

Final Evaluation Report

Your Details	
Full Name	Nedim Jukić
Project Title	Mires of Bosnia and Herzegovina - Important and Fragile Habitat Types and Refugium for Boreal and Circumboreal Fungal Species
Application ID	39467-D
Date of this Report	20 th December 2024

1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
To publish the book				<p>We have published the book about most interesting fungal species inhabiting peatlands we have investigated. Book can be found here in the electronic version (PDF): https://shorturl.at/BGNf8</p> <p>The book has been distributed to the all relevant local stakeholders (public institutions, museums, libraries, universities, schools, other nongovernmental organisations, etc). Total book printing is 400 copies.</p>
To record documentary movie				<p>We have record and produced documentary movie called "Fungi kingdom within moss kingdom" which have premiere in the second week of December in the National Museum of Bosnia and Herzegovina. Documentary movies can be watched on our YouTube channel: https://youtu.be/vaf4bTuug8g?si=2st-QRcHcs5Pmt42</p>
To run IUCN risk assessment of the recorded species and to propose relevant categories on the National level				<p>We have undertaken IUCN risk assessment according to all relevant criteria and from 82 species presented within the book, 47,56% have been identified as under threats (6 critically endangered, 20 endangered and 13 vulnerable). Relevant data will be shared and delivered to local authorities in both entities in Bosnia and Herzegovina.</p>
To publish scientific paper				<p>Unfortunately, due to the fact that we focused mainly on completing the book and the movies we have</p>

				<p>not succeed to publish one scientific per-review paper as planned at the beginning. However, we will now push this and we are expecting that it will be published by the mid-2025 (couple of new species which have not been presented within the book will be in the centre of the attention). We will provide update on this matter to the Rufford trustees in the months to come.</p>
<p>To introduce relevant stakeholders with the project results and to raise awareness about importance of this habitat type</p>				<p>All relevant stakeholders have been introduced with the project results. Book have been distributed to all local authorities and public institutions while major results and outcomes have been presented during book and movie promotion in the National Museum of Bosnia and Herzegovina in Sarajevo. Besides this, list of most endangered and relevant fungal species will be delivered to the authorities in both entities in order to consider this document and book during the next revision/updates of the red lists on national scale.</p> <p>On MycoBH social media we have been constantly sharing most interesting results from field research and project in general. Apart from the post and story formats we have presented reels or regular video material and these posts have been seen by many people. Some of the content have been sponsored too.</p>
<p>To identify most valuable peatland sites in Bosnia and Herzegovina</p>				<p>Throughout our field research and surveys, we have identified most important <i>Sphagnum</i> peatlands in our country. Still we are still investigating and checking all reported possible peatland sites by local inhabitants. We will definitely continue to investigate and monitor</p>

				known major peatland sites as well as some new ones.
To start initiative and strong promotion for the conservation of some peatlands				We have not start or initiate campaign towards conservation of specific peatland sites. However, we constantly share valuable information with relevant authorities and there might be some chances for conserving some sites in one entity in the future. One of the investigated localities was already planned for protection and our results will give strong boost for this campaign for sure.

2. Describe the three most important outcomes of your project.

a). Creating preliminary check-list of fungal organisms inhabiting *Sphagnum* peatland ecosystems in Bosnia and Herzegovina with strong social media campaign with main focus on raising awareness about the importance of peatlands among relevant stakeholder groups.

b). Publishing the book/monograph about the fungi more or less specific for *Sphagnum* peatlands in Bosnia and Herzegovina. Numerous fungi presented withing the book are first official findings in Bosnia and Herzegovina and region while some of them represents undescribed taxon. Risk assessment analysis according to relevant IUCN criteria for near 100 different fungal species is one of the very valuable outcomes too. Book has already been distributed to all relevant authorities and should represent very important scientific and solid basis for all future initiatives and strategic activities related to this type of ecosystems.

c). Documentary movie is one of the major project outcomes. Movies has been filmed and produced by our society and it is definitely one of our best video outputs so far. Together with the book promotion, documentary has premiere at the beginning of December 2024.

Movie can be watched on our YouTube channel:

https://youtu.be/vqf4bTuug8g?si=wyShr8_zXJO090kN

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

During the project implementation we have encountered improper management of certain very sensible type of peatland habitats (deforestation, drainage of water regime, destruction of peatland surface). We have immediately reacted on this and asked for prompted and precise measurements by relevant authorities. Condition of these peatlands improved slightly after this and some reconstruction and revitalisation steps have been undertaken.

