

Bruny Bioregion Background Report

Presentation to RPDC, September 2006



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Birds Tasmania - Introduction

- regional group of Birds Australia
- community-based voluntary group
- non-party political, independent source of information, advice and expertise
- approximately 320 members (September 2006), originated from B.O.A.T. (est. 1971)
- 40 years of shorebird data for some areas of Bruny Bioregion, surveys are ongoing



Birds Tasmania - Introduction

- working premise for our submission:

any area below High Water in the Bruny Bioregion is open for nomination or consideration as a candidate MPA

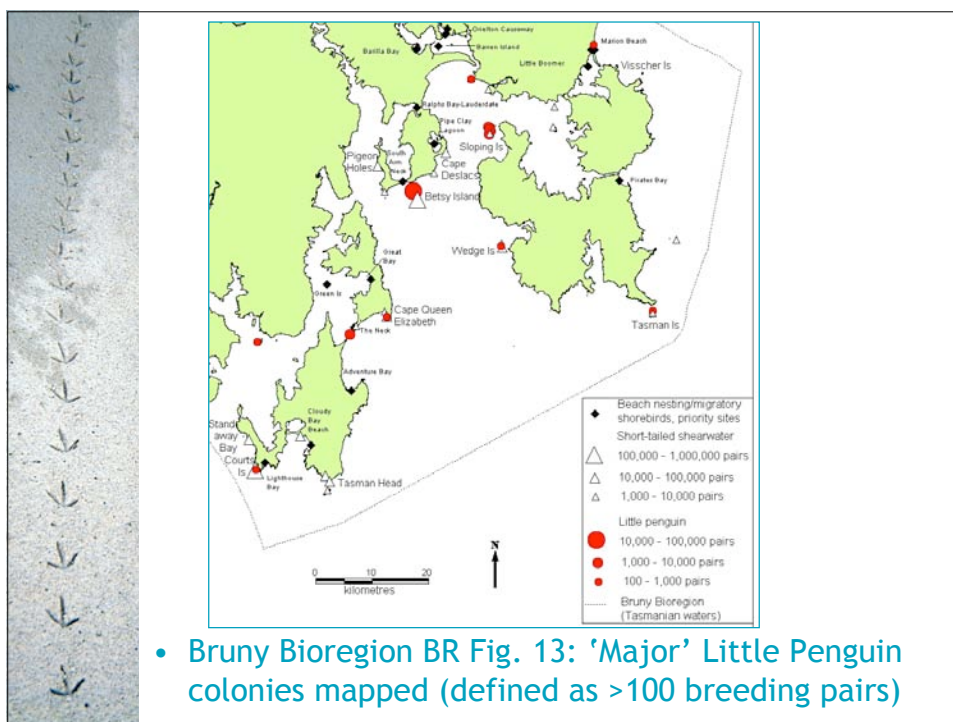


Marine birds of the Bruny Bioregion

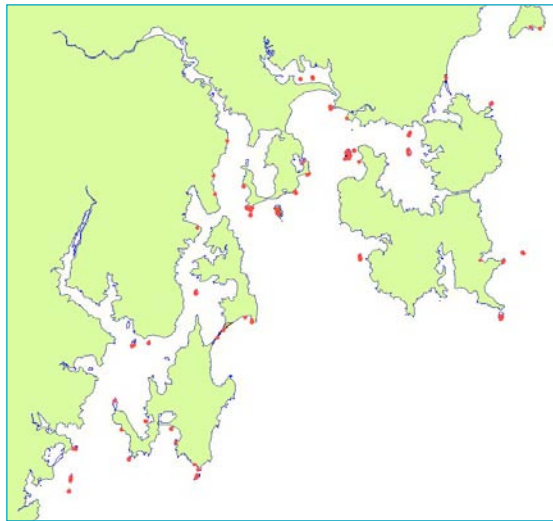
- collective term for seabirds and shorebirds
- seabird species in Bruny Bioregion include penguins, albatrosses, petrels, shearwaters, diving petrels, prions, cormorants, gulls and terns
 - extensive information on breeding and non-breeding populations for all these species are published in Brothers *et al.* (2001), DPIW OSRA and DPIW *Small SE Islands MP*, yet were not cited/used in Background Report
- **URGENT** need to assess all available data

Signals from marine birds

- marine birds globally acknowledged to provide signals on the state of health of coastal and marine ecosystems
 - destruction and loss of breeding, feeding and roosting habitats are reflected in:
 - decreasing species' abundances
 - decreases in species' distributions
 - decreases in species diversity
- all of these signals are being seen in Tasmania...



