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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

Standing Committee

40th meeting
Strasbourg, 1-4 December 2020

REPORT

**ON THE SPOT EXPERT APPRAISAL OF THE
IPOLYTARNÓC FOSSILS NATURE CONSERVATION AREA
(HUNGARY)
30-31 July 2019**

*Document prepared
by Prof. Dr. Maurice Hoffmann (Belgium)*

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1. EDPA Ipolytarnóc Fossils Nature Conservation Area, general information

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The original application for the European Diploma of Protected Area was submitted under the name Ipolytarnóc Nature Conservation Area. During the process of approval and consecutive renewals, official resolution documents named the area as ‘the Ipolytarnóc Protected Area’. In more recent documents, the name changed into “Ipolytarnóc Fossils Nature Conservation Area”. I judge this last change of the name as very logic and of added value, given the fact that the prior reasons for awarding the EDPA are its values as a paleontological extremely rich and unique site. I hence support this organically evolved change in the name of the EDPA.

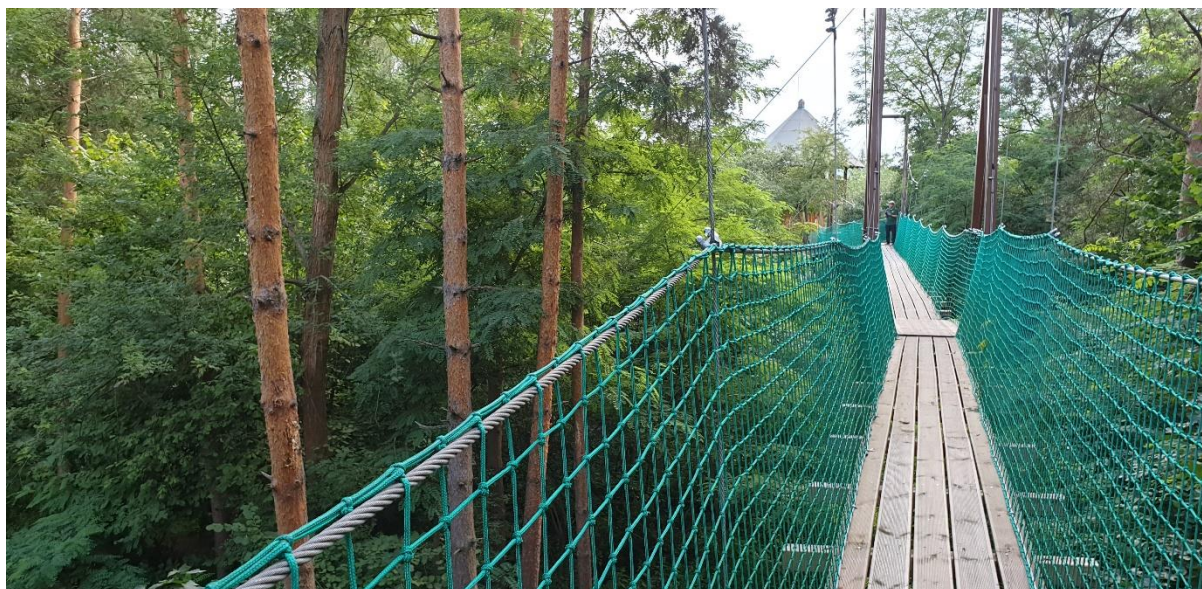
The area is described by the local authorities (several sources, among which the 2018 annual report to the Council of Europe (CoE) as “a hilly area criss-crossed by ravines with brooks in the valleys, in which springs are abundant. The main mother rocks are sandy sea sediments of 24-21 million of age and younger terrestrial and volcano-sediment strata. The brown forest soil type regolith's top zone is partly eroded with outcrops of fossil rich strata in some places.”

The Ipolytarnóc Fossils Nature Conservation Area protects a globally unique heritage of Earth history. It represents an exceptionally well-preserved Lower Miocene paleohabitat, the conservation of which is due to sheltering layers that resulted from a volcanic catastrophe that happened, according to the newest radiometric measurements, some 18 million years ago. Tectonics and natural erosion exposed the fossil-holding strata to the surface, fossil findings from outcrops instigated scientific excavations.

The area is an excellent location for field research and education on many aspects of earth sciences. It is a spectacular geological site with high quality paleontological exhibitions. There are several field study trails available, focussing on geological, paleontological, as well as biological aspects. In the area field educational programmes are regularly organised during spring, summer and autumn with excellent expert guidance. A visitor’s centre is at hand, strongly but rightly focussing on the geological and paleontological qualities. In the immediate vicinity of the visitor’s centre an impressive canopy trail was installed. The latter gives attention to the nature values. Within the area a basic, but very practical scientist housing facility is available.



