

# Monitoring waterbirds in the Coorong & Lower Lakes

winners and losers

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barrages



## Murray Mouth & Coorong

Listed as a Wetland  
of International  
Importance in 1985

## Prominent shorebirds of the Coorong ranked in the top ten sites in Australia

Species	Rank	Max # (in 1980's)
Pied Oystercatcher	2	630
Pacific Golden Plover	6	290
Red-capped Plover	3	5,700
Black-winged Stilt	3	990
Banded Stilt	1	77,000
Red-necked Avocet	3	5,400
Greenshank	4	720
Sharp-tailed Sandpiper	1	55,700
Red-necked Stint	1	63,800
Curlew Sandpiper	2	40,000
Sanderling	2	930





Red-necked Stints



Red-necked Stint



Sharp-tailed Sandpiper



Red-capped Plover





Grey Teal



Black Swan



Banded Stilt



Red-necked Avocet



Australian Pelican



Fairy Tern



Great Crested & Hoary-headed Grebes



Fairy Tern

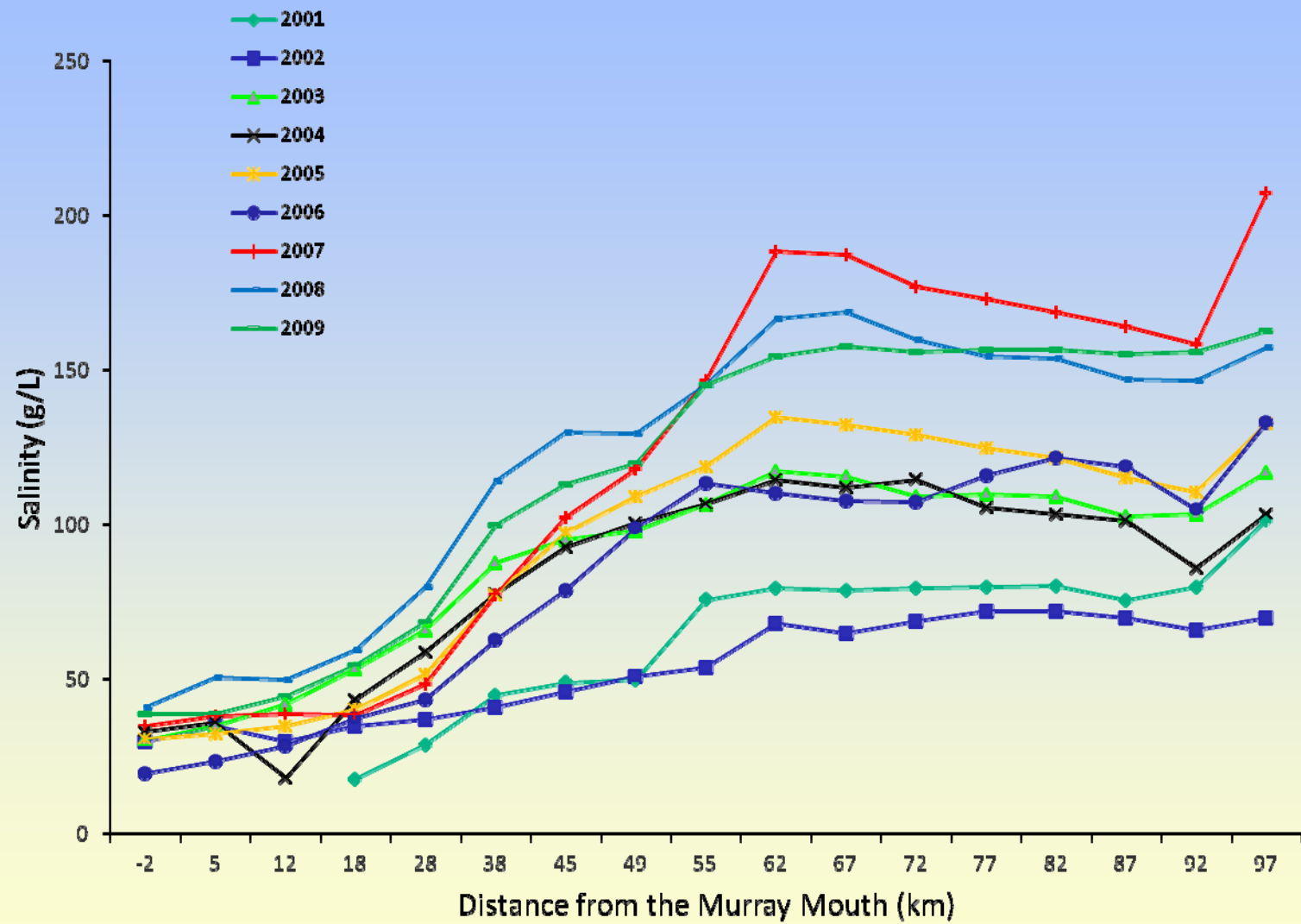


# Counts of small waders in Murray Estuary



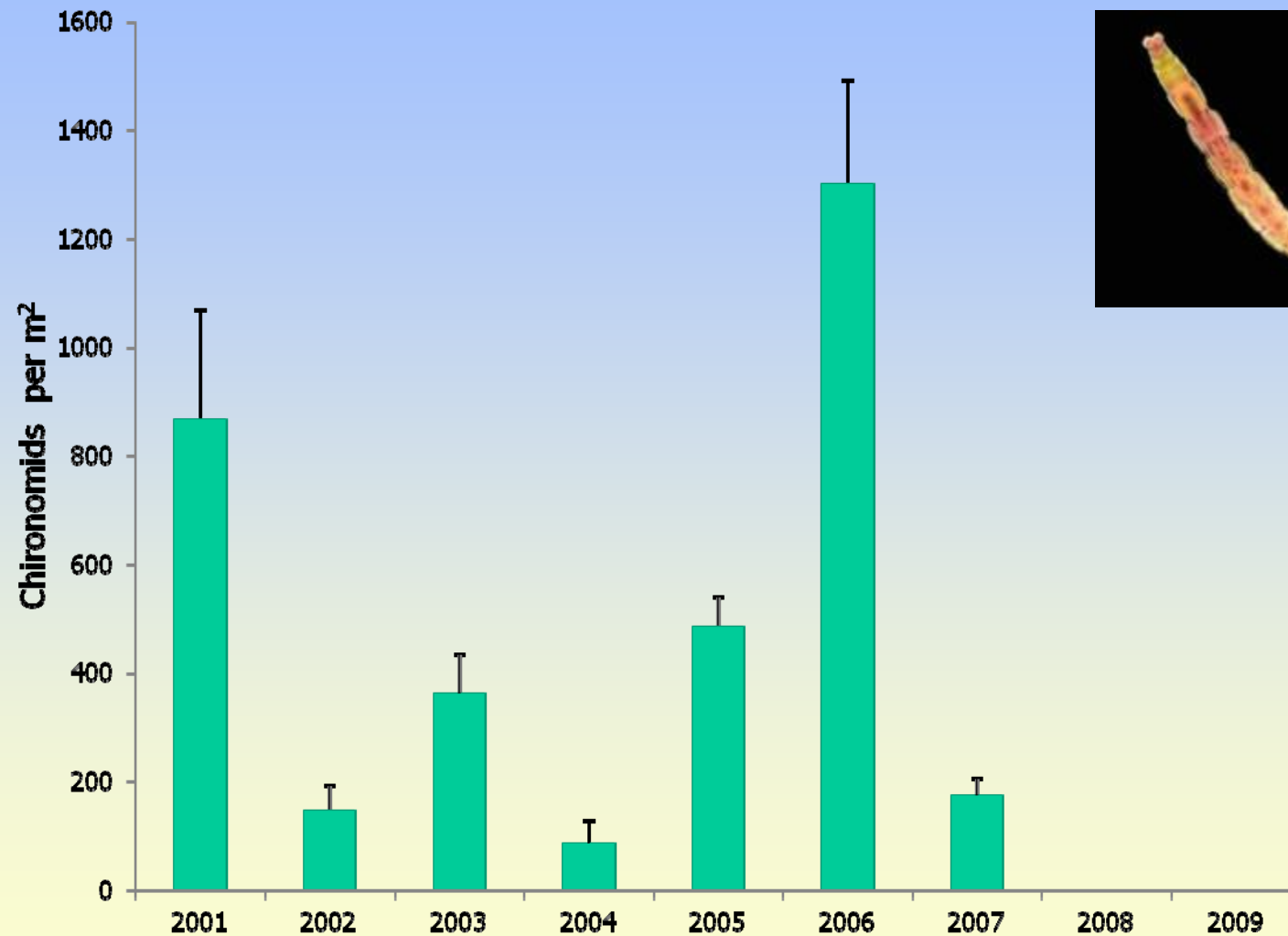
Years	# small waders
1960's	250,000
1980's	23,000 – 36,000
1990's	5,000 – 15,000
2000's	3,300 – 26,000
2010's	<1,000

