

THE SCHOOL NETWORK IN PROTECTED AREA

Guidebook for Protected Areas and Schools

Publisher

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To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.



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Introduction

Protected Areas are frequently home to threatened and irreplaceable biodiversity. They are therefore rightly recognized as centers of conservation of habitats that are vital for the survival and prosperity of numerous species. It is important that Protected Areas also become centers for education, in order to prepare and inspire a new generation to achieve our global and local conservation goals.

Protected Areas in the Adria region are rich and diverse in species, habitats and cultural heritage. As such they have great potential to become exceptional open air classrooms for environmental education and experiential learning. Supported by structured education programmes and trained educators, Protected Areas are undoubtedly excellent places for children and young people to learn about nature and gain the problem-solving, critical thinking and team-working skills they need in the 21st Century.

Since 2016 WWF Adria has impemented the project "Protected Areas for Nature and People", which is designed to enhance communication between Protected Areas and the local community, to better include local communities in the management of Protected Areas, and to develop educational programmes for children and tourism offers that will improve visitors experience and drive the development of the Protected Areas. Our journey into environmental education in protected areas began with the programme "WWF Nature Academy", which was conducted in cooperation with five Protected Areas in Serbia, 23 dedicated teachers and around 300 children from primary and secondary schools. This programme demonstated that working simultaneously with Protected Area staff, teachers and students, by bringing them together and creating conditions in which they can develop and implement activities



Škocjan Caves Park © WWF Adria

together, leads to better learning outcomes and to common understanding of needs, highlights the benefits of and potential for further cooperation, builds trust and strengthens relationships as a basis for fruitful long-term partnerships that benefit everyone involved.

Following the success of the WWF Nature Academy in Serbia, WWF Adria and our partner Park Dinarides decided to launch a new regional education project covering Bosnia and Herzegovina, Montenegro and Serbia, which aims to further strengthen cooperation between communities and Protected Area authorities through establishing School Networks in the Protected Areas. School Networks aim to create long-term and efficient partnerships between local schools and a Protected Area that is bound by the common goal of preserving local natural and cultural heritage in a way that contributes to the wellbeing of the local community.

We have created this guidebook, The School Network in Protected Area, for Protected Areas managers that want to work togeher with local teachers to develop educational programmes or improve existing ones, and for schools that are interested in conducting their school curiculla in the amazing environments of Protected Areas.

In the chapters *Learning about nature through play* and *Educational Activities and Critical Thinking* we explain how to develop educational activities and in *Annex 1 - Learning about nature through play - Description of activities* we provide detailed explanations of examples of activities.

We hope that you will use this guidebook to create your own School Networks. The Guidebook is designed to help you established longlasting and effective cooperation with partners, develop detailed plans and implement dynamic and interesting activities with children, and to promote and celebrate your success stories in your local communities and gain their support to acheive our common goal: Nature conservation and preservation of cultural heritage.

We value your knowledge and skills. The ideas, knowledge and inspirational stories shared with us by Protected Areas' staff and teachers that we have been working with are included in this guidebook. If your are interested in contacting one of our existing partner Protected Areas to learn more about what they have done already through the School Network, you will also find them listed at the end of the guidebook.

Our guidebook concludes with the chapter *Building the reputation of the School Network*, by Vanja Debevec, coordinator of International Schools Network and Universities Network in Škocjan Caves Park in Slovenia. Our model for the School Network that is described in this guidebook was inspired by the Škocjan Caves Park School Network, where the Park staff has worked closely with teachers from local schools for more than 15 years, jointly developing programme using a scientific and problem-solving approach, in which children learn about the importance of preserving their natural and cultural heritage.

We hope that this guidebook will inspire you to create a School Network of your own because, in the words of one teacher from Škocjan Caves Park School Network, "the School Network is Heaven".

Jovana Dragić May and Sonja Bađura, WWF Adria Education programme

Nature for All

In the world we live in today, it is easy to see that many groups are marginalized and do not have equal opportunities for inclusion and integration. 15% of the world's population is estimated to live with some form of disability¹, including limited sensory abilities or limited mobility. The ubiquitous alienation of people from nature and a sedentary lifestyle that is dependent on digital media means that time spent in nature, particularly when we are active, offers multiple benefits for everyone. Sharing and learning through activities in nature, particularly through inclusive workshops that are adapted for all participants, is a valuable experience that brings new insights and raises the quality of life of children with and without disabilities. We perceive nature, as well as arts, through our sensory system; both can be enjoyed by people with disabilities alongside all other members of society. Plants can be observed and experienced in tactile, olfactory, auditory and sometimes even gustatory ways. By conducting activities in nature we create space for inclusive education and the acquisition of new experiences for children with and without disabilities together.



WWF Nature Academy © WWF Adria/Milica Milović Kinol

In nature various opportunities arise for movement, spatial orientation and greater awareness for our bodies. Sensory integration, self-activeness and -initiative, attention, concentration and perception, as well as creativity, imagination, aesthetics and critical thinking, are all promoted and enhanced by being in nature. Participants can acquire knowledge about the connection between nature and its inhabitants, and how nature is changing, which in turn contributes to the development of ecological consciousness. By sharing a common experience, children with and without disabilities learn about each other and about themselves, discover similarities and differences, share positive common experiences, connect with each other and gain a better understanding of the importance of teamwork and collaboration, which encourages them to develop new relationships and responsibilities. This leads to a better psychophysical balance, reduces stress, and heightens relaxation, which is important for healthy growth and development.

World Health Organization (2011). World Report on Disability. [online] Available at: www.who.int/disabilities/world_report/2011/report/en/

Through the "School Network in Protected Areas" and similar projects, we create opportunities for children with disabilities and other marginalised children, such as children from minority groups and children that live in rural and highly inaccessible areas, to actively participate in the community and contribute to the sensibilisation of society towards marginalised groups. By promoting social inclusion and diversity we also contribute to changing conservative and traditional ways of thinking that negatively impact on minority groups. Active inclusion of marginalized groups in community life and rejecting stereotypes of 'others' that are 'different' opens up a path towards the development of a healthier and richer society, where everyone can benefit from and contribute to nature conservation.



Universal design trail in Tara National park © Tara National park/Ranko Milanović

Learning about nature through play

Nature provides us with diverse resources that are necessary to live our lives, but it also offers a wide range of services, such as water purification, forming soil, and climate regulation, and provides us with places for play, relaxation and recreation. Nature is the basis of everything alive.

Nature conservation is not only a subject about facts and scientific data. If we want to learn about nature, we must activate all our senses; and in order to understand nature's significance and our place in it, we must utilize experiences and emotions! Only then are we ready to move from words to deeds and take an active role in nature conservation.

Emotions are therefore an important aspect of nature conservation. Call it love, call it enthusiasm, call it curiosity...if we don't awaken people's emotions toward nature we will not succeed in protecting it.

Take students to nature and enable emotional, cognitive and group experiences. Touch hearts and use hands and minds. If you carefully select methods and apply them consciously in an appropriate order, in a short period of time you can create the conditions for a deep learning experience.

We need to spark a deeper connection with peoples' hearts and stop speaking only to their rational minds.



National park Tara © WWF Adria/Milica Milović Kinoli

Through interpretation – understanding; Through understanding – appreciation; Through appreciation – protection.

(Freeman Tilden, 1957)

The activities listed in *Annex 1: Learning about nature through play - Description of activities* can be used outdoors, and with few adjustments you can use some of them in the classroom too. For several activities we gave suggestions on how to adapt them for children with disabilities and how to conduct the activity in an inclusive way. Nature for ALL!

The key elements of a successful outdoor programme

Step by step towards the desired goal	What to do during each phase	Choosing the right method
Start where the group is!	Right at the beginning try to find out the mood of the group by observing them or asking direct questions.	
Create a good atmosphere from the very beginning.	1 – The group is stepping out of the bus after a long journey and is keen to get moving and get involved in activities.	1 - The orbit 2 - Metamorphosis walk 3 - Kitchen clock
Use the first activity to approach the group and the topic that will be addressed during the day.	2 - The group arrives tired after a long bicycle ride.3 - The group is timid and they do not know each other yet.	3 - Kitchen Clock
Emotions first!	Let nature touch kids emotionally first. Ecological knowledge comes later. Experience nature with all your senses!	
Begin with an emotional approach to nature!	Visual sense	Frame it, Photo click Smelling memory
Experience nature with all your senses!	Sense of smell Sense of hearing Tactile sense	Sound map Find your tree
Create calm and focus attention for nature observation	Attention focusing activities help us to sit or stand still and to be silent. They make us focus our attention, often using a setting in which the group forms a circle. Becoming attentive and receptive to nature will deepen our nature observation experience.	Toad concert Sound map
Enjoy observing nature!	Take your time. Chose a comfortable position. Focus your senses, e.g. while observing or listening to birds.	

Step by step towards the desired goal	What to do during each phase	Choosing the right method
Trigger and cherish curiosity!	Storytelling takes us into new worlds. You are about to discover a new habitat and its species.	The monster
It's time for action! Let's actively explore nature!	By using equipment like nets and magnifying glasses we can get very close to nature and explore it from new perspectives.	Net dipping and observing insects in a meadow
Encourage kids to gather more information!	Where exactly does a particular species live? What it needs to be alive? Questions make us observe more carefully and look for information from various sources.	Using classification books and internet sources
Process the information in a playful way!	Choosing and playing the role of a species that was found in the previous observation activities helps children identify with a particular part of nature	Who am I?
Help kids to feel and understand. Every part of nature is important! Everything is connected! We are part of nature and rely on nature!	All the species found in the previous observation activities, including people, are connected and depend on intact habitats. Human interventions that harm one species or habitat will affect all the other species as well. Think, talk, reflect and share your opinions with others.	Web of Life Food web
Look at things from a broader perspective! Nature is in our hands!	We decide how to organise our lives and our relationship with nature. We can imagine a better world. Let's practice giving more space to nature and using it wisely.	Mini national park
Look at things from a broader perspective! Every habitat counts!	One protected area is not enough! We need a lot of protected areas where nature is respected. And they need to be connected. Use a simulation game to show this in a fast, interesting and joyful way.	Stepping stones
Imagine solutions and prepare to get active! It is up to us!	How can we protect biodiversity and live well using natural resources wisely? There are many ways to achieve these 2 goals. Right now we jump into real life and get active. Imagine solutions and present your arguments. The future is ours!	Role play, debate, long-lasting experiments.

Educational Activities and Critical Thinking

Why is it important?

Protected Areas and schools have joined together around a common idea: To create a network of professionals who will work together to help young people understand the importance of protecting our natural and cultural heritage and become allies in achieving our conservation goals. We call this idea the School Network.

To cultivate these young minds we will need to join forces and undertake specific educational activities that are designed with this goal in focus. In the School Network, Protected Areas will play a vital role of knowledgeable guardians of our natural heritage, and schools and teachers will play the equally important role of keepers of knowledge and experts about learning.



Dbedska bara Special Nature Reserve © WWF Adria/Milena Dragović

Let us begin with a story.

Role-play scenario:

Imagine that there is an old forest. Half of this beautiful old forest is protected and the other half is not. It is a habitat with many species that interact in extraordinarily complex ways. One of these species is a rare bird that enjoys a nice meal of caterpillars. This has an important consequence for the forest ecosystem: by eating the caterpillars the rare bird regulates the size of the caterpillar population in the

forest. If the population of caterpillars grows too large, they will threaten near-by orchards, which are important for a very specific species - humans.

Most of the local human population makes a living by selling fruit from the orchards. You live in a small settlement of hard working but happy people. Your daily routine revolves around physically demanding work.

Most of the people in your settlement take pride in this unique and beautiful natural environment and there have been many discussions about expanding the borders of protected area to include more of the old forest.

You are responsible for all people in your settlement. They have put their trust in you because you have shown your determination to protect the harmony of this little piece of paradise many times. For this reason the community has just chosen you to be the mayor for the third time. Take a few moments to get into the role.

One day you witness a familiar scenario: A big international forestry company has offered money so that they can exploit the forest. But this time is different. The amount of money the company is offering is very substantial – twenty times more than last time. It would be enough for everyone in your small settlement to live much more comfortably. But at what cost? You know that cutting down the forest may affect the ecosystem of the protected area and beyond.

You are aware that the procedure of expanding the protected area to include more of the old forest is initiated, but the process is still ongoing and a decision has not yet been made by the national authorities.

You know that a community meeting is needed in order to decide what to do about the offer from the big international forestry company. What will you do?

This role play story is one of the many activities² that can be used to achieve our goal. And the best thing about it is that it can be easily adapted to the challenges facing your Protected Area.

You can define the roles of the key people in this scenario, such as the mayor.

Perhaps there are elderly members of community, who go to forest each season to pick herbs for natural medicines, using recipes that are centuries old and which are famous in the region.

There could be an orchard owner - an influential local businessperson who already lives well and employs a lot of people.

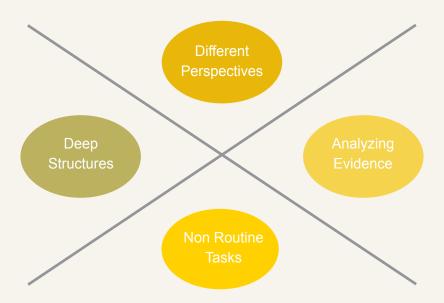
There might be people who enjoy the locally grown fruit and are concerned that the quality will be reduced.

The representatives of the protected area and a local environmental association are firmly against this deal and want to preserve the forest ecosystem and local heritage of the area.

² Annex 1 - Learning about nature through play - Description of activities

What ideas do you think a discussion between playing these people will spark? What are the strategies that each role-player will need to use to achieve their own goals? What alliances will they have to make? What are the important arguments that each role-player will have to use in order to convince the others that their perspective is the most important? The combinations are almost limitless!

This kind of activity highlights the *different perspectives* people can have. That's exactly what we are going to learn about on the next pages.



Different perspectives

Different perspectives are one of the four elements of a concept known as critical thinking. You might have heard of this concept, but the question is how do we use critical thinking in everyday life and does it help? Let us walk you through the concept of critical thinking by using a familiar example.

Different perspectives are very important for all environmental issues, because there are often many stakeholders that are interested in protected areas, usually for very different reasons.

All people, including those from our story, need air, water, and other natural resources; but they also need other services provided by nature, which we often refer to as ecosystem services. Forests, for example, prevent erosion, regulate the local climate, and purify water, among many others. People also need healthy ecosystems that are rich in insects, which pollinate the flowers in their gardens and the fruit trees in their orchards. Some people might make a living by collecting mushrooms, which grow abundantly in the specific local climate of a forest, or from fishing in the clean waters of the streams and rivers around the forest.

However, the big international company is also interested in the forest. They have calculated that they could make a good profit quickly by cutting down the trees and they offer jobs for local people, which are always welcomed. But they have not included the long-term impact of their actions in their calculation.

This story has been told many, many times... In order to solve such a complex challenge, we need to *analyse* all these perspectives and find common interests.

Activity example³:

- Role plays (like the example above)
- Who am I?
- Stakeholder council
- Stepping stones

Analyse evidence

It is quite common for people to do things because of habit and to make decisions without evidence. Let us tell you an anecdote:

Two students shared an apartment during their studies. One of the students wanted to fry a fish. Before putting the fish in the frying pan, he cut off the fish's head and tail. A friend asked him why he did this. The student replied: "Oh, I don't know. My mom always did it. I'll call her and ask".

And so he did: "Hi, mom. Why do we cut off a fish's head and tail before we fry it?" the student asked.

"Well", the student's Mom said, "I have never thought about it. Granny always did it that way. I'll ask her".

And so she did: "Hello" the student's Mom said. "Why do we always cut off the head and tail of a fish before we fry it?"

"Oh, do you remember that small pan we used to have?" said Granny. "You had to cut off the head and tail in order for the fish to fit into it".

Habits are formed because something made sense in a certain context. But contexts change. So we need to analyse the evidence over and over again. This is especially important when making decisions about environmental issues. Not only should different perspectives be considered, but the evidence provided by each stakeholder should be thoroughly analysed.

Activity example⁴:

- Dichotomous determination keys (based on the leaf or fruit of a tree)
- Net dipping
- Catching insects in a meadow and observe them
- Reading animal tracks
- Sampling method

³ Annex 1 - Learning about nature through play - Description of activities

⁴ Annex 1 - Learning about nature through play - Description of activities



Stara planina Nature park © WWF Adria/ Igor Đorđević

Non-routine tasks

Routine tasks are those that can be solved by using well known and practiced methods. The solution just needs to follow some sort of (exact) procedure. Non-routine problems need solutions that are new. The solution to a non-routine problem cannot be rehearsed or practiced as a sequence of steps. It is not predictable. The solution requires people to combine knowledge and experience in a completely new way and add something new into the mix.

The majority of environmental issues are non-routine tasks, because there are always complex factors in nature that create specific and unique circumstances. This is why we need to analyse the available evidence and then create original solutions. Although knowledge and experience are valuable, new solutions cannot just replicate what we have already done.

Activity example⁵:

- Mini national park
- Rivers connect us

Deep structure

Deep structures are the concepts and principles behind a superficial story. Every Protected Area has its own story, and they can seem quite different. What do they have in common? They are all based on ecological principles. Therefore, our goal is to educate people about the most important of these principles: the water cycle, matter cycle, food web and the interdependence of species.

⁵ Annex 1 - Learning about nature through play - Description of activities

Activity example⁶:

- Stepping stones
- Food web
- Web of life

As you may have noticed, many of the activities we have mentioned involve more than just one element of critical thinking. And that is OK. If you are going to consider different perspectives you need to look for the evidence they offer. And it is easier to look for a solution to a non-routine problem if you are able to examine the problem's deep structure.

