

NATURE EXPERIENCE AND EDUCATION

for people with disabilities

Part 2

**Experience nature with all senses –
practical ideas for methodological implementation**



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Activities in and with nature





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Activities in and with nature










1.1 Getting started

Who has ever?

Recommended for	   
Material	None.
Time	20 min.
Target	Getting the participants motivated and creating team spirit.
Method	The participants are standing in a circle. One is in the middle and asks a question concerning nature experiences to which his or her own answer is 'yes'. For example, Who has ever slept in the woods? All people answering the question with a 'yes', change their places. The person who is the last to find a place in the circle has to remain inside and ask another question.
Variation	<ul style="list-style-type: none"> For wheelchair-users, the surface has to be flat and leveled. For groups with both wheelchair-users and people who are able to walk, it is possible to do the activity without changing places or adapt the speed. Blind participants can pair up with their assistant or can find their new places themselves according to instructions. Here, too, there is the possibility of not changing places at all.



Connected to soil








Recommended for	      
Material	None.
Time	Minimum of 5 min., depending on the number of people
Target	Getting the participants motivated and finding out, what they already know.
Method	All participants form a circle and take turns passing around a “talking stick” (it can also be a “cone microphone” or stone). Each person holding the talking stick has to say a sentence (or word) that is connected to the topic “soil”. If the others do not understand the connection/association, the participant has to explain or find another word/sentence.
Variation	If there are deaf people participating in the offer, a sign language interpreter is needed.

Source: www.umweltbildung.at/publikationen-materialien/publikationen-detailansicht.html?tx_hetopublications_pi1%5bid%5d=166









1.2 Exercises for all senses

Sensation expedition

Recommended for	      
Material	Rope, clothes pegs, sheets or boards and natural objects.
Time	At least 20 minutes, depending on the number of stations and the intensity of the debriefing.
Target	Getting to know the environment in which the event takes place.
Method	An about 50 m long line is stretched to the height of the handrail (80 cm). On this line, various stations are marked with clothes pegs. Here, objects matching the natural environment are laid out on a cloth or board for feeling. The participants follow the leash (blindfolded), feel the objects and exchange information with others. This activity can be an introduction to imparting biological knowledge: for example, how to distinguish snail shells, how many different types of snails are there, which characteristics of different tree, shrub fruits and seeds can be felt. The objects are introduced and explained at the end.
Variation	<ul style="list-style-type: none"> • Instead of connecting sheets/boards with objects on them, it is also possible to connect trees or shrubs with a string. They can be experienced by touching, e.g. the stem, roots and the soil around it. • Deaf people take off the blindfold for discussion. • To include wheelchair-users and people with other motor impairments, a level and plain area is advisable. Moreover, the objects should be placed in an adequate position.

Source: Klein A. & Schaefer T. (2016): Seen mit allen Sinnen – Eine Handreichung zum geführten Naturerleben mit Blinden und Sehbehinderten

Barefoot expedition








Recommended for	     
Material	Rope, sticks for fixation of the rope, optional: boxes to fill with material, towels to clean the feet.
Time	20 to 30 min.
Target	Getting to know the environment in which the event takes place.
Method	An approx. 50 m long string is tensioned at handrail height (80 cm). This string connects areas with different kinds of substrate such as grass, meadow, leaves, mud, gravel or water. If necessary, it is possible to use a box for certain material. The participants walk along the string (with covered eyes) and experience, e.g. a slope at a shore, differences between gravel and sand, different water temperatures.
Variation	<ul style="list-style-type: none"> • Instead of walking along the rope, participants can hold on to each other and walk behind each other as a “caterpillar”, with the head being sighted and leading the “caterpillar” through the surroundings. • People with mobility impairments should be assisted if necessary.

Source: Klein A. & Schaefer T. (2016): Seen mit allen Sinnen – Eine Handreichung zum geführten Naturerleben mit Blinden und Sehbehinderten



1.2 Exercises for all senses








Sensation circle

Recommended for	      
Material	As many different natural objects as participants.
Time	20 min.
Target	To learn about the diversity, differences and characteristics of natural objects; memory.
Method	<p>Various natural objects are collected in the area by the educator. The participants form a circle and each one gets an object in their hand, which should be behind the back. They feel the objects so thoroughly that an inner image of them is created. On a signal, everybody passes on the object to the left neighbour and, at the same time, receives a new one from the right. After some time to explore it with the fingertips, this object will also be passed on - until each participant has received the original item back. Then all objects are collected and spread out in the middle of a cloth. In the end, everybody shows or describes his or her object.</p>
Variation	<ul style="list-style-type: none"> • Instead of describing the objects, they are recollected by the educator and spread out on a cloth. Does everybody find their own object? • Each participant collects his/her own object.

Source: www.gbv.de/dms/goettingen/336080212










Sensation bag

Recommended for	      
Material	Bag, stones, bud shoots, various plants, leaves, feathers, bark, fruits, branches or local animals made out of plastic. 5 each.
Time	20 min.
Target	To learn about diversity, differences and characteristics of natural objects; grouping.
Method	5 different objects from the surrounding area are collected and put into a bag. The game is played in groups of three, whereby one of the participants should be sighted. The first participant, for example, feels all the stones in the bag and chooses one to show to the second participant (sighted referee). Now, the palpable characteristics of this stone are described with words detailed enough, so that the third participant can find the puzzle stone by feeling it in the bag. The referee validates.
Variation	<ul style="list-style-type: none"> • People with sight can cover their eyes or get blindfolded. • People with hearing disabilities take off the blindfold during explanation of the stones and have an interpreter if necessary. • For people with learning disabilities, it is possible to use less than 5 objects. The selection can be adjusted according to the knowledge of the group.

Source: Klein A. & Schaefer T. (2016): Seen mit allen Sinnen – Eine Handreichung zum geführten Naturerleben mit Blinden und Sehbehinderten








1.2 Exercises for all senses

Sensation groups

Recommended for	      
Material	Stones, snail shells, bud shoots, various plants, leaves, feathers, bark, fruits, twigs, moss, reeds or local plastic animals. It makes sense to build up a certain pool of such objects.
Time	15 to 20 min.
Target	To learn about diversity, differences and characteristics of natural objects; grouping.
Method	Various objects are collected in the surroundings by the educator. They are offered in such a number that the participants can form pairs or groups, each with the same things. The participants form a circle and each gets one of the different objects placed in their hands. They explore it by feeling and then look for the partner or the other group members with the same object.
Variation	To improve the focus, the tasks can be accomplished without speaking. Deaf people can participate on equal terms like this.

