

**THE
EUROPEAN BISON
PEDIGREE BOOK**

IN HISTORY AND TODAY

TEXT

JAN RACZYŃSKI

Editor, „European Bison Pedigree Book”

MAŁGORZATA BOŁBOT

Assistant Editor, „European Bison Pedigree Book”

ISBN 978-83-87054-73-1

Copyright © by Białowiecki Park Narodowy

BIAŁOWIEŻA 2009

TRANSLATION

JAMES RICHARDS

TYPESETTING AND GRAPHICS

ELŻBIETA JABŁOŃSKA

PROOFREADING

MAŁGORZATA BOŁBOT

PRINTING

DRUKARNIA CHROMA, Krzysztof Raczkowski, Żary

ISSUE

550 COPIES

The first documenting of the pedigrees of European bison, and its aim

For anyone engaged or interested in the breeding of European bison there is now just one source of knowledge as to the origin of specimens in breeders' possession, and one basis upon which breeding plans for the future can be drawn up. For today it is impossible to imagine the manager of a bison herd not having on his/her desk, either a complete set of European Bison Pedigree Books, or at least the volumes from the last few years, these allowing for details of bison owned to be compiled, for family trees for individual animals to be drawn up, and for a general picture to be gained as to how things are going with the reinstatement of this once-almost-extinct species in different countries, and in the world as a whole.

The pursuit of detailed breeding documentation on a species saved from total extirpation began at the very time the idea of reinstating that species began to take hold, and that is now upwards of 80 years ago. Bearing in mind the task still facing bison breeders, there is no obvious sign that the need for publication to continue will be fading away any time soon.

From the outset, the European Bison Pedigree Book was an international undertaking requiring harmonious cooperation between breeders in different countries, this needing to continue no matter what the political divisions between those countries, and no matter how difficult it might become for those involved in the effort to establish and operate it to actually communicate with one another directly. Things of course look quite different now, in the era of globalisation, when Europe is open to and familiar with joint actions, and when contacts are both easy to establish and potentially almost instantaneous. No wonder that work on the EBPB is both easier and more efficient than it once was!

So, a desire to register the pedigrees of European bison manifested itself as the last individuals from the free-ranging population in Poland's Białowieża Forest succumbed in the year 1919. Prior to that, the European bison or wisent, once in fact a common enough

inhabitant of the forests of Continental Europe, had been accompanying humankind for literally thousands of year, furnishing our species with meat and skins. Doubtless such an imposing and powerful beast rather rapidly became the subject of awe, perhaps even religious or spiritual inspiration – as one may perhaps deduce when admiring the cave paintings at Altamira or Lascaux, which have maintained likenesses of bison on their walls for some 13 – 15,000 years now.

However, by historical times, that relationship with people had deteriorated to the point where the species was clearly under pressure, and in decline. Indeed, by the Middle Ages, it was already gone from Western and Central Europe, the remaining refuges at this stage being the still-wild forests of eastern Poland and Lithuania. As it turned out, however, their fate even there would only prove secure where and when the Polish Monarchs, and then the Russian Tsars, took active steps to make sure that they were. That eventually left just two places in the world for European bison – the Białowieża Primaeval Forest and the Caucasus Mountains, the population even in this latter wild area becoming extinct in 1927.

At Białowieża, in turn, the fate of the great bovines might have been different had the Forest not been in the thick of First World War fighting. But the repeated passage through that area of the armies of both sides had its own direct effect, as well as destabilising the situation sufficiently to leave the local community both suffering and starving. Not surprisingly, the remaining wild European bison paid the price for this, and the very last animals fell prey to poachers in the spring of 1919 – seemingly bringing a permanent end to the many-thousand-year reign of the European bison in the great fasts of the *Puszcza*.

Yet post-War Europe was a time of hope for a Poland reappearing on Europe's maps for the first time in 123 years, and with the Białowieża Forest once again located within its borders. When searches made revealed

a Forest entirely bereft of bison, it seemed all the more of a mercy that some animals at least (in fact some very few) had lived on in captivity – in the private animal collections of the super-rich, and in zoological gardens.

