### **Birds of the Mid Coast shorelines**

#### Alan Stuart Hunter Bird Observers Club



## What we will cover tonight

- The main locations
- The main birds
- Birds breeding on Mid-Coast shorelines
- Migratory shorebirds insights into their amazing journeys
- Threatened species
- How you can help



#### Shorebirds ... vs .... birds of the shoreline

Photos: Me, Trevor Murray, Dan Herbert, Alwyn Simple, Lois Wooding, Steve Merrett, Neil Fraser.

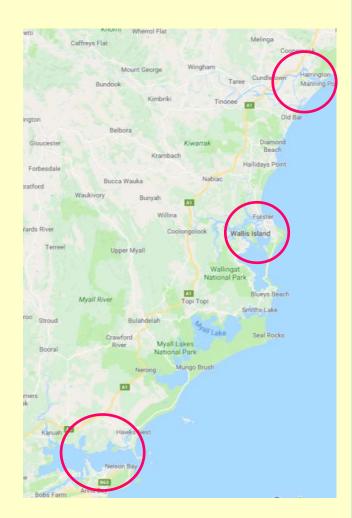
## Mid Coast shoreline birds

- Migratory waders ("shorebirds") & terns
  - >30 species
- "Endemic" waders, gulls & terns
  - >25 species
- Other
  - Birds of prey
  - Cormorants, Pelicans
  - Ravens, etc
  - ... save these for another time



## The main locations

- Manning estuary (1,500+)
  - 30 species recorded since 2008
- Port Stephens (1,500+)
  - 33 species recorded since 2004
- Forster-Tuncurry (300-500)
  - 13 species recorded 2010-15
- The beaches
  - An estimated 8-12 species
- Plus, Myall Lake
  - Important for waterbirds and some birds of prey
  - Shorebirds mainly are recorded in "Myall Lakes Ramsar site"



#### **Migratory Species**

- Eastern Curlew
  - ~1% of world population

     (= 300+ birds) visit Port
     Stephens every summer;
     many immature (non breeding)
     birds remain over winter
  - Port Stephens has been
     Internationally Significant



for Eastern Curlew ever since records are available (~100 years)

- 35-45 birds in the Manning Estuary in summer. Rare around Forster/Tuncurry.
- Critically Endangered under EPBC Act since 2015. Numbers in SE Australia have plummeted in recent years.

#### **Migratory Species**

#### Bar-tailed Godwit

- The most common shorebird in the Manning Estuary and Port Stephens
- Port Stephens is *Nationally Significant*
  - 500-800 birds (0.2-0.3% of world population) present in summer.
  - 100-300 immature birds in winter



- 150-200 birds in the Manning Estuary in summer and 20-30 birds around Forster/Tuncurry.
- Vulnerable under EPBC Act since 2016. Numbers have declined substantially in recent years.

- Pacific Golden Plover
  - 100-150 in the Manning Estuary in summer
    - A few immature birds sometimes
       over-winter
  - Uncommon in Port Stephens
  - Rare around Forster/Tuncurry



- Whimbrel
  - Port Stephens is *Nationally Significant*
    - 200-300 birds (0.2-0.3% of world population) each summer
  - 10-20 birds in the Manning Estuary sometimes in summer.
- Grey-tailed Tattler
  - Port Stephens is *Nationally Significant*
    - 100-125 birds (0.2-0.3% of world population) each summer,
    - Most important site in NSW for them
  - Uncommon elsewhere





- Double-banded Plover
  - Spend Feb-Sep in parts of the Mid Coast
    - Breed in the South Island of New Zealand
    - All the other migratory shorebirds come from northern Russia (esp. Siberia



- 50-100 birds regularly visit Old Bar (the lagoon and along Old Bar beach)
- 10-20 birds visit Harrington and similar numbers sometimes in Port Stephens (concentrated around Winda Woppa / Corrie Island)
- Beach surveys??

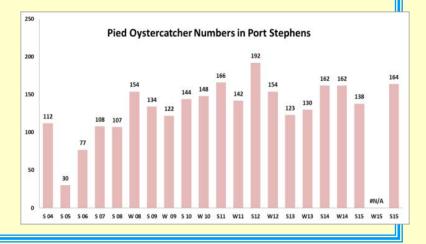
## Drab brown birds??



