

ACADEMIA

DAY IN THE LIFE OF

Andrzej Grygoruk, head of the Biebrza National Park, talks about Biebrza's natural treasures and the difficulties in protecting them

ACADEMIA: What's involved in managing a national park?

ANDRZEJ GRYGORUK: To begin with we have 23 national parks in Poland, the smallest one being the Ojców National Park (2,145 ha) and the largest being Biebrza (59,223 ha). In total, they take up about 1 percent of the entire country's area. National parks operate on the basis of the Nature Conservation Act, regulations issued by the Minister of the Environment and, as one of the other park directors has calculated, on the basis of up to 102 other acts of law. Each national park is a legally and financially separate unit. There is no central entity, but the Department of Nature Con-

servation at the Ministry of the Environment (recently renamed as the "Ministry of Climate") is responsible for handling all matters related to overseeing national parks from their end. The Polish National Parks Federation is made up of the heads of all the national parks. If I add that the targeted subsidies for national parks cover only 30 percent of their needs, and each park is different, you can see how "managing nature" is in fact quite a huge challenge.

The Biebrza National Park (BbPN) has been operating for 26 years now and employs 103 people, including 75 park service personnel and 28 support personnel. The main goals of national parks are nature pro-

Biebrza River near
the town of Dolistowo Stare,
Biebrza National Park

A NATIONAL PARK

tection, education and providing access, which is why we devote most of our time to these activities. Within the park, 36 percent of the area is private land made up of thousands of plots with a total area of 21,535 ha, intertwined with State Treasury land (mainly wasteland) managed by the park.

What are the biggest challenges you face every day?

Back in the seventeenth century, when the area around the park was first settled, people began to harness the wetlands in the Biebrza Valley for agricultural purposes, including to obtain hay. This caused the open

wetlands to become a haven for many species of wetland birds. This was the case until the 1960s, when people stopped using the wetlands for this purpose. The park was created to stop mires and swamps from overgrowing with trees, bushes and common reeds, which has been one of the main conservation activities for over 10 years, and with which the agri-environment-climate programs were supposed to help us. Unfortunately, an unfortunate provision in the Act on subsidy payments (to receive subsidies one was not required to hold a legal title to the real property) meant that many private entities, companies and associations applied for direct and agri-environmental

subsidies for park land (either owned by the park or held by it in perpetual usufruct) to receive. The Polish Agency for Restructuring and Modernization of Agriculture (ARiMR) has been granting payments to such “non-contractual plot users” for many years without informing the park. Moreover, in many cases, there are several entities requesting subsidies for the use of the very same plots. In addition to receiving subsidies, they usually mow and mulch meadows, damaging natural habitats, which are crucial to the park, taking away the park’s potential income. In such situations, the Park Service staff can do nothing but act as police officers safeguarding state property.

This must be very frustrating. In addition to problems arising from legal loopholes, are there also purely natural problems?

Another challenge is ensuring peat-forming processes in once-drained mire areas through their rewetting. The park was created in areas that have been drained for over 150 years through the Augustowski, Woźnawiejski and Rudzki canals, and subsequent drainage around the Biebrza tributaries. The effects of global warming, such as the droughts of 2015 or 2019, have added to this problem causing unprecedented low water levels in the Biebrza, which is why the park is working to restore the environment to its natural state. One can see this work taking place on the Rudzki and Woźnawiejski canals and on small watercourses in the Upper Biebrza area, as well as in the southern section on the Ławki Swamp. Often times this involves time-consuming efforts to determine ownership.

Another important task of park employees is monitoring the state of nature, species, habitats, and water resources. For monitoring, we use many modern technologies, including GNSS receivers, drones, automatic sensors that record water levels, photo traps, as well as computer software to collect data and limit the penetration of particularly sensitive areas of the park.

The Biebrza is Poland’s largest national park, but the park’s buffer zone and its Nature 2000 areas must also be monitored (an area of nearly 150,000 ha). In accordance with the Act on nature protection, the park is in charge of issuing permits for all types of construction projects in the park’s buffer zone. In 2017–2018, the park issued a total of 141 responses to draft decisions on building terms and locations of public buildings. Recently, we managed to help the residents of the village of Jagłowo halt the construction of a solar farm on several hectares in the middle of the park. Administrative decisions have yet to be finalized regarding the path of the S16 expressway and rebuilding the railway line into a rapid two-track route, known as the Rail Baltica, that crosses the park near Osowiec.

