

Satellite Tracking Report from North-West Australia 2019

Number 21

27.12.19

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 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.

AWSG ORIENTAL PRATINCOLE TRACKING PROJECT

REPORT NO. 21

22/12/19

Grace Maglio

“It is absolutely marvellous the way these satellite-tagged Oriental Pratincoles continue to come up with surprises.” Clive Minton April 2019

This morning after checking the data, I would have called Clive and updated him on the progress of this project. It is likely the response to this latest update would have also contained the words ‘absolutely marvellous’ and then we would have talked about ongoing/future work. How I miss our chats.

So, the great news is SEC is back in Northern Australia around Lake Argyle, 60 km south of Kununurra, Western Australia. SHE has reached the Australian shoreline overnight, on the Legune Coastal Floodplains in the Northern Territory and SEP seems to once again fly ‘under the radar’ and surprises us with another possible location after further low-quality data was received. Interestingly, SEP may well be around Lake Argyle too. It is due to SEP’s intermittent signals that we are still not quite giving up on SUN in Taiwan and a possible return to Australia.

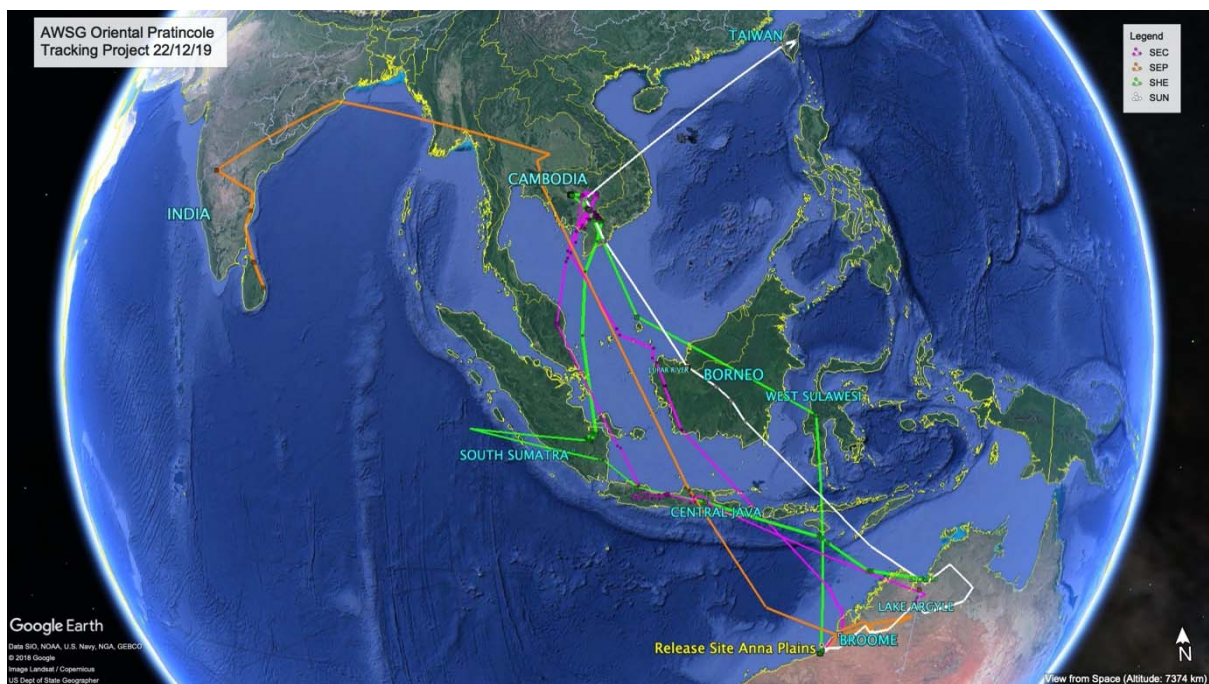


Figure 1 – Tracks of Oriental Pratincole 22/12/19

SEC (PTT 83596) – First back to Australia.

SEC reached the shores of Northern Australia on December 9th, moving to a location 70 km east of Lake Argyle the next day. Two days later it moved to the banks of Lake Argyle remaining in this area at the time of this report.

Departing Anna Plains on February 26th, 2019 and with its breeding site in Cambodia, this makes a total return trip of over 8000 kms.

