

Best practices in transport of wisent

Magda Kaczmarek-Okroj^{1,3,4}, Małgorzata Braczyńska¹, Daniel Klich¹, Marlena Wojciechowska^{1,3}, Krzysztof Głowacz², Karolina Gajewska¹, Wanda Olech^{1,4}

¹ Department of Genetics and Animal Breeding, Warsaw University of Life Sciences; ² Department of Animal Environment Biology, Warsaw University of Life Sciences;

³ European Bison Friends Society; ⁴ European Bison Conservation Center; ⁵ District Veterinary Inspectorate in Piszczyno

> Background of transport of wisent

The main goal of the management of the existing species population is to preserve the genetic diversity of herds. The *ex situ* population (%) of the whole existing population, EBPP (2015) is a matter of a breeding program aimed at maintaining the inbreeding level among the offspring of the mixed couples and it also forms the reservoir of genetic diversity. In order to avoid an effect of inbreeding increase, selected individuals are exchanged between centers after the analysis of genetic pool of animals.

After setting the group of transported animals, two cardinal principles should be remembered:

- to maintain the separation of genetic lines: Lowland (LB) and Lowland-Caucasian (LC);
- transportation of animals individually registered in the European Bison Pedigree Book.

According to Status Survey and Conservation Action Plan for European Bison (IUCN 2004) the European Bison Conservation Center (EBCC) is supposed to provide rules of management of the wisent population. Because of the needs of people involved in protection of the wisent, procedures concerning the wisent transportation with the application of best practices were collected and are here published as transport rules recommended by the EBCC.

> Legal status of wisent

Wisent across Europe is a species under legal protection as included in appendix of the Berne Convention. In the legislation the European Union it is listed in the Habitats Directive (92/43/EEC) as a priority species (Annex II). However, in the individual EU member states and outside EU, the protection of wisent, recommended in the above mentioned Directive, is not implemented in a uniform manner.

COUNTRY	STATUS	TRANSPORT
POLAND	UNDER STRICT PROTECTION	SPECIAL PERMIT**
GERMANY	UNDER PROTECTION; HUNTING LAW*	AS CATTLE
ROMANIA	UNDER PROTECTION; HUNTING LAW*	AS CATTLE
SPAIN	UNDER PROTECTION	AS CATTLE

* Hunting is strictly forbidden all year round

** The competent authority for a permit to waive the ban on the transport of wisent is the Ministry of the Environment (in the case of the national parks), General Director of Environmental Protection (transport, experience outside the country, acquisition from abroad in case where it regards the area beyond two municipalities) or Regional Director of Environmental Protection (otherwise).

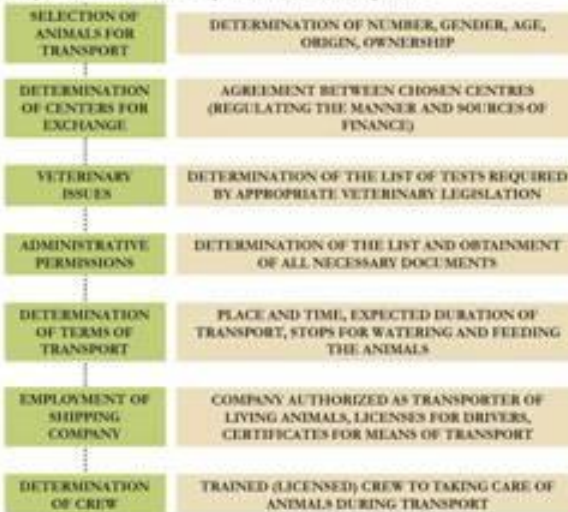
> Veterinary requirements

General rules:

- transported wisent should be healthy, in good condition,
- pregnant cows are allowed for transportation (up to 90% of gestation period),
- required health tests are listed by veterinarians on place of destination,
- obligatory ser tests for tuberculosis, brucellosis and enzootic bovine leukaemia,
- other tests may be required: for bartonellae, infectious pustular vulvovaginitis (IBR-IPV), bovine viral diarrhoea (BVD-MD), Schmallenberg virus (SBV) and the vector of *Salmonella* spp., (depending on veterinarian or recipient decision),
- sampling is possible only after pharmacological immobilization of the animal,
- in all EU countries before the transport wisent need to be examined to the diseases, which are listed in the EU TRACES-document No. 92-65.

> Coordination and logistic of the transport

It is recommended to establish a coordinator of each transport (or exchange of animals) to ensure an efficient and punctual cooperation between interested parties. In practice the whole procedure of wisent transport consists of several phases:



During the whole process of transport preparation, the coordinator should exchange all contacts and information between the transport company, the place of current residence of animals and centers that will receive them.

> Wisent transport legislation

Each transportation must meet the Regulation (EC) No 1/2005 of 22 December 2004 on the protection of animals during transport and related operations and Regulation (EC) No 1255/97 (EU Official Journal L 3 of 01.05.2005). In general:

- there should be taken the necessary steps in order to minimize transport duration and ensure all of the needs of animals during transport,
- documentation of transport must be supplemented with notice that the animals are wild, timid or dangerous,
- transporters must possess documents with identification of animals,
- further requirements for the transport of wisents depend on its length and duration,
- shipping company is obligated to possess an authorization as transporter of living animals and licenses for drivers as well as the whole crew,
- a journey log is also an important document mentioned in regulation 1/2005, during all shipments of European bison an official journey log is recommended as good practice.

Exemplary documents are embedded on the page www.bison-ebcc.eu

> Technical aspects of transportation

Adult E. bison should be transported only in specialized transport cages (containers). Cage should be partially soft covered to avoid injury during transportation.

- 1) Cages should be 10 cm wider than width of horns.
- 2) Inner height must be at least 30 cm higher than an animal's withers height.
- 3) Box should be long enough that animal could take up water and feed without problems.



Photos by courtesy of M. Roguski

- According to EBCC animal should enter the cage by itself therefore breeding centers should be equipped in so-called loading alleys.
- A container should be placed into enclosure for three days before the transport to get used the animal to it.
- Transportation the calf and the cow in the same container is forbidden.
- The day before the planned loading (in the morning) a wisent should not be feed.
- During transportation wisents should not be released from the containers.
- Car has to be equipped with: fast loading and unloading possibility, proper ventilation, secure from sudden weather changes during the transport, ability to maneuver, space for hay and water.
- Wisents should be transported only with their head directed to the front of the transporting vehicle.
- Very important aspect is welfare of animals especially possibility of overheating.
- Release of animals begins when the transport container is unloaded into specially prepared enclosure.
- Each animal should be quarantined (at least 30 days) before joining to the herd.
- Before the transport and after its ending, a vehicle and equipment (transport containers) must be cleaned mechanically and disinfected.

Detailed information and literature sources are included in the paper:

Kaczmarek-Okroj, M. et al. 2016. Rules of capture and transport of wisent from Poland to other European countries. European Bison Conservation Newsletter 9: 71-86