

**Australian Seabird & Turtle Rescue Inc.
NSW TurtleWatch
Beach Monitoring Guidelines 2023**



NSW TurtleWatch has been developed by Australian Seabird & Turtle Rescue and is proudly funded by the NSW Government.

Version 2 – This document has been adapted from the original ‘Australian Seabird Rescue Inc. Citizen Science. Sea Turtle Nest Monitoring Project 2018-2019’. Originally edited by Kathrina Southwell - 15th October 2018.

Cover photo - @ Lisa Beverstock

Copyright Australian Seabird & Turtle Rescue Inc.

All rights reserved. No part of this publication is to be reproduced other than for educational or non-commercial purposes without the prior approval of the copyright owner.

Acknowledgement of Country

Australian Seabird & Turtle Rescue Inc. acknowledges the Traditional Custodians of the lands where we work and the places in which we live. We pay respect to Ancestors and Elders, past, present and future. We recognise the unique cultural and spiritual relationship to seabirds, sea snakes and turtles and celebrate the contribution of the First Nations peoples to Australia.

Acknowledgements

These guidelines were compiled using documentation from various sources that are referenced throughout the document. We acknowledge the following contributing documents: IUCN/SSC Marine Turtle Specialist Group. Research and Management Techniques for the Conservation of Sea Turtles; Office of Environment and Heritage (OEH) Marine Wildlife Management Manual 2013-2014; Environmental Protection Agency. Copyright © Col Limpus, Queensland Parks and Wildlife Service; Queensland Turtle Conservation Project; Florida Fish and Wildlife Conservation Commission (FWC) – Marine Turtle Conservation Handbook; Ningaloo Turtle Program (NTP) Turtle Monitoring Guide; TurtleCare Sunshine Coast Operational Guidelines.

This edition was edited by the NSW TurtleWatch Project Officer Holly West.

List of abbreviations

ASTR - Australian Seabird & Turtle Rescue
LGA – Local Government Area
NPWS – NSW National Parks and Wildlife Service
SoS – Saving our Species

TABLE OF CONTENTS

Acknowledgements	2
List of abbreviations	2
Table of Contents	3
1. Introduction	4
1.1 Purpose	4
1.2 Objectives	4
1.3 Project Background	4
1.4 What is citizen science	4
2. Volunteer Responsibilities	5
2.1 Safety	5
2.2 Code of conduct	5
2.3 Media	6
2.4 Social Media	6
3. Beach Survey	6
3.1 Summary	6
3.2 Timing	6
3.3 Location	7
3.4 Reporting	7
4. Nesting Turtle on the Beach	8
5. Identifying Turtle Tracks	9
5.1 Photographing Tracks	9
5.2 Identifying the Emerging and Returning Tracks	9
5.3 Identifying Species Tracks	9
6. Nest vs False Crawl (non-nesting emergence)	13
6.1 Characteristics of a successful nest	13
6.2 Characteristics of a false crawl (non-nesting emergence)	14
7. Nesting Behaviour	15
8. Nest Management & Monitoring	16
Appendix A: Marine Turtle Species Identification	17
Appendix B: Step-by-Step reporting through Survey123 App	19
Appendix C: Turtle Watchers Code of Conduct	31

**Call the Project Officer on 0468 489 259 immediately
to report a nesting turtle or tracks.**

1. INTRODUCTION

1.1 Purpose: The intended purpose of these guidelines is to assist citizen scientists and volunteers with NSW TurtleWatch to safely conduct a Beach Survey on NSW beaches. It provides guidance on how to conduct monitoring activities and reporting process to ensure valuable and accurate data collection.

1.2 Objectives: The objective of NSW TurtleWatch is to promote the long-term recovery and conservation of marine turtles in NSW.

The key program goals are to:

- engage citizen scientists to monitor beaches for presence or absence of nesting marine turtles,
- train and enlist volunteers to assist management agencies to protect marine turtle nests,
- increase public awareness about marine turtles and nesting in NSW,
- and identify potential threats, such as marine debris, coastal erosion, and light pollution on nesting beaches to contribute to conservation.

1.3 Project Background: Marine turtle nests and hatchings have been reported in NSW from the early 1900's. Six of the seven species of sea turtles can be found in Australian waters ("Appendix A: Marine Turtle Species Identification"). Historically, loggerhead (*Caretta caretta*) and green (*Chelonia mydas*) turtles have been recorded to nest, with the rare occurrence of leatherback turtle (*Dermochelys coriacea*) nests in 1992-93 and 1995. With impacts of climate change and increased anthropogenic pressures on coastal environments, the NSW coastline could provide refugia for nesting marine turtles.

In 2008, Australian Seabird & Turtle Rescue (ASTR) created the 'Make Turtles Count' program, with guidance and support from WWF. The NSW Government has recognised the importance of these partnership species and has teamed up with ASTR to re-develop NSW TurtleWatch. With increased local interest and a potential increase in nesting numbers the program aims to enlist citizen scientists to collect valuable data and address key threats to the species.

1.4 What is citizen science: Citizen science has been defined by the Department of Planning and Environment as "scientific work undertaken by members of the general public, often in collaboration with or under the direction of professional scientists and scientific institutions". The goal of citizen science programs is to involve the wider community and gather important data that can be used to make informed decisions about our management of species and their environment.

2. VOLUNTEER RESPONSIBILITIES

*Marine turtles are a threatened species. Volunteers are **not** permitted to touch or disturb marine turtle nests.*

All marine turtles are protected in NSW under the National Parks and Wildlife Act 1974 and the Biodiversity Conservation Act 2017. Any activity that may interfere, disturb, or harm them may be illegal if conducted without an appropriate licence. If you observe any activities which you consider is of concern, please report the incident to the local NPWS office or ASTR as soon as possible.

2.1 Safety: We want to ensure all volunteers have an enjoyable experience while working with NSW TurtleWatch, volunteer safety is always the highest priority. We greatly appreciate all contributions from volunteers, the program would not operate without volunteers. Citizen scientists and volunteers are expected to do their due diligence to reduce the risk of unwanted incidents.

For your safety, please follow the below safety guidelines:

- 🦋 Your safety is the priority. If you feel unsafe at any time, please cease monitoring.
- 🦋 Perform a 'Take 5' before attending a beach survey.
 1. Stop and Think
 2. Look and Identify
 3. Assess the Risk
 4. Control Hazards
 5. Proceed Safely
- 🦋 Wear appropriate clothes, footwear, a hat, and sunscreen.
- 🦋 Drink plenty of water.
- 🦋 If there is adverse weather, do not walk.
- 🦋 Report any dangers to Project Officer.
- 🦋 Follow directions from any NPWS parks staff or authority.
- 🦋 Please answer questions from the public only to the best of your knowledge.
- 🦋 Please inform another family member, friend, or neighbour about your intended monitoring.
- 🦋 Do not monitor beaches at night.

2.2 Code of Conduct: NSW TurtleWatch values the contribution from citizen scientists and volunteers in collecting important data related to nesting marine turtles in NSW. We want everyone involved with NSW TurtleWatch to learn in a fun, relaxed, and inclusive

environment. When conducting any beach or nest monitoring related to NSW TurtleWatch, we ask any staff, volunteers, or citizen scientists to adhere to the following:

- Behave honestly and with integrity, acting with care and diligence,
- Ensure that all interactions are conducted free from discrimination and with respect and courtesy,
- Refrain from any form of harassment or bullying,
- Comply with all applicable laws, legislations, and codes of practice in the area that you are working,
- Only upload information that is truthful to the best of your knowledge.

2.3 Media: If volunteers are approached by the media, please refer them to the Project Officer or an ASTR staff member to provide comments. Do not supply photos or comments to the media without prior approval from staff.

2.3 Social Media: Social media is a great tool for sharing awareness and educating the public about marine turtles. We request that volunteers do not post pictures to social media that contain the exact location of a nesting event or real time photos of nesting activities. This could bring increased human presence to the nest site and hence impact the hatch success of the nest. Any pictures including monitoring processes, such as relocations or excavations, should be passed by the Project Officer or ASTR staff before posting to ensure they are appropriate.