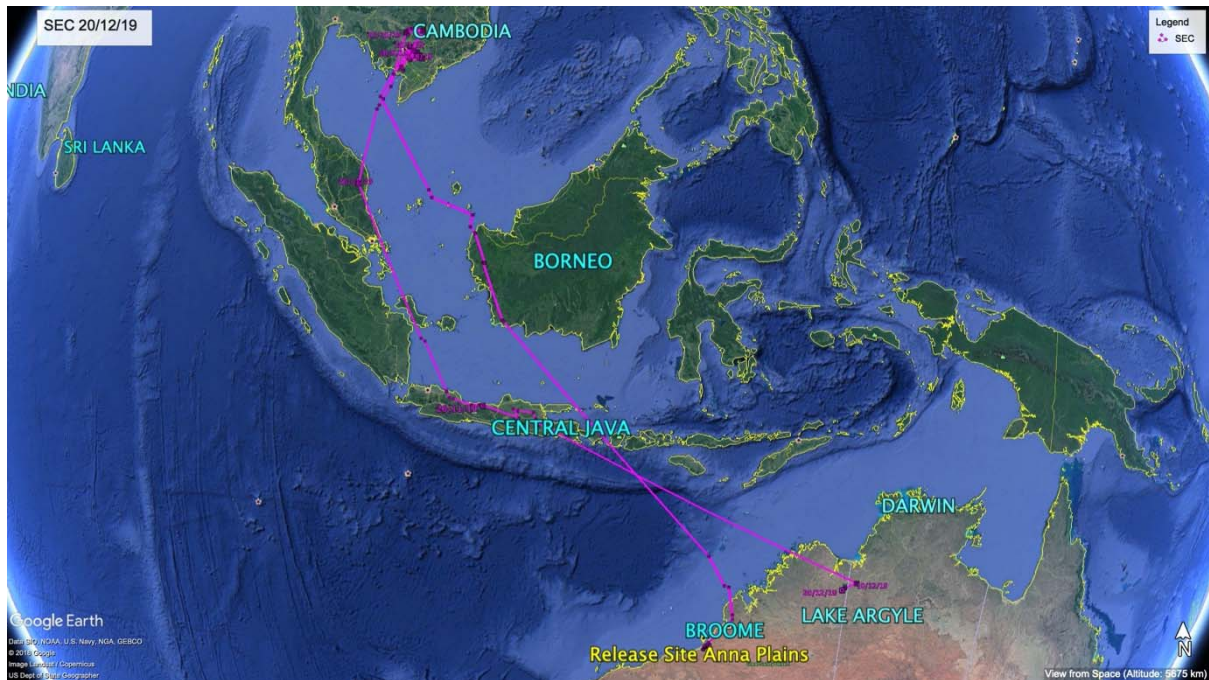


Figure 4 – SEC 20/12/19 – Currently around Lake Argyle, 850 km from the Eighty Mile Beach release site.

