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.

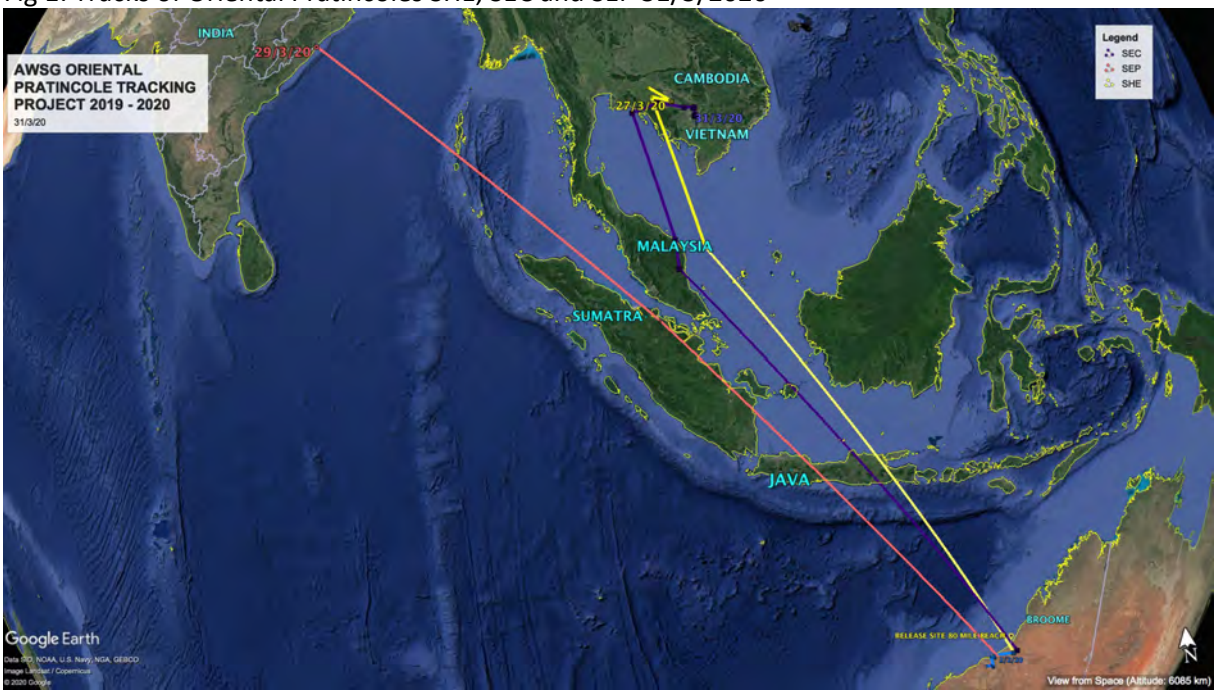
AWSG acknowledges the Yawuru People via the offices of Nyamba Buru Yawuru Limited for permission to catch birds on the shores of Roebuck Bay, traditional lands of the Yawuru people. AWSG acknowledges the Karajarri and Nyangumarta people for permission to catch birds to be marked for this project on the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

Oriental Pratincole 2019 **- Life Goes On!** *(by Grace Maglio)*

In all the craziness life has thrown us all so far, it is fascinating to see the natural world continue as it has always done, oblivious to the human-induced drama.

After two and a half weeks, new location data was received and we know SEP is now in India. SHE and SEC are following 2019 patterns, both on their 2019 breeding sites in Cambodia.

Fig 1: Tracks of Oriental Pratincoles SHE, SEC and SEP 31/3/2020



SHE (PTT 83595) – A Lakeside View

Once again, it seems SHE has chosen the floodplains of the Tonle Sap Biosphere Reserve for the 2020 breeding season. Arriving in this area around the 15th February SHE is currently 4000 km from the 2019 release site.

