LIFE Project no. LIFE12 NAT/PL/000081 "Protection of non-forest communities in the Beskids Landscape Parks.

I By way of introduction

The nature and landscape of the Beskid Śląski and the Beskid Żywiecki were undergoing constant changes over the centuries, which, with increasing intensity, continue to this day. The main factor transforming the landscape and affecting the world of plants and animals was the progressive and increasingly intensive human activity, both settlement and economic. Until the fifteenth century, the discussed area was covered with primeval beech and fir forests with an admixture of spruce, and in the higher parts of the mountains, spruce forests. Few towns and settlements were located in the region of river valleys, while in the more distant parts of the Beskids, small settlements of hunters, charcoal burners and pitch burners formed.

Along with the development of settlement, a long-lasting process of gradual transformation of the surrounding environment began. Initially, the lower, more fertile areas occupied by the oak-hornbeam forests were occupied for development and cultivation. At a later stage, the areas located higher, were occupied, entering previously unoccupied areas and introducing planned forest management in the 18th century. In the 19th century, with the rapid development of industry, and thus with the growing demand for wood, excessive logging caused the necessity of introducing new plantings. In the areas which were previously occupied by beech and fir forests, a rapidly growing spruce was introduced on a large scale. These practices resulted in a significant change in the species composition of tree stands, a negative impact on their health condition and resistance to biotic and abiotic factors. The result of such economy is the unsatisfactory health condition of spruce monocultures, growing in unsuitable habitats.

One of the most important factors affecting the landscape and nature of the Beskid Śląski and the Beskid Żywiecki was and continues to be grazing. With the appearance of the Wallachian shepherds in this part of the Beskids in the 15th century, the existing way of farming and landscape in the upper parts of the mountains changed to a great extent. The pastures and glades created in the area of fired and cleared forests varied the forested mountain ridges, while the systematically sheep grazing favored the enrichment of the species composition of natural non-forest habitats and ensured their durability.

II Picturesque Beskids

Due to the need to protect natural, landscape and cultural values, and at the same time to ensure sustainable economic development in the Beskid Śląski area and a significant part of the Beskid Żywiecki, two landscape parks were created*: Landscape Park of the Beskid Śląski and the Żywiecki Landscape Park.

** "A landscape park covers a protected area due to its natural, historical and cultural values as well as landscape values in order to preserve and promote these values in conditions of sustainable development." Nature Conservation Act of 16 April 2004 (with later amendments)*

The dense forest complexes of the Beskid Śląski Landscape Park and the Żywiecki Landscape Park are interspersed with a characteristic component of the local landscape, which are picturesque pastures and glades located on mountain ridges. To this day, used in the pastoralism, although not as large as in previous centuries, they are not only an attractive element of landscape appreciated by tourists because of their scenic values, but also a refuge for valuable natural habitats with numerous rare protected species of plants. Protection of mountain pastures and glades from their disappearance, one of the reasons for which is the abandonment of pastoral economy, is one of the most important tasks implemented as part of active protection of non-forest habitats and the protection of biodiversity.

III

Briefly about the Project

The activity that enable the preservation of biological diversity of the Silesian Voivodeship, including the Beskids area, is the implementation of programs related to active protection. This objective is the basis for the implementation of the principle of sustainable development, enabling harmonized economic and social development, consistent with the protection of environmental values.

One of the projects implemented by the Complex of Landscape Parks of the Silesian Voivodeship is LIFE Project no. LIFE12 NAT/PL/000081 "Protection of non-forest communities in the Beskids Landscape Parks". The main objective of the project is to preserve and comprehensively protect the natural non-forest habitats of the European Union in the area of the Beskid Żywiecki and the Beskid Śląski. The project implements, through its assumptions, Directive 92/43/EEC on the conservation of natural habitats and wild fauna and flora in special areas of habitat protection: SAC Beskid Śląski (PLH 240005) and SAC Beskid Żywiecki (PLH 240006). The assumptions of the Project were dictated by the real demand for protection of the natural and landscape values of the Beskids, which, to a large extent due to the abandonment and unprofitability of the pastoral economy, have changed unfavorably. The Life + "Beskids" project through active protection of about 500 hectares of the area of the Nardus grasslands and the mountain meadows and Agrostis grasslands along with *Campanula serrata* is an important element in the protection and restoration of non-forest natural habitats and contributes to the improvement of the Beskids landscape values. The project was implemented from July 2013 to December 2018.

