

# Reinforcing protected areas capacity through an innovative methodology for sustainability

Newsletter 2: July 2019



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**The Project is co-funded by the European Regional Development Fund (ERDF)  
and national funds of the participating countries**

## BIO2CARE – A project that cares for the environment

### A Few Words for our Project

“Reinforcing protected areas capacity through an innovative methodology for sustainability” (BIO2CARE) is a project approved for funding under the *Interreg V-A “Greece-Bulgaria 2014-2020” Cooperation Programme*. BIO2CARE falls under the Priority Axis “2. A Sustainable and Climate adaptable Cross-Border area”, Thematic Objective “6. Preserving and protecting the environment and promoting resource efficiency”, Investment Priority “6d. Protecting and restoring biodiversity, soil protection and restoration and promoting ecosystem services including NATURA 2000 and green infrastructures”.

In full compliance with the objectives of the Programme, the overall goal of BIO2CARE is **to reinforce Protected Areas’ Management Bodies (PA MBs) efficiency and effectiveness in an innovative and integrated approach**, promoting territorial cooperation in a very concrete and well-defined approach. BIO2CARE’s main objective is to enhance PA MBs administrative capacities on the benefit of biodiversity as of local communities. This is in full compliance with the programme’s specific objective “To enhance the effectiveness of biodiversity protection activities”.

The BIO2CARE proposed decision-making platform could become a valuable tool for understanding the activities and quantifying their respective impacts on biodiversity (e.g. measuring ecological footprint, carbon footprint and water footprint). The monitoring activities proposed will give a competitive advantage in managing bodies to enhance their capabilities of protecting the areas of interest and mitigating illegal activities. Small infrastructures like pathways accessible by disabled people will make PAs more attractive to new audience never been attracted so far, while will attract new target groups for neighboring businesses. At the same time this will be PAs contribution to social coherence. To further support entrepreneurship on surrounding areas, BIO2CARE will establish the process of awarding an ecolabel, a quality scheme that will help local businesses to show a qualitative distinction, surpassing competitors.

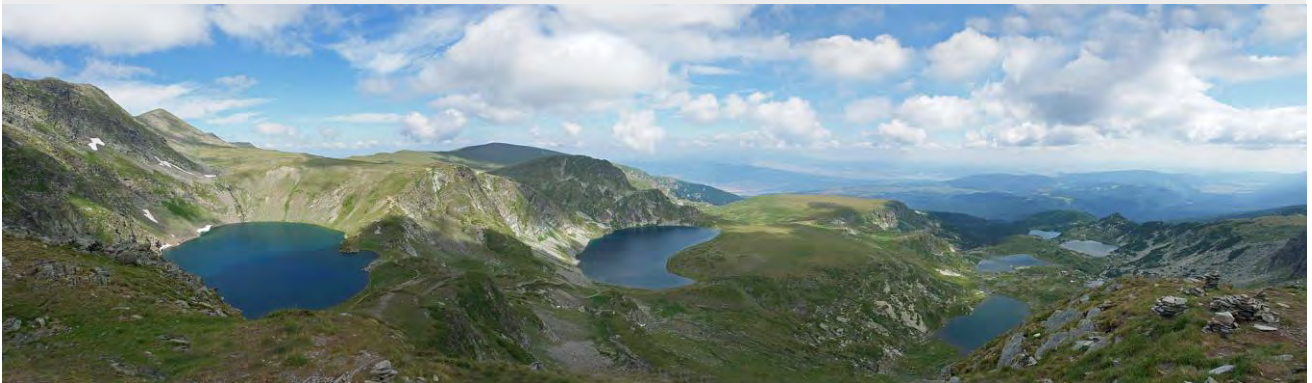
BIO2CARE applies an integrated approach responding to PAs entire environmental systems. It will deliver a wide range of differentiated outputs. Its main deliverables are:

- D.1: A set of studies
- D.2: One set of monitoring equipment fully operational per country
- D.3: Two sets of ICT applications and e-tools for valorizing, studies and data produced from monitoring systems per country
- D.4: Two small infrastructures certified for access and use by persons with disability
- D.5: One common labeling scheme

D.6: Training sessions

D.7: A Policy Recommendations Report

D.1, D.2, D.3 will form the essential components of one integrate Decision Support system (DSS) per country, that could operate separately or jointly on the cross-border area. D.4, D.5, D.6 will feedback DSS. Lessons learned during BIO2CARE implementation and scientific results from studies will form the D.7 output, to be discussed during last quarter of project with local, regional and national authorities.



The seven Rila lakes  
*Credits: Rila National Park*





## Mixed activities at Porto Lagos lagoon

*Credits: Managing Authority for Nestos Delta – Vistonis & Ismaris lakes*

## Expected Results of BIO2CARE project

BIO2CARE project intervention logic was developed based on the theory of change, taking into account the attempted changes as the basis for a result orientated project. It will succeed so by:

- (1) Producing new knowledge (WP3)
- (2) Applying to PA MBs new procedures and tools (WP3&4)
- (3) Setting the first solid foundations for one common or two commonly operating cross-border Decision Support system (-s) (WP4)
- (4) Setting in operation two jointly designed sets of monitoring equipment and exchanging information produced by them (WP4)
- (5) Setting in force an eco-labeling award scheme to help local businesses to overcome possible disadvantages emerge from protection status that apply (WP4)
- (6) Making PAs accessible to disable and aged persons (WP4 & 5)
- (7) Training specific target groups with training sessions and workshops (WP5)
- (8) Increasing awareness among target groups and wide audience (WP2)
- (9) Contributing to policies through Policy Recommendations Report (WP5)



### View from Porto Lagos lagoon

*Credits: Managing Authority for Nestos Delta – Vistonis & Ismaris lakes*

As BIO2CARE project is devoted to change, at the end of its implementation major positive impacts will be identified on PA MBs capacities and on local business communities.

The development of the two e-tools will increase the managerial capacity of the PA MBs in order to improve the management of the PAs as systems, define and prioritize the necessary improvements.

The combination with high-tech monitoring systems (both for fauna/flora and for illegal activities) will furthermore contribute to the improvement of PAs environmental status.

Small technical works (pathways), will provide a steady groundwork for the promotion of green tourism without discrimination, for every disabled and/or aged person to enjoy the natural beauty of the PAs.

This social approach of green tourism that is coupled with the promotion of the silver economy approach is expected to be a starting point for the establishment of similar activities in both countries.

## Our Partnership

We Cooperate! We Act Jointly and We All Win!

**BIO2CARE project** consists of the following partners:

**Democritus University of Thrace (DUTH)**, represented in the Project by the *Laboratory of Environmental Management and Industrial Ecology (LEMIE)*.

