

Jim

Second Supplementary Breeding Bird
Census of Big Sand Mound Nature Preserve
Louisa County, Iowa - 1984

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Environmental Services Division
Iowa-Illinois Gas and Electric Company
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Jim -
I have included the most significant
records in my report, but you might glean
some tidbits from the entire report.
My review of Iowa Birds in the Loos.

Pete

AIMS AND METHODS

The 1984 survey re-evaluated the breeding population of the preserve and attempted to determine any changes which could be connected to the plant operation. The plant was not operating during 1982 and 1983. Three visits were made in June as in 1983, this year they were on June 5, 19 and 28. The ten point counts were repeated between 5:00 and 7:00 a.m. CST. under favorable weather conditions as described in the 1982 report. Details are recorded in Table 1. After the point count was completed more remote areas were visited and the ten small boxes and many of the Wood Duck boxes were checked. The following table shows the changes noted in category for the breeding species present.

OBSERVATIONS BY CATEGORY - 1984 REVISION

These listings are an update of the listing on pages 2 and 3 of the 1982 and page 2 of the 1983 reports. Details of the basis for the changes can be found in the full species listing which follows:

Probable Breeders (X)

Belted Kingfisher
Northern Mockingbird

Others Seen (In June)

Canada Goose
Blue-winged Teal
Red-shouldered Hawk
Spotted Sandpiper

The number of species recorded during the breeding season now totals 97, with 31 confirmed and 32 probable breeders.

RECOMMENDATIONS

There was no indication of any changes in the breeding population as a result of plant operation. Six of the nine warbler boxes located were used, two by warblers, three by wrens and one by tree swallows. It would be desirable to have the nesting boxes checked in early to mid-June of 1985, but this could be accomplished on a volunteer day. They should also be cleaned out in the fall of 1984. Since Double-crested Cormorants were present during every June visit some provision for their nesting should be made. The nesting platforms above Lock 13 near Clinton were taken out by ice during the winter of 1983-84. Most of the birds nested in dead trees near the Lock and those not present probably went to other locations such as Big Sand Mound Nature Preserve. A utility pole with 4 or 6 nesting platforms placed in Beatty's Pond or Spring Lake is recommended. If the Company wishes to pursue this recommendation, I will be glad to assist in getting the proper specification.

SPECIES LIST

This list includes all species seen on the three visits. The three numbers represent the average number found on the 1982, 1983 and 1984 point count censuses. The order of species is the same as that used in 1982 and 1983 to make comparison easier. The symbols + and x preceding the name denotes the breeding status category; + for confirmed breeding and x for probable breeding.

- + Pied-billed Grebe (2.4, 2.7, .3) - Down from previous years but seen on every visit (twice away from point count locations). Never more than one per visit and there was no obvious reason for the decrease.

Double-crested Cormorant (.7, .3, 2.7) - Seen on both Spring Lake and Beattys Pond. Increase possibly due to destruction of nesting sites in Whiteside Co., Illinois. No natural nesting sites exist, but an artificial site could be provided.

Great Blue Heron (1, 5.7, 4.7) - Nearly the same numbers as 1983, probably from a colony established in 1983 just across the Mississippi at Blanchard Island. The preserve may have been a factor in the establishment of this new heron colony.

Great Egret (1.4, 3.3, 1) - Back to 1982 levels for a species which shared the new colony with Great Blue Herons in 1983, but might not have nested that close in 1984.

- x Green-backed Heron (1.1, 1.7, 1.7) - This year seen in all parts of the preserve, not just the south end.

Canada Goose (0, 0, 2) - Six seen near the south end of the preserve on 5 June, the first observed in June. This species could nest on the preserve, but the habitat is not ideal. If encouragement of Canadian Geese were desired, it could be done with nesting platforms which look like a wire basket welded to a post and placed in a pond. However, geese can dominate a small pond and negatively affect other species.

