

13. 1983 The Low Report – Tree Planting in the Islands

The 1982 Shackleton Report made the recommendation that advice should be obtained from suitably qualified forestry personnel about the possibility of initiating a tree-planting programme. A W Peers ¹ visited the Islands in early 1983 and he advised that a short visit by a forestry advisor ‘was necessary to assess the prospects and resources required for successful tree planting on the Islands.’² Dr Alan Low, a Principal Silviculturist from the Forestry Commission, visited the Islands for three weeks during September 1983.

The objectives of the visit by Dr Low were:

- i. To advise the ODA and FIG on the success and failures of previous attempts to grow trees, and the reasons for the failures.
- ii. The possibility of systematic tree planting, the species to be tried, and the techniques necessary for establishment.
- iii. The resources necessary for trial plantings, particularly to investigate shelterbelts, amenity forestry and general agro-forestry.

Low reviewed previous attempts at tree planting, most notably the plantation at Hill Cove, where in the early 1890s Robert Blake (Senior) had planted Southern Beech (*Nothofagus betuloides*) imported from Tierra del Fuego; Corsican Pine (*Pinus nigra*) imported from Britain; Scots Pine (*Pinus silvestris*) raised from seed; Poplar (*Populus alba*) raised from cuttings taken from a tree in Government House; and a variety of forms of Sitka Spruce (*Picea sitchensis* & *P. jezoensis* & *P. smithiana*) raised in Stanley from seed sent out from Kew Gardens in 1925.³

The work of James Reid, the Forestry Officer to the Islands Government 1920-1925, is outlined in the Report. Reid planted trees at Mount Low, Government House and at Hill Cove. After 1925, a lack of information concerning tree planting, for the next

¹ Agricultural Adviser, Overseas Development Administration.

² Low, A J; (1983) *Tree planting in the Falkland Islands; a report to FIG*; Stanley: Falkland Islands Government; p1.

³ Blake, B.; (2002) *Bridget's Book - memories of a Falklands childhood*; The Alistair Cameron Memorial Trust: Stanley.

thirty years, makes it impossible to obtain a clear picture of what occurred after Reid's work. Low stated that the next serious attempt⁴ at tree planting occurred in 1957-58 when the Falkland Islands Company imported several thousand plants of various coniferous species which were planted at Goose Green and Fitzroy. These plantings failed mainly because mishandling of the transplants, planting at the wrong time of the year, and failure to exclude grazing stocks from the plantations.

In 1977 Dr Jim McAdam⁵ imported a variety of Southern Beech (*Nothofagus antarctica*) from Esquel in Argentina, and they were planted on the southern slopes of Mount Osborne. These trees became established and grew,⁶ but they were probably destroyed during the 1982 Conflict by grazing animals. In 1977, the Sheepowners Association obtained a quantity of Lodgepole Pine (*Pinus contorta*) seed from the Forestry Commission and distributed the seed amongst its members. There are Lodgepole Pines, dating from this period, at Teal Inlet and at Port Howard.

Low noted that Monterey Cypress (*Cupressus macrocarpa*) was widespread throughout the Islands as either individual trees or as hedging. It is likely that the first introduction of this tree occurred in the 1930s at Weddell Island, and that this source provided the seed and cuttings for the rest of the Monterey Cypress in the Islands.

The Report reviewed the location of significant areas of tree planting in the Islands. It noted that very few farm settlements do not possess some trees or shrubs - although many are very windswept. The plantations at Hill Cove and Roy Cove were particularly noted. Low concluded that poor growth and low survival rates were due to attack from the Green Spruce Aphid (*Elatobium abietinum*) and to the effects of

⁴ Low is incorrect here; a tree planting programme at Government House began in July 1939.

⁵ Dr. Jim McAdam (b.1952) B.Sc. B.Agr., M.Agr., PhD. (all Queens University Belfast) has made a distinguished contribution to many areas of Falkland Islands life. Initially trained in Agricultural Botany, his first job was as a pasture agronomist. He worked in the Islands (with ODA) from 1975 until 1978. From 1980 onwards McAdam worked for Dept. of Agriculture, N.I. and became lecturer at Queens in 1982 (concurrently). He was asked to return to the Islands in 1983 by United Kingdom Falkland Islands Trust, and has done so every year since. He is scientific advisor to Department of Agriculture in the Islands and editor of the *Falkland Islands Journal*. McAdam has published many papers on the Islands; he has been especially involved in Tussac grass restoration, tree planting, seaweed utilisation, wild flora mapping, invertebrate surveys and grazing management.

⁶ McAdam, J H; (1982); op.cit. p10.

severe wind exposure.⁷ In Government House, in Stanley, the Report noted the 1944/5 plantation of Monterey Cypress, planted as shelter for other trees and shrubs. On Westpoint Island and Carcass Island the trees were mainly Monterey Pine (*Pinus radiata*).

The windiness of the Islands, the low rainfall, and the nature of the soil:

Almost certainly rules out the possibility that afforestation on any substantial scale will ever be a practical proposition in the Islands - even assuming that large areas of land could be made available for the purpose.⁸

However, Low was optimistic that there were reasonable prospects of establishing successful shelterbelt plantings provided that the trees are planted properly, the site was well prepared, and there was complete protection from grazing animals. The Report details how these shelterbelts might be established, and also the species of tree that could be used. The prospects for wood production on any economic scale were considered poor, but there was plenty of evidence in the Islands that small scale amenity planting was a practical possibility. Use of the native species of Box (*Hebe elliptica*) was commended as providing initial shelter for the young trees.

The Report recommended that a major new planting trial should be carried out to test out the validity of the assessments he had made. The primary emphasis should be on the provision of shelterbelts.⁹ The use of artificial shelter netting, or “Paraweb”, was commended. An arboretum should be established, and this should be under the supervision of a qualified forester. Low stated that despite the potential threats from phytosanitary problems the importation of plants would be more cost effective. The forest nurseries of the southern parts of Chile and Argentina would be the best source because of ‘their proximity and environmental similarity.’¹⁰

⁷ Low, A; & McAdam, J H; (1999) *Guidelines for Shelterbelt Planting the Falkland Islands*; Department of Agriculture & United Kingdom Falkland Islands Trust.

⁸ Low, A J; (1983); op.cit.; p19.

⁹ For the latest scientific opinion on the establishment of shelterbelts see: Low, A; & McAdam, J H; (1999); op.cit. p12.

¹⁰ Low, A J; (1983); op.cit.; p31 (note: Low’s views have changed, and he now recommends locally grown and sown stock. See: Low, A; & McAdam J H; (1999); op.cit.

The significance of the Low Report lies in the fact that it clearly indicates the future possibilities for tree planting in the Islands.¹¹

¹¹ Low reiterates the observations of William Dallimore made nearly sixty years earlier. See: Dallimore, W H; (1919) *Falkland Islands: Forestry and Tussock Grass*; Royal Botanic Gardens, Kew; Bulletin; pp. 209-222.