IV Detailed Project objectives:

- preservation and protection of biological diversity of the areas of the Ostoia Natura 2000 Beskid Śląski (PLH 240005) and the Beskid Żywiecki (PLH 240006) based on pastoralism, removal of self-seeding of trees and shrubs with the removal of biomass, mowing of meadow and grassland with removal of biomass;

- reconstruction of the habitat types listed in Annex I of the Council Directive 92/43/EEC: West Carpathian Nardus grasslands (6230-2) and the mountain meadows and Agrostis grasslands used extensively (6520);

- active protection of plants listed in Annex II of Council Directive 92/43/EEC: (4070*) *Campanula serrata*, (4109) *Aconitum firmum subsp. moravicum*,

- preservation and protection related to non-forest communities of animal species listed in Annex II of Council Directive 92/43/EEC, mammals: wolf *Canis lupus*, brown bear *Ursus arctos*, Tatra pine vole *Microtus tatricus*, birds: Capercaillie *Tetrao urogallus*, Lesser spotted eagle *Clanga pomarina*, Golden eagle *Aquila chrysaetos*, Eagle owl *Bubo bubo*; invertebrates: *Carabus variolosus*;

- implementation of agro-environmental programs supported by the European Union in Natura 2000 areas, including species subject to protection;

- raising public awareness and ensuring the implementation of good practice in the management of Natura 2000 natural resources;

- environmental monitoring of communities subject to protection under the Project, verification of zero status and monitoring during implementation and after completion of the project.

V Valuable types of non-forest communities

The mountain glades in the Beskids are an important refuge for biodiversity. They are the area of occurrence of many rare species of plants and animals, for which effective protection is necessary to get to know the plant communities in which they occur and the mutual relations between them. Despite the fairly uniform form of an extensive pastoral economy in the Beskids, a variety of diverse and interesting plant communities developed in the area of glades. Many of them are semi-natural communities

requiring constant human interference. This term means systems dominated by native species, but in need of a particular form of human activity, such as mowing or grazing.

NARDUS GRASSLAND

It's quite a floristically poor community, often called Nardetalia dominated by matweed. Other species commonly found in the patches of the discussed community include: *Potentilla erecta, Agrostis capillaris, Festuca rubra, Anthoxanthum odoratum* and *Carex pilulifera*. In the low sward, there are also species with great aesthetic qualities, which are: *Carlina acaulis, Dianthus deltoides* and *Mutellina purpurea.*

Nardus grassland is a typical collection of areas subject to extensive grazing of sheep and insufficiently fertilized. The soils are sterile and poor in minerals. They are most often formed as a result of the transformation of the hay meadows, which were insufficiently fertilized and too intensely grazed. They give hay very low quality, and unused very quickly grow over trees and shrubs. The patches of these grasslands have an anti-erosive function and are a mainstay of endangered and protected plant and animal species, which is why they deserve active protection.

MOUNTAIN MEADOWS AND AGROSTIS GRASSLANDS USED EXSTENSIVELY

This type of natural habitat identifies, in the Beskids, mainly Gladiolus and Agrostis grasslands, which develops on once-twice-a-year mowed glades, grazed only after mowing and regularly fertilized, in places with fertile brown soils. Traditionally, these glades should be additionally fertilized by manure spreading.

In contrast to Nardus grassland, the community is characterized by an extremely large species richness, amounting to over 50 species of flowering plants per 100 m^2. Such a large number of species makes it an extremely lush meadow and suitable for hay harvesting. The predominant species are mainly grasses, of which the most common are: *Agrostis capillaris, Dactylis glomerata, Festuca rubra* and Timothy-grass. A characteristic is also the participation of many non-grasses species, among which the most common and the most striking are: *Gladiolus imbricatus, Centaurea oxylepis, Heracleum sphondylium, Crepis biennis L., Scorzoneroides autumnalis* and *Hypericum maculatum* and various species of alchemillas - low plants with palmate-lobed leaves. Gladiolus and Agrostis grassland is an important element of the landscape that decides about its aesthetic qualities, requiring constant extensive use of the mowing and pasture.

