

SUPER-G Stakeholders Webinar – 26th April

Q1: What happens with the grass once it is mown?

From a formal point of view and from a nature protection point of view, the mown grass has to be removed, to preserve the structure and fertility of the peatland or grassland. So, all the mown biomass is supposed to be taken off the field. In the past it was straightforward as the winter in the Biebrza was harsh, with plenty of frozen conditions, making it easy to travel and harvest the grass. However, with climate change it is more difficult to predict winter conditions and, therefore what activities will be possible. In some years it is now very difficult to harvest the grass due to changing (wetter) conditions. This is one of several challenges that we face due to climate change.

Removing biomass from the grassland is a regulatory requirement, but it is challenging technically due to the wet conditions and the difficulties in transporting the material. Also, the forage quality of the harvested material is low, so farmers prefer not to use it to feed dairy cows or other livestock needing high energy feed. However, we have some experience with feeding the harvested forage to horses, especially with primitive horses such as Koniks, and I think it's a wonderful idea to offer hay from this land to horses, especially during the winter. This remains one of the major challenges in the National Parks, not only in Biebrza, that is how to integrate farming and nature conservation? Maybe the future is in the digestion or fermentation of harvested biomass, but there is also a problem with infrastructure and the transport of biomass from the swamps to the anaerobic digestion or fermentation facilities.

Answered by: Artur Wiatr & Piotr Stypinski

Q2: Have you experimented with producing biogas from grass? Or other high value-added products?

When the harvested biomass is dry it can be used on farm, mainly as bedding, and sometimes as food for cows and horses. However, we are looking at other uses for the biomass, so biomass energy and biofuel are possibilities. It is an ongoing discussion around what to do with this huge amount of biomass and how to successfully and effectively make use of it.

Answered by: Artur Wiatr



Q3: What factors have the greatest negative impact on the bird population in the Biebrza National Park?

I think the two most significant challenges are controlling water levels, which is exacerbated by climate change, and plant succession, i.e. encroachment of shrubs and trees into open non-forest habitats. These are the two main problems: water and vegetation management.

Answered by: Piotr Marczakiewicz

Q4: What are the main threats to protecting the bird populations in the National Park from a water levels perspective and from a climate change and political perspective? What are the main threats to preserving the value of the National Park?

Politics is very important because we need funding. We need money to support conservation activities to protect birds and to manage grasslands. Being in the European Union helps with funding. However, most of the money we use for this management is funding for agriculture rather than nature protection. There is very little money for nature protection.

Answered by: Piotr Marczakiewicz

Q5: The farmers earn money from environmental schemes. Is that enough money for them?

Changes in agriculture in recent decades present challenges for conservation management. All our habitats are human-made but it was extensive agriculture with mowing by hand that created them. Unfortunately, very few people are still interested in these traditional practices, so land tends to be either abandoned or farmed more intensively. Both these changes are not good for biodiversity and farmers are not very interested in extensive agriculture because it is more intensive production that provides higher revenues and a potentially more profitable system. Agri-environment agreements are available, but payment rates have not changed in 15 years since the schemes began. Now there are not many farmers who are interested in dry land farming. It is practiced, but tends to be focused within the Biebrza National Park where intensive agriculture is not permitted. On private land outside Biebrza National Park, farmers are more interested in intensive agriculture.



Answered by: Piotr Marczakiewicz

Q6: Companies and non-governmental organizations are keen to sign up private farmers to long-term land management agreements. Can you explain more about farmer interest in joining these agreements and programs?

This is one of the very successful and very efficient mechanisms of active nature conservation on the grassland and peatland meadows in the Biebrza National Park. It is based on agri-environmental scheme payments with the land owned by the park leased to outsourcing operators through public tender. Every year a public tender is organised and different interested organizations, and individuals can bid for the work. It is based on specific terms and conditions and we sign a contract for five years with the applicant who provides the best value for money. We ensure that nature protection objectives and activities are presented in the paper and the National Park receives some payment for leasing the land. The mechanism is reliant on the agri-environment scheme because the organisations or bodies who sign the contract with the park usually apply for financial support from the agri-environment schemes. Nature conservation activities are therefore reliant on funding from the agri-environment scheme program. It is unclear what would happen if no agreement or schemes were offered to the farmers.

