

AUTUMN BIRDS OF BAKE OVEN KNOB

by

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In eastern Pennsylvania there are a number of locations along the Blue Mountain or Kittatinny Ridge which are exceptionally favorable for the observation of spectacular autumn migrations of hawks as well as lesser numbers of non-Falconiform birds. One of these locations is Bake Oven Knob in Lehigh County. Descriptions of the Knob (Heintzelman, 1963; Heintzelman and Armentano, 1964) and directions for travelling there (Heintzelman, 1963; Pettingill, 1964) are presented elsewhere and need not be repeated here. A brief summary of the ornithological activities which have occurred at the Knob, however, may be in order.

GENERAL ORNITHOLOGICAL STUDIES

Since 1961 my associates and I have made increasingly detailed studies of the autumn hawk migrations which occur at Bake Oven Knob. Despite our strong emphasis on raptor research, we have also recorded data on all species of birds which we have observed there. During the eight-year period 1961 through 1968, our 323 days of observation have resulted in the tabulation of 118 acceptable species, and eight hypothetical species, representative of 35 families and 84 genera. The preparation of this paper also includes a few records which were obtained prior to 1961. Autumn is defined as the period beginning on August 1st and ending on November 30th of each year.

Two preliminary lists of the autumn birds of Bake Oven Knob have previously been published (Heintzelman, 1963; Heintzelman and Armentano, 1964). Since the appearance of these lists, a considerable number of additional records have been gathered. The purpose of this paper is to compile, organize and present all our Bake Oven Knob autumn ornithological records for the period 1961 through 1968 in the form of semi-annotated species accounts.

HAWK MIGRATION STUDIES

As is well known to students of birds of prey, autumn hawk migrations along the Blue Mountain or Kittatinny Ridge of eastern Pennsylvania and adjacent states are exceptionally rich fields for continuing research, particularly since observers have constant opportunities to observe large numbers of birds. During our eight years of observation, for example, 323 days of observation have resulted in the tabulation of 69,132 hawks of 15 species. Table One presents our yearly hawk totals.

TABLE ONE
SEASONAL HAWK TOTALS RECORDED AT BAKE OVEN KNOB*

Species	1961	1962	1963	1964	1965	1966	1967	1968
Turkey Vulture	26	47	146	106	113	130	210	182
Goshawk	3	13	7	9	37	38	24	67
Sharp-shinned Hawk	71	280	207	429	1719	1475	1954	1987
Cooper's Hawk	2	18	8	8	58	60	56	65
Red-tailed Hawk	129	733	881	938	1276	1165	1020	2149
Red-shouldered Hawk	26	31	44	78	142	325	158	341
Broad-winged Hawk	236	2606	5132	5940	7491	6082	6278	11476
Rough-legged Hawk	3	0	5	8	9	2	2	2
Golden Eagle	2	4	11	13	21	15	17	16
Bald Eagle	2	3	10	6	25	30	19	21
Marsh Hawk	15	47	56	100	140	126	136	282
Osprey	10	110	59	219	379	355	265	297
Peregrine Falcon	0	5	4	13	10	13	13	6
Pigeon Hawk	0	3	4	2	13	17	10	8
Sparrow Hawk	16	69	35	89	199	257	226	241
Unidentified Hawks	23	60	67	85	170	129	173	97
Unidentified Eagles	0	0	0	0	1	0	0	0
TOTALS	564	4029	6676	8043	11803	10219	10561	17237
*1961 = 9 observation days					1965 = 54 observation days			
1962 = 20 observation days					1966 = 55 observation days			
1963 = 32 observation days					1967 = 58 observation days			
1964 = 39 observation days					1968 = 56 observation days			

For certain species, e. g. the Goshawk, Red-tailed Hawk, Red-shouldered Hawk, Broad-winged Hawk and Marsh Hawk, the autumn of 1968 was an exceptional season in terms of numbers of raptors passing Bake Oven Knob and other lookouts. However, autumn hawk migration totals from a single lookout in eastern Pennsylvania can seldom, if ever, be used as indices to overall trends in hawk populations in eastern North America although Spoford (1969: 323-332), and perhaps Keith (1963: 51-52), attempted to use the Hawk Mountain data for this purpose. From time to time, attempts to utilize the Hawk Mountain data in a similar manner have appeared in various Newsletters published by the Hawk Mountain Sanctuary Association.

This is a complex subject, an analysis of which is far beyond the scope of this paper, and is being treated in a lengthy manuscript in preparation by the author. Briefly, such factors as geography, wind and other weather conditions, and basic morphology — especially aspect ratio and wing loading — of the species and genera of Falconiform birds all combine to influence where hawks will appear during migration and in what numbers. Certainly, the reader should not interpret the 1968 Bake Oven Knob (or Hawk Mountain) data as indicating that hawks are suddenly and rapidly increasing in numbers.

EVALUATION OF RECORDS

All of the records which form the basis of this paper are sight observations. Records of this type present special problems in terms of evaluation — especially when rare and/or unusually difficult-to-identify species are concerned. In order to make this list as accurate as possible, I have critically examined all

records and I have tried to evaluate each objectively. The result is that several of my own records, as well as some from other observers, have been placed on the hypothetical list. No species on the Bake Oven Knob list are new to the Pennsylvania avifauna although six species — Blue Goose, Sandhill Crane, Laughing Gull, Red-bellied Woodpecker, Common Raven and White-winged Crossbill — are not included in the Lehigh County avifauna list published by Trainer and Miller (1956). At least one of these, however, the Red-bellied Woodpecker, has been recorded in Lehigh County on Christmas Bird Counts and perhaps others have also been observed in the county.

Throughout the course of this investigation, collecting has not been utilized but, in the case of several species of hawks, well prepared data-bearing specimens remaining from the days of hawk shooting at the Knob are preserved in public and private museum collections. Some birds, picked up and prepared by Benjamin Hiatt, are preserved in the William Penn Memorial Museum (WPMM) in Harrisburg, Pennsylvania, and in the New Jersey State Museum (NJSM) in Trenton, New Jersey. Likewise, a few birds picked up and preserved by Nelson Hoy also are preserved in the collections of the WPMM. In addition, a considerable number of Bake Oven Knob hawk specimens are preserved in Nelson Hoy's (NH) private collection. For the historical record, information on these birds is included under the appropriate species accounts. No special attempt has been made to search for other Bake Oven Knob specimens in collections aside from the three mentioned.

STANDARD OF ABUNDANCE

The standard used to evaluate the status of abundance of each species is that used in a previous list of Bake Oven Knob birds (Heintzelman and Armentano, 1964). It is again outlined here for convenience.

Regular: Recorded every year.

Irregular: Recorded less than once every year.

Casual: Recorded very infrequently, with only one or two records available.

Abundant: Occuring in such numbers that a competent observer might see more than 500 individuals in a single day.

Very Common: 101 to 500 in a single day.

Common: 26 to 100 in a single day.

Fairly Common: 6 to 25 in a single day.

Uncommon: 1 to 5 in a single day.

Rare: 1 to 5 in a single day and no more than 5 per season.

Very Rare: No more than 1 per season.

Migrant: A species passing through the area or remaining in it for several days.

