



**Eberswalde University
for Sustainable
Development**




**Centre for Economics and
Ecosystem Management**

Connecting with Nature for the Benefit of Mankind. For 190 years.

Models for Sustainable Development in Times of War

First results of a workshop with Ukrainian Biosphere Reserves



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Organised by Chernobyl Radiation and Ecological Biosphere Reserve, NGO "Ecological Space 2020"



Overview

- Background
- The workshop
- Results
- Next steps

Background (Why this workshop?)

- Long developed cooperation and friendship
 - Since 2006 excursions to and projects with Carpathian BR
 - Since 2016 projects with Ukrainian National Forestry University and other BR partners in German Academic Exchange Service (DAAD) East West Dialogue programme (<https://www.centreforeconomics.org/consultancy-and-projects/transformation-processes/>)
 - 2019-2021 project with 3 Ukrainian Biosphere Reserves for fostering ecosystem-based adaptation to Climate Change strategic development and activities in Ukrainian Biosphere Reserves (<https://www.eba-ukraine.net/>)



Deutscher Akademischer Austauschdienst
German Academic Exchange Service

INTERNATIONAL CLIMATE INITIATIVE (IKI)



Background

- **Biosphere Reserves Institute (BRI)**
at Eberswalde University for Sustainable Development
- Since 2019
- Education, research and training with a focus on the UNESCO *Man and the Biosphere* Programme and the World Network of Biosphere Reserves



International Master's course

Biosphere Reserves
Management (BIOM)



Doctorate Programme

Research in, for, and with
biosphere reserves



Research Group

Coordinates biosphere
reserves' research & transfer

Background

- support biosphere reserves in their transition towards being **model regions for sustainable development**
- More than “just” a Protected Area

