

Nine-Banded Armadillo (*Dasypus novemcinctus*) Records in New Mexico, USA

Jennifer K. Frey
James N. Stuart

New Mexico represents the western range limit of the nine-banded armadillo (*Dasypus novemcinctus*) in the United States, although the nearest known established populations are in adjacent western Texas (Layne, 2003). Early records of armadillos in New Mexico were based on incidental observations (Findley *et al.*, 1975). Stuart and Knight (1998) provided a comprehensive synopsis of scattered literature records and additional new observations of the armadillo in New Mexico, although that publication is difficult to access. Most recently, Stuart *et al.* (2007) provided records of the first armadillo specimens collected and preserved in the state and a map of all known locality records of armadillos in New Mexico, but did not give details about previous records. They concluded that while many records were likely the result of human intervention, at least some from southeastern New Mexico were possibly of natural origin and that suitable habitat exists in this part of the state (Stuart *et al.*, 2007).

Herein we provide a complete synopsis of all records of *Dasypus novemcinctus* in New Mexico known to us, including localities, dates, and sources of information. A map of these locations (Figure 1) shows that records are from the eastern third of New Mexico, which delineates the northwestern range limits of the species as currently understood. Each record is provided as a direct quote of the locality data taken from the cited source. Additional data on a record are in brackets and the reference is in parentheses. Bold numbers in parentheses correspond to localities mapped in Figure 1 and in several cases refer to two or more records from the same locality or geographically similar locations. Abbreviations include: DOR = dead on road; MSB = Museum of Southwestern Biology, University of New Mexico.

Chaves County: (1) "On 2 December 2001, the skeleton of an adult armadillo (sex indeterminate) was collected along U.S. Highway 82, circa 9.5 km NNE of Dunken, Chaves County (Sec. 26, T16S, R18E; circa 32.86° N, 105.17° W)" [catalog number is MSB 140060] (Stuart *et al.*, 2007); (2) "On 11 December 2006, a mostly disarticulated skeleton (adult, sex indeterminate) was collected from a dry concrete watering trough in a cattle pen at Hagerman, Chaves County, 1.2 km N and 2.4 km E of the junction of

New Mexico Highway 2 and New Mexico Highway 249 (33.1221°N, 104.3099°W" [catalog number is MSB 146777] (Stuart *et al.*, 2007).

Curry County: (3) "During 1994–1995, a live animal was captured [on a soccer field] in Hillcrest Park in Clovis, Curry County and was released by a U.S. Fish and Wildlife Service agent in Texas (Wes Robertson, New Mexico Department of Game and Fish, pers. comm.)" (Stuart *et al.*, 2007).

Eddy County: (4) "near Carlsbad" [1 found in February 1924; fate unknown] (Bailey, 1928:60); "in Carlsbad" [1 acquired by wildlife rehabilitator on 28 December 1988; fate unknown] (Stuart and Knight, 1998:40); "On 22 June 2006, C. Gehrt and T. Nelson collected a road-killed adult (sex indeterminate) at the north end of Carlsbad, Eddy County, near an abandoned concrete flume over the Pecos River (32.4471°N, 104.2564°W)" [catalog number is MSB 146776] (Stuart *et al.*, 2007).

Guadalupe County: (5) "on highway 66, 9 and 9 and three-quarters miles respectively west of Santa Rosa" [2 DOR observed on 21 August 1962] (Hendricks, 1963:581).

Harding or San Miguel County: (6) "Mosquero area" ["several" or more observed ca. 1970; Stuart *et al.*

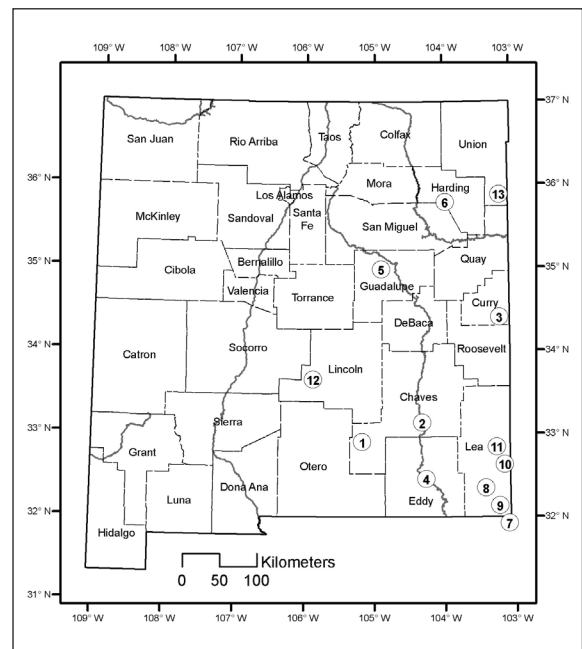


Figure 1. Map of New Mexico, showing localities of *Dasypus novemcinctus* records. Numbers in circles correspond to localities referenced in the text. Some numbered localities represent two or three records from the same general area.

(2007) thought these observations might have been the result of an unconfirmed release near Mosquero during this period] (Schaefer, 1975:134).

