

Handbook

for Implementing Learning Approches in Nature
to Empower Adults with Physical and Mental Disabilities:
Gamification, Forest Bathing, Green Skills



Nature & Disabilities

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1. Introduction

We created this handbook as part of the *Nature & Disabilities – Gamification, Forest Therapy and Green Skills – New Learning Approaches in Nature for the Empowerment of Adults with Physical and Mental Disabilities* project, which is part of the Erasmus+ programme.

** Meaning of the abbreviation AMMD:*

This abbreviation is sometimes used as a short form of “adults with mild or moderate intellectual and/or developmental disabilities”.

1. 1. Objective of the Nature & Disabilities Project

is to develop **three new learning approaches in nature intended for adults with mild to moderate disabilities**.

These learning approaches are:

- gamification
- forest therapy/forest bathing
- green skills

With this handbook, our goal is to make these new learning approaches accessible to educators so that they can implement them in practice.

Partnership

Coordinating organisation:

- *Socialna zbornica Slovenije* (Slovenia)

Partner organisations:

- *Ideje, koncepti in zgodbe, Vojka Žgavec Clemenz s. p.* (Slovenia) - authors of the project's conceptual and methodological design and partnership structure; experts in gamification, green skills and other activities in nature
- *Snaga šume* (Croatia) - experts in forest bathing and activities in nature
- *Varstveno delovni center Vrhnika-Ildrija* (Slovenia) - experts holding many years of experience with education, inclusion, and improving the quality of life of adults with physical and mental disabilities
- *Udruga osoba s intelektualnim teškoćama Istre* (Croatia) - experts with many years of experience providing support and improving the quality of life of people with intellectual disabilities and their families

Activities of the Nature & Disabilities project

Before preparing this handbook, the partners performed several project activities. These were valuable experiences and provided guidance while writing the handbook.

- **Two national surveys**

In the surveys conducted in Slovenia and Croatia, formal and non-formal adult educators working with adults with mild or moderate disabilities were included. A summary of the key findings.

- **Workshop in nature for adults with mild or moderate disabilities from VDC Vrhnika-Ildrija**

First pilot implementation of all three new learning approaches in nature (in the Karst region of Slovenia)

- **Workshop in nature for adults with mild or moderate disabilities from Udruga osoba s intelektualnim teškoćama Istre**

Second pilot implementation of all three new learning approaches in nature (in the surroundings of Pula, Croatia)

- **Transnational seminar/workshop in Ljubljana**

At the in-person meeting, we presented the project findings and experiences gathered by then to formal and non-formal educators from the two countries, and announced the forthcoming publication of this handbook.

After publication of the handbook, we shall also organise a **transnational online seminar** at which we will summarise the project for educators and present the handbook and how to use it in greater detail.

Key findings of the two national Nature & Disabilities surveys

The research supports our expectations that the **vast majority** of educators working with AMMD already carry out activities in nature and regard the effects of activities in nature on AMMD as **highly positive**.

Also confirmed was our hypothesis that both formal and non-formal educators possess **limited knowledge of, or are completely unfamiliar with, the concepts of gamification and forest therapy/forest bathing** and, in turn, **rarely or never practise these activities with AMMD**.

We were surprised to find the **concept of green skills was unclear** to the majority of respondents. Despite the concise introductory explanation of this concept given at the start of the survey, while answering the open-ended questions, many respondents listed activities falling outside the concept of green skills.

Although we did not expect resistance to the three new learning approaches (green skills, gamification, forest bathing), we were nevertheless positively surprised by the **results, which revealed strong and widespread support for them**.

Before the research, we could not reasonably predict whether, and if so to what extent, differences would emerge among each of the four respondent groups. **The results did not show any noteworthy differences between formal and non-formal educators, nor between Slovenia and Croatia**.

The only possible exception was that, with several questions, it was consistently shown that a lack of staff was an obstacle for significantly more Slovenian formal educators than for Croatian formal educators.

Our assumption that the **new learning approaches** are beneficial for AMMD and have a **positive impact on them was clearly and unequivocally confirmed**.

Even before seeing the 'light of day', this handbook was warmly welcomed by educators.

In both surveys, we received many useful suggestions from them, for which we are sincerely grateful. We took these suggestions into account as much as possible while both conceptualising the new learning approaches and designing the handbook.

How did the idea for the handbook come about and what do we hope to achieve with it

Anyone who loves nature knows the invaluable benefits of activities in the natural environment. Those who work with and care for people with disabilities know how beneficial nature can be for them as well, or perhaps especially so.

Adults with disabilities are not, or are very poorly, included in gamified activities, forest bathing or green skills activities – ones that bring numerous benefits and can all be performed in nature.

We wanted to bring both new, unconventional learning approaches/activities and nature closer to adults with mild or moderate disabilities.

This led us to the idea of **empowering and encouraging educators who work with AMMD** to provide these activities while guided by a simple, practical handbook.

Our hope is that educators will use the handbook with pleasure and enthusiasm, and that it will serve as a guide and source of inspiration for organising learning activities in nature as often as possible – in all seasons and in different weather conditions.

We also want the handbook to make clear, or help those who use it discover anew, what we authors have come to realise: **people are valuable and extraordinary despite the disabilities they are living with – or perhaps precisely because of them**.

And one final thought: **the best teacher and the 'best handbook' for all of us is Nature itself**. Let us spend time with it as frequently as possible, even if only in a garden or a city park especially when the forest seems too far away. Good luck!

2. Who the Handbook Is Intended For

The handbook can be downloaded free of charge from this website, <https://www.szslo.si/projekt-erasmus-nature-and-disabilities> and used by anyone.

The handbook is mainly intended for **formal and non-formal educators of adults with mild or moderate disabilities** – that is, those responsible for these people's activities as part of their work, as well as their parents and caregivers.

We designed it in harmony with the guidance provided by the vast majority of educators who participated in our national surveys: **concise, focused, and with concrete examples.**

We followed the principle that we were not preparing an academic article or an extensive book, but **'practical instructions for use'**. This means the theoretical explanations are brief, simplified and only included if essential for understanding the learning approach.

We welcome you **sharing this handbook** with others.

We also hope the handbook **inspires others** beyond the primary target group of users, such as students, educators and teachers, and other parents.

This handbook is the outcome of joint efforts, knowledge and dedication. Since we want it to live on and continue to develop, you are warmly invited to expand and use it in your work. All we ask is that, whenever you further use or adapt parts of the text, you always acknowledge the original authors. **It is only proper that the authors of any work are acknowledged.**

3. How to Use the Handbook

Even though we prepared the handbook with great care and responsibility, please don't take it too seriously! Our suggestions are mainly intended to encourage you to carry out learning activities in nature, and to adapt and improve them.

- the handbook is in an **'interactive PDF'** format: clicking on certain links allows you to access and combine content and highlights easily and quickly
- **suggestions for using the handbook:**
 - use the handbook primarily **on a screen**
 - in the interactive **Table of Contents**, select the content you want and click on it
 - several links (in the green frame) can be found within the content; clicking on them gives you immediate **access to related (expanded) content**
- of course, you can also read the handbook in the **traditional way** (from start to finish)
- please be **mindful of the environment: print on paper only what you truly need** and view the rest on a screen
- for those who will print the handbook, we designed it in a **print-friendly, economical format**: not many coloured areas and no photographs
- each learning approach in nature comes with **concrete activity scenarios**; you can follow them in full or in part, or use them as inspiration for your own ideas
- the same applies to the cards and the **annual plan**

**Combine, discover, experiment,
improve – and, above all, enjoy!**

4. Basic Principles of Activities in Nature for AMMD

While gamification, forest bathing, and green skills are different approaches, when working with adults with mild or moderate disabilities the same basic principles apply. Participants are not all the same, which means educators should adapt activities to suit their abilities, interests, and level of support required.

4. 1. Respect for the Person and Their Individual Abilities

Before an activity, consider the:

- level of independence
- way of understanding and expressing themselves
- physical and motor abilities
- attention span
- sensitivity to stimuli
- interests and motivation

Don't expect everyone to perform the activity in the same way. One person may complete a task independently, another with support, and yet another through demonstration or observation.

Important: The goal is simple: meaningful participation for every participant.

4. 2. Dignity and the Right to Choose

Allow participants to make choices according to their abilities and way of communicating.

The educator should:

- offer two or more options
- allow breaks or a change of task
- accept different ways of participating
- respect a person's refusal to take part in a given activity
- provide support without taking over the decision-making

Examples:

- "Would you like to do this task or that one?"
- "Would you like to have a go or observe?"

Important: Support should encourage participation and independent decision-making.

4. 3. Accessibility

Before an activity, check the:

- distance and accessibility of the location
- ground surface, slopes and obstacles
- opportunities for movement and rest
- places to sit
- noise, crowds and traffic
- the possibility of returning quickly

Activities can be organised in a forest, park, garden, an institution's courtyard, or other accessible green space. If a space is not accessible, change the location or the way the activity is performed.

4. 4. Safety

Safety is part of every activity in nature. Before and during an activity, the educator should monitor the conditions in the environment, the participants' abilities and circumstances that could affect safe implementation.

It is important to:

- adapt the activity to the group's abilities
- monitor any changes in weather and terrain conditions
- allow for rest and interruption of an activity
- take action if there are signs of fatigue, discomfort or overload

Important: A safe activity is one that can be adapted or stopped if the circumstances require it.

Adapt the activity to the person, not the person to the activity.

4. 5. Simple and Clear Instructions

Instructions should be short, concrete and given one at a time.

The following can help:

- keep your sentences short
- demonstrate what needs to be done
- use an object, picture or gesture
- repeat the instruction when necessary
- allow an appropriate amount of time for a response

Instead of saying, “Explore your surroundings and find something interesting”, say: “Find something green”.

Before moving on to a new step, make sure the current step has been understood.

4. 6. Learning Through Experience

Rather than lengthy explanations, give priority to actual experiences. Participants can learn by observing, listening, touching, moving, sorting, choosing and repeating.

Examples:

- gamification – find an object based on clues
- green skills – sort materials or water a plant
- forest bathing – notice a sound, colour or texture

Important: Less explanation, more concrete experience

4. 7. Flexibility

The activity plan is only a framework. Check for understanding, attention, interest, fatigue, tension, fear, overstimulation and the need for additional support.

If necessary:

- shorten the task
- simplify the instructions
- reduce the number of activities
- allow more time
- change the order
- offer a break or a simpler option

Note: Adaptation is not a deviation from good implementation – it's part of good implementation.



4. 8. Getting Support Persons, Family Members and Caregivers Involved

Support persons, family members and caregivers are a valuable source of support because they are familiar with the participants' needs and responses.

They can:

- repeat or demonstrate an instruction
- assist with movement
- assist with decision-making
- recognise signs of fatigue or discomfort
- help the educator understand a participant's response

Important: There's no need to take over a task if a person can participate independently or with less support.

Provide as much help as necessary – while allowing the greatest possible degree of independence.

5. Differences Between “Activities in Nature”/ “New Approaches to Learning in Nature”

The biggest differences between “general” **activities in nature** and **learning approaches in nature** (such as gamification, forest bathing, and green skills) lie in their **purpose, structure, and depth of the process**. While traditional activities mostly focus on recreation and leisure, **learning approaches are intentionally designed processes with clear pedagogical, psychological or environmental objectives**.

5. 1. General Key Differences

	Activities in nature	Learning Approaches in nature
Main objective	Enjoying nature, recreation, sport and relaxation	To acquire knowledge, develop competencies, change behaviour or achieve a therapeutic effect
Role of nature	Nature serves as the background (setting) for carrying out activities (e.g. running, cycling)	Nature is a co-facilitator , classroom, or valued medium of the learning process
Guidance and structure	Often spontaneous , recreational, and without predefined learning objectives	Structured , guided (pedagogical or facilitation-based), and grounded in experiential learning
Reflection	Usually absent , with the stress on the immediate experience	A vital part of the process in which participants become aware of what they have learned and how they will apply it

If the forest is too far away, organise the activity somewhere where nature is closer: by a stream, lake or sea, in a nearby park, or in our own garden.