**Cooperation and
communication**

**Learning and
training**

**Ideal sites for
sustainability
research**

**Socio-ecological
systems approach**

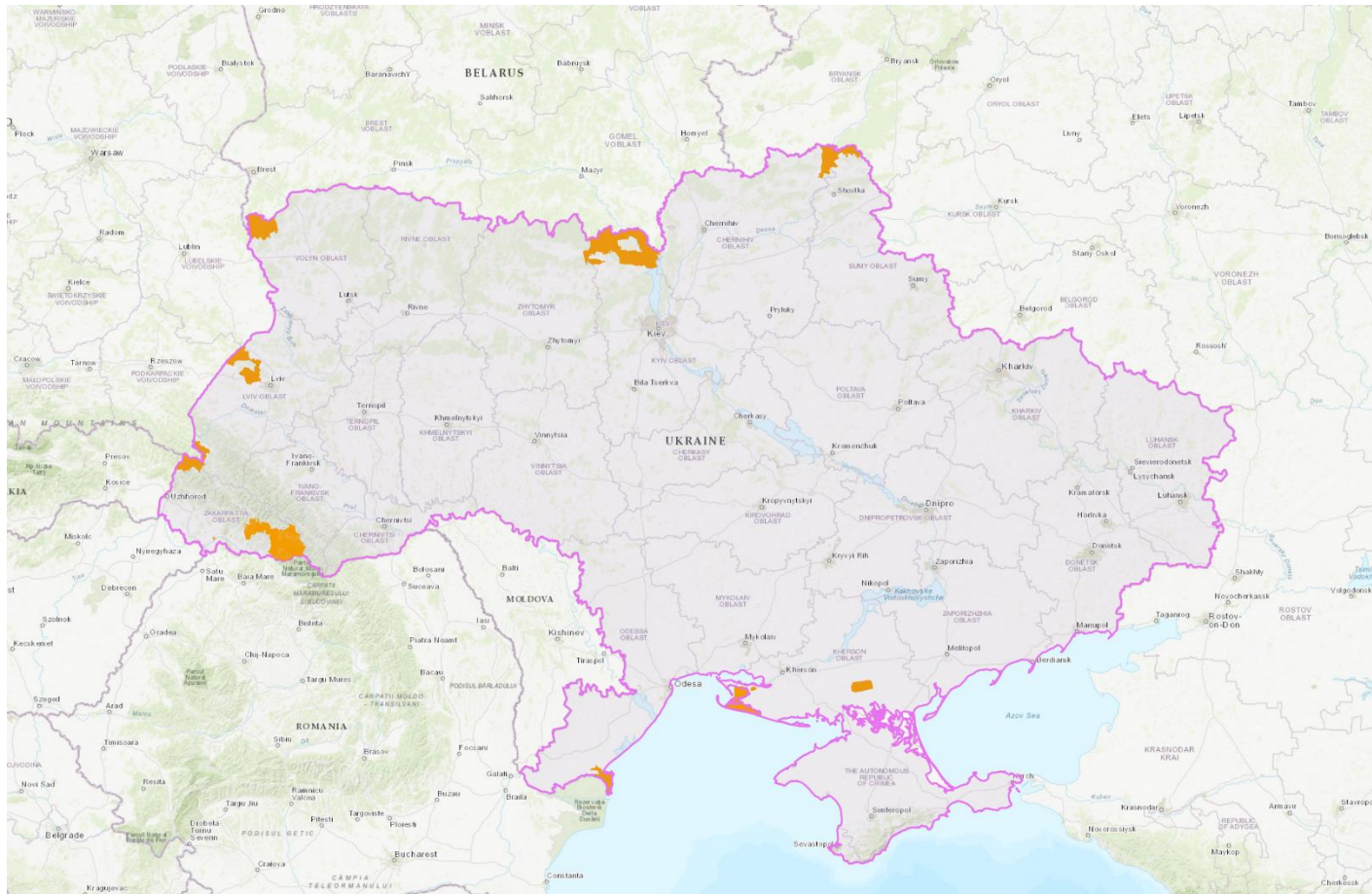
**Social & economic
transformation**

Co-Existence

**Participatory
governance models**

**A network of > 700
sites worldwide**

Ukrainian Biosphere Reserves



Workshop

- 12 participants from Biosphere Reserves and Protected Areas across Ukraine

Topic	Presenter / Moderator
Impact of Russian aggression on Ukrainian Protected Areas and biodiversity	Nastia Drapaliuk (UNCG)
Chornobyl Reserve during and after the occupation by Russian invaders	Valeriy Maliarenko (Chornobyl BR)
Problems of the Biosphere Reserve of Roztochcha caused by the war	Oksana Viiytk (BR Roztochya)
Consequences of the war for the Desnyansky Biosphere Reserve	Serhii Kubrakov (Desnianskyi BR)
Askania-Nova Biosphere Reserve during the war, current status and risks	Natalia Korinets (Askania-Nova BR)
Carpathian Biosphere Reserve - activity under challenges caused by the war with russia	Mykola Rybak & Vasyl Pokynchereda (Carpathian BR)

Results

- Varying types of impact and scale
 - no direct military activities (Carpathian BR)
 - some impact through military training areas (Roztochya BR)
 - de-occupation (Chornobyl BR)
 - continued occupation (Askania-Nova BR)
 - constant terror (Desnianskyi BR)

Results – Impact on

- Ecosystems
 - Large-scale fires in forest ecosystems
 - Mining, contamination with explosives
 - Pollution and destruction of the topsoil
 - Changes in the hydrological regime
 - Succession of abandoned agricultural land (bush and tree encroachment)
 - Intensified tourism in safer places
 - Intensified timber (over-)exploitation
- People
 - Threat of injury and death
 - Destroyed infrastructure and public services (private homes, schools, ...)
 - Lost access to traditional natural resource use and traditional livelihoods
- Institutions
 - Destroyed infrastructure (buildings, bridges, roads, energy, ...)
 - Loss of expertise and human capacities due to mobilisation and migration
 - Reduced budget

Results – Main Conflicts

- Already before the war
 - People don't see benefit of living in a biosphere reserve
 - Restrictions in access to natural resources (nature conservation measure)
 - Absence of compensation mechanisms
 - Since intensified invasion
 - Even more access restrictions (mortal and health danger)
 - Reduced land tax payments to forest communities
- > intensifies tensions with & frustration of local communities

Results – Needs for Recovery and Sustainable Development

- Degraded ecosystems
 - Monitoring and analysis of the situation to determine further strategy
 - Mine clearance of priority areas
 - Restoration of natural hydrological regime
 - Supporting natural processes through non-interference
 - Combining natural restoration processes with economic measures

Results – Needs for Recovery and Sustainable Development

- Biosphere Reserves specific
 - Shifting to close-to-nature forestry (e.g. abandonment of clear-cutting)
 - Prioritise restoration measures in regards to Climate Change impacted ecosystems
 - Involvement of the local population in ecosystem restoration
 - Education for sustainable agriculture (forest belts, crop rotation control)
 - Alternative and energy-saving technologies
 - Official status for UNESCO biosphere reserves
 - State program of compensation for restricted use

Results – Additional Ideas

- Experiences, relations and structures developed during war time show more **horizontal communication** between park/reserves management and the local population (e.g. they became hubs for humanitarian aid).
 - > Building trust
 - > This needs to be transferred to peacetime!
- **Re-wilding** of most destroyed or/and depopulated places, esp. in Eastern Ukraine
 - > Need for a BR in Eastern Ukraine?
- Variety of challenges and ecosystems could create opportunities for BRs to **specialise** and become **Ukrainian Showcase regions** (e.g. Askania-Nova could focus on steppe regeneration and rewilding)

Next Steps

- Scientific publication
- New project in Erasmus+ Cooperation Partnerships programme
 - with Ukrainian universities as main partners and biosphere reserves as associated partners
 - Foster sustainability in recovery of Ukraine (role of universities and BRs)
- A delegation of the German Bundestag (parliament) is planning a visit to the Carpathian region in the first half of next year (focus: Carpathian-BR)



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Щиро Дякуємо за Увагу



**it's about
life**