

West Pilbara Turtle Program



PROGRAM SUMMARY 2021-22

Background



Volunteers watching a female flatback return to the water after nesting



WPTP volunteer helping Rio Tinto with flipper tagging



End of season celebration

The West Pilbara Turtle Program acknowledges the traditional owners, the Ngarluma people, of the land and sea country where we work and pay our respects to Ngarluma elders past, present and emerging.

A brief history of the program

- The program is a partnership between Rio Tinto and the Parks and Wildlife Service (P&WS) of the 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 – 20 years ago
- Over 621 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 2021-22

- 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 – 25 November 2021
 - 26 November – 19 December 2021
 - 2 – 16 January 2022
- 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 2021-22. Fortunately for WPTP our beach monitoring continued with few interruptions and protocols were in place to manage COVID-19 risk. In early 2022 as COVID-19 spread throughout the Pilbara some educational activities for the program were delayed or cancelled.*

For more information contact the WPTP Coordinator. Phone: 9182 2031. Email: wptp@dbca.wa.gov.au

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Our findings – monitoring data

Monitoring effort

- This year, there were 172 volunteer days covering four beaches

Species identified

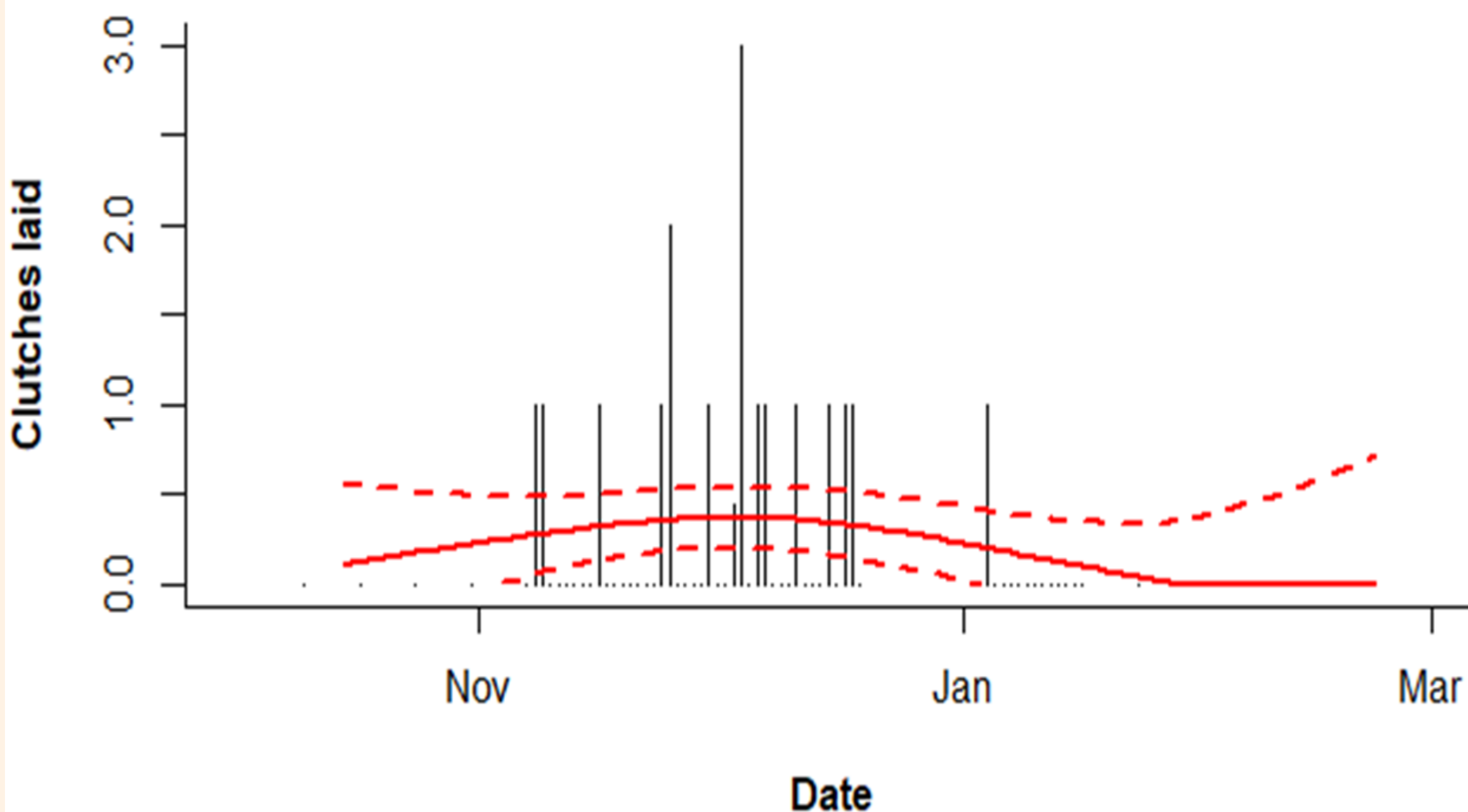
- All tracks and nests were identified as belonging to flatback (*Natator depressus*) turtles except one hawksbill (*Eretmochelys imbricata*) turtle false crawl at Cleaverville.

