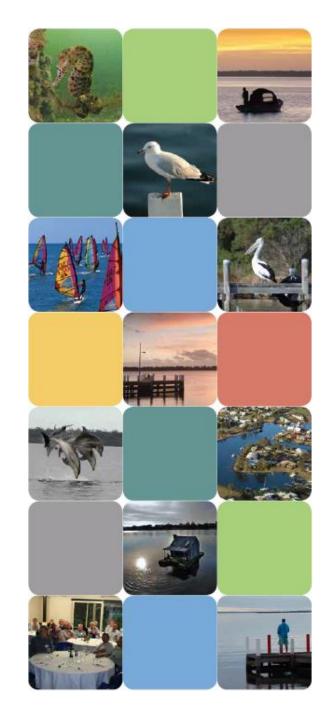


MONITORING DIVERSITY AND ABUNDANCE OF WETLAND BIRDS

Chris Healey President, BirdLife East Gippsland











GIPPSLAND LAKES IMPORTANT BIRD AREA

Ramsar site & Important Bird Area (GLIBA)

Recognised under international protocols

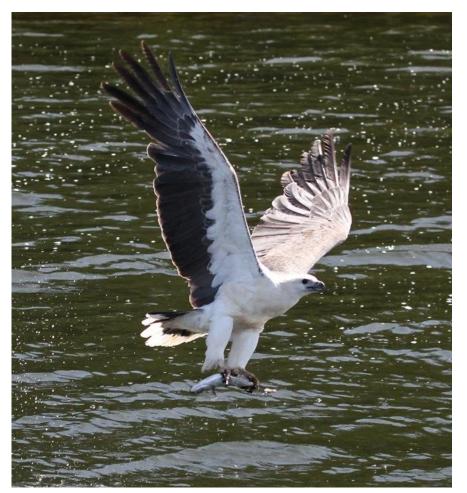
1% of global population of:

- ➤ Black Swan
- > Chestnut Teal
- > Musk Duck
- ➤ Little Tern

Refuge area for many other wetland species, including:

vulnerable, threatened and endangered species;

migratory waders



White-bellied Sea Eagle – a wetland-dependent top order predator. Photo: John Hutchison





WHY MONITOR WETLAND BIRDS?

Birds are top-order organisms in wetland food chains – therefore good indicators of ecosystem health

Large, highly visible, easily identified

Baseline data available from surveys over several decades by BirdLife East Gippsland, other organisations and many individuals

This presentation based on information from BirdLife Australia's **Atlas of Australian Birds** database



International migrants from northern hemisphere: Curlew Sandpipers. Photo: Ken Sherring





Atlas data for GLIBA

- > 1987-2012 (26 years)
- > Almost 2000 individual surveys
- > 500+ survey sites



The endangered Freckled Duck. Photo: Leah Beekman





HOW MANY WETLAND BIRDS?