Source: Klein A. & Schaefer T. (2016): Seen mit allen Sinnen – Eine Handreichung zum geführten Naturerleben mit Blinden und Sehbehinderten







„Mixed“ forest

Recommended for	      
Material	Parts of various tree and shrub species.
Time	20 to 30 min.
Target	To learn about the diversity, differences and characteristics of tree species; memory.
Method	<p>On the ground, an area is marked by branches and divided into four fields. Different parts of four tree species (leaves, branches, fruits, seeds, bark) are placed in these fields, whereby the parts of one species lie in the same field.</p> <p>Participants first learn about the materials in the fields and remember what belongs to each other - for example, which fruit and which bark belong to which leaf. Then someone changes the order and the participants have to place things correctly again.</p>
Variation	<ul style="list-style-type: none"> • If there is existing knowledge, a selection of tree parts can be distributed, and the participants have to sort them out by species. • A selection of natural objects can also be distributed and the participants then have the task of sorting them out into the four fields - leaves to leaves, bark to bark... • The method can be adapted for wheelchair-users or people with motor impairments by using an accessible table. • For blind people, it can also be helpful to participate in this activity on a table. The fields should be fixed, so they are stable while the objects are being examined. • The exercise can be performed blindfolded or by seeing.

Source: Klein A. & Schaefer T. (2016): Seen mit allen Sinnen – Eine Handreichung zum geführten Naturerleben mit Blinden und Sehbehinderten






1.2 Exercises for all senses

Crawling critters

Recommended for	     
Material	A small collection of plastic animals or animals made of wood etc. that live in or near the water.
Time	30 min.
Target	To learn about different groups of animals that live on and in water.
Method	<p>People with sight get blindfolded. Life-size animal models are spread out on a cloth or table (for example frog, salamander, grass snake, snail, mosquito, dragonfly, butterfly, grasshopper, beetle, shell, spider). The group is surrounding the animals.</p> <p>The animals are presented individually, i.e. number of legs, wings, further tactile conspicuous characteristics, other characteristics of the way of life from which one could conclude the form (sting, eyes, antennae). Then each participant takes an animal and tries to find the right one using the descriptions to recognize which one it is. Everyone introduces the selected animal to another participant, and they exchange ideas about it. Afterwards, the solution is presented.</p>
Variation	<ul style="list-style-type: none"> • Instead of animals living in or near the water, choose other habitats. • With a higher degree of difficulty, the animals can also be issued without a prior description. The participants feel the animals and tell the others what special features their animal has. Either they know it, or descriptive fantasy names are assigned. Afterwards, the animal concerned is dissolved.

Source: Klein A. & Schaefer T. (2016): Seen mit allen Sinnen – Eine Handreichung zum geführten Naturerleben mit Blinden und Sehbehinderten








Sound map

Recommended for	    
Material	Various natural materials to mark .
Time	30 min.
Target	Getting to know the surroundings by means of the noises/sounds that occur.
Method	<p>Getting to know the environment through sounds.</p> <p>The educator selects a location where different sounds of nature can be heard and no engine noise interferes. For each participant, get approx. 10 clearly tangible natural objects such as cones or hand-sized stones.</p> <p>Everyone sits down on the floor several meters apart and has 5 minutes to silently listen to the sounds and to „map“ them with the distributed objects. Is the sound coming from behind (6 o'clock) or is it coming from the right (2 o'clock)...After that, the results are collected and discussed. The clock can be used for orientation and determination of the direction (bird at 3 o'clock, frog at 8 o'clock etc.).</p>
Variation	<ul style="list-style-type: none"> • An alternative can be distributing paper and pen to each participant to draw the location of the sounds. • An easier version could be just counting the number of different sounds without mapping them.

Source: Klein A. & Schaefer T. (2016): Seen mit allen Sinnen – Eine Handreichung zum geführten Naturerleben mit Blinden und Sehbehinderten

1.2 Exercises for all senses






Same to same

Recommended for	      
Material	Plants or other fragrant natural materials.
Time	15 to 20 min.
Target	Fragrances are consciously perceived, recognized and assigned.
Method	<p>Snap lid or film cans are filled with strong smelling plants or other natural materials. The plants can be put directly into the hands of the participants as well.</p> <p>All plants and other materials with their different scents will be introduced, and the participants will make an olfactory trial. Then the phials with the different scents are distributed; the same scent to two people. Everyone rubs the plant with their fingers and lets the others smell it. This way, people come together in pairs recognising the same odours.</p>

Source: Klein A. & Schaefer T. (2016): Seen mit allen Sinnen – Eine Handreichung zum geführten Naturerleben mit Blinden und Sehbehinderten










Acoustic theatre

Recommended for	    
Material	None.
Time	20 to 30 min.
Target	Getting the participants motivated and find out, what they already know.
Method	The participants go out into nature (alone or in pairs) and try to notice all acoustic impressions. After about 15 minutes, they come back and form groups of 4-6 people. Then they write or tell stories with all their acoustic impressions.
Variation	Afterwards, it is also possible to make a theatre play out of the story.

Source: Umweltdachverband (2017): Vielfalt bewegt – Theatermethoden zum Thema Biodiversität in der Arbeit mit Jugendlichen

1.2 Exercises for all senses







Cook and taste together

Recommended for	      
Material	Edible plants (wild thyme, oregano, mint...).
Time	20 min.
Target	Experience natural tastes.
Method	Cook together with herbs from the meadow or the woods (expert needed) or taste the different flavours and try to guess what is what...

Source: www.umweltbildung.at/publikationen-materialien/publikationen-detailansicht.html?tx_hetopublications_pi1%5bid%5d=166








The eye as a camera

Recommended for	     
Material	None.
Time	20 min.
Target	To focus on the beauty of nature and get calm.
Method	<p>The participants divide into pairs. Each couple determines who wants to be a photographer first and who wants to be a camera first. The camera then closes the eyes and the photographer gently guides it around. When discovering an interesting subject, he or she aligns the camera and then presses the trigger. This can happen by tapping the shoulder or gently pulling the earlobe. The camera then briefly opens its eyes (1-2 seconds, possibly try different exposure times for pictures) and records the scene. Afterwards, the camera reports on the pictures and the two exchange their experiences, they revisit the original motives. Then the roles are exchanged.</p>

Source: Umweltdachverband (2019): Biodiversität erlebbar machen

1.3 Build and create








Plant music

Recommended for	    
Material	Dandelion stalks, knife.
Time	10 min.
Target	To get to know the nature of plants and to discover possibilities to play with them.
Method	<p>Collect a sufficient amount of strong dandelion stems (Attention: the plant sap can give ugly brown spots on clothes, but is not poisonous). Immediately before distribution to the participants, the upper end of the stem is cut about 1 cm deep in the middle (not earlier, otherwise the ends will curl up).</p> <p>With pointed lips and lots of power, the participants blow into the upper end and create sounds from the shaft. However, this requires a little practice.</p>

Source: Klein A. & Schaefer T. (2016): Seen mit allen Sinnen – Eine Handreichung zum geführten Naturerleben mit Blinden und Sehbehinderten










Plaiting with reed or rush

Recommended for	      
Material	Rushes or plantain stalks, scissors, possibly string.
Time	20 min.
Target	To get to know the nature of plants and to discover possibilities to create with them.
Method	<p>A sufficient quantity of rushes as long as possible (e.g. <i>Juncus effusus</i> or <i>J. inflexus</i>) has to be collected.</p> <p>The participants receive a finished plait as an example before they start tying together rushes and weaving themselves. A knot is placed at the end or wrapped in a tear proof string. With some help, it becomes a bracelet, a hair band or a necklace.</p> <p>Instead of rushes, it is possible to use plantain leaves or long flower stalks.</p>