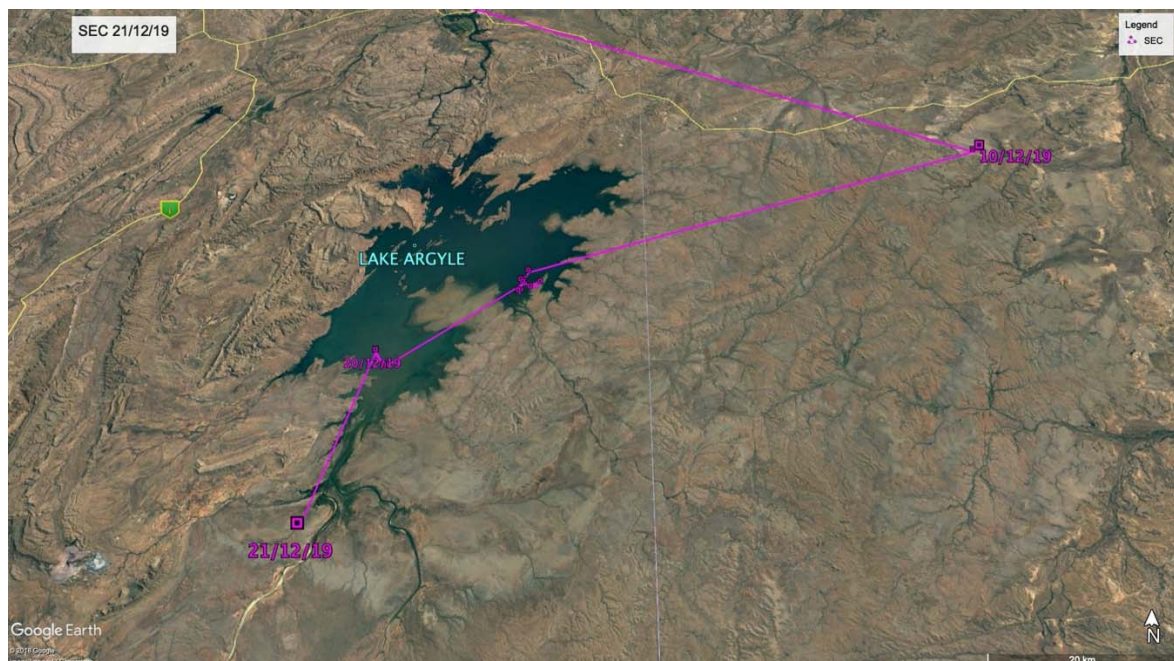


Figure 5 – SEC, recovering from its long flight on the banks of Lake Argyle.

SHE (PTT 83595) – 2000 km in less than 48 hours

SHE left Central Java in the early hours of December 20th arriving on the shores of the Legune Coastal Floodplain, Northern Territory in the last hour of December 21st, covering a distance of approximately 2000 km. It is interesting that both SEC and SHE have taken a circular route around Southeast Asia, both making short stops in Central Java on southward migration before making landfall.

The Legune Coastal floodplain was also the final Australian site for SUN before heading north towards Taiwan.

SHE is currently 980 km north east of the Eighty Mile Beach release site and has completed an 8700 km round trip.

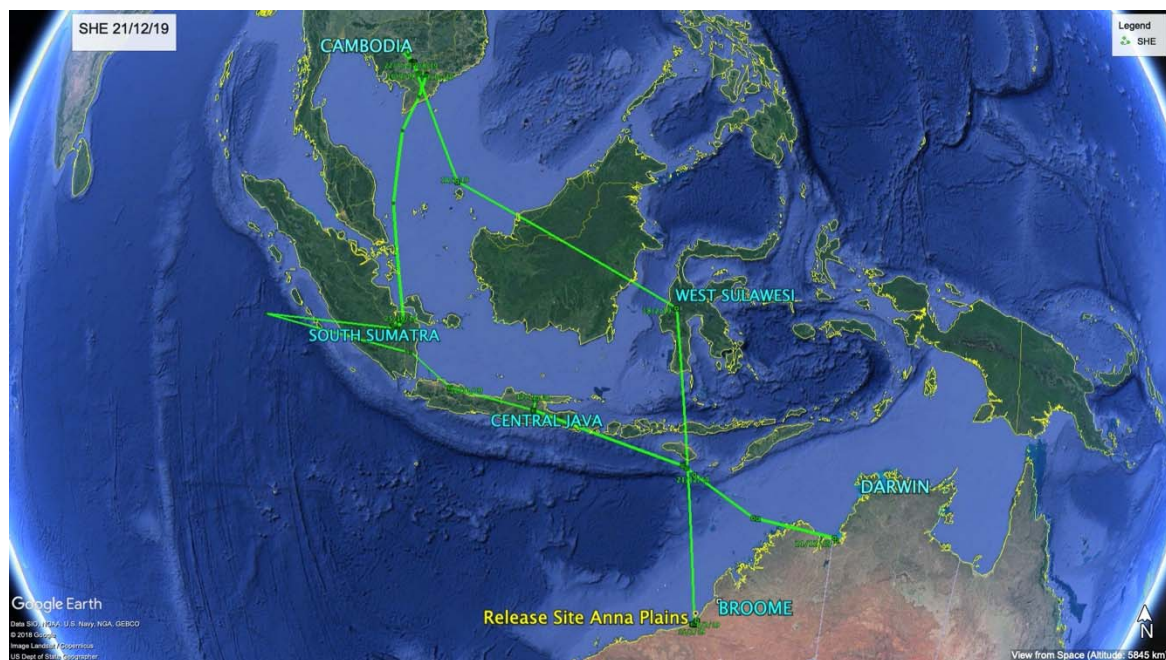


Figure 2 – SHE 21/12/19, from Central Java to the Australian mainland in less than 48 hours.