Based on these elements we can say that critical thinking is not an abstract academic skill; rather it is a skill that we all need to use in everyday life. We make decisions by using critical thinking. When we evaluate information, a product, a book or a video, we use critical thinking. When we listen to a discussion and try to understand the evidence provided by different sides, we use critical thinking.

To sum up: In order to think freely, make judgements based on facts (not on prejudice or beliefs) and make responsible and good decisions, we need critical thinking.

The term critical thinking does not correspond to one specific mental activity. It is actually made of three types of thinking: reasoning, making judgments and decisions, and problem solving.



Škocjan Caves Park © WWF Adria/Jovana Dragić May

⁶ Annex 1 - Learning about nature through play - Description of activities

We use these skills on a daily basis. We use them when we make the decision to organize educational activities in a Protected Area and when we solve organisational problems. But are we using all the elements of critical thinking during these processes? Not necessarily.

Do representatives of Protected Areas analyse activities with teachers in order to identify if learning objectives have been achieved? Do we work together or are responsibilities divided?

By asking these questions and including them in the process of planning and/or evaluating activities we are actually using all three aspects of critical thinking. In doing so, we are trying to find the best possible outcome for everyone involved: the Protected Area, teachers, children and nature.

Critical reasoning, decision making, and problem solving have three key features: **effectiveness**, **novelty**, and **self-direction**.

- Critical thinking is effective because it can help us to avoid common mistakes, such as seeing an
 issue from only one perspective, discounting new evidence that contradicts our ideas, reasoning
 with passion rather than logic, or failing to support our arguments and ideas with evidence.
- Critical thinking is **novel** in that we don't simply re-use a solution that has been applied in
 another similar situation. We need to think about new, innovative solutions that fit the specific
 context we are dealing with.
- Critical thinking is **self-directed** in that the person doing the *thinking* must make decisions themselves: We wouldn't give a student much credit for critical thinking if a teacher is prompting each step that the student takes⁷.

It is very important to always remember that critical thinking does not work without context. Critical thinking that is not applied to a context is like a powerful computer without software. At the same time, this means that critical thinking can be practiced in wide variety of contexts. Protecting the environment, nature, and cultural heritage are excellent subjects to use critical thinking.

⁷ Willingham, D. (2007). Critical Thinking Why Is It So Hard to Teach? [online] Aft.org. Available at: www.aft.org/sites/default/files/periodicals/Crit_Thinking.pdf

The School Network in Protected Areas

Before we begin discussing how to form and maintain a School Network, we need to define what a School Network is. In our case the School Network is defined as:

A long-term and efficient partnership between local schools and a Protected Area that is bound by the common goal of preserving local natural and cultural heritage in a way that contributes to the wellbeing of the local community.

This definition includes many important points that we will discuss in more detail.

We will start with the benefits of the School Network and the reasons why you should embark on this journey.

What are the benefits of a School Network?

Benefits for Schools

Improving learning

School systems tend to be focused on factual knowledge. Sometimes this is due to the curriculum, sometimes it is due to teaching practices, and sometimes it is due to a lack of resources; most often it is a combination of all these factors.

Learning from experience is crucial for motivation, critical thinking and knowledge retention. As mentioned earlier in this guidebook, the only way students (or any learner) can grasp a concept is through their own experiences and by making their own neural connections. However, this is not the end of story. We must not forget that only a well guided verbalization of an idea can lead to the formation of a concept in a person's mind.

Fifteen years of cooperating with Škocjan Caves Park has proven to us that the School Network is a joint creation of experts, pupils, mentors, local citizens that links together science, everyday life and society in promoting awareness of sustainable development and conservation of our natural and cultural heritage.

In learning about sustainable ways of life, smart use of natural resources, conservation of natural, cultural, and civilizational heritage and values, the vision and programme of Škocjan Caves Park School Network offers a unique case of inclusion of pupils in research activities. As a school principle, I was able to be part of many discoveries made by children in the School Network. I was impressed by children's confident performance in public, where their contentment and self-confidence on their path of education was evident.

Damijana Gustinčič, school principle, Dr. Bogomir Magajna Primary School, Divača, member of Škocjan Caves Park School Network, Slovenia

⁸ Public Service Agency Škocjan Caves Park (2018). Children of the Reka River - 15th anniversary of Škocjan Caves Park Schools Network. Debevec, V., Kranjc, D. (eds.)



Škocjan Caves Park School Network © Škocjan Caves Park/Vanja Debevec

This leads us to some alternative hands-on learning activities that are easily practiced in nature. There are also opportunities to conduct experiments in nature, including those that take days or weeks, or even months, to complete.

Examples of hands-on learning activities: learning to recognise species using a determination key, reading animal tracks using a guide, estimating population density, and planting seeds.

Protected Areas offer contexts for project-based learning and topic-based learning. The main difference between these two approaches is that in topic-based learning students investigate different aspects of a topic and in project-based learning students solve a problem or make a product.

School subjects that can be taught in Protected Areas include: biology, environmental sciences, history, geography, sociology, economics and physics, as well as others.

Projects can be created around real situations that affect the local community and a Protected Area.

Topic-based learning examples:

- **Floods** the biological importance of flooding, physics of flooding, historical aspects, dam engineering, modelling flooded areas, and sustainable solutions for flood prevention...
- **Forest** the biology of trees, species that live in forests and their ecological interactions, the wood wide web, forestry, tourism, ecological benefits of forests, history of land use, and sustainable uses of forests...

Project-based learning examples:

- Weather monitoring stations
- How did people deal with floods in the past (social research)
- Proverbs of local people related to nature (social research)
- Composting
- Constructing an insect hotel
- Maintaining a local garden
- Building animal shelters
- Waste reduction programme
- Water quality monitoring
- Modelling an ecosystem
- Research about local sustainable products



Škocjan Caves Park School Network © Škocjan Caves Park/Tomaž Zormar

Involving children in activities such as these has a large number of benefits that surpass the topic-specific and cross-curricula knowledge they gain. There are also **unexpected results** - because children work in teams, they develop important social skills and teamwork skills. Children that are not among the best in the classroom might be the most enthusiastic and reliable when they learn in nature. Working together on an outdoor project also strengthens bonds between group members, which supports teaching in schools. Children also improve and enrich their vocabulary.

Nature provides extraordinary opportunities for teaching and encourages the infinite imagination of students. Teaching in nature, in addition to helping students to relax, encourages them to navigate in new circumstances and enables them to learn from experiences that lead to everlasting knowledge. In this way, the curriculum is connected with real life. Also, teaching in nature influences the creation of high quality relationships between the students as well as feelings of commitment to common goals. It is also very important that this way of teaching can be organized through interdisciplinary content from various subjects, which enables students to explain the real world around them, and not only from a textbook or the virtual world.

Fahrudin Bičo, geography teacher, Druga Primary School, Ilidža/Hrasnica, member of the Cantonal Public Institution for Protected Natural Areas of the Canton of Sarajevo School Network, Bosnia and Herzegovina

While investigating topics and conducting research about species and habitats we can enhance children's understanding and respect for human rights and cultural diversity as well. Relationships with and traditional uses of nature differ from culture to culture – for example, in the way herbs are used and shelters are built, in the way nature can hold sacred importance and nature and natural resources form the foundation around which various communities are built. Understanding diversity helps children develop respect for diversity.

Knowing, respecting and protecting local heritage

What we do not know, we cannot love or protect. Thanks to the media, children often know more about exotic threatened species on the other side of the planet than they do about endangered species locally. Spending time in nature and learning in and about nature helps children develop bonds with local species: And bonding means caring. This is relevant not only for local natural heritage, but for our cultural heritage as well. Understanding the interconnections between our local natural and cultural heritage also strengthens our feelings of belonging and becomes part of our identity. If I belong to my local environment and it belongs to me, I care for it!

Children are our best allies for protecting nature. Education of children and partnerships with schools are very important aspects of protecting and promoting the natural and cultural heritage of Djerdap National Park. We have signed cooperation agreements with schools and are expanding our network. We have formed a group of "Small Rangers of Djerdap National Park" for preschool children and "Young Rangers of the Djerdap National Park" for primary school children from Majdanpek and Donji Milanovac. Our "small" and "young" rangers are honoured to be called ranges and proudly wear t-shirts with a logo that they designed themselves.

Marija Milenković-Srbulović, Associate Expert for Education, Djerdap National Park, Serbia

People who spend time in nature gain numerous benefits, and they only start with fresh air and aesthetic pleasures. Here are some more:

- Being outdoors and exposed to sunlight increases vitamin D production in our skin. Vitamin D
 is necessary for tooth and bone growth and for muscle and nerve functioning. Of course, long
 exposure to the hot sun should be avoided!
- Spending time in nature improves our brain activity, including concentration, working memory and short-term memory.
- Time spent in nature decreases stress, lessens depression and fatigue, and increases our feeling of wellbeing in general. It also improves the quality of our sleep.
- After spending time in nature our serotonin (happiness hormone) level rises.
- People who spend time active or resting in nature have measurably lower heart rates and blood pressure.
- Children are overexposed to screens and many live in urban areas, and therefore lack the opportunity to "look far", because there is always a building in the way: Being in nature allows children to look at very distant objects, strengthening their eyesight.
- Engaging in outdoor activities in nature can benefit a child's metabolism: Children in nature have greater energy levels and recover faster than well-trained adult endurance athletes! Why fight their metabolism? We should embrace it!

Benefits for Protected Areas

What your Protected Area offers to children is a priceless classroom. Protected Areas are a gateway to adventures, encounters, insights and self-discovery - this is true for adults too! Protected Areas get a lot in return, although it might not be obvious to you at first glance. Here are some of the benefits:

- Schools that conduct education activities in Protected Areas are more likely to organise each year school trips to the same Protected Area, generating valuable revenue. These schools are also more likely to recommend your Protected Area to other schools.
- Children that grow up spending time in your Protected Area will create a new generation of environmentally aware people that will actively support nature conservation. Some of these children will become decision-makers, activists and sponsors who will support your Protected Area in the future.
- Developing a Protected Area Schools Network will strengthen the integration of the Protected
 Area into the local community and increase the community's respect and understanding of
 the work you do. Children are excellent multipliers: For every child there are parents/legal
 guardians, grandparents, and other family members who will support your work. Working with
 school children can open the door to the whole community.
- Students are curious and interested in research, discovery and learning. They can contribute to the development of the Protected Area through conducting studies and surveys.
- Protected Areas have the potential to become research and education centres for all age groups.
 Through collaboration with schools, Protected Area can become open air classrooms for teaching and training. Because Protected Areas are public institutions, they can develop accredited training and professional development programmes for teachers, deepening the Protected Area's connection with the teaching community and providing a useful source of income.

⁹ Wells, K. (2019). Ecotherapy: The Health Benefits of Nature | Wellness Mama. [online] Wellness Mama®. Available at: www.wellnessmama.com/56086/nature-health-benefits/

For several years our school has had excellent cooperation with the Stara Planina Nature Park. Until last year this included a park ranger leading a lesson for 8th grade students as part of their geography class and co-organizing and implementing activities to mark important ecological dates. Since joining the Schools Network in Protected Areas, just over a year ago, we have carried out a lot of joint actions and workshops that have involved over 100 students, all of which were held in the Protected Area itself, with extensive professional and financial assistance from Stara Planina Nature Park.

I am convinced that children's ecological awareness and true love for nature can only develop if they spend quality time in pristine nature. We succeeded in a short period of time to awaken all of the children's senses. Field trips that had previously been reduced to eating snacks and sweets in nature developed into something much more. The children began to watch, listen, touch, smell, explore, learn and enjoy. They started to love and recognize the importance of every plant and animal species and to take care of them

Marija Todorović, geography and citizenship education teacher, Vuk Karadžić Primary School, Pirot, member of Stara planina Nature Park School Network, Serbia



Stara planina Nature park © WWF Adria/ Igor Đorđević

Benefits for Local Community

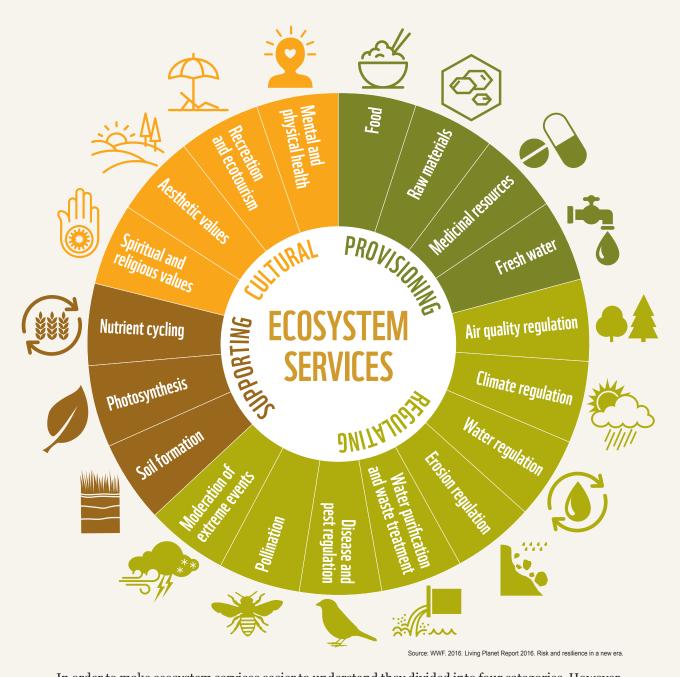
- All of the ecosystem services¹⁰ provided by the Protected Area benefit the local community. These services include:
 - provisioning (providing food, water, raw materials, medical resources);
 - regulating (regulation of air and water quality, local & global climate, erosion);
 - supporting (photosynthesis, nutrient cycling, pollination, soil formation);
 - cultural (mental and physical health, spiritual value, recreation).
- Communities often depend on local Protected Areas for sustainable development and ecosystem services without realising it. Networking with local schools can raise awareness of the many benefits Protected Areas provide for local communities and build up support for the work you do.
- Local communities that are aware of their heritage are more likely to actively participate in, promote and benefit from traditional practices that are in line with sustainable development.
- Local communities can be part of a global movement: Around the world people are turning toward sustainable economies that will improve their quality of life, instead of exploitation of nature and short-term financial gain.

Through participating in the Škocjan Caves Park School Network, we try to raise the quality of lessons and enhance children's knowledge, not just in the field of natural sciences, but also by supporting healthy lifestyles, caring for natural and cultural heritage and sustainable development. Over the years our cooperation has grown to integrate numerous areas of the life and work of the school, which adds value for everyone involved in the activities: pupils, teachers, parents and local communities. Cooperation encourage values that are today very important for youngsters - empowering them with love towards nature and people, encouraging curiosity, fostering self-esteem, and preparing them for life and the challenges brought to us in the modern world. Let it be like this in the future!

Karmen Šepec, school principle, Anton Žnideršič Primary School, Ilirska Bistrica, member of Škocjan Caves Park School Network, Slovenia¹¹

¹⁰ Ecosystem services are the direct and indirect contributions of ecosystems to human well-being and support our survival and quality of life. One of the most widely used classifications of ecosystem services was developed under the global initiative The Economics of Ecosystems and Biodiversity (TEEB) which is aiming at mainstreaming the values of biodiversity and ecosystem services into decision-making at all levels. They divide ecosystem services to four broader categories: Provisioning services, regulating services, cultural services and supporting services.

¹¹ Public Service Agency Škocjan Caves Park (2018). Children of the Reka River - 15th anniversary of Škocjan Caves Park Schools Network. Debevec, V., Kranjc, D. (eds.)



In order to make ecosystem services easier to understand they divided into four categories. However, it is important to recognize that natural ecosystems provide a wide range of different services (not just four). Mountain forests, for example, can be a resource for timber, forest fruits, and medicinal herbs for traditional medicines, and a habitat for many species of plants, animals and fungi, but they can also be a popular destination for tourists. In addition to these direct goods and services, forests also offer indirect benefits such as preventing avalanches and landslides that threaten villages in valleys, purifying air and water, carbon-dioxide storage and, globally, contribute to climate regulation and

reduce the negative effects of climate change.

Partnerships between Schools and Protected Areas

Now that we know about some of the benefits of School Networks, we are going to discuss the importance of partnerships and cooperation between schools and Protected Areas.

Cooperation

Large and important projects require everyone involved to cooperate (and coordinate) effectively. We need to create a common vision and goals, and develop activities that will act as our common ground for cooperation. Successful cooperation needs to demonstrate the benefits (or added value) that is gained from the synergy of our actions. How are we going to achieve synergy? By reflecting and discussing the components of our cooperation together. These are the foundations for creating and maintaining cooperative relations.



Škocjan Caves Park © WWF Adria/Jovana Dragić Ma

The main elements of cooperation are¹²:

- trust
- experience
- interdependence
- reputation
- evaluation
- common mission
- reciprocity
- economic situation

The success of cooperation depends on the aspects of cooperation listed above. Let us focus on trust, experience, reciprocity and the economic situation.

¹² Holubčík, Martin. (2016). Cooperation as base for synergy. eXclusive e-JOURNAL 1339-4509. 2016.

Finance

We will start with the issue that is probably the "elephant" in the room – the **economic situation**. At the time of writing this guidebook, Protected Areas and schools are often underfunded and the discussions we have had with Protected Areas and schools often focus on concerns about finances. We have been careful to develop and propose activities that are not expensive and do not require a lot of resources.

Mission

Please recall the many benefits of the School Network that we have discussed and think about our **mission**: We want to preserve the natural and cultural heritage that is specific to the local community; and the best way to do this is through education. Think about a time ten years from now. If we don't do something today, do you think that today's children will be able to achieve the mission of tomorrow? We can all think of big ideas and imagine what we would do with unlimited resources. But we need to be realistic. If we ignore the opportunities to act small today, we might miss the opportunity to act big later, and ultimately fail to achieve our mission.