5. 2. Examples of Differences

“General” activity in nature A walk in a forest	Gamification in nature The forest becomes a ‘living game board’ with challenges where participants have to solve environmental puzzles, collaborate, and acquire specific knowledge through play (e.g. identify a tree species to earn points)
“General” activity in nature A hike to a nearby hill for physical fitness (with an emphasis on the distance)	Forest bathing Deliberately slowing down and engaging all five senses to connect with nature. The goal is to promote neurological and psychological relaxation and develop mindfulness while guided by a trained facilitator
“General” activity in nature Foraging for mushrooms or making a fire at a picnic	Green skills Systemic learning for sustainable living – how to survive in nature without leaving a trace, understanding biodiversity, the circular economy, and active environmental protection

While engaging in an activity in nature, always respect and protect the natural environment.

6. Planning Activities in Nature

Good preparation helps to make sure an activity is feasible, safe, and adapted to the specific group.

Before conducting gamification, forest bathing, or green skills activities, as an educator you should clearly determine:

- what you will do
- where you will conduct the activity
- how long it will last
- which materials and equipment are needed
- what support the group requires

6. 1. Before an Activity

Define the objective and structure

Define the objective of the activity, the approximate duration, and a few clear steps. Keep the plan simple and feasible. Prepare the appropriate materials and, if needed, a simpler option for individual tasks.

Check the location and logistics

Before the group arrives, check the:

- access and transportation
- condition of the terrain and any possible obstacles
- places to sit and rest
- access to toilets
- possibility of a safe return
- number of educators and support staff

Agree on the support staff's roles and, if necessary, inform families, caregivers, or the team in advance about the location, duration, and structure of the activity.

Assess the risks

Check:

- the weather forecast
 - that clothing and footwear are appropriate
 - access to water and sun protection
 - known allergies, medications, and other important needs
 - whether an emergency contact is available
- Also consider what you would do if someone needs additional rest, wishes to opt out, or the group has to return early.

A good plan does not mean that everything will go according to plan. A good plan means knowing what to do if the plan has to be adapted.

Prepare a backup plan

Weather, terrain, group fatigue or other circumstances may change the plan. Decide in advance what you can:

- shorten
- simplify
- postpone
- replace with another option

A backup plan does not necessarily need to be a new workshop. A simpler, feasible version is sufficient.



6. 1. 1. Appendix: PRE-ACTIVITY CHECKLIST

Activity Name: _____

Date: _____

Location: _____

GROUP

- ☐ You know who is participating
- ☐ You know how much support individual participants need
- ☐ The number of educators/support staff is appropriate for the group's needs
- ☐ The roles of support staff have already been agreed

PLAN

- ☐ The objective of the activity is clear
- ☐ The approximate duration of the activity is known
- ☐ The activity is divided into easy-to-follow steps
- ☐ A simpler option is prepared if the task proves to be too challenging

LOCATION

- ☐ The terrain and any potential obstacles have been checked
- ☐ A place to sit or rest is available
- ☐ Access to a toilet has been checked, if needed
- ☐ A safe return route has been identified

SAFETY

- ☐ The weather forecast has been checked
- ☐ Participants have the appropriate clothing and footwear
- ☐ Water and necessary protection from the sun or cold is available
- ☐ Relevant allergies, medications, and other important needs are known
- ☐ An emergency contact is available

MATERIALS AND TRANSPORTATION

- ☐ All necessary materials have been prepared
- ☐ The materials are safe and easy to use
- ☐ If needed, transportation has been organised

BACKUP PLAN

- ☐ You know what can be shortened or simplified
- ☐ You have an alternative if the weather turns bad or the location is inaccessible
- ☐ You know what to do if the group is unable to continue

BEFORE SETTING OFF, ASK YOURSELF:

- ☐ Do you have a plan?
- ☐ Is it feasible?
- ☐ Is it safe?
- ☐ Do you know what you would do if circumstances change?

6. 1. 2. Appendix: SIMPLE RISK ASSESSMENT FORM

Activity Name: _____

Date: _____

Location: _____

Number of Participants: _____

Number of Educators/Support Staff: _____

1. WHAT DO YOU NEED TO CHECK

Potential Risks to Consider	Yes	No	What do you need to do?
Is the location accessible for the group?			
Is the terrain uneven, with slopes or obstacles?			
Are the weather conditions suitable?			
Is there a place to rest and sit?			
Do you know how to go back safely?			
Are all allergies or other important individual needs known?			
Does anyone need medication or special support during the activity?			
Do you have enough educators/support staff?			
Do you have water and necessary protection from the sun/cold?			

2. WHAT COULD GO DIFFERENTLY THAN PLANNED

Possible issue: _____

How will you respond to it: _____

3. BACKUP PLAN

If the activity cannot be carried out as planned, you can:

- ☐ shorten the activity
- ☐ simplify the task
- ☐ change the location
- ☐ take a break
- ☐ finish early
- ☐ carry out an alternative activity
- ☐ other: _____

Emergency contact: _____

Important: Risk assessment does not mean eliminating every possible risk. Instead, it is about identifying in advance what could happen and knowing how to respond.

6. 2. During an Activity

During an activity, the plan serves as a framework while the educator monitors what is actually happening in the group. If the participants' interest, energy, understanding, or the conditions in the environment change, adapt the activity immediately.

Communication, motivation, and support for participants

Monitor whether a participant understands the task and remains engaged.

If necessary:

- repeat or further simplify the instructions
- instead of explaining the task again, demonstrate it for them
- connect the task to what currently interests the participant
- increase the level of support only as much as required

If a person stops, give them enough time before offering them assistance.

What to do if a participant does not want to participate

Do not immediately try to bring them back to the same task. First, see if the task is unclear, too challenging, uncomfortable, or simply not interesting.

Offer an alternative:

- to observe instead of participating
- a simpler task
- working in pairs
- a short break
- rejoining the activity later

If the person also declines the alternative offered, accept their decision and continue with the activity.

What to do if the group is tired, restless, or overstimulated

When the group's energy changes, adapt your approach suitably.

If the group is tired:

- shorten the activity
- reduce the number of steps
- offer a place to sit or take a break
- finish with a simple task

If the group is restless or overstimulated:

- stop any more demanding task
- reduce the number of stimuli and instructions
- switch to a shorter and clearer activity
- change the location or pace of the activity

The goal is not to complete every planned step, but to keep the activity feasible and safe.

How to include nonverbal participants

Enable participants to respond and participate without the need for speech.

You can use:

- pointing
- choosing between two objects or pictures
- gestures or movements
- cards or symbols
- arranging or selecting natural materials

Ask questions that can be answered by choosing or pointing.

Examples:

- "Show me which one you choose"
- "This one or that one?"
- "Choose one object"

**Changing the plan is not a failure –
it's part of good practice.**

Ad hoc backup plan

Even with good preparation, an activity might end up going differently than expected. Weather, terrain, the group's mood, level of interest, or unforeseen circumstances could mean the plan has to be changed.

Instead of stopping the activity altogether, first try adjusting the duration, number of tasks, or the order, location or way of participating.

Gamification

If the overall game is too challenging, reduce the number of tasks, provide an easier hint, or solve one challenge together with the group.

Forest bathing

If the group finds it hard to stay engaged in the quieter part of the activity, shorten the invitation, introduce a few gentle movements, or decide on just one sensory activity.

Green skills

If the task is too complicated, break it down into one simple, concrete step. Instead of asking participants to sort several types of waste, for example, say: "Put paper into this container".

If the adapted version still does not work, end the activity early and make it clear that the activity has finished.



6. 3. After the Activity

An activity does not end with the final task. A brief closing helps participants bring the experience together, while also helping the educator identify what worked and what should be adjusted next time.

Reflection does not have to be lengthy. Sometimes one question, selecting a picture, a gesture, or a brief pointing response is enough.

Reflection and evaluation

At the end of an activity, take a few minutes to review how it went.

Participant reflection focuses on their experience: what they noticed, how they felt, what they found interesting, or what they would like to do again.

Educator evaluation is used to assess the implementation: what went well, where adaptations were needed, and what should be changed next time.

Still, it is not necessary to end every activity with a lengthy discussion or by completing questionnaires.

Why is reflection important

Reflection helps connect the experience with what the participant did, noticed or learned.

For the educator, it can help identify:

- what the participants found interesting
- what was easy or challenging
- what they would like to do again
- whether the activity was meaningful for the group

In green skills activities, reflection can connect the activity with everyday behaviour. With gamification, it can assist and guide participants in addressing everyday challenges, while with forest bathing, it can help highlight what was particularly meaningful or enjoyable for the participants.



Simple questions for a closing discussion

Choose 1 or 2 questions. It is not necessary to ask all of them.

- What did you like most today?
- What was easy for you?
- What was difficult for you?
- What would you like to do again?
- What did you notice today?
- How did you feel during the activity?
- What can we do to help nature?

Adapt the questions to the specific activity and the participants' preferred way of communicating.



Nonverbal reflection

If speaking is not the best way for a participant to express themselves, offer a simple choice.

They can:

- choose a picture or feelings card
- show a thumbs-up, thumbs-in-the-middle, or thumbs-down
- choose a natural object
- point to an object or place they liked
- use a colour, drawing, or simple gesture
- arrange or select pebbles or other objects

Do not ask for additional verbal explanation if the choice or gesture is sufficient.



**Take a moment to reflect,
note what is important,
and use it next time.**

Evaluation for educators

After an activity, record only what might be useful for the next implementation.

Consider:

- What worked well?
- Where was additional support needed?
- Was the duration appropriate?
- Was the space suitable for the group?
- Which part of the activity seemed most interesting?
- What had to be changed during the implementation?
- What would you keep, shorten, or do differently next time?

Also record important participant responses that could help you plan the next activity. Such an evaluation is already conceived in the initial structure as a brief record of what worked, what was difficult, and what has to be changed.

6. 3. 1. Appendix: ACTIVITY NOTES FORM

Activity Name: _____

Date: _____

Location: _____

Approach:

- ☐ gamification
- ☐ forest bathing
- ☐ green skills

Number of participants: _____

Duration of the activity: _____

1. WHAT WORKED WELL?

Which parts of the activity were successful?

What did the participants find particularly interesting or enjoyable?

2. WHERE WAS ADAPTATION NEEDED?

- ☐ instructions
- ☐ duration
- ☐ pace
- ☐ task
- ☐ space
- ☐ participant support
- ☐ communication style
- ☐ other: _____

Brief note: _____

3. HOW DID THE GROUP RESPOND?

- ☐ interested
- ☐ calm
- ☐ active
- ☐ tired
- ☐ restless
- ☐ overly excited
- ☐ varied – depending on the participant

4. DID ANYONE NEED ADDITIONAL SUPPORT?

☐ no

☐ yes

If yes, what kind of support was helpful?

5. WAS THE SPACE SUITABLE?

☐ yes

☐ partly

☐ no

What would need to be changed?

6. WHAT WOULD YOU DO DIFFERENTLY NEXT TIME?

☐ shorten the activity

☐ extend the time

☐ simplify the task

☐ change the task order

☐ provide additional support

☐ change the location

☐ keep it the same

☐ other: _____

7. WHAT IS WORTH REPEATING?

8. IMPORTANT REACTIONS OR COMMENTS BY A PARTICIPANT:

REMEMBER FOR NEXT TIME:

7. Learning Approach in Nature: Gamification

Gamification is the use of game elements and principles in activities that **are not a game**: e.g. for learning, strengthening skills or developing relationships. In our project, we focus exclusively on **gamified group activities in nature**.

7. 1. What Gamification Is Not

Gamified activities are not a synonym for games in the traditional sense; e.g. for board games, computer games, or sports games.

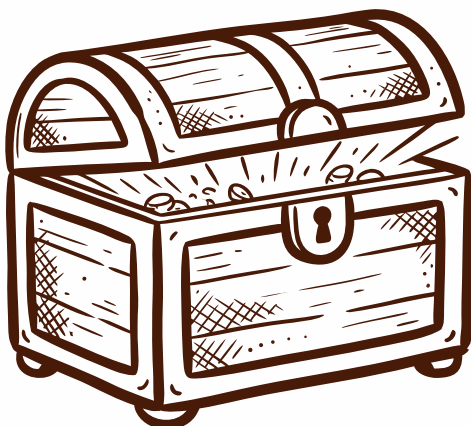
7. 2. Examples of Gamified Activities

A treasure hunt, an escape room, a role-playing game, geolocation games etc.

For AMMD, we recommend a gamified activity: a treasure hunt.

