ISSUE SHEET 8



AN EDUCATIONAL CENTRE FOR NATURE CONSERVATION

When the Nature Conservation Programme (NCP) began in 2012, it was recognized that proactive efforts were needed to win support amongst the local population for part of the landscape being declared Protected Areas. A public survey conducted at this time indicated a very low level of awareness of the importance of the natural environment. Two interventions were designed accordingly. One was a small grants scheme under which municipalities and local civil society organizations could seek funds for conservation-related field activities (see Issue Sheet 4). The other, focussing on the younger generation, was the establishment of an Educational Centre for Nature Conservation in village Negrevo.

"With the establishment of the Educational Centre, we infused new life into the old school building, thereby, in the best possible manner, contributing for good education of young people and boosting their interest in nature and its protection. The Educational Centre has already become an integral part of the Rulebook for Organisation of Student Excursions, endorsed by the Ministry of Education and Science, as an excellent site for educational visits. It contributes to the shared vision of Pehcevo municipality, local associations, and residents for utilizing local tourism potential and promoting the municipality, benefiting both local businesses and inhabitants." Igor Poposki, Pehcevo municipality Mayor (2013-2017).

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KEY LESSONS LEARNED

- The Educational Centre has become a one-stop point for information on nature conservation in the Bregalnica region. It offers a consolidated resource on the promotion of biological diversity for a wide range of different stakeholders.
- Collaboration with schools, faculties, citizens' associations, and other relevant institutions is essential for successful operation - engaging school pupils, university students and their teachers in activities.
- The importance of experiential learning for children is well known, but not always easy to arrange in classroom sessions. The interactive approach provided by the Educational Center, using innovative and contemporary tools, is key to arousing children's interest in nature and long-term learning.
- Support from the municipality as the responsible institution for recurring costs was crucial to ensure from the outset. At the same time, it has been important for the Educational Centre to maintain an independent status, allowing it to organize activities and events without the bureaucracy of municipal approval each time.
- Ontinuous capacity-building of the Educational Centre staff is required, ensuring that they have the necessary aptitude and skills. This is especially as only one or two staff are engaged at any one time; their interest and commitment is crucial.
- To ensure a regular flow of visitors to the Educational Centre, active promotion is essential, including new offers of activities to attract returnees.
- Informal educational opportunities are quite limited in North Macedonia; this makes the Educational Centre especially important as a source of up-to-date knowledge on biodiversity.
- The Educational Centre contributes to the local economy with local manufacturers and service providers benefiting significantly from organised visits and events.

THE LOCATION AND THE BUILDING

The first step was to select an appropriate location. Accordingly, in 2014 the NCP called for offers from the 15 municipalities in the project area. As a result of a transparent two-phase process, the application of Pehcevo municipality was selected in 2015. The municipality proposed the use of the old school building in Negrevo - a once vibrant village that has experienced high out-migration. The school was already closed due to the lack of pupils and was starting to fall into disrepair. It was judged an especially appropriate site due to the grassy open area of school grounds that could be used for outdoor activities, in addition to very easy access to the Maleshevo mountain range beyond the perimeter. A further advantage is an available area for parking cars and buses.

With NCP support, the old school building in Negrevo was renovated, refurbished and adapted into a modern Educational Centre, providing space for indoor and outdoor activities. The official opening of the Centre was held in September 2018.





DESIGNING THE CONTENT

The Centre was designed by OXO – an education, communication and consulting company, supported by experts of the Macedonian Ecological Society and the NCP team. The aim was to promote active learning and research, taking the specific characteristics of the Bregalnica region as the starting point. At the entrance, visitors are reminded of the past, when Negrevo was a thriving village based on farming and forestry activities, and the school had a full complement of pupils. The entrance leads on to a larger room that can be used for classes or workshops of 30 – 40 people. The walls are lined with colourful interactive elements explaining the water cycle within the Bregalnica water basin, and the human interactions within it. In a separate room, the different local habitats are visualised, again with interactive elements. These have been constructed with laminated surfaces that show very little wear even after many years of use. On the lower floor of the building is a research workshop, whilst in a separate room there is a display of a wide variety of crop seeds, including many now rare indigenous varieties, and a small fossil collection. The centre also has female and male toilets, and a small kitchen area for preparing refreshments. The whole concept with its four key elements is illustrated in Figure 1.

"The Educational Centre for Nature Conservation in Negrevo, with its content and wonderful surroundings is the right place for children to do research, familiarise themselves with nature, and human's connection with nature. The visual and practical methods used for organisation of workshops make possible the picturesque representation of nature. By using the services that the Centre offers, we also influence the shaping of positive environmental habits among preschool-aged children." Vaska Simovska, Head teacher, 7th September Kindergarten, Pehcevo.

