

AGRICULTURE IN THE FALKLAND ISLANDS.

On August 18th about 20 members and friends attended the lecture by Dr. J. G. Gibbs, who went to the Falkland Is. in 1940 as Agricultural Advisor. His term there, originally intended to be three years, finally extended to cover six.

The Falkland group of two main and many minor islands is opposite the Strait of Magellan, and about as far from the Equator as London or the Auckland Is. The overall extent is about 100 miles long by 40 miles wide, and the highest point is about 2000 feet. The topography is somewhat like that of the rolling country behind Timaru, and the most striking feature is the absence of trees - there are none native to the group.

Discovered in the 16th century the islands were first claimed by the French and then by the Spaniards, who in 1771 ceded them to the British. Early whalers and sealers using this as a base brought pigs and cattle - sheep were introduced only later. Botanical visitors included Bougainville in 1778, Darwin in 1834 and Skottsberg in 1901-1902 and 1907-1908.

Already in the early years of this century many plant species were almost eliminated by sheep, particularly Poa flabellata, a tall winter-green grass that could provide good fodder if protected and grazed only under control. Carex trífida and Uncinia sp. could also be useful under controlled grazing, but have now almost gone, as has also Alouecurus antarcticus. The position with Poa antarctica is only slightly better. Hebe elliptica, one of the few shrubby species is now destroyed wherever sheep can reach it. Hierochloa magellanica is still quite prevalent.

The pasture is like our tussock country with Cortaderia pilosa (white grass) as the principal species. The heath-like Empetrum rubrum which is not readily eaten by sheep, covers a lot of ground. Farming is ranching with huge holdings, averaging about 80,000 acres each, that area running about 15,000 sheep. Wool and skins are the only exports; there is little attempt to export meat. There is a lime deficiency, but the animals make good bone, possibly because so many have access to the seashore and eat seaweed freely.

The ground is all peat from one to twelve feet deep, and it is difficult to plough through the deep tight mat of roots of the white grass. Experiments in pasture improvement showed that clovers and rhizome grasses would spread out from established plants, but they would not establish themselves from seed in the pasture unless topdressed with phosphates and lime. The islands could well be made more productive than they are at present and would then support a bigger population than the 2,500 now resident there.

Communications are primitive. The ship connecting with Montevideo is about 700 tons gross (about as big as the Cobar!). A launch ferry plies between the two islands which are separated by a strait 7 to 11 miles wide. The only road is a private one, and the motor-car population is about thirty-three. The only alternative to walking is horse-back riding, and every shepherd has about a dozen horses. Peat is the only fuel used, and building materials are imported from Britain or South America.

A short film and a series of photographs handed round gave a good idea of the country and its plants, and brought up a number of points for questions. Many trees have been tried out and a number of species will grow. The weather is dull, grey and windy, but common vegetables can be produced to be available almost throughout the year and berry fruits are good.

A non-botanical treat in the film was an army of penguins advancing and right-wheeling like well trained soldiers.

uncultivated parts were the Cicada family, the larger members of which must have been nearly three inches long. One species has the abdomen ringed with alternate yellow and black bands, the legs, thorax and head are red, and the wings are tortoise-shell. May-flies and dragon-flies were seen on the wing but there was a noticeable and most agreeable absence of such pests as flies, gnats and mosquitoes.

Beyond the lawn with its lily pond are huge beds of bulbs, including gladioli, agapanthus, ornithogalum, nerines, ixias, crinum, lachenalia, babianas, and others well known in horticulture. The belladonna lily (Amaryllis belladonna) and several species of "Red Hot Poker" (Kniphofia) are natives.

It was interesting to notice the presence of the bracken fern which is of world-wide distribution but is here more dwarfed in stature than in moister climates.

The South African flora has made numerous and important contributions to our gardens. Besides those already mentioned, some familiar garden types noted were species of Pelargonium, the well-known red Crassula (called in Auckland the Christmas plant), Strelitzia, Anchusa, Arctotis, Gerbera, Aster, Verbena, and the blue Plumbago.

Few countries in the world could offer such a wealth of plant life and the Gardens must be a veritable wonderland when the spring flowers are in bloom.

W.F.Harris.

.

OTARI OPEN AIR NATIVE PLANT MUSEUM.

The dozen members who braved the bleak afternoon of September 6th were well rewarded for their trip to Otari. We were met at the top entrance by Mr. Brockie who is now in charge of the Reserve. Immediately we found ourselves among the treasures of Campbell Is. looking quite at home in the remodelled rockery just inside the gate. Here are displayed also some of the aristocrats of the South Is. mountains from the Garvies to the Spencers.

The pockets had been filled with a mixture of one part leaf-mould, one part peat and one part compost, mixed with the clay and all the plants looked very happy. They are clearly labelled and anyone who missed the arranged trip would do well to spend an hour there to be prepared to make the most of Mr. Brockie's talk on the Campbell Is. on November 19th. Among the exciting things from there that many of us saw growing for the first time were:- the daisies Pleurophyllum speciosum and P. hookeri; Chrysobactron (Bulbinella) rossii pushing up its fat shoots from the thready remnants of last year's leaves; Phyllachne clavigera, a dark green cushion starred with white flowers; Celmisia vernicosa in a variety of sizes; Hebe benthami, sturdy little bushes that should later develop their porcelain-blue flowers, the finest in the genus, Cotula plumosa from sea-elephants' wallows and the sturdy little C. lanata, Stilbocarpa polaris, Anisotome latifolia and A. antipoda; and the stout fleshy Plantago aucklandicus from the Auckland Is. The collection includes a number of the grasses from the island, including a proliferous form of Hierochloe in which the spikelets grow vegetatively instead of setting seed. Some of these spikelets set out in a box of sphagnum moss showed roots developing quite strongly from the rhachis.

Other plants specially noted in this top rockery were Dacrydium laxifolium (the pigmy pine), Pygmaea pulvinaris in flower, and the famous Ranunculus pauciflorus.

Before we passed on Mrs. Brockie invited us all in for a most welcome cup of tea, a warmly appreciated interlude!

Recent thinning has brought to light, near Dr. Cockayne's grave, two fine little specimens of Dacrydium kirki, still with all juvenile foliage, and one showing a twig with fasciated growth. Dracophyllum strictum had some flower spikes, the prettiest in the genus. The leafless Hymenanthera angustifolia again excited amazement that any plant so dead-looking could be alive and well.