to urban life and contemporary work practices dominated by high technology and virtual worlds. Current healthcare alone does not seem to be able to address all these problems. Fortunately, it has been recognised that natural and green spaces have the potential to improve human health (Karjalainen, Sarjala, Raitio, 2010).

The forest environment supports human mental and physical health in many ways. Forests help to reduce stress and relieve fatigue. Thus, they significantly improve the psychological and physical state of humans. Forests can help in both the prevention and treatment of mental illnesses such as burnout and depression. Many studies from different parts of the world report that compared to urban environments, natural environments improve mood state, concentration and performance and bring positive changes in human physiology after stressful or attention demanding situations. Studies show lower levels of blood pressure, heart rate, skin conductance and muscle tension in natural environments than in urban environments (Karjalainen, Sarjala, Raitio, 2010).

In Japan, Shinrin-yoku and its ability to provide relaxation and reduce stress is currently receiving increasing attention. The term Shinrin-yoku can be defined as soaking up the atmosphere in the forest or bathing in the forest. Shinrin-yoku is considered one of the most affordable ways to get in touch with nature and reduce excessive stress to a level that matches what is expected of our bodies. In Western societies, this approach has been incorporated into the lives of individuals since the nineteenth century. Shinrin-yoku and its concept were introduced in Japan by the Forest Agency of the Japanese

government in 1982. In 2005, the Forest Agency introduced the "Forest Therapy Plan", which included research to determine the physiological effects of Shinrin-yoku. Physiological experiments were conducted in actual forests, as well as in laboratories, to clarify the physiological effects of the overall forest environment or certain elements of the forest environment, such as the smell of wood, the sound of flowing water, and the image of the forest. In conducting research on Shinrin-yoku, the authors hypothesized that the reason behind people's sense of comfort in nature is closely related to human evolution. Frumkin states that the connection between nature and humans is not surprising, as human physiological functions must have adapted to the natural environment during evolution. Living in our modern man-made society is therefore inherently stressful for humans. It is therefore natural for humans to feel a sense of comfort or kinship with the natural environment (Tsunetsugu, Park, Miyazaki, 2010).

Smell is most closely associated with instinct, emotion and preference and thus has a greater influence on physiological changes than stimuli to other senses. When performing olfactory stimulation, phytoncides (phyto = plant, cide = "to kill") were worked with. They can be defined as volatile or non-volatile substances produced by all plant species that affect other organisms. Phytoncides are the olfactory elements of the forest environment (Tsunetsugu, Park, and Miyazaki, 2010).

The research also focused on the psychological effects of the forest environment. 498 respondents visited the forest during the 4 days of the research. The research revealed that respondents' mood (hostility, depression) significantly improved on the day of visiting the forest compared to the day when respondents did not visit the forest environment. (Tsunetsugu, Park, Miyazaki, 2010)

The researchers further focused on the effects of the forest environment on immunological functions. They found that essential oil(s) or wood fragrances (e.g., cypress stem oil) significantly increased the activity of so-called natural killer cells (Tsunetsugu, Park, Miyazaki, 2010).

Methods

The aim of this route is to point out the importance of trees, which is mostly hidden, to offer visitors simple relaxation techniques that they can take back to their lives, to allow visitors to stop, rest and relax among the trees, to popularize scientific research concerning the importance of being in the forest on the physical psychological side of man, to communicate to visitors the importance of the arboretum and the ŠLP ML Křtiny as its manager.

The Forest Mind - Mind among trees route.

- The main message is

o "We believe that our life is much better when we can go among the trees. That's why we take care of them - to keep them there for us, and our children."

- The sub-message is:

o "We believe that our life is much better when we can go among the trees. Being among them recharges our "batteries", washes away stress and refreshes our whole body. Many scientific studies have shown why it is good to go to the woods regularly. A stop among the trees can be as much of a holiday for one person as a visit to a cathedral is for another."

