

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 (PTT) were deployed on Little Curlew in Roebuck Bay, Broome. In February 2017 satellite trackers were placed on Whimbrel and in February 2019 on Oriental Plover.

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 Plover:

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.

Oriental Pratincole 2019 –Time to focus on breeding - April 2020 (By Grace Maglio)

15/4/2020

Although overall data has been quite poor over the last two weeks when compared to previous tag performance, we do have enough information to suggest that SHE and SEC are still on their breeding grounds. From the raw data it is difficult to say confidently whether they are actually in nesting phase or are still choosing a suitable patch to make a nest. SEP has likely made his way to his 2019-breeding site in the last week or so – Yes, from feather samples taken at the time of fitting the Satellite Tag, we can confirm that SEP is a he, (SHE and SEC DNA sexing not yet completed). Many thanks to Marcel Klaassen and his team from Deakin University for their assistance with DNA sexing analysis for this project.

As an extra special addition to this update our Taiwanese colleagues have provided us with information of a nesting attempt in the Xinying District, complete with photos and video footage.

Fig 1: Tracks of Oriental Pratincoles SHE, SEC and SEP 14/4/2020

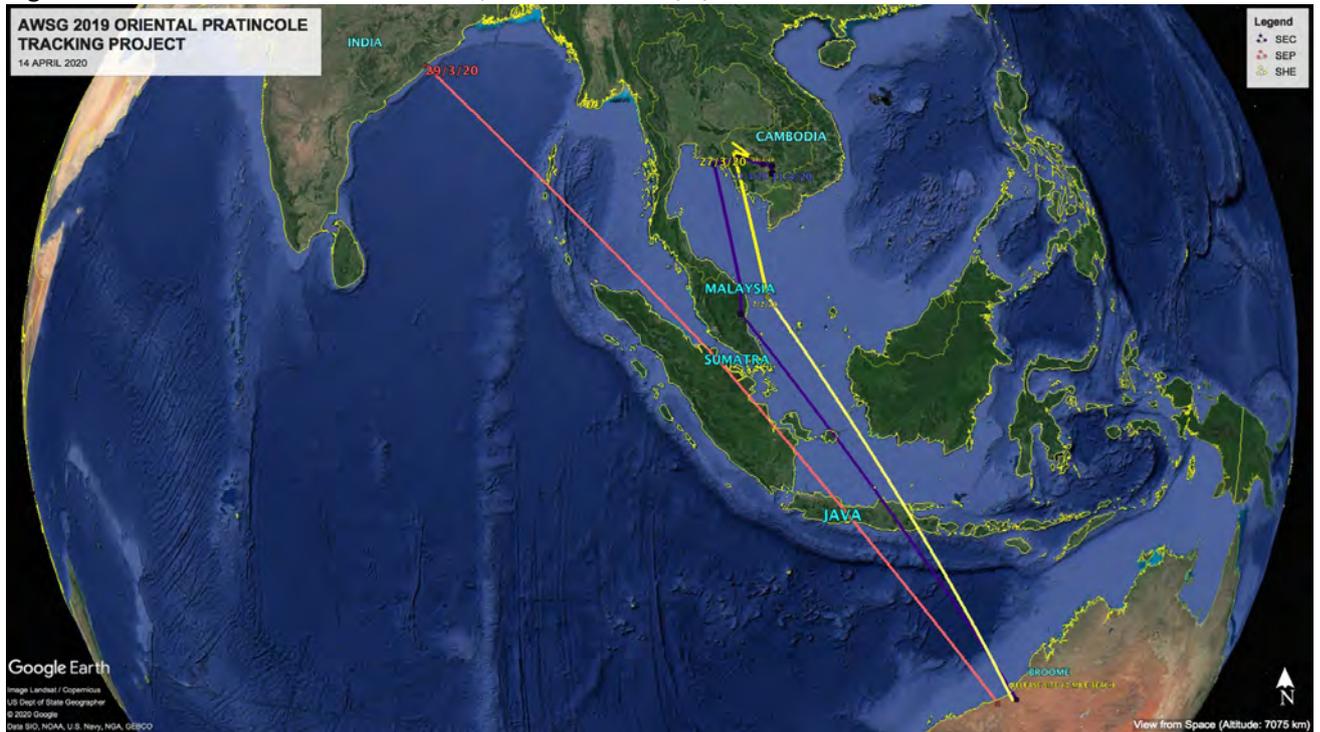


Photo 1 - One of the first recorded Oriental Pratincole in Taiwan (late March 2020)



Photo credit: Mr Yeh, Chih-Wei

SHE (PTT 83595) – Poor data but still confident all is well.

