

# West Pilbara Turtle Program



## PROGRAM SUMMARY 2020-21

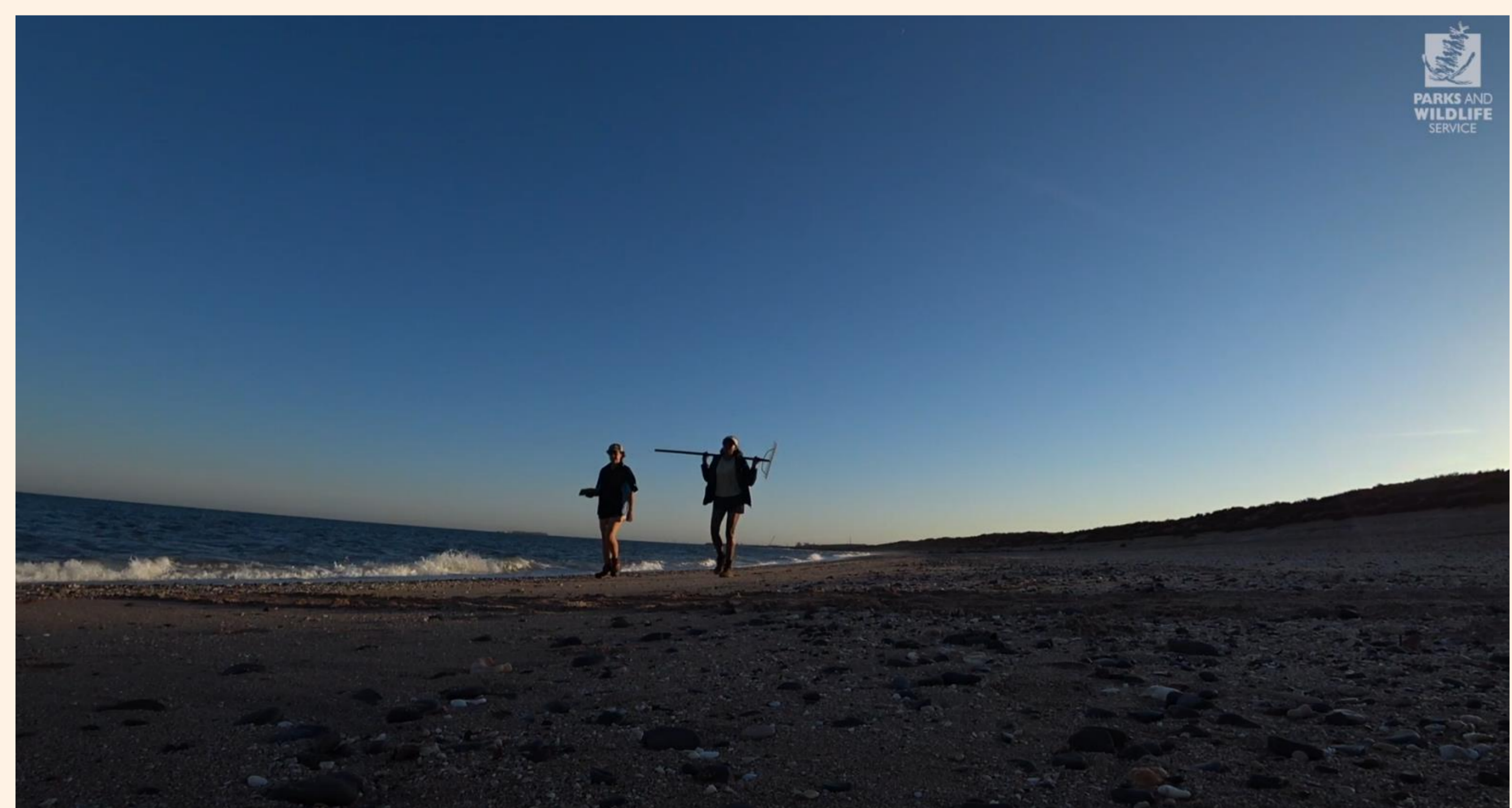
### Background



Volunteers at the end of season celebration



Volunteer training and night tours



Morning track counts

#### A brief history of the program

- The program is a partnership between Rio Tinto and the Parks and Wildlife Service (P&WS) of Department of Biodiversity, Conservation and Attractions (DBCA), bringing together industry, government and the community to monitor, raise awareness and protect marine turtles across the Pilbara
- WPTP has been operating since 2002, with first data collected for a pilot project in December 2002 – 19 years
- Over 540 people have signed up as volunteers, since 2005
- 30-50 volunteers actively conduct beach monitoring each year
- Since 2014-15, retention of volunteers has increased and experienced volunteers have increased the number of days they contribute to beach monitoring.

#### Monitoring methodology 2020-21

- Monitoring methodology is based on methodology used for Ningaloo Turtle Program and Care for Hedland Turtle Program
- This year, Bells Beach, Boat Beach and Yacht Club Beach (Wickham) and Cleaverville were monitored over the following peak nesting periods to gain a broader insight into turtle activity in the region:
  - 7 – 21 November 2020
  - 26 November – 19 December 2020
  - 2 – 16 January 2021
- Data are collected digitally using the ODK collect app
- The yearly estimates of nest numbers and total tracks have been derived from a model developed by A. Whiting in 2018 and used data collected from the three sampling periods above
- *In March 2020, a global pandemic was announced for the COVID-19 virus and significant disruption to society continued through 2020-21. Fortunately in north west WA life continued with very few restrictions, however protocols were in place to manage COVID-19 risk.*

For more information contact the WPTP Coordinator. Phone: 9182 2031. Email: [wptp@dbca.wa.gov.au](mailto:wptp@dbca.wa.gov.au)

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### Our findings – monitoring data

#### Monitoring effort

- This year, there were 168 volunteer days covering four beaches
- For the first time, Cleaverville was monitored for the three monitoring periods.

