

FACILITATORS REPORT:

SUSTAINABLE FARMING FUND HILL COUNTRY DEVELOPMENT PROJECT; THE MCRAE TRUST, WAIROA DISTRICT.



Introduction:

In the year 2000 the The McRae Trust (the trust) embarked on a hill country development to outline the benefits (or otherwise) of developing steep Wairoa hill country with a view to increasing bottom line farm returns. The project consisted of identifying a steep, woody weed covered hill country block on the property and working through a process of clearing the weeds, burning, over sowing with a modern pasture, subdivision and water reticulation. Dry matter quantities have been monitored and compared to other parts of the property. There has also been water testing to determine quality (or lack of) comparing the developed blocks water course with a QE2 blocks water. There has also been a desire to have a good knowledge of the environmental effects of the development. More recently the question of woody weed reversion has been monitored. The costs and returns of the whole development have also been measured.

Farmer groups have been encouraged to be a part of this process and a very useful working group has been established as a result. One aspect of the process involved a farmer led group making management suggestions based on a comprehensive soil analysis carried out by Murray Jesson of land care research. It was discovered that farmers involved lacked all the tools needed to make informed decisions based on the knowledge of soils and their values. This led to the formation of a 'growing business from the ground up' soils group. This group did a working analysis of their own farms and, with this greater working knowledge, there were many recommendations for the trust based on the soil information with a view to dividing the property into land use units.

What is the McRae Trust?

The trust is a 615 hectare property that was bequeathed to the people of New Zealand in 1975 (This includes a recent acquisition of 28 hectares). It is situated in the Wairoa District on the east coast of the North Island, Northern Hawkes Bay. Included in the Trust Deed was the requirement to 'demonstrate for the purposes of the betterment of farming on East Coast type hill country'. It also included the preservation of land and native flora and the use of trees for conservation. In 80's and 90's programmes of scrub clearing, pasture development, water supplies, tracks and improvement to stock performance were implemented.

The trust property has been the focus of a sustainable land management project since 1994. It has addressed both farm production/profitability and environmental goals during this time. Dramatic improvements in pasture and livestock performance have been achieved in some areas, including lambing percentage and growth rate of young cattle. After achieving some of the more important production targets, a new set of targets have now been set.

Alongside this work, has been the consistent input into environmental activities, including soil conservation planting, riparian management, forestry and native flora preservation. Riparian management in hill country has already proven to be less costly than expected, with significant improvements to surface water quality achievable by using very simple techniques. It is now time for the wider community to learn the benefits of keeping livestock out of some waterways and improving biodiversity in those areas for the betterment of water quality.

Forestry on 'pastoral' hill country has been a contentious issue for some time in the Wairoa area, certainly creating debate amongst the original community group. The forestry potential was discussed during the soil group meetings and is still being recognised by the trust as part of the trust deed requirements.

There is considerable scope in the Wairoa district, for the wider uptake of both more productive pastoral practices as well as more environmentally sustainable land use on some classes of land. Extension has been an issue for the trust as a result of an extended period of community group activity. It is one of the challenges of this type of work, getting the information to the greater community. Recent meetings on the future direction of the trust and the appointment of a new farm manager go a long way, in my opinion, to reinvigorating community interest in the property and its activities.

The Process:

The hill country development began with identification of 30 hectares of class six and seven land - with erosion potential – that was considered typical of Wairoa hill country farm land. It had minimal carrying capacity, and was covered in blackberry and regrowth scrub. The southwest facing block was sprayed with Answer, which leaves all the broadleaf species and totara. The land was then burnt and over sown with permanent pasture. It was then fenced into four blocks with electric fencing and had reticulated water fed to each new paddock. Approximate paddock size is equal; i.e. seven to eight hectares in size. There has also been some shade reintroduced for livestock by planting conservation trees.

Monitoring was set up to include:

- Pasture growth rates
- Fertility levels using soil transects
- Photo points with pictures every three months
- Health of native remnants
- Testing runoff for faecal contaminants
- Sediment traps to collect silt
- Phosphate levels in water
- Measurements of vegetative cover, species, and bare ground
- Worm counts
- Soil carbon levels
- Compaction

Subsequently farmer groups also suggested monitoring speed of regeneration of woody weeds (if any) and persistence of the new pasture.

The farmer group was reluctant to spend every meeting at the trust due to the length of time the sustainable land management project had been running before the hill country project and the extension issue discussed here earlier in this report. With the help of Hilton Collier from Ag-First another existing farm discussion group was used to bounce ideas off regarding the project. One criterion that was recognised as a must for any hill country development was the need for year round easy access. Without the access the long term success of hill country development was questioned because timeliness of management decisions were seen as crucial to harvest the extra pasture

as well as negate reversion problems. Another issue encountered was the lack of real understanding of the soil capabilities of the district. The 'grow your business from the ground up' soils group was a huge success and underpinned the recommendations for the trust based on individual land units. This has been the major success of the whole project with many farmers now having skills that are crucial for the future of their individual businesses.

The Future:

After three years involvement and some very successful fieldday's, it is obvious to me the trust should persist with local farm extension work and continue to be a vehicle for farm related projects in the Wairoa District. In relation to the hill country development project outlined here, it is paramount there is continued monitoring of

- water quality
- woody weed reversion
- soil stability/compaction
- new pasture persistence
- pasture growth rates

This will fully determine the effectiveness of the development and will certainly answer crucial questions regarding the merits of spending large amounts of funding on capital development of steeper hill country blocks.

Fenton Wilson
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