<https://lemie.pme.duth.gr>

**Municipality of Nestos.** [www.nestos.gr](http://www.nestos.gr)

**Greek Biotope/Wetland Centre (EKBY).** [www.ekby.gr](http://www.ekby.gr)

**National Confederation of Disabled People (NCDP).** [www.esamea.gr](http://www.esamea.gr)

**Regional Inspectorate of Environment and Waters – Blagoevgrad (RIEW – Blagoevgrad).**

**Rila National Park Directorate (RNPD).**

**The South-West University of Neofit Rilski in Blagoevgrad (SWU).**

**Pirin Tourism Forum (PTF).**





Mountain summit at Rila National Park

*Credits: Rila National Park Directorate*

## Implementation of BIO2CARE project

### 3<sup>rd</sup> BIO2CARE Project Joint Steering Committee Meeting in Blagoevgrad, Bulgaria

The Third Meeting of the Joint Steering Committee of the project BIO2CARE was held on 16 and 17 April 2019. The meeting was hosted by the Bulgarian partners of the Project: The Regional Inspectorate of Environment and Waters – Blagoevgrad, the Rila National Park Directorate, the Southwest University of Neofit Rilski and the Pirin Tourism Forum.

Its goal was to report the project progress up to this end, as well as the results achieved and problems encountered; to set steps necessary for the next project period. An overview was made of the implementation of the project Communication Plan for achieving better publicity and visualization.

Participants discussed the finalization of a whole phase of scientific research in the two project territories – National Parks of Rila (Bulgaria) and of Eastern Macedonia and Thrace (Greece) – related to the application of a new Methodology for calculating carrying capacity, ecological footprint, carbon footprint and water footprint.

The activities connected to the provision of access of people with disabilities to the two protected areas are progressing as planned, as well as the creation of an Eco-Labelling Scheme for local businesses. Preparations have started for the series of trainings envisaged towards the project end in order to present and share project results.

The guests representing the Greek partners of the project - Democritus University of Thrace, Nestos Municipality, the The Goulandris Natural History Museum / Greek Biotope Wetland Centre, the National Confederation of Disabled People, Bruch of Northern Greece – were shown the newly built Visitor Center of Rila National Park in Blagoevgrad and their first Visitor Center at Panichishte Resort Area.



### 3<sup>rd</sup> BIO2CARE Project Joint Steering Committee Meeting in Blagoevgrad, Bulgaria

*Credits: BIO2CARE project photo archive*



### 3<sup>rd</sup> BIO2CARE Project Joint Steering Committee Meeting in Blagoevgrad, Bulgaria

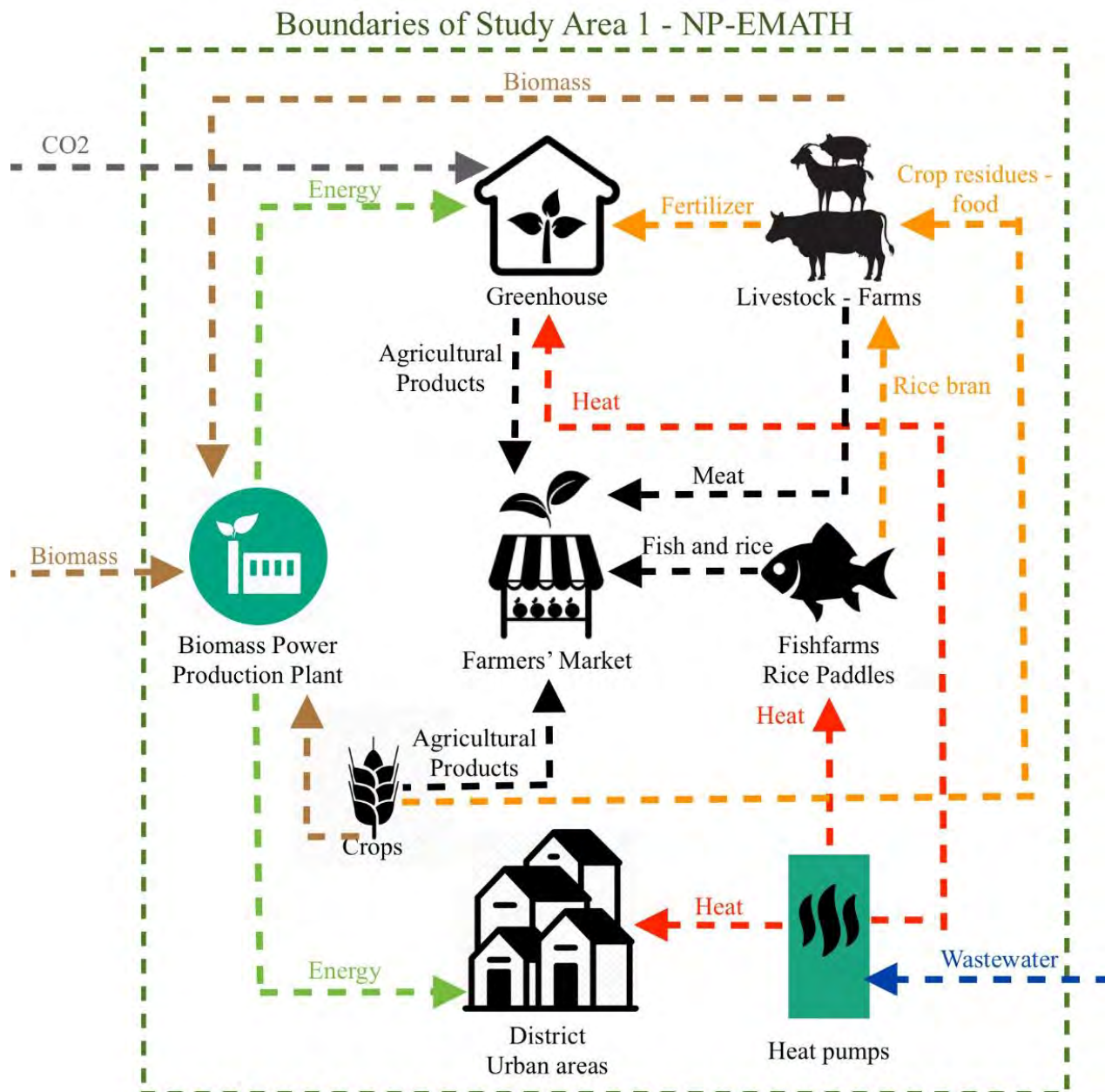
*Credits: BIO2CARE project photo archive*

## DUTh/LEMIE (LB) delivery of WP3

During the reporting period, one of the most important tasks for DUTh/LEMIE was the finalization of Work Package 3 and every Deliverable within this WP. After a two-month extension for the WP, every study was completed and published in on the project's website (<https://bio2care.eu/en/results>).

The importance of the completion of WP3 lies on the fact that WP3 feeds other Work Packages, hence it helped with the continuation of the work, while providing a solid base for project. Significant results include the completion of two Symbiotic scenarios, for each Study area, showcased in the figures below.