Source: Klein A. & Schaefer T. (2016): Seen mit allen Sinnen – Eine Handreichung zum geführten Naturerleben mit Blinden und Sehbehinderten








1.3 Build and create

Construction of wild bee nesting aids

Recommended for	      
Material	During the winter months, cut long, thick reed stalks with an inner diameter of 5 to 10 mm. Collect empty, slim cans, e.g. tomatoes.
Time	30 min.
Target	Learning about reeds and contribute to the protection of wild bees.
Method	<p>First, the participants are informed about the way of life of the wild bees. In addition, they receive a ready-made nesting aid to touch. They cut the reed stalks to a length that does not exceed the can length (rain protection). A stem knot at the end of each stem is important and can be easily felt. In addition, a clean cut with sharp pruning shears is needed so that the stalks do not fray at the edge, so the insects can't be hurt. These stalks are inserted into the can as close as possible to each other, with the stem nodes pointing to the can bottom. A flower wire is wrapped around the can several times as a suspension, and a loop is made at the end.</p> <p>The nesting aids are horizontal, rainproof and best directed to the southeast and offer protection especially to the red mason bee and European orchard bee. The site should be at least 1 m above the ground and provide free access for wild bees. The nesting aids will be hanged before flight operations start. They will be occupied from mid-March.</p>
Variation	Blind people or people with visual impairments decide themselves, if they want to participate on their own or with the help of an assistant.

Source: Klein A. & Schaefer T. (2016): Seen mit allen Sinnen – Eine Handreichung zum geführten Naturerleben mit Blinden und Sehbehinderten

Different construction tasks / landart

Recommended for	      
Material	Natural material.
Time	20 min.
Target	Promotion of creativity.
Method	<ul style="list-style-type: none"> • Build a track for a marble or a ball. • Build a symbol that represents the group. • Build a ship made from leaves that floats on the water. • Build a village for a little gnome family. • Build an ant or another animal. • Art works in nature.
Variation	<ul style="list-style-type: none"> • For people with sight or mobility impairments, the material for building can be offered. For other target groups, it can be the first task to collect it in nature. • Blind people can accomplish their task in large joint Landart projects, if necessary with an assistant.

Ideas from:

www.neverest.at/blog/landart-ideen-zum-ausprobieren/








www.kindernatur.ch/kopie-von-landart-spiele

www.lbv-muenchen.de/fileadmin/user_upload/Ueber_uns_Master/Mitgliederzeitschrift/Documents/2011_1



1.4 Discover nature






Do the soil test!

Recommended for	      
Material	Soil samples.
Time	20 min.
Target	Getting to know different soil textures.
Method	<p>The participants take some soil between the fingers and crumble it. How does it feel? They try that with different samples. The material feels rough, does not stick and trickles through your fingers, when it is dry? Then you have got sand. The soil is forming a compact lump? That is clay. Is the soil looking crumbly, but stays on the palm easily, you have got loam. Does the soil sample feel flaky and not sticky? It crumbles between the fingers to soft crumbs? This is humus.</p>

Source: www.naturimgarten.at/gartenwissen/videotipps/tipp/schnelle-bodenbestimmung-mit-der-fingerprobe



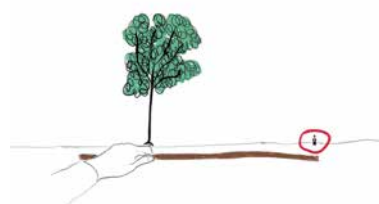
Tree height measurement

Recommended for	    
Material	Stick, optionally: tape measure.
Time	15 min.
Target	Understand how mathematics can be useful in practice.
Method	<p>See how maths can be used in a practical way.</p> <p>Position yourself (or a participant) about 30 steps from the tree that is supposed to be measured. Hold the stick vertically with a stretched out arm towards the tree. The top of the stick and the treetop have to be on the same line of sight. Put your finger on the stick, where the roots align with the stick (Graphic 1). Now “chop” the stick down and put it horizontally, “touching” the root of the actual tree. The position of the stick is the same as the actual tree would have after being chopped down. The distance between roots and treetop (marked on the stick) still equals the height of the tree. A person positions him or herself where the top of the stick is pointing at (Graphic 2). Now just measure the distance between the person and the actual tree with a tape measure or for estimation use steps.</p>
Variation	People with visual impairment must try out individually, if they can perform the exercise.

Source: www.schulwandern.de/assets/adbc1/c1d5175576348784









Graphic 1



Graphic 2

1.4 Discover nature








What swims in the water?

Recommended for	     
Material	Landing net, white bowls, magnifying glass/cups, paper, pencils, information about animals or sufficient knowledge.
Time	Min. 25 min.
Target	Get to know the diversity of life in waterbodies.
Method	At the beginning, the bowls are filled with water from a water body. With a net, the participants can catch the animals in the pond or stream. Carefully they lead the caught animals into the white bowls. Individual animals can be captured and magnified to be viewed in detail. Take a photo of all animals and note their names on a piece of paper. After that, put the animals back into the water carefully.
Variation	<ul style="list-style-type: none"> • Prepare a check-list with all possible animals (descriptions and/or photos) and information about them. Some of them are indicators for water quality. Can the participants find out something about the quality of this specific waterbody? (=bioindication). • People with visual impairment must try out individually whether they can perform the exercise.

Source:

www.naturdetektive.de/fileadmin/NATDET/documents/Kapitel_1-10/15884-16560-1-kapitel6_wasser_handreichung_naturdetektive
<https://m.simplyscience.ch/teens-liesnach-archiv/articles/was-verrat-eine-fliegenlarve-uber-die-wasserqualitat>








Who would have thought?

Recommended for	      
Material	One bag and enough natural objects for „right“ and „wrong“ per group.
Time	20 min, it is possible to make it shorter.
Target	To repeat and consolidate knowledge.
Method	<p>Two or more groups play against each other and have to find the answers together as a group. The game leader makes a statement about a topic discussed in the event and the participants discuss in their group whether it is right or wrong. For „right“, for example, they show a stone high in the air, for „wrong“ a branch. Then the solution is discussed.</p> <p>The groups answering correctly with their item may throw it into their bag. Which group answered the most questions correctly in the end?</p>
Variation	<ul style="list-style-type: none"> • For deaf participants, the questions can be asked in written form or a sign interpreter is assisting. • For blind participants, the process of the quiz has to be explained and moderated.