Permanent Resident: A species recorded in the area during the entire period of this investigation and which is known to be a sedentary species, e. g. the Ruffed Grouse.

THE ANNOTATED LIST

COMMON LOON

Gavia immer

Status: A regular migrant, uncommon from mid-September through October, and uncommon to fairly common during November.

Dates: September 12 (1965 and 1968) to November 22 (1964).

Maxima: 51 on October 30, 1968 (MacClay); 28 on November 8, 1967 (MacClay); 16 on November 11, 1968; 16 on November 13, 1966; and 14 on November 19, 1966.

DOUBLE-CRESTED CORMORANT

Phalacrocorax auritus

Status: An irregular migrant, recorded during four (1962, 1964, 1965 and 1967) of our eight years of observation. Uncommon to common during mid-September, and uncommon from late September to mid-October.

Dates: September 12 (1964 and 1965) to October 14 (1962).

Maxima: 45 on September 12, 1964.

GREAT BLUE HERON

Ardea herodias

Status: An irregular migrant, recorded during two (1965 and 1968) of our eight years of observation. Rare from early September through late November.

Dates: September 11 (1968) to November 20 (1965).

Maxima: One per day.

WHISTLING SWAN

Olor columbianus

Status: A casual migrant. The Whistling Swan is a casual migrant at Bake Oven Knob and is included in our list on the basis of one bird observed by members of the Delaware Valley Ornithological Club on November 12, 1967. The bird is considerably more common at Hawk Mountain Sanctuary.

CANADA GOOSE

Branta canadensis

Status: A regular migrant, fairly common to very common from mid-September through late September, uncommon to abundant during October, and uncommon to common during the first half of November.

Dates: September 12 (1964 and 1968) to November 13 (1966).

Maxima: 4,500+ on October 18, 1966 (MacClay); 2,426+ on October 26, 1968; 2,078 on October 17, 1966 (MacClay); 1,745 on October 5, 1968; 1,200+ on October 15, 1961; 1,157 on October 30, 1968 (MacClay); and 1,081+ on October 2, 1965.

Remarks: Occasionally we observe a Canada Goose which is much smaller than the other geese in the same flock. While it is possible that these small birds belong to the race *hutchinsii* (the Richardson's Goose), there are also other small races of *B. canadensis*. It would be imprudent to positively consider these small birds passing the Knob to be *hutchinsii* without collecting specimens and comparing them with adequate series of museum specimens. According to Earl L. Poole (1964) several small races of Canada Geese have been recorded in Pennsylvania. At least three of these were described as *hutchinsii*, presumably on the basis of collected birds compared with museum specimens.

BRANT

Branta bernicla

Status: A casual or irregular migrant, common during late October and uncommon to common during early to mid-November.

Dates: October 21 (1968) to November 11 (1966).

Records: 55 on November 11, 1966; 52 on October 21, 1968 (MacClay); and 4 on November 9, 1968.

SNOW GOOSE

Chen hyperborea

Status: An irregular migrant appearing during five of our eight years of observation (absent during 1961, 1964 and 1966). Uncommon during October and uncommon to fairly common during early to near mid-November.

Dates: October 7 (1962 and 1967) to November 12 (1967).

Maxima: 10 on November 12, 1967 (Delaware Valley Ornithological Club); and 4 on October 7, 1967.

BLUE GOOSE

Chen caerulescens

Status: A casual migrant. The placement of this species on the Bake Oven Knob list is based entirely upon one bird which Maurice Broun, Robert MacClay, Howard Drinkwater, and Alan Grout observed on October 20, 1967.

BLACK DUCK

Anas rubripes

Status: Hypothetical. The inclusion of the Black Duck on the Bake Oven Knob hypothetical list is based entirely upon the observation of 10 birds by Frederick Wetzel on September 24, 1966.

PINTAIL

Anas acuta

Status: A casual migrant. This species has been recorded at Bake Oven Knob on two occasions. Seven birds were observed at close range on November 11, 1962, and 28 birds were observed on September 12, 1968.

TURKEY VULTURE

Cathartes aura

Status: A regular migrant, uncommon to fairly common from August through mid-November.

Dates: August 3 (1963) to November 15 (1968).

Maxima: 23 on September 14, 1967; 18 on September 11, 1963; 15 on September 4, 1967; 15 on October 5, 1963; and 15 on October 25, 1967.

GOSHAWK

Accipiter gentilis

Status: A regular migrant, uncommon from late August through September, and uncommon to fairly common during October and November.

Dates: August 21 (1968) to November 23 (1962).

Maxima: 14 on November 14, 1965; 10 on October 30, 1968 (MacClay); 8 on November 9, 1968; 6 on October 7, 1962; and 6 on October 21, 1968 (MacClay).

SHARP-SHINNED HAWK

Accipiter striatus

Status: A regular migrant, uncommon during late August, uncommon to common during September, uncommon to very common during October, and uncommon to fairly common during November.

Dates: August 23 (1967) to November 26 (1966).

Maxima: 293 on October 10, 1965; 257 on October 6, 1968; 249 on October 21, 1967; 246 on October 4, 1967 (Manners); 234 on October 13, 1965; 220 on October 15, 1968 (Steffey, Tobias and Ashfield); 213 on October 12, 1966 (MacClay); and 207 on October 5, 1968.

Specimens: WPMM No. B1182, October 24, 1936 (Ben Hiatt); WPMM No. B1183, October 24, 1936 (Ben Hiatt); WPMM No. B1184, October 24, 1936 (Ben Hiatt); WPMM No. B1185, September 26, 1953 (Ben Hiatt); WPMM No. B1186, September 26, 1953 (Ben Hiatt); WPMM No. B1723, October 3, 1950 (Nelson Hoy); WPMM No. B1724, October 3, 1950 (Nelson Hoy); NJSM No. 79, September 27, 1953 (Ben Hiatt); September 22, 1951 (Nelson Hoy Collection); 2 on September 23, 1951 (Nelson Hoy Collection); October 3, 1950 (Nelson Hoy)

Collection); October 13, 1950 (Nelson Hoy Collection); October 14, 1945 (Nelson Hoy Collection); November 3, 1950 (Nelson Hoy Collection); and November 23, 1949 (Nelson Hoy Collection).

COOPER'S HAWK

Accipiter cooperii

Status: A regular migrant, uncommon during September, uncommon to fairly common during October, and uncommon during the first half of November.

Dates: September 3 (1967) to November 14 (1965).

Maxima: 10 on October 11, 1967 (MacClay).

Specimens: October 9, 1949 (Nelson Hoy Collection).

RED-TAILED HAWK

Buteo jamaicensis

Status: A regular migrant, uncommon to fairly common during August and September, uncommon to common during the first half of October, uncommon to very common during the second half of October, and uncommon to very common during November.

Dates: August 3 (1963) to November 26 (1966).

Maxima: 374 on November 3, 1963; 350 on October 30, 1968 (MacClay); 278 on October 27, 1962; and 258 on October 21, 1968 (MacClay).

RED-SHOULDERED HAWK

Buteo lineatus

Status: A regular migrant, uncommon during September, uncommon to fairly common during the first half of October, uncommon to common during the second half of October, and uncommon to common during November.

