BIRDS of Central PENNSYLVANIA

The Pennsylvania State University, College of Agriculture Agricultural Experiment Station, University Park, Pennsylvania
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Birds of Central Pennsylvania

MERRILL WOOD

FOR A HUNDRED YEARS people have been observing and recording information on the birds of central Pennsylvania. This region contains ever changing populations of birds with varied relationships to man. Some birds eat destructive insects and rodents, consume weed seeds, remove diseased animal carcasses which might infect others, or serve as game. Other birds work against the economic interests of man, and still others are only of general and scientific interest. This bulletin is intended to give information on the variety of bird-life, its frequency, abundance, seasonal occurrence, habits and status changes.

While the area within a radius of 15 miles around University Park, was studied for this bulletin, the data should give for the middle of the Twentieth Century a reasonably good picture of the bird-life within a radius of 50 miles. This larger circle includes the following counties: southeastern Elk and Cameron; all of Blair, Clearfield, Clinton, Centre and Huntingdon; western edge of Lycoming; all of Union, Snyder, Juniata and Perry, except their portions along the Susquehanna river; the northern tip of Franklin; and the northeastern corner of Cambria.

The study area, most of which is "ridge and valley country," is nearly in the geographical center of the Commonwealth, and covers portions of four counties—the southern half of Centre, the northeast corner of Blair, the northern part of Huntingdon, and the mid-western edge of Mifflin.

Topography.—In this region are four wide valleys: (1) Bald Eagle, width about 1 mile; (2) Nittany, width 5 to 10 miles; (3) Penn, width 3 to 6 miles; and (4) Stone, width 8 to 10 miles. In these four valleys are farms, woodlots and many small communities. Located in Nittany Valley is The Pennsylvania State University at University Park, adjacent to the borough of State College. University Park has an elevation of 1164 feet above sea level. The University resident student population is more than 14,000 and State College has a population exceeding 12,000. Eight miles northeast of University Park is the county seat, Bellefonte, an industrial town with a population of about 5,600.
In Nittany Valley, west of University Park, is the Centre County Barrens, an irregular scrub-oak and pitch-pine area about 10 miles long and 2 to 3 miles wide, the edges of which usually blend into woodlots. Observers of bird-life in the Barrens often use the unpaved auto road which branches from U. S. Highway 322 at a historical marker for "Scotia," 4.3 miles west of the Nittany Lion Inn at University Park. This road passes through the central part of the Barrens for 6.5 miles to a paved road at Fairbrook (Tadpole). Branching from this road are other roads suitable for use on hikes back into the dense brush.

North and west of University Park is Bald Eagle Mountain, beyond which lies high irregular land, the Allegheny plateau. To the east of University Park is Nittany Mountain. To the south and east is Tussey Mountain beyond which arises a rather irregular mass known as the Seven Mountains. On their eastern edge is Stone Mountain. Most of these mountains rise only several hundred feet above their valleys; however, the higher ridges go up a thousand feet or more. A few of the mountain tops of the Allegheny plateau, and Seven Mountains, such as Big Flat and Little Flat Mountains near Bear Meadows, reach an elevation of 2400 feet above sea level. The mountains are forested, the type generally being chestnut-oak or hemlock. In some places on the upper parts of these mountains are extensive patches of broken stone.

There are numerous shallow creeks and streams near University Park, the larger ones being Spring, Bald Eagle, Standing Stone and Stone Creeks. Smaller, though noteworthy, are Buffalo Run, Slab Cabin Run, Laurel Run, Shaver Creek and Sinking Creek. Some of these creeks and streams have banks suitable for the nesting of Belted Kingfishers and Rough-winged Swallows.

More than 25 artificial bodies of water occur in the study area. The largest is Black Moshannon Lake, about 2 1/2 miles long and 1/4 mile wide at its widest place, with an elevation of 1872 feet above sea level. Many dead tree stumps stand in the upper part of it. A number of the ponds in the area are farm fish-ponds. Although small in size and near human dwellings, grebes and ducks occasionally can be seen on them. Natural pot-holes, usually well-filled with shrubs, are rather numerous, particularly at the eastern end of the Barrens. Many of these pot-holes dry up in late summer.
Lakes and Ponds within 15 miles of University Park

Baileyville Pond
Black Moshannon Lake
Boalsburg Farm Pond
Boogersburg Pond
Centre Furnace Pond
Fisherman's Paradise Fish Ponds
Galbraith Gap Farm Ponds
Greenwood Furnace Lake
Linden Hall Pond
Penn-Roosevelt Park Lake
Pennsylvania Furnace Pond

Pleasant Gap Fish Ponds
Rockview Penitentiary Reservoir
Scotia Pond (10-acre Pond)
Seven Mts. Boy Scout Camp Lake
Shaver Creek Pond (Pine Swamp Pond)
Shingletown Reservoir
State Game Lands 176 (pot-holes)
Tow Hill Pond
Whipple's Park Lake

Centre Furnace Pond has been called “the University Pond,” “Thompson’s Spring Pond” and “the Duck Pond.” The name Centre Furnace Pond is being used because it identifies the pond with a geographical and historical landmark, an abandoned iron furnace with a historical marker, which is beside the pond. Also, before the pond was established the area was recorded as “Centre Furnace” in bird notes by Harlow and others.

Three artificial ponds are no longer in existence: one formerly at McCoy Dam at Milesburg, one at Oak Hall and one called Red Mill Pond east of Tusseyville. They were exceptionally fine places for water birds and were the location of several outstanding records.

There are 14 or more bogs and swamps in the area studied, at least 3 being noteworthy: (1) Bear Meadows, a wooded (hemlock with some larch and spruce) sphagnum bog 1 mile long and ½ mile wide with an elevation of about 1800 feet above sea level; (2) Millbrook Swamp (the lower part of Centre Furnace Swamp mentioned in “Birds of Western Pennsylvania” by Todd, 1940), a cattail swamp ½ mile long and ¼ mile wide with an elevation of about 900 feet; and (3) the Black Moshannon bogs, the largest one at the upper end of the lake, a shrub-filled bog 1½ miles long and ½ mile wide with an elevation of about 1900 feet.

Bogs and Swamps within 15 miles of University Park

Bear Meadows
Black Moshannon
Charter Oak (Penn State Forestry Camp)
Fairbrook (Meek’s Church)
Greenwood Furnace
Millbrook

Mothersbaugh
Oak Hall
Pennsylvania Furnace
State Game Lands 176 (Henszey’s)
Waddle (Buffalo Run)
Whipple’s Park
The University Park Region

COMMUNITIES

1. Baileyville  
2. Belleville  
3. Boalsburg  
4. Centre Hall  
5. Fairbrook  
6. Julian  
7. Lemont  
8. Linden Hall  
9. McAlevey's Fort  
10. Milesburg  
11. Milroy  
12. Neills Mills  
13. Oak Hall  
14. Pennsylvania Furnace  
15. Pine Grove Mills  
16. Pleasant Gap  
17. Port Matilda  
18. Potters Mills  
19. Shingletown  
20. Spring Mills  
21. Tusseyville  
22. Unionville (Fleming, P. O.)

TOWERS

23. Bald Eagle Fire Tower  
24. Greenwood Furnace Fire Tower  
25. Little Flat Fire Tower  
26. Rattlesnake Fire Tower  
27. Sky Top Observation Tower  
28. Tussey Fire Tower

LAKES, PONDS, SWAMPS AND BOGS

29. Bear Meadows Bog  
30. Black Moshannon Lake  
31. Boogersburg Pond  
32. Centre Furnace Pond  
33. Charter Oak Swamp  
34. Fisherman's Paradise Fish Ponds  
35. Galbraith's Cap Farm Ponds  
36. Greenwood Furnace Lake  
37. Millbrook Swamp  
38. Mothersbaugh Swamp  
39. Penn-Roosevelt Park Lake  
40. Scotia Pond  
41. Seven Mts. Boy Scout Camp Lake  
42. Shaver Creek Pond (Pine Swamp)  
43. State Game Lands No. 176  
44. Tow Hill Pond  
45. Waddle (Buffalo Run) Swamp  
46. Whipples Park Lake
Climate and Rainfall.—Records have been kept for 70 years at the Weather Station of The Pennsylvania State University. The average annual temperature was 49 degrees Fahrenheit, and monthly averages varied from 27 degrees in January to 71 degrees in July. Extreme temperatures were -20 and 102 degrees. The interval between the last freeze in the spring, which came between April 12 and May 14 (average April 29), and the first freeze in the fall, which came between September 19 and November 15 (average October 10), usually was about 164 days. In the Barrens, a freeze may occur during any month of the year.

The average annual precipitation was 39 inches and monthly averages varied from 2.50 inches in February to 4.13 inches in May. More than .01 inch of precipitation occurred on an average of 134 days each year. During the five winters, 1952-53 to 1956-57, the total number of days per winter the ground was completely covered with snow varied from 20 to 33 (average 26 days). The longest period of complete snow cover varied from 7 to 12, (average 8 days) and came in January or February.

The prevailing winds were moderate and from the northwest in winter and southwest in summer.

History.—In this region, around The Farmers' High School which eventually became The Pennsylvania State University, printed observations of bird-life first appeared in 1858 (Anonymous). The first annotated list, "Birds of Centre County, Pennsylvania" by John K. Musgrave was published in 1909. Other annotated lists followed: in 1912 "The Breeding Birds of Southern Centre County, Pennsylvania" by Richard C. Harlow; in 1924 "Migration Notes From State College, Centre County, Pennsylvania"; in 1931 "Notes on the Breeding Birds of State College, Centre County, Pennsylvania" by Thomas D. Burleigh; and in 1952 "Birds of the State College Region, Pennsylvania" by Merrill Wood. Numerous ornithologists and other people interested in birds have made observations in central Pennsylvania. Published observations have been credited when used in this bulletin.

Migration Seasons.—In central Pennsylvania, the spring migration of birds begins in mid-February or late-February with the arrival of such species as the American Widgeon, Killdeer, Horned Lark, Robin and Eastern Bluebird. This northward movement of birds was first noted at University Park, in 1953 on February 15, in 1954 on February 21, in 1955 on February 23, in 1956 on February 19 and in 1957 on February 21. The spring migration ends in early-June.

The fall migration begins in early-July or mid-July with the arrival of shorebirds, such as the Solitary Sandpiper, Greater Yellowlegs, Least Sandpiper and Short-billed Dowitcher. However, when this time is
rainless, these northern shorebirds may not be found until late-July or early-August. This southward movement of birds was first noted at University Park, in 1950 on July 11, in 1951 (no data), in 1952 on July 5, in 1953 on July 19, in 1954 on July 10, in 1955 on July 11, in 1956 (no data), and in 1957 on July 23. Herons may appear before the shorebirds but they are then wandering birds which are not actually moving south. The fall migration ends in mid-December.

Number of Species.—Within 15 miles of University Park, a total of 260 species of birds have been recorded, but the number present each year varies. The total number found through the efforts of all observers in 1953 was 216, in 1954 was 207, in 1955 was 212, in 1956 was 218, and in 1957 was 209 (average 211 species per year).

In any one calendar year, a diligent observer should be able to find 150 species, within 15 miles of University Park, and with considerable effort and some luck, over 200 species. This has been achieved only once, by Mrs. Blanche S. Bordner with 201 in 1957.

Each year the number of species of birds in this region gradually declines until mid-February, the time of year with the fewest species (67 in 1957) for by then most of the winter stragglers have died. Then, due to the spring migration, the number rapidly rises to a peak in mid-May, the time with the most species (162 in 1957), after which there is a rapid decline to the summer population (116 in 1957). Next, due to the fall migration, the number gradually rises to a peak in late-September, the time of the most fall species (135 in 1957), after which there is a gradual decline until the next mid-February low. The spring peak is narrower and higher than the fall peak which is spread over more time.

