

When Science is not Relevant

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Timberlands West Coast Ltd's Beech Management Plan has generated a range of interesting responses from various sectors of New Zealand society. Following the debate as I do, largely through editorials, articles and letters to the editor in the Christchurch Press, it appears as though there are three main groups who have responded. These groups include those who are identified with the forest industry, those who are identified with environmental groups that are in some way supporting the Beech Management Plan, and those who are identified with environmental groups who are against the Beech Management Plan.

Further examination shows that these groups can in turn be characterised by how they view the issues associated with logging beech forests. An important characteristic of the first two groups is that they believe that logging is acceptable under certain conditions, and that these conditions can be determined by scientific process. In other words, their world view, or paradigm, includes the possibility of beech logging. The latter group does not believe that logging is appropriate, and their paradigm does not include logging as an outcome. Viewed in this context, the main issues in the debate are related to a clash of paradigms rather than appropriate application of science.

The first two groups might be said to follow the scientific paradigm, where problems are viewed and dealt with using the tools of scientific thought and process. In this paradigm, a problem is identified, hypotheses are formed and tested, and management prescriptions based on those results are formulated and put into practice. The key thing is that the 'problem' is formulated in such a way that science is perceived as a relevant tool for solving the problem. The problem can include a range

of factors such as protection of wildlife, or preservation of water quality, and biodiversity.

The latter group views the beech forest problem from a different paradigm where the issue is 'ethical' rather than one which science can resolve. The applicability of science for these groups is really a non-issue. The exception to this is where science can be utilised as a means to stop



or limit an activity which is deemed to be unethical. This approach is not unique to New Zealand, and there are numerous overseas examples of this, including the Carmanagh Valley in British Columbia, and the spotted owl and old growth forests in Washington and Oregon. The spotted owl in particular shows how endangered species legislation becomes a useful tool for environmental groups, given the U.S.

court system. Using this legislation, environmental groups are able to take the U.S. Forest Service to court, arguing that there is missing or faulty science for protecting a species.

Timberlands West Coast appears to be running into similar arguments as the U.S. Forest Service. The original arguments of those opposed to logging beech forests were that no research had been done to be

able to substantiate any type of management. Much scientific research has now been done and strategies which flow from this research (ecosystem management, low impact logging) are being proposed to manage the beech forest. For some environmental groups, which accept the scientific paradigm, this has been sufficient to alleviate their concerns about the effects of any harvesting. For those environmental groups that do not accept the scientific paradigm, the opposition to logging continues.

The key issue for those who believe that beech forests can be logged in an acceptable and sustainable manner, is the effect that the paradigm conflict will have on the ultimate success of the Beech Management Plan. Leadership in this debate means recognising that the issue will likely be drawn into non-scientific areas of concern as the scientific issues are addressed. This is already happening as new issues are being raised, such

as a lack of consultation about the draft Plan, or why we would want to develop a market for something that no one wants. Given that the NZIF has already developed and published its Indigenous Forest Policy, an interesting issue for the Institute is how it can put itself in a position of leadership to guide the emerging debate.