Dates: September 5 (1966) to November 23 (1968).

Maxima: 69 on October 30, 1968 (MacClay); 66 on October 18, 1966 (MacClay); 56 on October 28, 1968 (MacClay); 54 on November 9, 1968; and 53 on October 26, 1966 (MacClay).

BROAD-WINGED HAWK

Buteo platypterus

Status: A regular migrant, uncommon to common during August, fairly common to very common during the first third of September, common to very abundant during the middle third of September, uncommon to abundant during the last third of September, uncommon to common during the first half of October, and uncommon during the second half of October and the first third of November.

Dates: August 3 (1963) to November 6 (1966).

Maxima: 4,137 on September 17, 1968; 3,637 on September 14, 1963; 2,947 on September 12, 1964; 2,575 on September 13, 1967; 2,489 on September 16, 1968; and 2,065 on September 17, 1965.

Specimens: September 28, 1952 (Nelson Hoy Collection).

ROUGH-LEGGED HAWK

Buteo lagopus

Status: An irregular migrant, appearing during seven of our eight years of observation (absent during 1962). Rare to fairly common from mid-October through late November.

Dates: October 10 (1965) to November 24 (1963).

Maxima: 3 on October 30, 1965; 3 on November 3, 1961; 3 on November 3, 1963; and 3 on November 9, 1965 (Grout).

GOLDEN EAGLE

Aquila chrysaetos

Status: A regular migrant, uncommon during late September, uncommon during most of October but becoming common to fairly common from late October through late November.

Dates: September 19 (1966) to November 24 (1963).

Maxima: 6 on October 26, 1966 (MacClay); 5 on November 9, 1963; and 4 on November 15, 1967 (MacClay).

BALD EAGLE
Haliaeetus leucocephalus

Status: A regular migrant, uncommon to fairly common during August and the first half of September, and uncommon during the second half of September through late November.
Dates: August 8 (1964) to November 19 (1966).
Maxima: 9 on September 12, 1968; 6 on August 29, 1965; 5 on September 10, 1967; and 5 on August 18, 1963.

MARSH HAWK
Circus cyaneus

Status: A regular migrant, uncommon during the latter half of August, uncommon to fairly common from September through the first half of November, and uncommon during the latter half of November.

Dates: August 18 (1968) to November 24 (1963).

Maxima: 19 on October 6, 1968; 19 on October 13, 1968; 19 on October 21, 1968 (MacClay); and 16 on October 15, 1968 (Steffey, Tobias, and Ashfield).

Specimens: WPMM No. B1176, no date (Ben Hiatt); and WPMM No. B1337, October 24, 1936 (Ben Hiatt).

OSPREY
Pandion haliaetus

Status: A regular migrant, uncommon to fairly common during the latter half of August, uncommon to common during September, uncommon to fairly common during October, and rare during November.

Dates: August 17 (1963) to November 21 (1964).

Maxima: 102 on September 11, 1965; 69 on September 24, 1966; 47 on September 22, 1965 (MacClay); 46 on September 20, 1967 (MacClay); 43 on September 24, 1968 (MacClay); 43 on September 18, 1965; 39 on September 26, 1964; 37 on September 12, 1964; 37 on September 10, 1967; 32 on September 18, 1962; 32 on September 15, 1966; and 31 on September 17, 1968.

Specimens: September 28, 1952 (Nelson Hoy Collection).

GYRFALCON
Falco rusticolus

Status: Hypothetical. The inclusion of a Gyrfalcon on the Bake Oven Knob hypothetical list is on the basis of a bird which was observed at eye level along the north slope of the ridge on September 25, 1966. The following is a direct quotation from my notes:

"Of particular interest was a large white raptor which passed near eye level along the north slope of the ridge in mid-afternoon. This bird had faint streaking on the ventral surface of its body but was otherwise cream-white except for the head. The head also was white but had a black mark on the face. The style of flight was a series of slow deliberate wingbeats similar to that of a Red-tailed Hawk. At the time, in the field, we could not place the bird in the proper genus, but after checking several field guides carefully it appears that the bird was a large falcon — a *white-gray Gyrfalcon (Falco rusticolus)*. The bird did *not* have black tip to its primaries, as a white phase Gyrfalcon would have, but it did strongly resemble the illustration of a gray phase Gyrfalcon on Page 79 of 'Birds of North America' by Chandler S. Robbins."

At the time, in the field, I thought that the bird remotely resembled a Marsh Hawk, which it was not, but Dr. Alice Savage and Frederick Wetzel both vigorously rejected that idea. Wetzel, on the other hand, thought that the bird might have been a Goshawk; I vigorously rejected that opinion.

"This bird was unlike any other Falconiform raptor I have ever observed in flight," I wrote in my notes. "Another factor which also supports the idea that the bird was a great white falcon was the view of a Sparrow Hawk shortly after the 'gyr' passed. The small falcon dove at our paper owl decoy and, in circling, assumed positions which perfectly matched the appearance of the larger white bird."

PEREGRINE FALCON

Falco peregrinus

Status: A regular migrant, uncommon from early September through early November.

Dates: September 7 (1964) to November 8 (1967).

Maxima: 4 on September 27, 1964; 4 on October 2, 1968 (MacClay); and 4 on October 9, 1966.

PIGEON HAWK

Falco columbarius

Status: A regular migrant, uncommon from early September through early November.

Dates: September 10 (1963) to November 9 (1963).

Maxima: 4 on October 13, 1966 (MacClay); 4 on October 16, 1966; and 3 on October 12, 1966 (MacClay).

SPARROW HAWK

Falco sparverius

Status: A regular migrant, uncommon during early August, uncommon to fairly common from mid-August through the first third of September, uncommon to common from the last two-thirds of September through mid-October, uncommon to fairly common from mid-October to the end of October, and uncommon during the first half of November.

Dates: August 8 (1965) to November 12 (1966).

Maxima: 41 on September 24, 1966; 39 on September 12, 1968; 38 on September 13, 1968; 37 on September 25, 1965; 36 on October 12, 1966 (MacClay); 34 on October 7, 1962; and 32 on October 5, 1966 (MacClay).

Specimen: September 23, 1951 (Nelson Hoy Collection).

RUFFED GROUSE

Bonasa umbellus

Status: A permanent resident, uncommon during August, uncommon to fairly common during the first half of September, and uncommon from the second half of September through late November.

Dates: August 13 (1966) to November 24 (1968).

Maxima: 12 on September 14, 1965; 6 on August 13, 1966; 5 on August 27, 1966; and 5 on October 17, 1968.

TURKEY

Meleagris gallopavo

Status: Formerly a permanent resident. Exterminated many years ago, but reintroduced by the Pennsylvania Game Commission. These introduced birds are now seen irregularly. They are rare from mid-September through late October. Observed during four (1961, 1964, 1965 and 1967) of our eight years of observation, and in 1959.

Dates: September 17 (1965) to October 26 (1967).

Maxima: 10 on October 21, 1959 (Poole and Potter, 1960: 21); 6 on October 26, 1967; and 3 on October 11, 1964.