Dead Birds.—Although dead birds remain visible only a comparatively short time, a considerable number of them are observed. On highways many birds, usually of the more common species, become victims of auto traffic. A lot of birds are killed by flying into windows, particularly “picture windows” which reflect the sky. This is a daily occurrence on the University campus during the peak of the spring and fall migration seasons. Insecticide sprays poison a small number of birds. Also, a few birds fly into fire towers and other high man-made structures. Illegal shooting, cats and dogs, and some farm practices destroy birds.

Dead wild birds should be inspected on the legs for U. S. Fish and Wildlife Service bands. A Chimney Swift picked up in University Park (by Michael Wills) had a band put on three years before in Atlanta, Georgia. A Starling caught by a cat in State College (reporter unknown) had been banded two years before in Cincinnati, Ohio. An Evening Grosbeak found dead near Boalsburg (by Robert W. Green) had been banded three years before in Concord, Massachusetts.
Another Evening Grosbeak examined in Phillipsburg (by J. Munson Lee) had been banded two months before in Montoursville, Pa.

To report a band found on a wild bird, not a domestic pigeon, remove the numbered aluminum band, flatten and scotch-tape it to a letter, telling (1) locality in which found, (2) date on which found, and (3) reporter's name and mail address. Although the bands are inscribed "Notify Fish and Wildlife Service, Washington, D.C.," they can be mailed directly to The Bird-banding Office, Patuxent Research Refuge, Laurel, Maryland. If the band is desired for a souvenir, request it, and it will be returned with a form giving the species, place and date banded, and the bander's name and address. Much of the scientific knowledge on ornithology has been gained from the reporting of bird-bands.

Unrecorded species.—One of the interesting features of bird-watching is the possibility of discovering a species far out of its normal range by accident. While such birds may appear in any season, perhaps the most likely time to find one is in the fall after a hurricane has passed up the Atlantic coast or blown inland in eastern United States.

The following three species should be looked for since they are expected to get into this region: the Red-necked Grebe, *Podiceps grisegena*, in early-spring; the Snowy Egret, *Leucophoyx thula*, in late-summer; and the Clay-colored Sparrow, *Spizella pallida*, in the autumn.

Species Escaped from Captivity.—Parakeets and canaries have been observed free in several communities from time to time, but, unless soon recaptured, none survive for long after escaping from their cages. Between 1950 and 1957 various species of ducks escaped from the Bird Navigation Propagation Range at the University and they were noted on local panels, sometimes at unseasonable dates. A Barrow's Goldeneye, one of these birds, was shot by a hunter near Williamsport, in November 1956 (Decker). Other species which escaped were Mallard, Black Duck, Gadwall, Pintail, Green-winged Teal, Blue-winged Teal, European Widgeon, Wood Duck, Ring-necked Duck, Greater Scaup, Lesser Scaup and Tufted Duck.

Nomenclature.—The common and scientific names of the 260 species of birds recorded within 15 miles of University Park are those used in the "Fifth Edition of the American Ornithologists' Union Check-List (1957)," and they are arranged in the phylogenetic sequence of the 1957 A.O.U. Check-list. An asterisk (*) preceding the name of a bird indicates that a specimen has been collected in the region and deposited in the Ornithology Collection (Research Section) in the Department of Zoology and Entomology of The Pennsylvania State University. Subspecies are given only where specimens have been critically examined.
The terms used to indicate frequency, abundance and seasonal occurrence are standards recommended in AUDUBON FIELD NOTES 1957 11:63-64.

**FREQUENCY STANDARD**

Regular: Recorded every year.
Irregular: Recorded less than once every year, but no less than once in 5 years, on the average.
Occasional: Recorded less than once in 5 years, but no less than once in 10 years, on the average.
Sporadic: Recorded less than once in 10 years, but no less than once in 20 years, on the average.
Casual: Recorded less than once in 20 years, on the average.
Accidental: Recorded but, because of its normal range, not expected to occur again.

**ABUNDANCE SCALE FOR NON-BREEDING BIRDS**

For each definition, the wording is similar, with only the numerals changing. The complete definition is given here only for the first term.

Abundant: Occurring in such numbers that a competent observer at the appropriate time and place might see or hear 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 and no more than 25 per season.
Rare: 1 to 5 in a single day and no more than 5 per season.
Very rare: No more than 1 per day and 1 per season.

**ABUNDANCE SCALE FOR BREEDING BIRDS**

<table>
<thead>
<tr>
<th>Term</th>
<th>Breeding Density (Flicker size or smaller)</th>
<th>Breeding Density (Larger than a flicker)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abundant:</td>
<td>1 pair per 1-5 acres.</td>
<td>1 pair per 1-25 acres.</td>
</tr>
<tr>
<td>Very common:</td>
<td>1 pair per 6-25 acres.</td>
<td>1 pair per 26-125 acres.</td>
</tr>
<tr>
<td>Common:</td>
<td>1 pair per 26-125 acres.</td>
<td>1 pair per 126 acres—1 square mile.</td>
</tr>
<tr>
<td>Fairly common:</td>
<td>1 pair per 126 acres—1 square mile.</td>
<td>1 pair per 1-5 square miles.</td>
</tr>
<tr>
<td>Uncommon:</td>
<td>1 pair per 1-5 square miles.</td>
<td>1 pair per 6-25 square miles.</td>
</tr>
<tr>
<td>Rare:</td>
<td>1 pair per 6-25 square miles.</td>
<td>1 pair per 26-125 square miles.</td>
</tr>
<tr>
<td>Very rare:</td>
<td>1 pair per 26 square miles or more.</td>
<td>1 pair per 126 square miles or more.</td>
</tr>
</tbody>
</table>
SEASONAL OCCURRENCE

Residents: Breeding species; may occur as *summer residents* or *permanent residents*.

Transients: Birds of passage which occur in spring and/or fall but do not breed; may occur as *spring transients* or *fall transients*.

Visitants: Non-breeding birds which occur as temporary visitors; may occur as *summer visitants*, *winter visitants*, or *vagrant visitants* (irregular as to season).

Interpretation of dates used in list: early-Month: 1 to 10, mid-Month: 11 to 20, and late-Month: 21 to 31.

**LOONS: Gaviidae**

The loons occur on Black Moshannon Lake and occasionally on the other bodies of water. Sometimes they are found stranded on wet highways.

*Common Loon, Gavia immer*: Regular, uncommon, spring transient from late-March to mid-May, and irregular, rare, fall transient from early-October to late-November with most fall records in November. Usually seen as single birds but sometimes in small flocks (highest local count 41).

*Red-throated Loon, Gavia stellata*: Regular, rare, spring transient from late-March to mid-May, and irregular, rare, fall transient in November with stragglers to mid-December. Usually seen as single birds but sometimes in small flocks (highest local count 3), always in non-breeding plumage. One Red-throated Loon picked up November 21, 1952, from wet highway at Lemont and released with a band on Centre Furnace Pond where it remained 15 days, was recovered on February 6, 1953, frozen in the ice on Hemlock Lake, Livingston County, N. Y., about 150 miles north of University Park.

**GREBES: Podicipedidae**

The grebes occur on all the lakes and ponds, and occasionally are found on wet highways, city streets and yards around homes.

*Horned Grebe, Podiceps auritus*: Regular, common, spring transient from mid-March to late-April with stragglers to mid-May, and fall transient from early-October to late-November with stragglers to mid-December. In spring Horned Grebes occasionally are seen in great numbers (highest local count: 910 on Black Moshannon Lake, April 13, 1958; D. Bordner). Summer record: 1 in 1953 on Reedsville pond. Irregular, rare, winter visitant (1 in 1950-51). Subspecies: *P. a. cornutus*.

*Pied-billed Grebe, Podilymbus podiceps*: Regular, common, spring transient from early-March to late-April with stragglers to mid-May, and fall transient from early-September to late-November with strag-
glers to mid-December. Summer records: At Scotia Pond 1 pair nested
twice in 1917 (Harlow, 1918; Burleigh, 1918), and 3 at Pennsylvania
Furnace Pond, apparently non-breeding birds, 1 in 1950 and 2 in 1951.
Irregular, winter, visitant (1951-52, 1952-53, and 1953-54). Subspecies:
P. p. podiceps.

CORMORANTS: Phalacrocoracidae

Double-crested Cormorant, Phalacrocorax auritus: Irregular, rare,
spring transient from late-April to late-May. No fall records. Summer
record: 1 July 8, 1956, on Centre Furnace Pond (Hue). In the area
within 15 miles of University Park, the first record of this species was
in 1952 (Fuller). Numbers seen each year: in 1952-1, 1953-2, 1954-0,
1955-1, 1956-2, and 1957-0. The most likely place to see Cormorants
is Black Moshannon Lake but occasionally they occur on the other
bodies of water.

HERONS and BITTERNS: Ardeidae

The herons and bitterns occur at nearly all the wet spots of this
region.

*Great Blue Heron, Ardea herodias: Regular, uncommon, spring
transient from mid-March to late-April with stragglers to late-May,
and fall transient from early-July (1 record on June 29, 1955, Pearson)
to late-October. Irregular, rare, winter visitant, usually found along
Spring Creek. Subspecies: A. h. herodias. Old newspaper accounts
of cranes in this region undoubtedly refer to Great Blue Herons.

*Green Heron, Butorides virescens: Regular, common, spring tran­
sient, breeding summer resident and fall transient, from mid-April
to early-October. Subspecies: B. v. virescens.

Little Blue Heron, Florida caerulea: Casual, very rare, summer visitant
from late-July to mid-August. Records: 1 seen July 26, 1928, near
McAlvey's Fort (Sutton; Todd, 1940) and 1 seen Aug. 11, 1953, at
Scotia Pond (B. Bordner, Wood).

*Common Egret, Casmerodius albus: Regular, rare, summer visitant,
from early-July to early-October. Spring records: 1 seen April 7, 1955,
at Black Moshannon Lake (Pudelkiewicz) and 1 found dead (appar­
etly for about 10 days) June 1, 1956, at Scotia Pond (B. Bordner,
Wood). Numbers of Common Egrets seen within 15 miles of Univer­
The first authentic record of this species in this region was in 1932,
in northern Huntingdon County (Clarke). Subspecies: C. a. egretta.

Louisiana Heron, Hydranassa tricolor: Accidental, very rare, visitant.
Only 1 record: 1 seen May 24, 1933, at Red Mill pond, 1 mile east
of Tusseyville (Curry, 1933).
Black-crowned Night Heron, *Nycticorax nycticorax*: Regular, rare, spring transient, breeding summer resident and fall transient, from late-April to late-September, with stragglers to early-November. This species was first recorded in this region in 1930 at Red Mill Pond near Tusseyville (Curry and Free). The first known breeding record was in 1949 with 3 nests on a wooded hill about 1 mile east of University Park (Dowling and Ralston). This place was used for nesting also in 1950 and 1951 but not thereafter. In 1957 there was one nest on the Pennsylvania State Game Lands No. 176 (Wood).

Yellow-crowned Night Heron, *Nyctanassa violacea*: Accidental, very rare, visitant. Only 2 records: 1 seen April 17, 1955, at Pennsylvania Furnace Swamp (Altemus and Pudelkiewicz) and 1 immature seen September 22, 1957, in Millbrook Swamp (Nickelsen, Blackadar and Wood).

