## Editorial

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It is hard for botanists not to be drawn into the climate change debate. Every day we hear of the serious plight of the entire planet as atmospheric concentrations of carbon dioxide continue to increase. We also hear about the value of protecting forests and planting trees—plants could be our only hope! The scientific evidence pointing to human induced climate change is unequivocal. No doubt this will have major effects on our environment but in the short term I find it hard to believe that a changing climate really is the most immediate and serious threat to our indigenous plant life. The declines in native plant populations and communities occurring since people arrived in New Zealand and which continue today are hardly climate related. Instead these changes can be attributed mainly to a human desire to tame, manage and 'productively' use the environment for economic and aesthetic purposes.

It would be nice to think large-scale destruction of habitat was a thing of the past but in the past year, throughout New Zealand (Wairarapa included), I have seen native forest dying as a result of aerial spraying with herbicide. Attitudes towards indigenous plants apparently have not changed much since Seventy Mile Bush was cleared by Scandinavian settlers in the 1800s. Local authorities are finding it hard to defend their 'significant indigenous vegetation' from development pressures despite the launch of new priorities for the protection of biodiversity on private land (MfE 2007) and despite the role vegetation plays in soil, water and biodiversity conservation, flood attenuation and carbon sequestration. Habitat destruction is the real agent of environmental decline that must be moderated if New Zealand's indigenous biota is to be protected.

*Nature-Deficit Disorder* is another serious concern. This phrase was coined by Richard Louv to describe the fact that we, especially children, are spending less and less time outdoors (Louv 2006). The role of a botanical society could not be more critical today in helping people connect with the natural world around them. In the recent government report on the state of New Zealand's environment, it states there are approximately 2,500 threatened species (MfE 2008)—although in 2009 the number of critically threatened indigenous vascular plant species is set to increase by 65% (pers. comm. Peter de Lange)! The plant indicator chosen to summarise their findings was *Dactylanthus taylorii* (wood rose) which was in serious decline and has contracted in distribution by 32% since the 1970s and now occupies only 4% of its former range. This story would have been worse had one of New Zealand's more critically threatened species been chosen such as *Clianthus maximus* (kakabeak) or *Olearia gardneri* (Gardner's tree daisy).

Counter intuitive to this is our bright perspective on the current state of the New Zealand environment. Research done by Ken Hughey and his team at Lincoln University showed that 80% of New Zealanders believe our natural environment to be "good or very good" (Hughey et al. 2006). Biodiversity losses are occurring but few are noticing. It is easy for an ecologist to be gloomy when talking about environmental degradation. Ecologist Aldo Leopold said "one of the penalties of an ecological education is that one lives alone in a world of wounds" (Leopold 1953). This lack of an ecological education may be the cause of New Zealand's undoing. After all, hillsides and stream banks are clothed in vegetation even if the dominants are *Pinus radiata* in forests and willows beside streams. The New Zealand landscape is now a cultural artefact and exotics are often structural dominants, especially in the lowlands. Of course this is not all bad since many of the species upon which large parts of our economy are built, are exotics—the grasses, the food plants and production trees. It would be a hard sell to suggest that pinot noir, browntop, radiata pine and kiwifruit are not important to New Zealanders. But that does not mean we should allow our landscape to be transmogrified, eliminating all essence of indigenous New Zealand. There *must* be room for indigenous plants.

I would prefer to talk optimistically about how indigenous plants are being saved from extinction. This has been helped by the establishment last year of a national seed bank for threatened plants and through active protection and recovery programmes throughout the country by community, conservation trusts, councils and the Department of Conservation. But it is important for us to acknowledge that there are still major plant conservation challenges for which solutions are still needed. Acknowledging humans as part of nature, not apart from it, is an important step towards learning how to protect what we value. The Society must play its part, and its members value native plants probably more than most. We must therefore work to raise standards for protection of our indigenous plant communities and promote them widely.

This bulletin provides one mechanism for promoting the study, protection and enjoyment of our plants. I encourage you to put pen to paper now so that the next issue of this bulletin will be filled with anecdotes, observations, research findings, conservation projects or stories about your own interactions with our beautiful local flora.

## REFERENCES

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