But such a situation had inevitably to be an ephemeral one, it being abundantly clear then as now that only swift international action could hope to postpone final, irrevocable extinction in just a few short years. As fate would have it, an occasion to voice these fears, and to call for the species to be bred back to safety, arose with the 1923 (Paris) International Congress on Nature Protection. Appearing at this – in his capacity as representative of the Polish State Conservation Commission – was Jan Sztolcman, Deputy Director of the National Museum of Natural History in Warsaw, who proceeded to present a general plan to protect (and hopefully save) the European bison. The plan drew on the experience gained in North America (primarily the US), where it had proved possible to bring back the similarly-endangered American bison, as well as at Pszczyna (Poland), where breeding had progressed effectively on the basis of a founder group of just a few bison brought there from Białowieża.

The problem with a European attempt at species reinstatement was that – unlike in America – remaining animals were scattered very thinly across several countries, making it necessary for a truly international effort to be mounted. Nevertheless, the motion to that effect gained acceptance at a Conference fully aware that any move towards actual implementation would have to be a rapid one.

It was the Germans who took initiative, under Dr Kurt Priemel, Director of Frankfurt Zoo, the first tangible fruit of this being the August 1923 founding in Berlin of the International Society for the Protection of the European Bison (*Internationale Gesellschaft zur Erhaltung des Wisents*), which commenced at once with energetic action.

The first task was to inventory all the European bison remaining in existence world-

wide, data being compiled by Goerd von der Groeben, the person appointed in accordance with the Society's Statute to run pedigree documentation. This work resulted in an accurate count of the numbers of animals in existence as of December 31st 1924, it emerging from this that there were – just – 66 individuals left (33,33) [numbers of males and females (in that order) are always given in parenthesis]. On the brighter side, a rather small number of adult animals were accompanied by numerous calves born in 1923 itself (7,6), as well as several young animals born in 1922 (2,5), these facts imbuing the *Erster Jahresbericht der Internat. Ges. z. Erhaltung d. Wisents* of 1925 with at least a degree of optimism for the future of the population.

The Society's logical next step and key aim then became to move up from basic inventorying to the maintenance of a pedigree record including all the surviving animals, and going as far as possible in determining their genealogy. A particularly vital, if somewhat demoralising task, was to exclude from further breeding consideration those animals whose pure-blood European bison status could not be vouched for, this reflecting the bitter truth that many breeders had played with hybridization between European and American bison, an easy enough feat to accomplish, as it turned out, and a "dangerous" one, since the hybrids are fertile from the first generation, and can also breed successfully with the original species. Hybrids of this kind, and back-crosses with a significant amount of wisent blood in particular, look so similar to true, pure-blood European bison that there is no effective way to tell them apart.

Under the circumstances, the fears of breeders acquiring "European bison" that were actually nothing of the kind was real enough. To this day, the concept of the "pure-blood" European bison remains a vital one, and indeed a fundamental argument in favour of ongoing compilation of Pedigree Books for the species.

The European Bison Pedigree Book – a main instrument in breeding for species reinstatement

It was under the above circumstances that the European Bison Pedigree Book came into existence, its task being to list and document specimens of known origin, the data included concerning basic identification throughout individuals' lives, and offering sufficient inter-generational information to allow any existing animal to be traced back to the original group within the so-called founding herd. v. d. Groeben was able to come out with the first such documentation for the species as at January 1st 1931 (the actual publication in 1932 falling among the Society's materials in *Das Zuchtbuch*).

So it was that the European Bison Pedigree Book became history's first detailed listing of a protected species, and hence in some way a predecessor of – and model for – the Books now run and published for a wide range of other endangered animals, not least the Przewalski horse, snow leopard, and so on.

The putting together of the Book gave effect to a number of concepts followed to this day in registration work of this kind. Every bison registered and documented is in receipt of a **pedigree number** unique to it and never repeated. This is then the fundamental means of identifying the given animal. Other features are a record of the animal's **gender**: **M** – for Male, **F** – for Female), **date of birth** (day-month-year), **number and name of parents** and **name of breeder**, which is to say of the owner at whose centre the given animal was conceived. For convenience, breeders of newborn animals are supplied with the specimen's **name** at the time of registration in the Book.

Nomenclature is regulated in line with the **identification letters** breeders themselves have come up with and submitted to the Book's Editorial Office for acceptance. These are the first 2 (more rarely 3) letters of the names given, and these identify different breeding centres, or sometimes countries. Thus, Polish European bison of the Białowieża Line all have names beginning

with the letters "PO", while those of the Pszczyna Sub-Line begin with "PL". The letters "KA" in turn denote animals captured from the free-ranging Białowieża Forest population.

