



Cutty grass safe haven for wetland birds

Marie Taylor with some giant umbrella sedge, *Cyperus ustulatus*.

By Marie Taylor, Plant Hawke's Bay managing director

Everyone wants to feel safe, and birds living in wetlands are no exception.

When planting a wetland, it pays to think about where birds like to be. They like open roosting areas with a good view, and they also need quiet, safe, protected areas away from avian predators like the kahu/Australasian harrier hawk.

Conveniently, there are quite a few rampantly growing wetland plants which can provide safe havens in short fashion.

Cutty grasses make perfect cover, and their sharp edges are another deterrent to predators.

"Sedges have edges" is an easy way to remember that even though it's called a grass, cutty grasses are sedges.

The first, most spectacular is the giant umbrella sedge, *Cyperus ustulatus*.

This plant, in te reo called toetoe upoko-tangata, is vastly underrated and should be planted much more widely throughout its range in the North Island and around Banks Peninsula, Motukarara, the Rakaia River mouth and Tai Tapu.

Right from salty coastal sites to inland wetlands, giant umbrella sedge grows into a dramatic, dense cover of up to 2m high. Try finding a marsh crake in that!

You'd be hard-pressed to find a more convincing species to plant than this because it is so adaptable and tough. It can cope with wet conditions in winter, and it manages through dry summers too.

And its real benefit is how it spreads: instead of being one of the subtle and very tidy clumping carexes, it spreads outwards in every direction.

I put it in the category of benignly aggressive, so it is perfect for wetland plantings because, planted at 1.5m spacings, it can outcompete weed growth well.

Don't put it into a garden site, because it will be too dominant, and your relatives will be very grumpy when they cut their fingers to shreds on its sharp edges.

It's great habitat too for insects and spiders. Annoyingly, when collecting seeds of giant umbrella sedge, the striking seedheads are frequently full of spiders in webs.

One other consideration is that when you see it in natural settings, there are grand sweeps of the species, it is not polka-dotted around a site.

When designing the planting, use it in a site which can dry out a bit in summer and is wet in winter. And use it with scale, so you create dense beds.

In Hawke's Bay, you can see it in wet seeps down steep coastal hillsides, in unmodified wetlands, and at the head of estuaries.

It's the kind of plant which has been drained out of many pastoral landscapes, but it's one of the first we should reintroduce.

A second species for widespread wetland planting is another cutty grass, *Carex geminata* or rautahi.

This grows everywhere in New Zealand, even on Stewart Island.

It's a bit more subtle and cryptic, but just as effective as *Cyperus*, because it too has a spreading habit, so unlike its tidier carex relatives.

Rautahi has also been drained off many farming landscapes, but is worth bringing back.

The beauty of both these species is that they help keep stream banks intact. Their spreading habit protects silty banks, and also soaks up nutrients running off pasture into waterways.

Unhelpfully, rautahi leaves die back a bit in winter (the rhizomes are still going strong underneath the soil). This does not help their sales potential in the nursery, because few people feel like spending good money on a plant which looks like it's at death's door.

Never fear, in spring it shoots away like crazy, and then the leftover plants nobody wanted to buy all look like they want to escape any which way they can from their containers.

It also fits into the benignly aggressive category, but it's shorter than giant umbrella sedge.

Landowners might find they already have some along their streams and wetland edges. Often it is a good idea to wait a few months after streams and wetlands are fenced, in order to see what pops up.

Instead of densely planting a whole wetland or riparian edge, landowners might suddenly find they only need half the plants they thought because of what emerges after grazing animals are removed.

Rautahi looks quite subtle in the landscape; just a large grassy sward bent over in the wind.

It can be found on road edges here and there, and in those coastal hill country seeps.

Unlike the spectacular upright seed stalks on the giant umbrella sedge, rautahi hides its seeds beneath its bent over leaves.

It is similarly tricky in the nursery, preferring some years not to germinate, which is very bothersome.

Seeds are often infested with a fungus, so it can be difficult to find good quality seed, especially as it is hidden in a protected and humid environment beneath the cover of leaves.

Like giant umbrella sedge, it is best to plant beds of this species, so that it can work more effectively in the landscape.

Both of these adaptable wetland species not only provide safe habitats for wetland birds, but also help protect the stability of the landscapes they are planted in.

They are much more valuable plants than they are given credit for and they are both worth adding into planting projects.

③ Plant Hawke's Bay started in 2005 as the result of a restoration project at Bay View. Founder Marie Taylor spent eight years learning about revegetation processes as she re-established forest on an east-facing cliff.

The project proved there was demand for tough and hardy locally sourced and grown plants. It led Marie to set up a nursery in Ahuriri.



A Carex geminata or rautahi in the nursery at Plant Hawke's Bay.

Production grew each year until 2020 when she joined forces with Hawke's Bay farmers Rob and Coral Buddo.

In 2020, they bought an existing nursery site at Waiohiki, Napier,

where they have expanded production. Customers include farmers, landowners, landscapers and conservationists, along with teams from councils and other organisations.

Waihi project wins sustainability award

An innovative project constructing new wetlands has been recognised at a recent conference in Christchurch.

The Pongakawa and Te Rere I Maniatutu Constructed Wetland Project won the Environmental Sustainability Project Award at the 2025 Water New Zealand Excellence Awards for converting farmland to wetlands in Bay of Plenty's Waihi estuary catchment.

The prize highlights how combined efforts can establish wetlands to reduce pollutants and improve the health of ecosystems, say Dr Chris Tanner and Dr Brandon Goeller, of Earth Sciences New Zealand (formerly NIWA).

The pair worked on the project as part of a nationwide programme, Sustainable Land Management and

Climate Change Project funded by the Ministry for Primary Industries.

Earth Sciences New Zealand has been leading initiatives with rural industries, councils and farmers to support the uptake of constructed wetlands as a practical mitigation tool to reduce diffuse contaminant losses from productive land use.

This includes publication of a Constructed Wetland Practitioner Guide (<https://niwa.co.nz/freshwater/freshwater-mitigation-systems/constructed-wetlands/constructed-wetland-guidelines>) and training courses to demonstrate the appropriate design and performance of constructed wetlands.

Case studies show that as constructed wetlands increase in size from 1% to 5% of their contributing catchment,

they can reduce more of the nutrient and sediment loads they intercept, Dr Goeller says.

"In warmer areas of New Zealand, nitrate removal ranges up to 50%. Wetlands up to 5% of the catchment area can also remove up to 48% of total phosphorus. Sediment load reductions from 50 to 90% can also be achieved."

Dr Tanner says the results from the case studies contribute important information to an ongoing programme focusing on improving design, quantifying performance, refining guidelines and providing regulatory confidence.

"It is great to be part of a highly collaborative project, where all the components have so successfully come together. Let's celebrate this."