Source: Klein A. & Schaefer T. (2016): Seen mit allen Sinnen – Eine Handreichung zum geführten Naturerleben mit Blinden und Sehbehinderten

1.5 Group activities

We are a tree

Recommended for	      
Material	None, you need a group of at least 15 people.
Time	20 min.
Target	Learning about the structure of a tree trunk and strengthening the sense of community.
Method	<p>A tree trunk consists of several layers, each of which fulfils a special function. This action transforms the whole group into a tree trunk, layer after layer, by forming concentric circles around the heartwood and making certain movements and noises to illustrate their respective functions.</p> <p>First, explain the structure of a tree trunk in cross section and the tasks of each layer. The participants are assigned to individual layers and rehearse the movements and sounds of their role beforehand.</p> <p>Inner wooden body, heartwood: this dead tissue gives the tree stability and is formed by two participants who stand back in the middle without noise or movement.</p> <p>Sapwood: This is the water conducting layer that supplies the crown space. It consists of three participants holding hands with the front facing in. While they squat and stand up repeatedly at the same time, their arms stretch upwards, their slurping sound symbolizes the absorption of water.</p> <p>Then, after a thin layer of cambium, the so-called bast or inner bark follows outwards: it is the supply line through which the food is transported to the other parts of the tree. At least four participants stand with the front side around the inner layers. With raised arms and a „hui“, they squat up and down at the same time.</p> <p>The bark or outer bark with at least five participants forms the conclusion, which protects the sensitive interior of the tree from predators such as the bark beetle or the woodpecker. This group tries to prevent that a bark beetle or woodpecker (other participants) tries to penetrate from the outside.</p>








We are a tree - Part 2

	In this way, the group presents the functioning of the trunk's line systems with movement and voice as a complex system. Here, at the latest, it becomes clear to everyone that a tree trunk is not just a piece of wood, but lives intensely.
Variation	<ul style="list-style-type: none"> • People with minor mobility impairments or in the wheelchair can e.g. join by making the sounds or movements with the arms. Playing the heartwood is also an option. • For groups with deaf participants this method can be done with only the movements and no sound. Information should be presented in written form in advance. • For groups with both deaf and blind participants/people with strong visual impairments it has to be decided individually, if the exercise is suitable.

Source: Cornell J. (2006): Mit Cornell die Natur erleben – Naturerfahrungsspiele für Kinder und Jugendliche

1.5 Group activities








Mystery animal/plant

Recommended for	      
Material	Gathered information about animals or plants.
Time	At least 10 min.
Target	To transfer knowledge in an inspiring way and to keep the group interest continuously.
Method	At every station, the educator discloses a piece of information to solve the riddle about an animal or a plant. Along the way, the educator will constantly check the knowledge level of the participants by asking who thinks to know the solution. The participants that know the solution, when asked, will have to point their nose with their index finger. It is advisable to reveal the information in such a way that, towards the end, there is still one fact „in stock“, which will unsettle the participants again. Only if all index fingers are at the nose tip, the solution is being revealed. This activity is a good opportunity to call the participants together repeatedly and to keep them calm, because everyone wants to know how the riddle will continue.
Variation	For deaf people, the information can be shown in short written form.

Source: Cornell J. (2006): Mit Cornell die Natur erleben – Naturerfahrungsspiele für Kinder und Jugendliche



What am I?








Recommended for	      
Material	Pictures of animals, plants, elements typical for the landscape (e. g. spruce, waterfall, squirrel, hazelnuts); masking tape.
Time	20 min.
Target	Getting to know animal or plant species and typical natural things from the area, identifying and describing them.
Method	A participant gets a picture (selected by the rest of the group) stuck on their back. The participant has to guess with questions that can be answered with „Yes“ or „No“, what picture he or she has got. The pictures or words and the level of detail (e.g. bird vs. Blue Tit) has to be adapted to the level of knowledge of the participants. With this method, already mentioned topics can be integrated again.
Variation	<ul style="list-style-type: none"> Blind people can be secretly told or described the word at the beginning. The method can also be executed in pairs of two, whereby the partners can put pictures on each other's back or get them from the group leader.

Source: Amt für das Biosphärenreservat Schaalsee (2006): Barrierefrei Natur erleben



1.5 Group activities

Tourism at the pond

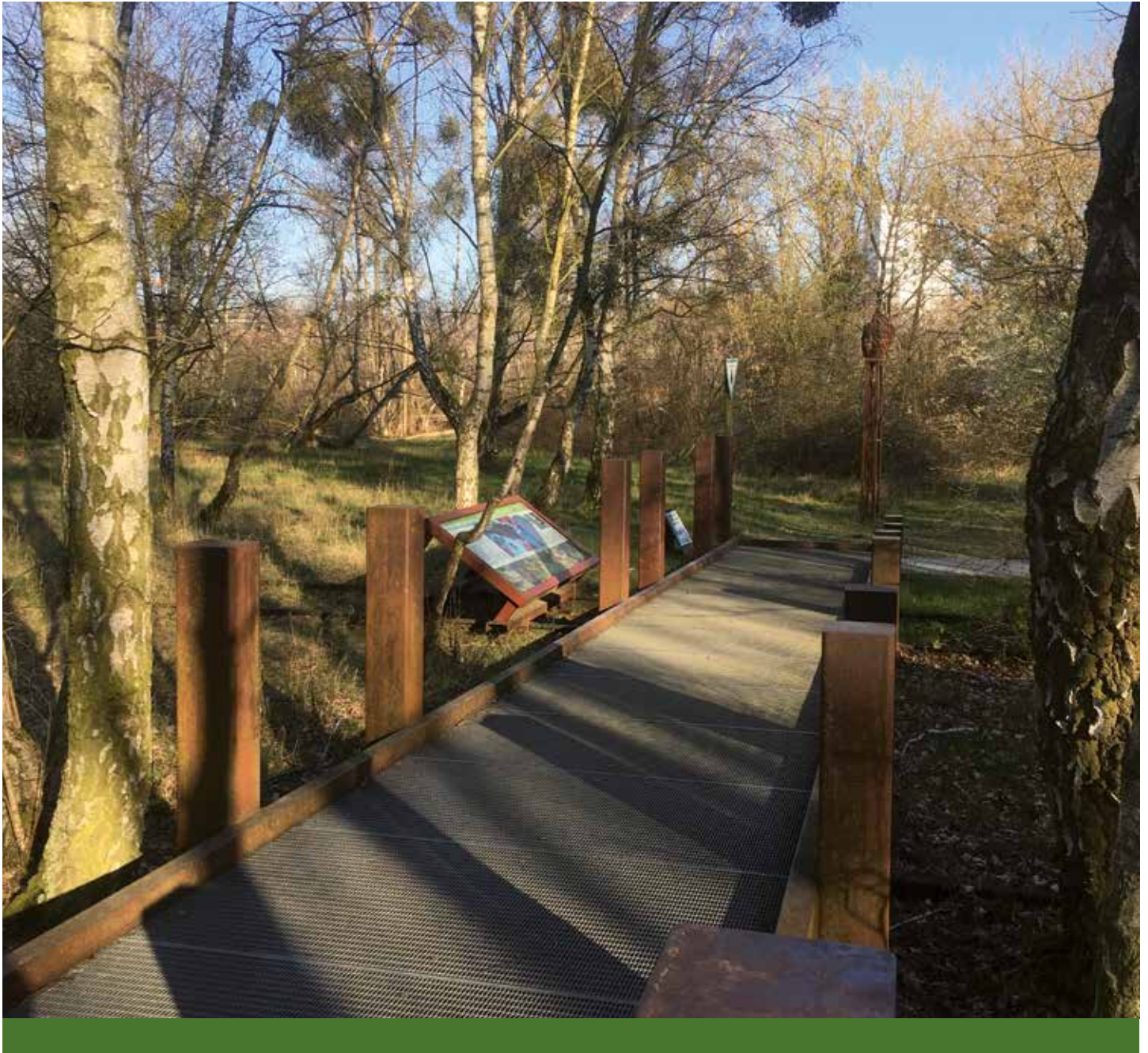
Recommended for	      
Material	Buckets; 6 things, that belong in a pond/river and e. g. 2 things, that don't belong there.
Time	20 min.
Target	Getting to know the natural habitat pond/river, practice tactile sense.
Method	6 natural objects that can be found in the natural pond/river and 2 things, that do not belong there, are placed in a bucket filled with water. The participants get blindfolded and try in turns to find out by touching objects in the bucket, which of them actually belong into the water. Attention: no objects that can hurt the participants!
Variation	For people in the wheelchair, a big, shallow bowl is more suitable. This can be placed on an accessible table.