Why? Because this activity:

- involves walking
- is (usually) less complex and less demanding than an escape room
- allows the game leader (educator) more opportunities for changes, improvisation, adjustments during the implementation



7. 3. Key Benefits of Gamification

- promotes **active involvement**
- increases **group motivation**
- **clear goals** and a **sense of progress** encourage **participation**
- shared challenges **strengthen relationships**, a sense of **belonging**, and promote **interaction**
- strengthens **intrinsic motivation** – a sense of achievement, autonomy, and progression encourages long-term participation
- promotes **active learning** – individuals are not just passive recipients of information, but explore and apply it themselves
- **improves engagement** – playful elements increase interest and persistence in tasks
- allows **immediate feedback** – participants quickly see their mistakes, progress and successes
- **develops various skills** – from problem-solving and creativity to communication and collaboration
- **adapts to different participants** – according to their pre-perceived specifics
- **makes (more) challenging tasks more accessible** – complex content can be presented in a more understandable and interesting way

Gamified group activities in nature are useful especially because they combine motivation, collaboration and learning in a playful way. By using game elements (challenges, goals, feedback, progression, rewards), participants develop a positive attitude to the topic, and grasp the material more easily and permanently.

7. 4. Adjustments of the Treasure Hunt for AMMD

Group

A group can consist of

- persons with disabilities
- persons with and without disabilities
- we recommend a **maximum of 8 persons** in a group (to adjust the number to the severity of the disabilities and specifics of the participants)

Selection of participants

Assess in advance whether each individual participant will

- be physically capable of the route
- be able to follow and contribute to most of the activities
- benefit from the activity

Designing challenges

First, check if, and how many, participants

- know how to read and how well
- know and can distinguish colours
- have any phobias
- other individual characteristics (e.g. obsessive-compulsive disorder, difficulties expressing themselves, major attention deficits), etc.

Difficulty

Adjust most of the tasks to the level of difficulty suitable for the persons with disabilities who are included.

Don't forget: each person may be capable of more than you expected. Also include a few more challenging tasks; monitor and, if necessary, adjust as they are happening.

Clear instructions

- avoid complex instructions
- be clear and unambiguous

Tasks

- should be short, easy to understand
- divide them into smaller steps
- start with simple ones
- gradually increase the difficulty

Space, weather

- adapt the activity to the participants' physical and sensory capabilities
- choose safe and accessible paths
- provide the possibility of rest
- take account of the weather conditions, season, accessibility

Duration

Observe the participants' well-being and concentration level and adjust the duration along the way. We recommend that any activity lasts **30–45 minutes**.



Abandon the “Beat the clock” rule

- treasure hunts typically are time-limited; if the team does not find the treasures within a certain time, the game is still over
- in a treasure hunt for AMMD, **do not set any time limit**

Role of the “hunt supervisor”

- in regular treasure hunts, the game leader (“hunt supervisor”) does not personally accompany the team, but guides them remotely and quite sparingly
- while conducting a treasure hunt for AMMD, the hunt supervisor (or several of them) should accompany the team at all times; here, **their involvement is much greater**

The “hunt supervisor” looks for new, real-time ways to guide those participating and motivate them towards success.

While they can guide discreetly if needed, in no circumstances do they solve the challenges instead of the team. That would cheat the players out of the satisfaction and ‘Eureka!’ feeling when discovering the treasure.

A group activity that respects every individual

Much more than usual, in gamified activities for AMMD an effort must be made not to overlook any individual. Lead a group activity, but also keep an eye on each individual.

Not every team member has to contribute equally in every task/ challenge. Some may prefer to contribute more to a particular one, while another to another task. Tasks should thus address a range of skills, abilities and talents.

Eureka!

The essence of a treasure hunt is collective discovery, satisfaction, pride, joy, and the feeling of “We did it!”. This means the game leader must not be too patronising and dilute or take this away from the participants.

7. 5. How to Prepare and Conduct a Treasure Hunt for AMMD

7. 5. 1. Before Designing a Treasure Hunt

Think about and check the following:

- who will the team members be?
- specifics of each team member
- how many game leaders (“hunt supervisors”) will there be?
- the weather
- how much time is available (take account of getting to the starting point of the hunt and the way back)?
- can you reach the location by foot or do you need to arrange transport?
- can you control the itinerary (hide items along the way and at the destination) or not?
- the treasure – what will it be, how will you hide it?
- will you have to clear up props and equipment after the hunt and, if so, who will do that?
- is there anything else to take into account?



7. 5. 2. Designing a Treasure Hunt

'Compass' of the activity

- What **specifically** do you wish to communicate, reinforce, achieve, improve, or learn with this learning activity?
- Your 'compass' should – regardless of the specific goals of the activity – always consider developing a responsible attitude and a love for **nature**.



Itinerary

- Where will the hunt start and where will it end?
- Where will the route go in between?
- Is the route varied enough?
- Is it safe and accessible for the whole team?
- Will you be able to hide the treasure at the destination in advance, or only during the game?

Time

- Walk the route at a moderate pace and record the time (e.g. 20 minutes)
- Multiply the recorded time by 1.4 (20 minutes $\times$ 1.4 = approx. 28 minutes) to roughly estimate the approximate duration of the treasure hunt
- We recommend a AMMD treasure hunt lasts **30 to 45 minutes**
- Adjust the route if necessary

Story

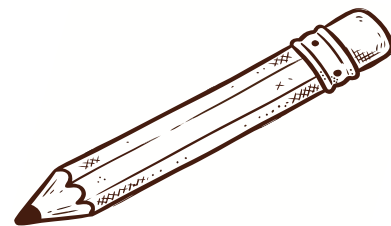
- Think carefully about this key element, yet also leave room for imagination. Enjoy the creative process – this will surely be reflected in the scenario.
- Possible starting points for a story include:
 - a natural or cultural local landmark along the route (e.g. a famous tree, the vicinity of a castle)
 - a character, folk tale, legend or customs the area is known for
 - the season (e.g. Easter, Carnival, Midsummer Night, the start of autumn etc.)
 - an imaginary starting point – you can also create the story yourself, but we recommend developing having in mind the environment where the treasure hunt is to take place

The “decisive aces” of gamification:

- the story
- a persona

A persona

- No, this is not you ;)
- You simply tell the story on behalf of the persona (the original storyteller) who comes from the story (e.g. a centuries-old tree, a fairy, a shepherd, a fox, a local person)
- The persona actually tells the story, sets the tasks, and leads the participants to the treasure



Gamification is an effective tool for promoting learning.
Design a fun, relaxing, yet at the same time educational experience.
Keep the 'activity compass' in mind at all times.

Checkpoints

- These provide direction, with “A, B, C, D ...” points found along the route to the final destination: THE TREASURE
- Choose them along the route according to the criterion: “What’s interesting, different, or worth highlighting?”
- Keep the story and the activity compass in mind at all times
- Also think about how you will equip the checkpoints with markers and signs showing the direction
- Make sure to consider that:
 - intermediate points are also important as places to stop and take a short break
 - they help maintain the dramaturgy, interest and suspense throughout the experience

“How many tasks have we completed so far?”

“How many tasks are still waiting for us before we reach the treasure?”

The answers are powerful motivators that encourage persistence. Track progress creatively and refer to it frequently.

Tasks, challenges

- Each checkpoint should be reached by completing the previous task or challenge
- At the same time, think about markers and direction signs and, of course, don’t forget the story and activity compass
- Design tasks and challenges that are:
 - unambiguous
 - varied – they should engage different skills and areas
 - easier at the start, gradually becoming more difficult
- The tasks should be issued by the persona
- It’s always a good idea to include a fun task along the way (e.g. “Show us your best smile”)
- Expect the unexpected – for example, your tasks might not be clear to the participants– and be prepared to make spontaneous changes

Markers, direction signs

- These mark a checkpoint or guide participants towards it
- They are incorporated into the tasks you have designed
- If you can control the itinerary or check it just prior to the hunt taking place, you can place the markers before it begins
 - in this case, make sure you also remove them after the hunt has been completed
 - they should be made from natural materials found in the environment
- If you don’t have this option, or there’s a risk that someone might remove the marker, it might be blown away by the wind etc., it is better to choose fixed markers that already exist in the natural environment (e.g. a crossroads, an unusually shaped bush, a rock)
- Markers and direction signs should be as varied as possible



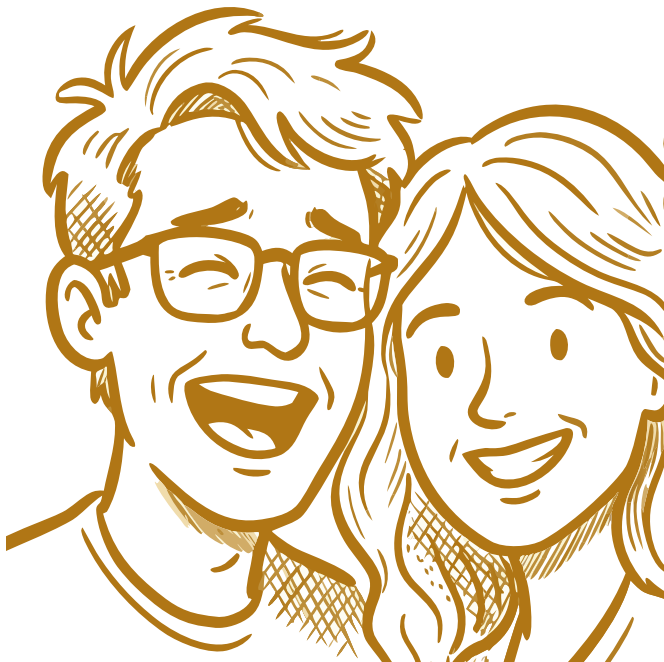
Tracking progress

- Important: at the start, clearly explain to the team:
 - how many tasks they must complete before discovering the treasure
 - how you will be tracking their progress
- Therefore, come up with a creative way of tracking progress that connects the story and the persona

Guiding materials

- Although the materials can be presented digitally (e.g. on tablets), experience leads us to recommend tangible materials (e.g. paper-based materials)
- You will show the materials to the team and use them to guide the hunt
 - include plenty of visual (colourful) elements (illustrations, pictograms, graphic elements, photographs – if you have decided to do a ‘photo hunt’ etc.)
 - include only the most essential text (you will tell the story yourselves)
 - avoid materials that could cause harm
 - use your craft skills: draw, write, sew etc. by hand
 - recycle (e.g. cardboard from a shipping box)

While preparing materials, it also pays to think backwards. Ask: “What do I have too much of and/or what can I reuse or make myself?”. In this way, you won’t need (a lot of) money for the materials.



7. 5. 3. Conducting the Treasure Hunt

Hunt leader

- You (the hunt leader) are the “hunt supervisor”, not a ‘hunter’
- You are not an active player in the activity
- When the game comes to a halt and the team does not know how to continue, you help them discreetly with some hints

Key point: while leading the hunt, use your acting skills, with both verbal and non-verbal communication. Be enthusiastic and convincing. Show that you genuinely enjoy your role.

Persona / hunt leader

- The persona has asked you for help; you are thus appropriately distanced from the persona
 - The persona also often comes in handy if something does not go according to plan
- Example:** “Even I don’t understand this! I wonder what that fox had in mind?”
- While leading the game, refer to the persona frequently (“The fox asked me to read this letter to you.”)

The importance of praise

Praise, praise, praise! Be enthusiastic, convincing, and genuinely excited. Be sensitive to every member of the team, especially anyone who is more introverted.

Humour

Joke often. Don’t be afraid to laugh at yourself, too.

Maintain a sense of playfulness, fun, a pleasant atmosphere, and a healthy, encouraging challenge.

How to handle team failure

- Don’t frame mistakes or inability as a failure; even setbacks are steps towards the goal
- Blame the ‘persona’ and/or yourself; encourage the team

Example:

“I was thinking the same way as you, but Šijan the Gnome probably has a different way of thinking. Shall we try again?”

Keep the team – and each individual member – constantly in mind. This is the best guarantee of a great treasure hunt experience.

Expect the unexpected, improvise

- Adapt the activity to the participants' responses
- Always have a backup plan in mind and be prepared to improvise

What to do when the game comes to a halt, the team can't find a solution, and the mood drops

- Change the pace and focus

Example: "Do you know what Šijan the Gnome just whispered to me? That my team can't sing. Is that really true?"

Once the team proves they can sing, Šijan the Gnome 'rewards them with the solution to the task', and you happily continue with the game.