Network coordinator

Based on examples of good practices, the lead role in the project should be taken by someone from your Protected Area. The Protected Area is the common denominator for School Network and the activities that the School Network will implement will revolve around the specific characteristics of your Protected Area. Your Protected Area will be the leader of the project, act as a hub for cooperation and activities, and thereby provide a basis for **interdependence** between all members of your School Network. The Protected Area should provide the necessary conditions for exchange of **experiences** and ideas that will ultimately lead to **trust** and effective cooperation.

Skadar Lake National Park enjoys successful cooperation with local schools. This cooperation is reflected in the exchange of knowledge and experience and the implementation of joint educational activities that aim to raise awareness among children and young people of the importance of preserving the Protected Area (and the environment in general). Collaboration between the Protected Area management team and teachers from local schools is contributing to achieving this goal. Experts from numerous fields (biology, geography, history, art, ethnology, etc.) participate in joint activities. It is particularly important to connect students from different schools and create opportunities for them to work together in educational activities. Activities have been initiated both by the Protected Area and by schools, which widens the topics we cover and activities we implement, and also strengthens our mutual trust. Examples of good cooperation with individual schools encourage new partnerships and the gradual growth of our network.

Marijana Živaljević Roganović, Associate Expert, Skadar Lake National park, Public Enterprise for National Parks of Montenegro, Montenegro

Importance of Natural and Cultural Heritage

Children can learn a lot about nature and how to protect it also from our cultural heritage. Today we often think about natural and cultural heritage separately, as if they exist independently of one another. The truth is, however, that we –people– are part of nature, and nature is a vital part of our cultures – and it always has been. Our cultural heritage shows us this.

The way we build our homes is directly influenced by our local environment. The crops we grow and the animals we keep have been adopted from nature and domesticated. The art and music that we create is inspired by the world around us.

Our cultural heritage —our buildings, food and art, among many other things— not only tells a story about us — it also tells a story about nature. The story of every old water mill, wooden house or castle on top of a hill is a story about how people have interacted with and exploited nature in the past. These places tell stories about how nature has shaped our communities and how people have changed nature. Learning about our cultural heritage can therefore be a great way for children to learn about nature and our relationship with it.

Traditional practices often play an important role in maintaining local ecosystems. Human activities such as harvesting wild fruits, herding animals and coppicing woodland have contributed to creating and maintaining balance in many local ecosystems. Learning about these traditional practices, which are an important part of our cultural heritage, can also be a great way for children to understand how we can live with nature and make a positive impact on it.

Think about the cultural heritage in your Protected Area. What can we learn from it about how people interact with nature? Can it be included in learning activities?



Škocjan Caves Park School Network © Škocjan Caves Park/Darja Kranjc

For the past five years Lovćen National Park has been involved in the project "History Class in the Capital: Cetinje - One Story", which has been created for seventh grade students from all Primary Schools in Montenegro. In addition to spending time in the park, children are introduced to the cultural and historical heritage of the area and learn about the birth of our country, our traditions and prominent figures from the past who embraced the values that we want to transfer to new generations, and are empowered to take care of nature; but above all to take care of each other.

Ana Uskoković, Associate Expert for Promotion, Education and Marketing, Lovćen National park, Public Enterprise for National Parks of Montenegro, Montenegro

Steps for Creating a School Network

Which steps are necessary in order to establish cooperation with schools through a School Network? We will not focus here on planning and implementing programmes and activities once the School Network has been established; that will be covered in the next chapter, where we will introduce the concept of Project Planning by using SMART goals.

Step 1.

You really have to want to create a School Network - it might seem obvious, but this is a prerequisite for everything. If you are thinking about creating a School Network then answer these simple questions: Do I have the desire, motivation, and passion to work with students from local schools in my Protected Area? Do I have the necessary time and resources to succeed in creating a School Network? Will the Protected Area management support this initiative? Can I find interested schools and teachers to take part in the project? or do I know someone who can help me find schools and teachers? If you answered positively to most of these questions, then you are ready to start!

I was very proud of my contribution to establishing the School Network. We were not aware that through our activities we were designing a network of schools, a network of people with the same goals and interests, anticipating new challenges and new knowledge. We were persistent, brave and eager to learn and get new ideas. We pass this courage and persistence on to young people in schools, from generation to generation, and to other schools in Slovenia and abroad.

Mirjam Trampuž, teacher, Dr. Bogomir Magajna Primary School, Divača, member of Škocjan Caves Park School Network, Slovenia¹³

¹³ Public Service Agency Škocjan Caves Park (2018). Children of the Reka River- 15th anniversary of Škocjan Caves Park Schools Network. Debevec, V., Kranjc, D. (eds.)

Step 2.

Develop a basic concept for your School Network – this is the first draft of your plan, which will change and develop when the School Network becomes operational. Think about it as a sales pitch. In order to motivate schools to become part of the School Network they need to understand what it is. In the next chapter you will learn how to do this in detail. But before we proceed, answer this question:

- **Can I form a Project Team?** Members of this team could be your colleagues, members of the community, or teachers that you have cooperated with in the past. The purpose of the Project Team is to help organizing all aspects of the project and to develop an initial plan. Many hands make light work!
 - Do not worry if you cannot form a Project Team at the beginning. It might be a little
 harder at first. You should always think about the ways in which you can include other
 people in the project.
- Choose a School Network Coordinator it would be ideal if you can form a Project Team, but every team (and School Network) must have a leader. This person will be responsible for the success of the project and will probably have the most administrative obligations. As explained in the section *Partnerships between Schools and Protected Areas*, it is recommended that the School Network coordinator is a member of staff of the Protected Area.

Step 3.

Contact local schools with a proposal for cooperation - once you have developed your basic concept you need to contact local schools. You can do this in many ways, such as visiting schools and discussing your ideas with teachers, calling them or sending an email. If you focus on finding motivated teachers you will be able to implement great educational activities, but always contact the school principals and try to get their support - it will be helpful when those teachers need a day off to work with you or if you want to invite pupils to join you in the Protected Area. If the school principal is your ally it will also be much easier to find teachers. When contacting schools with children with disabilities or centres for rehabilitation, which we encourage you to do, consider that you will need more time to plan and adjust activities and to prepare didactical tools and materials. Together with teachers you will find the best way to adapt.

Step 4.

Put a short description about the School Network online - we live in the age of the internet. This is not a mandatory step but it is useful to have a short description about your goals and planned activities available online for interested teachers.

Step 5.

Organise meetings with interested schools - once you have created a list of interested teachers from local schools you should organise a live meeting with all of them. This can be done face-to-face or online. The goal of this meeting is for everyone to meet, present their ideas, and discuss obligations and project activities. These people will be your operational team.



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Step 6.

Discuss and agree the important organisational questions – this is one of the most important steps. As we have mentioned, the financial situation will probably be one of the issues you need to discuss. It is important to be as clear –and frank– as possible about these issues. Schools and Protected Areas usually have different yearly planning cycles (school year versus calendar year). It is crucial to pay attention to this. For Protected Areas it is important to have a clear idea of the scope of the activities that are being planned. It might be possible to allocate part of the Protected Area's budget for education activities. For schools, it is important to know the dates of planned activities so that they can propose them in their school's Annual Plan. It is important to discuss these issues so that you can plan around them and agree on a date for the first official project planning session. Project planning will be covered in the next chapter.

Step 7.

Sign a memorandum of understanding¹⁴ – it is recommended to have a letter of cooperation as part of the admission procedure, signed by the Protected Area authority and school principal (and teachers). In this way you have formal evidence of admission and commitment from all sides.

¹⁴ Annex 2 - Example of MoU

Cooperation between the Protected Area and local schools is important in numerous ways for both parties: the Protected Area gets opportunities to include children in activities, and through them is able to engage the wider local community to contribute to the protection and preservation of natural habitats in the nature reserve, while schools are able to provide education in nature for students.

For effective cooperation, it is important to fulfil formal conditions through defining work plans and programmes, developing and implementing joint projects, and signing an agreement on cooperation and defining the obligations of both parties.

Our experiences and results have gone beyond our expectations and the readiness and the desire of children to work in and learn about nature is an incentive and guidance for future activities.

Ivana Lozjanin, Senior Environmental Protection Officer for Protected Areas, Obedska bara Special Nature Reserve – Public Enterprise Vojvodinašume, Serbia



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Who can be a part of School Network?

There are no special requirements for joining the School Network. All Primary and Secondary Schools, as well as Kindergartens, are eligible to join. Schools with children with disabilities and centres for rehabilitation are also very welcome. The prerequisites for schools joining the School Network are motivated teachers that are ready to go the extra mile and whose values are aligned with the mission of your School Network.

From the perspective of the School Network, you should pay attention to the organisational aspects of new cooperation. Joining the School Network will bring additional work that needs to be coordinated. Cooperation with local schools is easier, but this doesn't mean that other schools –from further away—are not welcome. With the advancement of new technologies, remote learning has become popular. You can use Skype, Google Hangouts, Zoom and many other applications to work remotely.

Cooperation with the Gornje Podunavlje Special Nature Reserve is invaluable for institutions that educate children with disabilities. Our collaboration has enabled students and their teachers to better understand their immediate environment. It is very important for students to spend time in nature and to teach outside of classrooms, where students develop their knowledge in thoughtful activities and their senses through sensory observations - visual, audio, tactile, and olfactory. Nature encourages children to research and to move, and at the same time it is relaxing. Through planning and implementing activities with students in the Protected Area, teachers improve learning and develop competences that are important in modern forms of education.

Radmila Jokić, teacher of elective classes, Vuk Karadžić School for Primary and Secondary Education, member of Gornje Podunavlje Special Nature Reserve School Network, Sombor, Serbia

Project Planning

In this guidebook, when we use the term "project" we simply mean the implementation of activities by schools and the Protected Area in cooperation with each other. We do not mean the process of writing a project or fundraising from donors. Planning a project means planning activities with your School Network.

Project planning is a versatile skill that is great to have! If you are considering forming a School Network it will be a valuable tool that will help put you on the right path.

If you have already created your School Network, the skills and tools that you will find in this chapter will be useful for planning and implementing new educational programmes and for expanding and improving existing ones.

It is never too late to be SMART!

Long-Term and Short-Term Goals

Every project should have goals. Goals guide a project and help us design appropriate activities that have a clear purpose and rational. Goals also help us to evaluate if a project has been successful.

Researcher Edwin A. Locke examined how goals are set in the mid-1960s and continued researching *goal-setting* for over 30 years¹⁵. Locke was one of the founding fathers of a concept later called Goal-Setting Theory.

Goal-Setting Theory highlights the improvement in efficiency and success that can be gained by setting goals. Goal-setting is a powerful process that can be used to improve every area of our life – be it personal or professional. It can help us think about and imagine our ideal future in each area of our life, and can motivate us to turn these ideas into reality.

The hardest choice is to decide exactly what we want to do. Let us take one example: **We want to form a School Network.**

We are motivated. We believe in our idea and its importance. But we might have doubts. Is this choice right for us? Do we have the resources necessary to implement it? The goal of *forming up a School Network* is a little bit vague, right?

The goal-setting process assists us to make decisions, commit to them, and to begin to implement them.

¹⁵ Locke, Edwin A.; Latham, Gary P. (2006). "New directions in goal-setting theory". Current Directions in Psychological Science. 15 (5): 265–268. CiteSeerX 10.1.1.553.1396. doi:10.1111/j.1467-8721.2006.00449.x.



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Wouldn't it be great to clearly define exactly *what you want to achieve*? To have a clear idea about *how to do it and what steps to take first*? To be certain about *where you need to put your effort* and to identify clearly *what issues are not a priority*? Goal-setting will give you answers to these questions and more! So let us dig a bit deeper into this concept.

We will focus on two types of goals.

- Goals that can be achieved relatively quickly are called **short-term goals**. Think about something you want to do in the near future. The near future can mean today, this week, this month, or even this year.
- Goals that take a long time to achieve are called **long-term goals**. They require time and planning. They are not as concrete as their short-term counterparts. Often long-term goals are *ideas* or *visions* that you want to achieve in certain area.

This guidebook is focused on helping you create and maintain a School Network. Therefore, the long-term goal has already been defined. Our long-term goal is intertwined in our definition of the School Network: School Network is a long-term and efficient partnership between local schools and a Protected Area that is bound by the common goal of preserving local natural and cultural heritage in a way that contributes to the wellbeing of the local community.

The best strategy for achieving long-term goals is to break them down into several short-term goals. We are going to do this by using the SMART criteria for setting goals.



Tara National park © WWF Adria/Milica Milović Kinoli

What are SMART goals?

SMART is a set of criteria that can be used to guide our goal-setting process.

SMART is an acronym for goals that are:

- Specific the goal is clear and concise
- Measurable easily quantified
- Attainable challenging but achievable
- Relevant appropriate for the situation the project addresses
- Time-bound undertaken over a specific time frame¹⁶

These criteria are also useful for thinking more generally about what makes a good project. When the goals are SMART, so is the project.

Now that we have explained the principles behind SMART goals, we will dig a bit deeper into SMART theory.

Our focus will be on showing how SMART goals can improve your professional work, strengthen project management and help you form and maintain a School Network.

SMART goals are just one part of your project. At first glance they are simple. This is their beauty! The project's complexity comes from the context.

¹⁶ Will the Real SMART Goals Please Stand Up?. (2002). The Industrial-Organizational Psychologist, 39(4).

To understand the context and to set goals, you will need to apply all of the aspects of critical thinking17 that we have gone through so far.

How to Write SMART Goals¹⁸

We will start with a simple –and very general– goal: We want to form a School Network.

This simple goal does not follow the criteria for SMART goals. Instead, it is more of a general statement of intent.

We will try to rephrase this goal together so that it is in line with the SMART criteria.

Specific

Our goals must be clear and concise – with no ambiguity. If we look at our current goal, we can see that it is specific in one way. We know WHAT do we want to do – but that is it. *WHAT* is only one of five W's we should try to answer when we write specific goals?

The five W's are:

- What do we want to do?
- Why is this goal important?
- Who is involved?
- Where is it located?
- Which resources or limiting factors are involved?

Take two minutes to reflect and try to answer these questions for yourself. Each Protected Area is different, so the answers to these questions will be specific to your context. Don't forget – only you can answer these questions correctly. Take your time.

This can be a difficult task, so here is a general example that might be useful:

- What do we want to do? We want to form a School Network.
- Why is this goal important? We want to raise awareness of the importance of nature conservation.
- Who is involved? Motivated teachers, children, people from the local community and PA employees
- Where is it located? In the Protected Area, at schools and at relevant stakeholders in proximity of our Protected Area.
- Which resources or limiting factors are involved? take into account the discrepancy between yearly planning of schools and the Protected Area.

What an achievement! But so far we have only implemented the first letter of the SMART criteria. Let us continue.

¹⁷ Chapter Educational Activities and Critical Thinking

¹⁸ Inspired by Meyer, P. (2006). Attitude is everything!. Waco, Texas: The Leading Edge Publishing Co.



Tara National park © WWF Adria/Milica Milović Kinol

Measurable

Our goals must be measurable. For our goals to be measurable they must be specific - we must be able to state clearly what we are measuring. The specificity of our goals and their measurability are therefore closely linked.

Measurable goals will enable us to track the progress we make towards achieving them and help keep us motivated.

To set goals that are measurable we should focus on questions like:

- How much (of something do we want)?
- How many (of something do we want)?
- How will we know that the goal has been accomplished?

Again, take a few minutes to reflect and try to answer these questions for yourself.

Here is an example:

- How much (of something do we want)? We will organise 3 face-to-face or "flipped" classes¹⁹. At least one class will take place outdoors at the Protected Area. The other classes will be organised within the school with one ranger from the Protected Area.
- How many (of something do we want)? With at least 2 schools in our network. Each school should include at least 10 pupils and 2 teachers.
- How will we know that the goal has been accomplished? We will know that the goal has been accomplished if we have organised the classes, we have taken photos documenting it and we get feedback from pupils and teachers.

We are on the roll! From 7 to 148 words so far!

¹⁹ A "flipped" class is an educational technique that blends different types of learning: In this case we specifically mean interactive group learning activities inside the classroom and direct computer-based individual instruction outside the classroom. See: www.asee.org/file_server/papers/attachment/file/0003/3259/6219.pdf

Attainable

Having meaningful goals is great. But the key question is, are they achievable? We do not want to define goals that are relevant only on paper or push us to the point that we give up on them.

Our goals should be challenging but achievable. To do this we need to answer questions like:

- How can I accomplish this goal?
- How realistic is the goal, based on other constraints, such as financial factors?

Think about the specific goal you have in mind and take two minutes to reflect. Then try to answer these questions for yourself.

Here is an example to consider based on one of the previous suggestions:

With at least 2 schools in our network. Each school should include at least 10 pupils and 2 teachers.

Is this goal attainable? Would it be attainable if we changed the numbers a bit?

Let's multiply the numbers by 5. Then we get 10 schools with 50 pupils and 10 teachers. Or we could multiply our original number by 10, so that we have 20 schools with 100 pupils and 20 teachers?

Which of these looks more attainable to you? Remember, the goal should be *challenging* (be ambitious!) and achievable (don't be unrealistic!).

It is great to strive to achieve our goals and to send our message to as many people as we can. But at the beginning we should focus on taking smaller, more attainable steps.



Relevant

Each short-term goal that you define should be relevant and contribute to achieving your long-term goals. In our case, this means forming and maintaining a School Network. This means that some goals are more relevant to us now than others.