Lea County: (7) “for a distance of 70 miles or more north of [Monahans, Ward County, Texas]” [record based on a 1909 letter from J. Holman, a rancher from Monahans, Texas] (Bailey, 1931:8); “both sides of the New Mexico line” [reported as very scarce; record based on a 1909 letter from H. Campbell, a rancher from Monahans, Texas] (Bailey, 1931:8); (8) “around San Simon Sink” [reports of “shells,” possibly not recent, and observations of live animals in general area as recently as 1930s] (Buchanan and Talmage, 1954:143); (9) “along State Highway 128 near County Road 6A just west of Jal” [1 DOR observed on 20 July 1978] (Stuart and Knight, 1998:40); (10) “Hobbs” [1 acquired by wildlife rehabilitator on 17 January 1988; released in San Angelo, Texas] (Stuart and Knight, 1998:40); “vicinity of Hobbs, near the Texas border” [2 DOR observed ca. 1993–1994] (D. Sutcliff, pers. comm. in Taulman and Robbins, 1996:642–643); (11) “On 15 July 2007, a road-killed armadillo was photographed by Calvin B. Smith along New Mexico Highway 18 between mile markers 61 and 62, approximately 11.2 km S and 8 km E of Lovington, Lea County (circa 32.83°N, 103.25°W” [photograph catalog number is MSB 140242] (Stuart *et al.*, 2007).

Lincoln County: (12) “Carrizozo (?)” [skull in New Mexico State University Vertebrate Museum (NMSU 1364), no other collection data; specimen examined in 1987] (Stuart and Knight, 1998:40).

Union County: (13) “dump site along Monia Creek, 5 kilometers south of Amistad via State Highway 402” [1 carcass photographed 30 May 1988; probably transported to location with household refuse] (Stuart and Knight, 1998:39).

Acknowledgments: We thank Z. Schwenke and L. Tyson for preparing the map and the following individuals for help in compiling observations and securing specimens: F. Armstrong, R. Artrip, D. Baggao, T. Best, D. Burkett, J. Cook, C. Dixon, J. Dunnun, C. Gehrt, B.R. Griffin, J.D. Griffin, J.J. Griffin, T. Griffin, C. Jordan, W. Justice, K. Garrison, K. Gehrt, K. Geluso, K. N. Geluso, A. Gennaro, M. Hakkila, J. Karam, G. Keller, J. Malaney, M. Massey, T. Nelson, B. Novosak, R. Paris, S. Patterson, W. Robertson, C.G. Schmitt, J.S. Sherman, Z.J. Schwenke, R. Terrell, G. Tillett, J. Truett, J. Whary, and B. Wilson.

Jennifer K. Frey, Department of Fish, Wildlife, and Conservation Ecology and The Vertebrate Museum, Department of Biology, P.O. Box 30003, Campus Box 4901, New Mexico State University, Las Cruces, New Mexico, 88003-8003, USA, e-mail: <jfrey@nmsu.edu> and James N. Stuart, New Mexico Department of Game and Fish, Conservation Services Division, P.O. Box 25112, Santa Fe, New Mexico 87504, USA, e-mail: <James.Stuart@state.nm.us>.

References

- Bailey, V. 1928. Animal life of the Carlsbad Cavern. *Monogr. Mus. Nat. Hist., Univ. Kansas* 3: 1–415.
- Bailey, V. 1931 (1932). Mammals of New Mexico. *N. Amer. Fauna* 53: 1–412.
- Buchanan, G. D. and Talmage, R. V. 1954. The geographical distribution of the armadillo in the United States. *Texas J. Sci.* 6(2): 142–150.
- Findley, J. S., Harris, A. H., Wilson, D. E. and Jones, C. 1975. *Mammals of New Mexico*. University of New Mexico Press, Albuquerque.
- Hendricks, L. J. 1963. Observation of armadillo in east-central New Mexico. *J. Mammal.* 44(4): 581.
- Layne, J. N. 2003. Armadillo, *Dasybus novemcinctus*. In: *Wild Mammals of North America: Biology, Management, and Conservation*, G. A. Feldhamer, B. C. Thompson and J. A. Chapman (eds.), pp. 75–97. The Johns Hopkins University Press, Baltimore and London.
- Schaefer, J. W. 1975. *An American Bestiary*. Houghton Mifflin Company, Boston, Massachusetts.
- Stuart, J. N., Frey, J. K., Schwenke, Z. J. and Sherman, J. S. 2007 (2009). Status of nine-banded armadillos (*Dasybus novemcinctus*) in New Mexico. *Prairie Nat.* 39: 163–169.
- Stuart, J. N. and Knight, P. J. 1998. Notes on the armadillo, *Dasybus novemcinctus*, in New Mexico. *New Mexico Naturalist's Notes* 1(2): 39–42.
- Taulman, J. F., and Robbins, L. W. 1996. Recent range expansion and distributional limits of the nine-banded armadillo (*Dasybus novemcinctus*) in the United States. *J. Biogeogr.* 23(5): 635–648.