

SURVEY OF THE NATURAL POTENTIAL OF THE MUNICIPALITY OF KYUSTENDIL FOR THE DEVELOPMENT OF TOURISM

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INTRODUCTION

The geographic location, the geological past and the contemporary climatic features are the reason for the exceptionally favourable combination of habitats and rich biodiversity of the municipality of Kyustendil. In the past the region has often remained far away from the attention of many researchers of Bulgarian flora and fauna, who paid more attention to the southern parts of the Struma Valley because of the stronger Mediterranean influence. Contemporary research, however, shows that this is totally undeserved. It is not by chance that very rare and endemic species of plants and animals are still present in the preserved nature of the municipality, while others, which are considered extinct, appear to have chosen exactly this part of Bulgaria to come back again. The low human impact, accompanied by lack of pollution or destruction of habitats, is the reason for the preserved populations of animal species included in the Red Data Book of Bulgaria and various European and international environment protection directives and documents.

Many people have heard about Pautalia and its riches, the medieval Velbuzhd and its impenetrable fortress. At school, we learned about the fateful battle for the Bulgarian state, near the walls of the city, about Ilyo Voyvoda, the exploits of the revolutionaries of VMRO and of the Bulgarian soldier during the Balkan wars, and of course during the Great War. We also have learnt about the other riches of the golden Kyustendil autumn, immortalized in the paintings of Vladimir Dimitrov-Maistora and an indispensable part of our table.

But how many people know about the hidden traces of the geological past, easily visible in different parts of the municipality and showing what happened tens of millions of years ago, when the greater part of what is visible nowadays was the bottom of a large water basin. How many of the visitors to the municipality know that the preserved old forests are the home of the lynx that has returned in our country after 70 years, or that here we can find the endangered by extinction marbled polecat and European pine marten, or that the most stable population of the rare and relic type of alpine triton is in Osogovo and that it can be easily seen only here. Only for a few hours in many places in the municipality many more species of daily butterflies can be seen than can be found on the entire British Isles. It is no coincidence that on the territory of the municipality of Kyustendil there are several important bird conservation sites, inhabited by vulnerable and endangered species of long-legged buzzard, peregrine falcon, grey-headed woodpecker, owl, boreal owl and many others.

The region has numerous and clean, unaffected by human activity, rivers. The Struma *nemacheilus breschi*, the Struma *alburnoides bipunctatus*, the Vardar *chondrostoma vardarensis*, the barbus *strumicae*,

the Macedonian trout seem to ordinary us, but we can only see them in a few rivers and nowhere else in the world. Some of these rivers spring or pass through municipality of Kyustendil.

To make this wealth known and appreciated by the inhabitants of the region and all Bulgarian citizens, as well as the visitors and guests in this wonderful part of our country, the municipality of Kyustendil has initiated the Survey of the Natural Potential of the Municipality of Kyustendil for the Development of Tourism.

The survey includes the following:

- Review of applicable national and European legislation on protected natural heritage and tourism;
- Study of good practices for development, management and promotion of protected natural heritage;
- Identification according to the methodology and visiting the sites that are part of the protected natural heritage and located on the Bulgarian part of the Macedonia-Bulgaria cross-border region and on the territory of the municipality of Kyustendil;
- Detailed description and analysis of protected, rare, conservation wise significant and interesting for presentation habitats, plant and animal species;
- Value Analysis of sites.
- Discussion and identification of priority (key) regions in the municipality of Kyustendil with opportunities for development of natural tourism.

1.2. Methodology for analysis and assessment of sites to be included in the Detailed Survey

This methodology has been developed on the basis of the review of applicable national and European legislation in the field of protected natural heritage and tourism and the study of good practices for the development, management and promotion of protected natural heritage.

