

A NEST OF THE ATLANTIC LEATHERBACK TURTLE,  
*DERMOCHELYS CORIACEA CORIACEA* (LINNAEUS),  
ON THE ATLANTIC COAST OF FLORIDA, WITH A  
SUMMARY OF AMERICAN NESTING RECORDS <sup>1</sup>

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Carr (1952: 451) pointed out that there has been only one reliable record of the nesting of the Atlantic Leatherback turtle, *Dermochelys coriacea coriacea* (Linnaeus), on the North American mainland beaches during the last 100 years. The case referred to was an emergence in June, 1947, on Flagler Beach, Flagler County, Florida. The evidence given below is thus apparently the second instance, reported by a zoologist, of a leatherback or trunkback, nesting on a North American shore in recent decades; and though the turtle itself was not seen by us, the data seem clear enough to be considered valid. An account of a third such emergence which recently occurred in south Florida is now being prepared for publication by Mr. Wilfred T. Neill of Ross Allen's Reptile Institute.

On the night of July 22, 1955, in company with several other persons, two of us (Caldwell and Hellier) were tagging female Loggerhead turtles, *Caretta caretta caretta* (Linnaeus), as they came out to lay on Hutchinsons Island, Martin County, Florida, opposite the town of Jensen Beach. We were met by Mr. Newt Chase, local officer of the Florida State Board of Conservation, who informed us that a trunkback had nested near the south end of the island about a week or ten days before. The officer did not see the turtle, but it was reported to him by a person who had witnessed the event. He went to the spot with the witness on the next night and found that the tracks, which he measured to be nine feet between the outermost marks of the flipper tips, were still plainly visible. The witness told him that the eggs had been about the size of baseballs. The white sand beach is fairly steep at this point and the nest site was located about 75 feet above normal high water, just at the edge of a line of rather high dunes.

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<sup>1</sup>Field work supported in part by National Science Foundation Grant G-1684, University of Florida (Principal investigator, Archie Carr), a project on which Caldwell was Research Assistant during the summer of 1955.



