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The Endangered Landscapes Programme offers an exciting and inspirational vision for the future in which European landscapes are enriched with biodiversity, establishing resilient, more self-sustaining ecosystems that benefit both nature and people.

The programme is funded by Arcadia, a charitable fund of Lisbet Rausing and Peter Baldwin, and is managed by the Cambridge Conservation Initiative.

Cambridge Conservation Initiative



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# RESTORING THE DANUBE DELTA, EUROPE'S LARGEST WETLAND





The Danube Delta is the largest natural river delta in Europe, and home to large populations of breeding birds, including many endangered and threatened species. Changes to the natural flows of river systems and industrial infrastructure have damaged the area, but there is now an opportunity to employ rewilding principles to restore the landscape and encourage the development of an natue-based economy. This will help restore the delta's unique environment and its amazing biodiversity for future generations.

### THE DANUBE DELTA

Situated in Ukraine, Romania and Moldova, the Danube Delta is Europe's largest remaining natural wetland. This unique and extensive ecosystem of unaltered rivers, lakes, marshes, steppes, dunes, lagoons and climax forests is home to more than 60 species of fish, including four species of sturgeon, and mammals such as otters and the European mink.

Breeding bird colonies totalling tens of thousands of individuals (notably terns and herons), including several globally threatened species, also inhabit the area. They include most of the global population of pygmy cormorant and most of Europe's populations of white and Dalmatian pelican.

Some 50 kilometres north-east and functionally connected to the delta's wetlands, the protected Tarutino Steppe in Ukraine is a unique landscape and the largest remaining piece of Pontic Steppe in the Danube Delta region.



## PROJECT CONTEXT AND OPPORTUNITY

Despite the Danube Delta being the largest surviving wetland in Europe, widespread development of infrastructure during the twentieth century has led to a deterioration in local water quality, salinisation and biodiversity loss. Associated attempts to "tame" natural river dynamics have negatively impacted local inhabitants, particularly fishing communities, and much of the resulting infrastructure that has caused these impacts is now dilapidated and obsolete.

The steppe areas surrounding the delta were once inhabited by large herds of wild horses, saiga antelopes, aurochs and wild ass (kulan). During times of severe drought or intense cold these herds would enter the fringes and larger dune systems of the delta and play a role in shaping these landscapes. Agricultural developments have led to the disappearance of these large herbivores and connections between the steppes and the delta wetlands have been broken.

This rare ecosystem could be restored as a living landscape, managed and maintained by herbivores and birds through the reintroduction of keystone species such as saiga antelope, kulan and the demoiselle crane.

### WHAT THE PROJECT WILL DO

This five-year project will take a vital step forward in restoring one of the largest delta systems in Europe (700,000 ha), by significantly improving the ecological integrity and ecosystem functioning of 40,000 ha of wetland and terrestrial (steppe) habitat in the Danube Delta region. Key natural processes, in particular flooding and natural grazing, will be re-established as driving landscapeforming processes. Fostering these processes will encourage wildlife comeback, increase biodiversity and underpin the development of local nature-based economies.

To achieve its aims, the project will:

- → Reinvigorate ecological processes such as flooding and water purification by removing dams and dykes, opening up channels and lakes and restoring natural hydrology
- → Restore productive shallow wetlands that function as spawning habitat for freshwater fish and many other dependant species by reflooding former polders
- Revive dynamic natural processes by releasing large herbivores, such as Konik horse, red deer, water buffalo and tauros cattle (analogue of extinct aurochs) in the delta wetlands, and saiga antelope and kulan on the steppe
- → Facilitate nature-based tourism growth by constructing wildlife hides, observation towers and information panels, in conjunction with training and supporting local conservation-based enterprises
- → Improve lake water quality by restoring natural flows in wetlands
- → Reduce flooding risks to towns and villages by restoring floodplains
- → Increase fish productivity and local livelihoods by restoring natural spawning grounds and native fish species populations
- → Create models for semi-natural steppes that are resistant to increasingly frequent droughts, by restoring steppe areas and improving conditions for natural grazing





### PROJECT LEAD:

Rewilding Europe

### **PROJECT PARTNERS:**

- → Rewilding Ukraine
- → Danube Delta Biosphere Reserve Authority (Romania)
- → Danube Biosphere Reserve (Ukraine)
- → Verde e Moldova

"This project will strengthen cross-border cooperation and benefit communities through large-scale wetland restoration and local development of new nature-based economies"

**Mykhailo Nesterenko** Rewilding Ukraine team leader