

Where tussac won't: coastal bluegrass might...

Advice for planting bluegrass in eroded areas, February 2017

The Evans Family have grown bluegrass on eroded clay patches at Spring Point Farm and Falklands Conservation established plants on sandy soil following demining. Here we share tips from these experiences.

Lots of questions remain – we hope that this leaflet will encourage folk to experiment with bluegrass and share their findings.



Background

Aside from tussac, bluegrass (*Poa alopecurus*) is the largest grass in the Falklands. It has two distinct growth forms: coastal bluegrass and mountain bluegrass. Coastal bluegrass grows in large clumps along sandy beaches and can form dense meadows behind the shore. Confusingly mountain bluegrass frequently has a pink tinge! It grows on peaty soil from lowlands to mountain tops.



Mountain bluegrass in a spelled paddock at Elephant Beach Farm

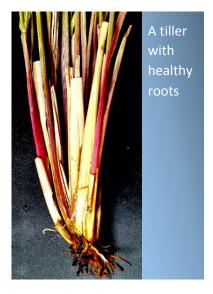
Bluegrass is much reduced by set-stocking and dense stands are usually found in areas without stock. We don't know exactly how it fares under rotational grazing but mountain bluegrass can certainly persist as large plants have reappeared quickly in spelled paddocks. Coastal bluegrass reappears in a different way when livestock are excluded; seeming to spread from remnant plants which have been protected from grazing by cliffs or dunes.

Because it can colonise areas with clay and sand coastal bluegrass can be a useful alternative to marram grass where there is a preference for using native species for habitat restoration. Its more general use in agricultural areas will depend on its ability to tolerate managed grazing and the speed with which it can stabilise mobile sand – as yet unknown.



Planting

Bluegrass can be grown from seed but easier to establish from tillers. Currently best planting methods are the same as those used for tussac and have worked in both sandy soils



eroded clay patches:

- Fence off sheep and cattle.
- Plant during the winter (April August), enabling plants to establish when soil moisture is relatively high.



- Pull tillers from the edge of healthy plants.
 Tillers must have some roots and be around three shoots thick (or thicker).
- Plant to a depth of around 2.5 inches (9cm) and firm-in well.

- In very exposed locations consider providing wind protection.
- Tillers should not be allowed to dry out but can be stored with water in buckets for a couple of weeks (this may even help by promoting root growth).
- Bluegrass grows on sandy soil but experiments with seedlings show that addition of sheep manure gets them off to a good start and sheep skins have proved helpful for getting tillers growing on clay. This type of support may be particularly helpful in very eroded or exposed areas.



Stanley Native Seed Hub

- Coastal bluegrass often grows alongside wild celery (Apium austral), and sea cabbage (Senecio candidans), which could be interplanted once bluegrass is established.
- Native plants are often poor at competing with non-natives. If planting an area with lots of established plants you might need to roughly weed, flail, or mulch around your bluegrass to allow it to establish.



Alternatives to bluegrass

We've focused on coastal bluegrass because it does well in poor mobile soil, but many other native species will grow from tillers in better soil. The following species have grown successfully in Falklands Conservation's Native Plant Garden: sword grass (Carex trifida), cinnamon grass (Hierochloe redolens), tussac (Poa flabellata), and mountain bluegrass (Poa alopecurus) - these all seem to do best in damper areas with some peat. Others have grown and spread well from small plants including: native boxwood (Hebe elliptica), Falkland thrift (Armeria macloviana), wild celery (Apium austral), Fuegian couch (Elymus magellanicus) and pig vine (Gunnera magellanica). Of these Fuegian couch and thrift grow in clay and sandy soils.

Where to see bluegrass habitat

Bluegrass was assessed by Hooker (1847) as being 'most abundant' and he described it occurring on sandy shores and in rocky places both near the sea and up on the hills. Sixty six years later Skottsberg (1913) states: 'I have met with it only once: West Falkland Fox Island, among rocks near the shore.'

- Today good coastal bluegrass stands remain on islands including Sea Lion Island (photo below) and Motley Island.
- Close to Stanley bluegrass can be seen north of Surf Bay (just past the green hanger), and around Cape Pembroke lighthouse.
 Falklands Conservation's Native Plant Garden also has some large bluegrass plants which can provide tillers.
- Elsewhere on the East Cape Dolphin Farm and Bull Point (North Arm) have good coastal bluegrass fringes.

 On the West, the Patricia Luxton Nature Reserve contains bluegrass (coastal and mountain forms) and Spring Point Farm have some excellent newly planted specimens!

Burning questions!

Please let us know how you get on with your bluegrass experiments, step-by-step photographs and details such as planting dates are very handy, as are lessons from unsuccessful trials. Information on the following aspects would be particularly useful:

- Can coastal bluegrass sustain carefully managed grazing?
- How quickly can bluegrass stabilise mobile sand? (Anecdotally growth rates from tillers seem highly variable: plants behind surf bay have grown well but spread slowly, while those at Spring Point and the Falklands Conservation garden have quickly grown and spread.)

Further information

Information on growing native plants from seed, plant distributions and a leaflet on tussac planting are available from Falklands Conservation (FC Habitat Restoration Library). If you would like help bluegrass planting and monitoring please contact Frin on 22247 or Habitatsrestore@conservation.org.fk.

Dale Evans (Spring Point Farm) and Ben Bernsten (Elephant Beach Farm) are happy to share their experience in planting and re-establishing bluegrass.