#### Species identified

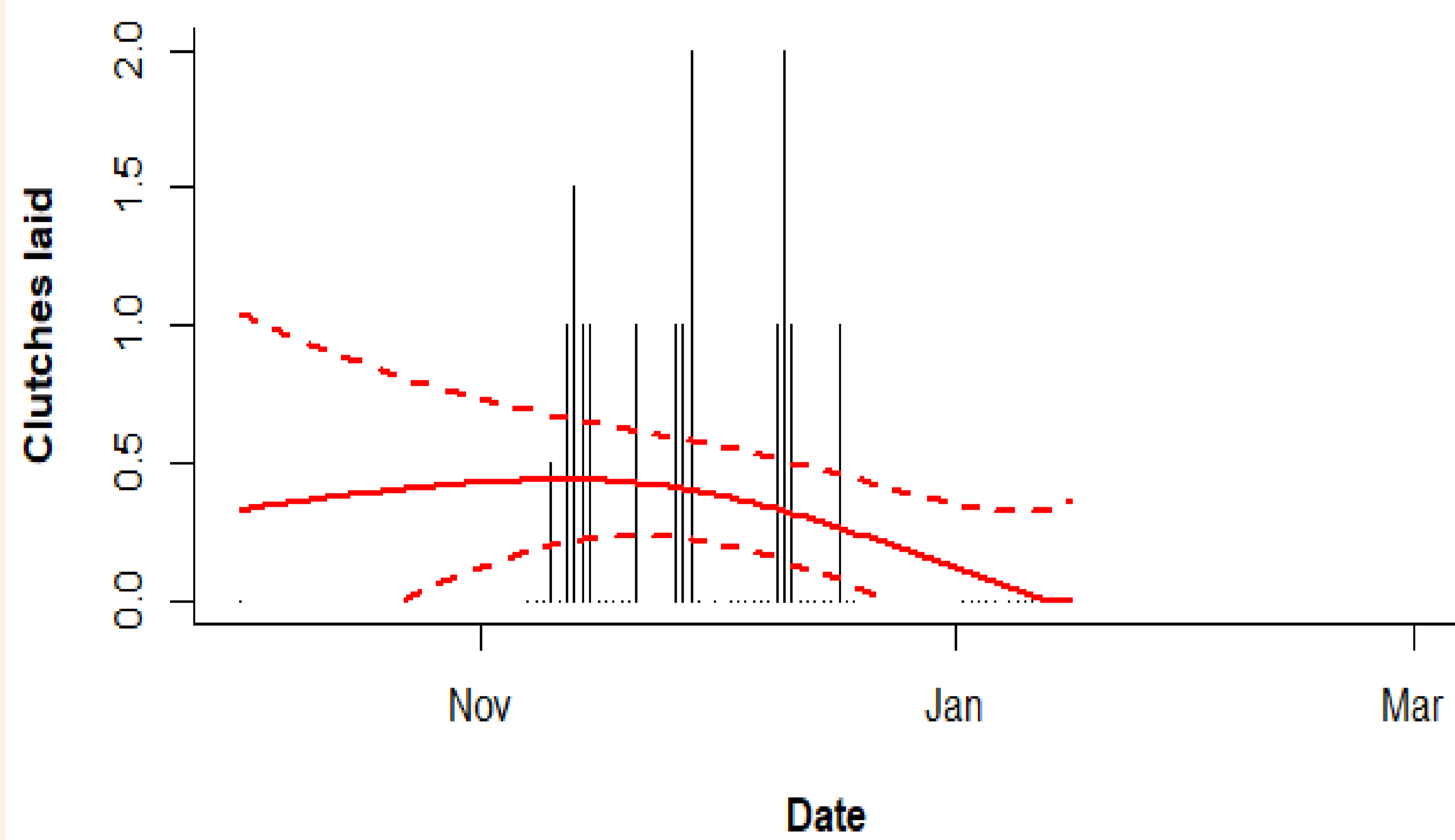
- All tracks and nests were identified as belonging to flatback (*Natator depressus*) turtles except one hawksbill (*Eretmochelys imbricata*) turtle false crawl at Cleaverville and 25 tracks that were recorded as unknown by volunteers.

#### Predation/disturbance 2020-21

- At Bells Beach and Yacht Club Beach there was low general disturbance (not near a particular nest) recorded – two cat tracks, two tidal disturbances, two dog tracks and one unknown. One nest had been dug up by a perentie.
- At Boat Beach there was a high level of disturbance to the nesting beach by vehicles with 18 days recording vehicle activity. Also one cat, one dog and one unknown disturbance was recorded.
- Cleaverville also recorded high levels of disturbance with 16 days of vehicle activity, three cat tracks, one dog track, one fox track and three unknown. There was one vehicle track that directly impacted a nest.
- Predator trapping was undertaken by Rio Tinto at Bells Beach in August and November 2020.