Potential symbiotic activities of Study Area 1  
(Greece)

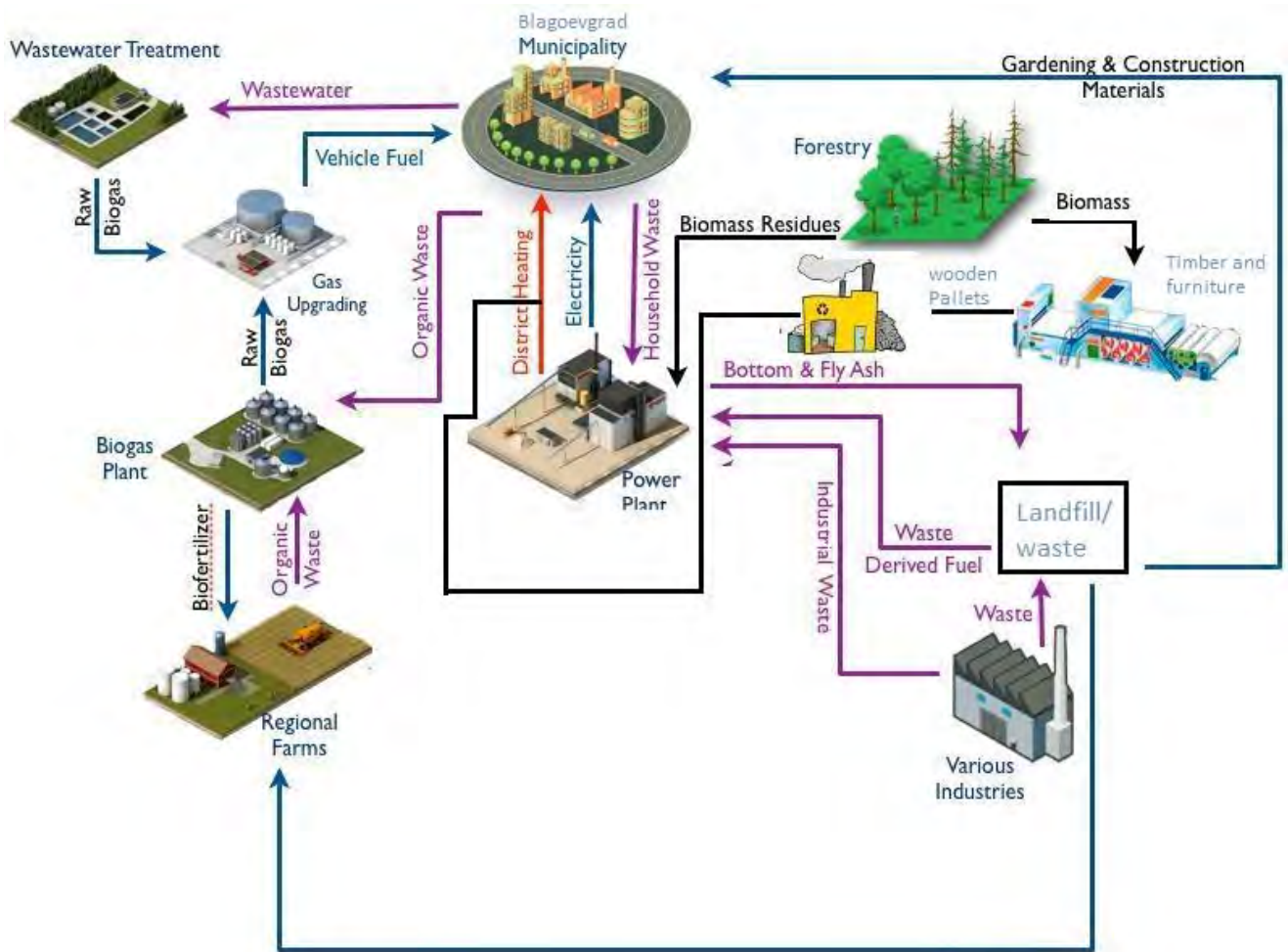
*Credits: DUTh/LEMIE*



Regarding Study Area 1, sixteen (16) potential symbiotic activities/exchanges were identified, with important environmental benefits such as including the reduction of more than 4.000 tons of CO<sub>2</sub>, the reduction of at least 72.000 tons of oil, and more. In Study Area 2, 18 potential symbiotic activities were identified, which could potentially lead to the reduction of almost 6500 MWh of electrical energy consumption.

Regarding WP4, LEMIE has developed a questionnaire for consumers and businesses in order to assess the potential implementation of BIO2CARE labelling scheme. Up until now, the results from the questionnaires show promising results in the consumer field, but also showcase the existing problem of business hesitation. Further, and safer, results will be discussed upon completion of Deliverable 4.1.5 in the coming months.

Furthermore, LEMIE is on the way of completing all the tendering procedures, regarding the high-tech monitoring equipment and the development of two e-tools (software).



Potential symbiotic activities of Study Area  
2 (Bulgaria)

*Credits: DUTh/LEMIE*

## New Accessible Information and Visitor Centre constructed by Rila National Park Directorate in Blagoevgrad

The new Information and Visitor Center of Rila NPD in Blagoevgrad will soon open its doors for the guests and friends of the biggest national park in Bulgaria. The Center, funded by the BIO2CARE Project, will have the main function of informing the visitors about the natural values of the Park (flora, fauna, forests, special sites) and the tourist trails, the rest areas and the behavior rules within the protected territory. Activities in the Center will be carried out by the Park experts in interpretation and environmental education, biodiversity, tourism and geographical information systems.

The first floor will feature a multi-functional hall with capacity 40 people, for handling educational and interpretation programmes, making presentations, showing films and multimedia. The hall will serve tourists, students and pupils, partners; it will be accessible for people with reduced mobility and special needs. For the ones with vision limitations, there will be publications in Braille, special lectures and expositions showing the Rila National Park in an innovative way. The second floor will serve the administrative needs of the Rila NP Directorate in relation to the future maintenance of the Information and Visitor Center.



Various phases of construction of the Information and Visitor  
Center of Rila NP

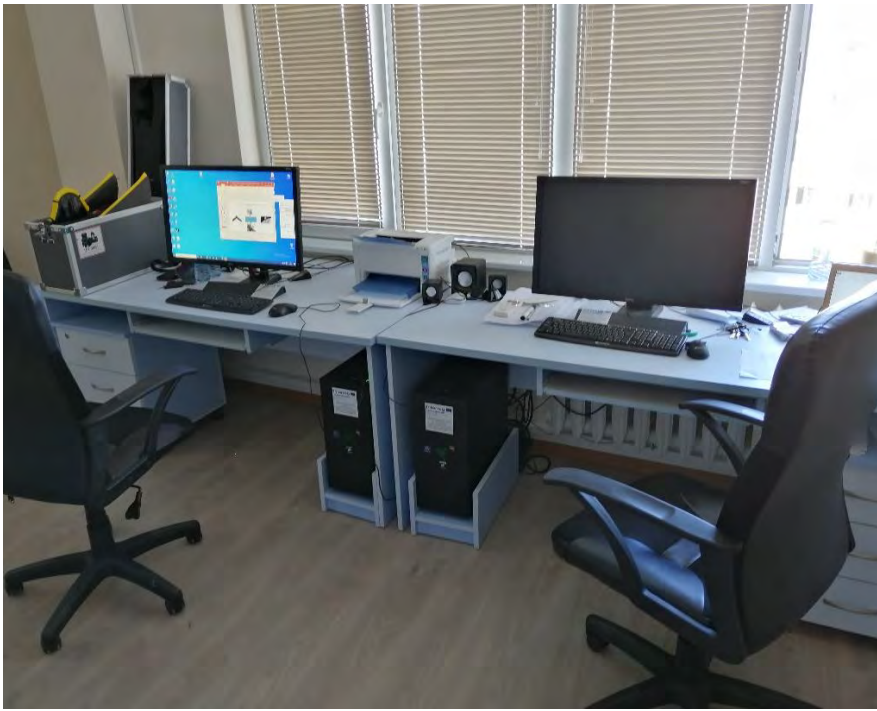
*Credits: Rila National Park Directorate*