Least Bittern, *Ixobrychus exilis*: Occasional, rare, spring transient in May and fall transient in September. This species was first recorded in this region in 1930 at Oak Hall (Curry).

*American Bittern, Botaurus lentiginosus*: Regular, uncommon, spring transient, rare, breeding, summer resident, and uncommon, fall transient, from early-April to late-October. Irregular, rare, winter visitant (1949-50).

**SWANS, GEESE and DUCKS: Anatidae**

The best places to observe waterfowl in the University Park region are the Centre Furnace Pond, Black Moshannon Lake, Scotia Pond and Pennsylvania Furnace Pond, but all the other ponds generally get birds sometime during the migration seasons.

The spring migration of waterfowl begins early in this region, most species appearing in March. However, if there is sufficient ice-free water, a number of species will arrive in the last half of February, probably birds which wintered just south of this region. The end of this northward movement comes in April with numerous stragglers in May.

The peak of the spring waterfowl migration in this region, nearly all the lakes and ponds being populated, is a short period of 4 or 5 days between late-March and late-April. The peak periods were noted to be: in 1953, April 11-14; in 1954, March 30-April 2; in 1955, March 26-29; in 1956, April 20-23; and in 1957, April 5-8.

The fall migration of waterfowl commences in this region in late-August with the peak in October and ends in November.

Wintering waterfowl appear nearly every year. They usually are single birds that probably are cripples or lacking in desire to migrate.
They therefore remain for part of the winter, and occasionally a bird survives until spring.

**Mute Swan, Cygnus olor:** An introduced species present in central Pennsylvania as captive birds producing young that occasionally become feral and fly out of this region.

A pair of Mute Swans taken from Lock Haven to the Claude G. Aiken farm at Boalsburg were difficult to keep due to their escaping and the regular winter freezing of the tiny pond. About 1939 this pair of swans was placed on the pond at Penn’s Cave, where they have lived without human care, except for occasional feedings in severe winters, since there is always some open water. They have nested each year, laying 3 to 5 eggs. Some of the young died, some were captured and sent to other localities, and some flew away, usually in spring. Two of the young flew to the pond at Mill Hall where they were caught and brought back to Penn’s Cave, but they did not remain long before leaving again.

Mute Swans kept for years on Spring Creek at Bellefonte, have been replaced from time to time. One from Penn’s Cave was released there on March 22, 1954.

Two Mute Swans were released March 28, 1954, on Pennsylvania Furnace Pond.

*Whistling Swan, Olor columbianus:* Regular, fairly common, spring transient from early-March to early-April with stragglers seen as late as mid-May, and uncommon, fall transient from late-October to late-November. Irregular, rare, winter visitant (1 in 1952-53). This species is usually seen flying overhead (highest local count, flock of 105) but single birds and flocks have been observed on Black Moshannon Lake and on the other bodies of water. Centre Furnace Pond had 54 Whistling Swans April 7, 1934 (Webb, 1937). On foggy nights swans and geese sometimes circle over the glare of State College and Bellefonte, a phenomenon recorded as early as November 1, 1867 (Anonymous, 1867). More swans than geese seem to migrate through this region.

**Canada Goose, Branta canadensis:** Regular, uncommon, spring transient from late-February to late-April with stragglers to mid-May, and fall transient from late-September to late-November. Irregular, rare, winter visitant (1950-51). This species usually is seen flying overhead but single birds and flocks (highest count, flock of 125) have been observed on Black Moshannon Lake and on the other bodies of water. Most spring migrating Canada Geese seem to pass through this region before the Whistling Swans. Occasionally, exhausted geese are picked up in fields.

**Brant, Branta bernicla:** Sporadic, very rare, fall transient. Only 1 record: 9 seen November 1, 1951, on Centre Furnace Pond (Dowling and others).
Snow Goose, Chen hyperboreus: Sporadic, very rare, fall transient. Only 1 record: a flock of about 70 seen flying overhead on November 16, 1916, at University Park (Burleigh, 1924).

*Blue Goose, Chen caerulescens: Sporadic, very rare, fall transient. Only 2 records (both on Centre Furnace Pond): 1 seen November 11-12, 1945, (Cowell, Clarke) and 1 diseased immature female collected November 15, 1946 (English, 1947).

*Mallard, Anas platyrhynchos: Regular, fairly common, spring transient, uncommon, breeding summer resident and, fairly common, fall transient, from early-March to late-November. Regular, rare, winter visitant. The Mallards at Centre Furnace and Pennsylvania Furnace Ponds seem to be feral birds that are permanent residents. At Centre Furnace Pond, 63 out of about 200 Mallards were banded in 1950 and by the end of 7 years only 5 had been picked up dead, 4 within 1 mile of the pond and 1 at Bellefonte. Places with Mallard breeding records: Bear Meadows, Centre Furnace Pond, Henshey's Swamp in the Barrens, and Pennsylvania Furnace Swamp. A late nesting record: a hybrid female (Mallard > Black Duck) at Centre Furnace Pond had a nest with 12 eggs, 9 of which hatched on December 2, 1952, and 4 appeared to survive. Subspecies: A. p. platyrhynchos. In 1957, 212 hand-raised mallards (Yeagley and Decker) were released locally with bands. One released May 21 on Spring Creek was shot September 28 on Hay Bay, near Napanee, Ontario.

*Black Duck, Anas rubripes: Regular, fairly common, spring transient from early-March to late-April with stragglers to mid-May, and fall transient from early-October to late-November. Regular, rare, summer resident (but no known nesting records) at Black Moshannon Lake and Centre Furnace Pond. Regular, rare, winter visitant (Centre Furnace Pond and Fairbrook Swamp).


Pintail, Anas acuta: Regular, fairly common, spring transient from late-February to late-April with stragglers to early-May, and fall transient from mid-September to mid-November. One non-breeding summer record, 1958. Irregular, rare, winter visitant (1952-53, 1953-54 and 1954-55).

*Green-winged Teal, Anas carolinensis: Regular, fairly common, spring transient from mid-March to mid-April with stragglers to

**Blue-winged Teal, Anas discors:** Regular, fairly common, spring transient from mid-March to late-April with stragglers to mid-May, and fall transient from late-August to late-November. Summer records: 1 pair with 11 young in June and July 1954 at Pleasant Gap Fish Hatchery (Ely, Wood); 1 non-breeding bird June 19, 1955 (Curry); and 3 July 13, 1957 (Blackadar and Nickelsen). Irregular, rare, winter visitant (1945-46).

**European Widgeon, Mareca penelope:** Sporadic, very rare, spring transient. Only 1 record: 1 male seen April 18-19, 1954, on Black Moshannon Lake (D. Bordner, Wood and Ely).

**American Widgeon, Mareca americana:** Regular, fairly common, spring transient from mid-March to late-April with stragglers to late-May, and fall transient from late-September to early-November. Summer records: 1 in 1953 on Centre Furnace Pond. Irregular, rare, winter visitant (1952-53 and 1957-58).

**Shoveler, Spatula clypeata:** Regular, rare, spring transient from early-March to late-April, with stragglers as late as late-May, and fall transient from mid-September to early-December. Irregular, rare, winter visitant (1940-41). Numbers of Shovelers recorded within 15 miles of University Park: in 1952-1, 1953-3, 1954-1, 1955-5, 1956-1 and 1957-4.

**Wood Duck, Aix sponsa:** Regular, fairly common, spring transient, breeding summer resident and fall transient, from early-March to mid-November. Nests at most of the wooded lakes and ponds. Irregular, rare, winter visitant (1957-58).

**Redhead, Aythya americana:** Regular, uncommon, spring transient from early-March to late-April with stragglers to late-May, and fall transient from early-October to late-November. Irregular, rare, winter visitant (1954-55).

**Ring-necked Duck, Aythya collaris:** Regular, fairly common, spring transient from mid-March to early-May, and fall transient from mid-October to late-November. Irregular, rare, winter visitant (1954-55).

**Canvasback, Aythya valisineria:** Regular, uncommon, spring transient from late-February to late-April, and fall transient from mid-October to late-November. Irregular, rare, winter visitant (1954-55 and 1956-57).

**Greater Scaup, Aythya marila:** Regular, uncommon, spring transient from early-March to early-May with stragglers to late-May, and fall
transient from late-October to late-November. Irregular, rare, winter visitant (1954-55). Subspecies: \textit{A. m. neavctica}.

**Lesser Scaup, Aythya affinis:** Regular, fairly common, spring transient from late-February to late-April with stragglers to late-May, and fall transient from late-October to late-November with stragglers to mid-December. Summer records (non-breeding birds): 1 in 1953 (Centre Furnace Pond) and 2 in 1957 (Baileyville Pond and Spring Creek at Bellefonte). Irregular, rare, winter visitant.

**Common Goldeneye, Bucephala clangula:** Regular, fairly common, spring transient from mid-March to late-April with stragglers to mid-May, and fall transient from early-November to mid-December. Summer record: 1 non-breeding bird in 1950 at McCoy Dam. Irregular, rare, winter visitant (1952-53, 1956-57 and 1957-58).

\* **Bufflehead, Bucephala albeola:** Regular, fairly common, spring transient from early-March to mid-May, and fall transient from late-October to late-November. Summer record: 1 cripple in 1951 at Pennsylvania Furnace Pond. Irregular, rare, winter visitant (1954-55).

\* **Oldsquaw, Clangula hyemalis:** Regular, uncommon, spring transient from late-March to late-April with stragglers to mid-May, and fall transient from early-November to mid-December.

\* **White-winged Scoter, Melanitta deglandi:** Irregular, rare, spring transient in April with stragglers to late-May, and fall transient in October. Numbers of this species seen within 15 miles of University Park: in 1953—1, 1954—0, 1955—4, 1956—15, and 1957—2. Subspecies: \textit{M. d. deglandi}.

**Surf Scoter, Melanitta perspicillata:** Accidental, very rare, visitant. Only one record: 1 female seen with open wings October 20, 1957, on Black Moshannon Lake (B. Bordner, D. Bordner and Wood).

\* **Ruddy Duck, Oxyura jamaicensis:** Regular, fairly common, spring transient from mid-March to late-April with stragglers to early-June, and fall transient from early-October to late-November with stragglers to early-December. Summer record: 1 non-breeding bird in 1954 at Pleasant Gap Fish Hatchery. Irregular, rare, winter visitant (1956-57 and 1957-58). Subspecies: \textit{O. j. rubida}.

\* **Hooded Merganser, Lophodytes cucullatus:** Regular, fairly common, spring transient from early-March to early-May, and fall transient from early-September to late-November.

**Common Merganser, Mergus merganser:** Regular, rare, spring transient from late-March to late-April, and fall transient in October and November. Numbers of this species seen within 15 miles of University Park: in 1953—2, 1954—1, 1955—4, 1956—1 and 1957—3.

**AMERICAN VULTURES**: Cathartidae

*Turkey Vulture, *Cathartes aura*: Regular, fairly common, spring transient, breeding summer resident and fall transient, from late-February to late-October with stragglers occasionally remaining into early-November. One Turkey Vulture nest with down-covered young was discovered in the entrance of a small cave in the Seven Mountains in 1949 (Hosler). A vulture roost was located on a wooded hillside at Pennsylvania Furnace (last used in 1954). Vultures are seen soaring over cultivated and forested areas of this region. Occasionally, vultures are found on the ground, usually at a place with a dead animal. Subspecies: *C. a. septentrionalis*.

**HAWKS, OLD WORLD VULTURES AND HARRIERS**: Accipitridae

The spring migration of hawks is so wide-spread over the entire region that it is not spectacular as is the fall migration over the mountain ridges. The fall migration begins in early-August, reaches a peak between September 10 and 25, and ends in mid-November.

