THE BALKANS

A diverse and exciting region for scientific research and discovery

The Balkans is a region often referred to as the Blue Heart of Europe. This title pays homage to the pristine nature and free-flowing rivers that run undisturbed from their source to sea. Within these intact and largely untouched ecosystems, physical and biological processes occur naturally which is a rare occurrence in densely populated Europe. But this pristine area is threatened by more than 2700 dams. A complicated collision of politics and finance has lead to this situation of exploitation and the unique ecosystems of these wild rivers are in danger. To understand the real impact–and examine what is there before it is too late–research is required in study fields ranging from political sciences to hydraulic engineering, from social sciences to sustainable energy development.

Come down to Balkans.

Make this last untouched region of Europe your classroom.

And let's put the area on the scientific map!

About us – BRD

When Slovenian Rok Rozman–former Olympic rower, whitewater kayaker and biologist–saw a map outlining over 2700 dams planned in the Balkans, he stopped what he was doing and set up the Balkan Rivers Tour. By creating this kayaking-based action to stop this dam craze he has involved many river enthusiasts from around the world, spreading the story of what is going on in his beloved backyard. Now, two years later, the Balkan Rivers Tour has grown into the biggest river conservation movement in Europe, raising awareness about the beauty of the Balkan rivers and the threats they are facing. This movement now goes by the name Balkan River Defence.

The 2018 tour will focus on supporting local communities in the fight for their wild rivers.

Team Members

The Balkan Rivers Defence (BRD) Team consists of thirteen people, all with different background and specialties ranging from an environmental policy expert, to filmers, designers, writers and athletes. The following contacts are most relevant:

Rok Rozman – Former Olympic athlete in rowing, biologist, fly fisherman, adventurer, Patagonia Enviro ambassador, extreme kayaker and founder of Leeway Collective (LWC), Institute for the Protection of Aquatic Ecosystems. As project manager and founder of BRT and LWC, a registered NGO, he plans and leads each tour, organizing events along the way and managing media relations.

Carmen Kuntz – Kayaker and freelance writer; working for a set of kayaking and outdoor media (web and print) as well as NRS Duct Tape Diaries. She is the NGO's main media correspondent and blog writer who accompanies and kayaks during the tours.

Vera Knook – Civil engineer and kayaker; joined the team after her graduation in hydraulic engineering at the TU Delft and will focus on involving students and professors by setting up scientific research projects.

"I believe knowledge is extremely powerful.

It will show the value of the rivers by more than Kilowatts."

Value for Students

Cultural Differences - The Balkans is an area relatively close to home yet it offers a combination of varied cultures and experiences. If you embark on a study project in the Balkans, you will not only learn about the unique nature, but have the chance to work with different values and unique political, social and cultural systems.

Knowledge Gaps – The Balkans have not been subject to elaborate research yet. Little is known which makes that it is possible to make big steps even when using simple methods. It can thereby give you a good insight in the possibilities of scientific research within a short time frame.

Cooperation with local students – Due to our growing network, it will be possible to work together with local students, either at universities or during field work. We can put the region on the map for varied studies and create connection at Universities in the region.

A look into the real world – Sustainability is a growing topic but what does it mean in practice? While doing a study project in the Balkans, you can be sure to learn the complicated story that goes along with sustainable energy development.

Multidisciplinary team – As we are involving students from many fields of study, it is possible to form a real multidisciplinary team. This will help you to gain experience that is valuable for becoming a team worker that is ready to change the world for the better.

Support – Depending on the background and topic of study, we will be able to either provide guidance or supervision throughout the project, connecting students with locals and experts where we can. As a motivated, passionate team, we will do what we can to establish a successful, educational project.

Your story will be told - Often, there is a big gap between research and media. We are extremely motivated to help tell your story to a wider public. Therefore, the impact of your project will be significant, shared with a larger and broader audience.


https://www.ellenmacarthurfoundation.org/

Value for Universities

Cooperation with other Universities – The Balkan Rivers Tour is not only gaining momentum through social media, this year we expect to increase involvement of different universities and institutes. This creates an opportunity to explore and increase cooperation.

