

The AWSG Satellite Tracking Projects

Background

The Australasian Wader Studies Group (AWSG) has been using satellite transmitters for tracking the migration of shorebirds visiting North West Australia since November 2013 when five 5g satellite transmitters were deployed on Little Curlew in Roebuck Bay, Broome. In February 2017 satellite trackers were placed on Whimbrel and in February 2019 on Oriental Pratincole.

The PTT were programmed to send signals for 10 hours then to be silent for the next 48 hours.

Whimbrel: It was decided to extend the satellite transmitter program to Whimbrel in 2017, with five 5g units being deployed at both 80 Mile Beach (one bird) and at Broome (four birds). This was carried out during the NWA 2017 Expedition, in February 2017. One of these transmitters on the bird from 80 Mile Beach is still functioning.

Oriental Pratincole:

The AWSG deployed, 5 satellite transmitters on Oriental Pratincoles (2g PTT units) in February 2019.

It is exciting to track birds with satellite transmitters because up-to-date location data is received as the bird flies or rests after migration. This occurs either in real time or at a maximum of two days behind the recorded event.

Acknowledgements

The generous donation by Dr Doris Graham is acknowledged which allowed the purchase of the satellite transmitters for Whimbrel.

The role of Dr Clive Minton in obtaining funding and driving the satellite tracking project over many years is also acknowledged.

AWSG acknowledges the Yawuru People via the offices of Nyamba Buru Yawuru Limited for permission to catch birds on the shores of Roebuck Bay, traditional lands of the Yawuru people. AWSG acknowledges the Karajarri and Nyangumarta people for permission to catch birds to be marked for this project on the shores of 80 Mile Beach, traditional lands of the Karajarri and Nyangumarta people.

Whimbrel 2017 – The third run (by Katherine Leung)

It was thrilling to see Whimbrel LA started its third northward migration and made it safe to land in Southern China once again.

LA’s exact departure time from Eighty Mile Beach was unknown. It happened sometime between the evening of 20 April and the morning of 22 April when the transmitter was switched off. As signals came through on 22 April evening, LA was already over 1,200km away from Eighty Mile Beach, flying above West Nusa Tenggara, Indonesia. Two days later, LA was still flying continuously over Palawan, the Philippines. Finally, on 27 April, LA ended its 4,783km flight crossing the globe and landed near Shantou City, Guangdong Province, China.

LA’s landing location “falls short” when comparing to 2018 and 2019. But soon after a day stop-over in Shantou, LA flew another 150km further north-east to reach the southern part of Xiamen City in Fujian Province. Will LA next move to its “familiar” bays further north in Fujian Province? Stay tuned!

Fig. 1: LA’s third journey from Eighty Mile Beach to Southern China (small map showing landing locations in different year)



Migration summary of Whimbrel LA (as of 29 Apr 2020):

No. of days since transmitter deployment	No. of days since departing Australia	Distance travelled (2019)
1,172 days	8 days	4,937 km

Oriental Pratincole 2019 – Busy breeding (by Grace Maglio)

As of the 29th April 2020, our tagged Oriental Pratincole SEC and SHE remain on their respective breeding grounds in Cambodia hopefully they are tending to nests or chicks. SEP is now officially on the breeding grounds in Karnataka, India, with one signal being received on the 18th April.

Little is known about Oriental Pratincole breeding biology. What we do know is the nest consists of 2 to 3 eggs on the ground. The breeding site is often modified land used for agriculture; land grazed by livestock or harvested fields. Actual nesting biology for has not been formally studied but it is thought that the Collard Pratincole may have similar habits...

Incubation 17 to 21 days

Semi precocial chicks leave the nest at 2-3 days of age

Chicks fledge at 25 to 30 days

➡ From egg to fledge 42 to 51 days

Figure 2: 2020 tracks from Eighty Mile Beach, Anna Plains Station to breeding grounds

