

# HANDBOOK FOR LEADERS OF ECO-CHANGE

## How To Get Involved in Activities for Ecology and Climate Protection



**Editor:** Eliza Szadkowska, PhD

Białystok, 2023

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**Reviewed by:**

“...The handbook is an excellent guide and a collection of ideas for activities for local society, and especially for local leaders, on how to get involved in activities for environmental protection, ecology and climate protection. It should be printed and distributed in particular among local communities through municipalities, government administration and social organizations.”

***Lech Magrel, PhD engineer***

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## **ENTRY**

### **What is the purpose of this publication?**

This handbook is one of the results of the project. It contains a presentation of best practices in ecology and educational activities aimed at stimulating pro-ecological attitudes among citizens of our region.

The main purpose of this publication is to present the tools developed in the project for pro-ecological activities in the local community.

In addition, the goals include:

- creating environmental awareness through the educational process, including shaping attitudes, arousing the interests of people in related economic, social, political and ecological issues,
- enabling the acquisition of knowledge and skills necessary to improve the condition of the natural environment and the proper management of its resources,
- creating new patterns of pro-ecological conduct, for example, wise consumption and saving natural resources.

### **Who is this publication addressed to?**

We hope that this handbook will become an inspiration and resource for every person who undertakes activities in the field of ecology, climate and nature protection at the local level.

The publication is particularly addressed to:

- the academic community, both students and staff at a university, regardless of any characteristics they have, including age, gender, origin, profession or special needs. The presented tools are addressed to the recipients of educational programs in the fields of economics, administration and business,
- citizens undertaking activities in the local community and institutions, as well as companies and non-governmental organizations implementing activities in the field of ecology and environmental protection.

***Team of the Eco-Change Leaders Project***

## **Part I: Introduction**

**Eliza Szadkowska, PhD**

### **Description of the Eco-Change Leaders Project**

#### **What problem does the project address?**

The problem we have diagnosed concerns the progressive degradation of the region's natural resources at the expense of economic development. We checked that it is mostly the result of low ecological knowledge and sensitivity of the inhabitants, the so-called pro-ecological attitudes. There are no forms of education on the proper management of natural resources, which is why citizens engage in ecological activities in their environment to a small extent. The 2020 Strategic Diagnosis of the Podlaskie Voivodeship indicated that the sense of individual impact on the environment is growing in our community. However, pro-environmental declarations on the part of the inhabitants of the region are motivated mainly by economic considerations and the desire to save. The culture or customs so-called ZERO WASTE are in a nascent state or nonexistent; environmental performance in purchasing and saving resources remains a marginal phenomenon. The problem of local government authorities making decisions regarding spatial development and infrastructure, which often leads to social conflicts. Participation of residents in public consultations on landscape and nature is the lowest in the country, as is participation in social activities and volunteering in ecology. In companies and local institutions, the implementation of ecological programs is negligible.

The current project is a continuation of our cyclical activities and gives a chance for a more effective implementation of the education and nature volunteering program in the local environment. That is why we invited partners with potential and experience in education and civic participation to the project.

Together, we developed a survey that we conducted among the recipients of our project, including students and employees of WANS in Białystok, in the following majors: finance, management, and administration. One hundred eighty-seven students and thirty-one WANS employees participated in the survey. The results show that most people have no knowledge of how to act in an environmental emergency, only twenty-three people have heard of local environmental education programs; activities and programs influenced the change of pro-environmental attitudes in only thirty-nine participants. One hundred forty-six respondents do not participate in environmental consultations and do not know how to do it effectively; as many as one hundred twenty-four need practical skills in responsible shopping and saving resources, as many as eighty people would like to increase their knowledge about

recycling and seventy-five about saving energy and water; more than half of the participants need a workshop on waste segregation and protection of natural resources. Among the respondents, there are as many as twenty-seven students who are willing to acquire Eco-Influencer skills.

Of the proposed forms of volunteering and ecological practice, most expressed their willingness to participate in monitoring and identification of threats and active protection of nature, as many as seventy people want to take part in environmental education activities and tourist services.

Therefore, the project responds to the needs of direct recipients and is part of the main strategic goals of the region: creating ecological awareness through ecological education including awareness raising, arousing people's interest in interrelated economic, social, political and ecological issues, enabling the acquisition of knowledge and skills necessary to improve the condition of the natural environment, including the creation of new patterns of pro-ecological behavior (the so-called wise consumption).

### **What is the main goal of the project? What actions have been taken to achieve it?**

The main goal of the project is to create the first Academic Center for Ecological Education and Practice in Poland, and to introduce the administration of the basics of the subject entitled "Ecological Empathy" permanently into the curriculum of the business faculties: management, finance and accounting.

In order to achieve these goals, we conducted: an Ecological Empathy course with Eco-Leader, Eco-Influencer, and Eco-Practitioner modules; a training camp for nature educators, and Student Alert for Mother Earth - civic monitoring practices in ecology, as well as open events for the community in the region: The First Plogging Championship through the Knyszyn Forest in May 2022, and a Festival for Mother Earth in June 2023. As part of the project, we collaborated intensively with a Partner from the Donor States of the Active Citizens – Regional Fund Program, with whom we exchanged best practices on sustainable development in large cities and jointly developed this Eco-Leader Manual.

To increase the chances of achieving results, we have created a team of partners from Poland and Norway:

1. The Association of Friends of the Knyszyn Forest '*Wielki Las*' supported by the Knyszyn Forest Landscape Park, which possesses knowledge and experience in nature education.

2. The East European Academy of Applied Sciences in Białystok with the potential and experience in educating finance, management, and administration staff, which coordinated the Ecological Empathy course.



3. The Foundation Center of Initiatives for Society (FCIS) which has experience in monitoring and civic participation and led the Student Alert for Mother Earth activity - civic monitoring practices in ecology.

4. Innovation Circle Network (ICN) - an international association with its registered office in Norway, operating since 2007 for smaller and medium-sized places in Europe and in the world, aimed at making such places sustainable and more attractive, which brought its experience and expert knowledge to our activities in developing tools for nature educators.

### **What were the results of our project?**

As a result of our activities, over one hundred people increased their knowledge and pro-ecological competences, and twenty educators gained new skills to involve citizens in activities for the proper management of their natural resources.

Twenty-one graduates of the Ecological Empathy Course fully involved in the activities of the project became Eco-Leaders. Such tools have been developed to support education about pro-ecological attitudes, such as: an e-learning platform entitled Eco-Leader Knowledge Bank, the Eco-Leader Handbook, The Scientific Circle of Ecological Empathy, a Media/film studio of Eco-Influencers, and a Report on civic monitoring in ecology with a Map of Eco-Positive Interventions.

People participating in the project, who took the course and actively joined the activities, including ecological practices, received a Certificate of Ecological Credibility and an entry in their supplement to their university diploma, confirmed by international experts.

### **We invite you to the social media of the project:**

- Facebook: <https://www.facebook.com/LiderzyEkoZmian>
- Website of **The Eastern European University of Applied Sciences in Bialystok (WANS)**: [www.wans.edu.pl/liderzy-eko-zmian/](http://www.wans.edu.pl/liderzy-eko-zmian/)

**Jarosław Ruszewski, PhD**

**Civic Participation and Volunteering in Ecology and Climate Protection –  
Case Study of the Podlaskie Voivodeship**

The Podlaskie Voivodeship is characterized by a wealth of above-average natural resources. There are as many as four national parks in the Podlaskie Voivodeship. These are the Narew National Park, the Biebrza National Park, the Białowieża National Park and the Wigry National Park, as well as three landscape parks: the Łomża Landscape Park of the Narew Valley, the Landscape Park of the Knyszyn Forest and the Suwałki Landscape Park. Existing large afforestation, grasslands, swamps, waters and rivers make this area valuable and attractive in terms of nature. This does not mean, however, that the region does not face ecological problems. In order to prevent them and at the same time take care of valuable natural areas, a number of activities are initiated and implemented in the Podlaskie Voivodeship to support entities that pursue objectives related to environmental and climate protection. The local government administration, the voivodeship authorities as well as enterprises and social entities undertake numerous activities aimed at improving the conducted activity with respect for the natural environment, as well as raising awareness of the voivodeship's biodiversity and increasing the level of ecological knowledge and sensitizing to environmental protection problems. The scope of these activities is determined by real needs, as well as legal regulations, available or obtainable financial resources, as well as openness to changes and new technologies or innovative solutions.

Nature is a national heritage, it is wealth, and the care of nature is the responsibility of the legislator for public administration bodies, legal persons and other organizational units, and also for natural persons. Public administration bodies are obliged to ensure legal, organizational and financial conditions for nature protection. The duty of public administration bodies, scientific and educational institutions, as well as public mass media is also to conduct educational, informational and promotional activities in the field of nature conservation. Environmental education conducted continuously and systematically favors the active inclusion of ever-widening circles of the community in activities to improve the quality of the environment and stimulates local initiatives by institutions and organizations with ecological activities as their goals.

Increasing the awareness of the inhabitants of the value of the natural environment, of existing threats resulting from climate change or the need to prevent these changes also facilitate the implementation of solutions aimed at adapting or mitigating climate change. They may require residents to change their behavior and

habits. Therefore, in addition to activities directly undertaken by the public sector, it is important to support the activity of citizens and non-governmental organizations for environmental protection.

The active participation of society in environmental protection activities is formally regulated by law, which introduces, among others, the procedure for public participation in making administrative decisions and in the development of strategic documents, policies, and plans, such as the Environmental Protection Program. The preparation of this document is a formal requirement resulting from art. 17 of the Act of 27 April 2001 - Environmental Protection Law, which obliges all levels of local government administration to develop environmental protection programs. The programs are to implement the objectives contained in the strategies, programs and programming documents referred to in the Act of 6 December 2006 on the principles of development policy.

Therefore, NGOs as representatives of the community have the opportunity to express opinions on matters important to the community and participate in the decision-making by the authorities, especially local governments. They implement civic participation in at least two areas:

1. They represent the local community, expressing its needs, aspirations and expectations. They play the role of a "transmission belt", transferring information both from the residents to the local government and from the local government to the residents. These organizations, as representatives of the community, should therefore be able to express opinions on matters important to the community and participate in making important decisions by local government authorities.

2. Undertake innovative activities. They develop new and unconventional ways of solving problems that local authorities cannot cope with.

The ecological awareness of the inhabitants and their commitment to improving the quality of the environment, as well as the belief that joint effort makes sense and has a real impact on their lives, favors the implementation of new ideas and solutions, e.g. in the area of nature conservation. Creating local cooperation networks, including non-governmental organizations, the media, local leaders and volunteers, allows for a permanent and effective placement of ecological issues in local communities. The social work of volunteers - natural persons who voluntarily and without remuneration perform services on the terms set out in the Act of 24 April 2003 on public benefit activities and volunteer work, contribute to helping restore ecosystems, eliminate polluting waste, protect animals and promote care for the environment. It can be a single action or systematic involvement, both in the implementation of professional research programs as well as campaign actions, such as initiatives to clean rivers or

forests, count birds or bats, secure mergansers marching to their lairs through busy road arteries or planting trees and shrubs.

From the perspective of protecting biodiversity, combating pollution of the planet or mitigating climate change, it is the local level that is crucial. Therefore, ten selected examples of best practices are presented below, bringing closer the social involvement of residents in shaping and protecting the environment in the Podlaskie Voivodeship, including the activities of public administration, business, and non-governmental organizations.

### **Protection of Tree Stands – Promotion of Native Species of Trees in North-Eastern Poland**

The project was implemented by the PRYZMAT Social Activity Center in Suwałki. For many years, this organization has been initiating, supporting and organizing projects combining volunteer social involvement with activities aimed at environmental protection and ecological education. In addition to training, consulting and grant-giving activities, they also have experience related to the implementation of their own projects related to nature conservation.

The aim of the project was to educate the public about the role of tree stands in shaping biodiversity. The activities were carried out in the communes within which the area of the Natura 2000 network "Ostoja Wigierska" ["Wigry Protected Area"] was designated, and in the city of Suwałki. The most important role of afforestation is primarily to perform protective functions, but they also have socio-cultural and economic significance. This is, of course, a very general division, because due to the nature and place of occurrence, they have specific goals to fulfill.

The content of the program was addressed mainly to the inhabitants of this area, but also to the general public of the region of north-eastern Poland, indirectly. The project was designed to shape the awareness of society from an early age towards understanding the importance and role of tree stands in shaping biodiversity, to familiarize the public with tree species naturally occurring in north-eastern Poland, and to familiarize the public with the provisions on the protection of tree stands. The attractiveness of the activities was ensured by the use of elements of 3D technology during training, educational activities and promotional events. During the implementation of the task, the following activities were carried out:

1. "The third dimension of environmental education".

These were educational activities and trainings using 3D technology, including:

- "Colorful Leaves" - small and field activities for preschool groups, including learning to recognize the basic tree species by the appearance of the leaves.

- "Get to know your own and strangers" - education of primary school students, including classes on native and foreign species found in the Wigry National Park. As part of this activity, a group of volunteers was also appointed, which, after six-month workshops, conducted 20 hour-long classes for primary school students.

- "Cudze sadzicie..."<sup>1</sup> - open training for residents of the municipalities from the area of Ostoja Wigierska in the field of protection of tree stands and their role in shaping biodiversity.

## 2. Photo competition "Our trees"

As part of this task, a photographic competition was held, the subject of which were native tree species of north-eastern Poland. The photos were used to create a photo database of native trees, placed on the project website, and to publish a wall calendar.

## 3. The action of introducing trees "We change gray into green".

Members of the association, volunteers and invited representatives of local authorities, non-governmental organizations and the media conducted afforestation campaigns in five locations in urban and rural areas in the Suwałki and Krasnopol Municipalities. The action was aimed at increasing the biodiversity base in non-forest areas. Afforestation is the first and most important source of the richness of plant and animal species in the agricultural environment mentioned above. They are valuable primarily due to the diversity of functions performed in the landscape. They also enable reproduction and life of species associated with the forest, in the area where these communities do not occur.

## 4. Promotion and information.

As part of this action, the following activities were carried out:

- an exhibition of photos of native tree species of north-eastern Poland, during which a pre-school recitation competition "Nature is my friend" was conducted,

- a tourist and recreational event "First Wigry Triathlon", including three-day educational workshops, as part of which a walking, cycling and canoeing rally on the Czarna Hańcza River, took place,

- project website,

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<sup>1</sup> „Cudze sadzicie...” – it is a play on words “cudze chwalicie, swego nie znacie”, the English equivalent of an idiom *the grass is greener on the other side*. “Cudze sadzicie...” – in the meaning: don’t plant invasives, plant natives.

- development, printing and distribution of publications, leaflets, posters and a calendar,
- purchase of promotional gadgets,
- setting up commemorative plaques in places where trees are introduced,
- evaluation of the results of educational activities and training carried out among the inhabitants of the region,
- a conference summarizing the project.

Reducing the introduction of alien species to home gardens, increasing public awareness of the role of woodlots in human life, and ensuring respect for the law in terms of their protection - these were the main goals of the authors of the project during numerous training sessions and meetings with the inhabitants of Suwałki and Municipalities located in the Natura 2000 area "Ostoja Wigierska", as part of the project. The analysis of the meetings and trainings conducted clearly showed that there is a problem with understanding how important the field, roadside or housing estate woodlots are as an important element of the natural environment. She also indicated that rural residents understand the importance of tree plantings in a broader context than just nice-looking landscape features or oxygen producers, as is the case with most city dwellers. They understand their potential for increasing the tourist attractiveness of the area, they value them for their functional and medicinal values or, perhaps above all, for the source of bee resources. At the same time, the same group of people pointed to certain areas of conflict that may occur at the interface between woodlots and agricultural land. She raised the problem of the root competition of roadside trees with crop plants, or the limitation of the possibility of mechanical use of the land owned by them. During the talks, specialists from the association tried to explain that the indicated problems would be justified as long as the farmers themselves did not contribute to their creation. In many cases, these planters, during field work, get into the road lane, effectively eliminating the buffer separating the trees from the agricultural land. By far the biggest problem for the participants of the meetings and trainings was understanding the law on the protection of tree stands. In many cases, they did not know about the need to obtain appropriate permits for felling trees, and if they did know about it, it was often not up-to-date due to the fact that the regulations in this area change quite often.

Thanks to the implemented activities of the project, it was possible to clarify many doubts among the residents regarding for example, the role of afforestation in the urban and rural landscape, procedures related to the removal of trees from afforestation, or the rules and dates of planting. In the summary of the project, the Association emphasized that its implementers hope that the field work carried out,

combined with the content of the trainings, competitions and publications, will significantly increase the tolerance of the local society to the extension of the afforestation area in the region of north-eastern Poland, limit the introduction of alien species in this area and will prevent violations of the law in the field of protection of tree stands. Given the fact that the content provided during the trainings clearly interested the participants and met with great understanding, one can hope that the goals presented at the beginning of the summary have been achieved, and their effect will be visible soon.

In 2016, the PRYZMAT Center for Social Activity in Suwałki won first place in the competition of the Podlaskie Voivode "Social Initiative of the Year" for the "Third dimension of education" program. The aim of the competition is to promote the activities of non-governmental organizations from Podlasie, which activate the local community with their initiatives, organize projects for the immediate environment, promote the principles of social coexistence and contribute to the development of civil society.

Project activities were implemented under the PL02 Program - "Protection of biodiversity and ecosystems" and were co-financed by Norway, Iceland and Liechtenstein under the Financial Mechanism of the European Economic Area 2009-2014.

## **Climate change**

The aim of the project implemented in the years 2022-2024 by the Center for Supporting Non-Governmental Organizations in Białystok is to involve, within eighteen months, at least twenty social organizations, ten local governments and a minimum of three hundred inhabitants of the region, including at least fifty young people, to actively participate in civil dialogue, conducted with innovative methods, that are attractive for given groups. The project is to facilitate consulting and negotiating difficult local issues between the society and the local government, as well as to encourage residents to get involved in the life of the municipality or county<sup>2</sup>. It is also supposed to increase the presence of social organizations, informal groups and residents (including young people) in public life, change the climate for civil dialogue, strengthen the forum for public debate in the area of environmental protection, and increase the sense of influence.

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<sup>2</sup> **municipality** (Polish: gmina) – the third-level unit of local government and administration in Poland, after **county** (Polish: powiat) - the second-level unit of local government and administration in Poland; the first level unit is called a **voivodship / voivodeship**, equivalent to a state or a province (Polish: województwo).

Two important aspects of the project are education about various forms of social dialogue that can be used to protect the environment and other key dilemmas of the community during the project implementation period, as well as the practical implementation and evaluation of selected consultation models in, among others, ten environments. The tasks in the project have been planned in such a way as to strengthen the competences and build relations between the three sides of the dialogue:

1. the local government side (officials),
2. the social side (representatives of organizations) and
3. residents directly.

The Marshal's Office of the Podlaskie Voivodeship also joined the dissemination of the consultations. The evaluation was used to prepare the guide "Consult for climate change - how to do it step by step in your municipality". This, in turn, made it possible to develop and disseminate proven scenarios in the region (conference) and in Poland (e-book) and to increase the participation of the community, including young people, in decision-making processes.

The project is financed by Iceland, Liechtenstein and Norway from the EEA and Norwegian Funds under the Active Citizens - Regional Fund Program.

## **Our Home is Part of the World**

As part of the project "Our Home is Part of the World", the Association of International and Intercultural Exchange ANAWOJ from Michałów in July 2021 invited a group of volunteers to Podlasie to become local animators and educators of ecology. They managed to host eleven young people from Spain, Italy, France, Greece, Portugal and Poland. The main theme of the project was ecology and caring for the environment.

