

Will vagrancy rates in the movement of migratory bird species increase with human induced environmental changes?



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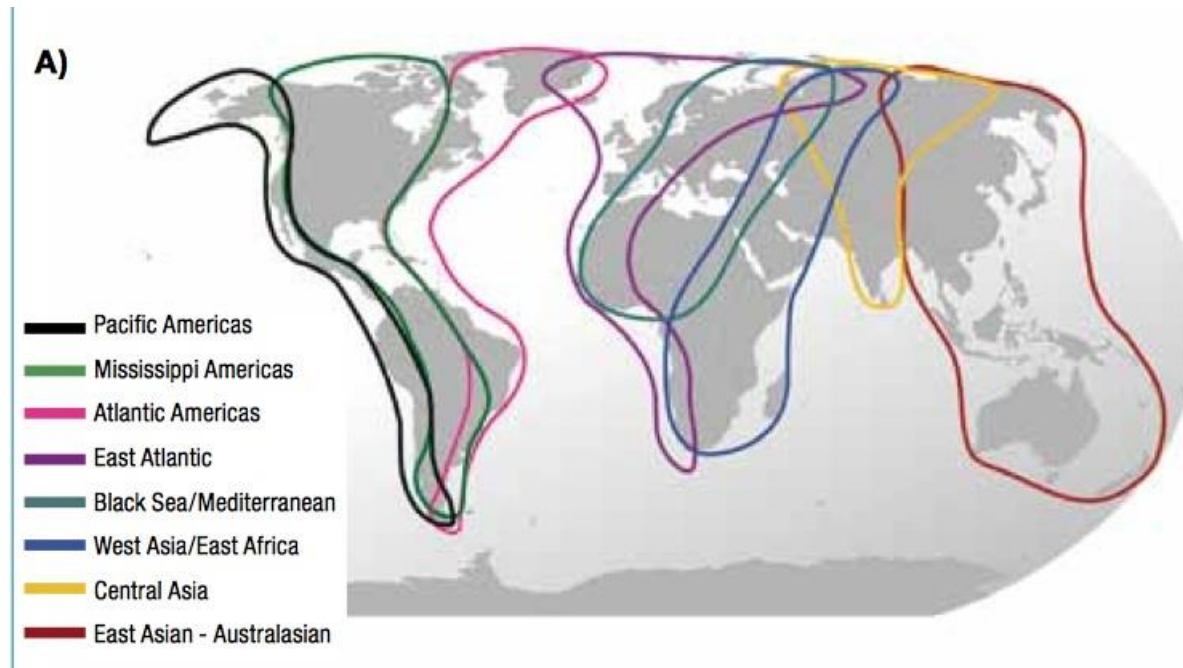
Yellow Bittern, Brisbane