#### Number of monitoring days and nests recorded at each monitoring beach, 2020-21

Site	Days monitored	Nests
Bells and Yacht Club beaches	60	91
Boat Beach	50	14
Cleaverville	58	19

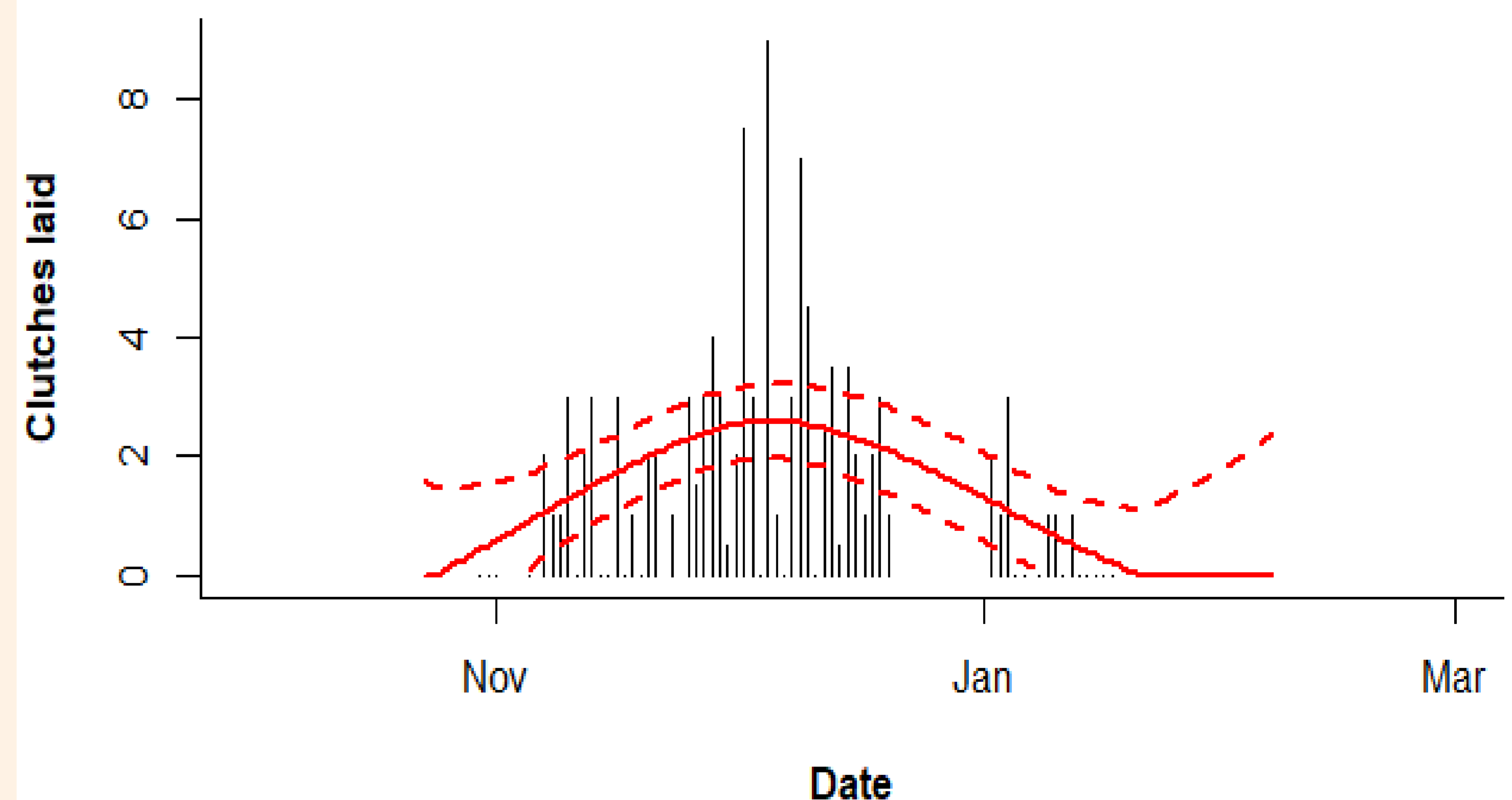


#### Boat Beach 2020-21

- Actual count: **14 nests over 50 days**
- Model prediction: **34 nests for season (error range: 10-66)**
- Black vertical bars are actual counts, red lines show model with upper and lower limits.

#### Bells Beach 2020-21

- Actual count: **90 nests over 60 days**
- Model prediction: **132 nests for season (error range: 79-231)**
- Black vertical bars are actual counts, red lines show model with upper and lower limits.