It is fully in line with the objectives set in the Terms of Reference at which the development and realization of the activity for "Preparation of Comprehensive Study" is aimed, namely:

- 3.1 Formation of a system of knowledge related to the natural wealth of the municipality of Kyustendil;

- 3.2 Creating a responsible attitude towards nature, forming an environmentally friendly culture;
- 3.3 Building on available information and exploring opportunities to enhance the region's tourism potential through better conservation and sustainable use of natural heritage based on good knowledge and advanced education in regard of local biodiversity;
- 3.4 Creating conditions for motivation of adolescents for care and protection of nature;

Based on the above, the methodology is grounded on an assessment for each site according to certain criteria.

Criteria for determining inclusion of sites

- **Nature conservation status** - Description of the nature preservation status, including spatial overlapping of sites
- **Nature conservation significance** – Provision of brief and summary information on the most important features of the site of conservation and announcement of the relevant protected territory or protected area
- **Popularity** - based on the frequency of occurrence and the ease of recognisability, as well as the presence of the species in popular materials, textbooks and folk legends and tales.
- **Opportunity for reliable identification** - for each species based on expert assessment.
- **Accessibility** - availability of transport infrastructure and public transport.
- **Access restrictions** – according to the regimes established in the Management Plan.
- **Restrictions to avoid disturbance and unconscious destruction** - for individual species based on expert assessment for the particular region or selected observation site.
- **Availability in the vicinity of appropriate tourist infrastructure - accommodation and boarding possibilities** (within a radius of 10 km – identification on the grounds of published information).
- **Hiking opportunities** – identification on the grounds of published information;
- **Other attractions**

The first criterion is rated by 0 or 1 depending on the presence of conservation status. The remaining criteria are rated from 1 to 3 points - see attached table.

Types, habitats and sites which have over 70% of the total number of points are automatically ranked. Those with 50 to 70% are included at the discretion of the responsible expert. Individual species, habitats and sites that have under 50%, and which are an item of interest (have high popularity) are discussed by all experts before being included.

Each classified species is subject to documentation, analysis, assessment and presentation, including a briefly available interpretive description (of habitats, protected plant and animal species, etc.), photographs and maps (where appropriate and possible).

Table for the value of the individual assessment criteria.

Criteria	3 points	2 points	1 points
Nature conservation significance	The presence of the species in Red Books and Lists, European directives, international conventions, endemism, relict and rarity.	Only separately - the presence of the species in European directives, international conventions or endemism, rare and relict.	Endemic or relict.
Popularity	Recognizable by most people and frequently occurring. Popular in literature, textbooks and teaching aids. Encountered in folk tales and legends.	Encountered in folk tales and legends, and sustainably recognized by the local population.	Encountered in popular science books and easy for observation.
Opportunity for reliable identification	Very easy to recognize and remembering without the need for specialized training.	Easy to recognize by amateurs.	Recognition requires specialised skills.
Accessibility	Availability of good transport infrastructure and public transport.	Availability of good transport infrastructure, but accessible only with personal transport.	Lack of good transport infrastructure.
Access restrictions	There are no regimes restricting the access to the territory or the site.	Access is regulated via a document specified in the Management Plan or via another document.	Strict access restricting regime.
Restrictions to avoid disturbance and unconscious destruction	No restrictions.	There are restrictions, but these only apply for close observation, and this is not taking place during tourist visits due to	The species or territory are not suitable for observations because of disturbance or unconscious

		inaccessibility or remoteness.	destruction.
Availability in the vicinity of appropriate tourist infrastructure - accommodation and boarding possibilities	There is a great number of possibilities for accommodation and boarding.	Limited number of possibilities.	Lack of possibilities or if available, these are of poor quality.
Hiking opportunities	There are available established, published and marked routes.	There are no established routes but there are good opportunities for practice of hiking tourism.	There is no such opportunity.
Other attractions	Great number.	Individual.	None.