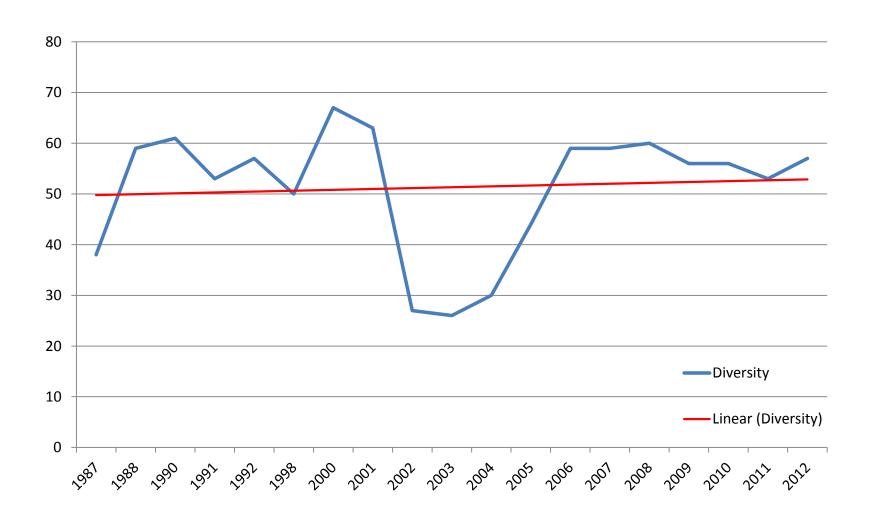
Species diversity varies

92 species recorded over 26 years of Atlas surveys



Royal Spoonbill and Chestnut Teal.
Photo: John Hutchison

Annual species diversity in GLIBA – wetland birds







ABUNDANCE

Calculated as **Annual Reporting Rate** for each species

i.e. how frequently a species is recorded each year (as %age)

For this analysis:

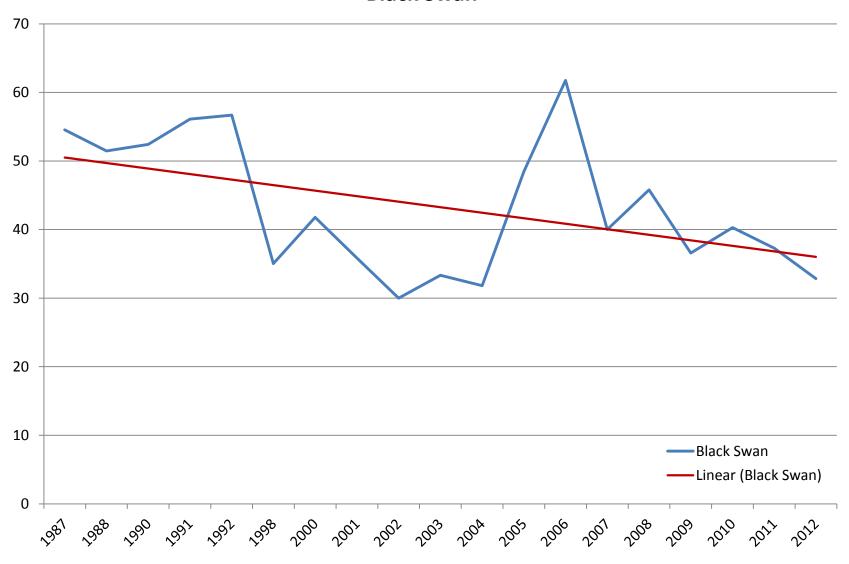
confined to **Top 10** most frequently recorded species – as follows:



