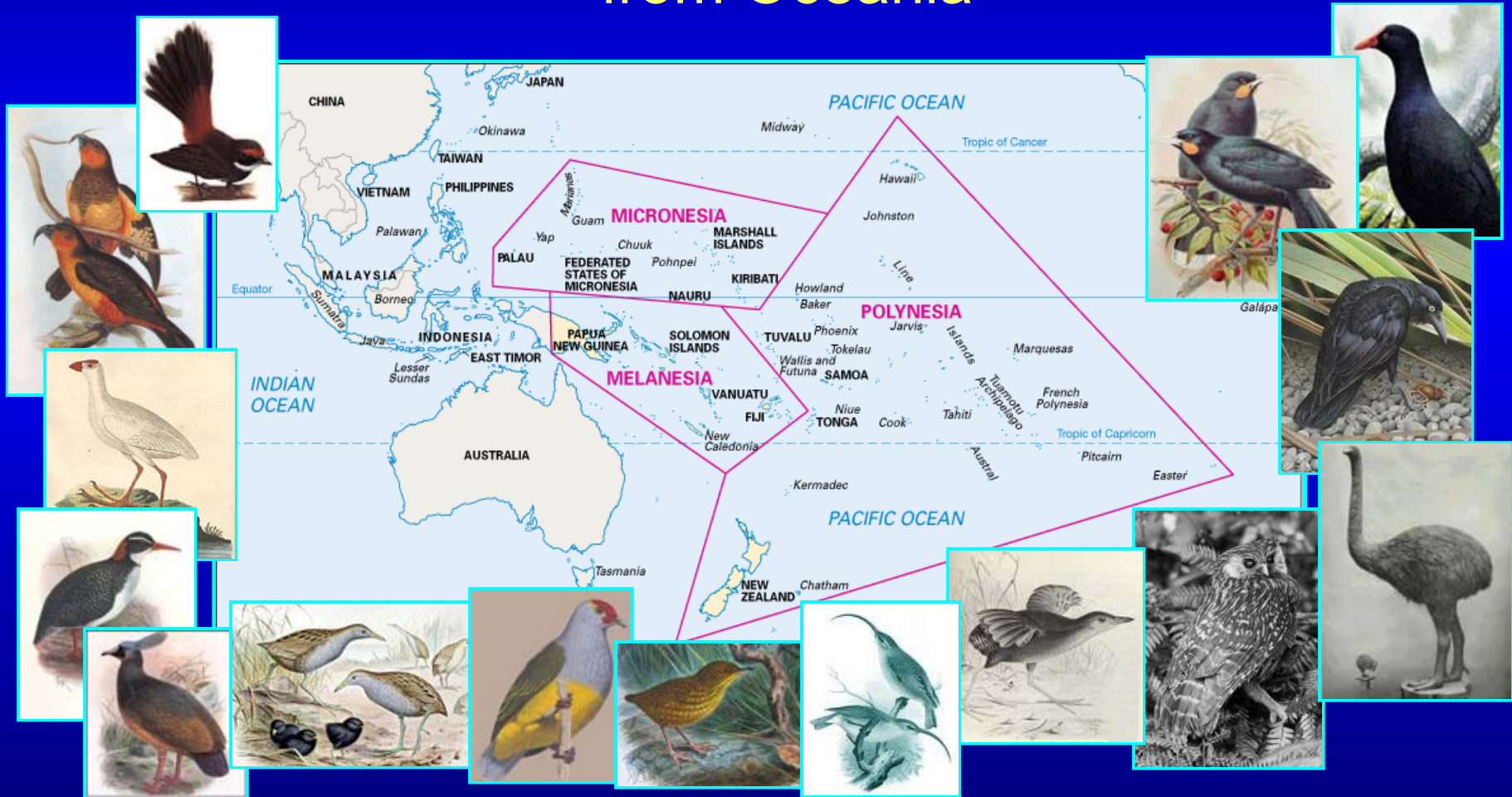




# Pacific Island bird extinctions

As many as 2,000 bird species have been lost from Oceania



# Hawaiian bird extinctions

- In addition to losing many honeycreeper taxa...