An excellent observation place for the fall migration of hawks is Tussey Fire Tower (elevation 2220 feet above sea level) on Tussey Mountain near Pennsylvania Furnace. This tower is reached by an unpaved road leaving state route 545 in Pine Grove Mills Gap or by another road on the east side of Tussey mountain, indicated by a sign to the tower. Other places to see hawks are Little Flat Fire Tower near Bear Meadows (mountain rather broad here); Bald Eagle Fire Tower near Bellefonte (difficult to reach); Sky Top Observation Tower (too exposed and noisy); Greenwood Furnace Fire Tower (rather far from University Park); and Rattlesnake Fire Tower near Black Moshannon State Park (mountain very broad here).

*Goshawk, *Accipiter gentilis*: Irregular, rare, fall transient, winter visitant and spring transient, from late-October to mid-March. Summer records: adults seen in 1889 (Roddy; Todd, 1940) and 1 adult seen April 21, 1950 (Huston); no nests. Goshawks are more numerous certain winters, usually around the middle of each decade. In the 1950 decade only a minor influx occurred. Numbers of this species seen within 15 miles of University Park, in the winters: 1950-51, 0; 1951-52, 0; 1952-53, 0; 1953-54, 2; 1954-55, 3; 1955-56, 0; 1956-57, 2; and 1957-58, 0. Subspecies: *A. g. atricapillus*.

*Sharp-shinned Hawk, *Accipiter striatus*: Regular, fairly common, spring transient, uncommon, breeding summer resident and common
fall transient, from early-April to late-October, with stragglers to mid-November. Irregular, rare, winter visitant. Subspecies: *A. s. velox.*

*Cooper's Hawk, Accipiter cooperii:* Regular, fairly common, spring transient, breeding summer resident and fall transient, from early-March to late-October. Regular, uncommon, winter visitant.

*Red-tailed Hawk, Buteo jamaicensis:* Regular, fairly common, spring transient, uncommon, breeding summer resident and common fall transient, from early-March to mid-November. Regular, rare, winter resident. Subspecies: *B. j. borealis.*

*Red-shouldered Hawk, Buteo lineatus:* Regular, uncommon, spring transient, fairly common, breeding summer resident and very common fall transient, from early-April to early-October. Subspecies: *B. l. lineatus.* A melanistic specimen was collected November 26, 1957, near University Park.

*Broad-winged Hawk, Buteo platypterus:* Regular, fairly common, spring transient, fairly common, breeding summer resident and very common fall transient, from early-April to early-October. Subspecies: *B. p. platypterus.*

Rough-legged Hawk, *Buteo lagopus:* Regular, uncommon, fall transient, winter visitant and spring transient, from late-October to late-March with stragglers to early-May. This species occurs in light and dark phases and is found over open farm land. Before the winter of 1953-54 this species was irregular and rare in this region.

*Golden Eagle, Aquila chrysaetos:* Irregular, rare, fall transient, winter visitant and spring transient, from mid-September to late-March with stragglers to mid-May. This species occurs here as single birds usually observed over the Seven Mountains, but has been seen over the other forested areas and once (in 1955, Curry) over the campus of The Pennsylvania State University. Subspecies: *A. c. canadensis.*

Bald Eagle, *Haliaeetus leucocephalus:* Irregular, rare, spring transient from late-April to mid-May, and fall transient from early-August to early-November. This species occurs here as single birds and in pairs usually observed over Black Moshannon Lake, but has been seen over the mountains, valleys and once (in 1953, Dorothy L. Bordner) over the campus of The Pennsylvania State University. Bald eagles hatched in Florida have wandered into this region. One banded at Englewood, Florida, on January 28, 1947, was shot at Huntingdon, on August 26, 1949; and another banded at Pine Island, Florida, on January 22, 1946, was killed at Clearfield, on July 18, 1946 (Broley, 1952). The "Eagle Nest" of early maps and pioneer accounts of Centre County was the camp of the Indian Chief Bald Eagle, located near Milesburg (Linn, 1888).
*Marsh Hawk, *Circus cyaneus*: Regular, fairly common, spring transient, breeding summer resident and fall transient, from early-March to early-November. Regular, uncommon, winter visitant. This species usually is seen flying low over large fields. Subspecies: *C. c. hudsonius.*

**OSPREYS: Pandionidae**

*Osprey, Pandion haliaetus*: Regular, uncommon, spring transient from late-March to late-May with stragglers to early-June, and fall transient from late-August to late-October. Summer records: 1 in 1952 at Shaver Creek pond and 1 in 1953 at Black Moshannon Lake, but no nesting records. In the spring, Ospreys are observed usually at the lakes and along the larger streams, and in the fall over the mountain ridges.

**FALCONS: Falconidae**

See information given on Accipitridae.

*Peregrine Falcon, Falco peregrinus*: Apparently a regular, very rare, spring transient, breeding summer resident and fall transient, from early-March to mid-November. Winter records: none. Local cliffs that have been or are used for nest sites are omitted here to protect this species from being used in falconry.


*Sparrow Hawk, Falco sparverius*: Regular, common, spring transient, fairly common, breeding summer resident and common, fall transient, from early-March to early-November. Regular, fairly common, winter visitant.

**GROUSE: Tetraonidae**

*Ruffed Grouse, Bonasa umbellus*: Common, permanent resident in suitable wooded areas, and occasionally seen in towns during the fall. Results of banding of over 200 grouse in the Barrens show that they generally remain in a territory of a few acres, however, one bird moved 7½ miles. Subspecies: *B. u. monticola*, however, a few specimens resemble *B. u. umbellus* and occasionally an unusually gray-colored bird is observed.

**QUAIL and PHEASANTS: Phasianidae**

*Bobwhite, Colinus virginianus*: Rare, permanent resident which seems unable to maintain more than an few individuals through
severe winters. The most likely place to find Bobwhites is in Stone Valley, particularly in the area around the Penn State Engineering Camp. The low Bobwhite population has been increased from time to time by restocking as game. Subspecies: C. v. virginianus.

*Ring-necked Pheasant, Phasianus colchicus: Common, permanent resident in cultivated areas; sometimes found in the Barrens. This species was introduced in Centre County on September 2, 1927 (Mosier) and restocking has been carried out frequently to get a larger population for hunting. Local newspaper accounts of “pheasants” before 1927 undoubtedly refer to Ruffed Grouse.

*Gray Partridge, Perdix perdix: This species was introduced in Centre County on February 23, 1928 (Mosier). Although restocked in Ferguson Township. (800 birds from England in winter of 1938, Sam Reed), it remained a very rare permanent resident in cultivated areas. Even though it bred (1 covey of young seen in 1951, Sam Reed), it gradually disappeared. Last record: 9 seen in October 1951 on the John Kocher farm (Sam Reed). Subspecies: P. p. perdix. One pair collected December 27, 1942, at Pine Grove Mills. One found crushed on Shortridge Road on campus in spring of 1929 (Wood).

**TURKEYS: Meleagrididae

*Turkey, Meleagris gallopavo: A very shy, uncommon, permanent resident of the mountains and the Barrens. Restocking has been carried out from time to time to improve certain areas for hunting. Approximately 800 wild turkeys were shot within 15 miles of University Park, during the 1953 hunting season (Sam Reed). Subspecies: M. g. silvestris. Collected specimens: 1 male in Rush Township of Centre County, Dec. 1, 1939, and 1 female in the Seven Mountains of Huntingdon County, November 6, 1941.

**RAILS, GALLINULES and COOTS: Rallidae

The best places to find rails in the University Park vicinity seem to be the swamps at Millbrook, Fairbrook, Oak Hall and along Buffalo Run. Finding rails is difficult and usually requires walking through wet areas. Gallinules usually are seen at Centre Furnace Pond and occasionally at other ponds where there are cattails. Coots stop at most ponds in this region.

King Rail, Rallus elegans: Sporadic, very rare, spring transient in May. Only 1 record: 1 seen May 13, 1956, in Millbrook Swamp (Curry and Honey).

*Virginia Rail, Rallus limicola: Regular, uncommon, spring transient, rare, breeding summer resident, and uncommon, fall transient, from late-March to early-November. Subspecies: R. l. limicola.
Sora, *Porzana carolina*: Regular, uncommon, spring transient, rare, breeding summer resident, and uncommon, fall transient, from early-April to late-October.

Yellow Rail, *Coturnicops noveboracensis*: Sporadic, very rare, spring transient in May. Only 1 record: 1 seen May 16, 1948, in Millbrook swamp (Curry, Smalley and Pearson).

*Common Gallinule, Gallinula chloropus*: Regular, uncommon, spring transient, rare, breeding summer resident and uncommon fall transient, from mid-April to late-October. This species nested at McCoy Dam in 1950 and 1952, and at Centre Furnace Pond in 1953, 1954 and 1955. Irregular, rare, winter visitant (2 immature birds in 1954-55 at Centre Furnace Pond, surviving until March 10). Subspecies: *G. c. cachinnans*.

*American Coot, Fulica americana*: Regular, fairly common, spring transient from early-March to late-May, and fall transient from late-September to late-November. Summer record: 1 non-breeding bird at Whipple Lake in 1953. Irregular, rare, winter visitant (1953-54 and 1954-55). Subspecies: *F. a. americana*.

**PLOVERS:** Charadriidae

The plovers are found at various wet spots, on plowed farmland and on the short grass of the University grass plots.

Semipalmated Plover, *Charadrius semipalmatus*: Regular, rare, spring transient in May, and fall transient from late-July to late-September.

*Killdeer, Charadrius vociferus*: Regular, common, spring transient, breeding summer resident and fall transient, from late-February to late-November. Regular, rare, winter visitant, usually along the stream at Bathgate Springs. Subspecies: *C. v. vociferus*.

*American Golden Plover, Pluvialis dominica*: Irregular, rare, fall transient from late-September to early-November, on plowed farmland, usually on the University farms. All records: 1936, October 12-13, 2; 1950, November 10, 1; 1951, October 28, 14; 1952, September 26-October 5, 21; 1953, October 3-5, 9; and October 26, 6; 1955, September 21-October 15, 25; 1956, October 28-November 4, 3; and 1957, October 7-27, 8. Subspecies: *P. d. dominica*. One collected September 27, 1955, University Park.

WOODCOCK, SNIPE and SANDPIPERS: Scolopacidae

Woodcock inhabit wet thickets, and snipe and sandpipers are found at various wet spots, in spring particularly in flooded fields, on the short grass at the University grass plots, and on dry fields (Upland Plover).

*American Woodcock, *Philohela minor*: Regular, uncommon, spring transient, breeding summer resident and fall transient, from late-February to late-November. Certain grassy areas in the Barrens, Bald Eagle Valley and Stone Valley are used as singing grounds from early-March to early-June. A woodcock banded at Julian, Pennsylvania, was found dead at Cottageville, South Carolina (Liscinsky).

Common Snipe, *Capella gallinago*: Regular, fairly common, spring transient from late-March to mid-May, and fall transient from mid-September to late-November. Regular, rare, winter visitant, usually found along the stream at Bathgate Springs.

Whimbrel, *Numenius phaeopus*: Sporadic, very rare, fall transient in October. Only 1 record: 1 seen October 28, 1948, on University farm-land (Clarke and Sharp).

*Upland Plover, *Bartramia longicauda*: Regular, rare, spring transient, breeding summer resident and fall transient, from mid-April to apparently late August.