Cape Barren Goose -- a rare visitor to GLIBA. Photo: Chris Healey

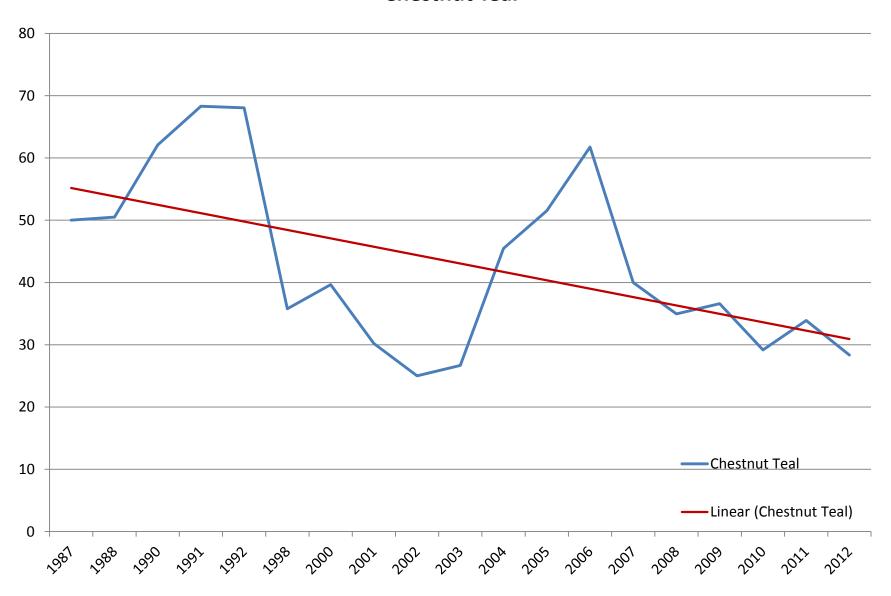


Black Swan



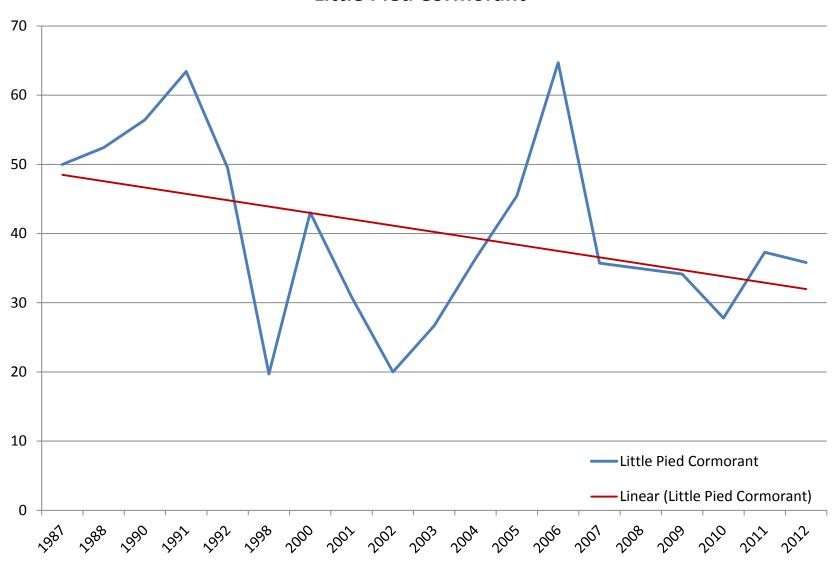


Chestnut Teal



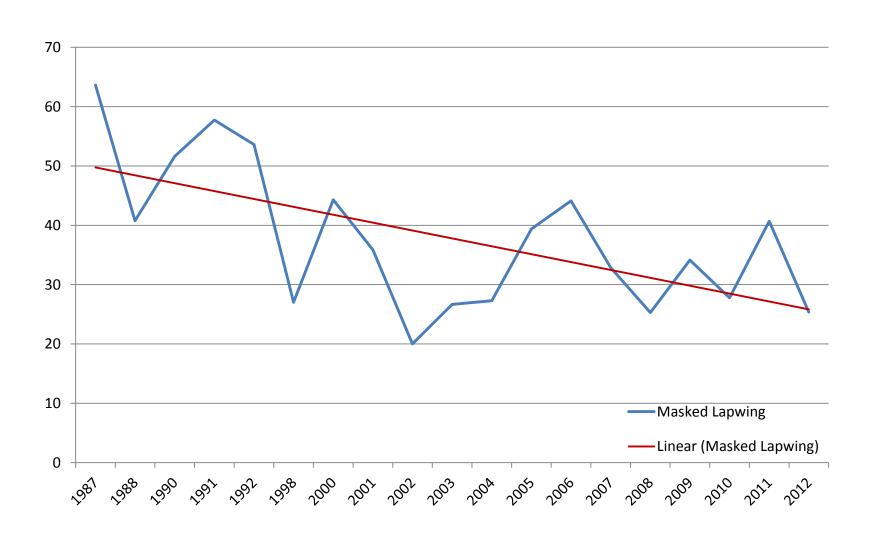


Little Pied Cormorant



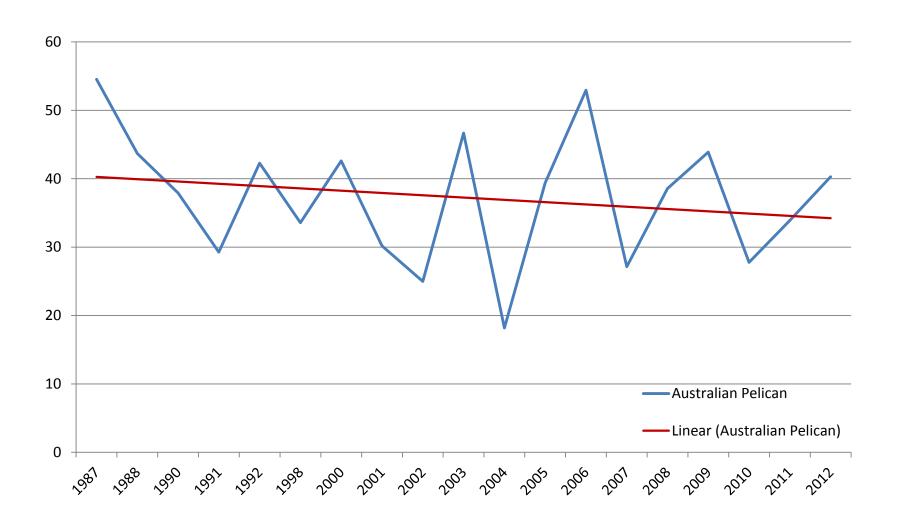


Masked Lapwing



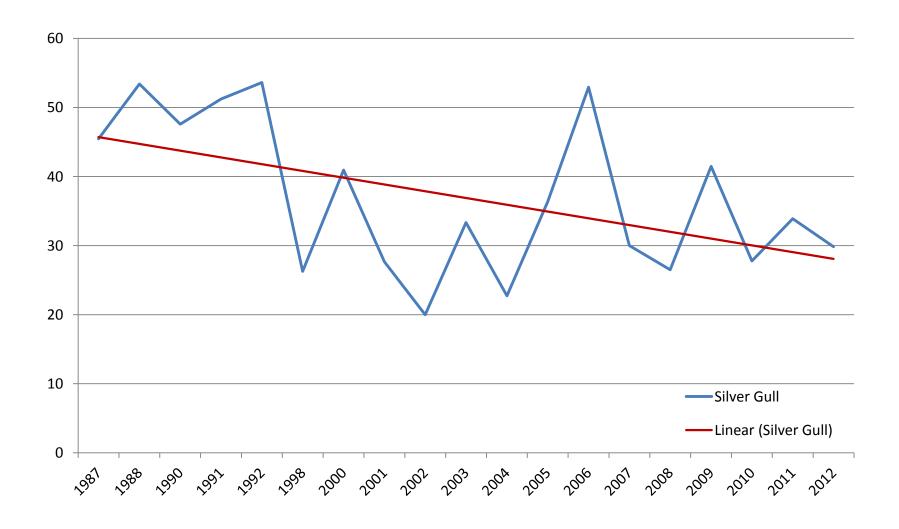


Australian Pelican



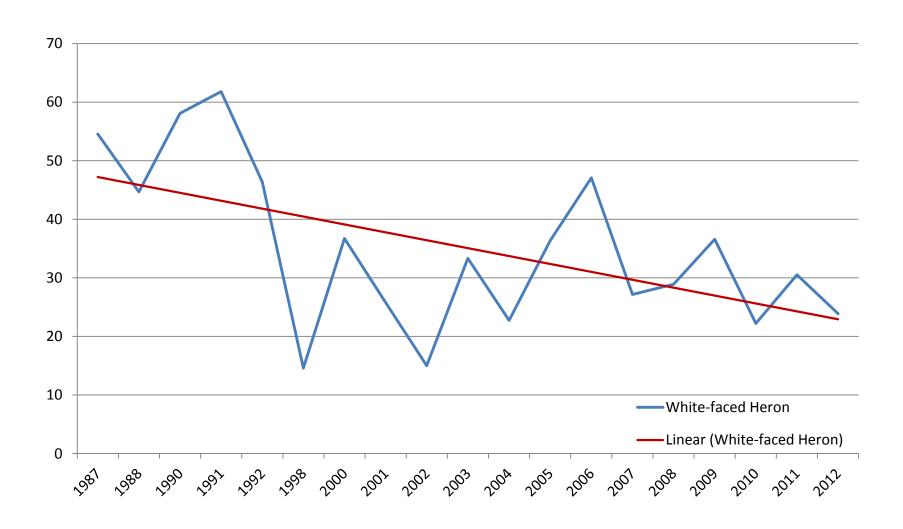


