

*Conserving birds in braided rivers:*

introduction,  
current and future  
challenges

JE Dowding



# Braided rivers

A rare habitat worldwide

Good examples in NZ

Most in the South Island

A highly dynamic habitat

Challenging habitat for birds



# Groups of birds in braided rivers

- Waterfowl
- Shags
- Shorebirds
- Gulls and terns
- Passerines

But which species are most highly dependent on braided rivers?

They are the species of most concern



# Braided river specialists

- Black stilt



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- Banded dotterel



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- Wrybill



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- Black stilt
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- Black-billed gull

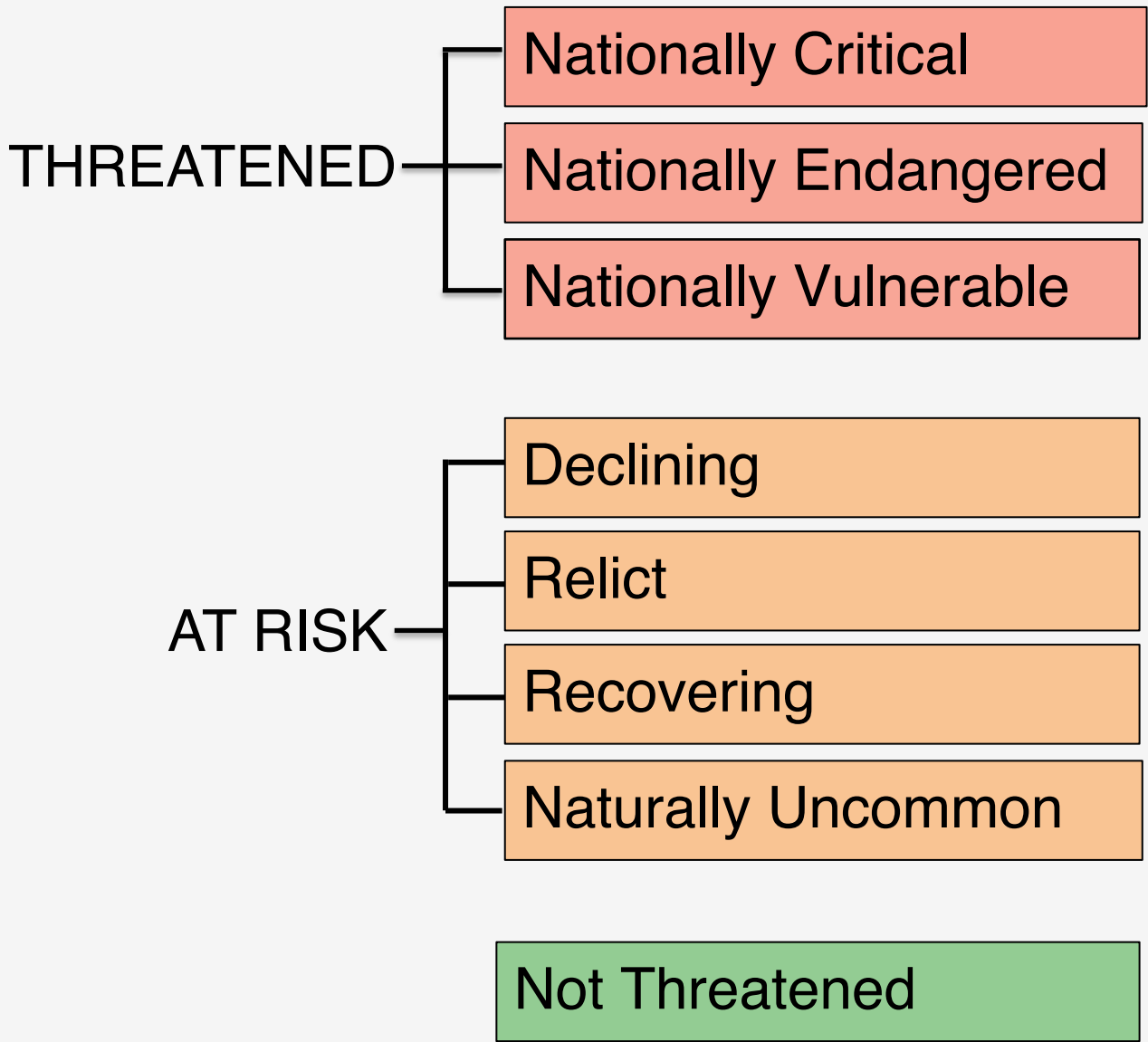


# Braided river specialists

- Black stilt
- Banded dotterel
- Wrybill
- Black-billed gull
- Black-fronted tern







# New Zealand Threat Ranking Scheme

Where do the five highly dependent species fit in the scheme?

THREATENED

Nationally Critical

Nationally Endangered

Nationally Vulnerable

Black stilt  
Black-billed gull

Black-fronted tern

Banded dotterel  
Wrybill

AT RISK

Declining

Relict

Recovering

Naturally Uncommon

All are Threatened  
All are endemic  
All are taonga

What are the threats?

Not Threatened

# Threats to braided river birds

- Natural processes (mainly floods, droughts)

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- Natural processes
- Threats resulting from human activities
  - predation by introduced mammals
  - predation by native birds (now more numerous)
  - loss of habitat (hydro-electric schemes, drainage)
  - modification of habitat (gravel/water abstraction, flood control works)
  - weed growth
  - disturbance (commercial and recreational activities)

- Threats interact
- Relative importance of threats not clear
- Threats vary spatially and temporally
- Threats to river birds outside riverbeds
  - most birds of concern leave rivers for the winter



# Short-term challenges

- Predator control
  - not always effective, need to determine why
  - improve current strategies, develop new techniques
- Monitor/evaluate appropriately (control sites, adult survival)
- Innovative management techniques
- Awareness of temporal and spatial differences
  - every river/section is unique
  - one prescription will not work everywhere/at all times

# Longer-term challenges



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- Realistic, long-term resourcing
- Raise awareness among the public and the decision-makers
  - education system (emphasis on parlous state of NZ biodiversity)
  - think in appropriate time-scales (decades/centuries)
  - need to communicate more effectively





*Every single day...*

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  - including associated wetlands (notably spring creeks, estuaries)



Estuaries provide vital feeding areas, wintering areas, flood refuges, and migration stop-over sites for braided river birds

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- Climate change

# Likely impacts of climate change on braided rivers

- West Coast/main divide
  - higher rainfall, more severe weather events (more floods)
- Eastern areas
  - drought (lower flows)
- Estuaries
  - sea-level rise (loss of inter-tidal feeding, wintering areas & flood refuges)



All likely to have negative impacts on braided river birds