



## **Coastal Weed Workshop Presentation Notes**

### **Sea Spurge Remote Area TeamS (SPRATS) update- John Marsden Smedley**

- Massive rise in number of sea spurge controlled – mostly seedlings that have sprouted post initial eradication.
- Helispraying conducted in Nov 09 and Feb 2010
- Bulk of plants being removed now are in the control zone, not the eradication zone.
- Herbicide research on sea spurge has been carried out
- Trial site on Ocean Beach
- Brush-off is getting the best results – either Pulse or Synertrol Oil are equally good as penetrants, but Pulse is less bulky to carry
- Native plants seem to be coming back in control areas
- Even in helisprayed sites, native plants seem to be doing ok

### **Geoff Luscombe – adventure volunteering**

- Wildcare model has the potential to expand the volunteer pool nationally – fits with core principles of fulfillment tourism models
- Advocates not planning for succession – interesting – this may mean downsizing of objectives, and hence strategies.
- Baby-boomers – looking for something meaningful to do with their free time. Presents an opportunity for active and interesting volunteering activities to engage this target audience.

### **Deal Island – Penny and Bob Tyson**

- Volunteer caretaker program – period of three months – program managed by Parks & Wildlife Service (PWS)

- Friends of Deal Island – 100+ members, 2 trips annually of 15 days, 8 people
- Sea Spurge first seen in the Kent Group National Park in 2001 (same year it became a National Park).
- Ragwort, Sea Spurge, Horehound, Arum Lily, Great Mullein, Marram Grass, Variegated Thistle, Cumbungi, Jonquils, Slender Thistles are all a problem.
- On Erith Island – Sea Wheat Grass, Garden Escapes, Kikuyu, Purple Groundsel all present
- Caretakers take on projects while on the islands to a greater and lesser extent– weeds, built heritage, other assets etc.
- Issues with outliers of spurge at significant elevations – some plants / groups of plants are marked with noticeable objects so people can find them and monitor them.

### **Matt Baker – Weed Identification and emerging weed threats**

- Matt presented several possible weed threats but the main message is to remain vigilant and keep looking for new weeds.
- *Cakile maritima* – European – much more recent arrival than *Cakile edentula* – American – which has been here since 1877 (spotted in St. Helens)
- *C. maritima* – has horn-like projections on the fruit
- *C. edentula* – doesn't have horn-like projections on the fruit
- *Senecio elegans* – purple groundsel – from South Africa – probably introduced as a garden plant. First recorded at Flinders Island and South Arm, and now more or less all over the north and east coasts.
- *Senecio pinnatifolius* (native) has hybridized with *Senecio elegans* in VIC – this isn't something that's been seen here.
- *Berkheya rigida* – African thistle Spreads by rhizomes, and layering of stems. It has deeply dissected leaves to 10 cm long; small, yellow flowers (1 cm diam.) that bear stiff, pointy bracts up to 12 mm long. It flowers in spring and summer. The seeds are not wind

dispersed, they stay in the head, then disperse as a burr. Probably introduced to Australia in ships ballast. In Tasmania, it is known from Curry, King Island – landcarers may have locally eradicated them.

- *Limonium hyblaenum* – Sicilian sea lavender – potential invader of salt marshes. Glabrous perennial herb with erect flowering stems up to 25 cm tall. Leaves are in a basal rosette, small, spoon shaped. Flowering occurs throughout the year. Naturalised in Victoria and South Australia.

“*L. hyblaenum* is one of the worst weeds to occur in recent times...” can completely cover salt marshes.

Does anyone know about the longevity of its seeds in seawater? Matt doesn't, unfortunately.

- The Tasmanian Herbarium is able to help SPRATS with identifications of coastal plants.