- x Mallard (1.6, 1.3, 2.3) - Present in constant numbers throughout the preserve, but not twice at the same point.

Blue-winged Teal (0, 0, .3) - One flushed from Spring Lake on 5 June. As with Canada Goose this species could nest but the habitat is not ideal.

- + Wood Duck (12.4, 46.3, 16.3) - A total of eight broods seen, number per brood down from 1983. No evidence of their use of boxes erected for Wood Ducks and Hooded Mergansers was noted.
 - + Hooded Merganser (2.3, 1.3, 0) - Not seen on point count route, but one was on Beattys Pond on 5 June and a brood of 7 or 8 half grown young were there with a female on 28 June. On 17 May an early brood of 1/3 grown young were seen south of the cooling ponds south of the preserve. Four large young and a female were here on 5 June, probably from the same brood and a single bird, female or young, on 19 June.
- Turkey Vulture (0, .7, 0) - Not seen on a point count, but 5 later in the morning on 5 June and 6 on 28 June indicate they are still present. They seldom become active early in the day.
- Red-shouldered Hawk (0, 0, .3) - One seen flying near Beattys Pond on 5 June. This shy hawk is easily overlooked and was expected in this prime habitat. It is an endangered species for Iowa.
- x Red-tailed Hawk (.1, 1, 2.3) - More widely distributed than in previous years, it was found twice at points 4 and 8.
 - x Bobwhite (.4, 1.7, .3) - One heard 28 June at point 9 was the only encounter. The habitat is not good for the Bobwhite.
- Killdeer (.4, .7, 1) - Again they were flying over the preserve. They nested on the plant site, three banded 28 June near the water cooling tower.
- Spotted Sandpiper - One seen 19 June at Beattys Pond. This species could nest but the habitat is not ideal. It is secretive and it would be difficult to locate a nest.
- Rock Dove (.6, 2, 2) - Birds from the plant fly near the preserve occasionally, but have not been seen to land.
- + Morning Dove (18.1, 11, 16.7) - Still a common breeder which utilizes the pine plantings for nesting.
 - + Yellow-billed Cuckoo (3.4, 3.7, 2) - Down a bit, but two cuckoos seen briefly on 28 June were not identified to species. If they were Yellow-billed the count would be 2.6.

- + Black-billed Cuckoo (2.3, .3, 1) - Back to more normal numbers after being down in 1982.
- + Great Horned Owl (0, .7, 1) - Seen three times at points 3 and 9 on 5 June and point 7 on 19 June.
- Chimney Swift (2, 2.3, 1.7) - Flying over on several occasions, this species is unlikely to nest on the preserve since it lacks nest sites.
- x Belted Kingfisher (0, 1.3, .7) - One seen 5 June at point 1 and again 28 June at the same location as well one on 19 June at Beattys Pond. Since the point is on the edge of the preserve the birds may be nesting nearby but not actually on the preserve which seems to lack a good clay bank for a nesting burrow.
- + Common Flicker (3, 2.7, 2.7) - No change in status.
- x Pileated Woodpecker (1.1, 1, .3) - Heard at Spring Lake and seen at the north end of Beattys Pond on 5 June.
- x Red-bellied Woodpecker (.7, 1.3, .3) - Down a bit at point counts, but several were seen later in the day on two of the visits.
- + Red-headed Woodpecker (7.3, 5, 4.3) - Nearly the same status as 1983, well distributed on the preserve.
- x Hairy Woodpecker (.3, 1, 1.3) - Similar status to 1983, well distributed.
- + Downy Woodpecker (3, 3.3, 4) - Widespread and common as previously.
- x Eastern Kingbird (1.4, 2.3, 1.7) - This year they were most regular near the site of the gun club building (point 6).
- + Great Crested Flycatcher (6.3, 3.7, 5) - They remain common in the heavily wooded areas of the preserve.
- x Willow Flycatcher (.4, .7, 0) - Not found on point count areas, but one heard 5 June along Beattys Pond.
- + Eastern Wood Pewee (2.1, 2.3, 1.7) - A regular species in the heavily wooded areas.
- x Horned Lark (2, 2.3, 2) - Still restricted to the southwest side of the preserve.

