

FULL TITLE OF THE PROJECT

INTERNATIONAL COOPERATION IN THE AREA OF SWANS STUDIES IN THE EUROPEAN NORTHEAST OF RUSSIA

BRIEF PREHISTORY OF PROJECT

The 3rd International Symposium on swans, organized by the International Waterfowl and Wetlands Research Bureau (IWRB) (Wetlands International from 1995), was held in December 1989, in Oxford (UK). The symposium has developed recommendations on structure of the Swans Team (ST) at IWRB. A new ST bureau and coordinators of selected swan species and regions were elected. Dr. Eileen Rees, Dr. C.J. Spray (UK), and Yu.N. Mineyev (USSR) became local coordinators of whooper swan (*Gygnus cygnus*).

DATES OF IMPLEMENTATION OF PROJECT

1991-1996

FUNDING ORGANIZATIONS

Institute of Biology Komi Science Centre RAS (Russia); Zoological Laboratory, Department of Ecology, University of Groningen and Directorate of Nature, Forest, Landscape and Wildlife of Ministry of Agriculture, Nature Management and Fisheries (The Netherlands); Ministry of Environment Forest and Nature Agency (Denmark); Wildfowl & Wetlands Trust (UK).

PROJECT CO-ORDINATORS

Dr. Yu.N. Mineyev (Institute of Biology, Russia), Drs. J.H. Beekman (University of Groningen, Netherlands), Dr. P. Andersen-Harild (Ministry of Environment Forest and Nature Agency, Denmark). Drs. Eileen Rees (Wildfowl & Wetlands Trust, UK).



RESPONSIBLE SCIENTISTS

Dr. Yu. N. Mineyev (Institute of Biology, Rissia)
Drs. J.H.Beekman (University of Groningen, Netherlands)
Dr. P. Andersen-Harild (Ministry of Environment Forest and Nature Agency, Denmark)
Drs. Eileen Rees (Wildfowl & Wetlands Trust, UK)
Prof. Dr. P. Berthold (Max Planck Institut für Verhaltensphysiologie, Vogelwarte Radolfzell, Germany)

GOAL AND TASKS

To reveal detailed information about migratory routs, habitats used for replenishing energy and factors determining the time schedules of migrating Bewick's Swans fitted with satellite transmitters. The expected data must lead understanding of which areas of crucial importance on their migratory routs, and of how the birds deal with limited energy reserves required for costs of flying and subsequent breeding. To assess nesting success and territory quality for as many pairs as possible. A study of factors influencing the breeding success of Bewick's Swans on the Russkiy Zavorot, where the highest densities of breeding pairs occur. A study of feeding ecology of swans, with emphasis on pre-migratory period in autumn in Korovinskaya Bay, Pechora Delta. To make a survey of breeding and non-breeding swans on the Russkiy Zavorot peninsula, Korovinskaya Bay and Pechora Delta.

PARTICIPATING ORGANISATIONS

Institute of Biology (Rissia)
University of Groningen (Netherlands)
Ministry of Environment Forest and Nature Agency (Denmark)
Wildfowl & Wetlands Trust (UK)



MAIN SCIENTIFIC RESULTS

For the investigation period, about 1.500 swans were caught and ringed, reproduction and nutrition ecology, migration routes revealed, swans counted. It was found out that the European Russian northeastern tundra is inhabited by nearly 35.000 bewicks swans, which mainly overwinter in Great Britain, the Netherlands and Germany. From their nestlings, the birds migrate along the Barents Sea and the White Sea coasts, the Ladoga and the Estonian Baltic Sea coast lines.

MAIN PRODUCTS

Beekman J.H., Van Eerden M.R., Mineyev Yu.N., Luigujoe L. and Den Hollander H.J. Landsat satellite images for detection of submerged microphytes: in search of potential stop-over feeding sites for bewicks swans (*Cygnus columbianus bewickii*) along their migratory routes // *Gibier faune sauvage Game and Wildlife*, vol. 13 (1), 1996. P. 421-450.

Beekman J.H., Mineyev Yu.N. Conservation of arctic migratory waterfowl and oil and gas exploitation in Russian coastal tundra// *Research in Eastern Europe to solve nature conservation problems in the Nordic countries*. Uppsala, Sweden, 1995. P. 19-21.

Beekman J.H., Mineyev Yu.N. Studies of migrations and breeding of bewicks swans in the former USSR / *Research in Eastern Europe to solve nature conservation problems in the Nordic countries*. Uppsala, Sweden, 1995. P. 21-22.

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Beekman J.H., Mineyev Yu.N., Koffijberg R. and Den Hollander H.J. Landscape and vegetation classification. Landsat images of the Pechora delta, Russia, Sept. 1985 // *Int. Report, Institute for Inland Water Management and Waste Water Treatment, Lelystad, the Netherlands*, 28 pp.