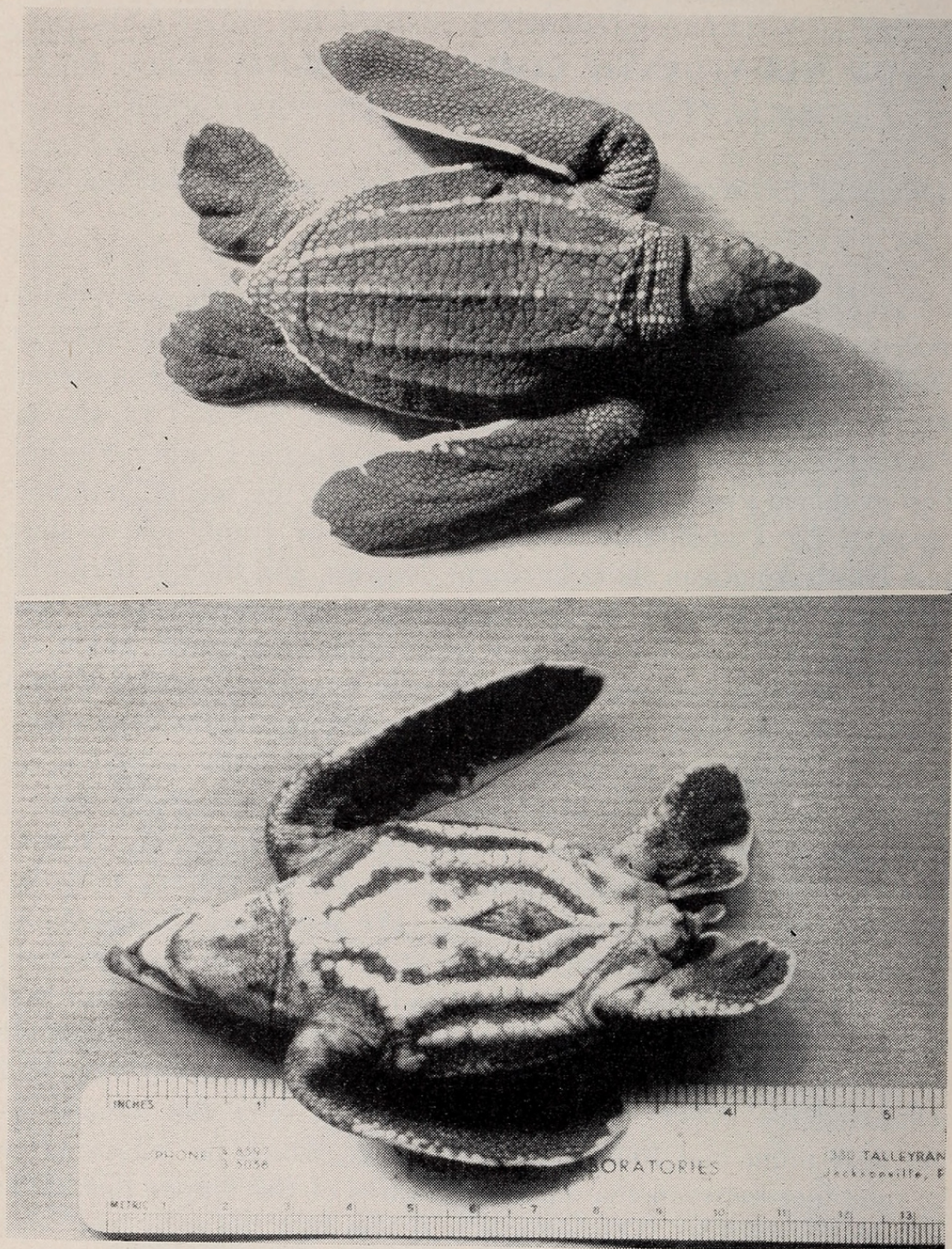


Figure 1. (*upper and lower*). Dorsal and ventral views of a hatchling Atlantic Leatherback turtle from Tortuguero, Costa Rica. Note umbilical scar on ventral side. Specimen now UF Acen. No. 16. (Photographs by Leonard Giovannoli.)



We returned to the spot on the 22nd in company with Chase, and found that the tracks were still visible, though partly destroyed by the wind. Even at this late date they were about seven feet across, much too wide for a loggerhead or any other species of sea turtle. The disturbed nest area measured about 12 by 15 feet.



Figure 2. Carefully excavated nest of an Atlantic Trunkback turtle at edge of *Ipornea* zone on beach near Toco, northern coast of Trinidad. The diameter of the opening is thought to correspond closely with the mouth of the original excavation. The stick, which was 49 inches long, rests on what seemed clearly to be the bottom of the nest as dug by the turtle. (From a Kodachrome by Archie Carr.)

The next morning we returned to the site armed with shovels, but were unable to recover any eggs, though we dug holes and trenches to a minimum of  $3\frac{1}{2}$  feet over the visible nest area. While it is well known that the large size of this species permits it to bury its eggs quite deep (Carr, 1956: 77), we felt that we should have discovered the top of the nest, though as it is further pointed out (Carr, 1952: 391; 1956: 99), it is often astonishingly hard to find the eggs of even smaller species of sea turtles after they have been covered, even if the entire laying process has been watched. Unfortunately, sea turtle eggs are much in demand by pastry