A relevant goal can answer "yes" to these questions:

- Does perusing this goal seem worthwhile in the current context and in relation to achieving our long-term goals?
- Is this the right time?
- Does it address our current priorities or needs?
- Are the members of our team the right people for the job?
- Does this goal make sense in the current socio-economic situation?

Again take two minutes to reflect and then try to answer these questions yourself.

Relevance can be tricky, because it really depends on your context. For this reason you need to think critically to understand the deep structure of the situation.

Here is an example:

Let's imagine that one of your goals is for children from schools in your School Network to understand all the key parts of the ecosystems that exist in the Protected Area. To do this, the children need to be able to visit locations spread out across the Protected Area. One of your colleagues proposes the idea of a bicycle tour: This would be a much quicker way to reach each location you want the children to visit. To do this you would need to buy 20 bikes. This seems like a great investment! It solves a problem in an innovative way and you could even rent the bikes to visitors, when the school children are not using them! However, you need to ask the questions: How will we store and maintain the bicycles? Will every child be able to participate? How does this contribute to our long-term goal? You might decide this is the right thing to do, or you might decide that there are more relevant things you should do now. Remember, not all good ideas are the *right* idea for you. Whatever you decide to do, you should use critical thinking to help you make the right decision.

Time-bound

Every goal needs a target date, so that you have a deadline to focus on and something to work toward. This part of the SMART goal criteria helps to prevent everyday tasks from taking priority over your long-term goals.

A time-bound goal will usually answer these questions:

- When do we plan to achieve our goal?
- What can I do in the next six months?
- What can I do in the next six weeks?
- What can I do today?

Again take a few minutes to reflect and then try to answer these questions for yourself.

Here is an example:

- When do we plan to achieve our goal? The School Network will be functional in one year from now.
- What can I do in the next six months? In the next six months we will organise at least 2 of the activities that we planned.
- What can I do in the next six weeks? In the next six weeks we will organise a meeting with school representatives to discuss forming the School Network.
- What can I do today? Today I will make a list of schools that could be part of the School Network.

Great job! We started with a basic statement of intent. Now we have applied the SMART criteria to create SMART goal that have 207 words!

We have developed a simple 7 word statement into a detailed 207 word SMART goal:

- We want to form a School Network in order to raise awareness of the importance of nature conservation, involving motivated teachers and children from local schools and other stakeholders in proximity of our Protected Area, taking into account the discrepancy between yearly planning of schools and the Protected Area
- We will organise 3 face-to-face or "flipped" classes. At least one class will take place outdoors at the Protected Area. The other classes will be organised within the school with one ranger from the Protected Area.
- We will include at least 2 schools in our network. Each school should include at least 10 pupils and 2 teachers.
- We will know that our goal has been accomplished if we have organised the classes, we have taken photographs documenting them, and we get feedback from pupils and teachers.
- The School Network will be functional in one year from now.
- In the next six months we will organise at least 2 of the activities that we have planned.
- In the next six weeks we will organise a meeting with school representatives to discuss forming the School Network.
- Today we will make a list of schools that could be part of the School Network.

You might think that it is important to have as many words as possible, but this is not a numbers game.

By using SMART criteria we now have developed a much clearer idea about the goal itself, the steps that we should take to achieve it, and the project's timeline.

We have already set our long-term goal, which is described in the definition of the School Network: School Network is a long term and efficient partnership between local schools and a Protected Area that is bound by the common goal of preserving local natural and cultural heritage in a way that contributes to the wellbeing of the local community.

We have two tasks for you:

- Your first task is therefore focused on defining SMART short-term goals for your project, focusing on those aspects that are relevant in order to form the School Network. Remember, these short-term goals are not activities.
- The second task is to create activities that will achieve each of the short-term goals. You should define the activity, choose a responsible (and accountable) person, and define the location of the activity as well as a timeframe for its implementation.

You will find templates for these two tasks in Annex 3.

Thorough planning of both the annual schedule and content is the key to successful and meaningful implementation of activities. This ensures that staff from both the Protected Area and the school understand the expectations and capacities of one another, which in turn enables them to work together efficiently on the development and realization of the programme. Looking back, we have come long way from our first visit, which was full of optimism and excitement but with limited planning, to our current visits, which are clearly structured. Students are more motivated every time we go to the park as they realize that the well-developed programme offers new learning opportunities.

Marea Grinvald, teacher of Biology and Environmental Systems and Societies, United World College in Mostar, member of Hutovo Blato Nature Park School Network, Bosnia and Herzegovina

Gantt Charts

So far we have learned a lot about how to set goals efficiently. If you have not already done all the exercises described previously in the guidebook then we suggest you do them now. If you have done the exercises, you should have written down a lot of goals.

When goals are written down it can sometimes be difficult to clearly see how they are connected to each other or to the wider context.

Think about how challenging it would be to achieve all of these goals at once. You would have to keep an eye on all of them at the same time.

It might be possible that some of our goals overlap and we are not aware of it! How do we know if some of our goals overlap? Perhaps the project overlaps some aspects of the work the Protected Area that is not related to the School Network? This could impact on the effectiveness of the whole project.

For these reasons it is helpful to be able to clearly see everything that needs to be done, and to know, at a glance, when each activity should be completed. This is the purpose of a tool known as a Gantt Chart.

What is Gantt Chart?

A Gantt Chart is a tool that presents activities visually. It outlines all of our project's SMART goals in an orderly way. The most important aspect of a Gantt Chart is a timetable that connects each of our goals. The time-bound component of SMART goal is very useful for this reason.

We have completed almost the stages in the exercise already and we know most of the tasks that will be included in the project. We just need to think about who is going to be responsible for each task and how these tasks are connected.

A Gantt Chart is useful as way of keeping your team and other relevant stakeholders informed about the progress of the project. All you have to do is regularly update the chart to show schedule changes and their implications. A Gantt Chart is also a useful way of communicating that key tasks have been completed.

The time has come for your next task.

You will find a Gantt Chart template in Annex 4.

You should write all the SMART goals that you have created in to the Gantt Chart and colour the squares that represent time units.



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Importance of Roles

Before beginning the project you should reflect on which staff should be involved.

You will need to form a team. You should appoint a School Network coordinator. The coordinator will be responsible for implementing the project and will be accountable for its success.

The School Network coordinator will lead decision making processes relevant for the project and support the team to stay on the right path. The coordinator can delegate tasks to other team members and make them responsible for specific parts of the project.

Defining roles is one of the main challenges in most projects, including this one. It is important to clearly define roles of everyone involved in the project.

There are several important questions that you should ask your team:

- Who will be the School Network coordinator?
- How many people will be included in the project?
- Is it useful to create a small central team?
- When will you include other members of the team in the decision-making process?



Škocjan Caves Park © Škocjan Caves Park/Letizia Fambri

Maintaining the School Network

We have created our School Network, defined our short-term and specific goals and planned all the activities corresponding to these goals.

The next steps are focused on maintaining your School Network. Its members should feel motivated to achieve its goals. If the School Network does not provide value to its members they will leave.

This value can be twofold. The first kind of value relates to specific benefits gained by School Network members. Achieving goals can motivate people, but it doesn't always work. So we need to create a system that is going to provide additional value for schools, something that will help them to stand out. Or in terms of our cooperation elements, something that will not only increase the **reputation** of the School Network, but also the reputation of the schools and the Protected Area. This topic will be covered in more detail in the Building the Reputation of the School Network chapter.

The second kind of value relates to the efficiency of School Network and achieving goals. This will be covered in the next part of the guidebook in the Monitoring and Evaluation chapter.



Škocjan Caves Park © WWF Adria/Emil Benesch

Monitoring and evaluation

Monitoring is the systematic collection, analysis and use of data gained from project activities, with three basic purposes:

- learning from acquired experiences (learning function),
- accounting internally and externally for the resources used and the results obtained (monitoring function),
- taking decisions (steering function)²⁰.

An evaluation is assessment of an on-going or completed project that is as systematic and objective as possible. The goal is to make statements about the project's relevance, effectiveness, efficiency, impact and sustainability.

Based on this information, it can be determined whether any changes need to be made to a project and if so, what those changes are. An evaluation asks what went well? and where is there room for improvement? An evaluation has both a learning function – in which lessons learned need to be incorporated into future projects and activities - and a monitoring function – in which partners and members review the implementation of the project based on its objectives and the resources mobilised to do so.

Monitoring and evaluation are complementary. During an evaluation, we use the information collected during monitoring phase. In contrast to monitoring, where the emphasis is on the process and results, evaluations are used to provide insight into the relationships between:

- results (for example, planned and delivered activities),
- effects (for example, increased interest in School Network activities),
- impact (for example, improved media coverage of School Network activities).

If you have done all of the previous exercises, the SMART framework will simplify the monitoring and evaluation process. Here is a checklist of the things that you can do in order to improve the monitoring and evaluation process and the project in general:

- Organise a planning session.
- Agree on the first activities and their timing.
- Create a Gantt Chart with all the activities planned with each school.
- Create unified Gantt Chart for all of the schools in the School Network.
- Share the unified Gantt chart with all schools in the School Network.
- Create a monitoring and evaluation plan based on the Measurable and Time-Bound elements of the SMART framework.
- Contact Schools and see if they need some help.
- Contact Schools and ask for monitoring information attendance records, feedback, images, videos, media articles, and similar.
- Use the material that you have gathered to promote the School Network.
- Organise a follow up meeting to discuss what went well and what can be improved and how.

²⁰ Kempen, P. (2019). What is monitoring and evaluation?. [online] Toolkitsportdevelopment.org. Available at: www.toolkitsportdevelopment.org/html/topic_8A6F8104-DBAD-4F47-927D-3FE9A13B30B4_E49DC123-DB53-4DDB-9148-FDE05BD96156_2.htm

The cooperation of our institution with students within the School Network is very important to us. It is a pleasure to work with young people, whose approach is always creative, full of enthusiasm and original. Through these activities we not only promote our Protected Area to students but to the wider community as well. Our experience in organising educational and recreational activities for students has shown us that, without exception, they gain great publicity in print and electronic media. This helps us to promote events for important ecological dates, and children's active contribution to our efforts to preserve our natural heritage.

Mustafa Zvizdić, Associate Expert for Promotion and Marketing, the Cantonal Public Institution for Protected Natural Areas of the Canton of Sarajevo, Bosnia and Herzegovina



Tara National park © WWF Adria/Milica Milović Kinoli

Building the reputation of the School Network

by Vanja Debevec, coordinator of International Schools Network and Universities Network in Škocjan Caves Park, Slovenia

There is a saying in Slovenia: "A good voice reaches the ninth village". It is not about a voice being loud or shouting fiercely, but rather that the word is spread from person to person. The wisdom of this saying implies that your good deeds are spoken about far away from your home. A good voice is a unique sort of brand and is present in people's minds, not just as information, but as facts to be aware of and remembered for a long time.

When Škocjan Caves Park initially began to work with elementary schools in Slovenia and Italy in 1999, the project "Reka River – from Mountain Snežnik to the Sea" engaged experts, local fishermen, scouts, mayors, and teachers and children from seven schools located along the river and above its underground course in joint activities. It was the pioneer model of such cooperation in Europe. We appreciated the joint work of chemical and biological analysis of the water, research into flora and fauna on the river banks, and the input and results that we produced in our newly formed group. But the notion that what we were doing was also being observed and acknowledged by local people came only after our bus driver greeted one of the teachers on the way home: "Finally some good things are happening on the river." Our work was recognised by the local community and it was clear that responsibility towards society became the most important aspect of the School Network. After 15 years of creative cooperation between teachers and representatives of the Park, the School Network is distinguished by a special way of working, which brings together ideas and suggestions, new findings and the way they are used in everyday life. With mutual trust and respect, persistence, and dedication to our homeland and the traditions of our ancestors, we look for linkages between nature, culture and people.

It can appear that this cooperation is complicated, but actually it is rather simple. Protected Areas and schools possess similar missions. In parks we have been entrusted to protect ecosystems; schools have been entrusted to bring knowledge to our children. We all keep promises. Before we fulfil the promise of managing their heritage and preparing them for life in the future, there are small promises that we need to fulfil, such as implementing agreements, plans, learning and teaching, and promoting the large number of small steps that we takes as part of our work. And this is the progress that parents and local communities acknowledge and commend. The work of the School Network is a process of building the reputation of all the partners involved: the Protected Areas, schools and municipalities that host this innovation. In order to express our recognition of the main actors involved in this process, Škocjan Caves Park decided to designate the title of Ambassador to people that have contributed, through their work, to the promotion, development and functioning of the UNESCO Karst and River basin Biosphere Reserve. The first ambassadors were designated in 2012. They were all mentors who actively participated in the establishment of School Network and contributed to its progress until today.

In order to show to the world, beyond the borders of our protected area, why our mountains, forests, meadows, rocks and rivers are so special, and why our biodiversity and cultural diversity is important, people must recognize our passion for the conservation of nature and cultural heritage. In order to

understand our role and support us by taking responsible action toward the environment, people need to see that we believe in what we do. At this stage we might be considered the role models. In 2016 Škocjan Caves Park received the highest national award of the Republic of Slovenia for outstanding achievement in elementary school education. Our reputation is a duty, an obligation that encourages us to maintain the good work and to implement goals for sustainable development with our many local partners. The process of conservation, education, awareness raising and promotion is also an opportunity for the creation of our own heritage today. The knowledge necessary for this enables us to develop methods of responsible wellbeing, healthy living and ecological freedom, to live in a harmony between nature, culture and people in the world that we belong to and shape.

The most rewarding and everlasting reputation is the pride that our children have in us as their teachers. The greatest heritage we can leave to our children is their home, where knowledge is our ally in keeping promises, showing the way and building a good voice for change in the future: "Learn to live, learn to love, and learn to last."



Beech Forest World Heritage Site Krokar in Kočevska reka © Škocjan Caves Park/Darja Kranj

Contact our Protected Areas

Protected Areas listed below took part in the project "Protected Areas for Nature and People" as a mentor, good practise examples and pilot PAs and are willing to share their experiences with you.

Mentor:

• Škocjan Caves Park, Slovenia

Pilot areas:

- Đerdap National Park, Serbia
- Gornje Podunavlje Special Nature Reserve, Serbia
- Hutovo blato Nature park, Bosnia and Herzegovina
- Lovćen National park, Montenegro
- Obedska bara Special Nature Reserve, Serbia
- Protected Landscape Avala, Serbia
- Skadarsko lake National park, Montenegro
- Stara planina Nature park, Serbia
- Tara National Park, Serbia
- The Cantonal Public Institution for Protected Natural Areas of the Canton of Sarajevo (Protected Landscape Bijambare, Protected Landscape Bentbaša, Nature Monument Skakavac, Protected Landscape Trebević, Nature Monument Vrelo Bosne), Bosnia and Herzegovina

Good practice example:

• Učka Nature Park, Croatia

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Annex 1

Detailed description of activities and necessary materials

Take children into nature and provide them with emotional, cognitive and group experiences; touching hearts, using hands and minds: If you chose methods carefully and apply them conscientiously and in the right order, you can create conditions for deep experience-based learning in a short period of time.

If you are working with children with disabilities you should allow more time for preparation and the introduction of activities. Here we will cover some general aspects that need to be considered.

A key aspect of preparation is cooperation with teachers that already know the children and understand their needs, so that they can provide all the necessary information you need in order to adjust activities appropriately. Together you will reach the best solutions for every group.

Before outdoor activities begin be sure to provide enough time for children with disabilities to get to know the surrounding area, as it will provide better orientation and encourage them to feel safe.

For blind and visually impaired children you should provide a detailed description of the place you are in, including all the details and colours, as well as tactile experiences (tactile maps, materials in Braille). You should avoid rough terrain. Use sounds from nature. Don't hesitate to use the term "see" - they "see" with their hands. During walks through nature (which they can do with the help of a personal assistant or white cane), encourage them to use touch along the whole path and in resting areas to gain non-visual information. You can encourage all the other members in the group to do the same and activate non-dominant senses.

For deaf children and children with impaired hearing it is important to provide a sign language translator (if one is not already with them). Eye contact is very important in communication. Speak slowly and clearly so that children can lip read. Take extra care when walking in the nature, as deaf and hearing-impaired children depend on their eye sight and cannot detect sounds around them; this is particularly important when using paths with multiple purposes (for example, pedestrian and bike paths, as children will not be able to hear signals from bikes that are coming from behind them).

If you are working with a group with wheelchair users or persons with limited mobility, consult the teacher and carefully chose terrain and adjust the activities accordingly. Communication with these children should be at eye level (sit or crouch next to them). Adjust the speed you are walking. Don't worry about using words like "walk" or "let's go"; they hear them every day. While moving through nature it is essential to choose paths that are wide and flat enough to be manageable by wheelchair users and persons with limited mobility. Also take care that there is a toilet available that can be accessed by wheelchair users.

If you chose to conduct inclusive workshops, then it is a good idea to do preparation exercises with children without mobility limitations so they can try walking with impediments and using wheelchairs, recognizing items while blindfolded and trying to recognise sounds while using ear plugs. This is a useful exercise for children to better understand the circumstances of children with impediments. Depending on the age of the children, children without impediments can be paired with children with impediments in order to assist them during activities.

The key elements of a successfull outdoor programme – overview

Phase	Remarks	Method
Create a good group atmosphere!	Getting to know each other. Making the group feel good and relaxed. Start with a proper energizer!	Orbit Metamorphosis walk Kitchen-clock
Experience nature with all your senses!	Emotions first! Let nature touch all the participants'senses and awaken their emotions.	Frame it! Photo click Smelling memory Find your tree
Calm down and focus attention!	Become receptive and attentative – the right mood for nature observation. Integrate artistic skills!	Toad concert Sound map
Trigger curiosity!	Curiosity is the basis for every learning process. Without curiosity there is no sustainable education.	The monster
Actively explore nature!	Use equipment to explore the hidden parts of nature. Help to collect more information!	Net dipping Catching insects in a meadow Gattering informaton from various sources
Repeat and process information!	Connect the species that you have explored in a playful way. From small pieces to the big picture.	Who am I ? Web of life
See things at a larger scale!	Use playful simulations to make kids feel and understand. Make your own conclusions.	Mini national park Stepping stones
Imagine solutions and prepare to get active!	Take responsibility	Role play, debate, longlasting experiments.