Answered by: Artur Wiatr

Q7: What is the level of interest in agri-environment schemes in other regions of Poland, and in Czech Republic and the Netherlands?

Grass is viewed differently in regions dominated by dairy production. Here, the farmers prioritise intensive production and are more interested in the high yields of quality milk demanded by three large milk processing companies. Even so, these companies recognise that they need to improve their environmental credentials and can possibly learn from practices within areas such as the Biebrza National Park and Narwiański National Park.

In Czech Republic, agri-environment schemes are often not well received by many farmers as forage quantity and quality is restricted in protected areas. If there is sufficient summer rainfall, and good production from other grasslands, they are happy to receive the financial support from their agri-environment scheme grassland. However, in the dry summer of 2018, which was the third dry year in succession, they had significant challenges as they had already depleted their forage reserves and the agri-environment



funding did not compensate them for the lost production and was not sufficient to buy replacement hay to feed their livestock. The conflicts between agri-environment schemes and production are particularly high in dry years.

The challenges mentioned in Poland and Czech Republic also occur in the Netherlands and have been acknowledged for many years. Farmers receive funding from agri-environment schemes, but many farmers are more or less obliged to run very intensive systems due to the high price of land, buildings, labour and machinery. With such high costs, and to achieve a profitable business model, they need to have a minimum number of livestock on their farm to produce a certain amount of milk and meat. In addition, there is pressure from regulations, farming social norms and other societal preferences and priorities.

Answered by: Andrezj Borusiewicz, Stanislav Hedjuk & Jouke Oenema

Q8: In the high output dairy systems in the Netherlands, how much of the c. 20,000 kilograms of milk per hectare is produced from the permanent grassland and how much from concentrates?

The farmers do not produce all the livestock feed on the farm. With this high level of output, half of the feed rations are grown on farm and the other half are imported. Approximately 25-30% is imported as concentrates and the remainder (of the imported feed, i.e. 20-25% of total feed) is imported as maize or by-products from sugar beet and other food-processing industries.

Answered by: Jouke Oenema

Q9: In the Biebrza National Park, in what kind of habitats can the grassland be managed by grazing instead of cutting? In many of these areas cutting and removing the biomass or the hay is very expensive and difficult to organise.

Most of the wetlands in Biebrza National Park are wet peatlands that are not suitable for grazing by most cattle breeds. Only the riparian areas (next to the rivers) and other areas with mineral soils are good for grazing. Some areas were grazed in the past on quite a large scale but now farmers tend to have cows in one place and the feed is brought to the cows. For dairy farms, this reduces the need to bring the cows back and forth from the pasture to the milking parlour daily or twice daily. Land abandonment is also an issue in



some areas, which is a problem for nature conservation as these pastures near a river are important habitats for waders and they are lost if the grassland isn't managed.

Answered by: Piotr Marczakiewicz

Q10: In the Netherlands how do farmers deal with Europe and the regulations associated with the Nitrates Directive and Water Framework Directive?

There is an ongoing debate about how livestock farms should be regulated. A Nitrates regulation derogation is still in place so farms can apply to have higher stocking rates if they meet certain conditions. The derogation allows a livestock nitrogen (N) production (i.e., stocking rate) limit of 230 to 250 kg total N/ha depending on the soil type. Without a derogation, the livestock N farm limit is 170 kg N/ha and if their livestock produce more N than this, they have to export the surplus of manure from the farm. At the same time, they may have to import mineral fertilizer, which increases their costs. Farmers have to pay to export their manure, so arable farmers get money from the dairy farms to use that manure.

Answered by: Jouke Oenema

Q11: Grazing on peaty permanent grasslands is not straightforward because of the wet soils, low grass quality, long distance from farm to pasture and narrow fields. How can grazing be improved, not only in the Biebrza National Park but on other valuable natural habitats on peat soils (for instance) and more generally in Europe?