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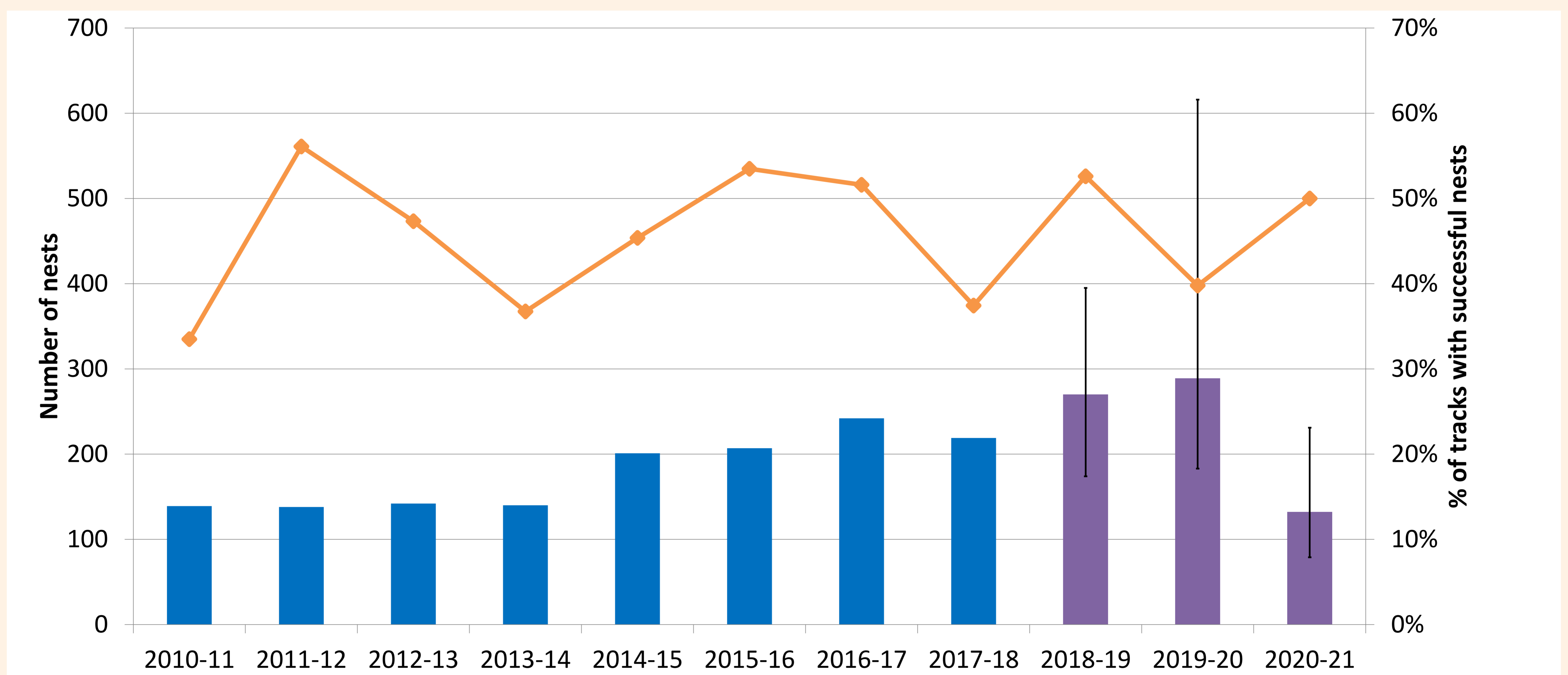
# West Pilbara Turtle Program



