



herbivore assemblages

The introduction of a diverse guild of herbivores maximises nature recovery by increasing biodiversity and restoring key ecosystem functions. Each species contributes differently to vegetation dynamics, habitat structure, and natural disturbance. Combined, these varied impacts promote ecological complexity and support resilient, self-sustaining landscapes that benefit both wildlife and people.

Benefits of Herbivore Diversity



Vegetation Diversity

Different herbivores shape vegetation in unique ways - their combined grazing, browsing, and rootling behaviour creates a varied mosaic landscape of grassland, scrub, bare ground and regenerating woodland. This increased structural diversity boosts biodiversity and bioabundance whilst also reducing fire risk.



Increasing Soil Health

The combined effects of dung, urine, trampling, and carcass breakdown by herbivores enrich soil fertility and microbial life. Each species creates a differing level of disturbance, which improves aeration and seed germination, supporting sustainable productivity and long-term carbon storage in soils.



Complex Food Web

Diverse herbivore species together support complex food webs by providing resources like dung, carcasses, and disturbed ground. These support scavengers, insect populations and soil organisms, which in turn sustain birds, bats, mammals and other wildlife across the food web.



Natural Disturbance

Herbivores facilitate natural disturbance processes, such as creating open spaces and dispersing seeds, which enhance habitat diversity and encourage the establishment of pioneer species. This supports ecological succession, increases habitat resilience to threats like drought or disease and helps maintain diverse, functional ecosystems.

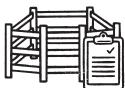


Eco Tourism

The presence of varied herbivore species brings natural processes to life to connect people with nature. Their role in shaping the landscape enhances ecotourism, provides employment and volunteering opportunities and supports education and engagement with nature recovery efforts.

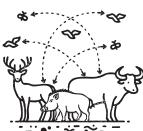
Managing Diversity in a Rewilding Project

Key management considerations include:



Necessary Infrastructure

Introducing a diverse guild of herbivores requires ensuring appropriate fencing and handling infrastructure is available for each species.



Species Monitoring

Regularly monitor how different herbivore species interact with each other and their environment to ensure that grazing, browsing, and rooting pressures are well-balanced.



Population Management

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



Ecological Surveys

Conducting ecological surveys to monitor vegetation, soil health, and species diversity helps build knowledge of nature recovery in the area and provides information to manage herbivore numbers.

Selective Culling

The composition of herbivore herds, such as age distribution and sex ratio, affects how they interact with their environment. Selective culling, such as removing weaker/injured, or aggressive individuals, mimics natural population fluctuations and helps preserve a balanced, wild herd structure.



Legal Restrictions

The management of large herbivores in Britain must comply with specific legal and regulatory requirements for each species:



Wild Release Licensing & Permits

Particular species require licenses for their introduction, and management regulations vary according to species.



Species-Specific Regulations

Wild species may be covered by specific legislation, such as the Dangerous Wild Animals Act (DWAA) or the Wildlife and Countryside Act 1981 (WCA), while domestic animals fall under separate legal regulations governing their management.



Fallen Stock Rule

Dependent on the species, carcasses of deceased individuals must be removed from land and disposed of without wildlife gaining contact.

Other large herbivore guides are available for the following species:

European Bison

Wild Horses

Wild Boar

Roe Deer

Water Buffalo

Red Deer

Cattle

Eurasian Elk

Fallow Deer

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.