Predation/disturbance 2021-22

- At Bells Beach and Yacht Club Beach there was low general disturbance (not near a particular nest) recorded. Vehicle tracks recorded at Yacht Club Beach and Bells Beach were from a quad bike that had crossed both beaches.
- At Boat Beach there was a high level of disturbance to the nesting beach by vehicles with 10 days recording vehicle activity. Three dogs and four unknown disturbances were recorded.
- Cleaverville also recorded high levels of disturbance with 10 days of vehicle activity, four cat tracks, four dog tracks and five unknown.
- The reporting of vehicle disturbance is certainly being under reported in our monitoring and will be a focus of 2022-23.
- Predator trapping was undertaken by Rio Tinto at Bells Beach in August and November 2021.

Number of monitoring days and nests recorded at each monitoring beach, 2021-22.

Site	Days monitored	Nests
Bells and Yacht Club beaches	58	253
Boat Beach	58	17
Cleaverville	56	53

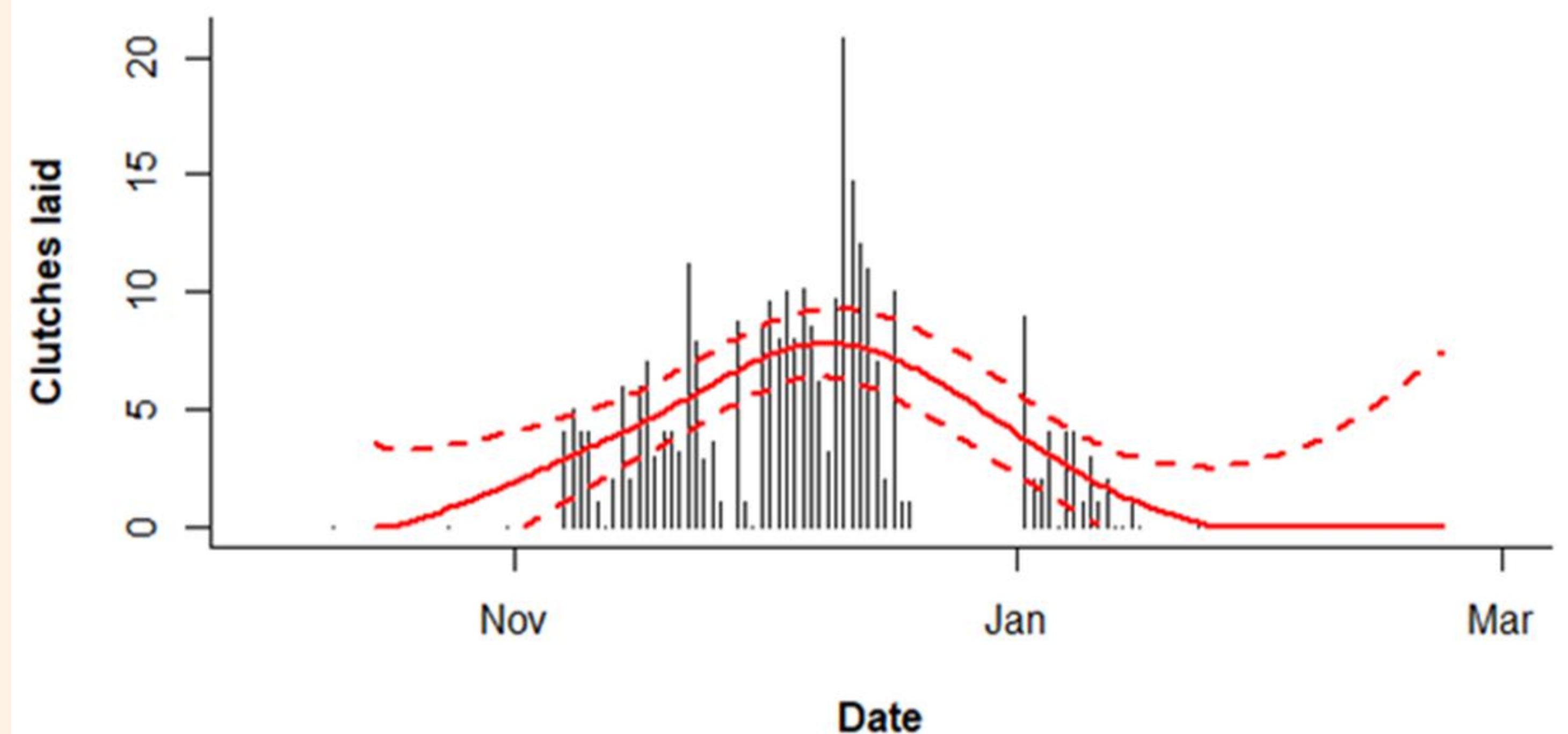


Boat Beach 2021-22

- Actual count: **17 nests over 58 days**
- Model prediction: **25 nests for season (error range: 5-63)**
- Black vertical bars are actual counts, red lines show model with upper and lower limits.

Bells Beach 2021-22

- Actual count: **252 nests over 57 days**
- Model prediction: **393 nests for season (error range: 255-709)**
- Black vertical bars are actual counts, red lines show model with upper and lower limits.



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Department of Biodiversity, Conservation and Attractions