Many species of birds have epic annual migrations



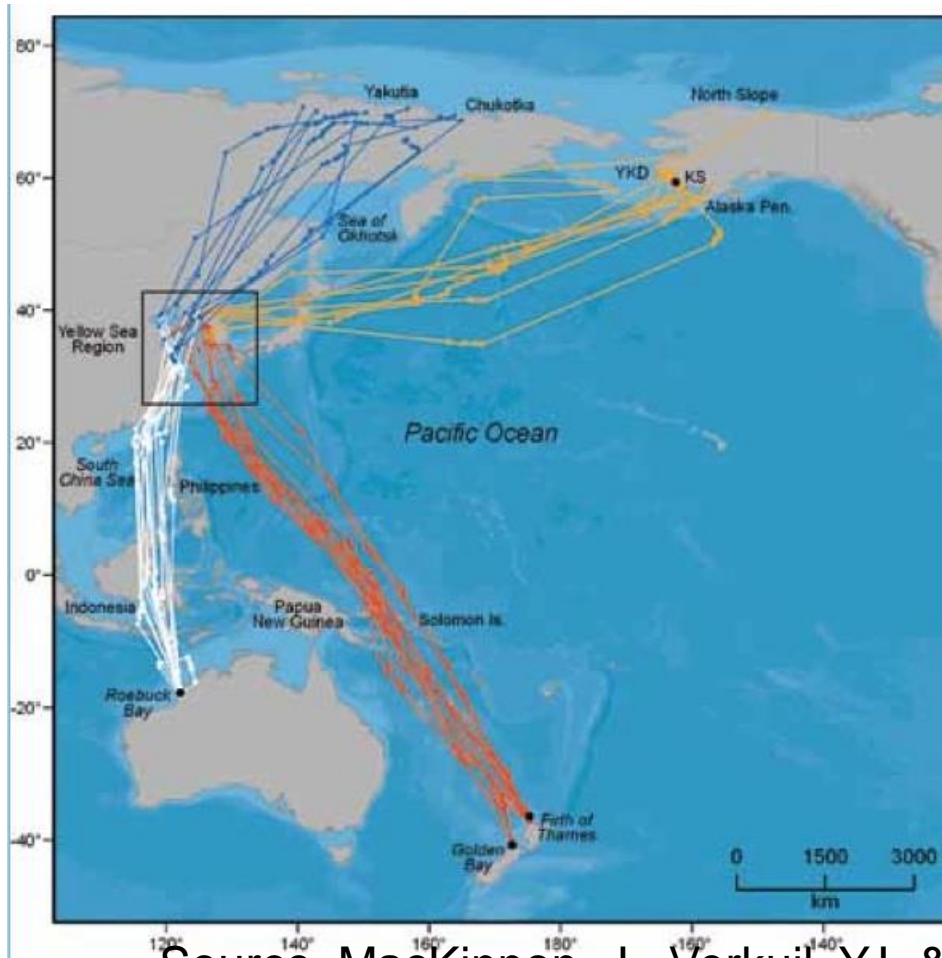
Migratory waders roosting at Roebuck Bay

There are eight major flyways for migratory waders

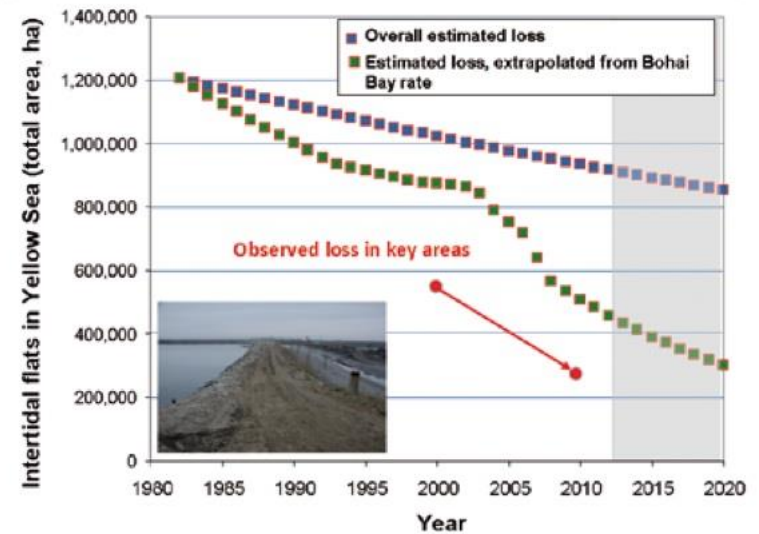


Migratory Shorebird Flyways Source MacKinnon, J., Verkuil, Y.I. & Murray, N. 2012. *IUCN situation analysis on East and Southeast Asian intertidal habitats, with particular reference to the Yellow Sea (including the Bohai Sea)* p 2

The loss of key habitat areas along migration routes can critically affect the survival of species



Loss of intertidal flats in the Yellow Sea (including Bohai Sea) and in Yellow Sea key areas



Source MacKinnon, J., Verkuil, Y.I. & Murray, N. 2012. *IUCN situation analysis on East and Southeast Asian intertidal habitats, with particular reference to the Yellow Sea (including the Bohai Sea)*

Are the environmental pressures on migratory species affecting their patterns of movement?



Saunders Terns, Cocos-Keeling Islands

Birdlife Australia Rarities Committee

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The Birdlife Australia Rarities Committee (BARC) is responsible for maintaining a list of rare birds recorded in Australia and its external territories. This includes areas at sea that are within the exclusive economic zone, which is 200 nautical miles offshore or to agreed international boundaries such as those with Papua New Guinea, Timor and Indonesia.

