CONSERVATION AND YOU – CONSERVATION BY INDIVIDUALS IN THE 21ST CENTURY

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When I was asked to talk about conservation of biodiversity and native plants on private land and by individuals (that is, off the conservation estate) I looked at the names of today's other speakers – all with great experience and knowledge of practical conservation. I also imagined the skills within the audience of interested people that I would be addressing and wondered: What can I add that Botanical Society members don't already know?

My imagination has been matched by the actual presentations, so that now I can only offer some personal reflections on protection and conservation of plant biodiversity on private land.

My job as a landscape ecologist working in a private environmental consultancy firm brings me into contact with clients that range from individual landowners dealing with small gardens to large corporate developers proposing changes to large areas of land or water. Local authorities too are dealing with private land and using the RMA to manage it. What are they telling me and showing us?

Firstly that we/you are not alone! There is a strong swell of public interest, understanding, motivation and commitment towards protecting, conserving, managing our indigenous plants (and animals).

This is not always for purely "botanical" or "ecological" scientific reasons – but I wonder, does that matter? People are actively out there planting native species. Maybe sometimes they use the wrong or inappropriate genetic stock but this is done in ignorance and is often the fault of the nursery or garden centre. In this room there are numbers of people who are helping to avoid this with better nursery supplies and information.

I think that what is important is that a wide range of people are now recognising that native plants are special and that NZ identity is special – planting a golden flax is a first step forward!!

Others may do it because they need a resource consent under the RMA and include planting of native species as part of the proposal or of mitigation of adverse effects. Again this may be a valuable learning exercise for the project developer. Preparing an assessment of effects on the environment means that they have to identify values and mitigate any adverse effects. This has led to

many proponents learning about the biodiversity values of the land they own, and taking an active role in their conservation, such as the restoration potential of degraded farmed land. A good local example of the potential benefits of mitigation planting is the proposed Pegasus Bay New Town (for which resource consents have been approved for an area of coastal land north of Christchurch). While this proposal has evoked a variety of reactions it does, as approved, provide for the protection and restoration of areas of four square sedge (*Lepidosperma australe*), coastal matagouri plants, and degraded wetlands in an area which is likely, without the New Town proposal, to continue to be heavily grazed.

Secondly, new options for biodiversity management are evolving. Many of today's speakers have talked about setting aside land for protection of biodiversity values, so that they are managed by a local authority or the Government, through DOC. These are invaluable for protection of our core biodiversity values, although many are likely to be the "plant hospices" that Peter Williams mentioned. But I think that we must move on and indeed, we are moving on to further conservation options.

Putting aside the question of how sustainable it is to fund an approach that depends on isolated patches, if we are to have long term care of the ecosystems supporting particular species (not just patches in a farming or forestry or urban landscape) we need to provide encouragement for anyone using and caring for the landscape. We need to encourage a "landscape ecological" approach, as mentioned earlier by Colin Meurk. Managing ecosystems will assist those processes, such as plant seed dispersal and animal movements, which previous speakers have talked about in detail.

Thirdly, more landowners – and I guess that this mainly means rural landowners – are starting to understand the biodiversity values of their lands and most of them want to manage these values with care. There are many recent studies of rural communities that show exactly that. But there are still some barriers to doing it, and these were highlighted by recent work carried out for the Minister for the Environment.

In 1999–2000, a Ministerial Advisory Committee (MAC) worked to advise Minister for Environment (Simon Upton and later Marian Hobbs) on issues around protection of biodiversity on private land. At the time the Government was under pressure from a number of groups to legislate on biodiversity protection on private land. But the Minister for the Environment wanted to know if there were alternatives to legislation – what was happening out there in the community? What would be the best way to foster good biodiversity management? So the group undertook a large number of meetings, prepared

draft reports and carried out widespread consultation with individuals, organizations, NGOs and local authorities.

MAC found great support for biodiversity protection from community – both rural and urban – from landowners themselves as well as those who are visitors to the natural areas. There was widespread enthusiasm and a desire to do the right thing BUT....

There was also a lack of information about what to do how to do it, and of finance to carry out many of the activities that landowners wanted to do.

Information gaps identified by landowners included: not knowing what biodiversity values are on their own lands or waterways; not knowing what to do about those values once identified; and, especially, not knowing how to manage their land or water productively while retaining the values. Many explained that managing the land productively was the only way to finance the protection.

