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# AN IMMOBILIZING CAGE FOR EUROPEAN BISONS AND HYBRIDS OF BISONS

## AND CATTLE

## KLATKA DO UNIERUCHAMIANIA ŻUBRÓW I MIESZAŃCÓW ŻUBRA Z BYDŁEM DOMOWYM

#### **Bisoniana XXXIII**

The development of hybrids of European bisons and domestic cattle is studied at the Mammals Research Institute, Polish Academy of Sciences. Białowieża. Lack of equipment allowing the immobilisation of animals for body measurements and retaining their normal position was a serious difficulty in these studies.

Open work cages used, for example in the USA, for transporting bulls are not used in Poland. Solid wooden cages for transporting the bisons did not suit our needs. Therefore we decided to design our own cage.



Fig. 1. An immobilizing cage used in the Mammals Research Institute.

The prototype of the cage was designed by Mr. Bołtryk, engineer at the Hajnówka Works of Forestry Machine Industry. However, the cage did not withstand tests with our animals and had to be rebuilt. The changes in cage construction were done at the Institute of Agriculture Mechanisation in Warsaw.

The final version of the cage is in use in the experimental reservation of our Institute since the beginning of 1966. It is used for all measurements and treatments of hybrids.

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The cage measures  $90 \times 190 \times 230$  cm and is mounted on an undercarriage allowing it to be moved around. When necessary (for example for transportation) it can be disconnected from the undercarriage. The frame of the cage is made of iron pipes  $\phi$  60 mm and the lower part of the side walls and the floor — of 45 mm boards (Fig. 1).

The animal is driven to the cage through a gradually narrowing corridor (Fig. 2) similar to the procedure used in catching bisons in Bialowieża breeding reservations. The corridor (A) is built of 2.5 m high and 45 mm thick boards tightly filling and is adjacent to a larger enclosure (B). To get the animals used to entering the corridor they are fed in its broad part for several days (D) next to the enclosure gate (C). An animal locked in the corridor tries to leave it and moves to part (E). Part (E) can be narrowed by moving the wall (F). Moving this wall decreases the width of the corridor thus preventing the animal from jumping out and makes it move immidiately to the last part of the corridor. When the animal is already there its way of retreat is cut off with the transverse



Fig. 2. The corridor used in catching of European bisons in Białowieża breeding reservation. (Explanation in text).

bolts (G). In this situation the animal can only go into the cage. After locking the animal into the cage the arm of the yoke (1) is lifted. This allows the animal to stick its head through the hole in the front part of the cage (2). Then the arm is lowered quickly and the head is trapped. If the animal has to be completely immobilised the cage allows puting its four legs in one line by constricting side walls (3) with the arm (4) which works as lever (Fig. 1).

Removable bars (5) on the side walls of the cage allow access to any part of the animals body. The skewed position of the side walls, the yoke pressing the head and the height of the lower cut in the front wall (2) can be adjusted to the size of an animal. After completing measurements or treatment the animal leaves the cage through the front door which is opened simply by pulling the steel rope.

This cage was repeatedly used to immobilise 21 hybrids, 7 domestic cows and bulls and the father of hybrids — wisents »Pokorny«. An animal in this cage is not dangerous and easily accessible for all breeding and veterinary measures especially when previously tranquilised with a drug for example tranquilin. When we first started to use this cage we had one fatal accident. A very excited female bison run into the cage,

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hit the arm of the yoke with the atlas and died on the spot. In the following practices we were restricting the head with the yoke only after the animal was locked into the cage.

After using our cage for one year we have discovered several technical faults, namely the closing of the back doors (6), too weak springs in the arm moving the side wall and the yoke and incorrect choice of material (iron).

It appears that the above described cage (possibly after some changes in size and employing a light duralumin frame) could find broader use in breeding and veterinary procedures requiring immobilisation of an animal. It could be used for bisons and other large animals kept in Zoos and also for especially aggressive domestic animals to immobilise them for treatment or for transportation.

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