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European bison

The European bison is Europe's largest land animal and a close relative of the Steppe Bison, an extinct species once native to Britain in the Pleistocene. Although the European bison came close to extinction in mainland Europe in the 20th century, conservation measures have enabled their populations to increase and expand across the continent. Although they are bovines, they have a more varied, browse-rich diet than cattle, and their larger size and more dynamic interactions with their environment shape the habitat differently. As a keystone species, their introduction to Britain has the potential to revitalise degraded landscapes, fostering biodiversity and creating habitat-rich environments to help boost nature's recovery.

Environmental Benefits



Grazer & Browser

Bison consume large quantities of vegetation by both grazing and browsing, creating disturbances that opens dense woodland environments and maintains mosaic landscapes.

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Bark Stripping

Bark stripping influences the survival of woody plants which prevents woody encroachment and creates standing deadwood – an important habitat for multiple invertebrate, bird and bat species. Further disturbance caused by scratching their horns creates holes in trees to be utilised by cavity-nesting birds and bats.



Dust Bathing

Bison regularly roll in dust to alleviate itching and remove parasites which creates patches of bare ground. These are ideal germination sites for pioneering plant species and supports a more diverse vegetation community which, in turn, benefits more organisms further up the food chain. Their large size and herding behaviour allows them to push through and trample dense vegetation, again creating open and more diverse communities.

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Trampling

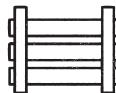
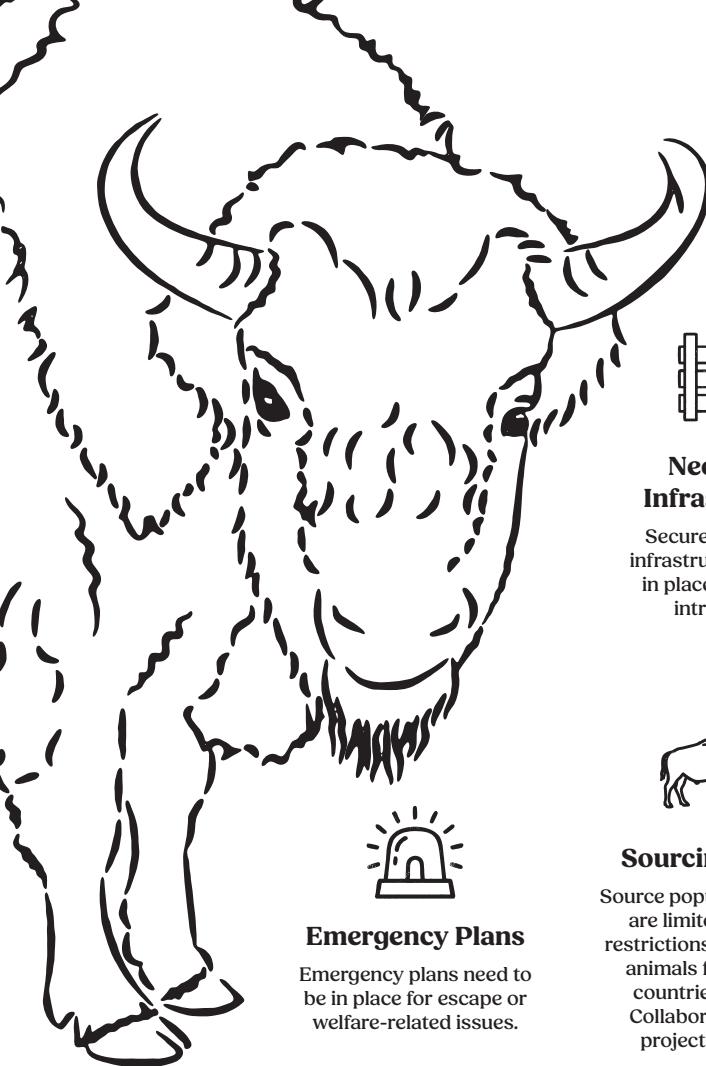


Seed Dispersal

Their dung, along with their thick coat and hooves are important sources of seed dispersal, with research showing that bison are one of the most important large herbivores for moving seed between habitats, supporting the development of a diverse and healthy ecosystem.

Managing Bison for Nature Recovery

Key management considerations include:



Necessary Infrastructure

Secure fencing and infrastructure must be in place before their introduction.



GPS Collars for Tracking

GPS collars make locating bison and carrying out health and welfare checks easier, but technology to manage where they can access, such as NoFence, is not licensed for bison.



Dedicated Staffing

Ongoing monitoring post-introduction to assess health and welfare of the animal requires a dedicated team, and a veterinary team available should intervention be necessary.



Sourcing Animals

Source populations in Britain are limited and current restrictions make importing animals from European countries a challenge. Collaboration between projects is essential.



Diseases

Disease risk analysis (DRA) must be conducted before introductions, and pre- & post-transport health checks to prevent the spread of diseases.



Population Management

Ensure appropriate social structures for each species is observed and maintain appropriate densities based on the carrying capacity of the area.

Emergency Plans

Emergency plans need to be in place for escape or welfare-related issues.



Legal Restrictions

The introduction of bison in Britain must comply with specific legal and regulatory requirements:



Wild Release Licence

Bison are considered non-native and will require a licence from Natural England.



Livestock Management

Bison are a bovine species and are considered in Britain to require management to comply with the same legislation that applies to domesticated cattle, such as identification requirements and TB testing.



DWAA Licence

Bison are listed on the Schedule to the Dangerous Wild Animals Act 1976 (DWAA), which restricts their release into fenced enclosures without a licence granted by the local authority.

A note on Diverse Herbivore Assemblages

Each herbivore has unique physical and behavioural traits that shape the environment in different ways and create habitats for a variety of species. Their combined impact supports a broader range of species and rewilding projects should therefore aim to introduce a variety of herbivore species where possible. Please refer to our other herbivore guides for more information.

The Large Herbivore Working Group (LHWG) is a UK-based network of experts formed in 2022 to support the restoration and introduction of large herbivores as part of nature-recovery efforts. It develops guidance, informs policy, and shares best practice across the sector. The LHWG is currently funded until 2027 and hosted by the Landscape Recovery team at The Wildlife Trusts.

Please note these species and nature recovery profiles produced by the LHWG are not legal advice and are intended to provide a high-level overview to support your understanding of considerations needed for large herbivore introductions and management for nature recovery initiatives in England.

Design and artwork by Lauren Hulbert.