

world like small birds attached to the stem by the beaks! For this reason it is sometimes called the canary tree. It is somewhat straggling, requires rigid pruning, and likes a sheltered corner. Ed.)

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Members who are fortunate enough to either possess microscopes or have access to them, will be interested in Mrs. Smith's appeal for fresh or fossil diatoms. Diatoms are microscopic plants of extreme beauty. They are encased in exquisite "shells" of silica, and move through the water by squirting mucilage through minute perforations in the cell wall. Deposits of fossil diatoms are found in the vicinity of Auckland on the shores of Lake Takapuna, and used to be obtained from the neighbourhood of Cabbage Tree Swamp. They are whitish in colour and the "earth" forming them is powdery.

SPECIAL REQUEST FOR MATERIAL : DIATOMS: Dr. Paul S. Conger, Diatomist at the Smithsonian Institute, Washington, is anxious to receive diatom material from New Zealand. He has large collections of Oamaru material, but he would like more from that area, if possible, or from any other fossil deposit. I believe he is already in contact with a Mr. Reid, an amateur diatomist in Christchurch, but but he has no other correspondents in New Zealand.

Dr. Conger tells me that he will welcome fossil or fresh material, and he will endeavour to send back identifications as soon as possible after receiving the packets. As there is some difficulty in sending things through the post (declarations etc.,) I suggest that those interested should make up packages giving localities, date, etc., and post them as one offering from the Auckland Botanical Society. Dr. Conger could then send all identifications to the Society, with separate notes to individual collectors, if they wished to have them. Dr. Conger has developed a wonderful technique in mounting specimens. He would probably send back some mounted material to those who are willing to study diatoms. Diatoms are certainly fascinating to study, and some group in the Society might well begin on the diatom flora of the Auckland district.

Material may be sent dry, or in formalin. Ask Professor Lancaster or Mr. Millener to explain how to take care of it. If you take a few scrapings from the College walls themselves you may find some of the very rare and beautiful forms that so excite Dr. Conger's interest. Then, there are find diatoms to be found in seaweeds - the reefs round Auckland might be tried. He tells me that New Zealand is the one country he would like to work in, and that is something from a man who has had collections from all over the world....I noted that he had worked on the Mawson and Byrd collections, for instance.

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On Wednesday, September 6th, 1944, Mr. A.C. Caldwell gave us a most interesting lecture on "Timber Trees". Mr. Caldwell went to considerable trouble to collect facts and figures for our consideration, and has now kindly summarised these for us.

THE GYMNOSPERMS: Although the Gymnosperms are more primitive than the much more varied and numerous Angiosperms, they are of much more importance to mankind as timber trees, and are still dominant over large areas of the temperate zones.

The ORDER Coniferae, with its 33 GENERA and 350 SPECIES, provide all the "soft-woods" of commerce.

In New Zealand, 97% of the timber milled in the season 1939-40 was from coniferous species, and of this 83% was from native, and 14% from exotic trees.

More complete figures, showing the amounts of the principal species milled in that year, are given in the following table.

Common Name	Botanical Name	Superficial Feet	Per cent of total
Rimu	Dacrydium compressinum	207,097,000	61.65
Pine	Pinus insignis (radiata)	46,672,000	15.95
Kahikatea	Podocarpus dacrydioides	33,045,000	9.84
Matai	Podocarpus spicatus	21,212,000	6.51
Totara	Podocarpus totara	10,882,000	3.25
Beech	Nothofagus species	9,008,000	2.68