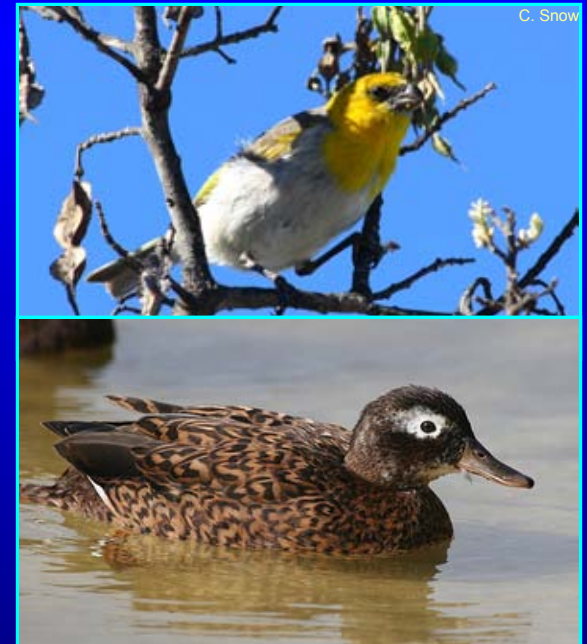


...entire families or groups have been lost.



# Bird conservation efforts in Hawai'i

- Focused on single species
- Limited ecosystem restoration
- Translocations focused mostly on preventing extinction



# Different conservation perspectives

- Phylogenetic distinctiveness (past)



- Ecological role (present)



- Evolutionary potential (future)



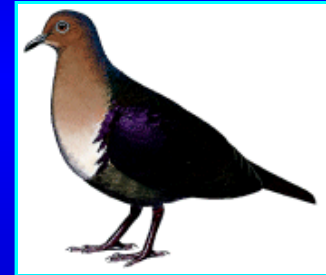
# Intersection of conservation goals





# Pacific island translocations

- Marianas
  - Guam Rail
- Marquesas
  - Imperial Dove
  - Marquesas Lorikeet
- Tonga
  - Tongan Megapode
  - Friendly Ground-Dove
- Cook Islands
  - Rarotonga Monarch
  - Rimatara Lorikeet



# New Zealand translocations



# Restoration of Mana Island

- Mana Island (217 ha)
  - > 200,000 plants
  - mammals eradicated
  - 17 species of birds