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

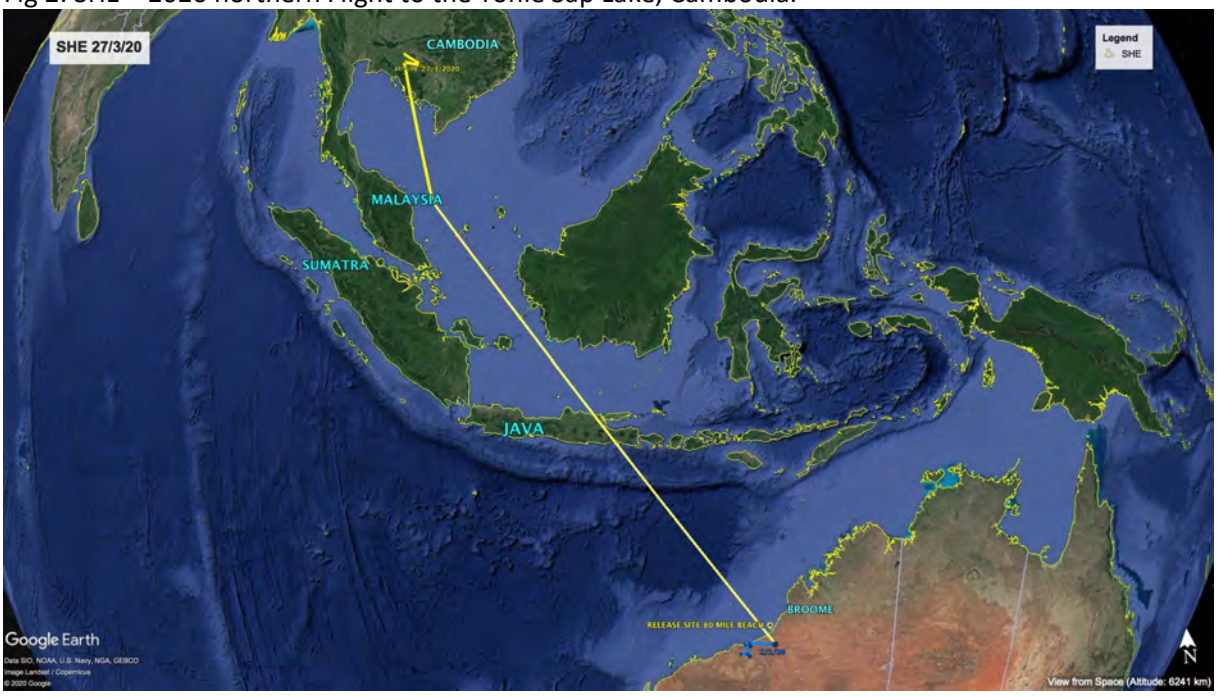


Fig 3: SHE 27/3/20 – Movement around the floodplains of the Tonle Sap Lake Biosphere Reserve