#### **Australian Endemic Species**

- Australian Pied Oystercatcher
  - Endangered in NSW
  - Port Stephens is a haven for adult birds waiting for an opportunity to have a breeding territory elsewhere in NSW
    - Surveys by HBOC/NPWS since 2004 find ~150 birds in summer & winter (30-40% of the NSW population)
    - Only recently birds confirmed to breed within Port Stephens
  - Port Stephens Internationally Significant for Pied Oystercatcher
  - 1-1.5% of the total population is present





#### **Australian Endemic Species**

#### • Aust. Pied Oystercatcher

- 6-8 pairs breed in the Manning Estuary (it was 15-20 pairs)
- Occasional autumnal influxes of larger flocks (20-40 birds) to Harrington and Forster/Tuncurry
- How many of them occur along beaches between Port Stephens and Old Bar??
  - Lack of data (surveys are very infrequent and/or only partial)
  - Numbers have been rising rapidly along Newcastle Bight





#### **Australian Endemic Species**

- Sooty Oystercatcher
  - Classified as Vulnerable in NSW
  - Nests on rocky headlands, off-shore islands
  - Numbers in Port Stephens have been rising in recent years
    - Now 35-50+ birds (0-3-0.5% of the total population)
  - Port Stephens is therefore
     *Nationally Significant* for the Sooty Oystercatcher
  - 2-5+ birds are sometimes in Manning Estuary and Forster/ Tuncurry



Pair of Sooty Oystercatchers



Sooty Oystercatcher about to land

#### **Australian Endemic Species**

#### Red-capped Plover

- Australia's smallest endemic shorebird
- A prolific breeder, but eggs/chicks suffer from predation & disturbance
- Now uncommon in Port Stephens
  - 10-20 birds in summer, mainly around Winda Woppa / Corrie Island



- Small/medium sized shorebird numbers have declined in Port Stephens since the 1980s (50-60 birds were recorded then)
- 20-50 birds in the Manning Estuary and several breeding pairs
- Probably also present along most beaches between Port Stephens and Old Bar

#### **Australian Endemic Species**

#### Beach Stone-curlew

- Classified as Critically Endangered in NSW (officially: 13 birds)
- Nests in dunes/clearings behind beaches, raising 1 young each year
- Severely impacted by predation
   (e.g. foxes) & disturbance on beaches
- A pair established at Old Bar in late 1990s



Beach Stone-Curlew family

- Southernmost in Australia. Breeding success from 2002 onwards
- A new pair established at Soldiers Point / Dowardee Island in 2010
  - Have bred in each subsequent season, successfully raising a chick every year
  - This is now the southernmost breeding pair in NSW
- Nest with egg found on Corrie Island in October 2017
  - Another new pair?? Fate unknown.

# The importance of the Mid Coast for shorebirds

	NSW Estuary	Total	Migratory	Endemic	
	Hunter	2695	2284	411	
<	Port Stephens	1811	1624	187	
	Richmond	953	941	12	
	Botany Bay	870	801	69	
	Clarence	786	772	14	
	Shoalhaven	772	736	36	
<	Manning	722	670	52	

- January 2010 data (the latest available full set)
- All other NSW estuaries had fewer than ~500 shorebirds

- Little Tern
  - Endangered in NSW
    - There are many threats to their
    - breeding success
  - 400+ birds in the Manning Estuary in summer
    - 50-100+ pairs attempt to breed
    - Formerly there was a Manning Point colony
  - A new colony established at Winda Woppa in 2016
    - 200+ birds present in early 2018
    - Breeding colony is growing (now ~30 pairs)
  - Formerly bred near Forster



- Common Tern
  - 400+ birds in the Manning Estuary in summer
  - Occasional in Port Stephens
  - Possibly present along the beaches between Port Stephens and Old Bar





- White-fronted Tern
  - Small numbers in Manning Estuary June-August. Rare elsewhere
- Aleutian Tern



- 15-18 birds have been at Old Bar since mid December.
- First ever reports for Australia (but probably some were present in late 2016)
- Is this the start of something .... or just an fluke?



#### Australian Endemic Species

#### Silver Gull

- Common, widespread
- Numbers usually are not high – but they are everywhere

#### Crested Tern

- Common, widespread
- Sometimes 500+ in Manning Estuary but numbers vary considerably
- Sometimes 100-200 at Forster/Tuncurry and in Port Stephens





#### Australian Endemic Species

- Caspian Tern
  - Widespread, in small numbers
  - Immature birds often present

#### • Aust. Gull-billed Tern

- In small numbers in the Manning Estuary
- Uncommon elsewhere
- Immature birds often present





