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Travel report

Background

The focus of my doctoral studies is to get a better understanding in establishing stands with a mixture of spruce and pine. But also how to manage said stands in the earlier stages to maintain the mixture, and thus creating more options for later. In order to do so, I need to get a better understanding of pine (and spruce) management and the challenges we are facing. The IUFRO conference in Sarajevo, "ABIES & PINUS 2022. Fir and pine management in a changeable environment: risks and opportunities" was a great opportunity for me to get a better understanding of pine management in different regions, as well as meeting fellow PhD-students and researchers from all over the world.

The Conference

The conference in Sarajevo was a three-day experience, where I listen to many presenters and participated in a poster session with one of my own projects. The presenters where mostly from Europe but also from Asia. There were many discussions about regeneration methods and what the best practice should be, having warmer weather, fires and drought in mind.

Me at the conference in Sarajevo.

The post-conference tour

With a local guide by our side, we traveled through Bosnia and Hercegovina during three days. We met up with local forest rangers to see different types of forest and to talk about risks and opportunities.

Day 1 - Konjic

We went to an area in Konjic where we looked at Black pine, *Pinus nigra*. It was a mountainous area, with steep slopes and organic, shallow soils. Erosion is a widely spread problem, only enlarged by

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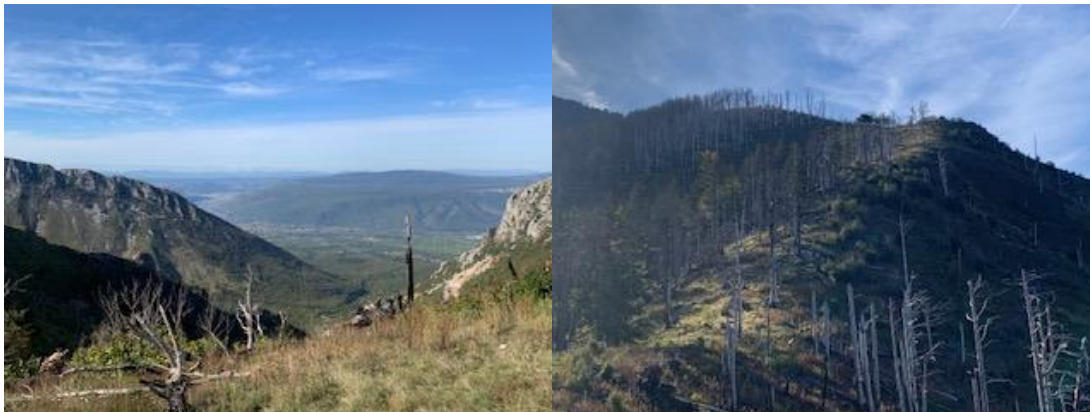The Southern Swedish Forest Research Center, SLU at Alnarp

grazing of cattle. The Bosnians are trying to solve the problem by planting Black pine, not much else can grow there in current conditions. However, fire is a huge problem and with the topography, they are not easy to put out. Also due to the topography of the country, the Bosnians are trying to find funding for planting with drones.

Black pine on shallow soils

Day 2 - Rujište

At our second day, we stopped in Rujište, an area where the endemic tree species, Bosnian pine, can be found. With the topography and climate (i.e. windy, 40 degrees in the summer), fires and erosion is also a problem here. Due to the tree species status, a special permission from the state is needed for logging (even for fire preventive measures and removal of dead trees). It can take 1.5 years before permission is granted, and if it is, the public alongside the newspapers usually hinders it. This illustrates the problem we foresters have today; we have to be able to communicate our knowledge to the public better. Furthermore, humans and human activities are usually the reason for fire ignition, with a warmer climate ahead we need to eliminate the risk.

The area of Rujište, here you can see the difficulties with the landscape and burnt Bosnian pine.

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Young Bosnian pine with its special "snake" bark.

Day 3 - National park Sutjeska

On our last day out, we went to the national park Sutjeska. Established in 1962, it is the oldest park in the country. However, when it was established, it was more so due to the role the area played in WWII and not for biodiversity. Today though, the area is home to a pristine forest with zones no one is allowed to enter. This is to let the ecosystem and animals have a safe place.

Different areas within the national park Sutjeska.

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Final remarks

There is a large community of researchers trying to find solutions to management issues related to pine. The researchers are located all over the world and it is important that we have forums to communicate our research to each other, other than through scientific papers. This conference and post-conference tour helped me put my own research into a larger perspective and meet a great community, thank you!