VI Division of tasks and the area of implementation

The active protection measures implemented in the Project include: mowing of meadows and grasslands with removal of biomass, grazing of sheep on mountain pastures and glades, removal of self-seedlings of trees and shrubs from areas undergoing succession towards forest communities. In the area of the Project's operation, three grazing complexes were originally separated, which covered the areas located on neighboring mountain ridges, thus separating the first complex comprising meadows and glades of the Beskid Śląski with a total area of 145 ha, the second complex covering the Beskid Żywiecki pastures in the groups of Romanka, Rysianka and Lipowska, Worek Raczański, and smaller below-lying glades at the foot of Barania Góra, covering 257 ha, and the third complex in the Pilsko massif with a total area of 40 ha. During the Project's implementation, two additional complexes, each with an area of 20 ha, were completed, complementing the complex I and II.

Activities of active protection are accompanied by tasks supporting the understanding of the need to conduct such operations, promoting traditional pastoral economy and education in the field of nature conservation and raising the ecological awareness of local communities.

VII ACTIVE NATURE PROTECTION

C.1. Removal of self-seeding of trees and shrubs

This activity was carried out for the first time in 2014 on areas selected by specialists, on which adverse changes in the open areas were observed related to the discontinuation of their use. These activities were carried out in 2014 and 2016, so as to strengthen their durability and ecological effect. Trees and shrubs encroachment into open areas causes a reduction in landscape values and shading of the area, which in effect leads to the disappearance of valuable species of meadow and grassland plants, such as *Campanula serrata* or *Carlina acaulis*. Due to the high percentage of glades and pastures on which use was discontinued, this activity was of a preparatory nature and was necessary for conducting other activities in the field of active nature protection, such as grazing animals, necessary maintenance and restoration of valuable non-forest habitats. Overgrowing of open areas also has a negative impact on species of animals, which their number of, as a result of overgrowth of meadows and glades, rapidly decreases because their ecological niches disappear.

The activity consisted in removing the undergrowth of trees and shrubs initially with a trunk thickness of up to 20 cm from the area of approximately 105 ha, on designated mountain pastures and glades covered by the Project. The obtained biomass was removed from the area and then it was recycled. The designated areas were selected during natural monitoring conducted as part of the Project. The operation was carried out in two stages - stage I in 2014, stage II in 2016.

In connection with the amendment to the law in the field of protection of trees and green areas in 2016, a change to the contract concerning the thickness of cut stumps took place. The change concerned the possibility of removing shrubs which age did not exceed 10 years and trees which trunk circumference at a height of 5 cm did not exceed 35 cm - in the case of poplars, willows, horse-chestnut, ash-leaf maple, silver maple, *Robinia pseudoacacia,* and *Platanus acerifolia* and 25 cm - for other tree species.

In 2016, it was decided to add an additional 15 ha within the IV and V grazing complex, where the task was also carried out. Finally, the removal of trees and shrubs undergrowth was carried out on a total area of 120 ha.

C.2. One-time removal of meadows and grasslands along with removal of biomass

Similarly to the removal of self-seeding of trees and shrubs, it was of a preparatory nature and included once removal of overgrowing mountain pastures and glades on the originally total area of 442 ha, along with removal of the biomass outside the area of the pasture. Using savings made during the implementation, it was planned to extend the operation by a further 75 ha, which was carried out in the fourth quarter of 2014 with the mowing of unexploited after grazing.

The whole was originally made in three grazing complexes, which was firstly mown, and then sheep grazing was introduced in 2014, and in 2016 in additional two complexes.

C.3. Mowing of patches with alpine sorrel with removal of biomass

Many trails of the Beskid Żywiecki lead through stunning pastures and mountain glades. Open areas are also attractive in terms of nature, provided that the light for rare plants and colorful flowers is not covered by *Rumex alpinus*. The alpine sorrel is an inconvenient mountain pasture weed. It is a plant with a rosette of leaves, which grows 10-30 cm wide. It blooms from June to August. Flowers gathered in dense inflorescence crown the strong stem. After the seeds are released, the inflorescences die and in the form of dry stalks protrude above the leaves. The alpine sorrel is an expansive species due to its strength of penetration and the ability to adapt to unfavorable conditions. Many floristically rich plant communities were supplanted by the areas of Alpine sorrel which, due to a complete cessation of use, have spread excessively on the glades. The impressive alpine sorrel obstructs beautiful views and significantly reduces the diversity of species vegetation, while limiting the food base for sheep. Because sheep are

reluctant to bite this plant and besides, grazing sheep in alpine sorrel patches may contribute to the deterioration of their milk quality.

