SPREAD OF THE ARMADILLO INTO THE TALLAHASSEE-THOMASVILLE AREA

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The Nine-banded Armadillo (Dasypus novemcinctus) has occurred for some time in the western Panhandle and Peninsular regions of Florida. though the populations in the two areas did not have a common geographic origin. The Peninsular population presumably resulted from one of two introductions. Bailey (1924) mentioned the release of a captive pair near Miami in 1922, but apparently the progeny of this pair did not persist for many generations. However, others escaped from a zoo in Cocoa about 1924, and it seems likely that these animals managed to establish the first permanent population in Florida (Sherman, 1943). Following its initial establishment in Brevard County, the armadillo spread northward and southward near the coast and westward to the center of the Peninsula, with smaller numbers possibly established throughout most of the remainder of the Peninsula by 1949 (Fitch et al., 1952). By 1951 individuals had been reported as far west as Dixie, Taylor, and western Wakulla Counties, and as far north as Hamilton and Duval Counties (Neill, 1952). Many records of armadillos, however, are known to represent recently escaped individuals, and it seems almost certain that Neill's record in Wakulla County could not have represented a natural occurrence (see below).

During this period of Peninsular establishment and expansion (1922-51), the Texas population was expanding its range northward and eastward. It first crossed over into Louisiana in the 1920's (Strecker, 1926; Lowery, 1943) and reached Mississippi in the 1930's, but may not have been established in Mississippi that early (Fitch et al., 1953). Whether the first records in the Florida Panhandle resulted from this population seems doubtful, as an armadillo (thought to have been a gravid female) was released at Foley, Alabama, as early as 1937, and the species was established there at least by 1949 (Fitch et al., 1952). It seems likely that this introduction led to the first records in west Florida, as Curtis Kingsbery informed us of records around 1938-40. Burt L. Monroe, Jr., (pers. comm.) found it common around Pensacola in the mid-1950's, Only 40 miles farther east, however, W.E. Shannon (pers. comm.) and H.H. Gaither (pers. comm.) did not find them around Fort Walton Beach until about 1968. During the period 1966-68 Wolfe (1968) found armadillos widespread in the Panhandle, ranging as far east as Holmes County. Records in Alabama lead one to suspect that the invasion throughout the Florida Panhandle may have taken place somewhat earlier, for Holliman (1963) mentioned records "throughout the southern tier of counties."

Thus by 1970 armadillos occurred throughout most of Florida except for the Tallahassee region (that portion lying between the Apalachicola and Aucilla Rivers). Since 1946, the senior author has spent thousands of hours in the field in that part of the state but had never seen an armadillo nor heard of such a record until the past few years. It seems highly improbable that an established population of so conspicuous an animal, and so frequent a traffic victim, could have remained undetected here. Thus we regard Neill's (1952) much earlier record in Wakulla County as an escaped animal. The armadillo's absence throughout this period in the Thomasville area is less certain, as Golley (1962) showed records on his map in Grady and Decatur Counties (Georgia), adding that "these may be introduced animals." Wilson Baker and Roy Komarek (both pers. comm.) verified records in Grady and Thomas Counties in the mid-1960's, but thought they represented escapees. That the species was spreading in this direction from west Florida was attested by a highway kill found by Stevenson and others one mile south of Red Bay (Walton Co.,), Florida, on 7 June 1969 (specimen, FSU 652). Within the next two days Mary Ann Olson (pers. comm.) found another highway kill near Panama City.

The first record in the Tallahassee region occurred when Jochen Wiese (pers. comm.) found one in eastern Wakulla County in July 1972. Another was found on the highway a few miles north of St. Marks on 25 September 1972, and a live one was seen a few miles farther east by Tom Berchem and Randy Flowers on 25 May 1973 (Culver Gidden, pers. comm.). Road kills at two points in Grady County, Georgia, were recorded on 26 July 1973 (Crawford, specimen, TTRS 704; H.L. Stoddard, Jr., pers. comm.). Local inquiries yielded no record of captive or escaped armadillos.

Because the armadillo has long been present as far northwest as Taylor and Hamilton Counties, it appears likely that the above invaders into the Tallahassee-Thomasville area represented the Peninsular population, and at that time none was thought to have crossed the Apalachicola River. However, a road kill found by Stevenson in Liberty County, 6 miles east of Bristol on 18 August 1973, probably came from the nearby Panhandle population. About 20 years ago Buchanan and Talmage (1954) predicted an eventual contact between the populations in Alabama and Peninsular Florida. Apparently this prediction is now materializing in the Tallahassee area.

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LITERATURE CITED

Bailey, H.H. 1924. The armadillo in Florida and how it reached there. J. Mamm., 5: 264-265.

- Buchanan, G.D., and R.V. Talmage. 1954. The geographical distribution of the armadillo in the United States. Texas. Jour. Sci., 6: 142-150.
- Fitch, Henry S., Phil Goodrum, and Coleman Newman. 1952. The armadillo in the southeastern United States. J. Mamm., 33: 21-37.
- Golley, Frank B. 1962. Mammals of Georgia. Univ. of Georgia Press. Athens. 218 pp.
- Holliman, Dan C. 1963. The mammals of Alabama. Unpubl. Ph. D. dissertation, Univ. of Alabama.
- Lowery, George H. 1943. Check-list of mammals of Louisiana and adjacent waters. Occ. Papers Mus. Zool., La. State Univ. 13:213-257.
- Neill, Wildred T. 1952. The spread of the armadillo in Florida. *Ecology*, 33: 282-284.
- Sherman, H.B. 1943. The armadillo in Florida. Fla. Entomologist, 26: 54-59.
- Strecker, J.K. 1926. The extension of range of the Nine-banded Armadillo. J. Mamm., 7: 206-210.
- Wolfe, James L. 1969. Armadillo distribution in Alabama and northwest Florida. Quart. Jour. Fla. Acad. Sci., 31: 209-212.
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