3. BEACH SURVEY

3.1 Summary:

<u>When</u>	- close to sunrise between November and March.
<u>Where</u>	- any beaches between the QLD border and Tuncurry area, walk along the high tide line.
<u>Reporting</u>	- all beach surveys should be reported through the NSW TurtleWatch App.

3.2 Timing: Marine turtles start nesting around the beginning of November, therefore the NSW TurtleWatch program records Beach Surveys from 1st November through until 1st March. The best time to look for marine turtle tracks is as close to sunrise as possible. This allows you to see tracks the clearest before human activity levels and winds increase on the beach.

3.3 Location: When walking on the beach, the best place to walk is just below the most recent high tide line. This allows you the best opportunity to see the turtle's tracks. The historical nesting range of marine turtles in NSW is from the QLD border to as far south as the Forster/Tuncurry area. Some outliers have been found to nest in areas further south although natural hatching generally would not occur in these areas due to cooler temperatures. Citizen scientists are asked to walk any beaches between Tweed LGA and Mid-Coast LGA, whichever beach is most convenient for the volunteer.

3.4 Reporting: NSW TurtleWatch utilizes the ArcGIS platform Survey123 App to record beach surveys. This is the preferred method for reporting a beach survey. If you do not wish to download an App please contact NSW TurtleWatch to discuss other options. See [Appendix B](#) for the step-by-step guide to downloading and submitting data through the App. There is also a YouTube tutorial available showing these instructions available on the NSW TurtleWatch YouTube channel.

*Beach surveys where **no** turtle activities are seen are still important! We also want to know where turtles are not nesting to be able to establish nesting trends.*



REMEMBER:

If you encounter any marine turtle activity, including a turtle, track or nest, during a beach survey,

STOP immediately and call the NSW TurtleWatch hotline

0468 489 259

4. NESTING TURTLE ON THE BEACH

If during a beach patrol you witness a marine turtle on the beach you should follow these guidelines:

- 🌿 Immediately call and report the turtle to the Project Officer or ASTR staff.
- 🌿 Do not approach the turtle.
- 🌿 Take photos, with no flash.
- 🌿 Stay behind the turtle's head (out of line of sight) and stay low to the ground.
- 🌿 If the turtle is not laying eggs they can still easily be disturbed and abandon the nest.
- 🌿 If possible, look at the trailing edge of the turtle's front flippers to see if there is a titanium tag (see Figure 1). Marine turtles are tagged to identify individuals for research purposes. This should only be done when the turtle is laying eggs or under the direction of ASTR staff or an NPWS officer.
- 🌿 Refer to "Appendix C: Turtle Watchers Code of Conduct" for further information.



Figure 1: Placement of metal flipper tag on a green turtle (Source: TurtleCare Sunshine Coast Operational Guideline).

5. IDENTIFYING TURTLE TRACKS

If in doubt, take a photograph!

5.1 Photographing Tracks:

- Choose the best part of the track for a clear photograph.
- Photograph to be taken with back to the sea and facing landward.
- Place clipboard or ruler on landward side, and step back approximately 1 meter.
- Turn the camera sideways for portrait photo.
- Shadows from the morning light help to identify features of tracks.
- You can never take too many pictures.

5.2 Identifying the Emerging and Returning Tracks: Use the following characteristics to identify the difference between the emerging and returning tracks.

- As a turtle crawls, it pushes sand backward with each flipper stroke.
- If one track is shorter, it may be an emerging track, depending on recent tides.
- If tracks overlap, the returning track will be on top.

5.3 Identifying Species Tracks: The two most common species found to nest in NSW are the loggerhead turtle (*Caretta caretta*) and green turtle (*Chelonia mydas*). There are historical records of nesting leatherback turtles (*Dermochelys coriacea*) in NSW. Below are figures of these 3 species tracks and how to recognise the difference. These figures have been adapted from the Ningaloo Turtle Program (NTP) Turtle Monitoring Guide, 2017.

LOGGERHEAD TURTLE TRACK (*Caretta caretta*)

A loggerhead turtle track has an alternate gait. Tail drag may be present or absent. Track width typically ranges between 70 -124 cm with an **average of 94 cm.**



CLOSE-UP

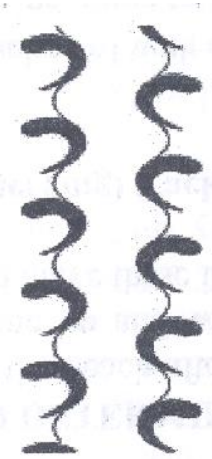


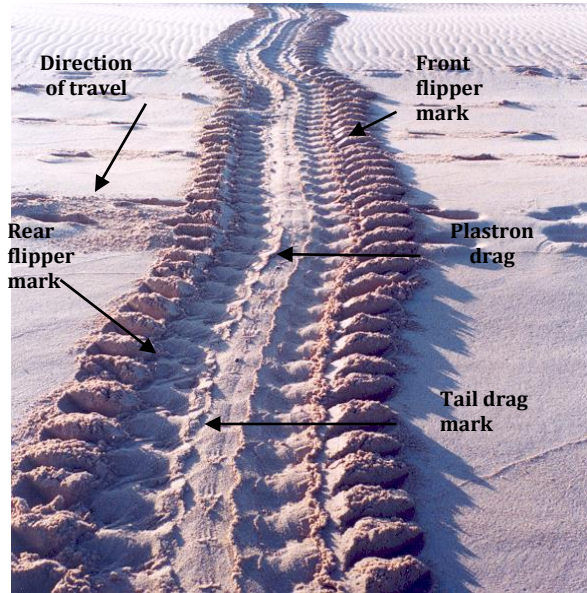
Illustration source: Florida Fish and Wildlife Conservation Commission. *Sea turtle Conservation Guidelines*.



Figure 2: Photographs, illustrations, and characteristics of loggerhead turtle (*Caretta caretta*) tracks.

GREEN TURTLE TRACK (*Chelonia mydas*)

Green turtles have a simultaneous limb movement. The track is opposite with a centre drag mark from the tail which is either a solid or broken line. Track width is variable but typically ranges between **95-144 cm.**



CLOSE-UP (WET)

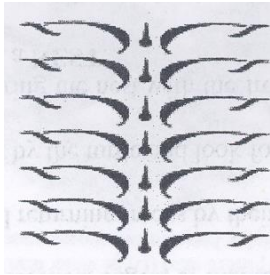


Illustration source: Florida Fish and Wildlife Conservation Commission. *Sea turtle Conservation Guidelines.*

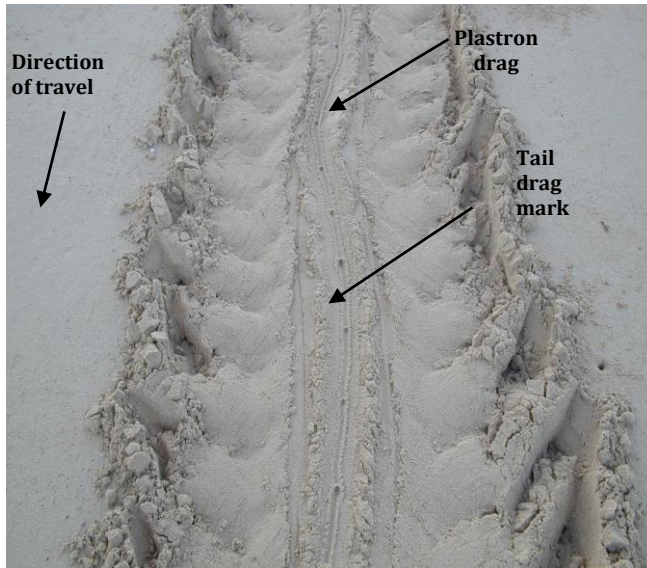


Figure 3: Photographs, illustrations, and characteristics of green turtle (*Chelonia mydas*) tracks.

LEATHERBACK TURTLE TRACK (*Dermochelys coriacea*)

The Leatherback turtles have a simultaneous limb movement. The track is opposite with a centre drag mark from the tail which is either a solid or broken line. The track is similar to green turtles but much wider and the front flippers extend far out from the main track.

Track width is the widest of all turtle tracks and should be sufficient to identify the turtle species on its own. Width ranges between **150-200cm**.