The group volunteering project started with a survival adventure in the forest. Together, they built a camp in Cisówka and integrated by exploring the area and looking for food in the nature surrounding the camp. We also managed to clean up the surrounding area. Then the volunteers moved to Lewków Stary, and later to Sokol, where they started with ecological workshops. Every morning before noon, new activities were offered to the volunteers to broaden their knowledge and show them different possibilities for further activities with the local community. There were workshops on the following issues: ecological cosmetics, recycling of plastic bottles, bags, cartons and paper, and sewing ecological reusable bags. Every afternoon there were activities activating the local community, led by our volunteers. Starting with sports and language classes, continuing with learning to juggle and ecological



workshops, and ending with an intercultural culinary evening. Through the activities undertaken, the association:

1. increased environmental awareness among project participants and target groups;
2. increased awareness of their own responsibility for the environment and surroundings (in the local and global context);
3. increased awareness of diversity, tolerance, respect – towards people and the environment;
4. leveled the chances for young people from rural areas, both through the conducted classes, as well as by including people with fewer opportunities in the project;
5. encouraged children to spend their free time actively.

The project "Our home is part of the world" was co-financed by the European Union under the European Solidarity Corps.

### **Volunteering for Wigry**

The mission of the "Volunteering for Wigry" program developed and implemented by the Wigry National Park is:

1. supporting activities carried out by the Wigry National Park (WNP);
2. engaging society in dynamic activities that foster the protection of nature;
3. nature education for society;
4. promoting pro-ecological attitudes and the idea of sustainable development;
5. increasing acceptance of activities undertaken by the ESL members among the local community;
6. supporting people active in social activities for the benefit of nature by enabling them to gain knowledge, experience and contact with nature in the WNP.

A volunteer under this program can be anyone who wants to actively support nature conservation, is over eighteen years old, meets the requirements for individual tasks, has passed the knowledge test and participated in training, if required in the task description.

As part of volunteering, you can complete student internships, internships or conduct scientific research. However, research topics and their methodology must be agreed with the WNP. The minimum length of a volunteer's stay and the provision of volunteer work is seven days, including two days off and one day for training and getting to know the place and the way of performing services. For the duration of volunteering, the volunteer receives a t-shirt and identification elements and is provided with free accommodation in a shelter standard. All the necessary tools and materials to complete the task are provided by the WPN. In addition, each volunteer can visit all facilities of the National Park free of charge. In the case of work requiring individual protection, the volunteer receives protective clothing and other personal protective equipment, depending on the needs.

Volunteers who decide to volunteer can choose activities covering 4 program directions:

1. maintenance of the condition and improvement of tourist infrastructure:

- maintenance of the condition of trails and paths, possible widening of trail clearances by trimming overhanging branches, removing obstacles;
- checking the condition of information boards, directional signs and other tourist infrastructure;
- cleaning and maintenance of wooden tourist infrastructure, i.e. preservation of wooden elements of infrastructure: fences, footbridges, platforms, benches, etc.;

2. forester's help:

- inventory of alien species;
- inspection of the condition of fences;
- help with sorter's estimates;
- help with measuring wood;

3. educational events:

- assistance in the organization, preparation and implementation of educational events;
- taking photos during educational events;
- assistance in the preparation of educational materials;
- field games - June/July 2023;
- cleaning up the world - September 2023;

#### 4. ethnographic exhibition:

- cleaning and painting exhibits for the ethnographic exhibition located at the headquarters of the Wigry National Park.

By participating in the action, volunteers gain:

1. a contribution to the protection of the nature of Lake Wigry and its surroundings;
2. developing their interests in nature;
3. experience that may be useful in studies or professional work;
4. actively spent time surrounded by nature;
5. new acquaintances with people with similar interests.

The "Volunteering for Wigry" program is funded by the Wigry National Park.

### **Picnic of Podlaskie National and Landscape Parks**

For three years, the Picnic of Podlasie National and Landscape Parks has been held at the Podlaskie Museum of Folk Culture in Wasilków. The inhabitants of the voivodship and tourists have the opportunity to meet employees of four national parks: the Narew National Park, the Biebrza National Park, the Białowieża National Park and the Wigry National Park, and three landscape parks: the Łomża Landscape Park of the Narew Valley, the Landscape Park of the Knyszyn Forest and the Suwałki Landscape Park.

National and landscape parks presented the natural wealth of their areas and prepared many attractions. Each year, the theme of the meeting is chosen. In 2023, it was plants. They could be seen in the photos presented at the exhibition and educational stands and in the form of models presented by the Białowieża National Park. They also appeared in the field game, which attracted many inhabitants of Podlasie towns and tourists present at the event. After completing the game, its participants received attractive gifts and book publications. The park has also prepared a science knowledge quiz - with prizes for children, teenagers and adults. Through games and activities, the correct segregation of waste was encouraged. The show of birds of prey was prepared by the Ecological Education Centre of Falcons. During the Picnic, visitors could see the exhibition "Climates of Podlasie" and other exhibitions, including: Folk Art of Podlasie, Animals in Folk Aesthetics, Court Interiors in the Manor of Bobra Wielka, Former Forestry in Podlasie, Forest Moonshine, About the Benefits of Clay. The permanent exhibitions of the Museum were also partly accessible: Ploughs, sickles, tarsus..., - about a former farm, Means of rural transport, Interior in

a house from Jacowlany, Interior of a cottage from Stara Grzybowszczyzna, Interior of a cottage from Dąbrowa-Moczydła, Interior of a cottage from Tymianki-Buci, and Mechanization of agriculture in the Podlasie countryside.

The organizers of the Third Picnic of Podlaskie National and Landscape Parks were the Białowieża National Park, the Marshal's Office of the Podlaskie Voivodeship and the Podlaskie Museum of Folk Culture in Wasilków.

The event was co-financed by the Provincial Fund for Environmental Protection and Water Management in Białystok.

### **Frog's Mook - A Mainstay of Amphibians**

There are only eighteen species of amphibians in Poland and all of them are under strict protection. The International Union for Conservation of Nature (IUCN) has identified amphibians as the most endangered group of animals. Since the 1980s, a steady decline in the population of these vertebrates has been noticeable. This is mainly due to loss of habitat. It is therefore necessary, wherever possible, to reconstruct ponds with appropriate external "infrastructure" in order to provide amphibians with appropriate living and reproduction conditions.

In the buffer zone of the Wigry National Park - the site of the activities, twelve species of these vertebrates were inventoried. A large proportion of wetland wasteland in this region is conducive to the development of amphibians, but the disadvantage is the rapid overgrowing and drying of these areas, whether as a result of climate change or intentional human activity.

Volunteers from the PRYZMAT Social Activity Center in Suwałki prepared an unused water reservoir for amphibians in Lipniak near Suwałki. As part of the project, an unused, natural water reservoir was developed and adapted to the needs of amphibians, such as the common toad, pool frog, water frog, grass frog and marsh frog. The reservoir was cleared of silt, and its bottom, with an area of about 140 square meters, was profiled in such a way as to enable both wintering of amphibians in the deepest places (1.5-2m), as well as their reproduction in coastal shallows. The transition from the bottom zone to the coastal zone has been shaped in a way that allows animals to get out of the reservoir outside in the event of a periodic drop in the groundwater level during drought. In addition, ten structures made of stones, stumps and branches were made near the pond, serving as resting places, shelters and winter quarters for animals.

The implemented actions lessened the negative impact of climate change locally on the reduction of the amphibian population and contributed to the enrichment of the

biodiversity of this area by increasing the population of an endangered animal species in the buffer zone of the national park.

The activities were carried out as part of the Microgrant Competition "Climate change - change of attitude" of the "Euroregion Niemen" Association and were financed by the National Fund for Environmental Protection in Warsaw.

### **Botanical "Pocket Park" in the Nowe Miasto District in Białystok**

The creation of the park is a result of the residents' choice of the project submitted to the Civic Budget 2021 in Białystok, for which one thousand and seventy four votes were cast. The Participatory Budget is a process in which the inhabitants of Białystok decide on the allocation of part of the city budget, submit projects for implementation, and then cast their votes for them. As part of the Białystok Participatory Budget, projects belonging to the city and/or county's own tasks of a city-wide or housing estate nature can be submitted.

Creating the "Pocket Botanical Park" in the Nowe Miasto District of Białystok, an area of less than half a hectare was developed. Flower meadows and plantings of deciduous shrubs have been established in the park. There are also various herbs and native species of deciduous trees. Trees create an educational dendrological path. Plane trees and fruit trees in older varieties are also planted. From the side of Transportowa Street, a plant fence made of a wrinkled rose was used. One of the elements of the equipment is the so-called "living architecture" - a gazebo and fences made of live shoots of various willow species. The butterfly house created as part of the project is very impressive - perennial beds with carefully selected plants, including the "butterfly bush" and purple coneflower. There are also wooden houses for butterflies and houses for bumblebees in the park. Next to the butterfly house there is a colorful educational board devoted to day and night butterflies.

The project from the Civic Budget 2021 "Botanical Park Pocket" was implemented for the amount of PLN 502,300.

### **Small ecological grants**

The program of the Center for Supporting Non-Governmental Organizations in Białystok [Polish OWOP] is focused on shaping appropriate social behavior in order to improve the quality of human life, in particular the quality of air and local climate. Under the program, the association will award at least nine grants up to PLN 2,000 for the implementation of projects in the area of public tasks in the field of ecology and animal protection and protection of the natural heritage of the Podlaskie Voivodeship.

The aim of the project is to shape appropriate social behavior leading to the improvement of the quality of human living space, in particular the quality of air and the local climate. Originators can obtain financial support for their initiatives in the field of:

1. informing about the importance of greenery, city parks, eco-parks, botanical gardens, etc.;
2. limiting the negative human impact on the immediate environment;
3. home coal boiler rooms and classless boilers;
4. shaping appropriate social behavior, promoting saving heat and electricity and using renewable energy sources;
5. counteracting heat islands in cities and drought threats;
6. informing about the importance of natural resources, biodiversity and ecosystems for maintaining natural balance;
7. teaching how to read landscapes and what is the relationship between ecology and landscape problems and social and economic issues and popularizing the assumptions of the European Landscape Convention.

According to the organizers, a change in these areas can only take place when the society, and especially the immediate surroundings, is convinced that a clean environment is the basis of people's health and well-being and needs to be taken care of on a daily basis. Not everything depends on the central or local authorities, because many everyday activities - at home and at work - have negative environmental effects and without the involvement of individual people in the process, not even the best organizational, legal or technical solutions will have the desired effect.

The OWOP Association also has experience in implementing another regranting program entitled "We take care of trees - 3 social initiatives". This program provided animation and educational support in undertaking activities aimed at raising social awareness about the role, value and protection of tree stands, as well as landscape and spatial order. Non-governmental organizations and informal groups with a patron could apply for grants in the maximum amount of PLN 1,500. Projects implemented under this program concerned issues related to the role of trees, shrubs and green areas, taking into account social, cultural and economic conditions; they indicated the importance and methods of tree protection, in particular the proper conduct of maintenance treatments, and promoted awareness of landscape-related topics by teaching how to read landscapes.

Both programs were implemented as part of tasks commissioned by the Board of the Podlaskie Voivodeship.

## **Employee Volunteering as a Manifestation of Activities in the Field of Socially Responsible Business (CSR) on the Example of the Castorama Company**

Employee volunteering includes in its scope all activities involving the initiation and support by the employer of social activities of its employees. In this arrangement, employee-volunteers perform various types of work, using their skills and abilities, while the employer enables them to undertake such initiatives and supports their activities. Thanks to this, both employees and employers gain many benefits that are impossible to obtain in any other way.

Legal regulations concerning volunteering, i.e. voluntary and unpaid activities of volunteers, are regulated by the provisions of the Act of 24 April 2003 on public benefit activities and voluntary work. Due to the slightly different nature of employee volunteering, a supplementary role is also played by generally applicable laws, in particular the provisions of the Civil Code, and in certain legal situations also the provisions of the Labor Code.

In practice, employee volunteering complements the strategies of a given enterprise and helps to integrate employees in relation to important social, environmental and economic issues. In addition, its assumptions perfectly match the ideas of Corporate Social Responsibility (CSR). It is a concept thanks to which enterprises at the stage of strategy building take into account social interests and environmental protection, as well as relations with various stakeholder groups.

As a socially responsible company, Castorama Polska supports local communities and cares about the environment. It is part of the international Kingfisher Group and, together with other companies that comprise it, implements a strategy of sustainable development, i.e. one in which the needs of the current generation can be met without limiting the development opportunities of future generations. The company's approach to sustainable development and the environment is in line with the requirements of the ISO14001 environmental management system. This obliges the company to regularly monitor its environmental impact, strive for continuous improvement and prevent pollution.

On April 21, 2023, the company organized a tree planting campaign on an area of almost 8 hectares, in which over 100 volunteers from Castorama's shops and offices and the Kingfisher Group took part. Thanks to this, the Podlasie region in Białogród, in the Rajgród Forest District, has gained 7,000 young pines. The afforestation

initiative was one of the largest employee volunteering campaigns in Castorama for the protection of the natural environment. Importantly, the company is already planning to continue the afforestation campaign with the Rajgród Forest District, which it wants to expand to include other tree species.

It is also worth pointing out that Castorama promotes sustainable forestry through products marked with FSC and PEFC certificates<sup>3</sup>, which tell customers that the products marked with certificates come from responsible sources. Thanks to the introduced wood policy addressed to suppliers and information activities for customers, they can contribute to the development of forest management managed in a responsible manner with respect for nature and local communities.

## **Eco-Podlasie**

In 2022, the Activation Foundation implemented a project aimed at ecological education of the inhabitants of the Łapy Municipality. Through the organization of pro-environmental workshops, which addressed, among others, topics of recycling, upcycling, zero waste, waste segregation, reducing consumption and producing less waste, the organizers assumed that project participants would actively approach pro-ecological issues.

Pro-environmental workshops and field trips were organized.

Depending on their age and organizational capabilities, they independently made various types of items from recycled materials, natural cosmetics, ecological bags and many other things according to the principle: waste is not garbage, but valuable raw materials. By the same principle, first-grade students made containers for crayons and pens out of cans, jars and yoghurt packaging. The second and third grades took care of the production of natural cosmetics and created soaps, among others, with coffee, mint or oatmeal. Students learned about the properties of various natural ingredients, creating blends of teas with mint, lemon balm, elderberries and rosehips, hibiscus, liquorice and other aromatic ingredients. Everyone found out that creating their own fruit and herbal teas is not difficult, and thanks to the use of natural ingredients, they can avoid preservatives and artificial flavors that are often found in purchased products.

Project participants also visited the Nature and Forest Museum and the Nature Education Center in Białowieża. Educational classes on bison provided a lot of information about this species. The participants of the trip learned about how the

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<sup>3</sup> Forest Stewardship Council (FSC) and Program for the Endorsement of Forest Certification (PEFC) - <https://www.raaft.co/insights/fsc-pefc-what-is-the-difference>



European bison returned to the forest after they ceased to exist in the natural environment after the war, how much an adult bison weighs, how one should behave when meeting an animal, what the largest mammals in this part of Europe eat, and how many individuals can be found in the Białowieża Forest.

Art works were also created, which were used to print postcards promoting the task as well as ecological behavior. The children's works were exhibited in the kindergarten and school, thanks to which students and parents could get acquainted with the subject of the classes.

The implementation of the task contributed to the deepening of the participants' knowledge of the natural environment and its protection, the role in human life and climate shaping. The project was co-financed by the Marshal's Office of the Podlaskie Voivodeship.

## **Adam Sacharewicz**

### **What are the natural resources of the local community in the Białystok Agglomeration?**

Located in the central part of the Podlaskie Voivodeship, the Białystok agglomeration covers the city of Białystok and ten neighboring municipalities: Choroszcz, Czarna Białostocka, Dobrzyniewo Duże, Juchnowiec Kościelny, Łapy, Supraśl, Suraż, Turośń Kościelna, Wasilków and Zabłudów<sup>4</sup>. This is an area of 1804.76 km<sup>2</sup>.

The number of people living in this area according to data from the Marshal's Office of the Podlaskie Voivodeship amounted to 414,751 people in 2013, and the population density was set at 229.8 people per km<sup>2</sup>. Białystok, which is the capital of the voivodeship, is inhabited by less than 300,000 people<sup>5</sup>.

A special feature of the Białystok agglomeration, distinguishing it on a national scale, is its location in an area that retains a significant degree of naturalness. The proximity of valuable natural areas, such as the primeval forests of Knyszyn, Białowieża, Augustów, Biebrza Marshes and the Narew Valley, as well as the relatively low population and industrialization, are conducive to the development of tourism. The natural values of the region contributed to the creation of the idea of the Green Lungs of Poland - a concept that combines economic and civilization development with environmental protection.

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<sup>4</sup> acc. concept of the Marshal's Office of the Podlaskie Voivodeship from 2003

<sup>5</sup> 295,683 inhabitants according to the data of the Statistical Office in Białystok from 2021

In the immediate vicinity of Białystok there is the Knyszyn Forest, surrounding the city from the north and east, including the cities of Supraśl, Wasilków and Czarna Białostocka. The forests of the Knyszyn Forest reach the upper part of the Biebrza Valley in the north. In the western part, the area of the Knyszyn Forest reaches Knyszyn and the commune of Dobrzyniewo Duże, and on the southern edge - the communes of Gródek, Michałowo and Zabłudów, and the Siemianówka Reservoir - an artificial water reservoir forming a conventional border separating the Knyszyn Forest from the Białowieża Forest. In the eastern part, the forests that are part of the forest complex reach the state border.

The Knyszyn Forest is one of the best preserved, most natural and protected forest complexes in the country. Most of the area of the forest covers the Knyszyn Forest Landscape Park (KFLP), the second largest in Poland, established in 1988 with an area of 72,860 ha. The buffer zone created around the park covers an area of 53,827 ha.

Almost the entire area of the park and the greater part of the buffer zone are part of the European ecological network - Natura 2000. The following areas have been designated in the described area: the Special Area of Conservation of Habitats "Ostoja Knyszyńska" ["Knyszyn Protected Area"] (PLH200006) and the Area of Special Protection of Birds "Puszcza Knyszyńska" (PLB 200003).

KFLP covers the area of eleven municipalities and seven Forest Districts: Czarna Białostocka, Dojlidy, Knyszyn, Krynki, Supraśl, Waliły and Żednia. There are twenty-five nature reserves in the Knyszyn Forest, of which twenty-one are located in this area. The task of the Landscape Park mentioned above is to protect the natural, landscape, cultural and historical values of the region.

When writing about the natural resources of the Białystok agglomeration, it is impossible to omit the importance of the immediate vicinity of the Knyszyn Forest. In relation to objects of significant and well-established natural value, the word "priceless" is often used, which, when used many times, is reduced to the rank of a slogan. Meanwhile, modern knowledge, thanks to the use of advanced methodology, allows for a precise valuation of the so-called ecosystem services provided by selected elements of the environment, starting from single individuals (e.g. trees) to complex ecosystems such as forest communities. Thus, it is possible to accurately calculate the financial value of the component functions of the ecosystem, such as production of oxygen, neutralization of pollutants, water retention or lowering the temperature in hot weather. An interesting initiative in the field of building awareness of the importance of trees in the city was undertaken by the Białystok City Hall. Next to selected trees growing in the capital of the voivodship, signs were placed informing people about the financial value they provide to the ecosystem.

Educating society about the function of Urban greenery, especially trees, is essential, according to the experience of nature protection services, including KFLP employees.

Trees in the city, due to the specificity of the environment, often function in conditions significantly deviating from the optimal ones. They are exposed to damage related to construction works, improperly performed care treatments, parking vehicles in the root zone or acts of vandalism. The topic of the importance of greenery in cities and methods of its management, due to its complexity, significantly exceeds the scope of this publication, however, it should be emphasized that building awareness about the role of trees in the city should become a priority direction of activities of nature educators.