The Pedigree Book goes on to document all changes of owner and hence place of residence of bison, though the name of the breeder remains constant. The dates of death of animals are also recorded, as are instances of animals ceasing to be registered for other reasons

The situation of the European bison as a protected species emerged as quite specific in that, at the time the reinstatement effort got underway, the pedigree listing contained just a single animal representing the Caucasian (Mountain) subspecies. The male "**Kaukasus**" was the individual concerned, he obtaining the pedigree number **100**. His offspring and descendants, notwithstanding their steadily declining dose of Caucasian bison "blood", continue to be identified as part of the separate Lowland-Caucasian Line of European bison. The lettering used for these animals in the Books is different, and a distinct breeding line continues to be run for them. Other bison deriving from the Lowland (Białowieża) Line are treated separately and – thanks to the efforts of breeders – managed and bred separately from the Białowieża-Caucasian Line as well. Obviously, both lines are entirely made up of pure-blood specimens at the species level.

The appearance of a pedigree listing of European bison did represent a true turning point when it came to the struggle for the species' restitution. Coming out in 1932, the first volume of the Pedigree Book encompassed 177 animals, each receiving its pedigree number and each combining with its fellows to constitute a closed founder list of animals from which all today's registered European bison at the different breeding centres are descended. Of course, this does not mean that all the 177 are co-founders of today's herd. First of all, the list included an-



A unique picture of M 100 KAUKASUS – the only pure-blood mountains bison to survive in the captive herd, and hence to find himself within the group of founders of today's European bison population.

All today's bison of the Lowland-Caucasian Line are in some way descended from KAUKASUS
(from the collection of the International Society for the Protection of the European Bison)



Offloading from the forest railway the crates with the first European bison brought back to Białowieża in 1929

Photograph: J.J. Karpiński *(from the BNP collection)*



The cow F 13 BISERTA was a representative of the Lowland Line born in Stockholm Zoo but brought over to Białowieża in 1929. She became one of the founders of the Białowieża herd
 Photograph: J.J. Karpiński (*from the BNP collection*)

imals already dead at the time of the listing, the condition for their inclusion being that their genealogy was capable of being established, and hence their status as pure-blood specimens.

Likewise, as it turned out, the 55 animals in the hands of the various owners at the time the Society came into existence included bison too old to participate in the reproductive effort. Furthermore, fully effective mixing of remaining genetic diversity was also rendered impossible by the degree of dispersal of breeding centres. Finally, we must concede that the then knowledge of genetics did not in any case allow for the development of the kind of DNA-based breeding programme

that might be organised today. This is not of course to say that breeders were unaware of the need to avoid matings between closely-related individuals.

Anyway, the facts now tell us that all European bison on Earth today descend from just 12 animals, of which 7 constitute the Lowland-Line ancestral stock. Such a situation has been enough to give the strategists behind the reinstatement of the species many a sleepless night, but things are as they are – from the scientific point of view the bison gene pool is a closed one, and all we may do is take care to use what breeding material we do possess as effectively as possible.



M 163 BORUSSE was the first pure-blood European bison to come to Białowieża, in 1929
 Photograph: J.J. Karpiński (from the BNP collection)

The Book's past fortunes

The few years before the Second World War saw just three successive European Bison Pedigree Books published. The last of these depicted the situation as it was in 1936. The early listings had been pursued further during this period by Dr Erna Mohr, a Hamburg-based zoologist well-known in scientific circles, and a person deeply committed to the development of bison breeding. Operating within the framework of the Society, Dr Mohr rapidly made a reputation for herself among scientists, and most especially among bison breeders, most of whom she knew personally and was in regular direct or postal contact with. Such contacts were obviously imperative if the purity of the blood of registered bison was to continue to be documented and checked out. However, as Erna Mohr herself conceded, formal control over the breeders was lost in 1938, though this did not discourage her from collecting material for further volumes. Nevertheless, the Pedigree Book was definitely in danger by this point.