To address these issues, the Ministry for the Environment proposed a number of "carrots" (that is incentives) and "sticks" (rules or disincentives). Together with the Department of Conservation they introduced Biodiversity Advice and Condition funds. These provide money for the community to provide information in variety of formats (for example, pamphlets, books or videos) and money to actually do something practical on the ground; for example, fencing, or pest or weed control.

I understand that MFE is also looking at how other "carrots" can help individuals using examples from overseas especially Australia. One example is whether tax or rates relief packages could be given on land managed for conservation; other options include providing more money for organizations like Landcare Trusts and QEII NT which work at the community level; and giving support for local initiatives like the Banks Peninsula Trust where landowners work together.

I like this latter example, because it also looks wider than the individual "patch" to a whole ecological district or area and considers the value of the wider landscape. In this way individuals or a community can look at the connections between the patches – again, managing the ecological processes linking the patches.

Perhaps I could note here that I was interested to learn, on a recent trip to Switzerland, that there the equivalent of our Department of Conservation is part of the Ministry of Agriculture and that Ministry is one of only three areas that are managed at a national rather than regional level. In Switzerland, every

farmer must set aside 7% of his land for conservation management. However, this is subsidised for conservation as well as for production – conservation is just another land use! The Swiss, like so many other Europeans have the benefit of a large amount of ecological information about the land systems and history that can assist that management; for example providing for compulsory mowing and fertilizer regimes. Although being helped by subsidies, landowners accept these levels of control because many of the things required are part of traditional farming /forestry practice and many people have strong traditional knowledge of their plants and animals and how to manage them.

But in New Zealand, we have only recently modified our landscapes and we are still learning about the values they hold and how ecosystems respond to the land management changes. The Botanical Society is an example of how that knowledge of New Zealand systems is growing.

But many people still see a need for "sticks". They feel that there should be things to protect lands or waters from the actions of those landowners who don't care enough to protect biodiversity values. To meet these concerns a National Policy Statement on Biodiversity is currently being drafted (provided for in the amendment to RMA that was passed in May 2003). This is likely to be released for comment later this year, and I understand that it will provide a national perspective on nationally valuable habitats to direct local authorities on the way they should manage biodiversity in their territories.

This means that local authorities will be directed to do more for biodiversity protection, and I believe that this has been a gap to date. Generally (but not everywhere) local authorities lack understanding of biodiversity values and issues in their areas, and are struggling to meet their existing obligations under the RMA. Few ecologists are employed in smaller territorial areas; there are some in Regional Councils, but often in quite specialised areas such as water quality rather than planning. So there is often a lack of ecological science in land planning and management decisions.

However, many communities are pushing their local authorities on biodiversity matters. They are asking for improvements in reserve design, having inputs to Plans and making submissions on RMA matters. We must remember that at each local body election an average of half the councillors change – so just when one council has come to understand biodiversity issues, half of the members may leave and the learning process for new members may need to start again. However, the Resource Management Act is not a piece of legislation that enables local authorities to be proactive in biodiversity matters. In particular I believe that local authorities are missing opportunities outside the RMA to foster

partnerships in property and landscape management and co-operation in breaking down barriers.

So, to summarise my observations about biodiversity protection on private land:

Private individuals are becoming more aware and more involved in conservation on private land.

From a landscape ecology point of view, this is essential if we are not to end up with a rural landscape that is simply a collection of isolated, fenced patches of intensively managed native vegetation in a sea of pasture or pine trees. These need to be integrated into the landscape and only the landowners of those connecting lands and waterways can make connections.

Shelterbelts, gardens, waterways, roadsides can all be used to make the links.

It is also important to break down the distinction between biodiversity protection and conservation in "conservation areas" (whether government reserves or private covenants) and economic productivity in "production areas". The conservation estate and other protected areas provide protection of the core biodiversity values, and these are supported by the surrounding areas.

Now we need to move forward to see the whole landscape as supporting total conservation management – and this means private land too. Ecosystems cross fence-lines and property boundaries – we must manage the ecological values of the total landscape to allow people to live off the land, and at the same time also protecting and even enhancing its indigenous biodiversity.

You are not alone! There is a wave of community and individual interest in conservation on private land and legislation is catching up with that interest. Conservation on private land is vital as a part of wider ecological, environmental and landscape management – it is the essential next phase of conservation in New Zealand.