SANDHILL CRANE

Grus canadensis

Status: Hypothetical. The placement of the Sandhill Crane on the Bake Oven Knob hypothetical list is based entirely upon a bird which Robert and Anne MacClay observed on October 18, 1966. The following description is taken from their notes:

Observed large bird flying directly south from north approximately $\frac{1}{4}$ mile west of Point lookout at Bake Oven Knob. After watching many geese this day, this bird was much larger and different construction. Sky was heavily over-cast and dark. Bird looked lighter (dirty white) with shadowed underwings darker but evenly colored. Noticed no red on head (too far) or black wing-tips (close enough for this).

Bird had long extended neck and also legs and feet extended straight out in back. Small fan tail. Wing fingers very plain — wing not pointed (wide to ends).

Wingbeat was sure and strong — no gliding observed. Noticed no down curve in bill (but could go unnoticed I suppose). Heard no call. Could not tell color of legs.

First impression — "crane!" This could include herons — egrets — ibises. Neck too long for ibis. Also wing-shape different. Neck not folded as heron's (completely extended while observed). No black in wings as Whooping Crane.

Our conclusion — Sandhill Crane — only doubt — very light (dirty white). Conclusion reached after consulting *Peterson* and *Field Guide to Birds of North America* and *Birds of America*.

According to Poole (1964), there have been three specimens of Sandhill Cranes collected in Pennsylvania. In addition, there are several recent sight records. The one which is geographically closest to us is an observation on April 28, 1963, at the Port Clinton fire tower near Hawk Mountain by Langer. Our record must be treated as hypothetical but, no doubt, the bird was a Sandhill Crane.

HERRING GULL

Larus argentatus

Status: A fairly regular migrant observed during seven of our eight years of observation (absent during 1966). Uncommon to fairly common from early October through late November.

Dates: October 10 (1964) to November 21 (1964).

Maxima: 6 on October 19, 1967 (MacClay); 6 on October 29, 1961; and 6 on November 12, 1967.

RING-BILLED GULL

Larus delawarensis

Status: A casual migrant. The Ring-billed Gull is placed on the Bake Oven Knob list on the basis of four birds which were observed on November 16, 1963 by Howard Drinkwater, another observer, and Donald S. Heintzleman.

LAUGHING GULL

Larus atricilla

Status: Hypothetical. On October 6, 1968, an immature gull flew over Bake Oven Knob and was tentatively identified as this species.

ROCK DOVE

Columba livia

Status: A regular migrant or visitant, uncommon to fairly common from mid-August through late October.

Dates: August 18 (1968) to October 29 (1968).

Maxima: 17 on September 22, 1968; 15+ on October 1, 1967; 13 on August 18, 1968; 12 on September 21, 1968; and 12 on October 20, 1968.

Remarks: Records for this species were not kept prior to 1968.

MOURNING DOVE

Zenaidura macroura

Status: A regular migrant, uncommon from early August through late October.

Dates: August 3 (1963) to October 21 (1962).

Maxima: 5 on September 1, 1963; and 5 on September 5, 1965.

COMMON NIGHTHAWK

Chordeiles minor

Status: A fairly regular migrant, recorded during seven of our eight years of observation (absent during 1967). Uncommon to fairly common during late August, uncommon to common during early September and uncommon during mid-September.

Dates: August 27 (1961 and 1966) to September 18 (1962 and 1965).

Maxima: 38 on September 7, 1968; 20 on August 31, 1968; and 18 on September 6, 1964.

CHIMNEY SWIFT

Chaetura pelagica

Status: A regular migrant, uncommon to fairly common from early August through early October.

Dates: August 4 (1963) to October 6 (1968).

Maxima: 22 on August 27, 1961; 19 on August 28, 1966; 17 on September 4, 1965; and 16 on September 5, 1965.

RUBY-THROATED HUMMINGBIRD

Archilochus colubris

Status: A regular migrant, uncommon to fairly common from late August through late September.

Dates: August 21 (1968) to September 28 (1963).

Maxima: 14 on August 29, 1965; 7 on August 30, 1967 (MacClay); 6 on August 28, 1965; 6 on September 3, 1967; and 6 on September 7, 1968.

BELTED KINGFISHER

Megaceryle alcyon

Status: A casual migrant. The Belted Kingfisher is included on the Bake Oven Knob list on the basis of two records secured by Robert MacClay. One bird was observed on October 24, 1966, and another on October 21, 1967.

YELLOW-SHAFTED FLICKER

Colaptes auratus

Status: A regular migrant, uncommon from early through very late August, uncommon to fairly common from very late August through early October, and uncommon from early October through mid-November.

Dates: August 8 (1964) to November 12 (1966).

Maxima: 18+ on September 18, 1962; 14 on October 10, 1968 (MacClay); 11 on September 25, 1965; and 11 on September 5, 1964.

PILEATED WOODPECKER

Dryocopus pileatus

Status: A permanent resident, uncommon from early August through late November.

Dates: August 8 (1964) to November 21 (1965).

Maxima: 2 on September 6, 1965; 2 on September 14, 1965; 2 on September 18, 1962; 2 on September 19, 1962; 2 on September 19, 1968 (MacClay); and 2 on October 26, 1963.

RED-BELLIED WOODPECKER

Centurus carolinus

Status: A casual migrant. The Red-bellied Woodpecker is a southern species which has been expanding its range northward within recent decades. It is the rarest of the woodpeckers which have been recorded at Bake Oven Knob, there being only two records from the Knob itself and a third from the valley near the mountain.

The first individual of this species to appear at the Knob was recorded by me on October 16, 1966. The bird flew directly overhead giving me an excellent opportunity for careful observation. The vivid black and white zebra-like barring on its back, and the red on its head, were obvious. The second record of a Red-bellied Woodpecker passing the Knob occurred early in the afternoon of October 22, 1966, when a beautiful adult passed *below* my observation position on the South Lookout. I had the unique opportunity to look down upon the bird and examine the striking zebra back and red cap of the head which identify this species.

My impression was that both of these birds were definitely migrating since they were flying southwestward along the ridge at a rapid rate in a manner similar to that employed by other migratory woodpeckers such as Red-headed Woodpeckers and Yellow-bellied Sapsuckers.

The third record of the Red-bellied Woodpecker is not from Bake Oven Knob itself. Rather, on November 11, 1967 I observed the bird, a male, on a tree beside the road near the Bake Oven Inn about 1.3 miles north of Germansville, and a few miles south of the Knob. It is difficult to determine whether this bird had used the ridge as a migration route and had broken away from the mountain, or whether it was wandering northward and had not yet reached the Blue Mountain. At any rate, the record deserves mention in view of our previous two records of Red-bellied Woodpeckers at Bake Oven Knob in 1966.

This species is one which is definitely to be looked for in future years since its numbers are becoming increasingly larger with each succeeding year.

RED-HEADED WOODPECKER

Melanerpes erythrocephalus

Status: A regular migrant, uncommon from early September through late October.

Dates: September 9 (1964) to October 30 (1968).

Maxima: 4 on October 2, 1966; and 3 on September 25, 1966.

YELLOW-BELLIED SAPSUCKER

Sphyrapicus varius

Status: Probably a regular migrant, uncommon from early September through late October.