Source: Amt für das Biosphärenreservat Schaalsee (2006): Barrierefrei Natur erleben



Ideas for thematic workshops:

Biodiversity



Thematic workshops: Biodiversity

Works for:










For preparation: offer all information also in written form and use tactile objects to explain structures and connections.

Total duration of the programme: 3 hours.

Duration	Method/Content	Recommendations
15 min	<p>Welcome</p> <ul style="list-style-type: none"> • Presentation of people who lead and support the programme. • Organisational issues: toilets, water facilities, safety issues. • Introduction into the topic "Biodiversity". • Short introduction to the programme. 	
20 min	Take a walk in the surrounding/nature	<p>In case people with reduced mobility are part of your group, you have to use a path that is barrier-free. If they walk with a stick, be sure that there are enough possibilities to rest.</p> <p>Make sure that hanging branches or branches from the floor are eliminated. This also benefits visually and hearing impaired participants.</p>
		<p>For blind and visually impaired people as well as for participants with learning difficulties, animals can be explained using models.</p> <p>For blind and visually impaired people, the environment should be described (information about interesting plants), which should also be touched if possible.</p>
40 min	Diversity of nature	
10 min	Break	
45 min	Animal diversity	In the descriptions below, you will find information on the suitability of respective sequences for concrete target groups.
30 min	Plant diversity	
20 min	Diverse as a multi-coloured rainbow	
10 min	Reflection and feedback	








Methods

a. Take a walk in the surrounding/nature

Target group(s):	      
Material	Optionally binoculars, magnifying glass; Animal models and illustrations.
Time needed	Approximately 20 minutes.
Description of the method	<p>The local animal species are introduced to the participants: where they live, what they eat, how they hunt, how much area they need, etc. Tangible animals should be presented for blind and visually impaired people and for participants with learning difficulties.</p> <p>The participants write down the names of the animals on small pieces of paper (pre-printed cards can be used). Each participant chooses a card. Take a short walk in nature and analyse the area from the perspective of the given animal. Binoculars and magnifiers can be used for better observation.</p> <p>For blind and visually impaired people, the assistant or ranger should describe the surroundings. For instance, information on interesting plants can be given. If possible, the objects can afterwards be touched.</p> <p>At the end of the walk, participants discuss their experiences. Which animals the given habitat is appropriate for, and which species would not feel good here.</p>








Methods

b. Diversity of nature

Target group(s)	      
Material	Paper, pen, coloured pencils, pictures, pictograms.
Time needed	Approximately 40 minutes.
Description of the method	<p>Main components of biodiversity: The educator describes the three types of biodiversity.</p> <p>1. Diversity of species. Participants list as many species as possible from the animals and plants they know. They write down the names of each species on a card (cards with pictures can be used for people with learning difficulties).</p> <p>2. Diversity of habitats (ecological diversity). Different species have different environmental needs. Habitats include forests, grasslands, various freshwater ecosystems, islands, coral reefs, and deep-sea areas. Pictorial representations and brief information about the habitats can support the explanations of the nature educators. The participants can now form different habitat groups. To do this, they assign the cards/pictures (which they created in the previous exercise) to the picture with the corresponding habitat.</p> <p>3. Genetic diversity. It refers to the diversity (or genetic variability) within species groups. Participants select a species (e.g. starting with easy species like dog, and then choosing a native wild animal) and discuss what kind of genetic differences can appear within the same species. For people with learning difficulties, this part of the workshop can be offered optionally.</p> <p>Food chain Participants have to select a habitat from the previous exercise and organise the species living there into a food chain. Is an element missing? What is the role of the various species in the nature? With the help of the educator, participants should talk about the role of the species located at each level. What effect do they have on the species located on the neighbouring levels? What would happen if any of the levels disappeared? Participants talk about the balance of ecosystems. This exercise is not suitable for blind visitors. For them, the topic can be communicated in conversation.</p>








Methods

c. Animal diversity

Target group(s)	      
Material	Educational cards (local animal species, footprints), tweezers / needles, paper, cardboard, pens, pencils.
Time needed	Approximately 45 minutes.
Description of the method	<p>Who am I?</p> <p>Each participant receives a picture of an animal typical for the area. For people with learning disabilities, it may help to work with pictures of more familiar animals. For visually impaired people, the pictures should have a high contrast. The pictures are attached to the participants' backs. Now, the participants ask each other questions about their animals, which can be answered with „yes“ or „no“, e.g. „Do I have four legs?“, „Can I fly?“, „Am I a fox?“ Once the correct animal has been named, the picture can be attached to the chest.</p> <p>Sound Map</p> <p>The participants form pairs and spread out in the surroundings with some distance from each other. All should look in the same direction. Sheets of paper are divided into four fields by folding or with a pen. The fields symbolize the cardinal points, the cross in the middle are the participants. Now, all visitors close their eyes for five minutes and listen to the sounds of the surroundings. Afterwards, the sounds are entered on the sound map, sounds coming from the left are entered on the left side of the sheet, etc. Finally, the sound cards are compared and unclear sounds are classified and discussed.</p> <p>In the work with blind people, the map is not being created; the sounds can be explained in conversation.</p> <p>This exercise cannot be used for people with hearing impairments who only use sign language. However, if they carry a hearing aid or cochlear implant, the sounds may be audible to them with an FM system connected to an audio player.</p> <p>Follow the traces</p> <p>The participants receive illustrations or models of animal tracks. Those are introduced and described by the nature educators. Now, the tracks can be searched for and followed in nature. For guests with mobility restrictions, the second part may only be possible with restrictions. The same applies to people with visual impairments. Blind people can be shown good animal footprints in nature.</p>








Methods

d. Plant diversity

Target group(s)	      
Optional Material	A fresh or dried plants (Grating of lavender, lemongrass, mint, lime, elder, camomile, etc.).
Time needed	Approximately 30 minutes.
Description of the method	<p>Fragrant nature</p> <p>At first, the visitors smell plants with open eyes. Afterwards, they are blindfolded and the plants are identified by smell and by touch (rubbing the leaves).</p> <p>My own tree</p> <p>The participants form pairs. One person puts on a blindfold and turns several times in a circle. Now, he or she is led by the participant without blindfold to a tree and asked to perceive it by touching the bark, the smell, the rustling of leaves, etc. The blindfolded participants are led a bit away from the tree by their partners. After taking off the blindfold, the respected tree must be found. Then they change. Through the exchange of experiences and the explanations of the nature teachers, the visitors learn more about the characteristic trees of the area.</p> <p>For blind and visually impaired people and participants with limited mobility, it can be difficult to move between the trees. They need assistance here.</p>