## January salinities

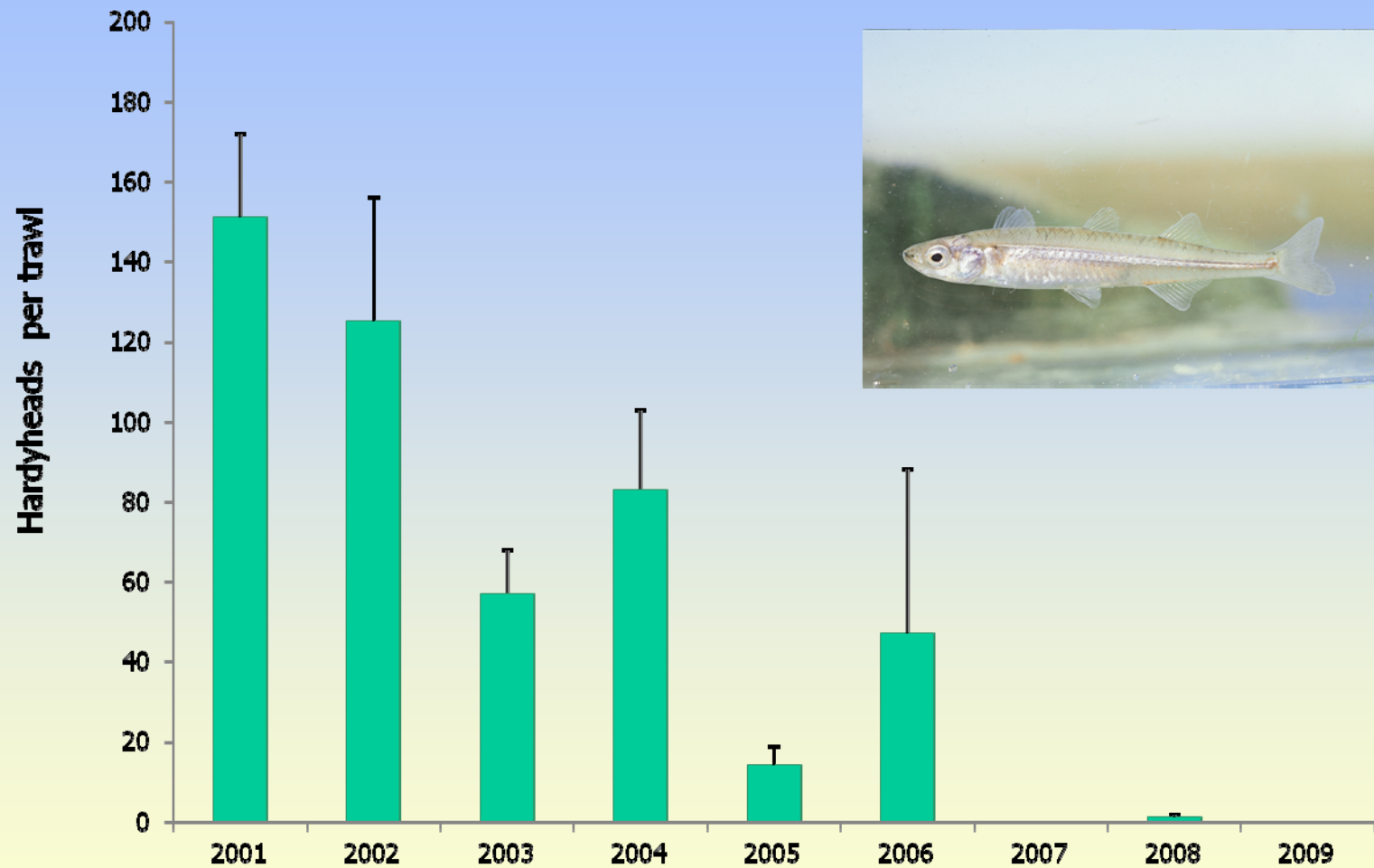




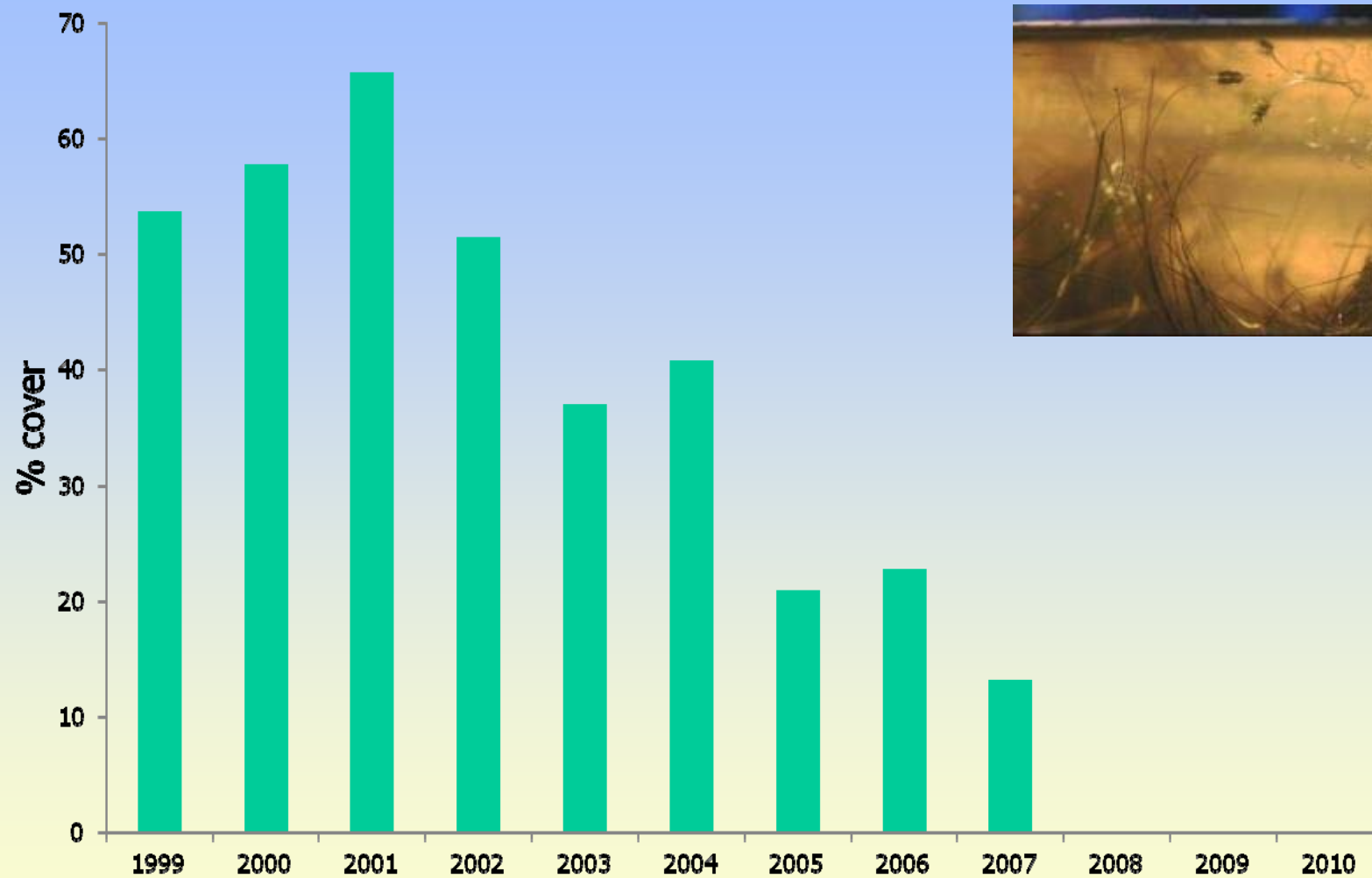
## Chironomids in South Lagoon



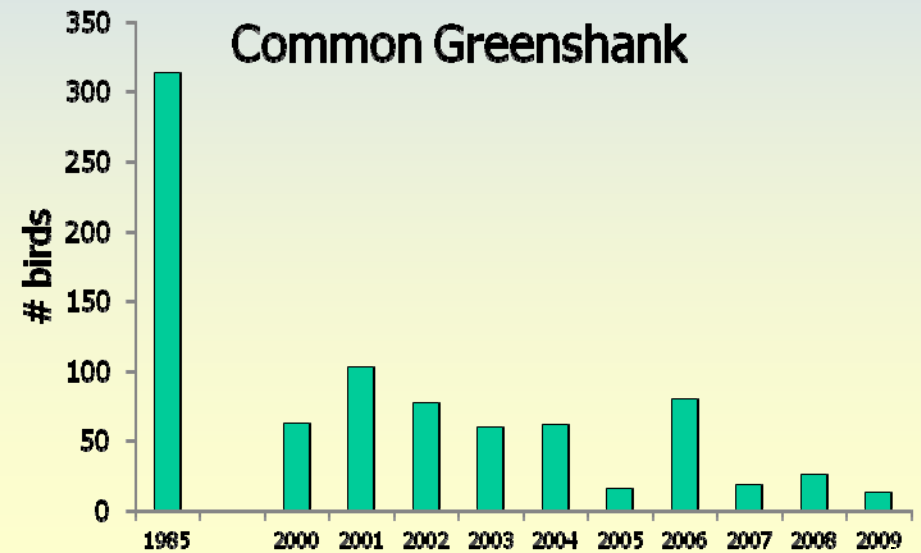