Foot prints in the Grand Hall exhibition room and reconstruction of the Lower Miocene Beardog (Amphicion) in the Rockpark at the EDPA Ipolytarnóc Fossils Nature Conservation Area.



The recently build canopy trail close to the visitor's centre, giving an excellent view of the indigenous but also the non-indigenous tree species (Robinia pseudacacia, Pinus spp.)

2. The expert mandate

The period of validity for the European Diploma of Protected Areas for the Ipolytarnóc Fossils Nature Conservation Area expires in 2020. In accordance with the regulations, an on-the-spot appraisal was carried out in July-August 2019 to assess the opportunity of a fourth renewal of the Diploma. The Ipolytarnóc Fossils Nature Conservation Area was awarded the European Diploma for Protected Area (EDPA) by the Council of Europe (CoE) in 1995 for the first time (11.09.1995). A first renewal was assigned in 2000, a second in 2005, a third in 2010. This fourth renewal is due in 2020 (10 years after the third renewal). The expert was not accompanied by people of the CoE-Secretariat.

The expert mandate consists of evaluating the intrinsic paleontological and nature and values, conservation status and management aspects of the reserve and its relations with the environment. The specific tasks of the expert are:

- Evaluation whether conditions formulated in the third renewal report were met with (2010-2020);
- The level of fulfilment of the recommendation formulated in the third renewal report (2010-2020);
- Advice on new or supplementary conditions for the fourth renewal (2020-2030);
- Advice on new or supplementary recommendations for the fourth renewal (2020-2030).

The above-mentioned questions were answered departing from the Resolution CM/ResDip(2010)15 on the renewal of the European Diploma of Protected Areas awarded to the Ipolytarnóc Protected Area (Hungary), adopted by the Committee of Ministers on 16 September 2010 at the 1091st meeting of the Ministers' Deputies.

3. Report of the expert visit

The field visits to the Ipolytarnóc Fossils Nature Conservation Area were organised on:

- Arrival: 29 July 2019
- Visit of the National Park: 30 July – 31 July 2019
- Departure: 1 August 2019, 8h

During the visit, I was extensively informed about the way the managing organisation dealt with the recommendations given by the Council in 2010, concerning ongoing research at the excavations, state of affairs of the infrastructure protecting the excavation sites, the progress made with educational and communication issues of the visitor's centre, forest management of the surrounding forest patches, particularly how the managers deal with non-indigenous tree species like *Robinia pseudacacia*, and how to replace them with indigenous tree species (*Quercus*) and on issues concerning sign posts in the Nature Conservation Area. Additionally, I had the opportunity to learn all about the geological and paleontological values of the site, but also of its natural values, and the way the general public experiences the area. Above that, I was allowed to take part in a local commemoration event at the neighbouring Litke village, concerning the 175th birth celebration of the internationally well-known botanist Vince Borbas. It illustrated well the local involvement with nature and with the Conservation Area.

Field excursions, lunches dinners, and meetings were organised by Dr. **Imre Szarvas**, area leader, who did a meticulous job in giving me all explanation asked for (and even not asked for) during, before and after the field excursions. Further details on the programme are given in the table below. I am very grateful to Imre for his skilful and very much enjoyed work during my stay at Ipolytarnóc.

Additional special thanks go to Prof. Dr. Laszlo Kordos (palaeontologist) and Ildiko Meszaros (assistant researcher) for their kindness and welcome at the local researchers centre, and particularly for their high-level explanations during the excursions to the excavations in the area and exhibitions in the visitor's centre.

Many thanks respectively also to Zoltan Vajda (forester of the Bükk National Park Directorate (BNPD – regional governmental nature conservation organisation, the legal body, which manages the Ipolytarnóc Fossils EDPA), to György Dudas (general vice director), and to Julia Nagy (department leader of Communication and Ecotourism of the BNPD), who gave explanations and insight information during excursions concerning the forest management and the excavation sites.

People, that were involved in the local celebration activity and the afternoon visit to the visitor's centre were Zoltan Vamos (mayor of Litke), Ms. Kalmanne Ronai (director of the BNPD), dr. Pal Kezdy (deputy director of the Danube-Ipoly National Park Directorate (manager of the Szenas Hills EDPA), Ms. Gaborne Bolyos (mayor of Ipolytarnóc, dr. Szabolcs Farkas, notary of Ipolytarnóc municipality and other local representatives; many thanks for the interesting discussions and the involvement in the protection of the Ipolytarnóc Nature Conservation Area.

Further appreciation should be expressed to Mr. Imre Varga (director of the local TETT NGO (which takes part in the contracted management of the site) and Tamas Juhasz (ranger and hunter at the site).

