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RECENT NESTING RECORDS OF PURPLE MARTINS IN WESTERN COLORADO

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The Purple Martin (*Progne subis*) is considered a rare summer visitor or local breeder in western Colorado. Scattered records of these visitors occur from May through July (Bailey and Niedrach, *Birds of Colorado*, Vol. II, Denver Mus. Nat. Hist., Denver, 1965:550) These birds usually nest in abandoned woodpecker cavities in trees of the transition zone or higher montane woodlands (Johnston, *Condor* 68:219-228, 1966). Most west slope records of Purple Martins during the breeding season have been made in the transition zone at elevations of 2600 m or more (Bailey and Niedrach 1965). The only Purple Martin breeding records prior to 1978 have been from the headwaters of Apishapa Creek in western Las Animas County in June 1872 (Sclater 1912 cited by Bailey and Niedrach 1965) and from Fort Lewis, La Plata County, where they nested in hollow trees and latticed ventilators (Morrison 1886, 1888 cited by Bailey and Niedrach 1965). Until recently, due to lack of breeding records, the Purple Martin was considered a migrant or accidental straggler in Colorado (Kingery and Graul, *Colorado bird distribution latilong study*, Colo. Field Ornithol. and Colo. Div. Wildl., 1978:33). As a result of the sightings reported herein, the first addendum to the Latilong Study shows the Purple Martin breeding in southwestern Colorado (Bardwell and Thomas, *C.F.O. Journal* 14:66-69, 1980). Andrews (*C.F.O. Journal* 14:82-87, 1980) also lists the Purple Martin as a confirmed breeder in Colorado in the last 15 years.

Herein we report two Purple Martin nests which we observed on Stoner Mesa, elevation 2800 m, 37°42'N, 108°13'W, 17 km northeast of Stoner, Dolores County, southwestern Colorado. Stoner Mesa is covered with extensive mature Quaking Aspen (*Populus tremuloides*) stands where 2 to 8 ha clear-cut patches have been harvested over the last 4 years. Initially, a singing male Purple Martin was observed on Stoner Mesa 8 June 1978. The aspen nest tree was subsequently found 18 July 1978 in a 4 ha aspen harvest area where unmerchantable trees and snags had been left standing. The nest was located in an 8 cm diameter abandoned woodpecker hole of a live aspen, 17 m tall and 50.0 cm dbh. The tree was on a south-facing 2% slope, about 60 m from the edge of the cut. The nest cavity was 9 m high with a southern exposure was located directly below a large branch stub. The nest tree had mostly solid whitewood, but conks were present indicating that the tree was infected with heartrot (*Fomes* sp.). Several snags standing near the nest were used by the Purple Martins for perching (Figure 1). A pair of Purple Martins was feeding young when the nest was found.

On 20 June 1979, a second Purple Martin nest was found on the southeastern side of Stoner Mesa near Stoner Creek. This nest was also in a 8 cm abandoned woodpecker hole in a live aspen. The aspen was 18 m tall and 45.2 cm dbh. The tree was on a level site in an open area about 6 m from the edge of a beaver pond. The nest cavity was 11 m high with a northern exposure and faced the open area created by beavers. The nest tree had mostly solid whitewood, but some dead branches and evidence of heartrot were present. This nest site was about 2.2 km from the Purple Martin nest located in 1978. In late June, a female was observed carrying green aspen leaves into the hole, and a male was singing while circling the area. Later in July, a male, female, and two young were observed in and around the cavity.

NOTES

In early September 1978, the first martin nest tree was felled along with all remaining trees during a clean-up operation of the harvested area. On 20 and 21 June 1979, a pair of Purple Martins was seen in an open area around a beaver pond 0.75 km from the 1978 nest site. The male martin was observed making unsuccessful attempts to establish a nest in a hole occupied by a Tree Swallow (*Iridoprocne bicolor*). Although an effort was made to locate the martins, they were not seen in the area again that summer and fall. Presumably, the martins left after failing to secure a suitable nest site. The swallows prefer to nest in tree cavities in relatively open areas where they can fly to and from the nest sites. Such areas are limited in old growth aspen stands. Modification of clear-cutting practices to leave cull and dead aspen trees, either scattered or in groups, would provide many suitable nesting sites for Purple Martins and other swallows.



Figure 1. Nesting pair of Purple Martins perched in a Quaking Aspen snag adjacent to the nest tree in southwest Colorado, 18 km northeast of Stoner, July 1978.

NOTES

APPENDIX

Listed below are the Colorado records of Purple Martin sightings through July 1980 of which we are aware. Records through 1978, supplied by Robert Andrews, have been reviewed by the Official Records Committee of the Colorado Field Ornithologists and are kept in the Denver Museum of Natural History. Some of these records have also been published in Bailey and Niedrach (1965), *Colorado Bird Notes* (Vol. 2, 4, 7, 9, 13), *Colorado Field Ornithologist* (No. 8), and the *Monthly Report of Field Observations of the Denver Field Ornithologists* (Vol. 6). More recent records were supplied by William Shuster and Virgil E. Scott.