When writing about the natural resources of the Białystok agglomeration, it is worth recalling that in 1993, Białystok, as the first city in Poland, was included in the list of the Healthy Cities Network of the World Health Organization (WHO).

Unfortunately, the opinion still functioning in the public space according to which Białystok is considered a "green city" has lost its relevance over the last quarter of a century. Changes introduced in the city landscape, related to its expansion and development, meant that in terms of the share of green areas and the presence of trees, especially old ones, Białystok does not differ significantly from other similarly sized cities in Poland. The more important is the appropriate compensation consisting in replacing the lost natural objects in a way that ultimately balances the loss.

Restoring the image of a city abounding in greenery, which is particularly important in the case of the capital of the voivodeship, which is proud of its natural wealth, is a challenge faced by urban planners, architects and designers shaping the landscape of Białystok. It is extremely important to preserve and integrate the existing green areas or even single trees, without giving up creating new urban green areas, especially in the central part of the city. It is advisable to prefer the use of native species when designing and arranging green areas. An important issue that needs to be taken into account during spatial planning is to leave as much biologically active area as possible, i.e. not covered with paving stones or granite slabs, enabling, among others, water absorption and evaporation. This is particularly important in connection with recent local flooding associated with heavy rainfall.

An innovative practice worthy of dissemination recently used in the management of green areas located within the city limits is the replacement of traditional flower beds or lawns with flower meadows. This allows obtaining an optimal aesthetic visual effect that changes according to the season and at the same time is justified both from the natural and economic point of view. In addition to savings resulting from the lack of the need for regular mowing or supplementing the plant population by planting them, the creation of flower meadows enriches biodiversity, creating conditions enabling the functioning of complex plant and animal communities, especially insects, including pollinating insects, such as bees, which are extremely important for the proper functioning of an ecosystem.

An equally interesting initiative, directly related to the increase in the area of flowering plants in Białystok, was the creation of an urban apiary. Its presence, in addition to introducing an "idyllic" element in the urbanized landscape, serves education and thus contributes to the increase of social awareness about the role of pollinating insects and the need to take actions aimed at their protection.

Despite the previously described unfavorable changes consisting in the loss of some green areas, especially in the very center, the natural resources of Białystok cannot be underestimated. Within its borders there are a number of valuable natural and protected objects that enable contact with nature without the need to undertake trips outside the city. The most valuable are its nature reserves: "Antoniuk" with an area of 70.07 ha and "Las Zwierzyniecki" with an area of 33.84 ha. Well-known to the inhabitants of Białystok and often used as an area for walks or other forms of activity are forest areas: Solnicki Forest, Pietrasze Forest, Turczyński Forest, Bagno Forest and others. People looking for contact with nature in the city also use areas located near water reservoirs, such as ponds at the following city's streets: Mickiewicza, Marczukowska or Octowa. Valleys of rivers flowing through the city area, especially in sections located outside the highly urbanized area, such as the Biała, Dolistówka or Bażantarka rivers, which function as the so-called ecological corridors.

Particularly noteworthy is the complex of Dojlidy Ponds – the protected area of water and water-marsh birds, known throughout the country, especially among ornithologists and amateur *birdwatchers*. The largest of the ponds, apart from the possibility of walking or conducting natural observations, offers recreational activities such as bathing, fishing, and water sports.

The parks located in the city, allowing contact with nature, are of great importance, such as the park surrounding the Branicki Palace, Park Zwierzyniecki, Park Antoniuk and squares or even single trees or their clusters, among which you can find several monuments of nature.

Recently published publications play an important role in shaping knowledge about local natural resources.

Particularly noteworthy are the publications from the series "Biodiversity of the city of Białystok" presenting current knowledge, characterized by a high substantive level and worth disseminating. Of the fourteen planned items, the following have been published so far:

- „Różnorodność biologiczna miasta” D. Drzymulska, P. Zieliński, Białystok 2019
- „Szata roślinna Białegostoku” D. Wołkowycki, Białystok 2019
- „Motyle dzienne Białegostoku” M. Sielezniew, I. Dziekańska, Białystok 2019
- „Porosty Białegostoku” A. Matwiejuk, Białystok 2021
- „Ptaki Białegostoku” P. Mirski, G. Grygoruk, Białystok 2021
- „Ssaki Białegostoku” M. Ratkiewicz, P. Rode, Białystok 2022

Extensive activities carried out as part of the “Leaders of Eco Changes” project also certainly had an impact on the level of ecological knowledge and empathy of the people to whom they were addressed. This publication is intended by the authors to serve a similar purpose.

The growing importance of areas characterized by a high degree of naturalness located in cities or in its immediate vicinity is evidenced by the involvement of residents in their preservation in the least changed state, e.g. by influencing the reduction of economic use. The participation of society in shaping the natural environment surrounding the city is visible during the consultations regarding the creation by the National Forest Holding “The State Forests” of forest zones with an increased social function.

The increase in awareness of the natural values of the environment and the need to preserve them is evidenced by the positive social reception of initiatives aimed at nature protection, such as the spring campaign conducted in the city, aimed at reducing the mortality of amphibians related to their migration to breeding sites. Also, popular science events in the form of guided nature walks are met with growing interest.

Natural values skillfully used can shape the broadly understood development of entire communities or cities. Supraśl, whose location in the vicinity of forests, as well as the presence of mud deposits with confirmed healing properties, positively influencing the state of health, contributed to the city obtaining the status of a health resort, and thus a significantly increased their tourism.

The beneficial impact of KFLP forest areas on the inhabitants of Białystok in the context of the above data cannot raise any doubts, and making the public aware of the measurable values of elements of the natural environment is an important factor in environmental education. It is worth emphasizing here that the sources of water resources used by the inhabitants of Białystok also come from the KFLP area - the Supraśl River and underground waters retained in sand and gravel sediments.

The described location of Białystok and neighboring towns is, from the point of view of both residents and visitors, exceptionally favorable in terms of the possibility of using natural resources. Easy access to attractive, naturally valuable areas allows for various forms of active recreation: from hiking through cycling, horse riding, skiing and canoeing at various levels. This is facilitated by designated tourist trails and constantly developing infrastructure, e.g. in the form of lodgings or agritourism farms. Forest areas provide the opportunity to use natural resources: picking mushrooms, undergrowth fruits or collecting antlers, which has recently become more and more popular.

Commercially used forests, which are a source of wood - a natural and renewable raw material, are of significant economic importance for the inhabitants of the region. In the forests and agricultural areas surrounding the Białystok agglomeration, hunting is also carried out, and the waters are used for fishing, mainly by anglers.

The recent trend of "returning to nature", manifested by the growing interest in natural products, healthy food or the use of environmental resources in therapy, is undoubtedly an opportunity for the development of the region and is conducive to its promotion. The search for contact with nature became particularly visible during the COVID-19 pandemic. The increase in the number of people spending time in areas located outside cities was largely related to the introduced restrictions that hindered the use of cultural facilities, shopping malls or food chains, but the "turn towards nature" initiated in this way resulted in visible increased interest in staying in natural areas, especially in the spring and summer. In the longer term, this situation requires the development of solutions to organize tourism. Such solutions, which at present may seem premature and unnecessarily far-reaching, in the future will serve to direct tourist activity in a way that allows them to learn about the natural values of the region, while limiting the presence of people in particularly valuable and vulnerable areas. This will allow them to be preserved in the least transformed state, allowing natural processes to run undisturbed by the presence of people. Achieving the above goal will be done by creating places that attract and gather tourists (an example may be the currently implemented investment consisting in the creation of a bison demonstration enclosure with the accompanying infrastructure in Kopna Góra in the Supraśl Forest District), marking tourist trails, educational paths, etc.

The location of the Białystok agglomeration is conducive to the organization of field events: cross-country runs, bicycle rallies, horseback rides, etc. An interesting and recommendable form of activity that is also conducive to educating the public is plogging – a combination of cross-country running with garbage collection. The First Plogging Championships, carried out as part of the project, gathered a large group of participants and allowed for combining competitive, active recreation with social and pro-environmental activities.

These types of educational and popularizing events, especially those organized in an attractive form combined with leisure, are an important element shaping awareness of the natural value of the local environment. Despite the noticeable increase in public awareness of the importance of natural resources and the need to protect them, by responding to emerging threats, further actions are necessary aimed at creating appropriate, knowledge-based attitudes and a sense of responsibility for the environment. Paradoxically, the natural wealth of the region means that as something common, obvious, and available every day, it is not fully appreciated by the local community. This attitude is partly due to the mentality of the inhabitants of the region - on the one hand, they feel proud of belonging to an area that is rich in nature and culturally diverse, and on the other hand, they have a feeling (often unjustified and resulting from stereotypes) of "lagging behind" in relation to more economically developed parts of the country.

The rich and diverse natural resources of the Białystok agglomeration create significant potential when it comes to conducting education focused on environmental protection - on the other hand, they also place high demands on people conducting this type of activity. Developing the knowledge of teaching methods and improving the qualifications and substantive knowledge of project participants, described in chapters 12 and 13 of part II of the publication, were one of the priority goals of its implementation.

**Izabela Solarczyk**

**Ecological Empathy (Effective Altruism) – Psychological and Social Aspects of Involving Citizens in Ecology and the Protection of Natural Resources**

Empathy is defined in the dictionary as the ability to empathize with the internal state of another person. The concept of "empathy" may evoke connotations relating to the sphere of emotions, experiences, affect, but the term empathy also includes a cognitive element regarding understanding, reflection, requiring certain knowledge, reaching a certain level of intellectual development, the ability to decentralize - adopting a perspective other than one's own. It requires not only a more tangible reaction to the state of another person, but also a prior correct perception, decoding information expressed by the subject towards whom it will be directed. Thus, empathy, pre-scientifically perceived as a simple emotional response, is in fact a complex response to the state of the subject, which requires the occurrence of many conditions that go beyond spontaneous affect.

Etymologically, the word comes from the Greek *emphatheia*, meaning suffering. Contemporary understanding is broader - it covers not only the area of unpleasant experiences. It can also refer to entities other than a person, as exemplified by the concept of ecological empathy.

Empathy requires crossing a certain intellectual threshold, beyond which it is a more independent construct. It can be measured and developed psychometrically, which is reflected in the empathy quotient index (Shaw et al., 2004).

A certain level of empathy is somehow automatic, which is illustrated by the involuntary, not fully conscious imitation of facial expressions of other people, and even the characters in a photo, or speech accommodation – mutual adjustment of interlocutors usually based on imitation, while these phenomena are not only an expression of shocking but they can also be a manifestation of social influence (Dimberg et al., 2000).

This brief analysis of the concept of empathy showed that empathy is not only sympathy, but also understanding. Similarly - non-obvious components contain another construct important from the perspective of the discussed topic - altruism. It is defined as “helpful behavior that does not bring benefits to the perpetrator, or even brings him losses” (Wojcieszke, 2002, p. 313). However, the lack of benefits for an altruist is only apparent and directly concerns only easily measurable benefits. The benefit may be self-satisfaction and mood improvement resulting from anonymous support of a person in need, admiration of others watching our hand dropping coins over a can as part of a charity collection (hence the empirically proven greater tendency to noble behavior in the presence of witnesses), or the expectation of some forms of reciprocity, such as potential support in the future (Trivers, 1971, Satow, 1975).

Taking into account the regularities diagnosed and described in the social sciences, relating to the broadly defined helpfulness, with particular emphasis on the concept of empathy and altruism, as well as the conclusions from research designed in the field of ecological/environmental psychology, which analyzes the mutual relations between the individual and the physical environment, including the several groups of arguments for the legitimacy of involving citizens in ecology and the protection of natural resources, as well as effective forms of encouraging participation.

Making a certain generalization and simplification of psychological theories relating to the issue of engaging in non-necessary activities, a relatively universal conclusion can be formulated that we are more willing to participate in such non-obligatory initiatives when, somewhat egocentrically, we see in it a certain benefit for ourselves instead of a lofty-sounding sacrifice for a good idea. In addition, an important factor influencing the readiness to undertake such actions is the knowledge of how to do it. It is also important to optimize the degree of difficulty of the task, taking into account the regularities regarding the relationship between the degree of difficulty and the level of motivation, where too simple is usually boring and too difficult is discouraging (Csikszentmihalyi, 2022). To sum up, we can distinguish three groups of factors conducive to participation in activities, including pro-ecological ones: a visible benefit for oneself, procedural knowledge (knowing "how") and an appropriate level of difficulty of the task.

Further considerations focus on the first of these factors, because the other two are more technical and depend on the content specifics of the project. So what is this benefit, the "compensation" for our contribution to care for the natural environment? How will not only future generations, humanity, the environment, animals, and plants, but specifically us, here and now, not only in the distant future, be the beneficiaries of our participation in nature conservation? What will it give us?

The first of the incentives concerns the benefits of staying in green areas. Pro-environmental initiatives often have a field character, are implemented in natural places, promote such places, and create them. In urbanized areas, areas imitating



natural ecosystems are designed - for example, flower meadows, which are becoming more and more popular, perform not only decorative functions, but also constitute a living space for many small organisms. In addition to institutionally implemented projects, local, bottom-up, often individual activities play an important role. Campaigns promoting pro-ecological attitudes more and more often refer to these small, informal activities undertaken by individuals. Many of them try to propose specific, easily implemented actions that can become habits or automated activities. Although the scale of such behaviors is small, their widespread and sustainable implementation can bring a significant cumulative benefit to the environment. An example of initiatives based on such assumptions was the information and education campaign "Our Climate" implemented under the slogan "Climate Creates People" and the Clean Poland Program. Pro-environmental activities were presented not as very advanced, elitist, but as simple and ordinary, for everyone. And what do we do? Natural places are the environment we prefer. We feel good in such places, we like to stay. Empirically, this preference for the natural environment was demonstrated, among others, by an experiment in which respondents assessed the places presented in the photographs. The same photos described as "forest" and "lake" received higher scores than photos with the captions "tree plantation" and "water reservoir" (Pitt, Zubce, 1987). It showed how we automatically choose and prefer natural surroundings, even without the perceptual data reaching us. A study leads us to similar conclusions, in which, by analogy, respondents rated places better if they had a lower degree of human interference, for example forest vs. national park (Anderson, 1981). This specific attitude to nature is also visible in various texts of culture, where lands of beauty are described and happiness abound in images of old forests, seas, mountains, and rarely have the form of large urban agglomerations with skyscrapers reaching the sky. This reluctance to over-structuring, specifying, planning, and controlling is also expressed by children's play preferences. Children observed while having fun in the backyard, having at their disposal a classic playground equipped with single-function devices such as a swing or a slide, they spontaneously chose to play on the outskirts, in a more natural space, not imposing the way of spending time (Lynch, 1977). Despite such conclusions from many studies, natural playgrounds are still rare.

Apart from fully natural areas, gardens are also a place that has a beneficial effect on an individual. We intuitively know that staying in them, often combined with work, is pleasant. Let us now consider what may be the cause of this impression and whether this supposed beneficial effect is confirmed by empirical research. Working in the garden combines many activities and states that generate specific reactions at the mental level. Being surrounded by nature, which, even in a passive form is, as the research presented earlier, a desirable state, is in this context enriched with work - our active influence, creation, and design. In addition to the obvious health-promoting effect of exercise, the possibility of obtaining organic vegetables and fruits, it also

affects the individual at the mental level. Freely creating “worlds” – your own spaces where everything looks the way we want it, has a great therapeutic value (Kalff, 2021). It enhances the sense of agency. Before the hypotheses regarding these associations were empirically verified, elements related to care began to be introduced based on less formalized observations for gardens for therapy, before these interactions were even called therapy. Already in antiquity, among the recommendations formulated for the sick, there were those that concerned staying or walking in a garden. At the beginning of the 19th century, in a mental hospital in Philadelphia, patients were included in the care of the garden. Gardening was seen as a way to distract oneself from one's own health problems. Therapy through work, an example of which may be therapy through work in the garden, gained more and more popularity, over time receiving a separate name – **hortitherapy** and a group of practitioners and researchers analyzing the relationship between work in the garden and mental and physical well-being. There are also other **naturotherapy** trends, such as tree-centered **sylvotherapy** or **ocean therapy**. In these areas, the boundaries between what is magical and what is scientific are often blurred. However, the pre-scientific “power” attributed to nature finds rational explication thanks to scientific research.

What soothes us in being in the bosom of nature is the lack of saturation of the natural environment with stress-related factors compared to the urban environment. The urban environment is characterized by a high density of people and other objects, the psychological consequence of which is crowding as a subjective state of excess. This excess is associated with discomfort, the impression of being overloaded, limiting freedom. It contributes to dysfunctional behaviors (Fredman & Stansweld, 1998; Milgram, 1976). It leads to increased self-censorship resulting from being constantly among people. Dealing with this overload may consist in changing the standards of behavior, expressed in limiting cooperation, reducing ties, and responsibility. Crowding also results in increased competition, failure to respect certain social norms, development of functional social relations characterized by fragmentation and lack of commitment (Toffler, 1997, Elias, 1993). Another feature of the urban environment is haste, which can be objectively measured by the pace of movement, which, as research has shown, increases with the size of the city (Milgram, 1976).

The environment that is calm and conducive to rest is the natural environment. In one of the experiments, the respondents, after completing a task generating a stress reaction, rested for half an hour performing identical activities at home or in the garden. The diagnosed decrease in cortisol levels was significantly greater in the group relaxing in the garden. In another study that measured physiological indicators of post-exercise stress in the context of city vs. in the natural environment, lower levels of stress indicators were also observed in the forest.

Another proposal to explicate the positive influence of the natural environment on our mind is included in the Theory of Attention Regeneration (Kaplan, 1995). This

concept describes attention overload in an urban environment. The intensity, dynamics, variety, and sophistication of stimuli generated by the urban environment strain our attention resources. However, continuous selection and analysis of incoming information is not possible. We are not biologically prepared to constantly absorb, think, process, focus, and we are often forced to do so by living in the modern city, where literally every moment is filled with doing something. It is increasingly difficult to see a person "doing nothing" even among people waiting for a bus or riding the subway. Such extreme exploitation of attention, however, leads to a decrease in cognitive abilities and fatigue. According to the concept of the Kaplans, the mechanisms of functioning of attention in the natural environment are significantly different from "urban" attention. Attention is then diffused – extensive. We are not forced to constantly control a difficult and complex environment, but involuntarily and effortlessly observe a simple and predictable environment. This relief of intensive attention allows it to somehow regenerate and preserve its resources. The positive impact of the natural environment on attention is indicated by studies in which students with a view of green areas through the window performed tasks requiring concentration of attention better. Similar conclusions are also drawn from studies comparing cognitive performance in the conditions of a walk in the forest vs. around town and more frequent vs. less frequent contact with nature in the situation of living in the city, to the benefit of cognitive functions in the natural environment.

In addition, the green environment is one of the factors affecting the recovery process. Research shows that the condition of patients after procedures improved faster when they stayed in rooms where trees could be seen through the windows, compared to patients who could see buildings, as measured by both difficult to objectify observations regarding well-being and objectified index of length of hospitalization. This study, apart from the shown connection between recovery and contact with nature, also provides empirical evidence for the significant impact of nature on the human condition, even when the interaction is indirect. Thus, not only intensive contact with nature, for example in the form of a walk in the forest, but also the peripheral presence of natural elements, such as the view through the window of green areas, is a factor affecting the individual in a tangible way in research. Similarly, simply unstructured staying in the forest, sitting, observing nature, gives measurable health benefits, even after a relatively short exposure of the individual to the forest ecosystem (Bum-Jin, 2007; Lee et al., 2011; Lefkowitz, 1975; Tsunetsugu et al., 2007).