Special thanks also to Gabor Mravec (technician assistant from Ipolytarnóc Fossils EDPA), who facilitated transport and other businesses at the site.

During the celebration event, an interview was given to the national radio M1 Kossuth (Laszlo Tarnoczy, radio reporter).

Programme of the Ipolytarnóc Fossils EDPA appraisal visit from 29 July 29 to 1st August 2019

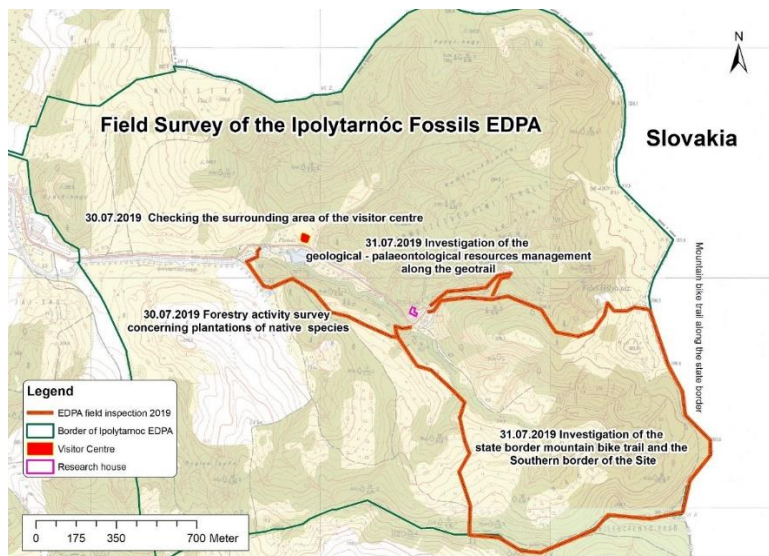
Monday 29 July 2019	
8:00	Arrival at Ipolytarnóc Fossils, 2 hours' drive during which consultation
8:10 – 8:30	Accommodation in the research house within the EDPA
8:30 – 10:00	Dinner with local staff

Tuesday 30 July 2019	
8:00 – 8:30	Breakfast at the canopy coffee buffet of the site
8:30 – 10:25	Field survey and consultation on the forestry rehabilitation area with Zoltan Vajda, forester; György Dudas, general vice director and Julia Nagy, department leader of Communication and Ecotourism of the BNPD
10:35 – 12:20	Vince Borbas botanist's 175th birth celebration, commemoration at the neighbouring Litke village, with interview by the national radio M1 Kossuth,
12:20 – 13:30	Lunch
13:30 – 18:30	Consultation with the leadership of the BNPD and prof. Kordos, the palaeontological expert of the site, visiting the ecotourism facilities around the Visitor Centre, including the building of the Bükkábrány trees, the Canopy Walk trail and the Miocene Forest
19.00 – 20.00	Dinner with prof. Kordos, Ms. Ildiko Meszaros, and Tamas Juhasz, ranger and hunter of the Site and Imre Szarvas

Wednesday 31 July 2019	
8 – 8:30	Breakfast
8:30 – 13:30	Survey of the paleontological assets and facilities of the geotrail with prof. Kordos, György Dudas, Ms. Julia Nagy, Ms. Ildiko Meszaros and Imre Szarvas
13:30 – 14:30	Lunch
14:30 – 17:30	Survey of the mountain bike state border trail on the way orchard and the Holya hamlet and hunting tower facility; walk along the southern border of the site with György Dudas, Julia Nagy and Imre Szarvas.
17:30 – 18:30	Consultation in the research house of BNPD staff, with some focus on previous recommendations
19:30 – 21:00	Dinner

Thursday 1st August 2019	
7:30	checking out from the research house
7:30 – 9:45	Travel back to Budapest with consultation on the way, accompanying people: Gabor Mravec and Imre Szarvas
10:00	Farewell – checking in at BUD airport, departure time: 12:10

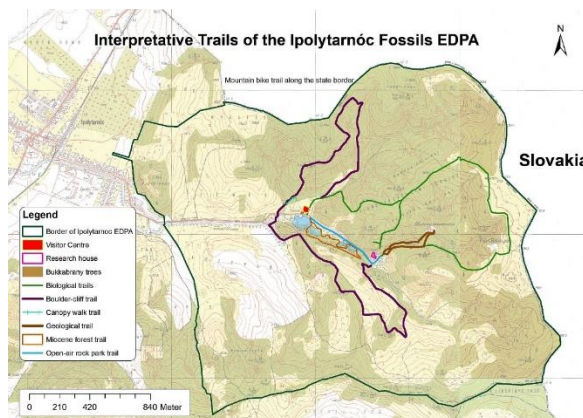
Field excursions organized during the stay:



4. 1994 Original justification for application for an EDPA for the Ipolytarnóc Nature Conservation Area

According to the application document of the 23-25 March 1994, under the heading “European interest justifying the application”, the following justifications were given:

- Characteristics and scientific, aesthetic, cultural or recreational value justifying conservation: rich occurrence of paleontological finds, scientific research. The finds are shown to the visitors. This way we popularize and help the visitors to get acquainted with the geological science.
- The rich fossil plant findings, the diversified marina micro- and megafossils, the fossil traces of birds and mammals and even of rain droplets preserved in their paleo-environment represent a unique collection of nature's treasures. The natural geological museum of Ipolytarnóc is to be thanked first of all to the habitat that had resulted from the exceptional paleo-geographical setting, to the rhyolite tuff blanket that played a role similar to the case of Pompeii.
- Unequaled exhibition which may be developed to representative international basis for education of geology experts and general public. It is a heritage of mankind and it may be an etalon area for scientific research in Neogene litho-stratigraphy, biostratigraphy, geochronology, chrono-stratigraphy, sedimentology, paleobiogeography and faciology. This is the most complex early Miocene paleontological find in Europe.





Renovated exhibition room at the visitor's centre, showing some of the fossilized, Miocene Bükkábrány tree trunks, the remains of a Miocene peat-forming swamp forest. According to the local information, these belong to paleontological analogues of present-day *Taxodium distichum* and *Sequoia sempervirens*, trees that used to live at the shores of the Pannonian Sea 7 million years ago.

5. Conditions and recommendations formulated in the consecutive diploma renewal decisions of 2000, 2005, 2010, respectively

1st renewal – recommendations. Resolution Dip (2000) 9

The Committee of Ministers, under the terms of Article 15.a of the Statute of the Council of Europe attached the following recommendations to the renewal:

1. The geological and palaeontological digs should continue, as should the scientific research aimed at interpreting the finds made on this site, which is unique from a natural history point of view; all appropriate measures should be taken to preserve these finds.
2. Co-operation should be established with the Slovak authorities responsible for the adjacent area, with a view to giving greater prominence to and preserving the entire palaeontological site.
3. The state should continue to purchase privately owned land or co-ownership shares.
4. The areas of meadowland and heath which are richest in flower species should be identified, and all appropriate management measures should be taken to preserve representative samples of these areas.
5. Gradual replacement of the exotic trees (*Robinia pseudoacacia*, *Pinus sylvestris*, *Pinus nigra*) with indigenous species should be stepped up, in particular by assisting the natural succession process.
6. The buildings should be further integrated into the landscape through appropriate planting of indigenous species; the power line that currently runs along the access path should be replaced with an underground cable.
7. The visitor reception centre should be restored to its function as an information point by setting up a permanent exhibition there, displaying both the natural features (in particular the different stages of the succession process) and the palaeontological features of the area, with the aim of making visitors more environmentally aware.

2nd renewal – recommendations, 2005. Resolution ResDip(2005) 12

The Committee of Ministers, under the terms of Article 15.a of the Statute of the Council of Europe attached the following recommendations to the renewal:

1. The geological and palaeontological excavations, and the scientific research aimed at interpreting the finds made on this site, which is unique from a natural history point of view, should continue. All appropriate measures should be taken to preserve and, if possible, exhibit these finds;
2. Co-operation should be continued with the Slovak authorities in order to preserve and enhance natural assets on both sides of the border;

3. Gradual replacement of the exotic trees (*Robinia pseudoacacia*, *Pinus sylvestris*, *Pinus nigra*) with indigenous species should be continued, by assisting the natural succession process, through ecologically sensitive land management practices; the control of the wild boar, of which there is still an overpopulation causing considerable damage, should be continued;
4. The visitor reception centre should be restored. An exhibition should be established there displaying the natural assets of the site, with the aim of making visitors more environmentally aware. As an ecotourist information point it should provide information about the site's attractions as well as basic information about the region's other natural phenomena. The site should create a home page on the Internet, accessible in English, and establish links to the web pages of other European Diploma sites;
5. The entrance to the protected area should have a sign displaying information in order to control tourism within the site and the buffer zone;
6. The buildings should be further integrated into the landscape through appropriate planting. The power line that currently runs along the access road should be replaced with an underground cable;
7. The balance between open spaces and wooded areas on the western side of the conservation area, close to the nearby settlement, should be maintained through selective grazing and cutting of pasture areas, in order to maintain the mosaic structure of the landscapes there;
8. A vegetation map and a botanical inventory should be drawn up in order to identify the most important areas from the biodiversity point of view.