## The Southwest University in Blagoevgrad Equipped to Monitor and Report Illegal Human Activities in Natural Areas

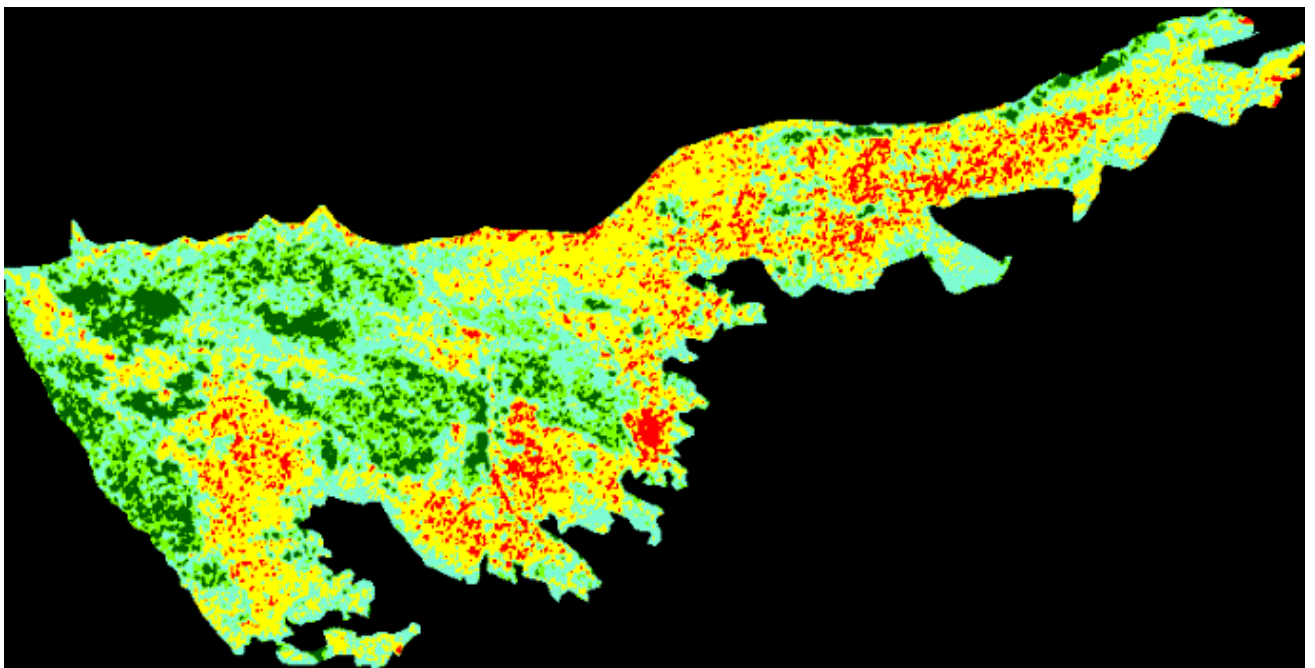
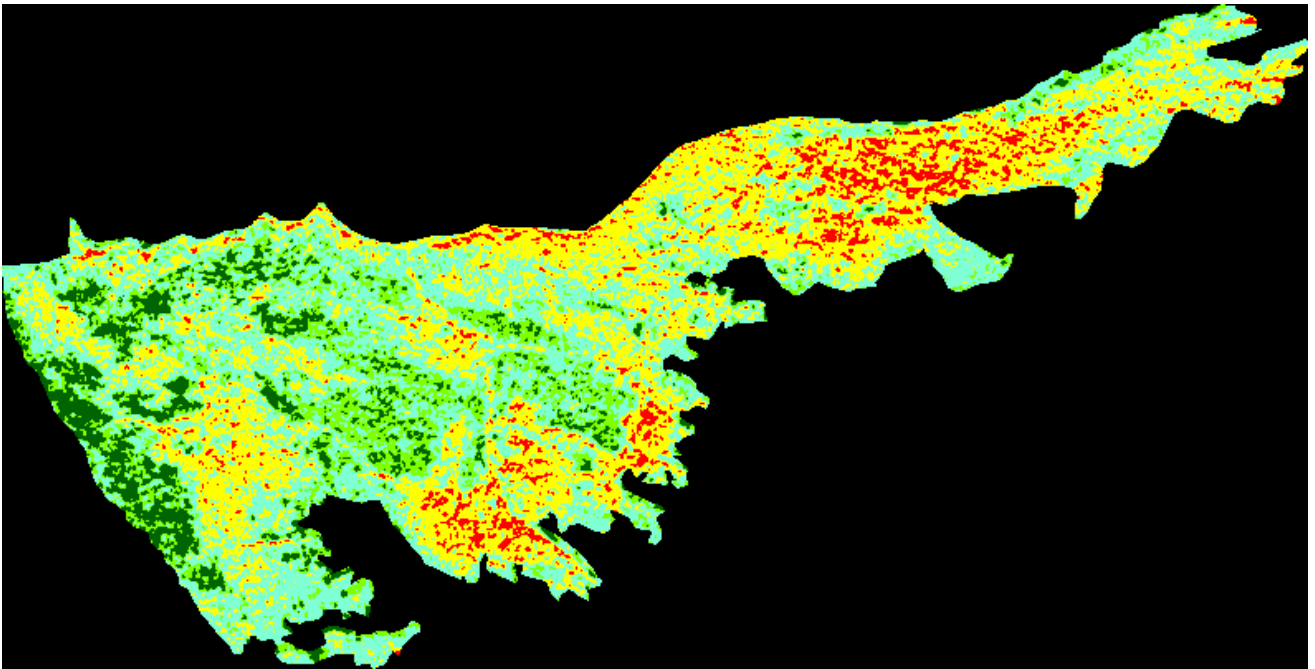
During last 9 months period the Southwest University of Neofit Rilski, in its capacity of Partner 8 in the BIO2CARE project, has successfully procured, installed and set in operation the new equipment and the new software (pic. 1, 2, 3) that have been ordered for the implementation of WP 4 under the project. This is about flora and fauna monitoring and mitigating illegal activities. During test period the equipment was used for monitoring of illegal sand extraction along Struma and Bistrica rivers, as well as for analyzing the change in the canopy and the vegetation health in Parangalitsa Nature Reserve area for a 10-year period.

Based on the data acquired by satellite images, images from the UAV and the measured with GPS ground control points, an interactive map with the main types of land covers along the Bulgarian part of the project territory has been developed. This interactive map will be integrated in the project web page and will be used as an interactive tool for visualization of the holistic environmental indicators that were estimated during the implementation of the project.





New equipment for SWU Neofit Rilski: Two high speed working stations for processing satellite and UAV pictures (left). Setting up the UAV for flight (right / top). Measuring ground control points by GPS with accuracy less than 5 cm (right / bottom).



