

## Helping people get their projects from planning to action!

### 1. LOCKERBIE FARM RESTORATION PROJECTS: LOCAL BACKGROUND



Image 1: Habitat on Hurunui river banks: A typical example of the proposed plant mix species growing together on riverside. Image 2. A wealth of biodiversity within 7 Km of Lockerbie farm. We have copied these plant species.

Observation and photography of points up stream of the Culverdon property “Lockerbie” on the banks of the Waiau-Uwha River, and also on the upper reaches of the Hurunui River towards lake Sumner, indicate a wealth of plant biodiversity present in the district, especially those species near the rivers but above the flood water mark on the river terraces

Plants chosen for the Lockerbie Farm Restoration Projects reflect species that are found locally.

In drier stony areas these include: *Melicytus alpinus*, *Corokia cotoneaster*, *Coprosma propinqua*, *Sophora microphylla prostrata* and *Muehlenbeckia axillaris*. In hilly and stony pockets these include species for example: *Phormium cookianum*, *Cordyline australis*, *Olearia paniculata*, *Coprosma robusta*, *Coprosma propinqua*, *Coprosma crassifolia*, *Veronica traversii*, *Olearia avicennifolia*, *Corokia cotoneaster*, and *Kunzea ericoides* *Ozothamnus leptophylla*, *Sophora microphylla* and *Sophora prostrata*. In the damper areas *Pseudopanax arboreus*, *Melicytus ramiflorus* and *Griselinia littoralis*, and *Fuchsia excorticata*.

## **2. COMMON REVEGETATION GOALS**

Many local revegetation or restoration projects have a goal to select plant species that have berries, nectar or wiggly stem character that provides food or protective habitat for insects, birds and lizards. Project goals usually aim to protect and maintain the health of all significant habitats and ecosystems, and the project at Lockerbie will significantly enhance the local habitat. This proposed habitat trial is important in that some of the diverse mix of species proposed for planting have not generally been included in past local restoration projects due to restrictions on plant availability.

Other common goals of projects include: enhancing public awareness, understanding and support of biodiversity, encouraging and celebrating support action by landowners and communities to protect, maintain and restore biodiversity, and improving the quality of knowledge and information about Hurunui's biodiversity for its sustainable management.

As the sites at Lockerbie are being developed, particularly Te Wahi, the Totara Walk and the Drylands experiment, public interest and awareness is being raised. Each proposed planting area is unique in character: biodiversity benefits, challenges and conservation opportunities for each specialised area is reflected by the name. This is a great opportunity to build: potential sponsors in the agribusiness sectors, extending knowledge in the community, contributing to survivability successes in other projects, growing biodiversity services, e.g. more owls, birds, rare plants, rare birds and skinks. It is a great opportunity to link up neighbourly walking tracks, and consolidate the bee corner. During the last few months educational tours of the sites have been enjoyed by representatives from Fonterra, Waterforce, Farmlands, Ecan, Hurunui District Landcare Group, a London based IT web developer, and local and Hurunui district landowners interested in revegetation projects. All the proposed sites for revegetation have some point of difference about them, and reflect the idea of plant communities which naturally occur in the wild. The project will be undertaken in stages.



## UNIQUE SITES

1. Te Wahi (Te Wahi te Hononga)
2. Dotterel bank (4320 m<sup>2</sup>)
3. Ti Kouka (4000 m<sup>2</sup>) areas.
4. Apple Patch (340 m<sup>2</sup>),
5. Nohoanga entry (350 m<sup>2</sup>),
6. Kahikatea Plot (350 m<sup>2</sup>),
7. Willow Stretch (650 m<sup>2</sup>),
8. Kingfisher Corner (520 m<sup>2</sup>),
9. Totara Walk (1000 m<sup>2</sup>).
10. Owl Gateway (500 m<sup>2</sup>),
11. Drylands 2 (280 m<sup>2</sup>),
12. Drylands Connect (520 m<sup>2</sup>),

### **3 SUE'S TAKE HOME MESSAGES:**

#### **G.E.W.E.W.** The "Hazard "Talk: **Going Everywhere With Everyone's Wellbeing**

**Ground** hazards, **Eye** hazards, **Weather** considerations, **External** events, **Where**-abouts, where is everybody are they safe?