As part of the Life + Beskids project, the alpine sorrel was removed twice a year from selected mountain pastures and glades in the Beskid Żywiecki. This treatment was performed in two dates. The first one was carried out in June, before the first flowering of the plant and the second in September, so that the sorrel would not have a chance to bloom again. Thanks to these treatments, a larger amount of light could reach the soil surface, enabling the development of other plant species. In order to intensify species diversity in alpine sorrel patches, in addition in September, in places where it was mowed, native plant species were sown, whose seeds were collected from neighboring glades.

The activities were carried out on an area of 50 ha, at Hala Lipowska, Hala Rysianka, Hala Cudzichowa and Hala Pawlusia in 2014-2017. Due to the savings, the implementation of this task was also extended for 2018. The works were carried out in the following stages: 2014 - single mowing of sorrel in September; 2015 - 2018 - double mowing in June and September.

C.4. Sowing native plant species in the area of alpine sorrel

Sowing native plant species is a task closely related to the elimination of alpine sorrel and the need to restore valuable meadows and grasslands in mountain glades. This operation consisted in scattering the biomass containing seeds of native plant species typical of meadows and grasslands present in a given pasture, in order to enrich the bank of native and non-expansive plant seeds. It concerned places where alpine sorrel patches were previously cut. The task was carried out initially in four stages in the years 2014-2017 and covered an area of 3 hectares of dense patches of alpine sorrel, with an area of more than 25 m^2, located at Hala Rysianka and Hala Lipowska. The dispersed biomass came from the areas adjacent to the sown pastures. The task was carried out after the second mowing of sorrels - in September.

In 2018, to speed up the process of increasing species diversity in Alpine sorrel patches, a decision was made to change the method of planting native plant species. After the expert opinion and after scientific consultations grass seeds were purchased - *Agrostis capillaris* and *Festuca rubra*, which were sown by the method of hand-sowing seeding in the amount of 10 kg/ha. In total, 30 kg of the mix was sown in May 2018 in a ratio of 2: 1, i.e. 20 kg of *Agrostis capillaris* and 10 kg of *Festuca rubra*.

C.5. Grazing in mountain pastures and glades

As part of the Project, from 2014, during five months a year, sheep were grazed on selected valuable areas in the Beskid Śląski and the Beskid Żywiecki. Currently, about 500 hectares are grazed over 1000 sheep purchased under the Project and several hundred animals owned by local breeders. Grazing of animals is considered the most optimal method of reproduction and preservation of meadows and grasslands. In addition to ecological benefits, traditional grazing gives the opportunity to improve the economic situation of people currently engaged in grazing. The restoration of grazing in the mountains also contributes to the increase of the region's tourist attractiveness, thanks to the pastoral infrastructure and the promotion of healthy food produced from sheep's milk and meat.

Sheep grazing conducted in the Life+ Project "Beskids" project begins in May and lasts until the end of September. On this occasion, pastoral events promoting traditional pastoralism were organized for both the beginning and the end of the grazing season.

For about five months in the year, sheep purchased within the Project are grazed on mountain pastures and glades, especially important in terms of nature and landscape. For the remaining months of the year, sheep remain under the watchful supervision of shepherds in warm pens.

Previously existing natural habitats with the participation of valuable species of plants and animals of open areas by stopping grazing activities gradually began to lose their special properties,

heading towards the transformation into forest areas. Animals grazed on mountain glades contribute to inhibiting the growth of seedlings of trees and shrubs, which prevents afforestation of open areas. In addition, herbaceous plants are bitten to varying degrees and at different levels, which positively affects the availability of hiding places and breeding sites of insects, invertebrates or small rodents.

Sheep moving during grazing regularly trot the pasture. The small area of the cloven hooves in relation to the weight of the animal makes this happen with great pressure. This phenomenon is conducive to the propagation of grasses and enables germination of seeds, including crocuses, which owe their presence to the pastures largely to grazing. Crocuses are not threatened, because they bloom and usually yield seeds before the sheep enter the pasture but the soil disturbed by cloven hooves is perfectly prepared for seeding them.

Consuming a large amount of low-energy food by sheep that is grass and herbaceous plants makes the processing of biomass taken by sheep takes place quickly and in large quantities. The amount of material excreted depends on the duration of the grazing, the size of the animal and the quality of consumed food. The average number of defecations for a sheep during the day is 4-7 times a day. Leaving discharges on the grazing site has a beneficial effect on the development of vegetation growing there, through its fertilization and the return of obtained nutrients in the circulation of elements directly to the soil. In addition, decaying discharges form a food base for many invertebrate species, such as insects, which in turn become food for other predators, which indirectly contributes to the increase of species diversity of animals.