Every hunt is different, even when carried out according to the same scenario: the team responds differently, and so does the hunt leader. This uniqueness is one of the charms of a gamified activity.



Gamification cards can be of help to you.

After the treasure hunt

- "After" does not necessarily mean "party"
 - aim to make the ending with the participants friendly, unhurried and warm
 - even if the participants have found the treasure, give them certificates and praise (don't overcomplicate it – you can make medals yourselves from sturdy recycled cardboard)
 - while presenting the certificates, say a few words to each individual that are personal to them ("Congratulations! If you hadn't found that tree, we'd still be wandering around the forest!")
- Reflection and evaluation

We recommend the following sequence of steps:

- Self-reflection and self-evaluation: the educators who led the activity should do this on the same day (if you led the activity on your own, prepare your own notes)
- Reflection and evaluation by the 'hunters' for whom the activity was designed
- Compare the two evaluations and summarise the conclusions – these will provide useful guidance next time

A treasure hunt is a group activity that not only builds the team, but also supports each individual personally. Attentive 'hunt supervisors' will take this into account.

7. 6. Example 1: A Treasure Hunt in Tomaj, the Karst, Slovenia

Introductory notes

- Tomaj is a small village in the Karst region in western Slovenia
- We prepared a treasure hunt for a group from AMMD at VDC Vrhnika-Idrija (central Slovenia) who travelled to the Karst for the activity
- The group consisted of 8 adults with mild to moderate disabilities
- The hunt was led by two educators

'Compass' of the activity

- We conducted the treasure hunt in the Karst landscape; the area is characterised by exceptional biodiversity, yet also fragility and vulnerability
- This was precisely our 'compass': to remind participants of the value, beauty and vulnerability of the Karst landscape

Itinerary

- We gathered in a building where toilet facilities were also available; we reminded the participants to use the toilets before setting off on the hunt
- The starting point of the hunt was that building, from which the route led us into the Karst landscape after just a few metres
- We walked through nature along a well-maintained gravel path that was safe, accessible, and free of motor vehicles
- We then continued across some grass and along a forest path; we were able to safely hide the treasure before the game commenced
- The route was approximately 1,500 m one-way; the participants also returned by foot along the same route

Time

- The treasure hunt took a total of 40 minutes (including a stop in a clearing for refreshments) – which is just right

Story and persona

- In the past, sheep and goat grazing was very common in the Karst region; the shepherds were mostly children who were not yet able to do more demanding farm work
- We knew that, during the time of the treasure hunt, a local cheesemaker would be grazing his goats nearby
- For the persona, we chose a young shepherd we named Lovro
- He entrusted the hunt leader (the educator) with a letter and instructions on how to find the treasure
- At the very beginning of the letter, young shepherd Lovro:
 - explained the basic story: he had hidden the treasure in the Karst landscape; and
 - explained they would discover the treasure once they had 'planted' 20 trees



We connected this treasure hunt with a green skills activity:

- Just before Lovro the young shepherd directed the team to the treasure, they had one more task: each participant had to make their own "Wardian case"
- For successfully having completed the task, they 'received' 10 trees
- The team left the Karst excited and full of energy:
 - they discovered the Karst landscape, its unique features, and its charms;
 - they took home a Karst keepsake: "the Karst landscape – contained their own jar";
 - with a some delicious homemade jam

We needed approximately **2 hours** for the treasure hunt, the green skills activity, and a refreshment break in between. The team was not tired, and their mood and **motivation did not decline during the activities.**

Checkpoints

- We identified several checkpoints along the route
- We selected them based on the itinerary, the 'compass' of the activity, the story, and the persona
- Examples of checkpoints included a flowering tree, a crossroads with a natural marker, a table in nature, a dry-stone wall, an unusually shaped rock etc.
- We meaningfully connected the checkpoints with tasks and challenges

Tasks, challenges

The tasks were varied. Through them, we followed the 'compass' of the activity, either directly or indirectly.

Examples:

- The participants had to sing the well-known song "Siva pot" ("Grey Road"), which helped them realise that they needed to follow the grey path
- We challenged them to identify which side was left and which was right ("Which side is our heart on?") and placed the marker on a natural limestone rock (a distinctive feature of the Karst)
- We prepared a sheet with 12 paper pictures/stickers; among them, the participants had to find three objects that do not belong in nature (a discarded plastic bottle, cans, cigarette butts)
- When they discovered an abandoned bird's nest, Lovro the young shepherd 'spoke' about the rare and protected birds of the Karst

Tracking progress

- For each completed task, the team 'successfully planted a tree'; for more challenging tasks, they planted more than one
- We created a progress sheet:
 - a blank sheet with a 4 × 5 grid of numbered squares;
 - they 'planted' a tree by perforating a tree into a square on the sheet using a perforation stamp; the tree 'turned green' (there was a green sheet underneath)
- Each time a new tree 'turned green', we celebrated together and worked out how many more trees we still needed to 'plant'/turn green before reaching the treasure

Markers, direction signs

- We were able to monitor the itinerary and had a chance to check the route just before the group arrived
- We therefore used several markers along the route
- We made them the day before using materials we had collected from nature

Example:

The task required us to have a 'heart' marker. Along the route, we placed a 'heart' on a rock, which we had made from a bundle of grass.



Treasure

Initially, we planned to hide the treasure in a bush, which the task would lead the participants to. However, when we finalised the activity the day before, we discovered an abandoned bird's nest in the bush.

We immediately adapted our plan: because the hunt was to take place in a controlled area, we did not hide the treasure itself. Instead, we placed the abandoned nest there with a key that unlocked the treasure.

We hid the treasure in an old cardboard box.

We secured the box with an old textile strap. We made loops at both ends and fastened a padlock through them.

When the participants found the key in the nest and unlocked the treasure, each of them found a jar of homemade Karst jam in the box (made using pears from Tomaj), which they had passed by along the treasure hunt route.

7. 7. Example 2: Treasure Hunt in the Šijanska Forest, Pula, Croatia

Introductory notes

- The Šijanska Forest is a large park forest on the outskirts of the city of Pula, located around 2 km from the city centre
- It is a protected area with many well-maintained walking paths and rich biodiversity
- We prepared the treasure hunt for a group of participants from UOITI Pula; they travelled from the centre of Pula to the starting point of the hunt, and the participants had a chance to visit a local site on the way
- The group consisted of 8 adults with mild or moderate disabilities; there were more participants with moderate disabilities than in the Karst
- The hunt was led by two educators

'Compass' of the activity

- The Šijanska Forest, which has a rich history dating back to the Austro-Hungarian period
- To remind participants of the beauty and importance of this forest park, which provides those living in this coastal city with valuable opportunities for recreation and relaxation throughout the year, especially to escape the summer heat of the city



Itinerary

- We gathered in the parking area at the entrance to the forest
- We walked through the forest along a well-maintained gravel path that was safe, accessible, and free of motor vehicles
- Several times, we left the designated walking paths and continued along a forest trail
- The route was about 1,800 m one-way; at the agreed time, a colleague from UOITI was waiting for the participants with a van on the other side of the forest
- We could not control the itinerary (as this is a public city park), nor could we intervene in the natural environment (as it is a protected area).
- We adapted the activities accordingly (especially the checkpoints, tasks, markers, and the overall 'manner' of the hunt)

Time

- The treasure hunt lasted 45 minutes

Story and persona

- The Šijanska Forest is magnificent; it is one of the first urban park forests in Europe and is also home of very old trees
- Forest gnomes are happy to settle in such a 'magnificent' forest, passing on the secrets of the forest century after century
- The chief gnome in the forest is Šijan, after whom the forest is also named (this is fictional)
- Šijan the Gnome likes the group that has gathered very much, so he has decided to delight them with a treasure hunt
- During the hunt, he will show them his beautiful forest and prepare a treasure for them at the end
- Still, Šijan the Gnome is extremely busy with the very important task of protecting the Šijanska Forest, and so he has given the instructions for the hunt to the hunt leader
- At the very start of the letter, Šijan the Gnome:
 - explains the basic premise of the story: he rarely shows himself, but he sees a great deal; he will secretly follow them to make sure they are working together well and deserve the treasure; and
 - tells them that after they have 'caught 21 rabbits', they will find the treasure

Checkpoints and markers, direction signs

- We identified several checkpoints along the route
- We selected them based on the itinerary, the 'compass' of the activity, the story, and the persona
- Due to the limitations described in the itinerary, we decided on a 'photo hunt' format
- While preparing the hunt, we used a phone to photograph potential checkpoints that already existed in the forest and would not change before the hunt took place

Examples: an information board next to the forest entrance, a tree with an unusual shape, the edge of some woodland with blooming cyclamens, existing direction signs, a 'bird tree', a pond, a fire hydrant etc.

- We selected the checkpoints thoughtfully and meaningfully connected them to the tasks and challenges

Tasks, challenges

They were varied. With them, we directly/indirectly followed the 'compass' of the activity.

Examples:

- find a fallen tree (here we talked about the unstoppable power of nature, which is constantly renewing itself)
- find cyclamens, but do not pick them (Šijan the Gnome: "In my forest, visitors leave flowers in nature so that others can admire them too")
- "You have reached the 'bird tree'. Observe it in silence until you spot a bird"
- when they reached the pond: "Do you agree that we need to take care of animals? What do they need when they are thirsty?"
- when they reached the meadow where buttercups grow, we pointed out: nature is also home to poisonous plants
- when they reached the conifers: "Do all trees shed what is growing on them in winter?"
- after each question, we had a brief discussion; the leader gave the participants a chance to speak, and they excellently complemented each other; the reward for each completed task was a 'rabbit'



Tracking progress

- For each completed task, the team 'caught a rabbit'
- We chose this because there was a pictogram on the information board at the entrance to the forest indicating that hunting and shooting animals are prohibited (a crossed-out image of shooting rabbits)
- We invited the participants to 'catch rabbits' in a different way
- We glued several sheets of paper together lengthwise (to form a 'strip')
- We inserted photographs of the sequence of checkpoints they had to find during the 'photo hunt'
- When they found the checkpoint shown in the photograph in nature, the hunt leader stamped a rabbit on the 'strip' inside the circle below the photograph
- Tracking progress on the 'strip' proved to be very encouraging

Markers, direction signs

- The Šijanska Forest is a legally protected natural area; we were not allowed to interfere with or damage the natural environment, and do not have full control over the itinerary
- Therefore, we did not use any props or markers for direction

Treasure

A colleague brought the treasure from the other side of the forest to the agreed location and hid it among the trees as we were approaching the spot

The treasure contained a gift for each participant: a canvas cap to protect them from the sun, and a foldable sitting mat. Both will come in handy the next time they visit nature and enjoy its beauty.

We connected this treasure hunt with a green skills activity:

- Just before Šijan the Gnome directed the team to the treasure, the participants were given a task: to create a natural mandala so that Šijan the Gnome could show the gnomes from other forests that a wonderful mandala can also be created in his forest
- The participants collected materials for the mandala (fallen cones, leaves, pebbles, twigs etc.) during the hunt; Šijan the Gnome also frequently encouraged them to do so in his instructions

We did not 'take the mandala with us'; instead, we left it as a thank-you for Šijan the Gnome, and for the enjoyment and admiration of the other visitors to the Šijanska Forest.

We needed about 90 minutes for the treasure hunt, the green skills activity, and a refreshment break in between. **The team was not tired, and their mood and motivation did not decline during the activities.**

7. 8. Remember

- a good story and an imaginatively chosen persona = 1/4 of the success
- the 'hunt supervisor' is the engine of the hunt – make use of your acting skills
- explain the instructions and story slowly, vividly, clearly and aloud
- repetition and summarising (especially in the form of asking questions) = your friends
- nothing should catch you by surprise: stay attentive, flexible, and able to adapt instantly, including improvising
- a treasure hunt is not a strict test of knowledge; it is a fun, relaxed (even if educational) activity
- humour = an excellent 'icebreaker'; when things aren't going well, when you get stuck, or when there is no real 'chemistry', make a joke; if necessary, make yourself the butt of the joke; the participants will certainly appreciate it
- 'less is more' – simplify
- you (the hunt leader) do not know everything either – try, experiment and improve
- do not be afraid to include a couple of more challenging tasks; you will probably be pleasantly surprised!
- 'trust' your own fallibility and misjudgements: if they happen, acknowledge them and correct them
- praise, praise, praise: often, sincerely and enthusiastically, in different ways
- there are no mistakes, only steps leading towards the goal
- even though this is a group activity, every individual matters – balance the opportunities, amount of attention, and time in the spotlight
- above all: **ENJOY** preparing and conducting the activity! Passion and genuine joy are contagious, so this is probably the true 'magic wand'!



