# SLOVAKIA CATCHING-UP REGIONS

DUE DILIGENCE REPORT
ON THE ESTABLISHMENT OF
A POLONINY NATIONAL PARK TRAIL











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## ACRONYMS AND ABBREVIATIONS

ATV All-terrain vehicle

CuRI	Catching-Up Regions Initiative
DMO	Destination Management Organization
DMS	Destination Management System
EC	European Commission
EFA	Ecological Functional Area
GDP	Gross Domestic Product
ICT	Information Communication Technologies
KOCR	Krajská Organizácie Cestovného Ruchu (Regional Destination Management Organisation)
KST	Klub slovenských turistov (Club of Slovak tourists)
MTB	Mountain Biking Trails
NP	National Park
NR	Nature Reserve
NRR	National Nature Reserve
OOCR	Oblastná Organizácia Cestovného Ruchu (Sub-Regional Destination Management Organisation)
OECD	Organization for Economic Cooperation and Development
PPT	Poloniny Park Trail
PSK	Prešovský Samosprávny Kraj, Prešov Self-Governing Region
R-DMO	Regional Destination Management Organization(s)
SME	Small and Medium Enterprise(s)
TDMIS	Tourism Destination Management Information Systems
TZT	Turistické značkované trasy (standardized methodology for trail marking in sr and cz) $$
TIC	Tourism Information Center
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNWTO	UN World Tourism Organization
WB	World Bank
WBG	World Bank Group
WTTC	World Travel & Tourism Council

## **SYNOPSIS**

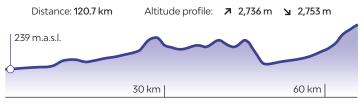
The following report focuses on what is needed to establish the Poloniny Park Trail—one of the main recommendations of the Output 2 Report. The Trail is intended to connect communities in the

park towards increased community engagement and economic empowerment by forming a single brandable, more marketable and cohesive tourism product. A team of trail experts conducted extensive field research, document reviews, and stakeholder meetings on, and related to, the trail. One of the main results is this initial full Poloniny Park Trail map (Figure 1).

Additional maps have been developed for specific Poloniny Park Trail (PPT) sections and each of the key activity areas—hiking, cycling, and horse-back riding. These maps are provided throughout this report to present the individual sections, as well as off-shoot routes that connect to interesting natural or cultural landmarks. All route variations and individual sections are in relation to the above overall Poloniny Trail map. To the extent possible, infrastructure needs, such as water access and rest area facilities (toilets, tables, and so on), have been highlighted and mapped (see below Existing Trail section and Annex 5).

FIGURE 1 The main map of Poloniny Trail





## **KEY FACTS ABOUT THE TRAIL**

The Poloniny Park Trail can comprise over 110-kilometer-long circuit with another over 100 kilometers with possibilities to connect to an existing network of trails, attractions, and communities:

- 1. 125 kilometers of marked hiking routes within and around the national park
- 2. 308 kilometers of cycling trails
- 3. 10 communities along the trails
- 4. 95+ national and local cultural monuments, shrines, and sites
- 5. 80+ notable natural attractions and viewpoints along or near the trails
- 6. 100 kilometers of planned equestrian trails

## INTRODUCTION

This Preliminary Due Diligence Report for the NP Poloniny builds on a key recommendation in the recent Output 2 report of the European Commission's Catching-up Initiative (CURI) for the Presov Self-governing Region (PSK). In that report, which focused on tourism, a World Bank team of experts, in coordination with PSK experts and local stakeholders, recommended that the NP Poloniny becomes a more developed adventure travel destination. To achieve this, the team recommended focusing on the development of a core NP Poloniny Trail with subsidiary trails suitable for activities such as hiking, cycling, and horseback riding. Best practice examples, such as the Lebanon Mountain Trail, provide some useful elements for replication and adaptation in the NP Poloniny. This report provides an overview of key elements related to NP Poloniny, existing documentation, and a preliminary mapping of trails that could be packaged, branded, and presented as 'NP Poloniny Trails,' as well as the initial trail condition reports. Achieving this overcomes the lack of cohesion in Poloniny as a destination.

The NP Poloniny is one of three parks comprising the East Carpathian UNESCO Biosphere Reserves; the other two are adjacent to Poland and Ukraine. NP Poloniny is in the north eastern region of the Slovak Republic, one of the most remote areas in the country. It covers an area of 29,805 hectares, and has officially been declared a national park since 1997. The park is a home to 10 villages with a total population of around 2,600 people. The villages are Jalová, Príslop, Kolbasov, Ulič, Uličské Krivé, Ruský Potok, Zboj, Nová Sedlica, Topoľa, and Runina.

The Park is characterized with dense primeval forests, unique flora and wildlife, such as, the European bison. It unites seven national natural reserves and 12 natural reserves, which cover an area of 10,973 hectares of strictly protected reserves. The park is also home to bison, wolves, over 200 species of birds, 24 species of fish, and 63 mammal species.

The park also hosts numerous cultural landmarks, such as the wooden churches in the villages of Jalová, Topola, Ruský Potok, Uličské Krivé, and other neighboring villages just outside the park boundaries. Most of these churches, as well as the natural reservations, are also designated cultural and natural UNESCO sites. The region is also home to the traditionally Christian Orthodox Rusyn (Ruthenian) ethnic group, who have lived there for a thousand years. Both world wars also left their mark on this region, which has left behind unique relics and monuments of remembrance for the lives lost during the battles throughout the region.

Combination of natural splendor and cultural heritage in the region holds for the NP Poloniny a great opportunity to become a competitive adventure travel destination (see definition below). An adventure destination requires a central point of orientation merging its unique natural and cultural attractions with active recreation such as hiking, cycling, horseback riding, and/or other activities, thus creating an array of experiences appealing to adventure travelers. Hence, the idea of a Poloniny Trail is greatly positioned for such vision.

In designing the Poloniny Trail, the team and stakeholders endeavored to meet the requirements of adventure travel families, as another dimension of tourism development within the region. Hence, family travel was kept in mind while analyzing alternate cycling routes, based on ease of terrain, available parking, recreational vehicle amenities, public amenities, and isolation from

road traffic. However, the park's topography and terrain do limit potential cycling routes for the recreational cyclist and/or a family of cyclists. Hiking trail outlets on, or along the Poloniny Trail, are aimed at reducing some of the vast distances, by creating a network enabling the visitor to combine routes and create a circuit of desired length. This and other considerations are part of this report.

The purpose of the PT project is to be part of the precedent for the future socio-economic development of the region, and to commence multidimensional cooperation among different levels of government and local enterprise:

- Increase cooperation of stakeholders in the Poloniny region during trail planning and design
- 2. Develop a new entity, or improve existing organizations, to implement quality tourist infrastructure pertaining to the Poloniny Trail and park as a travel destination
- Develop a travel destination product for the Poloniny region via the initiation and involvement of local and regional service providers and stakeholders
- 4. Work with the Krajská Organizácia Cestovného Ruchu (KOCR/R-DMO) and sub-regional DMOS—Oblastné Organizácie Cestovného Ruchu (OOCR/S-DMO) to develop sustainable promotion and management strategies that help define the Poloniny Trail and park, as well as the entire region, as a unique and distinct travel destination

The Poloniny Park Trail (PPT) is intended to become the main multiuse trail connecting existing cycling, hiking, and potentially equestrian trails (depending on the section of trail), within and around the park. The PPT passes through, or connects to, the most significant natural and cultural landmarks within and near the park. The PPT could use existing forestry road infra-

## **FIGURE 2** Typical Poloniny fields atop the numerous hills and peaks



Source: Peter Bujňák

#### **BOX 1** Adventure Travel Defined

Adventure travel is a form of travel that combines physical activity with cultural experience. According to the Adventure Travel Trade Association (ATTA), adventure travel requires three components to be present – physical activity, cultural immersion, and natural environment. This type of travel is meant to connect the traveler to an area by experiencing nature and culture with physical activity. Activities such as hiking, cycling, horseback riding, rafting, climbing, skiing, and others, are actively pursued while immersed in a new culture and landscape.

According to research from the ATTA, the adventure and nature-based travel industry is now worth more than US\$ 683 billion, and since 2012 has been growing at approximately a 21% compound annual growth rate (CAGR). Furthermore, in the 2017 ATTA Adventure Pulse, a survey of leading adventure tour operators, the most demanded outdoor activities were hiking and biking, a finding that bodes well for the Snina District and Poloniny Park.

In addition, while the research found that experiential travel (both nature and culture-based) has a broad appeal, the highest level of interest is especially among young people - Millennials or Generation Y (born between 1981 and 2000), and Generation Z (born between 2001 and 2019). If experiences are developed to appeal to these age groups, there might also be increased interest to pursue entrepreneurial experience-based businesses and opportunities in the Snina District and Poloniny Park, thus reversing the depopulation trend.

structure and minimize the construction of new roads. While not technically challenging, the terrain in the NP Poloniny is relatively steep, which must be considered when designing and mapping the trail, especially for cyclists and horseback riders.

## HISTORICAL AND CULTURAL CONTEXT OF THE NATIONAL PARK

The natural environment in Poloniny is spectacular and central to the Park's offers, but the cultural and historical context are also important to developing positive and authentic experiences in the Poloniny Park Trail. For example, simply seeing the Starina water reservoir, without understanding the political and social unrest that accompanied its construction, is an incomplete picture.

The reservoir development, beginning in 1983, caused the destruction of seven Rusyn villages, and the displacement of 3,463 people from 769 homes. The villages of Dara, Ostrožnica, Ruské, Smolník, Starina, Veľká Poľana, and Zvala were depopulated and subsequently destroyed during the 1970's to early 1980's, with only a few remnants remaining today. The reservoir takes its name from Starina village, which was flooded by the reservoir. Remnants include mainly cemeteries and religious monuments from the former villages, but all major objects, such as churches, were destroyed or removed. Today, areas such as Ruské are lined with recreational cottages, with Poloniny offering a picturesque backdrop.

When first entering the park, a visitor is awe struck by the sheer expanse of the park's forest canopy. While much of the park is a relatively untouched natural environment with minimal human interference, the park is also home to communities and commercial forestry operations. The latter comprises 65% of the total park land, with 27% under private ownership and eight percent designated as protected reserves.

The logging industry is an important economic activity of the park that dates back centuries and now supports over 200 families in the Snina District, thus making it the largest local employer, and an important dimension of local heritage. For tourism to be developed in the park, it must be, and from the team's perspective can be, complementary with logging.

Foresters play a key role in the health of the forests in the region. Historically, prior to the region being designated a national park, foresters were responsible for afforestation, expanding the forest from 1947 onwards, when the first state forestry administration was established in Stakčin and Ulič. Given the history of the region, these two sectors cannot be treated as exclusive entities, but should be combined effectively. For example, sustainable forestry management is essential for the strengthening of adventure travel and ecotourism in the region. The forestry organization can help ensure trail access throughout the park (see further details in Risks, Challenges, Obstacles and Opportunities).

According to Peter Šiška, Director of the Forestry Organization, the organization can help ensure trail access throughout the park. He has commented that the forestry industry in the Slovak Republic is in transition. While logging and forestry have historically been critical to local livelihoods, society, and the economy, as panelists at the June 2019 Catching-up Regions Initiative conference in Prešov emphasized, the local population is aging, and young people are not choosing logging as a profession. To sustain and further develop the local economy, panelists agreed that other options were needed, such as sustainable tourism. The logging industry has also been hampered by aging technology that has constrained the competitiveness and efficiency of forestry management. As Mr. Šiška emphasized, it is in the interest of the Forestry Organization to increase their management capacity and upgrade their technology, while simultaneously diversifying into other forestry-related areas, such as recreation, adventure travel, and ecotourism. The Us Forest Service is a prime example where both tourism and commercial forestry can be compatible, and operate in mutually beneficial and sustainable ways. The trail is intended to be the ideal common ground for all stakeholders.

## **METHODOLOGY**

The main purpose of this report was to develop the initial Poloniny Park Trail map with GPS coordinates marking areas of needs, and points of interest for potential trail cyclists, hikers, and riders. To determine this map, background research and extensive field work were conducted. For the latter, a field team led by adventure expert Peter Bujňák, and including Viera Štupáková (cycling expert), Vladislav Juško (equestrian expert), and Mario Perinaj (Director of Poloniny Park) provided details as to possible trail routing, infrastructure, and service needs, as well as points of historical, cultural, and natural interest. Peter pursued the following intense itinerary:

- 1. June 6, 2019—General inspection by car of accessible routes throughout the park, from Stakčín to Nová Sedlica, and from Stakčín to Ruská Volová via Kalná Roztoka
- 2. June 7—Snina- Stakčín section inspected by bike
- 3. June 8–9—Trail excursions began and included the marking of points of interest, potential rest areas, sign improvement needs, as well as discussions with residents; 75 kilometers covered by bike
- 4. June 10—Trail inspections by all-terrain vehicle (ATV), covering the southern part of the park, including the corridor between Nová Sedlica and Ulič
- 5. June II—Entire northwestern area of the park inspected by suv, including from Pčoliné to Osadné area, including Udava. Emphasis on equestrian potential and bison viewing, with consideration of opportunities also for cyclists and hikers. This is an important stretch for possible connectivity to trails and villages in and around Starina
- 6. June 13—Trail inspections by ATV, covering 120 kilometers along the southern slopes above Príslop to Kolbasov, and then from Ruský Potok to Zboj, and the forest road from Nová Sedlica to the intersection of the yellow route to Jarabá skala and the forest road, which paralleled the ridge line from Ďurkovec to just before Vel'ky Bukovec. The team explored part of this ridge by foot and inspected an old fire road along this ridge, and then returned to Nová Sedlica
- 7. June 22—Trail inspections by ATV covering the northwestern boundary of Poloniny Park along the Snina to Osadné corridor (conducted by Vladislav Juško). Equestrian requirements were considered, although the multipurpose use of the route was also considered. This route begins at the mini zoo compound in Snina, and follows forest road networks and paths along the northern corridor. Main factors considered were elevation and minimal contact with motorized roads and traffic (only required for crossing from west to east of the main corridor). The route inspection passed through Pčoliné, Parihuzovce, and continued to the former villages of Zvala and Smolník

To conduct these inspections, factors such as slope incline, property boundaries, and zoning for environmentally sensitive areas were considered and reflected in the GPX files. Initial trail mapping was conducted, using the online mapping application www.mapy.cz, which uses 'open street

FIGURE 3 Trail inspection from Prislop to Stakčínska Roztoka



Source: Peter Bujňák

maps' (open source data) as their source, and indicates levels of slope inclination. The route followed was based on existing marked trails, as well as logging roads. However, sections were discovered that historically had a path running through it, yet were absent in all online mapping applications, including Google Earth. The initial route was reviewed with the team and then mapped using online mapping applications and GARMIN'S Base Camp program.

At the time of writing, the team was waiting on additional feedback from the locals and from the University of Prešov Arcgis experts on road quality, slope, and terrain for more precise route inspections. Trail inspections resulted in the separation of cycling and equestrian paths from hiking paths, as hikers have different demands for trails compared with other users (see hiking section for details). Unsatisfactory sections of the route and possible route variations were determined. Multiple route options were considered with special attention to trail or road incline and slope, and road condition quality. The resulting Poloniny Trail recommendations are based on what optimal slope and road conditions are for cyclists, hikers, and horseback riders.

The field team was supported with reporting and research by World Bank official Guido Licciardi, and World Bank consultants Scott Wayne and Jordanka Tomkova.

## SITUATION ANALYSIS

## **OVERALL**

The Snina District and Poloniny Park offer nature-based and cultural experiences and attractions that, given international demand trends, could become genuinely competitive, if they are further developed. Both sets of activities are increasingly considered experiential travel—travel that is immersive, local, authentic, active and/or adventurous—that is, traveling to experience nature-based and cultural adventure. In fact, a 2018 study from the Adventure Travel Trade Association (ATTA) referenced above found that "experiencing a new culture" is now often included in the definition of adventure travel. So, when considering adventure travel demand, it is often combined with cultural tourism as experiential travel, of which Poloniny Park offers great destination potential. To develop these opportunities will require increased local coordination, infrastructure, and product improvements, as well as increased tourism and hospitality skills.

# KEY ACTIVITIES AND POINTS OF INTEREST IN NP POLONINY: SIGNIFICANT CULTURAL AND NATURAL LANDMARKS

Despite having over 27,000 hectares of forests (in Poloniny Park), presently, there is only a limited network of hiking, horseback riding, and cycling trails available. Improvements are needed to facilitate better access for more visitors and provide more variety of excursions. The area also hosts an internationally known 'dark-sky park' (at the edge of Poloniny), and multiple cultural monuments, sites, and institutions in local communities.

Hiking tops the list of preferred activities in the Snina District. According to the Snina Action Plan, the most frequent reason for visiting the district is hiking in the National Park Poloniny and Vihorlat Protected Landscape Area (CHKO), which is especially popular among the most numerous visitors—Slovaks, Czechs, and Polish tourists—who comprise 90% of all visitors.

## **Existing Trail Network**

The Poloniny Park hiking and cycling trail infrastructure is in its infancy compared with other national parks and protected areas in the Slovak Republic (see Annexes). When considering the natural splendor offered by Poloniny, the current trail network is quite limited and does not accurately reveal the full natural value and potential of the region for the visitor. The park is still relatively undiscovered by tourists, in part due to the limited hiking, cycling, and horseback riding trails that are marked in the park. The horseback riding potential is particularly untapped, since there is no mention of this activity on any of the park information boards or pamphlets.

#### **Communities**

As the map (Figure 4) shows, the NP Poloniny and areas adjacent to the Park include the following communities: Jalová, Príslop, Kolbasov, Ulič, Uličské Krivé, Ruský Potok, Zboj, Nová Sedlica, Topoľa, and Runina.

## Cultural Sights and Natural Attractions

The Snina District and Poloniny Park offer more than 140 sites and attractions, many of which could be of interest for visitors to the Poloniny Park Trail. Several of these sites, such as the wooden churches, military cemeteries, the miniature wooden church park, and Three Springs pilgrimage site, have been restored and are being well maintained. Many other sights, however, require improvements. Here is a summary of some of the key needs:

- Approximately 39 of 140 sights are currently inaccessible and require signage improvements, better mapping, and/or physical access.
- Numerous lookout points throughout the park, including the Príslop radio tower, offer spectacular views, but lack required
  - infrastructure and/or signage, and are sometimes not even indicated on maps, nor on nearby hiking trails.
- 3. The Slovak Republic's highest elevation military cemetery at Hodošík, is accessible by road, but there is no marked path for visitors.
- 4. The wooden churches can all be visited and seen from outside. However, entering them requires assistance, and thus signage or other information indicating who to call for access.
- 5. Attractions, such as the outdoor chapel in Veľka Poľana and the NR Pod Ruským, are easy to miss, due to a lack of signage.

Similar experiences were found during the trail inspections throughout the park that could be easily improved, and thus packaged as Poloniny Park Trail experiences. These experiences could,

in turn, enable Poloniny to compete with similar destinations in the region.

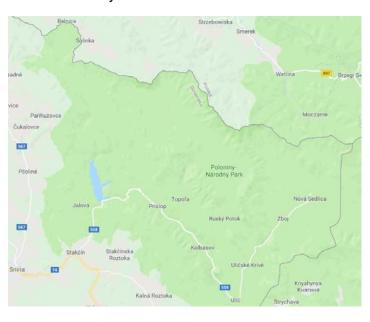
The full list of cultural monuments and natural attractions in the Snina District can be found in Annex 2. Some of the most distinctive and historic attractions include:

### A. Distinctive 18<sup>th</sup> Century Wooden Churches

The wooden churches of the region offer windows into 18<sup>th</sup> century, and with information and guides, offer incredible stories on history and culture.

 Wooden church of St. Michael, the Archangel, from the early 1700's, Ruský Potok

**FIGURE 4** The Map of the communities in the NP Poloniny area



## **FIGURE 5** Wooden church of St. Michael, the Archangel, from the mid-18th century, Topoľa



Source: Peter Bujňák

Situation Analysis

- 2. Wooden church of St. Michael, the Archangel, from the mid-18th century, Topol'a
- 3. Outdoor miniature wooden church park, Ulič
- 4. Greek Catholic wooden church from 1718, Uličské Krivé
- 5. Greek Catholic wooden church of St. John the Baptist, Kalná Roztoka
- 6. Wooden church exposition, Topol'a
- 7. Greek Catholic wooden church of Saint Juraj (George) from 1772, Jalová

#### B. WWI and WWII Cemeteries

The many military cemeteries attached to nearly every community in and around Poloniny Park are important and somber reminders of the human toll paid by the Slovaks in the world wars of the  $20^{\rm th}$  century. These cemeteries include:

- 1. Military cemeteries can be found in the following park communities: Kolbasov, Čišovatyj Runina, Topoľa, Ulič, Zboj, Dara\*, Ostrožnica, Ruské, Starina, Smolník, Veľka Poľana, Predný Hodošík, and Zvala.
- 2. Military cemeteries can also be found in the following communities outside the park: Hostovice, Osadné, Snina, Giglovo, and Ubľa.