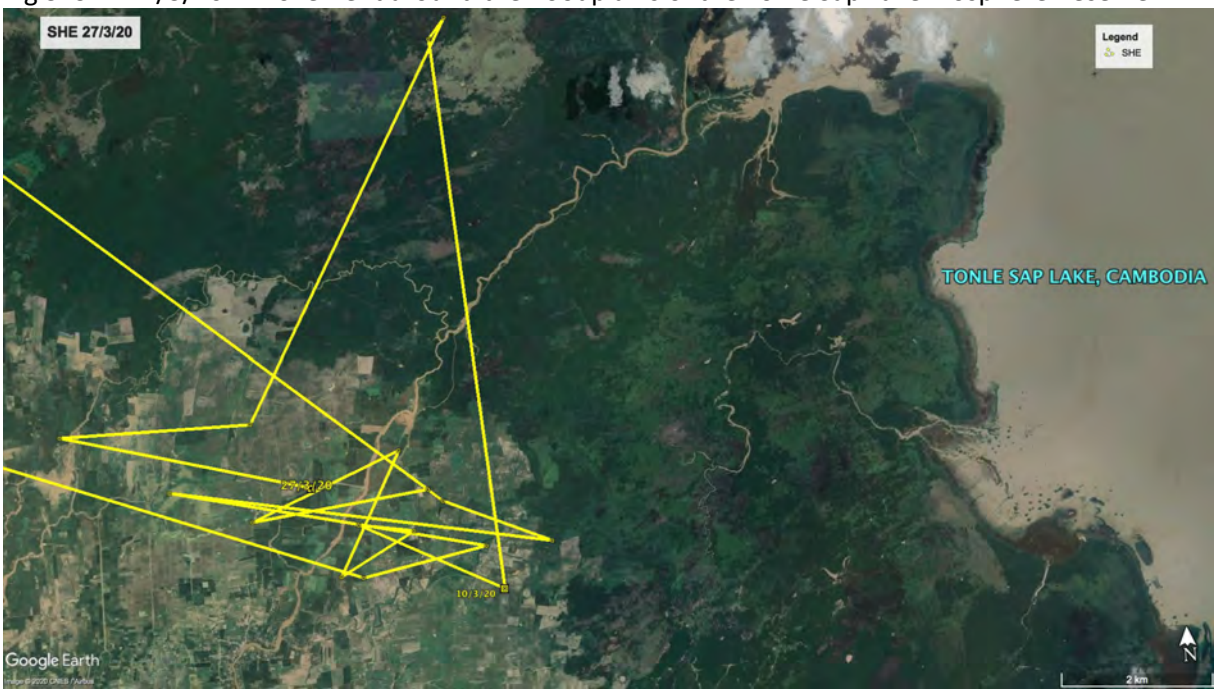
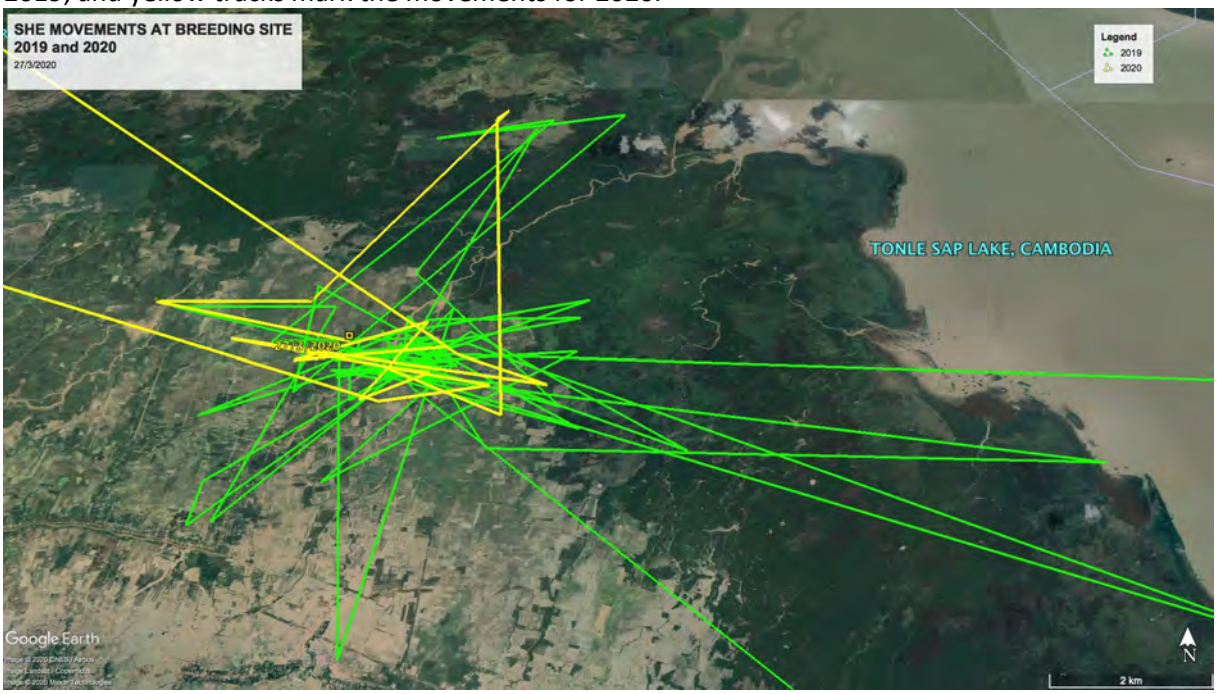


Fig 4: SHE 27/3/2020 – Comparing tracks at the 2019 breeding site. Green tracks mark movements of 2019, and yellow tracks mark the movements for 2020.



SEC (PTT 83596) – The "Great Green Belt" of Cambodia

After arriving in the Prey Veng Province on the 8th March, it seems SEC has also settled into its 2019 breeding site 35 km east of Phnom Penh. This area is one of Cambodia's most important agricultural sites, with a variety of crops such as tobacco, sugar cane and sesame and is also known for the most productive rice yields in the country. SEC is approximately 3870 km from the 2019 release site.

Fig 5: SEC – 2020 northern flight to Prey Veng Province, Cambodia.