Dates: September 1 (1968) to October 27 (1968).

Maxima: 11 on October 3, 1965; 2 on September 4, 1968 (MacClay); 2 on September 15, 1968; and 2 on October 9, 1968 (MacClay).

HAIRY WOODPECKER

Dendrocopos villosus

Status: Probably a resident although it has been recorded only during seven of our eight years of observation (absent during 1963). Uncommon from late August through late November.

Dates: August 22 (1962) to November 20 (1965).

Maxima: 3 on October 19, 1967 (MacClay).

DOWNY WOODPECKER

Dendrocopos pubescens

Status: Probably a permanent resident, uncommon from late August through late November.

Dates: August 22 (1962) to November 24 (1963).

Maxima: 3 on September 17, 1968; 3 on October 12, 1967; 3 on October 13, 1965; 3 on October 16, 1968; and 3 on October 31, 1964.

GREAT CRESTED FLYCATCHER

Myiarchus crinitus

Status: A casual migrant. There are three records for this species at Bake Oven Knob — one on September 8, 1962, one on September 13, 1962 and one on September 12, 1966.

EASTERN PHOEBE

Sayornis phoebe

Status: A casual migrant. The Eastern Phoebe is included in our autumn list on the basis of one bird observed on October 2, 1965, and one bird observed on October 9, 1966.

YELLOW-BELLIED FLYCATCHER

Empidonax flaviventris

Status: Hypothetical. I observed one bird, which I believe to be of this species, on September 6, 1967.

TRAILL'S FLYCATCHER

Empidonax traillii

Status: Hypothetical. Our single record of this species is a bird which I observed and heard uttering an alarm note on October 3, 1964.

EASTERN WOOD PEWEE

Contopus virens

Status: An irregular migrant, recorded during six of our eight years of observation (absent during 1961 and 1967). Uncommon during early August, uncommon to fairly common from late August through mid-September, and uncommon during the second half of September.

Dates: August 4 (1963) to September 26 (1965).

Maxima: 13 on September 13, 1962 (Armentano); 6 on September 15, 1968 (Armentano); 6 on August 27, 1963 (Armentano); and 5 on August 22, 1962 (Armentano).

OLIVE-SIDED FLYCATCHER

Nuttallornis borealis

Status: A regular migrant, rare from late August through early October.

Dates: August 27 (1961 and 1966) to October 4 (1964).

Maxima: One per day.

TREE SWALLOW

Iridoprocne bicolor

Status: A regular migrant, uncommon to common from early August through mid-October.

Dates: August 7 (1966) to October 13 (1968).

Maxima: 30+ on August 11, 1963; 20+ on August 17, 1963; 14 on September 4, 1962 (Armentano); 14 on October 13, 1968; and 13 on September 4, 1963 (Armentano).

ROUGH-WINGED SWALLOW

Stelgidopteryx ruficollis

Status: An irregular migrant, recorded during six of our eight years of observation (absent during 1961 and 1967). Uncommon to fairly common from early August through early September.

Dates: August 4 (1963) to September 8 (1962).

Maxima: 25+ on August 4, 1962; 25+ on August 11, 1963; and 10 on September 8, 1962.

BARN SWALLOW

Hirundo rustica

Status: A regular migrant, uncommon to common during August and early September, and uncommon to fairly common from early September through mid-September.

Dates: August 3 (1963) to September 18 (1962).

Maxima: 75+ on August 3, 1963; 40+ on August 11, 1963; 34 on September 3, 1967; 33 on September 1, 1968; and 26 on August 8, 1964.

CLIFF SWALLOW

Petrochelidon pyrrhonota

Status: An irregular migrant, recorded during three (1963, 1964, and 1966) of our eight years of observation. Uncommon to fairly common from early August through early September.

Dates: August 7 (1966) to September 8 (1964).

Maxima: 30+ on August 11, 1963; 15+ on September 1, 1963; and 10 on August 14, 1964.

PURPLE MARTIN

Progne subis

Status: An irregular migrant, recorded during five of our eight years of observation (absent during 1962, 1967, and 1968). Uncommon to common during early August, and uncommon to fairly common from mid-August through early September.

Dates: August 3 (1963) to September 7 (1963).

Maxima: 50+ on August 3, 1963; 25 on August 8, 1964; and 20+ on August 4, 1963.

BLUE JAY

Cyanocitta cristata

Status: A regular migrant, uncommon during August, uncommon to fairly common during the first half of September, uncommon to very common from the second half of September through mid-October, and uncommon to fairly common from mid-October through late November.

Dates: August 6 (1967) to November 26 (1966).

Maxima: 265+ on October 26, 1967; 185+ on October 7, 1961; 137+ on October 1, 1967; 114 on September 17, 1968; 110+ on October 2, 1965; and 100+ on September 25, 1965.

COMMON RAVEN

Corvus corax

Status: A casual migrant. The Common Raven is a very rare bird along our ridge. It has been recorded at Bake Oven Knob on four occasions: one on October 5, 1966, by Robert MacClay; one on October 17, 1968; seven on October 22, 1961; and one on October 30, 1965, by Frederick Wetzel.

Remarks: Of the seven birds reported on October 22, 1961, three went by between 9:00 A.M. and 10:00 A.M. The other four went by between 11:00 A.M. and noon. These birds were observed by Stephen T. Harty, William Middleton, Edward Manners, and Robert Haines. Although I would normally be doubtful about such an unprecedented number of such a rare bird, these observers are all experienced field men.

COMMON CROW

Corvus brachyrhynchos

Status: A regular migrant, uncommon from late August through mid-September, uncommon to common from mid-September through mid-October, uncommon to abundant during late October, and uncommon to very common during November.

Dates: August 20 (1966) to November 21 (1964).

Maxima: 2,670 estimated on October 21, 1968 (MacClay); 1,000+ on October 26, 1968; 870+ on October 30, 1968 (MacClay); 728+ on October 20, 1968; 675+ on October 24, 1965; 600+ on October 27, 1962; and 500+ on October 24, 1964.

BLACK-CAPPED CHICKADEE

Parus atricapillus

Status: Permanent resident, uncommon to fairly common from August through very early December.

Dates: August 3 (1963) to December 1, (1968).

Maxima: 19 on October 16, 1968; 16 on October 13, 1968; 14 on September 13, 1968; 13 on September 13, 1963 (Armentano); 12+ on August 22, 1962 (Armentano); 12 on August 27, 1963 (Armentano); and 11 on September 4, 1962 (Armentano).

TUFTED TITMOUSE

Parus bicolor

Status: Probably a permanent resident, uncommon to fairly common during August and uncommon from September through November.

Dates: August 13 (1966) to November 21 (1965).

Maxima: 9+ on August 22, 1962 (Armentano).

WHITE-BREASTED NUTHATCH

Sitta carolinensis

Status: Uncertain, having appeared during six of our eight years of observation (not recorded during 1962 and 1964). Highly migratory during 1968. Prior to 1968, uncommon from mid-August through late November. During 1968, uncommon to common during September and uncommon to fairly common during October.

Dates: August 13 (1966) to November 26 (1966).