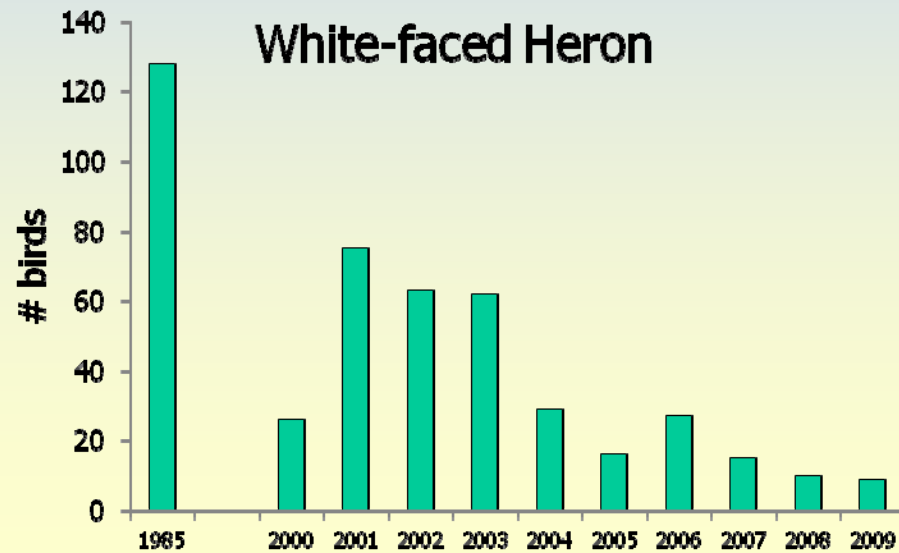
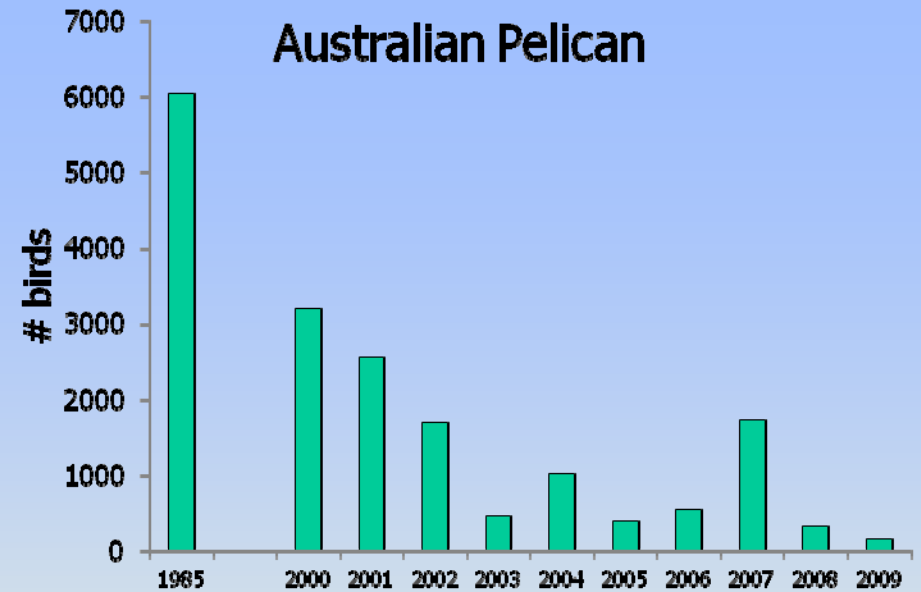
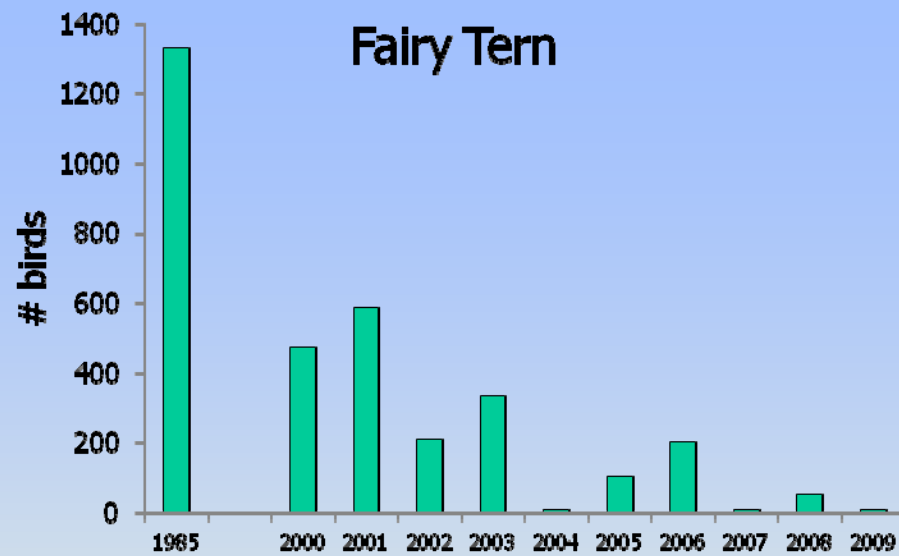
## Hardyhead fish in South Lagoon