#### C. Jewish Cemeteries and Memorials

The Jewish population in the eastern Slovak Republic suffered, as well, in World War II. Several memorials and cemeteries can be found in Kolbasov, Runina, Topol'a, Snina, and Ubl'a.

#### D. Other Interesting Attractions and Sights

Inside the park:

- 1. Nová Sedlica and vicinity—Honey Woman's wooden sculpture, and a nearby waterfall
- 2. Kremenec—(highest peak and tri-border), and the outdoor Slovak–Rusyn dictionary
- 3. Runina—An astronomical observation point
- 4. Topoľa—Paragliding take-off site on Bukovec peak
- 5. Ulič—Poloniny gallery of wooden statues

## FIGURE 6 Historic park part of late Baroque manor grounds in Snina



Source: Peter Bujňák

#### Outside the park:

- Snina—A late Baroque manor from the 18<sup>th</sup> century and historic park
- 2. Kolonica—Astronomical observatory
- Osadné—Marked hiking trail railway station, Balnica (small gauge railway line), and mineral spring Udavy
- Stakčín—Pathway
   of the small gauge forestry railway
   from Stakčín–Strihovec, and the town
   cultural heritage museum
- Zemplínské Hamre—Outdoor mining exhibition

The following map (Figure 7) indicates attractions in and around each community in Poloniny. Annex 2 presents the list of these attractions.

Wetlina 1153 Brzegi ( Moczarne olinka Wielko Durkove Papin 188 Bukovec 1012 Stakčír 28 Belá 1093 d Cirochou Домаши Княгиня Snina Kniahynia Dlhé Zemplinske Сіль nad Cirochou Hámre 74 Nežabec ou 1023 nský vod Vihorlat Великий Березний kovce 19 Velykyi Bereznyi

FIGURE 7 Map of the key attractions in and around the park

#### **Natural Attractions**

Prešov Region is well endowed with multiple nature-based attractions and sites that draw both domestic and foreign visitors. These sites include five national parks¹, 180 protected areas, nature reserves, UNESCO protected beech forests, geothermal springs, the astronomical observatory near Kolonica, and beekeeping operations. The NP Poloniny, along with the neighboring parks of, Bieszczadzki National Park in Poland and Uzhanian National Nature Park in Ukraine, offer opportunities for transnational park and tourism cooperation, particularly for extended hiking and biking trails, which can be a good selling point.

The Snina District and the National Park Poloniny currently generate limited demand for adventure and nature-based travel. Some of the nature-based attractions include astronomical tourism, birdwatching, especially the twitching Ural owl, woodpecker and hazel grouse; wildlife viewing of bison; and occasionally—with luck and/or professional tracking—wolves and bears.

Birdwatching offers opportunities for further development in the Snina District. With over 15,000 hectares of protected bird areas and 211 bird species<sup>2</sup>, the district could become an optimal area for birdwatching. According to the Poloniny National Park Management Plan, the park includes

62% of the bird species in the Slovak Republic. The Starina reservoir construction helped create good conditions for the breeding of several rare bird species and aquatic birds; it also is located on a significant migratory route to the south and back, across the Eastern Carpathians between Poland and the Ukraine.<sup>3</sup>

The Poloniny National Park needs improved and new lookout points to enable visitors to fully appreciate the beautiful landscape, and to foster activities such as birdwatching and bison watching. Residents recommended installing a wooden bison statue at points where bison watching is the best.

# EXISTING AND PROPOSED TRAIL NETWORK BY ACTIVITY

In conducting the inspections for each trail section, and meeting with the stakeholders, the team identified at least 114 infrastructure improvements. The list of improvements is not exhaus-

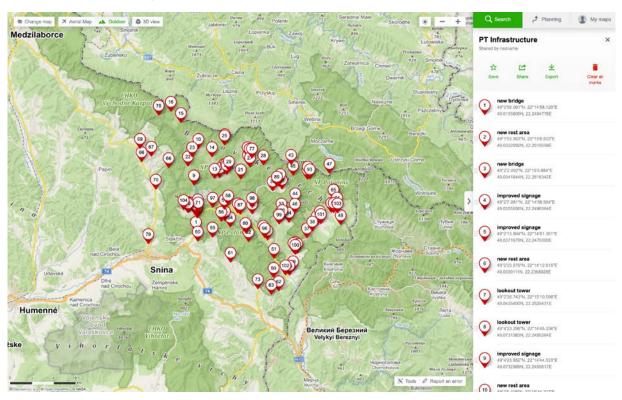
**TABLE 1** Number of infrastructure improvements needed

Infrastructure type:	Number needed
Bridges	4
New Rest Areas	14
Improved Rest Areas	3
Shelters	5
Lookout Towers	10
Improved Signage	30
Improved Water Sources	3
New Equestrian Campsites	3
Self-serve Bike Service Stations	4
New Recreational Areas	2
RV Campsites	10
Visitor Parking Areas	10
Public Restrooms	11

tive and may change as the route development progresses. Some improvements, such as visitor parking, public restrooms, and recreational vehicle campsites, are recommended for every village in the park. These infrastructure requirements should be understood as being phased in, starting with priority areas, as visitor numbers increase. Infrastructure requirements, such as bridges and rest areas, might also increase or decrease, depending on the route and other factors, such as permits to build in specific areas.

The following map (Figure 8) is a partial representation of an interactive online map that shows GPS coordinates and specific needs for each point. The improvements and their location can be viewed in detail via the following link: https://en.mapy.cz/s/3uuzw.

FIGURE 8 Map indicating locations of the required infrastructure



## **CYCLING**

The district hosts eight main cycling trails totaling about 309 kilometers, two of which connect the Slovak Republic with Poland and the Ukraine, and one that connects the Slovak Republic with the Ukraine. These include: the five-country Carpathian Cycling Route project, with 65 kilometers in the Snina District and along the edge of the park; and the Green Route, with 52 kilometers also in the district and park. In fact, as the team's local cycling expert, Viera Štupáková, explained, the Green Route overlaps and connects with the Porta Rusica Trail, which has been approved for € 2.2 million in funding for trail improvements. Notably, the Slovak Republic's most well-known hiking and outdoor web portal—hiking.sk—with their online mapping application—turistick—

amapa.sk—lacked all cycling routes, except for route o16 around Starina water reservoir and up to Ruské Sedlo. With trail improvements in Poloniny, the team recommends that these routes be added.

A major attraction point for cyclists is the Porta Rusica at the northern edge of the park, an ancient trade route built between 1861–1865 made of stone, that is due for restoration. The Porta Rusica, however, is an end point for visitors, meaning that if a cyclist were to continue, he or she would continue into Poland and leave the Poloniny Park. On the other hand, the planned restoration of Porta Rusica could see a rise in cyclist visitors from the Polish side, who are interested in seeing the restored historic trade route. Given the lack of monitoring of trail visitors, estimates as to the total numbers of cyclists from Poland are uncertain.

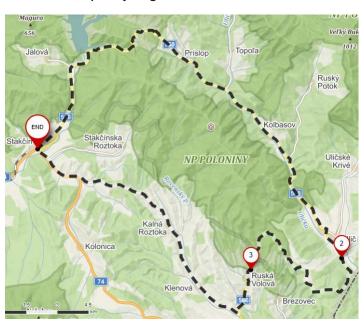
While the Park lacks circuits for cyclists, there are two existing possibilities to create circuits from the different marked trails:

- 1. Starting in Stakčín, south west of Starina, the route continues along Ruské to Topola, and returns to Stakčín, totaling just under 50 kilometers—a reasonable one- to two-day circuit. Roughly half the route shares the road with car traffic.
- 2. The route starts and ends in Stakčín, along the southern side of the park for just over 53 kilometers, passing through Príslop and Kolbasov, and then continues on to Ulič along a semi-paved forest road, connecting to Ruská Volová, where it continues alongside the road to Stakčín, passing through Klenová and Kalná Roztoka. While the route provides decent scenery and connects multiple communities, it does not show the vast natural attractions of the park. The cyclist may be left wondering what lies beyond the road within the UNESCO designated primeval forests. Over 80% of this route is shared with car traffic.

FIGURE 9 Map of cycling circuit 1 from Stakčín



FIGURE 10 Map of cycling circuit 2 from Stakčín



In their present state, neither circuit is appropriate for family cyclists, nor for road cycling, due to the road traffic and the surface quality in certain areas. Overall, they are best for the recreational sport cyclist who uses trekking bikes. Road cyclists would have to backtrack, and families with children would most likely want to avoid roads with car traffic. The construction of new trails along flatter sections of terrain could address the lack of family-oriented cycling routes, whereas the improvement to certain sections of marked routes, could significantly improve the appeal of the region for the road cyclist (see below for further details).

Another notable cycling trail in the region is the IKON Cycling Path, a premier trail that starts in Nová Sedlica, continues along the main road to Stakčín and beyond the park boundaries via Kalná Roztoka, Ubľa, and ending in Inovce, for a total of 109kilometers. This trail passes by several impressive UNESCO heritage wooden churches. As with the other trails, it shares the road with car traffic, but can be considered one of the most effective means of covering many kilometers along relatively simple terrain. However, a cyclist must first travel to Nová Sedlica to reach this route. Currently, there are no buses equipped with bike racks, while driving to the village means that the cyclist must return to retrieve his or her car, unless they have organized transport.

The marking and signposting of most cycling trails is provided by the nongovernmental organization (NGO) DO Fenix Snina; the Carpathian cycling trail was marked by the Prešov Bicycle Group Kostitras.

Since most of these and other cycling trails in the park share paved roads with motor vehicles for most of their lengths, these are appropriate mainly for the sport cyclist or cycling tourers, rather than families. These trails, however, only skirt the edge of the park, and do not really offer the visitor the opportunity for the full appreciation of its natural beauties and breathtaking vastness.

Furthermore, pertaining to cycling (as well as horseback riding), the natural topography of the park is a major determining factor, placing limits on the development of diverse cycling routes for all fitness levels within the national park.

The cycling trail from Starina north to Porta Rusica, via the former village of Ruské, is an exception that deviates from a paved road and then finishes on the main road between Topoľa and Runina, thus offering relatively easy access. While it does not pass through any areas with wooden churches, the route passes by, or provides access to, significant WW I military cemeteries, including Hodošik (the Slovak Republic's highest elevated military cemetery), the remnants of the former villages Veľka Poľana and Ruské, and a ride up the Porta Rusica. Out of the current offer of marked cycling routes, the Porta Rusica offers by far the most in terms of immersion in nature, providing great views, and a sense of history, as the visitor cycles along the cobbled stone road (with scope for restoration). Car traffic along the Starina route to Ruské and beyond to the north of Topola is minimal (only by permit and limited to 60 personal cars per day). Therefore, the level of motorized traffic does not seem to be an issue along this portion of trail. During the trail inspections between June 7–9, 2019, directional signs were found to be missing at numerous intersections along the route or were of poor quality and required repainting. Rest areas and shelters were also lacking along this route.

The team found route possibilities away from road traffic throughout the park that utilized existing forestry roads. Some of these routes also connect villages in the park area with potential new routes that follow more challenging terrain than the paved road trails, and are thus, more appropriate for an active or sport cyclist. The section below describes trail requirements for cyclists.

## Forestry Road Cycling Trail Profile: Runina – Ruský Potok – Uličské Krivé

This trail (inspected on June 9 and 10) uses existing forestry road infrastructure consisting of numerous ascents and descents, making it physically challenging. Numerous parts of the route require intensive trail improvements, but provide some spectacular scenery, including rides through typical Poloniny fields. Some sections (just before entering Ruský Potok) were missing entire road sections. The section from Ruský Potok to Uličské Krivé offered nice scenery and an interesting winding route with diversity, but this currently serves as a logging road and was nonnegotiable by bicycle in numerous sections. Of the 5.2 kilometer-route from Ruský Potok to Uličské Krivé, roughly 80 % would require significant road improvements to turn this into a viable cycling or equestrian path. The other option is to seek an alternate route along this corridor, within the boundaries of environmental zoning laws and landownership rights. However, given the beautiful scenery offered on this route, a collaboration with the state forestry agency for permanent improvements, would benefit both tourism development and sustainable logging activity.

FIGURE 11 Forestry road cycling trail: Runina – Ruský Potok – Uličské Krivé



## Recreational Route Option: Nová Sedlica – Zboj – Uličské Krivé – Ulič

Regarding recreational routes, the construction of whole new trail sections isolated from road traffic, could be possible on the main corridor between Nová Sedlica and Ulič, which could serve as a recreational trail, due to its gentle inclines. There are minor trail deviations between Uličské Krivé—Zboj—Nová Sedlica that are readily available due to existing forestry roads. The possibility of building new sections of trail alongside the Zbojský River for the length of the corridor, would connect the villages via nonmotorized modes of transportation, such as cycling and horseback riding, and could also be used as a footpath. Some sections of this route exist, while in some areas, whole new trail construction would be required. This route would increase the appeal of the park for families, by providing gentle terrain isolated from road traffic, plus it could further serve as a multipurpose trail.

Other individual trail segments and variations include the following (Figures 13–18).

FIGURE 12 Map of recreational cycling route: Nová Sedlica – Zboj – Uličské Krivé – Ulič

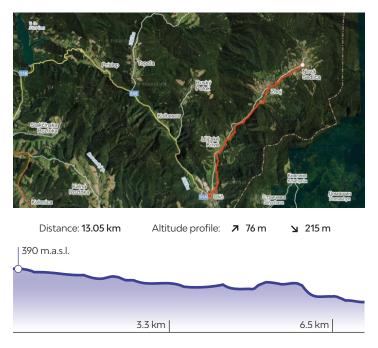
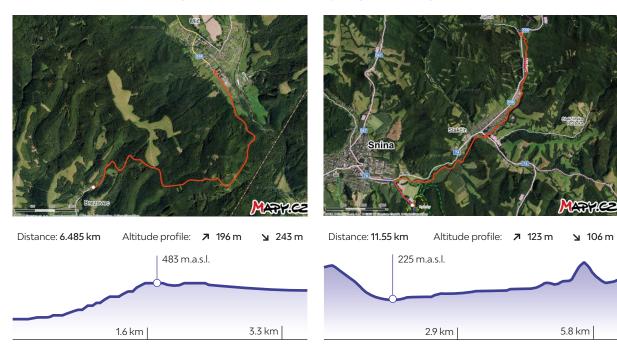


FIGURE 13 Ulič to Brezovec — connects the cyclist to the nearest border crossing with the Ukraine

FIGURE 14 Map of the Snina to Stakčín to Starina cycling route along the Cirocha River



Snina to Stakčín to Starina variation, isolating the cyclist from motorized traffic on a route along the Cirocha River (Figure 14). Ulič to Stakčín (Figure 15) through various existing forestry roads. Half of this route is part of the 2019 '1,000-Mile Adventure Race' (Ulič to Kalná Roztoka). Nová Sedlica—Uličske Krivé (Figure 16): A sport cycling route with modest elevation inclines, offering scenery and immersion in forests. Veľká Poľana—Ruské (Figures 17 and 18): an equestrian path, could also serve as a cycling route for the sport cyclist seeking lookout points at higher elevations.<sup>4</sup>

**FIGURE 15** Map of Ulič to Stakčín through various existing forestry roads.

**FIGURE 16** Nová Sedlica — Uličske Krivé: a sport cycling route.

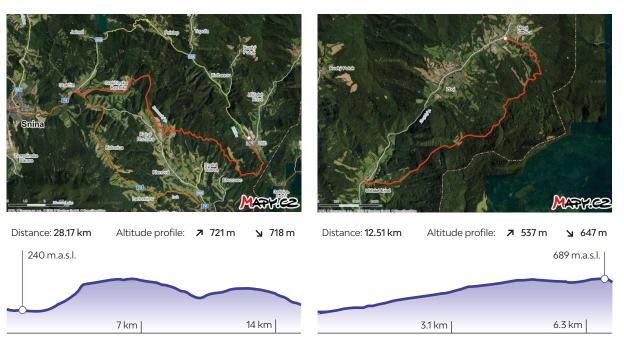
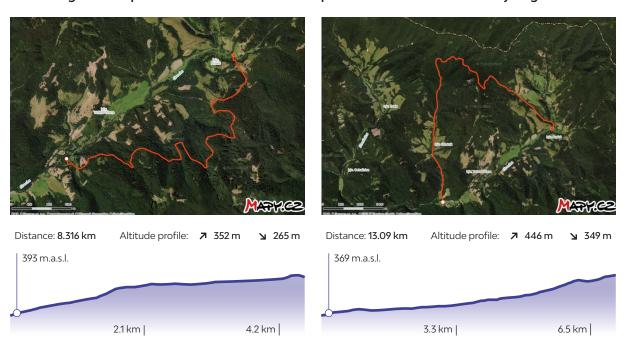


FIGURE 17 Map of Veľká Poľana to Ruské variation connecting with the path to Hodošik.

FIGURE 18 Veľká Poľana — Ruské: an equestrian path that could also serve as a cycling route.



Map in Figure 19 illustrates the entire marked cycling routes in the Snina / Poloniny region. As stated, the vast majority share the road with motorized traffic, except for a few sections mentioned previously. These routes are low traffic (generally accepted as less than 1,000 vehicles per day for the Prešov Region). An adventure travel destination seeks to provide experiences that require some physical input and are not readily accessible through common modes of transportation. The PPT could be an attractive destination for adventure travelers, such as bike-packers and classic cycle tourers, who would spend more than one day in the park with the implementation of appropriate infrastructure, such as overnight shelters, accommodations, food establishments, and other amenities. Furthermore, the PPT would only bolster the existing cycling network by providing various outlets for themed excursions, such as the IKON trail.

**FIGURE 19** Map of all marked cycling routes in Snina/Poloniny



FIGURE 20 Start of Porta Rusica leading up to Ruské Sedlo, the border between Poland and the Slovak Republic



Source: Peter Bujňák

## HIKING

The Snina Action Plan reports that the district offers 152.5 kilometers of marked hiking trails among 12 routes, which are maintained and marked by the Humenné branch of the 20,000-member nonprofit Club of Slovak tourists (KST). There are around 125 kilometers of marked hiking routes within and around the national park, with some routes leaving the park and ending in villages near the park. The trails pass through and/or connect every village in Poloniny, as well as the towns of Snina, Stakčin, and other communities in the district. In addition, some of the trails could also be used for horseback riding.

One of the highlights of the marked hiking trails is that nearly 40 kilometers are along the ridge of the Poloniny mountains, where more than 50% of the marked trail passes through the primordial forests, or above them on the Poloniny fields. Some of the forests are designated UNESCO world heritage sites and biosphere sites. All of them are part of the Slovak Republic's national natural reserves and natural reserves that have been accorded the fifth level of environmental protection. However, there are certain areas such as Havešova or Kycera, which also have great appeal, as they are part of the natural reserves list, yet have no marked hiking trails nearing these areas. The recommended Poloniny trail seeks to incorporate a hiking route variation passing the borders of these areas, but not running directly through them.

Hiking trails are well marked on available paper maps from manufacturers such as, ShoCart and VKU Harmanec, as well as on mobile applications such as MAPY CZ. Hiking trail markings in the actual park can be problematic depending on the area. Trail markers on trails passing through areas with logging activity have been reported to be poorly marked, due to instances of trees being cut containing the marker or damaged signs, (in this case, the route to Giglovo military cemetery outside the park grounds within the Snina area near Sninské Rybníky was observed during trail inspections on June 7, 2019). The issue of trail marking and maintenance needs to be addressed with the stakeholders, such as the NP Poloniny, KST, LPM Ulič, and other regional entities.

The hiking trail to Jarabá Skala, a nature reserve site, initially winds along a 7.7-kilometer forest road where occasionally logging trucks pass by, but then the trail veers off the main logging road and into the forest for the remaining two kilometers, before reaching the top of the ridge.