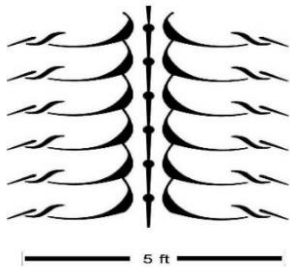
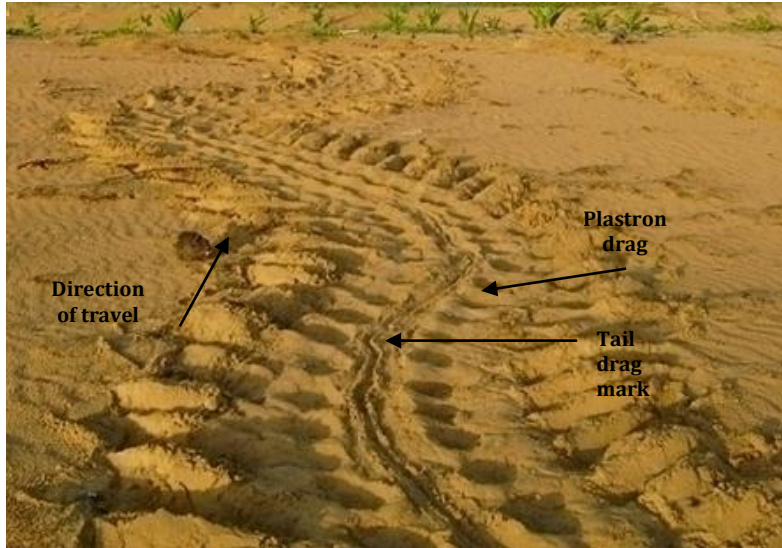


Illustration source: Florida Fish and Wildlife Conservation Commission. *Sea turtle Conservation Guidelines*.



Figure 4: Photographs, illustrations, and characteristics of leatherback turtle (*Dermochelys coriacea*) tracks.

6. NEST VS FALSE CRAWL (NON-NESTING EMERGENCE)

6.1 Characteristics of a Successful Nest: After identifying the incoming track, follow the entire path of the turtle looking for the following characteristics:

- 🐢 Presence of an escarpment (the rim around the nest mound).
- 🐢 Front flipper sand misted or thrown over emerging track.
- 🐢 Vegetation that may have been dug up.

See below Figures 5 & 6 for illustrations and examples of successful nests.

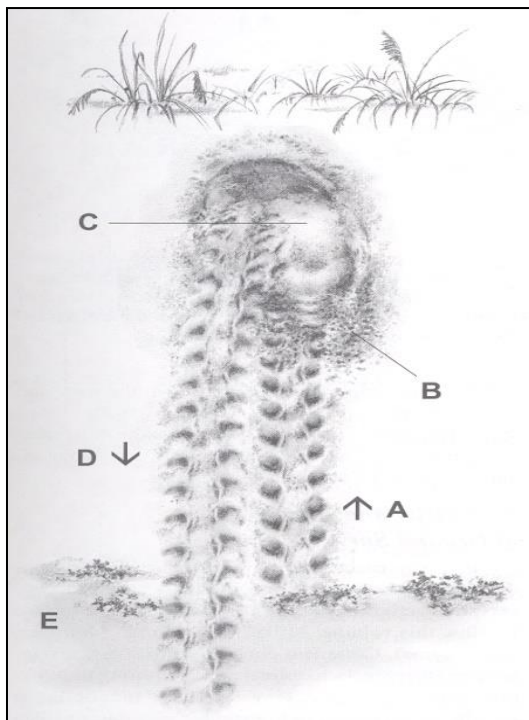


Figure 5: Illustration of successful loggerhead turtle nest with (A) emerging track; (B) sand misted or thrown of emerging crawl; (C) a secondary body pit, nest mound and escarpment, with sand thrown in the vicinity; and (D) returning crawl. (E) marks the high tide line. (Source: IUCN/SSC Marine Turtle Specialist Group. Research and Management Techniques for the Conservation of Sea Turtles.)



Figure 6: Photograph of successful loggerhead turtle nest (Source: NTP Turtle Monitoring Guide)

6.2 Characteristics of a False Crawl (non-nesting emergence): After identifying the incoming track, follow the entire path of the turtle looking for the following characteristics:

- ✦ Very little or no sand disturbed other than tracks.
- ✦ U-shaped or simple arc with no digging.
- ✦ Considerable amount of sand disturbed from a digging effort, but with the crawl exiting the disturbed area and continuing toward the dune before turning toward the ocean.
- ✦ Considerable sand disturbed from a digging effort, but with a smooth-walled or abandoned/open egg chamber (15-25 cm diameter) in the center of a pit within the disturbed area.

See below Figures 7 & 8 for illustrations and examples of false crawls.

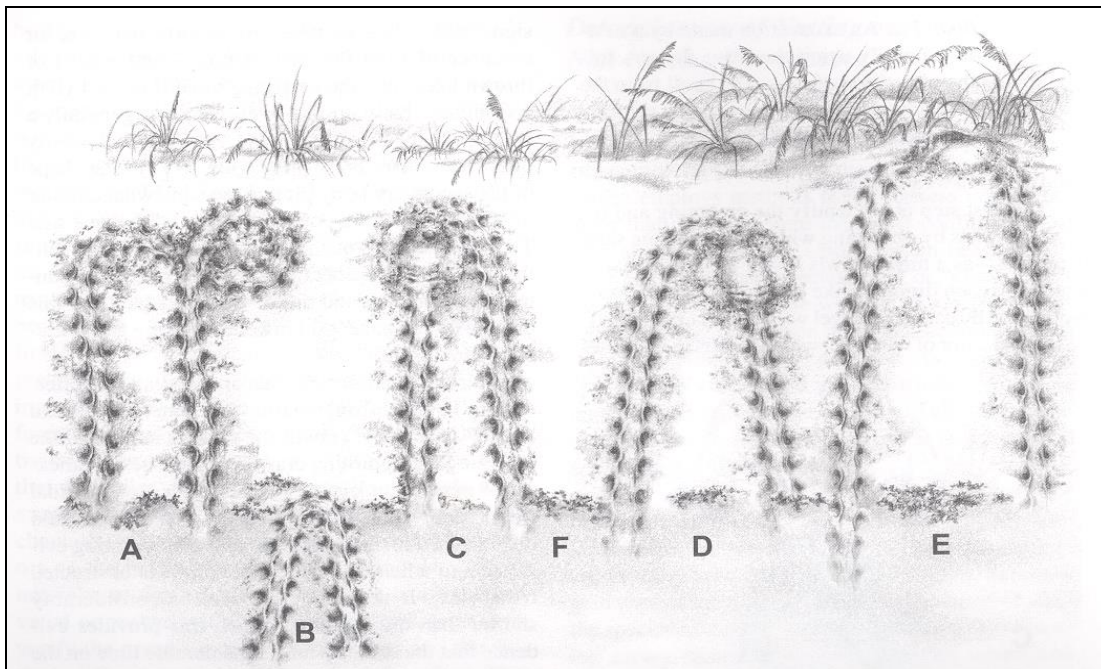


Figure 7: Illustrated examples of false crawls (non-nesting emergences) made by loggerhead turtles (*Caretta caretta*) including: (A) extensive wandering with no body pitting or digging; (B) U-shaped crawl to the high tide line; (C) considerable sand disturbance, evidence of body pitting and digging with a smooth-walled egg chamber and no evidence of covering; (D) considerable sand disturbance and evidence of body pitting and digging and no evidence of covering; (E) marks the site of a crawl where the relative lengths of the emerging and returning crawls are the same; (F) marks the high tide line. (Source: IUCN/SSC Marine Turtle Specialist Group. Research and Management Techniques for the Conservation of Sea Turtles.)



Figure 8: False crawl with abandoned body pit (Source: NTP Turtle Monitoring Guide)

7. NESTING BEHAVIOUR

Marine turtles undergo an instinctive nesting process that can be broken down into different stages. Understanding this process can help with interpreting marine turtle nests and false crawls. Marine turtles can easily be disturbed at any stage of this process and abandon the nest.