© David Cornick



# Hawai'i translocations

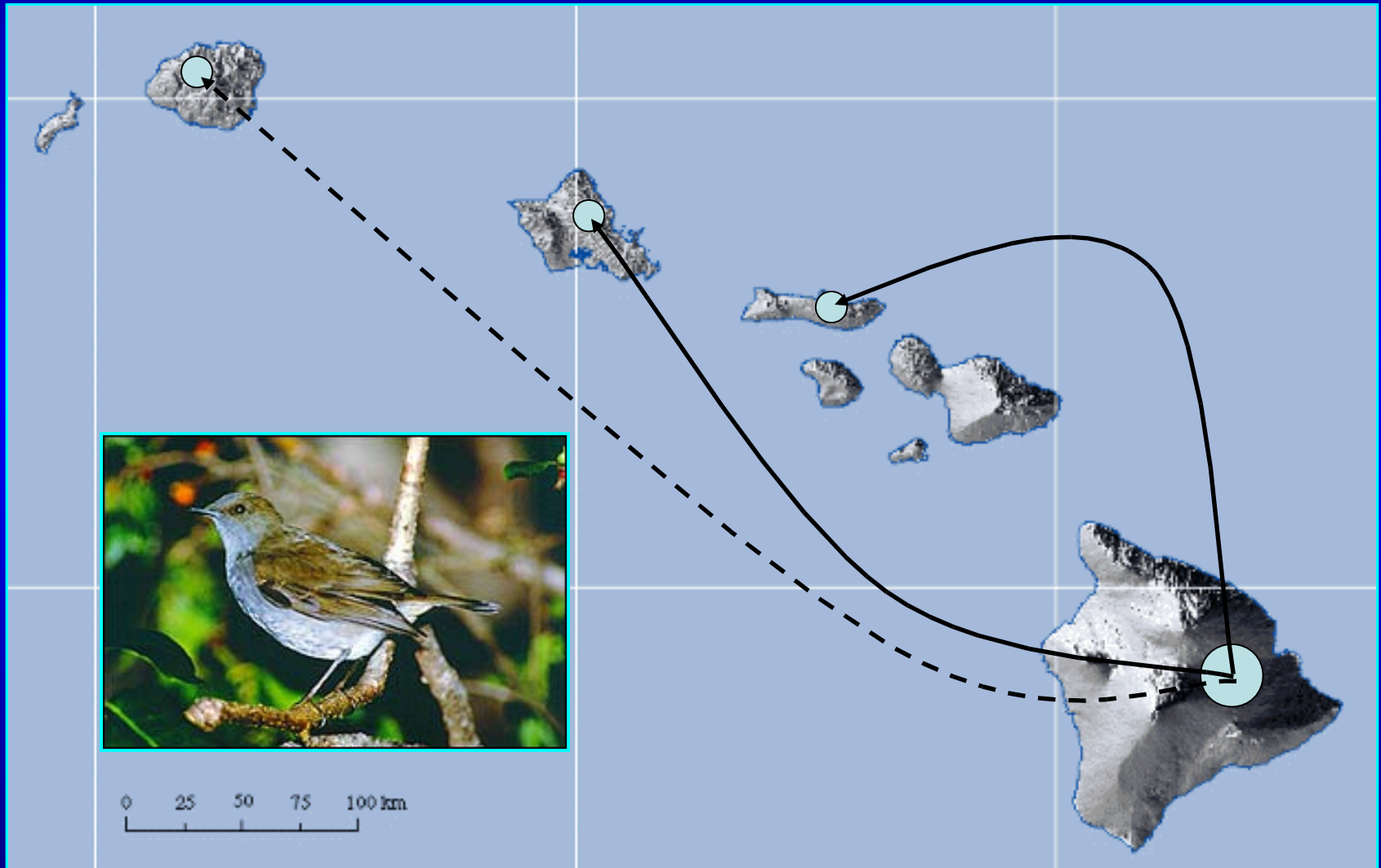
- Laysan Rail (1891 - 1923) to Midway
- Hawaiian Duck (1958) to Big Island ☺
- Nene (1960 - 96) to Big Island, Maui & Kaua'i ☺
- Laysan Finch (1967) to Pearl & Hermes ☺
- Laysan Duck (1967) to Pearl & Hermes
- Nihoa Finch (1967) to French Frigate Shoals
- Palila (1993 - 2005) ☺
- O'mao (1996) ?
- Po'o-uli (2002)
- Laysan Duck (2004 - 05) to Midway ☺