**The goal is not the treasure.
The treasure is the journey and
the companions along the way.**



8. Learning Approach in Nature: Forest Bathing

Forest bathing is an approach to learning in nature based on consciously and slowly spending time outdoors and directing our attention to what we see, hear, touch, smell and feel around us.

8. 1. What Is Forest Bathing?

- slowing down and spending time in nature
- listening to the sounds around us
- noticing colours, shapes, light and movements
- touching natural materials (if the person feels comfortable doing so)
- noticing smells and sensations on the skin
- connecting with oneself, others and nature

The goal is to:

- slow down the pace and step away from the fast pace of everyday life
- direct attention to nature
- explore through the senses
- experience nature at one's own pace
- learn through direct experience

For AMMD, this approach is valuable because it allows for different ways of participating and does not require a single 'correct' answer.



Important:

- the participant does not have to 'achieve' anything
- every experience can be different
- noticing is more important than completing a task

8. 2. What Forest Bathing Is Not

- mountaineering, hiking, or a sports activity
- a competition or knowledge test
- a lecture on flora and fauna
- forced relaxation
- an activity in which everyone must participate in the same way

Forest bathing provides an opportunity to step away from the hustle and bustle and direct attention to simple stimuli in a natural setting.

8. 3. The Key Benefits of Forest Bathing

It can contribute to:

- a sense of calm and rest
- reducing feelings of tension and fatigue
- directing attention
- greater awareness of one's senses and own experience
- a sense of connection with other people and nature

A participant can engage by way of:

- observing
- listening
- touch
- movement
- sitting
- gestures or pointing
- speech or non-verbal communication

Advantages of the approach:

- there is no single correct answer
- not everyone has to participate in the same way
- as an educator, you can adapt the activity to the suit participants' abilities and interests, and the pace

8. 4. Adaptations of Forest Bathing for AMMD

For this group, as an educator, adapt:

- the way you explain things
- the number and complexity of activities
- low long it lasts and the pace at which it proceeds
- the way of participating
- the level of support required

The goal is not for all participants to complete the same task, but for everyone to have the opportunity to experience nature in a way that is understandable and accessible to them.



8. 4. 1. What Helps the Rducator

- Speak briefly and clearly

Example: “Find one green thing.”

- Give one instruction at a time
Allow enough time for a response.

- Show, whenever possible
A gesture or demonstration is often easier to understand than a long explanation.

- Offer a choice

Example: “Would you like to touch it or just look at it?”

- Accept different responses

A word, gesture, look, movement, or pointing can be just as valuable.

- Adapt the duration and pace

If attention starts to wane or there are signs of fatigue or overload, simplify the activity, offer a break, or finish early.

- Reduce abstraction when necessary

If the question “If a tree could talk?” is too abstract, ask: “Is the bark smooth or rough?”

- Closing your eyes is not mandatory, and silence is not the goal; the goal is to direct attention.

- Allow participants to say “no”.

- Offer an alternative: “You can just observe” or “You can choose something else”.

- Monitor the group’s interests.

If the participants are drawn to an ant, a bird, a footprint, or a stone, let them spend some time exploring it.



8. 5. How to Prepare and Conduct a Forest Bathing Session

Forest bathing as a learning approach should be structured enough for you, as an educator, to know what you're doing, while also being flexible enough to adapt it to the group. For a session of approximately 30 minutes, three to five brief invitations are sufficient, containing the option to shorten the activity, take a break, or change the activity.

8. 5. 1. How to Prepare a Forest Bathing Session

Get to know the group

Before the activity, consider:

- how many participants will be taking part
- how much support individual participants need
- whether everyone is able to move safely around the selected area
- whether anyone needs more frequent rests or the option to sit down
- whether there are sensitivities to sounds, touch, smells, or other stimuli
- how long the group can maintain attention

If the group is larger or individual participants require more support, arrange for an additional support person. Adjust the number of participants so that, as an educator, you can monitor the responses and needs of each individual.

Choose a safe and accessible location

Forest bathing does not necessarily have to happen in a forest. Other suitable locations can include:

- a park
- a garden
- a quiet green courtyard
- an area by a river, the sea, or a lake
- another safe space with enough natural stimuli

Choose a location that does not require a long walk and where there are opportunities to stand, sit and rest. Before the activity, check the terrain, obstacles, and places where the group can stop safely.

Determine how long it will last

Adapt the duration to the group and its ability to concentrate:

- approximately 20–45 minutes
- for a first experience, it can also be shorter
- allow for the possibility of taking a break
- finish early if attention starts to wane

A shorter, high-quality activity is better than a long activity that overwhelms the participants.

Prepare 3–5 short invitations

For approximately 30 minutes, it is enough to plan:

- the arrival and for slowing down
- listening
- looking or touching
- one activity of your choice, or an imaginative activity
- a calm conclusion

Don't try to include all the senses in every session. It's more important to allow enough time for each invitation.

Prepare a simpler alternative

Prepare an easier option in advance for each activity.

Example:

- "Find three shades of green." → "Find something green."
- "If a tree could talk, what would it say?" → "Is the bark smooth or rough?"
- "Choose the place you like best" → "Would you like to be next to this tree or that one?"



8. 5. 2. How to Conduct a Forest Bathing Session

Clearly introduce the activity

Briefly explain what you will be doing and what the participants can expect.

Example:

"Today, we will be spending time in nature at a slower pace. We will look, listen, and notice what is around us. We do not all have to do the same thing."

Use short sentences and, if necessary, demonstrate what you mean.

Slow down the pace

The transition to a slower pace should be gradual.

Examples:

- "Let's walk ten steps very slowly"
- "Let's stop. Notice how your feet are resting on the ground"
- For a person with greater difficulty moving:
"Move your arms slowly, as if they were branches moving in the wind"

Do not require complete silence; the goal is to focus attention.

Open the windows of the senses

Direct attention to one sense at a time.

- Hearing: "What sound do you hear?"; "Point to where it is coming from"
- Sight: "Find something green."; "Find something very small."; "Find something that is moving"
- Touch: "If you would like, touch the bark, a stone, or a leaf"; "Is it smooth or rough? Warm or cold?"
- Smell: "Notice whether you can smell anything"

Don't ask participants to taste plants or other natural materials.

Offer personal choice

Allow the participants to choose an object, tree, or part of the space which attracts their attention.

Example: "Choose one tree that interests you". The participants can stand, sit, observe, touch, or simply stay nearby. If an open-ended choice is too difficult, offer two options.



**Forest bathing cards
can be of help to you.**

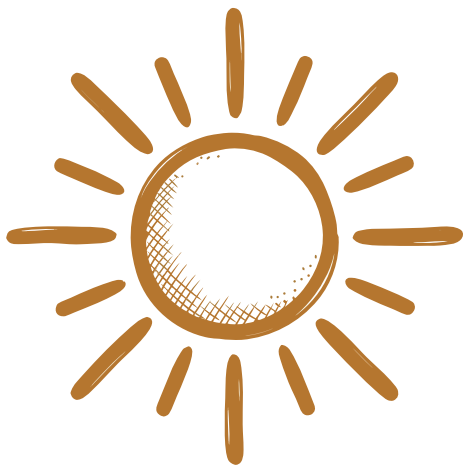
Include imagination if desired

Imaginative invitations can enrich the experience, but are not mandatory.

Examples:

- “If your tree had a name, what would its name be?”
- “If the sun could send you one message, what would it be?”
- “Choose something very small and observe it for one minute”

If the question is too abstract, return to concrete sensory awareness.



Monitor Responses and Adapt

During the activity, observe:

- whether the participant understands the instruction
- whether they are still paying attention
- whether they are showing interest
- whether they need more support
- whether there are signs of fatigue, tension or overload

If necessary, shorten the activity, simplify the invitation, offer a break, or change the order.

Allow the Right to Say “No”

If a participant doesn't wish to take part in a certain invitation, offer them an alternative:

- “You can just observe”
- “You can stay next to me”
- “You don't have to close your eyes”
- “You can choose something else”

In forest bathing, you invite – you don't force.

Conclude Calmly and Clearly

Gather the group and ask one simple question: “What did you like the most about being in nature today?” The answer can be by way of a word, a gesture, pointing, or choosing an object.

- You can also conclude with an invitation: “Find one thing that you'd like to remember”

Clearly indicate that the activity has come to an end and allow enough time for a smooth transition to the next activity.

After the activity



FOREST BATHING PATH

get to know the group → choose a location → prepare invitations → slow down
→ notice → offer choice → adapt → conclude

8. 6. Example 1: "IN THE QUIET STEPS OF THE FOX"

Duration: around 30 minutes

Location: a forest, a park, or a larger garden

Materials: none; sitting mats are optional

Goal: slowing down, activating the senses, and directing attention

1. The fox awakens – 5 min

- Briefly introduce the story:
"Let's imagine that we are foxes which have just come out of their den. The fox carefully looks, listens, and smells"
- Demonstrate a few slow steps and invite the group to copy them.
- Do not require complete silence; it's enough to slow down.
- A person with greater difficulty moving can participate while seated, using slow movements of their hands and head.

2. Fox ears – 5 min

Stop in one place and give one or two short instructions:

- "Which sound do you hear closest to you?"
- "Point to where one sound is coming from."

Allow a few seconds for a response. The response can be by way of a word, a look, a gesture, pointing in a direction, or simply listening.

3. The fox's nose and eyes – 5 min

Offer two or three simple tasks:

- "Find something whose colour you find interesting."
- "Notice one smell."
- "Find something very small."

If this is too much, choose just one task. Anyone who does not wish to smell or touch things can simply observe them.

4. The fox chooses its space – 10 min

Each person chooses a tree, stone, part of a meadow, or another spot which catches their attention. They can stand, sit, observe, touch the object, or simply stay nearby.

If needed, ask:

"What do you find interesting here?"

Do not require everyone to answer. If the group is particularly drawn to one phenomenon – ants, a bird, or tracks on the ground – stay with it for longer.

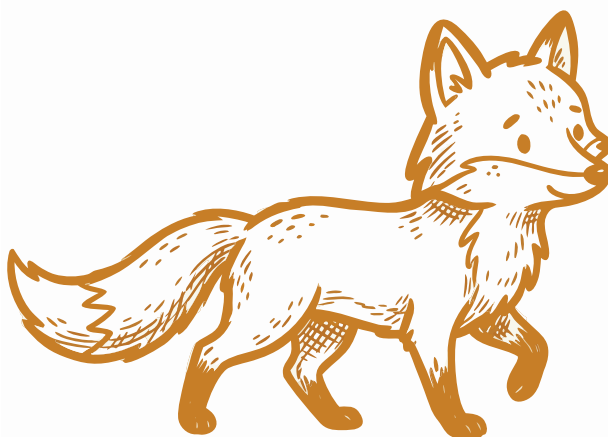
**The plan is just a framework.
If the group's attention remains
focused on one activity, there's no
need to rush to the next one.**

5. Returning – 5 min

Gather the group once again:

"The fox is returning home. What did it notice today?"

Just one word, gesture, look or movement is enough. Conclude with a clear signal, such as a brief wave goodbye to nature.



8. 7. Example 2: “MY TREE”

Duration: 20–30 minutes

Location: an area that has several trees

Materials: sitting mats (optional)

Goal: personal choice, sensory exploration, calmly directing attention

1. Choosing a tree – 5 min

Say:

“Look at the trees around you. Choose the one that interests you today”

If the person finds it hard to decide, offer a choice between two nearby trees.

3. A little imagination – 5 min

Ask one question:

- “If your tree had a name, what would it be?” or “If it could tell you something, what would it say?”
- If the question is too abstract, return to something concrete: “Is the bark smooth or rough?” or “Are the branches high or low?”

**Imagination is only an option,
not an obligation.**

4. Greeting the tree – 3–5 min

Say: “Let’s greet our tree in whichever way we choose”

Some may decide to touch, look at, wave to, or simply stand beside it.

If desired, ask:

“What will you remember about your tree?”



