

NEW BANDING RECORD FOR PEREGRINE FALCONS IN ALABAMA

Jimmie R. Parrish and E. William Wischusen

During the month of October 1979 we operated a raptor banding station on the Alabama Gulf Coast between Gulf Shores, AL, and Fort Morgan, AL, near the mouth of Mobile Bay. At this site, observation was facilitated for both the Gulf coast line and the bay area. The wind velocity and direction were noted for each day of observation, as well as the temperature. The highest temperature for any one day was 86° F and a low one morning of 59° F. Average daily temperature for observation time was 79.6° F. We recorded a total of 63 man-hours of observations. This includes 50 hours total time spent attempting to trap and band raptors. The stated man-hours are the result of approximately six days banding/observation time over a two-week period from 6 - 21 October. The approximation comes from the fact that on 6 October we were not actually operating the station until just past 1400. Observations were made, however, starting at 0800 the same day, with the morning and noon hours being spent preparing the area for operation. The station was manned and operated from 0700 to 1800 on 5 of the 6 days. There was a total of 391 raptor sightings, representing 10 species. The most abundant species was the Broad-winged Hawk (Buteo platypterus) comprising 203 of the total. The more consistent American Kestrel (Falco sparverius) was second at 103 sightings. The maximum number of sightings of Broad-winged Hawks was 112 on 7 October. The maximum number of Kestrel sightings during the period was 29 on 21 October. On 13 October 84 Broad-winged Hawks were sighted, including one count of a 60 member kettle. Other actual counts of Broad-winged Hawk kettles were made, this being the largest.

The primary objective of this banding operation was to assess the movements of the endangered Peregrine Falcon (Falco peregrinus subsp.) along the

Alabama Gulf Coast during its autumnal migration to Central and South America. A total of 9 Peregrines was observed, 8 hatching year birds, and 1 adult. Of the 6 Peregrines that came into the station, 4 were captured, banded and released. This marks the first banding of this species recorded for Alabama. The maximum number of Peregrines sighted was 7 on 13 October. This is almost a week in advance of previous peak sightings and represents over twice the number of most recent peak sightings (Imhof, 1976). At least three of the individuals that were banded were judged to belong to the tundrius subspecies and one to the anatum subspecies. An ongoing banding program along the eastern flyway for the past ten years has shown an increase in the numbers of Peregrines sighted and over 500 have been banded during this same time frame. These sightings indicate an upward trend in the status of the two subspecies which have been considered to be most seriously endangered. Falco peregrinus anatum is not normally known to be so highly migratory as Falco peregrinus tundrius, but the former has been recorded at other stations along the eastern flyway (Ward, pers. com.). Banded were two hatching year females and two hatching year males. One male was classified as belonging to the anatum subspecies. The crown and head to the nape were dark brown. The top of the crown was a bit lighter but not very much. The characteristic malar stripe was much darker than the rest of the head, and was very wide. The entire body coloration was darker than other individuals trapped. The breast was heavily barred and washed throughout with a reddish tint. Heavy barring occurred over the entire breast and throat right up to the lower mandible. The cere was pale blue, as well as the area around the eye. The feet were a "faded" blue color with a slight yellow color seen intermittently in the toes.

In the immature plumage, F. p. anatum has the broad facial bar that in all plummages marks the species, but the crown is brown, as is the entire dorsal surface. The entire pale, reddish brown

ventral surface is streaked with dark sepia, darker than the brown of the dorsal surface. Cere and eyelid are bluish-grey; eye, dark brown; feet vary with different individuals from bluish-grey or greyish-white to pale yellow. F. p. tundrius averages smaller than F. p. anatum and is generally paler and greyer, especially in the first year plummage. The facial bar, in F. p. tundrius in all plummages, is narrow and often separated from the crown by a narrow line of white feathers under the eye. Immatures are sandy-brown above, the crown often pale greyish rather than dark, giving them a blond-headed appearance. Two ocelli are present on the nape in 50 per cent or more of first-year birds of this subspecies. Dorsal feather edges in first-year plummage are broad pale buff. Ventrally, immatures are nearly white with a pale rufous overwash, narrowly streaked with dark brown (Beebe, 1974). This resemblance is to first year Prairie Falcons (Falco mexicanus).

Currently, plans are underway to operate a similar station at this site in 1980 during a consecutive 25 day period. Banding operations will be conducted in conjunction with other stations along the eastern flyway and will hopefully provide some further insight into the migratory route taken by these fabulous birds during their fall trek to the south.

In addition to the sightings previously mentioned, there were others as follows: Cooper's Hawk (Accipiter cooperii) 8; Sharp-shinned Hawk (Accipiter striatus) 17; Red-tailed Hawk (Buteo jamaicensis) 1; Marsh Hawk (Circus cyaneus) 42; Osprey (Pandion haliaetus) 4; Merlin (Falco columbarius) 2; one unidentified falcon and one unidentified Buteo.

We made a preliminary visit to the area on 1 September and at that time observed 1 Osprey and 1 immature Bald Eagle (Haliaeetus leucocephalus). The initial choice of location for the station was changed due to the damage resulting from hurricane Frederick. A surprisingly small number of Peregrines was noted

during observation time and may or may not be correlated to this same damage. Much of the vegetation appeared to be in good shape, only pine showing obvious signs of damage. The marsh areas and beaches, however, were significantly altered. It is felt that for all practical purposes, the height of the migration through this area had taken place by 21 October. On both 20 and 21 October counts were very low and the high point of this weekend was two American Kestrels which appeared throughout the day chasing each other. One individual was showing signs of becoming territorial during these last two days of observation.

Literature Cited

- Beebe, Frank L. 1974. Field Studies of the Falconiformes of British Columbia, Vultures, Hawks, Falcons, Eagles. The British Columbia Provincial Museum, Victoria, B.C., Canada, pp. 176-7.
- Imhof, Thomas A. 1976. Alabama Birds. 2nd Edition, Alabama Department of Conservation and Natural Resources, Game and Fish Division, The University of Alabama Press, University, AL 35486, pp. 148-9.
- Ward, F. Prescott. Report on The Autumn Migration of Peregrine Falcons in North America with Emphasis on Studies of Assateague Island, MD/VA, and personal communication.

Department of Biology
The University of Alabama
University, AL 35486