However, returning to the topic of walking in the forest - this form of contact with nature was conceptualized, among others, as part of *shinrin-yoku*, i.e. forest bathing. In the 1980s, the Japanese physician Qing Li defined the nature deficit problem. In developed countries, people spend more than 90% of their time indoors in artificial environments. According to Qing Li, this deficiency of nature can be compensated to some extent by forest bathing, which is a specific form of walking in

the forest. This walk should be aimed at multi-sensory contact with nature, conscious "immersion" in the forest environment as in water. Non-natural stimuli should be reduced at this time by giving up conversations, using mobile devices and other distractions. Conclusions from the studies conducted so far support the hypothesis of the impact of forest bathing on both the physical and mental state. They show, among others, the differences resulting from the use of *shinrin-yoku* at the level of such parameters as the activity and number of NK lymphocytes, the level of intracellular anticancer proteins, and cytolytic substances (Li, 2006; Li, 2008). Beneficial effects on metabolic diseases have also been observed (Li et al., 2011; Ohtsuka, 1998). The relationship between forest bathing, blood pressure and heart rate were analyzed, positively verifying the hypotheses about the beneficial impact in this area (Song, 2015; Bum Jin Park 2010). Gradually, forest bathing gains the status of a highly beneficial health improvement method recognized by academic medicine in individual countries due to numerous empirical studies regarding the effectiveness in the field of prevention, treatment support and rehabilitation.

Forest bathing can also be used as an ecotherapeutic intervention in a group of people with mental problems. Among other things, a beneficial effect of this form of contact with nature was diagnosed in a group of people with schizophrenia (Simonenko, 2022). This practice also helps to reduce stress levels, as measured by a decrease in adrenaline and cortisol levels (Ohiai, 2008). In psychological research, using standardized psychometric tools, links were found between the use of forest bathing by patients with depression, anxiety, hostility, relaxation, and fatigue. The data obtained indicated a sense of greater psychological comfort and well-being in the patients' conditions when using forest bathing, with a simultaneous reduction of unpleasant states (Chen et al., 2018; Hassan, 2018; Li, 2011; Morita, E.; Song, 2015; Song, 2017; Tsunetsugu, 2011; Yu, 2017).

The diagnosed benefits of forest bathing, beyond application in the narrow area of caring for one's own physical and mental health, can be extended to the development of profiled tourism, activities in the field of *wellness*, educational initiatives, and other activities of economic importance. The wisdom that health is wealth can be applied here, improving the health of large swathes of society will undoubtedly increase positive economic ripple effects.

An important incentive to practice close contact with the forest are also the conclusions from the research, showing the satisfactory durability of the effect. Spending several hours in the forest just two days a month has a measurable immunological effect (Li, 2007; Li, 2008). Care for natural resources is therefore not an activity that requires permanent involvement. Even relatively small actions give measurable and long-term benefits to the involved entity. The added effect of such activities is also an increase in knowledge and sensitivity to issues related to nature. Using the nearby natural resources, for example by taking walks in the forests located

closest to our place of residence, contributes to treating these areas in a specific way - as "our" forest, i.e. one for which we are particularly responsible and care for.

The presented list of incentives to engage in activities for the protection of natural resources concerns the benefits for the entity itself, as such arguments, referring to the literature on the subject, are effective due to the general regularity regarding special concern for one's own benefit. The context of nature protection for nature itself is important, or even fundamental, but without showing the consequences for the quality of human life, arguments referring to such idealistic-sounding statements may prove insufficient to encourage, engage, and maintain interest in the protection of natural resources. The social sciences help to understand and strengthen this motivation and thus contribute indirectly to the protection of the environment and the well-being of a human living close to nature.

**Agnieszka Nazaruk-Zdanuczyk**

### **Ecological Responsibility in Finance and Business**

Sustainable development and ecological responsibility should be important issues for every entrepreneur. The common element of these issues is the so-called green marketing and pro-ecological attitude, thanks to which the company, including employees, can take care of the planet, protect its natural resources and counteract the ongoing degradation of the natural environment.

Every entrepreneur running a company strives to increase the sale of products, services or expand the offers it has. Such economic development can generate measurable profits, but it should also be remembered that such activity affects the natural environment to varying degrees. This is a very important aspect of the company's development, because ongoing climate change is a problem that should not be underestimated or ignored if we want to take care of the fate of future generations.

The ecological responsibility of enterprises (CER) is part of the social responsibility of enterprises, i.e. positive actions taken by an entrepreneur who has in mind the well-being of the broadly understood society. It is a new form of cooperation between business and the environment. Companies that take into account environmental issues in their operations and relations with stakeholders do not worsen their economic results.

The concept of ecological responsibility means a set of organizational initiatives aimed at reducing the company's impact on the natural environment. In particular, to make products from environmentally friendly materials, save energy,

water, materials in the production process, recycle raw materials as well as products, and introduce environmental assessments or reports from environmental activities.

Three approaches to the relationship between the economy and the environment can be identified, in which the position of future generations is defined:

1. economization of the natural environment, which is characterized by thinking on the scale of one generation;
2. greening the economy and ecological economics where quality is important and availability of environmental resources for future generations;
3. economics of sustainable development, where the principle of self-sustaining development in a strong and restrictive version is intergenerational justice and intergenerational thinking.

Corporate responsibility for the environment is related to the sustainable development paradigm, which is based on three pillars:

1. environmental - a positive impact on the planet can have a positive impact on the financial result;
2. social - a sustainable company should have the support of its employees, customers and the community in which it operates,
3. economic - economic profit cannot reduce the value of the other two pillars.

Corporate and business environmental responsibility depends on many factors, including on the industry in which the company operates: manufacturing and food production have the greatest impact on the environment, followed by pharmacology, trade, energy, and fuels. It also depends on the size of the company - depending on whether it is small or large, in which country it operates, and even on whether the company is managed by a woman or a man. Women entrepreneurs are more involved in environmental issues than men. The company may be driven by various motivations that will allow it to decide what environmental strategy will be adopted. It can be customer pressure, financial results or company image. Different groups of stakeholders and customers are interested in different aspects of environmental protection. Environmentalists are interested in human health and the ecosystem, trade unions and consumer protection organizations are interested in environmentally friendly processes and services, and governments and international organizations are interested in sustainable economic development.

Environmental responsibility at the company level includes related practices with products. Examples include developing greener products or processes, reducing

waste or improving resource use, as well as marketing, educational projects, and foundation activities.

Environmental responsibility in business can bring many benefits:

1. improve the company's reputation,
2. improve the sustainability of profits and bring long-term value to the enterprise,
3. environmentally friendly companies are perceived as more attractive to potential employees looking for a job,
4. consumers prefer organic products,
5. increased competitiveness compared to companies that do not engage in the environment,
6. the cost of equity is lower in companies with higher ecological responsibility,
7. provides better access to external financing, and in the long run can effectively improve the efficiency of investments,
8. improving quality and increasing innovation, including eco-innovation,
9. reduces the risk of companies in terms of social costs and environmental responsibility.

In order to meet social expectations, enterprises undertake various activities, most often these are charity projects. It is part of the company's social responsibility and a visible manifestation of its social commitment.

More and more companies understand the concept of ecological responsibility and take actions towards sustainable development. The company's ecological commitment may contribute to the creation of new commercial ventures and improvement of relations with stakeholders. It also facilitates gaining the favor of local communities and gaining the trust of local authorities, as well as increasing the interest of investors, and thus allows access to various types of financing. In addition, consumers are more and more aware of various threats and sensitive to all manifestations of unethical behavior, apart from good price and quality, they also expect products and services to be ecological, evoke positive associations, and that the principles of social responsibility related to sustainable development are respected in the process of their production.

### **Examples of Best Practices in Ecological Responsibility**

For employers, it is important to fulfill the requirements resulting from the company's mission. Taking care of the environment, i.e. ecological responsibility, is such a value. Entrepreneurs achieve this goal, starting with educating employees, but also implementing specific solutions. Examples of such solutions are:

1. Encouraging employees to change the way they commute to the plant or office, for example, leaving the car behind in favor of a bicycle, electric scooter, or public transport. At the same time, entrepreneurs are trying to simplify the task as much as possible by installing bicycle racks, but also by financing tickets, offering flexible working hours, or organizing corporate, collective transport.

2. McDonald's, as part of its global strategy, has committed that by 2025 all packaging for guests in the restaurant will be made of recycled material. The company has combined its activities with Starbucks, resulting in cups that are fully recyclable and compostable.

3. Sports brands like Adidas and Nike have developed different strategies. Adidas, as part of its ecological responsibility, announced that all shoes will be made of plastic extracted from the ocean, this involves collecting plastic from seas and beaches and then reusing them. Nike, on the other hand, uses eco-friendly packaging for shoes made of left-over plastic from drinks, for example.

4. Most companies, restaurants, and bars do business without plastic. An example is the campaign to change plastic drinking straws and cups to non-plastic straws and cups, to reduce the amount of plastic produced.

5. Recycling of electronic devices in the company - laptops, monitors, tablets, photocopying equipment, printers, multifunctional devices, hard drives or even hot drink dispensers. You can also recycle household appliances, which are often also found in companies: refrigerators, freezers, washing machines, dishwashers, microwave ovens, electric stoves, electric heaters, fans, and air conditioning.

6. All kinds of replacement of radio and television equipment, household appliances, alteration of clothes, recycling of clothes - companies try to make employees and consumers aware of the impact of industry on environmental protection. Clothing companies encourage you to donate old clothes to get a discount on the purchase of new ones. Other companies organize workshops that allow you to learn how to remake clothes. DIY<sup>6</sup> stores regularly organize the exchange of electronic equipment for plants that can be planted in the garden or at home.

### **Business Combined With Ecological Responsibility - Local Examples**

An example of an eco-friendly business in Poland is a globally unique agritourism facility located in the Podlaskie Voivodship. It is known as Herbal Corner, which on twenty hectares concentrates the rich culture and tradition of this area. There is an ecological vegetable garden on its premises, where vegetables are grown organically, based on traditional methods. The dishes served in the restaurant are

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<sup>6</sup> DIY – an abbreviation for Do-It-Yourself



prepared with ingredients from this place as well as herbs and organic spices. An important element of the herbal and botanical activity is the company called Dary Natury [Gifts of Nature], which uses local products in creating organic food.

Another example is the ASTWA Service and Waste Management company, which deals with comprehensive waste management and uses programs for the export of asbestos and asbestos-containing materials. It is the company that was the first to introduce a selective waste collection program in Białystok. Its constant goal is to increase the amount of raw materials sent for recycling and thus to minimize waste deposited in landfills.

Four Starlings Mydlarnia is a company that produces cosmetics based on natural raw materials, which, if possible, are obtained locally. They use traditional recipes and artisan production methods. The packaging of the cosmetics themselves is produced in the spirit of zero waste - paper, glass and other materials come from recycling.

## **Part II:**

### **Methods of Participatory Activities in Ecology and Climate Protection Developed in the Project**

**Eliza Szadkowska, PhD**

#### **Academic Center for Ecological Education and Practice – Ecological Empathy Course, Eco-Leader Module**

As part of the course in the Eco-Leader Module, a total of three thematic blocks of workshop classes were conducted:

1. eco-participation,
2. eco-volunteering,
3. eco-mediation.

#### **Eco-participation workshops.**

The first cycle of classes called eco-participation was conducted by an expert - a naturalist, the main specialist in the Knyszyn Forest Landscape Park (KFLP). As part of the series, three types of meetings and workshops were held:

Research and educational walks through nature. During educational trips in the City of Białystok, an experienced naturalist, educator and biologist discussed and showed the relationship between man and nature, he spoke about unusual species of plants and animals, as well as about the practical principles of drawing from nature without degrading it.

Participants received answers to many questions about life in harmony with nature, e.g. What birds and insects can bring financial benefits? How to evaluate how much a tree is worth? What are ecological violations and how can they be prevented?

Workshop on “How to get involved in nature conservation in the city?” - during the workshops, the participants acquired practical knowledge in the field of recognizing species of plants and animals living in the urban area, practical rules for feeding birds and animals, greenery development standards, rules for removal and proper care of trees. During the workshop, aspects important for every inhabitant and citizen were discussed: environmental protection and financial issues and social functions of nature, ecosystem services, principles of human intervention in the natural environment, including the principles of care for wild birds and animals, as well as the principles of tree care and felling.

Visits to the Knyszyn Forest Landscape Park: during the meetings, the participants listened to nature lectures on active nature protection and visited the headquarters and the reserve of the KFLP, led by prof. Witold Sławiński in Supraśl. Participants prepared films and photo reports from these meetings. At the meeting, the aspects of landscape and natural heritage protection, as well as the value of the natural ecosystem and tree stands for clean air, were discussed.



**Illustration No.1:** eco-participation workshops,  
source: Leaders of Eco-Change Project, KFLP, Supraśl 2023

### **Eco-volunteering workshops.**

As part of the series, two types of practical classes were held. The first one, included a civic initiative, entitled *Eco-volunteering action. The Second Life of a Tie*. The flagship objectives of the action were the following:

- promoting pro-ecological attitudes in our community,

- development of eco-volunteering,
- education on the idea of a circular economy, including ZERO WASTE.
- support for needy children,
- joint integration around the subject of quality of life conditioned by the natural environment.

The challenge that the participants received in order to actively join the project was to independently organize the collection of ties, scarves and jewelry, bringing and placing the collected items in a special container, which was installed in the main hall of **The Eastern European University of Applied Sciences in Białystok**. The action schedule was as follows:

- June-October 2022: collection of ties, scarves and jewelry as well as an information campaign in the media and social media;
- October-November 2022: creative upcycling workshops (ideas for processing/remaking objects: during the workshops, participants under the supervision of craftsmen and artists gave unnecessary or damaged things a second life, increasing their value, preventing them from turning into garbage.);
- November 2022: Lectures "The tie in the main role, the history of the tie..., tie etiquette...";
- December 2022: organization and conduct of a regional charity gala, during which an auction of items made during workshops to support children in need - charges of the Foundation "Pomóż Im" ["Help Them"], benefitting the Children's Hospice in Białystok and conducting a Christmas charity collection by people studying and working at the university.

Forty-eight different organizations and companies from the region and about a thousand people joined the campaign.



**Illustration No.2:** The Great Charity Auction Second Life of a Tie for the charges of the Foundation “Pomóż Im”, Children’s Hospice in Białystok  
source: Leaders of Eco-Change Project, 2022

**“A recipe for a metamorphosis in the *slow fashion style*” workshops** concerned the acquisition by the participants of the skills of a conscious image in line with the ecological trend under the slogan “fashion free from industry”. Participants practiced slow fashion created by Prof. Kate Fletcher from the Center for Sustainable Fashion. Under the guidance of a stylist and make-up artists, they learned how to create their own wardrobe so as to buy consciously, purchase smaller quantities, and select good quality things while keeping the environment in mind.

The workshop program included the following topics: a workshop on building your own style, body type analysis, creating a minimal wardrobe, beauty analysis workshops, color and accessories selection workshops - eco tricks, a dress code workshop in professional situations, including the selection of clothes for an exam, job interview, and party, plus a slow fashion volunteering campaign - give boxes, alterations, maintenance of things, second-hand shopping, a style conscious design workshop and slow fashion image metamorphosis.

Eighty-nine people took up the eco-challenge of changing their style to slow fashion. The finale of the workshop was a complete change of fashion habits into ecological ones and image metamorphosis of two participants of the program.



**Illustration No.3:** A recipe for a metamorphosis in the *slow fashion* style workshops  
source: Leaders of Eco-Change Project, Białystok, 2023

### **Eco-mediation workshops.**

The classes in this cycle included workshops entitled: public appearances and self-presentation, public debates, and a workshop of social consultations in ecology and climate protection. Two types of workshops were held as part of the series:

- **workshops with an expert entitled public appearances and self-presentation of the Eco-Change Leader,**
- **workshops with an expert on communication on climate change.**

During the first workshop, training was held in: preparing a good speech on ecology, self-presentation - first impression, and behavior in front of the audience. At the end, the participants had individual public speaking practice in front of the camera and in the form of stand-up. The workshops were conducted by an expert with many years of journalistic and educational experience.

As part of the second workshop, the participants learned about the key issues related to conducting a public discussion on climate protection and biodiversity. In order to be able to communicate well, the participants learned difficult terms and their actual meaning. They learned to distinguish between false messages and to choose the right stock of words and meanings to encourage them to engage in environmental activities.

An important aspect of the discussed issue was also replacing many words with pictures and graphics, which greatly facilitates communication and is much more effective, especially in groups of young people. Images and graphics speak louder than many words. Participants could therefore practice many ways to communicate using effective and universal graphics.



**Illustration No.4:** Eco-mediation workshops  
source: Leaders of Eco-Change Project, 2023

## **Dominik Sołowiej**

### **Academic Center for Ecological Education and Practice - Ecological Empathy Course, Eco-Influencer Module**

Social media has dominated the way we communicate with the world, get information and talk to each other using modern technologies. Today, every major TV station, radio station or newspaper has its own Facebook, TikTok or Instagram accounts, publishing news and interviews there, interacting with viewers, listeners and readers, and encouraging the sharing of video recordings and photos. No wonder that such solutions, focused on social media, are also used by government institutions and local governments as well as non-governmental organizations, including NGOs promoting ecology and the idea of sustainable development. And they do it effectively, as in the case of the organizations involved in the "Leaders of Eco-Change" project.

As part of promotional activities, the creators of the project set up a Facebook fan-page and an Instagram account, where invitations to individual project events, reports from events, and notices of festivals and workshops were regularly published. Project partners (including media patrons) and students - primary and secondary school students from Białystok and the region, as well as seniors and public figures who wanted to promote the idea of ecological development of our city and region were invited to prepare them. Being aware of the role that social media plays in the promotion of ecology, social-media trainings were also organized, attended by people of all ages interested in environmental protection and a wide range of related topics.

The training program included, among others:

1. A workshop in "Cybersecurity basics for eco-influencers";
2. A workshop in "Promotion of events in social media";
3. A workshop in "Copywriting for citizens and influencers in ecology";
4. A workshop in "Analysis of the results of promotional campaigns in social media";
5. A workshop in "Fake news in ecology and climate protection: greenwashing and myths about the climate";
6. A workshop in "Using Canva and other online tools to create graphics, infographics and posters for social media and more".

Participants learned not only to create content, but also received an introduction to free tools to monitor activity in social media and in the blogosphere (e.g. Facebook Business, Google Analytics, Google Search Console and Twitter Analytics). As part of the workshop, you could also get acquainted with solutions using artificial intelligence. Participants in meetings learned how Chat GPT, Midjourney and Dall-E work, and how to use AI to write marketing texts, press releases and coverage of events. It is worth



knowing the possibilities generated by artificial intelligence, to be able to rely on solutions that allow you to create original texts based on self-gained knowledge, thanks to which the recipients want to identify with the authors, seeing them as mentors, and set new trends in ecological activities. This was the idea behind the social-media training, which showed the participants how to combine modern technologies with humanistic reflection about the world and man.

Particularly interesting, from the point of view of the idea of the "Eco-Change Leaders" project, was the involvement of seniors who, together with students of the Eastern European Academy of Applied Sciences in Białystok, learned copywriting, social-media marketing and "programming" of Artificial Intelligence. It turned out then that the potential for learning, development, gaining knowledge and new experiences among seniors is enormous. Cooperation between seniors, students and lecturers opens up possibilities of original ideas, addressed to different age groups, because not only young people or adults, but also people over sixty and seventy years-old are interested in a healthy lifestyle, a balanced diet and environmental protection. In addition, social-media trainings showed that seniors are well versed in modern ecological trends and willingly use social media, seeing them primarily as tools thanks to which they can develop their passions and interests.