### **Eric Woehler – Coastal birds and beach weeding activities**

- Outlined how not to threaten nesting birds on beaches.
- Peak breeding / nesting period - 1 Sept -31 March. This is when threats are most critical. Avoid weeding on hot, cold, wet days, and at night time, because it's easy for chicks to get very cold. Best times for weeding to avoid disturbing birds – 1 April to 30 Sept.
- 7 species of resident beach nesters – Pied and Sooty Oystercatchers, Hooded and Red-Capped Plovers, Little Tern (EN), Fairy Tern(VU) and Caspian Terns.
- Hooded Plover populations have decreased by more than 25% statewide since 1982, same trends predicted for red-capped plovers. Plovers sometimes use visual markers like sticks to locate their nests – nests only around 10cm across,
- Little penguins and Short-Tailed Shearwaters can also breed in/on dunes.
- Little Terns – only two confirmed breeding pairs for the whole state last year – this is really not good.
- Little Tern is the one where the black does extend to the bill through the eye – and sometimes they have a black bill tip. Fairy Terns have white between the eye and the bill.

Terns face same threats as other shorebirds on beaches. 18 Fairy Tern nests at the mouth of the Prosser at Orford – almost invisible – good example of how easy to disturb nesting birds. Fairy Tern eggs about the size of an easter egg – not usually marked by sticks like plover nests. Fairy Terns will hover and drop, to try to scare you away from their nests/chicks. They are very quick to abandon their nests if disturbed.

- Pied and Sooty Oystercatchers – lots of trans-Bass Strait migrations of these species observed.

### **Chris Arthur –Parks and Wildlife Service (PWS) support for the SPRATS et al and coastal weed management**

- Key learnings for managers
  - Trust – has to be in place, otherwise nothing happens. PWS cannot undertake these tasks themselves.
  - Partnerships – develop appropriate partnerships, Wildcare, SPRATS, World Heritage Area Committee, provider companies (ie; helicopter providers), General Manager PWS. Chris believes the trickiest part of developing a partnership can be is developing a good relationship / partnerships with the powerbrokers – this is possibly where PWS come in.
  - Also, groups need to be able to justify their activities, sell themselves and show the results of activities.
- PWS:
  - are a good source of information and knowledge but are not the holder of all knowledge.
  - have to be strategic but flexible, have many focuses, including managing fires, whale strandings, infrastructure etc.
  - are continually learning as well.
  - will to take calculated risks – no one would have expected the success of the two remote areas weed management programs, this was calculated risk.
  - can use OH&S to enable, not block activities.
  - have to follow bureaucratic process and can help groups through these processes, OH&S forms, Job Safety Analysis
  - are there to manage Parks lands, don't have jurisdiction beyond boundaries.

- Parks need to work within budgets, and find a multiplier effect, ie; volunteers assisting staff is a good outcome and can leverage funding.
- volunteers can be a vocal advocate for PWS projects – many issues that community can be involved in.
- need to make sure that works are achievable – important for ongoing faith and dedication of volunteers.

### **Tim Rudman – More on Sea Spurge**

- Sea Spurge is in other parts of Australia
- Not sure how far north of Perth sea spurge has moved, or how far it could go.
- Only 8 days to for drift cards to travel from the SA/VIC border to King Island.
- Studies show that seeds can get almost any where, but the difficulties of seeds moving and establishing are quite different from those faced by drift cards.
- Synergy opportunities with Geraldton Carnation Weed (*Euphorbia terricina*) – big problem in WA, lives in alkaline sands, grows in coastal dunes, very closely related to sea spurge.
- Potential agents for investigation for biological control:
  - A rust fungus (*Melampsora euphorbiae*)
  - An unidentified/unnamed fungus
  - A moth *Acroclita subsequana*
- Red dots on sea spurge – they think they may be from pepper spurge rust, they are normally yellow, but maybe the spores are repelled and healed by the sea spurge?
- Talk of a push for a sea spurge/Euphorbia group WONS status application.

### **Sandy Leighton – A strategic regional approach to coastal weed management**

- Coastal weeds as part of integrated weed management strategy - Southern Tasmanian Weed Strategy
- Boneseed – containment lines and new areas identified and being managed.
- Bridal Creeper – is a weed to watch out for, could be more widespread than currently known.

## **Greg Stewart Northern NRM Coastal Weed Management**

- NRM North – taking an integrated approach:
  - targeted weed control
  - high priority sites/values (e.g *Phebalium daviesii* – Davies Wax Flower at St. Helens)
  - Education/awareness (council, community groups, Parks, CVA)
  - Community groups – working on sea spurge from Anson's Bay to the Gardens (Alison Hugo coordinates)
  - Collaboration with land holders
  - Property management plans –works directly with landholders.
  - Mitigation of threats