Emergence / Up Track: In general, marine turtles should leave the water during the night to lay their eggs. They crawl up the beach looking for a suitable place to lay their eggs, hopefully above the high tide line.

Body Pitting: When the female finds a potential nesting spot she will begin to throw sand using her front flippers. She removes the top layer of soft sand and vegetation. Different species make different shaped body pits as (Figure 9).

Digging an Egg Chamber: The female digs the egg chamber with just her hind flippers. Carefully scooping out the sand one flipper at a time and throwing the sand over her carapace. For loggerhead and green turtles, the final shape of the egg chamber will resemble a vase shape, a bowl at the bottom that has a neck and is narrower at the surface.

Laying Eggs: Once the female turtle begins to lay her eggs, she will enter a 'trance' and will continue until she is finished laying. The eggs have a soft shell, so they do not break when dropped from the cloaca into the egg chamber. Loggerhead and green turtles can lay an average of 100-120 ping pong ball sized eggs per nest.

Covering the Nest: When the turtle has finished laying, she will cover the eggs with sand using only her hind flippers. She pats down the sand to ensure its compact on top of the eggs. Once the egg chamber is filled, she begins to throw sand with her front flippers, piling sand on top of the nest while moving forward. The time and distance of the covering will vary depending upon the individual and species.

Returning / Down Track: After she has finished covering the nest she will return to the water. She may be exhausted and take her time, stopping at times.

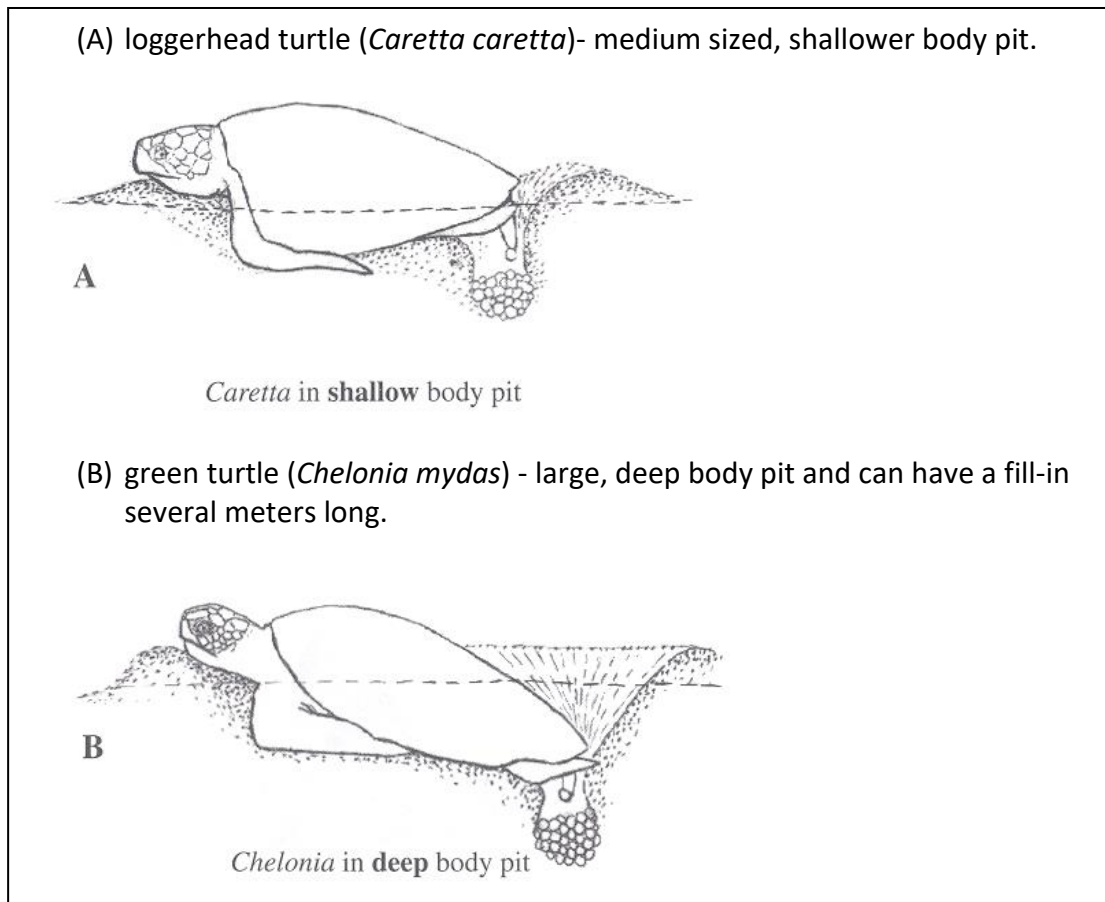


Figure 9: Illustrations of typical nesting positions and depth of body pit for the loggerhead (A) and green (B) turtle (Source: IUCN/SSC Marine Turtle Specialist Group. Research and Management Techniques for the Conservation of Sea Turtles.)

8. NEST MANAGEMENT & MONITORING

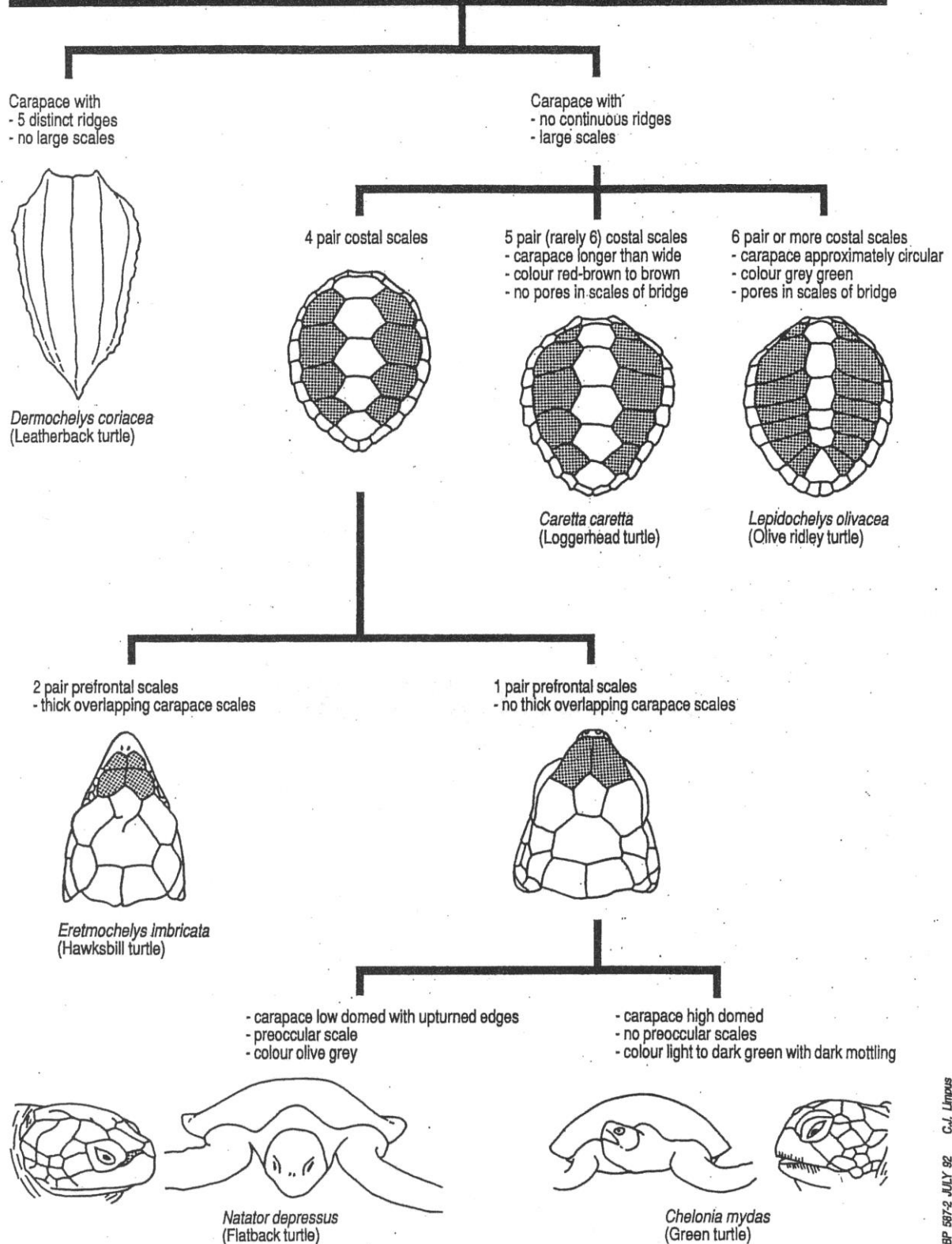
When a nest is reported to NSW TurtleWatch or ASTR, staff will notify NPWS rangers of the location and details of the marine turtle nest or false crawl. NSW TurtleWatch works with NPWS staff to undertake further nest monitoring efforts. The nest will be monitored for signs of:

- Erosion or sand water inundation,
- Disturbances from predators,
- Impacts from human presence,
- Hatching,
- Disorientation.