Methods

e. Diverse as a multi-coloured rainbow

Target group(s):	      
Material	Natural materials of all kinds (leaves, bark, grass...), paper, scissors, glue.
Time needed	Approximately 20 minutes.
Description of the method:	<p>Create a rainbow from natural materials.</p> <p>The participants first sort collected natural materials by colour. Then they design a rainbow on a cardboard.</p> <p>If it is difficult for the participants to collect the natural objects themselves, the educator can prepare those in advance.</p> <p>Since colours are not or only partially perceptible for blind and some visually impaired people, the materials can also be sorted according to their size or surface shape and stuck to the paper.</p>

Methods

f. Reflection and feedback

Target group(s)	      
Material	None.
Time needed	Approximately 15 minutes.
Description of the method	<p>The group sits in a circle.</p> <p>You can ask the following questions:</p> <ul style="list-style-type: none"> • What surprised you? • What did you like best? • Which part of the workshop did you like most? Which one did you like the least? • Are there any open questions? <p>The given answers can be noted and collected for a later evaluation.</p>

Ideas for thematic workshops:

Eco-system Lake



Thematic workshops: Eco-system Lake

Works for:










For preparation: offer all information also in a written form and use tactile objects to explain structures.

Total duration of the programme: 3 hours.

Duration	Method/Content	Recommendations
15 min	Welcome <ul style="list-style-type: none"> • Presentation of people who lead and support the programme. • Organisational issues: toilets, water facilities, safety issues. • Introduction to the topic “Eco-system Lake”. • Short introduction to the programme. 	
20 min	Walking on the shore	In case people with reduced mobility are part of your group you have to use a path that is barrier-free. If they walk with a stick, be sure that there are enough possibilities to rest. Make sure that hanging branches or branches from the floor are eliminated. This also benefits visually and hearing impaired participants.
40 min	Water sampling	The suitability of each sequence for individual groups is described below.
15 min	Break	
30 min	Life in water and out on the shoreline	
30 min	Exploring aquatic habitats	
20 min	Let's become creative!	
10 min	Reflection and feedback	

Methods








a. Walking on the shore

Target group(s)	      
Material	Binoculars, magnifying glass, paper, pens, pencils, soil samples.
Time needed	Approximately 20 minutes.
Description of the method	<p>Walking on the shore.</p> <p>The participants walk along the lakeside for about 10 to 15 minutes. During this walk, they consciously perceive the atmosphere (sounds, smells, the weather). If possible, binoculars or magnifying glasses can be used to observe things more closely. Exciting discoveries can be noted down. At the end the participants exchange their perceptions. The guide / ranger moderates and gives further information.</p>

Thematic workshops: Eco-system Lake








Methods

b. Water sampling

Target group(s)	      
Material	Water test kits (e.g. Pack test).
Time needed:	Approximately 40 minutes.
Description of the method	<p>Water test kits can provide important information on the quality of natural waters within a couple of minutes.</p> <p>You should select water test-kits that display as many water quality parameters as possible.</p> <p>Nature educators take a water sample according to the instructions of the water test set. Meanwhile, they explain to the visitors how to work with a water sample, which parameters are analysed and why it is important to measure them. The results are then evaluated and discussed together.</p> <p>If more test kits are available, water samples can also be taken in pairs or in smaller groups. In this case, the groups evaluate their results separately and then discuss the experiences together with the educators.</p>








Methods

c. Life in water and out on the shoreline

Target group(s)	      
Material	Blanket, magnifying glass, net, microscope.
Time needed	Approximately 30 minutes.
Description of the method	<p>Who is on the shore?</p> <p>The participants look for animal tracks on the bank. The nature educators help to classify these tracks (stork, gull, coot, fox, otter etc.). For guests with limited mobility, this programme item may only be possible to a limited extent. The same applies to participants with visual impairments. Here, the tracks can be described and illustrated with good photos. Blind people can perceive good prints of animal tracks in nature (for touching), alternatively, the descriptions of the animal tracks can be accompanied by models.</p> <p>On the shore</p> <p>The participants work in pairs or small groups. They lay their landing nets in the water and/or pull the net through the water plants to catch insects and other small animals. The material is then analysed and explained with the help of the nature teachers.</p> <p>Single-celled organisms can be examined under the microscope; visually impaired participants can also try this out.</p> <p>For blind people, it is recommended to work with models and describe the captured animals, if possible.</p> <p>Lie on the ground</p> <p>The participants lay blankets on the floor and lie on them with their stomachs on top. From this position the animal world (ants, worms, spiders, beetles etc.) should be observed. Magnifying glasses can be used if necessary. Afterwards, all together with the guide / ranger discuss their observations.</p> <p>For blind people and people with reduced mobility, observation on the ground is not very suitable. For these groups it is possible to work with illustrations or tactile models.</p> <p>For all of them it can be a nice experience to simply close their eyes and listen to the singing of the water birds.</p>








Methods

d. Exploring aquatic habitats

Target group(s)	      
Optional Material	Baskets, plant identification books (apps).
Time needed	Approximately 30 minutes.
Description of the method	<p>Let's collect!</p> <p>Participants work in pairs or in small groups. Each couple / group receives a small basket in which they collect water and coastal plants. Make sure that there are no endangered species on the shore or in the lake. Afterwards, the collected plants are identified with the help of a plant identification book or an appropriate plant application. They will be supported by the guide / ranger. The most important plants found should be presented to all participants in a round and their special characteristics and functions discussed. In this context, the plants can be palpated in detail with the hands. If there is a plant of special importance by or in the lake that has not been found or collected, it should be specially mentioned and appropriate material (pictorial representation, if possible plant material) should be provided.</p> <p>For blind people, the independent collection of the water plants, as well as their identification, may be not possible. They can work with prepared plant material and go directly to the description and explanation of the material.</p> <p>Consciously perceive the underground.</p> <p>Describe briefly what kind of soil / rocks / pebbles are found in and around the lake.</p> <p>Then the participants form pairs or small groups again. A partner or a person from the small group blindfolds their eyes and explore the underground with the other senses. There will be a change, so that everyone has the opportunity to consciously experience the underground.</p>








Methods

e. Let's become creative

Target group(s)	      
Material	Natural materials of all kinds (leaves, bark, grass etc.), paper, watercolour / tempera, clay, plaster or kneads.
Time needed	Approximately 20 minutes.
Description of the method	<p>The participants become creative with previously collected natural materials. Leaves, plants, stones, barks etc. are painted with colours one after the other. The painted materials are then used to make prints on paper.</p> <p>Blind participants can press the materials into clay, plaster or kneads.</p> <p>Finally, all participants can discuss the results of the creative time.</p>

Methods

f. Reflection and feedback

Target group(s)	      
Material	None.
Time needed	Approximately 15 minutes.
Description of the method	<p>The group sits in a circle.</p> <p>You may ask the following questions:</p> <ul style="list-style-type: none"> • What surprised you about aquatic plants and animals? • What did you like best? • Which part of the workshop did you enjoy the most? Which one the least? • Are there any open questions? <p>The given answers can be noted and collected for later evaluation.</p>

Ideas for thematic workshops:

Trees and Woods



Thematic workshops: Trees and Woods

Works for:










For preparation: offer all information also in written form and use tactile objects to explain structures.