Unfortunately, awareness about importance of peatlands is very poor in Bosnia and Herzegovina in general and continuous work on public and institutional education is very much needed.

It should be noted too that some of the fungal species strictly restricted to the peatland sites have not been found during our intensive field research. Due to the very complex way of "hidden" life of fungi it is very hard to find some extremely rare fungal species within 12-20 months period. However, this should not mean that these species do not exist here.

4. Describe the involvement of local communities and how they have benefitted from the project.

Local community become an active part of the project by providing quite valuable information about small peatland sites in the central part of the country. Some of the information lead us to the peatlands whilst some not. This kind of information should be gathered in the future too in order to investigate some other location which have not been included within this project.

We have built strong relation with local authorities in both entity in Bosnia and Herzegovina. In Federation of Bosnia and Herzegovina we have close cooperation with The Cantonal Public Institution for Protected Natural Areas in Canton Sarajevo. One of the major peatland sites is managed by them within the territory of the Protected Landscape Bijambare. We have provided this public institution by very valuable data about fungal species inhabiting these peatlands together with important guidelines for the future managing activities.

In Republic of Srpska we will provide an update for the list of protected and strictly protected fungal species recorded on peatland sites in this entity. All relevant information will be shared with The Institute for Protection of cultural, historical and nature heritage of Republic of Srpska.

One of the main activities where local community have been included is book and documentary promotion which have been held within National Museum of Bosnia and Herzegovina at the beginning of December 2024.

Promotion was excellent opportunity to introduced all interested person with our work and project results. Small hall of the department of Natural science in the National Museum of Bosnia and Herzegovina was too small and promotion went really well. All attendants receive free copy of the book and also receive some promo material produced within this project.



*Some of the photos from book and documentary movie promotion
National Museum of Bosnia and Herzegovina – December 2024*

5. Are there any plans to continue this work?

There are definitely plans for the future and continue of the field research on peatland sites in Bosnia and Herzegovina. We are already planning to investigate some small and new reported possible *Sphagnum* peatland sites in spring.

Besides that, we will surely do monitoring of peatland sites we have investigated during the project implementation. Our main focus will be to monitor status and condition of main peatland sites in our country as well to try to register some highly specific fungal species we have not registered within the project activities.

We are fully aware that our work is not completed on this matter and that we have to do some hard work in order to raise awareness towards desired level among relevant stakeholders.

6. How do you plan to share the results of your work with others?

Project results will be delivered to the all relevant authorities and stakeholder groups (public institutions, libraries, universities, schools, other similar environmental NGOs) primarily in the form of the published book.

Relevant public institutions - *The Institute for Protection of cultural, historical and nature heritage of Republic of Srpska* and *The Cantonal Public Institution for Protected Natural Areas in Canton Sarajevo* will receive an update of the species registered in the proper .xls format together with other relevant data.

Documentary movie is also great way to share most important conclusions and project results with public in Bosnia and Herzegovina and on regional scale as well.

In order to achieve better reach we have sponsored posts about the documentary and similar posts on our social media channels on couple of occasions.

Within next couple of months, we will try to publish list of fungal species recorded on GBIF portal too.

7. Looking ahead, what do you feel are the important next steps?

Continuance of mycological investigation of *Sphagnum* peatlands in Bosnia and Herzegovina in order to create a better perspective on these sensitive habitat types is priority goal for the future. With better understanding and much better knowledge about fungal diversity within these ecosystems it is easier to implement specific conservation strategies.

Apart of already investigated sites and their monitoring we will continue to work on revealing new sites and trying to create a map of *Sphagnum* peatland sites in Bosnia and Herzegovina. This could be very important in order to adequately protected the most important locations.

Creating or strongly supporting initiative for protection of some peatland sites will be one of the major focus of our organisation in the near future.

By using most important project results and outcomes we are sure we will actively contribute to the conservation initiatives for these specific sites all across our country.

8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?

We have been using Rufford logo on all produced project materials – social media posts and reels, produced video material, book, PR texts, documentary movie, etc. During book and documentary promotion in the National Museum of Bosnia and Herzegovina in Sarajevo we have emphasized importance and significance of Rufford support several times during our expo.



Book front page with Rufford logo.