Water

The Bregalnica river basin is depicted in several separate graphics. One shows the water cycle, and the mode of operation of waste water treatment. Aquatic flora and fauna are explained in another. Interactive digital tools allow opportunities for educational games and stories.

Diverse local habitats

The nine main habitat types in the Bregalnica region are outlined, typifying them by their important and/or rare plant and animal species. The special characteristics of these species are explained with clear visual representation, coupled with simple question and answer pop-out elements.



Research Workshop

This room serves as a space for practical learning about the process of preparing a herbarium or an insectarium as part of identifying and classifying biodiversity. Some of the distinctive flora and terrestrial invertebrate fauna species of the Bregalnica river basin are represented in a collection.

Agrobiodiversity and geology

The long agricultural history of the Bregalnica region has resulted in rich agrobiodiversity. Here the seeds of a wide range of different crop species and varieties are attractively catalogued and displayed. The Centre also houses a fossil collection along with a small laboratory are represented in a collection.

Figure 1: The four key design components of the Educational Centre: water, habitats, biodiversity research and agrobiodiversity

ACTIVITIES

The Educational Centre operates on the premise that close contact with nature, and greater understanding of the interactions taking place, motivates children and people in general to have a greater interest in, and respect for, the natural world. Furthermore, by making even minor changes in their everyday habits (such as responsible waste disposal), they can themselves trigger significant changes in environmental conservation and protection.

Activities are organised to promote this message both independently and in collaboration with other educational institutions. They include the following:

Interactive workshops for children: These

workshops are tailored to different age categories and encourage children to understand their role in protecting nature, and how they and their families can behave in a sustainable manner. The concept of experiential learning embodied in these workshops is now, since 2022, a component of environmental educational curricula. This means that the Negrevo Educational Centre has become an important resource for environmental education as taught



in primary schools. Kindergartens in the region also make use of the facilities, thus giving children from the early years onwards a chance of interactive environmental education. Nevertheless, the workshops are defined as an extracurricular activity, meaning that their organisation largely depends on the interest and willingness of teachers. In expanding the workshop concept to work with entire families, rather than focusing solely on children, a manual for the organisation of family workshops has also been prepared. Developed through the project in collaboration with the Macedonian Ecological Society (MES), this manual provides a means to use the facilities of the Educational Centre for standalone educational activities.



Educational walks in nature: The mixed habitats and rich biodiversity in the vicinity of the Educational Centre serves as an open air classroom. Accordingly, a 2 km educational walking trail has been established, titled "The Trail of Petko and Forest Inhabitants - Pehcevo Adventure!". Petko in this case is a cartoon dog. The trail ends at a marshy area known as Judovi Livadi, where the common sundew Drosera rotundifolia occurs. This insectivorous plant is very rare in North Macedonia. Its distinctive leaf shape has

accordingly been used as part of the logo of the Educational Centre and all its promotional material.

Eco-camps: The grounds of the Educational Centre have been equipped with elements for interactive activities for children, young people, and adults. This makes it an excellent location for the organisation of eco-camps.

"Part of the scout program of the First Skopje Scout Unit is getting to know our country and its nature. It was this goal that led us to the Educational Centre for Nature Conservation, situated in Negrevo village, where we spent a wonderful camping weekend with the scouts. Guided by the Centre's host, we learned and saw many new things; we were introduced to the Bregalnica region and its natural values, and we were not indifferent to all the forest fruits that we picked along the Trail of Petko and Forest Inhabitants – Pehcevo Adventure! This unique experience is excellent for all scouts and lovers of nature." Snezana Jankovic, First Skopje Scout Unit. **Experiential Learning Network:** The Educational Centre is part of the Experiential Learning Network (ELN), implemented by the Macedonian Ecological Society (MES), in coordination with UNICEF. This network comprises a community of scientific and educational institutions engaged in natural science. Through the network, they devise and implement experiential activities related to environment and climate change education for pupils at both primary and secondary schools. This integrated environmental education is an important means of reinforcing environmental literacy amongst the younger generation and raising public awareness more widely. Through the network website, schools can schedule visits and experimental workshops at the Educational Centre.

A related but separate activity is collaboration with ERASMUS+ programmes; participating institutions and organizations use the facilities of the Educational Centre for workshops.

INTEGRATED TOURIST OFFER



The Educational Centre is also part of the Integrated Tourist Offer in the Bregalnica region, developed through the support of the Nature Conservation Programme (NCP). As part of developing a tourist offer for Maleshevo, the Centre has obtained camping equipment that can be used by individuals or groups wishing to stay overnight within its grounds. This experience can be enriched by guided tours of the local natural environment. Since the Educational Centre is

located within the network of over 220 km of marked pedestrian and cycling trails in Maleshevo, it represents a ready stop-off point that can be used by tourists for overnight stays or for shorter visits. Educational tourism is recognised as a rapidly growing branch of the tourism industry; clearly the Educational Centre is perfectly placed to respond to this demand.