Maxima: 80 on September 17, 1968; 29 on September 15, 1968 (Armentano); 22 on September 29, 1968; and 20 on September 21, 1968.

RED-BREASTED NUTHATCH
Sitta canadensis

Status: An irregular migrant, appearing during seven of our eight years of observation (absent during 1967). Numbers vary greatly depending upon the presence or absence of a major invasion. Uncommon to fairly common (or occasionally common) from September through October, and uncommon during November.

Dates: September 2 (1961) to November 24 (1968).

Maxima: 28 on September 17, 1968; 19 on October 13, 1968; 15 on September 15, 1968; 14 on October 17, 1968; 13 on September 4, 1968 (MacClay); 13 on September 21, 1968; and 12 on October 16, 1968.

BROWN CREEPER
Certhia familiaris

Status: An irregular migrant, occurring during five of our eight years of observation (absent during 1961, 1963, and 1968). Rare from mid-September through late October.

Dates: September 16 (1964) to October 20 (1967).

Maxima: 3 on October 8, 1966 (Conolly).

HOUSE WREN
Troglodytes aedon

Status: An irregular migrant, occurring during four (1962, 1964, 1965, and 1966) of our eight years of observation. Rare from late August through mid-October.

Dates: August 22 (1962) to October 14 (1962).

Maxima: 3 on September 13, 1962 (Armentano).

WINTER WREN
Troglodytes troglodytes

Status: An irregular migrant, occurring during three (1964, 1967, and 1968) of our eight years of observation. Four of our seven records are from 1967. Rare from early October through early November.

Dates: October 3 (1964) to November 7 (1964).

Maxima: One per day.

CAROLINA WREN
Thryothorus ludovicianus

Status: A casual migrant, recorded during 1962 and 1968. Rare from early September through mid-October.

Dates: September 8 (1962) to October 15 (1968).

Maxima: One per day.

MOCKINGBIRD
Mimus polyglottos

Status: A casual migrant. The Mockingbird has been recorded on two occasions at Bake Oven Knob. One bird was observed by Frederick Wetzel on September 25, 1966 and another bird was observed by Heintzelman, MacClay, and Edward Manners on October 30, 1966.

CATBIRD
Dumetella carolinensis

Status: An irregular migrant, recorded during six of our eight years of observation (absent during 1961 and 1968). Rare from early August through mid-October.

Dates: August 7 (1966) to October 13 (1963).

Maxima: 2 on August 22, 1962 (Armentano).

BROWN THRASHER
Toxostoma rufum

Status: A casual migrant. Single birds have been seen on August 10, 1967; August 30, 1964; and September 14, 1963 (Armentano).

ROBIN

Turdus migratorius

Status: A regular migrant, uncommon to fairly common during August, uncommon to common from September through the first two-thirds of October, uncommon to abundant during the last third of October, and uncommon to common during November.

Dates: August 9 (1964) to November 21 (1964).

Maxima: 2,000+ on October 24, 1964; 400+ on October 27, 1962; 330+ on October 21, 1968 (MacClay); and 185 on October 26, 1968.

WOOD THRUSH

Hylocichla mustelina

Status: An irregular migrant, recorded during three (1964, 1965, and 1966) of our eight years of observation. Very rare to rare during September.

Dates: September 5 (1966) to September 26 (1965).

Maxima: One per day.

HERMIT THRUSH

Hylocichla guttata

Status: An irregular migrant, recorded during six of our eight years of observation (absent during 1961 and 1962). Uncommon from fairly early in October through early November.

Dates: October 10 (1968) to November 1 (1964).

Maxima: 4 on October 10, 1968 (MacClay).

SWAINSON'S THRUSH

Hylocichla ustulata

Status: An irregular migrant, recorded during four (1961, 1966, 1967, and 1968) of our eight years of observation. Very rare to rare from mid-October through the end of October.

Dates: October 16 (1966 and 1968) to October 30 (1968).

Maxima: 3 on October 24, 1967 (MacClay).

GRAY-CHEEKED THRUSH

Hylocichla minima

Status: A casual migrant. Single birds have been observed on October 8, 1966 (Conolly) and October 16, 1966.

EASTERN BLUEBIRD

Sialia sialis

Status: An irregular migrant, recorded during four (1964, 1965, 1966, and 1968) of our eight years of observation. Uncommon to fairly common during October.

Dates: October 2 (1966) to October 24 (1964).

Maxima: 13 on October 22, 1968 (MacClay); and 10 on October 16, 1968.

GOLDEN-CROWNED KINGLET

Regulus satrapa

Status: An irregular migrant, recorded during six of our eight years of observation (absent during 1961 and 1963). Uncommon to fairly common from late September through about mid-November.

Dates: September 29 (1968) to November 11 (1967 and 1968).

Maxima: 6+ on October 14, 1962; and 6 on October 4, 1964.

RUBY-CROWNED KINGLET

Regulus calendula

Status: A regular migrant, uncommon to fairly common from mid-September through the first half of October, and uncommon during the last half of October.

Dates: September 14 (1964 and 1965) to November 1 (1968).

Maxima: 20 on October 15, 1968 (Steffey, Tobias, and Ashfield); 15 on October 12, 1967 (MacClay); and 12 on October 15, 1966.

CEDAR WAXWING

Bombycilla cedrorum

Status: A regular migrant, uncommon to common from August through mid-October, uncommon to abundant from mid-October through early November, and uncommon to fairly common from early November through late November.

Dates: August 8 (1964) to November 21 (1964).

Maxima: 500+ on October 24, 1964; 466 on November 8, 1967 (MacClay); 274+ on October 21, 1962; and 250+ on October 27, 1962.

STARLING

Sturnus vulgaris

Status: An irregular migrant, recorded during six of our eight years of observation (absent during 1962 and 1963). Uncommon to common through the second half of September, uncommon to very common and occasionally abundant during early October, and fairly common to very common from early October through early November.

Dates: September 13 (1966) to November 7 (1965).

Maxima: 750+ on October 7, 1961; 300+ on October 10, 1964; 135+ on October 17, 1965; 132 on October 24, 1965; and 100+ on September 13, 1966.

WHITE-EYED VIREO

Vireo griseus

Status: A casual migrant. One specimen was observed on September 21, 1968, and another specimen was observed by Ed Hagenback on October 17, 1967.

SOLITARY VIREO

Vireo solitarius

Status: An irregular migrant, recorded during four (1964, 1966, 1967, and 1968) of our eight years of observation. Very rare from mid-September through fairly late October.

Dates: September 11 (1964) to October 20 (1968).

Maxima: One per day.

RED-EYED VIREO

Vireo olivaceus

Status: An irregular migrant, recorded during six of our eight years of observation (absent during 1961 and 1964). Uncommon from late August through late September.

Dates: August 22 (1962) to September 26 (1965).

Maxima: 3 on September 13, 1962 (Armentano); 3 on September 15, 1968 (Armentano); and 3 on September 26, 1965.

PHILADELPHIA VIREO

Vireo philadelphicus

Status: A casual migrant. Our only record is one bird observed on September 26, 1965.

WARBLING VIREO

Vireo gilvus

Status: A casual migrant. Two birds were observed by Armentano on August 22, 1962.