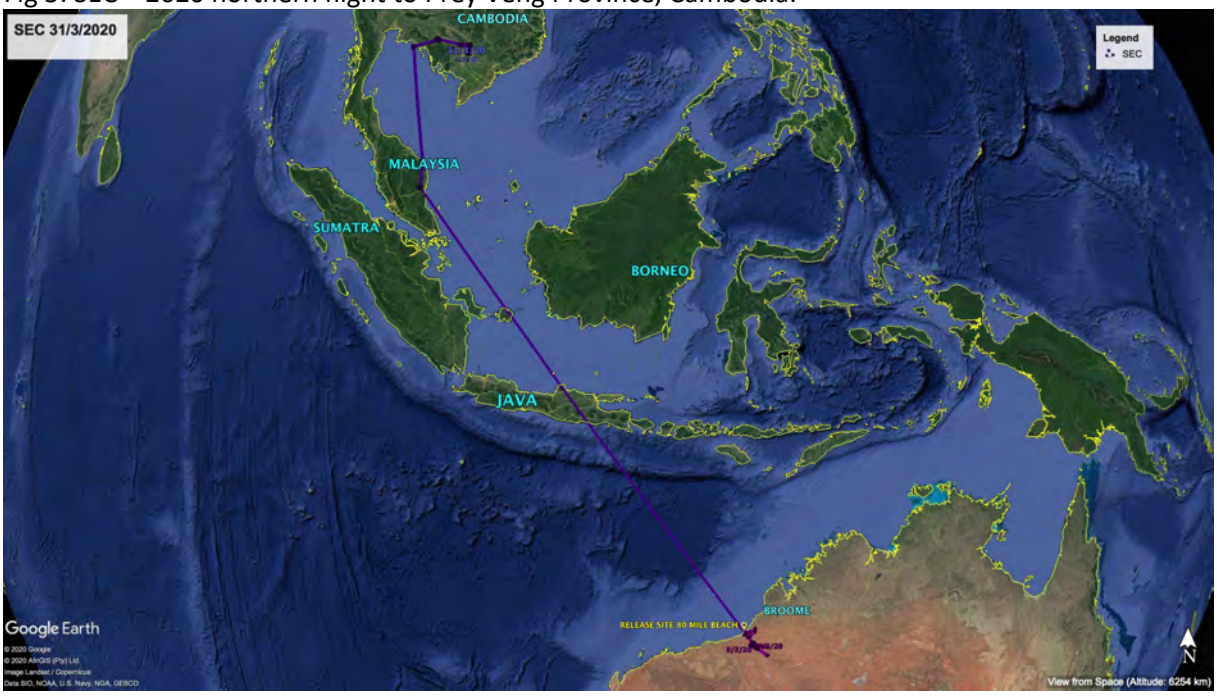
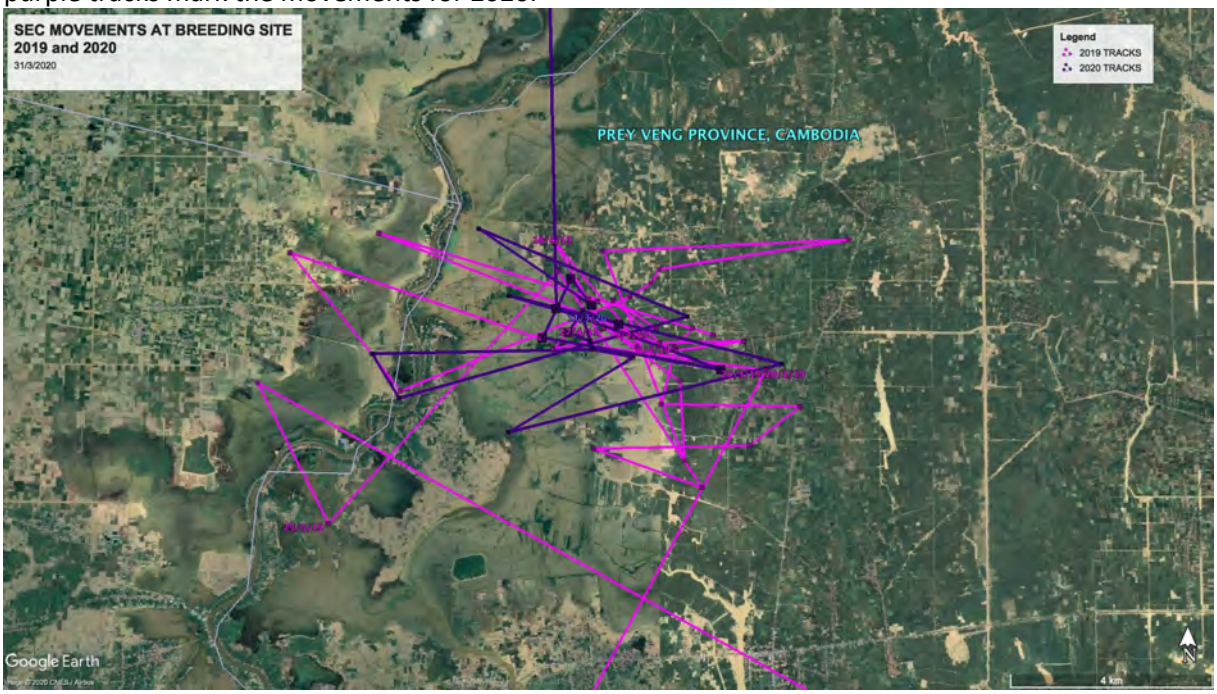