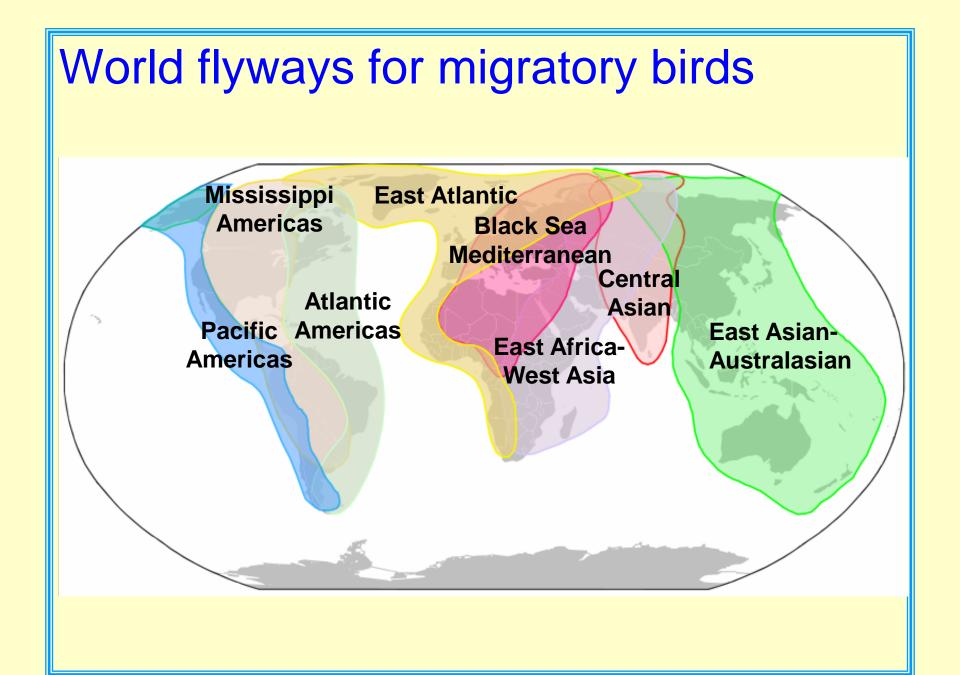
## **Breeding Mid Coast birds**

- Australian Pied Oystercatcher
- Beach Stone-curlew
- Red-capped Plover
- Little Tern
- Crested Tern
- Silver Gull?







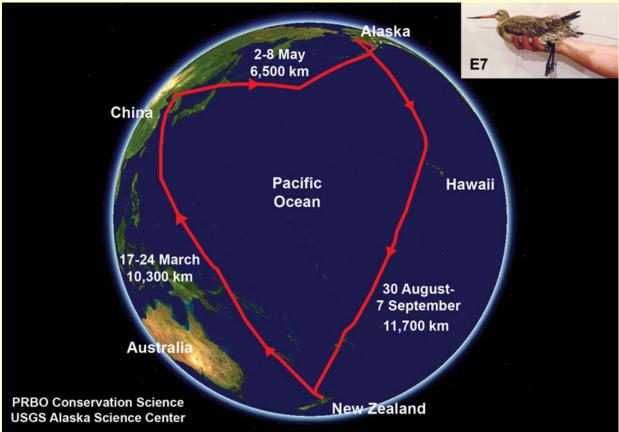


## East Asian - Australasian Flyway



Shorebirds breed in Siberia, North China and Alaska in June and Julv Stopover at staging sites in Yellow Sea Migrate south to Australia & New Zealand

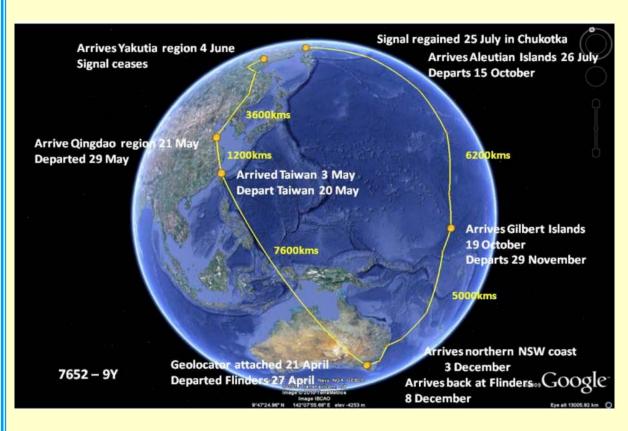
## Bar-tailed Godwit satellite tracking



- In 2007 NZ scientists fitted 16 Bar-tailed Godwits with satellite transmitters
- Birds flew non-stop to Yellow Sea, then non-stop to Alaska
- One godwit E7 flew non-stop 11,700 kilometres from Alaska to NZ in 9 days
- Total round-trip 30,000km! (for a 250-350g bird!)

## Smaller geolocators, smaller birds...

- Since 2008, geolocator studies are being progressed to smaller shorebirds
  - Whimbrel, Ruddy Turnstone, Greater Sand Plover, Grey-tailed Tattlers ....



- Geo-locators were fitted to Ruddy Turnstones in southern Australia
- Birds flew non-stop to Taiwan, then on to their breeding grounds in 2 further stages
- Return via Gilbert Islands
- This bird weighs just 100-130g!

## Conclusions

- 55-60 shoreline species are present locally
  - ~30 migratory waders and terns
  - ~25 Australian endemics
- Total numbers in summer are >4,000 birds
- Manning Estuary and Port Stephens are the main sites
- The beaches between Port Stephens and Old Bar are undersurveyed
- 5 (perhaps 6) species breed locally in our estuaries and beaches
- Breeding species have a difficult time of it
  - Predation, disturbance, weather & tide events
- Six of our common/regular visiting species are classified as threatened in NSW/Australia
  - As are several of the less common species

## What you can do to help

- Learn where birds prefer to be and help protect those areas from disturbance
- Keep records, count numbers present, monitor the trends
  - Submit details to the national database
- Join a local bird club
- Join BirdLife Australia (national body: knowledge and advocacy)
- Get involved









birds are in our nature