Local Movements of Some Arizona Montane Birds

John B. Dunning, Jr. and Richard K. Bowers, Jr. Department of Ecology and Evolutionary Biology, University of Arizona, Tucson, Arizona 85721

Local movements of southwestern montane birds are poorly understood. In southeastern Arizona, one factor contributing to this lack of knowledge is that banding operations are generally located in the low-lands; thus most mountain-dwelling species are not banded in large enough numbers to generate significant recoveries. In 1982 and 1983 we did some banding in the mountains of southeastern Arizona and made two recoveries which illustrate movements of mountain birds.

On 27 September 1982 Stephen Russell and Ruth Ogden banded a White-breasted Nuthatch (Sitta carolinensis, band number 1192-42902) in Tucson, Pima Co., Arizona. The bird had been captured by Russell along the floodplain of the Rillito River in Tucson, in Sonoran desert scrub at an elevation of 732 m. Nuthatches are rare winter visitors in such lowland areas. For example, the Tanque Verde Guest Ranch banding operation, the largest in the Tucson area and located in similar habitat, banded only two nuthatches from 1970 through 1979 (C. Corchran, unpubl. data). 1192-42902 is the only nuthatch that Ogden and Russell have banded at their lowland stations in 5 years of operation. The bird was recaptured on 2 April 1983 by John Dunning at Rose Canyon Recreational Area, Santa Catalina Mountains, Pima Co., Arizona. This location is in Ponderosa Pine (Pinus ponderosa) forest at an elevation of 2142 m and is 22.6 km from the original banding site.

White-breasted Nuthatches are occasionally found in lowland sites in southern Arizona in fall and winter (Phillips, Marshall and Monson, The Birds of Arizona, University of Arizona Press, 1964). These birds could be either local residents moving down from the mountains in winter or visitors from more northern areas. Most authorities have assumed that they are local, primarily on the basis of subspecific identification, but few hard data exist (G. Monson, pers. comm.). Our recovery is consistent with the hypothesis that lowland nuthatches in the fall are altitudinal migrants from adjacent mountain ranges.

Our second recovery was made in the Huachuca Mountains of southeastern Arizona. On 15 April 1983 Richard Bowers banded and color-banded a territorial male Buff-breasted Flycatcher (Empidonax fulvifrons, band number 1560–74219) in Sawmill Canyon, Huachuca

Mountains, Cochise Co., Arizona. This bird was located in what might have been marginal breeding habitat for this species, since neither a single male nor a mated pair observed there in 1982 bred successfully. 1560-74219 was never seen with a mate, and was last seen in Sawmill Canyon on 15 May 1983 by Robert Smith. The bird was relocated on 29 May 1983 by David Vleck in Carr Canyon, Huachuca Mountains, Arizona, 7.4 km southeast of the original banding site. The bird successfully attracted a mate, and Bowers recaptured it on 9 July 1983 as it fed a recently fledged young. In contrast, none of the ten other territorial males or seven females banded in 1982 and 1983 during this study shifted its territory during or between years. This is the first evidence that Buff-breasted Flycatchers occasionally disperse between mountain canyons during the breeding season.

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