Spotted Sandpiper, *Actitis macularia*: Regular, fairly common, spring transient, breeding summer resident and fall transient, from early-April to early-October.

Solitary Sandpiper, *Tringa solitaria*: Regular, fairly common, spring transient from early-April to late-May, and fall transient from early-July to early-October.

*Willet, *Catoptrophorus semipalmatus*: Casual, very rare, fall transient. Only 1 record: 1 immature male collected in the fall of 1947 on the University grass plots (Bowers). Subspecies: *C. s. inornatus*.

Greater Yellowlegs, *Tringa melanoleuca*: Regular, uncommon, spring transient from late-March to late-May, and fall transient from mid-July to mid-November.

Lesser Yellowlegs, *Tringa flavipes*: Regular, rare, spring transient from early-April to late-May, and fall transient from early-August to late-October. Collected specimens: 1 caught in a duck-banding trap October 2, 1950, at Centre Furnace Pond and carefully measured before being released with a band.

Pectoral Sandpiper, *Erolia melanotos*: Regular, uncommon, spring transient from late-March to mid-May, and fall transient from mid-July to early November.

Baird’s Sandpiper, *Erolia bairdii*: Sporadic, rare, fall transient from early-October to mid-November. Only 3 fall records: 1 October 5, 1930 (Curry); 1 November 10, 1945 (Clarke); and 3 October 2, 1956 (B. Bordner). Two spring records: 7 June 2, 1954, at Scotia Pond after a severe storm from west (Bordners, Fuller, Ely and Wood); and 1 May 22, 1957, at Fairbrook (D. Bordner).

Least Sandpiper, *Erolia minutilla*: Regular, uncommon, spring transient from early-May to early-June, and fall transient from early-July to early-October.

Dunlin, *Erolia alpina*: Irregular, rare, spring transient in May, and fall transient from early-October to mid-November.

Short-billed Dowitcher, *Limnodromus griseus*: Regular, uncommon, spring transient in May, and fall transient from mid-July to late-September.

Semipalmated Sandpiper, *Ereunetes pusillus*: Regular, uncommon, spring transient in May, and fall transient from late-July to late-September.


Sanderling, *Crocethia alba*: Casual, very rare, fall transient in October. Only two records: 1 October 28, 1945, at Centre Furnace Pond (Clarke) and 1 October 6, 1953, on University grass plots (D. Bordner and E. R. Bordner).

**PHALAROPES: Phalaropodidae**

Red Phalarope, *Phalaropus fulicarius*: Sporadic, very rare, fall transient in October. Only 1 record: 1 seen October 4, 1946 at Centre Furnace Pond (Curry).

Northern Phalarope, *Loibipes lobatus*: Sporadic, very rare, fall transient in October. Only 2 records: 1 seen October 7, 1949 at Centre Furnace Pond (Hue and Smalley), and 1 October 25, 1950 at Pennsylvania Furnace Pond (Latham).

**GULLS and TERNS: Laridae**

The gulls and terns appear at the various lakes and ponds, the best place being Black Moshannon Lake. Gulls also are found on plowed
farmland, flooded fields, golf courses, airports, and on the short grass at the University grass plots. There are more records of gulls and terns in the spring than in the fall.

**Herring Gull, Larus argentatus:** Regular, rare, spring transient from late-February to mid-May, and irregular, rare, fall transient from late-August to late-November. Usually seen as single birds, sometimes with other species of gulls, and occasionally in small flocks.

**Ring-billed Gull, Larus delawarensis:** Regular, uncommon, spring transient from mid-February to late-May, and fall transient from early-October to late-November. One summer record: 1 June 30, 1951 (Smalley). Usually seen in small flocks.

**Bonaparte's Gull, Larus philadelphia:** Regular, uncommon, spring transient from mid-March to late-May, and fall transient from late-July to late-November. Usually seen in small flocks.

**Common Tern, Sterna hirundo:** Irregular, rare, spring transient from mid-April to mid-May. No fall records. Numbers seen within 15 miles of University Park: in 1953–2, and 1956–1.

**Caspian Tern, Hydroprogne caspia:** Irregular, rare, spring transient from mid-April to mid-May. No fall records. Numbers seen within 15 miles of University Park: in 1935–1, 1952–1, 1953–4, and 1956–2.

**Black Tern, Chlidonias niger:** Regular, rare, spring transient from late-April to late-May, and fall transient from mid-August to mid-September.

**AUKS, MURRES and PUFFINS: Alcidae**

* Thick-billed Murre, Uria lomvia: Accidental, very rare, visitant. Only 1 record: 1 male collected in the fall of 1895 in the Barrens (Buckhout). Subspecies: *U. l. lomvia*.

**PIGEONS and DOVES: Columbidae**

* Rock Dove (Domestic Pigeon), Columba livia: Common, permanent resident, established as a wild species in some communities. At University Park feral pigeons congregate on the roofs of buildings and at the University barns. Flocks (highest count 90) feed on the University farmland just northeast of the campus. Nesting occurs in or on various buildings.

* Mourning Dove, Zenaidura macroura: Regular, common, spring transient, breeding summer resident and fall transient, from early-March to late-October. Regular, uncommon, winter visitant (largest wintering flock: 51 in 1955-56). Subspecies: *Z. m. carolinensis*. The banding of 664 mourning doves at University Park (by Rensel, Wood, Howarth, Chambers, Runner, Sheldon and Bordner) had the follow-
ing 16 recoveries: 5 in northern Florida (Alachua, Chiefland, Gainesville, Lecanto and Newberry); 3 in Alabama (Hale, Moundville and Ozark); 2 in Georgia (Danville and Nahunta); 3 in South Carolina (2 Orangeburg and Yemassee); 3 in North Carolina (Albemarl, Liberty and Valdese); and 1 in Louisiana (Pitkin).

**Passenger Pigeon, Ectopistes migratorius:** Extinct, apparently was a regular abundant spring transient, breeding summer resident and fall transient, from early-March to late-October. The last record for this species in central Pennsylvania seems to be 1892 (Davis, 1922).

**CUCKOOS: Cuculidae**

*Yellow-billed Cuckoo, Coccyzus americanus:* Regular, uncommon, spring transient, breeding summer resident and fall transient, from early-May to early-October, with stragglers to early-November. The Yellow-billed Cuckoo was unusually common in the fall of 1954. Subspecies: *C. a. americanus.*

*Black-billed Cuckoo, Coccyzus erythropthalmus:* Regular, fairly common, spring transient, breeding summer resident and fall transient, from early-May to early-October. In this region the Black-billed Cuckoo usually is more numerous than the Yellow-billed Cuckoo.

**BARN OWLS: Tytonidae**

Due to their nocturnal habits, all owls seem scarce and difficult to find.

*Barn Owl, Tyto alba:* Uncommon, permanent resident, with some individuals migrating. The most likely place to find a Barn Owl is in the top of a silo, but occasionally they are found in quarries, large dead trees, pine plantings and fields with tall grass. The first record of this species in this region was a male collected December 10, 1928, in State College (Ross and Wood). The first breeding record: 2 nests in spring of 1948 in University Park; one of the young banded on June 22 was shot on November 7 at Eudora, Arkansas. A nestling Barn Owl banded in 1951 in University Park was picked up 5 years later at Pine Grove Mills.

The nesting season of this species is irregular, sometimes occurring in mid-winter. Subspecies: *T. a. pratincola.*

**TYPICAL OWLS: Strigidae**

When a flock of noisy crows is discovered, investigate, since the crows are probably chasing an owl.

*Screech Owl, Otus asio:* Fairly common, permanent resident. In this region 2 color phases occur; about 75 per cent of the individuals are of the gray phase and 25 per cent of the individuals are of the red
phase. This species is found dead frequently upon highways where it is the victim of auto traffic. Subspecies: *O. a. naevius.*

**Great Horned Owl, *Bubo virginianus***: Uncommon, permanent resident in wooded areas. Great Horned Owls can be heard hooting on December nights since they nest early, beginning in late-February. Eighteen Great Horned Owls were removed from the State Game Lands in the Barrens in 1953 and 8 in 1954 (Reed). Subspecies: *B. v. virginianus.*

**Snowy Owl, *Nyctea scandiaca***: Occasional, rare, winter visitant from late-November to late-January. Comes into the United States from Canada in cyclic invasions which occur about every 4 or 5 years or multiples thereof. Records in Centre County: 1 collected January 1891 (Musgrave, 1909); 5 collected between December 3, 1949 and January 3, 1950; 1 seen December 26, 1953; and 1 seen November 28-30, 1957.

**Barred Owl, *Strix varia***: Uncommon, permanent resident in the wooded areas. Subspecies: *S. v. varia.*

**Long-eared Owl, *Asio otus***: Uncommon, permanent resident in the wooded areas. The most likely place to find this species is in the pine plantings near the University sawmill. Subspecies: *A. o. wilsonianus.*

**Short-eared Owl, *Asio flammeus***: Irregular, uncommon, fall transient, winter visitant and spring transient, from late-October to early-May. The best place to find this species is a large field (on University farms or in Boogersburg area) with tall grass, about 1 foot high. Numbers of Short-eared Owls recorded within 15 miles of University Park: in the winter of 1951-52, 0; 1952-53, 0; 1953-54, 4; 1954-55, 7; 1955-56, 7; 1956-57, 5; and 1957-58, 1. Subspecies: *A. f. flammeus.*

**Saw-whet Owl, *Aegolius acadicus***: Irregular, very rare, fall transient, winter visitant, and spring transient, from mid-November to late-March. One spring record: 1 cripple seen May 26, 1913 (Harlow, 1918). Subspecies: *A. a. acadicus,* collected in Stone Valley, Bear Meadows, Snowshoe, the Barrens and the campus of the University.

**GOATSUCKERS: Caprimulgidae**

**Whip-poor-will, *Caprimulgus vociferus***: Regular, common, spring transient, breeding summer resident, and fall transient, from mid-April to late-September, with stragglers to early-October. Whip-poor-wills seem more numerous in the Barrens than in the mountains. Look for this species in the evening on the cinder road which goes through the Barrens. Subspecies: *C. v. vociferous.*

**Common Nighthawk, *Chordeiles minor***: Regular, common, spring transient, breeding summer resident, and fall transient, from early-May (rarely late-April) to mid-September with stragglers to early-October. Fall migrating flocks, usually 10 to 25 birds, but occasionally
as many as 100 birds, are seen from early-August to early-October. From observations in the summer of 1920 and earlier, Burleigh (1931) states "this species is one of the scarcest of breeding birds here . . ." At that time most of the campus buildings had high pitched roofs. Construction of many buildings with flat, gravel-covered roofs has apparently caused the increase of Common Nighthawks as breeding birds in University Park. Subspecies: C. m. minor.

**SWIFTS: Apodidae**

*Chimney Swift, *Chaetura pelagica*: Regular, very common, spring transient, breeding summer resident and fall transient, from mid-April to early-October. One early-April arrival record, April 7, 1957 (B. Bordner). During migration large quantities of chimney swifts may be seen entering or leaving certain campus chimneys used for roosting places.

**HUMMINGBIRDS: Trochilidae**

*Ruby-throated Hummingbird, *Archilochus colubris*: Regular, fairly common, spring transient, breeding summer resident and fall transient, from late-April to early-October with stragglers to mid-October. First spring arrivals generally are seen hovering at wild columbine (*Aquilegia canadensis*).

**KINGFISHERS: Alcedinidae**

*Belted Kingfisher, *Megaceryle alcyon*: Regular, fairly common, spring transient, breeding summer resident, and fall transient, from late-March to late-November. Regular, uncommon, winter visitant. Subspecies: M. a. alcyon.