8. 8. Example 3: FOREST BATHING IN 15 MINUTES

Duration: 15 minutes

Location: a forest, a park, a garden, or other accessible green space

Materials: none needed

Goal: a brief slowing down, directing attention, and activating the senses

This workshop is suitable when a group has less time or energy, or when forest bathing is used as a calm transition after a more dynamic activity.

1. STOP – 3 min

Slow down your walking and stop in a safe place.

Say: “Notice how you are standing or sitting and what you are feeling under your feet”

You can take a few calm breaths in and out without insisting on any particular technique.

2. LISTEN – 3 min

Say: “Listen to one sound”

If needed, add: “Point to where it is coming from”

There is no need to count or name the sounds.

3. LOOK – 3 min

Offer simple tasks:

- “Find something small”
- “Find something big”
- “Find something that is moving”

If this is too much, use just one task.

4. TOUCH OR OBSERVE – 3 min

Choose a natural object or a tree.

Say: “If you’d like, touch it. If you don’t want to, just look at it”

You can ask:

“Is the surface smooth or rough?”

“Is it warm or cold?”

5. WRAP UP – 3 min

Gather the group and say: “Show an object that you liked today.”

Whoever wants to name the object can do so. Whoever does not can just show it, look at it or simply listen to the others.

Clearly mark the end of the activity.



**If you only have 10 minutes,
skip a step or two.
Even a short forest bathing is
meaningful if it allows participants to
slow down, focus their attention,
and notice something.**

8. 9. Remember

- Don't plan too much. A few good instructions are better than several tasks or activities carried out superficially and in a rush.
- Give only one short instruction at a time.
- When possible, demonstrate. A movement or example is often clearer than a long explanation.
- Invite, do not command.
 - "If you would like ..."
 - "You can ..."
 - "Try it if it feels right for you ..."
- Closing one's eyes is never compulsory.
- Don't expect a verbal response. A look, gesture, movement, touch, or pointing in a direction are also responses.
- Don't require everyone to participate in the same way.
- Look out for signs of fatigue and/or overload. If attention drops, simplify, take a break, or finish earlier.
- Don't correct personal experiences. What matters is what the participant noticed and felt themselves.
- Monitor the group's interest. If something unexpected in nature catches their attention, give it time.
- Safety and accessibility take priority over the plan.
- The goal is not to conduct a perfect forest bathing session, but to enable the persons involved to experience nature in a way that is accessible to them.



**Invite. Offer a choice. Observe.
Adapt.**



9. Learning Approach in Nature: Green Skills

Green skills are the knowledge, skills and competencies that enable individuals to act sustainably and responsibly towards the environment. They include practical, relaxing and creative activities that raise participants' awareness and encourage them, while guiding them to respect nature.

9. 1. Examples of Green Skills

- 'I observe – I recognise – I understand' – *recognising and understanding nature*

Examples:

- recognising trees, plants and fruit
- finding different types of leaves
- recognising animal tracks
- recognising birds in nature and knowing their characteristics
- observing habitats
- recognising changes in nature
- observing the impact of humans on nature

- 'I use responsibly' – *sustainable use of natural resources*

Examples:

- recognising renewable and non-renewable resources
- responsibly collecting natural materials
- thinking about how many material we need
- discussing responsible forest management

- 'I know how to make' – *practical skills in nature*

For example:

- collecting and sorting natural materials
- making products from natural materials – based on the principle of reuse

- 'I care – I protect – I contribute' – *skills for protecting and preserving nature*

Examples:

- removing waste from nature
- recognising and removing invasive plants
- visiting nature responsibly

You can combine several skills in one activity – for example, during a walk in a forest.

9. 2. What Green Skills Activities in Nature Are Not

Not every activity in nature is automatically a green skills activity. Activities in nature are all activities that we carry out in nature. **Green skills activities**, however, are educational activities which help individuals understand nature, use it responsibly, and care for it. Nature is no longer merely a setting for activities, but a subject of learning.



Activity in nature:
"What do I do in nature?"
Green skill:

"What do I learn to do, understand, or use through it?"

Green skills activities in nature are not:

walking, running, cycling, climbing, swimming in natural water, rowing, fishing, watching the sunset, having a picnic, resting and relaxing, meditation, sledding, skiing etc.

Still, an activity in nature can be developed to become a green skills activity.

Example: picking mushrooms is not necessarily a green skill in itself.

However, by learning how to identify mushrooms, pick them responsibly, protect their habitat and follow sustainable harvesting rules, an individual is already developing certain green skills

9. 3. Key Benefits of Green Skills

The essence of green skills is that an individual is not just a visitor to nature, but learns from it, develops skills in it, and builds awareness of and a responsible attitude to the environment.

They also gain other valuable benefits which can be transferred to everyday life:

- developing practical skills – participants learn distinct tasks with a clear purpose and outcome
- greater independence – by carrying out tasks, they gain experience, skills, and confidence in their abilities
- learning through experience – participants gain knowledge by way of observing, trying, working, and repetition
- a sense of competence and achievement – completing a task and seeing the result adds to the feeling that one is capable and able to contribute
- active group participation – activities enable cooperation within the group and the integration of different individual roles
- developing creativity and problem-solving skills – nature offers open-ended situations in which individuals and groups can seek different solutions
- connecting with the local environment



9. 4. Adaptations of Green Skills for AMMD

As you go along, adapt green skills activities to the individuals who make up the group – their abilities, needs, and learning styles.

The aim of adaptation is not to simplify the content to such an extent that it takes away the individual's opportunity to participate independently, but to allow them to **participate in the activity, understand it, and experience success.**

For every participant, at each major step of an activity check whether they need your support. If they do, determine the level of support they need.

Example: insect hotel

- **less support:** the participant independently finds suitable materials, brings them, and places them in the hotel
- **moderate support:** the participant collects and sorts the materials independently, while the educator helps them select suitable materials and determine the sequence of tasks
- **more support:** the mentor prepares a selection of materials, demonstrates each step, and guides the participant through the activity
- **highly adapted approach:** the participant chooses from two materials and places the selected material into the prepared structure

The final product of the activity is not the only measure of success. The process of participation and the individual's progress are important. Adapt the activity so that each participant can do something independently, make a choice, and contribute something. Remember: through the activity, you raise awareness of the value and fragility of nature and encourage sustainable, responsible and respectful behaviour towards the environment.

9. 5. How to Prepare and Conduct Green Skills Activities

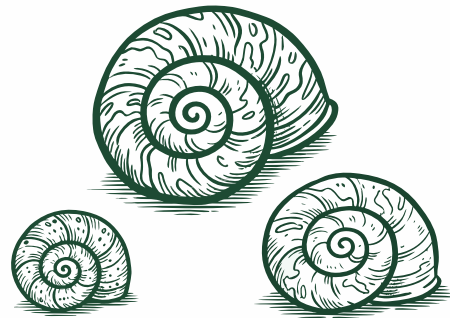
9. 5. 1. Activity Preparation

- **prior site inspection and terrain assessment**
 - is the terrain safe, easily accessible, with enough shade (during hot months) etc.
- **adapting materials and tools**
 - prepare work equipment that is safe to use and ergonomically adapted (e.g. lightweight tools with larger, non-slip handles)
 - avoid sharp objects; if unavoidable, use them yourself
- **visual and clear instructions**
 - break down complex concepts of nature conservation into simple steps
 - prepare visual materials, symbols or photographs to help participants understand the sequence of tasks
- **determining support and roles**
 - make sure the number of support persons or educators is adequate
 - assign each support person their role in advance as well as the group of participants they are to guide
- **checking health considerations**
 - be aware of any allergies (e.g. to insect bites or pollen) and other health or mobility limitations of the participants
- **checking the weather forecast**
- **adapting protective equipment**

9. 5. 2. Implementation of the Activity

- **a structured and calm introduction**
 - start the activity at a predetermined entry point
 - make the participants familiar with the space, clear rules of safe behaviour in nature, and with one simple and tangible goal of the day
- **a multisensory approach**
 - encourage learning about nature via direct contact
 - enable the participants to touch, smell and listen
- **learning through a guided process (step by step)**
 - give instructions along the way, one by one
 - first, demonstrate each step in practice yourself (e.g., how to hold a plant)

- **adapt the pace and breaks**
 - monitor fatigue and the concentration level of the group
 - implementation should happen without rushing, with regular intermediate breaks for hydration and rest (in the shade)
- **positive encouragement and constant assistance**
 - focus on what each participant can do independently
 - offer discreet help only where absolutely necessary
 - strengthen the sense of usefulness and connection with the environment



9. 5. 3. After the Activity

- **conclusion and clearing up**
 - tidy up the tools together and make sure no waste or other traces are left in nature
- **reflection with a review of achievements**
 - in a short conversation or with a simple visual method (e.g. a thumbs up, choosing a coloured card), check how the participants felt
 - connect the work they have completed with a broader meaning of nature
 - also conduct a reflection among the monitors and educators
- **the awarding of certificates, praise**
 - explicitly acknowledge each individual's contribution to nature protection
 - awarding a simple symbol (e.g. a handmade sticker or a natural souvenir) reinforces the activity's long-term success
- **evaluation of the mentoring team**
 - in the absence of the participants, along with the team briefly assess which parts of the activity ran smoothly and where challenges arose, so that you can adapt the next implementation to make it even better
- we recommend you **set the date for the next activity right away**

9. 6. Example 1: WARDIAN CASE

9. 6. 1. Presentation of the Wardian Case

What is a Wardian case

It is a closed glass jar in which we create a self-sustaining mini plant ecosystem. Inside it, water continuously circulates in the form of 'internal rain', and the plants only need light to survive.

Who 'invented' it

The Wardian case was invented completely by accident in 1829 by Nathaniel Bagshaw Ward, an English physician and botanist from London. He sealed a moth cocoon inside a glass jar with moist soil and decayed leaves, as he wanted to observe its development. The cocoon did not develop into a moth, but a fern and a blade of grass, which had been sown in the soil, germinated. They lived in the sealed jar for several years without watering.

Ward realised that glass protects plants from external influences and creates its own microclimate. His invention later enabled the safe shipping of exotic plants in large glass greenhouses all over the world and became the predecessor of today's indoor terrariums.

**Green skills cards
can be of help to you.**

Why does this activity belong among green skills, what is its 'contribution'

This activity is an excellent example of a green skills workshop since it teaches participants basic environmental concepts through practical work – the circulation of matter in nature, the importance of biodiversity, sustainable resource management, and responsibility with respect to living beings.

By creating their own ecosystem, individuals develop ecological awareness and a direct understanding of how the natural systems around us function and how vulnerable they are.



**Adjust the path to the goal,
not the goal itself.**

9. 6. 2. Implementation



Before the workshop

- **select a location**
 - choose a suitable spot in nature (e.g. under a large tree)
 - provide a stable work surface (a table) and benches (optimal): find locations where this is already available
- **prepare the equipment and tools**
 - containers (at least three for each participant; they can also be clean, already used yogurt cups)
 - small shovels (spoons and forks can also be used), a water spray bottle; longer tweezers (optional) – participants will share these tools
 - for each participant, a larger glass jar with a wide mouth and a lid (use discarded glass jars such as larger jars from pickled foods like sour turnip)
- **prepare clear visual materials**
 - presentation of the mini ecosystem taking place inside the jar
 - presentation of how the participants will 'build' their Wardian case

Implementation

- **introduction**
 - prepare an interesting, attractive introduction where you concisely present the Wardian case, as well as the course and purpose of the workshopiskanje, zbiranje in razvrščanje materialov

- **collecting, and sorting materials**

Invite the participants to gather materials in the nature surrounding you and place them separately into the containers, sorted into the following groups:

- small pebbles (for drainage)
- good soil (basic food for growth)
- 'decorations': interesting stones, twigs, a pine cone, an acorn etc.
- dug-up little plants (with roots, up to 3–4 cm long) – these will grow inside the jar
- **demonstrate** in advance all the procedures of searching, gathering and sorting (e.g. how to accurately dig out a plant so that its roots come with it)
- **monitor and guide**
 - explain the meaning of each activity
 - encourage friendly exchange

- **'building' the Wardian case**

Use the visual materials from the introduction to help you with your guidance. We warmly recommend you to first create (build) your own Wardian case in the presence of the participants; as you do this, explain the steps and keep the jar as a model example.