Finally, although I should have mentioned it in the first place, the Biebrza National Park employs 103 people who specialize in biology, forestry and environmental protection, but also specialists in spatial planning, geography, agriculture, geodesy, tourism, economics, construction, IT, and administration. Out of this number 57 people have a university degree, with five holding a PhD degree. The work requires a lot of commitment and sensitivity, constantly being “out in

Cranes in Biebrza
National Park



the field,” observing natural phenomena and assessing risks to them, monitoring, planning and carrying out protective measures and educating. Unfortunately, we don’t get enough subsidies and salaries are very low, which is why it’s getting harder to find specialists to help this place fulfill its full potential.

What are the costs of maintaining a national park?

The budget for each park is specified in Poland’s National Budget Act. In 2019 Biebrza received PLN 25.5 million, including about PLN 6 million for employee salaries. Other expenses include land purchases, monitoring and scientific research, protection against fire, damage and many other animal and plant protection measures, as well as educational activities. These expenses must be covered by funds from various sources, including the Ministry of the Environment (PLN 5.3 million), the National Fund for Environmental Protection and Water Management, the European Union, and the National Forest Fund. We also planned our own revenues in the amount of PLN 4.4 million from leases, fees for providing access to the park and selling wood. In sum, if we were able to obtain our planned revenues (without any problems with the rents as described above) and received an annual subsidy from the Ministry of the Environment for investments and repairs in the amount of at least PLN 500,000, our budget would be sufficient.

The theme of this issue of *Academia* magazine is “The Forest.” But parks and forests are two different things, often confused in everyday language.

Forests administered by the State Forests and forests in national parks have different functions. The Polish State Forests Administration oversees an area of 7,105,000 ha (77 percent of Poland’s forest area) and they focus mainly on wood production. National parks, on the other hand, manage a much smaller forest area of about 186,000 ha (2 percent of Poland’s forest area). Their primary focus is preserving forests as part of the ecosystem along with its richness and biodiversity to protect native plant and animal species and natural habitats.

With the creation of each national park, land that was held by the State Treasury, including state forests, become park property. In 1994, the Biebrza National Park took over approx. 15,000 ha of state forests from several forest districts. These forests currently make up only one quarter of the national park. We don’t manage these forests the same way we do the rest of the park, limiting our input only to providing protective measures or reconstructing the stands to comply with their habitats, enriching and eliminating artificial stands or monocultures. We also protect them from harmful insects and fire. The areas where the stands



Andrzej Grygoruk

is an economist, ecologist, tour guide, Deputy Chairman of the Commission for Environmental Protection at the Polish Tourist and Sightseeing Society (PTTK), and the founder of several societies, including the North Podlasie Society for the Protection of Birds. He has worked as an environmentalist for 31 years, including in the Biebrza National Park since 2000, and for the last 3 years as the head of the Biebrza National Park. His interests include canoeing and birdwatching.

don’t require any help are designated strict protection areas (currently they make up nearly half of the forests in Biebrza). Thus the function of forests in national parks is not economic, but as a place for natural processes and many species of plants, animals and fungi to live undisturbed by humans. The public often thinks we’re foresters because we wear identical uniforms, but not all of us have this professional title. I believe we should have our own supervisory unit that would be tasked with creating a positive image of specialists working at Polish national parks. Perhaps the new Act on National Parks, which is in the pipeline, will head in this direction.

In your experience, what is the public’s attitude towards national parks?

Someone once joked that “acceptance for the existence of a national park is proportional to the square of how far away from it someone lives.” I don’t quite agree with this, but there is something to it. Usually,

expectations of the locals in one area will be different from those on the opposite side of the country and vice versa. One example is the planned route of the express road through the park, where local governments are seeking approval, but residents in other parts of Poland are protesting, seeing it as a threat to nature in Biebrza. However, when construction projects that are problematic for individual residents are planned close to the national park, people's perceptions change. At that point the existence of a national park is a positive thing and we receive requests from the public to not agree to such construction.

The section of the Biebrza at the 82nd km, running from the Augustów Canal to the mouth to the Narew, is also a designated water-transport route. This conflicts with the regulations of the Nature Conservation Act prohibiting river regulation and using motor boats and other motor equipment, as well as engaging in water and motor sports. Unfortunately, our requests to remove the Biebrza from the list of navigable rivers have not been approved.

In addition, the park is often perceived by local municipalities as a hindrance to their development, as they have to seek approval from park authorities regarding any construction work within the park and buffer zone. The park also makes decisions on the felling of trees and shrubs on private land, sometimes not allowing it to take place. It also reacts when drainage ditches are dug or floodplains are covered with debris, usually in order to have more land for development. In these situations public reaction to the national park

may not only be negative but even hostile, especially when we interfere with the actions of private individuals who do not comply with park regulation.