Fig 6: SEC - 31/3/20, 35 km east of Phnom Penh

Fig 7: SEC, Comparing tracks at the 2019 breeding site. Pink tracks mark movements of 2019, and purple tracks mark the movements for 2020.



SEP (PTT 83593) – Back in India!

On the 12th March location data showed SEP in Sumatra. After another long wait, the next set of data was received on the 29th March positioning SEP in Andhra Pradesh, less than 1 km from Nelavanka, a village of around 4000 people, in the district of Srikakulam, where agricultural crops include rice, millet, peanuts and sugarcane. Will SEP make it back to its breeding site in Karnataka?

SEP is currently 5800 km from the Eighty Mile Beach release site.

Fig. 8: SEP - 2020 northern flight to Andhra Pradesh, India.

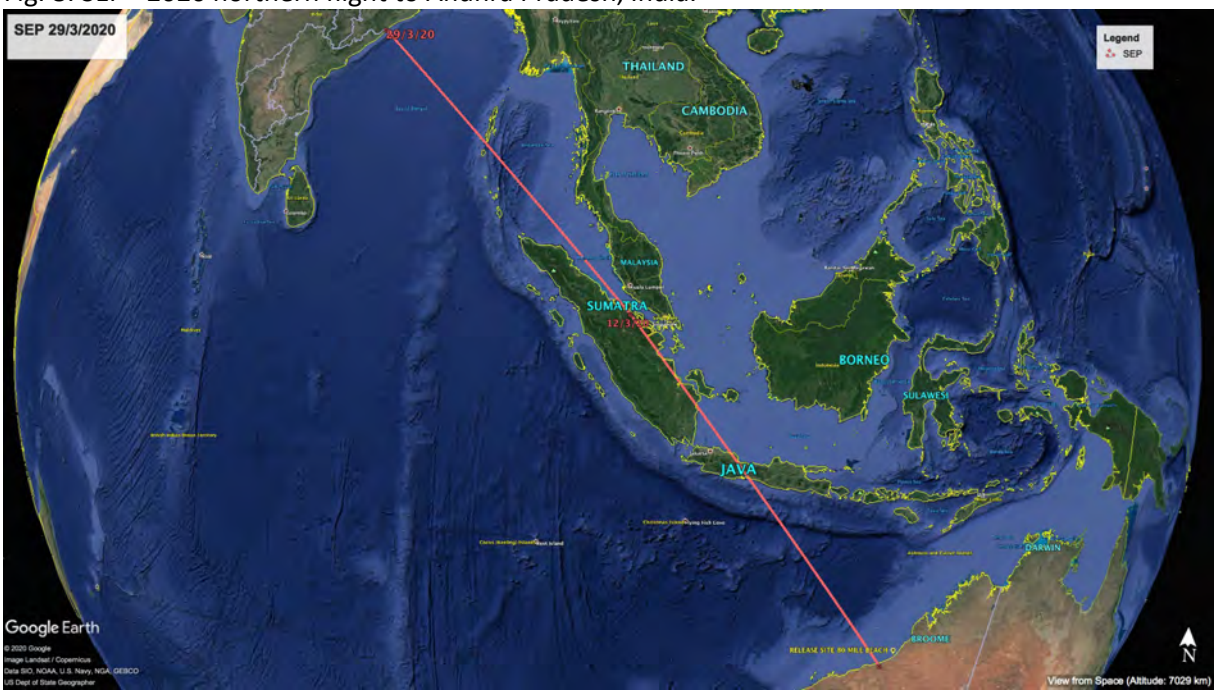


Fig. 9: SEP – 29/3/20, near the seaside village of Nelavanka, India.

SUN (PTT 83591) – The Journey ended in Taiwan.

The Journey may have ended for SUN in Taiwan but last week the first Oriental Pratincole were being recorded around the country.

Photo credit: Mr Yeh, Chih

Fig 10: SUN – 2019 tracks to Taiwan before unexplained signal failures.