Total duration of the programme: 3 hours.

Duration	Methods/Content	Recommendations
20 min	<p>Welcome, organisational issues and introduction to the topic</p> <ul style="list-style-type: none"> • Welcome and presentation of the programme guide(s). • Information regarding infrastructure: toilets, water facilities, safety. • Introduction to the topic and regional particularities. <p>Short introduction into the workshop content.</p>	
40 min	Ecosystem forest	Blind visitors need support of a sighted person (assistant or an other group member).
30 min	Plant memory	Blind people pair up with someone who can see the different plant parts.
	Break	
20 min	Excursion through the forest	If people with reduced mobility are part of your group, use a barrier-free path. If they walk with a stick, check if there are enough possibilities to rest. Make sure that potential danger sources are eliminated (e.g. hanging branches). This can also be useful for people with visual and hearing impairments.
15 min	The age of a tree	For people with learning difficulties, it is possible to use other measure scale like “which tree is older” depending on size/form.
40 min	Create your own tree – tactile picture	Blind people and people with motor impairments of their arms and hands are supported by their accompanying person or assistant. The same applies to participants with learning difficulties.
15 min	Reflexion und Feedback	








Methods

a. Ecosystem forest

Target group(s)	      
Material	Moderation cards, pencils, wool or threads, if possible: animal models, and plant material.
Time needed	Approximately 40 minutes.
Description of the method	<p>1. A habitat and the organisms living in it form an ecosystem. In order to get an idea of the forest ecosystem, the participants find themselves in pairs. They pick a place close by or in the forest, look around and feel the surrounding.</p> <p>2. They should think about what organisms might be found there (trees, shrubs, mushrooms, insects, bacteria, all kinds of plants and animals). The names of all the organisms are written on cards. For participants with learning difficulties, the written names should be supplemented by pictograms.</p> <p>3. Then, the participants discuss which organism belongs to which one of the following groups: producer, consumer or a decomposer in the forest.</p> <p>4. In the next step, the participants should find as many connections between the different organisms as they can and put a string between the cards with connections.</p> <p>5. In case important connections are missing, the educator adds new connections and explains terms that are not known to everybody. Animal models and plant material can be used at this point. The additional connections can be integrated into the string-network. Afterwards, the participants pick up the strings and each one of them represents one of the organisms. Blind people should be paired up with a person with sight to tell them what is happening.</p> <p>The educator may now explain how the balance of the forest depends on all those organisms. There is room for discussion about what happens if one group of organisms is harmed and the natural balance is damaged. This can be seen and felt, when the participants let go the strings one by one, whenever a connecting organism is taken out of the net. The educator may also decide which organism drops out first or asks for a volunteer.</p> <p>Variation: Reduce the number of organisms for the string-net and only use simple ones. The participants can represent organisms in pairs or small groups.</p>

Methods








b. Plant memory¹

Target group(s)	      
Material	Pencil, paper, camera.
Time needed	Approximately 20 - 30 minutes.
Description of the method	<p>1. The participants pair up. Every pair has to find two leaves, flowers or fruits from two different trees or plants and bring their findings to the educator.</p> <p>2. When everybody has returned, the educator reveals all the names of the plants, fruits or flowers. Everybody can touch them. The participants are asked to keep the names in mind.</p> <p>3. Then all the “treasures” placed under different yogurt cups or under a scarf.</p> <p>4. The participants then have to find pairs like in a memory-game. Everybody chooses two items and if they are the same, they can name them and put them aside. Every revealed item can be touched by the other participants.</p> <p>5. In the end, all the leaves, flowers and fruits are laid out and named again.</p>

¹ www.umweltdachverband.at/assets/Umweltdachverband/Publikationen/Eigene-Publikationen/2013-Broschuere-Biodiversitaet-erlebbar-machen








Methods

c. Excursion through the forest

Target group(s)	      
Optional Material	Rope.
Time needed	Approximately 20 minutes (this can vary a lot; include time for a short break if required).
Description of the method	<p>1. Before the excursion, the educator has to find a trail that is accessible for all participants.</p> <p>2. The visitors meet in pairs. One partner closes or blindfolds their own eyes, the other person leads him or her through a part of the forest.</p> <p>3. The group is asked to walk through the forest in silence, to listen to all the noises or to try to observe the forest floor. The different smells of the forest can be perceived.</p> <p>4. Afterwards, the participants share their experiences and the educator explains the specialities of this type of forest (plants, animals, history, geo-chemistry, stories or myths). Playing bird voices is also a nice option. You can use stones or plants collected along the way to support your explanations.</p>

Methods








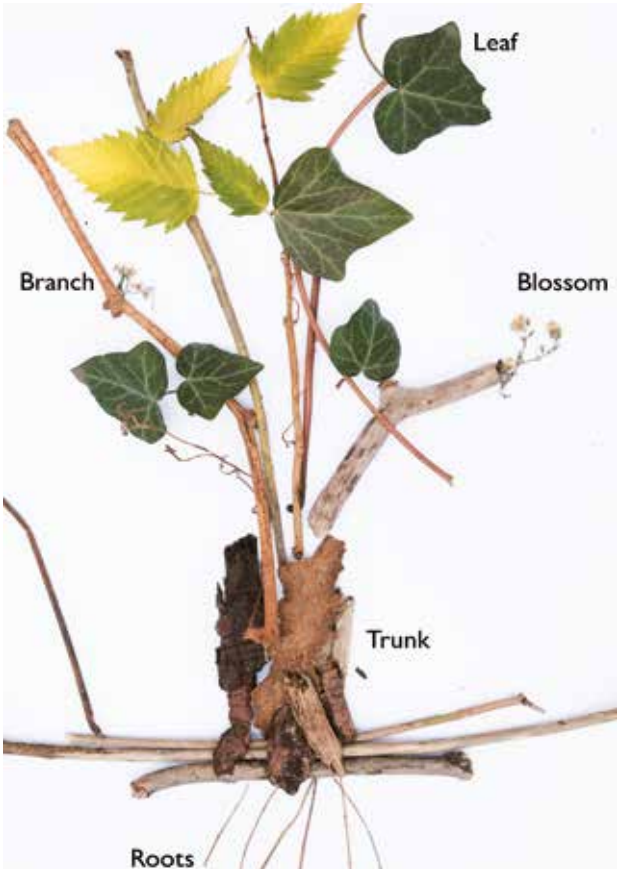
d. The age of a tree²

Target group(s)	      
Material	Pencils, paper, measuring tapes.
Time needed	Approximately 15 minutes.
Description of the method	<p>1. The participants pair up. Every pair gets a tape measure. The pairs are asked to find a tree, which is at least as tall as a grown up person, and lay the tape measure around the widest part of the trunk horizontally to measure the circumference.</p> <p>2. The participants write down their measurement or keep it in mind.</p> <p>3. The measurement of the circumference in inches (1 inch = 2,54 cm) is also the approximate age of the tree in years! The following formula helps to calculate the age of a tree:</p> <p>circumference of their tree in cm/2,54 = age of the tree.</p> <p>You may now search for a tree that was cut down (= stump) and explain the calculation of the age of the tree with help of the tree rings. Then one or two participants lay their measuring tape around this tree. Thus, it becomes possible to compare the two methods.</p>