Up to that time it had seemed that progress with the work to reinstate a world herd of Eu-



In the course of her September 1927 visit to Poland, Dr Erna Mohr is pictured at the Bison Breeding Reserve at Białowieża, by the enclosure holding bull M 163 BORUSSE
 Photograph: A. RzaŹnicki (from the BNP collection)



The cow F 89 BILMA, born at Białowieża in 1913, found herself back at Białowieża in the enclosure in 1935, having been brought in from Stockholm Zoo. Alas, she failed to produce any offspring here
Photograph: J.J. Karpiński (*from the BNP collection*)



The five-year-old bull M 542 PUZON shown in the Białowieża Reserve. A year later, he was sent to Niepołomice, where bison of the Lowland-Caucasian Line were gathered together
Photograph: J.J. Karpiński (*from the BNP collection*)

European bison could not be deterred as long as there was still peace in Europe. But this was an illusion, as the emergence of a totalitarian system in 1930s Germany was enough to begin to obstruct the international cooperation dimension to the work. Nazi circles extended to people for whom the “hijacking” of bison breeding might prove helpful in furthering a career, it being no coincidence at all that the European bison was by then coming to be seen as symbolic of Germanic tradition.

One individual with an eye for the main chance back then was Dr Lutz Heck, the Director of Berlin Zoo and a staunch proponent of National Socialist ideology. It was thanks to him that Schorfheide (one of the largest forest complexes in Germany located not far at all from Berlin) came to be the seat of a great breeding centre for “German bison” that drew in the best specimens from

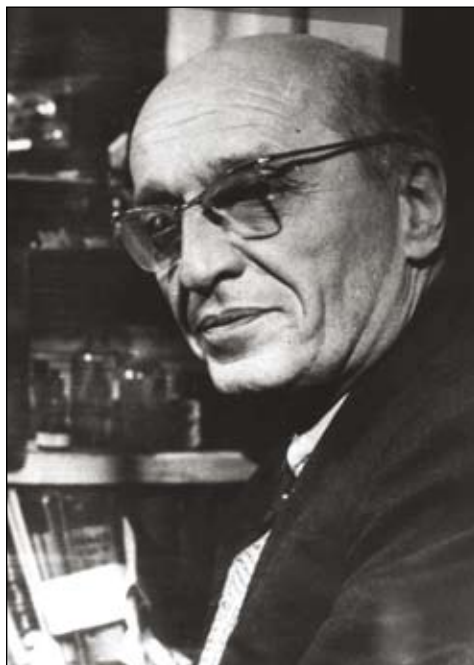
other herds around the Reich. The owner of the forest was none other than Hermann Göring.

Naturally, the symbolic side of the operation made it necessary that the breeding effort should prove a rapid success, even if that meant that purity of blood could safely be ignored – on this one occasion at least. Bison were thus crossed with hybrids, but no breeding documentation to this effect ever saw the light of day. In fact, the “Schorfheide problem” (for bison breeding and reinstatement) was actually brought to a definitive if brutal resolution in 1945, when the victorious Red Army slaughtered all the animals they found. A greater problem at this point remained the questionable reliability of the pedigree data for all the other breeding centres in Germany.

The Book’s post-War fortunes

World War II changed the world distribution of European bison possessed in terms of numbers, as well as leading to a need to verify different countries and breeding centres as regards their work to reinstate the species. At this point, the largest numbers (44) in fact remained in Poland itself, at several centres of which the largest at Białowieża held 17 animals that had come safely through the War. In contrast, the USSR had not a single bison to its name by this time, all herds established thereafter thus arising from animals transferred steadily to the Soviet Union from Poland. As was suggested above, knowledge of the situation in Germany needed radical updating, with the bison at Munich Zoo, for example, needing to be checked for signs of hybridisation.

By this stage, there had been of course been a ten-year absence of the Pedigree Book, so breeders could no longer even recall the pedigree numbers of the beasts in their possession. Furthermore, it was immediately apparent that the post-War years were going to see a fundamental division of Europe, with a great many breeders being stuck on “the wrong side of the Iron Curtain”, with all the implications that had



Dr Jan Żabiński – the pre-War (post-1929)
Director of Warsaw Zoo
and the first Polish Editor
of the European Bison Pedigree Book

(from the collection at Warsaw Zoo)

for ease of personal contacts and information exchange. However, some kind of normalisation of relations post-War did lead to decisions at the level of the politicians that the European Bison Pedigree Book ought to be continued with no matter what. The way in which Nazi action and individuals had dispensed with the idea of maintaining the purity of breeding lines had its consequences in a decision taken at the International Conference of Directors of Zoological Gardens (held in Rotterdam in September 1946), to the effect that further leadership of the International Society for the Protection of the European Bison should be in Polish, rather than German, hands, the chairmanship role passing to Dr Jan Żabiński, Director of Warsaw Zoo. Żabiński had in fact been the Society's deputy head in the pre-War years, so his appointment in any case represented a natural prolongation of the pre-War situation.