# Challenges in Hawai'i

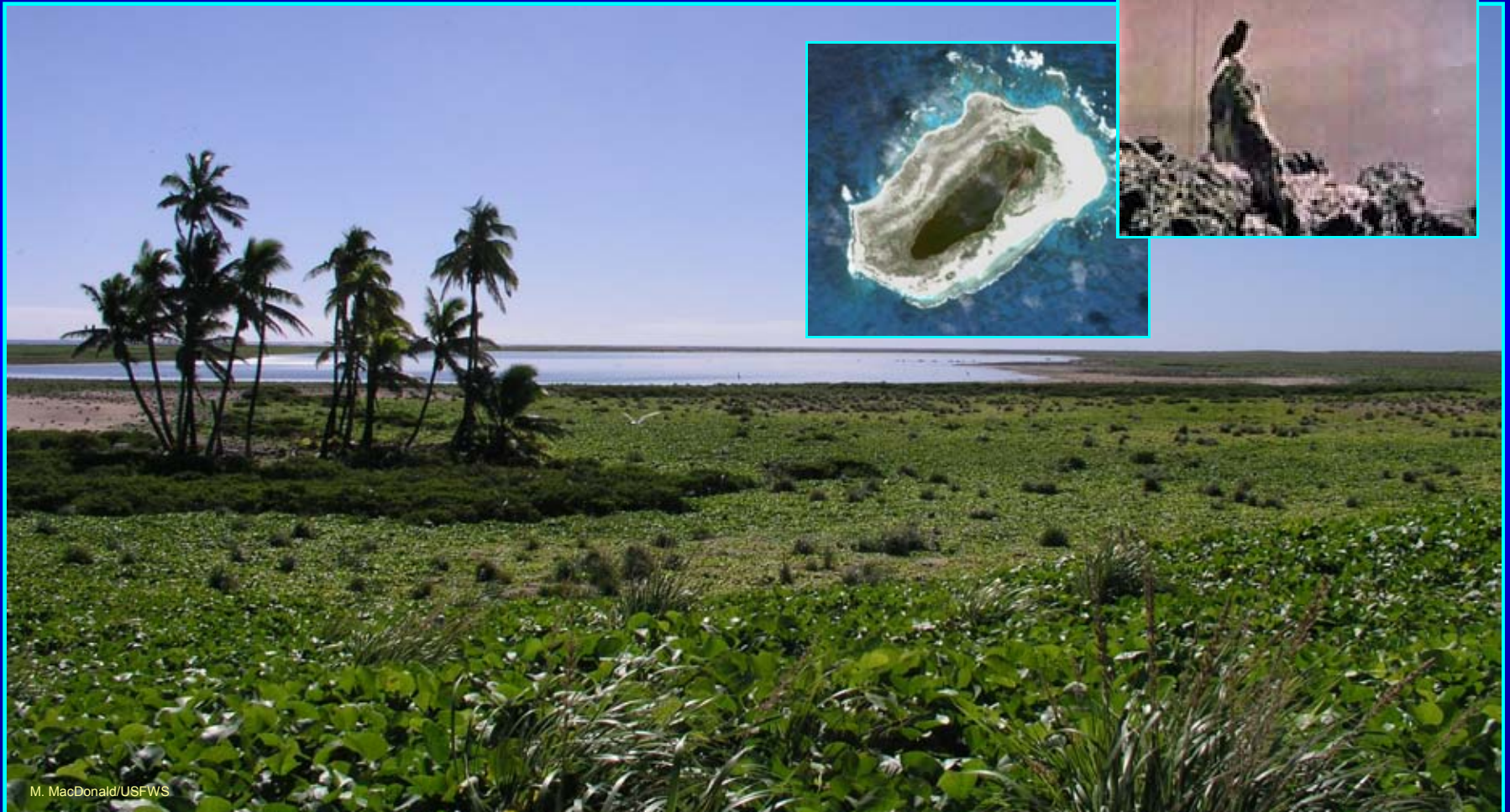
- Few landscapes free of predators
- Disease (climate change)
- Replacement species limited
  - endemism is such that some surrogates could only be functional and not taxonomic



