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STUDIES SUPPORTING THE DESIGNATION OF A NEW NATURA 2000 SITE: BAHNELE BANCULUI NORD

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Abstract

The Bahnele Bancului peatlands, located in Suceava County, were selected for restoration due to multiple threats, such as habitat degradation, overgrazing, and drainage. The peatland currently faces an unfavourable conservation status, with Picea abies trees, over 80 years old, being the dominant vegetation. By integrating national moss species surveys with ongoing peatland restoration efforts, local research has been significantly supported. Field assessments conducted between 2022 and 2023 revealed valuable species and habitat data. Buxbaumia viridis (Moug. ex Lam. & DC.) Brid. ex Moug. & Nestl., a key moss species that serves as an indicator of well-preserved spruce forests and is protected by the EU Habitats Directive, was identified on the site in June 2022. In addition, priority habitats, such as 91D0 Bog Woodland were observed, with notable species including Sphagnum spp., the rare orchid Epipactis helleborine, and the Carpathian newt (Lissotriton montandoni). These findings have contributed to the completion of the Natura 2000 site designation forms, which include detailed habitat and species data along with a map, highlighting the site's importance for conservation.*

Key words*: bryophytes, threatened species, bog woodland.*

INTRODUCTION

The European network of natural areas, Natura 2000, serves as an umbrella for the long-term conservation of valuable natural habitats in accordance with the Habitats Directive 92/43/EEC, as well as for the protection of threatened flora and fauna species. Peatland habitats play a critical role in environmental preservation and climate change mitigation. Reducing carbon loss in peatlands, which store significantly more carbon than the world's tropical rainforests, means an important reduction in global greenhouse gas emissions (Page & Baird, 2016).

Given their importance and the imperative need to protect these peatland habitats vital for certain species of conservation concern, proposing the inclusion of Bahnele Bancului North (BBN) peatland within the Natura 2000 network represents the most appropriate solution. This will help protect the included Bog Woodland habitat (91D0*) as well as conserve *Buxbaumia viridis* (Moug. ex Lam. & DC.) Brid. ex Moug. & Nestl. (Ștefănuț et al., 2023) and *Lissotriton montandoni* (Carpathian newt) protected species.

According to Steinacker et al. (2019), Bog Woodlands (91D0*) represent the most threatened forest habitats due to their heightened vulnerability to climate change. They advocate for expanding the Natura 2000 network to reduce non-climatic stressors on this habitat, and to support climate change mitigation efforts.

Consistent with the current study, the research conducted by Ștefănuț et al. (2023) provides fundamental support for the proposal to designate new Natura 2000 sites, including BBN peatland. Given that habitat 91D0* is a priority habitat under the EU Habitats Directive (Annex I), also found in the BBN site and hosting moss species such as *B. viridis* and *Sphagnum* spp., and considering Law 49/2011, which ratifies GEO 57/2007 and emphasizes the necessity of designating special conservation areas to ensure their long-term preservation, we prioritized the

BBN peatland proposal under the Natura 2000 framework. Moreover, the solution also supports the EU Biodiversity Strategy for 2030, which calls for strict protection of 10% of the terrestrial area and the preservation of 30% of it by that year (European Commission, 2020) and to reach the Kunming-Montreal Global Biodiversity Framework Target 2 (CBD Secretariat, 2022).

The aim of this study was to assess the BBN site's degradation degree, pinpoint the limiting factors that have impacted the condition of this delicate habitat, outline the methodology employed to efficiently restore the site, and emphasize the importance of implementing legal measures to protect the site by legislation. By adding the BBN peatland to the Natura 2000 network as a Special Area of Conservation (SAC), the main goal is to guarantee its long-term conservation in optimal conditions.

MATERIALS AND METHODS

Site location and description

The BBN peatland is located in the northern region of the Eastern Carpathians and the western part of the Dornelor Depression, southwest of Suceava County. At 898 m a.s.l. elevation, the site's eastern boundary follows the Bancu (Coșnița) stream and the DC 85B communal road (Figures 1 and 2); here, the soil is classified as eutrophic peat. The terrain becomes forested at higher elevations, initially with peaty soil, then developing into a spruce forest with shallow soil, reaching an elevation of up to 970 m a.s.l.

The BBN site's geographical coordinates, covering an area of 18.85 ha, are 47°23'40.743"N 25°11'38.713"E. The BBN site belongs to the North-East administrative region, NUTS level 2 code RO 21, and is entirely located within the Alpine biogeographical region.