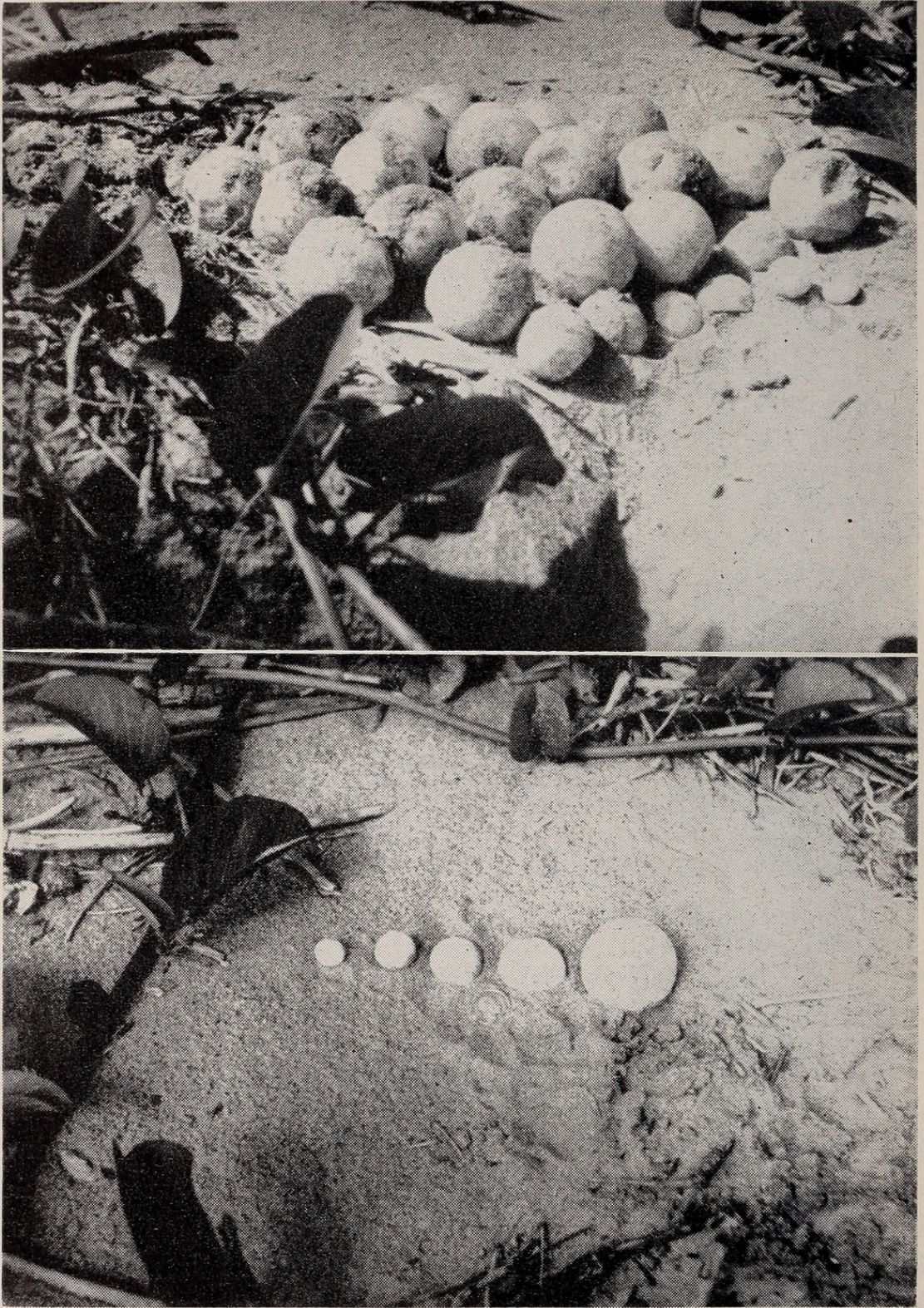


Figure 3. (*upper and lower*). Eggs from the nest in Figure 2. The extreme range in egg size is characteristic of trunkbacks, both Atlantic and Pacific. The coin shown is an English half crown. The big egg in the graded series was  $2 \frac{1}{16}$  inches in diameter and most of the eggs in the nest were, with the wooden calipers used, not measurably different. There were 8 undersized eggs in the clutch of 50. (From Kodachromes by Archie Carr.)



cooks, and it is of course quite possible that the witness took the eggs, refilled the hole, and failed to report this to the conservation agent.

Mr. Chase stated that though he had never seen one himself, two or three trunkbacks are reported nesting in this area each summer.

American nesting records for the Atlantic Leatherback are as follows:

FLORIDA: Flagler Beach, Flagler County, June 6, 1947 (Carr, 1952: 451); Hutchinsons Island, Martin County, (see above). JAMAICA: West end (Negril Bay), March 30 and April 10, 1846 (Gosse, 1851: 306). COSTA RICA: Tortuguero, May, 1953 (Carr, 1954: 138); Tortuguero, June, 1954, several old nests; Tortuguero, July 12, 1955, a single hatchling taken by Leonard Giovannoli (see Figure 1)—with measurements as follows: Carapace length 64 mm (2.56 in.); carapace width, 42 mm (1.68 in.); weight, 44.9 gms (0.099 lbs.). TRINIDAD: Near Toco (northern coast), three nests, August 29, 1953 (Carr, 1954: 138; 1956: 98; see Figures 2 and 3); in the Royal Victoria Institute, Port of Spain, there is a photograph of a trunkback with the notation that it had been taken on the beach at Manzanillo (eastern coast) near the mouth of the Oropuche River, where it had laid 150 eggs the night of May 29, 1937. TOBAGO: August, 1953, old nest (Carr, 1954: 138). Schmidt (1916: 9) named the islands of St. Croix and Tortola, in the Danish West Indies, as sites of nesting emergence, and Audubon (1926: 196) said that trunkbacks nested on the Florida Keys. Honduras, Nicaragua, the Bahamas, and Brazil have also been noted on the basis of old or word-of-mouth accounts as breeding localities (Carr, 1952: 451).

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than was needed for the particular project and some could be diverted to other activities.

The Academy Conference and the Council of the A.A.A.S. agreed on a new basis for the distribution of the small research fund which the Academies receive each year from the A.A.A.S. Grants are to be made for the support of outstanding research projects with consideration being given to applicants in the following order: First, High School students (for projects of the type which are entered in the National Science Talent Search); second, undergraduate students and third, graduate students and faculty members. In each category special consideration is to be given to applicants from the smaller institutions with limited budgets, and none of the money is to be used for prizes or rewards.

The afternoon and evening sessions of the Academy Conference were devoted to a series of discussions on two topics. The first of these was The Role of Academies of Science in the A.A.A.S. Science Teaching Improvement Program. Among the suggestions made along this line were: continued and increased activity by the Senior Academies in establishing and supporting Junior and Collegiate Academies, Science Fairs and Science Talent Searches; and the appointment of Special Academy Committee(s) to make recommendations for improvement in the training of science teachers and especially to help with the establishment of inservice training programs, and to examine existing science curricula in the high schools and try to improve them, especially from the laboratory standpoint.

The second topic of discussion dealt with Science Fairs as an Academy activity. The importance of stimulating an interest in science among students at the Junior High level was discussed and the value of Science Fairs in helping to promote such an interest was pointed out. The Oak Ridge Institute of Nuclear Studies has some very interesting publications in which this matter is discussed at some length.

The Conference concluded with the annual dinner on Wednesday evening.

E. RUFFIN JONES

Academy Conference Representative



Caldwell, David

K.

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