### *Ruppia tuberosa* in the South Lagoon







## Fairy Terns – statistics

SE Aust population 2,580

~1,500 in Coorong in 1980-90

~ 700 in Coorong in 2000-01

~ 350 in Coorong in 2009

~ 200 in Coorong in 2011

- Oldest bird known (14-15 yrs)
- Can breed at 2 yr of age

No successful breeding for 2007 - 2011

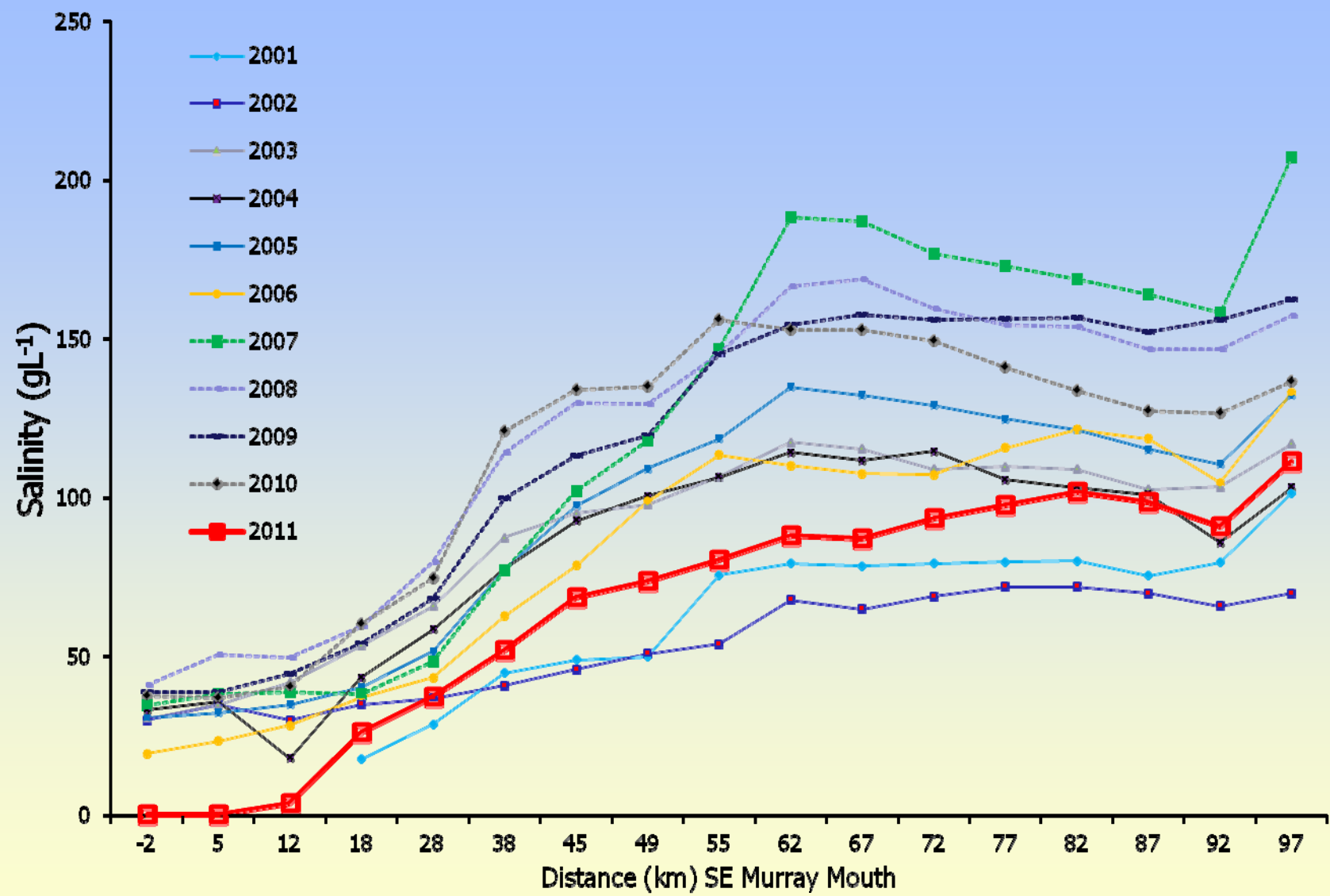
Low annual success for last decade (<5% young)