This peatland is owned by the Dorna Candrenilor Commune town hall and is not included in the protected natural areas managed by the National Agency for Protected Areas (ANANP).

Evaluation and monitoring activities

In the last years, many efforts have been made by several European countries to adopt national peatland restoration and conservation strategies and ensure their sustainable use. The Institute of Biology of the Romanian Academy Bucharest has also made such efforts between 2022 and 2024. Along with six other sites from the Suceava and Maramureș counties, the BBN peatland was included in the restoration process through the project "*Degraded mires and peatlands restoration of North-East 2 region of Romania (PeatRO3)*" (https://www.ibiol.ro/peatro3/index.htm) funded through EEA Grants mechanisms.

Considering the sensitivity of peatland habitats to biotic and abiotic factors, the evaluation and monitoring activities were designed accordingly. In the first stage, an initial assessment of the peatland conservation status was made, evaluating pressures and threats, vegetation changes, and the indicator species (several taxonomic groups have been inventoried), but also measuring the groundwater level and some environmental variables (water physicochemical parameters, air physical parameters). Subsequently, the monitoring was carried out over the period from 2022 to 2024.

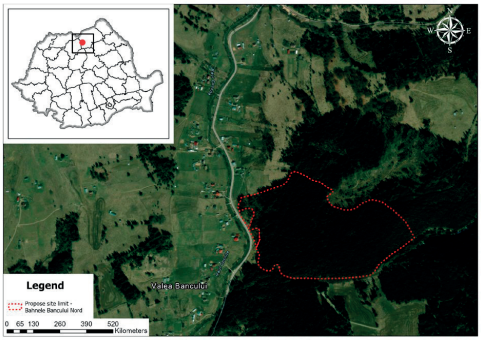

Figure 1. Geographical limits of the BBN proposed site as a SAC, under Natura 2000 network

Figure 2. The site layout next to the DC 85B communal road (drone image) (photo by Bîrsan C.)

The site pressures and threats caused by anthropic and environmental factors were detected throughout the monitoring and restoration period, the codes being assigned according to the European Environment Agency's updated list (2024).
Experts used drones (DJI Mini 2) and cameras to evaluate the vegetation changes and identification keys to assess the indicator species. Field surveys were conducted alongside these methods, allowing experts to identify plant species *in situ*, determine their proportions within the floristic composition, and study the site's conservation value. The nomenclature of plant species follows Sârbu et al. (2013), while habitat types are classified according to the *Interpretation Manual of Natura 2000 Romanian Habitats* (Gafta & Mountford, 2008; Doniță et al., 2005).
The site's water level was measured using five piezometers: four installed in the northern, eastern, southern, and western parts, and the fifth in the site's center. The water level in the five piezometers was recorded at different times during the monitoring process (June 2023, October 2023, April 2024).
The water physicochemical parameters (pH, oxidation-reduction potential− ORP, dissolved oxygen− DO, conductivity, total dissolved solids− TDS, turbidity, and temperature) were measured using the HI9829 multiparameter instrument (Hanna Instruments).
Furthermore, air physical parameters (temperature, relative humidity, and dew point) were measured every 30 minutes using EasyLog EL-USB 2 Data Loggers (DL) placed in two different locations (DL 1: 47°23.754'N 25°11.430'E; DL 2: 47°23.734' N 25°11.455' E).

Reconstruction activities
The restoration activities were determined based on the initial pressure and threats identified.

Barrage construction
In October 2023, a dam with 47°23'45.1"N 25°11'25.2"E coordinates was built to maintain the peatland's optimal hydrological level. The barrage, which measured 40 cm x 300 cm in dimensions, was constructed using natural materials: wooden spikes made from fallen trees on the site, untreated wooden planks, and soil, which were covered with local vegetation (Figure 3).

Figure 3. The barrage built to limit the water flow from the BBN peatland (arrow - the flow direction of the drainage ditch towards DC 85B and the Bancu River)

Water pond construction
To attract some characteristic invertebrates, a 20 sqm water pond (47°23'45.35" N 25°11'25.47" E) with a depth of 50 cm was constructed in September 2022 (Figure 4).

Figure 4. The water pond constructed in BBN peatland

Waste collection
Waste found in different areas of the BBN peatland was collected manually in garbage bags and then transported by the local authorities to specially designed places.

