



Global Re-introduction Perspectives: 2013

Further case-studies from around the globe
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IUCN/SSC Re-introduction Specialist Group (RSG)





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Re-introduction of wood bison in Russia

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Introduction

In the Pleistocene and early Holocene, bison inhabited almost the entire territory of Russia. In historic times, its range began to dwindle and became fragmented (Lorenzen *et al.*, 2011). The main reasons for this were climate change and persecution by humans. Up till the 7th - 10th century, the bison lived in the trans-Baikal and Baikal regions (Ermolova, 1978; Vereschagin & Baryshnikov, 1985). To the south of Yakutia the bison populations merged about 2,000 years ago (Lazarev *et al.*, 1998), and to the northeast of Siberia about 3,000 years ago (Flerov, 1977; Sipko 2009). According to K.K. Flerova (1977 & 1979) bison in eastern Siberia are almost identical to modern wood bison (*Bison b. athabasckae*) now found in Canada and these animals are listed on CITES. The high degree of similarity in the ecosystems of both Canada and Russian Siberia has identified an interest in the return of wood bison. For this purpose, two sites were selected on the territory of Yakutia. An important element in the idea of this project was the need to create the most isolated population of wood bison, giving assurance that the animal form will be retained, in case of any mishap threatens them in Canada.

Goals

- Goal 1: Establish a breeding center for these animals, to preserve the gene pool of this species. The isolation provided by the great distance guarantees the obstacles from simultaneous occurrence of any threat to these animals.
- Goal 2: Return species previously present in the ecosystem of Siberia.



Wood bison (*Bison b. athabasckae*)

- Goal 3: Raise the productivity of ecosystems.

Success Indicators

- Indicator 1: Achieve sustainable regeneration of herds and get the offspring of calves born in Siberia.
- Indicator 2: Assemble on the territory of Yakutia a genetically diverse population.

- **Indicator 3:** Get practical examples of successful bison re-introduction in the wild of Yakutia.

Project Summary

The project for the re-introduction of wood bison in Russia was implemented by the importation of 90 bison from Elk Island National Park in Canada. The animals were brought in groups of 30 individuals for several years. The history of the wood bison started in 1965 when 23 individuals were delivered which became the population founders. Also we assumed that the imported bison had all the genetic polymorphism. The imported bison have successfully adapted to the local climate and the low winter temperatures. This is an important consideration, since in December - January the average temperature is -40°C and the temperature is often below -50°C . In the summer season there is a large number of mosquitoes and heat, which is a problem for ungulates.

Wood bison were placed in two breeding centers, located at a distance of 200 km from each other and in a place with a low density of domestic animals. This is important to ensure the biosecurity of the bison. The bison began to successfully reproduce, and their population dynamics can be seen in table 1. Supplementary feeding is available only during the winter but a few experiments were also conducted on male bison without supplementary winter feed in the wild. These experiments were successful and the results will be integrated into more successful management of the wild bison.

Table 1. An update of bison numbers from the two breeding centers								
	Year							
	2006	2007	2008	2009	2010	2011	2012	2013
Breeding Center, Lenskii Stolby National Park								
Imported from Canada	30	0	0	0	0	0	0	0
Birth	0	0	6	7	8	10	5	?
Death	2	2	0	0	0	0	0	0
Removed	0	0	0	6	7	8	9	5
<i>Year end total</i>	<i>28</i>	<i>26</i>	<i>32</i>	<i>33</i>	<i>34</i>	<i>36</i>	<i>32</i>	<i>27</i>
Breeding Center, Timpinay National Park Sinyy								
Imported from Canada	0	0	0	0	0	30	0	30
Imported from Buotoma	0	0	0	6	7	8	9	5
Birth	0	0	0	0	0	0	2	?
Death	0	0	0	0	0	2	0	0
<i>Year end total</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>6</i>	<i>13</i>	<i>49</i>	<i>60</i>	<i>95</i>
GRAND TOTAL	28	26	32	39	47	85	92	122

Mammals



Overview of the Yakutia territory

Major difficulties faced

- This project is ongoing with support and funding from the Government of the Republic of Yakutia, which ensures its sustainable development.
- Problems of adaptation to the harsh climate of this unique region were overcome as well.
- A problem remains with the presence of bears living in the nearby national parks.

Success of project

Highly Successful	Successful	Partially Successful	Failure
	√		

Reason(s) for success/failure:

n/a

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