

Status Survey and Conservation Action Plan

European Bison

Edited by Zdzisław Pucek

Compiled by Zdzisław Pucek, Irina P. Belousova,
Małgorzata Krasińska, Zbigniew A. Krasiński and Wanda Olech



IUCN/SSC Bison Specialist Group

Status Survey and Conservation Action Plan

European Bison



Status Survey and Conservation Action Plan

European Bison

Edited by Zdzisław Pucek

**Compiled by Zdzisław Pucek, Irina P. Belousova,
Małgorzata Krasińska, Zbigniew A. Krasiński and Wanda Olech**

IUCN/SSC Bison Specialist Group

**IUCN – The World Conservation Union
2004**

The designation of geographical entities in this book, and the presentation of the material, do not imply the expression of any opinion whatsoever on the part of IUCN concerning the legal status of any country, territory, or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The views expressed in this publication do not necessarily reflect those of IUCN.

Published by: IUCN, Gland, Switzerland and Cambridge, UK

Copyright: © 2004 International Union for Conservation of Nature and Natural Resources

Reproduction of this publication for educational or other non-commercial purposes is authorised without prior written permission from the copyright holder provided the source is fully acknowledged.

Reproduction of this publication for resale or other commercial purposes is prohibited without prior written permission of the copyright holder.

Citation: Pucek, Z. (ed.); Pucek, Z., Belousova, I.P., Krasińska, M., Krasiński, Z.A. and Olech, W. (comps.). 2004. *European Bison. Status Survey and Conservation Action Plan*. IUCN/SSC Bison Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK. ix + 54 pp.

ISBN: 2-8317-0762-5

Cover photo: Adult bull European Bison (*Bison bonasus*). © K. Zub.

Produced by: The NatureBureau, Newbury, UK

Printed by: Information Press, Oxford, UK

Available from: IUCN Publications Services Unit
219c Huntingdon Road, Cambridge CB3 0DL, United Kingdom
Tel: +44 1223 277894, Fax: +44 1223 277175
E-mail: books@iucn.org
www.iucn.org/bookstore
A catalogue of IUCN publications is also available.

The text of this book is printed on 100 gsm Fineblade Smooth, which is made from 100% sustainable fibre sources using chlorine-free processes.

Contents

Preface	vi	10.3 Seasonal and daily activity rhythms	23
Acknowledgements	viii	10.4 Reproduction and development	24
Executive Summary	ix	10.5 Population structure and organisation	26
Chapter 1. Introduction	1	10.6 Regulation of European bison numbers in the population	27
Chapter 2. Conservation Status	4	10.6.1 Mortality	27
Chapter 3. Origin of the European Bison	6	10.6.2 Culling	28
Chapter 4. Taxonomy	7	Chapter 11. Actual and Potential Threats	29
Chapter 5. Genetic Structure of the Species	8	Chapter 12. Research Needs	31
Chapter 6. Origin and Genetic Characteristics of Breeding Lines	10	Chapter 13. Conservation Strategy and Recommended Action Plan	33
Chapter 7. Hybrids of European Bison (European × American bison hybrids; European × American bison × Cattle hybrids)	13	13.1 Details concerning an Action Plan for European bison developed in particular countries	35
Chapter 8. Distribution	14	13.1.1 Belarus	35
8.1 Distribution of the species in historical times	14	13.1.2 Latvia	36
8.2 Recent distribution	15	13.1.3 Lithuania	36
8.2.1 Captive breeding	15	13.1.4 Poland	37
8.2.2 Free-ranging and semi-free herds	16	13.1.5 Russian Federation	39
Chapter 9. World Population Numbers	17	13.1.6 Romania	40
Chapter 10. Biology and Population Ecology	20	13.1.7 Slovakia	40
10.1 Environment and habitat	20	13.1.8 Ukraine	41
10.2 Food and feeding	21	References	42
		Appendix 1: Contributing Authors	48
		Appendix 2: Origin of the Hybrids of North American and European Bison in the Caucasus Mountains	49
		L.V. ZABLOTSKAYA, M.A. ZABLOTSKY AND M.M. ZABLOTSKAYA	

Donors to the SSC Conservation Communications Programme and European Bison Status Survey and Conservation Action Plan

The IUCN Species Survival Commission is committed to communicate important species conservation information to natural resource managers, decision makers and others whose actions affect the conservation of biodiversity. The SSC's Action Plans, Occasional Papers, newsletter *Species* and other publications are supported by a wide variety of generous donors including:

The Sultanate of Oman established the Peter Scott IUCN/SSC Action Plan Fund in 1990. The Fund supports Action Plan development and implementation. To date, more than 80 grants have been made from the Fund to SSC Specialist Groups. The SSC is grateful to the Sultanate of Oman for its confidence in and support for species conservation worldwide.