RESULTS AND DISCUSSIONS

Pressures and threats
After the initial evaluation, we found that the BBN peatland has an unfavorable conservation status. This was evidenced by the substantial garbage deposits (Figure 5), low water table caused by drainage through an artificial ditch, which is the main threat in the marshes throughout Europe (Figure 6), overgrazing, and significant vegetation changes with transition to

spruce afforestation (Figure 7), and other pressures and threats (Table 1).

Figure 5. Significant garbage deposits inside BBN

Figure 6. Drainage ditch at the perimeter of the site

Figure 7. Transition of the vegetation to spruce afforestation

Table 1. Main pressures and threats of BBN peatland

Code	Pressure/threat name 2019-2024
PA08	Extensive grazing or undergrazing by livestock
PB01	Conversion to forest from other land uses, or afforestation (excluding drainage)
PB05	Logging without replanting or natural regrowth?
PB23	Physical alteration of water bodies for forestry (including dams)
PE01	Roads, paths, railroads and related infrastructure
PF06	Deposition and treatment of waste/rubbish from built-up areas
PF07	Residential and commercial activities and structures generating pollution to surface or ground waters
PF13	Drainage, land reclamation and conversion of wetlands, marshes, bogs, etc. for built-up areas
PJ01	Temperature changes and extremes due to climate change
PJ03	Changes in precipitation regimes due to climate change

Site's importance: habitats and flora

While the lowest part of the site appears as an eutrophic swamp, as elevation increases, the landscape transitions into a wooded area, first with peaty soil and then into a spruce forest on shallow soil, extending up to an altitude of 970 m.

The marshy area covers approximately 2.28 ha and is characterized by a eutrophic wetland with a shallow peat layer that has not yet been entirely isolated from infiltrating groundwater. Over time, this area may develop into a peat bog if the peat layer becomes sufficiently thick to detach from the influence of mineral-rich infiltration water (Pop, 1960). The plant species recorded in this area include: *Alnus incana* (L.) Moench, *Betula pendula* Roth, *Rhamnus frangula* L., *Salix caprea* L., *Sorbus aucuparia* L., *Caltha palustris* L., *Cirsium palustre* (L.) Scop., *Epilobium palustre* Willd., *Equisetum sylvaticum* L., *Filipendula ulmaria* (L.) Maxim., *Galium palustre* L., *Juncus effusus* L., *Lychnis flos-cuculi* L., *Lycopus europaeus L., Myosotis scorpioides* L., *Potentilla erecta* (L.) Raeusch., *Scirpus sylvaticus* L., *Urtica dioica* L.

The forested area covers 97.72 ha, consisting primarily of coniferous forests. The site is of significant conservation value due to the presence of two habitats of Community

importance: priority habitat **91D0*** Bog woodland that provides habitat for notable moss species such as *B. viridis* and *Sphagnum* spp., and also habitat **9410** Acidophilous Picea forests of the montane to alpine levels (Vaccinio-Piceetea) that hosts several important plant species, including *Sphagnum* spp., *Epipactis helleborine* (L.) Crantz, *Lycopodium annotinum* L., and *Lycopodium clavatum* L.

The **91D0*** Bog woodland habitat covers 1.54 ha of the site and consists primarily of coniferous forests. The tree layer is dominated by spruce (*Picea abies* (L.) H. Karst.), with scattered occurrences of *Pinus sylvestris* L., *Betula pendula*, *Rhamnus frangula*, and *Salix caprea*. In the most oligotrophic areas of the forest, the ground layer is dominated by a thick carpet of Sphagnum moss, often forming dense accumulations at the base of spruce trees. The characteristic moss *Sphagnum squarrosum* Crome exhibited healthy growth and adequate hydration (Figure 8). The understory vegetation is sparse, with only a few recorded species, including *Athyrium filix-femina* (L.) Roth, *Maianthemum bifolium* (L.) F.W.Schmidt, *Vaccinium myrtillus* L., and *Vaccinium vitis-idaea* L. Of particular conservation interest is the presence of *B. viridis*, a species of Community interest, which was observed growing on decomposing fallen logs in various stages of decay.

Figure 8. *Sphagnum squarrosum* in the BBN peatland (photo by Ștefănuț M.M.)

