Shades of Green
An Environmental and Cultural History of Sitka Spruce

Ruth Tittensor
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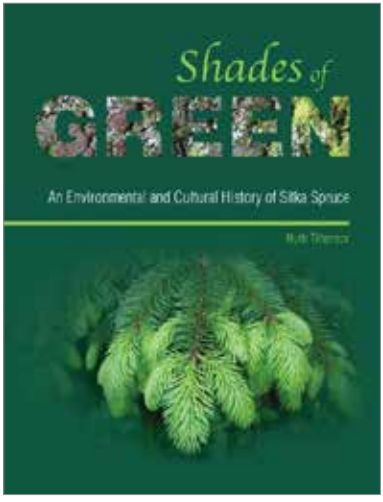

When I saw the words "Sitka spruce" and "environmental" in the title of this book I feared for the worst; neither was I encouraged by the opening sentence on its dust cover which read – "This book takes a look at the most disliked tree in Britain and Ireland". However, having finished the book, I feel that Ruth Tittensor, who read botany at Oxford and woodland ecology and history at Edinburgh, has done a remarkable job in refuting much of the ill-informed and misguided comment about this species which one commonly encounters.

She begins by discussing its importance in the coastal region of Western North America and explains its significance for First Nation peoples who view Sitka spruce quite differently from Europeans. They prize it for its beauty, its spiritual significance and for the many items it supplies them –e.g. canoes, woven bowls, glue etc.

There are many gems of information between these covers – perhaps the most surprising is that there are now more Sitka spruce trees in Britain and Ireland than in its natural range which extends from California to Alaska -a narrow belt rarely more than 80 km wide (Figure 1). Since the late nineteenth century it has been the most important timber

tree for the timber industry of west coast North America. Sitka is the tallest of the spruce species and comes number three worldwide after coast redwood and Douglas fir.

The conservation emphasis on the native and the natural has caused ecological research on conifer plantations to be neglected. It is therefore frequently assumed that modern, planted forests are much poorer in associated species and ecological dynamics than native woodlands. She concluded that years of complaints about Sitka spruce afforestation displayed little understanding of the fact that it was an industry which provided us with everyday items under extremely difficult ecological and working conditions. Although greater numbers of urban dwellers visit forests now, the link between a working countryside and goods produced appears to be tenuous. Few realise that their newspapers, kitchen units, even the walls and roofs of their houses might be made of Sitka spruce.

Ecologists, conservationists and foresters assumed that conifer plantations supported few flora and fauna – plants and animals could not easily be seen, therefore they were absent. They also assumed that conifer plantations needed "improving" for biodiversity and looked at ways of "improving" Sitka spruce forests for nature conservation. But they provided no data to show that these forests actually needed improving. Foresters responded to these criticisms but had no baseline against which to check their "improvements". Compared with ecological studies of broadleaved woodlands, projects and publications about plantations of introduced conifers are negligible. Yet Sitka spruce is the commonest tree in Britain and Ireland! Our understanding of conifer plantations is scant; it lags a century behind our understanding of deciduous forests. However, the important ecological work undertaken by UCC in recent years is completely absent from the text and references. This serious oversight is disappointing as the UCC work clearly demonstrates that under Irish conditions there is much greater biodiversity in Sitka spruce forests than heretofore believed.

Ruth Tittensor says "that there is no longer any need [was there ever?] to compare Sitka spruce plantations unfavourably with other woodlands." She suggests "that we put away our nostalgic, rose-tinted daydreams of the *ideal* Sitka forest". Instead, we should look ahead and discover, without prejudice, just how they evolve. She suggests we also finish with the dogma of "naturalness" which has forced organisations and individuals to try merging (native, natural woodlands) into one identity with (Sitka spruce look-alike native natural woodlands) – instead we should let them develop ecologically without pre-conditions.

Her book alerts us to the imminent dangers posed by climate change. In Britain, the growing season for Sitka spruce already begins three weeks earlier than it did 60 years ago. While Britain and Ireland will continue to be oceanic, except possibly in the south east, Ireland is fortunate in that the John F. Kennedy Arboretum is located in the south east and data have been collected there since the arboretum was established in 1968. Analysis of these data will help to formulate a policy on which tree, or trees, might replace Sitka spruce.

The palate of species could include Macedonian pine (*Pinus peuce* Griseb.), Douglas fir (*Pseudotsuga menziesii* (Mirb.) Franco), western hemlock (*Tsuga heterophylla* (Raf.) Sarg.) and Chilean pine (Monkey puzzle; *Araucaria araucana* (Molina) K. Koch). She concluded that the apparently featureless and wildlife-deficient Sitka spruce plantations are gradually developing recognisable ecological features. Sitka has the potential to form temperate rainforests this century as well as producing much-needed goods for society. But conserving natural old-growth forests, sustaining the needs of First Nation peoples, and producing materials for the modern timber industry will be an intricate balancing act.

The author lists all the local names for Sitka spruce which are found throughout the world. She includes Gaelic, and even Canadian Gaelic, which is given as *craobh spruisead,* which actually translates as a spruce branch. That apart, the author succeeds admirably in getting the balance right between our two islands as there are minor climatic differences but major cultural and attitudinal differences towards Sitka spruce.

In spite of these, this is a timely publication and one that should be read by anyone interested in the countryside, be they conservationists, foresters, landowners and planners. It is a must for every forester's Christmas list. Perhaps we should leave the last word to the Alaskan ecologist, Richard Carstensen, who says "In Alaska we almost worship it".

John Mc Loughlin

Figure 1: *This impressive specimen was felled in Sitka National Park as it had become a danger to the public. Reproduced with kind permission of Oxbow Books.*