Grazing does occur on peatlands in the Netherlands and elsewhere, so it can be done. However, this is only possible when the water levels in the ditches are controlled, allowing grazing to start in April for cows and young stock. Of course, lowering of water levels is only managed on productive grassland and creates some conflict with other grassland services, so it depends on what services and values we as a society would like to prioritise. If water levels are lowered it has a negative impact on other services such as habitat support for birds. So yes, it is possible to graze intensively on peatlands, but it requires a significant amount of investment (e.g., to control water levels) and impacts on other ecosystem services.



Extensive agriculture was widespread in the past. Farmers used ‘free grazing’ practices, when cows were released into the marshes; they grazed where and when they wanted and would return to the farmstead for the night. The problem is when livestock numbers increase, because if a farmer has five cows, they can send them into the marshes in the morning and milk them when they return, but if the farm has 100 or 200 cows, the same extensive practices are not practical. Grazing with beef cattle may be more effective, but beef from the marshes is not popular with a limited market for it in Poland because of its high price.

Answered by: Jouke Oenema & Piotr Marczakiewicz

Q12: What types of grassland management are needed to preserve the typical peatland landscape with its high biodiversity and environmental value and to offer farmers suitable grass and fodder?

In some situations, it is a conflict between farmers and ecologists and nature protection organizations, so I agree that at the present moment cutting is the optimal form of management, but the time of cutting is critical and create a conflict. For example, for nature conservation purposes it would be necessary to cut as late as possible in the summer, whereas farmers prefer to cut earlier to harvest higher quality grass. I think we are not able to resolve this problem without providing farmers with support and advising farmers to consider the impacts of early cutting on the environment. If farmers are to cut some fields later, they expect some sort of compensation for the reduction in milk production. I remember very well many years ago, farmers asked a very simple question: “Who pays for biodiversity? Who will pay? I am for biodiversity, but who will pay me the difference?”, and I think that question still exists. Some farmers apply for extra supplementary payments. However, many are reluctant to join some agri-environment schemes because there is often a lot of paperwork involved and generally it is difficult to find a neutral solution for everybody with the right balance between scheme application requirements and financial rewards.

Answered by: Piotr Stypinski

Q13: Farmers are not happy to have grass and then protected areas, but how can we increase the attractiveness for them? And is there a role for society?

One basic conclusion, which comes from our discussion with farmers, is that many of them would be interested to contribute to supporting biodiversity in protected areas. However,



the farm is a business, so there must be some financial return, and I think the agri-environmental schemes should be more flexible, more adapted, more open, especially if they are to be adopted in the protected areas and surroundings. I think this is my basic conclusion from our discussion and our management experience in the Biebrza National Park; and I'm fairly sure that this would be the case in many other national parks and protected areas where grasslands are one of the main protection issues. I would strongly urge that agri-environment and climate schemes can be very effective as a solution to environmental challenges, but that they should be more open and more flexible, with more funding available to protect biodiversity and maintain a balance between farming and nature protection.

Answered by: Artur Wiatr

Q14: What about development and connection with agritourism in this area?

We are very keen on agritourism and ecotourism, and it does exist in the National Parks, with some very good examples. Of course, in relation to grassland management, the more biodiversity we have, the more interest there is for bird and wildlife watchers and so on. So, if we want to have good levels of ecotourism and agritourism, we must take care of the services that support this kind of tourism. Agritourism has been developed over time, with many good examples promoting small scale agriculture and high value nature protection.

Having said that, ecotourism in Biebrza National Park is unlikely to be on the same scale as in other national parks, as we are remote from the main tourist centres and the marshlands are not particularly attractive for standard tourists. For example, the number of tourists visiting Biebrza National Park in a whole year, may be less than the number visiting one part of Tatra National Park in a day. So, we'll never have vast numbers of tourists, but we can appeal to those interested in wildlife and the cultural values of the peatlands and grasslands.

Answered by: Artur Wiatr / Piotr Marczakiewicz