1. Create a good atmosphere in the group

Start from where the group is! Consider their mood and aim to create a good atmosphere from the very beginning. If possible, use the first activity to introduce the topic of the day.

Energizer: Orbit

Goal: After a long bus journey the group is ready to get moving. Considering

their mood we choose to begin with a game involving running.

Age: 5+

No. of participants: 5 - 35.

Method: The group should stand in a circle. Invite each student to choose another

person from the group without letting anyone else know who it is.

Level 1: When the facilitator gives the signal to start, all of the students should try

> to run around the person they have chosen – the target person will still not know they have been chosen. Once each participant has *orbited* the person

they have chosen everyone can stop running.

Level 2: Each student should choose two persons and try to run around them. They

can begin when the facilitator gives the signal to start. Once the goal is

accomplished the participants can stop running.

Level 3: Now each participant should choose three other persons and try to run

around them.

Material: No material needed.

Duration: 10 minutes.

Suggestion: If possible film the activity from a high point. A possible thematic

> link between an outdoor programme and biodiversity: Seen from the outside they can both seem to be random. For example, when we look at organisms living in a pond there seems to be no order, but when we look closer we discover regularities and that the organisms in the pond are

related to each other.



Energizer: Metamorphosis walk

Goal: Energizing a group that feels a bit tired.

Age: 3+

No. of participants: 5 - 35.

Method: Invite the group to stand in a circle. The facilitator should explain: "Let's

go on a relaxing walk, we will breathe the fresh air, we will enjoy the sun \dots

and we are looking forward to meeting...

... a hunting falcon formed by two students" ... the students should come together in groups of two and form a flying falcon, moving their wings like

a hummingbird, and looking out for a mouse on the ground.

"Let us continue our relaxing walk, breathing fresh air, enjoying the sun...

looking forward to meeting

... a spider walking ... formed by four students ...

... a caterpillar turning into a butterfly ... formed by three students ...

... a dragon fly hunting a mosquito ... formed by two students ...

... a leech looking for some blood to suck ... formed by one student...

... a centipede walking ... formed by all of us."

Material: No material needed.

Duration: 15 minutes.

Suggestion: Do the relaxed walking sequence for 10 seconds or more. Choose animals

you will study or encounter during your programme. Feel free to give the children ecological information. Encourage the students to act

expressively.

Adjustment of activity for children with disabilities:

Choose flat terrain or trails that are adapted for wheelchairs. For blind and visually impaired children you should provide an assistant. During the task of forming the animals the assistant should leave the child to participate independently and only approach the child again when the walk continues. The facilitator should describe the animals that are being

formed in detail.

Energizer: Cow stall

Goal: Energizing a big group (after a long journey or lunch).

Age: 5+

No. of participants: 12 - 40, activity is done in groups of three.

Method: Form groups of three participants. Two students in each group should

form a cow stall; to do this they should make a roof with their arms, with their hands touching at the ridge of the roof. The third student acts as a cow and should stand under the roof. At the beginning of the activity, one student from the whole group remains alone – he or she will shout instructions (described below) for the whole group. While the other students are following the instructions, the student who gave them

should join one of the groups and another student should leave it once the instructions have been fulfilled. The student that has left the group then shouts new instructions. There are three possible instructions:

Instruction 1: Cow! All of the students acting as cows move out of their stall (under the roof of arms) and look for another one. The students who are forming the cow stalls should stay where they are and continue hold their arms in the same position.

Instruction 2: Stall! All of the students forming a cow stall should move and try to find a second person to build a new stall over a lonely cow. Note: the cows must stay in the same place - they are not allowed to move! The other students may only build a new stall over a cow, not somewhere else and call a cow to come to them! Cows should make themselves visible by using their hands to form small horns on their heads and Mooooing! Mooo Moooo!

Instruction 3: Cow stall! Everybody leaves his or her place and looks for two other students to build a new Cow stall with. Only in this case can students change their role!

Material: No material needed.

Duration: 15 minutes.

Suggestion: This activity can be quite chaotic when people don't follow the

instructions, but it doesn't matter. The most important thing is to have

fun and mix people!



Energizer: Fast and furious

Goal: Energizing a big group (after a long journey or lunch).

Age: 5+

No. of participants: 10 - 40.

Method: Stick five pieces of sticky tape to everyone's pullover. The aim is to stick

all of your five pieces of tape onto somebody else and not to have any on yourself. But... everybody else is also trying to stick their pieces of tape on

to you, too, so... run!

Material: Crepe tape.

Duration: 10 minutes.

Suggestion: You can connect the introduction to the activity with a topic.

Get to know each other game: Kitchen clock

Goal: For a group in which participants do not know each other yet.

Age: 8+

No. of participants: 10 - 40.

Method: Participants should stand in a circle.

Round 1: Set a kitchen clock to ring in two minutes. Participants have two minutes to quickly pass the clock around and say their name when they

receive it.

Round 2: Again set the clock to ring in two minutes, but this time everyone should express what they associate with the place where they are when

they receive the clock.

Round 3: Set the clock to two minutes. This time, everyone should express

their expectations for the day when they receive the clock.

Note: The time should be adjusted to the size of the group. Two minutes

are needed for a group of 25 participants.

Material: Kitchen clock.

Duration: 10 minutes (depending on the number of participants the activity can take

more or less time).

Get to know each other game: Two right, one wrong

Goal: For a group in which participants do not know each other yet.

Age: 8+

No. of participants: 10 - 35.

Method: Give each participant a piece of paper and a pen. They should write three

statements about themselves on the paper and then stick it to their chest so

that everyone can read it. Two statements must be right, one must be wrong. Participants should chat with each other and find out about their hobbies and

their little lies!

Material: A4 paper, pens.

Duration: 20 minutes (depending on the number of participants the activity can take

more or less time).

Suggestion: It is not important that participants really get to know everyone in the

group. It is more important that they start to move, warm up, begin to talk,

to communicate, and lose their fear and shyness.

Adjustment of activity for children with

Blind and visually impaired children can participate in the activity with the assistance of other children in the group. Encourage all the children to

speak

disabilities: loudly and clearly.



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Starting game: Entrance ticket

Goal: Create a positive atmosphere within the group and familiarize them with the

space in which they will work. If you include this activity, it would be good to also include the 'Exit ticket' activity upon the culmination of group work.

Age: 5+

No. of participants: 5-30, in the case that the group is large, you can divide it into two or

three smaller groups.

Method: briefly familiarize the participants with the place in which they've arrived,

ask them to look around and find some part of nature that will be their entrance ticket to the workshop, to examine it fully, touch, smell, memorize, and then place in a canvas carrier bag. Turn their attention to the size of the ticket, which must fit into the palm of the hand. Explain to participants that spending time in nature does not demand a material charge (an entrance ticket that is purchased) provided we behave as part of nature. This means that when departing we take with us only our carry impressions,

photographs or sketches, and leave behind only our footprints.

Material: canvas carrier bag for storing the entrance ticket.

Duration: 10 minutes.

Suggestion: Ensure that each participant takes only one entrance ticket. Direct their

attention to making sure that their ticket is unique, and part of nature that they find interesting. If necessary, place certain items in the area where you start working with the group so that each participant finds an item to use as a ticket (for example, pinecones, acorn, feathers, small plastic or rubber animals, environmental messages, animal tracks, moss, twigs etc.).

Adjustment of activity for children with disabilities:

Assist blind and visually impaired children and wheelchair-users during the exploration of the field by guiding them or describing their surroundings in detail. Remind them to memorise the subject they have chosen for their Entry Ticket by using their tactile senses. If you

decide to do this activity at the beginning of the day, also do the Exit Ticket

activity at the end of the day.

Finishing game: Exit ticket

Goal: Rate and stimulate responsible behaviour while spending time in nature

Age: 5+

No. of participants: 5-30, in the case that the group is large, you can divide it into two or

three smaller groups.

Method: participants stand in a circle, side by side, facing the centre of the circle.

They place their arms behind their backs and join hands. The educator places one item from a canvas bag in the hand of each participant. At the

indication of the educator, the participants determine through touch, without turning around to look, whether they have received the object that represented their ticket from the beginning. If they have, they exit the circle, while the others move closer and pass the item they are holding to the right. The activity continues until everyone receives their original entrance ticket, i.e. exit ticket. Discuss impressions with participants following this activity and ask them to state how they recognised their entrance ticket, what they will do with it, and what they would now choose as a ticket if they had to pick again.

Material: canvas carrier bag containing the materials from the Entrance ticket

activity.

Duration: 15 minutes.

Suggestion: If participants mix up their tickets and take someone else's by mistake,

allow them to investigate the reason that happened.

2. Experience nature with all senses

Let nature first touch children emotionally. Ecological knowledge comes later. Experience nature with all senses!

Frame it!

Goal: Sensitisation for nature with focus on visual sense.

Age: 8+

No. of participants: 10 - 30.

Method: Give the group a few minutes to explore an area and look for beautiful,

interesting, stunning or funny natural objects that will fit into a picture frame. Select an object (feather, grass, flower, old spider' web, but <u>no</u> <u>living animals!</u>) and clip the object into the frame. The group should form a circle, ideally lying on their backs, heads to the inside of the circle, feet outside. Each participant should hold their frame above their face with the sky as a "screen" in the background and admire the object, its details, beauty and unity. The facilitator gives the signal "click!" and everybody hands over the frame to their neighbour on their right. Give them a few seconds to admire the new "picture" and then "click!" again, and so on until everyone gets back their own frame again. The atmosphere should be silent, cosy, and relaxed, as if watching a picture show like in old times or a

power-point presentation nowadays.

Material: Glassless picture frames (one frame per student) - or make frames from

cardboard and u-foil (or similar).

Duration: 20 minutes.



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Photo Click!

Goal: Sensitisation for nature with focus on visual sense.

Age: 7+

No. of participants: 10 - 30, activity is done in pairs.

Method: Choose a natural habitat like a meadow, where you will look more closely

at the surprising beauty of nature from different perspectives. The students should form pairs. One takes the role of a photographer, while the other one becomes a camera. The photographer stands behind the camera and holds them by the shoulders. The camera lens is shut (the child's eyes are closed). The photographer now carefully leads the camera to an object of interest. The photographer positions the camera near a plant with a flower or remarkable leaves and chooses an artistic perspective. Saying "click" and pressuring the shoulders of the camera the lens opens (the child opens their eyes and enjoys the view and remembers it). After a few seconds the photographer says "click" again and pressures the shoulders of the camera once more. The lens will close (the child shuts their eyes again and the photo is saved in the camera). The photographer carefully leads the camera (whose eyes are closed) back to their starting point. Now the roles are reversed. The photographer becomes the camera and the camera becomes the photographer. Follow the same steps. When all the

students have a saved a photo in their memory, they all develop them. Give each student a clip board with a piece of paper and coloured pencils; the

children should then draw the photo in their memory.

Material: Clip board and paper for each participant, coloured pencils.

Duration: 30 minutes.

Suggestion: Encourage the students to sit down comfortably wherever they want and

give them enough time to draw their photo. They will be in nature in a

contemplative and peaceful mood.

Sound map

Goal: Nature sensitization with a focus on the sense of hearing.

Age: 6+

No of participants: 5-30.

Method: While in a certain area in nature, pay attention to the many natural sounds

that can be heard around you. Each participant is given a sheet of blank A4-sized paper or a notebook and a pencil or felt-tip pen and asked to select a pleasant place of their choice, distanced slightly from others. They are given five minutes to listen during which talking is not permitted. They direct their focus towards different sounds, they can also be advised to close their eyes. They create their own map of sounds by first marking their own position on the paper (for example, in the middle of the sheet of paper), and then they write or sketch sounds they hear in different directions and at different distances in relation to their own position. Allocate enough time for this, as this activity can take up to 20 minutes. The group then regathers upon hearing an agreed sound (a whistle or imitation animal call) and the participants present their maps and what they heard. You can display the sound maps in an open-air gallery by using

a string and pegs to hang all of the maps drawn between trees.

Material: Notebooks or blank sheets of paper, pencils or felt-tip pens, string (15)

metres in length), pegs (as many as the number of participants).

Duration: 10-20 minutes (gauge how much the group is enjoying the activity, if

they are still working peacefully after 15 minutes, feel free to extend their

enjoyment in the sounds of nature).

Suggestion: Maintaining a certain distance between participants enables each of them

to be "alone with nature" and to feel comfortable in that environment for a

few minutes.

Alternative variation for younger

participants:

on a sheet of paper, everyone can draw a stick man with one very large ear and the children then sketch all the sounds they hear on the paper. In order to help them be calm, you can ask them funny questions like "Can you hear the frogs peeing?" (For example, if you are near a water habitat) or "can you hear nightingale? Do you hear the jay's tummies rumbling?"

(If you are in the vicinity of a forest or a park).

Adjustment of with disabilities:

Deaf and hearing-impaired children can draw their map as an "expression activity for children of silence". For blind and visually impaired children you can prepare playdough for mapping the sounds on a piece of paper or clipboard.



Smelling memory

Goal: Sensitisation for nature with focus on sense of smell.

Age: 5+

No. of participants: 5-30.

Method: Invite the group to wander through the landscape searching for

> remarkable smells. They are allowed to touch things. Each student should collect a material that smells and put it in a small box. When all of the students have collected something, they should exchange boxes. Each student should check the new smell and then try to find it in the

surrounding landscape.

Material: A small box that can be closed for each participant.

Duration: 10 minutes.

Suggestion: Beware of toxic substances and wash hands afterwards or clean them with

wet wipes.

Adjustment of with disabilities:

Blind and visually impaired children can participate in the activity with activity for children the assistance of another child from the group. If they have had enough time to explore the space in which the activity is being conducted, blind and visually impaired children can independently look for scents. Before you begin it is very important to check whether there are poisonous plants,

plants with thorns or plants that cause burns in the area.

Find your tree

Goal: Sensitisation for nature with focus on tactile sense.

Age: 7+

No. of participants: 5- 30, activity is done in pairs.

Method: The activity must take place in a wooded area. The students should form

pairs. One student in each pair is blindfolded and then turned around so that they lose their orientation. The other student should now carefully lead the blindfolded student to a tree 10-30 meters away, indicating any dangers on the way. The blindfolded student must now familiarise themselves with the tree so that they can find it again later without a blindfold. After touching the tree, the non-blindfolded student should lead the blindfolded one back to where they started. The blindfolded student should then be turned around once more and the blindfold removed; their task is now to go

through the wood and try to find the tree without any external help. Once they have found the tree, the students change roles and follow the

same steps.

Material: Blindfolds.

Duration: 20 minutes.

Suggestion: Beware of possible dangers, such as steep slopes or holes in the ground.

The activity can easily be done more than twice.

3. Calming down and focusing attention!

Activities for focusing attention help us to sit or stand calmly and not talk. They lead us to focus our attention, often using scenarios in which the group stands or sits in a circle. Paying attention and focusing receptors on nature serve to deepen our experience of observing nature.

Toad concert

Goal: Focus attention and become calm and receptive.

Age: 7+

No. of participants: 15-40.

Method: Invite everyone to sit on a comfortable spot in a circle and join in a toad

concert, simulating the sounds of toads. Toads emit noises irregularly, each one in its own rhythm. One participant should start to emit noises quietly and then the others should join in one after the other, gradually getting louder. After the peak has been reached, the participants should stop emitting noises

one after the other, until only one is left, who finally also fades out.

Material: No material needed.

Duration: 10 minutes.

Suggestion: Everybody has their own rhythm, let the concert develop intuitively.



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Rain cycle

Goal: Focus attention and become calm and receptive.

Age: 7+

No. of participants: 10 - 40.

Method:

Invite the participants to form a circle and sit down. First the wind starts: the facilitator rubs their hands together; the person on their left follows the example and so the noise moves from one person to the next around the circle until it reaches the facilitator. Important note: participants should only begin to make a (new) noise once their neighbour to their right is already doing it. The facilitator then starts to imitate gentle rain by snapping their fingers, and one after another the other participants join in, changing from wind noises to raindrops. Once everyone is making raindrop sounds another sound begins (heavier rain). Make sure that participants continue to perform their noises until the new noise reaches them. Continue until the rain is very hard, even thunder. The storm passes as it came, reversing the actions/sounds. Again the noises move around the circle; people should only switch to new noise when "the wave" reaches them. In the last round people stop making noises and slowly, one by one, the rain fades away until silence falls.

Actions/sounds in order:

rub your hands... wind starts...

snap fingers... first raindrops (gentle rain)...

clap your thighs... heavier rain... clap even harder... even heavier rain...

stamp your feet... thunder...

...and then go back through the steps in reverse!

No material needed. **Material**

Duration: 10 minutes.

Suggestion: This is very good for opening a session and creating a good atmosphere

within the group. Participants listen to each other, don't talk, calm down

and do something together. Magical!

Adjustment of with disabilities:

Assign an assistant or a child who is sat next to a blind or visually impaired activity for children child to describe the movements and indicate when it is their turn. Deaf and hearing-impaired children can participate by doing the movements

and enjoying the fellowship of the group.

Frog

Goal: Creating a positive atmosphere within the group, building trust, concentration.

Age: 7+

No. of participants: 15-40.