Silver Gull





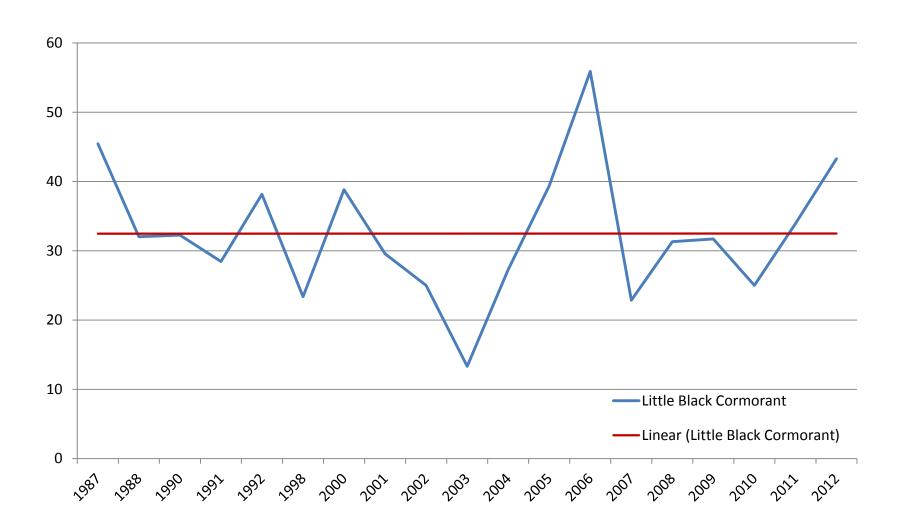
White-faced Heron



Little Black Cormorant Photo Chris Healey

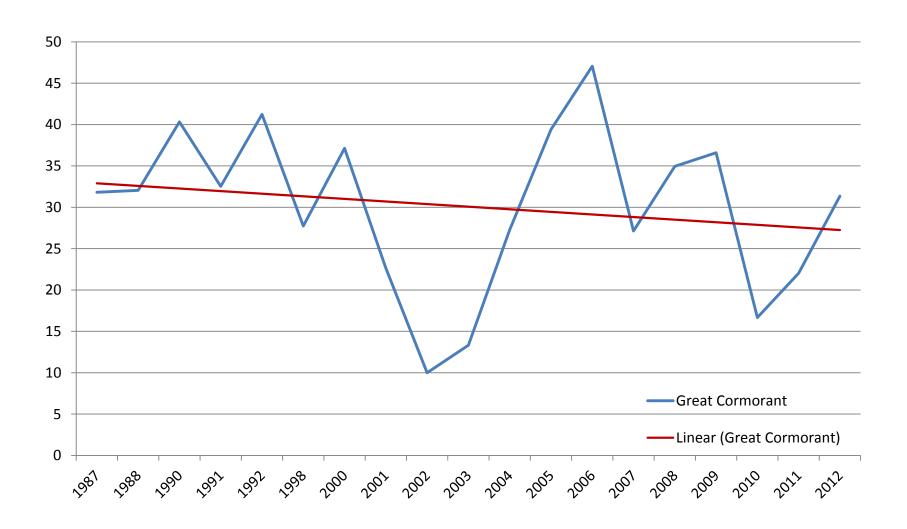


Little Black Cormorant



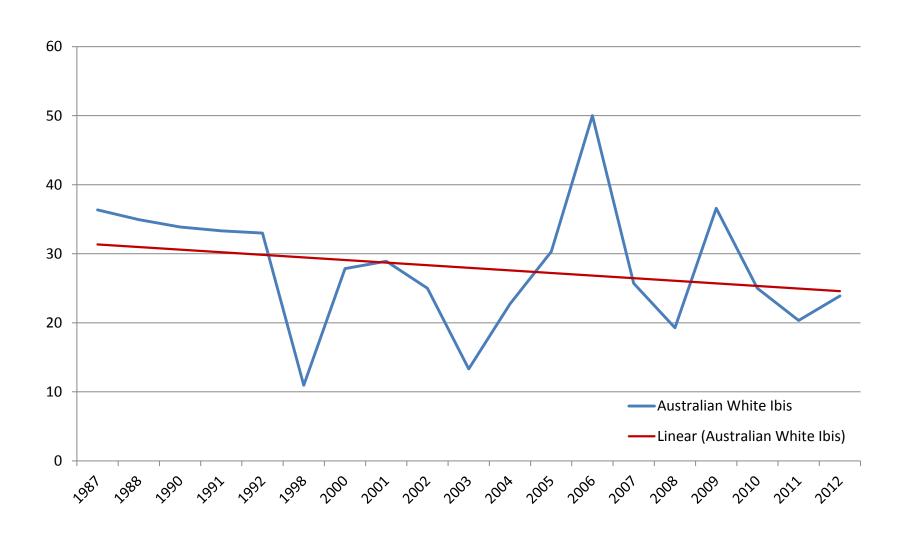


Great Cormorant



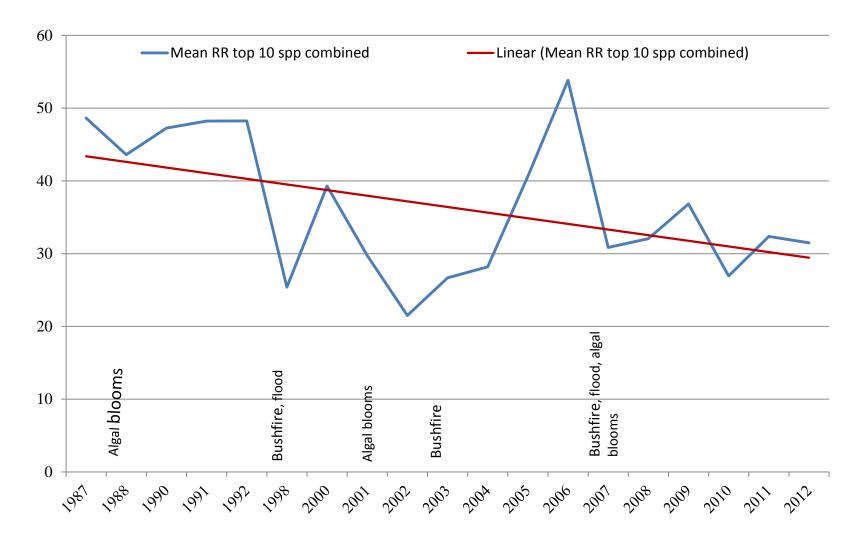


Australian White Ibis





Mean RR top 10 spp combined







THE MESSAGE OF THESE GRAPHS?

The most common, widespread & numerous waterbirds in GLIBA are **all in decline** (except Little Black Cormorant)

Similar situation for many other species – though some are increasing (e.g. Black Duck)

Major troughs in Reporting Rates coincide with 'notable ecological events' within GLIBA

Peak Report Rate in 2006 may be associated with progressive drought across SE Australia – GLIBA a refuge for birds as inland waters dry up

Highlight the importance of **long term** records to pick up trends





BIRDLIFE EAST GIPPSLAND GLIBA PROJECT

surveys every 6 months of wetland birds

Standard 20-minute surveys at 17 sites

Data to BirdLife Australia Atlas Project and national 'Shorebird 2020' project

Long-term project

NEW MEMBERS AND GUEST PARTICIPANTS WELCOMED!



BirdLife East Gippsland members try out new spotting scopes at Jones Bay

Contact: eastgippsland@birdlife.org.au

Mobile: 0404 983 383