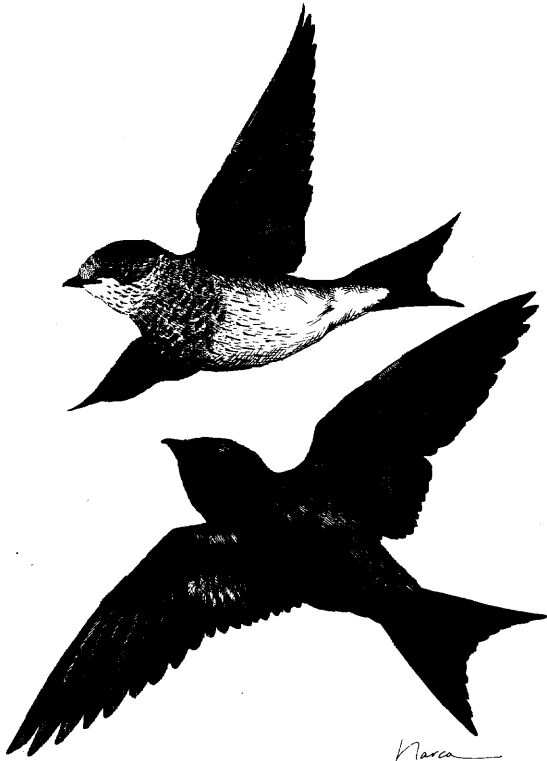
Records are listed alphabetically by county and chronologically within each locality. Dates are followed by the names of the observers and number of birds recorded.

- ADAMS CO. Barr Lake State Park: 29 Apr 1976, Robert Andrews, 1 male.
BACA CO. 1902, E.R. Warren, 1 pair.
BOULDER CO. Boulder: 26 Jun 1974, Steve Larson, 1 adult male.
DELTA CO. Paonia: 21 May 1955, Homer Griffin, 6.
DOLORES CO. Stoner Mesa, 17 km NE of Stoner: 8 Jun to 18 Jul 1978, Peggy Svoboda, Kimberley E. Young and Virgil E. Scott, 1 pair feeding young in cavity of live aspen, 1 other male. SE side of Stoner Mesa near Stoner Creek: 20 Jun 1979, Virgil E. Scott, Jill Whelan and Peggy Svoboda, 1 singing male and 1 female carrying green leaves into cavity of live aspen; Jul 1979, Jill Whelan and Peggy Svoboda, 1 male, 1 female and 2 young in and around previously located nest cavity.
GARFIELD CO. S side of Douglas Pass: 10 Jun 1978, Steve Larson and Diane Burkhardt, 1 pair. SW of Glenwood Springs: 27 Jun and 22 Jul 1978, Marc Bosch, Odele Bosch and Rich Kielbosa, 1 pair evidently nesting and 1 additional individual. Along the West Fork of Elk Creek, about 13 km above Newcastle: reported in 1908, E.R. Warren, several. White River National Forest, 22 km NE of Rifle: 7 Jul 1959, Dennis Carter, 1 male; 8 Jul 1959, Dennis Carter, 2 female.
LA PLATA CO. Durango: 31 May 1973, Elva Fox, 4 adults. Florida Mesa, S of Durango; 27 Apr 1969, Oppie Reames, number unknown; 10 May 1969, Oppie Reames, a flock of over 40. Fort Lewis: reported in 1886 and 1888, C.F. Morrison, nesting in hollow trees and latticed ventilators of the barracks. 0.8 km W of Pastorious Reservoir, Durango: 10 May 1965, Oppie Reames, number unknown.
LARIMER CO. Berthoud: 23 May 1957, Jay Arnold, 1 pair seen. N of Fort Collins: 1 Sep 1965, Carroll Littlefield, 1 female.
LAS ANIMAS CO. Headwaters of Apishapa Creek: Jun 1872, C.E.H. Aiken, number unknown, breeding.
MESA CO. Head of Beaver Creek, at 2742 m: reported in 1908, R.B. Rockwell, number unknown. 5.6 km SSW of DeBeque: 16 Aug 1979, Ron Lambert and Nancy Green, about 8.
MONTEZUMA CO. Jackson Gulch Dam, near Mancos: 9 Jul 1950, Oppie Reames, 2 or 3 seen. Jersey Jim Lookout, 19 km NE of Mancos: 24 Jun 1979, William Shuster, 1 pair; 4 Jul 1980, William Shuster, 1 female. Near Puett Reservoir, Haycamp Mesa, 22 km N of Mancos: 19 Jul 1979, William Shuster, 4 pairs nesting and feeding young in aspen snags killed by flooding in beaver pond; 27 Jul 1980, William Shuster, 3 pairs nesting in dead aspens, 1 other male. Sellar-McClain Reservoir, 8 km from Mancos: 24 May 1978, William Shuster, 1 male; 26 Jul 1980, William Shuster, 2 males and 1 female feeding. Summit Reservoir, 13 km NW of Mancos: 16 Aug 1974, Richard Stransky, 3; 14 and 28 Aug 1975, Richard Stransky, 3.

NOTES

- MORGAN CO. 26 km SW of Fort Morgan: 25 May 1976, Joseph C. Rigli and Carl J. Rigli, 1 female. Muir Springs Park: 5 Jun 1971, Jack Reddall, 2.
- RIO BLANCO CO. 24 km SE of Meeker, headwaters of Middle Miller Creek: 17 Jun 1980, Virgil E. Scott, 3 males and 2 females feeding; 9 Jul 1980, Virgil E. Scott, 1 pair nesting in cavity of live aspen. White River Plateau, 40 km SE of Meeker, 2437 to 2742 m elevation: Aug 1905, M. Cary, several; 17 Jul 1907, M. Cary, 1. White River Plateau, at Mud Springs near Wind Spring: 13 and 14 Jul 1907, E.R. Warren, 2 males (1 collected).
- ROUTT CO. Along Elk River: 11 June 1911, Hersey, 1 male (collected).
- YUMA CO. Bonny Reservoir: 20 May 1961, observers unknown, on statewide spring count, 3; 15 May 1971, Jack and Grace Welch and Robert Spencer, on statewide spring count, 2.

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Sketch by Narca Moore