Marine Turtles Western Australia



RioTinto

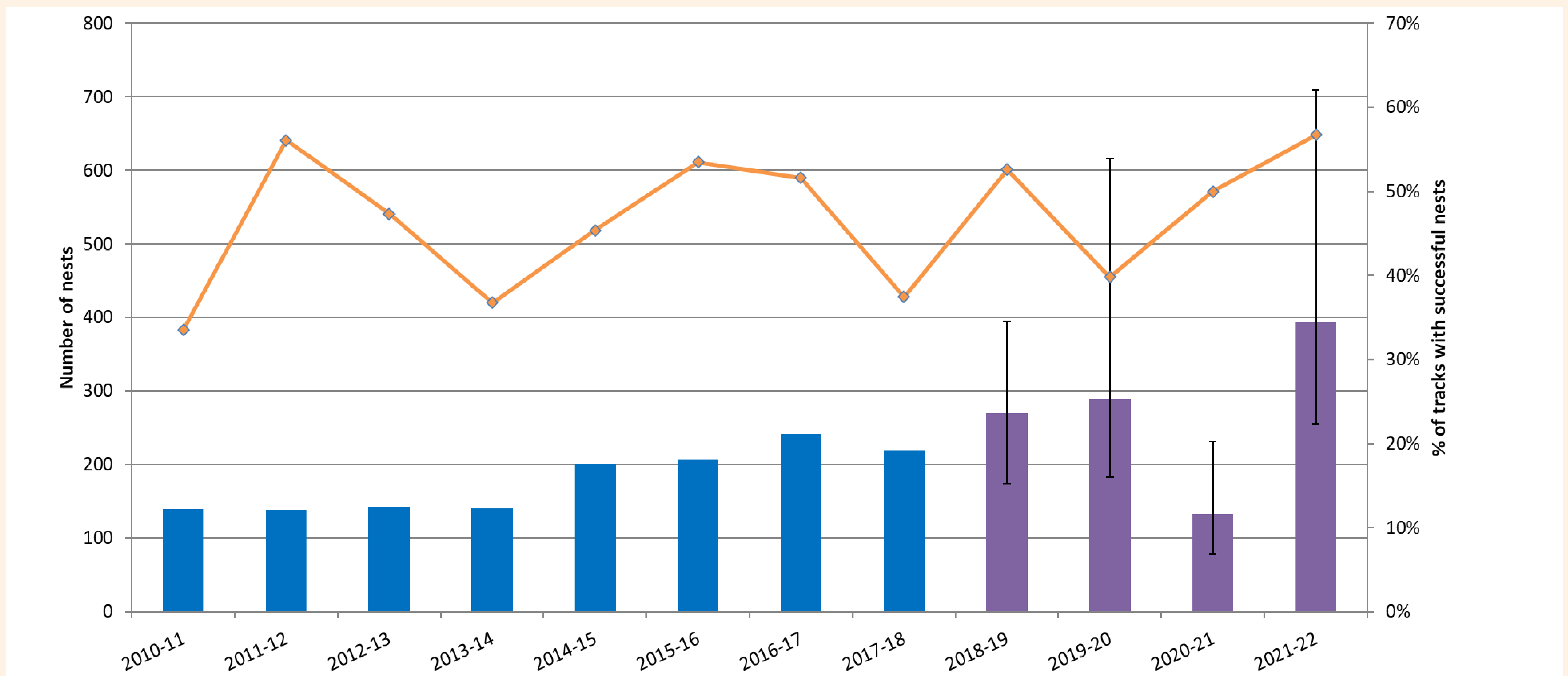
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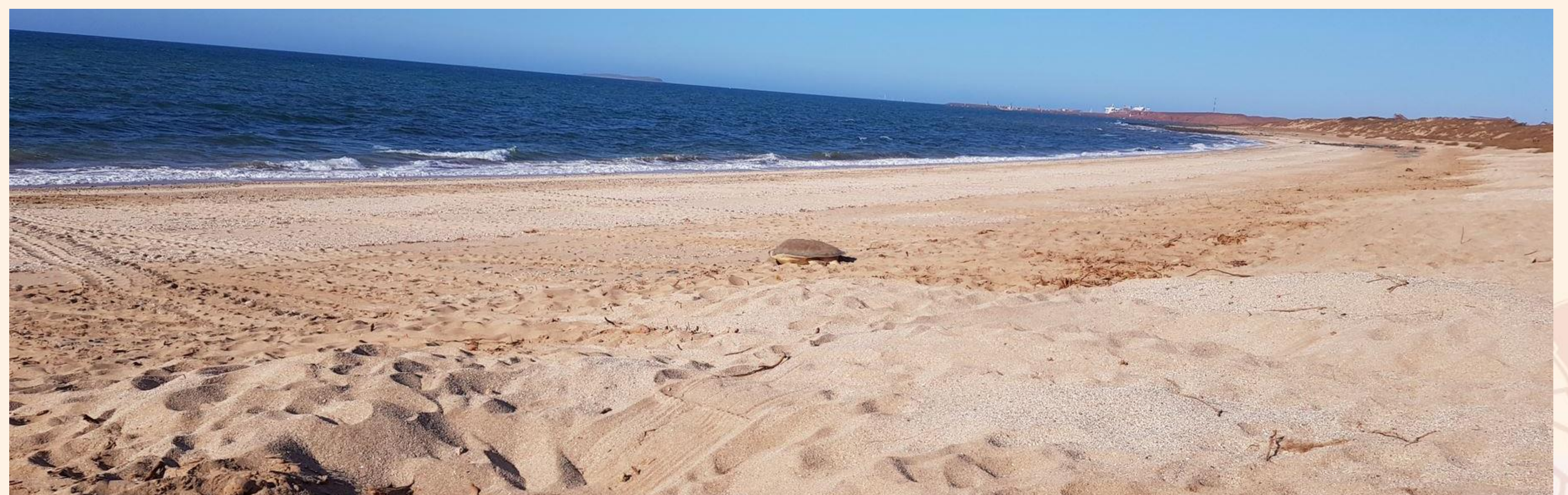
PROGRAM SUMMARY 2021-22

Our findings – long term nesting trends

- Overall the number of nests (modelled) for 2021-22 was the highest on record since 2010-11 (see figure below) with 393 nests estimated.
- Over the same date ranges, we recorded 252 nests this year (2021-22) compared with 90 last year (2020-21).
- After a low nesting season last year, it was exciting to see so many nesting turtles at Bells Beach in 2021-22.



