

FEATURE ARTICLES

SUMMER DIET OF THE PEREGRINE FALCON IN FAUNISTICALLY RICH AND POOR ZONES OF ARIZONA ANALYZED WITH CAPTURE-RECAPTURE MODELING

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Abstract. We collected prey remains from 25 Peregrine Falcon (*Falco peregrinus*) territories across Arizona from 1977 to 1988 yielding 58 eyrie-years of data. Along with 793 individual birds (107 species and six additional genera), we found seven mammals and nine insects. In addition, two nestling peregrines were consumed. We found a larger dependence upon White-throated Swifts (*Aeronautes saxatalis*) and birds on migration in northern Arizona, while in southeastern and central Arizona average prey mass was greater and columbiforms formed the largest dietary component. In northern, central, and southeastern Arizona, 74, 66, and 56 avian prey taxa, respectively, were recorded. We used capture-recapture modeling to estimate totals of 111 ± 9.5 , 113 ± 10.5 , and 86 ± 7.9 (SE) avian taxa taken in these same three areas. These values are counterintuitive inasmuch as the southeast has the richest avifauna. For the entire study area, 156 ± 9.3 avian taxa were estimated to be taken by peregrines.

Key words: Arizona, diet, *Falco peregrinus*, Peregrine Falcon, prey.