**Illustration No.5:** Social-media workshops  
source: Leaders of Eco-Change Project, 2023

## **Photography and film workshops**

Film and photography workshops were an indispensable supplement to the social-media trainings conducted as part of the "Leaders of Eco-Change" project. After all, social media cannot function without the right content, i.e. good photos and videos. Social media attracts attention with multimedia that is visually attractive, using graphics, music, animation and expressive colors. TikTok and Instagram are videos prepared with an idea, imaginativeness, originality, attracting attention with original frames, properly selected music and short, expressive statements, thanks to which viewers gain knowledge and have fun at the same time.

Workshops conducted as part of the "Leaders of Eco-Change" project focused on such issues, showing the participants that you do not need a team of several dozen people and professional equipment to create a fascinating film. To attract the attention of a viewer interested in ecology and a healthy lifestyle, all you need is a smartphone and an idea for a movie. The participants of the project had plenty of such ideas, because the workshops, in addition to the theoretical introduction, used activating methods, thanks to which ecology enthusiasts created announcements of project events, recorded their course, and prepared the multimedia setting of individual meetings beforehand. The skills acquired during the workshops were used, among others, to promote the Festival for Mother Earth, organized at the turn of May and June 2023 at the Eastern European University of Applied Sciences in Białystok.

However, there would be no perfect promotion of the "Leaders of Eco-Change" project without photography workshops supplementing film workshops and social-media training. Organizing these meetings was important because today, in the era of mobile phones equipped with excellent photographic lenses, taking photos with classic cameras seems archaic. Therefore, the photography training organized as part of the project focused not only on the use of smartphones, but also devices such as analog cameras, reflex cameras and mirrorless cameras. Participants learned how to compose frames using a photographic tripod, learned the secrets of lighting the set (including the faces of the heroes of the photos), composition and photo processing (retouching, cropping, compression, use of photos in social media). And the conclusion of these meetings was surprising for everyone: even though we take photos with smartphones and tablets on a daily basis, we are not aware that these devices can be used to carry out a professional photo session or to record an inspiring video that will gain a wide audience on Tik Tok, Instagram or YouTube.



**Illustration No.6:** Photography and film workshops  
source: Leaders of Eco-Change Project, 2023

Promoting ecology has never been an easy task. Caring for our planet, for the local environment, and for human health requires not only a legislative initiative, implemented at the level of states or local governments, but also requires changes in our daily habits and rituals that may cause air, water and soil pollution in the long run term. Such a change, unfortunately, is never easy, so environmental activists have to find a way to create a well-thought-out, subdued narrative that will convince us to reflect on the state of the environment. This assumption guided the authors of the "Leaders of Eco-Change" project, implemented in order to show how "small" gestures, and the aforementioned habits and rituals can make a real impact on reality.

Let's go back to social media. Today, the authors of content published on social media very often create their image, subjecting it to retouching, corrections and stylizations. And it's not just about the filters popular on Instagram, thanks to which we seem more beautiful and attractive. Social media is also a retouching of reality, or rather a stage where users play specific roles, put on masks, pretend to be someone they are not. Therefore, we often do not want to believe someone who tries to "sell" to the recipients the image of an ecology enthusiast, concerned about the fate of the world. The answer and one effective solution is authenticity, which should be reduced to showing oneself in everyday situations: at home, work, in the park and shopping, when, for example, we turn off the water, brush our teeth, limit the use of printing paper,

carry a linen bag instead of plastic, we choose a bicycle or public transport instead of a private car or taxi. This is how ecology was promoted at the photography and film workshops in the "Leaders of Eco-Change" project, and the evidence of the effectiveness of the "strategy" adopted today is the information published on Facebook, YouTube and Instagram of the project and on the website of the Eastern European Academy of Applied Sciences in Białystok. Their authors – the lecturers, students and seniors from Białystok and the region – proved that they understand and feel ecology and are able to talk about it in a fascinating, original and authentic way. This is the first and probably the most important step on the way to a better life.

**Eliza Szadkowska, PhD**

### **Academic Center for Ecological Education and Practice – Circle of Ecological Empathy**

Within the structures of the Eastern European University of Applied Sciences in Białystok, the Scientific Students' Club of Ecological Empathy was established and registered. Two supervisors are responsible for coordinating the club's activities. In order to support the club's activity, a place for open meetings was created at the Law and Administration department, equipped with office facilities and educational materials. According to the statute approved by the Rector of WANS, the goals of the club are following:

1. deepening and popularizing knowledge in the field of ecology and environmental protection,
2. promoting ecological culture and supporting the individual development of students,
3. integration of students from the Faculty of Economic Sciences and from the Faculty of Management of the WANS branch in Elk.

Club members undertook the organization of several projects and participated, as partners, in ecological activities undertaken by other organizations.

The main and largest project initiated and organized as part of the Scientific Students' Club of Ecological Empathy were two editions of the competition entitled "Become a Leader of Eco-Change". The aim of the competition is to educate and increase the involvement of students and teachers of secondary schools in the promotion of civic attitudes in ecology. The competition covered both the Podlaskie and Warmińsko-Mazurskie Voivodeships. The participants of the competition are teams of two or five students under the supervision of teachers from secondary

schools from the above mentioned regions. The task of each participant of the competition was to send an electronic application to the following address: [leaders.eko-zmian@wsfiz.edu.pl](mailto:leaders.eko-zmian@wsfiz.edu.pl) with an attachment in the form of his or her own work, regarding the educational campaign on promoting the attitude of "being ECO" (caring about the Earth and nature by saving natural resources, energy, money, purchasing ecological products, giving a second life to used items, planting trees, making houses for pollinating insects, using a bicycle, etc.). The submitted competition work should be of the following form, a poster, film, song, or poem (digital format). The rules of the competition were announced on the website: <https://wans.edu.pl/Liderzy-eko-zmian/> and on the Facebook profile: Projekt Liderzy Eko-Zmian. The competition was settled by a committee consisting of representatives of the organizer. The results of both editions of the competition were announced both at the organizer's headquarters and in social media. The competition was very popular. The works were sent from dozens of schools from both voivodeships. In both editions of the competition prizes were funded by the organizer and by the local government of the Podlaskie Voivodeship.

The Scientific Students' Club of Ecological Empathy also organized the Holiday Photo Contest called "I love nature". The initiative consisted in encouraging the academic community to be more mindful of nature during holidays. The participants of the competition were adults, amateur photographers, representing the academic community and the inhabitants of the region. Professional photographers and visual artists were not allowed to participate in the competition. The competition consisted in taking photos showing the natural landscape, animals, nature and had to be published on Instagram or Facebook with the following designation:

#KochamNatura,  
#LiderzyEkoZmian,  
#FundacjaFCIS,  
#WSFiZBialystok.

Several entries were sent, from which the winners were selected. The results of the competition were announced in the social media of the Leaders of Eco-Change project.



**Illustration No.7:** “Become a Leader of Eco-Change” competition gala at WANS, Białystok, source: Leaders of Eco-Change Project, Białystok, 2023

Until now, the Scientific Students’ Club of Ecological Empathy has participated in the organization of such projects as:

1. The First Plogging Championship through the Knyszyn Forest in Białystok in May 2022, organized as part of the project.

2. The Second Life of a Tie eco-volunteering campaign, including the organization of a gala and charity auction for the leaders of the Foundation “Pomóż Im” [“Help Them”], Children’s Hospice in Białystok in December 2022, organized as part of the project.

3. Spring replacement of small RTV and household appliances organized in cooperation with such organizations as: the Council of Federation of Scientific and Technical Associations NOT (FSNT NOT) in Białystok, the Foundation Center of Initiatives for Society, the Association for Good Hope, the Association of Poland-East Cooperation, the ASTWA Enterprise, the Białystok Branch of the Polish

Association of Sanitary Engineers and Technicians, the Białystok Branch of the Association of Polish Electrical Engineers, the Białystok Branch of the Association of Forestry and Timber Engineers and Technicians, the Marshal's Office of the Podlaskie Voivodeship. The aim of the event was: to promote the exchange of equipment between the inhabitants of Białystok so as to not buy new ones (in accordance with the idea of a circular economy), to help the Association for Good Hope in equipping apartments for people recovering from the homeless crisis, to give ordinary things a second life (equipment such as: electric kettles, toasters, irons, dryers, ironing boards, microwaves, mixers/food processors, blenders, vacuum cleaners, radios, TVs, hair dryers, and bedside lamps were allotted for replacement). Several hundred people took part in the action. We managed to collect a lot of equipment that went to people in need.

4. An Eco-volunteering campaign entitled Help Four Paws. The aim of the action was to collect food and products for cats and dogs - the charges of the Kocie Ranczo Association [Cat's Ranch Association] from Czarna Białostocka and the Vita Canis Foundation from Sokółka. A central collection point was organized in the main hall of the Eastern European University of Applied Sciences in Białystok. The action was dismantled through the media and social channels. Volunteers from the Scientific Students' Club of Ecological Empathy were responsible for servicing and coordinating the collection point. The action enjoyed great public interest. The collected items were donated to two supported organizations.



**Illustration No.8:** Spring replacement of small RTV and household appliances  
source: Leaders of Eco-Change Project, Białystok, 2023

**Eliza Szadkowska, PhD**

### **Academic Center for Ecological Education and Practice - Eko-Influencer film studio and Eko-Lider Knowledge Bank**

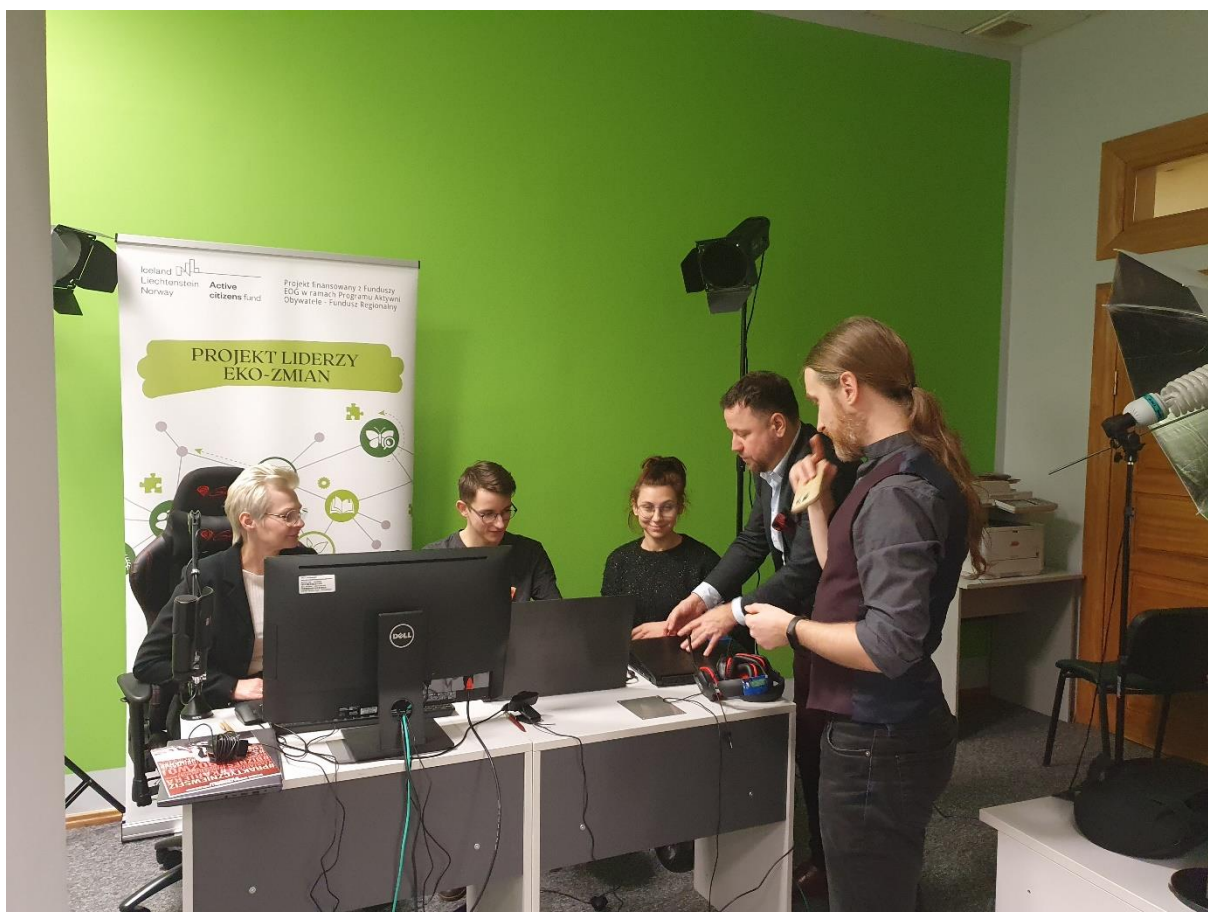
Thanks to funding from the project, a Media/Film Studio has been arranged at the WANS Campus in Building E. It is equipped with modern multimedia equipment, including lamps, cameras, a screen, and a multimedia board. During the project, students associated with the Scientific Students' Club of Modern Marketing and the Scientific Students' Club of Ecological Empathy, with the support of the Tutor Studio and expert trainers, held workshops aimed at acquiring media and digital competences in the use of equipment and software for editing audiovisual recordings, taking photos and preparing a film and photo reportage for presentation on social media. Materials for presentations were prepared on Instagram, Facebook, YouTube and Tik Tok.

After the workshops, people participating in the activity developed twenty-two eco-diploma theses in the Eko-Influencer Studio: films promoting civic activities for



nature and ecology in everyday life. The task was coordinated by the Supervisor of the Scientific Students' Club of Modern Marketing.

A mini e-learning platform was created on the university's website called the Eco-Leader Knowledge Bank. The platform serves as a collection of accumulated knowledge and tools for activities in ecology. The platform includes tabs such as training materials and eco-diploma theses. All educational materials produced during the project activities are published here.



**Illustration No.9:** Eco-Influencer Film Studio  
source: Leaders of Eco-Change Project, Białystok, 2023

### **Adam Sacharewicz**

### **Academic Center for Ecological Education and Practice - Internships and volunteering in the Knyszyn Forest Landscape Park**

As part of the project, a series of educational meetings were held, aimed at shaping knowledge and awareness in the field of environmental protection. Theoretical classes were held at the Eastern European University of Applied Sciences in Białystok

(WANS) and the headquarters of the Knyszyn Forest Landscape Park (KFLP). The practical part carried out in field conditions took place in the cities of Białystok and Supraśl and in the area of KFLP. The participants of the classes were students and employees of WANS.

Particular emphasis was placed on raising awareness of the existence and value of local natural resources in the immediate vicinity, and thus having a direct impact on the inhabitants of the region, including the participants and their families. Building appropriate attitudes in the society, resulting from the awareness of the natural values of the environment, their value and the need for protection, was one of the main assumptions and goals of the project. During the classes, the aim was to develop an attitude of civic responsibility among the participants, manifested on the one hand by setting an example of best practices in everyday conduct, and on the other hand by taking decisive action in the event of identifying threats that may reduce the value of natural resources or even lead to the destruction of valuable elements of the environment.

During the implementation of classes, consisting of both theoretical and field work, special attention was paid to the role of trees and urban greenery. The experience of people conducting the meetings shows that the public's knowledge of the importance of trees in the environment needs to be thoroughly deepened. Despite the fact that most people are aware of their role in the production of oxygen and appreciate the value of green areas, a separate, serious problem from the point of view of preserving trees in the city is improper maintenance work. Conducted in an incompetent manner, by people who do not have the appropriate knowledge, not only technical, but above all dendrological and arboristic, often results in serious mutilation, reduction of natural and aesthetic value and, as a consequence, often the death of the tree.

In addition to the obvious loss to the environment, this exposes those responsible for the destruction to criminal liability. Making the participants aware of the problem was one of the main purposes of their implementation. For this purpose, during the theoretical part, examples of the ecosystem services provided by trees, including the production of oxygen, removing pollutants from the air emitted as a result of human activity or mitigating the effects of heavy rainfall. Based on the materials held by the KFLP, examples of incorrectly performed maintenance cuts and damage to trees as a result of failure to comply with regulations during construction projects are presented.

The basic principles that should be followed during care procedures and the applicable regulations in this regard are presented. The specificity of the urban environment in terms of the functioning of trees and the characteristics of trees functioning in the urban environment, for example, a shallowly placed and often asymmetric root system, and therefore particularly susceptible to damage. Adaptation

mechanisms developed by trees in order to counteract unfavorable changes were presented, for example the so-called bulkheading process.

During the practical field work carried out in urban areas, cases of incorrectly carried out maintenance cuts and damage to trees related to investments or improper spatial planning were presented and discussed using examples such as leaving insufficient space around the trunk, or limiting the root ball, hindering the proper functioning of the tree. During the field classes conducted in the form of a seminar, the topic of the importance of urban greenery from the point of view of residents was widely discussed.

The subject of the use of existing trees in the implementation of new investments was discussed, consisting in their skillful integration into new facilities, implemented in accordance with good practices (like trees that play a significant role in the vicinity of playgrounds). The preservation of existing trees makes it possible to use the shadow they cast, which is extremely important on especially hot days, without the need to introduce new plantings that will reach the ecosystem value of mature trees only in a distant time perspective.

A separate thematic block from the topic of greenery in cities were issues related to interaction with wild animals, especially those present in urban areas.

During the course, much attention was paid to activities aimed at facilitating the functioning of animals living in human settlements. The issue of feeding birds in winter was discussed in detail, starting with the justification of the need for supplementary feeding by providing guidelines as to the correct conduct. The correct construction of the feeder, the appropriate types of food to be used during winter feeding, and the most common mistakes, e.g. feeding birds with bread. The role of wild, native fruit bushes as a source of food used by wintering birds was emphasized. Participants of the classes were encouraged to introduce certain shrubs in their surroundings as an element increasing biodiversity (also used by pollinating insects) and helping birds find food, a hiding place or a place to build a nest.

Limiting treatments throughout real estate used by the participants was also encouraged in order to enable the development of the most natural vegetation with the presence of wild plants commonly perceived as weeds and removed from gardens. Weed seeds are an extremely important source of food used by wintering birds. The need to ensure the availability of water, especially during the warm season, was emphasized. Access to water in the summer period from the point of view of bird protection is as important as winter feeding, therefore, examples of simple and easy-to-construct tanks serving as birdbaths used by birds and insects were presented. During the classes, the correct construction of a nesting box was discussed, which is a significant help in finding a suitable place for a nest, willingly used by a number of bird species found in human settlements. Attention was drawn to the most common mistakes regarding the construction and placement of the nesting box.

Among the animals that can often be found in the human environment, attention was also paid to hedgehogs. It was emphasized that special care should be taken when driving vehicles, especially after dark, in order to avoid hitting hedgehogs and other animals. Solutions have been proposed to facilitate the preparation of places for hedgehogs as a wintering place.

The phenomenon of spring migrations of amphibians carrying out breeding migrations to water reservoirs was also discussed. In the case of amphibians crossing the road, this usually results in high mortality of these animals. Participants were encouraged to report identified migration sites to nature conservation services in order to take action to reduce amphibian mortality. Issues related to the protection of bats were also discussed - animals that are extremely important as human allies - similarly to birds, which significantly reduce the number of nuisance insects. It was pointed out that investments consisting of roof repairs or thermal modernization of buildings must be preceded by inspection aimed at detecting the presence of bat colonies (or bird nests) and, if necessary, postponing the works for a period enabling their safe transference without posing a threat to individuals belonging to protected species. The methods of dealing with a situation where a bat finds itself inside a room used by people were discussed.

