SC Sea Turtle Stranding and Salvage Network
Species Identification and Training Guide

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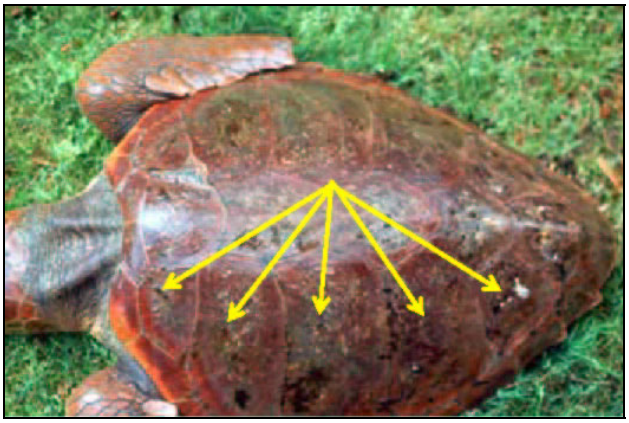
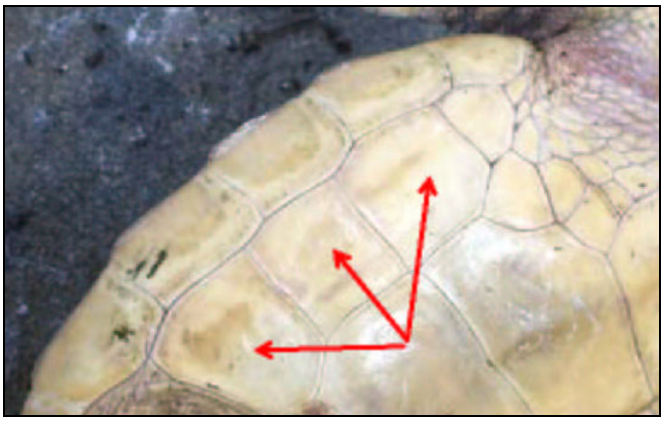
(Revised 6/2007)

Speciation

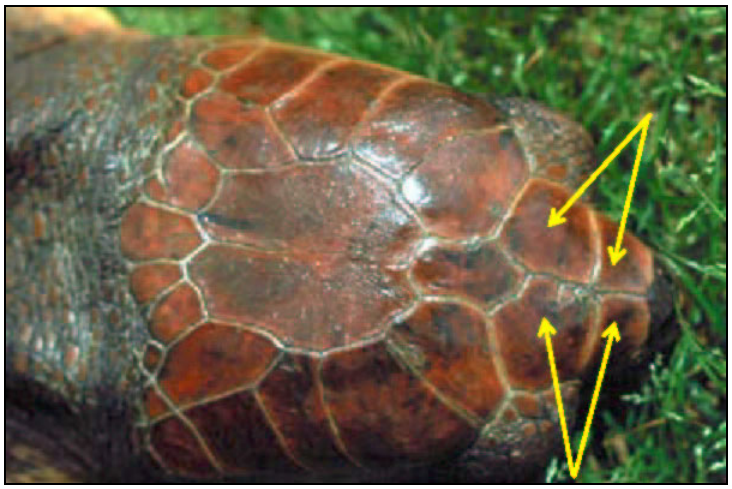
1. *Caretta caretta* carapace showing five lateral scutes and reddish brown color.



2. *C. caretta* plastron showing three inframarginal scutes and yellow color.

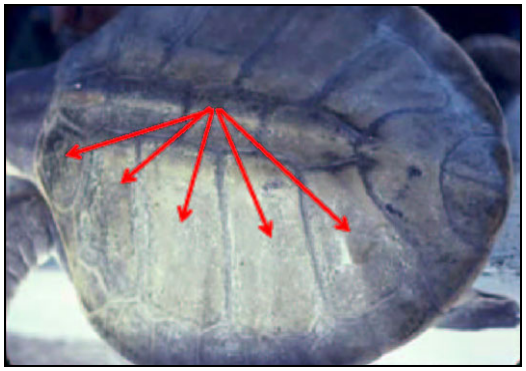


3. *C. caretta* reddish brown head with two pairs of prefrontal scutes.

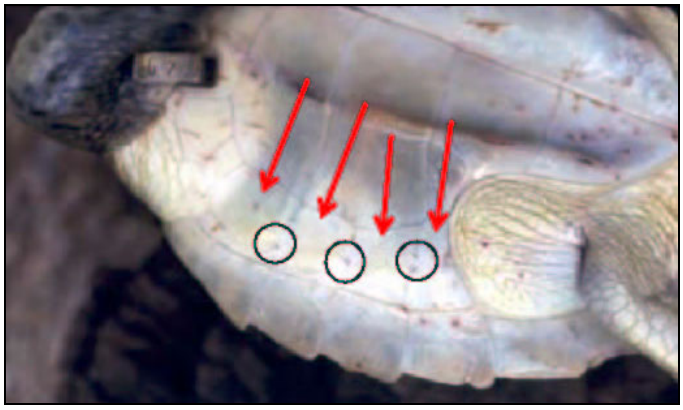


4. *Lepidochelys kempii* carapace showing dark grey color in young juveniles and round shell. *L. kempii* have a carapace width equal to or greater than the carapace length.