The Council of Agriculture (COA), Taiwan has awarded major grants to the SSC's Wildlife Trade Programme and Conservation Communications Programme. This support has enabled SSC to continue its valuable technical advisory service to the Parties to CITES as well as to the larger global conservation community. Among other responsibilities, the COA is in charge of matters concerning the designation and management of nature reserves, conservation of wildlife and their habitats, conservation of natural landscapes, coordination of law enforcement efforts, as well as promotion of conservation education, research and international cooperation.

The World Wide Fund for Nature (WWF) provides significant annual operating support to the SSC. WWF's contribution supports the SSC's minimal infrastructure and helps ensure that the voluntary network and publications programme are adequately supported. WWF aims to conserve nature and ecological processes by: (1) preserving genetic, species, and ecosystem diversity; (2) ensuring that the use of renewable natural resources is sustainable both now and in the longer term; and (3) promoting actions to reduce pollution and the wasteful exploitation and consumption of resources and energy. WWF is one of the world's largest independent conservation organisations with a network of National Organisations and Associates around the world and over 5.2 million regular supporters. WWF continues to be known as World Wildlife Fund in Canada and in the United States of America.

The Large Herbivore Foundation (LHF), founded in 1998 by WWF as the Large Herbivore Initiative, and supported the Species Action Plan for European Bison. The Large Herbivore Foundation has been an independent foundation since September 2003, and its goals are to conserve and enhance landscapes and ecosystems as habitats for large herbivores in Europe, Russia and Central Asia, conserve all large herbivore species and increase people's knowledge and appreciation of large herbivores. The approach of LHF is to facilitate a network of experts who are active in the field of policy, science and politics. This network is an operational entity, which also serves as a source of new ideas for action in the field. LHF gives small financial support to initiate projects and helps to find structural follow-up funding. The European Bison has been a key species for LHI/LHF from the beginning.

Deer: Status Survey and Conservation Action Plan. Edited by C. Wemmer. Compiled by Andrew McCarthy, Raleigh Blouch and Donald Moore. IUCN/SSC Deer Specialist Group, 1998, vi + 106pp.

Bears: Status Survey and Conservation Action Plan. Compiled by C. Servheen, S. Herrero and B. Peyton. IUCN/SSC Bear and Polar Bear Specialist groups, 1998, x + 306pp. (out of print)

Conifers: Status Survey and Conservation Action Plan. Compiled by A. Farjon and C.N. Page. IUCN/SSC Conifer Specialist Group, 1999, ix + 121pp.

African Rhino: Status Survey and Conservation Action Plan. Compiled by R. Emslie and M. Brooks. IUCN/SSC African Rhino Specialist Group, 1999, ix + 92pp. (out of print)

Curassows, Guans and Chachalacas: Status Survey and Conservation Action Plan for Cracids 2000–2004. Compiled by Daniel M. Brooks and Stuart D. Strahl (with Spanish and Portuguese translations). IUCN/SSC Cracid Specialist Group, 2000, viii + 182pp.

Parrots: Status Survey and Conservation Action Plan 2000–2004. Edited by Noel Snyder, Philip McGowan, James Gilardi, and Alejandro Grajal, 2000, x + 180pp.

West Indian Iguanas: Status Survey and Conservation Action Plan. Compiled by Allison Alberts. IUCN/SSC West Indian Iguana Specialist Group, 2000, vi + 111pp.

Grouse: Status Survey and Conservation Action Plan 2000–2004. Compiled by Ilse Storch. WPA/BirdLife/SSC Grouse Specialist group, 2000, x + 112pp.

Mosses, Liverworts, and Hornworts: Status Survey and Conservation Action Plan for Bryophytes. Compiled by T. Hallingbäck and N. Hodgetts. IUCN/SSC Bryophyte Specialist Group, 2000, x + 106pp.

Pheasants: Status Survey and Conservation Action Plan 2000–2004. Edited by Richard A. Fuller and Peter J. Garson. WPA/BirdLife/SSC Pheasant Specialist group, 2000, vii + 76pp.

Megapodes. Status Survey and Conservation Action Plan 2000–2004. Edited by René W.R.J. Dekker, Richard A. Fuller, and Gillian C. Baker on behalf of the WPA/BirdLife/SSC Megapode Specialist Group, 2000, vii + 39pp.