1.3. Protected territories and areas in the region of the municipality of Kyustendil

"We have not inherited the land from our ancestors, but have borrowed it from our children," states an old proverb. The majority of our compatriots know only a small part of this wealth and cannot even imagine its diversity. Fortunately, since ancient times our ancestors had been aware of the protection of certain territories for the sake of their conservation, as well as the unconscious protection of individual animal species or plants either as a resource or simply as something beautiful in aesthetic and spiritual terms. More recently, and after the rapid destruction of nature at the end of the 19th and the beginning of the 20th century, nature preservation became a major interest for the Bulgarian civil society.

This is also reflected in the first and fully compliant with the world tendencies nature preservation acts of the Third Bulgarian State - Ordinance-Law on the Protection of the Nature and Rules for its Application from 1936. On the grounds of this regulation and of the proposals of the Bulgarian scientists and citizens, some of the first reserves and national parks in Europe were announced during the period 1931-1936.

Nowadays, after many historic changes, we again have contemporary nature preservation legislation. The main texts regulating the protected natural territories are included in the Protected Areas Act and the Biodiversity Conservation Act. In Bulgaria, depending on the severity of the protection regimes, there are the following protected areas - reserve, national park, natural landmark; maintained reserve; natural park; protected area. The protected areas, part of the European ecological network NATURA 2000, have been declared for protection of the habitats of the protected species.

There are eight protected areas in the municipality of Kyustendil - one reserve, four protected areas and three natural landmarks. Parts of the municipality fall into 7 Natura 2000 protected areas - six are under the Habitats Directive and 1 under the Birds Directive. On the territory of the municipality there are

two main areas for the conservation of butterflies in Bulgaria.

PROTECTED TERRITORIES:

1. CENTURY-OLD BEECH FOREST – ST. LUKA MONASTERY

Category: Protected area

Location:

District: Kyustendil, **Municipality:** Kyustendil, **Populated area:** village of Granitsa

Regional Inspectorate of Environment and Water (RIEW): Pernik

2. REDWOOD GROUP - IUCHBUNAR **Category:** Natural landmark

Location:

District: Kyustendil, **Municipality:** Kyustendil, **Populated area:** village of Bogoslov

Regional Inspectorate of Environment and Water (RIEW): Pernik

3. THE GREEN RIDGE **Category:** Protected area

Location:

District: Kyustendil, **Municipality:** Kyustendil, **Populated area:** village of Sazhdenik, village of Tsarvena yabalka

Regional Inspectorate of Environment and Water (RIEW): Pernik

4. THE ZEMEN ROCKS **Category:** Natural landmark

Location:

District: Kyustendil, **Municipality:** Kyustendil,

Populated area: village of Polska Skakavitsa

Regional Inspectorate of Environment and Water (RIEW): Pernik

5. FIELD OF VERBASCUM ANISOPHYLLUM – VILLAGE OF TSARVENYANO **Category:**

Protected area

Location:

District: Kyustendil, **Municipality:** Kyustendil,

Populated area: village of Tsarvenyano

Regional Inspectorate of Environment and Water (RIEW): Pernik

6. FIELD OF OF CENTAUREA FINAZZERI ADAMOVIC

Category: Protected area

Location:

District: Kyustendil, **Municipality:** Kyustendil,

Populated area: village of Polska Skakavitsa

Regional Inspectorate of Environment and Water (RIEW): Pernik

7. **SKAKAVISHKI WATERFALL Category:** Natural landmark

Location:

District: Kyustendil, **Municipality:** Kyustendil,

Populated area: village of Polska Skakavitsa

Regional Inspectorate of Environment and Water (RIEW): Pernik

8. **TSARNATA RIVER Category:** Reserve

Location:

District: Kyustendil, **Municipality:** Kyustendil, **Populated area:** village of Sazhdenik

Regional Inspectorate of Environment and Water (RIEW): Pernik

PROTECTED AREAS:

1. **DOLNI KORITEN Category:** Protected area according to the Habitats Directive

Location:

1. District: Kyustendil, **Municipality:** Kyustendil,

Populated area: village of Gorno Uino

2. District: Kyustendil, **Municipality:** Treklyano, **Populated area:** village of Brest, village of Dolni Koriten

Regional Inspectorate of Environment and Water (RIEW): Pernik

2. **ZEMEN Category:** Protected area according to the Habitats Directive

Location:

1. District: Kyustendil, **Municipality:** Kyustendil, **Populated area:** village of Bunovo, village of Garbino, village of Dvorishte, village of Konyavo, village of Kopilovtsi, village of Poletintsi, village of Polska Skakavitsa, village of Razhdavitsa, village of Shipochano, village of Shishkovtsi

2. District: Kyustendil, **Municipality:** Treklyano, **Populated area:** village of Бъзовица, village of Gabreshevtsi, village of Dobri dol, village of Dolno Kobile, village of Zlogosh, village of Kosovo, village of Sredorek, village of Sushitsa, village of Treklyano, village of Cheshlyantsi

3. District: Pernik, **Municipality:** Zemen, **Populated area:** town of Zemen, village of Blateshnitsa, village of Vrania stena, village of Divlya, village of Zhablyano, village of Kalotintsi, village of

Peshtera, village of Rayantsi

4. District: Pernik, **Municipality:** Kovachevtsi, **Populated area:** village of Egalnitsa, village of Kalishte, village of Lobosh

5. District: Pernik, **Municipality:** Radomir, **Populated area:** village of Baykalsko, village of Debeli lag

6. District: Pernik, **Municipality:** Tran, **Populated area:** village of Dokiovtsi, village of Penkiovtsi
Regional Inspectorate of Environment and Water (RIEW): Pernik

3. KONYAVSKA MOUNTAIN

Category: Protected area according to the Habitats Directive

Location:

1. District: Kyustendil, **Municipality:** Bobov dol, **Populated area:** village of Babino, village of Golema Fucha, village of Gorna Koznitsa, village of Korkina, village of Mala Fucha

2. District: Kyustendil, **Municipality:** Kyustendil, **Populated area:** village of Gorna Grashtitsa, village of Tavalichevo, village of Tsarvenyano

3. District: Pernik, **Municipality:** Radomir, **Populated area:** village of Baykalsko, village of Dragomirovo, village of Zhedna, village of Zhitusha, village of Izvor, village of Kasilag, village of Klenovik, village of Uglyartsi

Regional Inspectorate of Environment and Water (RIEW): Pernik

4. KARSHALEVO Category: Protected area according to the Habitats Directive

Location:

District: Kyustendil, **Municipality:** Kyustendil, **Populated area:** village of Goranovtsi, village of Gorno Uino, village of Gyueshevo, village of Dozhdevitsa, village of Dolno Uino, village of Dolno selo, village of Dragovishtitsa, village of Kamenichka Skakavitsa, village of Kutugerts, village of Karshalevo, village of Leska, village of Mazarachevo, village of Prekolnitsa, village of Razhdavitsa, village of Ranentsi, village of Rasovo, village of Sovolyano, village of Stensko, village of Tserovitsa, village of Chudintsi

Regional Inspectorate of Environment and Water (RIEW): Pernik

5. OSOGOVO Category: Protected area according to the Birds Directive

Location:

1. District: Kyustendil, **Municipality:** Kyustendil, **Populated area:** village of Bogoslov, village of Vratsa, village of Gramazhdano, village of Garlyano, village of Gyueshevo, village of Zhilentsi, village of Kamenichka Skakavitsa, village of Novo selo, village of Prekolnitsa, village of Ranentsi, village of

Savoyski, village of Sazhdenik, village of Slokoshtitsa, village of Tsarvena yabalka

2. District: Kyustendil, **Municipality:** Nevestino, **Populated area:** village of Pelatikovo, village of Rakovo, village of Stradalovo, village of Chekanets

Regional Inspectorate of Environment and Water (RIEW): Pernik

6. OSOGOVO MOUNTAIN

Category: Protected area according to the Habitats Directive

Location:

1. District: Kyustendil, **Municipality:** Kyustendil, **Populated area:** village of Bogoslov, village of Vratsa, village of Gramazhdano, village of Garlyano, village of Gyueshevo, village of Zhilentsi, village of Kamenichka Skakavitsa, village of Novo selo, village of Prekolnitsa, village of Ranentsi, village of Savoyski, village of Sazhdenik, village of Slokoshtitsa, village of Tsarvena yabalka

2. District: Kyustendil, **Municipality:** Nevestino, **Populated area:** village of Vaksevo, village of Vetren, village of Dlahchevo-Sablyar, village of Druhomar, village of Eremiya, village of Iliya, village of Pelatikovo, village of Rakovo, village of Rashka Grashtitsa, village of Smolichano, village of Stradalovo, village of Tishanovo, village of Tsarvaritsa, village of Chekanets, village of Chetirts

Regional Inspectorate of Environment and Water (RIEW): Pernik

7. CHOKLYOVSKO SWAMP

Category: Protected area according to the Habitats Directive

Location:

1. District: Kyustendil, **Municipality:** Kyustendil, **Populated area:** village of Bunovo

2. District: Pernik, **Municipality:** Radomir, **Populated area:** village of Baykalsko

Regional Inspectorate of Environment and Water (RIEW): Pernik

Important ornithological sites

BG079 OSOGOVO

Target species

White stork, European honey buzzard, long-legged buzzard, golden eagle, peregrine falcon, hazel grouse, rock partridge, owl, European nightjar, grey-headed woodpecker, black woodpecker, Syrian woodpecker, middle spotted woodpecker, crested lark, barred warbler, red-backed shrike.

Main regions for butterflies in Bulgaria

49 ZEMEN GORGE

Target species

Thymelicus acteon, Zerynthia polyxena, Parnassius mnemosyne, Pieris ergane, Lycaena dispar, Pseudophilotes vicrama, Scolitantides orion, Glaucopsyche alexis, Maculineaalcon, Plebejus sephirus, Erebia medusa, Apatura ilia, Neptis sappho, Melitaea trivialis, M. aurelia, Brenthis hecate.

The following species of butterflies found in the region are important from conservation point of view and are rare:

Spialia phlomidis, Zerynthia cerisy, Leptidea duponcheli, Pieris krueperi, Poecilocampa alpina, Trichiura verena, Lemonia balcanica, Perisomena caecigena, Eumera regina, Lignioptera fumidaria, Erannis declinans, Nychiodes dalmatina, Proserpinus proserpina, Peridea korbi, Paradrymonia vittata streckfussi, Dichagyris renigera renigera, Spaelotis senna contorta, Conisania renati meszarosi, Perigrapha i-cinctum, Cucullia scopariae, Calocucullia celsiae, Amephana dalmatica, Lithophane lapidea, Dryobotodes sevardei, Agrochola wolfschlagerei, Agrochola thurneri, Moma alpium, Amphipyra micans, Polyphaenis subsericata, Pseudoxestia apfelbecki, Caradrina terrea, Praestilbia armeniaca, Pyrrhia victorina, Nycteola siculana, Simplicia rectalis, Orectis proboscidata, Ocnogyna parasita lineae, Phragmatobia placida, Euplagia quadripunctaria

25 OSOGOVO

Target species

Zerynthia polyxena, Parnassius mnemosyne, P. apollo, Colias caucasica, Scolitantides orion, Glaucopsyche alexis, Maculineaalcon, Polyommatus eroides, Coenonympha rhodopensis, Erebia medusa, E. pronoe, E. oeme, Neptis sappho.