**WOODPECKERS: Picidae**

*Yellow-shafted Flicker, *Colaptes auratus*: Regular, common, spring transient, breeding summer resident and fall transient, from mid-March (most flickers come in early-April) to late-October. Irregular, rare, winter visitant (1953-54). Subspecies: C. a. lutus. In University Park, two Yellow-shafted Flickers (1 immature male collected July 25, 1953, and 1 adult male banded April 11, 1955) had a rare nutritional disorder (identified by Dr. F. H. Test of the University of Michigan) that produces pink in the place of yellow on some primaries and rectrices.

*Pileated Woodpecker, *Dryocopus pileatus*: Uncommon, permanent resident, on the mountains and in valley woodlots; occasionally seen on the campus of the University. This species was rare in central Pennsylvania before 1940. Subspecies: D. p. abieticola.
Red-bellied Woodpecker, *Ceratodus carolinus*: Sporadic, very rare, visitant. Records: 1 seen March 17, 1917 (Burleigh, 1924); 1 seen January 24, 1924 (Large); 1 seen February 1, 1955, along Spring Creek (Bordners); and 1 seen July 16, 1956, in Pine Grove Mills (Fuller).

*Red-headed Woodpecker, *Melanerpes erythrocephalus*: Regular, fairly common, spring transient, breeding summer resident and fall transient, from late-April to late-November. Regular (absent in 1944-45 and 1955-56), uncommon, winter visitant among the larger oaks on the campus of the University, and occasionally in other wooded areas. Subspecies: *M. e. erythrocephalus*.

*Yellow-bellied Sapsucker, *Sphyrapicus varius*: Regular, uncommon, spring transient from early-April to mid-May, and fall transient from late-September to late-October with stragglers in November. Regular, rare, winter visitant. Subspecies: *S. v. varius*.

**Hairy Woodpecker, *Dendrocopos villosus*: Uncommon, permanent resident, found mostly in extensive wooded areas.


**TYRANT FLYCATCHERS:** Tyrannidae

Birds of this family usually are observed flying out from exposed perches to get insects and returning to the same perching places. Most species are identified by their calls. The members of the genus *Empidonax* seen in the autumn should be recorded only as “Empidonax flycatchers” since their identification is uncertain.

*Eastern Kingbird, *Tyrannus tyrannus*: Regular, uncommon, spring transient, breeding summer resident and fall transient, from late-April to mid-August with stragglers to mid-September.

**Western Kingbird, *Tyrannus verticalis*: Accidental, very rare, fall visitant. Only 1 record: 1 seen September 3, 1957, 2 miles west of University Park (Bordners and Wood).

**Great Crested Flycatcher, *Myiarchus crinitus*: Regular, spring transient, breeding summer resident and fall transient, from late-April to mid-September.

**Eastern Phoebe, *Sayornis phoebe*: Regular, common, spring transient, breeding summer resident and fall transient, from mid-March (occasionally appears in early-March) to late-October. Regular, rare, winter visitant, usually along Spring Creek.

*Yellow-bellied Flycatcher, *Empidonax flaviventris*: Regular, rare, spring transient in May, and fall transient apparently in September and October.
Acadian Flycatcher, *Empidonax virescens*: Regular, rare, spring transient, reported (Harlow, 1918) breeding summer resident and fall transient, from early-May to apparently late-September.

Traill's Flycatcher, *Empidonax traillii*: Regular, rare, spring transient, breeding summer resident and fall transient, from early-May to apparently late-September. This species occurs in the brush-covered fields east and south of Centre Furnace Pond.

*Least Flycatcher, Empidonax minimus*: Regular, uncommon, spring transient, breeding summer resident and fall transient, from late-April apparently to late-September.

*Eastern Wood Pewee, Contopus virens*: Regular, common, spring transient, breeding summer resident and fall transient, from early-May to early-October.

Olive-sided Flycatcher, *Nuttalornis borealis*: Regular, rare, spring transient in May, and fall transient in late-August and September.

LARKS: Alaudidae

*Horned Lark, Eremophila alpestris*: Regular, common, spring transient, breeding summer resident and fall transient, February to November. Regular, common, winter visitant. Larks inhabit large fields. In winter when these fields are covered with snow, larks congregate along roads which have been cleared. Manure strips, or freshly spread manure on frozen ground, are excellent places to find larks. Subspecies: In the vicinity of University Park *E. a. praticola* has been seen in all months and collected on January 10, January 30, February 24, March 24, and April 10; and *E. a. alpestris* has been seen from mid-November to late-January, and collected on January 19.

SWALLOWS: HIRUNDINIDAE

In early spring the best place to observe swallows is over a lake or pond where they are feeding. During the summer they are easiest found at the particular nesting habitat used by the species. In the autumn, look for them on power lines.

Tree Swallow, *Iridoprocne bicolor*: Regular, common, spring transient, uncommon breeding summer resident at Black Moshannon Lake and uncommon fall transient, from late-March to late-September with stragglers to late-October. This species formerly nested at Scotia Pond (Harlow, 1918; Burleigh, 1931).

Bank Swallow, *Riparia riparia*: Regular, rare, spring transient from mid-April to mid-May, and fall transient from late-July to early-September. There are more spring than fall records.
Rough-winged Swallow, Stelgidopteryx ruficollis: Regular, common, spring transient, uncommon breeding summer resident and common fall transient, from early-April to early-September.

*Barn Swallow, Hirundo rustica: Regular, very common, spring transient, breeding summer resident and fall transient, from late-March to late-September with stragglers to mid-October. Subspecies: H. r. erythrogaster.

*Cliff Swallow, Petrochelidon pyrrhonota: Regular, uncommon, spring transient, breeding summer resident and fall transient, from mid-April to early-September with stragglers to early-October. Nesting colonies usually are on or in unpainted barns with less than a dozen nests (largest colony: 42 nests in 1930 at Pennsylvania Furnace). Subspecies: P. p. pyrrhonota.

Purple Martin, Progne subis: Regular, uncommon, spring transient, breeding summer resident and fall transient, from late-March to late-August with stragglers in September. Nesting colonies at Rockview State Penitentiary, in State College, at Harner Fruit Farm (south of State College) and at Bellefonte, Milesburg, Pleasant Gap Fish Hatchery, Spring Mills, Kishacoquillas Valley, etc.

JAYS and CROWS: Corvidae

*Blue Jay, Cyanocitta cristata: Regular, uncommon, spring transient from mid-April to early-May; uncommon, breeding summer resident; common, fall transient from mid-September to mid-October; and uncommon, winter visitant. This species was unusually plentiful in the fall of 1954. Subspecies: C. c. bromia.

*Common Raven, Corvus corax: Rare, permanent resident in the mountains. The recommended place to find ravens is the Alan Seeger Forest area. Ravens are occasionally seen from Tussey Fire Tower. Subspecies: C. c. principalis.

*Common Crow, Corvus brachyrhynchos: Regular, common spring transient in March, breeding summer resident, fall transient in October and November, and winter visitant. Centre County appears to have fewer crows in the 1940 and 1950 decades than in the 1930 decade. Subspecies: C. b. brachyrhynchos.

TITMICE: Paridae

*Black-capped Chickadee, Parus atricapillus: Common, permanent resident. Some individuals migrate or at least wander more during the spring and fall. Fall movement begins in mid-October in central Pennsylvania, according to bird-banding records (Wood). Subspecies: P. a. practicus present in all months, and P. a. atricapillus present during the winter (earliest record: November 21).
Boreal Chickadee, _Parus hudsonicus_: Sporadic, very rare winter visitant, from early-November to mid-March. Only 3 records: 1 seen mid-winter of 1921-22 in State College (Cowell), 1 seen November 3, 1954 in southern part of the Barrens (Bordners), and 1 seen January 15 to March 14, 1955 at the University sawmill (Wood, Curry, Hue and others).

*Tufted Titmouse, _Parus bicolor_: Common, permanent resident which wanders considerably during the winter.

**NUTHATCHES: Sittidae**

*White-breasted Nuthatch, _Sitta carolinensis_: Common, permanent resident. Subspecies: _S. c. cookei_.

Red-breasted Nuthatch, _Sitta canadensis_: Regular, uncommon, spring transient from mid-April to late-May, and fall transient from early-September to late-November. Regular, rare, winter visitant.

**CREEPERS: Certhiidae**

*Brown Creeper, _Certhia familiaris_: Regular, uncommon, spring transient in March and April; rare, breeding summer resident (at Bear Meadows, Alan Seeger Monument, Shingletown Gap and Black Moshannon State Park); uncommon, fall transient from late-September to mid-November; and rare winter visitant. Subspecies: _C. f. americana_.

**WRENS: Troglodytidae**

*House Wren, _Troglodytes aedon_: Regular, common, spring transient, breeding summer resident and fall transient, from mid-April to mid-October with stragglers to early-November. Subspecies: _T. a. aedon_.

*Winter Wren, _Troglodytes troglodytes_: Regular, uncommon, spring transient from early-April to mid-May, and fall transient from mid-September to mid-October. Regular, uncommon, winter visitant. Subspecies: _T. t. hiemalis_.

*Bewick's Wren, _Thryomanes bewickii_: Irregular, rare, spring transient, breeding summer resident and fall transient, from early-April to early-October, but seldom seen after August 1. This species has been seen in State College (nested in author's yard), at Scotia ore pits and once on top of Mt. Nittany where the highway crosses from Pleasant Gap to Centre Hall. A pair of Bewick's Wrens was found July 13, 1957, in Clinton County near State Camp (Wood).

*Carolina Wren, _Thryothorus ludovicianus_: Rare, permanent resident (after 1950).
Long-billed Marsh Wren, *Telmatodytes palustris*: Regular, rare, spring transient from mid-April to mid-May, probably a breeding summer resident, and fall transient from mid-September to late-October with stragglers to early-November.

Short-billed Marsh Wren, *Cistothorus platensis*: Irregular, rare, spring transient in May, and fall transient from early-August to late-September with stragglers to late-October. No records for 1952 to 1957.

**MOCKINGBIRDS and THRASHERS: Mimidae**


*Catbird, Dumetella carolinensis*: Regular, common, spring transient, breeding summer resident and fall transient, from late-April to mid-October with stragglers in November. Irregular, rare, winter visitant (1954-55 one survived to January 16, 1955-56 one survived to December 7, and 1956-57 one survived to January 15).

*Brown Thrasher, Toxostoma rufum*: Regular, common, spring transient, breeding summer resident and fall transient, from mid-April to mid-October. Subspecies: *T. r. rufum*.

**THRUSHES and BLUEBIRDS: Turdidae**

*Robin, Turdus migratorius*: Regular, abundant, spring transient, breeding summer resident and fall transient, from late-February to early-November with stragglers lingering throughout November. Regular, uncommon, winter visitant. In spring the first Robins occasionally come in mid-February. Spring flocks have been observed in the woods on the mountains as late as April 8. Subspecies: *T. m. migratorius*. Robins banded at University Park have been recovered in Pennsylvania (Butler), South Carolina (Conway), Georgia (Augusta, Fort Valley and Manchester) and Florida (Jacksonville and Panama City).

*Wood Thrush, Hylocichla mustelina*: Regular, fairly common, spring transient, breeding summer resident and fall transient, from late-April to early-October.