The only main areas of interest along the route (which is also a main logging road) are:

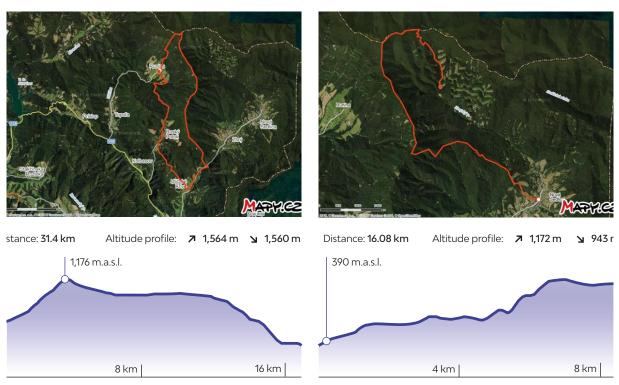
- 1. The Honey Woman's wooden monument, with a traditional wooden hut housing 80 beehives. The monument is, in fact, a memorial to Žofia Maťašovská, who maintained the beehives with her daughters as her husband worked in the logging industry.
- 2. The forestry lodge and lake is roughly 500 meters further along the route. The lake has the potential to become a recreational area, if proper eco-remediation activity were implemented, and terms and conditions agreed with the owner (LPM Ulič).

While these areas are major points of interest and could be more attractive, the route leading up to these is long and monotonous, and even longer, if one continues to the intersection leading up to Jarabá Skala (after which, the visitor is finally immersed in the natural beauty of the park). A possible rerouting or an added trail in the vicinity could address this portion of the trail, by offering additional options. The current route (yellow marking) along the main logging road could become a cycling path, or even a through path for motorized vehicles, with parking provided in the vicinity of the Honey Woman sculpture. Space is adequate, without extensive earthworks needed. Measures for traffic regulation, capacity, and fees need to be addressed to prevent any environmental damage or encroachment. Existing road infrastructure is of a sufficient quality, with only minor improvements needed to create a visitors' parking area, alongside a potential recreational outlet in the Honey Woman and lake vicinity. This option would enable more favorable excursions for tourists hiking up to Jarabá Skala and continuing along the ridge of Poloniny.

A suggested variation for a hiking trail runs along the main ridge from Zboj to Ďurkovec. In fact, during trail inspections on June 12, 2019, it was discovered that an old fire vehicle access road runs along the entirety of the ridge passing along nature reserve (NR) Borsučiny and peaks, such as Veľký Bukovec, Kýčera, and Minčol. This variation also provides options for approaches from Nová Sedlica or the Honey Women monument, though further inspection of possible route variations would be required. A route along this ridge would bring the existing trails closer together and enable one-day circuit hikes. With the possibility of improving the logging lodge and lake into a recreational area, the homeward journey would provide lakeside relaxation for the visitor.

FIGURE 21 Map of Runina — Ruský Potok — Uličské Krivé hiking circuit No

FIGURE 22 Map of hike from Nová Sedlica North West



Around **eight kilometers of the red hiking trail from Nová Sedlica to Uličské Krivé** share the road with car traffic. This trail runs along the main road corridor connecting Ulič to Nová Sedlica, the Slovak Republic's most eastern settlement.

Upon trail inspections on June 13, 2019, variations were found that might veer the tourist off the paved road shared with traffic, and follow instead, a route through the forest along the Zbojský River, with only minor trail improvements needed, such as clearing bushes and improving the surface (see map below for the exact section). Other variations that follow the Zbojský River along this corridor are possible physically but would require input from the municipalities as to the ownership of the land, and other factors that may impede such a route. The landownership distribution map reveals that most of the area along the corridor is state owned or lies within municipal boundaries. The proposed route variation for this corridor is the same as mentioned for cyclists, a multiuse recreational corridor along the river connecting the villages.

The existing trail network (Figure 23) is not well developed compared to the size of the park and to other national parks in the country. The ridgeline of the National Nature Reserve (NNR) Havešová, in the southern part of the park, can be easily reached from Príslop, where the proposed trail could be located. It would take the

The logging activity can be shocking for visitors who are unaware that the park has long been shared with commercial logging, especially considering that the park has UNESCO designated biospheres. Improved information about how the dual activities of logging and recreation can be managed sustainably is recommended, as well as the gradual improvement of forestry road infrastructure, and other sustainable logging practices that minimize erosion.

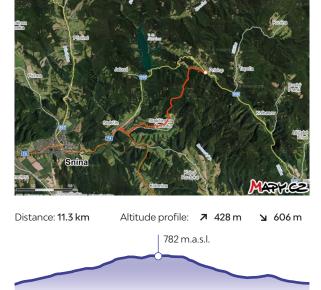
hiker across the entire ridge towards the NNR Havešová, and through the spectacular scenery of the region, including the distinctive locally created haystacks, a WW II battle trench, and beautiful lookout points of the entire region. Adequate trail marking, a lookout tower on the Príslop peak, and an overnight shelter on top of the ridge, would make this part of the park more accessible to multiday backpackers and day hikers. Variations of this route exist as well, providing the option of choosing an alternative circuit.

FIGURE 23 Current hiking trail network within the park (red, blue, and yellow marked trails).

FIGURE 24 Route from Ulič to Príslop



FIGURE 25 Route from Stakčín to Príslop



2.8 km

**FIGURE 26** Stakčín to Jalová to Veľka Poľana off the paved road.

5 km |

10 km



Stakčín to Jalová off the paved road uses the hilltops west of Starina, passing through Jalová with its historic wooden church, and offers views of the water reservoir atop of the fields (Figure 26).

5.7km

## HORSEBACK RIDING

Poloniny Park has no officially marked equestrian trails, yet the potential for developing equestrian trails in the park was boosted by the approval in 2019 of an INTERREG project between the Slovak Republic and Poland to improve cross-border 'horse tourism' between the two countries. The region is home to several horse stables and a small enthusiastic equestrian community. Horseback riding routes in their present state are derived from local knowledge of the terrain, as well as first-hand riding experience in the region.

According to Vladislav Juško, the local veterinarian, equestrian, and Poloniny Trail consultant, horseback riding in the region offers many opportunities for connecting routes between villages

outside of the park, and former villages within the park, north of the Starina water reservoir. He explained that most equestrian riding activity occurs in this area, due to the proximity of villages and decent infrastructure. Additionally, this area of the park is also home to the European bison, which is best viewed from horseback. Furthermore, horseback riders are also attracted to the Porta Rusica for its history and natural setting. This area is the proposed starting point for developing an equestrian trail network within the region.

In its present state, local knowledge and experience of viable equestrian trails are essential, due to the lack of officially marked trails. Expert horseback riders who would like to visit the park would still require a guide who knows the region and the forest road network. Mr. Juško states that, just as there are numerous possibilities for routes, there are equally numerous possibilities that lead to nowhere, or pose a significant challenge for equestrian travel, due to the quality of the trail. The known 'good' trail networks are mostly navigable, and can be marked as equestrian trails, with some sections requiring improvements to increase the appeal and accessibility. Since no marked trails exist for horseback riding, there is no tracking or monitoring of riders either, so the number of riders currently is unknown.

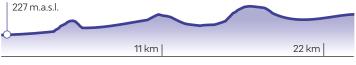
The following routes are equestrian trail recommendations that require further development, due to the specific complexity and demands of equestrian travel.

### **Equestrian Route 1**

Route I starts in Snina and finishes atop the Ruské sedlo (Figure 27), via the Porta Rusica, totaling some 44 kilometers, plus another 35 kilometers back to Snina, along the shortest route possible, passing by Starina to Stakčín to Snina. This route offers diversity and rolling

FIGURE 27 Map of equestrian route 1—begins in Snina and finishes atop the Ruské sedlo, via Porta Rusica





**FIGURE 28** Beautiful tree seen during equestrian trail inspection northeast of Snina



Source: Vladislav Juško

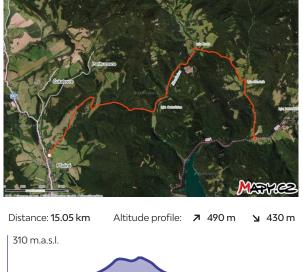
terrain with beautiful scenery. The entire route is isolated from motorized traffic, except for one intersection crossing, and the return journey from Ruské, along the Starina reservoir (maximum daily limit set to 60 cars). A proposed cycling route from Stakčín to Snina could run along the banks of the Cirocha River. This section could serve the journey home to Snina, free of motorized traffic. At present, this variation is envisioned as a cycling route.

Figures 29-34 show variations of equestrian trails in this corridor offering numerous possibilities and shorter distances.

FIGURE 29 Map of route from Parihuzovce

Altitude profile: 7 384 m **¥** 435 m Distance: 14.36 km 599 m.a.s.l.

FIGURE 30 Map of route from Pčoliné



8 km

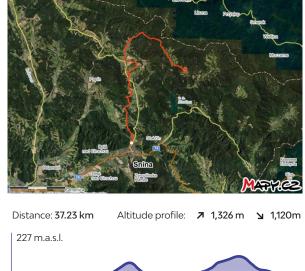
FIGURE 31 Map of route from Diakov (Osadné) to Veľka Poľana<sup>a</sup>



via Osadné







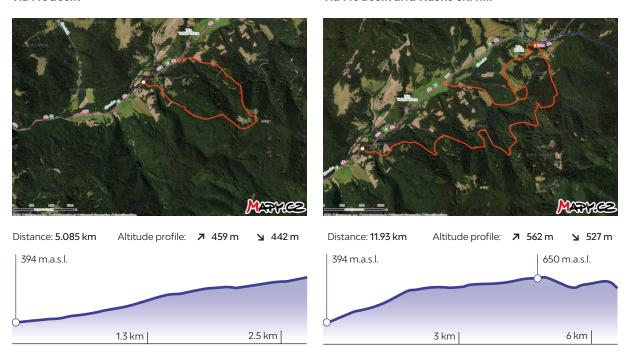
10 km |

20 km

a. Diakov is a potential equestrian campsite.

FIGURE 33 Circuit route 1 from Veľká Poľana via Hodošík

FIGURE 34 Circuit route 2 from Veľká Poľana via Hodošik and Ruské ski hill



In Poloniny, the natural topography of the terrain makes the region more suitable for experienced riders than beginners. The terrain is generally rolling with numerous ascents and descents. For example, trail 5 from Snina to Osadné to Smolník has ascents totaling 1,326 meters, and descents totaling 1,120 meters, over a 37 kilometer route. The numbers are similar for the other routes, whether cycling or equestrian. Furthermore, the proposed routes as day trips are on the difficult spectrum for distance, elevation profile, and lack of available infrastructure. Since there are no officially marked trails in the region, there is no equestrian infrastructure, such as rest areas, camps, or even water sources equipped with buckets for horses. There are water sources in Pčoliné and Smolník. The interred horse tourism project that started in the region (see below) might address some of these needs.

On the return journey, water sources are available in Ruské sedlo: two in Ruské and one in Veľká Poľana. Additional water sources would benefit the development of an equestrian trail network in this part of the park and expand it gradually to other areas. Trail improvements, rest areas, campsites, and other required amenities for equestrian travel, would need to be carefully considered (the infrastructure map already suggests possible locations for such amenities).

These listed routes have been ridden on horseback by locals in the region, however, that is not to say that these trails require only official markings to be completed. Trail improvements in certain sections are necessary, if these routes are to meet globally accepted equestrian trail standards. Additionally, some sections will need rerouting before the route is finalized, as parts of these routes encroach on farmland. As an unofficial trail, these pose no problems, but having these marked as official equestrian trails needs to take into consideration current land use activities, and then find a viable variation.

With the development of infrastructure, equestrian travel can expand eastward and perhaps southward into the park. Various routes with certain variations, which are proposed for hiking or cycling, can also serve as equestrian trails, provided that the infrastructure gap is addressed. Horses require a certain level of care when on day trips and multiday trips.

A possible idea is to select an optimal site or two within the national park that provides all the required amenities for equestrian travel, such as: sufficient space for grazing and feeding the horses, access to a water source, shelter for tourists, and so on (refer to the equestrian requirements section for more details). These sites can serve as a base camp for organized day trips throughout the park. Hence, the site should also be in a place that makes it easy to reach trails throughout the park, and then return after a day trip. The area around Ruské provides such possibilities, in terms of space and access to water. Other factors would still require further investigation, such as land-ownership titles, and others. Other areas in the park should also be further inspected to select such an equestrian base camp. Amenities such as parking sites with space for horse trailers, may also be a requirement if tours are to commence from within the park. Aside from Ruské, another location could be the Osadné-Udava area, which offers adequate space, access by car, fields for pasture, and a campground.

#### The INTERREG Project: "Developing Horse Tourism in the Carpathians"

The Interred project called "Developing Horse Tourism in the Carpathians" combines the preservation of the cultural heritage with the sustainable use of the natural heritage in the areas of Bieszczady, Poloníny, and Vihorlat. The project is expected to connect the existing network of horse trails in Poland—in the territory of NP Bieszczady and Cisniansko-Wetlin Natural Landscape Park, with trails in Poloniny and nearby areas.

The lead partner is the Municipality of Belá nad Cirochou, the Slovak Republic (SR) with additional partners including: Caritas Diecezji Rzeszowskiej, Poland (PL); the animotherapeutic riding center Snina (SR), of team member Vladislav Juško; and the State Nature Conservation of the Slovak Republic, which is implemented through a subordinate unit, the Poloniny National Park Administration (SR). An estimated 100 kilometers of equestrian trails are proposed on both sides of the border. Other activities include the construction of a 'furmansky dvor' in Bela nad Cirochou, which is a traditional establishment for horses and people working in the logging and agriculture industry. The project is in progress.

Current plans, such as the abovementioned intered project, are an indication of the interest in equestrian travel as a form of recreation and tourism development in the region. The proposed PPT can further bolster the current intered project, as well as help the local equestrian organizations and municipalities to implement it. An equestrian center with stables in Snina (intered partner) has the capacity to lead excursions, day trips and tours; the missing link is adequate equestrian infrastructure and marked trails within the park, to make the experience safe, enjoyable, and viable. Furthermore, proper infrastructure, such as a marked trail network with equestrian—specific campsites, could also lead to the development of camps, workshops, and activities around equestrian travel.

## ADDITIONAL TOURIST ACTIVITIES

In addition to the principal activities of cycling, hiking, and horseback riding, the park can also be an appealing destination for all-terrain vehicle touring, cross-country skiing, dog sledding, river floating, and sport competitions, especially for running and biking. Dog sledding is currently popular in the Tatra Mountains.

#### **Events and Competitions**

Sports competitions, such as the 1,000-Mile Adventure Race, offer a strong potential for boosting tourism to the Park. The 1,000-mile race, which is open to mountain bikers, runners, walkers, and even paragliders, starts in Nová Sedlica in Poloniny Park. It is the best-known adventure race in the Slovak and Czech Republics, spanning the far reaches of the two countries, taking the adventurer

from Poloniny—the most eastern point in the Slovak Republic—to the far west of the Czech Republic (or vice versa, alternating every other year). The race is limited to 150 participants. Race coverage has been gradually increasing, with TV NOVÁ (CZ) covering the event since 2016. The race could be an advantageous way to promote the national park, as the race has a growing international following among adventure travel bloggers. In addition, it would be helpful to involve Peter Sagan, the Slovak international cycling champion and sports ambassador, in the competitions and trail promotions.

Other event possibilities include music festivals, such as the 'Rock pod Kameňom' in Snina, and locally themed food and dance festivals, such as 'Mestské dni Snina' (the city festival of Snina).

FIGURE 35 Peter Sagan at the Tour de Suisse, June 20, 2019



Cross-country and back-country skiing could be winter activities, due to the long winters, diverse terrain, and route network. The average snow cover in the park is up to 140 days per year, which is adequate for a stable cross-country skiing destination. With the development of overnight shelters along the route and other infrastructure, Poloniny could promote itself as a cross-country skiing location, as well as an adventure destination for back-country skiing. Briefly, back-country skiing is practically the same as cross-country skiing, except that the skis used are thicker, have metal edges, and use a more pronounced honeycomb pattern to prevent sliding on steeper, more varied terrain. They are also meant for traversing untouched snow, instead of following a groomed and maintained track, as is the case with cross-country skiing. Poloniny Park could gradually provide both a maintained and marked network of trails, while also allowing the more adventurous visitors to make use of the vast proposed trail network and infrastructure, and promote hut-to-hut back-country ski tours.

**Alpine ski touring** is one of the fastest growing sports in the Slovak Republic. As popular mountain ranges, such as the High Tatras, Low Tatras, and Fatra ranges, see more and more ski tourers on a yearly basis, ski tourers are looking for new areas to explore. Although Poloniny Park does not offer the same level of terrain as the other mountain ranges in the country, the region has been explored by ski tourers seeking adventure in the past few seasons. Ski touring usage of hut-to-hut routes, could be most appropriate for the north side of Poloniny, where the terrain is more interesting for the ski tourer. This form of skiing could perhaps lead to the development of more huts.

#### **Paragliding**

The national park of Poloniny has three officially designated paragliding takeoff sites, and one landing site within the park boundaries. The takeoff sites are one at Ďurkovec, and two on Malý Bukovec. The landing site is on the fields north of Runina. There is another takeoff site just west of Magurka peak, between Snina and Stakčín. The two takeoff sites on Malý Bukovec, and one site just outside Snina, do not have any marked hiking trails leading to these takeoff sites. Adding marked trails to pass through these areas, has the potential to attract visitors as spectators, or to simply enjoy the views from these ridges.

Since Poloniny is characterized by their fields on top of ridges, it would be beneficial to explore the park grounds and the region for further possible opportunities for the development of paragliding as an activity within the park.

#### **Mountain Bike Trails**

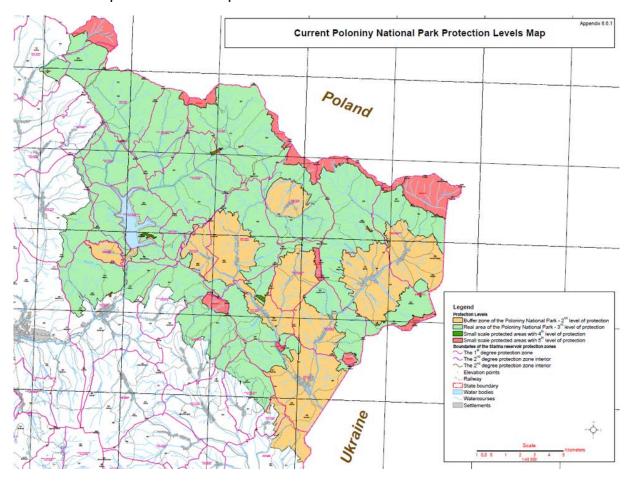
Mountain biking is one of the most popular summer sports in the Slovak Republic. Single-track mountain bike trails are being built on the outskirts of cities across the country, from Bratislava, Prešov, Kosice, Banská Bystrica, to Stará Ľubovňa and others. These projects are supported by the local municipalities, with civil society groups and informal volunteer organizations helping to build and maintain these mountain bike trails. Rural communities have also noticed the potential of single-track mountain biking trails to attract visitors to their regions. These trails are also an attraction on the outskirts of the Pieniny National Park, and in the recreational and thermal springs spa destination of Bardejovské Kúpele.

Given the growing popularity of this sport in and around the region, mountain biking offers a strong potential for boosting and supporting small businesses, such as restaurants and bars, as well as accommodations within Poloniny Park. Areas such as Sninské Rybníky toward Vihorlat, or areas north of Snina that are not within the national park boundaries, could also offer ideal locations for the development of single-track mountain biking trails, thus adding to the attraction appeal and diversity of the Poloniny region.

# **ZONING LAWS IN THE PARK**

Official zoning in the park is divided into five levels of protection, with the fifth level being the highest. Development is strictly prohibited in level five zones, and access by visitors is limited to low impact activities, such as hiking in certain areas along marked hiking paths leading up to Kremenec or Jarabá Skala, which pass through the natural reserves of Stužica or Jarabá Skala. In fact, over half the ridge of the Poloniny peaks marking the border between Poland and the Slovak Republic passes through level five protected areas, and is accessible only to hikers. The Poloniny Park Management Plan includes the following map, which delineates each level of protection.

FIGURE 36 Park protection levels map



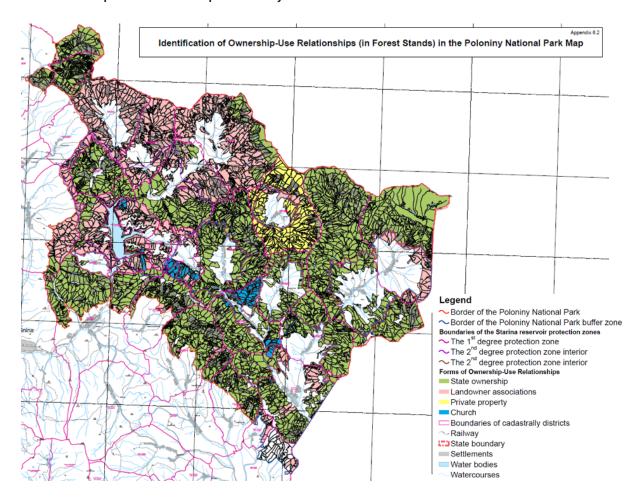
#### LAND OWNERSHIP DISTRIBUTION IN THE PARK

As the following map shows, land in Poloniny Park is divided between the state, landowner associations, private property, and the Church. While it appears to complicate the establishment of a continual Poloniny Park Trail, Peter Šiška, Director of the State Forestry and Agriculture Enterprise, and Mario Perinaj, Director of Poloniny Park, helped delineate a clear set of existing and potential trails, which would ensure that the Poloniny Park Trail and forestry activities are complementary and not in conflict.