Population likely to contain mainly old birds

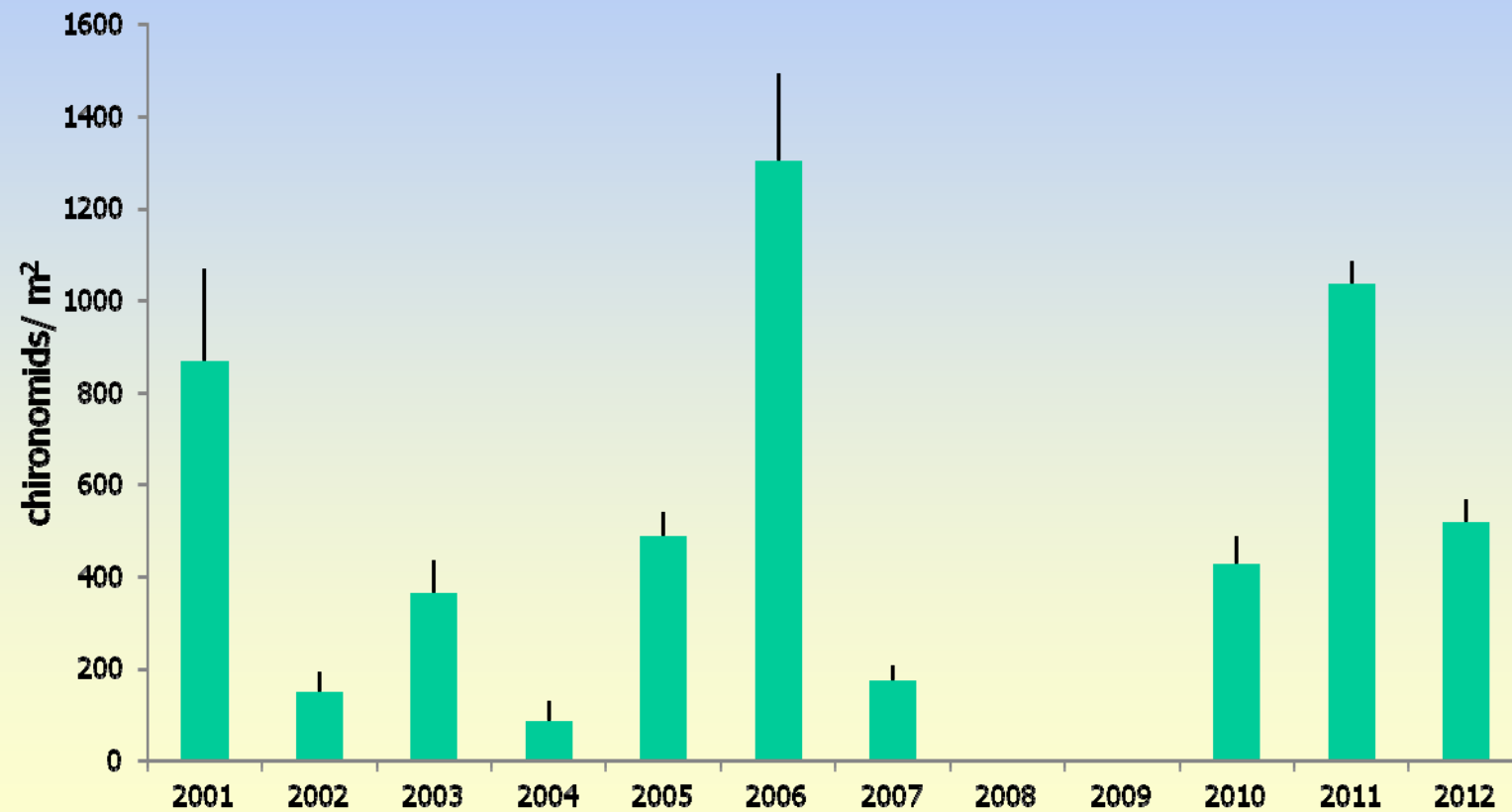


Have bird populations recovered following the return  
of flows?



