

UK Overseas Territories Conservation Forum

Championing UK's most special species: the wildlife of UK's Overseas Territories (UKOTs) and Crown Dependencies (CDs)

FACT-SHEET ON:

Tussac Grass *Poa flabellata* UK Overseas Territory: Falkland Islands

The Falkland Islands are treeless and have a wind-resistant vegetation predominantly composed of acid grasslands and a variety of dwarf shrubs. Tussac is one of the most striking habitats to be found in the Falklands in coastal areas, and is formed from almost pure stands of *Poa flabellate* which attain heights of 2-3 m, with individual stocks of up to 1.5 m in diameter.

Tussac Grass is an important habitat supporting a diverse fauna and flora and is typical of undisturbed coastal habitat in the Falkland Islands, a UK territory. Around 20% of the world's Tussac Grass is found here. South Georgia, also a UK territory, has some tussac grass habitat supporting endemic bird species.

Ecosystem: Tussac is confined to coastal areas rarely extending more than 300 m inland or 200 m in altitude. It forms pure stands of *Poa flabellata* at maximum development attaining a height of 2-3 m, with a fibrous stock of 1.5-2.0 m high and a diameter of 1.0-1.5 m and a crown of leaves, which can form a closed canopy. Tolerance to salt-laden winds and spray play an important role in its distribution. The plants can live for over 200 years.

Importance: This grass environment provides nesting sites for over 40 species of birds and shelter for sea-lions and elephant seals. Many of the invertebrates found in this habitat are unique to the islands.

Tussac Grass also plays an important role in conserving water in the soil and thus maintaining the hydrological and ecological balance of islands. It also conserves and adds to the fertility (nitrogen and phosphate) of the soil by uptake of the droppings of nesting seabirds. There is a link between this important plant and its ability to capture carbon. Notably, tussac peat, which can be over 10m deep and 10,000 years old, is formed when tussac lays-down carbon in its leafy skirts known as pedestals.

Threats: One of the results of long-term grazing and burning on the Falkland Islands has been to restrict the distribution of tussac grass to the ungrazed outlying islands. Invasive species, disturbance, and plastic and oil pollution are threats, However, work coordinated by local conservation body, Falklands Conservation, has been implemented over many decades to replant this grass in bare and eroding areas of peatland with the aim of stabilising the peat, protecting and storing carbon, and providing forage for sustainable grazing.

Needs: There is no doubt that this is an extremely important habitat for the Falkland Islands biodiversity. As human activity has reduced Tussac to 20% of its original area, replanting is needed to improve soil stability and habitat for wildlife. Habitat restoration is



Above: Tussac, © Falklands Conservation. Below: Tussac stand on one of the small islands, with human scale, © Dr Mike Pienkowski, UKOTCF. Bottom: Habitat Restoration, © Falklands Conservation.



encouraged by local NGO, Falklands Conservation. Methods such as planting out tillers (offshoots of the parent plant with roots) are simple; others, such as small plug-plants grown from seed, are a little more intensive. Trials at Cape Dolphin Farm have used Tussac plug-plants to restore an eroded coast. A *Stanley Tussac Grass Islands Management Plan* was published in 2018, which aims to protect relatively pristine Tussac Grass islands close to Stanley, the islands capital.