While landownership is a potential challenge, private property ownership is not necessarily an obstacle to establishing the trail. Instead, landownership titles and distribution are understood as indicators of the stakeholders involved in realizing the PPT and its accompanying infrastructure. While private property may pose a challenge in certain cases, obtaining permission on sections of trail that serve no direct benefit to the owner are a viable means of mapping the trail and realizing it.

The PPT route has certain areas that require closer attention, due to the complexity of ownership rights. A next step is to evaluate the ownership titles, and address the stakeholders, for the possibility of using their land as part of the PPT. Most land in the park is owned by the state, and there are also a few landholder associations, as well as Church ownership in some areas. In areas outside the park, the situation is more challenging—many more parcels that have individual owners. Obtaining permission for the trail to pass through their property is an option that should be pursued. In case of not reaching an agreement, certain sections of the route can be diverted. However, it is important to note, the most unique and attractive sections of the park which are not yet marked (Ďurkovec—Uličske Krivé, and Príslop—Havešová—Ulič, and others) have been verified with key stakeholders, and have been thus far approved.

FIGURE 37 Map of landownership in Poloniny



## **IDENTIFICATION OF STAKEHOLDERS**

A range of stakeholders are and could be involved with the development of the park and a Poloniny Park Trail. These include:

- 1. Poloniny National Park
- 2. LPM Ulič (Forestry Organization)
- 3. State Water Management Company
- 4. Prešovský samosprávny kraj (PSK)—the Prešov Self-governing Region
- 5. KOCR (R-DMO)
- 6. OOCR (S-DMO)
- 7. Ministry of Environment, Ministry of Agriculture, Ministry of Culture
- 8. Mayors of Snina, Stakčín, and the park villages
- 9. Club of Slovak tourists (KST)
- 10. Local accommodation and restaurant owners
- 11. Private land owners
- 12. Park visitors and current trail users should also be considered stakeholders, especially cyclists, hikers, and horseback riders. Their feedback, perhaps through focus groups and surveys, would help develop the trails in ways that would appeal to other similar trail users.

# REQUIREMENTS FOR HIKERS, CYCLISTS AND HORSEBACK RIDERS

The ideal Poloniny Park Trail will be multiuse for as much of the trail as possible. Equestrian trails would not be compatible with cycling and hiking trails, although in parts they might be in parallel. Based on European Cyclists' Federation standards, width requirements for a multimodal tourist trail are:

- 1. Cycling trails: 30-180 centimeters
- 2. Equestrian trails: 60-240 centimeters
- 3. Walking and hiking: 45-240 centimeters

Natural and cultural scenery require that the trails pass through a variety of significant landmarks and offer a degree of physically challenging activities, such as cycling, hiking, and/or horseback riding. The trails should also provide solitude, and quiet time away from crowds, road traffic, and urban noise. These are closely in line with the principles of the U.S. National Park Service (NPS) and the National Scenic Trail Organization (NST) who state that "National scenic trails are continuous and provide access to outstanding scenery and natural landscapes, and link significant

**FIGURE 38** U.S. Forest Service trail management tools webpage

Source: https://www.fs.fed.us/managing-land/trails/trail-management-tools

natural and cultural features by means of simple pathways".

According to the U.S. National Park Service's guidelines, a network of trails should be closed to motorized access. They also emphasize that: "The trail experience [should be] multi-faceted...[offering] stimulation of the senses, a place for learning, a feeling of safety, re-creation for the soul, exercise for the body, and overwhelming satisfaction."5 The current network of cycling and hiking trails provides such an experience along limited sections, while some areas leave a negative impression, due to the route, and the limited information about the history of logging in the region, as well as the current lack of marked routes. For design requirements, the team has referenced the detailed requirements of the U.S. Forest Service, which provides multiple tools and references for optimal trail design. We recommend that their resources be consulted when designing the multimodal trail, as well as the individual activity trails.

## **HIKERS**

A good hiking trail, or any recreational trail for that matter, can be defined by a set of factors that need to be present. These factors are:

- 1. Natural and cultural scenery
- 2. Physical challenge
- 3. Solitude
- 4. Variety of experiences possible—culture, history, and nature

Hiking trail construction standards are generally based on the internationally accepted standards of the U.S. National Park Service, which ensure environmentally sustainable and safe trail construction. These standards require certain criteria to be met, such as slope gradient, maximum sustain gradient, corridor clearance, access, and cross slope. These standards conform with the standards of EU agencies and the State Protection Agency of the Slovak Republic (Slovak Environment Agency), as well as the Club of Slovak tourists—all of which will be used for the design of the hiking sections of the PPT.

Based on the U.S. National Park Service and U.S. Forestry Service standards, some specific trail requirements include:

- 1. Trail clearance should be at least 120 by 240 centimeters
- 2. Trail tread should be a minimum of 45 centimeters
- 3. Gradients above 10% should have steps, if possible
- 4. Sustained gradient should not exceed 10%, to prevent erosion
- 5. In flat sections, some gradient should be incorporated, to provide drainage of the tread
- 6. Marshy or wet areas should be avoided, or covered by a wooden foot path
- 7. Cross slopes should be used on steeper terrain, but should not impede the natural flow of water or hold water on the trail, nor exceed the sustained gradient

Pertaining to the infrastructure, hiking and backpacking requires certain amenities standards along the trail, for the PPT to compete with other national parks in the Slovak Republic and Europe.

- 1. Roofed rest areas should be located every 8-10 kilometers along the trail.
- 2. Multi-day hikes should have shelters every 14–25 kilometers depending on the difficulty of terrain and the expected time for crossing each stretch of trail.
- 3. Overnight shelters should be near water sources.
- 4. Amenities, such as an outhouse, table and benches, and designated fire pit, should be standard features for overnight shelters.

Trail markings in the Slovak and Czech Republics have existed since the mid-19<sup>th</sup> century, with some of the first hiking routes marked around the Štiavnické Vrchy near Banská Štiavnica in the 1860s. Turistické značkované trasy (TZT) is the standard method for marking trails and tourist infrastructure in the Slovak and Czech Republics. TZT markings are planned and systematically implemented in accordance with the Slovak Technical Standard—STN 01 8025 Tourist Marking. TZT also defines the exact parameters of movement through environmentally sensitive areas and high alpine terrain. The primary objective of TZT is to make interesting areas accessible and enable orientation in the field.

Hiking trail markings have a specific design, color pattern, and size, helping the tourist to navigate the terrain and be aware of their location at junctions. The standard marking of a hiking trail has four colors—red, blue, green, and yellow. Red represents long-distance trails, blue represents regional trails, green represents district trails, and yellow represents a connecting

FIGURE 39 Official trail markings



trail between other trails. The marking is a 10 by 10 centimeter square, with two horizontal lines on the outside, and one colored line in between the two white lines.

Trail markings should be placed along all intersections of the trail for easy orientation. Existing forestry road infrastructure and other trails along the path could make it difficult for the tourist to orient himself or herself without adequate markings. All trail junctions should have information signs, such as location, and a directional sign with expected travel time and destination location. Significant landmarks such as peaks, saddles, monuments, and so on, should also have signs stating the name of the location and elevation.

In the Slovak Republic, the KST is the main authority marking and maintaining hiking trails. For the development of the Poloniny Trail, they should be engaged as a key stakeholder for marking trails that will act as an extension of the Poloniny Trail.

FIGURE 40 A hiker in the Jarabá Skala nature reserve



Source: Peter Bujňák

# **FIGURE 41** U.S. Forest Service Design Parameters for Hiking Trails



#### esign Parameters

leaging Parameters are technical guidelines for the survey, design, construction, maintenance, and assessment of National Forest System trails, ased on their Designed Use and Trail Class and consistent with their management intent<sup>1</sup>. Local deviations from any Design Parameter may be stabilished based on trail-specific conditions, topography, or other factors, provided that the deviations are consistent with the general intent of the policiable Trail Class and the survey of the survey

Designed HIKER/P	Use EDESTRIAN	Trail Class 1	Trail Class 2	Trail Class 3 <sup>2</sup>	Trail Class 4 <sup>2</sup>	Trail Class 5 2
Design Tread Width	Wilderness (Single Lane)	0" – 12"	6" – 18"	12" – 24" Exception: may be 36" – 48" at steep side slopes	18" – 24" Exception: may be 36" – 48" at steep side slopes	Not applicable
	Non-Wilderness (Single Lane)	0" - 12"	6" – 18"	18" – 36"	24" - 60"	36" - 72"
	Non-Wilderness (Double Lane)	36"	36"	36" - 60"	48" - 72"	72" – 120"
	Structures (Minimum Width)	18"	18"	18"	38"	36*
Design Surface <sup>3</sup>	Туре	Native, ungraded May be continuously rough	Native, limited grading May be continuously rough	Native with some onsite borrow or imported material where needed for stabilization, occasional grading Intermittently rough	Native with improved sections of borrow or imported material, routine grading Minor roughness	Likely imported material, routine grading Uniform, firm, and stable
	Protrusions	≤ 24* Likely common and continuous	≤ 6" May be common and continuous	≤ 3* May be common, not continuous	≤ 3 ° Uncommon, not continuous	No protrusions
	Obstacles (Maximum Height)	24"	14"	10"	8"	No obstacles
Design Grade <sup>3</sup>	Target Grade	5% - 25%	5% – 18%	3% – 12%	2% - 10%	2% - 5%
Grade	Short Pitch Maximum	40%	35%	25%	15%	5% FSTAG: 5% - 12% <sup>2</sup>
	Maximum Pitch Density	20% – 40% of trail	20% – 30% of trail	10% – 20% of trail	5% – 20% of trail	0% - 5% of trail

Designed HIKER/P	Use EDESTRIAN	Trail Class 1	Trail Class 2	Trail Class 3 <sup>2</sup>	Trail Class 4 <sup>2</sup>	Trail Class 5 <sup>2</sup>
Design Cross	Target Cross Slope	Natural side slope	5% - 20%	5% - 10%	3% – 7%	2% – 3% (or crowned)
Slope	Maximum Cross Slope	Natural side slope	25%	15%	10%	3%
Design Clearing	Height	6.	6' - 7"	7-8	8"-10"	8' - 10'
Clearing	Width	≥ 24" Some vegetation may encroach into clearing area	24" – 48" Some light vegetation may encroach into clearing area	36" - 60"	48" – 72"	60" - 72"
	Shoulder Clearance	3" - 6"	6" - 12"	12" - 18"	12" - 18"	12" - 24"
Design Turn	Radius	No minimum	2' - 3'	3' - 6'	4' - 8'	6' - 8'

<sup>1</sup> For definitions of Design Parameter attributes (e.g., Design Tread Width and Short Pitch Maximum) see FSH 2309.18, section 05

Source: U.S. Forest Service Trail Design Parameters, October 2008

<sup>&</sup>lt;sup>2</sup> Trail Classes 3, 4, and 5, in particular, have the potential to provide accessible passage. If assessing or designing trails for accessibility, refer to the Forest Service Trail Accessibility Guidelines (FSTAG) for more specific technical provisions and tolerances (FSM 2350).

<sup>&</sup>lt;sup>3</sup> The determination of trail-specific design grades, design surface, and other Design Parameters should be based upon soils, hydrological conditions, use levels, erosion potential, and other factors contributing to surface stability and overall sustainability of the trail.

## **CYCLISTS**

Team member, Viera Štupáková, is a local cycling expert who has advised on the development, maintenance, and marketing of multiple cycling trails in the region. Her advice concerning cycling and cycle trail requirements is directly pertinent for Poloniny, especially in terms of the following sets of elements:

- 1. Route infrastructure
- 2. Services (accommodation, bike rental, restaurants, repair shops, and others)
- Marketing and promotion to target segments (via websites, brochures, maps, bookable offers, and so on)
- 4. Organization and financing for development and maintenance (coordination, assembly of funding, monitoring, and so on)

#### **Route infrastructure**

National route infrastructure standards should be respected to the extent possible. These are: STN 736110 Design of urban roads, Technical guidelines TP 07/2014 Infrastructure for cyclists, and STN 018028 Signage and marking of cycle tourist trails. Route infrastructure includes consideration of surface conditions, gradients, maintenance needs, asphalt road use, route attractiveness, and safety:

#### A. Surface conditions

- 1. The surface should be suitable for use by cyclists with any type of trekking or touring bike (mandatory), and preferably road racing bikes, children's bikes, and bikes with trailers (optional), in normal weather conditions during the local cycling season (mandatory).
- 2. The surface should be smooth and solid enough to ride, so it should either be asphalted or paved with another material, such as concrete, stone, or other. In exceptional circumstances, such as in a protected nature reserve, loose material may be used but should be consolidated (mandatory).
- 3. The preferred option is a good quality asphalted surface.

#### **B.** Gradients

- 1. High gradients (more than six percent on longer sections; more than 10% on shorter sections) should be avoided wherever possible (optional).
- 2. For daily sections that include more than a 1,000-meter elevation, alternative solutions (public transport with bike carriage or alternative routes) should be provided.

#### C. Maintenance needs

- 1. Clarify maintenance issues before investing in and developing routes. The responsibility for maintenance of infrastructure depends on the type of infrastructure and national regulations. It may vary from one section to another. Maintenance plans should include surface maintenance, surface cleaning, and the control of vegetation encroachment.
- 2. Regular surveys of the route infrastructure conditions and the precise itinerary are necessary.
- 3. The maintenance of signing should be coordinated at the national, or at least the regional level. It should include the repair and replacement of missing or damaged signs and posts.

#### D. Separation and/or inclusion with asphalt roads

- 1. Public roads: if the speed limit exceeds 30 kilometers/hour, the road should not carry more than 2,000 motor vehicles per day, preferably under 500 vehicles.
- 2. Shared lane marking, traffic reduction, calming measures, and speed reduction can all contribute to improving safety. In urban areas and roads with high levels of motorized traffic, 30 kilometers/hour speed limits are a good solution.

- 3. Cycle lanes separated from traffic, asphalted shoulders: cycle lanes beside public roads should not be located alongside roads carrying more than 10,000 vehicles units per day. In exceptional circumstances, the shoulder could not be asphalted.
- 4. Segregated cycle paths
- 5. Shared use cycling and pedestrian paths
- 6. Bridges, subways, and tunnels for cyclists and/or pedestrians
- 7. 'Cycle streets' for intensive cycling traffic and low levels of motorized traffic
- 8. Agricultural / forestry / water management roads

#### Attractiveness of the route

Include and connect cultural, historical, and natural sights, culinary, and/or other attractions, while avoiding unpleasant areas. Coherence and directness: provide uninterrupted route infrastructure, but link to attractions connected with the theme of the route and provide signing. Avoid unnecessary detours.

#### Safety

Separate from public roads with large motor traffic volumes and high speeds.

### **Signage and Marking of Cycle Tourist Trails**

Signage and marking of cycle tourist trails are defined in detail by the STN 01 8028 national regulation. The system consists of several elements and symbols, such as directional signs and information boards. The signage should be installed by a certified and licensed cyclo-tourist route market professional. Key elements include:

- 1. Painted signs are used in terrain to mark the route and are placed so that the route is always clearly indicated, even if damaged by vandalism.
- 2. Bi-directional signs are placed on places other than cycling signposts, for example, electricity poles or trees.

Cycling routes are classified by colored signs according to usage by road bicycles and mountain bicycles, length, and level of difficulty. For example, red signage represents long-distance cycling routes, of which about 30 are planned in the Slovak Republic, with the other colors representing regional routes. The Slovak Cycling Club Headquarters determines the classification and color coding.

#### **Road versus Mountain Cycling**



#### Road cyclo-tourism

Routes are passable on all bicycle types (road, trekking, and mountain bikes). Usually, they lead along asphalt or penetration roads, and use the second and third class road network, and/or hardened access and specific-purpose roads.



## Mountain cyclo-tourism

Routes are usually passable only on mountain or trekking bikes. Mostly, they lead along existing forest and unpaved roads with natural surfaces. These are the routes that require more advanced technical skills from cyclists.

#### Signage Coding for Trail Length



#### Red

Long-distance cycling routes leading through different districts or even regions. Most often, they lead through river valleys or mountain passes, with the aim to lead cyclists to the most interesting places of the country



#### Blue

Routes that are parallel to long-distance cycling routes through spaces away from the red routes



#### Green

Routes of local or regional level, sometimes thematic trails, usually used for short distances (up to 30 kilometers)



#### Yellow

Connecting lanes or routes between other cycling routes, or short diversions leading to various natural, historical, and technical points of interest

#### Signage coding for level of difficulty





Less demanding routes and circuits designed for learning to cycle. These routes require basic cycling technique and physical skills





More demanding sport circuits or cycling routes requiring good cycling skills and good physical condition





Difficult routes for serious cyclists who devote a lot of time to the sport. They must have mastered the cycling techniques and be in an excellent physical shape with lots of stamina. Routes of this type mostly lead along natural roads in mountain settings and are usually meant for mountain bikes

## **Design Parameters for Cycling Trails**

A useful tool for classifying the level of difficulty of cycling trails is the following table of design parameters from the U.S. Forest Service.

#### FIGURE 42 U.S. Forest Service Design Parameters for Bicycle Trails



Designed BICYCLE		Trail Class 1	Trail Class 2	Trail Class 3	Trail Class 4	Trail Class 5
Design Tread Width	Single Lane  Double Lane  Structures (Minimum Width)	6" – 12" 36" – 46" 16"	12" - 24" 36" - 46"	18" - 38" 36" - 48" 36"	24" = 48" 48" = 84" 46"	36" - 60" 72" - 120" 60"
Design Surface <sup>2</sup>	Туре	Native, un-graded May be continuously rough Sections of soft or unstable lead on grades < 5% may be common and continuous	Native, limited grading May be continuously rough Sections of soft or unstable tread on grades < 5% may be common	Native with some onsite borrow or imported material where needed for stabilization, occasional grading intermitmently rough Sections of soft or unstable thead on grades < 5% may be grades < 5% may be gream, but not common.	Native, routine grading with improved sections of borrow or imported materials Stable with minor roughness	Likely imported material, routine grading Uniform, firm, and stable
	Protrusions Obstacles	≤ 24° Likely common and continuous 24°	≤ 6" May be common and continuous 12"	≤ 3° May be common, not continuous 10°	≤ 3" Uncommon, not continuous	No protrusions  No obstades
	(Maximum Height)	6% - 20%	5% - 12%	3% - 10%	2% - 8%	25 - 55
Design Grade 2	Target Grade	8% - 20%	8% - 12%	3% - 10%	25 - 05	2555
CH III CH	Short Pitch Maximum	30% 50% on downhill-only segments	25% 35% on downhill-only segments	15%	10%	8%
	Maximum Pitch Density	20% - 30% of trail	10% - 30% of trail	10% - 20% of trail	5% - 10% of trail	0% - 5% of trail

Designed BICYCLE		Trail Class 1	Trail Class 2	Trail Class 3	Trail Class 4	Trail Class 5
Design Cross	Target Cross Slope	5% - 10%	5% - 8%	3% - 8%	3% - 5%	2% - 3%
Slope	Maximum Cross Slope	10%	10%	8%	5%	5%
Design	Height	6	00.	8	8-8	08.
Clearing	Width	24" – 36" Some vegetation may encroach into clearing area	36" = 48" Some light vegetation may encroach into clearing area	60" = 72"	72" = 96"	72" - 96"
	Shoulder Clearance	0'-12"	6" - 12"	6"-12"	6" - 18"	12" - 16"
Design Turn	Radius	2-3	3 6.	4-8	8" - 10"	8 - 12

#### **Services**

According to Viera Štupáková, optimal cycling trails include access to accommodation, bike rental shops, restaurants, groceries, and repair shops. Her recommendations for each of these service areas are as follows:

# Accommodation, food, drink, and attractions

- At least basic accommodation should be available at the start and end of every daily trail section (every 30–90 kilometers) (mandatory)
- Food and drink (at restaurants, cafes, and others) should be available in the middle of each daily trail section (every 15–45 kilometers) (optional)
- Cyclist friendly facilities, such as for safe bike storage, bike repair kits, laundry, and so on (optional)
- Training and awareness raising for service providers to become more cyclist friendly (optional)
- Label and quality criteria systems for cyclist-friendly services should exist at the national or regional level (optional)
- A range of standards available (for example, accommodation could range from campsites to hotels) (optional)
- Attractions (for example, museums, visitor centers, pools, and so on) and information centers with cyclist-friendly facilities (optional)
- Regularly updated database of services and attractions

#### **Rest areas**

- · Necessary if food and drink services are not provided frequently enough
- Can be provided by local enterprises or established locally
- Should have protection against sun and rain, toilet facilities and drinking water free of charge
- Can be combined with public art

# Bike repair, helpline, bike rental, 'pedelec' charging stations and bicycle centers

- Bike repair stations can be provided by private companies or as self-service facilities. They are required at intervals no greater than 150 kilometers (mandatory)
- Helpline: to help cyclists in emergency situations, telephone help lines, and technical rescue services can be developed in remote areas (optional)
- Bike and pedelec rental stations for holiday cyclists / remote areas (optional)
- Pedelec charging stations can be provided as a premium service, as this is a growing market segment and can attract new target groups (optional)
- Bicycle centers with a wide range of services (accommodation, bike rental and repair facilities, luggage transfer, and others) (optional).