3rd renewal – recommendations, 2010. Resolution CM/ResDip(2010)15

The Committee of Ministers, under the terms of Article 15.a of the Statute of the Council of Europe attached the following recommendations to the renewal:

1. recognising the site's high potential for further discoveries of geological interest, research – especially the palaeontological excavations – should continue; all appropriate measures should be taken to preserve and, if possible, exhibit the natural resources; the results of scientific research should be made publicly available;
2. the site should take an active role in the management of the Slovak-Hungarian transborder Novohrad-Ngrd Geopark, in order to preserve and interpret the natural assets of the region and to become a focal, multilingual information point for geo-tourism;
3. the entrance to the protected area should have an appropriate gateway displaying information in order to control tourism within the site and the buffer zone; the buildings along the geological trail should be further integrated into the landscape; the power line that runs between the village and the visitor centre should be replaced with an underground cable;
4. gradual replacement of the exotic trees with indigenous species should be continued by assisting the natural succession process through ecologically sensitive land management practices; the control of game – causing considerable damage to vegetation and protected animal species – should be continued;
5. the balance between open spaces and wooded areas on the western side of the conservation area, close to the nearby settlement, should be maintained to preserve the mosaic structure of the landscapes there.

6. Measures taken to look after the recommendations of the last renewal (2010)

This chapter is largely based on the EDPA “Annual report of 2018 for the period November 1, 2017 – November, 30, 2018, with some focus on changes that happened since the last renewal of 2010”, in which the reporters did an excellent job in reporting on the measures that were taken to comply with the recommendations written out in the 3rd renewal Resolution CM/ResDip(2010)15. Therefore, I repeat the consecutive recommendations, and largely copy the actions taken. If necessary, I add experiences based on the actual visit in July 2019.

Recommendation 1: *Recognising the site's high potential for further discoveries of geological interest, research – especially the palaeontological excavations – should continue; all appropriate measures should be taken to preserve and, if possible, exhibit the natural resources; the results of scientific research should be made publicly available.*

Actions taken by the site management to comply with the recommendation:

Research on the fossil footprints on the geological study trail continued since 2017. At least 40 vertebrate taxa have been identified so far. Lectures were given at scientific conferences and research papers were uploaded to the homepage of the website. Systematic brand management started to market the site as a potential geo-tourism destination. To interpret the new discoveries of the Miocene habitat new animations were created and are in use in the high-tech interpretation as 4DX time travel simulation movie at the Visitor Centre and holographic projection at the Great Conservation Hall of the geological trail. The GUIDE@HAND smartphone application got expanded and is available in Slovak and English languages as well as in offline format on the geotrail. In 2018, the cellar building, which shelters the giant silicified pine about was to get a new, stable roofing. Its construction started at the end of November of 2018.

Developments since 2010:

Since 2010 several positive changes appeared in the recognition of the area's geological heritage. These were partly instigated by the discoveries of new excavations. The fossil vertebrate taxa increased from 11 to at least 40, a roof was erected above the geotrail-side excavation and the rehabilitation of old protective buildings started. The interpretation of palaeontological assets, although with some delay, followed the new discoveries. And those are published in scientific papers and different social media platforms.

Recommendation 2: *The site should take an active role in the management of the Slovak-Hungarian transborder Novohrad-Ngrd Geopark, in order to preserve and interpret the natural assets of the region and to become a focal, multilingual information point for geo-tourism*

Actions taken by the site management to comply with the recommendation:

As the main gateway to the Novohrad-Nógrád Geopark, Ipolytarnóc promotes the geological heritage preservation of the region and advocates its resources to the visitors during special events, like the Geopark Week in May and provides an exhibition place to the Geopark. The site hosted the spring meeting of the Hungarian Geopark Committee in 2018. The UNESCO experts, who revalidated the Geopark in summer 2018, spent half a day at the Site, which heavily lobbied for the Geopark. The Ipolytarnóc guides have training about the Geopark's geological resources. The BNPD brand management extended its marketing including the Geopark's own website and programmes since early spring 2018, the cooperation got intensified between the two parties.

Developments since 2010:

The trans-boundary Novohrad-Nograd UNESCO Global Geopark with the essential endorsement of the BNPD, became member of the European and Global Geoparks Networks in 2010. Unfortunately, after that, for a while, the working relationship between the two sides extensified and the BNPD delegate was removed from the international relation staff of the Geopark. Luckily, after management changes of the Geopark in 2016 the communication became better. The Geopark got the UNESCO label in 2016 after the BNPD and the Geopark concluded a cooperation agreement. The BNPD delegate (the leader of Ipolytarnóc Fossils) has an influence again in the international affairs of the Geopark. Since that time the relationship between the two parties improved again.