Premijera filma i promocija knjige o gljivama visokih tresetišta u Zemaljskom muzeju BiH

02/12/2024

U subotu, 07.12.2024. godine s početkom u 17:00h, održaće se premijera dokumentarnog filma i promocija knjige o gljivama visokih tresetišta u Zemaljskom muzeju Bosne i Hercegovine.

Mikološko društvo MycoBH sa zadovoljstvom najavljuje premijeru novog dokumentarnog filma – „Carstvo gljiva u carstvu mahovine“ i promociju knjige „Diverzitet gljiva na tresetištima u Bosni i Hercegovini“. Nova publikacija Mikološkog udruženja MycoBH i uzbudljivi kratki dokumentarac nas vode kroz zadivljujući svijet gljiva koje nastanjuju visoka tresetišta širom Bosne i Hercegovine. Visoka tresetišta u Bosni i Hercegovini su neuobičajena. Ovi rijetki ekosistemi zauzimaju male površine i predstavljaju jedna od najosjetljivijih staništa. Danas ih srećemo prvenstveno u planinskim regijama u vidu fragmentiranih ostataka iz postglacijalnog doba, a karakteriše ih prisustvo mahovina iz roda *Sphagnum*.

Vegatacija koja preovladava na ovim ekosistemima stvara atmosferu koja podsjeća na daleku sjevernu divljinu, čineći da se prilikom svake posjete visokim tresetištima osjećamo kao da putujemo u prošlost. Sama tresetišta su fascinantni ekosistemi - stalno vlažni i kiseli, sa niskim nivoom kiseonika i hranljivih materija. Ovo surovo okruženje predstavlja jedinstvene izazove, a dokumentarni film i knjiga prikazuju vrste gljiva koje su razvile izuzetne sposobnosti adaptacije za preživljavanje u tako zahtjevnim uvjetima.



Mikološko udruženje Mycobh - Mycological Society Mycobh
Plaćeni oglas

Od večeras premijerno na našem YouTube kanalu možete pogledati naš novi dokumentarac "Carstvo gljiva u carstvu mahovine".

Ovaj kratki dokumentarni film u trajanju cca 18:00 minuta rezimira naša dvogodišnja mikološka istraživanja izuzetno osjetljivih i ugroženih ekosistema visokih tresetišta u Bosni i Hercegovini. Pogledajte koje lokalitete smo istraživali, koje smo to rijetke vrste gljiva zabilježili, u kakvom su stanju danas visoka tresetišta s mahovinama iz roda *Sphagnum* i koliko ih uopće ima kod nas...

Film je snimljen u okviru Rufford projekta "Mires of Bosnia and Herzegovina - Important and Fragile Habitat Types and Refugium for Boreal and Circumboreal Fungal Species" kojeg je podržala The Rufford Foundation i predstavlja jednu od posljednjih projektnih aktivnosti.

Dokumentarac možete pogledati na linku ispod u 4K rezoluciji. Uživajte.

The Rufford Foundation
KJU za zaštićena prirodna područja Sarajevo

federalna.ba/zemaljski-muzej-bih-u-subotu-premijera-filma-i-promocija-knjige-o-gljivama-visokih-tresetista-dy/1

427034 TRESETIŠTA - EU polje CALL OUT - PREMIJERA... www.zemaljski.ba Biskupski Arhiv

Zemaljski muzej BiH: U subotu premijera filma i promocija knjige o gljivama visokih tresetišta