#### Marketing and promotion

Information should be made available online, via mobile apps, and in print, for trip preparation and in-progress trips, via websites, brochures, and other means. Given that most visitors are, and will be, from Poland and the Czech Republic, it is important to include information about cycling opportunities in Poloniny in online portals, such as: www.mtbiker.sk, www.vitajtecyklisti.sk,

www.cyklopo.sk, and other sites for the Slovak Republic. In the Czech Republic, popular portals include: www.mtbs.cz, www.cyklistevitani.cz (directly linked to the Slovak version mentioned above), www.cykloserver.cz, and others. Comparable portals exist in Poland and should be included for marketing.

#### **EQUESTRIAN VISITORS**

"The beautiful view of the world provided from atop a horse is paid for by hard work and effort..."

According to the team's equestrian expert, Dr. Vladislav Juško, horseback riding requires some effort, but it is well worth the experience:

"Those who understand this," Mr. Juško said, "know that cooperation with an intelligent and enthusiastic horse that provides a means of transport is one of life's most joyous experiences. Equestrian travel leaves life-long memories with the traveler. Both exceptional and routine rides,

positive and negative experiences atop a horse form such strong emotions that later all seem positive. However, information and knowledge are needed to minimize negative feelings and danger, ensure the safety of both the horse and rider, and make the most of the beautiful views from atop a horse."

The Poloniny Park offers great potential for equestrian travel for both the beginner and the expert, but establishing safe and memorable experiences also requires addressing infrastructure gaps, such as: the availability of equestrian specific services and facilities on or near the trails, equipment needs, trail riding considerations, and overnight camping considerations. All of this should be in accordance with international equestrian standards. The following sections elaborate on these areas. Background on equestrian travel and horse section can be found in Annex 5.

FIGURE 43 Gaining experience in the field with an expert rider near Osadné



Equestrian travel entails a certain risk for which one must account. Replacement horses, accidents, poor weather, and other unforeseen incidents, mean that a horse guide must ensure that all clients have proper insurance and a thorough contract outlining the terms and conditions of equestrian travel.

#### **Infrastructure: Equestrian Specific Services and Facilities**

Ideally, there are commercial or public equestrian establishments with expert staff, equipment, and facilities available near, or at the trailheads. The most common type is the horse stable or ranch, in which an owner keeps and maintains their horses for equestrian activities. These establishments usually include an indoor and outdoor riding hall, dressing rooms, and restrooms for the riders. Some establishments also offer restaurants and/or cafes, accommodation, and activities other than riding as part of a vacation package. However, the most common are establishments with stables for individually owned horses, as well as horses of the stable owners. Accommodations are then usually in nearby hotels or chalets, and daily excursions are planned from the stable site, or transportation is planned ahead of time.

At the establishments, the following are recommended and/or required:

- 1. Stalls and boxes, plus their accompanying parts, such as: the saddle room, feed lot, and compost lot required for the proper care of horses
- 2. Dressing room, restrooms, and showers for clients
- 3. A riding lot of a minimum 20 x 40 meters in size
- 4. A certified guide, a veterinarian, and stable assistant for managing a facility of up to 20 horses
- 5. All required equipment for riding, and especially for safety, including the following:
  - a. Helmet
  - b. Riding whip
  - c. Saddle
  - d. Saddle accessories and its contents: raincoat, canopy and rope, waterproof blanket for horse, additional clothing
  - e. Left front saddle bag: horse grooming kit, spare horseshoes, hammer, straps, wire, and sewing kit
  - Right front saddle bag: toiletries, human and veterinary first aid kit, and personal needs
  - g. Left rear saddle bag: cooking utensils and supplies, and food
  - h. Right rear saddlebag: canvas or PVC water bucket, axe, and maps
  - Rear saddle supplement: Reserve bridle, halter, binder, belt, sleeping bag, oat reserves, and girth.

# **Trail Riding Considerations**

Juško also provided the following considerations for planning and choosing an equestrian route.

### Route planning and selection

- 1. When planning a route on a map, it is important to note the elevation profile, which can easily be done with most online outdoor specific mapping applications on smartphones or via an outdoor paper map, by calculating the distance and elevation for each section of the trail.
- 2. The trail corridor must be considered when planning a route, especially the rider's height. The trail corridor must be at least three meters in height and 1.6 meters in width. The height element is a safety precaution so that a rider or horse is not impeded by branches or other dangerous obstacles in the route corridor.
- 3. In selecting a route, it is important that the route parallels as closely as possible with the contour lines of the map. If the rider approaches the slope without constantly stepping down or up, then the horse is riding along the contour path. The closer the contour lines, the steeper the terrain, and the more distant the contour lines, the gentler the slope is.
- 4. Most marked hiking trails are also appropriate for horse riders. Certain obstacles on hiking trails, however, are not navigable by horse—weak bridges, ladders, stairs, and high alpine terrain.
- 5. Bridge considerations are especially important, since bridges for equestrian use require certain minimum standards not met by simple foot hiking bridges. The U.S. Forest Service has a concise guide on bridge requirements and other path requirements for the safe and secure design of equestrian trails, and should be referenced for designing equestrian-friendly features on trails.
- 6. Paved roads are also a consideration, since they can negatively impact horses' hooves and joints. A viable option which is healthier for the horse is for the rider to walk the paved portion dismounted alongside the horse.

# Classification of terrain difficulty and surface types

Vertical and horizontal route profiles have six rating levels, from zero for flat surfaces to five for inaccessible terrain:

- o-Very light terrain: represents riding compounds, pastures, and other flat terrain
- I—Light terrain: slight sloping with minimum requirements for guiding the horse
- **2**—Moderate terrain: rolling terrain with occasional shorter ascents and descents requiring increased horse guidance
- 3—Difficult terrain: long, steep ascents and descents, for good experienced riders
- 4—Very heavy terrain: steep ascents and descents, drops, steep slopes that can only be navigated by walking the horse by hand
- 5—Non-negotiable terrain: small foot bridges, stairs, ladders, and other elements that are impossible for horses to navigate

Surface types are categorized from 'A' (good base) to 'C' (unsuitable):

- A—Good base: can be galloped without restriction.
- B—Medium ground: harder or deeper terrain, can be trotted without trouble or galloped, but only for short periods
- **C**—Bad ground: hard or marshy terrain, unsuitable for galloping, limited trotting, frequent horse guiding by hand.

# **Overnight Camping Considerations**

Overnight camping trips by horseback are special experiences but they also have special requirements. Horses require feed, litter, and safe shelter. Wild camping with horses is not suitable for beginners, and should only be carried out by mature riders with well-prepared and well-trained

horses. Choosing a good camp location is no different from other types of travel. Some factors to consider are:

- 1. Place should be dry
- 2. Blocked from strong winds especially northern winds
- 3. Outside a forest preferably in an open field
- 4. Access to water
- 5. Barrier erected with adequate space for horses to move about, or at least ensure that they are tied properly
- The stall halter should still have a cervical strap to keep it from slipping off the horse
- 7. If the horse is already used to camping, the rope can be tied from the wooden stake to the horse's hind leg clip, so that they can roam and feed. In such a case, the rope should be rubber wrapped for a minimum length of 1.5 meters, to prevent injury to the horse from chafing. The rope should be at least seven meters long
- At least two hours are required to setup and disassemble a campsite during equestrian tours. The horse also requires this time to feed

#### FIGURE 44 Design Parameters for Equestrian Trails

Design Parameters

Design Parameters are technical guidelines for the survey, design, construction, maintenance, and assessment of National Forest System trails, based on their Designed Use and Irrial Class and consistent with their management intent", Local deviations from any Design Parameter may be established based on trail-specific conditions, topography, or other factors, provided that the deviations are consistent with the general intent of the applicable Trail Class.

Designed   PACK Al	Use ND SADDLE	Trail Class 1	Trail Class 2	Trail Class 3	Trail Class 4	Trail Class 5
Design Tread Width	Wilderness (Single Lane)	Typically not designed or actively managed for equestrians, although use may be accepted	12" = 16" May be up to 48" along steep side slopes 48" = 60" or greater along precipioes	10" - 24"  May be up to 48" along steep side slopes  48" - 60" or greater along precipioes	24" May be up to 48" along steep side slopes 48" – 60" or greater along precipioes	Typically not designed or actively managed for equestrians, although use may be accepted
	Non-Wilderness (Single Lane)		12" – 24" May be up to 48" along steep side slopes 48" – 60" or greater along precipioss	18" – 48" 48" – 60" or greater along precipices	24" – 96" 48" – 60" or greater along precipices	
	Non-Wilderness (Double Lane) Structures (Minimum Width)		60" Other than -bridges: 35" Bridges without handralls: 60" Bridges with handralls: 84" clear width	60" = 84"  Other than bridges: 36" Bridges without handrails: 60" Bridges with handrails: 84" clear width	84" = 120"  Other than bridges: 30" Bridges without handralls: 60" Bridges with handralls: 64" clear width	
Design Surface <sup>2</sup>	Туре		Native, limited grading May be frequently rough	Native with some onsite borrow or imported material where needed for stabilization, occasional grading Intermittently rough	Native, with improved sections of borrow or imported material, routine grading Minor roughness	
	Protrusions  Obstacles (Maximum Height)		≤ 6" May be common and continuous 12"	≤ 3° May be common, not continuous 6°	≤ 3" Uncommon, not continuous 3"	

	(Maximum Height)					
Designed PACK AI	Use ND SADDLE	Trail Class 1	Trail Class 2	Trail Class 3	Trail Class 4	Trail Class
Design Grade <sup>2</sup>	Target Grade		5% - 20%	3% - 12%	2% - 10%	
Grade -	Short Pitch Maximum		30%	20%	15%	
	Maximum Pitch Density		15% - 20% of trail	5% - 15% of trail	5% - 10% of trail	
Design	Target Cross Slope		5% - 10%	3% - 5%	0% - 5%	
Cross Slope	Maximum Cross Slope		10%	8%	5%	
Design	Height		8" - 10"	10"	10' - 12'	
Clearing	Width		72" Some light vegetation may encroach into clearing area	72" - 96"	96"	
	Shoulder Clearance		6" = 12" Pack clearance: 36" x 36"	12" – 18" Pack clearance: 36" x 36"	12" – 18" Pack clearance: 36" x 36"	
Design Turn	Radius		4" - 5"	5'-8'	6" - 10"	

<sup>&</sup>lt;sup>1</sup> For definitions of Design Parameter attributes (e.g., Design Tread Width and Short Pitch Maximum) see FSH 2009.18, section 05.

Source: U.S. Forest Service Trail Design Parameters, October 2008

<sup>&</sup>lt;sup>2</sup> The determination of trail-specific design grades, design surface, and other Design Parameters should be based upon soils, hydrological conditions, use levels erosion potential, and other factors contributing to surface stability and overall sustainability of the trail.

# GAPS IN THE PARK

To become a stronger, more sustainable destination, this report proposes the establishment of the Poloniny Park Trail, which builds on the existing set of disconnected trails, connects communities, and offers more cohesive visitor experiences that, in turn, would be more attractive to tourists and operators. However, to achieve this requires addressing several gaps, namely in infrastructure, services, and human resources.

#### INFRASTRUCTURE GAPS

Infrastructure gaps cut across a range of needs. These include shortages of international standard accommodations, shelters and rest areas along the trails, amenities such as ATM access and public toilets, transportation access, water, parking, visitor services, such as: restaurants, cafes, and grocery stores. Each of these gaps is described briefly below.

## **ACCOMMODATION**

One of the biggest challenges to generating more tourism to the region is the lack of accommodations—hotels, bed & breakfasts, and campsites with huts and shelters. Six websites were searched for available accommodations in the Poloniny region (within park boundaries and surrounding areas outside the park). Only one website—www.booking.com—was international, while the other five were popular Slovak booking websites (see legend).

Feedback from residents in Runina and Ulič confirmed that the lack of accommodations—both in buildings and tents—in the park poses a challenge for tourism growth. At Runina, visitors often set

**TABLE 2** Accommodation in and outside Poloniny Park

	# of accommoda- tion providers		Total Bed Capacity			
Within Park Boundaries						
Runina	2	3, 6	16			
Nová Sedlica	2	2, 3	24			
Ulič	4	1, 3, 5	60			
Park Boundaries Total	8		100			
Outsi	de Park Boundarie	s				
Snina	8	1, 2, 3, 4, 5, 6	300			
Stakčin	2	3, 5	60			
Osadné	1	3	10			
Ubla	2	3	30			
Outside Park Boundaries Total 400						
Total			500			

Legend: www.megaubytovanie.sk (1), www.ubytujsa.sk (2), www.lacneubytovanie.net (3), www.ubytovanie.sk (4), www.1-2-3-ubytovanie.sk (5), www.booking.com (6).

up their tents on the village fields, or even in people's backyards. In Ulič, two residents noted that tourists arrive in recreational vehicles or cars, see the local sights or go for a hike, and do not stay overnight, due to the lack of accommodation and other amenities, such as restaurants and bars.

Within the boundaries of the park, there is no official campsite to accommodate tents and recreational vehicles, only one makeshift site on the western side of the cadastral boundary of Ulič (coordinates 48.9823731N, 22.3965906E). Discussion with Jan Holinka, mayor of Ulič, confirmed that this site is maintained by the municipality. At present, it is a field with a roofed rest shelter and a fire pit, where recreational vehicles and campers can stay overnight free of charge, as there is no fee mechanism in place. Improved campgrounds could be a source of income for the village of Ulič. A possible option is to start with low-fee structures, due to the lack of available

amenities in the campsite. As amenities such as electricity, water, toilets, and so on are added, prices can be adjusted accordingly. Such an establishment could potentially start promoting local economic growth in the form of local services, such as: home cooking, souvenir sales, offering excursions, and other potential services. On the other hand, the municipality could potentially use the minor income generated to co-finance a campsite improvement project via potential public funding mechanisms from the EU or other programs.

As the Poloniny Trail passes through and/or connects villages within the park, it would be ideal for each village to designate a campground area similar to what is currently available in Ulič. Zoning laws outside municipal boundaries mean that such campgrounds would be much easier to establish within the municipal boundaries than outside of them. Provision of infrastructure in the form of utilities for campgrounds is more practical within the municipal boundaries, but is possible outside of it as well. Local engagement and cooperation, between and with, the municipal authorities and residents is needed to designate available space, access, utilities, and to provide visitor services.

Hypothetically speaking, if each municipality's campground could accommodate five recreational vehicles, 10 tents, and then gradually add four to ten four-person huts, the accommodations capacity would increase substantially, and become a reasonable income source for the municipalities. With 10 villages in the national park, and another 11 villages just outside of the park boundaries, accommodations capacity could increase to a more attractive level, and thus be a catalyst for local initiatives.

This type of approach could also expand on the Italian concept Albegro Diffuso (described and proposed in the Output 2 Report as an opportunity for Poloniny) and offer a variation of this concept in which camping and recreational vehicles stay overnight on municipal properties or private lands (with the owners' approval). It can spur further initiatives, such as food establishments and other hospitality services for visitors. This concept could evolve into an actual Albegro Diffuso model as visits into the park increase. This concept facilitates cooperation among all stakeholders, especially local government and residents, and small business owners and the s-dmos (OOCR), all of whom could participate in training workshops on how to maximize the benefits of this concept. Potentially, cooperation fostered among the s-dmos (OOCR), or some other entity and organization in Italy where this concept is in operation, could be a potential approach to knowledge sharing.

#### SHELTERS AND REST AREAS

Shelters and rest areas, including restrooms, are important amenities for trail visitors. Currently, there are 22 rest areas in the park, five of which are overnight shelters. Setting up tents is also common around the shelters, as their capacity is limited. There are three official places for pitching tents, all of which are near the overnight shelters. A full list of the shelters and rest areas, along with GPS coordinates and indications where water is accessible, can be found in Annex 3.

**TABLE 3** Rest Areas and Water Access

The following rest areas could be improved with the addition of access to water:

Location	<b>GPS Coordinates</b>	Type	Access to water nearby?
Starina reservoir	49.0426167N, 22.2615978E	Rest area	No
Runina	49.0788997N, 22.4007444E	Overnight hut	No
Runina	49.0733592N, 22.4053733E	Rest area	No
Runina	49.0750422N, 22.4081528E	Rest area	No
Runina	49.0709531N, 22.4065011E	Rest area	No
Ulič	48.9823731N, 22.3965906E	Rest area	No
Cisna (SK/PL)	49.1030000N, 22.4589333E	Rest area	no
Runina	49.0660033N, 22.3945239E	Rest area	Yes*
Ruská Volová	48.9640956N, 22.3758450E	Rest area	no

<sup>\*</sup>Yes, but requires improvement.

Mineral springs in the Slovak Republic are abundant, yet the challenge of adding water to these existing shelters is one of finding a source. The only open water sources in the park along the various hiking and cycling trails are in the form of natural springs or wells. In Runina, open water sources are 600–800 meters away, depending on the shelter. In such cases, improved signage could be an alternative to finding a water source or digging a well.

Within the national park, there are long distances without any shelters or rest areas. Many areas could use shelters and rest areas to add to the appeal of the park. Some areas that provide stunning scenery are at junctions requiring rest, yet lack rest areas. During trail inspections, the team found that along cycling route 016 following the Starina water reservoir towards Ruské, there were places that would benefit from a rest area or lookout tower. These are:

- 1. One specific location is at the junction of the main Starina reservoir and the sedimentation collection pond (coordinates 49.0731425N, 22.2458797E). The area provides beautiful views of the Starina water reservoir and is a potential spot for bird watching. The construction of a lookout tower, which would simultaneously bar access to the shores of the lake, would be a value-added feature for both the visitor and for the environmental protection of the reservoir (as visitors are known to jump the barrier to get a better view of the lake).
- A rest area would also increase the appeal of the proposed route along the Cirocha river bank (coordinates 49.0322842N, 22.2517806E).
- 3. Yet another area that provides stunning views and is considered a natural attraction is the hill-top of the Príslop transmission tower (coordinates 49.0429961N, 22.3032467E). The suggested Poloniny Trail will pass through this area as a hiking path, traversing the southern part of the park along the ridge towards Havešová. A lookout tower with an integrated overnight shelter would be ideal at this location. Although there is no water in the area, the nearest water source and grocery store is in the village of Príslop roughly 1.5 kilometers away. There already is a fire pit in the area. Slight improvements would make this an ideal overnight stop for travelers, who can stargaze and enjoy the views of the Starina reservoir and the surrounding hills.

Numerous such potential areas abound in the park. The following map outlines concise locations with potential rest areas or overnight shelters. These areas have been chosen for their aesthetic appeal and distances along the route, which meet the requirements of hikers, cyclists, and equestrian travelers.

Overnight shelters typically have outhouses in the vicinity as a standard hygiene amenity. Proposed overnight shelters in remote areas along the PPT should also include an outhouse. This would include shelters, such as those suggested near Veľká Poľana, Príslop transmission tower, near Havešová, and at the equestrian-specific campsites.

#### WATER

Access to potable water is essential for trail visitors. According to Mario Perinaj, Director of Poloniny Park, there are 17 improved springs that provide potable water in the Park. Some of these are not yet marked on hiking or cycling trails, but could become part of the Poloniny Trail. For example, the spring above Nová Sedlica (49.0482067N, 22.5397897E) is along the proposed route, and could be added as a source of potable water. In addition, among the improved springs, five are not surrounded by shelters or rest areas in the vicinity (two at Plaša, and two at Kremenec). However, these specific springs are located within the natural reservations of Stužica and Plaša. Therefore, the construction of a shelter is not viable. Furthermore, the nearest shelter and water from Kremenec is around five kilometers westward along the Poloniny ridge. This overnight shelter with a water source is optimally positioned for backpackers doing a multiday hike. Hence, improved water sources mainly lie outside the current trail network, with a few sources (such as near Ruské Sedlo) along existing routes, that could use minor improvements. A list of the 17 improved springs and their GPS coordinates can be found in Annex 4.