Yet the management structure of the geopark still excludes the nature conservation agencies in both countries. Although the BNPD could delegate one member to the EGN Coordination Committee, further restructuring is needed for an effective geopark management. One solution would be the creation of a legal entity (European Grouping of Territorial Cooperation (EGTC)), which would enable regional authorities from different member states to participate in its management. Advanced negotiations started about the creation of the Neograd Geopark EGTC. There are some obstacles still on the Slovak side, but as a preliminary arrangement, all the other stakeholders recognized the essential role of the BNPD, by offering unanimously the potential EGTC presidency to the director of the BNPD.

Another development since 2010 is that the Global Geoparks were recognised by the UNESCO in 2015, and as a follow up the Government established the Hungarian Geopark Committee to endorse the initiative. The BNPD takes part in the Committee's work.

Recommendation 3: *The entrance to the protected area should have an appropriate gateway displaying information in order to control tourism within the site and the buffer zone; the buildings along the geological trail should be further integrated into the landscape; the power line that runs between the village and the visitor centre should be replaced with an underground cable.*

Actions taken by the site management to comply with the new recommendation:

New information panels were put into place in front of the visitor centre and at the border of the Ipolytarnóc settlement in 2018. QR codes and old Hungarian script alphabet are used in some places in addition to the more commonly used Hungarian, Slovak and English languages.

Developments since 2010:

Luckily the buildings raised in the last 15 years fit well in their surroundings. At the visitor centre earthen cover was used. The temporary shelter protecting the new excavation and the new roof cover of the protective cellar are good examples of these efforts. Unfortunately, though, partly because of fire-protection restrictions, solutions for vegetation cover of the 40 up to 26 year-old buildings is very limited and they cannot be properly blended into the landscape in their recent conditions. There are project plans targeting EU funds to erect landscape integrated and enlarged buildings in place of the old, industrial structures.

To control geo-tourism and lessen environmental impact on the whole territory it would be ideal to relocate the visitor reception facilities to the borderline, between the village and the protected area, but project proposals have failed so far. So far, several attempts to replace the above ground power line's in underground infrastructure were not successful. Nonetheless a project plan focuses on underground cabling. The BNPD is constantly applying and lobbying for funds to achieve these goals.



The Grand Hall, one of the exhibition buildings along the Geological Study Path.

Recommendation 4: *Gradual replacement of the exotic trees with indigenous species should be continued by assisting the natural succession process through ecologically sensitive land management practices; the control of game – causing considerable damage to vegetation and protected animal species – should be continued.*

Action taken by the site management to comply with the recommendation:

Minor forestry activity focused on the rehabilitation of old orchards and enhancing the spreading of indigenous oak tree species and suppressing exotic species (In particular *Robinia pseudacacia*), including the elimination of invasive ragweed (*Ambrosia artemisiifolia*) in 2018. Sensitive game management is an ongoing activity throughout the year. The ranger of the site is responsible for it with the assistance of the staff of the BNPD headquarters.

Developments since 2010:

A larger scale forestry activity has been going on covering some 10 hectares since the last decade, where the former *Robinia* forest section's transformation by indigenous tree saplings is making progress. Fencing had to be introduced to prevent game over-browsing. Game management is an ongoing activity every year managed by the BNPD, since the whole area is a long-term, specially designated hunting area, where demands for nature protection take priority.



Robinia pseudacacia in the canopy along the canopy trail at Ipolytarnóc Fossils Nature Conservation Area.

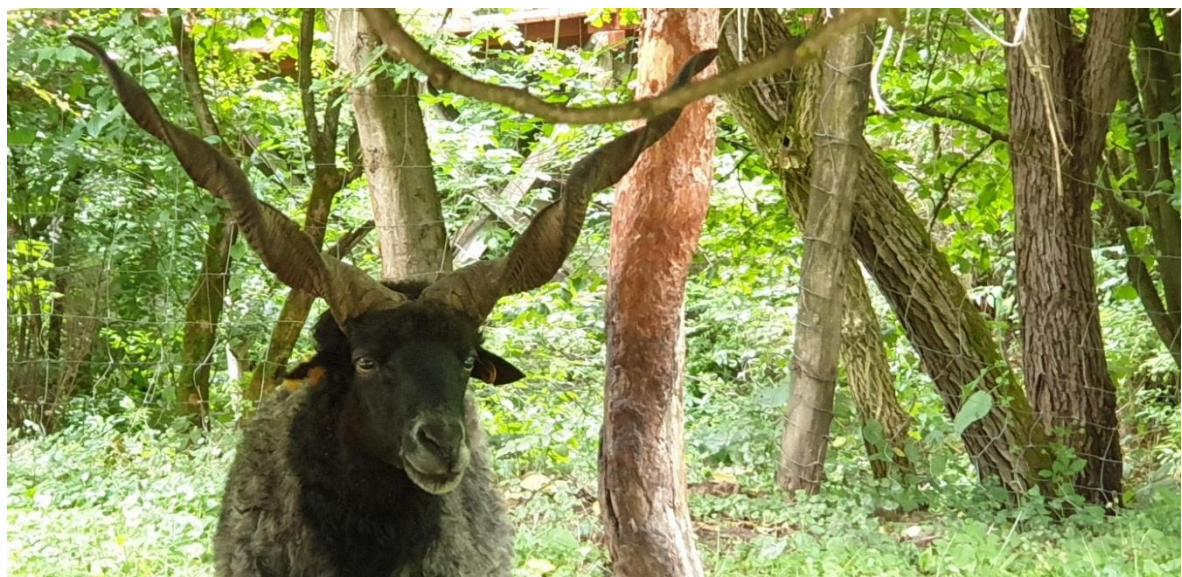
Recommendation 5: *The balance between open spaces and wooded areas on the western side of the conservation area, close to the nearby settlement, should be maintained to preserve the mosaic structure of the landscapes there.*