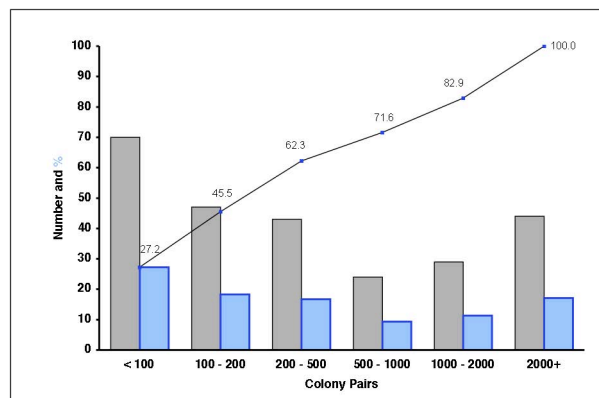
- Bruny Bioregion BR Fig. 13: 'Major' Little Penguin colonies mapped (defined as >100 breeding pairs)



- Bruny Bioregion DPIW OSRA data for Little Penguin colonies (all colonies)
- other population data in OSRA must be assessed



Sizes of Little Penguin colonies



- important to not focus on just 'major' colonies as >25% known breeding colonies estimated to have <100 pairs

Little Penguins

- mainland colonies decreasing or lost due to disturbance, loss of habitat and predation
- critical need to protect marine foraging areas around all penguin colonies
 - single biggest threat to penguins in marine environment of Bruny Bioregion is continued use of recreational gill nets
- **URGENT** need to ban recreational gill nets in the Bruny Bioregion

Terns



- 2 tern species breed at Marion Bay:
 - Little Tern (Endangered) & Fairy Tern (Rare)
- major feeding area during breeding season is Porpoise Hole

Shorebirds in the Bruny Bioregion

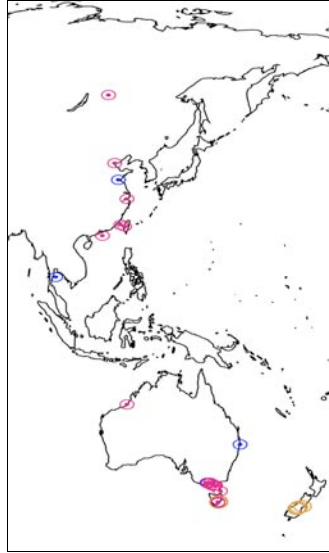
- shorebird assemblage comprises 7 resident (year-round) and at least 12 migratory species (present annually in summer months), also have one species of New Zealand migrant present in winter months
- few other migratory species occasionally reported in Bioregion
- shorebirds are the links between Bruny Bioregion and Siberia, Alaska, Asia and New Zealand

Migration into the Bruny Bioregion



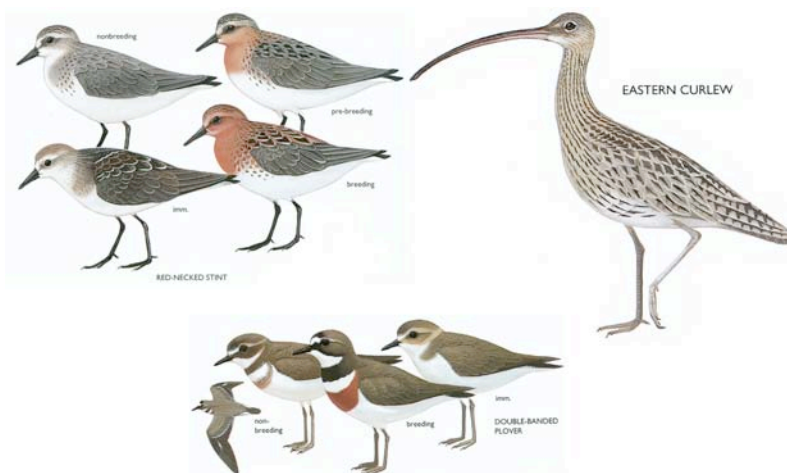
- East Asian - Australasian Flyway

Migration into the Bruny Bioregion



- approximately 5 million shorebirds (>50 species) migrate annually in the East Asian-Australasian Flyway
- range in size from Eastern Curlew to Red-necked Stint
- Bruny Bioregion is the southern-most destination in the East Asian-Australasian Flyway
- several key localities in Bruny Bioregion