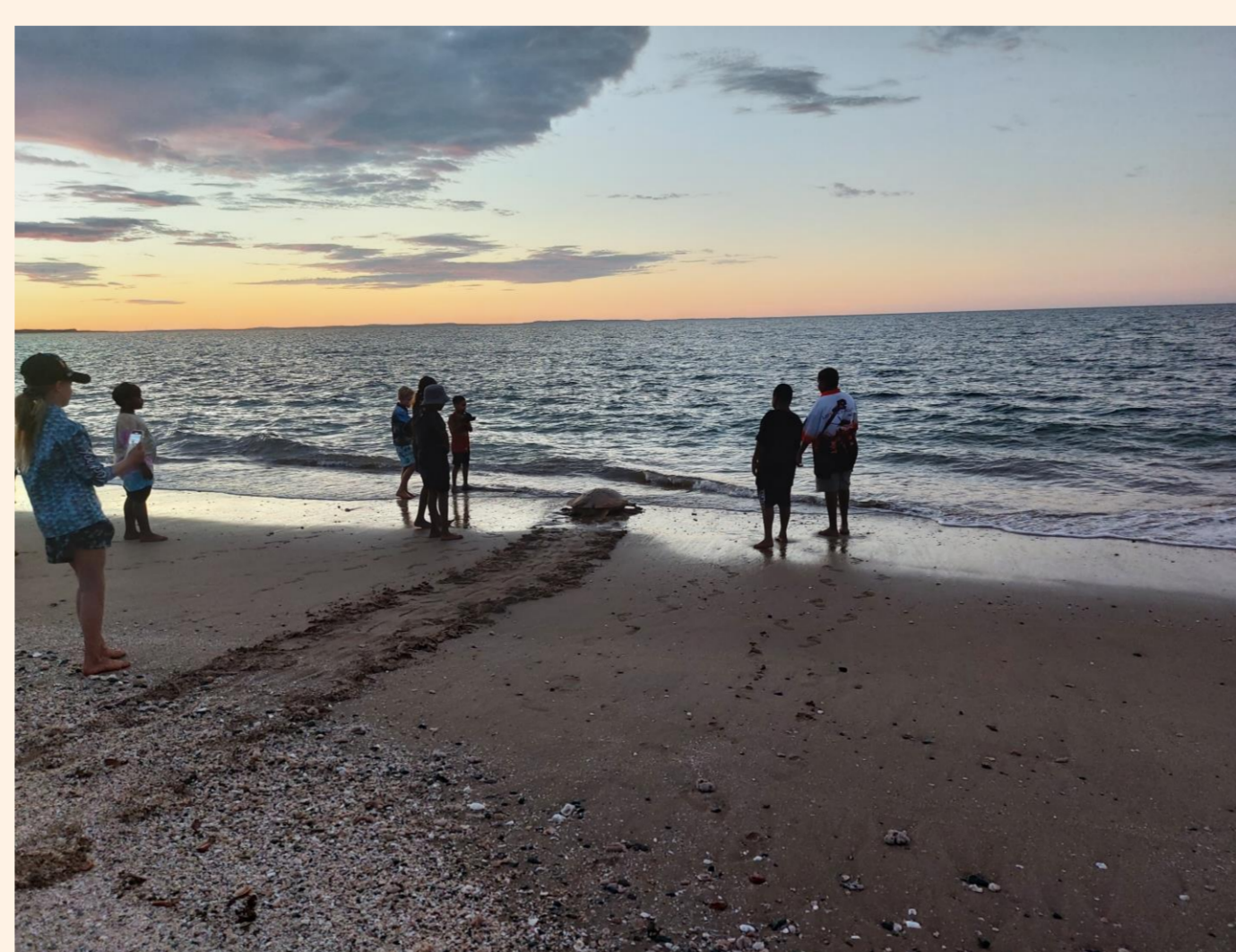
## PROGRAM SUMMARY 2020-21

### Our findings – long term nesting trends

- Overall the number of nests (modelled) for 2020-21 was the lowest on record since 2010-11
- Over the same date ranges, we recorded 90 nests this year (2020-21) compared with 187 last year (2019-20)
- This season's nest number is similar to the nest numbers for season 2010-11 to 2013-14
- It is unclear at this stage if the lower nest numbers this year compared with recent past seasons (2016-17 to 2019-20) is part of the natural fluctuation in nest numbers or due to external factors.
- Other programs around the region also recorded lower nesting numbers by flatback turtles this season (Pers. Comms.).



Note: Error bars for 2020-21 show the error range of the model used to predict 132 nests for the season at Bells Beach.



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Department of Biodiversity, Conservation and Attractions