NSW TurtleWatch aims to assist NPWS staff to achieve the best hatch success for each individual nest.

Indo-Pacific marine turtles

IDENTIFICATION KEY



INDO-PACIFIC Marine Turtles

Identification guide



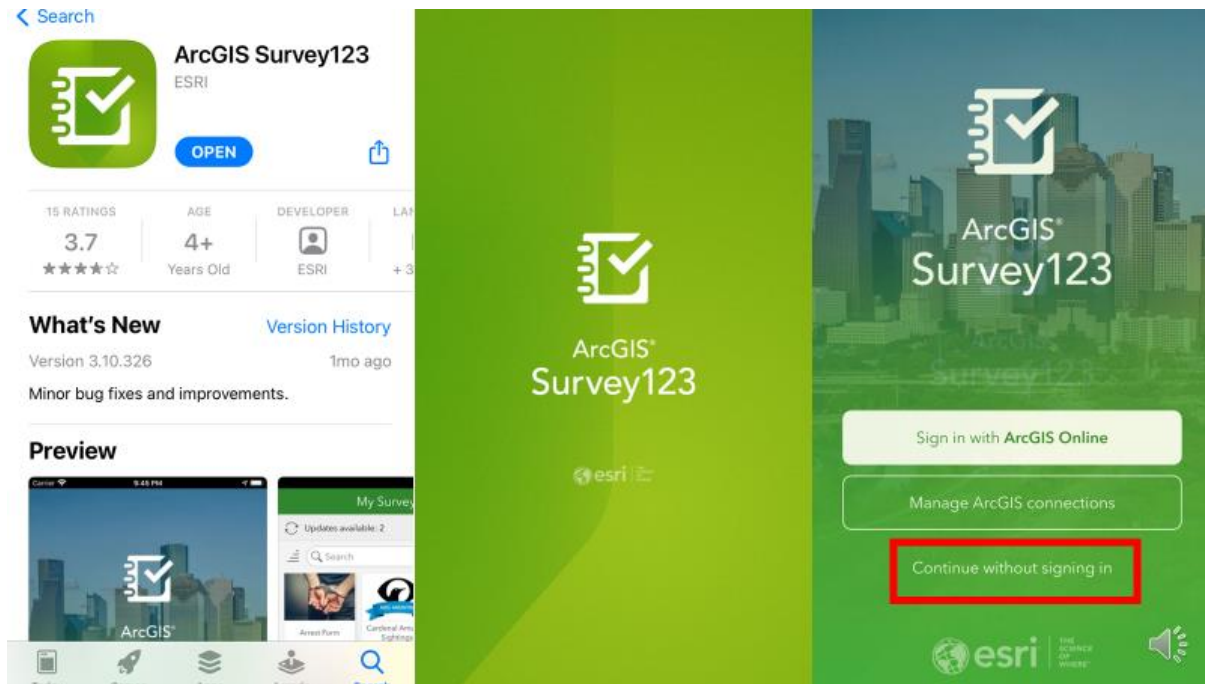
#52135

APPENDIX B: Step-by-Step Reporting through Survey123

1. DOWNLOAD THE APP

Step 1: Go to the App store on your device and search “ArcGIS Survey123”. See picture below. Then click “open” or “get”. This App will work on both iPhone and android devices.

Note: You do not need to sign in, always click “continue without signing in” as highlighted in red.



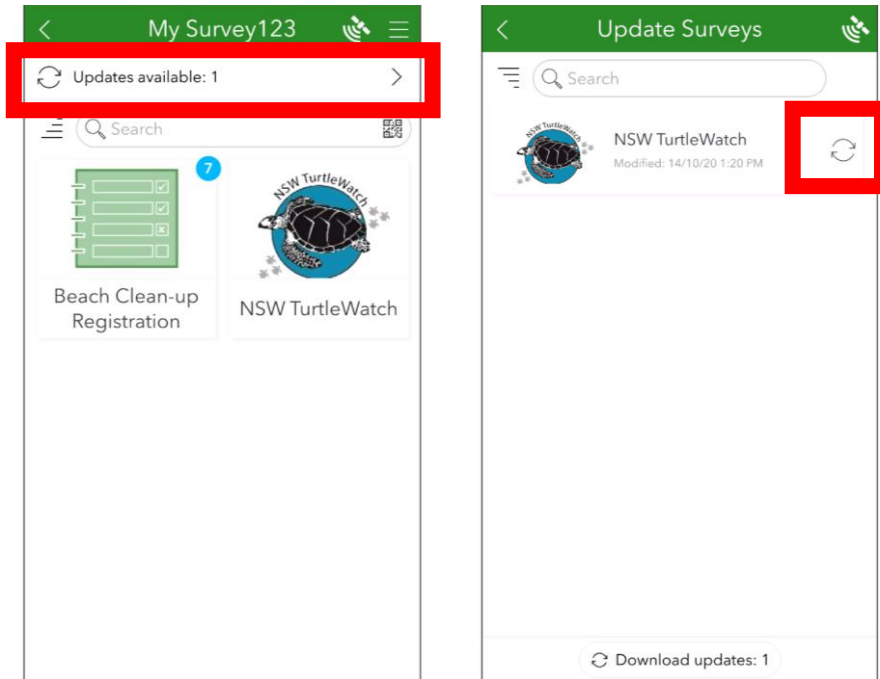
Step 2: To then open the NSW TurtleWatch form within the App you can either scan the QR code below or enter the link <https://arcg.is/01zrz5> into your Web Browser on your phone. Alternatively, email turtlewatchnsw@gmail.com and the link can be sent to your email or phone.



APPENDIX B: continued

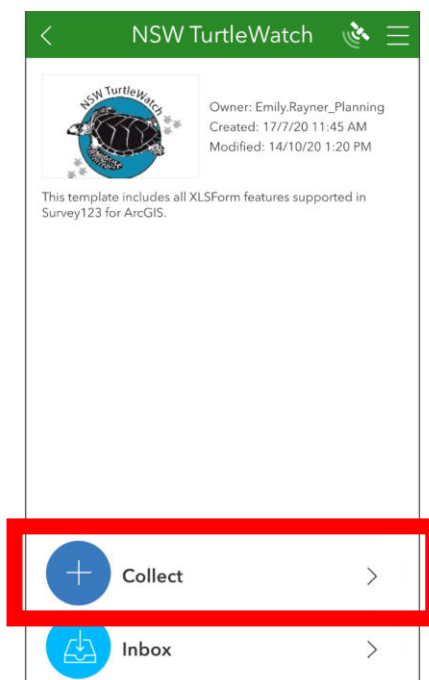
2. BEFORE ENTERING A RECORD

If you have previously downloaded the “NSW TurtleWatch” form, check to see if there is an updated version before starting. It will appear at the top of the screen, indicated below. Follow the steps to download the latest version.