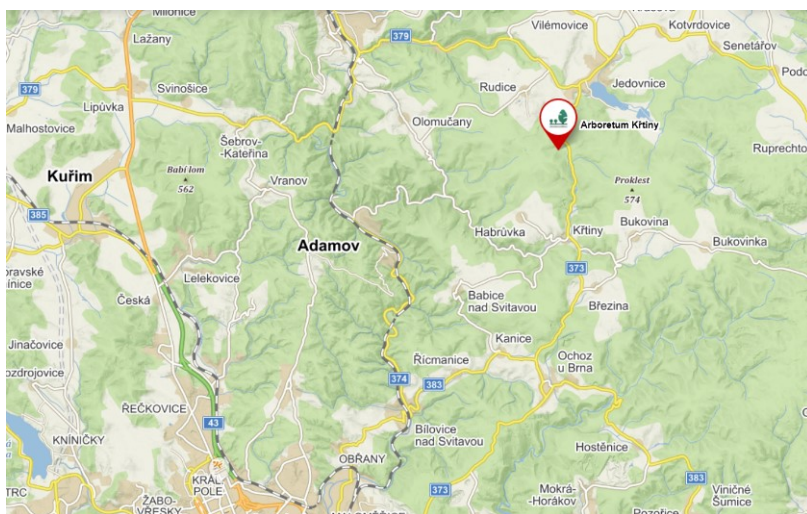


Fig. 1: Map with the location of Křtiny Arboretum (Mapy.cz)

Results

This trail is not educational and it is up to each of us what we take from it. Everyone can enjoy time alone on the path, or use it as an opportunity for deeper conversations with partners, older children or friends.

Duration: approximately 2 hours

Equipment needed: an open mind

Tab. 1: Stops on the trail

number	title
1	Magical breathing
2	Sounds of nature
3	Binoculars
4	Art of being present – back tree
5	Wish tree – thankfulness tree

1. DID YOU KNOW... the smell of the forest heals?

If you want to lower your blood pressure, smell the Japanese cryptomeria. Scientists say it happens in just 40 to 60 seconds after inhaling the scent. Even the essential oils of other trees help us. For example, they give a feeling of security and help with breathing difficulties.

EXPLORE

The oldest sense and our memories

If you're in the mood and feel like it, try smelling something from your surroundings - dirt, bark, or leaves...

The smells we know can transport us back in time. Try to recall a smell you associate with the forest. What is it, and what memories do you associate it with?

The magic of breathing

The art of slowing down and calming the mind (icon)

1. Sit on a stump, bench, stone or lean against a tree.
 2. Pay attention to your breathin
 3. Then focus on your inhalation and exhalation.
 4. Become aware of what is happening to your body as you breathe.
 5. Watch your breathing calm down and slow down after a while.
 6. Try to observe how energy and freshness return to your body with each breath.
 7. You can do the exercise at the beginning when you enter the forest and at the end of your walk.
- What difference do you notice?

2. DID YOU KNOW THAT... Nature teaches us to concentrate?

We all sometimes have problems with concentration and attention. Swedish scientists have proven that we can regenerate them much better in nature than, for example, with relaxing music. There are also several studies that show the positive effect of greenery on improving the attention of children with so-called attention deficit hyperactivity disorder (ADHD).

EXPLORE

Holidays for the head

Want to slow down the constant flow of your thoughts? It helps if you start focusing fully on just one of your senses. It gives our minds a rest. We find it easier to concentrate in the woods than anywhere else.

Sounds of nature

The Art of Observation (icon)

1. Find a pleasant place in the surroundings.
2. If you don't mind, close your eyes

3. Listen to the sounds around you. Notice which sounds are coming from near and which from far? Be aware of how each sound affects you.
4. Which of these sounds are most pleasant to you and do you want to associate with your journey? Try to remember it.

3. DID YOU KNOW THAT... We can go into the woods for prevention?

Your immune system only flourishes in the woods. Being in the trees increases the activity of natural killer cells (natural killers of infected cells). These can then have a preventive effect against cancer.

EXPLORE

Binoculars

The art of relaxation and recharging (icon)

1. Imagine you are in the forest for the first time.
2. Make a telescope with your fingers and look around with it. Focus on a detail that catches your eye.
3. What caught your eye? What makes it beautiful, special?
4. Zoom in on the detail you are examining and examine all the little things that caught your attention. What natural forms do you see? What would you wonder if you were seeing this detail for the first time?
5. What surprised or intrigued you as you explored?