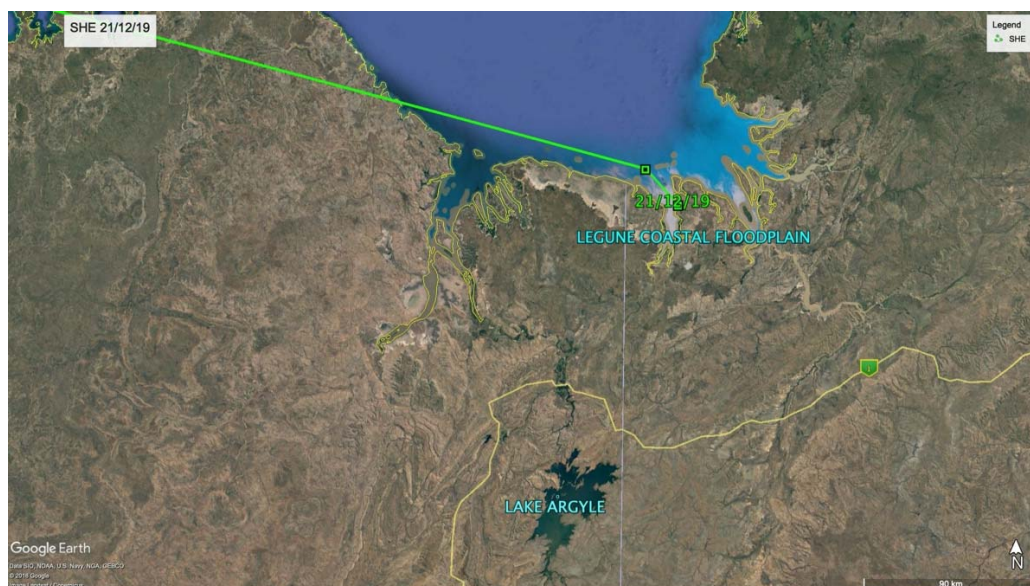


Figure 3 – SHE 21/12/19 – SHE's current location, Legune Coastal Floodplain.

SEP (PTT 83593) – Flying “under the radar”

By Grace Maglio and Subbu Subramanya

After very limited, inaccurate data in mid-November showing that SEP may have travelled to South Sumatra, we once again received more poor-quality data on the December 20th suggesting SEP is now north of Lake Argyle. It is unfortunate that the PTT is not providing the same quality data as SEC and SHE, missing the opportunity of discovering SEP’s route and timing of its flight south. Regardless, after a breeding attempt in India, SEP as completed an extraordinary return trip of over 13,000 km, 5000 km more than its Cambodian breeding counterparts.



Figure 6 – Poor quality data showing that SEP is likely around the Lake Argyle region.



Photo 1 - SEP on the breeding grounds in India (credit: S. Subramanya)

SUN (PTT 83591) – Just for the record

By Grace Maglio and Chung-Yu Chiang

Still no signals at all from SUN since the 1st September.

In the very slim hope that we may receive some data, this map will remain on this final page for a little longer.



Figure 5 - SUN – Still no accurate readings. Pinned area marks probable location from last reading (low accuracy) 1/9/19.



Photo 2 – Oriental Pratincole in west Taiwan (Credit: Chung-Yu Chang)

What next? – the story so far.

With northward migration occurring around late February, there is little time for recovery before migration commences once again as the birds fuel up for their next northward flights.

At the time of this report, SEC, SHE and (probably) SEP are all in the Lake Argyle region within 200 km of each other. In the late November early December period I was alerted by colleague, Amanda Lilleyman of some reports of flocks of Oriental Pratincole flying south-west over Humpty Doo in Darwin, Northern Territory.

Past observations at Anna Plains Station saw very large numbers of Oriental Pratincole coinciding with huge numbers of locusts. These insect blooms typically occur soon after rain and as yet insect numbers on the station are still low due to the lack of sufficient rain (D. Stoate pers. comm).

Unlike the more predictable behaviour of the coastal dependant waders that more or less utilise the same roosts and foraging areas, it will be interesting to see what movements the Oriental Pratincole make between now and February as the wet season rains bring about the right conditions for insect breeding.

