INTERNATIONAL CONFERENCE

BIOLOGY, ECOLOGY, AND PROTECTION OF FOREST GROUSE IN POLAND AND IN EUROPE



Kliczków Castle, Bory Dolnośląskie Forest, Poland 6-8 September 2017



The objective of the Conference is to sum up the effects of the project entitled "Active protection of capercaillie lowland populations in the Bory Dolnośląskie Forest and the Augustowska Primeval Forest" LIFE11 NAT/PL/428,

as well as the exchange of experience between teams involved in similar projects in Poland and Europe (www.konferencja.lifeurogallus.pl)

Organized by:

Coordinating Beneficiary LIFE11 NAT/PL/428

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Financed by:

European Commission – under the LIFE + program "Nature and Biodiversity" component



National Fund for Environmental Protection and Water Management



The State Forests National Forest Holding





Ladies and Gentlemen,

Its is my great pleasure to welcome you to the International Conference "Biology, ecology, and protection of forest grouse in Poland and in Europe". It is not accidental that the meeting takes place within the Bory Dolnośląskie forest, the largest lowland forest complex in Europe where one of the four Polish populations of capercaillies lives.

Since immemorial past, the capercaillie *Tetrao urogallus* has lived within our country. Because of its extremely interesting biology and spectacular leks it has always fascinated foresters, naturalists, scientists, hunters and artists. In contemporary nature conservation it is regarded as the emblematic species of major cultural significance. Within the European culture of forestry and hunting it is considered to be a focus and umbrella species.

The long term decline in the population numbers of capercaillie occurring almost throughout its entire range of distribution has raised interest in the protection of this species in many countries of Europe dating back to the mid-20th century. The foundations of the protection and management of the populations of forest grouse include studying the natural trends of their population dynamics and identifying the threats and the causes of extinction. It is my conviction that this conference gathering foresters, naturalists, and scientists from many countries who came here to share the results of their long-term studies and experience, is extremely important to the future of forest grouse.

In Poland the active protection of the capercaillie has been carried out since the late 20th century. Until recently the extinction of this species has been halted only to certain extent. Project LIFE 11 NAT/PL 428 entitled "Active protection of lowland populations of capercaillie in the Bory Dolnośląskie Forest and the Augustowska Primeval Forest", implemented in Poland in 2012-2018, allowed developing the effective methods of comprehensive conservation of the species taking into account the new ways for releasing birds into the wild, extensive monitoring as well as adapting the habitats to the requirements and needs of capercaillies.

During the Conference, the results obtained in the project will be presented along the outcomes of the newest programmes and scientific studies pertaining to the capercaillie in Poland and in 13 European countries. We hope that the information passed during these presentations will provide the basis for fruitful discussion on the directions of future conservation activities and scientific research.

On behalf of the Organisers

Janusz Kobielski

Chief Forester of the Ruszów Forest District

ORGANIZING COMMITTEE

Janusz Kobielski, Ruszów Forest District, Poland

Ryszard Anglart, Ruszów Forest District, Poland

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Dr. Robert Rutkowski, Museum and Institute of Zoology, Polish Academy of Sciences, Poland

Dr. Andrzej Krzywiński, Wildlife Park Kadzidłowo, Poland

Professor Roman Gula, Museum and Institute of Zoology, Polish Academy of Sciences, Poland



PROGRAMME of the International Conference

Biology, ecology and protection of forest grouse in Poland and in Europe

Kliczków Castle, Bory Dolnośląskie Forest, Poland 6-8 September 2017

5 SEPTEMBER, 2017 (TUESDAY)

16:30 - 18:00	Registration		
19:00	Welcome party		
1ST DAY - 6 SEPTEMBER, 2017 (WEDNESAY)			
08:00 - 10:00	Registration		
10:00 - 10:30	Welcome address and opening of the Conference		
Session No.	1 - Conference opening session (Chair: Dorota Zawadzka)		
10:30 - 10:45	Life programme and biodiversity protection Anna Żochowska		
10:45 - 11:00	Nature conservation in the State Forests National Forest Holding Jolanta Błasiak		
11:00 - 11:30	Ecology and protection of capercaillie in Europe – a review Siegfried Klaus		
11:30 - 12:00	Coffee break		
Session No.	2 - Status and protection of capercaillie in Poland (Chair: Dorota Zawadzka)		
12:00 - 12:30	Active protection of lowland populations of capercaillie in the Bory Dolnośląskie Forest – summing up the implementation of the project LIFE11 NAT/PL/428 Ryszard Anglart, Janusz Kobielski, Dorota Merta		
12:30 - 13:00	Active protection of lowland populations of capercaillie in the Augustowska Primeval Forest – summing up the implementation of the project LIFE11 NAT/PL/428 Dorota B. Ławreszuk, Tomasz M. Gałęzia, Tadeusz Wilczyński, Grzegorz Myszczyński		
13:00 - 13:15	Capercaillie Tetrao urogallus in the Lublin area – its history and current status Przemysław Stachyra, Paweł Szewczyk, Andrzej Wediuk, Małgorzata Piotrowska		
13:15 - 13:40	Capercaillie in the Polish Western Carpathians – occurrence, threats and the methods of protection in the of data from the Polish National Programme of Capercaillie Protection		