- + Tree Swallow (1, 2.7, 4) - This species has been helped by the nesting boxes, especially and surprisingly Wood Duck boxes. On 5 June, 5 Wood Duck boxes and one Warbler box contained nests and eggs of Tree Swallows with the total of 7 eggs and 22 very small young. The next visit, 19 June, 5 Tree Swallows were banded and 5 others were too large to catch. It is unusual to have Tree Swallows utilizing large boxes, but the fact they were placed only about 1-1/2 meters over the water probably made them attractive.

- Barn Swallow (2.3, 1, 7.1) - Again this species was occasionally foraging over the preserve.

- + Blue Jay (12, 13, 7.9) - Common again in all areas of the preserve.

- + American Crow (23.4, 16.3, 42.7) - Large flocks of 30 and 40 on 19 and 28 June raised the average considerably. The figure would be 19.7 without these two flocks.

- + Black-capped Chickadee (5.1, 5.3, 9.3) - Several family groups seen at the point count spots increased the average sharply but they do seem to be even more widely spread.

- x Tufted Titmouse (1.1, .7, 1) - Still in the same areas near Beattys Pond plus an observation in the pines at point 8.

- x White-breasted Nuthatch (1.3, 1.3, 1.3) - Found only at the site of the hunt club building, point 6.

- + House Wren (8.6, 7.3, 8.7) - Wrens are holding their numbers. On 5 June, 3 nests were found in warbler boxes with a total of 14 eggs.

- x Northern Mockingbird (0, 0, .7) - Noted at point 4 (gate) on 5 June and 19 June, but not present on 28 June. It was calling and displaying as well as chasing other birds.

- x Gray Catbird (2, 6, 2.1) - Down a bit, being present at Beattys Pond and Spring Lake only. None at south end of preserve this year.

- + Brown Thrasher (4.9, 4.3, 2.3) - Also down, but still well distributed throughout the preserve.

- + American Robin (7.6, 3, 5) - Common and widely distributed.

- x Wood Thrush (1.1, .3, 1.3) - Found on every visit near Spring Lake, especially the southwestern edge.
- x Cedar Waxwing (8.9, 23.3, 4.3) - No large flocks seen as was the case in 1983, so the number is more accurately the breeding population.
- + European Starling (82.1, 134, 29) - Several flocks seen 29 June but not nearly as many as previous years, a good sign.
- x Yellow-throated Vireo (.7, .7, 2) - A nice increase for this bird with observations at point 6 and Spring Lake as well as the south end of the preserve.
- x Red-eyed Vireo (1, 3.3, 2) - Present south of Beattys Pond, along the west border at point 8 and the southwest edge of Spring Lake.
- x Warbling Vireo (4, 5, 3) Primarily in the Beattys Pond and Spring Lake areas and down a bit.
- + Prothonotary Warbler (.4, 2.3, 2) - The increase of 1983 was maintained. On 5 June, one box contained 6 eggs and a natural cavity near a box contained small young in the Spring Lake area as well as two territorial males at the northeast end of Beatty's Pond where no boxes were placed. On 19 June three eggs were found in another Spring Lake box, but were predated by 28 June. Of the ten boxes, one was not located, but a singing male warbler was in the area. Two of the nine found were used by warblers.
- x Common Yellowthroat (2, 7.1, 1) - It was found once near the south end of the preserve and twice near Spring Lake.
- x Yellow-breasted Chat (.3, .3, .7) - Found twice, 19 and 28 June, at point 9 in the same area as in previous years.
- American Redstart (.3, 0, .3) - Heard at Spring Lake on 28 June.
- House Sparrow (1.6, 1.3, .3) - The only observation was one at point 8 on 28 June.
- Eastern Meadowlark (.3, .3, .7) - On 5 June one was heard at points 4 and 9. These sites are both near burns which could have made the area of interest to meadowlarks which didn't stay past 5 June.