The majority of the investigated area is occupied by the **9410** Acidophilous Picea forests of the montane to alpine levels (Vaccinio-Piceetea) habitat, covering 16.88 ha. The tree layer consists almost exclusively of spruce (*Picea abies*), with occasional occurrences of *Fagus sylvatica* L., and *Sorbus aucuparia.* The shrub layer is poorly developed, with scattered individuals of *Sorbus aucuparia*, *Salix caprea,* and *Sambucus racemosa* L. The herbaceous layer is unevenly distributed, forming patches depending on the amount of light reaching the forest floor. Recorded species include *Oxalis acetosella* L., *Cardamine glanduligera* O.Schwarz, *Campanula abietina* Griseb., *Dryopteris filix-mas* (L.) Schott, *Vaccinium myrtillus, Athyrium filix-femina*, *Maianthemum bifolium, Epipactis helleborine*, *Lycopodium annotinum*, and *Lycopodium clavatum*.

Among the recorded species, *Lycopodium annotinum* and *Lycopodium clavatum* are species of Community interest (Figure 9). They are included in Annex V of the Habitats Directive due to their slow growth and sensitivity to habitat disturbances. These clubmosses are important in forest ecosystems, forming dense mats contributing to soil stabilization and moisture retention. *Epipactis helleborine* is an orchid species listed on the National Red List (Oltean et al., 1994) and included in CITES Appendix II, highlighting its conservation concern.

Figure 9. *Lycopodium clavatum* (left) and *Lycopodium annotinum* (right) (photo by Nicoară G.-R.)

In Romania, according to the European Environmental Agency (EUNIS), 91D0* habitat is already protected in 27 Natura 2000 sites (*Bog Woodland. EUNIS*), while 9410 habitat is protected in 66 Natura 2000 sites (*Acidophilous Picea forests of the montane to alpine levels, Vaccinio-Piceetea, EUNIS*).

Following the inventory of some animal and plant groups, two species protected under the EU Habitats Directive were identified: *B. viridis* and *Lissotriton montandoni* (Carpathian newt).

The Carpathian newt (*Lissotriton montandoni*, Figure 10) was found in April 2024 at the edge of the BBN site (coordinates: 47.396137° N,

25.190248° E), and we only observed one male. Although locally abundant in its distribution range, the species is endemic to the Carpathian Mountains, where it is distributed primarily in the Eastern Carpathians and partially in the Southern Carpathians from 200 to 1900 meters a.s.l. Its terrestrial habitats are represented mainly by moist deciduous, coniferous, or mixed forests, and meadows. Sometimes individuals can be found above the tree line in alpine habitats. The species is mainly affected by the destruction and modification of aquatic breeding habitats. Listed as Least Concern (LC) by the IUCN Red List, the Carpathian newt nevertheless has a descending population trend, although it is protected by the Bern Convention and the Habitats Directive, as well as Laws 13/1993 and 49/2011 in Romania.

Figure 10. *Lissotriton montandoni* in the BBN peatland (Carpathian newt) (photo by Maria G., April 2024)

Figure 11. Mature sporophyte of *Buxbaumia viridis* in the BBN peatland (photo by Ștefănuț S., June 2022)

B. viridis, an important moss species that indicates well-preserved spruce woods, was discovered in the BBN site 91D0* on June 23, 2022 (Ștefănuț et al., 2023). Six individuals were located on a decayed coniferous log at an altitude of 900 m a.s.l., facing west, (47°23'43.8" N 25°11'27.2" E, 895 m a.s.l.) (Ștefănuț et al., 2023) (Figure 11). On April 12, 2024 two individuals were found in the same spot (Figure 12).

Figure 12. Sporophytes of *Buxbaumia viridis* in the BBN peatland (photo by Ștefănuț S., April 2024)

B. viridis is a circumpolar species that is found in Europe, North America, and East Asia. It is also found in Romania in the Alpine bioregion. Sapro-lignical, characteristic of natural and mature spruce forests, *B. viridis* primarily grows on dead wood; however, it can also be rarely found on wood remnants on the ground (Deme et al., 2020; Kropik et al., 2020). It prefers wood in an advanced stage of decay, and it could be found on large fallen trunks and stumps, especially conifers, particularly those close to the streams, because it needs high humidity (Ștefănuț et al., 2023; Puntillo & Puntillo, 2024). However, it has also been found on beech, birch, mountain ash, maple and alder. These special requirements, along with its small size, dioecy, short life span, and low competitiveness with other larger bryophytes, cause its scarcity (Wiklund, 2002). Kropik et al. (2020) state that the climate has the most significant influence on the occurrence of *B. viridis*, with the dead wood quality coming secondarily.