- **assembly process**

- pour approx. 2 cm (in height) of small pebbles into the bottom of the jar and level them out (with a spoon) – for drainage
- pour in the fertile soil (you can also use a substrate you brought with you); press the soil down slightly with a spoon to make it more compact; this layer should measure approx. 4–5 cm in height
- the green part: make small holes in the soil; carefully insert the plants into them – use long tweezers; otherwise, help yourself with longer sticks (find them in nature); carefully press the soil down around the plants
- spray generously with a spray bottle
- decorate with the natural decorations you have gathered
- spray once again
- if necessary, wipe the inside of the jar
- close the lid tightly, take the jar home, and admire the progress



- **instructions for maintenance**

Give them to the participants at the end of the workshop:

- place the jar in a bright spot
- do not open the jar, watering is not necessary
- observe how 'dew' accumulates on the inside walls of the jar, and how the plants develop
- if needed, open the jar only after a few months to remove any dead plants and/or decayed natural decorations

After the activity

- tidy up carefully after yourselves
- carry out reflection and evaluation
- monitor the 'development' of the Wardian cases together with the workshop participants

9. 7. Example 2: INSECT HOTEL

With this activity, participants learn about the importance of biodiversity, sustainable materials management, and nature protection, while obtaining practical experience in creating a habitat for beneficial insects.

The most suitable time to conduct the workshop is the blossom season. The hotel can be made in various natural environments – on the edge of a meadow, a forest edge, in a park or in a garden.

Before the workshop

- **select a location:**
 - that you visit frequently and is easy to access for you – in this way, you'll be able to often observe the life of the 'hotel visitors'
 - where there are plenty of blossoming plants

If a **home garden** or a **garden in a school or work environment** meets these criteria, that would be excellent.

- **prepare what you will take to the location**
 - **a wooden frame**

Prepare it in advance (a wooden frame with a bottom; approximate dimensions 20 x 30 cm); you can also use an already made wooden box.

- **work gloves**
- **garden shears, a small saw, a hammer**
- for mounting the hotel: **nails or screws; string or wire** for fastening
- **a tape measure, a pencil, paper**
- **textile bags or baskets** in which you will gather the materials
- optional: if there aren't enough hollow stems in nature, **drill holes of various sizes into pieces of wood** beforehand

The material to be gathered in nature is listed in the description of the workshop course.



Implementation

The workshop can be carried out **in one day** or divided into **two**:

- **1st day:** conversation, observation of the natural environment, collection of natural materials
- **2nd day:** implementation, installation

- **introduction in nature, observing the environment – 10 minutes**

Lead the group (up to 8 people) to the selected location, and present the essence of the activity through conversation. First, let the participants observe the environment where the hotel will be on their own. Ask questions:

- Which insects do you see?
- Where are they hiding?
- What do they need to live?
- What do they feed on?
- Why are insects important?
- Where could insects settle around here?
- Are there any blossoming flowers nearby?

- **gathering and sorting the materials – 20 minutes**

Collect dry twigs, pieces of dry wood, pine cones, bark, leaves, dry grass etc. Hollow stems (e.g. bamboo or similar sticks and reeds) are very suitable. If there aren't enough of them in nature, use the pieces of wood that you pre-drilled.

Important: use primarily dry, naturally fallen materials.

The insect hotel encourages the presence and reproduction of beneficial insects, in turn contributing to natural pest control and the preservation of biodiversity.

Sort the gathered material into groups:

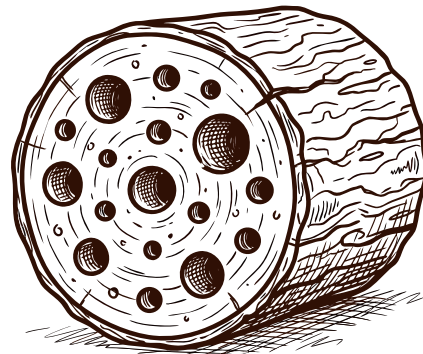
- group 1: twigs and dry wood
- group 2: pine cones and bark
- group 3: hollow stems
- group 4: dry leaves and grass

- **planning the hotel – 15 minutes**

- think together about how you will arrange the materials within the wooden frame to make sure the hotel structure is stable
- draw a simple sketch – which group of materials you will use where

- **implementation – approximately 40 minutes**

- **cut or saw the hollow stems into smaller sticks;** the length should be equal to the depth of the frame
- the **holes** of the hollow stems or the ones you drilled into the wood should have various diameters – different insects use shelters of different sizes
- fill the individual sections within the wooden frame with the natural materials; follow the sketch
- pack the materials **tightly** enough so that wind or rain does not blow them away



- **selecting a spot for installation – about 5 minutes**

Find a place:

- that is relatively **calm**
- **protected** from strong winds
- near blossoming plants and other natural vegetation
- where the hotel can be safely attached

It is not necessary for the hotel to be in the sun all day. It is more important that there are enough food sources nearby and that it will provide shelter.

- **installation – approximately 2 minutes**

Attach or install the hotel so that it is stable. You can also place a sign you have made yourself next to it.

After the workshop

- tidy up carefully after yourselves
- carry out reflection and evaluation
- together with the workshop participants:
 - record the hotel visitors
 - monitor what has changed
 - discuss the conditions

An insect hotel provides shelter for various beneficial insects.

9. 8. Example 3: A NATURAL MANDALA

Before the workshop

- **select and review the location**
 - find a flat, clean area of the forest floor or grass (without protruding roots or hidden holes)
- **preparation of a visual plan**
 - make a large visual card (a photograph or a simple drawing) of a mandala so that the participants immediately understand the final goal
 - the mandala should have clear, wide circles
- **introductory ritual (calming down)**
 - gather the group in a circle at the entry point
 - redirect attention to nature with a deep inhale and exhale
 - announce the course of events, for example: "Today, we will be building a collective picture from forest treasures in the shape of a large sun"

Implementation

Step A: gathering the materials (sensory collection), division of the tasks

- **division of tasks**
 - distribute light baskets to the participants
 - give each person a simple task according to their capabilities (e.g. "You gather only large brown pine cones", "You look for fallen yellow leaves", "You gather flat pebbles")
- **focus on touch**
 - guide the participants through their senses, e.g.: "Feel how rough this bark is and how smooth this stone is"

Step B: Positioning the centre and the base (Structure)

- **determining the centre**
 - together with a participant, place the largest or most special object (e.g. a large round stone or a big, beautiful pine cone) exactly in the centre of the workspace; this will be the anchor of the mandala
- **drawing lines**
 - gently draw concentric circles in the soil (like a target) with a stick or draw lines from the centre outwards (like sun rays)
 - this provides the participants with clear visual boundaries on where to place the materials

Step C: Assembling the mandala (Repetition and collaboration)

- **the 'One by one' principle**
 - take one type of material in your hands (e.g. the pine cones) and demonstrate: "Now we will arrange the pine cones right along the outer edge of the first circle"
- **working in pairs or chains**
 - participants who find it hard to squat can pass materials to those sitting or kneeling on the ground
 - each participant adds their own layer or their own circle (a layer of leaves, a layer of pebbles, a layer of twigs)
- **rhythmic, calm work**
 - maintain a peaceful atmosphere during the work, enjoy the sounds of nature

Gather, feel, assemble.
The wordless language of nature.



After the workshop – reflection and conclusion

- collective viewing and admiration
 - when the mandala is finished, all the participants stand around it (at a safe distance to avoid stepping on it)
 - encourage a round of applause for the completed work
- photography (lasting memory)
- mini reflection (feelings)
 - ask simple questions that do not require complex answers: "Which part of the mandala do you like the most?", "Which material felt the softest under your fingers?", "How do you feel now, looking at this picture of ours?"
- **sustainable conclusion**
 - explain to the participants that the mandala is to remain in the forest as a 'gift to nature'
 - the materials will eventually decay or be blown away by the wind, which is part of the natural cycle
 - the participants say goodbye to the mandala – each in their own way



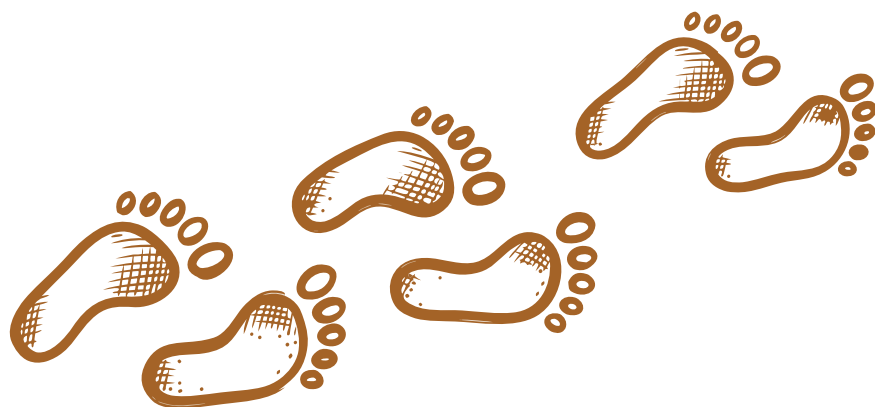
Observe nature, do not destroy it.
Do not over-harvest live plants.
Do not hunt animals.

9. 9. Remember

- **provide a 'here and now' experience instead of theory**
 - avoid complex lectures
 - show green skills through direct hands-on work instead
- **'step by step'**
 - break each green task down (e.g. planting a plant or preparing natural compost) into small, easily manageable steps
 - the educator should demonstrate one step, and the participants repeat it immediately
- **'leave no trace'**
 - leave the natural environment in the state you found it (or better)
- **create useful products as well**
 - this will help to boost self-confidence
- **ensure a sense of (relative) predictability in the field**
 - participants should not get a feeling of anxiety, danger, or loss of control in nature
- **take care of ergonomics and the adaptation of tools**



Nature is the most adaptable classroom. It does not demand complex words, just open senses, repeatable steps, and the opportunity for every participant to become its proud guardian.



10. Inclusivity and Adjustments

The activity is not necessarily the same for all participants. Adjustment can mean a change in the task, duration, space, method of communication or level of support, while the goal of the activity remains the same.

It is often enough to alter only one element for a participant to actively participate. Plan the adjustment in advance when you know the needs of the group, but if necessary, carry it out during the activity itself as well.

10. 1. Adjustments for Adults with Mild or Moderate Disabilities

Adjust the level of difficulty to the understanding of the task, attention, previous experience, and support required.

You can:

- reduce the number of steps or tasks
- offer a choice from two options
- show the task before starting
- use cards, objects, or visual aids
- allow more time and repetition
- divide a more demanding task into simpler steps
- include work in pairs or support from a companion

It is not always necessary to simplify the entire activity. Sometimes, it's enough to simplify only the instructions, the first step, or the way of answering.

Example: in gamification (an activity in the form of a game), one participant can follow multiple clues on their own, while another receives a single clue, a visual sign, or assistance with choosing the next step.

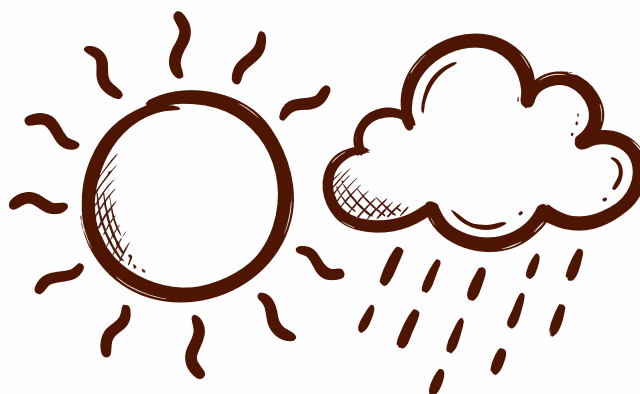
Important: adjust the difficulty of the task, but not necessarily its goal.

10. 2. Adjustments for Persons with Physical Disabilities

Inability to move along a certain path does not yet mean the inability to participate in the activity. In the initial plan, provide shorter routes, accessible seating areas, and activities that can be performed without moving on demanding terrain.

Adjust:

- the length and difficulty of the path
- the place of implementation
- the position of materials and objects
- the time required for movement
- the possibility of sitting and resting
- the role of the participant in a group task



Examples:

- gamification – place clues in accessible locations or assign the participant a role such as the guardian of the map or clues
- forest bathing – carry out sensory instructions at a single location
- green skills – place materials on an accessible work surface

Important: If the participant can't get to the activity, bring the activity closer to them.