*Hermit Thrush, Hylocichla guttata*: Regular, fairly common, spring transient from late-March to mid-May, apparently rare breeding summer resident at Black Moshannon State Park (in dry deciduous woods with elevation of 1900 to 2000 feet above sea level) and fairly common fall transient from late-September to late-October. Irregular, rare, winter visitant (1950-51 one survived to December 29, and 1953-54 one survived to February 14). Subspecies: *H. g. fasoni*.
*Swainson's Thrush, *Hylocichla ustulata*: Regular, common, spring transient from late-April to early-June, and fall transient from late-August to mid-October with stragglers to late-October. Subspecies: *H. u. swainsoni*.


*Veery, Hylocichla fuscescens*: Regular, rare, spring transient, apparent breeding summer resident, and fall transient from early-May to mid-September. This species was unusually plentiful in the spring of 1956. Subspecies: *H. f. fuscescens*.

*Eastern Bluebird, *Sialia sialis*: Regular, common, spring transient, breeding summer resident and fall transient, from late-February to early-November. Regular, rare, winter visitant. Subspecies: *S. s. sialis*.

**OLD WORLD WARBLERS, GNATCATCHERS AND KINGLETS: Sylviidae**

*Blue-gray Gnatcatcher, Polioptila caerulea*: Regular, rare, spring transient, breeding summer resident and fall transient, from mid-April to early-September but seldom seen after June 1. This species was first recorded in this region in 1927 (Large).

*Golden-crowned Kinglet, Regulus satrapa*: Regular, common, fall transient, winter visitant and spring transient, from late-September to late-April. Subspecies: *R. s. satrapa*.

*Ruby-crowned Kinglet, Regulus calendula*: Regular, common, spring transient from early-April to mid-May, and fall transient from mid-September to late-October. Regular, rare, winter visitant. Summer record: 1 male June 3, 1957, in Black Moshannon State Park (Wood).

**PIPITS: Motacillidae**

*Water Pipit, Anthus spinolletta*: Regular, uncommon, spring transient from late-February (generally arrives in late-March) to mid-May, and fall transient from late-September to late-November. Pipits are found in large fields on plowed ground or among stubble.

**WAXWINGS: Bombycillidae**

*Cedar Waxwing, Bombycilla cedrorum*: Regular, common, spring transient; uncommon, breeding summer resident; common fall transient; and irregular, fairly common, winter visitant (absent in winters 1951-52 and 1954-55). Movements of this species are erratic; however, the spring migration is chiefly in May and the fall migration is mainly in October.
SHRIKES: Laniidae


Loggerhead Shrike, *Lanius ludovicianus*: Regular, rare, spring transient from mid-March to early-May, and fall transient from late-August to late-November. Irregular, very rare, winter visitant.

STARLINGS: Sturnidae

"Starling, *Sturnus vulgaris*: Common, permanent resident, abundant in late-summer and early-fall with some individuals migrating. Apparently the spring migration occurs from mid-February to the end of March, and the fall migration occurs from late-September to early-November (Kessel, 1953). This species was first recorded at University Park on February 29, 1916 (Burleigh, 1924). In mid-June Starlings begin to appear in flocks which become a nuisance. Subspecies: *S. v. vulgaris*.

VIREOS: Vireonidae

White-eyed Vireo, *Vireo griseus*: Apparently an occasional, very rare, spring transient, summer visitant or fall transient, in early-May to mid-September. Reported in spring 1927 (Large), June 23, 1951 (Clarke) and a few other times.

*Yellow-throated Vireo, Vireo flavifrons*: Regular, rare, spring transient, breeding summer resident and fall transient, from late-April to mid-September, but seldom seen after June 1.

*Solitary Vireo, Vireo solitarius*: Regular, uncommon, spring transient, rare breeding summer resident and uncommon fall transient, from mid-April to late-October with stragglers to early-November. Subspecies: *V. s. solitarius*.

*Red-eyed Vireo, Vireo olivaceus*: Regular, abundant, spring transient, breeding summer resident and fall transient, from early-May to mid-October. This species is one of the most common birds of the woods.


Warbling Vireo, *Vireo gilvus*: Regular, uncommon, spring transient, rare breeding summer resident and uncommon fall transient, from late-April to late-September.

WOOD WARBLERS: Parulidae

The recommended places in which to find warblers are (1) Bear Meadows (for breeding warblers); (2) Penn State Forestry Camp (Charter Oak), an area of bushy fields and streams in Stone Valley;
(3) the dry Barrens; (4) Henszey's Swamp, a big tree-and-shrub-filled pot hole on the State Game Lands No. 176; (5) Shingletown Gap and Musser's Gap, hemlock-covered gaps on Tussey Mountain with dense rhododendron in the lower parts; (6) the Rock, a small cliff by Spring Creek on Rockview Penitentiary land; (7) Oak Hall Swamp with its surrounding trees; (8) Buffalo Run, a swampy stream bordered with trees; (9) the area along the abandoned railroad bed that runs north from Pennsylvania Furnace, and (10) the filter beds at the University Park sewage plant.

The spring warbler migration begins in late-March, reaches a climax between May 10 and 15, and ends in late-May. The fall warbler migration begins in early-August, reaches a climax in late-September, and ends in late-October, with stragglers remaining to early-January but rarely surviving until spring.

*Black-and-White Warbler, *Mniotilta varia*: Regular, fairly common, spring transient, uncommon breeding summer resident and fairly common fall transient, from mid-April to late-September with stragglers to November 1.


Worm-eating Warbler, *Helmitheros vernalis*: Regular, rare, spring transient, breeding summer resident and fall transient, from early-May to mid-August. One of the better places to find this species is in Waddle Gap on Bald Eagle Mountain.

Golden-winged Warbler, *Vermivora chrysoptera*: Regular, uncommon, spring transient, rare breeding summer resident and uncommon fall transient, from late-April to early-September with stragglers to mid-September.

Blue-winged Warbler, *Vermivora pinus*: Casual, very rare, spring transient. Only 1 record: 1 seen May 11, 1956 at Pine Grove Mills (Fuller and Bordners).

*Tennessee Warbler, *Vermivora peregrina*: Regular, common, spring transient in May, and fall transient from late-August to mid-October with stragglers to early-November.

Orange-crowned Warbler, *Vermivora celata*: Occasional, very rare, spring transient in May, and fall transient in October. Recorded in 1936, 1948 and 1950. Casual, very rare, winter visitant (1953-54 one survived to January 10).

Nashville Warbler, *Vermivora ruficapilla*: Regular, common, spring transient from late-April to mid-May; rare, breeding summer resident in the Barrens and Bear Meadows: and common, fall transient from early-September to mid-October.
Parula Warbler, *Parula americana*: Regular, uncommon, spring transient, rare breeding summer resident and uncommon fall transient, from late-April to early-October.

*Yellow Warbler, *Dendroica petechia*: Regular, common, spring transient; uncommon, breeding summer resident; and uncommon, fall transient, from mid-April to late-July. One late record: 1 seen September 6, 1935 (May). Subspecies: *D. p. aestiva*. Late fall transients may be of other races.

*Magnolia Warbler, *Dendroica magnolia*: Regular, common, spring transient, uncommon breeding summer resident and common fall transient, from early-May to mid-October.

*Cap May Warbler, *Dendroica tigrina*: Regular, common, spring transient from late-April to late-May, and fall transient from early-September to mid-October with stragglers to late-October. Irregular, rare, winter visitant (1946-47 one survived to December 25 and in 1952-53 one survived to February 2).

*Black-throated Blue Warbler, *Dendroica caerulescens*: Regular, uncommon, spring transient, breeding summer resident on mountains and fall transient, from late-April to mid-October with stragglers to late-October. Subspecies: *D. c. caerulescens*.

*Myrtle Warbler, *Dendroica coronata*: Regular, very common, spring transient from early-April to mid-May, and fall transient from mid-September to late-October. Regular, uncommon, winter visitant; a few survive the winters. Subspecies: *D. c. coronata*.

*Black-throated Green Warbler, *Dendroica virens*: Regular, common, spring transient, breeding summer resident and fall transient, from late-April to mid-October with stragglers to late-October. Subspecies: *D. v. Virens*.


*Blackburnian Warbler, *Dendroica fusca*: Regular, fairly common, spring transient, uncommon breeding summer resident on mountains and fairly common fall transient, from late-April to late-September with stragglers to mid-October.

*Chestnut-sided Warbler, *Dendroica pensylvanica*: Regular, common, spring transient; uncommon, breeding summer resident; and common, fall transient, from late-April to late-September.

*Bay-breasted Warbler, *Dendroica castanea*: Regular, fairly common, spring transient in May, and fall transient from late-August to early-October with stragglers to late-October.
*Blackpoll Warbler, *Dendroica striata*: Regular, uncommon, spring transient from early-May (May 10) to early-June, and fall transient from mid-September to late-October.

**Pine Warbler, Dendroica pinus**: Regular, fairly common, spring transient, breeding summer resident in the Barrens and fall transient, from late-March to early-October.

**Prairie Warbler, Dendroica discolor**: Regular, common, spring transient, breeding summer resident in the Barrens and around the Penn State Forestry Camp (Charter Oak) and fall transient, from late-April to early-September. Subspecies: *D. d. discolor*.

**Palm Warbler, Dendroica palmarum**: Regular, uncommon, spring transient from early-April to mid-May, and fall transient from early-September to mid-October with stragglers to early-November. Subspecies: *D. p. hypochrysea* has been caught in bird-banding traps, and *D. p. palmarum* has been observed.

*Ovenbird, Seiurus aurocapillus*: Regular, common, spring transient, breeding summer resident and fall transient, from late-April to mid-October. Subspecies: *S. a. aurocapillus*.

**Northern Water thrush, Seiurus noveboracensis**: Regular, uncommon, spring transient from late-April to late-May, and fall transient from early-August to mid-October.

**Louisiana Water thrush, Seiurus motacilla**: Regular, uncommon, spring transient; rare breeding summer resident; and, uncommon, fall transient, from mid-April to mid-August.

*Kentucky Warbler, Oporornis formosus*: Casual, rare, spring transient in May. Records: 1 seen May 8, 1927, at Oak Hall (Ross); 1 female found dead May 10, 1953, on campus of the University (Paxton); and 1 seen May 20, 1953, in Bear Meadows (D. Bordner and Ferguson).

*Connecticut Warbler, Oporornis agilis*: Regular, rare, fall transient from early-September to mid-October.

**Mourning Warbler, Oporornis philadelphia**: Regular, rare, spring transient in May, and fall transient from early-August to late-September.

*Yellowthroat, Geothlypis trichas*: Regular, abundant, spring transient, breeding summer resident and fall transient, from late-April to late-October with stragglers to early-November. Irregular, rare, winter visitant (1951-52 one survived to January 6). Subspecies: *G. t. trichas*. *G. t. brachidactylus* was found in Centre County on northern edge (BURNSIDE Township) at an elevation of 2200 feet above sea level on June 11, 1957 (Wood).
*Yellow-breasted Chat, *Icteria virens*: Regular, fairly common, spring transient, breeding summer resident and uncommon fall transient, from late-April to late-August, but seldom seen in August. Stragglers: 1 seen November 6, 1954, in State College (Bordners) and 1 banded October 7, 1957, in State College (Bordners). Subspecies: *I. v. virens*.

*Hooded Warbler, Wilsonia citrina*: Regular, fairly common, spring transient, breeding summer resident and fall transient, from early-May to late-September.

*Wilson's Warbler, Wilsonia pusilla*: Regular, uncommon, spring transient in May, and fall transient from early-September to early-October with stragglers to mid-October. Subspecies: *W. p. pusilla*.

*Canada Warbler, Wilsonia canadensis*: Regular, common, spring transient, breeding summer resident and fall transient, from early-May to mid-September with stragglers to late-October.