Zbigniew Żurek, Paweł Armatys

Discussion

Lunch break

13:40 - 14:00

14:00 - 15:00

Session No 3 – Factors affecting the population dynamics of capercaillie (Chair: Jolanta Błasiak)

15:00 - 15:20	Improving the suitability of capercaillie habitat in managed forest Bogdan Brzeziecki, Dorota Zawadzka, Stanisław Drozdowski
15:20 - 15:40	Dynamic coexistence of goshawks and grouse in boreal forest Risto Tornberg, Vitali Reif, Jere Tolvanen, Seppo Rytkönen, Pekka Helle
15:40 - 16:00	Impact of medium-sized carnivores on forest grouse populations Rafał Kowalczyk
16:00 - 16:30	Coffee break
16:30 - 16:50	Conservation genetics of capercaillie in Poland Robert Rutkowski
16:50 - 17:10	Outdoor recreation in capercaillie habitat – effect and solutions Rudi Suchant, Joy Coppes , Judith Ehrlacher, Veronika Braunisch
17:10 - 17:30	Capercaillie in the eyes of artists Tadeusz Mizera
17:30 - 18:00	Discussion
19:30 - 24:00	Banquet dinner

2ND DAY - 7 SEPTEMBER, 2017 (THURSDAY)

Session No. IV Methods of breeding and re-introduction of capercaillie (Chair: Siegfried Klaus)

09:00 - 09:20	Release projects with capercaillie <i>Tetrao urogallus</i> in Germany – a review Ralf Siano, Siegfried Klaus
09:20 - 09:40	Our experiences in capercaillie breeding in the Wisła Forest District Zenon Rzońca, Ewa Łukaszewicz, Artur Kowalczyk
09:40 - 10:00	'Born to be free' method and its hitherto use in reintroduction of capercaillies with particular attention paid to its results obtained within the Piska Ancient Forest Andrzej Krzywiński, Bogdan Kasperczyk, Armin Kobus, Krystyna Krzywińska
10:00 - 10:20	Live-catching, keeping and welfare of capercaillies in captivity – Russian experience Alexey Scopin, Vyacheslav Solovyev, Alexander Saveljev
10:20 - 10:40	Sweden and its support for conservation projects on capercaillie and black grouse Michael Schneider

10:40 - 11:00 Coffee break

Session No. V - Status and protection of the capercaillie across Europe (Chair: Ryszard Anglart)

11:00 - 11:20 Current status of the population of capercaillie *Tetrao urogallus* in Lithuania *Petras Kurlavicius, Rytis Zizas*

11:20 - 11:40	Contemporary resources, use and protection of capercaillie Tetrao urogallus in Russia
	Vladimir Piminov, Alexey Sergeyev, Ekaterina Luginina, Igor Domskiy
11:40 - 12:00	Current status and population dynamics of capercaillie in Belarus Tatiana Pavlushchick
12:00 - 12:30	Coffee break
12:30 - 12:50	Old-growth forests loss and decreasing habitat connectivity result in rapid capercaillie population declines in the Carpathians Martin Mikoláš, Peter Klinga, Marek Svitok, Martin Tejkal, Tobias Kuemmerle, Volodymyr Trotsiuk, Pavel Janda, Radek Bače, Marius Theodosiu, Robert Morrissey, Miroslav Svoboda, Kurt Bollmann
12:50 - 13:10	Population trend and management of capercaillie in Czech Republic Václav Tomášek, Tomáš Lorenc, Tomáš Myslikovjan
13:10 - 13:30	Capercaillie protection project Thuringia, Germany – the latest developments Luise Stephani, Christoph Gehrecke
13:30 - 14:00	Discussion
14:00 - 15:00	Lunch break
15:00 - 15:20	Reintroduction of capercaillie in southern Brandenburg, Germany Lars Thielemann, Alexander Zimmermann
15:20 - 15:40	Urgent action for the conservation of the Cantabrian Capercaillie (<i>Tetral urogallus cantabricus</i>) and its habitat. Project LIFE+09 NAT/ES/513 summary Felipe González Sánchez
15:40 - 16:00	Forty years of monitoring and conservation of capercaillie in France Emmanuel Ménoni, Marc Montadert
16:00 - 16:20	Action for capercaillie in Scotland: 1995 to 2017 Kenny Kortland
16:20 - 16:50	Coffee break
Session No.	VI - Perspectives for the protection of capercaillie
16:50 - 17:15	After-LIFE Conservation Plan for the Augustowska Primeval Forest Tomasz M. Gałęzia, Dorota B. Ławreszuk
17:15 - 17:40	After-LIFE Conservation Plan for the Bory Dolnośląskie Forest Janusz Kobielski, Dorota Merta
17:40 - 18:00	Discussion and summary
18:00 - 18:15	Closing ceremony
20:15	Social evening - optional presentation of films/videos of participants
3RD DAY - 8	SEPTEMBER, 2017 (FRIDAY)
Active protec	tion of capercaille in the Ruszów Forest District, Bory Dln. Forest - field trip
08:00 - 13:00	1st group - grill lunch in the field - 11:00-11:45
08:15 - 13:15	2nd group - grill lunch in the field - 11:45-12:30
09:30 - 14:30	3rd group - grill lunch in the field - 12:30-13:15
09:45 - 14:45	4th group - grill lunch in the field - 13:15-14:00