B. viridis has a small size (10-18 cm), with a reduced gametophyte and a well-developed sporophyte, with brown setae that measure 5-10

mm, and a large, green capsule that measures 5-7 mm (Mihăilescu et al., 2015). The upper side of the capsule is slightly flattened, and the cuticle of the capsule exfoliates at maturity. Being an annual, acrocarpous, and dioecious species, *B. viridis* depends on the distance between the male and female bryospores to germinate as well as the existence of a water film that facilitates the antherozoid's progression towards the female (Ștefănuț et al., 2023).

While the gemmae are produced all year round, the juvenile sporophyte individuals start to develop in the fall, and around half of them die before they reach maturity in the summer (Deme & Csiky, 2021); both freezing followed by drought can hinder the development of sporophyte (Dierssen, 2001; Wiklund, 2002). According to Guillet et al. (2021), one of the most important factors influencing the presence of sporophytes− which are regarded as poor competitors (Hola et al., 2014)− may be the humidity. Due to its high-water level and forestation, the BBN peatland offers this protected species an ideal habitat.

Legally protected in Europe by Annex I of the Bern Convention, Annex II of the Habitat-Fauna-Flora Directive *(Directive 92/43/CEE),* and first included in the European List of Bryophytes as a Critically Endangered category - CR (Schumacker and Martiny, 1995)− *B. viridis* was also recently added to the new European Red List's Least Concern group species (Hodgetts et al., 2019). Plášek (2004) suggests that the species needs to be conserved in protected areas designated under the Natura 2000 network.

In a previous study, Ștefănuț et al. (2023) recommended reclassifying the conservation status in Romania of *B. viridis* from Endangered - EN A3c; C1 (Hodgetts and Lockhart, 2020; Ștefănuț & Goia, 2012) to Vulnerable - VU A3c. According to the European Environment Agency EUNIS, *B. viridis* is already protected in about 532 Natura 2000 sites across 18 countries (*Buxbaumia viridis*, *EUNIS*). In Romania, the species is protected in 11 Natura 2000 sites (*Buxbaumia viridis*, *EUNIS*). In the meantime, new reports of this species have been made for both Natura 2000 sites and areas not currently protected, supporting the update of management plans as well as declaring new sites.

The uniqueness and significant conservation value of the site are primarily defined by the presence of two habitats of Community importance (habitat 91D0* Bog Woodland and habitat 9410 Acidophilous Picea forests of the montane to alpine levels) and the occurrence of protected species, specifically *B. viridis* and the endemic *L. montandoni*. The distribution of *B. viridis* is well-documented in the Southern Carpathians, including protected sites, whereas in the Eastern Carpathians, it remains less studied. Consequently, distribution data in this region is scarce, highlighting the need to establish new protected areas in alignment with the EU's Biodiversity Strategy for 2030 (European Commission, 2020).

Restoration efforts - preliminary results

The PeatRO3 project's reconstruction efforts in the BBN peatland were designed to rebalance the ecosystem. One of the main targets was restoring the optimal hydric regime by reducing water loss through the drainage ditches. This goal was achieved by building a barrage across the drainage channel. This measure will encourage the growth of native plant species and limit the emergence of invasive vascular plant species. As a result, the ecosystem can function independently, self-regulate, and develop into an active peat bog that sequesters carbon dioxide through peat production.

The water pond construction aimed to attract invertebrate species such as the protected species *Leucorrhinia pectoralis* (Charpentier, 1825) (Natura 2000). Like other odonates, this species' life cycle depends on a water body, as they lay eggs on the water surface or aquatic vegetation. Dragonfly species can colonize a new water pond in three years after restoration (Elo et al., 2015). In the case of the BBN peatland, if the hydric level increases and remains at an optimum level, the newly formed water ponds can be colonized by *Leucorrhinia pectoralis* (Charpentier, 1825), as a high number of individuals have been reported in the nearby located Pilugani peatland (Manci & Iorgu, 2021).