Of course, we want the local community to approve of the park's activities so we take part in local council meetings and events organized by local and regional authorities, as well as anniversaries, patriotic and special celebrations, and we organize the Local Product Fair "100 ideas for the Biebrza," promoting local products. We publish the newsletter *Biebrzańskie Wieści* ["Biebrza News"] where we describe and explain what we do to protect nature and promote local residents. We run an Animal Rehabilitation Center, which treats wild animals that have suffered accidents, and we work to benefit the local community in many other ways.

In 2012-2017 a project entitled "Protecting the wetland habitats of the Upper Biebrza Valley" was carried out in the Biebrza National Park. Its purpose was to preserve the valuable and endangered natural habitats of the Upper Biebrza, as well as to develop an effective model of nature conservation management in collaboration with the local community. At the end of the project we commissioned a survey of its socio-economic impact, which showed that attitudes towards the park are improving and, although the park is not gaining new supporters, the number of its die-hard opponents is definitely dwindling.

What makes the Biebrza wetlands unique?

I remember a lecture by the late Prof. Zygmunt Denisiuk, a long-time director of the PAS Institute of Nature Conservation in Kraków, who would assess the natural value of national parks according to three categories: wildness, biodiversity, and uniqueness. In all these categories the Biebrza National Park ranked very high. The professor defined uniqueness as "the frequency and repeatability of a given natural element in a given area" (for example the frequency of bison occurring in the Białowieża Forest), meaning the rarer something is, the more it's unique. According to this definition, the wetlands of the Biebrza Valley are unique because this is the only such large area of mires, marshes and swamps remaining in Central Europe that keep on functioning in feedback with natural processes of annual spring floods and groundwater discharge. There are many areas here of natural wetland plant communities with well-preserved transverse and longitudinal zoning, as well as a rich world of fauna. In the park one can find moose, beavers, otters, wolves, as well as over 280 species of birds, including 29 rare species, such as greater spotted eagle, aquatic warbler, great water eagle, and black grouse.

The wetlands of the Biebrza Valley are also an excellent area for research for many scientific disciplines. Researchers from abroad come to us to learn about wetland ecosystems not found in western Europe.

The Długa Luka Path,
Biebrza National Park





You said that the park is home to the moose. How are they doing these days?

Statistically speaking, they're doing great. CSO year-books state that in March 2018 there were 23,000 moose throughout Poland. According to our estimates, there are 650 individuals of moose in the park itself and this is the same number we reported in 2000. In recent years we have observed beautiful males (bulls with strong, shovel-shaped antlers) and females with two calves. This tells us that conditions have improved for these animals, especially since the moratorium on moose hunting was introduced in 2001 and they are no longer hunted.

The moose is a dual-habitat, cold-loving species. This means that in the summer they live in open landscape of wetlands, and for the winter they relocate to forests. During the hot months it is much cooler in the swamps, the moose feel safe there and have plenty to eat. In winter they have to leave as they can't walk on ice, so they move into the forest, where they feed on needles, young shoots of pines, spruces and junipers, as well as blackberry leaves. They move through state and private forests surrounding the Biebrza Valley, often causing damage. If moose hunting was restored, in order to protect the native population, Biebrza National Park would be forced to request game protection zones in the park buffer zone (to limit the hunting area surrounding the park).

Increasingly hot summers are another problem for the moose. As I mentioned, they are cold-loving animals and don't do well in temperatures above +25°C. They seek refuge in swamps, but these also dry up. Another concern is the increasing car traffic and expressway construction. Infrastructure development is causing habitat fragmentation, including of protect-

ed areas. There are also plans to build expressways across Biebrza National Park and wildlife corridors through which moose and other large mammals migrate between the forest and other protected areas. To migrate south to areas such as the Narew National Park, moose from the Biebrza Valley have only one crossing available to them across dozens of kilometers of road S8. It takes them years to get to know these paths. If we build more expressways, we will close them up in enclaves surrounded by networks of roads and highways. I'm not sure how these animals will cope with that.

Have there been cases of poaching in the park?

Fortunately they're not as frequent anymore. The biggest problem we have is fish poaching. Every year park rangers confiscate over 100 different types of poaching equipment. Another problem are "anglers" who venture into sections of the Biebrza, Ełk, and Jędrzonia Rivers and the Woźnawiejski Canal, where fishing is prohibited. They don't have fishing licenses and don't comply with fishing regulations, catching fish during protection periods. There have been a few cases of illegal hunting with weapons and setting various traps for animals, but fortunately there are fewer incidents of this sort. Hunting is prohibited inside the park, and there are hunting circuits in the buffer zone with whom we establish hunting plans together every year. The only drawback are the various shooting towers set up right at the park's border, which not only irritate tourists, but also spoil the image of the park and hunting itself.

INTERVIEW BY DR JUSTYNA ORŁOWSKA
PHOTOGRAPHY BY JAROSŁAW DELUGA-GÓRA

A moose
in Biebrza National Park