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Frequency of Northern Bobwhite X Scaled Quail hybridization.—Occurrence and plumage of Northern Bobwhite (Colinus virginianus) X Scaled Quail (Callipepla squamata) hybrids are well documented (McCabe, Auk 71:293–297, 1954; Sutton, Southwest. Nat. 8:108–111, 1963; Johnsgard, "Grouse and Quail of North America," Univ. of Nebraska Press, Lincoln, 1973). Wild hybrids are reported from three counties of the Texas rolling plains (Sutton 1963) and one county in the South Texas plains (Lehmann, "Bobwhites in the Rio Grande Plain of Texas," Texas A&M Univ. Press, College Station, 1984). Sutton (1963) suggested that interbreeding may be fairly common in portions of the rolling plains. I estimated frequency of hybridization between Texas Bobwhite (C. virginianus texanus) and Chestnut-bellied Scaled Quail (C. squamata castanogastris) in the South Texas plains.

Observations and collections are from a 4251-ha portion of the Jennings Ranch, Zapata County, Texas. In the 1986–87 hunting season, 1787 Northern Bobwhites and 257 Scaled Quail were harvested. A juvenile female hybrid (no specimen) was shot on 13 December 1986 and a juvenile male hybrid (specimen in author's possession) was shot on 16 January 1987. Thus, hybrids comprised 0.11 and 0.78% of bobwhite and Scaled Quail harvest, respectively. I trapped 433 Bobwhite and 40 Scaled Quail during October 1987, including one adult male hybrid on 5 October 1987 and two juvenile hybrids (sexes unknown) on 8 October 1987. Trapping sites of the juveniles were >1 km apart and were >3.5 km from the trapping site of the adult. I banded, photographed, and released these birds. Hybrids comprised 0.69 and 7.50% of trapped bobwhites and Scaled Quail, respectively. A juvenile male hybrid (Museum # JTK 88181) was shot on 16 January 1988. Harvest during the 1987–88 season was 1060 bobwhite and 236 Scaled Quail. Hybrids comprised 0.09 and 0.42% of bobwhite and Scaled Quail harvest, respectively.

Estimates of hybrid frequency are conservative. Deep sand sites comprise >15% of the area. Scaled Quail are absent on these sites. Excluding bobwhites trapped and harvested in

these areas would give higher hybridization rates. The boundaries I used when recording data did not follow soil boundaries and selective exclusion was not possible. I did not consider possible effects of differences in susceptibility to capture or harvest.

Interbreeding seemed to occur frequently. Captive hybrids have low reproductive capacity (Johnsgard 1973). Trials with wild stock are needed to determine the reproductive potential of hybrids of these subspecies. Genetic changes are unlikely if captive and wild hybrids have similar fertility.

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