² www.education.com/activity/article/How_Old_Are_They

Methods








e. Create your own tree – tactile picture ³

Target group(s)	      
Material	Pencils, paper, natural materials of all kinds (leaves, bark, grass etc.), other materials, glue.
Time needed	Approximately 40 minutes.
Description of the method	<p>The participants can explore trees of different types and sizes by just touching them. Those who wish can close their eyes.</p> <p>After that, the participants are asked to create a tree poster based on one of the trees that they explored with their hands. They may use the provided material and/or natural material they find in the forest. Later, they are invited to arrange and glue the materials on sturdy paper.</p> <p>Afterwards they may write the designations for the different parts of the tree on separate cards to fix it next to the part in the picture.</p> <p>In the end, the artworks can be presented to the group.</p> 

³ www.pathstoliteracy.org/strategies/supporting-tactile-images-real-experience-and-concrete-materials

Methods

f. Reflection and feedback

Target group(s)	      
Material	None.
Time needed	Approximately 15 minutes.
Description of the method	<p>The group sits in a circle and the educator may ask the following questions:</p> <ul style="list-style-type: none"> • What surprised you in the forest? • Which part of the workshop did you enjoy the most? Which the least? Why? • Are there any open questions? <p>The educator could gather the provided answers and add information that he or she thinks is important to remember for the participants.</p>

Ideas for thematic workshops:

Bird Watching



Thematic workshops: Bird Watching

Works for:



For preparation:

Check with the participants / organiser of the trip for:

- Experience of the group in bird watching and field outings.
- Need for binoculars or whether they take their own optical equipment.

Advise participants to wear clothes appropriate for possible weather conditions in the destination area.













Prepare plates with bird drawings and/or audio recordings of bird songs

Total duration of the programme: 1 to 5 hours.

Duration	Methods/Content	Recommendations
15 – 30 min	<p>Welcome</p> <ul style="list-style-type: none"> • Presentation of people who lead and support the programme. • Organisational issues: toilets, water facilities, safety issues. • Introduction to bird watching and tips on behaviour while birdwatching. • Short introduction to the programme. 	<p>In case people with reduced mobility are part of your group, you have to use a path, which is barrier-free.</p> <p>Make sure that branches hanging or on the floor are removed. This also benefits visually and hearing impaired participants.</p> <p>Do not forget to check your bird watching equipment.</p> <p>For a group with blind participants, you can focus on bird songs.</p> <p>When working with deaf and hard of hearing people, choose a place where birds are easy to see. Open waters or city parks are ideal, the forest is not suitable.</p>
30 min (or more)	Field activities: bird watching with optional programme (games, competitions)	<p>For beginners and for people with learning difficulties bird watching should not exceed 2 hours.</p> <p>The best season to hear birdcalls is spring, early in the morning or evening.</p>
15 min	Reflection and feedback	

Methods








a. Field activities: possible approaches for bird watching

Target group(s)	      
Material	<p>Information plates (well structured and rich in contrast), audio recordings, optical equipment, optionally: sound recorder, smartphone app(s), camera Also group-dependent:</p> <p>   : bird models or relief drawings of bird silhouettes, feathers or stuffed animals. </p> <p>   : written instructions, drawing board/ sketchbook; optionally: large screen tablet. </p> <p>  : paper (sketch blocks), colouring sheets, colour pencils (crayons); optionally: simplified field guide books. </p>
Time needed	Depending on the group (1 to 5 hours).
Description of the method:	<p>1. At the beginning (in the house or in the field), the bird song is introduced and its role in bird biology is explained. Here, you can dwell upon the possibilities of recognising birds by their appearance. Indicate the parts of the body that are important for proper recognition and classification. For visitors with learning difficulties, focus on explaining why birds sing. It is useful to show the pictures of birds that are expected to be seen during the tour. For guests who are hard of hearing or deaf, explain pictures using brief written material or, depending on the composition of the group, use a sign language interpreter. This is followed by a listening exercise with prepared sound samples. Afterwards, the participants can try to imitate the singing (rhythm, pitch, changes, etc.). For participants with learning disabilities, explain the main differences between the birds you are talking about such as size, colour, shape, and play different songs if possible. Explain the use of the equipment if available.</p> <p>2. One person shows an image from a distance, another person looks through the binoculars and describes it. Using the description, the other participants try to find the bird on a set of cards or in the field guide. Important: For visually impaired people and visitors with learning difficulties, this exercise is not suitable or suitable only to a limited extent!</p>

3. Walk in nature with explanations.
 4. Listening to the sounds of nature. Hearing impaired and deaf guests concentrate on the described features of the appearance of individual species.
 5. **Important:** When working with visually impaired people, please go straight to exercise 6!
- Description of birds that the participants have discovered in the field (comparing different birds seen at the same moment, etc.):
- a. Find the biggest bird, bird with the longest beak, etc.
 - b. Naming the bird species according to their appearance, based on the information given by the nature educators.
 - c. Pointing out differences between single birds.
 - d. Counting birds of the same species: Explain, why counting birds is important to scientists.
- Variation for guests with learning difficulties: Birds seen are described by the participants. The nature educators connect the descriptions with the names of the birds. Different birds seen at the same moment are compared in colour and size. Corresponding bird pictures can be coloured.
6. **Important:** This exercise is not or only partially suitable for deaf and hard of hearing visitors!
- Discussing the birdsongs, analysis of the songs:
- a. The participants try to repeat songs heard in the field. The guide names the birds heard.
 - b. The participants suggest words that best characterize the songs; the guide can give examples of traditional phrases, such as „nice to meet you“ sung by the Common Rosefinch.
 - c. Counting the birds singing a particular song (played or imitated by the guide).
 - d. Naming the birds according to their song, based on the information given by the nature educators.
7. **Further options:**
 - a. Recording the birdsong.
 - b. Photographing or filming birds (if appropriate under the given circumstances).
 - c. Observation of live birds during the ringing plan. Touching live birds during ringing is, as an exception, particularly interesting and exciting for people with visual impairment.
 - d. Autumn visits to places with concentrations of birds rich in noise and large spectacular flocks of birds, such as water reservoirs.

Methods

b. Reflection and feedback

Target group(s)	      
Material	None.
Time needed	Approximately 15 minutes.
Description of the method	<p>The group sits in a circle.</p> <p>You may ask the following questions:</p> <ul style="list-style-type: none"> • What surprised you about birds? • Which part of the workshop did you enjoy the most? Which the least? Why? • Are there any open questions? <p>The given answers can be noted and collected for later evaluation.</p>

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