From what little information we have received over the last few weeks, it looks likely that SHE is still in the Tonle Sap Lake breeding location in Cambodia. SHE has now been here for 49 days since arriving on the 26th February. A distance of 4000 km from the 2019 release site.

Fig 2: SHE – 2020 northern Flight to the Tonle Sap Lake, Cambodia.

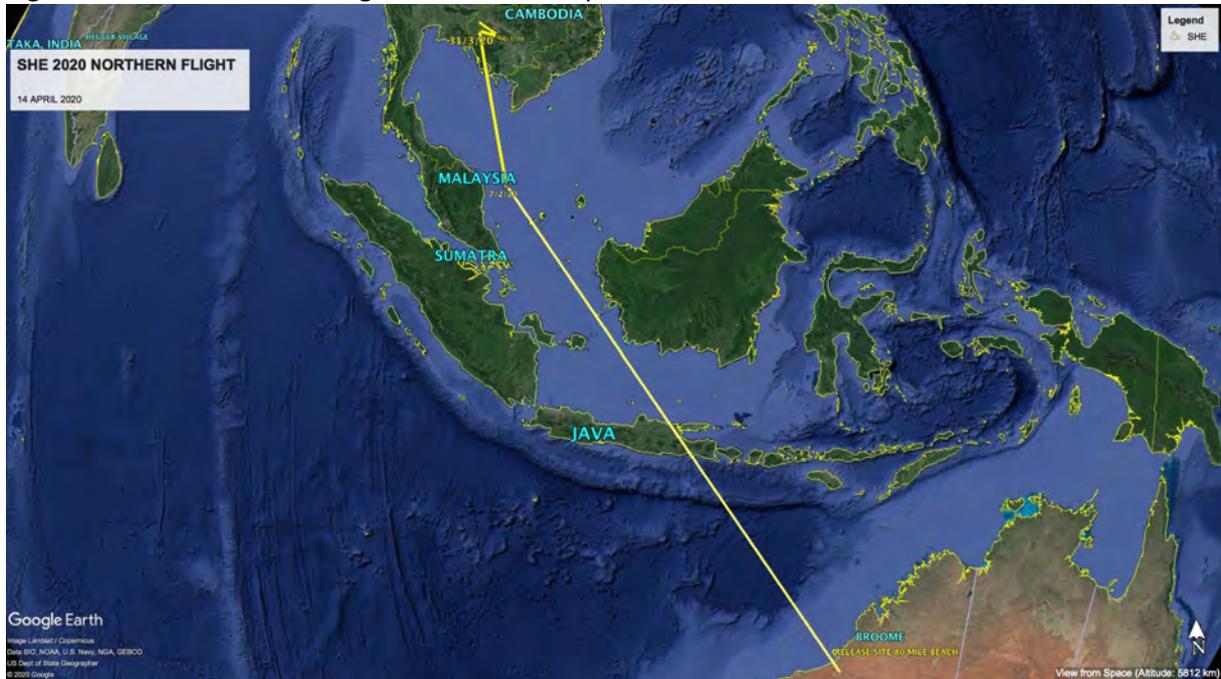
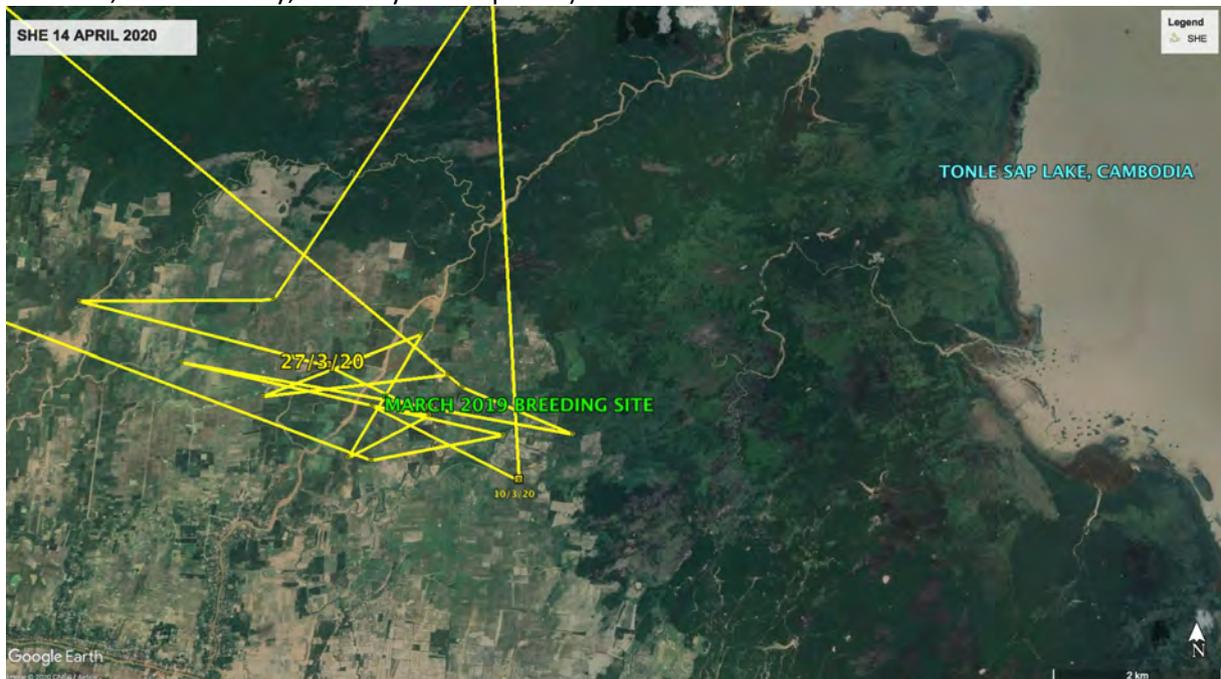