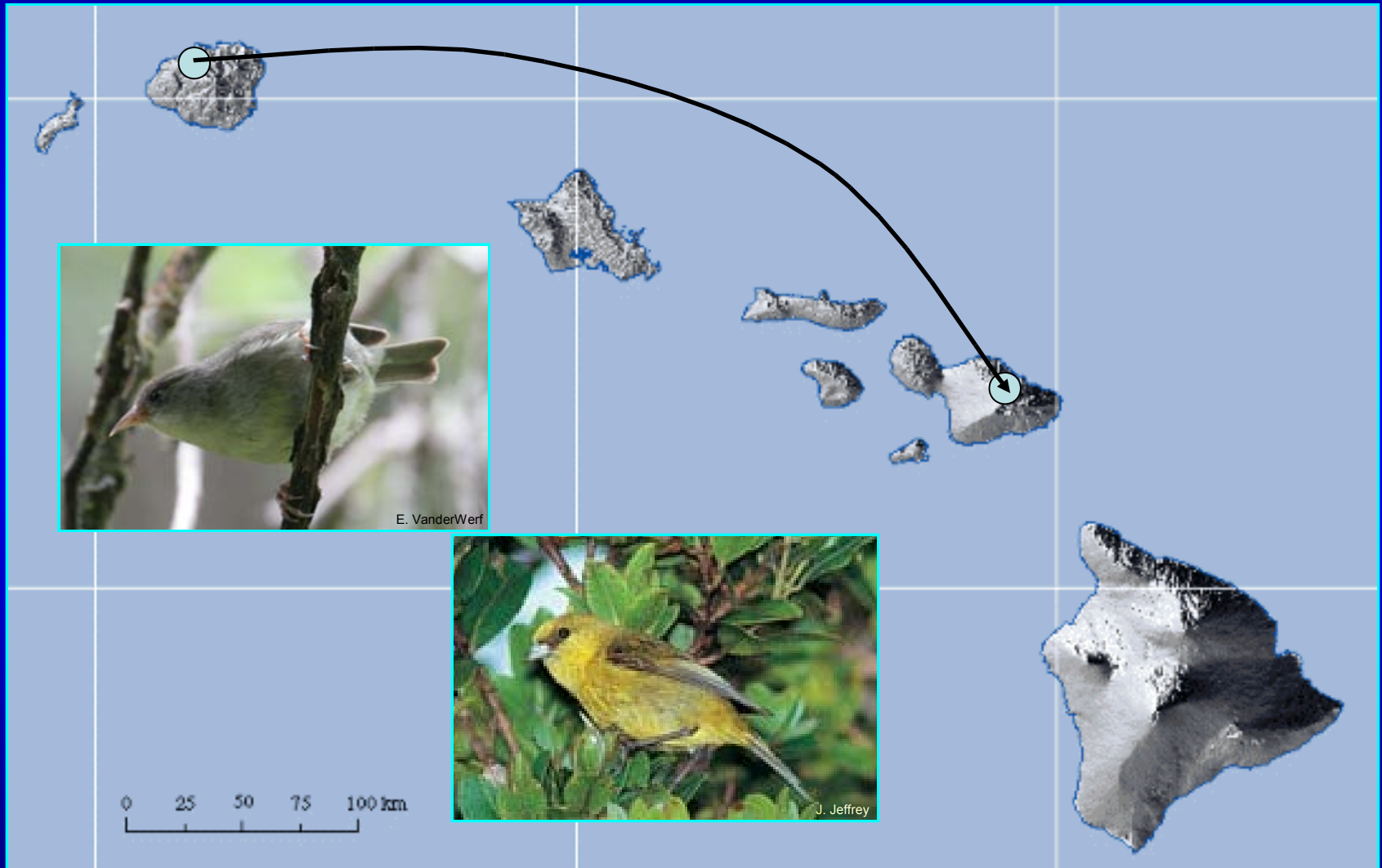
# No brainer; could do “today”