Scientific Importance – Scientific research experiences an impulse from different directions. Funding is increasing from European countries, and scientists realise the value of the pristine area.

Vision - The Balkans has the potential to become a long-term scientific hub establishing research centers or conferences.

"For us, the Viosa is a godsend. Here. we can examine what constitutes a wild river. At home, that's no longer possible. There aren't any left."

- Friedrich Schiemer, Department of Limnology and Biological Oceanography, University of Vienna

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"Our interest is to contribute to the development of a scientific knowledge base on the processes and dynamics of the Vjosa river, together with other groups working on this river system, because of its high value from a scientific, environmental and management point of view."

- Guido Zolezzi et al., University of Trento and Andrea Castelletti et al., Milan Polytechnic

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"The advancement of science systems in Southeast Europe is not only significant for countries of the Western Balkans but also for Europe. Science is a central instigator for societal and economic development. Given that scientific knowledge and innovative ideas are not confined by national boundaries, high quality research in the Western Balkans also provides opportunities for all European countries."

Anton Zielinger, Austrian Academy of Sciences.
Statement made at the 2nd Joint Science Conference of the Western Balkans Process

Possible Topics

Due to the pristine nature of the area combined with its interesting historical and political background, many topics in various directions are possible.

The following are a few research ideas and directions:

Which opportunities do the Balkans have for producing sustainable energy? We believe hydropower dams are not sustainable. But, what would be a good solution? What possibilities do the countries have, which would fit in with the culture and what is the total potential of these sustainable solutions?

What is the energy demand (perspective) of the Balkans? What do local people need and what is their expected demand in different economical and environmental scenarios?

What is the role of riverine sediment transport to the protection of the coastline? If this sediment would be trapped in dams, could this harm the marine environment and stability?

Which elements should be part of the functional flow hydrograph to preserve the riverine ecosystem? How does the natural hydrograph look like? Which elements can be distinguished and which functions do they have?

What role does the political system play in decision making about dam projects? Does corruption play a big role? What role does large companies lobbying play?

What is the financial feasibility of a certain hydropower plant? How much does this depend on political choices, short and long term?

Is local agriculture dependant on the rivers? Would dams jeopardize agricultural activity or could they be beneficial for e.g. irrigation?

Which ecological habitats exist in the riverine area? What is the ecological health of the rivers?

What is the influence of the past war on current decision making processes?

Etc. etc.

Italian scientists visit the Vjosa river system

One example of the increasing interest in Balkan's wild rivers

From February 20 - 24, 2018 scientist from Italy visited the Vjosa river system with the following motivation:

"The Vjosa River is considered among the last large free-flowing rivers in Europe and presently subject to a high pressure for hydropower development through large dams, with serious concern for their environmental and socio-economic effects, in the absence of good quality, quantitative data on its hydrology, geomorphological and sediment transport processes, biology and ecology. It is representative of a broader class of rivers in the Balkans which are under high international attention for their unique natural value and a high pressure for massive dam development at the same time."

The images show the Tagliamento River (Northeast Italy) and Vjosa River (Albania), showing similar morphological pattern, river corridor width, and near-natural hydro-morphological conditions, which are reflected in huge natural values. Both streams have a long braided river reach, an active river corridor up to 1 km wide, and show evidence of interaction among flow, sediment transport, morphology and riparian vegetation. Almost like the Vjosa, the Tagliamento has preserved a unique natural value thanks to the low level of anthropic effects including the absence of large dams.

Given the scarcity of quantitative hydro-morphological and sediment transport information on the Vjosa river system, and the large experience on monitoring and modelling tools applied to analogous rivers in Italy, there is a huge potential to develop sound scientific knowledge on which decision making for sustainable management of rivers like the Vjosa should be based.

The following scientists are involved in the project setup;

University of Trento: prof. Guido Zolezzi and prof. Marco Bezzi prof. Walter Bertoldi, prof. Alfonso Vitti

Milan Polytechnic: prof. Andrea Castelletti, dr. Simone Bizzi, dr. Marco Tangi

Want to get involved?

BALKAN RIVER DEFENCE

I look forward to hearing from you!

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