Note: Error bars for 2021-22 show the error range of the model used to predict 393 nests for the season at Bells Beach.



Flatbacks nesting at Bells Beach

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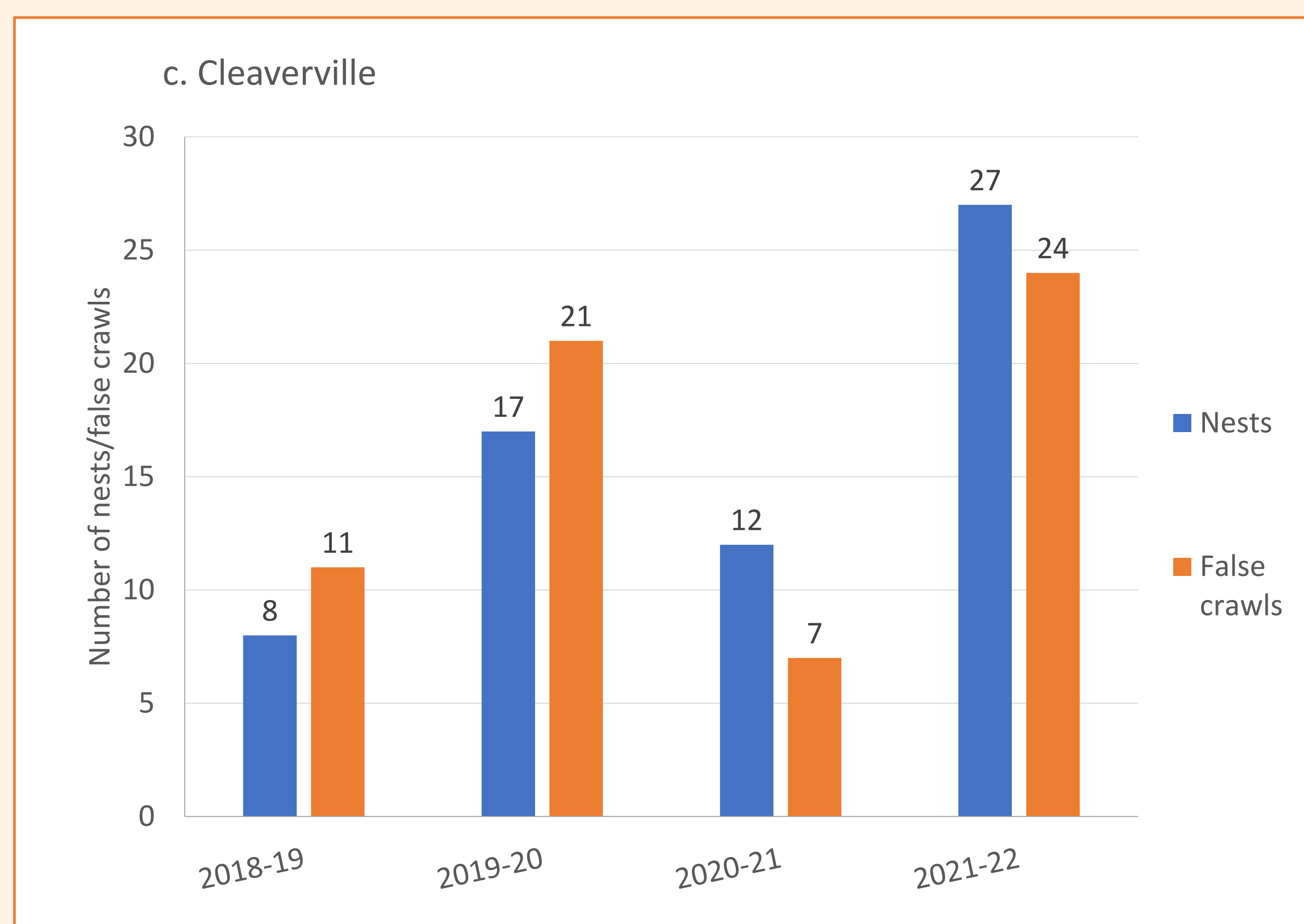
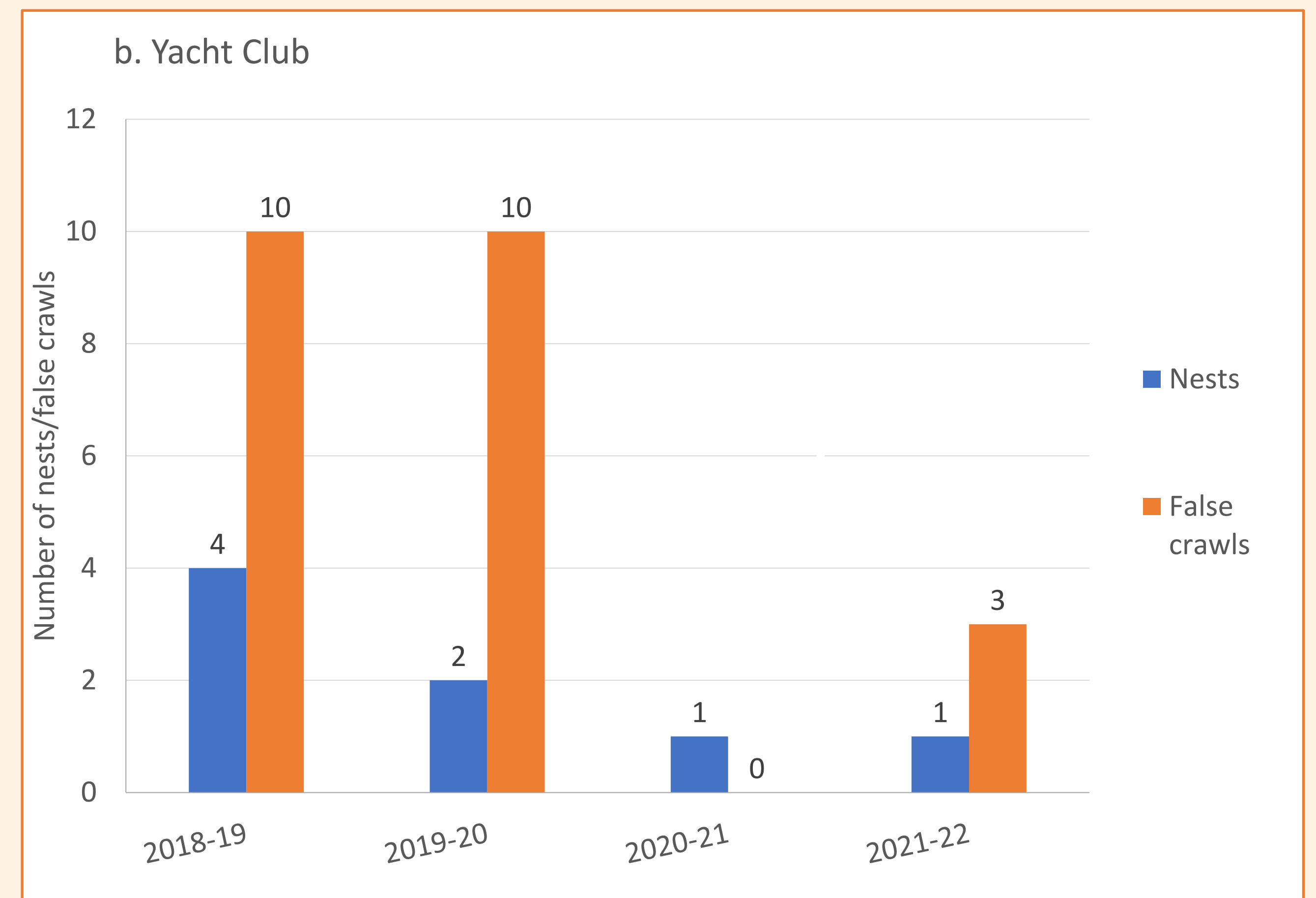