Use of new equipment: Measuring vegetation health in Parangalitsa Reserve area; dead vegetation is marked in red, vegetation not in good condition – in yellow, light green is for vegetation in good condition and dark green – for perfect condition.

(Up photo: 2009 data, Down photo: 2017 data)





Use of new equipment: Identifying illegal sand extraction shot  
by the UAV's 20 MP camera

*Credits (all photos): SWU Neofit Rilski*

## RIEW – Blagoevgrad opens BIO2CARE profiles at Social Media

The Regional Inspectorate of Environment and Waters created profiles of the BIO2CARE Project in Facebook, Twitter and Instagram. At each of the platforms, one can follow project progress, learn more about expected results and products when they are delivered and see what each of the partners is doing in their everyday work. Project events can be promoted through these media as well, attracting more people.

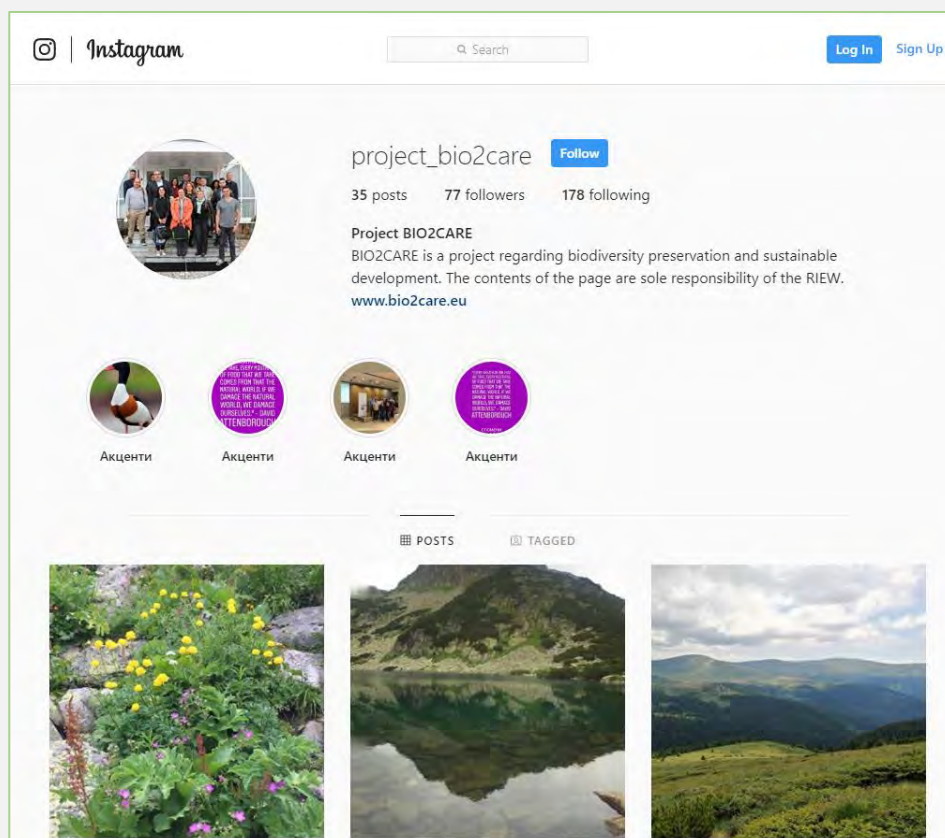
**Facebook (Bio2care):** [www.facebook.com/Bio2care-2287116031559364/](https://www.facebook.com/Bio2care-2287116031559364/)

**Instagram (name: Project BIO2CARE, nickname: project\_bio2care):**  
[www.instagram.com/project\\_bio2care/](https://www.instagram.com/project_bio2care/)

**Twitter (BIO2CARE):** [twitter.com/bio2care](https://twitter.com/bio2care)







BIO2CARE Project presence on social media  
Credits: BIO2CARE project photo archive



## EKBY on the status of nature of the National Park of Eastern Macedonia and Thrace in Greece (NP-EMATH)

The Greek Biotope Wetland Centre (PB4) reported on the status of nature in the Greek protected area of the project “National Park of Eastern Macedonia and Thrace in Greece NP-EMATH”. The study regarded the collection of information and the production of knowledge regarding anthropogenic activities and status of nature (incl. SWOT analysis) of the areas. In specific, EKBY reported on the geographical characteristics, the flora and fauna species of the area and other important natural characteristics of the protected area.

The National Park of Eastern Macedonia and Thrace (NP-EMATH) is located in the southern part of the Region of Eastern Macedonia and Thrace, extending along the coasts of the Thracian Sea, in three prefectures and six municipalities. It was established in 1996 and it is zoned in three major zones and several sub-zones, ranging from zones of absolute protection (A) to zones where anthropogenic activities of mild and/or medium intensity are permitted to co-exist (C). It occupies an area of approximately 93,000 ha, including the buffer zone (72,678 ha of which are terrestrial) and is thus ranked among the largest wetland parks in Greece.

Since 2003, the National Park is under the responsibility of the Nestos Delta - Vistonida - Ismarida Management Body (<http://www.fdnestosvistonis.gr/>).

NP-EMATH is one of the most important wetland complexes in Greece, Europe and worldwide due to its high biological, geomorphological, aesthetic, educational and economic value.

Protection acts, such as the Ramsar Convention on Wetlands of International Importance, the Barcelona Convention for the Special Protected Areas, the Bern Convention for the protection of wildlife and biotopes in Europe and the Bonn Convention for the protection of migrating animals reflect the significance of this protected area. Also, the Park overlaps with six Natura 2000 network sites (SPAs and SACs, designated under the Birds and Habitats Directives, respectively) which are of particular importance for the protection and conservation of the areas' biodiversity.

NP-EMATH comprises an extensive complex of coastal wetlands from Nea Karvali lagoons, Nestos delta, Lakes Vistonida and Ismarida and the surrounding lagoons till Lissos River.

The important features of this coastal wetland complex form a unique habitat for many important fauna and flora species and vegetation types. Among them, *Platanus orientalis* (Plane), *Populus nigra* (Black poplar), *Salix alba* (White willow) and *Alnus glutinosa* (Alder) tree species, all forming important riparian habitat types.

Also, NP-EMATH hosts a great variety of animal species, many of which are rare and endemic. Mammals, amphibians and reptiles, fish, insects and other invertebrates, and of course birds use the wetlands complex as an ideal habitat to feed, reproduce and nest, to live as permanent residents or as ordinary visitors. Indicative are the species *Canis aureus* (Jackal), *Lutra lutra* (Otter) as well as the endemic fish *Alburnus vistonis* (Vistonis shemaja) in Lake Vistonis. Regarding the birdfauna, *Phasianus colchicus* (Black-necked pheasants, Common pheasant), once widespread in

Greece, is nowadays confined in one small area of Thrace (Nestos delta), with a declining population.