4. DID YOU KNOW THAT... The forest is like a pharmacy that never closes?

Some of the most common remedies - for pain - are due to the effects of willow bark. Today, the active ingredient - acetylsalicylic acid - is produced industrially, but it was the willow tree that was responsible for its discovery.

Other trees also have an irreplaceable role in medicine. For example, a medicine made from yew is one of the most promising anti-cancer drugs.

EXPLORE

Not just palms

One of our sense organs is touch, and most of the time our palms come to mind. But it's not just them. Our feet can do the same. Walking barefoot on a good surface is therapeutic and allows the soles of your feet to be naturally massaged. Try walking for a while without shoes?

Lean your back against a tree

Art of being in the present – back tree

1. Find a tree you like.
2. Stand with your back to it and lean against it.
3. Look at a fixed point on the ground or close your eyes.
4. Become aware of the part of your body you are leaning on and stay that way for a while.
5. Finally, take a deep breath and continue walking.

5. DID YOU KNOW... we are happier among trees?

Everyone needs to reduce tension, anger, fatigue and relieve anxiety once in a while. And the forest can help. So it's no wonder that Scottish doctors, for example, give their patients a 'prescription' to stay in the woods.

EXPLORE

We may not realise it, but trees are part of our lives. Try to think of one particular tree that has played an important role in your life. For example, you may have climbed it as a child, had your first date under it, rested in its shade... What is your story?

Wish tree – thankfulness tree

The art of looking for the good

1. Look around you and choose a tree that catches your eye.
2. Take a rest by it and then stand in a place from which you can see the whole tree.
3. Consider the things of today for which you can be grateful. Pay attention to the small things and the big things.
4. Imagine that you are placing all the "ornaments" of gratitude on the tree - one thought of gratitude per branch.

5. What is happening to your thoughts, feelings, body?

The leaflet can be downloaded here:

https://arboretum-krtiny.cz/wp-content/uploads/2022/03/letak_smysly.pdf



Fig. 2: Four leaflets for Křtiny Arboretum – different trails (Monika Pevná)

TRY - Not only palms
One of our sensory organs is touch, and most of the time, our hands come to mind. But it's not just them. Our feet can do the same. Walking barefoot on a good surface is therapeutic and allows the soles of the feet to be naturally massaged.
Will you try walking for a while without shoes?

Lean your back against a tree - Art of being present
1. Find a tree that you like.
2. Stand with your back to the tree and lean back.
3. Look at a stable point on the ground or close your eyes.
4. Become aware of the part of your body you are leaning against the tree and stay there for a moment.
5. At the end, inhale deeply and continue walking.

DID YOU KNOW... We are happier amongst the trees?
Everyone needs to reduce tension, anger, fatigue and relieve anxiety occasionally. And the forest can help. So it's no wonder that Scottish doctors, for example, give their patients a „prescription” to stay in the woods.

TRY - A tree with a story
We may not realise it, but trees are part of our lives. Try to think of one particular tree that has played an important role in your life. You might have climbed it as a child, had your first date under it, rested in its shade... What is your story?

Wish tree
Do you have any wishes for the world, your family, friends, or yourself? Please share it with us and decorate the branches of the tree. According to our ancestors, the beech is a powerful tree... And so who knows - maybe your wish will come true before you visit us again...

A tree of gratitude - the art of looking for the good
1. Look around and choose a tree that catches your eye.
2. Rest by it and then stand on a spot from which you see the whole tree.
3. Reflect on the things of today that you can be grateful for. Pay attention to the little things and the big things.
4. Imagine placing all the „ornaments” of gratitude on the tree - one branch is one idea of gratitude.
5. What is happening to your thoughts, your feelings, your body?

EXERCISES ARE PART OF THE CONCEPT OF THE FOREST MIND (FOREST MIND METSAMELI).

DID YOU KNOW THAT ...
• we are the most prominent university arboretum in the Czech Republic (with an area of 23 ha, the area size of the arboretum is five times larger than Wenceslas Square in Prague)
• a unique collection of trees was founded between 1928 and 1929 by Professor August Bayer, who was one of the founders of Mendel University in Brno
• you can find us on the list of European botanical gardens and arboreta. Our arboretum is one of the renowned arboreta, and you can meet experts from all over the world.