In practice, the main thing to do was to recommence with the publication of volumes of the Pedigree Book, a goal and task to which Dr Żabiński committed himself at once, contacting Dr Erna Mohr, who set to work on the Western European side of the equation. Happily, the friendship and close professional contacts characterising this fortuitous pairing of individuals would ensure publication of the first post-War edition of the Pedigree Book as early as in 1947. The volume in question sought to encompass the entire 1937–1946 period, herculean as this

task might seem. After that, new editions of the Book would appear every two years.

A reporting system devised in later years saw cooperation in the supply of data develop, the Western European information being a matter for Dr Mohr, while Soviet data were handled by Dr Mikhail Zablotsky – as a scientific employee of the Prioksky Bison Reserve near Moscow. It was thus left to Dr Żabiński himself to compile data for Poland and the other Eastern Bloc countries.

As it turned out, the idea of the European bison being reinstated was really able to take off in the post-War years, there thus being a major increase in the number of breeding centres and the numbers of animals being bred. There can be no doubt that this was the solid quantitative phase to the development of the world population – if one that could readily give way to a later stage at which quality of stock began to assume greater and greater importance. Scientific developments were of course supporting this change of emphasis, as it became possible to rationalise breeding programmes – and hence cooperation between breeders and centres – in line with the new findings in genetics.

However, by the mid 1960s it was becoming clear that the data-gathering system that had remained in place up to that time was no longer up to its task. For a centralised system of information-gathering was proving harmful to the Book's rhythm of publication.

The reform of the European Bison Pedigree Book and the transfer of its Editorial Office to Białowieża

Specifically, by the late 1960s, the information released in given editions of the Pedigree Book was as much as 5 years out of date, a degree of slippage that was very much obstructing the real-life, practical work breeders were seeking to do. Letters of complaint pressing for a change in the situation were thus finding their way into the hands of Prof. Zdzisław Pucek, as head of the Polish Academy of Sciences' Białowieża-based Mammal Research Institute, this being an important enough institution to be able to maintain

regular and extensive international contacts. Fortunately, Prof. Puck himself proved influential enough to intervene successfully with the Ministerial Board of Nature Conservation in Warsaw, whose decision it was to reinforce the EBPB's editorial team with a post of Editorial Secretary. This position was in fact taken on by Dr Jan Raczyński, a scientific employee of the MRI, who had already studied bison and was quite well-acquainted with the necessary editorial work.

It was in this way that compilation and editing of the Pedigree Book transferred *de facto* to Białowieża (for the first time), notwithstanding its continued formal headquartering in the Polish capital. This change resulted in a reform of the means by which material was brought together, as well as in the way the finished product (the Pedigree Book itself) actually appeared, for there was now a new graphic element and layout, even though the tables documenting the fates of individual bison as regards birth, death, change of centre and owner were retained. A new numerical table depicting numbers of bison at different centres at the end of the given reporting year was introduced, and this also started to take in animals from breeding centres that had appeared in the meantime, these only being dealt with quantitatively, in the face of an inability to further track the pedigrees of given animals.

The main problem with the compiling of material to bring out further editions of the Book lay in the way that direct contacts between the Editorial Office and breeders kept having to be made. The contact was obstructed by a lack of addresses of breeding centres, since the Editorial Office was still at that point receiving compilations of data. These difficulties further coincided with the death of that pioneering compiler of the said data, Dr Erna Mohr (who left us in September 1968).

A more favourable circumstance ensued when the writer of these words (Dr Raczyński) found himself in late 1968/early 1969 on a scholarship-funded visit to Berlin in what was then of course the German Democratic Republic. It then proved possible to make contact with the late Dr Mohr's sister, Meta Schaubach, who lived with her husband in West Berlin. A meeting could only come about by virtue of a special pass to cross what was at that time the extremely well-guarded and firmly-closed border between the eastern and western parts of the former German capital. In turn, the issuing of the pass was only conceivable thanks to intervention by the Ministry with the then authorities of the GDR, who were willing to consent on this occasion at least. The event

was not least memorable for a pile of conditions to be met and formalities to be complied with (including at the Polish Embassy) that looks nothing short of grotesque from today's happier standpoint.