***For further information, please, see Deliverable 3.1 (chapter 2.1).***



Nestos delta riparian vegetation

*Credits: Logothetis*

## Handful recommendations and tools for the design and evaluation of accessible pathways in nature

The National Confederation of Disabled People in Greece (NCDP), as part of its contribution to the BIO2CARE Project, has created a new ***Guidebook for Accessible Nature Trails - Design Guidelines and Evaluation System***, with the main objective of supporting the implementation of the project's pilot interventions for improving and promoting selected hiking and bird-watching trails in the two countries participating in the Cross-Border Programme "INTERREG VA GREECE-BULGARIA 2014-2020".

The Guidebook offers practical guidelines, that are in line with the legal framework, to the Project Beneficiaries that are to implement technical works on pathways and trails that fall under their field of responsibility so that their visit is feasible and satisfactory for the widest possible range of visitors, including for *persons with reduced mobility*.

The two countries in which these interventions will be implemented, namely Bulgaria and Greece, have their own institutional frameworks for accessibility to the built environment (specifications, guidelines, etc.). However, they do not have integrated instructions for designing accessible interventions in the natural environments. Therefore, the guidelines and the relevant evaluation system included in this Guide are intended to serve as useful tool in the hands of the respective authorities.



In order to serve this purpose, the Guidebook includes two main parts.

The **First Part** contains **guidelines** aimed at facilitating the design of the BIO2CARE new, accessible recreation and birdwatching pathways, in accordance with the national legislation of the two countries, building on specifications, guidelines and good practices from Europe and abroad.

The **Second Part** includes a practical **evaluation system** that aims to facilitate the assessment of the accessibility of the implemented interventions of the Project by providing instructions and tools for the evaluators that may help them prepare, plan and conduct appropriate inspections and audits, and thereby: (a) identify any negative factors and barriers for visitors with reduced mobility, (b) assess the criticalness of these factors, (c) suggest appropriate corrective actions, and (d) develop the Accessibility Profile of each route, a useful tool for increasing their visibility to the target public.

This Guidebook has also been developed with a view to being distributed and **used in a wider context**, not just for hiking trails and bird observation, but also for accessible nature trails in general, beyond the BIO2CARE Project.



In this context, the Guidebook has also been designed as a useful tool for service executives, organizations and bodies engaged in the management, protection and promotion of natural environments of the two countries so that they can:

- Understand the **characteristics and needs of people with reduced mobility** (introductory part);
- Design **new nature trails** (Part One) in the area in which they are active, so that visiting them is feasible and satisfactory for the widest range of visitors with reduced mobility; and
- Evaluate **existing nature trails** (Part B) in their area, develop proposals for improvement works, and **shape the Accessibility Profile** of each trail, so as to be able to provide accurate information to potential visitors.

The widespread use of the Guidebook is likely to make a significant contribution to:

- Promoting the right of all citizens, without exclusions, to access and enjoy the natural environment of the two countries and to raise awareness amongst stakeholders.
- Improving the accessibility and attractiveness of the two countries' natural resources and developing new nature activities for visitors with reduced mobility.
- The capitalization of the natural resources of the two countries for the diversification of the tourist product and the attraction of new tourist markets that are dynamically and steadily developing, both globally and domestically, such as those of elderly and disabled tourists.

***For more information, please refer to deliverable D4.5.2.***



PROJECT

**REINFORCING PROTECTED AREAS CAPACITY THROUGH  
AN INOVATIVE METHODOLOGY FOR SUSTAINABILITY**

The Project is co-funded by the the European Regional Development Fund (ERDF)  
and national funds of the participating countries

**Interreg**  
**Greece-Bulgaria**  
**BIO2CARE**  
European Regional Development Fund



NATIONAL CONFEDERATION  
OF DISABLED PEOPLE

## Guidebook for Accessible Nature Trails

Design Guidelines and Evaluation System

PHOTO: RIVER-EDGE FOREST, NESTOS RIVER (CREDITS: MUNICIPALITY OF NESTOS)

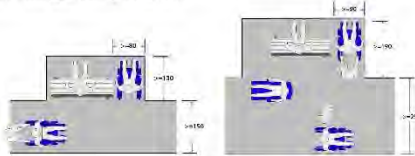


#### B2 Χώροι ανάπαυσης

Κάθε 100 με 200μ μήκος προβάθμισης μονοπατιού, διαμορφώνονται εντός του καθαρού πλάτους του μονοπατιού και ως επέκτασή αυτού, χώροι ανάπαυσης για χρήσιμους της διαδρομής.

Σε περίπτωση κατασκευής χώρων ανάπαυσης, που προορίζονται για στάση χρηστών αναπηρικού αμαξιδίου παράλληλα με τη διεύθυνση της κίνησης, εντός του καθαρού πλάτους του μονοπατιού και σε απόσταση αυτού, συνιστάται η προβολή ελεύθερου χώρου μήκους 1,30-1,60μ<sup>2</sup> και πλάτους 0,8μ<sup>2</sup> ελάχιστον, με δάπεδο συνεχές, ομαλό και σταθερό και κλίση προς κάθε κατεύθυνση μέχρι 2%.<sup>11</sup>

Συνιστάται, όμως, όπου είναι δυνατόν, η κατασκευή χώρων ανάπαυσης, μεγαλύτερων των προαναφερμένων διαστάσεων, που θα αποδίδονται σε όλους τους χρήστες, συμπεριλαμβανομένων και των χρηστών αναπηρικού αμαξιδίου, εντός του καθαρού πλάτους του μονοπατιού και κατ'επίπεδο αυτού, οι οποίοι θα εξοπλίζονται με συμβολικά καθίσματα για όλους τους χρήστες του μονοπατιού και θα φέρουν πλήρη του συμβολικού καθίσματος και ελεύθερο χώρο, διαστάσεων τουλάχιστον 0,8x1,3μ για τη στάση χρήστη αναπηρικού αμαξιδίου.



Εικόνα 20. Ελάχιστες (αριστερά) και ιδανικές (δεξιά) διαστάσεις χώρων ανάπαυσης σε επέκταση των μονοπατιών

Τα συμβολικά καθίσματα (πρόχειο) συνιστάται να έχουν ύψος 43-48εκ και να φέρουν πλάση σε όλο το μήκος τους και βρεχόμενα στα δύο άκρα ή τουλάχιστον ένα βρεχόμενο στο ένα άκρο ή και στο μέσο αυτών για διευκόλυνση των ατόμων με δυσκολία στο να καθίσουν ή σηκωθούν.



Εικόνα 21. Ελάχιστες κλίσεις και διαστάσεις χώρων ανάπαυσης σε επέκταση των μονοπατιών

<sup>11</sup> Αποφασίστηκε στην ετήσια συνάντηση αναπηρικού αμαξιδίου οι οποίοι περιλάμβαναν τη διεύθυνση της κίνησης, επιπλέον της επέκτασης του μήκους - 30μ, προέβλεπε κατά μήκος χώρος μήκους περίπου 0,30μ (B2 ADA Accessibility Guidelines - ADAAG, Appendix A to Part 1191, 4.7 Space Allowance and Health Tagging).