#### **RESTROOMS**

Public restrooms are a basic amenity provided in popular tourist destinations around the world. There are currently no public restrooms in the national park or municipalities in the park. A search on open street maps showed the nearest public restrooms are in Ladomirov and Kalná Roztoka, two villages outside the southern boundaries of the Poloniny Park. Restrooms are municipal matters and could be addressed by the municipalities directly, given available financing. Restrooms should at least be provided in all the villages containing significant cultural landmarks, such as the wooden churches, or Jewish and military cemeteries, as well as at starting points for popular hikes. Gradually, as tourism expands, public restrooms should be a feature of every village within the park or connected to the PPT<sup>6</sup>.

#### **PARKING**

Parking for cars, buses, and recreational vehicles is important for park visitors and has been a constraint because the park lacks parking both within and outside the municipal boundaries of the villages, as well as at natural and cultural sites outside of the municipalities. Consequently, the municipalities are missing an opportunity for revenue. Visitor levels are still low enough that parking is not yet an issue, but with the development of the Poloniny Park Trail, this is expected to become a challenge. Local feedback confirmed that bus parking is a requirement for villages with significant cultural and historic landmarks, such as the Jewish cemetery and wooden church in Topola. The same is expected for other villages in the park, especially in areas that would attract cultural tourists.

Viewpoints should receive special attention for parking, since these attract visitors. The viewpoint at Gazdoráň above the Starina water reservoir is one such popular attraction, since it attracts newlyweds for photographs, and busloads of tourists keen to see the beautiful view of the Starina water reservoir.

Parking is also a consideration for equestrian travelers seeking to explore the park for a day or more. In such a case, visitor parking would also need to accommodate horse trailers. The recommended equestrian specific campsites should be in proximity (500 meters) to parking lots, as is specified by equestrian travel standards. Cyclists who plan on spending a day or more in the park would also benefit from organized visitor parking lots, especially if they plan on touring the park vis-à-vis the planned shelters along the routes. Visitor parking is a value-added service, as it provides convenience and ease of access to different types of visitors and is a source of revenue for the municipalities.

# RESTAURANTS, FOOD AND BEVERAGES

Food and drinks are lacking in the park in two main respects:

- 1. Lack of restaurants, bistros, cafés, and bars
- 2. Lack of grocery stores and local food vendors

The ethnic Rusyn cuisine that is distinct to the eastern Slovak Republic is an attraction that deserves further development. 'Tatarčane perogies', for example, are a unique tradition and special treat made from buckwheat flour, and filled with 'tvaroh,' a type of cottage cheese. Other Rusyn specialties include: 'mačanka' soup made of mushrooms and sour cabbage juice, and 'holubky'—cabbage leaves filled with minced meat, rice, and other traditional ingredients. Yet even these two dishes, as well as local products, such as honey, syrups, and baked goods, are not easy to find in the region's restaurants.

Gaps in the Park 65

#### **Restaurants and cafes**

There is a disparity in the number of establishments providing food and beverage services between towns and villages; with the town of Snina offering more diverse options than the villages within and around the national park. Two of the highest quality restaurants are in hotels around the recreational area of Sninské Rybníky (where there are fishponds and a natural swimming pool). These restaurants receive relatively high ratings, both online and locally. Most other restaurants in the Snina area do not really cater to tourists, that is, opening from 11 am to 2 pm only during the weekday restricts business mostly to locals during lunch breaks. Many are also in Snina's industrial or residential areas away from the city center, thus also catering more to the local workforce during lunch breaks.

Other establishments in the Snina area, however, received mixed reviews. While there are good reviews for some restaurants, local cuisine is lacking. Traditional Slovak restaurants, such as a 'salaš' or 'koliba', which serve traditional meals, attract tourists in the Slovak Republic, but are lacking in the park and surrounding areas. A 'salaš' is a traditional sheep herding pasture with a wooden and stone ranch. Today, a 'salaš' is considered a restaurant serving traditional foods made mainly of sheep cheese, as well as other traditional foods, such as cabbage soup, providing a traditional atmosphere inside a log house. Similarly, a 'koliba' is traditionally a simple wooden structure used to house shepherds watching over sheep that has come to represent a type of restaurant in the Slovak Republic like a 'salaš'. Locals in the area will occasionally travel to the Polish side of the border to visit such establishments.

Within the national park boundaries, as well as in the villages just outside the park boundaries, restaurant, bar, and café establishments are lacking. One exception is the family-owned Penzion Kremenec in Nová Sedlica, which receives good reviews for its home-cooked meals and pleasant atmosphere. Several residents in Ulič, the park's biggest municipality, confirmed that restaurants are also lacking there, apart from the Restaurant Poloniny, which is part of the hotel with the same name.

The challenge in Poloniny and the region is not with quality, but with the stability of the visitor flow, as well as the number of establishments. They are challenged by the remoteness of these regions, no through traffic, and economic considerations.

#### **Grocery stores and food vendors**

Grocery stores and other food vendors are also lacking. Grocery stores are abundant in Snina, with such internationally recognized chains as Tesco, Lidl, and Billa that offer common Slovak products as well as international products. Such establishments are ideal for the hiker planning a multiday tour, or for a family travelling by recreational vehicle, and are convenient for residents as well. Within the park, a few small grocery stores can be found in select villages, such as: Ulič, Nová Sedlica, Zboj, Uličské Krivé, Kolbasov, and Runina, offering local products such as the previously mentioned 'tatarčane perogies'.

This presents both a challenge and opportunity—local products such as: 'perogies', juices and syrups, dried mushrooms, as well as other products—have enormous potential to promote the region and stimulate economic growth. Local foods are a key attraction for many travelers, especially adventure travelers, as they seek to immerse themselves in local cultures. According to a study conducted by the Institute for Rural and Regional Research (RURALIS), local products, especially food offered by an establishment or region, attract visitors to stay in destinations that otherwise might not be attractive.<sup>7</sup>

The s-dmo (Oocr) for the region, or some other entity, could help promote and sell locally produced goods, both food and souvenirs. Providing a platform for sharing best practices, knowledge transfer and promotion could help address the lack of awareness of local products, and inspire new ventures in food production, as well as with non-food products representative of the region.

# **TRANSPORTATION**

# Remoteness and access by car

The Poloniny Park lies in the northeastern part of the Slovak Republic, the most remote region in the country. One of the social cohesion challenges faced in the country is proper road infrastructure connecting regions, such as the Snina District, to other regions. An often-cited argument highlighting the disparities between the east and west parts of the Slovak Republic is the time it takes to complete the highway connecting the entire country. Poloniny faces such a challenge—access to the region is not only challenging from within the country itself, but also from bordering countries such as Poland. The nearest highway connection is 95 kilometers away in Prešov and Košice, with no fast roads beyond Prešov connecting to the region. The average driving time from Prešov or Košice to Snina is over 1.5 hours.

For tourists coming from Poland, the closest official border crossing is in Palota near Medzilaborce. The distance and travel time from the Polish border to Snina is 59 kilometers, and one hour of driving along side roads. The following chart outlines the average distance and travel time by car from selected cities across the Slovak Republic, the Czech Republic, and Poland to Snina.

Access to the region by car is a long-term challenge impacted by multiple social and economic factors. However, to improve access and traffic into the area, a possible border crossing between Poland and the Slovak Republic north of Osadné, could help improve cross-border visits, especially for the neighboring national parks. According to residents, Porta Rusica is actually utilized by tourists entering the Slovak Republic from

**TABLE 4** Driving distances and durations between Snina and other destinations

Starting Location	Distance	Trip Duration
Bratislava, SK	505 km	5h 45m
Žilina, SK	310 km	3h 48m
Banská Bystrica, SK	285 km	3h 46m
Prešov, SK	92 km	1h 35m
Košice, SK	98 km	1h 45m
Prague, CZ	722 km	8h 09m
Brno, CZ	518 km	6h 18m
Ostrava, CZ	416 km	5h 16m
Krakow, PL	277 km	4h 29m
Krosno, PL	118 km	2h 15m
Przemysl, PL	169 km	3h 12m
Rzeszow, PL	171 km	3h 15m

Poland by car, in order to access the park. A border crossing between Poland and the Slovak Republic, within close vicinity of the national park, should be taken into consideration for the long-term development of the region; it would also eliminate illegal motorized border crossings via Porta Rusica. Such a proposed crossing could pose a challenge to the ecological sensitivity of the region, but this could be managed. Most of the ridge on the border of the national park is part of the nature reserves of Udava, Šipková, Plaša, and others, while the area north of Starina, between Balnica and Ruské sedlo, is also protected grounds due to the Starina water reservoir, and is closed to road traffic, except by permit.

# **Access by train**

The Snina district is reachable via train, with Stakčín the end of the railway line. The following table shows the average travel times from the five biggest cities in Slovakia.

TABLE 5 Train travel times between Stakčín and other destinations

Starting Location	Trip Duration	Number of Transfers
Bratislava	7h 17m to 9h 5m depending on train	Minimum 3
Žilina	5h 26m to 6h 34m depending on train	Minimum 2
Banská Bystrica	6h 27m to 7h 44m depending on train	Minimum 4
Prešov	2h 34m to 3h 4m depending on train	Minimum 2
Košice	2h 17m to 4h 17m depending on train	Minimum 2

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Transfers and wait times could hinder increased travel by train, compared with car travel. Additionally, train station amenities in Stakčín are very limited, and may be challenging for tourists, particularly for ticket payments upon departure. At present, the traveler must have cash on hand to pay for train tickets departing Stakčín, as there is no card payment options available. The nearest bank machine is in Snina. This inconvenience is something that should be addressed in the future as tourism develops within the region.

#### **Access by bus**

Access from Stakčín railway station into the park requires bus service. From Stakčín to Nová Sedlica, for example, the distance is 37 kilometers. By bus, the travel time is 60 to 120 minutes depending on the bus, departing six times daily between 5:37 am and 7:43 pm. The challenge is that these buses are not equipped with bike racks, hence bikes are usually not allowed on board. However, bus coverage throughout the entire national park is good, as it covers every village, although not at the same frequency as the Stakčín to Nová Sedlica route.

A bus service, like other regions, could be a better model. For example, in central Slovak Republic, in the districts of Žilina, Banská Bystrica, and Zvolen, local bus service providers (sad Zvolen a.s. and sad Žilina a.s.) offer bike transfer services during weekends and holidays, from May until September, and during the winter season a ski bus service is offered connecting local ski resorts. These buses are also often used by hiking tourists, as many of these destinations offer great hiking routes.

These services are supported by the local self-governing regions and other regional organizations. SAD Zvolen a.s. is supported by the regional tourism agency (OOCR Stredné Slovensko), the national travel agency of the Slovak Republic, the Ministry of Transportation SR, as well as by the city of Banská Bystrica and the Self-governing Region of Banská Bystrica. SAD Žilina a.s. is also supported by the regional tourism agency (OOCR Turiec-Kremnicko), as well as the Malá Fatra Region Initiative, which is supported by a host of regional and municipal organizations, as well as the Ministry of Transportation SR. A similar engagement of local stakeholders within the Snina District may help improve transportation services within the region. The stakeholder s-DMOS (OOCR) Horný Zemplín a Horný Šariš could play a similar role within this region, with the improvement of their capacity to take on such a role.

For the Poloniny region, the local bus service provider, SAD Humenné a.s., also provides long-distance bus service. SAD Humenné a.s. could be a future stakeholder that serves as the premier bus service provider throughout Poloniny Park for transporting cyclists and hikers, similar to what is offered in the Žilina and Banská Bystrica regions. Additionally, their current long-distance routes do not cover the national park nor Snina. They offer one international route connecting Brno and Humenné via Košice, Zvolen, Nitra, and Bratislava. Its domestic long-distance national route connects Bratislava and Svidník, Humenné and Banská Bystrica, and Vranov nad Topľou, with various stops in between.

#### TOURISM DEVELOPMENT PLANS FOR THE PARK

A mind-boggling assortment of strategies, plans, and reports related to tourism development for the PSK and its sub-jurisdictions can be taken as a positive sign that there is interest at all levels in analyzing and planning for tourism development. There are also numerous challenges in attempting to take actions based on this assortment of documentation, which are listed in the next section below. This documentation includes:

- 1. Study of the Sustainable Development of Protected Areas in the NPP
- 2. Strategy for the Development of Tourism Products for Astronomy

- 3. Snina Tourism Development Strategy for Astronomy Products in the Polish–Slovak Border Region; December 2010
- 4. Strategy for Destination Marketing of Tourism in the Prešov Self-governing Region
- 5. Regional Economic and Social Development Program of the Prešov Self-governing Region (2014–2020)
- 6. Rural Development Program for the Prešov Self-governing Region
- 7. The Economic Development and Social Development Program of the Municipality of Ruský Potok for 2016–2025
- 8. The 2017–2025 Economic and Social Development Program of the Municipality of Ulič
- 9. The 2017–2025 Agenda for the Economic Development and Social Development of the Municipality of Nová Sedlica
- 10. The Economic Development and Social Development Program of Snina City 2016–2022
- 11. Action Plan for the Development of the Snina District (2019–2023)
- 12. A Community Plan for the Municipality of Nová Sedlica 2011-2021
- 13. The Runina Economic Development and Social Development Program for 2016-2025
- 14. The Concept of Development of Tourism in the Upper Zemplín Region; 2012
- 15. Tourism Development Concept of Snina for the period 2012-2021
- 16. The Integrated Territorial Development Strategy for the Country Action Group 2009–2015
- 17. Tourism Action Plan for the Municipality of Zemplínske Hámre
- 18. Strategy for the Sustainable Tourism Development of the Carpathians
- 19. Poloniny National Park Management Plan for 2017-2026

In addition, the Tourism Support Act (2010), the Regional Destination Management Organization (R-DMO/KOCR), and the representative local offices (reporting to the R-DMO) in the PSK, can all be positive stimulants for tourism demand and enablers for tourism development, investment, and business. The interest in tourism and leadership of the PSK Executive, the mayor of Snina, and the mayors of the municipalities in Poloniny, along with energizing entrepreneurialism, can be the catalysts for building the necessary consensus for tourism development.

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# RISKS, CHALLENGES, AND OBSTACLES

Developing the Poloniny Park Trail is fraught with risks, challenges, and obstacles, but the team believes that these are outweighed by the overall opportunities for developing and leveraging the trail and the park into a significant adventure and experiential travel destination. The following sections summarize both sets of factors.

Development of the Poloniny Park Trail is faced with several risks, challenges, and obstacles, especially in terms of public and private sector administrative resources, financing of developments and projects, human resources, landownership, and infrastructure. The following section summarizes some of these factors.

#### **ADMINISTRATIVE RESOURCES**

- 1. Public sector: the Poloniny Park management office's responsibilities could expand with the establishment of a formal Poloniny Park Trail. Coordination with the public authorities in Stakčín, Snina, and the PSK office, as well as with the local municipalities and associations, could help.
- 2. Private sector: stimulating the growth of microenterprises—such as homestays, restaurants, cafes, bars, bicycle rental, and others—will require some training and capacity building of business management skills, such as accounting and hospitality skills, especially for new microenterprises.

#### **FINANCING**

The current EU structural funds phase is due to expire in 2020, so a new phase will need to be allocated. This is both an opportunity and a potential challenge, but also timely for proposing new sustainable activities, such as expanded tourism, particularly the trail. Related to this is proposing, identifying, and/or responding to EU calls for proposals, which could result in financing developments. Currently, the capacity to respond has generally been lagging or insufficiently organized among the small and medium enterprises (SMES), municipalities, local and regional enterprises.

#### **HUMAN RESOURCES**

The main industry in the area is logging via the LPM Ulič Forestry Organization, where the average age of their 200 or so workers is above 50 years. This means many will be retiring over the next five to ten years. These workers are not being replaced. As Peter Šiška explained, forestry work is not attracting younger workers, so there is a growing need for workers, but the organization's forestry operations will become more difficult to continue, with an increasingly smaller workforce. As tourism grows, there is a strong potential for the organization to play an increasing role helping to manage and develop tourism, with the Poloniny Park Trail being a core component. This could help the organization survive, perhaps more as a destination steward.

## **LANDOWNERSHIP**

Landownership is not necessarily seen as a roadblock to the proposed route. Land titles indicate the stakeholders who should be involved in the design and implementation of the PPT and its accompanying infrastructure. Next steps require a close review of the cadastral database, so that a clearer ownership map can be developed. For now, it is enough to state that, as the map shows, there are several types of ownership throughout the park. The map (Figure 45) shows the multitude of parcels delineated (by green boundaries) for a five kilometer route.

According to cycling infrastructure expert and team consultant, Viera Štupaková, addressing access for passage through parcels is common in the mapping, designing, and implementation of cycling routes. In the next phase, it will be necessary to work with these numerous stakeholders, by presenting the trail route design and benefits for the region, where the trail crosses through their parcels. A database with all the individual parcels, ownership titles, and entity type, will be a valuable tool for stakeholder engagement.

**FIGURE 45** Parcel ownership along the route from Vel'ka Pol'ana to Hodošik.



# NEXT STEPS AND KEY RECOMMENDATIONS

This preliminary analysis identified several gaps, especially regarding infrastructure. Addressing them would improve and better connect segments and, in turn, increase ways for the local communities to benefit from the trails. Our recommendations address the trails as a whole, as well as, for specific segments. While these are outlined in the order of importance, they should be viewed as complimentary and mutually reinforcing.

# RECOMMENDATION #1: IMPLEMENT 'POLONINY PARK TRAIL PROJECT'

Poloniny Park offers enough trails today to be a system that could be designated as the Poloniny Park Trail Project, so that potential trail users, community hosts, and tour operators could begin thinking of Poloniny as a distinct destination for hikers, cyclists, and horseback riders. Launching the project immediately could generate momentum and interest in the trail concept, and thus help launch a program to implement improvements and marketing.

# RECOMMENDATION #2: FINALIZE MAPPING

In conducting the mapping, the team built on the base of existing maps, especially from the Poloniny Park Management Plan. They identified multiple needs and opportunities, including many route variations beyond motorized roads. These variations offer possibilities to experience the many diverse cultural and natural attractions throughout the park, as well as help improve connections between the communities.

To finalize the mapping, the following related activities are needed:

- 1. Work with stakeholders in providing more precise identification, and the prioritization of infrastructure needs along the most accessible sections of the trail
- 2. Define priority segments that are readily available to be promoted as the Poloniny Trail
- 3. Work with equestrian, hiking, and cycling experts to classify trails based on the levels of difficulty for each activity and type of attraction, as well as the scenic possibilities. This classification should be conducted according to accepted national and international standards and criteria
- 4. Work with the municipalities of Snina and Stakčín to complete the route along the Cirocha River into Poloniny Park, separating it completely from motorized traffic

# RECOMMENDATION #3: CONSENSUS ON QUALITY TRAIL DEVELOPMENT AND MAINTENANCE STANDARDS

Standards and a set of criteria for meeting quality trail standards must be defined and agreed on by all stakeholders and entities involved in both the realization of the trail and its future maintenance. Defining trail design, construction, and maintenance standards are a key component of the next phase of this project.

Achieving a consensus among stakeholders on the quality trail standards is a critical starting point for developing a sustainable, high quality Poloniny Park Trail. Trail standards are dictated by the national Slovak technical norms, such as STN 018025 (hiking), and STN 018028 (cycling). These STN guidelines serve as a template for marking trails. The trail quality standards from organizations such as the U.S. National Park Service and the U.S. National Forest Service, and the European Ramblers Association, can also assist with the design, construction, and maintenance of high quality trails.

# RECOMMENDATION #4: STAKEHOLDER CAPACITY FOR TRAIL DEVELOPMENT

Identify stakeholders based on their capacity to implement infrastructure improvements on selected sections of the trail, and address the gaps in infrastructure. There are multiple levels of capacity, ranging from the SME and individual entrepreneur, such as accommodation and restaurant establishments, and local landowners, to the regional nonprofit organizations and NGOS, as well as reaching across to the other end of the spectrum comprised of regional agencies, municipalities, the state forestry agency, and the national park administration, among others. Defining the specific capacities of each stakeholder is necessary in order to identify the financing mechanisms available for the realization of the PPT, and to address the infrastructure gaps. Defining stakeholder capacity sets expectations of duties and responsibilities, and enabling strategic planning to realize the individual features of the proposed project. It also sets tasks and a realistic timeline for achieving the numerous aspects of the PPT and rectifying the infrastructure gaps. This activity is vital, because it sets the volume of work that the various stakeholders can take on, as well as allows for strategies to help develop capacity in areas that are lacking it.