Method: participants arrange themselves in a circle. One participant moves away

> from the group so as not to hear the agreement reached within the circle. The other participants agree who among them will be the frog, while all the others are flies. The frog participant must "eat the flies" by sticking their tongue out towards the other participants in the circle. The participant to whom the "frog" shows their tongue must squat down, thus becoming an "eaten fly". Before the frog begins to eat the flies, the participant who moved away from the group returns and stands in the middle of the circle.

Their role is to guess who is the "frog".

Material: no materials are required. **Duration:** 10 minutes (may last longer).

Catch the finger!

Goal: Creating a positive atmosphere within the group, building trust,

concentration, coordination.

Age: 7+

No. of participants: 10 - 40.

Method: participants arrange themselves in a circle. Each participant extends their

> arms so that they can easily touch the hand of the participant beside them. Everyone turns their left palm to face upwards at shoulder height to the person next to them. Everyone turns the index finger of their right hand to

face downwards and places it on the hand of the participant to their right. At the indication of the educator leading the activity, everyone attempts to grab the finger of the person next to them and avoid their finger being

grabbed.

Material: no materials are required.

Duration: 10 minutes.

Suggestion: The educator can misdirect the participants' attention with some story,

> and then unexpectedly give the signal to start. The "roles" of the left and right hands can be switched. A good activity to conduct between two

others that are mentally demanding or at the start of the day.

Adjustment of with disabilities:

Children in wheelchairs should be positioned next to younger (shorter) activity for children or you should do the activity sitting on chairs. Give the signal to deaf and hearing-impaired children by using a previously agreed gesture.



Have you ever...?

Goal: Creating a positive atmosphere within the group, getting acquainted with

the pre-existing knowledge and attitudes of the group, building trust, fun.

Age:

No. of participants: 10 - 40.

Method: participants arrange themselves in a circle. The educator explains that

> the question "have you ever ...?" will be used to elicit different things that may or may not relate to participants. The participants to which questions relate run in a circle and give each other "high-five" greetings. The list of questions can help the educator improve their familiarity with the participants and it is advisable to prepare 10-15 questions in advance (they

can be general or related to a topic of the day).

Material: no materials are required.

Duration: 10 minutes (may last longer depending on the mood of the group).

Example of a list of (pay attention to switching between questions for determining participants' pre-existing knowledge and questions of a general type): questions

Have you ever previously been to "name of protected area"?

If yes, how many times have you been to "name of protected area"?

Have you had a good breakfast?

4. Have you ever seen "some specific species of animal"? In nature or a

- Do you know why it is important to protect nature? Here address those who have entered the circle and ask them why.
- Have you got brothers or sisters?
- 7. Have you heard of any medicinal plant? If yes, ask them which.
- Have you used medicinal herbs when you were ill?
- 9. Have you ever broken a bone?
- 10. Are you able to recognize more than five species of bird that live in our country? Poultry does not count. Ask a few participants to list which birds they know.
- 11. Do you know how to whistle? Ask them to whistle.
- 12. Have you ever caught a bug?
- 13. Have you got a fear of insects or spiders?
- 14. Have you been on more than three continents?
- 15. Are you ready to get to know "name of protected area"?

Adjustment of with disabilities:

Blind and visually impaired children can participate in the activity with activity for children the support of an assistant or another child in the group. For deaf and hearing-impaired children you must provide a sign language translator, as it is important that the children understand all the questions you ask them.

Blinded animals

Goal: Awakening the senses, concentration, connecting group members.

Age: 7+

No. of participants: 15-40.

Method: Invite the participants to stand in a circle. Each participant extracts a piece

of paper showing the name of a species of animal from a bag. Participants are only allowed to look at their own paper and cannot tell anyone which animal they've drawn. That's their big secret! Then give the participants blindfolds and ask them to put them over each other's eyes. The challenge is to find other animals that call out in the same way. There is no talking, only animal calls. If possible, use animals that are characteristic of a

particular area and that are known to the participants.

Material: small pieces of paper containing the names of animals, canvas sack or hat,

blindfolds.

Duration: 10 minutes.

Suggestion: You can also use this activity to divide a large group into several smaller

groups. If you don't have blindfolds, or not enough for the entire group, you can do the exercise without them, with the participants imitate the type of animal by their motion (either movement or calling). For younger

participants use papers with animal drawings.

Forest bon ton

Goal Introduction to the rules of behaving in nature.

Age: 10+

No. of participants: 10 - 40.

Method: clarify with the entire group the meaning of the term BON TON (French

for good form/manners). Talk about the importance of the rules. Do the rules exist only to "bother" us, or do they serve some purpose? Through questions lead to the fact that, **in essence**, **they serve our own safety**, **the harmonising of relations**, **easing of co-functioning**. Divide participants into groups of two – five and share them with the paper form "Forest Bon Ton" and pens. They have five minutes to write down as many rules (or at least one) of proper behaviour in nature. Time the exercise. Following this activity, gather up the forms with rules written down. Use them from time to time to remind the group of the rules that they agreed to abide by during the visit in nature. **Leading with questions:**

- Are we ready for the forest (clothing, footwear, water, cap, camera, magnifying glass etc.)? Tick off everything you have ready. Discuss why it is essential to have long trousers, deep boots, caps etc.
- We have now entered the forest (state the name of the protected area) as guests. Do we know how to behave as guests? How to be welcome guests?

- I will give an example of bad behaviour as a guest, and you will give an example of good behaviour in nature.
- *I turn up as a guest and break the furniture, remove paintings from* the walls, break the wall sockets. Is that a good behaviour? Would we like to have such guests? If we now translate that into a visit to the forest – how should we behave? Possible answers could be: we protect seedlings, we observe flowers, we photograph them, smell them etc.
- I turn up as a guest and trample over, cut and scratch the host or his children. I pack his child in a sack and take him with me. If we now translate that into a visit to the forest – how should we behave? Possible answers could be: We protect the inhabitants of the forest, observe them, photograph them etc.
- I turn up as a guest and shout at the host. If we now translate that into a visit to the forest – how should we behave? Possible answers could be: we speak quietly so as not to frighten the animals. When they flee from us, we won't see them.
- I turn up as a guest and throw litter around the house and stick chewing gum to the tables. What should we do in nature? Possible answers could be: We take our litter with us to a bin.
- *Is it difficult to behave in such a way that nature enjoys us?*

printed form "Forest bon ton - etiquette" (A4 format for younger participants, while a smaller format can be used for older participants), felt tip pens/ballpoint pens/pencils.

10 - 30min (depending on how much participants are permitted to consider and come up with rules by themselves and how much the discussion develops).

- Allowing participants to formulate their own rules creates the feeling among them that the rules are their own, as opposed to being imposed from outside.
- Playing 'I turn up as a quest' aims to show how certain behaviour is bad in a familiar context (some may not consider breaking a branch terrible, but would consider breaking a chair or hitting someone as such).
- It is important that rules are formulated affirmatively (instead of 'We don't break branches', use 'We protect plants growing in the forest'. Instead of 'We don't drop litter', state 'We carry our waste with us'). If rules are formulated as bans, what needs to be done remains unclear. Affirmation is guidance on desirable behaviour, not just eliminating that which is undesirable.
- This activity should be carried out prior to field trips or at the start of a

Blind and visually impaired children can participate in the activity activity for children with the support of an assistant or in a pair with another child in the group. Alternatively, you can record the statements using a mobile phone or dictaphone.

Material:

Duration:

Suggestion:

Adjustment of with disabilities:



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4. Trigger curiosity

Curiosity forms the basis of every learning process. Without curiosity there is no successful education. Storytelling leads us into new worlds.

The monster

Goal: Raise curiosity before exploring a new habitat/living space.

Age: 4+

No. of participants: 5-25.

Method: Give the students are clipboard, paper and pencil. The facilitator

> should choose an animal that is likely to be found in the habitat you will subsequently explore. With a picture of the organism in hand, the facilitator should describe the organism -step by step- to the students. The facilitator should not reveal the picture of the organism to the participants. The students should draw what is being described. These drawings tend look like monsters, which is often funny. Students should show what they have drawn and compare it to the picture of the organism. You can make and open air monster exhibition by hanging the drawings on a rope with paper clips.

Material: White paper or notebook, coloured pencils, rope (around 15 meters), paper

clips.

Duration: 10 minutes.

Suggestion: The drawings usually turn out to be very original, creative and surprising.

They are good for decorating classrooms or telling others about your

outdoor activities.

Adjustment of with disabilities:

Blind and visually impaired children can participate in the activity by activity for children using play dough or clay to make a three dimensional monster. For deaf and hearing-impaired children you must provide a sign language translator, as it is important that the children understand the detailed description of the monster.



Scavenger hunt

Goal: Awakening curiosity for independent exploration of new habitats, paying

attention to details in nature, creativity, coping, fun.

Age:

No. of participants: unlimited. It is possible to work in pairs or groups of three-four

participants.

Method: Divide participants into pairs or small groups and give them a sheet of

> paper entitled "Eco trophy quest" and a felt-tip pen or pencil. Before commencing, give participants instructions on exactly what they should do (whether, for example, some trophies need to be collected and/or photographed) and agree on directions of movement and setting off. You can work in a specific place or throughout the duration of a walk (if the walk is linear and you have to return the same way, they can carry out this activity on the return journey and thus won't even notice that they are returning the same way). After the search, discuss what they were able to find easily, what was the most difficult thing for them to find, whether they were unable to find some things at all during the time of the year when the activity was done or perhaps whether something doesn't exist in the habitat in which they find themselves... Use questions to direct them to draw their own conclusion (for example: task them with finding a pinecone, but take them to a deciduous forest. They need to conclude for themselves that they cannot find a pinecone there, and then you can discuss the differences between deciduous and coniferous forests).

Material: sheets of paper entitled "Scavenger hunt" prepared in advance, pencils or

felt-tip pens, a camera or, alternatively, a mobile device with a camera.

Duration: 15-20 minutes (depending on the number of trophies and their type, this

> activity may take less or more time than suggested. It's important that you allocate enough time for them to investigate, so that they can find all the

trophies).

Suggestion: you can adapt this activity to a specific topic and age group, and choose

what the trophies will be accordingly.

Alternative variation for

younger Instead of written form, use sketches of the items that need to be found

participants: in nature.

Adjustment of with disabilities:

Choose suitable terrain where children with limited mobility and activity for children wheelchair users can move independently or provide an assistant. Blind and visually impaired children can participate in the activity in a familiar environment with the support of an assistant. Customize the scavenger

hunt sheet for the group you are working with.



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Colour hunt

Goal: Awakening curiosity for independent exploration of new habitats, paying

attention to details in nature, creativity, coping, fun.

Age: 3+

No. of participants: Unlimited. It is possible to work individually or in pairs.

Method:

divide participants into pairs as required – if the group is smaller (up to 20 participants) they can work individually. Give them a sheet of paper entitled "Quest for colours" and a pen, or use painted pebbles or coloured ribbons. Before commencing, provide instructions on precisely what participants have to do (for example, to find one item of each colour on the "Colour Quest" sheet, or to find two objects of the same colour as the pebble they extracted from the Colour Guard sack) and agree on directions of movement and setting off. You can work in a specific place or throughout the duration of a walk (if the walk is linear and you have to return the same way, they can carry out this activity on the return journey and thus won't even notice that they are returning the same way). After the search, discuss what they were able to find easily, what their favourite colours are, what the colour of nature is etc. Use questions to direct them to draw their own conclusion that nature is multicoloured and that colourfulness changes throughout the year.

Material: sheets of paper entitled "Quest for colours" prepared in advance, pencils or

felt-tip pens, pebbles or ribbons in various colours or some natural items

of various colours.

Duration: 10-20 minutes (depending on the number of colours and group size).

Suggestion: You can start this activity with the question "Who is the guardian of colour

in nature?" ... the answer you would like them to arrive at is that "the rainbow is the guardian of colour". If you ask them which colour is nature, most will answer that it is green. After the activity, you can return to this answer and ask them if they've changed their mind about what the colour

of is nature.

Nature postcard

Goal: Focusing attention, active observation and awakening curiosity for further

exploration of nature.

Age: 4+

No. of participants: unlimited.

Method: every participant gets a piece of cardboard covered with double-sided

adhesive tape with a protective film. Ask them to look around, seek and collect materials that they will use to create a unique postcard. You can specify a theme, though that is not essential. You can link the activity to the theme of the protection of nature (how we collect medicinal herbs or different fruits, what we can collect in nature ...). In the end, create an

exhibition of prepared postcards and a group photo.

Material: rectangular pieces of cardboard and double-sided adhesive tape.

Duration: 20 minutes.

Suggestion: if you are working with younger participants, pay attention that they don't

stick live animals to their postcards (beetles, ants etc.). Observe them and encourage their work. An alternative is to make with them bracelets,

crowns, medals etc.

Adjustment of activity for children with disabilities:

For blind and visually impaired children (particularly younger children),

provide an assistant who will offer them items and assist with the postcards. For older children that can move independently, choose an

appropriate field for collecting the materials.



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Head in the clouds

Goal: Focusing attention, active observation, coordination.

Age: 7+

No. of participants: unlimited.

Method: choose a safe area free of obstacles (meadow, park, wood, courtyard etc.).

All participants line up, standing single file, and place one hand on the shoulder of the person in front of them. With the other hand they hold a small mirror under their eyes, so that the mirror points upwards and rests on the bridge of the nose. The first person in line starts slowly walking and all others follow. Participants should only look into the mirrors and thus get the impression that they are walking between tree canopies or clouds.

Material: small mirrors.

Duration: 15 minutes.

Suggestion: The selection of a location for this activity is crucial, as is the time of day

during which you will conduct the exercise. Participants should not look directly into the sun, so it is not a good idea to conduct this exercise in the middle of a sunny day, unless you are in a dense forest! Also check whether any of the the participants suffer from dizzy spells. This activity "challenges" balance and coordination, so pay attention to the physical behaviour of participants. If they don't feel good doing this exercise, they do not have to do it. Let them observe how the other participants progress.



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5. Actively explore nature

By using equipment for field work, we move significantly closer to nature and explore it from new perspectives. Where exactly does a certain species live? What does it live on? Questions lead us to observe more attentively. What's more, we also seek information from different sources.

Habitat expedition

Goal: Fascinating and inspiring beginning to the topic: Getting to know your

protected area from the ground up; familiarisation with the most common species in your area; opening your eyes to an unknown hidden world, such

as underwater life.

Age: 8-

No. of participants: 10 - 30, divide large groups into several smaller ones so that all children

can be actively involved.

Method: Depending on the habitats in your protected area select appropriate

equipment to catch and examine the fauna. Give the students a short introduction about how to use the equipment. Call students' attention to the fact that they are dealing with living creatures and make sure that at no time animals may be harmed or killed and that all species are put back carefully into their natural habitat after observing them. If, for example,

you are implementing the activity in a water habitat, let the students spend some time catching water insects or other small creatures, using a brush to place them into water-filled containers. After approximately 30 minutes summon the children together to examine the species they have collected in their mini-aquariums. You can use the brush to take out individual animals and put them into water-filled magnifying cups and show them around separately. If you implement this activity in a meadow or forest habitat, put each species you catch in the nets under one empty magnifying glass and call the students back together when all magnifying glasses are full in order to a take a closer look at them all together. Insects or spiders caught on the ground or those crawling on bushes can be caught directly in a cup. Note that larger insects like big grasshoppers or butterflies suffer when kept too long in relatively small cups. Release them sooner rather than later! Collect the names of the species you have found on a list or make drawings of them to take home. You can do a second round of catching and examining fauna, if time allows.

Material:

Equipment appropriate for the ecosystems in your protected area: Water habitats: Small nets (normally used at aquariums) or kitchen strainers, brushes (for removing the small animals carefully from the nets or strainers into the mini-aquariums): one for every 1 or 2 students; shallow watertight containers (mini-aquariums to temporarily host the animals): 3 to 5 for the whole group; magnifying cups and books or pictures with the most common water animals.

Meadow: Insect nets (bought or home-made from old curtains) for catching flying insects such as butterflies; magnifying cups and books or pictures with the most common insects.

Forest: Magnifying cups and books or pictures with the most common forest animals. If flying insects or water habitats are available then use the equipment above as well.

Duration:

60 - 90 minutes.

Suggestion:

it is advisable to have some assistants with you as the activity can be very intense and the children can be very enthusiastic about searching for and catching the animals.

Adjustment of with disabilities:

For this activity we suggest that you consult the responsible teacher and **activity for children** customize the activities with them. Suggestions for adjusting the activity: For blind and visually impaired children you must provide an assistant to describe the space and conditions in order to help the child to explore the area. You can prepare educational materials in advance, such as relief images, large images with high contrast on non-reflecting paper or small models of animals and plants. For children with limited mobility and wheelchair-users you must provide an assistant and pay special attention to safety. If possible, children can sit or lie on the ground during the activity.



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Tree identification key

Goal: Familiarizing participants with species of trees in a certain area on the

basis of leaves and/or fruit (protected area, park, street etc.), applying the

dichotomous key for species determination.

Age: 10+

No. of participants: 5-25, activity can be done individually, in pair or small groups of 3-4

participants.

Method: each participant receives one dichotomous key for leaves and one for

fruits and a pencil. They need to sit during this activity and to have either fresh or herbarium material available. It is best for them to receive the fruit and leaf of the same plant at the same time. In that way we save time, and the children familiarize themselves with the tree as a whole. You can demonstrate how to use the key on one copy. Check to ensure the activity is clear to participants and whether they are familiar with the following terms: petiole (leaf stalk), blade or lamina, leaf margin, needle leaves, simple and compound leaves, fruits, seeds, jagged edges and all other concepts from the key that you consider could be new to them. Circle the groups as they work. Although this activity seems simply, it is actually a very challenging task. Advanced groups that complete the task quickly can

help slower groups.