The border was traversed at the Friedrichstrasse *S-Bahn* station, which served the very limited border traffic possible for citizens of the FRG and residents of the Eastern Zone, and was thus furnished with passport control. The whole circumstance was favoured from our point of view as incomers from the East by the fact that the *S-Bahn* was under GDR ownership and so ran on tickets bought with its currency.

The visit to the Schaubachs' in Zehlendorf district proved a great success from the Polish point of view, not least because the author was regarded as an emissary from the EBPB Office who was seeking to continue the work their late sister/sister-in-law had devoted so much time and effort to. I was able to determine that the card index of bison plus general material from the German-based Editorial Office remained at the late Dr Mohr's Hamburg flat, though they were due to be removed from there at any moment. I was promised that these documents would be transferred to Białowieża, so all that there remained to do was to organise the transport and find someone who could take charge of the operation over on that side – it quite obviously being impossible for me myself to make a trip to Hamburg (*i.a.* because a scientific institution had neither the clout to organise the passport, nor the funding to pay for a visit). What could be secured, however, was the assurance of the Embassy of the Peoples' Republic of Poland that our man at the Chamber of Commerce in Hamburg would see to things.

So it was that the goodwill of E. Mohr's sister, and her conviction that the deceased's last wishes were being fulfilled, ensured the safe arrival at Białowieża in spring 1970 of the index of bison, a whole range of personal correspondence maintained by the leading German researcher into their species, and other important materials relating to the International European Bison Protection Society.

The further fate of the Pedigree Book then took certain unexpected twists and turns. Dr Jan Zabiński died in 1974, the Editor nominated in his place being Prof. Kazimierz Krysiak, a well-known anatomist and conservationist who founded the European Bison Research Centre, but who died as relatively soon after as in 1977. Back in 1974, Dr Raczyński had relinquished his role as keeper of the Pedigree Book, and the Editorial Office (with all its materials) had been

transferred to Warsaw. The initial destination was the city's Zoo, but this was followed by the Institute of Environmental Protection.

In general, however, this was not at all a good period for the Pedigree Book. Changes in the makeup of its Editorial Committee were frequent, and regularity of publication suffered as a result. The quality of editing of the editions published at that point also unfortunately leaves a lot to be desired.

The return of the Book's Editorial Office to Białowieża

1991 represented a further breakthrough year in the history of the EBPB. Sixteen years previously, for reasons both political and personal, the seat of the Book's Editorial Office had been transferred to Warsaw, with all the attendant impact in terms of hindered communications between breeders and the Editor. Successive volumes had therefore come out after considerable delays, and with 2-year periods therefore being covered.

However, in February 1991, a decision was taken at the then Ministry of Environmental Protection, Natural Resources and Forestry which led to the Editorial Office of the EBPB being transferred back to Białowieża National Park, under the editorship of Dr Jan Raczyński, with the Secretary at the Editorial Office being the writer of these words, Małgorzata Bołbot, M. Eng.

The first and most important task of the new staff was to bring out another edi-



European bison at Piedrafita de Jaca (Spain), 2003
(from the archive of the EBPB Editorial Office)



M 9507 POKEMON, Hardehausen (Germany)
Photograph: Rainer Glunz

tion of the Pedigree Book with all possible haste, the last one to be published having been concerned with the state of affairs in 1985–1986, and thus containing information for many breeding centres that was very much out of date.

In the case of many of the centres, nothing less than a *de novo* re-establishment of contacts was required if the necessary data were to be obtained. A “complication” here was that the years that had passed had brought the collapse of the old Eastern Bloc and the disappearance, emergence or re-emergence of states. This was of particular significance when it came to the countries born or reborn of the old Soviet Union, this having been such a significant player in bison breeding. While centralised Soviet control over the different bison herds might have had some pluses when it came to the ready supply of data (which were transmitted by a single specially-authorised person), it absolutely

precluded direct contacts with the actual breeders.

But the collapse of the Soviet Union had ushered in a brave new world in which contacts – even breeder-level contacts – had to be made with Belarus, Ukraine, Lithuania, Latvia, Estonia and so on. Establishing them proved a hard slog but, with a concerted effort on the part of all involved, it paid dividends. The 1993 volume concerned itself with data for the years 1987–1991, and further editions then began to appear annually. This remains the situation to this day, and we may hope that it will continue to be the case.

In turn, the ideal scenario now being pursued by the Editorial Office is for successive yearbooks to come out 6 months or less into the subsequent year. This is obviously being worked for in the name of release to breeders of information that is as up-to-date as possible.