5. Subadult *L. kempii* carapace showing light olive green color and five lateral scutes. Shell color lightens as they mature.



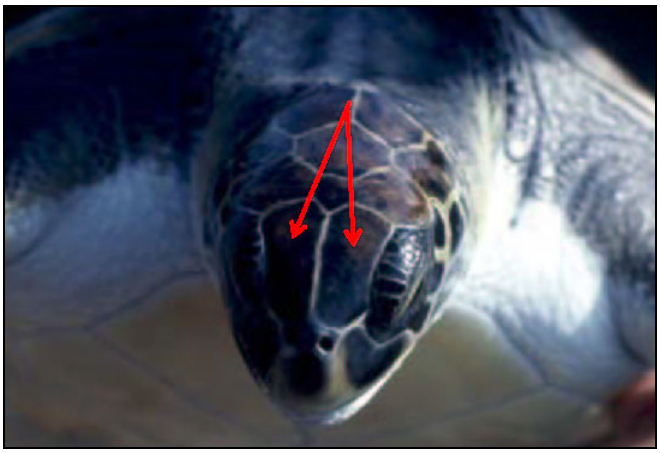
6. *L. kempii* plastron showing creamy white color and four inframarginal scutes with pores; note flipper tag.



7. *L. kempii* head showing hook on beak and almond shaped eyes.

8. *Chelonia mydas* carapace with sunburst pattern and showing typical size seen in South Carolina.

9. *C. mydas* head showing one pair of prefrontal scutes.



10. *C. caretta* and *C. mydas* head shots for comparison of prefrontal scutes.

If you cannot determine the species, salvage the skull and/or the endoplastron bone (equivalent of a breast bone) and bring into our office.

11. Comparison of *C. caretta* and *L. kempii* maxillary bones in the skull. Notice that they touch on the *C. caretta* and are separated by a smaller bone on the *L. kempii*.

12. Head of C. mydas showing the serrated lower jaw. Photo by Ellen Hiller.

13. Comparison of endoplastron bones in the *C.caretta*, *L. kempii* and *C. mydas* (from left to right).

14. *Dermochelys coriacea* showing its smooth leather skin with ridges.

15. *Eretmochelys imbricata* with overlapping scutes and pointed marginals. There have been no verified strandings of this species in South Carolina.

16. *E. imbricata* plastron.

17. *E. imbricata* head; note pointed beak.

Sex of the Animal

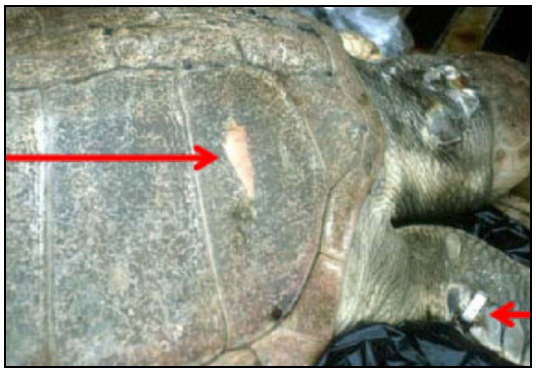
18. Adult male *C. caretta* showing elongate tail.

19. *C. caretta* showing tail length of juvenile or female.

Types of Tags

20. *L. kempii* with flipper tag.

21. *L. kempii* with a living tag in second right lateral scute and flipper tag.



Measuring a Turtle

22. Measuring over the curve from the center of the nuchal notch beginning at edge of skin; note bloated appearance of this code two, adult *C. caretta*.

23. Curved length (maximum) is measured over the curve to the longest tip on either side of the posterior notch on this adult male *C. caretta*. Curved length (minimum) is from the nuchal notch to the apex of the posterior notch.

24. Measuring carapace length (curved) of immature *C. caretta*.

25. Measuring carapace width (curved) at widest point of carapace *on L. kempii*.

Remarks

26. Shark bite on *C. caretta* carapace.

27. *C. caretta* with propeller wounds.

28. Emaciated *C. caretta*; note visible neck muscle.

29. *C. caretta* "Barnacle Bill"; note emaciated state and heavy barnacle load.

30. *C. caretta* entangled in fishing line.

31. *C. caretta* with missing appendages; most likely postmortem shark attack.

32. *C. mydas* killed by dredge.