Partridges, Quails, Francolins, Snowcocks, Guineafowl, and Turkeys. Status Survey and Conservation Action Plan 2000–2004. Edited by Richard A. Fuller, John P. Carroll, and Philip J.K. McGowan on behalf of the WPA/BirdLife/SSC Partridge, Quail, and Francolin Specialist Group, 2000, vii + 63pp.

Microchiropteran Bats. Status Survey and Conservation Action Plan. Compiled by Anthony M. Hutson, Simon P. Mickleburgh, and Paul A. Racey. IUCN/SSC Chiroptera Specialist Group, 2001, x + 258pp.

Antelopes. Part 4: North Africa, the Middle East, and Asia. Global Survey and Regional Action Plans. Compiled by D.P. Mallon and S.C. Kingswood. IUCN/SSC Antelope Specialist Group, 2001, viii + 260pp.

Equids. Zebras, Assess and Horses. Status Survey and Conservation Action Plan. Edited by Patricia D. Moelman. IUCN/SSC Equid Specialist Group, 2002, ix + 190pp.

Dolphins, Whales and Porpoises. 2002–2010 Conservation Action Plan for the World's Cetaceans. Compiled by Randall R. Reeves, Brian D. Smith, Enrique A. Crespo and Giuseppe Notarbartolo di Sciara. IUCN/SSC Cetacean Specialist Group, 2003, ix + 139pp.

Cycads. Status Survey and Conservation Action Plan. Edited by John Donaldson. IUCN/SSC Cycad Specialist Group, 2003, ix + 86pp.

West African Chimpanzees. Status Survey and Conservation Action Plan. Edited by Rebecca Kormos, Christophe Boesch, Mohamed I. Bakarr and Thomas Butynski. IUCN/SSC Primate Specialist Group, 2003, ix + 219pp.

Canids: Foxes, Wolves, Jackals and Dogs. Status Survey and Conservation Action Plan. Edited by Claudio Sillero-Zubiri, Michael Hoffmann and David W. Macdonald. IUCN/SSC Canid Specialist Group, 2004, x + 430pp.

Other IUCN/SSC Publications

IUCN Policies and Guidelines

Policies and Guidelines are published as booklets and offer scientifically-based conservation principles and guidelines to aid decision-making at both the global and national level.

Monographs (arranged by topic)

- CITES
- Crocodiles
- Educational Booklets on Mammals
- Marine Turtles
- Plants
- Trade
- Others

Occasional Papers Series

SSC Occasional Papers cover a broad range of subjects including conservation of groups of species in a particular geographical region, wildlife trade issues, and proceedings of workshops.

A more detailed list of IUCN/SSC publications is available from the SSC office, Rue Mauverney 28, CH 1196 Gland, Switzerland. Tel: +41 22 999 0000, Fax: +41 22 999 0015, E-mail: mcl@iucn.org

IUCN/Species Survival Commission

The Species Survival Commission (SSC) is one of six volunteer commissions of IUCN – The World Conservation Union, a union of sovereign states, government agencies and non-governmental organisations. IUCN has three basic conservation objectives: to secure the conservation of nature, and especially of biological diversity, as an essential foundation for the future; to ensure that where the Earth's natural resources are used this is done in a wise, equitable and sustainable way; and to guide the development of human communities towards ways of life that are both of good quality and in enduring harmony with other components of the biosphere.

A volunteer network comprised of some 8,000 scientists, field researchers, government officials and conservation leaders from nearly every country of the world, the SSC membership is an unmatched source of information about biological diversity and its conservation. As such, SSC members provide technical and scientific counsel for conservation projects throughout the world and serve as resources to governments, international conventions and conservation organisations.

IUCN/SSC Action Plans assess the conservation status of species and their habitats, and specifies conservation priorities. The series is one of the world's most authoritative sources of species conservation information available to natural resource managers, conservationists, and government officials around the world.

IUCN Species Programme
Rue Mauverney 28, CH-1196 Gland, Switzerland
Tel: +41 22 999 00 00, Fax: +41 22 999 00 15
E-mail: ssc@iucn.org
www.iucn.org/themes/ssc

IUCN Publications Services Unit
219c Huntingdon Road, Cambridge, CB3 0DL, UK
Tel: +44 1223 277894, Fax: +44 1223 277175
E-mail: books@iucn.org
www.iucn.org/bookstore