BLACK-AND-WHITE WARBLER

Mniotilta varia

Status: An irregular migrant, recorded during six of our eight years of observation (absent during 1964 and 1967). Uncommon from fairly early in August through mid-September.

Dates: August 11 (1962 and 1963) to September 14 (1965).

Maxima: 3 on August 27, 1963 (Armentano).

ORANGE-CROWNED WARBLER

Vermivora celata

Status: Hypothetical. This species is placed on the Bake Oven Knob hypothetical list on the basis of one bird observed on September 18, 1964, by Edward Reed and Richard Gemmel.

NASHVILLE WARBLER

Vermivora ruficapilla

Status: A casual migrant. Two birds were observed on each of the following dates: September 8, 1962 (Armentano); September 15, 1968 (Armentano); and September 26, 1965.

PARULA WARBLER

Parula americana

Status: A casual migrant, recorded during 1964, 1965, and 1966. Rare during the middle third of September.

Dates: September 11 (1964) to September 19 (1965).

Maxima: 2 on September 14, 1965.

YELLOW WARBLER

Dendroica petechia

Status: A casual migrant. Our single record is that of one bird observed by the MacClays on September 4, 1968.

MAGNOLIA WARBLER

Dendroica magnolia

Status: An irregular migrant, recorded during four (1963, 1965, 1966, and 1968) of our eight years of observation. Uncommon to fairly common from early September through mid-September, and uncommon from mid-September through early October.

Dates: September 4 (1962) to October 8 (1966).

Maxima: 7 on September 15, 1968 (Armentano); and 5 on September 15, 1965.

CAPE MAY WARBLER

Dendroica tigrina

Status: An irregular migrant, recorded during five of our eight years of observation (absent during 1963, 1965, and 1967). Rare to uncommon from early September through early October.

Dates: September 5 (1966) to October 7 (1961).

Maxima: 3 on September 13, 1962 (Armentano); and 3 on September 14, 1962.

BLACK-THROATED BLUE WARBLER

Dendroica caerulescens

Status: An irregular migrant, recorded during six of our eight years of observation (absent during 1961 and 1966). Uncommon during early September, and uncommon to fairly common from mid-September through mid-October.

Dates: September 4 (1962) to October 13 (1962).

Maxima: 12 on September 13, 1962 (Armentano); 9 on September 13, 1963 (Armentano); and 6 on October 12, 1967 (MacClay).

MYRTLE WARBLER

Dendroica coronata

Status: A regular migrant, uncommon from mid-August through early October, uncommon to fairly common during mid-October, and uncommon from late October through mid-November.

Dates: August 18 (1963) to November 12 (1966).

Maxima: 8 on October 15, 1968 (Steffey, Tobias, and Ashfield); and 6 on October 12, 1968.

BLACK-THROATED GREEN WARBLER

Dendroica virens

Status: A regular migrant, uncommon during early September, uncommon to fairly common from mid- through late September, and generally uncommon but occasionally fairly common during the first half of October.

Dates: September 4 (1965) to October 15 (1967 and 1968).

Maxima: 17 on September 26, 1965; and 13 on September 13, 1962 (Armentano).

BLACKBURNIAN WARBLER

Dendroica fusca

Status: An irregular migrant, recorded during four (1962, 1963, 1964, and 1965) of our eight years of observation. Rare to uncommon from late August through early October.

Dates: August 22 (1962) to October 3 (1965).

Maxima: 3 on August 27, 1963 (Armentano).

CHESTNUT-SIDED WARBLER

Dendroica pensylvanica

Status: An irregular migrant, recorded during four (1962, 1965, 1966, and 1968) of our eight years of observation. Rare from late August through early October.

Dates: August 22 (1962) to October 9 (1966).

Maxima: 2 on August 22, 1962 (Armentano); and 2 on September 15, 1968 (Armentano).

BAY-BREASTED WARBLER

Dendroica castanea

Status: A casual migrant. Our only record is of two birds recorded on September 25, 1966.

BLACKPOLL WARBLER

Dendroica striata

Status: An irregular migrant, recorded during three (1962, 1964, and 1965) of our eight years of observation. Very rare to rare during September.

Dates: September 8 (1962) to September 26 (1964 and 1965).

Maxima: 2 on September 26, 1965.

PINE WARBLER

Dendroica pinus

Status: Hypothetical. There are two records of this species from Bake Oven Knob — one bird recorded on August 31, 1963, and two birds recorded on September 2, 1963.

OVENBIRD

Seiurus aurocapillus

Status: An irregular migrant based upon our records but possibly a regular migrant (absent during 1966). Rare to uncommon from mid-August through late October.

Dates: August 17 (1963) to October 20 (1967).

Maxima: 2 on September 13, 1962 (Armentano); 2 on September 14, 1965; 2 on September 15, 1965; and 2 on October 20, 1967 (MacClay).

NORTHERN WATERTHRUSH

Seiurus noveboracensis

Status: A casual migrant. One bird recorded on September 11, 1964.

YELLOWTHROAT

Geothlypis trichas

Status: A casual migrant. One bird was observed on August 8, 1964, and another on September 16, 1963.

WILSON'S WARBLER

Wilsonia pusilla

Status: A casual migrant. Two birds were observed on September 7, 1964.

CANADA WARBLER

Wilsonia canadensis

Status: A casual migrant, recorded during two of our eight years of observation (1965 and 1968). Very rare to uncommon during September.

Dates: September 2 (1965) to September 26 (1965).

Maxima: 2 on September 5, 1965.

AMERICAN REDSTART

Setophaga ruticilla

Status: An irregular migrant, recorded during three (1962, 1965, and 1968) of our eight years of observation. Possibly more common than our records indicate. Rare during the first half of September.

Dates: September 1 (1968) to September 13 (1962).

Maxima: One per day.

RED-WINGED BLACKBIRD

Agelaius phoeniceus

Status: An irregular migrant, recorded during six of our eight years of observation (absent during 1961 and 1963). Uncommon to common during October, and common to very common during the first half of November.

Dates: October 4 (1964) to November 13 (1966).

Maxima: 450+ on November 2, 1968; 252+ on November 11, 1968; 100+ on November 5, 1967; and 100+ on October 29, 1967.

BALTIMORE ORIOLE

Icterus galbula

Status: An irregular migrant, recorded during five of our eight years of observation (absent during 1962, 1963, and 1964). Uncommon from early August through very early September.

Dates: August 7 (1966) to September 2 (1967).

Maxima: 2 on August 21, 1968 (MacClay).

COMMON GRACKLE

Quiscalus quiscula

Status: A regular migrant, common during the first two-thirds of September, abundant to very abundant from late September through October, and common to very common during the first half of November.

Dates: September 5 (1965) to November 11 (1966).

Maxima: 8,500+ on October 27, 1962; 4,350+ on October 23, 1966; 1,800+ on October 25, 1967; 1,650+ on October 17, 1965; 1,345+ on October 20, 1968; 1,250+ on October 29, 1967; 1,200+ on October 18, 1964; and 1,125+ on October 22, 1967.

BROWN-HEADED COWBIRD

Molothrus ater

Status: An irregular migrant, recorded during three (1965, 1966, and 1967) of our eight years of observation. Uncommon to common during late October.