During the classes, the issue of flying birds was raised - young birds that left the nest, despite the fact that they did not fully develop the ability to fly. They remain under the care of their parents who feed them and protect them from threats. Unfortunately, it often happens that birds are taken by people who mistakenly take them for chicks that have fallen out of the nest. Such unnecessary "help" often ends with the bird's death, and at least significantly hinders its restoration to nature, even when it is handed over by finders unable to cope with it to the care of specialists. The ability to distinguish a fledgling from a chick in need of assistance or an injured bird was one of the objectives of the project's activities.

Participants of the classes were encouraged to introduce elements of flower meadows in their immediate surroundings as plant communities much more diverse than a traditional, regularly mowed lawn, and at the same time cheaper to maintain, effective and important from the point of view of animals, especially insects, and after the formation of seeds, also birds.

Summing up the activities carried out during the internships and volunteering taking place as part of the project, one should first emphasize their unquestionable importance for the development of knowledge about nature and shaping social awareness and sensitivity in the field of environmental protection. The very fact that such activities have been carried out, and at the same time found a wide audience, is optimistic, but on the other hand, it indicates the need to carry out similar activities in the shortest possible time perspective. Developing an attitude of responsibility resulting from the awareness and appreciation of the value of natural resources

occurring locally, in the immediate vicinity of the project recipients, was one of the key goals that we managed to achieve. It should be expected that the recipients of the activities, i.e. the participants of the classes conducted as part of the project, will become in a sense - in accordance with the title of the project - leaders who pass on the acquired knowledge and set an example with their own conduct, and actively react in the event of a situation threatening the environment. Even small steps, seemingly insignificant, multiplied by a sufficiently large number of people can influence the development of appropriate behaviors and attitudes serving the broadly understood protection of natural resources, therefore similar initiatives should be pursued. In order to increase the reach of the value and the target effect of the activities, it is necessary to strive to cover the largest possible diverse group of recipients, in particular people who have the ability to further transfer knowledge and appropriate attitudes (teachers, educators) and people who publish content on a large scale via social media, i.e. the so-called influencers and youtubers.



**Illustration No.10:** Internships and volunteering in the KFLP  
source: Leaders of Eco-Change Project, Białystok, 2023

## **A training camp for nature educators**

During the implementation of the project, an activity was carried out under the slogan "Training camp for nature educators" - a part of the project addressed to participants professionally or socially engaged in educational activities in the field of nature, as well as those who want to undertake this type of activity in the future. It was attended by twenty people: educators employed in national and landscape parks of the Podlaskie Voivodeship, as well as employees of forest districts and local government units. Theoretical classes in the form of lectures and workshops were held at the headquarters of the Knyszyn Forest Landscape Park, the field part was carried out on the premises of KFLP.

There is no doubt that conducting effective education requires, in addition to knowledge, appropriate predispositions and skills to convey messages in an effective and possibly attractive way from the point of view of recipients. The classes were conducted by people involved in didactic work on a daily basis - academic lecturers and teachers working with young people at the high school level.

The main message of the training was to strive to conduct educational activities in a way that would enable the participants to make independent observations and draw conclusions through direct contact with natural objects, thus departing from the traditional scheme of school activities. Particular emphasis was placed on practical field activities. In accordance with the adopted assumptions, the focus was mainly on the local environment in order to raise awareness of its resources, as well as to build an attitude of responsibility for their preservation in a condition that allows them to be used in the future. During the practical part, the possibilities of conducting educational activities were presented, assuming the use of natural objects encountered directly in the field, consisting in their appropriate exposure and presentation in a way that engages the attention of the participants of the classes. An example is a small body of water, which with the use of a minimum of equipment (a net for catching aquatic organisms, a transparent container, a magnifying glass) becomes an extremely attractive, living laboratory, allowing you to explore the complexity of the underwater ecosystem under the guidance of an experienced guide who shares their knowledge. Similarly, other objects or traces of the existence of organisms encountered during classes: plants, bird feathers, animal tracks, snail shells, insects, etc. can be used as a starting point for expanding knowledge about the surrounding nature, and perhaps also - which is particularly desirable - developing interests. From the point of view of deepening knowledge about the resources of the local environment, it is extremely important to familiarize the participants with the particularly valuable natural objects of the Podlaskie region. It seems obvious, but in practice it often turns out that the knowledge of, for example, the natural tourist attractions of the region is, according to

the Polish proverb "*Cudze chwalicie, swego nieznacie...*" [Eng. "*The grass is greener on the other side*"] - incomplete.

An important part of the activities carried out as part of the "camp" were issues related to the role of wetlands in the environment, including peatlands, and responsible management of water resources. Swamp forest areas, usually excluded from economic activities, are a valuable habitat - a sanctuary for often rare species of plants and animals, and also play an important role as water retention facilities. In the case of mid-field wetlands, there is a much higher risk of degradation due to the risk of activities aimed at draining them and using them in agriculture. A separate issue are peat bogs - areas that have been shaped since prehistory, with an extremely important role consisting in the accumulation of carbon and exceptionally effective water retention. Unfortunately, as a result of the drainage of wetlands and the lowering of the groundwater level, the dried peatlands paradoxically become one of the main emitters of carbon dioxide, contrary to their original, natural function. Participants of the training could familiarize themselves with the methods of restoring the proper hydration status of drained peatlands on the example of activities carried out in Norway.

An integral part of the training were classes on expanding knowledge about the beneficial impact of the forest environment on human health and well-being. An innovative element of the training was a philosophical look at the forest and the relationship between man and nature. During the classes, participants had the opportunity to perform meditation exercises designed on the basis of research by neuropsychologists in order to have a positive impact on the participants' well-being (e.g. inducing a relaxation reaction and stimulating the harmonious cooperation of all the senses) and exercises stimulating reflection in building the attitude of coexistence.

A modern lifestyle characterized by working under the pressure of time and a high level of stress encourages the development of techniques that enable calming down and regaining emotional balance. Being in a forest environment is an important way to reduce stress levels. The demand for close contact with nature can be seen by the growing interest in various relaxation techniques, such as forest therapy, silvotherapy or forest baths.

Knowledge about the health-promoting impact of the forest environment and the ability to use it in practice is an important competence developed during the project.

Continuous improvement of the qualifications of nature educators is particularly important, even necessary in the context of far-reaching, unfavorable changes taking place in the environment. The experience of people involved in nature conservation, including the author of this chapter, clearly shows that there is much to be done in terms of the knowledge of nature among Polish society. Despite the recently noticeable "ecology fashion" (which should be considered a positive trend), the

increase in social awareness, necessary for the development of appropriate environmental protection attitudes and habits on a large scale, is not possible without properly conducted natural or ecological education at many stages, addressed to different ages and social groups. Effective education requires, apart from specialized, constantly updated knowledge, also an appropriate workshop, consisting in knowledge of teaching methods and the ability to use them in practice. Effective transmission of knowledge about nature, especially in relation to young people who often show no interest in the above-mentioned area, including school-age children, is a difficult task. It requires educators' commitment, continuous development of teaching skills and creativity, as well as the use of various and modern tools - perceived by young people as interesting and attractive: social media, websites, applications, games, etc.

Undoubtedly, there is a need for further actions aimed at increasing the number of nature educators as well as supporting them in developing competences and raising qualifications - inter alia, through the exchange of experience. Efforts should be made to enable the largest possible group of people to participate in similar events, both by organizing more trainings, their effective promotion and increasing the coverage to the national or even, in an optimistic variant, international level. This is obviously associated with costs, but taking into account the overriding goal, which is to form a responsible society that is aware, involved in environmental protection and uses its resources prudently, financial expenses should be considered justified, the more so that in the longer term they will translate into savings and a properly preserved natural environment.

Despite the limited scale, the improvement of qualifications of twenty educators as training participants should be considered a positive result of the activities carried out as part of the project.





**Illustration No.11:** Training camp for nature educators as part of the Leaders of Eco-Change Project, source: KFLP, 2022

**Eliza Szadkowska, PhD**  
**First Plogging Championship**

On May 15, 2022, we organized the First Plogging Championship through the Knyszyn Forest in the Pietrasze Forest in Białystok. The event was aimed at promoting our project in the regional community and arousing interest in ecology. The idea of plogging, or combining running with collecting garbage, was born in Sweden around 2016 and spread to other countries two years later. An approximately two million people plog in one hundred countries every day, with some plogging events attracting over three million attendees. The program of our event included activities such as: a warm-up with professional Academic Sports Association (ASA) trainers, ninety minutes of plogging in the forest, competition for the largest amount of garbage collected, competition for the strangest garbage, photo competition for fans, educational stands on ecology, health, games and ecological games, eco-refreshments, first aid training and demonstrations.

During the meeting, in addition to attractive material prizes, participants won tickets to a concert at PGE Narodowy<sup>7</sup>, passes to sports day camps, gym tickets and discounts to restaurants. The prizes were funded by our partners. The event attracted the interest of all nationwide television news services and local media.

The event was attended by over four hundred people from all social groups: children and youth, adults and the elderly. We managed to remove several tons of garbage from the forest, which was disposed of by the Dojlidy Forest Inspectorate.



**Illustration No.12:** First Plogging Championship in Białystok  
source: Leaders of Eco-Change Project, 2022

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<sup>7</sup> Warsaw's national football stadium under the name of Polish Energy Group (Pol. PGE) – a state-owned public power company and the largest power producing company in the country.

**Eliza Szadkowska, PhD**

## **Festival For Mother Earth**

From May 31 through June 2, 2023, a large festival event for the inhabitants of the region was organized at the Campus of the Eastern European University of Applied Sciences in Białystok.

From the very beginning of the festival, a festival town was set up on the WANS campus. It was a place where visitors could see various nature exhibitions and take advantage of specialist advice, including in the field of computer and laptop repair, thanks to the 3GIGA company. In addition, you could visit the stands of the tap water laboratory of the Białystok Waterworks, the recycling stand of the “We For Others” Association [“My Dla Innych”], the stand of the Animal Shelter in Białystok and the educational tent of the Knyszyn Forest Landscape Park.

On the first day of the festival, the event began with the Rector of WANS giving a Letter of Congratulation on the occasion of the 35th Anniversary of the Knyszyn Forest Landscape Park. Then, a lecture was given by Dawid Popończyk, a Green Hero-Super Eco Influencer.

Participants listened to the speech of Representatives of Innovation Circle Network’s Norwegian Partner (ICN), who talked about ecological life in their country. The gala of the results of the Youth competition: #BecomeTheLeaderOfEco-Changes was a big event. On the same day, a specially prepared SUMMER CINEMA was held, i.e. screenings of pro-ecological films developed by graduates of the Eco-Change Leaders project. During the festival, there were sixteen various workshops for children and teenagers, such as crafting with string, caring for dogs and cats, and creative recycling. In addition, workshops for adults were conducted, including soap making, artistic recycling and macramé tangling.

In the festival town there was also a concert on the ecological stage, performed by Jędrzej Detek Dądziłło – the creator of the Up To Date Festival.

The second day of the festival was focused on thematic workshops such as: slow fashion (fashion free from industry), herbs in our home and business based on the gifts of nature.

An online lecture was held on the third day, as part of the Academy of Good Practices. A business influencer Magdalena Teterko-Walczak was one of several speakers. The lecture was devoted to the subject of sustainable development in business. According to the participants, the festival was a great opportunity to learn and discover various aspects of sustainable development and ecology. Thanks to various events and workshops, the participants broadened their knowledge and skills that will enable them to engage in environmental issues and create positive change for

our Mother Earth. The event thus ended the cycle of intensive training of pro-ecological activities in our project.



**Illustration No.13:** Festival For Mother Earth  
source: Leaders of Eco-Change Project Białystok 2023



## **OBJECTIVE OF ACTIVITIES**

The aim of the action is to increase the skills of citizens - project participants in monitoring violations of the law in the field of environmental protection in their environment. In addition, the goal is:

1. increasing the awareness of the inhabitants about the condition of the natural environment in the region and the possibility of taking action and civic actions for ecology and nature protection, including the prevention of natural losses or ensuring compensatory measures,

2. sensitizing the local community to the topic of ecology and increasing understanding and involvement in pro-ecological activity,

3. increasing knowledge about the current situation in the local environment of the region and civic activities on this topic,

4. integration of citizens, groups and social organizations around the topic of ecology,

5. environmental and climate protection at the local level.

## **RECIPIENT GROUPS**

The main recipients of the activity are students and employees of the Eastern European University of Applied Sciences in Białystok and the Branch in Elk. Indirect recipients are:

- families of students and employees of the Eastern European University of Applied Sciences in Białystok and the Branch in Elk,

- representatives of local media,

- social partners: Knyszyn Forest Landscape Park, Kronenberg Institute, Academic Sports Association,

- Local community: employees of non-governmental organizations operating in the field of environmental education, e.g. Białystok Federation, Volunteer Network of Podlasie, Center for Social Activity of the City of Białystok, social and business partners: e.g. Foundation of Tadeusz Kasprzak, Center for Entrepreneurship and Innovation, Polish Economic Society, Chamber of Commerce and Industry in Białystok, Confederation Lewiatan - representatives of local business, employees of nature protection institutions, i.e. national and landscape parks from the region, forest

services, the Regional Directorate for Environmental Protection, the Voivodship Fund for Environmental Protection, employees of the local government administration.

## **REPORT**

### **RANGE OF ACTIVITIES**

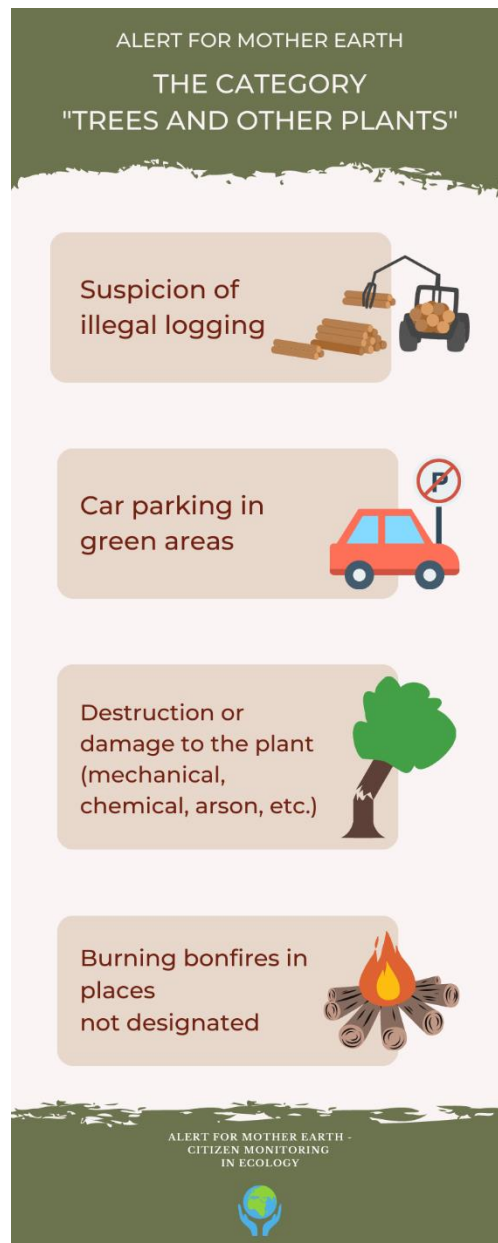
Monitoring activities were carried out at the local level. They covered the area of the Podlaskie Voivodeship. Information and promotion activities were carried out at the national level, e.g. thanks to the use of contacts with media and social media channels.

### **SCOPE OF MONITORING**

Monitoring includes the observation of events that have an impact on environmental damage. Participants, when they notice something disturbing that may have an adverse effect on nature, report such a case to the organizer, whose task is to investigate and properly handle the matter. Reports concern three categories of events:

#### **1. CATEGORY OF TREES AND OTHER PLANTS:**

- Suspicion of illegal logging.
- Destruction or damage to the plant (mechanical, chemical, arson, etc.).
- Burning bonfires in places not designated.
- Car parking in green areas.



**Illustration No.15:** infographic Alert For Mother Earth - category trees and other plants, source: The Leaders of Eco-Change project 2023

## **2. CATEGORY OF WASTE:**

- Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.
- Pouring wastewater out of the sewer system.
- Pollution of surface waters.
- Air pollution.
- Incineration of waste in places not designated for this purpose





**Illustration No.16:** infographic Alert For Mother Earth - category waste, source: The Leaders of Eco-Change project 2023

**3. CATEGORY OF NATURAL LANDSCAPE DEGRADATION:**

- Illegal development, e.g. on the shoreline of a river, lake, nature reserve.
- Destruction of plant or animal habitats.
- Poaching.
- Illegal construction.
- Scaring animals.
- Parking in the wrong place.
- Burning grass.



**Illustration No.17:** infographic Alert For Mother Earth - category natural landscape degradation, source: The Leaders of Eco-Change project 2023

**METHOD OF CONDUCTING MONITORING:**

The monitoring is carried out in two stages. In the first stage, individual reports are collected from people participating in the project who experience or witness negative phenomena and attitudes towards the environment in their surroundings, e.g. illegal landfills, illegal development, tree felling. For this purpose, a special application form has been developed and is available online. After receipt of the application, it is

registered. Subsequently, the information contained in the notification is analyzed in terms of data completeness. Then, the Secretary appointed for this task submits the application form with attachments to three independent experts. In the second stage, environmental and legal consultations take place with experts. A team of 3 experts - specialists in the field of environmental law with administrative experience - support the reporting persons in the process of carrying out the civic Eco-Positive Intervention. A team of experts provides advisory support for each reporting person - how to solve the case. He provides advice on procedures, official and court rules, and helps in the preparation of letters, petitions, applications and appeals to the competent administrative authorities and services. The result of the intervention: After consultation with experts, an individual intervention plan is created, i.e. a decision is made to transfer the case to the competent public administration body in order to repair the damage to the natural environment. In the event that the reporting person, for objective reasons, is unable to report or resolve the matter on their own, the team will intervene directly. Each consulted application is forwarded in writing by the Center of Initiatives for Society Foundation to the locally competent administrative authority. The Center for Initiatives for Society Foundation monitors the proceedings in the case and provides the reporting person with information about the final resolution of the case.

#### **MONITORING RESULTS:**

Number of interventions: 32 applications for civic intervention in ecology and nature protection were received.