The present situation of the European Bison Pedigree Book and of bison breeding around the world, as well as the roles of individual breeders in founding the Book

The existence or non-existence of consecutive volumes of the Pedigree Book that come out less than half a year after the reporting year is not in fact a matter of the Editorial Office's efficiency of performance. This is because so very much depends on the breeders themselves, and on their capacity to submit relevant data in the first few months of each new year. Alas, there remains a hard-core of breeders who have not chosen to get in touch with the Office for a long time now. This despite a number of requests and reminders, sent by traditional post and e-mail. Even attempts to get to given breeders via other breeding centres or private persons maintaining friendly relations with us also fail in some cases. This of course explains why so many of the centres dealt with in the Book are marked with asterisks, while a good number of centres (and their individual bison) have over the years been struck from the register altogether, on account of the fact that too much time has elapsed without any information at all on a given herd. Such a situation for example applied as work on the editions concerning 1994, 1995 and 1996 was being done.

Happily, some of the scratched breeding centres have been re-registered subsequently, along with their old or newly-acquired animals. Indeed, we may even note how some breeding centres have spontaneously re-established contacts with the Editorial Office, making the status of herds and account of ongoing changes therein more up-to-date and reliable than may have been the case before. Nevertheless, it remains true that most of the breeding centres struck off the list have never responded to our requests for information.

A further major problem is posed by some of those who intermediate in the trade in animals. These are people who attach no importance whatever to the documentation that ought to accompany European bison as they arrive at their purchasers' breeding cen-

tres. This is a matter of major significance, since it is the documents in question that can vouch for an animal's pedigree, and hence attest to purity of blood (by confirming that an animal is not the product of hybridisation with either American bison or cattle). There are cases in which breeders (in particular new ones remaining unaware of the requirements needing to accompany transactions) purchase a bison without the necessary certification provided by confirmed pedigree number, name of animal, date and place of birth and identity of parents. An animal of this kind will never gain registration in the EBPB and is thus in essence lost to the world population of the species, since its offspring and descendants will likewise be left out of future Pedigree Books.

For these reasons we again make a heartfelt appeal to breeders not to sell bison on to any old dealer, but rather to deal with reliable intermediaries prepared to take the trouble to attend to the necessary formalities required as animals are transferred to new owners. A similar appeal goes out to purchasers themselves, to the effect that they should never buy animals of unknown origin that lack the relevant documentation! The later determination of the pedigree of such animals is at best a very difficult matter and at worst not possible at all.

Happily, the current situation the European bison finds itself in is not the dire one it once was, though in no way can the numbers be described as high when there are still just 4000 or so animals on Earth. Worse than that is the fact that this world population derives from such a very small founder group (of 12 animals in the case of the Lowland-Caucasian Line, just 7 where the Lowland Line is concerned). And, while numbers are rising steadily from year to year, there remains no way of knowing what problems may afflict the species in the future. European bison are prone to suffer from, and even die of, foot-and-mouth disease, disease of the prepuce,



The herd of bison at Hardehausen (Germany)
Photograph: Rainer Glunz



A radio-collared bison in Russia
Photograph: Taras Sipko



A bison of steel – the symbol of the Avesta Stainless plant at Avesta (Sweden)
Photograph: Yngve Mattiasson

blue-tongue disease, tuberculosis, diarrhoea and worm infestations. These sometimes assume epidemic proportions, and may thus decimate herds, making it particularly important that some bison at least are present in well-dispersed and small groups isolated from others.

Breeders themselves are a great help here, continuing to show great interest in raising world numbers of bison. Indeed, this interest is not even confined to Europe as the homeland of the species, since there are breeding centres in Canada and the USA (if fewer now than before), as well as in Brazil and South Africa. These are of course mainly show animals in zoos and private collections, but then it was precisely thanks to such enthusiasts that the species survived the post-WWI extermination at all.

The fact nevertheless remains that the key large breeding centres are in Europe, as it should be. The most important countries (in order) are Poland, Belarus, Russia and Germany, albeit with the first three countries

mainly supporting free-ranging bison, while Germany has captive breeding. There is reason to expect that the so-called breeding in semi-wild conditions will become more and more popular as time goes by, the animals being kept in a fenced-in area, but this being large enough to ensure that the breeder cannot always identify given individuals. This is why such centres are documented in the Pedigree Book in terms of nothing more than the overall size of herd, plus a division into male or female. The same principles apply to free-ranging populations.