Maleshevo Protected Landscape: With the proclamation of Maleshevo as a Protected Area (category V – protected landscape), the Educational Centre has gained a further role: that of an information point on the practical implications of protected area status. Through offering information on the biodiversity, geology and specific landscape characteristics of Maleshevo, the centre contributes to public awareness raising on how nature conservation can be combined with sustainable development. It also collaborates with civil society organisations engaged in biodiversity conservation and environmental education.

Promotion: Pro-actively informing potential users about the facilities available at the Educational Centre, and the message of nature conservation that it supports, is an integral part of regular activities. This is done through targeting different audiences. The Macedonian public and potential international visitors are reached through interactions on social media (Facebook, Instagram) as well as through a web page (in both Macedonian and English) On site open days are organised for teachers, in addition to presentations about the Educational Centre in schools, in the meetings of Regional Councils, and to professional associations of teachers such as the Macedonian biologists society.

Additionally, in cooperation with national and international institutions and organisations the outdoor space is used to organise events to celebrate environmental related days, such as Natura 2000 Day, International Biodiversity Day, World Bee Day, and Velo Day.



"A wonderful experience, impressions, and an excellent welcome by the organisers in the Educational Centre for Nature Conservation in Negrevo. This multifunctional facility is situated in the depth of Malesevo mountains. It is suitable for various activities: creative classes – workshops, activities in the open, games, cycling, sports activities, hiking, walks along Petko's Trail with solving forest puzzles and puns on the way. I recommend a visit to this educational centre to all my colleagues and pupils; here they will have a chance to interact with nature, do interesting research, and have a feeling of being one with nature." – Marija Bikovska, class teacher in Gjorgija Pulevski Primary School from Skopje.





CHALLENGES

The main challenge faced by the Educational Centre has been ensuring a sustainable funding base. The Pehcevo municipality recognises its responsibility for recurring costs (including staff salaries and maintenance) and views the activities of the centre very positively. However, the budget at its disposal has generally only partially covered annual costs. The NCP has therefore continued to fund additional equipment for the Centre, promotional activities, and capacity building activities for its staff. It is common in North Macedonia for state institutions to face difficulties in continuing funding for the operation of institutions founded with foreign aid. However, it is hoped that with some independence in financial management, the Educational Centre will be able to continue its operations well into the future. One of the possibilities in this regard is cooperation with companies seeking to enhance their credentials in corporate socially responsibility (CSR). As an example, Farmahem DOOEL and the Macedonian Ecological Society participated in the maintenance of the outdoor facilities of the Educational Centre, in cooperation with Pehchevo municipality.

CONCLUSION

Through the emphasis placed on experiential learning and the enjoyment of nature, the Educational Centre for Nature Conservation has become a vital tool for motivating children and young people to appreciate the natural world and modify their behaviour towards more sustainable habits. It has also become more than a centre for the young generation; it serves as a source of information for all people interested in biodiversity conservation and the natural characteristics of the Bregalnica region. In attracting visitors from other parts of the country and beyond, a boost is given to the local economy. The Centre thus plays a key part in the overall goal of the NCP to conserve nature at the same time as supporting sustainable livelihoods in the Bregalnica region.

PRACTICAL RECOMMENDATIONS

- Aim for good quality, attractively designed installations. Visitors to the Educational Centre at Negrevo are always impressed by the high quality of the panels and interactive tools, which are still in very good condition and do not yet need major repairs or replacement. Quality also engenders respect and care on the part of the users.
- Plan the funding model very carefully. Although this was done for the Educational Centre at Negrevo, it remains a challenge to ensure adequate funds for recurring costs.
- Integrate the facility into the national educational framework. Since 2018, the Educational Centre has been included in the official list of potential locations for primary school excursions, approved by the Ministry of Education and Science.
- Invest in promotional materials and media coverage to ensure that there is widespread awareness of the existence of such a centre and the services that it offers.

This Issue Sheet was produced by Jasminka Pashaliska Andonovska, Local Activity Coordinator, NCP, Farmahem and Verica Arnautovska, Head of Educational Centre (2018-2022). It entailed consultation with many NCP stakeholders, including but not limited to those quoted. Marjana Shushlevska, Team Leader, NCP, Farmahem and Jane Carter, Senior Adviser, Natural Resource Governance at Helvetas, provided editorial support. For further information, please contact farmahem@farmahem.mk.

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