Απλές πινακίδες πρέπει να επαναλαμβάνονται, σταυρώματα, όπου υπάρχει αλλαγή κατεύθυνσης ή όπου μπορεί να προκληθεί αμφιβολία, στον αραφά στην επίσημη διαδρομή. Εντός επί της επιφάνειας του μονοπατιού, μπροστά από την πινακίδα σήμανσης, τοποθετείται πλάκα, εύκολα αναγνώσιμη με το λευκό μπασιόν των υψηλών ατόμων, για να δηλώσει στο υψηλό άτομο την ύπαρξη της σήμανσης. Άλλες τεχνικές προβλέπουν τη διακοπή του "περιγράμματος" του μονοπατιού εκκατευθυνθείς της θέσης της απλής πινακίδας σήμανσης (π.χ. 0,50μ πριν και 0,50μ μετά από αυτή) ή τη διαμορφώση του "περιγράμματος" στη θέση της απλής πινακίδας (π.χ. με χρήση διαμορφωτικής διαστολής του ίδιου υλικού με το "περίγραμμα", όπως σταθμά του ίδιου πλάτους / βάθους, αλλά μεγαλύτερου ύψους).



Εικόνα 22. Παράδειγμα προβάθμισης κατεύθυνσης σήμανσης, με απλή πινακίδα και απλό περιγράμματος για υψηλά άτομα<sup>12</sup>

<sup>12</sup> Η απλή πινακίδα πρέπει να συνδυάζεται με υψηλά άτομα τις πληροφορίες κατεύθυνσης που λαμβάνουν οι βλεπόντες, ή με βάση τις οδηγίες των οδηγιών, ώστε ο χρήστης με τη χρήση κανονικού τηλεφώνου μπορεί να λάβει πληροφορίες για την πορεία στο μονοπάτι. Άλλα τεχνικά προγράμματα όπως τα πινακίδα, είναι μοναδικά προς τη θέση προς βόρεια, για το Ακουστικό. Απόσταση 55μ, περίπου 6 λεπτά με κανονικό ρυθμό βάδισματος (210 βήματα), προσβάσιμο σε άτομα με αμαξίδιο, με οδηγό ταξιδιού. Facing this sign, to the right (to the left) leads a path to the Akousmatika. Distance 55m, approximately 6 minutes at normal walking speed (210 steps), accessible to wheelchair and blind users.

#### ΣΗΜΑΝΣΗ ΑΝΕΛΚΥΣΤΗΡΩΝ ΑΜΕΑ (SGN4)

Σε τυχόν ανελκυστήρες ΑμεΑ, υπάρχει κατάλληλη σήμανση με το ΔΣΠ στον παρακείμενο τοίχο της θύρας του	<input type="radio"/> ΛΑΘΟΣ <input checked="" type="radio"/> ΣΩΣΤΑ	<input type="radio"/> ΛΑΘΟΣ <input checked="" type="radio"/> ΣΩΣΤΑ	Σημεία με προβλήματα:	Παρατηρήσεις:	B10.32
Τυχόν σήμανση για ανελκυστήρα ΑμεΑ η οποία είναι τοποθετημένη στον παρακείμενο τοίχο της θύρας του, είναι πάντα και ανάγλυφη	<input type="radio"/> ΛΑΘΟΣ <input checked="" type="radio"/> ΣΩΣΤΑ <input type="radio"/> ΣΩΣΤΑ, μάλιστα είναι και σε Braille	<input type="radio"/> ΛΑΘΟΣ <input checked="" type="radio"/> ΣΩΣΤΑ	Σημεία με προβλήματα:	Παρατηρήσεις:	B10.33
Για κάθε τυχόν ανελκυστήρα ΑμεΑ, υπάρχει κατάλληλη κατεύθυνση σήμανση προς αυτόν (αόρα με διεθνή εικονίδια)	<input type="radio"/> ΛΑΘΟΣ <input checked="" type="radio"/> ΣΩΣΤΑ	<input type="radio"/> ΛΑΘΟΣ <input checked="" type="radio"/> ΣΩΣΤΑ	Σημεία με προβλήματα:	Παρατηρήσεις:	B10.34
Τυχόν κατεύθυνση σήμανση προς ανελκυστήρα ΑμεΑ, είναι πάντα και ανάγλυφη	<input type="radio"/> ΛΑΘΟΣ <input checked="" type="radio"/> ΣΩΣΤΑ <input type="radio"/> ΣΩΣΤΑ, μάλιστα είναι και σε Braille	<input type="radio"/> ΛΑΘΟΣ <input checked="" type="radio"/> ΣΩΣΤΑ	Σημεία με προβλήματα:	Παρατηρήσεις:	B10.35
Σε τυχόν ανελκυστήρες ΑμεΑ, σε κάθε όροφο, σπίναντα από τη θύρα του, υπάρχει πινακίδα με την ένδειξη του ορόφου και των στοιχείων / χώρων που στεγάζονται σε αυτόν	<input type="radio"/> ΛΑΘΟΣ <input checked="" type="radio"/> ΣΩΣΤΑ	<input type="radio"/> ΛΑΘΟΣ <input checked="" type="radio"/> ΣΩΣΤΑ	Σημεία με προβλήματα:	Παρατηρήσεις:	B10.36

## The 2018 Data Report for the Environmental Status of Blagoevgrad Region has been published

Every year, the Regional Inspectorate of Environment and Waters – Blagoevgrad presents research data about the status of all components of the environment on its territory. The results for 2018 were publicized in the beginning of this year. They show a relatively good status of most environmental components with some problems in certain elements. For example, the main source of pollution of ground waters on the territory are the wastewaters from settlements without treatment plants, and these are many. Results for air pollution caused by dust particles exceed the established limits thanks to the big number of cars and not very good condition of road infrastructure but also to the huge number of households who use solid fuel for heating in winter. There are still old waste depots which are outside any contemporary norm for such places.

However, many components are significantly below the legally set limits, e.g. the levels of sulfur dioxide, nitrogen dioxide and benzene. The analysis of soil indicators shows a good soil status. The efforts for better waste management are highly assessed, which includes the start of the long-expected construction of a modern regional waste depot near Blagoevgrad. In addition, it is important to mention that RIEW – Blagoevgrad invests a lot in measures for public awareness and environmental education; in 2018 alone, there have been 12 information and educational campaigns involving 330 participants – 240 pupils from different schools and 90 adults.





Belasitsa Nature Park, Petrich Municipality



Rupite protected nature site



## Tortoises (Testudinidae), Rupite locality, Petrich Municipality



## Protected species Pirin tulip (*Tulipa pirinica*) in the protected site of Pavlyuva Padina, Hadzhidimovo Municipality



Photos at the 2018 Data Report for the Environmental Status  
of Blagoevgrad Region

*Credits (all photos): RIEW - Blagoevgrad*

## Activities of BIO2CARE project beneficiaries

During this period, LEMIE has participated in external events promoting the activities of BIO2CARE project, and trying to disseminate results of the studies.

**On Friday 01/03/2019**, LEMIE participated on the 6<sup>th</sup> Conference on “Operational Research and National Production Models”, organized by the Greek Organization for Operational Research and the Department of Production & Management Engineering of Democritus University of Thrace. The aim of the conference was to develop channels of communication and collaboration between researchers and research teams that may come from a wide range of scientific areas, and businesses.

