Europe's bison: prehistoric survivor with Achilles' heel

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A bison walks in the Bialowieza National Park. Some 800 bison roam freely in the Bialowieza mountains that sit between Poland and Belarus. The animals, distant cousins of the American bison, are considered living miracles after the whole population of 700 beasts was masacred by local poachers and the German divisions present during the First World War.

As if straight out of prehistory, dozens of bison emerge timidly from the dark trunks of a primeval forest, their imposing bulk masking their vulnerability.

Step by step, the huge beasts with their thick hides enter a clearing where foresters have served up a tonne of hay and sugar beets to supplement their winter diet.

"In the winter we feed them so they won't destroy forest vegetation or go

in search of food on farms," explains Miroslaw Androsiuk while spreading out the bails of hay.

About 800 bison live freely in the vast Bialowieza forest, the final remnant of a massive woodland that covered Europe after the last Ice Age, which ended about 10,000 years ago. The forest spans the Polish-Belarussian border, with some 450 bison living on the Polish side.

These cousins of the North American buffalo have miraculously survived repeated peril.

The 700 animals that lived in the Bialowieza forest prior to Word War I were wiped out by German soldiers and local poachers. The species was saved from extinction thanks to seven captive animals -- though there is an Achilles' heel.

"These bison are closely related and it could lead to the disappearance of the entire group," says chief Bialowieza forest ranger Jerzy Dackiewicz.

"This weak genetic diversity can pose problems in the future if, for example, they won't have the right genes to protect them from a certain type of illness," says Rafal Kowalczyk, a researcher at the Polish Academy of Sciences (PAN) base in Bialowieza.

Up to now, the herd has shown no sign of deleterious traits due to inbreeding, he says.

The park keeps some 30 animals isolated in captivity for breeding stock to maintain the species, should the free-range bison herd succumb to disease. "Many researchers estimate that the bare minimum group required to insure long-term survival is 500 to 1,000. So even the Bialowieza population may not be enough," says Kowalczyk.

Politics have made things worse. Polish bison have not been able to mate with herds from Belarus since 1981 when the Eastern bloc masters in Moscow -- worried about the momentum building in Poland's anti-communist Solidarity movement -- installed a fence along the length of the border between what was then the Soviet republics of Belarus and Poland.

Under Belarus' authoritarian President Alexander Lukashenko, this Soviet-era vestige along what is now the European Union's eastern frontier has been kept.

There are currently 28 bison herds roaming freely across Europe including ones in Belarus, Lithuania, Poland, Russia, Ukraine and more recently in Slovakia. Most herds have fewer than 100 animals. One group from Bialowieza lives in semi-captivity in the deeply rural department of Lozere in southern France.

Unlike the now extinct aurochs, a primeval ox, and mammoth, bison have survived since prehistoric times, spreading across Europe from Spain to the Ural mountains before gradually disappearing as the development of agriculture pushed them into the remaining forests.

The Bialowieza forest was saved from the axe when hunting there became a royal privilege. In the 15th century, the woodland was declared a hunting ground for Polish kings, then taken over by Russia's Czar after the 1795 partition of Poland.

And hunting appears to carry on as an elite activity.

"Bison hunting is currently illegal," a Bialowieza forest ranger insists.

But asked about what Spanish King Juan Carlos may have been up to during his visit to Bialowieza in 2004, the ranger replies coyly the ban

holds... "apart from some exceptions for VIPs."

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