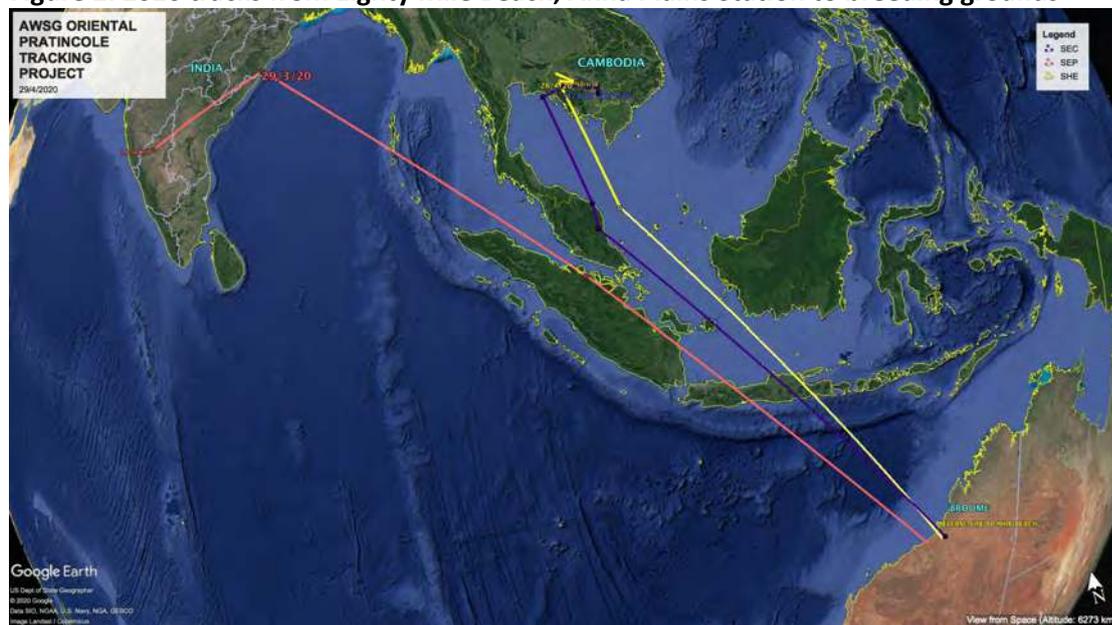
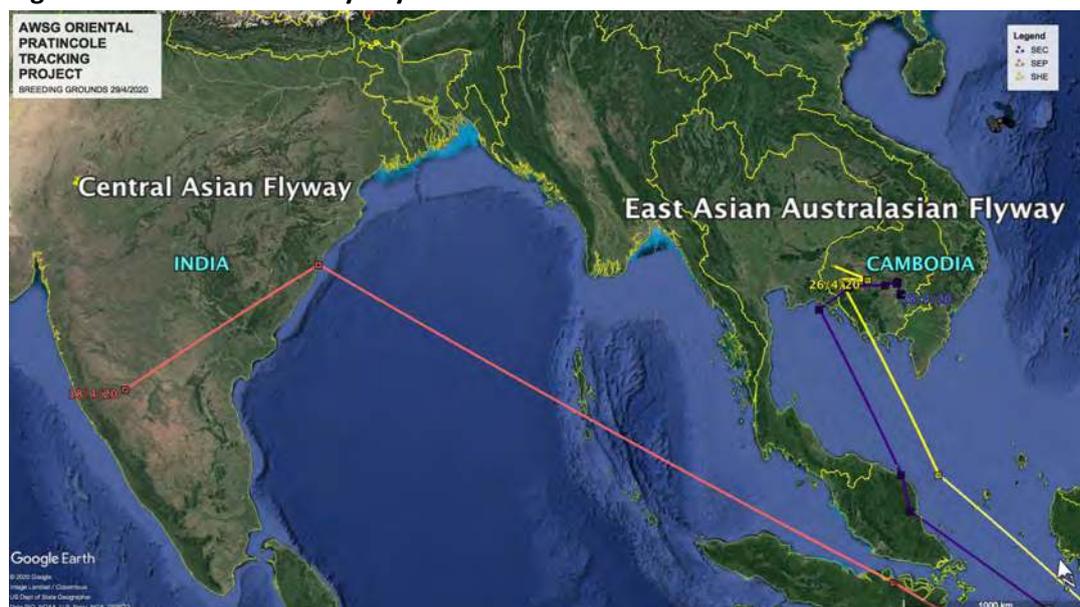


Figure 3: Three birds two Flyways



DISTANCE FROM RELEASE LOCATION 29/4/20

Bird ID	Distance from 80 Mile Beach release location to breeding site (approx.)	Approximate time in breeding location (days)	Breeding Location	Comments
SEP	6350km	At least 14 days	South-west India	Intermittent data
SHE	4000km	63	Tonle Sap Lake, West Cambodia	
SEC	3840km	52	Prey Veng Province, South-east Cambodia	

***Photo 1: SEP back on the breeding grounds in Karnataka, India.
Photo credit S. Subramanya May 2019***