Dates: October 22 (1966 and 1967) to October 24 (1965).

Maxima: 75+ on October 22, 1967.

SCARLET TANAGER

Piranga olivacea

Status: An irregular migrant, recorded during six of our eight years of observation (absent during 1961 and 1966). Uncommon from early August through late September.

Dates: August 9 (1964) to September 26 (1964).

Maxima: 2 on August 22, 1962 (Armentano); 2 on September 3, 1967; and 2 on September 8, 1962.

CARDINAL

Richmondia cardinalis

Status: A casual migrant or visitant. The single record of this species appearing at Bake Oven Knob is a bird observed by Robert and Anne MacClay on August 21, 1968.

ROSE-BREASTED GROSBEAK

Pheucticus ludovicianus

Status: An irregular migrant, recorded during four (1962, 1965, 1966, and 1968) of our eight years of observation. Uncommon during September.

Dates: September 5 (1966) to September 26 (1965).

Maxima: 2 on September 14, 1968.

EVENING GROSBEAK

Hesperiphona vespertina

Status: An irregular migrant, recorded during five of our eight years of observation (absent during 1961, 1964, and 1966). Uncommon to very common from mid-October through late November.

Dates: October 17 (1965) to November 30 (1968).

Maxima: 165 on October 24, 1965; 75 on November 16, 1963; 55 on November 4, 1968; and 50+ on October 29, 1967.

PURPLE FINCH

Carpodacus purpureus

Status: A regular migrant, uncommon to fairly common during September and the first third of October, uncommon to common during the second two-thirds of October, and uncommon to fairly common during the first half of November.

Dates: September 3 (1967) to November 14 (1964).

Maxima: 71 on October 16, 1965; 66 on October 22, 1967; 40 on October 20, 1968; 27 on October 21, 1967; and 25+ on November 5, 1967.

PINE GROSBEAK

Pinicola enucleator

Status: A casual migrant. This species has been observed on three occasions — 24 on November 10, 1957 (Harty, Manners, and Haines); 8 on November 14, 1965; and 4 on December 1, 1968.

PINE SISKIN

Spinus pinus

Status: Probably a regular migrant (absent during 1961), uncommon during September, uncommon to common during October, and uncommon to very common during November.

Dates: September 12 (1964) to November 26 (1966).

Maxima: 130+ on November 14, 1965; 70 on October 31, 1965; 64 on November 16, 1963; and 50 on October 23, 1965.

AMERICAN GOLDFINCH

Spinus tristis

Status: A regular migrant, uncommon during the first half of August, uncommon to fairly common (and occasionally common) during the second half of August through September, and uncommon to fairly common from October through November.

Dates: August 8 (1964 and 1965) to November 26 (1966).

Maxima: 46 on August 21, 1968 (MacClay); 40 on September 17, 1968; 24 on September 6, 1967; 21 on October 4, 1967 (MacClay); and 20 on September 7, 1968.

RED CROSSBILL

Loxia curvirostra

Status: A casual migrant. Our records consist of 7 on November 20, 1965 at Bear Rocks (Walden); 3 on November 16, 1963; and 1 on November 12, 1966 (Darrow).

WHITE-WINGED CROSSBILL

Loxia leucoptera

Status: A casual migrant, recorded during 1963 and 1965. Uncommon to fairly common during November.

Dates: November 10 (1963) to November 24 (1963).

Records: 15+ on November 14, 1965; 5 on November 10, 1963 (Harty); 3 on November 20, 1965; and 1 on November 24, 1963.

RUFOUS-SIDED TOWHEE

Pipilo erythrophthalmus

Status: A regular migrant, uncommon to fairly common from August through October, and uncommon during the first half of November.

Dates: August 3 (1963) to November 14 (1964).

Maxima: 25 on August 11, 1962; 15+ on October 15, 1966; 13 on September 26, 1964; 11 on October 12, 1968; and 10 on October 2, 1966.

SLATE-COLORED JUNCO

Junco hyemalis

Status: A regular migrant, uncommon during September and uncommon to common during October (occasionally becoming very common during late October) and November.

Dates: September 8 (1964) to November 26 (1966).

Maxima: 250+ on October 28, 1962; 38 on November 7, 1966; 30 on October 8, 1966 (Laudenslager); and 28 on November 11, 1966.

WHITE-THROATED SPARROW

Zonotrichia albicollis

Status: A regular migrant, uncommon during late September and early October, uncommon to fairly common during mid-October, and uncommon from late October through mid-November.

Dates: September 26 (1964) to November 11 (1968).

Maxima: 12 on October 17, 1967 (MacClay); and 10 on October 18, 1968.

FOX SPARROW

Passerella iliaca

Status: A casual migrant. The Fox Sparrow is placed on the Bake Oven Knob list on the basis of one bird which Meritt, Goldstein, and Heintzelman observed at close range on October 27, 1968.

SONG SPARROW

Melospiza melodia

Status: A casual migrant or visitant. The Song Sparrow is included on our Bake Oven Knob list on the basis of two birds which I observed on October 4, 1964.

SNOW BUNTING

Plectrophenax nivalis

Status: A casual migrant. The Snow Bunting is included on our Bake Oven Knob list on the basis of one bird observed on November 16, 1963, and two birds observed on November 21, 1964.

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Throughout the course of this investigation, dozens of observers have contributed information. Acknowledgment of each observer is not possible here, but I wish to express my appreciation to each of these individuals some of whose names appear throughout this paper. A few people, however, have gone far out of their way to lend assistance. In particular, thanks are extended to Thomas V. Armentano, with whom I co-authored an earlier version of this list, and to Alan Grout, Paul Grout, and Edward Reed. Above all, my deepest appreciation is extended to Robert and Anne MacClay whose competent and loyal devotion to gathering data at Bake Oven Knob has produced a very large amount of information of major importance to this investigation. Without their help, preparation of this report would have been impossible.

In gathering specimen documentation, Benjamin Hiatt generously donated hawk study skins to the research collections of the William Penn Memorial Museum and the New Jersey State Museum. Nelson Hoy also donated hawk study skins to the William Penn Memorial Museum, and allowed me to gather data from Bake Oven Knob hawk specimens in his private collection.

In addition to the cooperation of private individuals, several organizations and institutions rendered important support in various ways. During 1966 a portion of my field work at Bake Oven Knob was supported by a research grant from the Pennsylvania Academy of Sciences. Additional field work during 1966, 1967, and 1968 was supported by the William Penn Memorial Museum on whose professional staff I was employed. A special note of thanks is due Winslow M. Shaughnessy and Albert G. Mehring who made this latter field work possible. Finally, the many members of the Delaware Valley Ornithological Club have contributed data which have enhanced the value of this investigation.

SPECIAL REQUEST

From time to time during each hawking season various observers visit Bake Oven Knob to watch birds. Some of these visits are on weekdays when Robert MacClay and/or I are not present. I would therefore appreciate receiving copies of any lists of any birds (include species and numbers of each species observed) along with the date when the observations were made. Please forward the information to the author at 629 Green Street, Allentown, Pennsylvania, 18102.

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