- Western Meadowlark (0, .3, .3) - One at point 8 on 28 June was the only observation.
- + Red-winged Blackbird (24.1, 7.7, 10.7) - Some fledged young seen on 28 June which increased the count. The dryness of the area keeps Redwing numbers down.
- + Northern Oriole (19.7, 21, 20) - Orioles continue as one of the most common species on the preserve. A nest with young was found on 19 June near Beattys Pond.
- + Common Grackle (22.7, 18.7, 40) - Several large flocks of fledged young brought up the average sharply for this lover of pines.
- + Brown-headed Cowbird (15.6, 22.7, 11.7) - Cowbirds were back down to more reasonable levels, seen at 18 of the 30 stops.
- + Northern Cardinal (16.1, 17.7, 12.7) - A small decrease for this widely distributed bird.
- x Rose-breasted Grosbeak (5.1, 2.7, 1.3) - Down again for no apparent reason. The four sightings were at four different points.
- + Indigo Bunting (14, 19.3, 13.7) - Back to 1982 levels after a fine showing in 1983 and widely distributed, found at all 10 points on 19 June.
- + Dickcissel (10, .3, 1.3) - Up a bit after a terrible 1983. This bird still faces problems primarily in the wintering areas. Found at four different points but recorded on each visit.
- x American Goldfinch (9, 14, 13.7) - They maintained the increase of 1983 which could reflect a benefit of burning.
- x Rufous-sided Towhee (.6, 0, .3) - Found only at point 9 on 19 June.
- + Grasshopper Sparrow (8.7, 9.7, 5.7) - Down a bit but still a common prairie bird present in all grassy ares.
- + Lark Sparrow (2.1, 7.7, 3.3) - Still present in good numbers for a very localized breeding bird. They are partial to the western border of the preserve along the pines.

- x Chipping Sparrow (.7, 4.3, 1.7) - Regular but less common than in 1983 along the western border of the preserve.
- + Field Sparrow (17.3, 12, 8.7) - Down a bit, but still common in all grassy areas.

SPRING OBSERVATIONS

On two occasions in spring I visited the preserve, 14 April and 17 May. The following observations were noteworthy. On 14 April, 1 Common Loon was on Beattys Pond, 3 Black-crowned Night Herons were at Goose Lake and the following migrant ducks were on Beattys Pond: 4 Blue-winged Teal, 6 Gadwall, 2 American Wigeon, 8 Ring-necked Ducks, 10 Lesser Scaup, 2 Bufflehead, pair of Hooded Mergansers and 2 Red-breasted Mergansers along with 50+ American Coot. A singing male Black-throated Green Warbler was the second earliest ever for Iowa. The 17 May visit, part of a "big day" spring count, turned up 2 Common Nighthawks, 1 Least Flycatcher, 1 Veery, 1 Swainson's Thrush, 2 Tennessee Warblers, 2 Chestnut-sided Warblers, 2 Blackburnian Warblers, 1 Blackpoll Warbler, 1 Wilson's Warbler and 8 Lark Sparrows, many of the latter on the 1984 burn. Weather information for all visits given in Table 1.

TABLE I

Date	Arrived (CST)	Departed (CST)	No. Obs.	Weather	Temp F.	Wind-mpg	No. of #Species Seen
4/14	7:00 am	1:00 pm	2	OC,rain	40-48	8-12	54
5/17	7:00 am	8:30 am	3	Clear	60-65	8-10	60
6/5	5:25 am	12:30 pm	3	OC shower	70-85	10-20	68
6/19	5:30 am	11:00 am	2	Mostly clear	70-80	5-8	61
6/28	5:30 am	9:00 am	4	Mostly clear	65-75	0-2	63

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