#### **"Handle it only Once!"**

Always think what do we do to be most effective, reduce maintenance long term, and gain fast access thru the site.. and never go back to do the same task again!

#### **R.E.P successful projects include ideas from each of these areas**

Repair, Revegetation, Restoration, Regeneration, Research, Rehabilitation

Education, Enthusiasm, Energy, Community Engagement, Encouragement

Planning, Potential, Progress, Pleasure, Promise for the future, Praise

and many more

#### **How, Why, Benefits & Follow thru**

**How?** We already know we are going to do something, its a matter of how we are going about it

**Why?** Why do we do it this way? Is it the best way to do it? And if not this way is there another way?

#### **Benefits:**

What will we gain?

Will we reduce maintenance hours over time?

Will natural regeneration and faster ground cover occur?

Will we reduce the exotic seed bank or recurring weeds?

Hazards removed or clearly marked so faster access?

#### **Check your work (follow thru)**

Check how effective your plan is. Change strategy if necessary

Record successes. Share information

## 5. SUE MCGAW. SOME OF THE THINGS I DO

I am a Biodiversity Consultant & Biodiversity Field Technician with over forty years in the field. Recent work in Biodiversity areas include revegetation or restoration of new projects, repair of old projects or scattered existing native remnants, study and research in second-stage restoration, threatened plant species and Rongoa Maori plants (medicinal practice of benefit to both humans and animals), and long-term maintenance of existing native projects. Areas I have worked in include Hurunui, Waimakariri and Marlborough, West Coast and Central North Island.

My two particular areas of interest are:

**What does it take to get 100% success rate in plant establishment?**

**What can we do to increase biodiversity and add species that belong in our area back into our areas?**

Some other things I do:

Evaluate project areas

Construct budgets for procuring plants, planting and action tasks

Construct plant data-bases and identify local plants

Construct practical as well as extending plant lists relevant to the site which include winter bird food, and plant species relevant to increased biodiversity possibilities and services

Plan across many areas of a project, i.e. set up, future maintenance practice, 2nd, 3rd stages extending projects

Plant sourcing & plant layouts,

Any special project involving plants, native or exotic

Handling, and propagation of rare plants, or organising for it to be done.

Contribute to the Inaturalist data-base.. plants and birds

Background in practical fieldwork for revegetation, restoration, landscaping, plant growing, project planning, plant identification, lecturing, engaging in Biodiversity workshops, as well as field surveying, pest industry field research, and even rare bird surveys.

Community based Biodiversity workshops are tailored to suit.

Topics include:

Planning, where to start, resources, steps to take, smart costs, what tools, how to use them, propagation, plant failures, plant success establishment.

Planting techniques, after-care, reductive maintenance, protection maintenance, hazards, shortcuts, handle it only once, REP, How Why benefits, Goal planning, practical maintenance applications.

What are biodiversity benefits and how to achieve them. How to select plants. Pitfalls and successes. Encouragement.

Thank you. Sue McGaw

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## **Seven contributors to failure**

- 1 Lack of planning, research and exploring the long-term benefits potentially arising on the project
- 2 Incorrect plant choices
- 3 Unsuitable plant placement
- 4 Under-performed planting techniques
- 5 Insufficient, uninformed or careless aftercare
- 6 Animal interference
- 7 Environmental stress

Techniques 1-5 are under the project hands-on control and are worth being particular over. Attention to detail contributes greatly to plant survival (Sue McGaw)

## **Tips for Success**

- 1 Research and plan well, include long-term view and bio-diversity services
- 2 Use locally suitable plants, choose healthy plant material with good root systems, plan for emerging species, use eco-sourced plants, no cultivars, no exotics or non-regional plant material
- 3 Be mindful of plant cultural requirements, e.g. sun/shade, salt spray/frost, growth expectations, size/spread, companion plants
- 4 Good planting techniques, moisture, firmness, no oscillation, protection measures where applicable
- 5 Educated and informed methods and techniques of aftercare
- 6 Plan for protection against animal interference if required
- 7 Plan for provision against environmental stress with suitable plants