

Old Mans Beard in South Marlborough

Summary of Report by T Stein for Marlborough District Council – June 2004

Old Mans Beard (*Clematis vitalba*), is native to UK and Europe. Originally named “traveller’s joy”, it was sold as a garden plant and has been present in Marlborough from early in the twentieth century, and a serious weed since the 1970’s. Old man’s beard is self fertile and produces copious seed. The seeds are primarily dispersed by water and wind and can remain viable in the seed bank for up to ten years. Old man’s beard stems can grow more than four metres in a season and impact on native plants by shading out light, competing for nutrients and with the weight of plant material caused by its prolific growth leading to a collapse of the canopy.

Ecologists carrying out a survey to identify significant natural areas on private land in South Marlborough during 2001 and 2002, repeatedly identified old Mans Beard as a threat to many of these areas. While the pressure from farm stock was damaging some areas and preventing regeneration, at the same time the stock have a beneficial effect in controlling the weed through grazing. Removing stock will increase the threat from old Mans Beard, therefore both issues need to be looked at and managed together, if sites are to be practically protected.



A more detailed study of the history, ecology, distribution and control options for old man’s beard in South Marlborough was carried out by pest management consultant Tom Stein, on behalf of the Council and has confirmed that the weed is a major threat to many remaining areas of native vegetation in South Marlborough. The study involved a written questionnaire sent to landowners covered by the Significant Natural Areas survey, discussions with MDC and Department of Conservation staff, a roadside survey then in-depth foot (and cycle) coverage on and around some high value natural areas identified by the SNA survey on selected properties. These in depth inspections are continuing on some properties to help build a more complete regional overview.

- While old man’s beard is scattered over a wide area of south Marlborough there are many areas that are free or very nearly free of any infestations.
- Those areas relatively free of infestations include the upper Wairau, Awatere and Waihopai valley’s and much of the land east of state highway one.
- Major infestations were confirmed in the lower Wairau River, the Medway, the Waihopai, the mid Waima and Awatere Valley’s, the Waihopai and Waima Rivers, and the Woodside Creek area on the east coast.

A literature search plus Tom's observations suggest;

- Old man's beard prefers sites with a reasonable amount of moisture available year around. It is often found growing on reliably moist stream-sides and gully bottoms.
- Waterways provide the ideal means of rapid seed dispersal.
- The spread of seeds through road metal and machinery continues to be a significant problem
- Lack of light limits establishment and seedlings are likely to be suppressed in areas with an intact forest canopy.
- Increased levels of nitrogen boost growth of the weed.
- Fertile mudstones and alluvial gravel plains provide the preferred sites for old man's beard which is almost never found in areas with relatively infertile greywacke soils
- Old man's beard is highly palatable to sheep, cattle, deer and presumably goats.

Much of South Marlborough's remaining native vegetation provides ideal conditions for the establishment and spread of old man's beard because sites are often small with a lot of "edge" area where light levels are high, and the vegetation is not generally established or intact enough to provide a shading canopy.

However, there are also extensive areas that because of soil structure, low fertility, grazing pressure, light and moisture levels are unlikely to ever be severely impacted by old man's beard. These include high altitude tussock country, larger areas of mature forest, low fertility beech forests and some of the more arid pastoral areas.

Currently the Council does not carry out any control of old man's beard. It is listed in the Regional Pest Management Strategy as a "surveillance" pest to be monitored over time. The study outlined a number of possible options for control of old mans beard ranging from do nothing to the other extreme of complete eradication.

The most effective control would probably lie somewhere in between with some level of targeted control on and around significant natural areas, or groups of significant natural areas, where landowners are willing to implement protection measures such as fencing (there is financial assistance available for this). Given that old mans beard seems spread mainly via water ways, a wider catchment approach, or at least a focus upstream of sites would be most effective. Any control would need to be programmed over a period of six to ten years. Council will be considering a range of options, in consultation with landowners in specific areas.