As an example: trail construction and improvement are one aspect of capacity, while trail maintenance and service to maintain quality standards, are a second aspect of capacity. Infrastructure gaps, such as a lack of accommodations and public restrooms, are a different set of priorities. Additionally, capacity is also defined by jurisdiction: the PPT is a network of trails, both within the park boundaries and outside them that crosses different lines of jurisdiction, such as state-owned lands, municipal boundaries, and areas with different levels of environmental protection. With this in mind, defining capacities helps create cooperation and establish partnerships for the project implementation, and demarcates the project into specific tasks and milestones, based on the stakeholder capacity. Defining stakeholder capacity sets the stage for the organization and coordination of individual tasks.

# RECOMMENDATION #5: ORGANIZATION

Identify a local organization to coordinate development of the trail among stakeholders, or develop an action plan for the establishment of a new organization or association (like the association that was established for the Lebanon Mountain Trail). This organization would have the following functions, among others:

- 1. Coordination of trail improvements
- 2. Coordination with the local communities on the funding of trail improvements
- 3. Tendering / public procurement to find external capacities, if necessary
- 4. Implementation of every route component (infrastructure, services, marketing, and organization)
- 5. Coordination with the Forestry Organization and Park Administration on maintenance and operations

**Poloniny Adventure Center**, such as the National Outdoor Leadership School (NoLs) described in the Output 2 Report, could serve the dual functions of an administrative center for the trail, as well as a capacity-building base for local people interested in expanding their nature-based tourism skills, and an international outdoor skills and leadership center.

NOLS participants have included secondary and university age students, government agencies, including NASA, military, and firefighters. They have also become a course elective in several prominent MBA programs, such as the Columbia Business School, Haas School of Business, Wharton, and the Yale School of Management. Participation in NOLS centers around an educational adventure in the wilderness that can last anywhere from one week to several months. The adventure is led by expert instructors, who teach the participants outdoor skills, such as backpacking, rock climbing, kayaking, and wilderness survival. The expeditions are conducted from 16 centers around the world, including: East Africa, India, Mexico, New Zealand, Patagonia, and Scandinavia. Aside from the center in northern Sweden, 140 miles above the Arctic Circle, no other NOLS centers exist in Europe. The shorter expeditions, such as the 14-day sailing program in New Zealand, or the 14-day Tanzania wilderness experience, also serve as educational tourism offers ('Edu-tourism').

# RECOMMENDATION #6: FINANCING AND INVESTMENT

Assist local stakeholders with identifying and securing public- and private-sector financing and investment sources, especially among the European Union Structural Funds. This calls for monitoring the developments in financing and investment schemes available for the various stakeholders, and determining strategies for cooperation in project proposal design. Financing and investment opportunities that are tailored to the different components of the project will be identified. For example, stakeholders such as LPM Ulič, could be the lead partner in trail improvement projects; and local NGOs or SMES could seek microfinancing call opportunities to address certain gaps in the infrastructure, such as accommodation or equestrian campsites. The important step is to identify the various options available and the mandatory terms required to participate in the various available financing schemes.

Effective communication is essential across different levels of government, such as: the municipalities within the Poloniny region, the PSK at the regional level, as well as the ministries or state agencies that issue structural funds for development projects at the national level. Communication sets expectations and helps to effectively determine the short-term and long-term impacts of investments in the infrastructure gaps, and the tourism development of the region. Identifying financing and investment opportunities, while simultaneously working with the various levels of government

and the stakeholders, will also identify risks early on. Finding financing opportunities for building the trail will not turn Poloniny into a fully viable travel destination, if the gaps in infrastructure, such as basic amenities (public restrooms, parking, and so on), are not addressed simultaneously or beforehand, due to a lack of funding in these areas.

# RECOMMENDATION #7: USAGE MONITORING

Assist the Park Administration and Forestry Organization with establishing a system for monitoring trail usage. This could include a visitors' entrance, visitor registration, and technology for counting visitors at trail heads (like automatic counters), visitor surveys, road traffic volume, visitor parking data, and so on. The current expected annual visits, hovering between an estimated 15,000–40,000 visits, is too large a disparity for a proper analysis to develop strategies and track progress. The development of usage statistics will help determine the strengths and weaknesses of various marketing strategies and infrastructure developments, reveal areas of improvement, and help complete a comparative analysis with other travel destinations in the Slovak Republic.

# RECOMMENDATION #8: PRODUCT DEVELOPMENT, MARKETING AND PROMOTION PLANS

Develop and implement a Poloniny Park Trail Marketing Plan that includes product development, marketing, lobbying, and promotion in domestic and selected international markets. This recommendation would result in improved park information online, in broadcasting, and in print, especially about the trails. This would also include the dissemination of information to key target groups (such as residents, potential visitors, investors, and tour operators).

Marketing activities could include product development and improvements, sporting events, such as the '1,000-Mile Race,', cultural events, such as the 'Rock pod Kameňom' concert, City Days of Snina, mountain bike competitions, the increasingly popular trail runs, mini-marathons, and ATV trails, and others.

During trail inspections and meeting with the locals, it was discovered that all-terrain vehicle (ATV) riding is a popular activity in the region. Locating a viable designated area for ATV trails outside the park boundaries could help raise the attraction of the region for niche groups, such as ATV or off-road motocross riders, as well as the local population. An ATV designated trail network could also be an attraction to visitors looking for specific activities during their vacation. As part of this overall recommendation, an evaluation of potential sites for ATV-only trails should be conducted in accordance with the zoning laws and private property rights, and the main entity and stakeholders that would be responsible for the implementation of this network of trails should be defined.

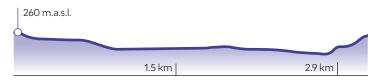
# RECOMMENDATION #9: IMPROVE ACCESS BETWEEN POLONINY, POLAND, AND THE UKRAINE

Creating access from Poland could commence with a feasibility study that looks at the possibility of extending the Balnica small-gauge rail network across the border into the Slovak Republic via Vyšná Jablonka, with the final destination in Parihuzovce, or some other nearby location.

FIGURE 46 Map showing trail access between Poloniny and Ukraine



Distance: **5.846 km** Altitude profile: **对 107 m ¥ 140 m** 



From the Ukraine side, there are a few options that could increase tourist travel between the Ukraine and the Slovak Republic, as well as make the region attractive for long-distance cycle tourers. A possible and relatively simple connection could continue via Ulič into the Ukraine for cycling and foot traffic only. Road infrastructure would only require slight adjustments. Additionally, this passage has been approved by the PSK and the regional municipalities. With the Poloniny Trail, this option should be renewed in order to join the two sides, especially since they share a common history. Another connection point with the Ukraine is to connect the cycling route 8879 from Ulič to Ruská Volová with Brezovec. While it is possible to access the border crossing of Ubľa from Ruská Volová, the proposed connection would reduce the travel time significantly and add Brezovec to the trail network of the region.

# RECOMMENDATION #10: DEVELOPMENT OF REGIONAL TOURISM INITIATIVES

#### Nature school for children

In 2014, a local sports organization, VOUK, began a summer camp for youth focused on outdoor survival such as camping in the woods and teaching outdoor survival skills. Now entering its sixth year, over 280 children have enrolled in this year's camp, including children from foster homes. The organization is looking to expand summer camps focused on various themes, such as a camp reliving the traditional life of the Poloniny region, adventure camps for families, a treetop adventure park, and other possible initiatives.

The fact that interest in such activities is growing in the region is testament to the potential opportunity to work with organizations such as VOUK, other similar organizations, and regional stakeholders in developing the capacity for a permanent establishment such as a nature school for children or an adventure center, as mentioned in recommendation #3. To further develop this initiative requires identifying all stakeholders and assessing the organizational requirements.

## Local food production and cuisine promotion

A region and its culture are in part defined by its cuisine. There is a need to work with local food producers, the s-dmo (Oocr), and other relevant stakeholders to devise strategies to promote local food production and cuisine. Local cuisine has its own specialties, as mentioned in the infrastructure gaps section of this report. The region is home to some local food producers specializing in items such as buckwheat 'perogies' and syrups. These opportunities could be further developed to not only benefit tourism but also the local economy, and be a source of pride for the region.

#### **Mountain biking trails**

Develop MTB single track trails around the Sninské Rybníky area, or elsewhere around Snina. The number of these trails are growing rapidly throughout the Slovak Republic and they could help increase visits to the region. A possible location around Sninské Rybníky provides easy access to the natural swimming pool, campsite, and two hotels in the area. Ideal locations need to be evaluated for such a trail network.

#### **ATV Excursions**

During trail inspections and meeting with the locals, it was discovered that all-terrain vehicle (ATV) riding is a popular activity in the region. Locating a viable designated area for ATV trails outside the park boundaries could help raise the attraction of the region for niche groups, such as ATV or off-road motocross riders, as well as the local population. An ATV designated trail network could also be an attraction to visitors looking for specific activities during their vacation. As part of this overall recommendation, an evaluation of potential sites for ATV-only trails should be conducted in accordance with the zoning laws and private property rights, and the main entity and stakeholders that would be responsible for the implementation of this network of trails should be defined.

### **CONCLUDING SUMMARY**

Based on the team's activities in June 2019—trail inspections, mapping, meetings with the stakeholders, and evaluating the gaps in infrastructure—the current modest network of Poloniny Park Trails with their multiple cultural and natural attractions are enough to package and market as a distinctive adventure travel destination that attracts more visitors from the targeted markets. Nonetheless, as described and mapped as extensively as possible above, the park trails as a network are analogous to a piece of Swiss cheese, with some holes here and there. These gaps or holes need to be filled for a complete 'piece of cheese,' a complete destination, to appear. Improvements that will fill in the gaps are certainly needed. Such improvements would make the Poloniny Trail an even more attractive and competitive destination, but these upgrades can be phased in as the capacity among the local stakeholders to help implement and maintain the advancements growth. The team found great interest across a wide spectrum of stakeholders and residents to make the necessary changes and further develop the Poloniny Trail.

Some improvements are already underway, such as the restoration of selected cultural and historical attractions, including the 18<sup>th</sup> century wooden churches, military cemeteries, the Porta Rusica trade route connecting Poland and the Slovak Republic, and development of equestrian trails. These improvements are not yet enough to transform Poloniny into a destination which meets international standards. To make this destination meet the required standards, the following needs to be addressed:

- 1. Provide basic public amenities such as parking, public restrooms, and ATMS
- 2. Provide adequate public transit equipped with bike carriers
- 3. Provide support for the establishment and/or improvement of restaurant, bars, and accommodations providers in the national park
- 4. Provide adequate rest areas on the trails
- 5. Improve the surface quality of trails, and repair or replace damaged trail markings
- 6. Expand knowledge of the history of the forestry industry
- 7. Increase targeted marketing and promotion
- 8. Equip the regional dmo to plan and conduct the marketing and promotion  $\boldsymbol{\theta}$

By addressing these and other gaps, the Poloniny Park Trail can become an internationally competitive high-quality adventure travel and cultural tourism destination. The Park's unique culture and cuisine, history, natural splendor warrant a visit, regardless of its remoteness and underdevelopment.

This uniqueness must be communicated as a unified local narrative, such as what is successfully presented in areas like the Malá Fatra and Banská Štiavnica regions described in the annexes. This narrative must be backed up by adequate infrastructure, if the region is interested in making the leap to the next level of tourism development. Hence, the Poloniny Trail can be regarded as a key initiative to address socio-economic issues targeted by the Catching-Up Regions Initiative. In its final vision, the PPT is not just a narrow tourism initiative, but an opportunity for the region to diversify its economic activities and engage its local inhabitants in the development of their region.

Addressing these gaps also means developing and improving the product offers, such as the trail and related offers. These include the following:

- 1. Improvement of the existing hiking, cycling, and equestrian trails, as well as the development of new ones that are clearly mapped.
- 2. A Poloniny Park Adventure Center, which could include a nature school for children and an establishment similar to the National Outdoor Leadership School in the U.S.
- 3. Development of single-track mountain biking trails
- 4. Development of specials for all-terrain vehicles (outside the park boundaries)
- 5. Development of ski touring and cross-country skiing for the winter season
- 6. Development, marketing, and promotion of festivals and sporting events

Addressing the gaps and achieving these product developments can only be achieved by working and cooperating with the numerous stakeholders in the region, and by identifying appropriate funding opportunities to implement the PT vision. In conclusion, the Poloniny Park Trail offers the opportunity to generate this cooperation, fill in the 'holes', literally and figuratively, and transform the park and the eastern Slovak Republic into an internationally competitive adventure and cultural destination of high quality.

# **ANNEX 1:**

# EXAMPLES FROM OTHER NATIONAL PARKS AND NATURAL AREAS ACROSS THE SLOVAK REPUBLIC

# BANSKÁ ŠTIAVNICA – ŠTIAVNICKÉ VRCHY

### **Key Strategy:**

The town and protected landscape attract visitors through combined sport and cultural activities.

Banská Štiavnica is a historic mining town located in the central Slovak Republic in the designated protected natural landscape of Štiavnické Vrchy (77,630 hectares). The town is a UNESCO world heritage site located in a picturesque valley surrounded by rolling hills. There is a cavalry church overlooking the town, which has the world's first and oldest mining school, as well as numerous other cultural attractions. The surrounding countryside of Banská Štiavnica is characterized by historic mining villages, mountainous landscapes, and a unique network of 'tajchy'—essentially, constructed water bodies that served the deeply rooted mining heritage of the region. Today, mining has long ceased in Štiavnické Vrchy, and its new major source of income is tourism.

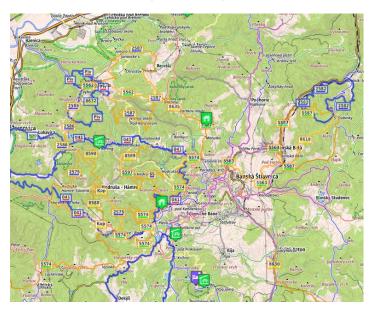
One of the most successful strategies in the Štiavnické Vrchy region combines culture with sport. The project is known as 'Bajkom k tajchom', meaning by bikes to tajchs (mining water reservoirs). The area is already abundant in hiking trails. With this latest project, total marked cycling routes exceed 250 kilometers, with many of them designed as circuits or connecting routes to other trails. Additionally, very few new trails have been built, since the majority of the marked cycling trails make use of the existing forestry road network, as well as pass through the villages with cultural and historical significance, sharing the road with road traffic in certain sections. A civil society group maintains the trails, as well as proposes the design of new trails. The trails pass

through numerous landmarks such as mining infrastructure, tajchs, natural landmarks, and cultural landmarks.

Hiking trails are well designed and marked. They also make use of some shared trails with cyclists and connect to significant cultural, historical, and natural landmarks, including Sitno, the highest peak in the region with castle ruins on top.

The town of Banská Štiavnica hosts many cultural festivals throughout the summer months, from film to music and art. In 2019, the town is a designated European City of Culture. The region has done a great job at merging cultural with natural attractions and is currently one of the premier tourist destinations in the entire country. The Štiavnické Vrchy region, with Banská Štiavnica at its core, serves a wide array of travelers beyond the adventure traveler.

FIGURE 47 Map showing 'bikes to tajchs' routes



Annex 1 83

# NP VEĽKÁ FATRA AND MÁLA FATRA

#### Key strategy

Leverage the legend—A local legendary Robin Hood-type figure has become the source of a range of cultural events, attractions, and activities in the backdrop of a national park characterized by grassy mountain tops with unique rock formations.

The national parks of Veľká Fatra and Malá Fatra (23,262 hectares) are in the central and north central Slovak Republic. As far as tourism is concerned, Malá Fatra is far more developed than its counterpart to the south. Malá Fatra offers skiing in the Vrátna valley resort. It is also a popular ski touring destination offering a vast variety of backcountry skiing terrain, from tree skiing to above tree line chutes and rolling hills. In the summer, hiking is by far the most popular activity, as many hikers from the Slovak Republic and neighboring countries hike the entire Malá Fatra ridge totaling roughly 35 kilometers, starting in either Terchová or Zázrivá, and finishing by the river Vah in Strečno. The hiking trail network of the region is very well marked and diverse, offering overnight hikes of multiple route options, with a popular mountain chalet 'Chata pod Chlebom' as a central destination, as well as one day hikes or nature trails. Janošíkove Diery, a deep gorge with a stream flowing through is the most popular route in the park. Furthermore, the peak Veľký Rozsutec is considered to be one of the most beautiful peaks in the country.

Cycling and horseback riding are also becoming popular activities in the region. Zázrivá, a village well known for traditional cheese production, also offers agritourism and horseback riding in the region. According to monitoring activities by the park's management office, the Vrátna valley receives around 3,000 visitors per day, while Janošíkove diery is the most common destination in the park, welcoming a total of over 100,000 visitors in a two-month period.

The region has also done a great job at promoting its cultural heritage. This region is famous for the folk legend of Janošík, a sort of Slovak version of Robin Hood. Janošík was a bandit who stole from the rich and gave to the poor, and most often outwitted the law, until his eventual capture in the village of Valašská Dubová. The village of Terchová, Janošík's birthplace, is also the center of Terchová. It uses this legend to its advantage to promote various festivals, events, and its overall travel product. Terchová is home to music festivals, cooking festivals, Janošík days, and other activities. According to a 2016 study conducted by the NP administration, visits to the park have been continuously rising. A key contributor has been improved access to the ridge of the mountain, due to the construction of a new cabin lift. Accomodation, restaurants, and bars are abundant in the region, making the Mala Fatra National Park one of the most popular adventure travel destinations in the country.

# NP NÍZKE TATRY

#### Key strategy:

A renowned 95-kilometer four-to-five day hike in the Low Tatras attracts international tourists.

The national park of Nízke Tatry (72,842 hectares) is a well-known tourist destination, providing a host of activities throughout both the winter and summer seasons. The park hosts the most famous multiday hike in the Slovak Republic, attracting tourists from abroad. The ridge of the Low Tatras spans 95 kilometers and takes an average of four to five days to complete. The starting point is usually in Telgart, and the finish line is in the ski resort of Donovaly. There are trails passing through the ridge between the north and south of the range, allowing a tourist to add variation to the route, or shorten it. Many of the villages along the mountain range, on both the north and south side, have accommodation, restaurants, and other amenities. The hike traditionally concludes in Donovaly, which is one of the country's major tourist destination for skiing in the winter, and hiking and cycling in the summer. Additionally, the hiking trail also passes through the Slovak Republic's largest and most popular ski resort, Jasna—Chopok, which provides numerous tourist amenities, such as restaurants, luxury hotels with spas, chalets, sport stores, and souvenir

shops, on both sides of the mountain. Both Jasna and Donovaly cater to families with various themed attractions, such as 'The Dragon's Path to Chopok', which is a sort of adventure trail for families centered around a legend of a dragon inhabiting the mountains and guarding its treasures. Donovaly has a well-known tree runner park, as well as a theme village known as Donovalkovo, which consists of a miniature town full of 'grown-up' toys, where children can play as grown-ups. Nízke Tatry is one of the top winter and summer destinations within the country, catering to a large array of travelers, from adventurers to families that provides a variety of amenities, from standard to luxury, depending on the area within the park.

# NP MURÁNSKA PLANINA

### Key strategy:

Leveraging unique geological and cultural attributes to attract visitors.

The national park of Muránska Planina is the Slovak Republic's youngest park and is remote in terms of access. Its uniqueness lies in its geology—it is the only plateau in the country. The ruins of Muráň Castle, situated above the village of Muráň at an elevation of 935 meters, are a gateway into the park. The uniqueness and main attraction of the park, other than the dense and diverse forests, fauna, and abundant wildlife on the plateau, are the semi-wild horses running free throughout the park. The horse breed is unique to this region, and is called the Norik Muran type. The horses are akin to the bisons of Poloniny, a unique feature not found in other areas of the Slovak Republic.

The park has a strong network of marked hiking and cycling trails, connecting the north side of the park with the south, and the east side with the west. The multiple route variations allow for a circuit route in various directions. However, there are also areas that need improvement. The lack

of accommodation, restaurants, outdoor sporting stores, and a central starting point are gaps in the infrastructure that need to be addressed for the destination to improve its tourism appeal.

The park's central location, although remote, still makes it an accessible place from the bigger cities and towns around the country. A well-known attraction of Muránska Planina is the local brewery and resort, known as 'Predná Hora', which, ironically, is adjacent to an alcoholic treatment facility. Muránska Zdychava is also an attractive destination, as it has locals living in 'na lazoch', which are usually traditional homes built high up in the hills remote from the villages and town. As a comparison, Muránska Planina's infrastructure development is similar to Poloniny's; its key advantage being its central location in the Slovak Republic.