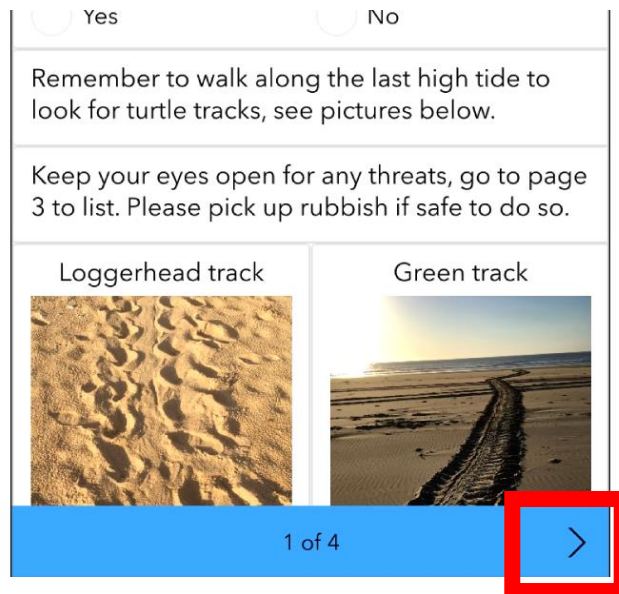
3. ENTERING YOUR BEACH SURVEY

Step 1: Click the “NSW TurtleWatch” form icon, then click “Collect”.



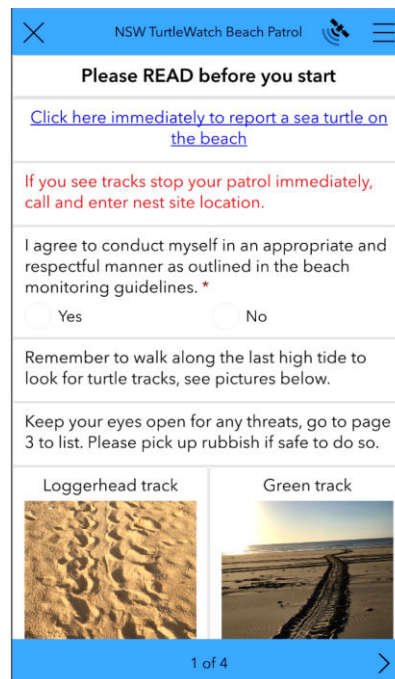
APPENDIX B: continued

Note: To move between pages click the arrow on the bottom right corner of the page.



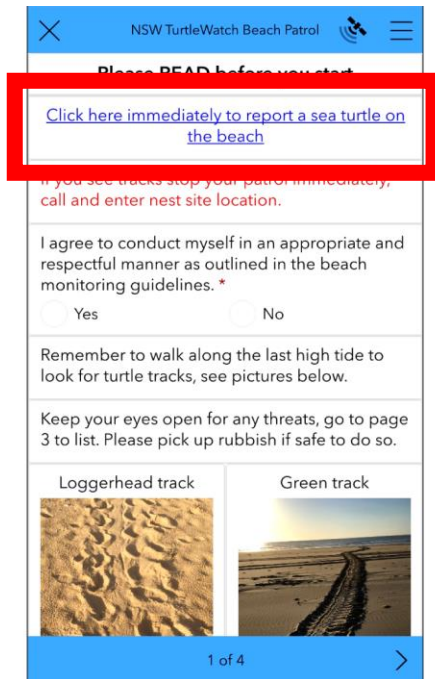
PAGE 1: “Please READ before you start”

- This first page gives you an overview of what to look for during your beach patrol and links for who to call if you see a sea turtle or track.

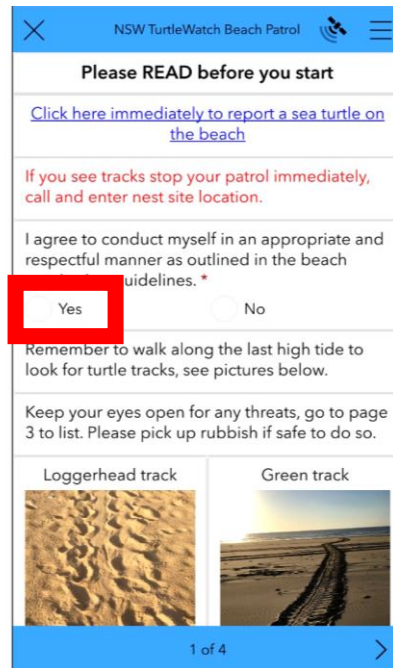


APPENDIX B: continued

- Click the link at the top of the screen to directly call NSW TurtleWatch if you see a sea turtle or track during your walk.



- You must click the required field to indicate that you will conduct yourself in an appropriate manner during your beach patrol with NSW TurtleWatch.



PAGE 2: "Contact Information"

- Please fill out the contact information correctly, that way if we have any questions about the data we are able to get in touch.

A screenshot of the NSW TurtleWatch Beach Patrol app interface showing the 'Contact Information' form. The blue header is at the top. Below it, the title 'Contact Information' is centered. There are three input fields, each with a red asterisk indicating a required field: 'Name *', 'Email *', and 'Phone Number'. Each field is currently empty. Below the form, there is a large grey rectangular area, likely a placeholder for more information or a confirmation button. The bottom of the screen shows a blue footer bar with '1 of 4' and a right-pointing arrow.

APPENDIX B: continued

PAGE 3: “Beach Survey”

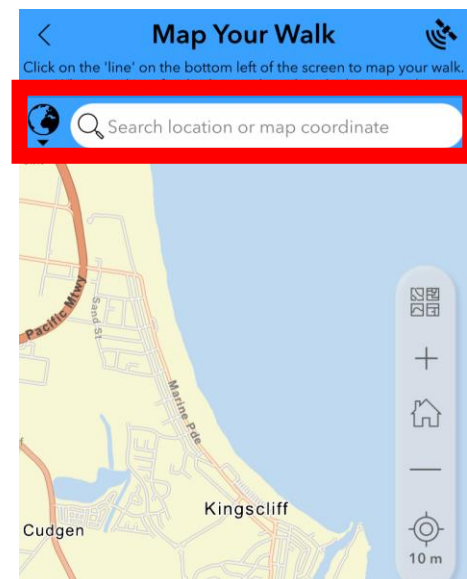
- This page asks for details about where, when, and how you did your beach survey.
- Enter the details about your beach survey. The date and time will be automatically generated. If entering at a different time to when you did the survey, please remember to adjust.

The screenshot shows a mobile application interface for a 'Beach Survey'. At the top, there is a blue header with a close icon, the text 'NSW TurtleWatch Beach Patrol', a signal strength icon, and a menu icon. Below the header is a section titled 'Beach Survey'. It contains several input fields: 'Name of Beach' with a text box; 'Start Date and Time' with a date picker showing 'Wednesday, 28 October 2020' and a time picker showing '10:08 AM'; 'How long was your walk (minutes)?' with a text box; and 'How did you survey?' with three radio button options: 'foot', 'bicycle', and '4WD'.

- To **“Map Your Walk”** click the map icon to enter the map screen.

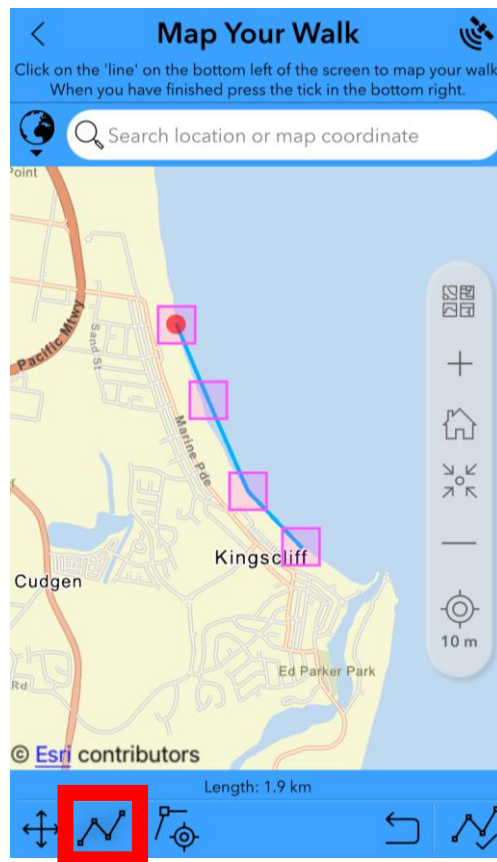


- If your location does not show up you can search at the top of the screen.