*American Redstart, Setophaga ruticilla*: Regular, common, spring transient, breeding summer resident and fall transient, from late-April to mid-October. Subspecies: *S. r. ruticilla*.

**WEAVER FINCHES: Ploceidae**

*House Sparrow, Passer domesticus*: Very common, permanent resident in communities and at farms. This species first entered central Pennsylvania about 1876 (Barrows, 1889). Subspecies: *P. d. domesticus*. Partial albinism occurs occasionally. One pale specimen exhibiting imperfect albinism was collected January 23, 1954, at Centre Hall (C. R. Studholme).

**MEADOWLARKS, BLACKBIRDS and ORIOLES: Icteridae**

*Bobolink, Dolichonyx oryzivorus*: Regular, uncommon, spring transient, breeding summer resident and fall transient, from late-April to early-October with stragglers to late-October. This species inhabits large fields with tall grasses.

*Eastern Meadowlark, Sturnella magna*: Regular, common, spring transient, breeding summer resident and fall transient, from early-March to late-October with stragglers in November. Regular, uncommon, winter visitant. Subspecies: *S. m. magna*.

*Western Meadowlark, Sturnella neglecta*: Accidental, very rare, spring visitant. Records: 1 April 9 to May 1, 1956, on farmland, at University Park.

*Redwinged Blackbird, Agelaius phoeniceus*: Regular, very common, spring transient, breeding summer resident and fall transient, from late-February to late-October with stragglers in November. Regular, rare, winter visitant. Subspecies: *A. p. phoeniceus*.
Orchard Oriole, *Icterus spurius*: Irregular, rare, spring transient, breeding summer resident and fall transient, from late-April apparently to late-August but seldom seen after June 1.

*Baltimore Oriole, Icterus galbula*: Regular, common, spring transient, breeding summer resident and fall transient, from late-April to mid-September with stragglers to late-November.

Rusty Blackbird, *Euphagus carolinus*: Regular, uncommon, spring transient from mid-March to mid-May, and fall transient from early-October to mid-November. Irregular, uncommon, winter visitant.

*Common Grackle, Quiscalus quiscula*: Regular, common, spring transient, breeding summer resident and fall transient, from late-February to mid-November. Regular, rare, winter visitant. Subspecies: Most of the Common Grackles in this region are *Q. q. stonei*; only a few are *Q. q. versicolor*. Of 369 Common Grackles banded in 1944-57, only 1 was a typical *Q. q. versicolor*.

*Brown-headed Cowbird, Molothrus ater*: Regular, common, spring transient, breeding summer resident and fall transient, from mid-March to late-October. Regular, uncommon, winter visitant. At the University, on campus lawns in early-July, this species begins to gather in flocks which increase to large numbers as summer progresses. Subspecies: *M. a. ater*.

**TANAGERS: Thraupidae**

*Scarlet Tanager, Piranga olivacea*: Regular, fairly common, spring transient, breeding summer resident and fall transient, from late-April to mid-October. First spring arrivals are generally found in the tops of oaks (*Quercus*) at the time of bloom.

**GROSBEAKS, FINCHES, SPARROWS and BUNTINGS: Fringillidae**

*Cardinal, Richmondena cardinalis*: Common, permanent resident. In May 1912 this species was first recorded in this region (in Stone Valley, Huntington County; Harlow, 1912), and in 1918 it was reported to be a regular, rare, breeding resident in Centre County (Harlow, 1918). In the early part of the 1930's the Cardinal still was seen only occasionally, in the gaps of the Seven Mountains and in State College. In the 1940's this bird became common throughout the area in suitable habitats. Subspecies: *R. c. cardinalis*.

*Rose-breasted Grosbeak, Pheucticus ludovicianus*: Regular, uncommon, spring transient from late-April to late-May with stragglers to early-June, and fall transient from mid-August to mid-October.

**Blue Grosbeak, Guiraca caerulea**: Casual, very rare, visitant. Records: I reported seen in May 1947 in the Barrens (Cowell).
*Indigo Bunting, Passerina cyanea: Regular, common, spring transient, breeding summer resident and fall transient, from late-April to late-September with stragglers to mid-October.

Dickcissel, Spiza americana: Accidental, very rare, visitant. Only 1 record: 1 male seen June 1, 1958 near Waddle (Bordners).

*Evening Grosbeak, Hesperiphona vespertina: Irregular, rare to abundant, fall transient, winter visitant and spring transient, from early-October (Oct. 4) to late-April with stragglers to late-May. Recorded in the winters of 1929-30, 1941-42, 1945-46, 1946-47, 1949-50, 1951-52 (abundant), 1952-53, 1954-55, 1955-56 (abundant), and 1957-58. This species is found chiefly in Box Elder (Acer negundo) and at feeding stations supplying sunflower seeds. Experiments show that a flock of 24 of these birds may consume a pound of sunflower seeds in a single day (Wood). Subspecies: H. v. vespertina. Banding of 3500 Evening Grosbeaks at University Park at 2 stations (D. Bordner and Wood) has had 28 recoveries: 12 in Pennsylvania, 1 in North Carolina, 1 in Wisconsin, 6 in New York, 1 in Connecticut, 1 in Massachusetts, 1 in Vermont, 1 in Maine, 1 in Ontario, 2 in Quebec, and 1 in New Brunswick.

Also caught at University Park were 54 Evening Grosbeaks which had been banded in the following places: 7 in Pennsylvania, 1 in Michigan, 11 in New York, 2 in New Jersey, 12 in Connecticut, 1 in Rhode Island, 7 in Massachusetts, 1 in Vermont, 8 in New Hampshire, 2 in Maine, 1 in Ontario, and 1 in Nova Scotia.

*Purple Finch, Carduelis purpurea: Regular, common, spring transient from mid-April to mid-May, and fall transient from early-September to late-October. Summer record: 2 males and 1 female throughout June 1957 in Black Moshannon State Park (Wood). Regular, rare to uncommon, winter visitant. Subspecies: C. p. purpurea.


*Pine Siskin, Spinus pinus: Regular, uncommon, fall transient, winter visitant and spring transient, from early-October to early-June. Subspecies: S. p. pinus.
*American Goldfinch, *Spinus tristis*: Regular, very common, spring transient, breeding summer resident and fall transient whose time of migration is erratic. Regular, common, winter visitant. Subspecies: *S. t. tristis*.


**White-winged Crossbill, Loxia leucoptera**: Casual, rare, winter visitant from early-November to mid-May. Recorded in the winters of 1915-16 and 1922-23.

*Rufous-sided Towhee, Pipilo erythrophthalmus*: Regular, common, (abundant in the Barrens) spring transient, breeding summer resident and fall transient, from late-March to late-October with stragglers to late-November. Irregular, rare, winter visitant (1954-55 one survived to January 26). Subspecies: *P. c. erythrophthalmus*.

**Savannah Sparrow, Passerculus sandwichensis**: Regular, common, spring transient, breeding summer resident and fall transient, from mid-March to late-October with stragglers to early-November. This species inhabits grassy fields.

**Grasshopper Sparrow, Ammodramus savannarum**: Regular, common, spring transient, breeding summer resident and fall transient, from early-April to mid-September with stragglers to late-October. Casual, very rare, winter visitant (1955-56 one survived to January 15). This species seems to prefer dry grassy fields, and is more often heard than seen.

**Henslow's Sparrow, Passerherbula henslowii**: Regular, uncommon, spring transient, breeding summer resident and fall transient, from mid-April to early-October. This species inhabits old abandoned weedy fields.

**Sharp-tailed Sparrow, Ammospiza caudacuta**: Irregular, very rare, spring transient in May, and fall transient from late-September to late-November. Recorded in Centre County in 1932, 1933, 1948, 1949 and 1955.

*Vesper Sparrow, Poecetes gramineus*: Regular, common, spring transient, breeding summer resident and fall transient, from late-March to early-November with stragglers to mid-November. Subspecies: *P. g. gramineus*.

**Lark Sparrow, Chondestes grammacus**: Accidental, rare, spring transient, breeding summer resident and fall transient. Only 1 record: one pair found nesting on June 27, 1981 in a 3-acre field at the Penn
State Nature Camp near Alan Seeger Monument, in the Seven Mountains, by Miss Farida Willey. An adult was photographed at its nest by George T. Hastings.

*Slate-colored Junco, *Junco hyemalis*: Regular, very common, fall transient, winter visitant and spring transient, from mid-September to late-April with stragglers to mid-May. Subspecies: *J. h. hyemalis*. Among 642 Slate-colored Juncos banded over a 14-year period at University Park, 1 was aberrant, having a distinct white throat and white around the eyes. Juncos resembling the Oregon Junco, *Junco oreganus*, have been observed: 1 January 25, 1955 (D. Bordner), 1 November 6, 1955 (Curry), and 1 December 10, 1957 (D. Bordner). A Slate-colored Junco banded by William J. Moughener on April 15, 1957, at Hollidaysburg was picked up April 25, 1957, in Rochester, N. Y.

*Tree Sparrow, *Spizella arborea*: Regular, common, fall transient, winter visitant and spring transient, from early-October to late-March with stragglers to late-April and 1 record May 22, 1957, in the Barrens. Subspecies: *S. a. arborea*.

*Chipping Sparrow, *Spizella passerina*: Regular, common, spring transient, breeding summer resident and fall transient, from late-March to late-October with stragglers to mid-November. Occasional, rare, winter visitant (1956-57 two survived entire winter on campus, seen daily). Subspecies: *S. p. passerina*. One banded at University Park was recovered in Georgia (Collins).

*Field Sparrow, *Spizella pusilla*: Regular, common, spring transient, breeding summer resident and fall transient, from mid-March to late-October with stragglers to late-November. Irregular, rare, winter visitant (1953-54 and 1956-57). Banding shows the peak of migrations in April and October. This species was abundant in the fall of 1952 and 1953. Subspecies: *S. p. pusilla*.

*White-crowned Sparrow, *Zonotrichia leucophrys*: Regular, uncommon, spring transient from late-April to late-May, and fall transient from late-September to late-October with stragglers to late-November. Subspecies: *Z. l. leucophrys*.


Fox Sparrow, *Passerella iliaca*: Regular, uncommon, spring transient from early-March to late-April with stragglers to late-May, and fall transient from mid-October to late-November. Occasional, rare, winter visitant (1944-45); unusually plentiful spring of 1955.
Lincoln's Sparrow, *Melospiza lincolnii*: Regular, uncommon, spring transient in May, and fall transient from early-September to late-October.

Swamp Sparrow, *Melospiza georgiana*: Regular, fairly common, spring transient, breeding summer resident at Black Moshannon State Park, and fall transient, from late-March to early-November. Regular, rare, winter visitant (usually at Pennsylvania Furnace Swamp and Centre Furnace Pond).

*Song Sparrow, Melospiza melodia*: Regular, common, spring transient, breeding summer resident and fall transient, from late-February to early-November. Regular, uncommon, winter visitant. Banding shows migrations are from late-February to early-April and from mid-September to early November. The song period may begin in late-January but it does not reach peak performance until March. The fall song period is from late-September to late-October. Subspecies: *M. m. melodia*.

Lapland Longspur, *Calcarius lapponicus*: Regular, rare, fall transient, winter visitant and spring transient, from late-October to early-April. This species is observed usually after the departure of Water Pipits (Curry).

Snow Bunting, *Plectrophenax nivalis*: Irregular, uncommon, fall transient, winter visitant and spring transient, from mid-October to late-March. Recorded in the winters of 1953-54, 1954-55 and 1957-58 with the largest flock containing 30 birds. This species is usually found on freshly manured frozen fields and among corn stubble.

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