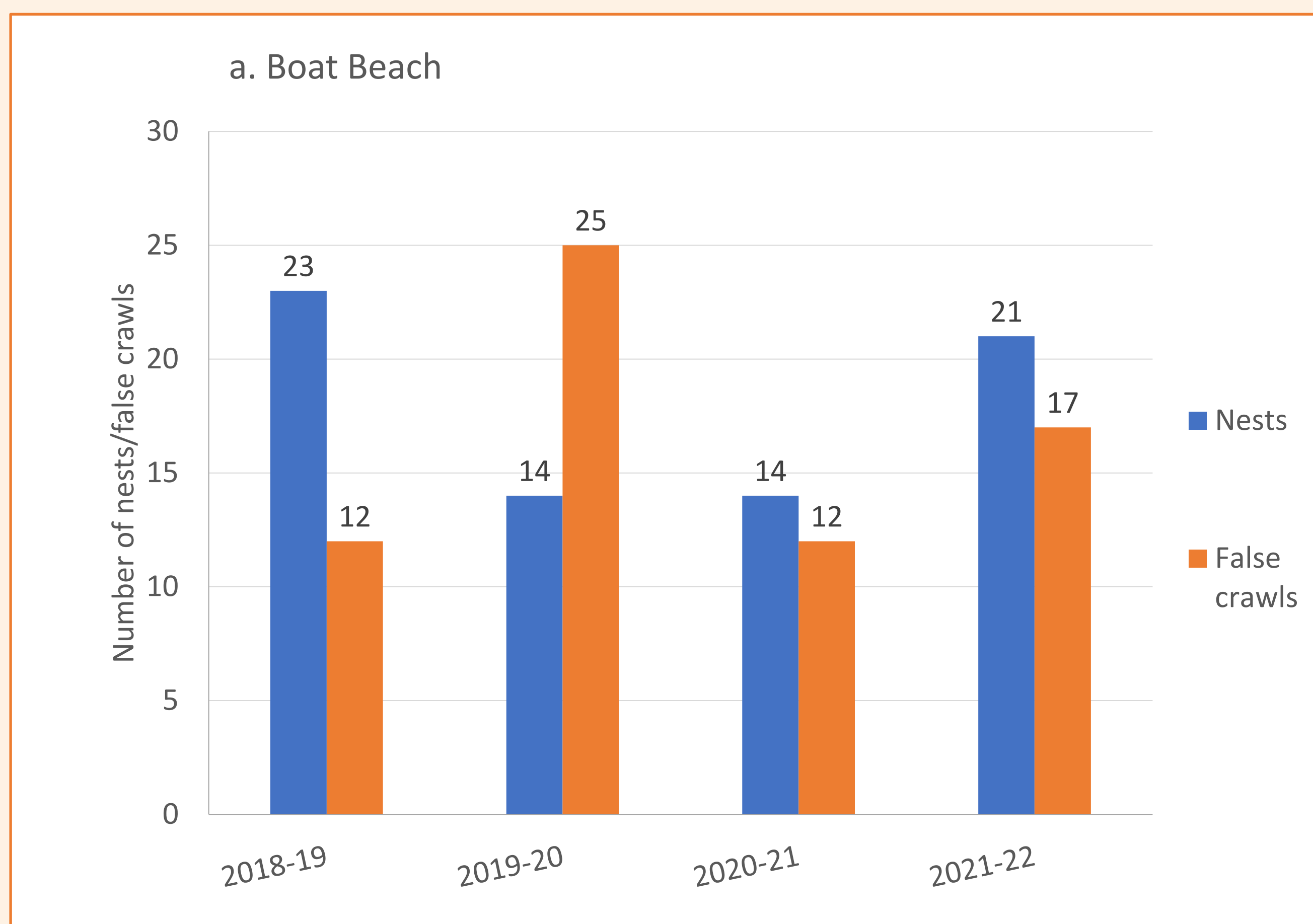
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Our findings – long-term nesting trends continued