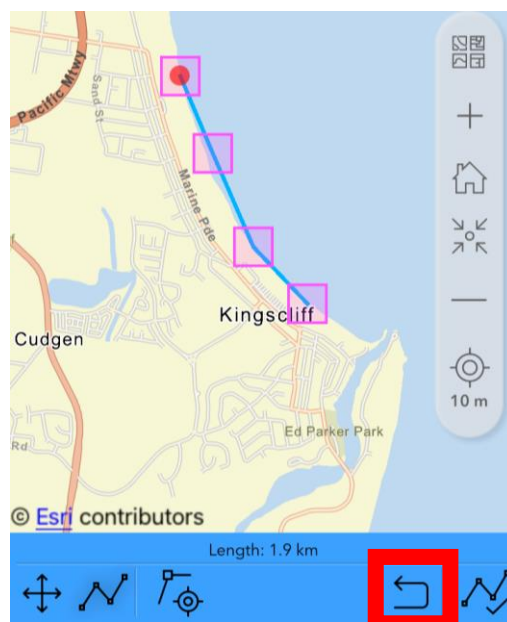


APPENDIX B: continued

- Next click the line in the bottom left corner then tap along the map where you walked.

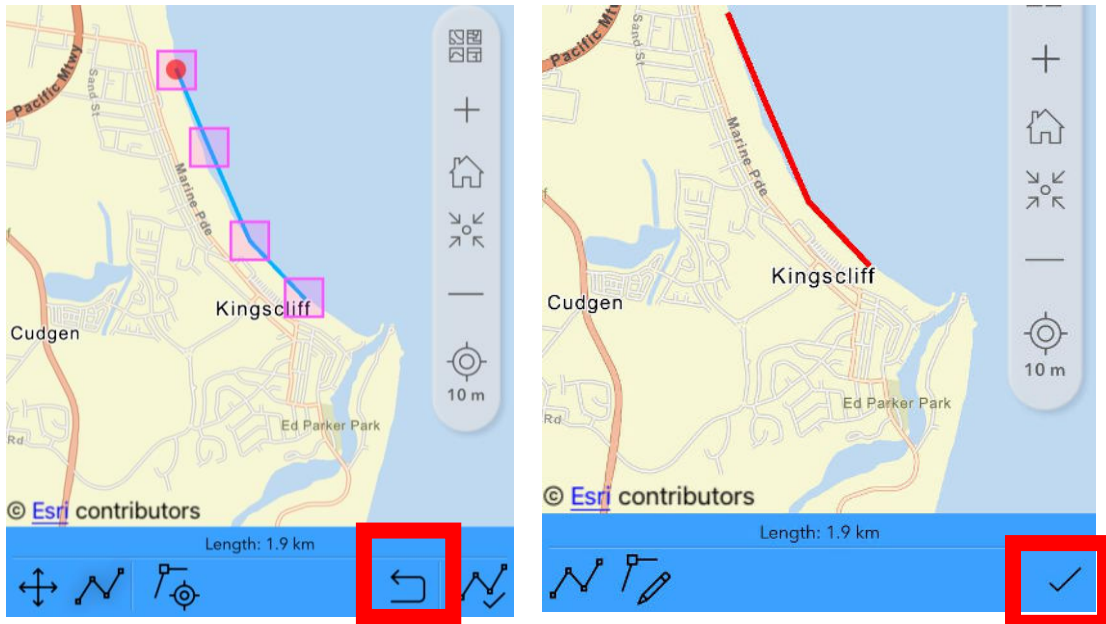


- If you make a mistake use the back arrow in the bottom right.



APPENDIX B: continued

- Once you are happy with your map click the bottom right corner twice to submit the track.

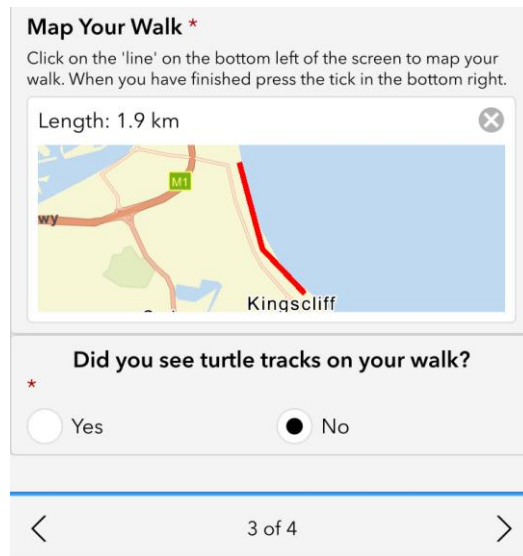


- “Did you see turtle tracks on your walk?” – This field is Required to fill in!
 - If you click “yes” you will then be prompted again to call NSW TurtleWatch immediately and asked more questions about the location of the nest and to upload pictures (Picture to the right).

The image shows a screenshot of the NSW TurtleWatch mobile application. At the top, the title bar reads 'NSW TurtleWatch Beach Patrol'. Below the title bar, there is a survey question: 'Did you see turtle tracks on your walk?' with a red asterisk indicating it is required. There are two radio buttons: 'Yes' (selected) and 'No'. Below this is a section titled 'Nest or Track Site' with a link that says 'Click here to call immediately'. Underneath is a 'Location' field showing the coordinates '28°15'S 153°34'E' and a small map with a blue location pin. Below the location field is a 'Nest Position on Beach' section with five radio buttons: 'below high tide line', 'open beach', 'fore dune', 'hind dune', and 'no nest'. The 'open beach' option is selected. At the bottom of the form is a field labeled 'Close up picture of track'. The bottom of the screen shows a navigation bar with left and right arrows and the text '3 of 4'.

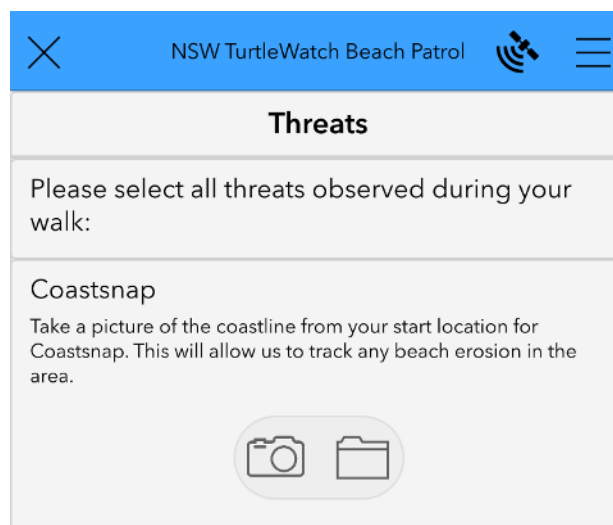
APPENDIX B: continued

- “Did you see turtle tracks on your walk?”
 - If you click “no” you can move on to the next page.



PAGE 4: “Threats”

- This page is all optional – the data collected is shared with stakeholders in various areas to assist research and conservation efforts. You can upload information on the following threats.
- *Coastal Erosion* – take a picture of the profile of the beach, especially if you visit a place repetitively and we can track changes in the coastline. This information will be uploaded to the ‘CoastSnap’ database.



APPENDIX B: continued

- *Marine Debris* – you can report on the rubbish you collect on your walk and the information will be sent to Tangaroa Blue and be uploaded into the Marine Debris Database.

The screenshot shows the 'Marine Debris' reporting form in the NSW TurtleWatch Beach Patrol app. The form is titled 'Marine Debris' and has a 'Yes' radio button selected. It contains two columns of questions: 'How many pieces of rubbish did you collect?' with a numeric keypad, and 'Please describe all the rubbish you collected:' with a text input field. Below these is a section for 'Take a picture of the plastic' with camera and gallery icons.

- *Domestic Animals* – please make sure you know if dogs are allowed on your local beach before entering information. If you see animals that are in areas that they should not be we can share this information with council to hopefully assist with better management of beaches. It will also help with management of turtle nests if found in the area.

The screenshot shows the 'Domestic Animals' reporting form in the NSW TurtleWatch Beach Patrol app. The form is titled 'Domestic Animals' and has a 'Yes' radio button selected. It contains four questions in a 2x2 grid: 'Is it a dog beach?' (Yes/No), 'Was the dog on a leash?' (Yes/No), 'Was the dog impacting on any wildlife?' (Yes/No), and 'Other type of domestic animal' (text input field).