Material: dichotomous keys for tree species (one for leaves, another for fruits)

prepared in advance, fresh or herbarium samples of twigs, leaves and fruits,

pencils, rubbers, sharpener, list of species with local and Latin names.

Duration: 30 minutes.

Suggestion: You can conduct this activity as preparation for a walk during which

participants should recognize and find as many of the determined species as possible, or you can first collect fresh plant material with the group and

then determine the species in question.



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Reading animal tracks

Goal: It's difficult to see live animals in nature, especially when you're on a field

trip with a large group. However, you can confirm their presence based on

their tracks.

Age: 8+

No. of participants: 5-30.

Method: take photos of every type of track you find in the field. With the help of a

mini key for tracks, uncover which animals they belong to.

✓ Measure the length and width of the track.

✓ How many toes does the animal's tracks show.

✓ Determine whether it's a two-legged (bird) or four-legged animal.

✓ Determine whether it's a small or large animal.

 \checkmark Confirm the direction of movement (where it came from and where the

tracks lead).

- ✓ Confirm the type of movement (standing-crouching, slow walk, walking, trotting, jumping, skipping, running, galloping).
- ✓ Sketch the shape of the track.
- ✓ Identify the species of animal that left the track.

Inspect the bark of trees well and try to find a tooth print. Also check fences, pickets, roadside wires in detail and try to find leftover fur, hair and feathers. Uncover the similarities and differences between tracks.

Material: notebook or papers, pen, key for determining details, camera or mobile

device with camera.

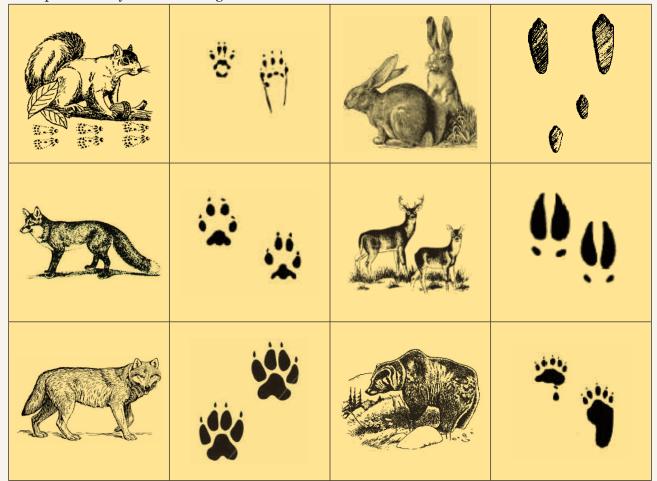
Duration: 45 – 60 minutes.

Suggestion: You can divide the activity into two parts if required: 25 minutes in the

field collecting materials and taking photos \pm 25 minutes in the classroom determining details (alternatively, the entire activity can be conducted in

the field).

Example is the key to determining tracks



Making a animal tracks plaster cast

Goal: Create a collection of plaster casts of animal tracks that can be used in the

classroom on days when you can't go into the field.

Age: 12+

No. of participants: 5-20.

Method: use a thick brush or handful of grass to clean the animal track and the surface of

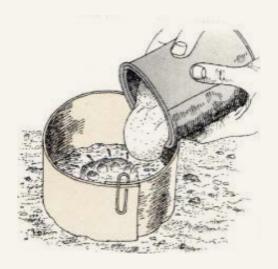
the soil around the track. Cut a strip from a milk carton (a strip cut from a larger bigger plastic bottle or drinks can will suffice). Push the cardboard into the ground around the track. Connect the two ends of the strip with a paper clip or peg. You can also use a piece of pipe around five centimetres in width and with a diameter corresponding to that type of track (eg. for dog, fox or hare tracks, use a pipe with a diameter of 10 cm). Mix the plaster (add the plaster powder to water) and pour it over the track. Dig out the plaster cast after one hour and leave to it dry. On the completely dry cast, write information about the find

(animal species and location where the track was recorded).

Material: drink carton, plastic bottle or piece of pipe, scalpel, plaster powder, water,

bowl for mixing the plaster, small brush, trowel.

Duration: 60 minutes. Can take longer if required.



Plant mapping

Goal: Familiarization with the characteristics of grassland communities and

the number of species living in just one square metre, as well as their

interconnectedness and interdependence.

Age: 10+

No. of participants: 10-40.

Method: take a piece of string with a length of 4.2 metres. Hammer four wooden

stakes or large nails into the ground. Wrap the string around each stake to make a perfect square of 1m2. With the help of a magnifying glass, try to explore this mini space, count the different plants growing there and observe the micro-world of insects, snails, and earthworms. Record all

observations and try to sketch some of the organisms observed.

Material: string, wooden stakes or large nails, magnifying glass, notepads, pencils.

Duration: 60 minutes. Can take longer if required.







Sampling method

Goal: Familiarization with the characteristics of grassland communities and the

frequency of specific species.

Age: 12+

No. of participants: 10 - 40.

Method: the random sample method falls under the category of relative methods for

researching the numbers of specific species in a meadow or forest clearing.

A surface area of one square metre is usually chosen for researching.

• Divide the selected surface area into 10x10 squares.

• In the table, in precisely defined places, enter the number of units of a

plant, e.g. dandelion.

• Then calculate the average number of plants in the researched meadow

	1	2	3	4	5	6	7	8	9	10
А										
В										
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1										

Square ref.	No. of plants of a specific species

a)	Total number of units of a specific plant species from the researched area (1m²):
b)	Average number of units of a specific plant species from the researched area (total number of plants divided by 10):
c)	Total number of units of a specific plant species from the researched meadow (multiply the average number of plants by 100):
	ring, wooden stakes or large nails, magnifying glass, table to be filled in, neils.
60	minutes. Can take longer if required.

Duration:

Materials

Shy forest inhabitants

Goal: Familiarization with and observation of species of animals from a sample

of thick forest floor.

Age: 12+

No. of participants: 5-30.

Method: take a sample of forest soil from under the leaves. Pour alcohol into a jar

and add a funnel. Place netting at the bottom of the funnel and over it the soil sample. Turn on a lamp. Place the jar under the lamp. After a few minutes, different types of animals will appear in the jar with the alcohol. Turn off the lamp. Extract the animals with a tweezer or brush and place them on a white surface. Observe them with the help of a magnifying glass. What kinds of shapes are they? Measure the largest animal. Why did the

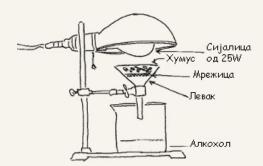
animals appear only when you turned on the lamp?

Material: table lamp, funnel, piece of netting, jar, 20ml of alcohol, tweezers, brush.

Duration: 60 minutes. Can take longer if required.







Tree giants

Method:

Goal: Introduction to indirect methods of measuring.

Age: 8+

No. of participants: 10 - 40.

10. of participants. 10 – 40

for the health of forest communities is it important to observe and measure trees annually. Select two or three trees that at first glance appear different or unusual, or which you like for some reason, i.e. canopy shape, leaf, flower, fruit.

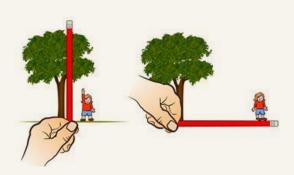
- Measure the thickness of the trunk so you can estimate the relative age of the tree (this applies only to deciduous species).
- *** A tree's relative age can be determined by measuring the trunk's girth at a height of 1.3 metres from its base. The number gained should be divided by 2.5. This number (2.5) is used as a standard measure of the annual growth of trees, which is approximately 2.5cm in most species of deciduous trees.
- If you come across a tree stump, calculate the age of the tree when it was felled; there are summer and winter rings, while rings on the

southern side are wider.

- Note how the shadow of the tree (light regime) impacts on the plants found on the ground.
- Calculate the height of the tree with friends and pencils. Hold a pencil upright, moving it back and forth until the top and bottom of the tree align visually with the pencil (the pointed end of the pencil should be at the base of the tree). Moving your arm as little as possible, turn the pen horizontally until it is parallel with the ground.
- The sharpened end of the pencil should still be at the base of the tree. Ask a friend to move slowly until they reach a point that aligns with the tip of the pencil. The distance from the base of the tree to the place where your friend stands represents the height of the tree. If you do not have a tape measure, measure the distance in steps. One step is around 75 cm long.

Materials: pencil, tape measure, notepad.

Duration: 30 minutes



6. Repeat and process information!

If we choose one species and devote ourselves to its role, that leads to us identifying significantly with part of nature. All species, including humans, are interrelated and depend on pristine habitats. Human intervention that disturbs one species or habitat impacts all others. Consider, discuss, share your views with others.

Who am I?

Goal: Ideal after a field trip to show the whole group all of the species that have

been found by the class: repeat their names and learn more information

about them.

Age: 7+

No. of participants: 10 - 30, if the group is large you can divide it into two smaller groups or

do the activity in pairs.

Method: Sit together and recapitulate the species you have found during the field

trip. If you didn't do any outdoor activities you can alternatively choose species from the local ecosystem you like. Write the names of the species

on pieces of paper. Stick the paper to a volunteer's back (alternatively use a sticky note and put it on their forehead). This person must then guess the name of the species by asking questions that can only be answered with either yes or no. Participants should ask question related to the characteristics of the species, such as "Do I have four legs?" or "Do I have fur?" and not direct questions like "Am I a wild cat?". Alternatively, two volunteers can compete: each time one gets a "no" answer the other gets a turn; or the students can play the game in pairs without an audience.

Material: paper, pens, crepe tape.

Duration: 30 minutes.

Suggestion: You can prepare cards with typical animals from your area in advance.

Adjustment of

activity for children For blind and visually impaired children, describe in detail

with disabilities: the animals that will be used during the activity.

Web of life: each species counts!

Goal: Ideal after a field trip to show the whole group all of the species that

have been found by the class: repeat their names, get more information, and learn about their relations to each other; the activity helps children understand that each plant/animal has its place in a "web" and is important for other species, and that removing one or two can cause serious damage to others and might lead to the collapse of a whole

ecosystem.

Age: 7+

No. of participants: 10 - 15 for younger participants, 15 - 30 for older participants.

Method: Sit together and recapitulate the species you have found during the field trip. If you didn't do any outdoor activities you can alternatively choose

species from the local ecosystem you like. Invite the group to form a circle. Someone starts the activity by saying, for example, "I am a kingfisher and I eat fish"; they then throw a ball of wool to a person representing the "fish" but continue to hold on to the end of the string. The person representing the fish catches the wool and continues "I am a fish and I like to eat tadpoles", and then throws the ball of wool to a student representing the tadpole while also continuing to hold on to the string. The web is growing. The student representing the tadpole could say "I am a tadpole and dragonfly larvae like to eat me", and so on. Don't forget to include some plants or birds or even humans, so that the web includes a large variety of species. At the end, when everyone has become part of the web and is holding the string (in several places if they have been addressed more than once), the group may lean back, holding only the string of wool in their hands. This can have a surprising effect: an ecosystem is like a strong web,

each member counts.

To see what happens when the web is broken, one or two students should let go of the string and the group should try to lean back again. The web has lost its strength and some of the students may even fall backwards because the string is loose.

Material: Tear-proof ball of wool, paper and pens, crepe tape.

Duration: 30 minutes.

Adjustment of with disabilities:

For blind and visually impaired children, an assistant or another child activity for children in the group should catch and pass them the ball of wool and describe the species mentioned during the activity. The next child to whom the ball of wool will be passed should give a vocal signal to make it clear in which direction the ball of wool should be thrown by the blind or visually impaired child.



Food web

Goal: Understanding food chains/networks, the circulation of matter,

understanding the interconnectedness of living beings in an ecosystem.

Age: 9+

No. of participants: 5-30.

take small glasses with images of plants and animals turned upside down and arrange them on a table. Check with the group if they know what a food chain is and how it is built. The chain always starts with plants (the lowest glass), because only plants can produce food (from carbon dioxide, which is what we exhale, water and sunlight; oxygen is a by-product). Ask participants to make as many food chains as possible. Allocate sufficient time for them. It can occur that someone will make a food chain that includes decomposers. Such a chain may be longer. In this case, note that

there are two chains included and separate them into individual examples.

prepared glasses with pictures of plants and animals.

Duration: 30 minutes.

Alternative variation for younger participants:

Materials:

print out a certain number of sketches of plants and animals and give them to the kids to colour them in first. Use adhesive tape to stick some coloured drawings to their chests so that they are visible to the whole group. Then step by step, with the question "Who do you eat?", create a food chain. Participants stand in line single file holding one hand on the shoulder of the person in front of them. In this way you will form several food chains (depending on the size of the group). Try crossing some chains. Can a food network be made from them?



Forest spirits

Goal: Identifying with nature, encouraging creativity, respecting and

encouraging environmentally correct behaviour.

Age: 3+

No. of participants: up to 30.

Method: tell participants a story about the ancient protectors of the forest,

mysterious creatures that live in every tree. These forest spirits are waiting

to be awakened, and they are woken only by the pure heart of a true guardian of nature, who will give them a figure shaped in clay on the bark of a tree. Give each participant a piece of clay, ask them to look around

at the surrounding trees, embrace the one they choose as their own and whisper to it a concern they have in connection with nature conservation. The participants are then tasked with using the clay and parts of nature from the environment to create the image of an awakened forest sprite on the bark of their tree. They need to give it a name and consider its powers. Discuss the participants' impressions with them after this activity and ask them to tell the other participants the story of their forest sprite.

Material: piece of clay for every participant, various natural materials found in the

field. Clay is not required if you have appropriate mud available in the

Duration: 30 minutes.

Suggestion: Narration is the key to this activity. Regardless of the participants' ages,

you need to bring them into the right state for this activity with the story. Also plan for time to check out the works of all participants and hear the story of every forest sprite. If the group is large, ask who wants to

volunteer to share their story.

Adjustment of with disabilities:

For blind and visually impaired children, provide an assistant to help them activity for children find a tree where they will create the forest spirit. Give them enough time to collect natural materials to create the forest spirit and to lead them on a tactile tour of the works of other children.



7. See things at a larger scale!

We decide how we will organize our lives and relationship towards nature. We can imagine a better world. Let's practice giving more space to nature and use it intelligently. One protected area is not enough! We need many areas where nature is respected. And they must be connected. We use simulation games to show that in a fast, impressive and fun way.

Mini national park

Goal: Getting familiar with the characteristics of a national park, such as zoning,

endangered species or tourism, etc., through a playful approach to the

topic.

Age: 12+

No of participants: 12 - 30, activity is done in small groups of 3-5 participants.

Method:

Each team starts by looking for the best spot to create their own mininational park. This should be a place where several natural features are present, such as water, vegetation, bare spaces, etc. Make clear to the participants that biodiversity is an important issue in protected areas. Once each team has agreed on a spot, they should form a one-square meter boundary for their mini national park using nails and rope. Within this square meter the students may alter the conditions, moving things, adding others, building small model houses or paths, and marking zones (1st, 2nd and 3rd zone), using only natural materials or materials they find around (they can also include litter if convenient). This should be a playful and creative process, but the teams must meet some criteria given at the start, such as:

- + define zones (what kind of activities are allowed in each zone)
- create areas for tourism and activities regarding environmental education
- + visitor guidance management (paths, parking, public transport, etc.)
- + natural values (number of protected or endangered species, number of different habitats)
- + number, size and distribution of settlements (how many people live in the national park)
- + you can add other criteria

Give all the teams time participate in a tour of each other's parks (30 minutes up to 1 hour). The teams should act as managers of their protected areas and present their mini-national parks, stating its name (if that was required) and informing the "public" (other teams) about endangered species, the management steps they have taken in order to protect them and other infrastructure. The "public" can ask questions or criticize or suggest improvements. A more serious approach for adults is for other participants to act as a "commission" (rather than as "public"), which should decide if the park gets its approval (or disapproval) as a protected

area (using national or international standards, such as IUCN). Every visit

always ends with applause for the creators.

Material: Four long nails (length 20 cm, alternatively tent pegs or sticks, etc.) and a

4m length of rope (can be also longer), criteria for the establishment of a

protected area.

Duration: 90-120 minutes.

Suggestion: You can do this activity with participants of various ages; just adapt the

> complexity of the criteria! If you do the activity with younger participants go and check on them from time to time to see how they are doing, as they might have a lot of questions. The activity can also be done without the protected area criteria: let the participants imagine their own protected

area.

Adjustment of with disabilities:

Integrate blind and visually impaired children into teams with children activity for children without disabilities. The facilitator should make sure that children with disabilities are active and intervene if necessary. The duration of the

activity may be shortened if appropriate.

Stepping stones

Goal: Learning about habitat networks and their important role as stepping

stones, using the example of migrating species or species with wide movement range; this activity helps children to understand that nature protection doesn't make sense without national and international collaboration; participants physically experience the difficulties that

migrating species face in our man-made landscapes.

Age: 6+

No. of participants: 15 - 30.

Method: Define a playing field and mark it. Arrange "protected areas" (ecosystems)

all over the field.

Variety 1: Storks (migrating birds).

Round 1: The group should stand at one end of the field. Together select a migrating

> animal (for instance a stork). Tell a story about the animal's lifecycle and habits, what they feed on, etc. While listening, the students should act as storks and identify themselves with their role by playing (building nests, laying eggs, breeding, feeding the young ones and so on). Tell the students that the storks must fly from here (Europe or Serbia) to the other end of the field (Africa). Make clear that the coming migration is a long, tiring and dangerous journey that takes two or three months. Along the way, the storks have to take rests, feed and gather their strength for the next part of the journey – and for this they choose attractive protected areas (ecosystems). In the space between the marked areas that promise food, peace and shelter, the birds are threatened by many dangers – these dangers are represented in the game by "catchers" (who are played by

other participants), who will try to catch all birds that are not standing on a protected area (ecosystem). Students that are touched by a catcher have to leave the playing field, because they have starved. The remaining birds arrive at the other (safe) end of the field. You should now tell the students stories about the storks' lifecycle and habitat in Africa.