Marine Turtles Western Australia



RioTinto

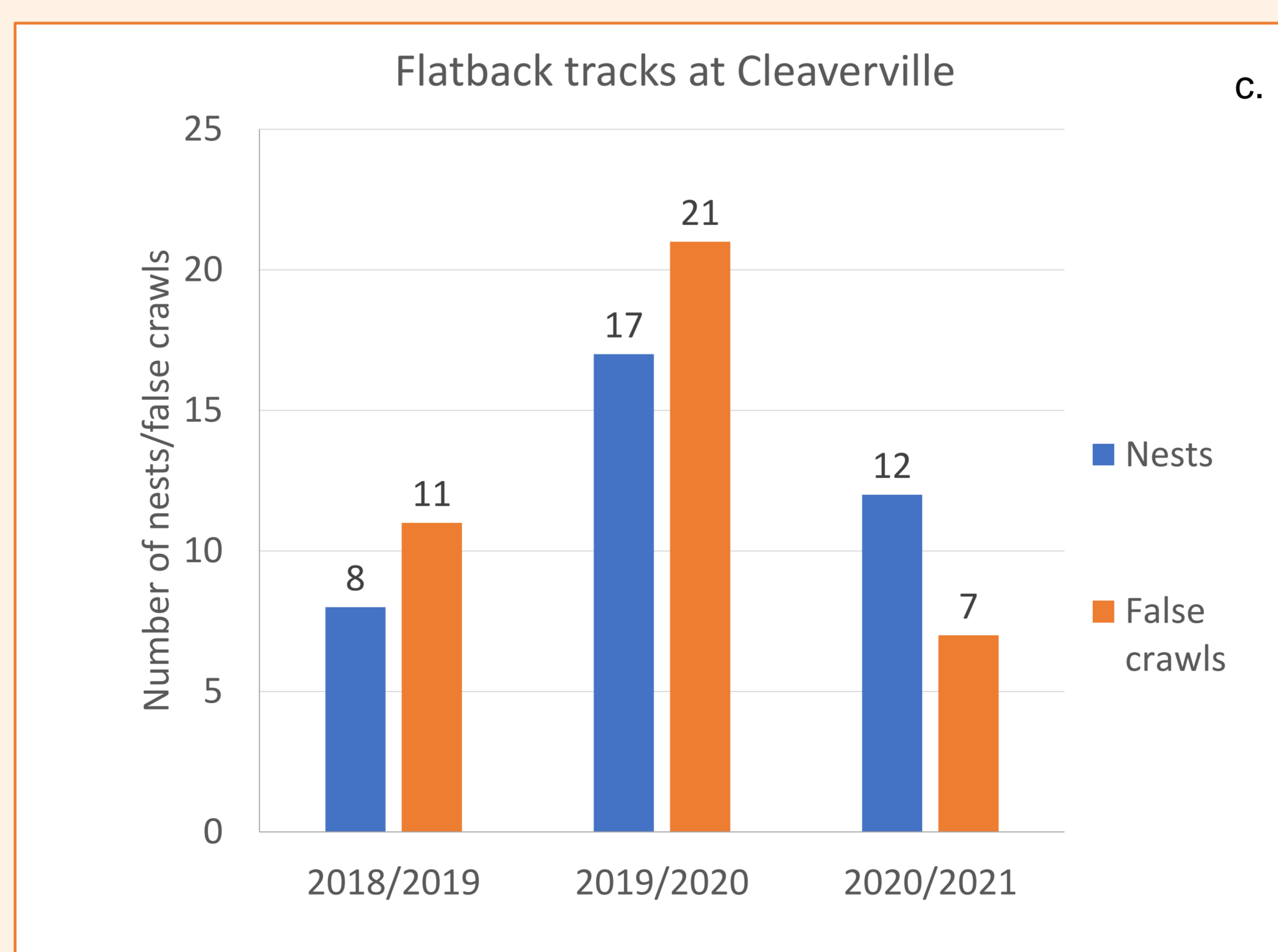
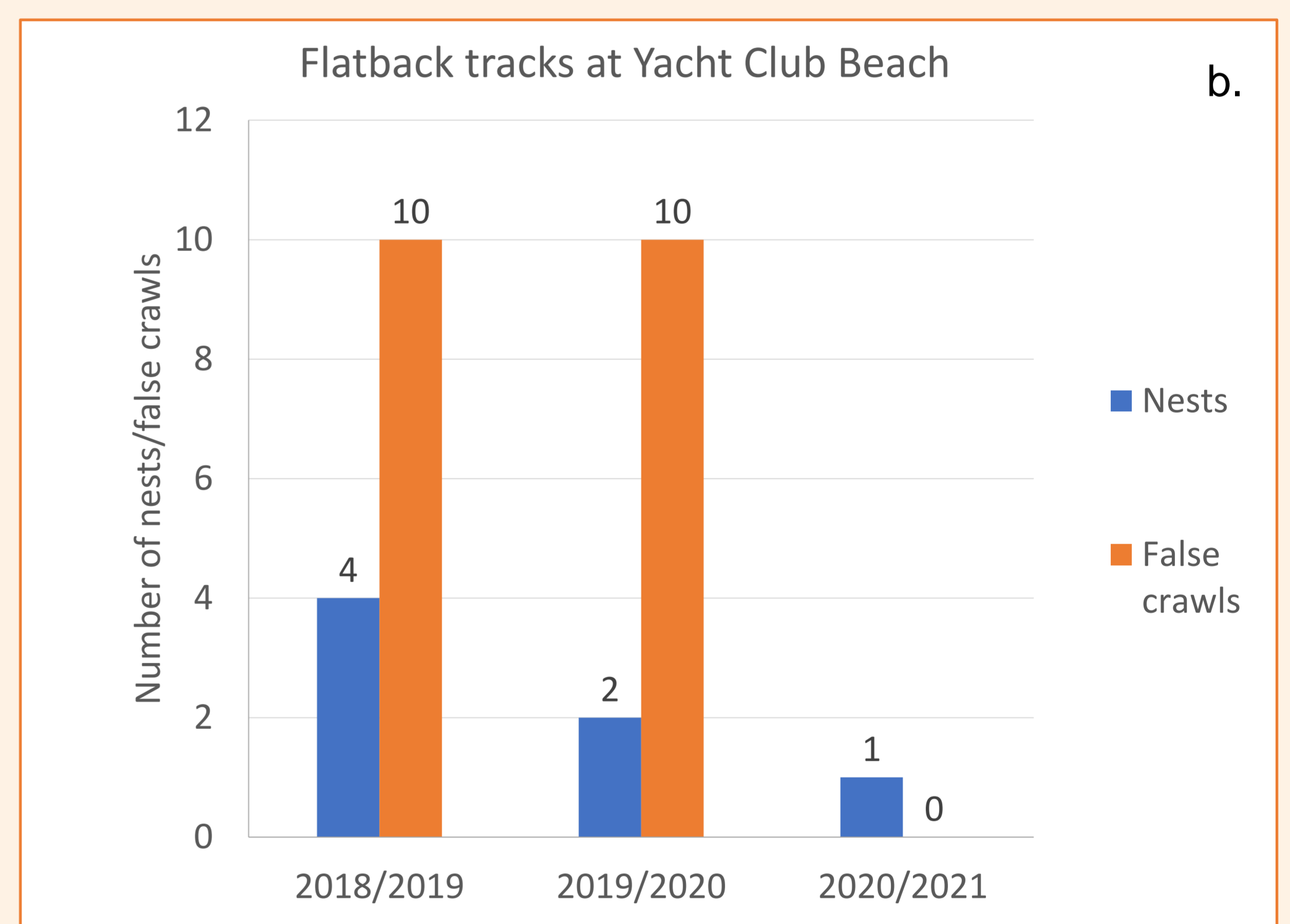
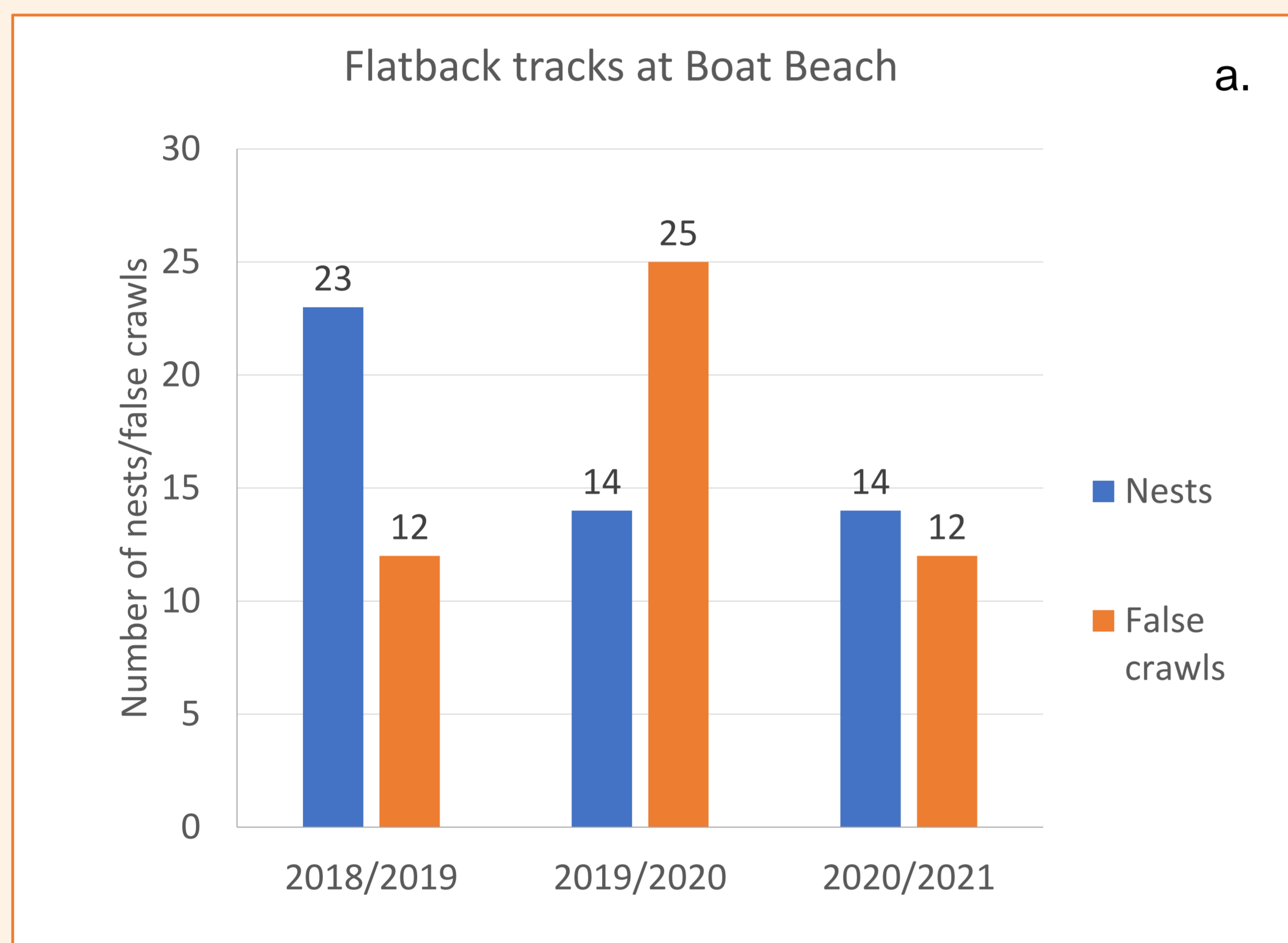
# West Pilbara Turtle Program