Staff members of Lead Beneficiary (LEMIE) presented a paper related to Deliverable 4.1.5 of BIO2CARE project and entitled *“Development and implementation of a sustainability labelling scheme including varying certification levels”*. During the presentation, the current situation of Eco-labelling was discussed, through a selective literature review, and the potential BIO2CARE labelling scheme was presented, along with the proposed various certification levels.

The presentation led to a constructive discussion on Eco-labelling and potential implementation of restrictions that will prevent degradation of the natural environment, while helping businesses achieve their goals in a sustainable manner.



An extended summary of the paper is published in the minutes of the conference and can be found here:

<https://6eeeestudent.files.wordpress.com/2019/06/6eeeestudent-proceedings-1.pdf>



LEMIE on the 6<sup>th</sup> Conference on Operational research  
Credits: DUTh/LEMIE

A detailed article regarding Bio2care was presented on **14/5/2019** in the well-known electronic version of the environmental magazine "Green Agenda", characterizing the project as an innovative tool for the effective management of protected areas.

The article can be found here <https://greenagenda.gr/βιο2care-καινοτομικό-εργαλείο-για-τη-διαχ/>

On **15/5/2019**, Prof. Gaidajis, project Manager of Bio2care was interviewed for the project on the national scale radio of ET3.

On **Wednesday June 5**, in a coastal setting close to Nestos Delta, Assoc. Prof. Georgios Gaidajis and staff of LEMIE (LB of BIO2CARE), participated on an event for World Environment Day. The event was organized by the Management Body of the National Park of Eastern Macedonia and Thrace where Prof. Gaidajis acts currently as President of the Management Board and the company of Energean Oil that exploits hydrocarbons within the boundaries of the National Park. A Memorandum of Cooperation was signed between the two parties, aiming in a closer cooperation in environmental issues of local and regional scale.



Prof. George Gaidajis signing the Memorandum of  
Cooperation during the  
event for World Environment Day

*Credits: DUTh/LEMIE*

## Pirin Tourism Forum Attending the Annual Conference of Interpret Europe in Sarajevo

The capital of Bosnia and Herzegovina hosted the Annual Conference of the European network for natural and cultural heritage interpretation – Interpret Europe. Between May 31<sup>st</sup> and June 3<sup>rd</sup>, more than 120 representatives of protected areas, museums and other cultural institutions, schools and universities, tourism, environmental and cultural NGOs, tourism businesses, professional guides and others gathered together to share and exchange personal experiences in the field of heritage interpretation, latest scientific research and good practices from all over the world.

Representatives of the Pirin Tourism Forum took part in the conference and were able to present the activities of the organization in this field for many years. PTF is one of the oldest tourism NGOs in Bulgaria and one of the first to start promoting the concept of natural and cultural interpretation as the basis for modern tourism and as a tool for sustainable development and environmental protection. Contacts established with colleagues from different corners of the world are priceless.



Moments from the Interpret Europe 2019 Conference

*Credits: Pirin Tourism Forum*



## New tourist platform launched by the Pirin Tourism Forum

Pirin Tourism Forum is implementing the project “Nature Guides for Protected Areas in Bulgaria”, funded by the German Federal Environmental Foundation (DBU). The project covers four pilot nature parks and one national park in Bulgaria – Rilski Manastir, Belasitsa, Vitosha, Vrachanski Balkan and Central Balkan. Experts from all these protected territories received extensive training in tourism and marketing basics, nature guiding, nature interpretation, etc., delivered by German and Bulgarian professionals. These newly trained tourist guides have developed themed nature trails in their protected territories. The trails tell stories about butterflies and flowers, waterfalls, old forests, beautiful Karst landscapes, breathtaking views from the hearts of the mountain and many others.

**They are being promoted via an Internet platform in English and German at:**  
[www.nature-experience-bulgaria.com](http://www.nature-experience-bulgaria.com) / [www.naturerlebnis-bulgarien.de](http://www.naturerlebnis-bulgarien.de).



Glimpses from the new thematic trails in Bulgarian protected areas

*Credits: Pirin Tourism Forum*

## Other news

Greece has successfully submitted the national report on the implementation of the Habitats Directive for the period 2013-2018

In Greece, the Natura 2000 network currently includes 446 sites. These include proposed Sites of Community Importance (pSCIs), Sites of Community Importance (SCIs) and Special Areas of Conservation (SACs) established for the protection and conservation of habitat types and species of the Habitats Directive as well as the Special Protection Areas (SPAs) established for the protection and conservation of bird species (Birds Directive).

The National Park of Eastern Macedonia and Thrace includes three SACs: GR1130006 "POTAMOS FILIOURIS", GR1130009 "LIMNES KAI LIMNOTHALASSES TIS THRAKIS - EVRYTERI PERIOCHI KAI PARAKTIA ZONI" and GR1150010 "DELTA NESTOU KAI LIMNOTHALASSES KERAMOTIS - EVRYTERI PERIOCHI KAI PARAKTIA ZONI", as well as three SPAs: GR1130010 "LIMNES VISTONIS, ISMARIS - LIMNOTHALASSES PORTO LAGOS, ALYKI PTELEA, XIROLIMNI, KARATZA", GR1130012 "KOILADA KOMPSATOU" and GR1150001 "DELTA NESTOU KAI LIMNOTHALASSES KERAMOTIS KAI NISOS THASOPOULA".

According to Article 17 of the Habitats Directive (Directive 92/43/EEC), all Member States are requested to report every six years to the European Commission (EC) on the effectiveness of the Natura 2000 network (conservation measures and assessment of their success) and the conservation status of habitat types and species of Community interest.

Since the beginning of the Directive's implementation, a total of four reporting cycles have been completed and an equal number

of national reports have been submitted by Greece and the other Member States. With the exception of the 1<sup>st</sup> report (which had a more generic format), these national reports consist of two parts:

- ✓ The first part includes general information on the implementation of several provisions of Directive 92/43/EEC in each Member State (legal framework, status of the Natura 2000 sites, management issues, conservation and protection measures, financial issues etc.).
- ✓ The second part includes factsheets for the conservation status of Annex I habitat types and Annex II, IV and V species occurring in the country, as well as distribution (and range) maps for each habitat type and species.

Greece's 4th National report was successfully submitted on 25.04.2019 (within the EC deadline), by the overall competent Authority i.e. the Department of Protected Areas of the Directorate for the Management of Natural Environment and Biodiversity (Ministry of Environment and Energy) with EKBV's contribution.

The results show that there are no significant changes in the Conservation Status of habitat types and species compared to the previous reporting period (2007-2012). Any changes observed are due to the application of different methods and / or to the improvement of knowledge, with the exception of species that are subjected to real changes regarding their conservation status (for example, *Pinna nobilis* which, due to its pest infestation, had a deterioration in its conservation status).

**The report is posted to the Central Data Repository (CDR) of the European Environment Agency at the link:**

<http://cdr.eionet.europa.eu/en/eu/art17/envxi9xsq>.

**National reports are used by the EC to produce a synthesis report at EU level.**

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**[www.bio2care.eu/en](http://www.bio2care.eu/en)**

**Also, you can regularly visit our social media**

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*The Newsletter of the BIO2CARE project has been transcribed in multiple accessible formats by the National Confederation of Disabled People, Greece (Project Beneficiary PB5).*



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