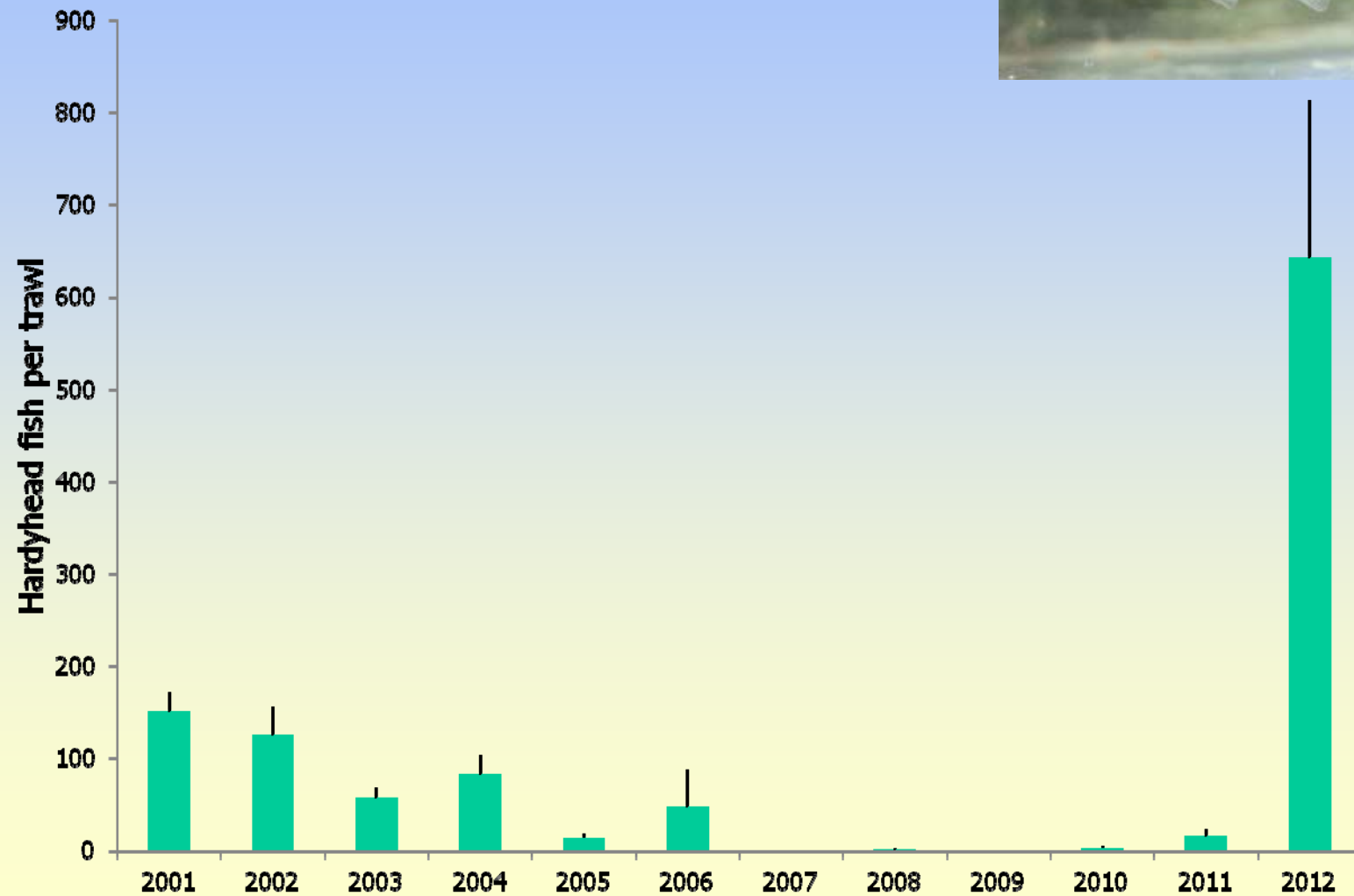


## Chironomids in the South Lagoon



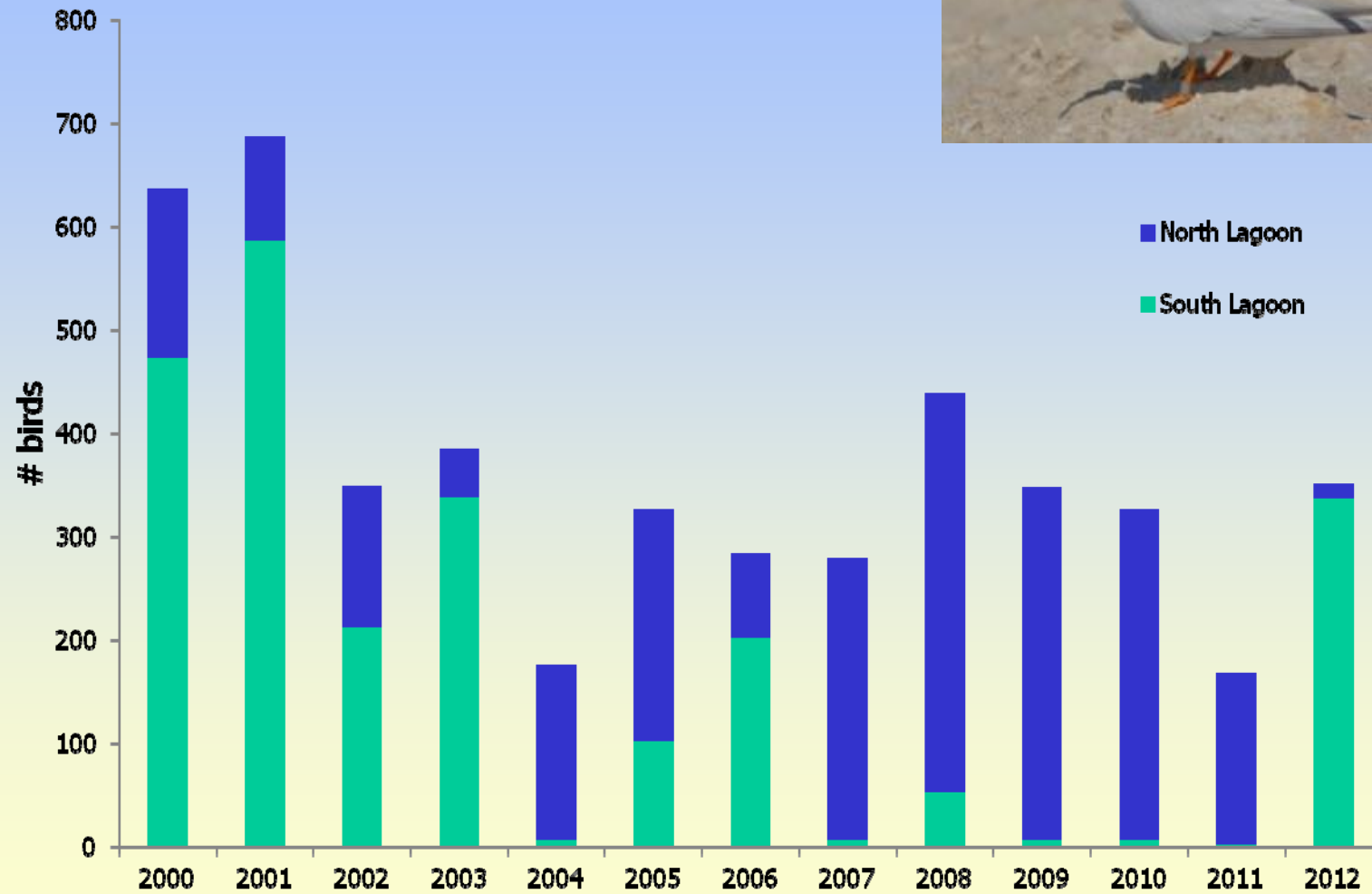
# Hardyhead fish in the South Lagoon

1 year lag

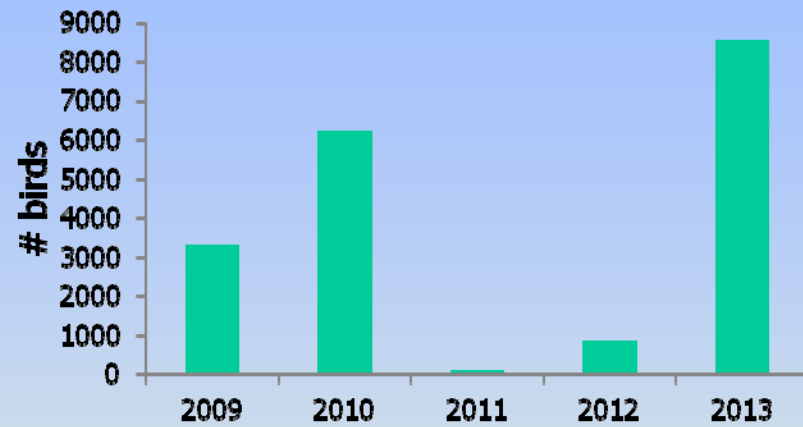




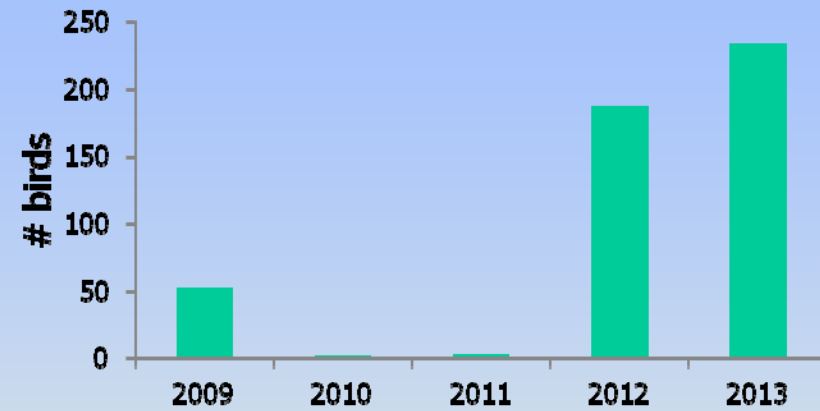
## Fairy Terns in Coorong



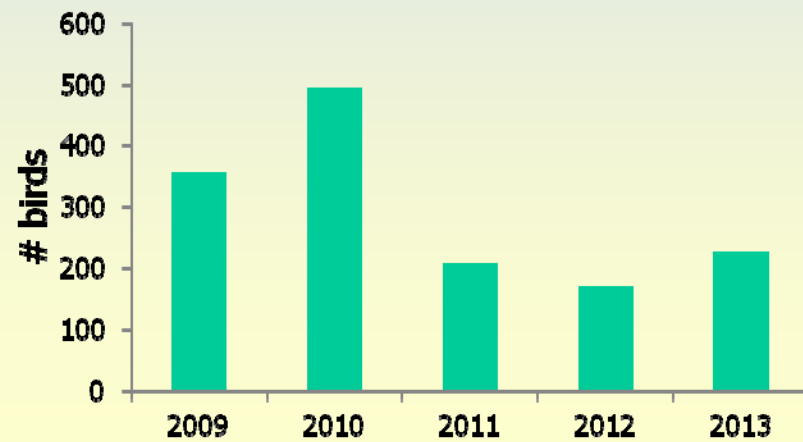
**Sandpipers -estuary only**



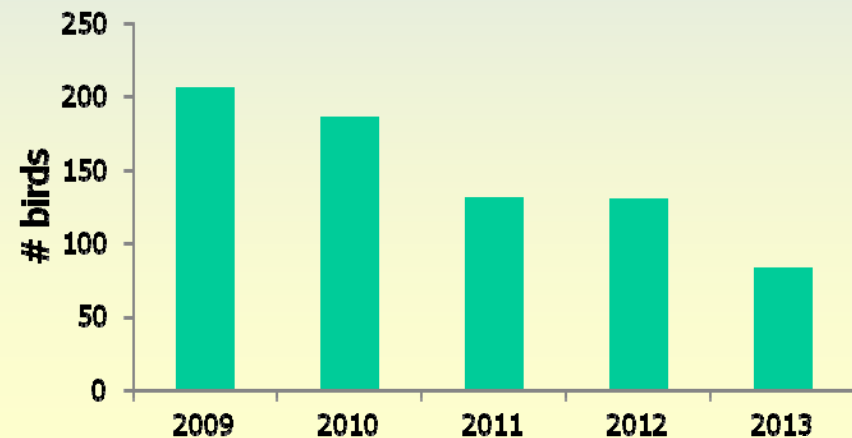
