

Nature Conservation in Europe: Approaches and Lessons

Annex PL.1. The Bison, Emblematic Species of Polish Nature Conservation

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In historical times the [European] Bison (*Bison bonasus*) was widespread and presumably abundant in its native range. However, the species disappeared across almost all of Europe over the eighteenth–nineteenth centuries, mainly due to intensive hunting. The population of the forest subspecies survived only in Białowieża Forest, where the species was protected as a hunting target for the Russian tsars. Nevertheless, during the First World War (1914–1918) even these animals were shot; the last one in April 1919. The population of the mountain subspecies in the Caucasus became extinct in the wild in 1927. Thus, the species was Extinct in the Wild.

However, a captive population remained, consisting of just 54 (29 males and 25 females) in various places in Europe, and the idea of restoring the species appeared in 1923. With the initiative of the Polish zoologist Professor Jan Sztolcman, the International Society of Bison Protection was established and controlled breeding of animals in captivity started. Due to suspected hybridisation with the American Bison (*Bison bison*), most of the potential parents were excluded and only 12 founder animals were used. In 1929 Bison breeding farms were established in Białowieża Forest and in Pszczyna, Silesia. The number of animals increased consecutively, reaching 37 in Poland and 115 in the world by 1939. At the end of the Second World War (1939–1945), there were 44 animals in Poland and 103 in the world. Poland had become a world leader in Bison breeding, in particular concerning the forest subspecies.

In 1952 the first two Bison were released in Białowieża Forest, and in 1957 the first free-born calf was recorded. Over 1952–1966 a further 38 Bison were released, at which point the free-living population started to increase up to c.200 individuals in the 1970s, and c.700 currently. Additional free-living populations were founded in Poland in 1962 in Borecka Forest, in 1964 in Bieszczady, in 1973 in Knyszyn Forest, in 1980 near Drawa Forest in West Pomerania, in Augustów Forest in 2018, in Janów Forests and in Romincka Forest in 2021. At the end of 2020 there were 2 316 Bison in Poland, of which 2 115 were in free-living populations. This is 28% of the world population and c.90% of the EU population. The population is still increasing and the species action plan assumes further simultaneous expansion and the foundation of new herds (Olech and Perzanowski, 2007).

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As a result of the conservation actions, the species' global Red List threat category has improved from Extinct in the Wild to Near Threatened (Plumb *et al.*, 2020), or Vulnerable in Europe according to an older assessment (Wanda Olech, 2007). At least some naturalists believe that it is realistic to establish a target to make the Bison a natural element of ecosystems, without the need for permanent conservation interventions (Niedziałkowski, 2019).

References

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