# No brainer; could do “today”



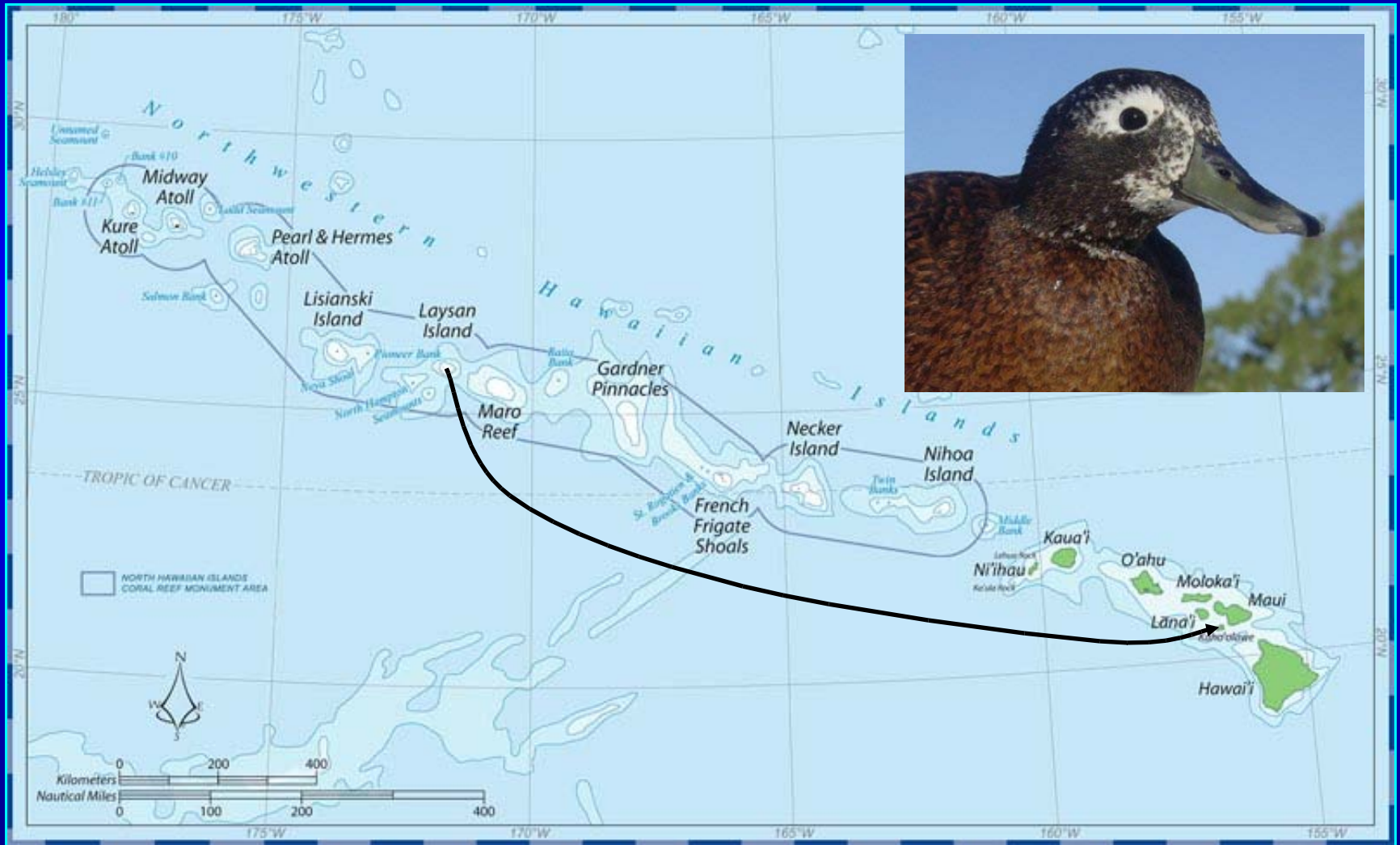
# “Low island” rescue



# Landscape scale restoration



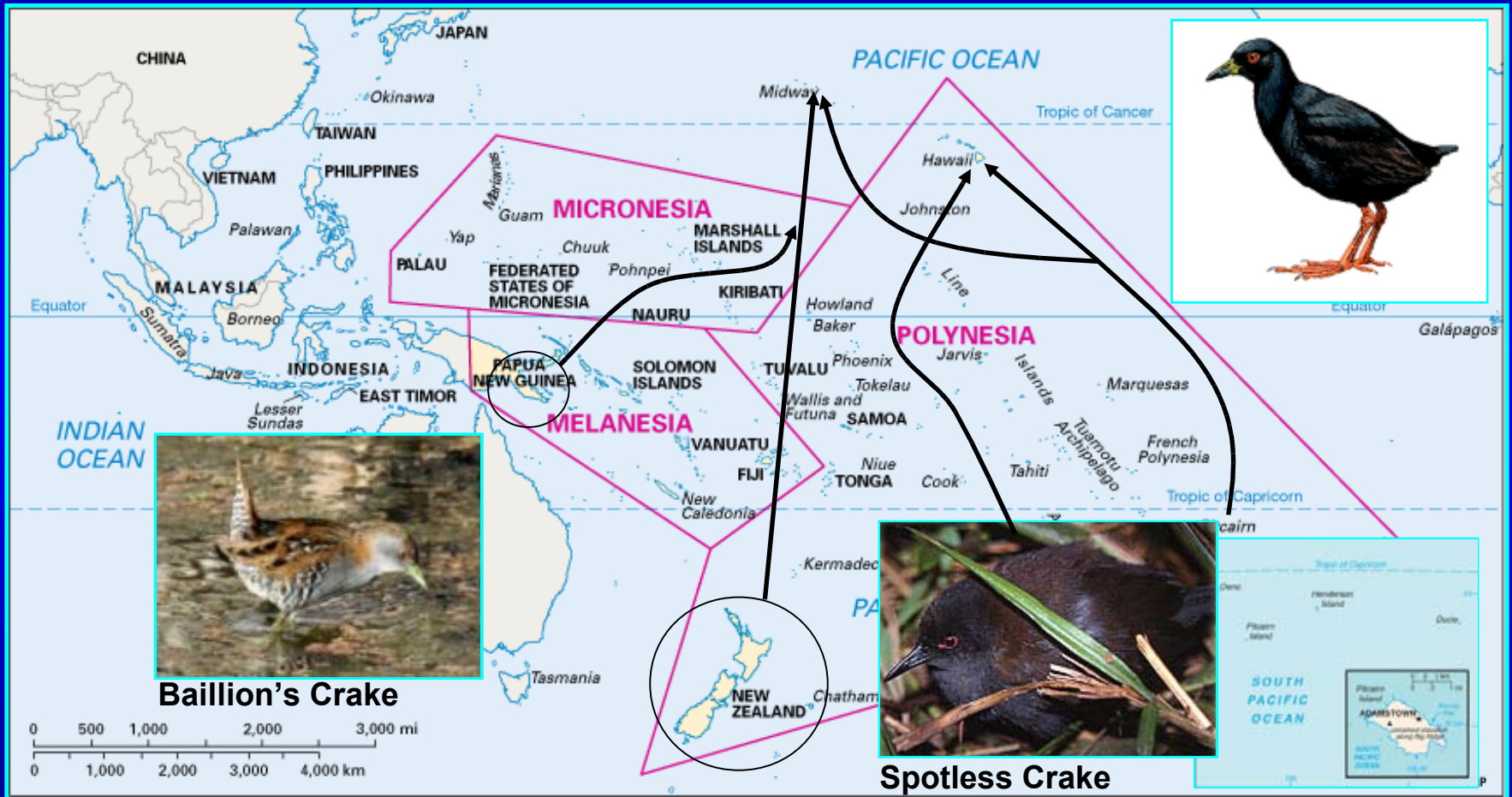
# Landscape scale restoration