Live-catching, keeping and welfare of capercaillies in captivity - Russian experience

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The live-catching of capercaillies has a long history and was conducted with two main goals. The first goal is the translocation of birds into new territories and the restoration of populations. The second is capturing of birds for breeding in captivity. In Russia the large-scale translocation of the capercaillies took place since 1955 to present. During this period over 2000 birds were caught and released in 14 regions of Russia, as well as in Kazakhstan, Latvia and Lithuania . The main region for wood grouse catching was the territory of the Kirov Region.

In the modern period, the live-catching of capercaillies were carried out for release into the territory of the Augustow Forest (Poland). In 2014, 40 individuals were transported to Poland, and 24 individuals - in 2016. The prototype of the used live-traps was an ancient self-made trap dubbed as "slopets". The trap represents an implement that press down the bird under the weight of its own design. In the autumn the slopets sets up on the banks of rivers, burnt and deforestation areas, in places where the sand and pebbles were excavated naturally. The presence of pebbles attracts capercaillies.

The first actively used live-trap was the Romanov's curtain-trap, created and tested in 1957. In 1970, employers of our institute V.A.Agafonov and A.N.Romanov developed a new type of trap specifically for capturing capercaillie, covering with a cloth material and not damaging the bird. In 2014-2016, we caught birds by this model of trap. The catchability was 2.5 ind. and 13.3 ind. per 100 trap-days, respectively, that directly depends on the density of birds in nature.

The keeping of capercaillies during a month quarantine in cramped conditions up to 10 ind. per 6 sq.m and feeding *ad libitum* only plant food (leaves of aspen, pine needles) and fruits of lingonberry, cranberry and rowan were a cause of body mass decrease (on average 17,5%) in almost all birds. With prolonged keeping, the death of birds was recorded. Capercaillies do not lose weight and even gain in mass, especially young birds, at keeping in specialized premises with an area of 8-10 sq.m for 5-6 birds and feeding on berry diet with the addition of milled mixed fodders for chicken and quails. An important aspect in the keeping is the mandatory separation in aviaries by sex and age of captive birds. Capercaillies did not feed forcibly that is important for a successful long overexposure and further successful release into the nature.



Contemporary resources, use and protection of capercaillie Tetrao urogallus in Russia

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In the territory of the Russian Federation there are two species of the genus *Tetrao*: the capercaillie (*T. urogallus*) and the stone capercaillie (*T. parvirostris*). The area of the T. urogallus occupies the entire European part of the country, the Urals, Western Siberia and most of Eastern Siberia, Including the Lena River basin. The area of distribution of the stone capercaillie concludes Eastern Siberia on east of the watershed of the Yenisei and Lena, as well as the Far East. Areas of species overlap one another. The intergradation zone is located within Evenkia, Yakutia and the Irkutsk region. According to 2006-2016 data, the number of *T. urogallus* in Russia at the beginning of autumn was 2.9-4.1 million individuals. The largest species resources are concentrated in Siberia (1.2-2.0 million individuals) in the North-West of the European part of Russia (0.7-1.2 million individuals).

The data of the population dynamics of capercaillie in Russia over the past 11 years are presented. The reasons that can dramatically affect the resources of capercaillie in Russia, are not currently exist. At the regional level fluctuations are more likely.

On the majority of the range the main limiting factors for the populations of the capercaillie are abiotic, which determine the success of reproduction and, accordingly, the level of reproduction. Of considerable importance is the preservation and reproduction of population are usually associated with winter conditions. The impact of predators as a whole is relatively constant. This factor has less impact on the capercaillie than other species of grouses.

The impact of anthropogenic factors (anxiety, hunting, logging, drainage of swamps and peat extraction) on the capercaillie population is the largest in the European part of the country. Here in the future, will most likely decrease in the number of birds while reducing the area of distribution of the species. In Western Siberia, where in the second half of the last century there was a sharp drop in the number of capercaillie in connection with the industrial development of hydrocarbon reserves, the number of birds is gradually stabilizing, but at a lower level. Analyzing the dynamics of capercaillie resources in the country as a whole, it may be noted negative trend.

Data on the use and protection of capercaillie in different regions of Russia are also presented.