Fig 3: SHE 15/4/20 – 49 days in the floodplains of the Tonle Sap Lake Biosphere Reserve (tracks from accurate, raw data only, no analysis completed)



SEC (PTT 83596) – Settling in nicely.

SEC's PTT has continued to transmit data at regular intervals and it is clear that this bird is still on location in the 2019 breeding location. This makes it 38 days on breeding grounds, approximately 35 km east of Phnom Penh, Cambodia, and some 3870 km from the 2019 release site.

Fig 4: SEC – 2020 northern flight to Prey Veng Province, Cambodia.

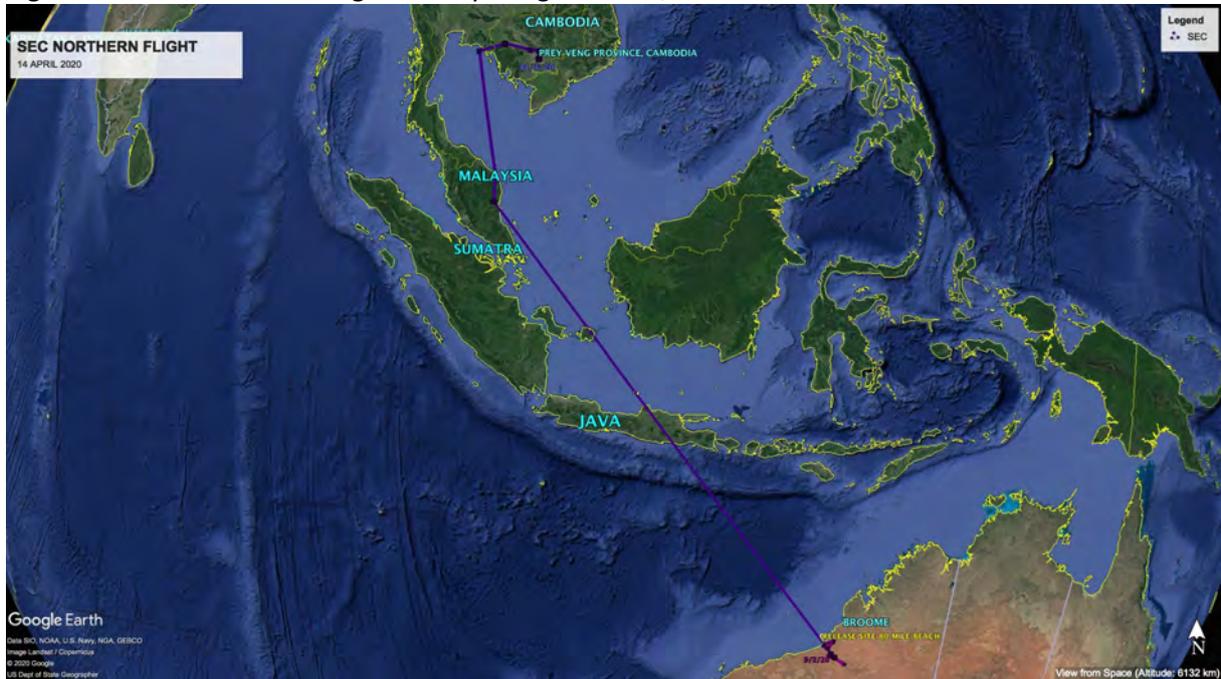
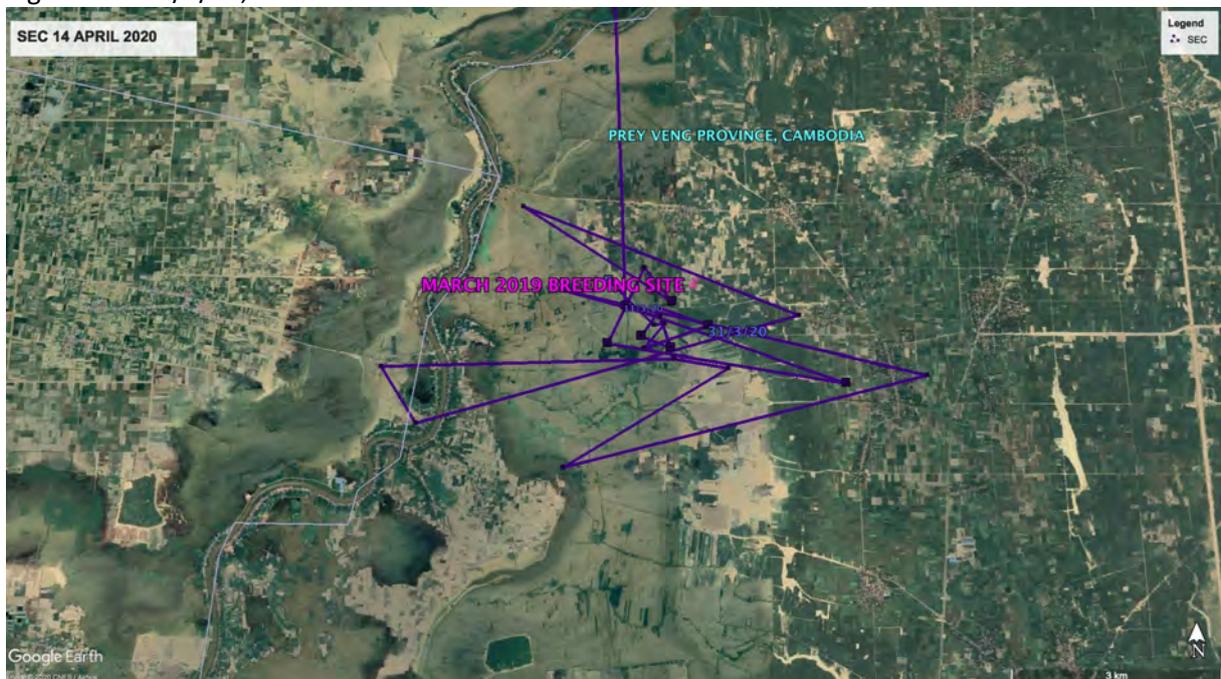


Fig 5: SEC - 31/3/20, 35 km east of Phnom Penh



SEP (PTT 83593) – And SEP is back on site preparing for another breeding season.

(By Grace Maglio and Subbu Subramanya)

On the 15th April one signal was received showing that SEP may be in the 2019 breeding site in Karnataka, India.