Semi-wild herds were present previously in the USA (GURLEY), and are still managed in the Russian Federation (CHERGA) and Ukraine (ZALISSKA). Recently, this kind of breeding has also commenced in Romania (at NEAGRA BUCSANI and NEAMT), and most recently of all (since 2008) it has concerned the RÉSERVE BIOLOGIQUE DES MONTS D'AZUR in France.

It remains a priority in bison-breeding around the world to maintain the separate

identities of the two breeding lines (Lowland and Lowland-Caucasian). In the EBPB itself, the names given in bold are of Lowland-Line bison. The names of breeding centres devoting themselves to this Line only are treated in a similar way in the Book. The names of Lowland-Caucasian bison, and of breeding centres for them (or for both Lines in a single herd) are in turn given in normal print.

And finally to the very important matter of the bison breeders themselves – a large group of people very dedicated to the task at hand, competent and only too happy to cooperate with the Editorial Office for the European Bison Pedigree Book. It is impossible to overestimate the role of these individuals, hence the desire to list at least a few of them right here and now.

Taras Sipko has supplied information on the bison in Russian collections for several years now, though his role also extends beyond that country's borders. Thanks to Taras's involvement it has proved possible to obtain information on breeding centres in Ukraine after a great many years with no news. In particular, Taras put the Office in touch with Vladimir Vovchenko, who has been supplying us with data compilations on the Ukrainian bison for a year now.

Razvan Deju has been the one to send us information on the whole set of Romanian centres for many years now. Razvan has dedicated himself to ensuring that the species remains extant in Romania. Ever ready to supply clarification as and when pedigrees are in doubt, he is a fine colleague, and above all the man behind some very effective cooperation.

Tommy Svensson and **Erland Wadsten** are two individuals from Sweden who are of great importance to the Book. Tommy supplies information on the two large bison breeding centres at Avesta and Eriksberg, while Erland has been dealing with Stockholm, Höör, Kolmården and Lycksele. All praise to them for what they do! For it is thanks to their efforts that the population of bison at all the Swedish breeding centres is reliably known and up-to-date. At present, not a single Swedish breeding centre has its name marked with an asterisk.

Marcel Lehocki is someone who helped us out a great deal when it came to determining the pedigrees of bison at the Topol'čianky breeding centre in Slovakia. It is thanks to him that all the bison now living at that centre enjoy EBPB documentation, while the name of centre as a whole has ceased to be accompanied by an asterisk.

Conrad Enseñat and **Maria Gómez de Segura** helped with updating the documentation as regards the bison herd at Barcelona Zoo.

Papšys Rytas disappeared from the list of bison breeders for a while, only to return and supply up-to-date information on the bison present at two Lithuanian breeding centres: the captive breeding centre of Panevėžys-Pašilių Stumbrynas and the PANEVĖŽYS-PAŠILIŲ STUMBRYNAS centre with its free-ranging herd.

Ints Mednis in turn furnished information on two breeding centres in Latvia, i.e. Lake Pape and Kalvene Zoo. Ints also offered assistance with contacting two other Latvian centres which had systematically failed to respond to our attempts to make contact, thus mailing to supply information on the situation of specimens in Riga and Vestina. **Kris Jansen** supplied detailed explanations regarding the pedigree of bison present for a period at Mierlo (Dierenrijk Europa in The Netherlands) prior to their transfer to the Lake Pape and Zoo Kalvene centres in Latvia.

Rainer Glunz is a breeder from Hardehausen who never turns down our requests for help in obtaining information on bison at German breeding centres other than his own, and he also helps us to make sense of various unclear situations as regards those centres. There is of course a long enough list of other breeders who keep in touch with the Editorial Office and to whom we are most grateful for information supplied.

THANK YOU!

We count on future cooperation too, as much for the good of the European bison as for ourselves. May the population of this beautiful and still-rare animal continue to grow steadily!



F 9726 POJAWINKA with her 1-day-old calf, F 11410 USARA, at Prätenow (Germany), 18.06.2009
Photograph: Dirk Weichbrodt



F 20 BEATRICE with her 4-day-old calf M 244 ARCOMES at Amsterdam Zoo (The Netherlands), 22.09.1934 (from the archive of the EBPB Editorial Office)



M 3049 ZORTAN at the Zoo in Kraków (Poland) in winter 1979. Photograph: A. Turczański