Other species which are important from conservation point of view: *Syngrapha rilaecacuminum, Autographa bractea, Shargacucullia prenanthis, Paradrina wulschlegeli schwingenschussi, Apamea maillardi, Apamea zeta, Apamea rubrireana, Hadenacaesia bulgarica, Mythimna andereggii pseudocomma, Divaena haywardi, Spaelotis senna contorta, Chersotis cuprea, Epipsilia grisea, Euxoa vitta hercegovinensis, Nycteola siculana, Euplagia quadripunctaria.*

1.4. List of regions identified for observation of sites included in the detailed survey:

On the basis of the above methodology, as well as the compliance with the regimes of the activities in the protected territories and areas, the following regions for observation of the selected species and habitats, included in the present Detailed Survey, were identified. These will also be the basis for the future development and growth of nature tourism in the municipality of Kyustendil.

Identified regions for observation sites included in the detailed survey:

- 1. SHEGAVA CANYON**
- 2. VIDEN PEAN**
- 3. THE CANYON AT TSARVENYANO**
- 4. POLSKA SKAKAVITSA WATERFALL**
- 5. POLSKA SKAKAVITSA WATERFALL**
- 6. CENTURY-OLD BEECH FOREST AT THE ST. LUKA MONASTERY, VILLAGE OF GRANITSA**
- 7. DRAGOVISHTITSA RIVER AT THE VILLAGE OF DOLNO UINO**
- 8. FOREST AND SUB-ALP AREA OF OSOGOVO ABOVE THE TRITE BUKI MOUNTAIN HUT AND THE OSOGOVO MOUNTAIN HUT**
- 9. REDWOOD GROUP AT THE IUCHBUNAR AREA**
- 10. THE GREEN RIDGE, VILLAGE OF SAZHDENIK AND VILLAGE OF TSARVENA YABALKA**
- 11. STRUMA RIVER ABOVE THE VILLAGE OF RAZHDAVITSA**
- 12. BISTRITSA RIVER**
- 13. CHOKLYOVO SWAMP**
- 14. VILLAGE OF STRADALOVO, THE VALLEY OF THE ELESHNITSA RIVER**
- 15. FOREST AND SUB-ALP AREA OF THE KONYAVSKA MOUNTAIN, THE ROAD TO THE TV TOWER**
- 16. THE ZEMEN ROCKS AT THE VILLAGE OF POLSKA SKAKAVITSA**
- 17. GARBINSKI THRUST FAULT**

1.5. Thanks:

The preliminary survey has been carried out under a project of the municipality of Kyustendil

and the municipality of Konche for "Enhancing the tourist potential of the municipalities of Kyustendil and Konche - a sustainable joint future" with the support of the European Union through the INTERREG-IPA Cross-Border Cooperation CCI No.2014TC16I5CB006. The content of the publication is the sole responsibility of municipality of Kyustendil and should in no way be taken as an expression of the statement of the European Union or the Managing Body of the Program. The team also expresses its gratitude to Rositsa Plachkova, Deputy Mayor of the municipality of Kyustendil and Miroslava Taskova for their invaluable help in the field work, the valuable advice and the provided data and materials.

1.6. Sources:

Register of protected territories and protected areas in Bulgaria

<http://eea.government.bg/zpo/bg/index.jsp>

Vladimirov, V. (rev.). 2014. Pilot network of small protected areas for conservation of rare plants in Bulgaria. Institute of Biodiversity and Ecosystem Research at the Bulgarian Academy of Sciences and the Ministry of Environment and Waters, city of Sofia.

Abadjiev, S., Beshkov, S., 2007. Prime Butterfly Areas in Bulgaria. — Pensoft Publishers, Sofia—Moscow, 222 pp.

Kostadinova I., Gramatikov M. (rev.) 2007, Important ornithology areas in Bulgaria and Natura 2000. Bulgarian Society for Protection of Birds, Nature protection selection, Book 11. city of Sofia, 639 pp.



This publication has been produced with the assistance of the European Union through the Interreg-IPA CBC Bulgaria-the Former Yugoslav Republic of Macedonia Programme, CCI No 2014TC16I5CB006. The contents of this publication are the sole responsibility of Municipality of Kyustendil and can in no way be taken to reflect the views of the European Union or the Managing Authority of the Programme.