FIGURE 48 Map showing hiking and cycling trails in NP Muránska Planina



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# **ANNEX 2:**

# LIST OF NATIONAL CULTURAL MONUMENTS AND ATTRACTIONS IN THE SNINA DISTRICT

#	Location	Attraction			
	Within National Park Boundaries				
1	Jalová	Greek Catholic church of Saint Juraj (George) from 1772			
2	Kolbasov	NR Ulička NR Bzaná Greek Catholic Church Saw mill Memorial to the Jews murdered in 1945 Military cemetery from WW I			
3	Nová Sedlica	NNR Stužica Most massive fir tree (518 centimeters in diameter) in the NP Poloniny, located in Stužica Kremenec (highest peak and tri-border) Wooden log house Memorial to the fallen Russian soldier, A. Gladyš Honey Woman Information center, NP Poloniny Outdoor Slovak — Rusyn dictionary Miniature replica of a former wooden church in Nová Sedlica Fish pond of the count's maid Waterfall below the Honey Woman Hlboký stream Čierťaž (peak)			
4	Príslop	Radio tower Príslop – 630 meters – Karcaba saddle			
5	Runina	Ulička stream Oreničov rock — Oreničov waterfall (5 meters) Jewish cemetery Three Springs pilgrimage site Stone memorial — monolith Military cemetery from WW I — Čišovatyj Panoramic map with local attractions Astronomical observation spot			
6	Ruský Potok	Wooden church of St. Michael the Archangel, from the early 1700s Lány — slopes above village flushed with rare flowers from May to June NR Borsučiny Mineral spring Wayside shrine Military cemetery from WW I — Pod Príslopcom			
7	Topoľa	Wooden church of St. Michael the Archangel, from the mid-18 <sup>th</sup> century Replica of fragments of ancient Cyrilic text from Ostroznica Wooden church exposition Military cemetery of WW I Jewish cemetery Alexander Duchnovič Park Outdoor Slovak — Rusyn dictionary Paragliding takeoff site			

#	Location	Attraction
8	Ulič	Doorway to Poloniny Outdoor Slovak — Rusyn dictionary Outdoor miniature wooden church park Defense fortification Arpádová línia Manor park Mergancov stone Oak Marsh Military cemetery of WW I Greek Catholic church NR Uličská Ostrá Poloniny gallery of wooden statues Panoramic viewpoint, Holic (360°) Grave of famous person (Alexander Chira jr. (1856 – 1928)) Building of the former district notary office from 1933
9	Uličské Krivé	Greek Catholic wooden church from 1718 Hiding place of Orthodox monk Ihnatij Čokyn (1889 - 1976) Oblazy – split point of two streams, and memorial to fallen soldier Location 'Tava' – a sample of the cistern layers of the flysch zone Oil drill Tufa source – initial stage of the travertine building process Dilovanka – representative example of submenilite layers 49 <sup>th</sup> parallel NNR Rožok Kováčová field
10	Zboj	NR Bahno Riaba skala lookout point  Ďurkovec peak Kvasná voda – thermal mineral spring Pseudo-karst caves Bystriansky stream and waterfall NNR Stinská – Májková lúka Carpathian Cichlid source NR Stinská slatina Three-dimensional model of meteorite Kňahyňa in the ratio 1: 2 Military cemetery of WW I Wayside shrine from 1896
	Stakčín*	*Former villages destroyed during the construction of the Starina water reservoir—within the municipal district of Stakčín
11	Dara*	Geological information site Military cemetery of WW I
12	Ostrožnica*	Military cemetery of WW I – pod Jalovím
13	Ruské*	Porta Rusica — old trade route Ruské Sedlo — border crossing Mineral spring Cirochy War memorial to liberators Ivankov Čertež — lookout point PR Šípková Dlhá lúka — lookout point Pseudo-karst cave Rupa Former monastery — Monastyr Ruské Small Riaba skala NR Ruské NNR Pod Ruským Military cemetery of WW I — pri cerkvi Military cemetery of WW I — Ruské NNR Pľaša
14	Starina*	Water reservoir Starina Lookout point above water reservoir Starina Beskyd Pantheon NR Gazdoráň Orthodox church of Mother Mary the Protector Late Baroque manor from the 18 <sup>th</sup> century Manor's historic park Barankov bridge for small gauge railway Military cemetery of WW I #1 Military cemetery of WW I #2 NR Grúnik
15	Smolník*	Military cemetery of WW I
16	Veľka Poľana*	Military cemetery from WW I with rotunda Military cemetery from WW I – Predný Hodošík Orest Dubay Spring Well

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#	Location	Attraction				
17	Zvala*	NR Stružnická dolina Military cemetery of WW I				
Outside National Park Boundaries						
18	Čukalovce	Oldest stone Greek Catholic church in the Slovak Republic				
19	Dúbrava	Winter oak, tulip tree and smooth pine — three protected trees				
20	Belá nad Cirochou	Church of St. Anna Water mill Manor-house				
21	Hostovice	Hostovický Kremenec – former tri border between Germany, Hungary, and the Slovak Republic Military cemetery of WW I Bell tower				
22	Hrabová Roztoka	Wooden Greek Catholic church of St. Basil the Great, from the 18 <sup>th</sup> century NR Roztoky				
23	Kalná Roztoka	Greek Catholic wooden church of St. John the Baptist NPR Havešová				
24	Kolonica	Astronomical observation site at Kolonica saddle Sponarna stone gorge				
25	Ladomírov	Significant mineral deposits site Greek Catholic church of the Virgin Mary the Protector, from 1890				
26	Osadné	NR Hlboké NR Udava Crypt and military cemetery of WW I Balnica – hiking route and border crossing Railway station Balnica – small gauge railway line Mineral spring Udavy Balnica – cemetery Beaver dams on SR / PL border Astronomical observation site				
27	Parihuzovce	Greek Catholic church of the Birth of the Virgin Mary from 1801				
28	Ruská Volová	Orthodox church of St. John the Baptist				
29	Snina	Rollovský Manor Historic park Fountain with Hercules sculpture Jewish cemetery Memorial to the fallen soldiers of WWI Chapel of Mary, Mother of Jesus, Seven Sorrows Military cemetery of WW I – Giglovo				
30	Stakčín	Stone silo Archeological site Valal Relics of traditional glass manufacturing sites in the Chotinka valley Pathway of the small gauge forestry railway from Stakčín — Strihovec Border patrol building Elementary school 'Ovoda' Defense fortification system 'Arpádova línia' Rolling mill Graves of famous persons (Anca Jaburova [1898 – 1984], Juraj Kolynčak [1909 – 1984], and Jeno Banffy de Lossonczi [1894 – 1914]) Memorials (A. Duchnovič, fallen soldiers from WW I, fallen soldiers from WW II, relocated inhabitants of fallen villages resulting from the construction of the Starina water reservoir) Plaques of famous historic figures (Anca Jaburová and Juraj Kolynčák)				
31	Šmigovec	Greek Catholic wooden church of the Ascension of the Lord				
32	Ubľa	Military cemetery of WW I Location of former wooden church with wayside shrine from 1907 Building from the former district notary office from the 19 <sup>th</sup> century Jewish cemetery Cellar of Áron Mermenstein Lacanyčova school House of former butcher Jutku Traditional folk architecture (houses, cellars) Memorials (10 <sup>th</sup> anniversary of the establishment of Czechoslovakia, fallen soldiers of WW II, Jewish inhabitants of Ubla who fell during WW II)				
33	Zemplínské Hamre	Traditional folk houses Outdoor mining exhibition Hiking route to Morske Oko				

# **ANNEX 3:**

# LIST OF SHELTERS AND REST AREAS IN THE PARK

Location	GPS Coordinates	Type	Access to water nearby?
Starina reservoir	49.0426167N, 22.2615978E	Rest area	No
Ruské	49.1079831N, 22.3473708E	Rest area	Yes
Ruské	49.1077800N, 22.3617525E	Rest Area	Yes
Ruské sedlo	49.1438303N, 22.3334603E	Overnight hut	Yes
Runina	49.0788997N, 22.4007444E	Overnight hut	No
Runina	49.0733592N, 22.4053733E	Rest area	No
Runina	49.0750422N, 22.4081528E	Rest area	No
Runina	49.0709531N, 22.4065011E	Rest area	No
Runina	49.0660033N, 22.3945239E	Rest area	Yes*
Topoľa	49.0469669N, 22.3553581E	Rest area	Yes**
Topoľa	49.0271494N, 22.3536725E	Rest area	Yes
Príslop	49.0377219N, 22.3317022E	Rest area	Yes**
Príslop	49.0400553N, 22.3230433E	Rest area	Yes**
Ulič	48.9823731N, 22.3965906E	Rest area	No
Cisna (SK/PL)	49.1030000N, 22.4589333E	Rest area	no
Sedlo pod Čieťažou	49.0876928N, 22.5014222E	Overnight hut	Yes
Nová Sedlica	49.0559147N, 22.5094486E	Overnight hut	Yes
Nová Sedlica	49.0464378N, 22.5148400E	Rest area	Yes
Nová Sedlica	49.0425458N, 22.5129544E	Rest area	Yes
Zboj	49.0231553N, 22.4780728E	Overnight hut	Yes
Ruská Volova	48.9640956N, 22.3758450E	Rest area	no
Stakčínska Roztoka	49.0026183N, 22.2842431E	Rest area	Yes**

<sup>\*</sup>Yes, but requires improvement. \*\*Only available for purchase at local grocery store.

# **ANNEX 4:**

# LIST OF IMPROVED SPRINGS IN POLONINY PARK

Location	GPS Coordinates		
Pčoliné	49.0730333N, 22.1729994E		
Cirochy – Ruské sedlo	49.1440967N, 22.3348989E		
Cirochy – Ruské sedlo	49.1439500N, 22.3338833E		
Ruské	49.1063939N, 22.3505558E		
Porta Rusica	49.1383711N, 22.3302981E		
Runina – pilgrimage site (3 springs next to each other)	49.0827556N, 22.4184731E		
Plaša	49.1150936N, 22.3974939E		
Plaša	49.1096794N, 22.4046064E		
Rabia Skala	49.1006600N, 22.4481500E		
Sedlo pod Čierťažou	49.0872833N, 22.5020833E		
Kremenec	49.0876247N, 22.5651739E		
Kremenec	49.0853500N, 22.5640667E		
Nová Sedlica	49.0482067N, 22.5397897E		
Nová Sedica	49.0516639N, 22.5126528E		
Zboj	49.0229269N, 22.4778728E		
Príslop	49.0400453N, 22.3230850E		
Topoľa	49.0271394N, 22.3536200E		

# **ANNEX 5:**

# LINK TO ONLINE MAP INDICATING PPT ROUTE INFRASTRUCTURE RECOMMENDATIONS

https://en.mapy.cz/s/3utxH

There are over 80 recommended infrastructure improvements in the form of signs, shelters, look-out towers, bike repair stations, bridges, and other amenities that are easier to view via online mapping applications than by being listed as GPs coordinates. Please use the above link to access the online map with the recommended infrastructure improvement areas.

# **ANNEX 6:**

# EQUESTRIAN TRAVEL BACKGROUND

# **TYPES OF EQUESTRIAN TRAVEL**

- 1. **Horseback excursions:** These are the foundation of equestrian travel—rides in nature lasting one to four hours in which 7–30 kilometers are covered that offer a physical, technical, and immersive experience elements. Riders gain greater confidence in the saddle, and learn the ropes of horseback riding in a natural setting, while simultaneously providing a form of rehabilitation for the horses. Excursions do not demand any special equipment for the horse, as long as a break is planned. In such cases, a halter and a bridle are sufficient.
- 2. **Tours:** These are generally excursions into nature lasting an entire day during which 30–70 kilometers are covered, comprised of the same elements as excursions—a physical, technical, and immersive experience. Equipment for the horse and rider must include a first-aid kit, raincoat, bridle, and restraining rope.
- 3. **Trips:** Trips consists of multiday tours combined into a whole. Trips can be categorized in a 'star' type or 'chain' type. A chain is more complicated, it requires the transportation of required equipment for the duration of the trip, as the end destination is different every night. A star trip consists of one base camp with daily tours taking place along different routes, where the riders return to the base camp at the end of the day. Both types of tours are considered demanding forms of equestrian travel.

# HORSE SELECTION FOR EQUESTRIAN TRAVEL

Equestrian travel and recreational horseback riding are one of the few opportunities to use horses that are not suited for work or equestrian sports. Therefore, equestrian travel and recreational riding are a means of saving horse breeds from extinction that are not suitable for labor or equestrian sports.

The determining factor is the horse's temperament which must be calm and balanced. The horse cannot be jittery, kicking, or aggressive. Equestrian travel is characterized by movement through nature. Therefore, the horse should be agile, with healthy legs and strong hooves. It should be well fed, and not have a discerning taste for food.

Given these considerations for equestrian travel, it is not recommended to use noble horse breeds because of their high care demands. Also, horses should not be too tall, because during equestrian travel there is plenty of mounting and dismounting of the horse, hence a small horse is advantageous. Geldings, mares and stallions are not ideal equestrian travel horses. Ideal breeds for travel tourism in the Poloniny region are Hucul pony, and the Arabian horse. These breeds excel in toughness, are not demanding, and easily adapt to worsening and changing conditions. These breeds are characterized by endurance.

# CONSIDERATIONS FOR RIDING IN OPEN TERRAIN

- 1. **Riding in a group:** Size of the group needs to be taken into consideration, as the larger the group, the slower the movement. The optimal group size is three to five riders per group.
- 2. **Marching formations:** Row, twofold, and troop. Riders should not be in close quarters; care must be taken to ensure safe spacing; riders should be led by an experienced rider; and a more experienced rider should also trail the group. Safe separation means that the rider sees between his horse's ears, the end of the tail, or the heel of the horse, in front of him or her.
- 3. Lead rider's instructions: Raised right hand indicates alert, a hand pointing directly forward indicates to move in that direction, a drawn hand to the right indicates direction change to the right, a bend in the right arm indicates a turn to the left. A raised hand with a clenched fist repeatedly brought down to the chest and back up means to crouch. A few right-handed circles overhead mean a command to shuffle. Swinging back with the right is a command to stop. Obstacles on the trail are pointed out with the index finger. If a rider loses his or her horse, the group must stop. Road traffic rules apply when riding on roads.

# CONSIDERATIONS FOR TRAVEL IN OPEN TERRAIN

- 1. **Short distance travel in open terrain:** Short distance is 5–30 kilometers. Trotting and galloping are acceptable, but not sprints—these do not belong in open terrain. On plains, the rider alternates between trot and step (5–10 minutes trot, 10–15 minutes step). Galloping for two to three minutes at a time in a suitable place. Galloping should not be carried out in the same location settings repeatedly, as a horse quickly forms associations, which may result in challenges for a less-experienced rider in controlling the horse. Dense forests and agricultural crops should be avoided.
- 2. **Trip preparation:** One kilometer takes 10 minutes in step, five minutes in trot, and 2.5–3 minutes in gallop. In mildly rolling terrain, 7–7.5 kilometers can be covered per hour. The daily total distance covered in such a setting can range from 30–65 kilometers, depending on the complexity of the terrain and obstacles.
- 3. **Easy route:** Total daily trip duration lasts around eight hours, with an average speed of seven kilometers per hour. Twenty-four hours of rest period are required by the horses every six days.
- 4. Intermediate route: Total daily trip duration lasts about six hours, with an average speed of five kilometers per hour. Twenty-four hours of rest period are required by the horses every five days.
- 5. **Difficult route:** Total daily trip duration lasts five hours with an average speed of four kilometers per hour. Twenty-four hours of rest period are required by the horses every three days.

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### TEN RULES OF RIDER ETIQUETTE AND SAFETY

- 1. It is important to realize that once you get on the horse you are a new being. Your weight and height will increase considerably, and your speed will surpass your current abilities.
- 2. Never risk challenging terrain and situations, as you are not alone in the situation, but have a powerful animal to take into consideration.
- 3. Keep in mind the ethological characteristics of your horse—shyness and herd instinct. Peace and balance are important. We don't have a chance to overpower the horse.
- 4. Don't ask of the horse for more than he is capable.
- 5. When you take care of the horse, the horse will take care of you.
- 6. You should remain alert at all times. Do not drink alcoholic beverages before or during the journey.
- 7. Before riding, check your equipment, saddle stuff, legs, hooves, and horseshoes. Carefully avoid high voltage electrical columns. Currents from voltage overload from the fuse may leak into the earth. Horses are extremely sensitive to electric voltage and can be harmed by a current which a person may not even feel through their shoes.
- 8. Maintain safe distance between the horses in the group, even while resting. Avoid passing each other during gallop.
- 9. Use every opportunity for learning. There is always something new to learn, we are all equestrian adepts, no matter how experienced. Unless we are able to humbly accept this fact, we are lost.
- 10. Try to be completely self-sufficient, but on the other hand, be ready and willing to help others in trouble. Increase your physical fitness.

## SAFE HITCHING OF HORSES

It is the rider's duty to know certain knots, such as the farmer's knot and the quick release knot. The rider should be versed with standard equestrian knots in all weather conditions and terrain. Other common knots are the dragon knot, and the Cossack and Kuman knots. Knots should be used in conjunction with a bridle, as a rope around a horse's neck poses the risk of choking.

## SAMPLE ITINERARIES OF EQUESTRIAN TRAVEL

Often, a client envisions an equestrian vacation where he or she can learn to ride, as well as complete a multiday tour in the matter of days or a week. A proper equestrian travel guide will reject such demands, as it is neither safe nor possible for beginner riders.

Realistic expectations of an itinerary include:

- 1. **Group r clientele:** Clients who have experience in equestrian travel and seek a vacation on horseback where they will participate in organized day trips and excursions. This type of group does not pose a challenge of ability or know-how—it is a matter of organization and logistics. Such a group is demanding with regard to the preparation of horses, as well as the physical demands that it places on them. With such a group, the quality of the equipment and the organization determine the availability of options for equestrian travel.
- 2. Group 2 clientele: Novice riders looking to improve their riding skills by participating in excursions and day trips. With this group, a few days are catered to improving riding skills and habits in a controlled environment, before venturing out into open terrain. An example of a one-week itinerary would consist of the following:
  - Day I: Grouping of clients based on skills and experience. Reviewing saddle mounting, bridging, grooming, loading, and packing saddle bags, and so on. The first day also consists of getting to know your fellow riders and horses.

- Day 2: Practicing horse lunging
- Day 3: Theory and practice of horse riding, basic riding positions, and methods
- Day 4: Trip/excursion preparation
- Day 5: Forty to fifty kilometer circuit at seven kilometers per hour; evening sitting by the fire reminiscing over the trip, preparation for the next day's trip
- Day 6: Thirty to forty kilometer-circuit at six kilometers per hour; after returning, preparation for the next day
- Day 7: Circuit 20-30 kilometers at a speed of five kilometers per hour
- 3. **Group 3 clientele:** Clients who have never ridden but want to learn. A professional equestrian guide is able to set realistic expectations with this type of clientele, and will set up an interesting itinerary with limited riding. This type of clientele does not make any excursions into open terrain. This type of group is the most challenging, in terms of patience and the required coaching time. The typical program for such a group consists of the first three days learning to sit on the horse, theory and practice, etiquette and safety, and other basics. The next days are spent learning to control the horse walking alongside it. The remaining two days consist of step walks with possible trot sections.
- 4. **Group 4 clientele:** experienced or professional riders who have their own horses. The certified guide provides interesting routes in a region and takes on the role as a tour guide.

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# **NOTES**

- 1. These include the High Tatras NP (TANAP), Low Tatras NP (NAPANT), Pieniny NP (PIENAP), Poloniny NP, and Slovenský Raj (Slovak Paradise) NP.
- 2. Poloniny National Park Management Plan for 2017–2026, State Nature Conservancy of the Slovak Republic, Banská Bystrica, Poloniny NP Administration, Stakčín, p. 13.
- Ibid.
- 4. Most cycling routes are also ideal for equestrian travel, especially in the northern parts from Ruské to Osadné.
- North County National Scenic Trail, A Handbook for Trail Design, Construction, and Maintenance, U.S. National Park Service, August 1996, p.5.
- Note: One relatively low cost and quick solution is the use of prefabricated public restrooms.
- 7. This was based on research conducted on the Scandic Nidelven Hotel in Trondheim, Norway which has won the best hotel breakfast award 11 years in a row and attracts visitor from the world over mainly because of its local foods. The hotel receives its products from local suppliers whose products cannot be easily found in other regions throughout the country. Food became a major added value component of the hotel experience and has had a positive impact on the local economy by setting standards for logistics and production streamlining the delivery process between supplier and hotel to the end customer. This eventually enabled the local suppliers to expand their sales to other specialty vendors (reference—https://ruralis.no/en/2016/12/07/localfood-as-a-tourist-attraction/).