As mentioned in the introduction SEP is a male bird, with analysis of DNA from a feather sample having been completed recently.

SEP is likely around 6350 km from the Eighty Mile Beach release site.

Fig. 6: SEP - 2020 northern flight to Andhra Pradesh, India.

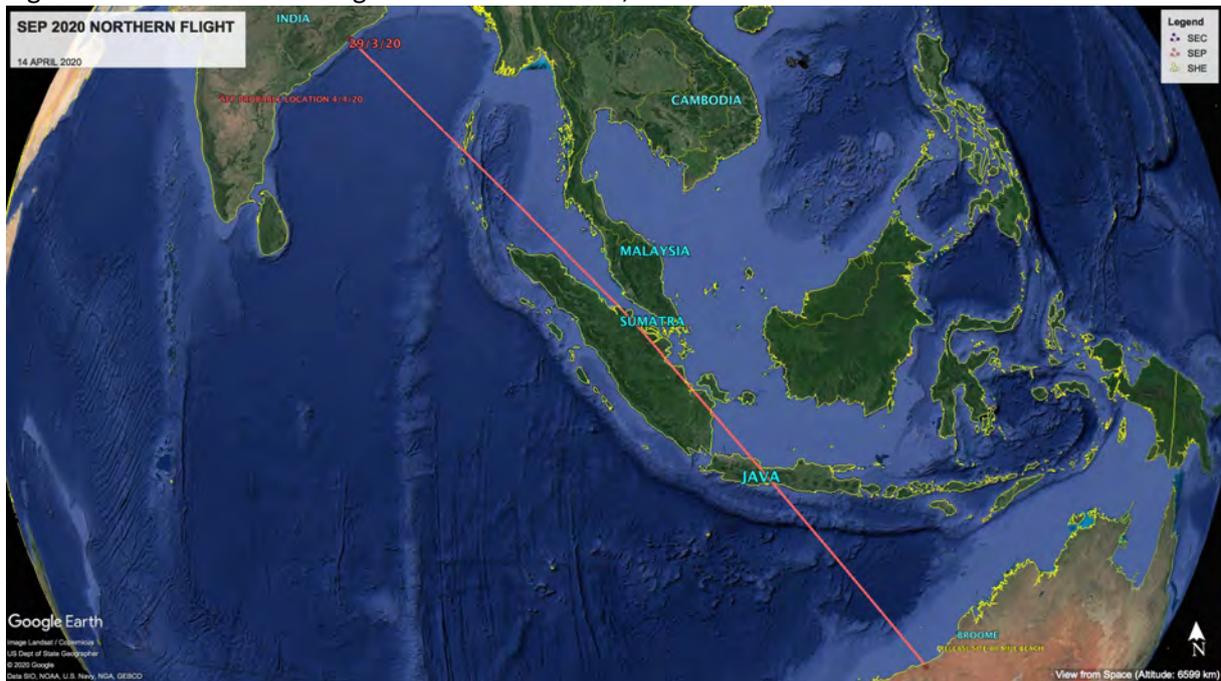


Fig. 7: SEP – 15/4/20, Likely back in the 2019 breeding site - Karnataka, India.



SUN (PTT 83591) –News from Taiwan

(by Grace Maglio and Chung-Yu Chang)

Even though we are unable to continue tracking SUN, we are fortunate to be receiving information from birdwatchers providing details of Oriental Pratincole activities in Taiwan.

Many thanks to **Mr. Chen, Chien-An** for providing photos and video of a nesting Oriental Pratincole in the Xinying District.

Sugarcane plantations support the Xinying District economy and past observations show that Oriental Pratincole readily make nests in fields after the Sugarcane is harvested.