Action taken by the site management to comply with the recommendation:

Since this year the focus on the Racka sheep breeding changed and most of the sheep flock was moved to another area of the BNPD. The sheep grazing had minor impact on maintaining the sparse, mosaic-like structure of habitats inside the area. Instead, management was more focussed on hay-cutting rather than grazing. Narrow gauge tractors were used for hay cutting. At the buffer zone, where the meadows are leased to local farmers, grazing, hay cutting and bailing activities happened on a larger scale. In the meadows of the border zone the pine tree and Robinia spreading have been suppressed with the help of a local NGO.

Developments since 2010:

Constant and effective animal husbandry, sheep grazing and hay cutting activities managed the mosaic-like structure of open spaces with forested areas at the buffer zone of the Fossils. The meadows have been leased to local farmers. In the border zone tree thinning on forest edges has maintained the mixed vegetation cover of the landscape. Around buildings of the geological trail *Robinia* was suppressed, in some places natural succession has taken place.



Hungarian Racka sheep, one of the managers of grassland habitats in the Ipolytarnóc Fossils Nature Conservation Area.

7. Have recommendations been met with?

During the visit, a lot of attention was given by the managers of the Ipolytarnóc Fossils Nature Conservation Area to the measures that were taken to meet as much as possible with the recommendations given in 2010. Some of those recommendations were comparable to those given in 2005 and even 2000, indicating that some of them were not yet entirely met with. The same general impression remains after the field visit in 2019, although the local managers do their utmost to best manage the area as appropriate as possible, but some issues seem to last very long and difficult to resolve. Therefore, some of the recommendations of 2010 remain valid, and would best be further taken care of. Remaining recommendations are given in chapter 8, next to several new recommendations and suggestions.

8. Conditions and recommendations for the fourth renewal period 2020-2030

Given the great effort put into complying with the recommendations and given the generally positive and well-kept situation of the EDPA, I have no reasons to formulate conditions for the renewal of the EDPA. Recommendations partly confirm the earlier recommendations, some additional recommendations and suggestions are added.

Recommendation 1: *Further explore the site's high potential for discoveries of geological interest, research – especially the palaeontological excavations. It would be of significant added value if further promotion of INTERNATIONALISATION of research activities would take place by making the results of scientific research publicly available;*

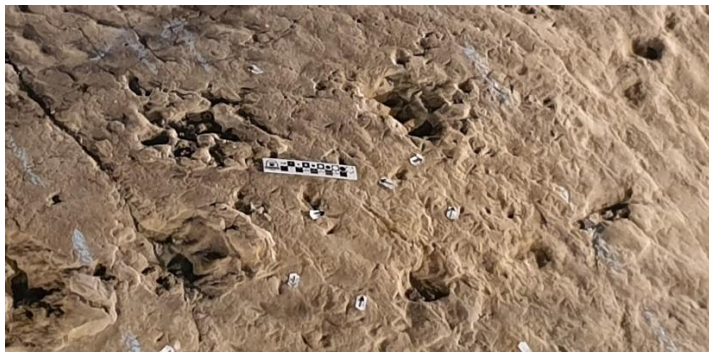


Researcher and management facilities at Ipolytarnóc Fossils Nature Conservation Area.