YOU CAN TAKE ADVANTAGE OF PREPARED WALKING ROUTES OR PLAN YOUR OWN.

CONTACTS:
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GPS coordinates: 49°19'17.785" N / 16°44'33.115" E

WWW.ARBORETUM-KRTINY.CZ
Do you love trees as much as we do? We will be happy if you support us. Even a small gift will help us take care of the arboretum to remain an oasis for people and trees. Thanks.
Account No.: 43363V0100
vat. symbol: 1820
D: 02156489

ALL OUR FORESTS ARE MIXED FORESTS. THEY ARE FSC AND PEFC ECOLOGICALLY CERTIFIED AND ARE PART OF AN INTERNATIONAL NETWORK OF MIXED FORESTS. THIS LEAFLET IS ALSO PRINTED ON FSC PAPER.
We carry out the management of the arboretum under the systematic guidance of the Department of Forest Botany, Dendrology and Geobotany of Faculty of Forestry and Wood Technology of Mendel University in Brno.

MIND AMONG THE TREES

We believe our lives are so much better when we can walk among the trees. Being among them „recharges our batteries”, washes away stress, and refreshes our whole body. A lot of scientific research shows why it is good to go to the woods regularly. A stop among the trees can be as much of a holiday for a person as is a visit to a cathedral for another.

MEDELI
• University Enterprise
• Masaryk Forest
• in Křtiny

Fig. 3: Leaflet for the trail Mind among the trees

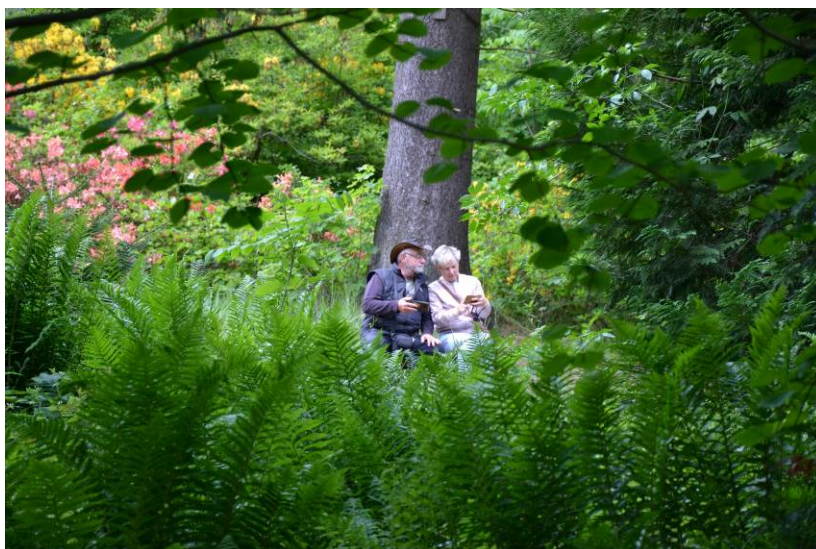


Fig. 4: People enjoying the tranquility of the arboretum (Jitka Fialová)



Fig. 5: Wish tree (Jitka Fialová)



Fig. 6: Some of the wishes – collected in the Křtiny Arboretum (not in proper place) (Jitka Fialová)

Conclusion

The authors of the article really believe that our life is much better when we can walk among the trees. Being among them will recharge our "batteries", wash away stress and refresh our whole body.

The Forest Mind Route, which is the first of its kind in the Czech Republic, is appreciated by experts not only in the Czech Republic but also abroad. So far, it has been implemented for the third year and the information about it is getting to people very slowly. Even students with specific learning disabilities and subject to stress can use the trail for their needs and calm their minds, work with ADHD and take advantage of everything the forest has to offer.

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Souhrn

Autorky článku opravdu věří, že náš život je mnohem lepší, když můžeme jít mezi stromy. Pobyt mezi nimi nám dobije "baterky", odplaví stres a osvěží celé tělo.

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