

Discussion Points While Training Personnel Authorized To Conduct Nest Protection Management

1. All authorized personnel must be informed of the federal and state laws protecting marine turtles and their nests. Authorized personnel must be informed that conducting nest survey activities without a permit is unlawful.
2. Interpretive programs (lectures, slide presentations, etc.) that incorporate accurate, updated information on marine turtle conservation and biology are highly recommended for your authorized personnel. If desired, SCDNR staff members will assist in developing interpretive programs. A list of current topics that should be discussed during the presentation or at other times is listed [below](#).
3. The use of flash photography and lights [other than infrared] for filming is not permitted. The use of flashlights by authorized personnel is not permitted. A flashlight with a [red or infrared](#) filter may only be used to ensure safety while gaining access to the beach. Remember that other turtles are in the area and hatchlings may be emerging nearby. Improper use of light can deter other nesting females and disorient emergent hatchlings.
4. Sea turtle conservation requires long-term public support over a large geographic area. The public must be factually informed of the issues particularly when conservation measures conflict with human activities such as commercial fisheries, beach development, and public use of nesting beaches. Public education is the foundation upon which a long-term conservation program will succeed or fail. It is the responsibility of the projects to ensure that information provided to the public in any form is biologically accurate and in keeping with the SCDNR Guidelines.
5. It is also important to ensure that there is correct representation when providing public information. The authorship of any educational materials rests with the respective project. Do not act as an agent or employee of SCDNR when providing public information.
6. Nests should not be dug into at any time, neither during daylight or dark, to see if hatchlings are "ready" to emerge.
7. Hatchlings shall emerge naturally and shall be allowed to crawl to the water on their own. It is unlawful to hold a hatchling without a permit.
8. Please direct the media to the [SCDNR Sea Turtle Media web page \(http://www.dnr.sc.gov/seaturtle/media.htm\)](http://www.dnr.sc.gov/seaturtle/media.htm).
9. Refer to [Section 8 \(http://www.dnr.sc.gov/volres/mtsection8.pdf\)](http://www.dnr.sc.gov/volres/mtsection8.pdf) of the guidelines on proper protocol during major storm events.
10. Disposable gloves should be worn at all times when handling eggs, hatchlings or nest contents.
11. Ensure that all authorized personnel are using the proper probing technique. There should be only one person probing the nest at one time. Probe stick should be held between your legs with knees bent at all times. Probing locations should be approximately four inches apart. First probe outside of the body pit to get a feel for how compact the sand is in that area. Any change in resistance while probing should be checked with your hands only.

Nest Identification

I. Identify which is the incoming (emerging) track and which is the outgoing (returning) track?

- As a turtle crawls it pushes sand backward with each flipper stroke.
- If one track is shorter, it will be the incoming track.
- If tracks overlap, the outgoing track will be on top.
- "V" shape impression in the sand always points to where the turtle came from. It is easier to see in the intertidal zone.

II. What species made the crawl (loggerhead, green turtle or leatherback)?

Please refer to [A Field Guide for Sea Turtle Nesting Surveys](#) .

III. Is the crawl a nest or a non-nesting emergence? It is important to record both types of emergences.

- A.** Identify emerging and returning tracks by their direction (see I. above).
- B.** Follow the path taken by the turtle and look for the following nesting attributes.
 - a.** Incoming tracks disappearing under covered area
 - b.** Body pit (always investigate the last body pit made)
 - c.** Thrown dark sand
 - d.** Uprooted vegetation
 - e.** Crescent arc
 - f.** Differential crawl lengths if the turtle laid her nest during a dropping tide

- 2.** Evidence of an abandoned nesting attempt. If present, the crawl can be considered a non-nesting emergence (i.e., false crawl).
 - a.** Very little or no sand disturbed other than tracks.
 - c.** 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.
 - d.** Considerable amount of 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.

Current Issues to Discuss During Training

- [Endangered Species Act \(http://www.fws.gov/laws/lawsdigest/ESACT.html\)](http://www.fws.gov/laws/lawsdigest/ESACT.html)
- Coastal development impacts
- Beach nourishment (pros and cons)
- Beachfront lighting impacts
- Marine debris impacts
- Poaching
- Natural and exotic predators
- Propeller/boat injury impacts
- Beach armoring impacts
- [TEDs and the shrimp fishery \(http://www.dnr.sc.gov/seaturtle/teds.htm\)](http://www.dnr.sc.gov/seaturtle/teds.htm)
- Impacts by other fisheries (gill net, longline,...)
- Impacts caused by human nighttime activity on the beach
- [Cape Romain National Wildlife Refuge \(http://www.fws.gov/caperomain/turtleproject.html\)](http://www.fws.gov/caperomain/turtleproject.html)
- Non-nesting turtles (false crawls)
- [International trade \(CITES\) \(http://www.cites.org/\)](http://www.cites.org/)
- Fibropapillomas
- Significance of South Carolina's nesting population