## PROGRAM SUMMARY 2020-21

### Our findings – long term nesting trends continued

- There are now three years of comparative data for Boat Beach, Yacht Club Beach and Cleaverville. Figures a-c below show a comparison of the same number of days, over the same period each year for each site.
- The number of nests recorded at Boat Beach in 2020-21 was similar to previous years (Figure a).
- At Yacht Club Beach there was lower turtle activity in 2020-21 compared with other years with no false crawls recorded and only one nest (Figure b).
- At Cleaverville, for the same number of monitoring days during the same period, the numbers of nests and false crawls recorded varied over the three years (Figure c).
- It is evident from the past three monitoring seasons that flatback turtles are consistently using Boat Beach, Yacht Club Beach and Cleaverville beach to nest.



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# West Pilbara Turtle Program



## PROGRAM SUMMARY 2020-21

### Other achievements – promotion and education



School talks and excursions



Radio interviews



Hats and t-shirts



Night tours



Interested in becoming a volunteer...



WPTP promotional video



Sea Week event

#### Promotional activities

In 2020-21 we had 9 promotional projects including but not limited to:

- Continuous posts and monitoring of WPTP Facebook page - 73 posts
- WPTP merchandise distributed at Dampier markets, Program Launch, training and the end of season volunteer celebration
- Distribution of flyers across Karratha, Wickham, Roebourne and Dampier
- Tilly the Turtle videos created and posted on Facebook to promote a beach clean-up at Cleaverville and turtle nesting season
- Advertisement of volunteering opportunities through volunteering WA
- Updates to the WPTP webpage including new photos added, public annual report and promotional video
- Flyers/posters shared across Rio Tinto site screens and/or Facebook pages

#### Educational activities

- This year has been a busy year for educational activities with over 40 events including talks to all but two primary schools in the local area, activities at daycares or Ready Set School programs, talks to EPIC, projects with the Karratha Senior High School integrated science students and St Luke's College and family monitoring days.
- We participated in cultural awareness training with Ngarluma Aboriginal Corporation and began discussion and planning for a project to record traditional ecological knowledge of turtles and sea country.
- We held a Sea Week event at Hearson's Cove to celebrate all things from the sea including turtles and screenings of David Attenborough's A Life On Our Planet for World Turtle Day and World Biodiversity Day.

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# West Pilbara Turtle Program



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### Other achievements – working with others



Program launch with Wickham Tidy Towns



Working with industry, government and businesses for Sea Week event at Hearson's Cove

#### Working with others

We had many activities in 2020-21 that involved other community groups or government agencies such as:

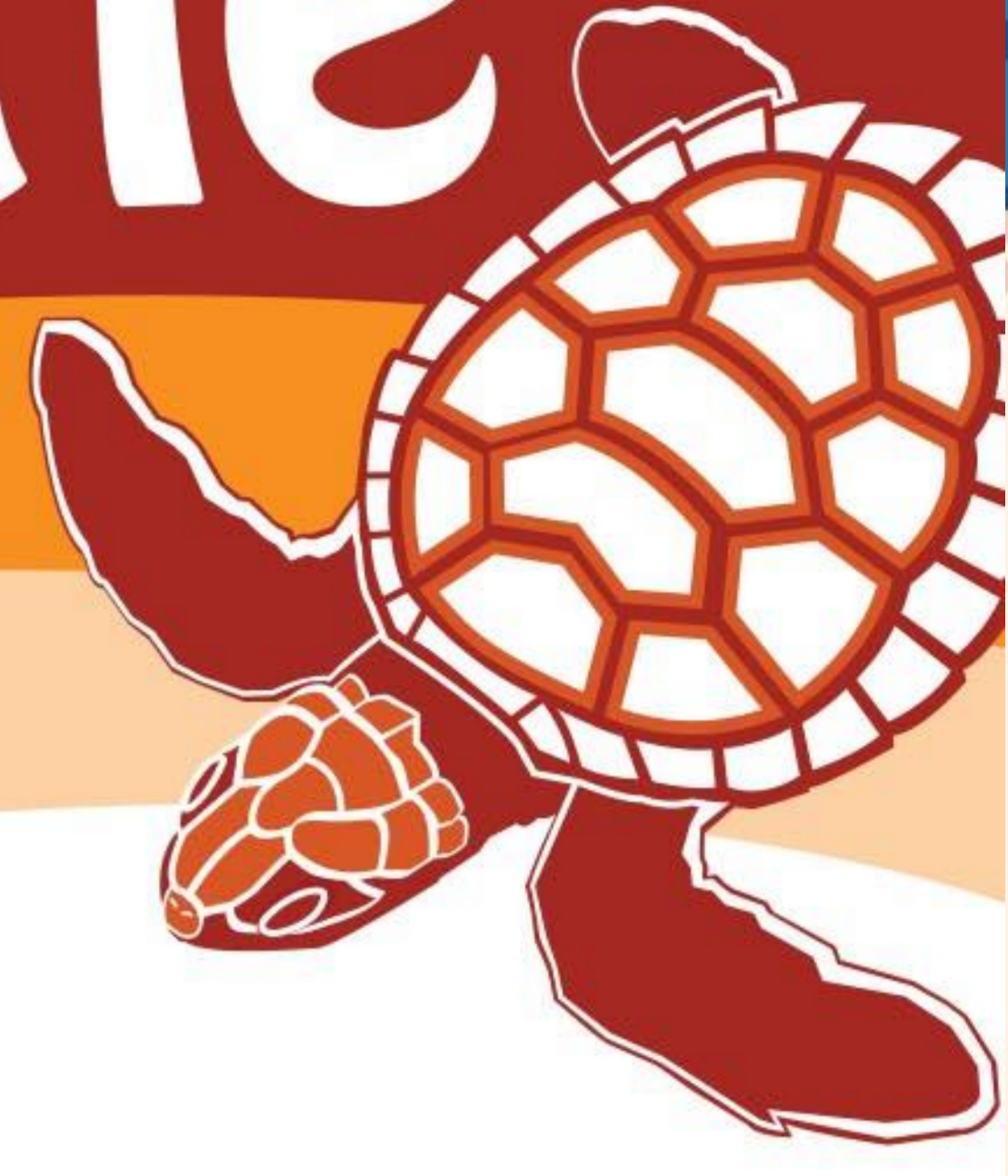
- WPTP program launch and beach clean-up with Wickham Tidy Towns
- A Sea Week Celebration event to educate the general public in all this about the sea at Hearson's Cove involving 11 industry, government and small business organisations
- Active management of nests laid on public beaches with City of Karratha and Rio Tinto
- Joint messaging and educational material with Rio Tinto and the City of Karratha
- One night tour with the North West Shelf Flatback Turtle Conservation Program and the Police and Community Youth Centres
- Work with Pilbara Dive and Tours to run a beach clean-up at Cleaverville and promote messaging about turtles in the area
- Promotion of the program through City of Karratha networks
- Work with Karratha Community House to deliver turtle talks to their programs and share information about the program.



Beach clean-ups with Pilbara Dive and Tours

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### Summary

- All sites (Bells Beach, Boat Beach, Yacht Club Beach and Cleaverville) were successfully monitored for three periods, with all days covered by volunteers or the program coordinator. There was an increase in monitoring at Cleaverville this season.
- At Bells Beach, the number of nests recorded was the lowest on record since 2010-11 and nearly half the number of nests compared with the last two seasons. The number recorded this season, was similar to the number of nests recorded for seasons 2010-11 to 2013-14 and it may therefore be part of the natural variability in annual nesting numbers.
- We now have three years of nesting data for Boat Beach and Cleaverville, areas used regularly for recreation. Flatback turtles are consistently nesting at these beaches with between 8 and 23 nests recorded at each beach each season.
- WPTP continued to work with the City of Karratha in 2020-21 to manage Boat Beach and Cleaverville by marking nests in areas of high vehicle disturbance and erecting signage around turtle nesting areas.
- The education pillar of the program continued to grow in 2020-21 with 40 activities across schools, community groups and events both in person and online. Of the 11 schools in the area, 7 have had turtle education activities delivered to them and there are more planned for 2021-22.
- In 2020-21 there were many new volunteers who actively participated in beach monitoring. This may have been a result of the COVID-19 pandemic and the increase in people participating in local activities rather travelling away from the region.
- The WPTP and North West Shelf Flatback Turtle Conservation Program increased their work together, sharing knowledge and ensuring consistent messaging and activities across the region. In particular, work continued to develop a traditional ecological knowledge of sea turtle and sea country project with Ngarluma Aboriginal Corporation and local traditional owners.

#### Improvements identified for 2021-22 include:

- Continue to offer family friendly events and activities throughout the year
- Continue to work with the North West Shelf Flatback Turtle Conservation Program and Ngarluma Aboriginal Corporation
- Work more closely with volunteers and Rio Tinto when volunteers participate in turtle tagging and nest excavation activities to ensure a positive experience by all.

Flatbacks  
Thanks  
Amazing  
Volunteers  
Thankyou  
Turtles  
BellsBeach

DBCA  
2020-21  
Nature  
Dankie!Merci



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