# Pushing the envelope

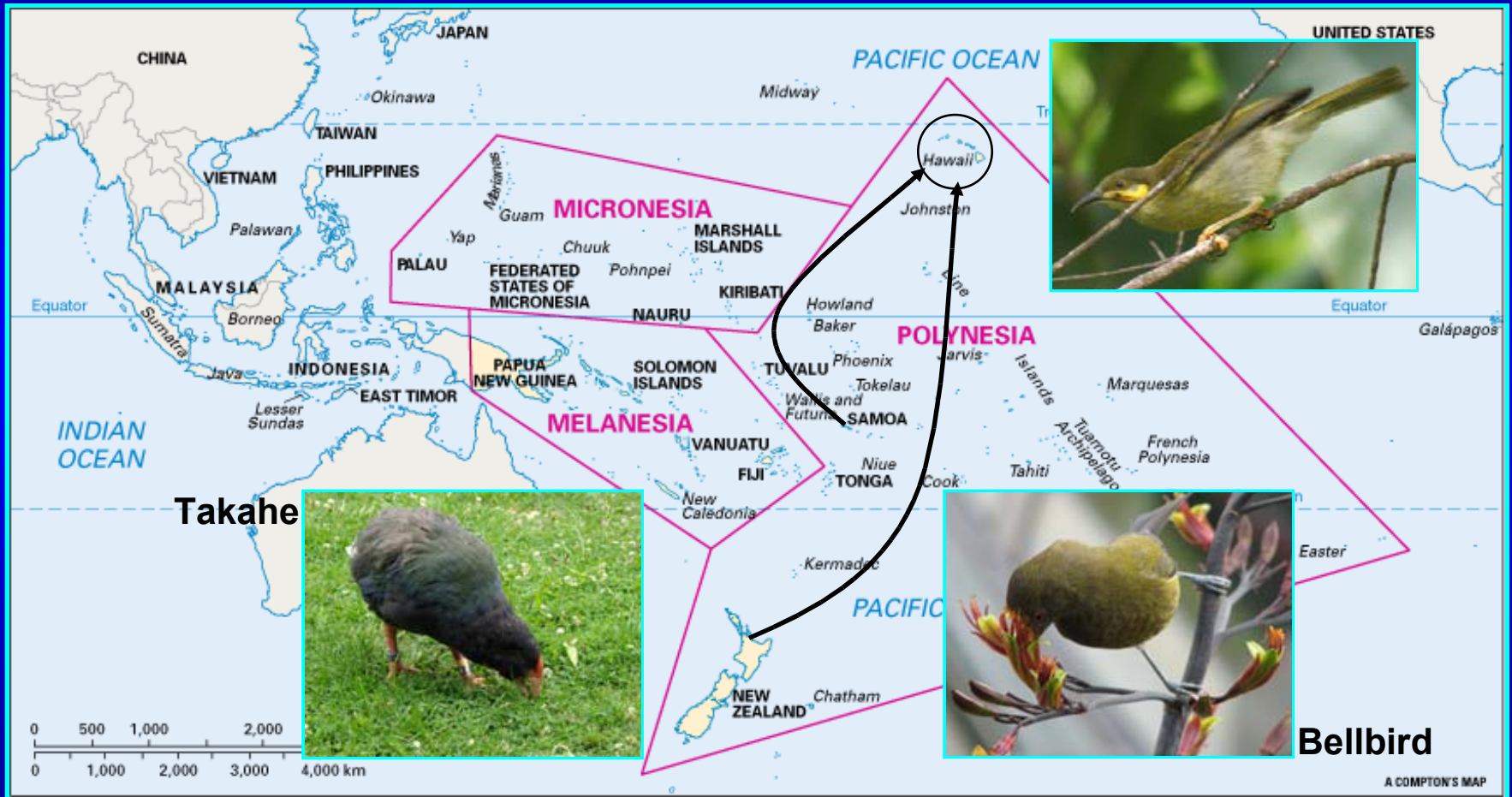


# Pushing the envelope



# Mind benders

## ecological vs. taxonomic replacements



Humans have been altering the distribution of birdlife on Pacific islands in negative ways for thousands of years. We already have quite a history of “playing God” with these birds. It would be nice to use our godly powers constructively (Steadman 2006).

