



water buffalo

Domesticated water buffalo serve as an ecological proxy for the extinct Eurasian water buffalo, which once ranged across temperate Europe until approximately 12,000 years ago. Whilst there is currently no evidence that Eurasian water buffalo were ever present in Britain, they are introduced in nature recovery projects as large, semi-aquatic herbivores whose unique foraging and wallowing behaviour can shape wetland environments.

Environmental Benefits



Wallowing

+



Grazing

+



Trampling

+



Nutrient Input

+



Seed Dispersal



Natural Disturbance

Water buffalo exhibit wallowing behaviour which creates microhabitats such as temporary ponds and muddy scrapes, benefitting amphibians and aquatic invertebrate species. Frogs are even known to use the back of water buffalo as a foraging spot to pick off bothering flies.

Selective grazing by water buffalo helps to maintain a varied and dynamic aquatic plant community. By preferentially feeding on tougher, fast-growing species, they reduce the abundance of dominant plants in wetland environments and create a more diverse plant community.

Trampling disrupts compacted soil and breaks up dense ground vegetation, facilitating the germination of seeds and enhancing natural regeneration processes, which creates niches for early successional plants.

Dung deposition particularly between aquatic and terrestrial ecosystems provides an important nutrient input into the ecosystem and supports a wide array of dung beetles, flies, and fungi. These, in turn, are critical food sources for birds and other invertebrate predators, contributing to a complex and productive food web.

Maintenance of open wetland systems is achieved by their continuous grazing and movement, which slows or prevents scrub and tree encroachment and helps preserve this rare habitat through natural disturbance.

Managing Water Buffalo for Nature Recovery



Key management considerations include:

Dedicated Staffing

As well as handling to meet legal requirements, regular health checks and monitoring are required, so a dedicated team and access to veterinary advice are essential.



Public Signage

Areas with public access should be clearly signed; buffalo may be unpredictable, particularly around calves.



Necessary Infrastructure

Robust, stock-proof fencing is essential. Ear tagging and TB checking require the corralling and handling of individuals; therefore, suitable handling sites and infrastructure must be available, including facilitating for their horns.



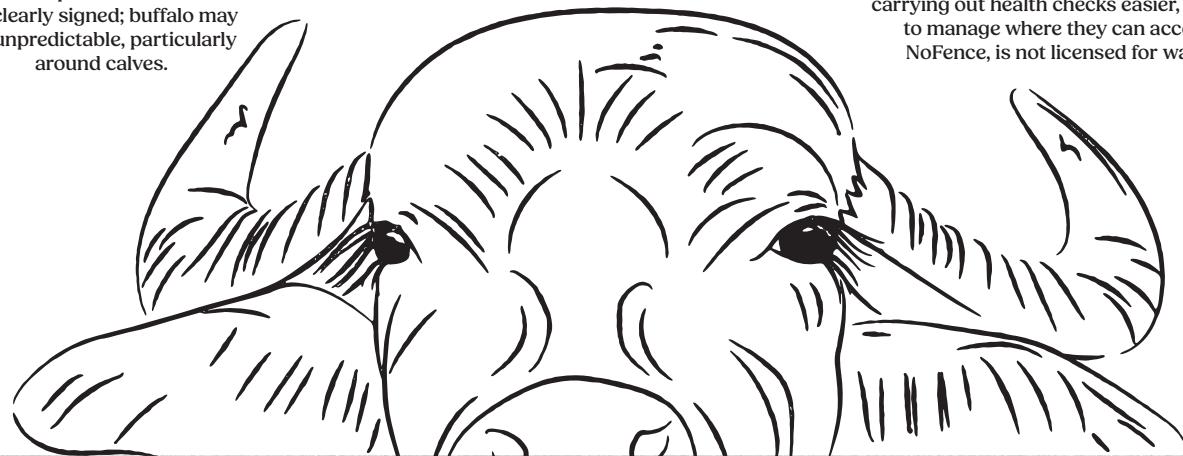
Population Management

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



GPS Collars

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



Legal Restrictions

Water buffalo are a bovine species and are considered in Britain to require management as domesticated livestock which requires compliance with various restrictions:



TB Testing

Bovine TB testing is mandatory but testing interval is dependent on the risk level of the site location.



Fallen Stock Rule

Carcasses of deceased individuals must be removed from land and disposed of without wildlife gaining contact.



Identification

Water buffalo must be ear-tagged within 20 days of birth. Accurate records of all individual movement, births and deaths must be maintained.

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 andrewilding 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.