10. 3. Adjustments for Persons with Communication Barriers

Plan tasks so that speech is not the only way of understanding, choosing or responding.

Use:

- pictures and symbols
- objects and visual aids
- pointing and demonstrations
- gestures
- a choice from two options
- cards
- responding with a movement, glance, or choice of an object

Instead of an open-ended question “What do you want to do?”, offer two clear options that the person can point to or choose.

Do not limit your checking for understanding solely to the question “Do you understand?”.

Ask the person to show the first step, choose an object, or repeat the action in their own way.

A familiar person or a companion can help the facilitator understand the participant’s method of communication, but they must not answer for them when the person can express their choice in another way. The initial proposal also anticipates pictures, gestures, objects, pointing, and non-verbal answers.

10. 4. Adjustments for Persons Who Find it Difficult to Relax or Have a Fear of Nature

A more distant or unfamiliar natural space is not necessarily pleasant for everyone. Start where the person feels safer – in a yard, garden, familiar park or on the edge of a natural space. Such a gradual beginning is already anticipated in the very structure of the programme.

It helps to:

- explain in advance where you are going and what you will be doing
- show a photograph or briefly describe the space
- start with a short and predictable activity
- avoid moving away suddenly from a familiar space
- allow for a return or a break
- gradually extend the time in nature if the experience suits the participant

Do not insist on closing eyes, touching, silence, or approaching what causes discomfort.

**Adjustment does not change the goal
– it changes the path to it.**



11. From a Single Workshop to a Regular Programme

A single workshop can be the beginning of regular work in nature. You do not immediately need a plan for an extensive programme. It's more important to find a rhythm that suits the group, the organisational possibilities, and the environment in which you work.

Gamification, forest bathing, and green skills can rotate and connect in such a way that, over time, participants experience nature through play, senses, learning, and practical activity. Regularity helps activities become familiar, anticipated, and more easily integrated into everyday work.

11. 1. How to Plan a Cycle of Activities

Plan the cycle according to the group, the available time, and possibilities of regularly spending time in nature.

Short cycle – 4 sessions

- a gamified activity
- forest bathing
- green skills
- a collective closing activity and reflection

Medium cycle – 6 sessions

Alternate all three approaches and repeat those that suit the group best. The closing session can be a collective green action or an activity that connects elements of all three approaches.

Seasonal cycle – 12 sessions

During each season, carry out:

- one gamified activity
- one forest bathing session
- one green skills activity

Such a model allows for the repetition of a familiar structure in different weather conditions and during natural changes. These three models are already suggested in the initial structure of the handbook.

You do not need to plan every detail in advance. It's enough to determine the framework of the cycle, while adapting individual sessions to the interest of the group, the season, and what you observed during previous activities.

Important: the cycle is not necessarily the same for every group. It is better to have a few activities carried out regularly than an extensive programme that is hard to maintain.

11. 2. Activities Through the Seasons

Nature changes throughout the year, which means the content of the activities can change as well. The same place can offer a completely new experience in different seasons.

Spring

Observe new plants, colours and scents, plant and water, look for signs of spring, or go on a short sensory walk.

Summer

Choose shadier spots and shorter activities. Observe sounds, colours and insects, care for plants, or conduct a simple search in nature.

Autumn

Use leaves, fruits and colours for sensory activities, sorting, gamified tasks, and working with natural materials.

Winter

Activities can be shorter and closer to the institution. Observe tracks, shapes and sounds, or transfer some of the activity indoors. When the weather does not permit going outside, you can use leaves, pebbles, twigs, seeds, photographs or recycled materials.



11. 3. Recommendations for Sustainability and the Continuation of Work

To make sure the activities don't remain just an occasional event:

- include them in the monthly or annual work plan
- set a simple and realistic rhythm
- repeat activities that have proven to be beneficial
- note what worked well and what has to be adjusted
- involve families and caregivers when appropriate
- connect with local parks, gardens, forests, or ecological associations
- exchange experiences with other facilitators and organisations

Regularity doesn't mean that an activity must always be extensive or demanding. A short walk, a single sensory task, a simple game, or caring for a single plant can also be part of the programme.

You don't have to reinvent a new activity every time. A familiar activity can be repeated in another season, in a different place, or with a slight change to the task.

From an occasional workshop to a regular practice, you progress with small, repeatable steps.

11. 4. Seasonal Activity Plan Proposal

Create your own annual implementation plan for outdoor learning approaches. This will help you build a valuable routine.

Once you have built the routine, nurture it: carefully and persistently.

It's better to shorten or modify an activity in poor weather and a less friendly season than to skip it altogether.

Why create an annual implementation plan for new outdoor learning approaches

- **year-round overview** – you can see in advance which activities you want to carry out and when
- **timely preparation** – you can more easily plan the space, tools, materials, and collaboration with others
- **a reminder** to observe which opportunities each season offers
- **a source of ideas and inspiration** – when looking for an activity idea, you already have a starting point prepared
- **connecting activities** – individual activities can be logically continued and upgraded
- **more outdoor learning** – the plan helps outdoor activities become a regular part of teaching, not just an occasional addition
- **monitoring what was carried out** – throughout the year, you can record what you executed, what worked well, and what you wish to repeat or improve

The plan is only a framework that you can adjust along the way based on the weather, natural conditions, and needs of the group. **Examples for inspiration:**

Seson	Gamification	Forest bathing	Green skills
Spring	Spring Awakening – the Easter Egg Hunt	Awakening of the senses – perceive the sounds, colours, and scents of spring	Spring Nature's Pharmacy – discovering medicinal plants in nature
Summer	A Green Photo Hunt in the Cool Shade – searching for Keke's Magical Spruce	A corner that pleases me – find a pleasant spot in the shade and briefly observe the surroundings	Plants – Nature's Air Conditioners – measuring temperatures in the forest, in the park, in the garden, and in the city without plants; raising awareness of the importance of plants during the hot summer months
Autumn	The Magic of Autumn Fruits – finding checkpoints where autumn fruits and berries can be found (rose hips, beech nuts, acorns, juniper berries, Cornelian cherries, etc.)	Autumn in the palm of your hand – observe, touch, or compare leaves, bark, and fruit	Autumn's Little Magic collecting suitable plant materials, making natural dyes to colour paper for New Year's greeting cards
Winter	Following in the Footsteps of the Winter Queen – discovering the secret path she prepared for the three kind old men who visit in December	Short winter forest bathing – listen to the sounds, observe the sky or the tree canopies	"Thank You for Not Flying Away!" – make bird feeders from natural materials and keep them stocked with bird food throughout the winter

11. 5. Seasonal Rhythm Proposal

We suggest an average of **2 activities per month**. Important: the goal of the monthly annual plan is not to carry out all 24 activities at all costs, but to help assure that spending time, learning, and acting in nature become a regular part of work during the entire year.

	Planned activities	Completed	Notes
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

12. Gamification Cards

The use of cards while carrying out a gamified activity is optional. The educator can include them in the game in full, in part, or not at all.

A CLUE PLEASE	OH, THIS TASK IS TOO DIFFICULT	WOW, THIS TASK WAS GREAT!
I WANT MORE	SLOWER, PLEASE	READ MORE DISTINCTLY
I LIKE IT VERY MUCH	INCLUDE ME TOO	I AM NOT ENJOYING THIS AT ALL

12. 1. Instructions for the Educator

- offer these cards as a choice to the participants if you assess that your scenario allows for it
- you might decide to use only some of the cards suggested here and/or prepare the cards yourself
- the cards are face-up, and each participant chooses them individually (based on how they are feeling)
- if a participant knows how to read, they should read the card aloud themselves; otherwise, you should read it
- discuss each card briefly
- take a look at the “feeling cards” as well - perhaps you can include one of them?

13. Forest Bathing Cards

The card is an invitation, not an obligation. The participant can perform the task in their own way, just observe it, or choose a different card.

LISTEN Perceive one sound in nature.	LOOK Find something that catches your eye.	TOUCH Choose an object from nature. If you want, touch it.
SMELL Perceive one scent around you.	LOOK UP Observe the sky, the treetops, or the clouds.	FIND A COLOUR Choose one colour in nature.
SLOW DOWN Take a few slow steps and perceive what is around you.	FIND A SPOT, where you want to stop for a moment.	SHOW SOMETHING, in the conclusion that you liked in nature today.

13. 1. Instructions for the Educator

- the cards contain short sensory instructions that can be used independently or as part of a forest bathing session
- select a few cards based on the space, time and group, or offer the participants to draw or choose a card themselves – the cards can therefore be face-up or face-down
- if a participant knows how to read, they should read the card aloud themselves; otherwise, you should read it
- discuss each card briefly
- take a look at the “feeling cards” as well - perhaps you can include one of them?

14. Green Skills Cards

The cards suggested here are 'general' and should serve as inspiration. Depending on the particular activity, you can supplement them with concrete prompts/tasks. The interaction will in this way be stronger and more fun.

NATURE IS WONDERFUL. Do you agree?	I CAN THROW TRASH ANYWHERE. Do you agree?	I CAN BLAST MUSIC VERY LOUDLY IN THE FOREST. Is this true?
WATER IS PRECIOUS. Right?	I CAN PICK ANY PLANT IN NATURE. Is this true?	THERE IS NO NEED TO PICK UP OTHER PEOPLE'S GARBAGE. Do you agree?
MOVING IN NATURE IS VERY PLEASANT. Right?	IS A CITY MORE BEAUTIFUL WITH PARKS OR WITHOUT THEM?	I DON'T CARE ABOUT ANIMALS IN NATURE AS THEY ARE NOT MINE. Do you agree?

14. 1. Instructions for the Educator

- when you assess that it is appropriate, an individual participant draws one of the cards
- if a participant knows how to read, they should read the card aloud themselves; otherwise, you should read it
- discuss each card briefly
- take a look at the "feeling cards" as well - perhaps you can include one of them?

15. Feeling Cards

LUCKY / PLEASANT I feel good.	CALM I feel calm.	CURIOUS Something interests me.
PROUD I like that I have accomplished something.	UNSURE I am not sure.	UNCOMFORTABLE Something doesn't feel right.
I WANT A BREAK I need a break.	TIRED I am tired.	I WANT MORE I want to continue.

15. 1. Instructions for the Educator

- the cards can be used during or after any activity – for gamification, Forest Bathing, or green skills activities
- place the cards where the participant can see them and say, for example:
 - “How do you feel now?”
 - “Choose the card that suits you best”
 - “How did you feel during the activity?”
- the participant can show, take, touch, or choose a card with their gaze
- no additional verbal explanation is necessary
- the cards can also be used during the activity itself if the educator wants to check whether the participant needs a break or a change of task
- if a participant can read, let them read the card aloud themselves; otherwise, read it aloud for them

16. Conclusion

Nature does not discriminate, judge, or impose conditions. It offers everyone, including adults with disabilities, an equal space for exploration, connection, calm and growth. By bringing educational approaches into natural environments, we are not only opening the door of the classroom, but also opening the door to greater independence, self-confidence, and genuine inclusion in society.

We can find these benefits not only in the forest. Nature also awaits us in a city park, by a river or the sea, in an orchard, and even in our own garden. When we make appropriate adaptations, nature welcomes us in every season and in almost any weather.

Formal and non-formal educators (parents, carers) hold the key to these doors. Your patience, flexibility and willingness to try new approaches transform theoretical knowledge into vivid, unforgettable experiences. Every step along the way, every challenge or task completed, every touch of tree bark, and every moment of silence beneath the tree canopy leaves a lasting mark on an individual's development.

We hope you will use this guide primarily as a starting point and as inspiration for further development. Be bold while developing your own ideas, respond to your own specific situations, and make the most of what the natural environment offers you at any given moment. Learning in nature does not require elaborate plans, but open hearts.

It is hoped that this guide supports and inspires you whenever you wonder whether going outdoors is worth all the effort. Nature always rewards our efforts – with a smile, progress, and a sense of peace that can be hard to find within four walls.

Nature sets no limits – people do, when we forget that we are part of it.

All the best!

Vojka Žgavec Clemenž and Danijela Medaković
On behalf of the Nature & Disabilities project partnership



Nature & Disabilities



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Authors of the handbook: Vojka Žgavec Clemenz and Danijela Medaković

Design: Ideje, koncepti in zgodbe, Vojka Žgavec Clemenz s. p.

English language editing: Murray James Bales

Illustrations: Magnific

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