After waste collection and disposal in September 2022 and October 2023 (25 garbage bags), an informative panel mentioning the restricted activities was placed at the site entrance (Figure 13) to minimize further

garbage accumulation. Besides interdicting garbage disposal, the panel also contains warning messages aimed at restricting other harmful anthropic activities such as grazing and tree cutting. Also, by scanning the QR codes (in Romanian and English) installed on the panel, visitors and local community members can access details about the restoration project, the eco-touristic potential of the site, and additional information on responsible behaviour, thus contributing to the long-term success of habitat preservation.

In their study, Strzelecka et al. (2022) emphasize the importance of a strong link between the residents' relationship with nature and the conservation policies, thus resulting in the need to engage them in various forms of nature stewardship. A better understanding of the residents' bond with nature, an "engagement in" approach through a collaboration that reduces pressures on the habitat (in our case grazing, waste disposal, etc.), will strengthen the connection between nature and the local community, which is directly involved in protecting the site (Restall et al., 2021).

Figure 13. The billboard from the entrance to the site

Monitoring Results - preliminary effects

At the BBN peatland, piezometer data readings indicated optimal hydration, albeit with uneven water distribution across the ecosystem. These variations were influenced by the site topography, the presence of water sources, and the peat`s capacity to retain moisture. Measurements of water level variations from the piezometers undertaken within the site between October 2023 and April 2024 revealed a general increase in hydration with 8, -1, 6.5, -4, and 6 cm, respectively, indicating an improvement in the peatland`s water retention capacity.

Two EasyLog EL-USB 2 Data Loggers (DLs) recorded the meteorological parameters: temperature, humidity, and dew point (Figures 14 and 15). Unlike temperature and dew point, which exhibited constant trends across the two monitoring points (corresponding with normal monthly and seasonal variations), some variations in humidity level were observed. Namely, slight differences were recorded between the humidity of the two site zones, especially in the warmer months. Local environmental factors such as vegetation, water availability, and sun exposure can contribute to these disparities. However, the monthly average humidity levels, which ranged from 74.23% to 98.84% relative humidity, showed that the atmospheric conditions were favourable, with a tendency for higher humidity levels in the southern part of the site.

Variations between the designated points (natural water pond and artificial water pond) were found by *in situ* measurements of water quality parameters using the HI9829 multiparameter instrument (Hanna Instruments) (Table 2).

Table 2. Water parameter values

Parameter	Natural water pond	Artificial water pond
pH	6.69	8.03
ORP (mV)	177.3	-5.5
DO (%)	7.3	3
DO (mg/L)	0.74	0.26
Conductivity (µS/cm)	50	102
TDS (mg/L)	25	49
Turbidity (NTU)	11.4	22.4
Water temperature (°C)	9.39	22.4

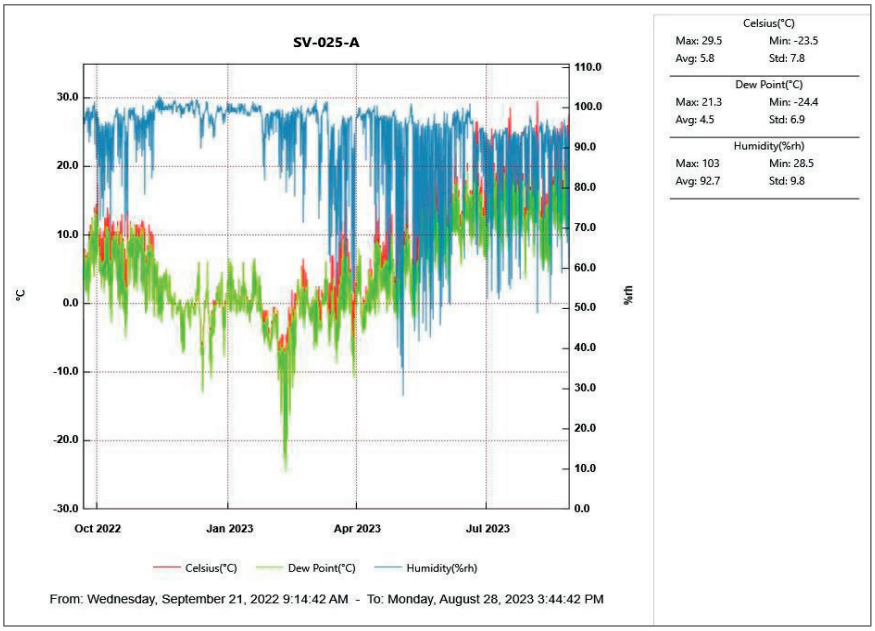

Figure 14. Variations in parameters measured with Data Loggers (September 2022 - August 2023)

