



4 - Southland Wetland and Streamside Native Planting

Why Are Wetlands Important?

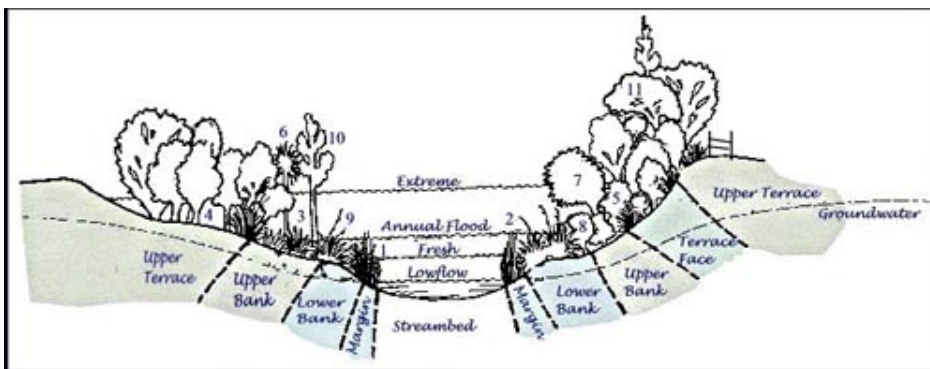
Wetlands play an important role in the environment providing a natural ecosystem for plants and animals that are suited to wet conditions. They are dynamic in nature but are also very sensitive to change, for example in water availability and land use. They contribute to the overall health of the environment and add to the unique biodiversity of the region.

However, in the past wetlands have unfairly and inaccurately been portrayed as wastelands and over 90% of New Zealand's wetlands have been drained in the last 200 years. Creating and enhancing wetlands has many advantages and it can be a rewarding contribution to restoring a native habitat. Streams and waterways also benefit from fencing from stock and the planting of riparian vegetation, with improved water quality, reduced water temperature, minimising bank erosion, reducing flood impact, and enhancing habitat for wildlife.

Using local plants

Eco-sourcing means sourcing plants from your local area. Plants sourced from the local area are better adapted to conditions there, are more likely to survive and will help to preserve the distinctiveness of plants from the region. As a general principle select plants from seeds collected as close as possible to where you want to plant. As a minimum standard use seeds or plants from within the Region e.g. Southland Region.

Typical Stream Profile



(source: Christchurch City Council, 2004)

Plants Listed

(The position of the plants on the profile indicates the degree of standing water they can tolerate)

- | | |
|--|---|
| 1. Sedge ~ purei (<i>Carex secta</i>) | 6. Cabbage tree ~ ti kouka (<i>Cordyline australis</i>) |
| 2. Sedge ~ purei (<i>Carex virgata</i>) | 7. Tree fuchsia (<i>Fuchsia excorticata</i>) |
| 3. Red tussock (<i>Chionochloa rubra</i>) | 8. Koromiko (<i>Hebe salicifolia</i>) |
| 4. Toetoe grass (<i>Cortaderia richardii</i>) | 9. New Zealand flax ~ harakeke (<i>Phormium tenax</i>) |
| 5. Mingimingi/mikimiki (<i>Coprosma propinqua</i>) | 10. Lowland ribbonwood ~ manatu (<i>Plagianthus regius</i>) |
| | 11. South Island kowhai (<i>Sophora microphylla</i>) |

Interest Story: Toetoe grass (*Cortaderia richardii*)

Plant profile: Found only in the South and Stewart Islands, this large tussock plant has yellow and feathery flower heads whose stems can reach up to 3m tall. The leaves are also long, green in colour and grass-like in form

Historical use: These leaves were used by Maori to make baskets, kites, mats, wall linings and roof thatching. The flower stalks were employed to make kite frames and tukutuku paneling. Medicinal purposes of the plant included: use of the seed heads on fresh wounds to stop bleeding; while other purposes involved treatment of diarrhoea, kidney complaints, and burns. Contemporary use of the flower plumes can be visible in the decoration of lounges and entrance hallways. Toetoe are particularly useful in stabilizing ground and minimizing erosion.

References

- Hovell Environmental Planning (2003) *Wetlands of Southland: A Guide for Maintaining and Enhancing the Values of our Wetland Areas*.
- Metcalf, L.J. (1998) *The Cultivation of New Zealand Native Grasses*. Auckland: Godwit.
- Trees for Survival (2004) online: *Toetoe*. www.treesforsurvival.org.nz/TREEINFO/toetoe.htm (downloaded 15 January 2004).
- Wilson, H.D. (1982) *Field Guide: Stewart Island Plants*. Christchurch: Field Guide Publications.

Benefits of wetlands for wildlife

- is a diverse and attractive landscape
- provides diversity of habitat for native birds and waterfowl
- provides secure nesting, brooding and feeding areas for birds

Benefits of wetlands for the farm

- fencing & planting wetlands reduces erosion, runoff and stock loss
- reduces peak water levels during flooding and reduces drought by maintaining water table
- provides recreational opportunities
- improves landscape values and increases property values
- quality of water through wetland areas improves due to nutrients being recycled and sediment trapped

Key features for ponds

- Shelving margins, avoid steep sides
- Irregular shape & islands for nesting
- Maximum depth 1m, shallow water is rich in foods for water birds
- A ratio of 1:1 open water to swamp, dry margin
- Professional advice on pond design and creation is recommended. Contact Southland Fish and Game.
- A resource consent may be required for damming diverting or taking water

Key Features for Stream Restoration

- provides a diverse and attractive landscape
- provides diversity of habitat for native birds and waterfowl
- provides secure nesting, brooding and feeding areas for birds

Southland Community Nursery in Otatara is a voluntary community project where you can pot up your own native plants from locally sourced seedlings for free. Advice is available on native plants and landscaping. Contact Chris and Brian Rance (03) 2131161. The Southland Community Nursery web site is <http://homepages.ihug.co.nz/~rances/>

For free advice on planning and designing your forest restoration programme or about Southland Landcare Groups contact Land Sustainability staff at Environment Southland (03) 211-5115