**Great Egret**

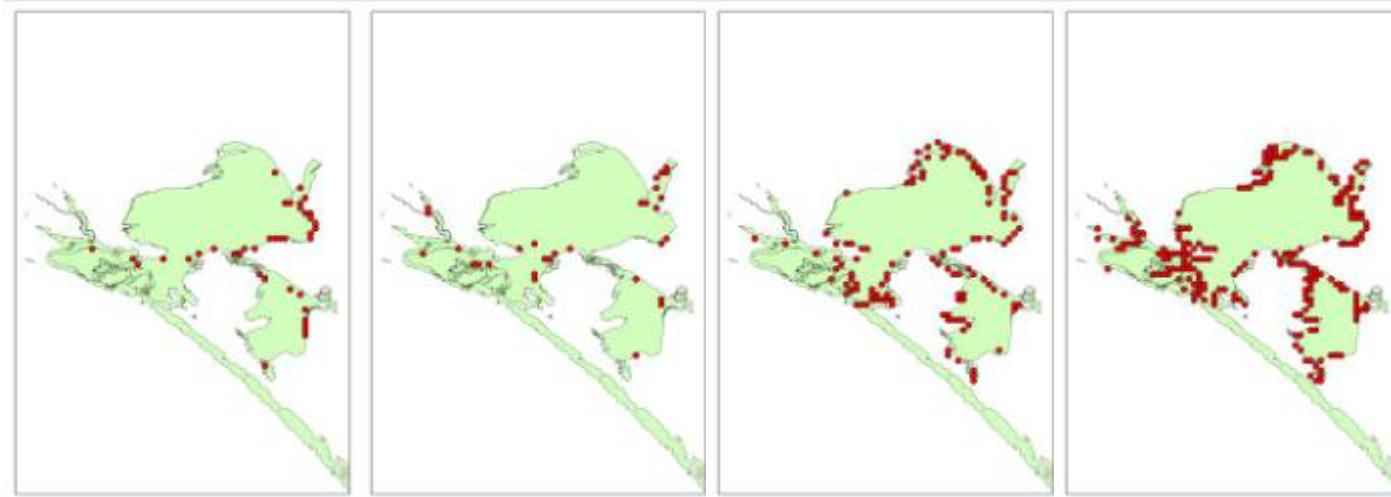


**Greenshank**



**Pied Oystercatcher**





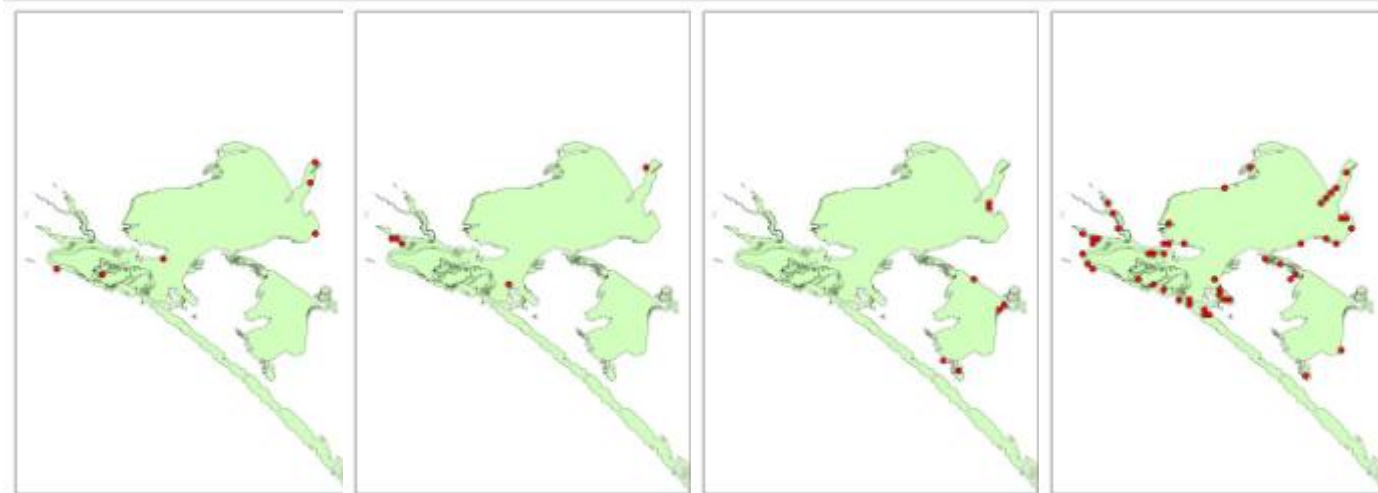
2009

2010

2011

2012

## Pied Cormorant



2009

2010

2011

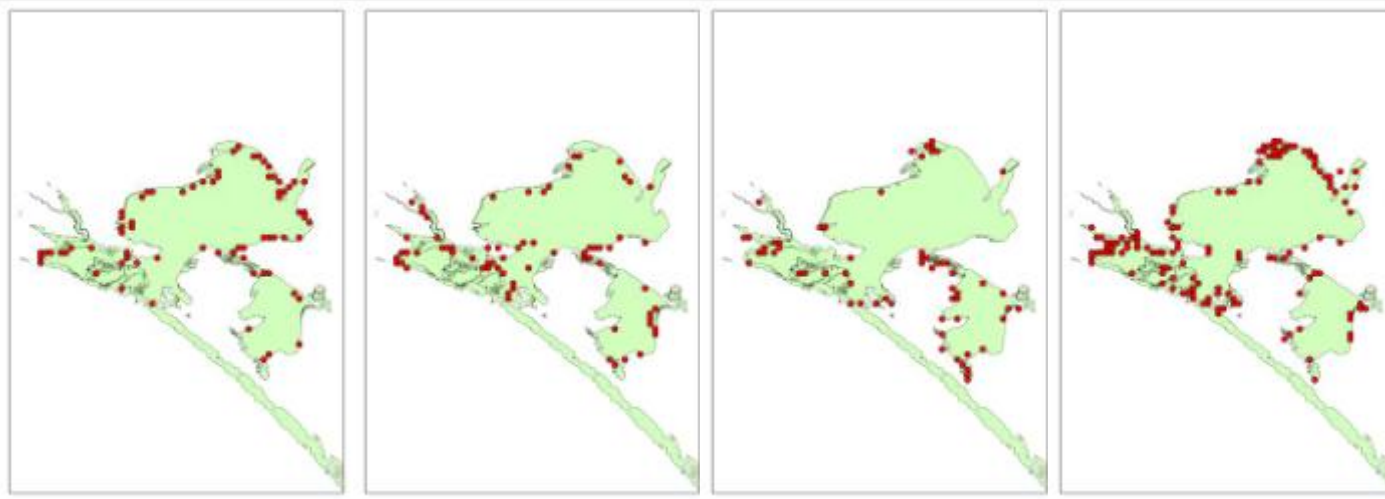
2012

## Great Crested Grebe





## Caspian Tern



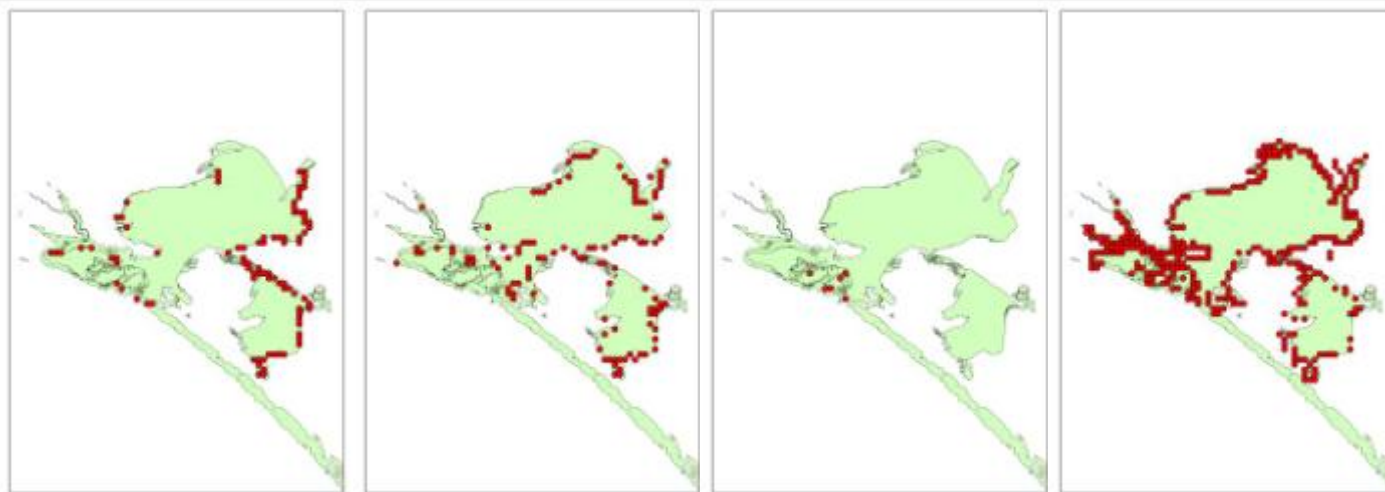
2009

2010

2011

2012

## Whiskered Tern

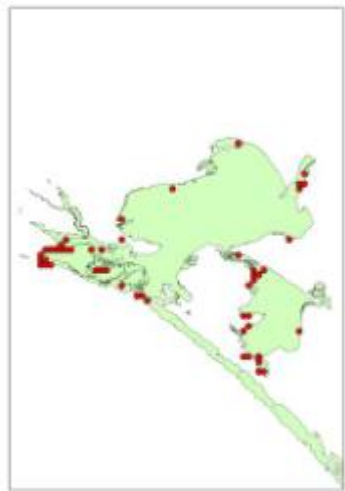


2009

