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BERICHTE UND MITTEILUNGEN

A VEGETATION MAP OF TASMANIA*)

ULRICH SCHWEINFURTH

Introduction

The first vegetation map of Tasmania dealing with the island in more than general terms deserves, no doubt, a review. The present reviewer had the chance of a first month-long sojourn on the island in November 1959; after 16 months of field work in New Zealand, he was tempted to visit the island for comparison – an idea, which proved to be a most rewarding experience (Schweinfurth 1962). A later visit in August 1965, partly covering the same ground, provided the chance to see the country under winterconditions, which added greatly to the perception of the ecological situation of the island, in so many ways closely comparable with southern New Zealand.

When in 1965, on the occasion of the Annual Meeting of the Australia and New Zealand Association for the Advancement of Science (ANZAAS) in Hobart, an 'Atlas of Tasmania' was published (Davies (Ed.) 1965), the map of the vegetation of the island therein (1:1800000) was a disappointment in so far as a very general idea only of the vegetation was presented (Schweinfurth 1970).

It took another 20 years to see the publication of the first 'fully-fledged' vegetation map of Tasmania, covering all the island, which is the subject of the present review. J. B. KIRKPATRICK and K. J. M. DICKINSON appear as co-authors. It seems appropriate to add

that J. Kirkpatrick paved the way to this map by an impressive series of contributions on plant-geography and vegetation of the island, published during the ten years past, of which no mention is made on the map.

The vegetation map

The map is presented in 1:500 000 – a scale allowing for some considerable detail; the top-part of the map sheet is used for the legend, distinguishing 49 'types'; on the back of the map is, what is called, a 'detailed legend', giving the names of the plants for the 49 'types', as well as twelve photographs, and a glossary of common names. The first impression of the map is excellent, the colours are pleasing and convey immediately a basic idea about the vegetation arrangement.

The 49 'types' of the legend are subdivided into 4 groups: 1. high altitude; 2. low altitude – high rainfall; 3. low altitude – low rainfall; 4. other; to 1: there is no definition for 'high' altitude given; so, the initiated wonders, that, for instance, Eucalyptus

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coccifera-forest (likewise the upper belt of rain forest) is included into the high altitude group; normally, a suitable – and accepted – definition for 'high altitude' would be, for instance, 'above forest' resp. 'above treeline', though the reviewer is fully aware of the problems connected with 'tree-lines' in the southern hemispheric temperate high-oceanic latitudes (see Schweinfurth 1962, 1966, 1978);

to 2: the lack of a definition of 'high' altitude concerns, naturally, the definition of 'low' altitude just the same; what is meant by 'low altitude - high rainfall', is, broadly spoken, the southwest plus upland-parts, including the upland-parts in the northeast of the island. The question to ask is: what means low altitude, when in fact this group includes 'high rainfall types' up to the uppermost forest belts, i. e. a whole vertical range? Another point, on parallel lines, is the distribution of button grass (Gymnoschoenus sphaerocephalus): this ranges virtually from the coast in the southwest up to the up-country parts in the centre of the island, it is, in a way, the most typical 'Tasmanian', being confined to the parts most exposed. There is, also, included in group 2 what is called 'Queenstown desert': the initiated knows, of course, what this means; but the uninitiated will not be much enlightened even by the few words given in the 'detailed legend' on the back - here, the reviewer thinks, would have been a good case for supplying one of the photographs to demonstrate what 'desert' under 'high rainfall' in western Tasmania means! (see, for instance, Schweinfurth 1962, ph. 6-8); to 3: with the first two groups discussed, it seems comparatively easy to come to grips with No. 3 and No. 4. No. 3 includes, indeed, mainly the lower altitude forests northeast of the central (mountain) divide (save the northeast proper with Ben Lomond), covering the areas with actually 'lower' rainfall; to 4: No. 4 serves as the convenient 'bag for all the rest' not fitting into Nos. 1 to 3, for instance: 'coastal com-

plex'.

Human influence is included throughout in various types.

The twelve photographs attached are, unfortunately, not classified according to the legend given; this would have been helpful, nor are they sufficiently localised – even 'a dot on the map' would have enhanced their usefulness greatly. The 'detailed legend' gives barely more than the botanical names of the plants dominating the various types; beyond, it does not elucidate any of the guiding principles of the classification.

'High altitude' has not much meaning, if not supported by the one or the other figure. 'High' and 'low rainfall' are the obvious criteria for a first division of the vegetation of Tasmania, i. e. between west and east; but 'low altitude' is not acceptable, if it is supposed to range as far up as 1000 m or more in the west and east. The summary distinction 'high altitude' is,

on the first glance, helpful to differentiate, recognize 'the higher parts', whatever that may mean, when there is no altitudinal limit given. The uninitiated will, naturally, expect such a clear-cut limit, though this would be misleading in the case of Tasmania, where the southwestern exposed part is open to the impact of the Circumsubantarctic Ocean, which tends to lower altitudinal belts. So, why not apply the useful tools of three-dimensional geography and add one or the other profile (see Schweinfurth 1962) in support of the idea of vertical changes and west-east differentiation? This mountainous island invites such a procedure and offers more than one example, where it could be demonstrated to great advantage. It is a pity that this chance to apply the third dimension has been missed as it would have helped to a better understanding of the map and the island and its mountainous nature.