**Photo 2 –Oriental Pratincole nest containing 2 eggs discovered on harvested Sugarcane
(Photo credit -Mr. Chen, Chien-An)**



Click on the photo (or the link below) to see fabulous video footage of the Oriental Pratincole incubating eggs!

https://www.youtube.com/watch?v=BQfFNvEFB4M&feature=youtu.be&fbclid=IwAROF_x7gBbDaZ3p_x5lo7lsZf6d7SpAgmH4q6mZVI2liL3blqEEDMw59IJ4k

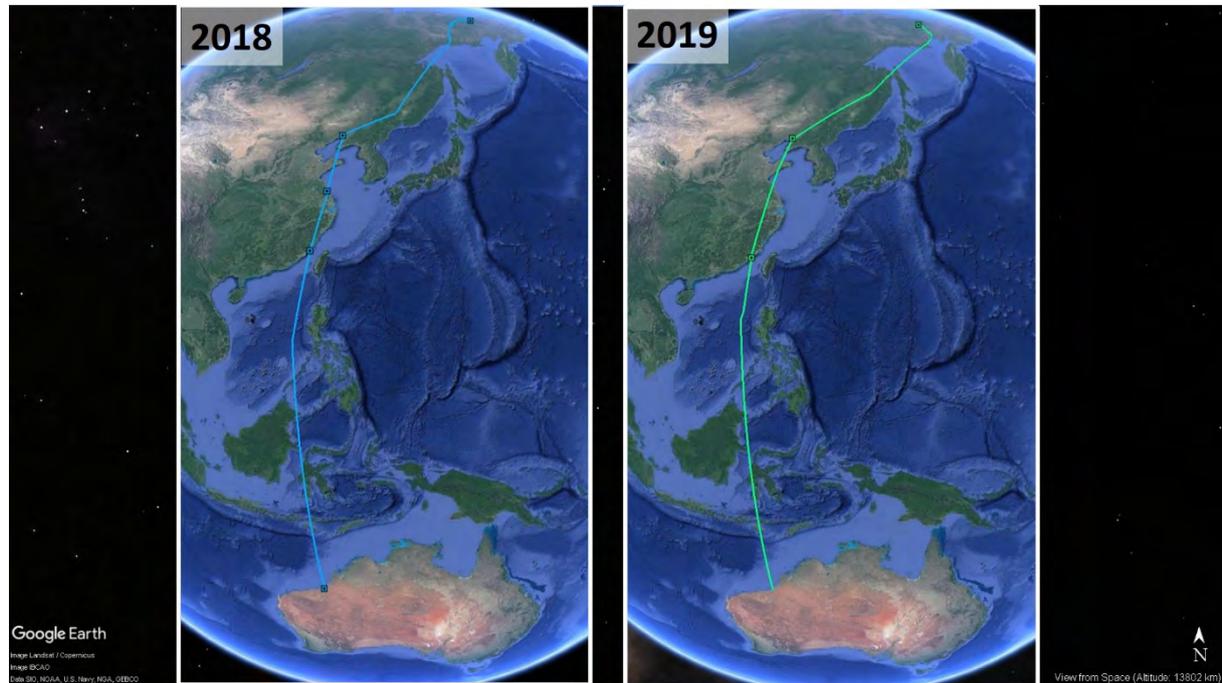
Photo 3 – Nesting site, recently harvested Sugarcane field. (Photo credit -Mr. Chen, Chien-An)



Whimbrel 2017 – Ready to take off (by Katherine Leung)

In preparation for LA’s third northward migration in the coming week, let’s review LA’s journeys from Eighty Mile Beach to the breeding ground in the past 2 seasons.

Fig. 8: Northward migration of LA in 2018 and 2019



	Season 2018	Season 2019
Departure date:	24 April	26 April
1st stop-over site:	Putian, Fujian	Xiamen & Kinmen, Fujian
No. of days travelled:	6 days	6 days
Arrival date:	30 April	2 May
No. of days stayed:	4 days	10 days
2nd stop-over site:	Yancheng, Jiangsu	Qingdao, Shandong
No. of days travelled:	2 days	2 days
Arrival date:	6 May	13 May
No. of days stayed:	7 days	Less than a day
3rd stop-over site:	Panjin, Liaoning	Panjin, Liaoning
No. of days travelled:	2 days	2 days
Arrival date:	15 May	15 May
No. of days stayed:	9 days	7 days
Departure date to breeding ground:	24 May	22 May
Arrival date at breeding ground:	10 Jun	2 Jun
Total no. of days travelled:	47 days	37 days
Total northward migration distance:	10,845km	10719km

Migration summary of Whimbrel LA (as of 18 Apr 2020):

No. of days since transmitter deployment	No. of days since arrive back in Australia (2019)	Count-down to migration (estimated)
1,161 days	190 days	7 days