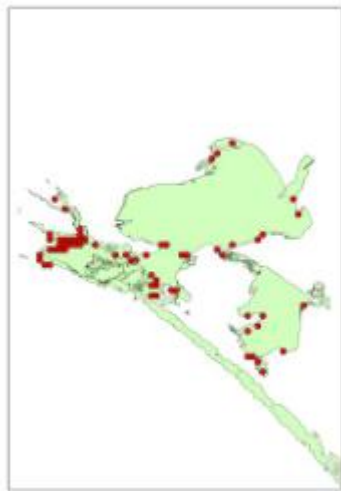
2010

2011

2012



2009



2010

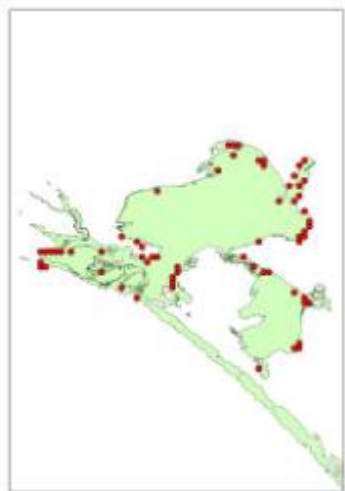


2011



2012

## Black Swan



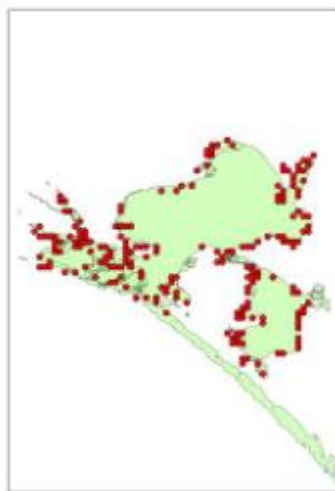
2009



2010



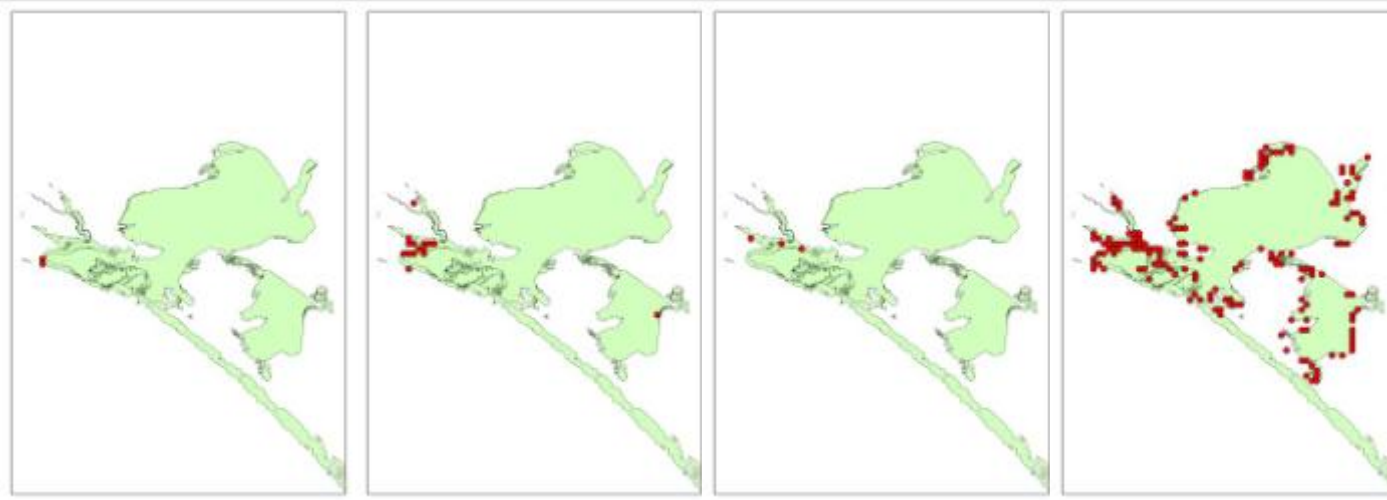
2011



2012

## Pacific Black Duck





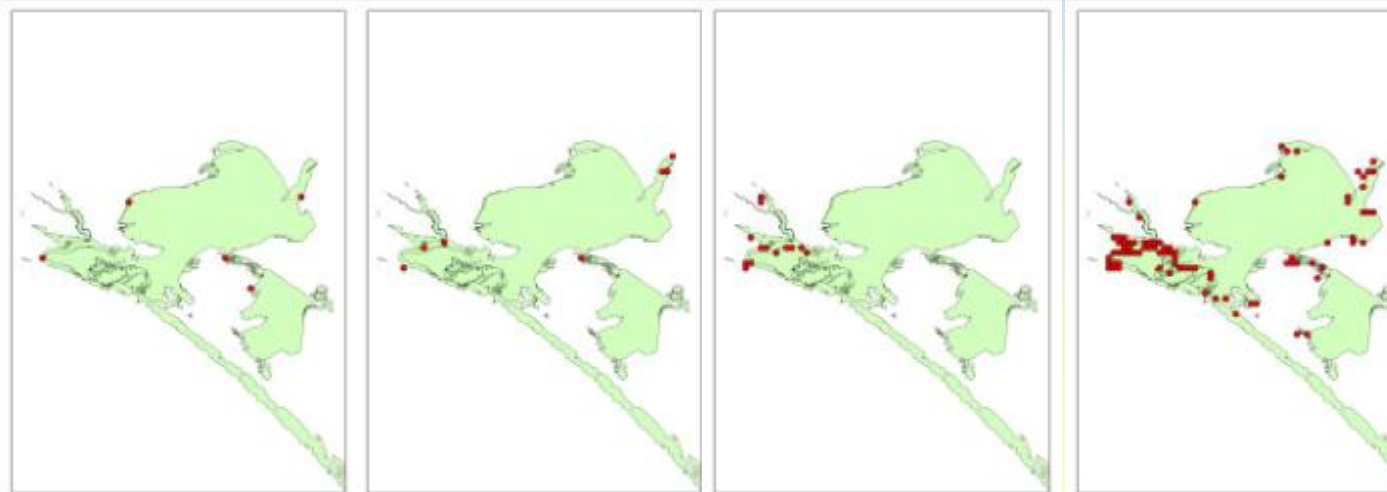
2009

2010

2011

2012

## Eurasian Coot



2009

2010

2011

2012

## Purple Swamphen