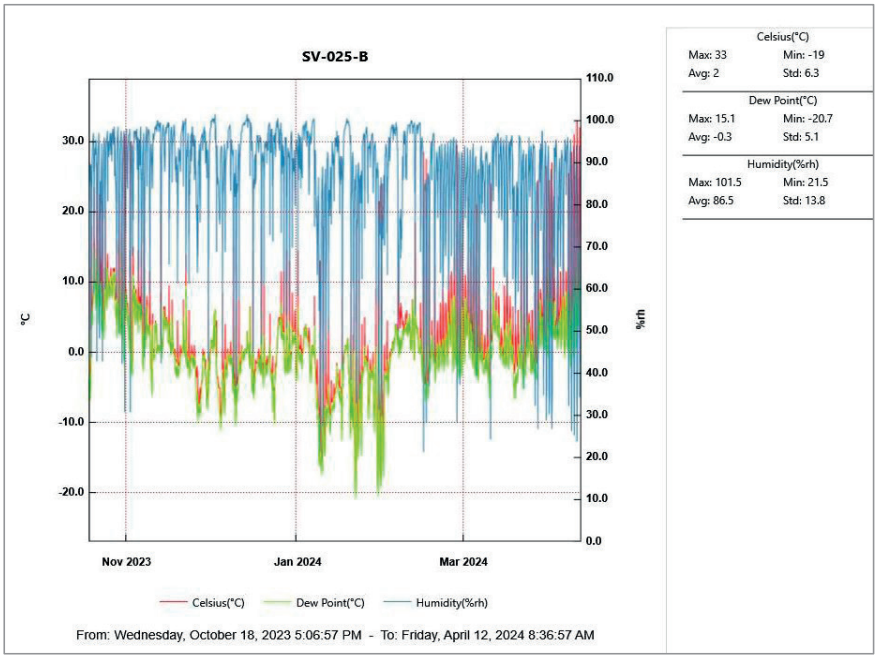

Figure 15. Variations in parameters measured with Data Loggers (October 2023 - April 2024)

The pH values were within the optimal range for both water bodies. Instead, in the natural pond, a positive ORP was recorded, indicating the oxidation of organic materials, whereas the artificial pond had a negative ORP, reflecting reducing reactions. Dissolved oxygen (DO) saturation also differed, measuring 7.30% in the natural pond and 3.00% in the artificial pond,

supporting further chemical processes as indicated by the ORP values. Peat formation occurs through the anaerobic decomposition of organic matter. Due to sediment accumulation, the artificial pond showed higher conductivity, TDS, and turbidity, which led to a reduction in water clarity. Also, water temperature influenced both biological and chemical activities, with lower temperatures slowing these processes and higher temperatures accelerating them.

A better understanding of the restoration process's quality may result from the ongoing improvement and adaptation of the monitoring protocol, guided by methodologies employed in other peatland restoration projects in other countries (Kyrkjeeide et al., 2024). Beyond the national strategies of restoration and conservation of peatlands, in a comparative study, Nordbeck & Hogl (2024) conclude that the European governments are becoming more politically committed to sustainable management of peatlands. Also, maintaining peatlands in good conservation status means a better potential for carbon-storage, an efficient solution for climate change mitigation (IPCC, 2021). Therefore, for the long-term preservation of peatland habitats in our country, a legislative framework must be established supporting these strategies.

CONCLUSIONS

The BBN peatland restoration efforts implemented during the PeatRo3 project led to an overall water table rise, despite the initial unfavourable conservation status.

Ongoing and improved monitoring, alongside the identification of key indicator species will be essential to assess the long-term stability and success of the restoration.

This improvement of the hydric level constitutes a starting point for the development of a legal framework aimed at the conservation and protection of this site.

This study scientifically supports the BBN peatland's designation as a Natura 2000 site, as proposed in April 2024. The primary objective of this designation is to ensure the long-term legal preservation of the protected species, namely *B. viridis* and *L. montandoni,* as well as the priority habitat Bog Woodland (91D0*), with a particular emphasis on their conservation. Furthermore, it advances the broader objective of achieving tangible progress towards the EU's goal of expanding terrestrial protected areas across Europe.

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