##### ***Who are the interveners?***

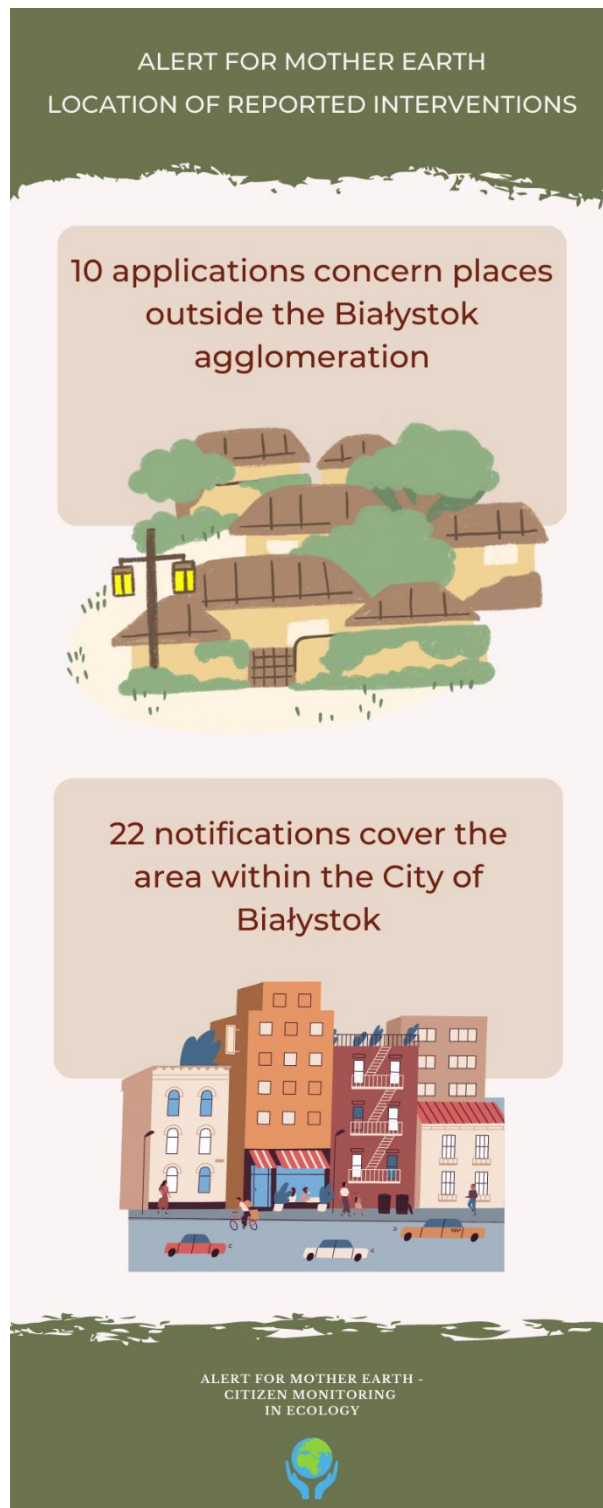
- 27 of them were donated by women and 5 by men.
- 29 applications were submitted by adults aged 18-60.
- 2 notifications were submitted by people aged 65+.



**Illustration No.18:** infographic Alert For Mother Earth – who are the interveners?  
source: The Leaders of Eco-Change project 2023

***Location of reported interventions***

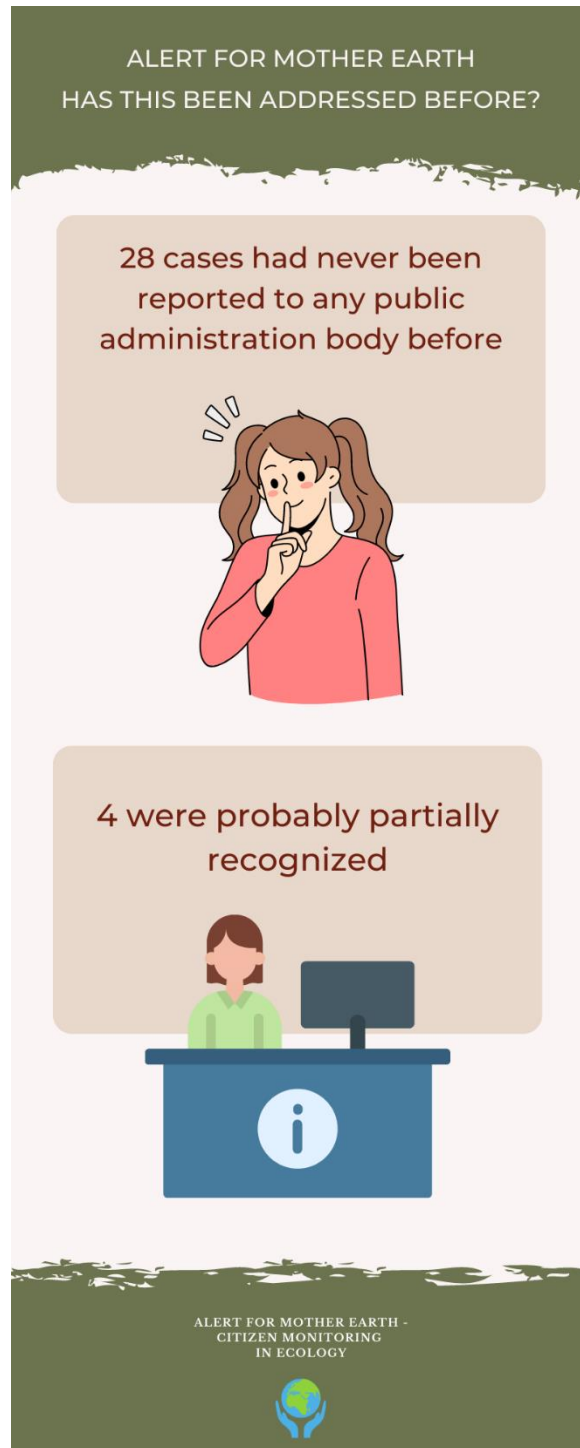
- 10 notifications concern places outside the Białystok agglomeration,
- 22 notifications cover the area within the City of Białystok.



**Illustration No.18:** infographic Alert For Mother Earth – location of reported interventions, source: The Leaders of Eco-Change project 2023

***Has this been addressed before?***

- 28 cases had never been reported to any public administration body before,
- 4 were probably partially recognized.



**Illustration No.19:** infographic Alert For Mother Earth –has this been addressed before? source: The Leaders of Eco-Change project 2023

**What are the reported cases of interventions related to?**

**In the category of trees and other plants:** 14 notifications of intervention were received, 2 of them concern suspected illegal felling of trees, 8 concern the destruction or damage to a plant (mechanical, chemical, arson, etc.), 1 concerns parking cars in places, setting fires in places not designated - 2 reports, parking cars in green areas - 1 report, dead tree on the right-of-way - 1 report, pollution of the green area - 2 reports.



**Illustration No.20:** infographic Alert For Mother Earth – reported cases in category 1, source: The Leaders of Eco-Change project 2023

**In the category of waste:** 23 notifications of intervention were received, of which 22 are related storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose, and 1 case concerns pouring sewage outside the sewage system and 1 - contamination of surface waters.



**Illustration No.21:** infographic Alert For Mother Earth – reported cases in category 2, source: The Leaders of Eco-Change project 2023

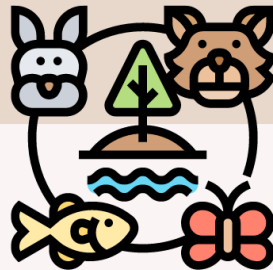
**In the category of natural landscape degradation:** 8 intervention applications were submitted. 7 of them concern the destruction of plant or animal habitats and 1 concerns another event that affects the destruction of the landscape.



ALERT FOR MOTHER EARTH  
WHAT ARE THE REPORTED CASES OF  
INTERVENTIONS RELATED TO?

IN THE NATURAL LANDSCAPE DEGRADATION  
CATEGORY, 8 INTERVENTION APPLICATIONS WERE  
SUBMITTED

7 of them concern the  
destruction of plant or animal  
habitats



1 concern another event that  
affects the destruction of the  
landscape



ALERT FOR MOTHER EARTH -  
CITIZEN MONITORING  
IN ECOLOGY



**Illustration No.22:** infographic Alert For Mother Earth – reported cases in category 3, source: The Leaders of Eco-Change project 2023

## IMPLEMENTATION OF INTERVENTION PLANS - EFFECTS OF ACTIONS TAKEN

All thirty-two cases, hereinafter referred to as Alerts, were reported to the following institutions:

- Chief Inspectorate for Environmental Protection - Department for Combating Environmental Crime: [www.gios.gov.pl](http://www.gios.gov.pl)
- Voivodeship Fund for Environmental Protection and Water Management: <https://wfosigw.bialystok.pl/zglos-nielegalne-postepowanie-z-odpadami>
- <https://www.city.bialystok.pl>

Alerts No. 1, 2, 3, 4, 5, 7, 8, 9, 10, 12, 13, 14, 18, 19, 20, 22, 25, 26 were additionally reported to:

- Municipal Office in Białystok: <https://ratusz.pl>
- Municipal Police in Białystok: <http://strazmiejska.bialystok.pl/>

Other cases were reported to the following offices:

- Alert #28: Zawady Municipality Office: <http://gminazawady.pl/>
- Alert #29: Dobrzyniewo Duże Municipality Office: <https://dobrzyniewo.pl/>
- Alert #31: Juchnowiec Kościelny Municipality Office: <https://www.juchnowiec.gmina.pl/>
- Alert #32: Municipal Office in Czarna Białostocka: <https://www.czarnabialostocka.pl/>

Proceedings in all 32 cases are pending.

### **Alert #1**

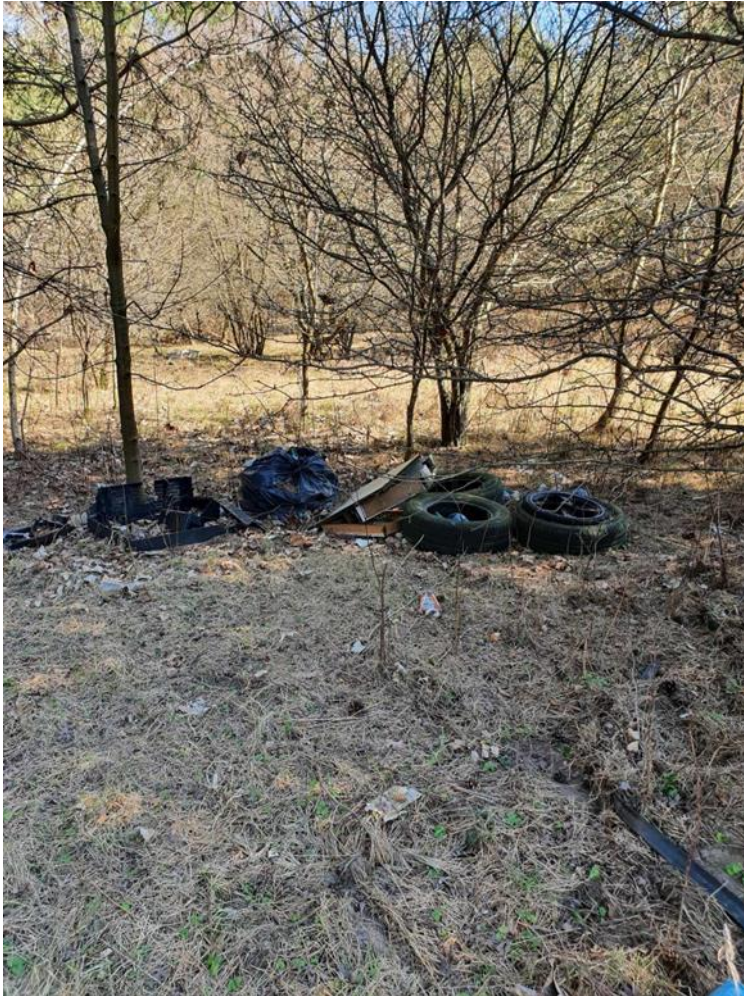
**Waste category:** storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Location:** Bialystok, Andersa street, 58-60; forest behind private houses.

### **Visualization:**



**Illustration No.23:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023



**Illustration No.24:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

## Alert #2

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Natural landscape degradation category:** Destruction of plant or animal habitats.

**Location:** Forest path running from Wołyńska str., near the church on Sybiraków str. in Białystok.

**Visualization:**



**Illustration No.25:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #3**

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Natural landscape degradation category:** Destruction of plant or animal habitats.

**Location:** Towarowa Str., Białystok

**Visualization:**

### **Alert #4**

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Natural landscape degradation category:** Destruction of plant or animal habitats.

**Location:** Forest at the bus terminal of line 5, Sybiraków Str., Białystok

**Visualization:**



**Illustration No.26:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #5**

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Location:** Pietrasze Forest, the area behind the property at Andersa 56 Str., then the road leading to the border of the Białystok Waste Incineration Plant.

**Visualization:**



**Illustration No.27:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #6**

#### **Trees and other plants category:**

1. Destruction or damage to the plant (mechanical, chemical, arson, etc.).
2. Car parking in green areas.

**Location:** a plot with geodesic no.23, Sochonie precinct, or with geodesic no.220/1, Wólka Przedmieście precinct, Municipality of Wasilków.

#### **Visualization:**



**Illustration No.28:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #7**

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Location:** Antoniukowska 56 Str., Białystok (next to the Antoniuk Commercial Centre).

**Visualization:**





**Illustration No.29:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #8**

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Location:** Białystok Bus station, at the bus parking lot, behind the Kaufland store

**Visualization:**



**Illustration No.30:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert # 9**

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Location:** Old mosque at the corner of Kujawska and Rzeszowska Streets.

**Visualization:**



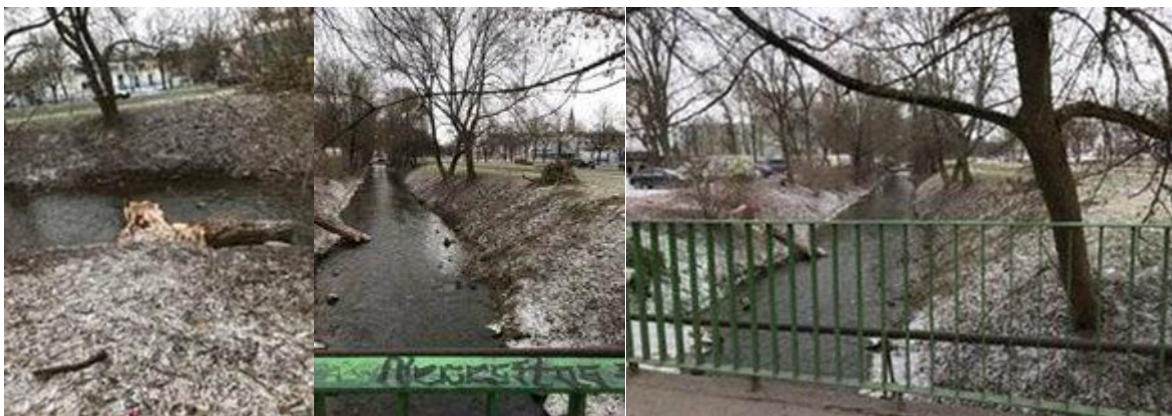
**Illustration No.31:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### Alert #10

**Trees and other plants category:** Suspicion of illegal logging. Destruction or damage to the plant (mechanical, chemical, arson, etc.).

**Location:** Orzeszkowa Str. in Białystok nearby the Biała River.

### Visualization:



**Illustration No.32:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### Alert #11

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Location:** Sokółka (Buchwałowo) near Orłowicze village.

**Visualization:**



**Illustration No.33:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023



**Illustration No.34:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023



**Illustration No.35:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #12**

**Trees and other plants category:** Suspicion of illegal logging.

**Location:** Palmowa 20 Str., Białystok.

**Visualization:**



**Illustration No.36:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #13**

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Location:** Transportowa 3 Str., Białystok.

**Visualization:**



**Illustration No.37:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #14**

**Category of trees and other plants:** Destruction or damage to the plant (mechanical, chemical, arson, etc.)

**Location:** Ogrodniczki Str., Bialystok

**Visualization:**





**Illustration No.38:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #15**

**Category of trees and other plants:** Destruction or damage to the plant (mechanical, chemical, arson, etc.).

**Natural landscape degradation category:** Destruction of plant or animal habitats.

**Location:** Bojary - a village in the Turośń Kościelna Municipality; by the railway tracks under construction.

**Visualization:**



**Illustration No.39:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### Alert #16

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Location:** Bojary - a village in Municipality of Turośń Kościelna; by the railway tracks under construction.

### Visualization:



**Illustration No.40:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### Alert #17

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Location:** Kolonia Koplany Railway Station.

**Visualization:**



**Illustration No.41:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### Alert #18

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Location:** Ścianka 8 Str., Białystok, at the bus terminal.

**Visualization:**



**Illustration No.42:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023



**Illustration No.43:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### Alert # 19

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Location:** Bema Str. in Białystok, at the entrance to the allotment gardens.

**Visualization:**



**Illustration No.44:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #20**

**Category of trees and other plants:** Destruction or damage to the plant (mechanical, chemical, arson, etc.).

**Location:** Car wash next to the Turkus hotel in Białystok, Wierzbowa Str.

**Visualization:**



**Illustration No.45:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #21**

**Category of trees and other plants:** Destruction or damage to the plant (mechanical, chemical, arson, etc.).

**Location:** Around Pawełki village, Sokółka Municipality.

**Visualization:**



**Illustration No.46:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #22**

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Location:** Bialystok, (Google Maps): 53,1457932, 23,1407130

**Visualization:**





**Illustration No.47:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #23**

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Natural landscape degradation category:** Destruction of plant or animal habitats.

**Location:** Meżenin, Rutki-Kossaki <https://maps.app.goo.gl/yri2T2ZXodTFH4bv5>

**Visualization:**



**Illustration No.48:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023



**Illustration No.49:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #24**

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Location:** Koplany

**Visualization:**



**Illustration No.50:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### Alert #25

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Location:** Białystok, Forest by allotment gardens

**Visualization:**



**Illustration No.50:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### Alert #26

**Category of trees and other plants:** Destruction or damage to the plant (mechanical, chemical, arson, etc.).

**Location:** Antoniuk Park on Wierzbowa Str., Białystok.

**Visualization:**



**Illustration No.51:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #27**

**Category of trees and other plants:** Destruction or damage to the plant (mechanical, chemical, arson, etc.).

**Location:** Roman-Catholic Cemetery in Księżyno, Municipality of Juchnowiec Kościelny.

**Visualization:**



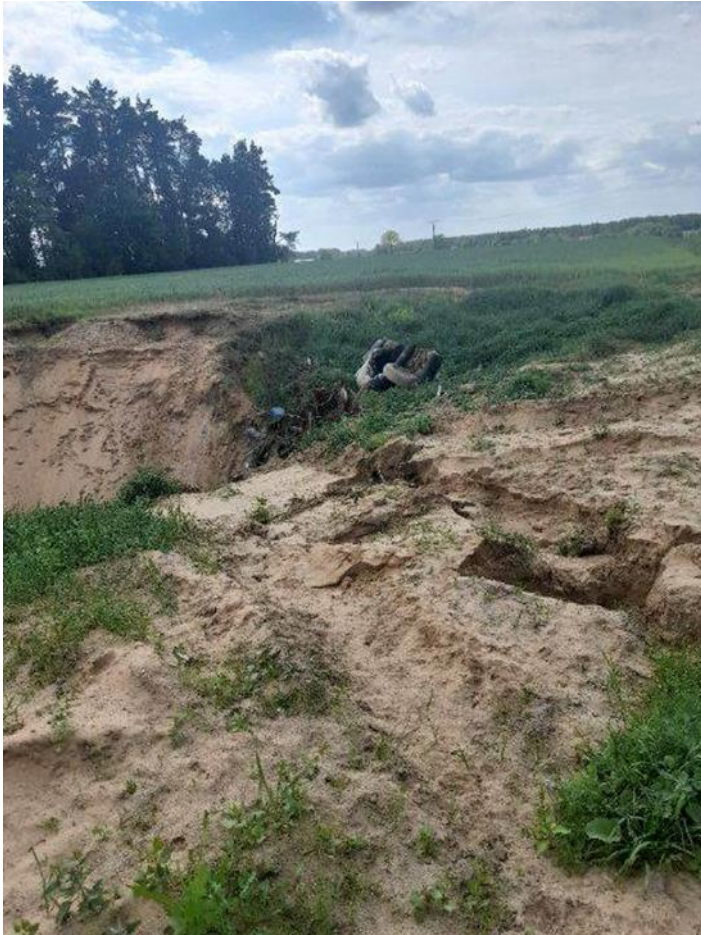
**Illustration No.52:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #28**

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Location:** village in Municipality Zambrów/ Google maps: 53.154540,22.610577

**Visualization:**



**Illustration No.53:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #29**

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Location:** Gnła village in Municipality of Dobrzyniewo Duże.

**Visualization:**





**Illustration No.54:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #30**

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Natural landscape degradation category:** Destruction of plant or animal habitats.