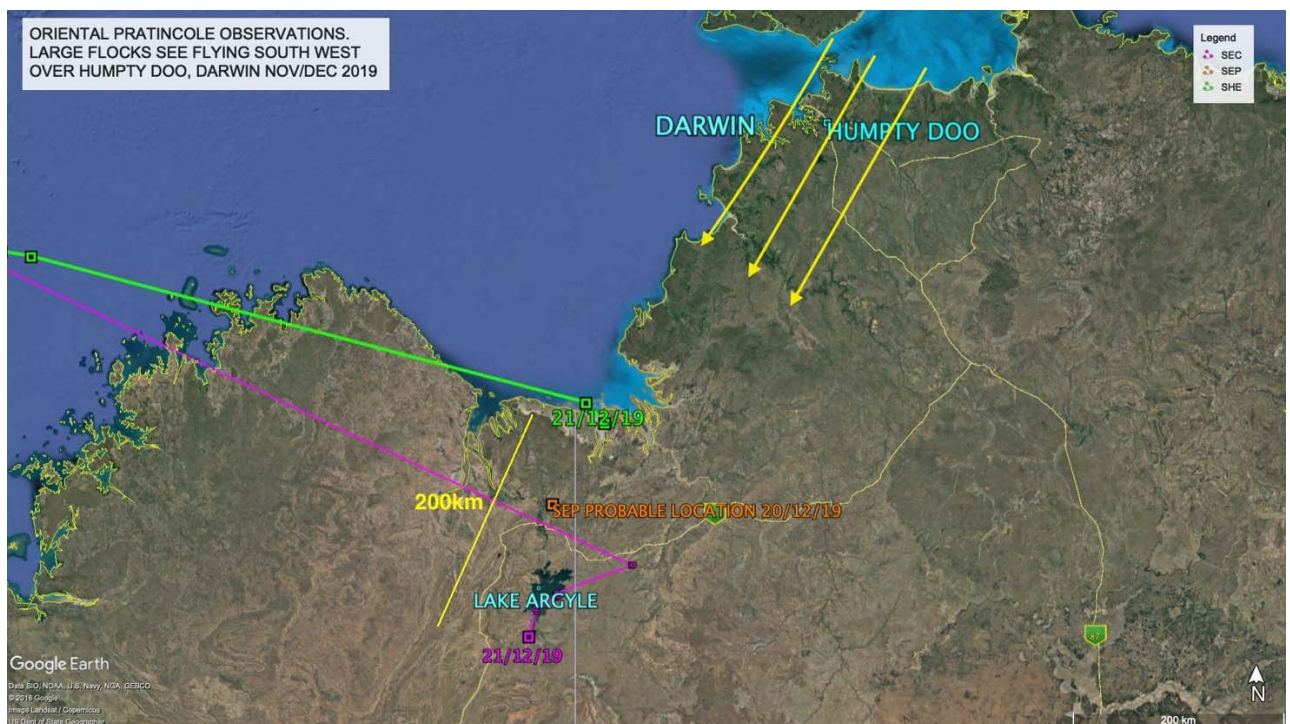


Figure 7 – SHE, SEP and SEC all within 200 km of each other with some independent observations of large flocks of Oriental Pratincole flying south west over Humpty Doo, Darwin.

Table 1 - Dates and flight distance – accurate location data only (analysis pending)

ELF	DATE DEPART AUSTRALIA - approx.	DATE Mainland South East Asia- approx.	DATE AT BREEDING GROUNDS - approx.	Approximate Flight Distance (km)
SEA	SHED/DEAD 9/2/19	N/A	N/A	N/A
SUN	8/3/19	30/3/19	18/4/19- 26/6/19	4800
SEP	4/3/19	20/3/19	22/4/19 – 14/7/19	13,000
***SHE	16/2/19	20/2/19	22/2/19 - 1/6/19 and 2/6/19 – 12/9/19	8700
SEC	26/2/19	20/3/19	20/3/19 – 28/5/19	8400

***** Two breeding attempts in different locations within Cambodia**



Photo 3 – Release of Oriental Pratincole, Eighty Mile Beach, 42 km south of Anna Plains Station, Western Australia (credit: Gary Matthews)

Whimbrel – Good day, LA! (by Katherine Leung)

I receive the following news from Nigel Jackett (previous BBO warden) in early December:

Nigel: I just wanted to let you know that Nyil (BBO warden) saw LA during our shorebird counts on 80MB on 25 November between 40-45km south. He didn't realise it was sat tagged so unfortunately can't comment on the state of the tag, but clearly all is well!

Katherine: Wao~~~ Good work finding LA! and good to know it is doing well. I might write a few lines about this in the next update.

Nigel: I know, pretty cool! I was actually in the car with him scanning the knots and didn't realise he'd seen it until we'd left the flock! I said "LA has a sat tag!", but he admitted he hadn't noticed it. Oh well, great it's still going!

So, these are the few lines. Pretty cool!

Migration summary of Whimbrel LA (as of 27 Dec 2019):

No. of days since transmitter deployment	No. of days since arrive back in Australia (2019)	Count-down to next migration season
1,048 days	(estimated) 77 days	120 days