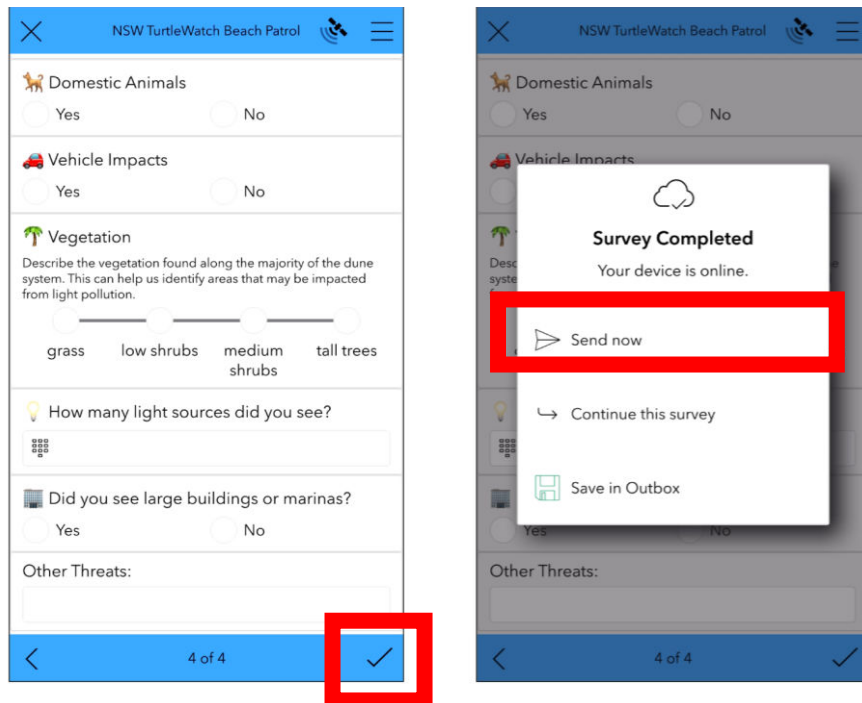
APPENDIX B: continued

- Vehicle Impacts* – we respect that most 4WD owners follow the rules and there are areas where commercial fishermen have licenses to drive on local beaches. If you see 4WD tracks on the dunes especially, please make note so that we can inform council.

- Light Pollution* – information on vegetation, light sources and buildings can help to recognise what beaches may be appropriate for sea turtles to lay their nests on and also which beaches may cause hatchlings to disorientate while trying to find the ocean. Remember sea turtles ‘dig the dark’ - bright lights affect the potential for females to lay and hatchlings to find the ocean.

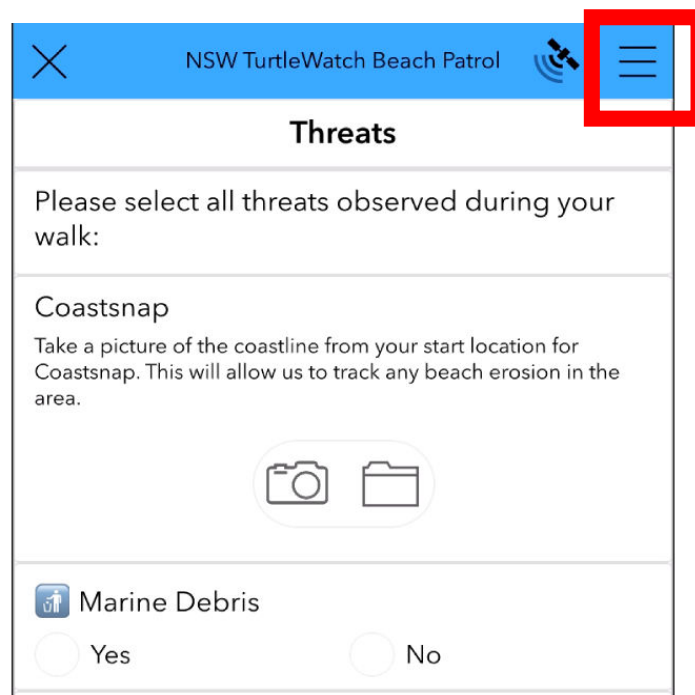
APPENDIX B: continued

FINALLY - SUBMITTING: When you are finished and happy with all your answers click the tick in the bottom right corner of page 4, then click send now.



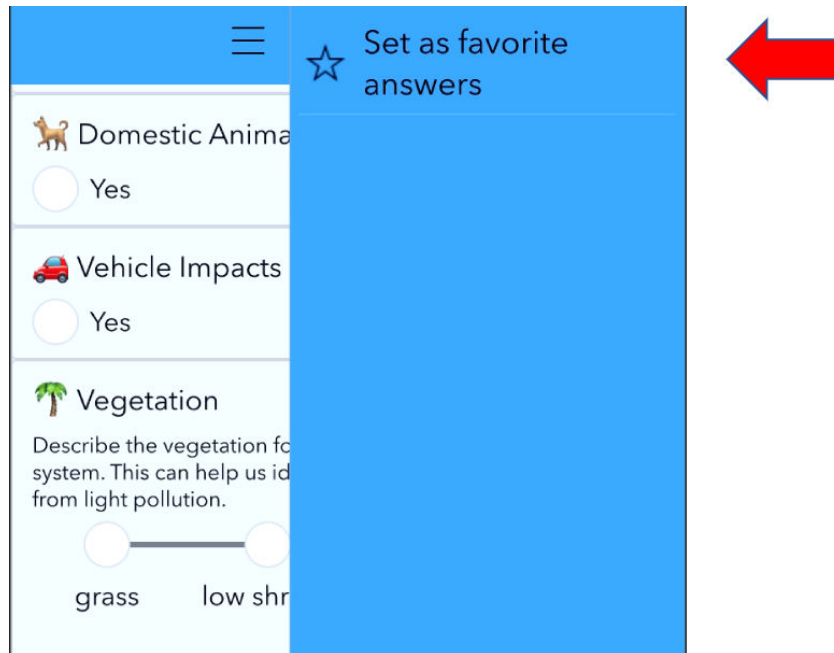
4. SETTING YOUR FAVOURITES

Step 1: When you have entered in all your information, you can set your favourite answers to make submitting quicker in the future. Before you submit your beach patrol click the 3 lines in the top right corner of the screen.



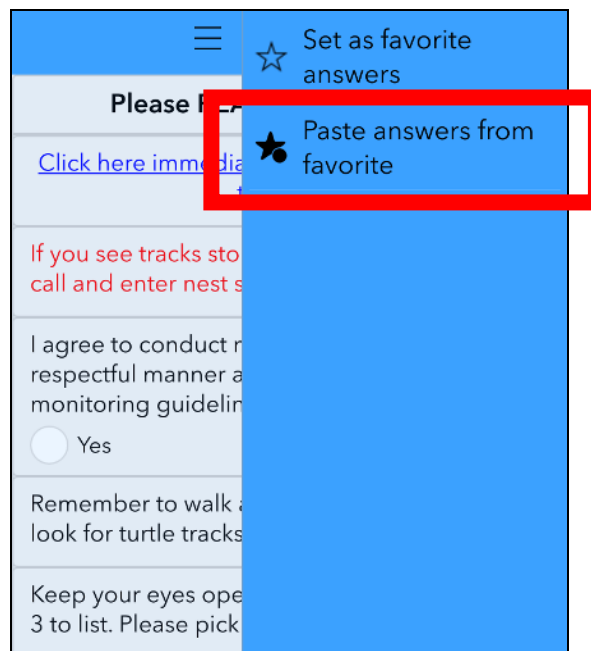
APPENDIX B: continued

Step 2: Click “Set as favorite answers”.



Step 3: Then you must continue and submit your beach patrol for the favourites to be saved.

Step 4: Next time you open your NSW TurtleWatch form click the 3 lines in the top right corner and it will now give you the option to “Paste answers from favorite”. Please still double check all answers before submitting each record.



APPENDIX C: Turtle Watchers Code of Conduct (Source: TurtleCare Sunshine Coast).