Round 2:

Remove one or two protected areas (ecosystems) and tell a story why this happened (perhaps they are no longer protected by law, or they were replaced by tourist infrastructure, or growing cities swallowed them up...). The group should then try to get back to the other end of the field without getting caught by a catcher, which is now of course more difficult than before.

Round 3:

Again remove one or two protected areas and tell a story about why this has happened (giving different reasons than before). Again the group should try to reach the other end of the field.

Play the game for a certain amount of time or until none of the students are left on the field.

Tip:

It can be quite effective to go back and replay the first round of the game (with all the protected areas returned to the field) – so that the students can feel the difference.

Variety:

Bears (terrestrial animals).

For bears (and wolves, lynx, deer and other larger animals) green "corridors" are important. Green corridors allow large animals to move from one protected area to another. Large roads without "green bridges" break up their habitats and black access to other protected areas. In our game, the bears want to find each other, mate, and raise young cubs; and the young cubs then want to find new territories of their own. The bears don't need to get to the other end of the field but instead want to visit as many of the other protected areas as possible. You can adapt the story to other solitary species that also live on their own in large territories but need to meet, for example, to mate. Set a rule that the bears (participants) can only reach other protected areas that are no more three steps (green corridors) away. In round two and three add new roads, as well as green bridges and green corridors, as positive examples. When the bears' cannot migrate anywhere, and are stuck in their protected areas, the game is over.

Tip

For advanced players you can choose two species with different needs, such as storks (which need wetlands and meadows) and bears (which need huge forests and green corridors). You can mark the protected areas with different colours (for water and forest), indicating that they can only host one of the species: the game becomes more complex.

Material:

Pieces of rope, paper, camping mats or similar materials (for protected areas or ecosystems). A long rope may be helpful to mark the boundaries of the playing field.

Duration:

30 – 45 minutes.

Adjustment of with disabilities:

Form pairs of children with disabilities and children without disabilities so activity for children they can "migrate" together. Inform the children without disabilities of the importance communicating and adjusting their movements and speed so that they are appropriate to their partner. It is important that all children hear and understand the instructions for each round of the activity as well as the conclusions at the end.

Rivers connect us

Goal: Experience the region as a whole and three different aspects of it as

examples of the connections that rivers create (floods, migration of fish,

water pollution).

Age: 12+

No. of participants: 15 - 30.

Method: Give the participants a map of the Danube river basin and a (preferably

blue) rope that represents the Danube.

In the first step ask the group to create the shape of the River Danube as it actually flows through Europe, from Germany to the Black Sea, making clear curves on its way, due to geomorphological circumstances. Once the River Danube (rope) has been set out on the ground, the participants should position themselves according to the region/country they come from. The participants can discuss and agree the position of countries and the location of the borders, for example along the river, as well as connections and distances. The facilitator should now provide the participants with three more (shorter) pieces of rope. These pieces of rope represent important tributary rivers such as Sava, Tisza and Prut. The facilitator should provide background information about the role of tributary rivers. Two or three voluntaries should take the shorter ropes and form the tributary rivers, connecting them with the Danube where they actually flow into the River Danube. In the next step everybody should position themselves along the Danube or a tributary river and take the rope (representing a river) in one hand. Where the Danube is the border between two or three countries, two or three participants should stand facing each other. This occurs between Slovakia and Hungary, Croatia and Serbia, Serbia and Romania, Bulgaria and Romania and Ukraine and Romania. The Danube also forms a border for a few kilometres between Moldova and Romania, Austria and Germany and Slovakia and Austria.

Now the simulation of processes can start.

The facilitator tells a story: Nothing comes from nothing. The water in the River Danube is comes from about 300 different rivers in the whole Danube basin region. But there are big differences throughout the year. During periods of low water the outflow of the Danube into the Black Sea is 1,610 cubic meters per second. During periods of high water the outflow into the Black Sea is 15,540 cubic metres per second. Almost 10 times more!

In the winter months of January and February, the water levels are lowest in the upper course of the River Danube. Downstream from Budapest, and especially between Rumania and Bulgaria, the Danube is covered by ice. Ask the group to simulate the low water levels (for example by holding the rope down to the level of their knees) and the frozen Danube.

In spring, the snow in the Dinaric Alps and the Carpathians starts melting. A flood wave moves down the Sava, Tiza and Prut rivers, entering the Danube and creating high water levels downstream. The participants should indicate rising water levels by raising the rope high up in the air. As the flood wave goes by the ropes should be lowered again.

Until the point where the Morava discharges into the Danube, the Danube is heavily influenced by the Alpine glaciers. For this reason the Danube reaches its highest monthly flow in the upper course only in July. When the Alpine glaciers melt in July, a flood wave moves down the whole Danube River to the Black Sea.

In autumn a Beluga starts to swim upstream from the Black Sea in order to spawn. Use a wooden ring to symbolise the fish. The participants must jump through the ring without taking their hand off the rope and pass it on to the next person. The Beluga cannot pass through the Iron Gate hydro dam. Then a fish run is added and the dam becomes passable. The Beluga continues until the dam of Gabcikovo in Hungary. After 2Youh months of spawning somewhere in the Danube, the Beluga returns to the Black Sea. When the fish passes a participant, they must jump through the wooden ring and pass it to the next person.

Then suddenly an accident happens on the Tisza River. Poisonous substances are entering the river and flowing downstream. A symbol of toxic waste should be passed downstream by the participants. Talk about the accident and the consequences. As time goes by the water dilutes the poison and it is washed into the sea, the last destination of the journey. We end our simulation with a hopeful message: A drop of water needs four weeks from the moment it leaves the springs in Germany to travel down the whole length of the Danube River to the Black Sea. Fresh and clean water is always coming from the springs. If we stop polluting the rivers they will be clean soon and the Black Sea will recover. This is an advantage for all of us.

Material: 1 (blue) rope of 15-20 meters, 3 shorter pieces of rope of 3-5 meters, at

least 1 map of the Danube region, a wooden ring of 80 cm, and a symbol

for toxic substances.

Duration: 30 minutes.

Suggestion: This activity can be done outdoors or in a big room indoors.

8. Imagine solutions and prepare to get active

How can we protect and create nature with biodiversity and live well by using natural resources intelligently? There are many ways that lead us to achieving these two goals. We are currently moving into real life and becoming active. We imagine solutions and present our arguments. The future belongs to us!

I can contribute as well (for younger children)

Goal: Evaluating and encouraging responsible behaviour while spending time in

nature, recognizing personal contributions.

Age: 5+

No. of participants: 5 - 30, divide a large group into 2 or 3 smaller once.

Method: after spending time in nature, ask the participants to note one or more

things that they can change about their behaviour immediately, as soon as they leave the protected area or park, that would contribute to the conservation of nature. Let that become their new good habit and

something that they will take home with them.

Materials: no materials required.

Duration: 15 minutes.

Note: use questions and conversation to lead them to these habits being related

to the topic that you worked on together that day (water, air, waste etc.).

Stakeholder council meeting (for older children)

Goal: First-hand experience of different interest groups living and working

in protected areas. Familiarization with contrasting ideas and opinions

of others, as well as identifying with a situation in which others find themselves. Taking on a stance and spreading one's opinions. Understanding that mutually listening and going through democratic

processes leads to sustainable solutions.

Age: 12+

No. of participants: 15 - 30, activity can be done in pairs or small groups of 3 participants.

Method: choose roles among participants (a team of two people can also take on

one role). Share the symbolic characteristics by which it will be easier to recognise the roles on all sides at a glance. You can also write them down on cards. Give the participants time to acquaint themselves with their role by reading a short description and assuming a stance regarding the given scenario (problem). In order for communication to be more effective, it is recommended that participants sit in a circle or on chairs facing one another. Start with an introductory circle: each participant briefly presents their role and opinion. The discussion should then start (the first scenario

to be resolved). One person in charge of leading the activity should assume the role of a judge or mediator, and may also provide additional information as and when required. Make sure that the basic rules of communication are always respected (that others listen, don't interrupt etc.). At the end of the first round of discussion, all stakeholders make a decision by voting. Continue with the next case. Play as much as the group wants and for as long as time allows.

Materials:

cards with brief descriptions of each role (depending on the topic of the stakeholders committee meetings, define the roles and which stakeholders are important in the scenario), cards with "scenarios" (problems that should be addressed in protected areas) and, optionally, one symbolic object for each role (e.g. tie for the mayor, binoculars for the tourist, fishing rod for the fisherman etc.).

Duration: 60 - 120 minutes.

Adjustment of with disabilities:

activity for children For blind and visually impaired children you can read the description of the roles or prepare the descriptions in Braille.

Example of a possible scenario: a mayor invites local residents to a public debate on plans for the development of tourism in their municipality. He sends an invitation letter to the locals.



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Mayor's letter

Dear fellow citizens,

The beauty of our municipality, and primarily our nature reserve, is attracting ever more attention. During recent months, various ideas have been relayed to me regarding the development of tourism.

On the one side, one extremely wealthy man, who you all know from the media, wants to buy 25% of municipal land, including half of the nature reserve. His dream is to create a ski resort intended for guests from abroad, with an accommodation capacity five times the total population of the municipality.

On the other side, a group of local citizens is advocating for the sustainable development of tourism based on the best possible protection of the nature reserve and biodiversity. Their goal is to improve the state of nature both within and outside the nature reserve even while developing tourism.

As your mayor and on behalf of the municipal board, I would like to invite you to join me for a public discussion on the future of tourism in our municipality on 19th October at 5pm in the Local Community hall.

The result of the discussion will impact on our official position and be included in the planning process. I can hardly wait to hear your opinions and arguments.

Sincerely yours, The Mayor

Description of roles

Child

I live right next to the nature reserve and my favourite playgrounds are within it. I don't accept the fact that us children are ignored and our playgrounds destroyed. I plan to defend our playgrounds in nature together with all the other kids.

School teacher

What can we learn from someone else's experience? Considering history, as well as current examples of tourism development, I would like to remind you of the associated dangers and successes.

Tourism manager

I'm doing everything I can to ensure more tourists come to visit us and spend more time and more money in our municipality. I advocate for the building of the ski resort.

Mayor, focused on jobs

People are more important to me than plants and animals. My priority is for as many jobs as possible to be created, and a new ski resort will surely secure that.

Deputy Mayor, focused on nature protection

The well-being of people is based on pristine nature. Economic and tourism development cannot be implemented at the cost of the nature reserve. Tourism development must contribute to everyone and promote a common and harmonious life in the community. I advocate the development of "ecotourism".

Landowner

I want to sell my land at the best possible price, so that I can live without any longer having to work.

Elderly woman

When I was young, we produced everything we needed for life here ourselves. I think we need to again find a way that we can use our own resources ourselves. If someone wants to meet us and visit our nature as a tourist, that's fine. I don't accept handing over our land and nature reserve to a large company for the construction of a ski resort.

Fisherman

I live from fishing and want to continue to do so. As such, I consider that, in the case of tourism development, the quality of the water in our rivers and lakes must also be preserved, as well as their natural structures.

Ranger

Habitats in the nature reserve must not be destroyed. Tourism must respect that. If we are smart, we will use nature without destroying it. I have the following ideas for the promotion of tourism and the simultaneous protection of nature and biodiversity.

Businessman

My opinion is as follows: the more opportunities we have to do business, the better. That which has the highest priority, in my opinion, is the highest possible financial gains and the highest possible number of tourists.

Annex 2

Memorandum of Cooperation

Membership in the programme ""School Network of name of protected area"

1. School Network

The School Network represents a new form of active participation of young people in nature and environmental protection, with the aim of improving the quality of educational programmes in schools and Protected Areas, in line with the objectives of the Protected Area management, as prescribed by the Law on Nature Protection.

2. Members of the programme "School Network of <u>name of protected area"</u>

The School Network connects schools from <u>name of protected area</u> and surrounding areas that are in direct contact with the natural and cultural heritage of this area.

The management of the protected area _____ dd/mm/yyyy has established the School Network in which the follow schools take part:

- School name, address
- School name, address
- School name, address
- School name, address
-

In signing this document, these schools become full members of the programme "School Network of _name of protected area_"

3. Cooperation between the manager of <u>name of protected area</u> and schools members

Cooperation between the manager of <u>name of protected areas</u> and schools members includes:

- experience and knowledge exchange, designing and implementing group activities in the field of education of children and youth;
- rising awareness among children and youth about the importance of preserving and improving care for the Protected Area (and environment in general);
- connecting students, teachers and employees of the Protected Area through a range of activities and programmes focused on preserving nature and cultural heritage;
- organizing educational workshops and celebrating ecologically dates;
- expanding school involvement at an international level.

The manager of <u>name of protected area</u> and schools, as well as experts from different fields (including but not limited to biology, geography, history, art...) will participate in joint activities.

4. Obligations of the signing parties

Manager of <u>name of protected area</u>:

- Coordinating the "School Network";
- cooperation with school participants in designing the programmes and activities of the "School network";
- active participation in planning and delivering the programmes and activities of "School Network";
- coordinating with the educators and external associates;
- providing materials needed for the activities;
- organising transport for participants in the activities, according to prior agreement.

Schools members:

- cooperation with the management of the Protected Area in planning the programme and activities of the "School Network";
- active participation in planning and delivering the programme and activities of the "School Network";
- active participation in joint activities;
- cooperation between school members;
- analysing data gathered from activities and presenting them publically;
- organising transport for participants in the activities, according to prior agreement.

Manager of <u>name of protected area</u> and schools participants:

organizing joint activities

5. Purpose of establishing the programme "School Network of protected area $_$ name of protected area $_$ "

The School Network has great significance for improving the educational and social programmes in schools and the Protected Area, and helps to raise awareness of the importance of preserving natural habitats and learning about the nature and cultural heritage of the area.

6. Changes and additions:

In case of disagreement in the execution of joint activities, parties signing this agreement are willing to solve their disputes in the spirit of good will and tradition of cooperation.

If the nature of the dispute is of a sort that cannot be solved with an agreement, the parties that have signed this document reserve the right to dissolve their membership, with a notice period of 15 (fifteen) days.

All changes and additions to this document are obligatory only if they are made in written form.

In the case that the signing parties decide to undertake a specific legal transaction with mutual rights and obligations of a binding legal character, it will be described and arranged in a separate contract.

I Manager of <u>name of protected area</u>	-
Director	Coordinator of School Network, Employee of the Protected Area
II Primary School	, address
Director	
III Primary School	, address
Director	
IV Primary School	_ , address
Director	
[Add additional as required]	
Place, date	

7. Signing parties of the programme "School Network of <u>name of protected area</u>":

Annex 3

PLANNING SCHOOL NETWORK ACTIVITIES

Protected Area:	
School Network Coordinator (Project Leader):	
Member Schools:	
Contact(s) at Schools for School Network:	



	Jetwork is based on a long-term and efficient partnership between local schools and a and by the common goal of preserving local natural and cultural heritage in a way that g of the local community.
* SMART goals – specific, 1	measurable, attainable, relevant and time-bound
GOAL 1 * SMART	
GOAL 2 * SMART	
GOAL 3 * SMART	
What are your TARG ● Who will you inc	ET GROUPS?



What is your MAIN MESSAGE?

•	The main message is something that you want everyone to know/understand about your project Imagine the title of a text in a newspaper - what would it say?
How	will you CELEBRATE?
How	will you CELEBRATE? A strong and motivated team is a key component of the project. How will you celebrate your success?
	A strong and motivated team is a key component of the project. How will you celebrate your
	A strong and motivated team is a key component of the project. How will you celebrate your
	A strong and motivated team is a key component of the project. How will you celebrate your
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	A strong and motivated team is a key component of the project. How will you celebrate your
	A strong and motivated team is a key component of the project. How will you celebrate your



What is the NAME of your project?	
What do you think will be the most fun thing you do during the project? What are you most looking forward to?	



PLANNING SCHOOL NETWORK ACTIVITIES

• What activities will you implement to achieve your short-term goals? How will your activities contribute to achieving the long-term goal?

	Time range (from - to)					
	Where?					
	Who?					
SHORT-TERM GOAL 1:	School Network Activities	1.	2.	3.	4.	ý.



SHORT-TERM GOAL 2:			
School Network Activities	Who?	Where?	Time range (from – to)
1.			
2.			
3.			
4.			
ιġ			



SHORT-TERM GOAL 3:			
School Network Activities	Who?	Where?	Time range (from - to)
1.			
2.			
3.			
4.			
5.			



Annex 4

LONG-TERM GOAL

The existence of a school network is based on a a long-term and efficient partnership between local schools and a Protected Area that is bound by the common goal of preserving local natural and cultural heritage in a way that contributes to the wellbeing of the local community..

SHORT-TERM GOAL Annual plan for School Network Activities												
SHORT-TERM GOAL				Annu	al plan	for Scho	ol Netw	ork Acti	ivities			
Activity 1	1	2	3	4	5	6	7	8	9	10	11	12
Activity 2	1	2	3	4	5	6	7	8	9	10	11	12
Activity 3	1	2	3	4	5	6	7	8	9	10	11	12
Activity 4	1	2	3	4	5	6	7	8	9	10	11	12
Activity 5	1	2	3	4	5	6	7	8	9	10	11	12
Activity 6	1	2	3	4	5	6	7	8	9	10	11	12
Activity 7	1	2	3	4	5	6	7	8	9	10	11	12
Activity 8	1	2	3	4	5	6	7	8	9	10	11	12



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Why we are here.

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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