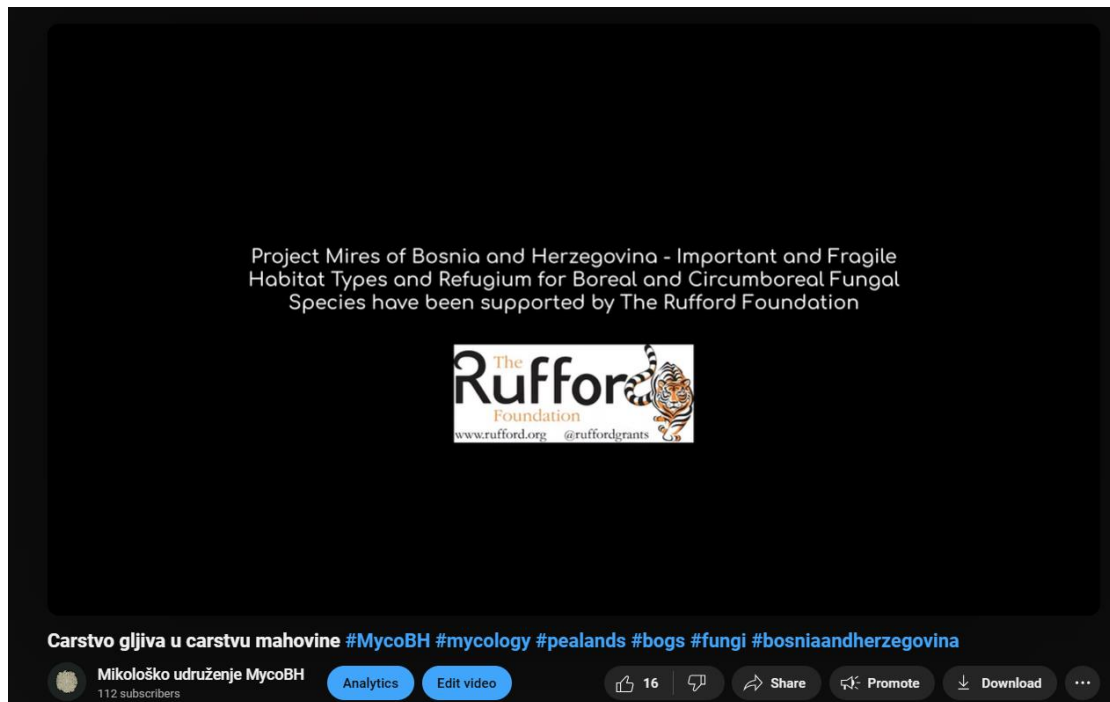
Otpremljeno: 05.12.2024. 18:06
Uređeno: 05.12.2024. 18:18

U subotu, 07.12.2024. godine s početkom u 17:00h, održaće se premijera dokumentarnog filma i promocija knjige o gljivama visokih tresetišta u Zemaljskom muzeju Bosne i Hercegovine.

Mikološko društvo MycoBH sa zadovoljstvom najavljuje premijeru novog dokumentarnog filma – „Carstvo gljiva u carstvu mahovine“ i promociju knjige „Diverzitet gljiva na tresetištima u Bosni i Hercegovini“.

Nova publikacija Mikološkog udruženja MycoBH i uzbudljivi kratki dokumentarac nas vode kroz zadivljujući svijet gljiva koje nastanjuju visoka tresetišta širom Bosne i Hercegovine.

PR texts and sponsored posts with Rufford Foundation logo or with mention of Rufford Foundation within the text itself.



Acknowledgment part with Rufford logo at the end of the documentary movie.

9. Provide a full list of all the members of your team and their role in the project.

Nedim Jukić (Sarajevo, Bosnia and Herzegovina) – Project manager, financial planning and implementation, organizing of field research, sampling, laboratory analysis, one of the authors of book that have been published, social media communication and posting, main cameraman for documentary shooting, producing video material, drone pilot, correspondence with relevant authorities and organizations.

Nihad Omerović (Olovo, Bosnia and Herzegovina) – participating in the field research, sampling and laboratory analysis, participating in the documentaries shooting, participating, one of the authors of book, fungi photographing, landscape photographer, assistance cameraman.

Smiljan Tomić (Sarajevo, Bosnia and Herzegovina) – participating in most of the field research, sampling material, one of the authors of book, assistance cameraman, landscape photographer.

Jasmin Jukić (Sarajevo, Bosnia and Herzegovina) – field research, audio and video recording for the documentary movie.

Amar Hršumović (Vareš, Bosnia and Herzegovina) – field research, field guidance, audio and video recording for the documentary movie.

Faris Mušija (Kakanj, Bosnia and Herzegovina) – assistance field research.

Ermin Mašić, (Sarajevo, Bosnia and Herzegovina) – book review.

Dragiša Savić (Novi Sad, Serbia) – book review.

10. Any other comments?

We wish to gratefully express our sincere acknowledgments to the Rufford Trustees for supporting our project once again and for recognizing our efforts to promote mycology and importance of protecting *Sphagnum* peatland sites as one of the most endangered ecosystem types overall.

We are very confident that major project outcomes and its results will have strong impacts on all future mycological research in Bosnia and Herzegovina as well in the region too.

We will continuously work on creating and supporting environmental initiatives for conservation of the peatlands in Bosnia and Herzegovina in the future.

Main project outcomes: published book, documentary movie, social media posts, PR texts and other video and reels material will definitely contribute to raising awareness among most relevant stakeholder groups and to creation of different perspective regarding importance of the peatlands for nature in general too.