

THE following extracts from a Californian book review are relevant to ecology and conservation in New Zealand today.

Alpine rangelands of the Uinta Mountains and Flora and major plant communities of the Ruby-East Humboldt Mountains. By Mont E. Lewis. 75 & 62 pp. U. S. Forest Service, Region 4, Ogden, Utah. 1970 & 1971.

The U. S. Forest Service is an honest, conscientious, large, wide-flung, old, and generally expert government bureau that manages the bases of production for much of the West's lumber and livestock industries, the water that is vital to everyone in the West, and the open-space amenities that are indispensable. It is currently being criticized. Local residents object to clear-cutting forests in a travesty of sustained yield, and lumbermen want a larger annual cut from federal lands to brake the price rise on lumber so privately-owned timber will have a future market. Conservationists object to management that destroys resources; commercial interests object to preservation of wilderness areas. Foresters want to convert old-growth stands to "healthy, rapidly growing, managed forests"; others believe the necessary silvicultural knowledge is too poor, call the process mining and the result brush fields. Some emphasize the relief from urban existence experienced in the woods; others say Americans cannot be housed without making 2 x 4's out of the remnants of our virgin forests. Resort developers want to build private country clubs on public land; hikers have always hiked for free. Most western ski resorts have been developed on Forest Service lands and according to Forest Service plans; many skiers object to the very expensive yo-yoing on the pattycaked piste that skiing has become. Organized skiing wants more lift-serviced areas; many skiers object that touring areas have been preempted for purely commercial purposes. So it is nice to be able to say nothing but good about the two recent Forest Service publications by M. S. Lewis.

They are the result of careful, long-continued, and perceptive observation by an experienced field botanist. . . . They are basic to understanding the plant ecology of the Ruby Mts. of eastern Nevada and Uinta Mts. of northeastern Utah. They could have been done only by a skilled field taxonomist who is also a knowledgeable and sensitive ecologist.

They both contain checklists of the plant species, 577 for the Rubies and 357 for the Uintas. For the Uintas the species are listed by habitat types, for the Rubies by major plant communities (altitudinal belts) with notes on abundance and kinds of habitats, described physiognomically. Such local data contribute to autecology and therefore to inductive rather than anecdotal descriptions of plant habitats in floras. . . .

Unfortunately the basic stand surveys are not tabulated, so conclusions only, not data, are presented. This is, sad to say, a universal practice in American plant ecology. It distinguishes our work from that in the rest of the world. There the Braun-Blanquet system of presenting tables of species occurrences on individual sites (stands) is almost universal, and it makes possible agreement or disagreement on the hypothesis that certain species do in fact occur together in ecologically homogeneous areas often enough to make the recognition of such associations valuable not only to describe vegetation but to indicate its ecology. . . .

Is there any way students who study the ecology of some kind of vegetation or the vegetation of some area can be brought up to the field taxonomic competence that Lewis has? Or must they (we) all become measurers of temperature, of radiation, of rain, of soil particle sizes, of photosynthesis, of transpiration, of above- and below ground biomass, etc.? Not that these measurements are not worth doing. They certainly are. But someone, sometime, has to describe what plants occur together in the fascinating natural mosaic that can tell us so much about the history and ecology of our flora and vegetation.—JACK MAJOR, Botany Department, University of California, Davis 95616.

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