Sheep are kept in specially adapted, closed premises - sheepfolds for most of the year, especially in mountainous regions. Owners of sheepfolds, where sheep overwinter, make every effort to provide them with proper living conditions - after all, the health and productivity of animals depends on them.

Special shepherd dogs watch over the safety of sheep. They do not leave them even during wintering in the sheepfold, providing sheep with a good sleep. Dogs purchased as part of the Project are Polish Tatra Sheepdogs with a pedigree confirmed by a birth certificate. This breed is characterized by a high learning ability, intelligence and deeply rooted vigilance towards strangers, but unlike other races of this type, they lack mindless aggression, which makes them great in the role of guard dogs.

The project's sheep belong to breeds: foothill sheep, Polish mountain sheep and hybrids of the mentioned breeds. The animals of these breeds tolerate the climatic and physiographic conditions of the Beskids very well - significant temperature fluctuations, both during the day and the year, a large amount of rainfall, shallow soils which have low humus and calcium, harsh climate and a relatively short vegetation period. These sheep are resistant to diseases, have low feed requirements and strongly developed herd instinct. Maintenance of races adapted to specific environmental conditions is of great importance for the preservation of genetic resources of farm animals and constitutes an important role in shaping the landscape and culture.

C.6. Implementation of pastoral infrastructure

Due to the activities carried out regarding sheep grazing and propagation of the idea of pastoralism in the regions covered by the Project, the Project envisages the implementation of pastoral infrastructure, necessary for sheep grazing and a place for traditional sheep milk processing and production of traditional regional products. As part of this activity, protective elements for grazing sheep were purchased, such as fladry, panel barracks, watering places for animals. There were also four shepherd complexes - shepherd huts in Kamesznica Złatna, in Bukovina in the commune of Węgierska Górka, in Przegibk in Rycerka Górna and in Stary Groń in the commune of Brenna. Pastoral infrastructure is used on an ongoing basis during the grazing season.

C.7. Implementation of tourist infrastructure

As part of this activity, two viewing platforms were built, which effectively focus tourist traffic in places intended for this purpose, giving the opportunity to observe the vast landscape of the Beskid Śląski and the Beskid Żywiecki and further mountain ranges. One of the platforms with a view of the Beskid Śląski was set in Stary Groń in the Brenna commune along the black trail from Brenna to Grabowa, the other one is on the Duży Rachowiec Hill in the Rajcza commune, near the longest T-bar lift in Zwardoń. Twenty one pieces of wooden information and educational boards concerning the natural values protected under the Project were deployed along trails. Information and educational boards were located next to the platforms, next to the shepherd's hut built as part of the Project in Bukovina in the Commune of Węgierska Górka and along trails in the Beskid Żywiecki: yellow from Redykalny Wierch to Hala Lipowska and red leading from Hala Rysianka towards Żabnica.

VIII. Monitoring of the impact of implemented activities on the natural environment

Environmental monitoring - assumptions of natural monitoring were based on the methodology of monitoring of habitats and species of the State Environment Monitoring carried out by the Main Inspector of Environmental Protection, which includes field works as well as detailed works. The division of environmental monitoring in the project into stages including zero monitoring and proper monitoring, allowed to collect comprehensive information on the condition of habitats and species protected in the Project for all five grazing complexes. In addition, during the implementation of the project, maps of the distribution of natural habitats along with risk assessment and recommendations for further protection were made.

Assessment of the socio-economic impact of the planned activities on the local economy and society, as well as ecosystem services.

As part of this task, one thousand pieces of questionnaires were distributed among the local community, tourists and entrepreneurs associated with the areas of the Beskid Śląski and the Beskid Żywiecki. During the first year of the project, about five hundred pieces of questionnaires were distributed, and then the study was repeated at the end of the project at the turn of 2017 and 2018. The questionnaire was developed by the project team. The questionnaires were distributed among school students of various levels, employees of offices and tourist and cultural institutions during: educational workshops, events promoting traditional pastoralism, meetings with the local community, festivals and conferences related to the Project.

IX. Increased social awareness and dissemination of the results of the performed activities

a) Cooperation with entities in the field of project preparation for implementation

At the beginning of the project, twenty meetings with the local community were organized in order to provide basic information about the starting project. The meetings were attended by a total of over 600 people representing both local governments, tourist and cultural institutions, non-governmental organizations, as well as residents of the areas covered by the project.

b) Promotional activity of the project

In order to reach the largest number of recipients and create the possibility of presenting the substantive assumptions of the project, a website was established: www.lifebeskidy.com.pl, where you can follow the progress of the project. There were also eleven information boards set up in the places of its implementation in the area, specifying information about the Project Beneficiary and financing.