- There are now four 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. The number of nests recorded at Boat Beach in 2021-22 was similar to previous years (Figure a).
- At Yacht Club Beach there was similar turtle activity in 2021-22 compared 2020-21 but lower compared with other years with only one nest and three false crawls (Figure b).
- At Cleaverville, for the same number of monitoring days during the same period, the numbers of nests and false crawls recorded was higher this year (Figure c).
- It is evident from the past four monitoring seasons that flatback turtles are consistently using Boat Beach, Yacht Club Beach and Cleaverville to nest particularly at Boat Beach and Cleaverville.



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Other achievements – promotion and education



Promotional products and market stalls

Promotional activities

In 2021-2022 there were more than 26 activities, events or products delivered to promote the program. These included:

- Regular Facebook posts
- Distribution of merchandise at FeNaCING Festival, Dampier markets, the Program Launch and other educational stalls
- Distribution of flyers at shopping centres, sports precincts, libraries and visitor centres
- Advertisements and flyers on Rio Tinto site screens, social media and newsletters
- Tilly the Turtle videos on Facebook
- Newspaper advertisement and advertising on Volunteering WA and seek
- Radio interviews with ABC North West and Ngaarda Media and a live TV interview with ABC National News.

Educational activities

Educational activities were again a key focus for the WPTP in 2021-22. Across Karratha, Wickham, Roebourne and Dampier 47 educational activities were delivered. These included:

- 21 talks at local primary and secondary schools
- Story time sessions at Dampier, Karratha and Wickham libraries
- Six night tours to show the community turtle nesting at Bells Beach
- Family monitoring days to introduce people to the program and look for hatchlings
- Various stalls at festivals and school events including National Science Week Fair at Karratha Senior High School, STEM Open Day at Baynton West PS and FeNaCING Festival
- Beach clean-ups with Pilbara Dive and Tours and Wickham Tidy Towns
- Turtle First Aid and Necropsy Workshop for locals (industry and public) who may respond to sick or injured marine turtles.



Night tours



School talks to Karratha STEM Centre

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Other achievements – working with others



Bird watching event with industry and other government agencies
Hearson's Cove



Program launch with Wickham Tidy Towns



Work with the City of Karratha and Rio Tinto to manage Boat Beach

Working with others

In 2021-22, the WPTP continued to work closely with a range of stakeholders to deliver events and jointly manage turtle nesting beaches. For the fourth year in a row, we worked with Wickham Tidy Towns to launch the turtle monitoring season and clean-up Wickham beaches. We also worked with Pilbara Dive and Tours to clean-up Dampier foreshore.

On Boat Beach during the turtle monitoring season we worked with the City of Karratha to protect turtle nests laid in the vehicle traffic zone by fencing nests with bunting and putting up signs. We also worked with the City of Karratha to install new turtle rookery and "Avoid driving on the beach" signage around Cleaverville and Boat Beach. There is more work to do to manage these beaches and complete the signage project in 2022-23.

This year, we also continued to work with other turtle programs to ensure consistent messaging and methodology. In particular, we worked closely with the North West Shelf Flatback Turtle Program and Rosemary Island Turtle Program to deliver educational activities and look for ways of including Traditional Owners in local turtle work. We are excited continue this work in 2022-23.



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.
- At Bells Beach, the number of nests recorded was the highest on record since 2010-11. This was very positive to see given the very low number of nests recorded in the previous year (2020-21).
- We now have four years of nesting data for Boat Beach and Cleaverville, areas used regularly for recreation. Flatback turtles are consistently nesting at these beaches commonly where people are driving on the beach.
- Disturbance recorded was low on Bells Beach but higher on Boat Beach and Cleaverville where consistent vehicle tracks were recorded in nesting areas and there was evidence of dog and cat activity.
- WPTP continued to work with the City of Karratha in 2021-22 to manage Boat Beach and Cleaverville by marking nests in areas of high vehicle disturbance and erecting signage around turtle nesting areas. Shared communication was also posted on local Facebook pages and on Rio Tinto site screens.
- The Education pillar of the program continued to be an important part of the program in 2021-22 with 45 activities across schools, community groups and events both in person and online. There was again strong demand for education activities with regular requests for turtle talks. Unfortunately the spread of COVID-19 in the community meant that some education sessions were cancelled or postponed.
- There were again high numbers of volunteers actively involved in the program in 2021-22 with a number of key, long term volunteers returning to the program and supporting our new volunteers.
- Night tours to watch nesting turtles continued to be a highlight of the program with growing interest from the general public. This has been an exceptional way to build environmental stewardship within the community and generate passion for marine turtles.
- The WPTP and North West Shelf Flatback Turtle Conservation Program (NWSFTCP) continued their work together, sharing knowledge, ensuring consistent messaging and activities across the region and to look for ways to involve Traditional Owners in local turtle work.
- Overall, the program has had positive community support and continues to deliver both turtle monitoring and education and awareness raising of marine turtle conservation in the local area.



Night tour with Roebourne PCYC



Hatchling launching off rock at Bells Beach

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