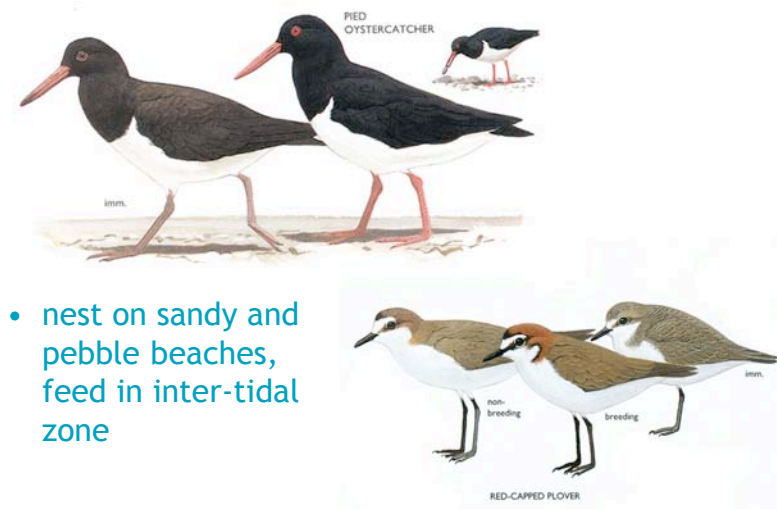
Migratory species



Eastern Curlew

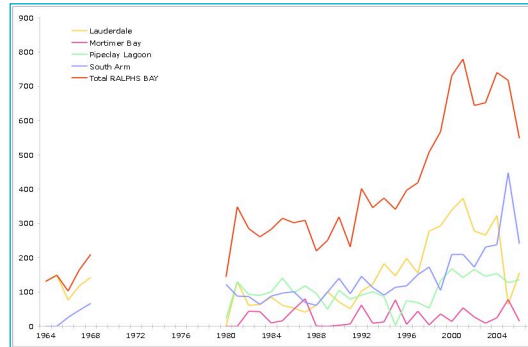
- long-term data set for Eastern Curlew
 - largest migratory shorebird in Tasmania from Siberia
 - listed as Endangered under State and federal legislations
 - 65% decrease statewide since 1950s
 - predicted 95% probability of nil present in Derwent Estuary by 2027
 - gone from Porpoise Hole (100 seen 1948), steady decrease 1950s - 1980s, nil remaining

Resident species



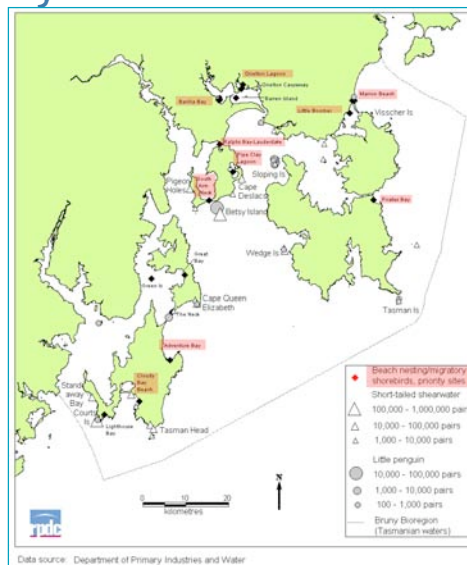
- nest on sandy and pebble beaches, feed in inter-tidal zone

Pied Oystercatchers in Ralphs Bay

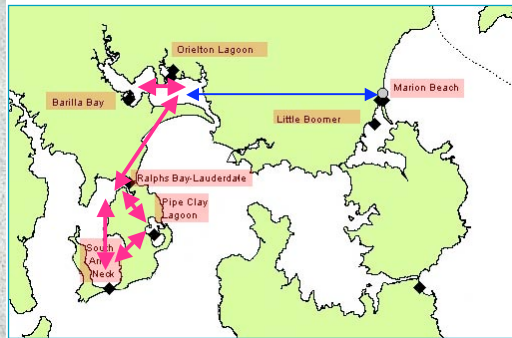


- 4 winter counts since 2000 recorded >700 Pied Oystercatchers in Ralphs Bay, or approximately 7% of the estimated Australian population (10,000)
- species populations elsewhere decreasing:
Ralphs Bay is refuge for species in SE Tasmania

Priority shorebird sites in Report



Highest priority shorebird sites



- network of sites, regular + frequent movements of resident and migratory species among sites, depending on age, tide, time of day & night, time of year and disturbance

- cannot treat each site as a separate entity, **MUST** consider network as **SYSTEM**
- fewer movements between the Derwent - Pitt Water / Orielton Lagoon sites and Marion Bay

Ralphs Bay



- northern inter-tidal area (existing Conservation Area) primary feeding area for resident and migratory shorebirds, but all of bay is used

- Ralphs Bay is on the Register of the National Estate
- Ralphs Bay is the most important site for resident shorebirds in Bruny Bioregion and a high priority site in Derwent - Pitt Water/Orielton Lagoon network for migratory species
- all inter-tidal areas in Ralphs Bay should be protected as foraging areas for resident and migratory shorebirds

Resident species



Hooded Plovers in Bruny Bioregion

- long-term population decreases at most beaches in Bruny Bioregion:
 - Marion Bay:
 - 62% decrease in numbers, 1982-2004
 - 44% decrease in territories, 1996-2004
 - decrease accelerating 1996 onwards
 - Adventure Bay: 100% loss, 1982-2004
 - Seven Mile Beach: 100% loss, 1982-2004
- preparing nominations of Hooded Plover to Threatened Species list for Tasmania and under EPBC Act



Protection for shorebirds

- conservation of inter-tidal zone in the Bruny Bioregion will protect foraging areas used by the shorebird community, both resident and migratory species
- highest priorities:
 - Ralphs Bay, including Pipe Clay Lagoon and South Arm Neck
 - Pitt Water/Orielton Lagoon (including Lower Pitt Water to Five Mile Beach)
 - Porpoise Hole (Blackman Bay) - will also protect terns' foraging area