

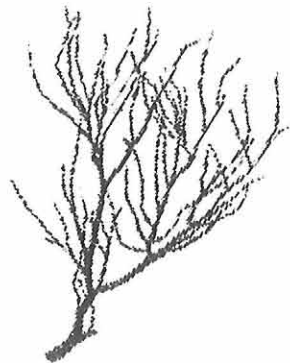
The relative roles of light and salinity in controlling the upper depth range of black coral communities in the New Zealand fiords.

Louise T. Kregting and Mark T. Gibbs

The shallowest populations of black coral colonies so far documented are located in the remote fiords on the south-western coast of the South Island of New Zealand. The majority of populations of black coral are found in deep water habitats; presumably a result of the intolerance of these colonies to high levels of incoming irradiation. By contrast, black coral colonies in the New Zealand fiords are observed as shallow as a few metres in some cases. However, this is not qualitatively inconsistent with the other populations since surface low-salinity-layers in the New Zealand fiords act to significantly reduce incoming irradiation. The role of these surface freshwater layers in controlling the upper depth of the black coral colonies is investigated here. In particular, the relative roles of low salinity and incoming irradiation are investigated in order to ascertain controlling factors on the distribution of the populations.

Fig. The plant-like appearance of the black coral *Antipathes fiordensis* (*Antipatharia*) makes it hard to imagine that these corals are really colonies of millions of polyps joined together by their white epidermis. It is the black skeleton underneath, composed primarily of protein and chitin, that forms the hard tree-like skeleton that the black coral is named for.

- Louise Kregting



The role of scientists in science communication. Gudrun P Wells.

Science has a huge impact on society these days, so it should be no surprise that communication of science matters is happening all the time. The communication of science is itself a very broad field and can be roughly broken into three parts: communication within the scientific community; communication between the scientific community and the public; and communication among members of the public.

Communication between scientists is an integral part of doing science and as such is something scientists do every day. The importance of communication between scientists and the general public is becoming more important as scientific discoveries are more widely reported by general media, become more mainstream, and scientists have to justify their research to funding bodies. The communication of science among

members of the general public on the other hand is often ignored. This is the main channel through which the majority of the population receives its science information and often involves inaccurate science that can give people the wrong idea about how science is done. The antidote to this inaccurate science is to become involved in communicating good science directly to the public.

Making reductionist ecology useful: Examples from beech forest.

Dave Kelly

In the past much ecology has been single-species (autecology) or community based. The former is too narrow and the latter so broad it never tells you anything useful. A challenge is to do meso-scale ecology where we understand species interactions well enough to predict the behaviour of ecological systems (or model them). I present three examples from recent work in *Nothofagus* communities; looking at tree- scale insect interactions over honeydew production, at how climate change alterations to beech masting will affect birds, and at how predators affect bird-plant pollination mutualisms

Report

WBS Summer trip, Bay of Plenty 2–12 Jan 2003. – Allison Knight

A keen Otago contingent of Audrey Eagle, Moira Parker, Neill & Barbara Simpson, and John & Allison Knight joined the Wellington Botanical Society's trip in the Bay of Plenty this summer. There Graeme Jane and Gael Donaghy of Tauranga had prepared a wonderful array of trips for us, complete with the latest species lists and maps to aid our explorations of the many and diverse plant communities in the area. They led us from the mangrove, *Avicennia marina* subsp. *australasica*, swamps of the coastal estuaries through dense tawa, *Beilschmiedia tawa*, stands to the goblin fog forests of the Kaimais, from the spectacular red-flowering coastal pohutukawa, *Metrosideros excelsa*, forests to the regenerating kauri, *Agathis australis*, forest of Mt Te Aroha; from the special ferns and prostrate kanuka adapted to the hot soils of Waimangu thermal area to the towering remnant podocarp forests of Whirinaki. Always there was much to see and marvel at – (even a hidden patch of marijuana, *Cannabis sativa*). The Tawari, *Ixerba brexioides*, in full flower, was just as fragrant and magnificent as Geoff Baylis had said it would be.

Many thanks to Graeme and Gael for hosting such an excellent trip, to Joyce Wilson for keeping the home base ship-shape and well fed and to Barbara Clark for her quiet background organisation. It was another fascinating, fun, full-on ten days of total immersion botany and I would recommend a summer Bot. Soc. trip to anyone, at any level, who would like to get more familiar with our native plants.