Recommendation 2: *Take all appropriate measures to preserve and, if possible, exhibit the geological and paleontological resources. By 2025 engage in a careful (maximally respecting geological and paleontological features) renovation/replacement of buildings, primarily the exhibition halls along the geological trail on short notice. Additionally, renovate the visitor's centre and other visitor's facilities during the renewal period of ten years;*

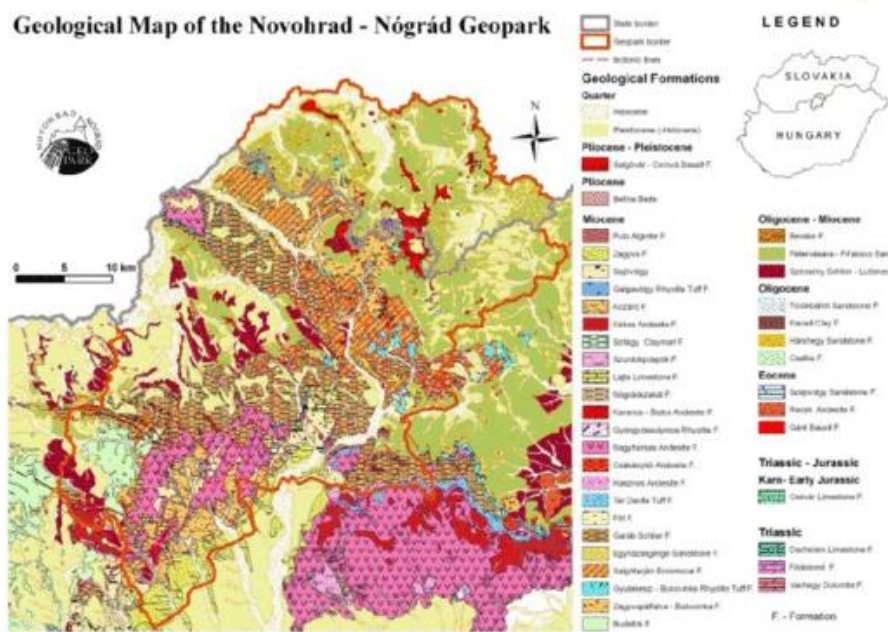


Entrance to the Geological Study Path, along which several protected excavations are exhibited.



Some of the countless fossil animal tracks. These are protected by a large exhibition building (the Grand Hall). Along the Geological Study Path several QR-code signposts are available, connecting the visitors to the GUIDE@HAND app.

Recommendation 3: *The site should further explore the possibilities of a central and active role in the integration in the Slovak-Hungarian transborder Novohrad-Ngrd Geopark, in order to preserve and interpret the natural assets of the region and to further develop the focal, multilingual information point for geo-tourism;*



Ing.arch. Erika Anderková



Recommendation 4: Continue the gradual replacement of non-indigenous tree species, in particular *Robinia pseudacacia* and regionally non-indigenous *Pinus* species with indigenous deciduous tree species (*Quercus* and others) by assisting the natural succession process through ecologically sensitive land management practices. Also take measures to control herbal non-indigenous, invasive species such as *Ambrosia artemisiifolia*. Continue the control of game, causing considerable damage to vegetation and protected animal species;



*Herbal meadow vegetation with strong presence of the highly allergenic *Ambrosia artemisiifolia*.*

Recommendation 5: *Maintain the balance between open spaces and wooded areas on the western side of the conservation area, close to the nearby settlement to preserve the mosaic structure of the landscapes there. Maintain the use of the regional breed of Racka sheep because of its added value from a historical husbandry point of view, and also to increase structural diversity in the herb-dominated vegetation. For agropastoral reasons, maintaining hay-cutting by local farmers and/or NGOs should be thrived at. Limiting management of open habitats to the use of sheep grazing alone would change the landscape into a mosaic of woody and herbal plant communities (so-called woodland), which would not comply with earlier recommendations (2010);*

Recommendation 6: *Replace the power line that runs between the village and the visitor centre by an underground infrastructure, respecting the current landscape and exhibitions;*

Recommendation 7: *Explore the feasibility of a video presentation, documentary film on the scientific evidence-based process of paleontological science (paleotaxonomy as well as paleo-ecology and ecosystem reconstruction). Particularly, the way of reasoning of palaeontologist that seem to be able to reconstruct whole animals based on 'simple' footprints is astonishing and will interest the general public and colleague scientists in life sciences;*

Recommendation 8: *As is already aimed at in the Rock Park, further develop visualisations that make links between present and past (Miocene) ecosystems;*

Recommendation 9: *Better document/report on management measures results through structured monitoring, also of public response (numbers of visitors, appreciation), etc;*

Recommendation 10: *Further enlarge local, regional and transnational public involvement and administrative cooperation, e.g. on the transnational N-N Geopark (to be realised by the Bukki NP authorities rather than the Ipolytarnoc management);*

Recommendation 11: *Consider Citizen Science projects in order to strengthen involvement and engagement of non-scientific people;*

Recommendation 12: *Continue to make good and systematic use of the logo and slogan of the European Diploma.*



The EDPA Ipolytarnóc Fossils Nature Conservation Area, where man's footprints meet fossil animal footprints.