During the project implementation, fifteen articles on the project and nature issues in local newspapers were published.

c) Promotional materials

As part of the project, promotional materials were made to encourage the broadening of information about the project. These were USB flash drives, cotton bags, postcards, pens and pencils bearing the Project name and logos of the Beneficiary and financial institutions, as well as special gadgets designed for younger customers - thermal mugs, shirts, notepads, reflective pendants, reflective bands and leashes with interesting graphics sheep.

d) Information leaflet regarding the project

As part of this activity, 40 000 pieces of information leaflets about the project were carried out, including project assumptions, objectives, scope of work and expected results. Leaflets were distributed in local offices, tourist institutions, mountain chalets, guest houses, holiday farms, etc. Additionally, as part of this activity, a leaflet was published in the form of a map containing the most important places related to the Project in a circulation of 5 000 pieces, also distributed among the local community and tourists.

e) Manual of pastoral practice

The publication of the textbook allowed breeders, sheep owners and all interested parties to broaden their knowledge on the implementation of grazing in mountain areas, the history and role of pastoralism in today's landscape or the types and ways of protecting valuable habitat types and species. The textbook was issued twice in 3 000 copies in 2014 and 5 000 in 2017.

f) Multimedia album

The multimedia album was released in the form of CD in 1000 copies at the beginning of the project. It illustrates the objectives and assumptions of the project and the first stages of its implementation. In 2017, the album was released on Flash media in the form of a film with shots from the UAV, depicting the effects of the project in the field, as well as the folklore of the region, which was developed thanks to the infrastructure built within the project.

g) Workshops addressed to local stakeholders

As part of the project, a series of thirty workshops was held for local stakeholders, in which approximately 900 people took part. Classes consisted of two parts - a stationary run at the ZPKWŚ office in Żywiec and a field part in the form of a trip to the Ochodzita mountain in Koniaków or to the shepherd’s hut in Węgierska Górka. The workshops were aimed at all those interested, although children and schoolchildren used the most often in this form of education. During the classes, the participants got acquainted with: the characteristics of natural non-forest habitats, the main objectives and tasks implemented in the Project, the need to embrace areas of their occurrence with active protection. During the course, each participant had the opportunity to use keys and atlases for marking plants, and then be able to identify protected and endangered species independently in the field.

f) Activities promoting traditional pastoralism

As part of activities promoting traditional pastoralism during the project implementation, seven pastoral events took place with the participation of the local community, during which there were demonstrations of wool processing into felt, a demonstration of forming cheese form sheep's milk and a performance by a highlander group. Participants of the meeting had the opportunity to taste regional dishes, including mutton goulash, and also admire a herd of sheep grazing nearby. It was also an opportunity to get information about the project and nature conservation in general from project employees and representatives of the scientific world invited to this type of event.

h) Publishing the layman's report and scientific report

One of the final tasks of the project is to publish a layman's report and a scientific report on the project. These documents in the form of a shortened scientific message should constitute a source of data on the subject of the project, its implementation and results.

XI Total cost and financing

The total value of the Project was estimated at EUR 2 033 768

European Commission funds - up to 50% of the value

The National Fund of Environmental Protection and Water Management - up to 45% of value

ZPKWŚ own resources - up to 5% of value (in: WFOŚiGW in Katowice)

XI CONCLUSIONS

Looking at the vast landscapes of the Beskids, one should remember how much beauty they owe to the activities of the Wallachian shepherds, who thanks to their economy, pastoral infrastructure or the introduction of pastoral traditions provided the modern inhabitants with conditions for the development of unique culture and peculiar nature. However, it should be emphasized that currently occurring in terms of nature valuable grasslands and mountain meadows require constant human interference and active protection through their proper use. Disappearance of pastoral culture caused by a significant reduction in the demand for sheep products contributed to the transformation and depletion of natural non-forest habitats. The opportunity to slow down this process is a constant improvement of knowledge of the local population on the conduct of activities in the field of active protection and their financial support, the example of which can already be completed LIFE+ project no. LIFE12 NAT/PL/000081 "Protection of non-forest communities in the Beskids Landscape Parks".