Conclusion

A vegetation map of Tasmania is discussed which presents the first attempt at demonstrating a fullcoverage of the island's vegetation in 1:500 000. The map can claim an extraordinary degree of reliability given the scale 1:500 000 - this is no mean achievement. The pleasing colours invite immediately the recognition of the basic division of the island in a 'wet southwest' and a 'less wet northeast'; a certain idea of the 'higher parts' can be gained, too. About the concept of the classification the user of the map is, more or less, left 'in the dark'. There is no reference made to any literature; the reviewer compiled relevant literature up to 1962 in Schweinfurth 1962, to which the references to the vegetation map in the Atlas of Tasmania (1965) did not add significantly, nor the parallel contribution by Davies (1964). Major progress, relevant to the map under discussion, has been achieved by KIRKPATRICK, though, again, there is no reference to that on the map. If not meant to be used just without any further reflection, the map seems to be prepared for the initiated, who already knows about the island, its vegetation and its problems.

The reviewer takes advantage of this opportunity to point to the changes in the landscape of the island, which the vegetation map reveals; a quarter of a century ago, Lake Pedder was still untouched by human interference and Lake Gordon did not exist at all both lakes cover now considerable areas of more or less primeval Tasmania; what there has been in the way of plants and animals and habitats, has been drowned – future generations may take the lakes for granted as something, 'which has been there before'. Someone who witnessed these areas prior to submersion thinks differently about it; he will react violently, when further plans for submersion are propounded in

an island country, which, by nature, abounds in water and in natural reservoirs, i. e. lakes, especially if such plans, as in the infamous case of the Franklin, are designed for that part of the island, which has been specified above as 'Tasmania sensu stricto'. It remains a mystery, how in the days of supposedly 'environmental awareness' politicians may come to think of such plans - and the only answer seems to be that - besides realising the southwest being uninhabited to-day and therefore unable to offer any resistance - they are totally oblivious of the particular qualities and uniqueness of the Tasmanian Southwest, i.e. 'Wet Tasmania': in a global context - there is nothing like it elsewhere in the world in the way of plants, animals, habitats - the later all too often forgotten as the precondition for life in its spatial existence, but only recently been brought home most convincingly by the discovery of archaeological remains of still not yet fully determined top-value for Tasmania's prehistory and by the particular rank the Tasmanian aboriginals occupy in human prehistory for mankind in general.

The one thing, which has to be conceded by the scientific community, is that the Tasmanian Southwest has by far too long remained a badly neglected realm and it has been neglected to propagate its uniqueness, too – it needed twenty years to compile the

vegetation map after initial prompting that 'something had to be done about it', so, in connection with the publication of the map, the case for absolute preservation of the Tasmanian Southwest ought to be propounded once again: by its uniqueness the Tasmanian Southwest belongs to the entire mankind and is part – a not to be neglected part – of mankind's global heritage. May this review, meant to welcome and appreciate the first full-cover vegetation map of the island, lead also to a wider appreciation of the island of Tasmania in general.

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BUCHBESPRECHUNGEN

GLÄSSER, EWALD u. SCHNÜTGEN, ACHIM: Island. 315 S., 45 Abb., 35 Tab. u. 31 Bildtafeln im Anhang. Wissenschaftliche Länderkunden, Band 28. Wisserschaftliche Buchgesellschaft, Darmstadt 1986, DM 69,-

Island gehört zu den Ländern, die seit langer Zeit Geowissenschaftler aus aller Welt anziehen und zu sehr verschiedenartigen Arbeiten anregen. In naturgeographischgeologischer Hinsicht präsentiert die Insel vor allem eine ungeheure Vielfalt an Formen und Prozessen des Vulkanismus (Island liegt in der Dehnungszone des Mittelatlantischen Rückens) sowie der Glazialmorphologie. Das Hauptinteresse der Kulturgeographie richtet sich auf das historische und gegenwärtige Ringen der isländischen Bevölkerung (seit ca. 1100 Jahren) mit den Naturgewalten, das Auf und Ab der Wirtschafts-, Gesellschafts- und Siedlungsentwicklung. So sind im 20. Jahrhundert weite periphere Räume von Landflucht und Entsiedlung geprägt,

während der Großraum Reykjavik inzwischen 55% der gesamten Bevölkerung umfaßt.

Die vorliegende Länderkunde eines Anthropogeographen (Glässer) und Geologen (Schnütgen) entspricht dem seriösen wissenschaftlichen Standard dieser Reihe. Das Verhältnis zwischen den genannten länderkundlichen Dominanten ist sehr ausgewogen. Der Rezensent hat lediglich einen Abschnitt über die reiche isländische Gewässerwelt mit ihren verschiedenartigen Flüssen, Wasserfällen und Seen vermißt. Wohltuend ist die Sachlichkeit der Darstellung, die sich von manchen Island-Büchern abhebt, die vornehmlich auf touristische "Highlights" abzielen. Dennoch sei dem Verlag die Anregung gegeben, darüber nachzudenken, ob das allgemeine Image der länderkundlichen Reihe bzw. eine größere Verbreitung nicht durch Format, Umschlag, Layout und Farbbilder (!) verbessert werden kann GERHARD HENKEL