Project Update July 2017

Expeditions

In spring 2017, we carried out one expedition to the National Park 'Gomilshansky lisy' and two visits to Kharkiv Forest Park in order to map fruitbodies of *Pleurotus calyptratus* and to take samples of wood for PCR.



While organising expeditions, we have realised that surprisingly many people, especially young ones, show their interest in science volunteering. For that reason, we decided to expand the horizon of our project and start monitoring programmes for three additional species of fungi – *Morchella steppicola*, *Urnula craterium* and *Sarcoscypha* spp. So in spring 2017 we organised four additional expeditions with volunteers to forest and steppe areas of Kharkiv region, see photos below.





Molecular studies

We analysed 10 samples of aspen wood (five from trees with detected fruitbodies of *Pleurotus calyptratus* and five from trees with no signs of fungus). PCR analysis showed positive results only in two samples from five expected to be positive. Now we have not enough results to draw conclusions about the biology of this species. We need more time to optimise the sampling protocols and make a bigger sample. Nevertheless, we know that designed primers are suitable for detecting *Pleurotus calyptratus* DNA in deadwood.

Education activities

We have managed the public event – Lectorium and Interactive Exposition 'Let me tell you about the forest'. The idea of this event was to explain the deadwood's importance for different groups of forest inhabitants, with focus on aspen forests. We made this event in collaboration with two national parks, The Kharkiv Museum of Nature, NGO 'Forest guard', Social Initiative 'Feathered friends', Kharkiv Bat Group and other conservational and touristic organisations. During the exposition children and adults were exploring a real decaying log using magnifying arrangements, dissecting microscopes and a USB-microscope. Also they could see bats, bird nests, specimens of wood-inhabiting fungi and insects, animal footprints on deadwood, beaver bite marks, etc. During the Lectorium five lecturers were talking about deadwood, forest conservation, forest management and green tourism.





To see more event photos please follow the link

http://mycology.univer.kharkov.ua/ya-rozpovim-tobi-pro-lis-interaktyvna-vystavka-ta-lektorij-vid-profesijnyh-biologiv/

We have designed and printed some educational materials – stickers with deadwood inhabitants (fungi, lichens, mosses, animals) and a brochure 'Why does the living forest need a deadwood?'. Materials were distributed for free during our public event. 300 booklets were transferred to two national parks of Kharkiv region. Also the brochure was immediately requested and will be distributed to several national parks and nature reserves of Ukraine, children and youth ecological clubs, libraries, NGOs and individual activists.





Conferences and articles

From the beginning of our project team members reported the project results in three scientific conferences.

Iryna Yatsiuk has made two presentations at Odessa National University and Kharkiv National University. Oleh Prylutskyi have made a report at the National Nature Park 'Slobozhanskiy'.

In 2017 our team member Maryna Kit received her MSc degree (Diploma with Honours), with a thesis 'Ecological characterisation of rare fungus *Pleurotus* calyptratus'



The article 'The conservational value of old-growth aspen forests in Eastern Ukraine', planned to be submitted in one of Ukrainian peer reviewed journals, is in process of improvement and will be submitted at the end of the year.