**Location:** Forest nearby the village Ozarki-Olszanka, Municipality of Rutki.

**Visualization:**



**Illustration No.55:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #31**

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Category of trees and other plants:** Destruction or damage to the plant (mechanical, chemical, arson, etc.).

**Natural landscape degradation category:** Destruction of plant or animal habitats.

**Location:** Kleosin, Municipality of Juchnowiec Koscielny, near the tracks and the sports field.

**Visualization:**



**Illustration No.56:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

### **Alert #32**

**Waste category:** Storage of waste (garbage, plastics, tires, rubble, liquid substances, vehicle wrecks, etc.) in places not designated for this purpose.

**Location:** Czarna Białostocka, along the tracks next to the high-voltage pole.

**Visualization:**



**Illustration No.57:** Photograph of the event as part of the Alert Report for Mother Earth, source: Project Eco-Change Leaders 2023

## **Part III Description of Practices and Tools in Ecology and Climate Protection Used in Norway**

**Alf Johansen**

### **Description of practices and tools in ecology and climate protection used in Norway**

The Innovation Circle Network (ICN) was established 17. September 2007, at the Hotel "Zajazd\_Napoleoński» in Warsaw. It was a result of a numbers of succesfull projects carried out by the founding partners. One of these projects was an Interreg 3B project named Innovation Circle, and with partners from 8 different countries. Lead partner was Alytus City Council in Lithuania. Other partners came from Norway, Sweden, Poland, Estonia, Russia, Belarus, and Latvia. The organisation is registered as a non-governmental entity in Norway and has an international board consisting of specialists and researchers from the governments and other sectors.

The ICN has implemented small actions and large-scale projects with a long list of local actions, undertaken within several regions and towns. In this report we will mention 2 such actions which can be relevant for this handbook.

- 1) **The Young Eyes project** was funded by the Erasmus+ and implemented 2015-2016. ICN was the lead partner from Norway, where we also involved the Spydeberg local municipality, and other partners came from Jelgava district municipality in Latvia, Rauna local municipality in Latvia, Robertsfors local municipality in Sweden, Suwalki city municipality in Poland, and PAS from Scotland, which is a non-government association located in Edinburgh. The Young Eyes project established transnational workshops in Suwalki, Rauna, Jelgava, Robertsfors and in Scotland. At all these places young people (14-20 years) were invited to apply for participation and the project provided travel and accommodation and recruited experts to coach and motivate the students during the workshops.

The “mirror workshops” aimed at learning, and raising of awareness about the local communities, where the workshops took place. Through a black and white methodology, the hosting students should invite the visiting students to review the places and give honest feedback about good and bad sides. This was organised through group walks (3-5 persons) in the natural landscape and through the built urban environment with mobile cameras, and with eyes and ears open. After the

walks, the mixed transnational groups should sort out their observations, and put together a 10-minute presentation with drawings/video/images. This presentation should be conducted in front of the plenary, and where local press, mayors or other representatives from the local council were present.

The experiences from these mirror workshops were good. The students became active, motivated and they also came up with many useful ideas and proposals for the future development of the communities involved. They pointed out what they missed, things that were nice, and some things that were ugly, or should be removed or changed. The workshops also gave the students some tools for the work in local youth councils, and good learning about the other countries. They were also encouraged to bring and share some samples of national/regional food traditions. In this way the project managed to create a friendly atmosphere and cultural experience. Interactions with other cultures and nations became easier because of this experience.

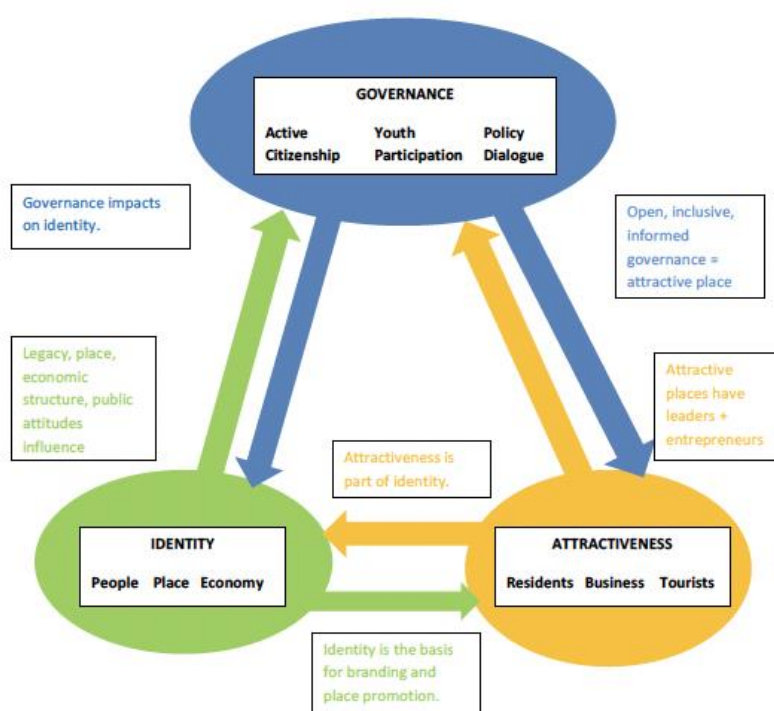


Diagram 1: Key concepts and their inter-relation

3

Illustration 58: [Young Eyes Guidelines](#) . Source: ICN 2023

2) **The Transinform project** was implemented during the years 2010-2012.

Notodden municipality in Norway was the originator and project owner. Other Norwegian partners were the county councils of Telemark and Østfold together with Indre Østfold Regional Council. Telemark Research Institute did also make several studies about regional attractiveness measurements in seven countries. Other partners were: Regional Planning Authority Havelland-Fläming in Germany, The Municipality of Tranemo in Sweden, Vidzeme Planning Region in Latvia, the Region of Jelgava in Latvia, Alytus County Governor's Administration in Lithuania and Suwalki City Municipality in Poland.

Co-partners were Grodno City Municipality in Belarus, Pskov Regional Development Fund in Russia, Russian Tourism Academy, Pskov Branch in Russia, Krasnoznamensk City Council in Kaliningrad, Russia and the public institution Innovation Circle Network registered in Norway.

[The Transinform project](#) mission was to develop new strategies to make small and medium sized cities in Europe more attractive for people and businesses. By means of face-lifting public spaces the aim was to strengthen attractiveness and competitiveness. Architecture, water, light and design were central elements.

Local and international experts were brought together for workshops. They put forward regional scenarios and concrete investment plans. Schools, NGO's and local businesses involved, focusing regional identity and profiling the participating regions. Trans in Form also published and described Baltic Sea Region highlights. The project aimed at synergies with other EU projects such as The ESPON project PURR (Potential for Rural Regions).



Illustration 59: Transinform project webpage. Source: ICN 2023

One of the outputs from this project was the reconstruction of Maria Konopnicka Square in Suwalki.



Illustration 60: Maria Konopnicka square in Suwalki, before and after the reconstruction. Source: ICN 2023

Another output was the work on identity for the Notodden town in Norway. The main idea was to capitalise on the very famous Blues Festival, which has created an new post-industrial identity for the old industrial town, and where the new land marks are the big microphone sculpture, and the House of Book and Blues.

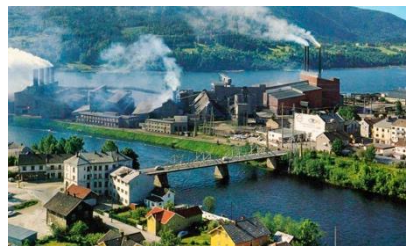
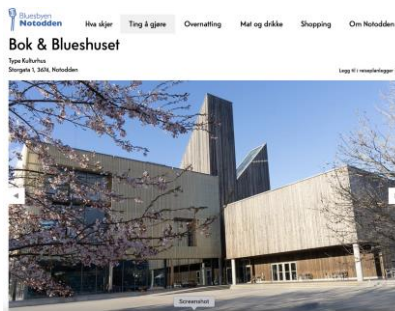


Illustration 61: Notodden House of Book and Blues. Photos: Telen, VG, Visittemark.no. Source: ICN 2023

The project also managed to bring home ideas from Spain and other countries, such as street furnitures for leisure and sports. Today this is more common throughout Europe and shows how fast new good ideas are shared and copied into other places. The ICN's mission is to make places more attractive. It has focused the good life and promoted sustainable and reasonable solutions. The urban-rural balance is needed. The good life includes the natural environment with wildlife, and where green environment is properly protected and maintained, not just exploited, and wasted.

[Read more about Innovation Circle projects here](#)



## **Øra Ecopark and the engagement of youths and children**

**Øra Ecopark** is located in Fredrikstad municipality in Norway.

Øra Ecopark is a collaborative project between Gudeberg local community committee, Månegartneriet and the Norwegian Center for Circular Economy (NCCE). We work to develop the Øra area to give visitors a richer hiking experience and increased knowledge of connections in and between nature and society. Through exploration and tasks, school classes and other groups gain an exclusive insight into organic farming, what our local nature has to offer, and how we can best utilize and recycle our resources. The teaching program is interdisciplinary, rooted in the curriculum and adapted to all levels.

### **Vision**

Create knowledge and understanding among children and young people about how ecology and economics are connected in order to equip them with sustainable action skills for the future.

### **Main goal**

Develop a learning and dissemination arena for children and young people in the district around the themes of natural values, biological diversity, organic food production and circular economy.



Illustration 62: Recycling. Source: Øra Ecopark, ICN 2023

In order to achieve sustainability and climate goals, there is a need for a shift in how the economy works and creates value. In a circular economy, products must live as long as possible in a cycle where as few resources as possible are lost. It's about burdening nature as little as possible, and ensuring that as little waste as possible ends up in nature.

The pupils are taught and participate in various activities, to learn about how we can achieve this in practice, both on a larger scale and about how each of us can contribute.

### **The moon garden**

Månegartneriet (the moon garden) is a green classroom designed for teaching and communication. Here, many children and young people participate in the school garden where they learn about organic farming, biological diversity, preserving and preparing food and much more.

We also have activities and offers for many other groups and also function as a social meeting place for people who are interested in nature and urban agriculture. Children can feel the earth with their own hands and experience the cycle of life, and they can discover the secrets of nature in their community neighbourhood.



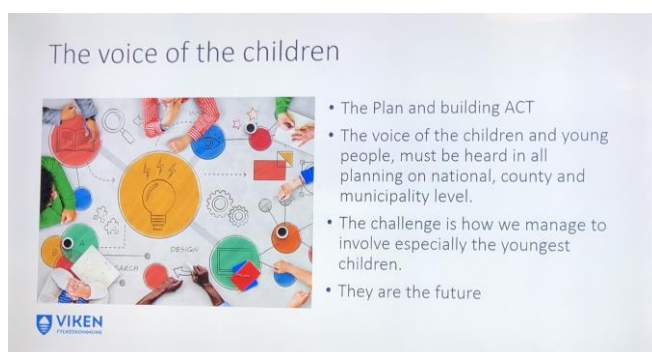
Illustration 63: Øra Ecopark. Source: ICN 2023

At the moon garden they also receive visitors for sharing and learning from their experiences. In 2023 ICN brought several study groups from other countries to this location.



Illustration 64: Øra Ecopark. Source: ICN 2023

In Norway there is also an expressed political goal to involve children and young people into the planning of local communities and environment. In order to achieve that, proper coaching must be established. Almost all municipalities have established youth councils. However, one may ask if this system is really working according to the theory. The involvement should be realistic and trustworthy. If not, then there is a risk that the label promises more than the content of the planning processes. Then the involvement of children and youth turns into alibi for the government, more than real democratic business.



*Illustration 65: The voice of children. Source: ICN 2023*

In order to empower the children and youths, there is a need for competence, structure and coaching. This coaching shall be provided in such manner that the children are able to formulate and express their thoughts and opinions. There are various methodologies for this. The Interreg project [PIPE\(2002-2024\)](#) worked with several techniques. One method is to ask the children and youths to put up a short list of things they see as important to change or improve in their society. Another list can Focus on things to preserve and to care about for the next generations. PIPE named this method the creation of a **future charter** and an **action plan**, which could be delivered to the local or regional council, or other relevant bodies. One important aspect within PIPE was to focus on the identity issue, and the difference between identity and image.

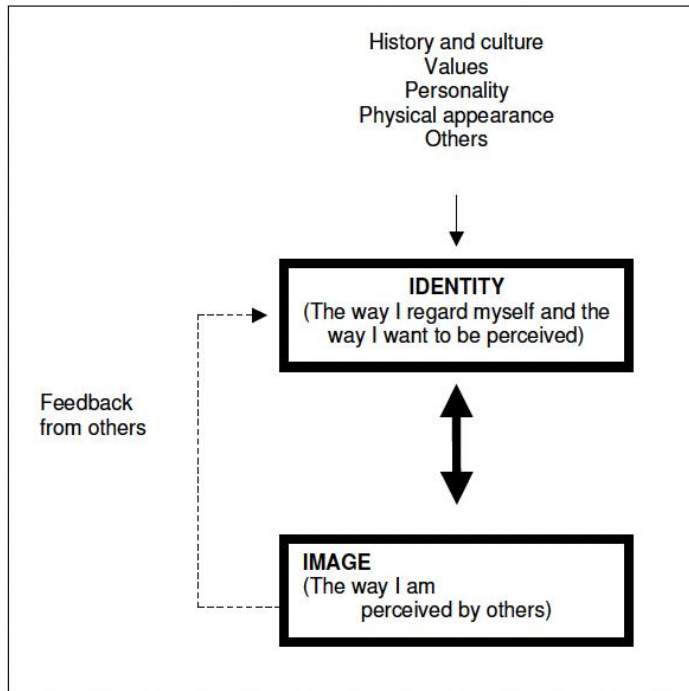


Illustration 66: What is identity? [from PIPE methodology guidelines](#) Source: ICN 2023

### **Halden Canal Regional Park in Ørje**

The regional park's goal:

The Haldenkanalen and the surrounding areas have a number of competitive advantages. The most important are easy access to untouched nature and proximity to population concentrations, as well as proximity to a strong concentration of businesses and organisations. Proximity to the Swedish border and the cooperation across the border can also be regarded as competitive advantages for the region.

The aim of the regional park is to bring about a long-term development that will provide increased value creation and liveability in the local communities along the canal.

#### **The regional park must:**

- a) be a decisive contribution to business development in the area, through establishing and developing places to eat, stay and experience
- b) increase the number of visitors to the region
- c) create new jobs through more salable products based on the region's nature and culture



Illustration 67: Haldenkanalen Regionalpark. Source: ICN 2023

### **Shared culture and basis of identity**

Haldenkanalen Regional Park comprises a geographically defined landscape area with a common culture and basis of identity. and consists of the municipalities of Aurskog-Høland, Marker, Aremark and Halden in Viken.

The park is located in the south-east of Norway, right on the border with Sweden, and only a good hour from Oslo. The nearest airport is Oslo Airport Gardermoen. You can also easily reach Halden by Inter City train.

The regional park is named after the Haldenkanalen, because this is the most magnificent cultural monument in the area, and an arena for many exciting activities. The other activities in the area also belong under this brand, including those that are some distance away from the canal and the waterway itself.

Regional Park Haldenkanalen was established in 2012, and in the 10-year period has worked on many exciting projects.

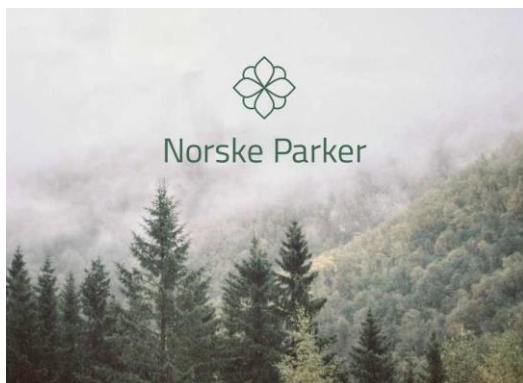


Illustration 68: Norske Parker. Source: ICN 2023

A regional park is a geographically coherent valuable and valued landscape and identity area. Defined on the basis of its unique natural and cultural value.

Norwegian Parks consists of 9 regional parks in 41 municipalities with a total of 350 partners. Haldenkanalen Regional Park is a proud member of Norwegian Parks. Through experiences that are enriched in the interaction between nature and people, we work in the Haldenkanalen Regional Park to create a profitable business life and a rich cultural life along the Haldenkanalen based on nature, sharp expertise and small places where people not only live, but live!

The Norwegian parks in [Norske Parker](#) contribute to local value creation and strengthen development power based on natural and cultural resources. The parks must make a difference to place identity, business development and sustainable tourism. The parks develop sustainable products and experiences, through local anchoring and committed collaboration with local businesses, organizations and authorities.

Regional nature and cultural parks in Norway have been established based on local initiative. Norske Parker contributes with expertise, cooperation model and network. This leads to strengthened local implementation power. Norske Park's landscape approach is holistic and includes people in local communities. It contributes to conservation, value creation and social development across sectors. We call it "Park as a collaborative model"

The work contributes to environmental value creation through safeguarding the region's landscape, cultural heritage and identity. The parks trigger volunteering and social value creation through long-term partnerships, interaction and participation. They work across and in the space in between where the sector authorities often fall

short. Park thus becomes an important comprehensive cooperation model that contributes to solving current challenges in relation to sustainable social development. These new parks are developed from the bottom up in District Norway and several areas are now working with parks as a collaborative model.

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## **Biographical information about the authors**

**Jarosław Ruszewski** – PhD in law, legal adviser with many years of experience, academic lecturer, administrator, founder and long-term president of the Pryzmat Social Activity Center Association and the Suwałki Federation of Non-Governmental Organizations RAZEM. Social animator, advisor, trainer and author of publications.

**Adam Radosław Sacharewicz** – biologist, graduate of the University of Białystok. Naturalist works as head nature conservation specialist in the Knyszyn Forest Landscape Park.

**Izabela Solarczyk** – psychologist, PhD in psychology, specializing in psychology of cognitive processes, social psychology, ecological psychology and music psychology. Academic lecturer and psychologist practicing in a socialization facility, in projects offering support to people with disabilities and in a counseling center for people on the autism spectrum.

**Agnieszka Nazaruk-Zdanuczyk** – educated cultural expert and management specialist with many years of practice in organizing cultural events. She has twenty-five years of professional experience at Social Insurance Institution [pol: ZUS], Branch in Białystok. She is the vice-president of the Podlaskie Voivodeship Branch of the Polish-East Cooperation Association, the chairwoman of the Audit Committee of the Association for Supporting Local Environments "Active Housing Estate", a member of the Convent of the Podlaski Business Club.

**Eliza Szadkowska** – PhD in law, substantive coordinator of the Eco-Change Leaders project, implementer of several projects, including reports in the field of civic monitoring. An expert on social participation at the local level, she has 14 years of local government and strategic experience, eleven years in the coordination of social and educational projects, including those financed from EU and EEA funds.

**Bożena Rutkowska** – an administrator by education and profession, an employee of local government administration for four years, a social worker, actively involved as a member and volunteer of local non-governmental organizations operating in the field of ecology and animal protection and protection of natural heritage.

**Dominik Sołowiej** – journalist, marketing specialist, webmaster and copywriter, spokesman for the Eco-Change Leaders Project. He conducts meetings devoted to culture and social affairs, as well as training and lectures. His specialties include: political marketing, public relations, narrative marketing, advertising and new media issues. Owner of Studio DS Info advertising agency.

**Alf Johansen** – is a spatial planner from Norway and deals with regional development and urban planning. He has experience in the public sector, politics and private enterprise. He is the founder and coordinator of the Innovation Circle Network, an international non-governmental organization based in Norway, working for the sustainable development of small and medium-sized cities.

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