The primary function of BARC is to assess records of rare or rarely reported species that are submitted for appraisal. A summary of the results is published annually (currently in Australian Birdlife). The Committee, which includes eight primary members and a number of proxy members, has been in operation since 1975 and has assessed almost 800 cases (as of July 2013). The Committee's work has confirmed the occurrence of many vagrant species new to Australia, but has also prevented many errors and unsubstantiated reports from confusing ornithological literature. The work of BARC feeds into the organizations official checklist, the [BirdLife Australia Working List of Australian Birds](#).

The links below and the related downloadable spread sheets provide ongoing information regarding the work of the Committee.

Committee and proxy members

Guidance on how to submit a record

[Rarity Photographs](#)

Formed in 1975
Assessed >800 cases
Involving >190 species

<http://birdlife.org.au/conservation/science/rarities-committee>

Outcome of Observations Reviewed by BARC up to July 2015

Year of occurrence	Number of occurrences accepted	Number of occurrences not accepted	Number of species accepted for the first time	Proportion of first occurrences observed on the “mainland”
Before 1961	7	3	7	60%
1961-65	2	0	2	100%
1966-70	3	1	1	100%
1971-75	7	8	6	83%
1976-80	29	22	15	100%
1981-85	36	11	20	100%
1986-90	40	3	15	80%
1991-95	52	22	21	81%
1996-00	78	25	23	70%
2001-05	142	39	29	45%
2006-10	279 (+1)	37	35	53%
2011-15	133 (+35)	17	13 (+7)	54% (+29%)

Classification of Rarities Observed

Type of species	
Terrestrial	89
Pelagic	55
Shorebird	27
Coastal	14
Waterfowl	8



Asian Brown Flycatcher, Ashmore Reef

Normal Movement Patterns

Normal pattern of movement	
Trans-equatorial migrant	20
Long distance migrant	61
Dispersive	47
Regional migrant	37
Sedentary/local movements	19



Laughing Gull, Bribie Island

Location of Rarity Occurrences



Lesser Yellowlegs, South-West Rocks

Sighting Zone	
Mainland Australia	133
Christmas & Cocos-Keeling Islands only	27
Ashmore Reef only	16
Torres Strait only	6
Macquarie Island only	4

Species Removed From the BARC Review List

Species	Type of bird	Pattern of movements	Year of last acceptance
Providence Petrel	pelagic	dispersive	1983
Bulwer's Petrel	pelagic	dispersive	1993
Light-mantled Albatross	pelagic	dispersive	1993
Grey Noddy	pelagic	dispersive	1995
Grey Petrel	pelagic	dispersive	1995
Kermadec Petrel	pelagic	dispersive	2000
Cooks Petrel	pelagic	dispersive	2009
Matsudaira's Storm Petrel	pelagic	long distance migrant	1996
Black Petrel	pelagic	long distance migrant	2010
Red-necked Phalarope	coastal	long distance migrant	1979
Franklin's Gull	coastal	trans equatorial migrant	2015
Common Redshank	shorebird	long distance migrant	1983
Asian Dowitcher	shorebird	long distance migrant	1985
Little Ringed Plover	shorebird	long distance migrant	2003
Pin-tailed Snipe	shorebird	long distance migrant	2005
Little Stint	shorebird	long distance migrant	2010
Garganey	waterfowl	long distance migrant	1989
Eastern Yellow Wagtail	terrestrial	long distance migrant	1984
Grey Wagtail	terrestrial	long distance migrant	2006
Oriental Reed Warbler	terrestrial	long distance migrant	2007
Red-rumped Swallow	terrestrial	sedentary/long distance migrant	2006
Barn Swallow	terrestrial	trans equatorial migrant	1974



Providence Petrel, Lord Howe Island

Looking Ahead



The increased occurrence of vagrants like the Blue Rock Thrush at sites such as the Cocos-Keeling Islands could indicate environmental changes are having an impact.

Thanks



Grey-headed Lapwing, Burren Junction