

BREEDING BIRD CENSUS RESULTS, 1993
CROOKED SLOUGH WOODS
MATURE BOTTOMLANDS HARDWOOD FOREST
UPPER MISSISSIPPI RIVER NATIONAL WILDLIFE & FISH REFUGE
ROLLINGSTONE, MINNESOTA

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Latitude: 44, 05', 48" N
Longitude: 91, 44', 15"W
USGS Quad: Winona-West MN-WIS 44091-16-TF-024

Plot Size: 12.2 ha.
First year published: 1993
Most recently published: 1993
Years censused: 1

For more about the Breeding Bird Census program, see:
["A Walk Through a Flood of Song,"](#)
at [Endangered Birds and Habitats](#).

1993 CENSUS OF CROOKED SLOUGH WOODS

Red-eyed vireo, 13.0
American robin, 12.0
Northern oriole, 9.5
Brown-headed cowbird, 8.0
House Wren, 7.5
Great-crested Flycatcher 6.5
American Redstart, 6.5
Song Sparrow, 6.0+
Common yellowthroat, 5.5
Eastern Pee Wee, 5.0
Northern Cardinal, 4.0
Gray Catbird, 4.0
Blue-gray Gnatcatcher, 4.0
Rose-breasted Grosbeak, 4.0
Blue Jay, 3.5
Yellow-bellied Sapsucker, 3.0
Yellow-shafted Flicker, 2.5
Wood Duck, 2.0
Red-bellied Woodpecker, 2.0
Hairy Woodpecker, 2.0
Downy Woodpecker, 2.0
White-breasted Nuthatch, 2.0
Black-capped Chickadee, 2.0
Brown Creeper, 2.0
Yellow-billed Cuckoo, 1.0
Barred Owl, 1.0
Pileated Woodpecker, 1.0
Yellow-throated Vireo, 1.0
Warbling Vireo, 1.0
Indigo Bunting, 1.0

VISITORS:

Red-headed Woodpecker
Black-throated Green Warbler
Northern Waterthrush
Ovenbird
Scarlet Tanager

VISITS	DATE	START	END	HOURS	START TEMP.	WIND SCALE
1	5-26	5:15am	11:00	5.75	6	3
2	6-3	5:30am	11:30	6.00	4	0
3	6-6	5:00am	10:30	5.50	10	0
4	6-12	4:50am	9:50	5.00	19	0
5	6-21	5:10am	9:40	4.50	13	1
6	7-10	5:30am	10:00	4.50	15	1
7	7-12	5:30am	9:30	4.00	11	2
8	7-14	5:30am	10:00	4.50	12	1

Visits = 8 Maximum observers/trip = 1
 Total Census Hours = 39.75 Sunrise visits = 8
 Sunset visits = 0 Mean start temp. for census days = 11.25
 Minimum temp. = 4 Maximum temp. = 23

WEATHER:

MEAN TEMPS: May 15.0; June 19.8, July 21.9
 NORMAL MEAN TEMPS: May 15.2; June 19.1; July 23.0
 PRECIPITATION: May 135 mm June 270mm; July 92.5 mm
 NORMAL PRECIP: May 82.5 mm; June 97.5 mm; July 95.0 mm

Temperatures and precipitation came from U.S. Weather Station, LaCrosse, Wisconsin.

DESCRIPTION OF PLOT: A square plot (350 X 350 m) with closed canopy of unlogged common cottonwood and silver maple covering 90 percent of the plot. Under story includes box elder, black willow, green ash. Stinging nettles primary ground cover. Mean canopy height, 22 m (range 5-25 m). A seasonal drainage (1-5 m wide) runs through east end of the plot. Approximately 50 percent of the drainage is covered by cottonwood and maple canopy, 50 percent open. >80 percent of the plot was under 0.5 to 3.5 m water after 6/21. Approximately one-half of nettles withered.

(Peterson's Field Guides were the authorities for plant names.)

EDGE: >95 percent of plot bordered by similar cottonwood/maple forest. 50 m of north border bordered by drainage. High canopy runs 500 m north of drainage, then

bordered by willow marsh. Stream 300 m from s.w. corner of plot, >1,000 m from n.w. corner. Mississippi R 1,500 m e. of plot. Elevation 220 m.

TOPOGRAPHY AND ELEVATION: Plot is essentially level, but proximity to drainage affects period/levels of inundation. Elevation 660.

REMARKS: Precipitation for May and June was a combined 225 mm above normal. Mississippi River levels during survey dates ranged from 10.77 cm to 25.77 cm above normal. The first four visits, before 6-21, <10 percent of the plot was under water. By 6-21 >80 percent of the plot was 0.5 to 3.4 m underwater. The last four visits were made in waders and by canoe. The slosh of plastic against water and the bumping of fiberglass against floating dead wood and other debris reduced detection during these visits.

SPECIFIC DECREASES IN CONTACTS AFTER INUNDATION: 63 Northern Oriole contacts were made visits 1-4, before inundation. 14 contacts were made visits 5-7, after inundation. None were made the last visit. A flock of >100 Common Grackles visited the plot visit 5, 6-21, in high canopy. >100 Common Grackles and >50 Redwing Blackbirds visited the plot visits 6,7,8. If the blackbirds affected contacts with orioles, another high-canopy nester remained constant. Red-eyed Vireo contacts were 41 visits 1-4; 49 visits 5-8. 20 contacts were made with Rose-breasted Grosbeaks visits 1-4, two on visit 5, 0 afterward. One Song Sparrow cluster was established entirely after inundation. Gray Catbirds sang short, quiet songs after inundation. All previous Song Sparrow territories continued to be represented after inundation. Gray Catbirds sang short, quiet songs after inundation. 22 Gray Catbird contacts were made visits 1-4, 12 during visits 5-8. All Gray Catbird territories were represented by contacts visits 5-6; two territories were represented visits 7-8. 41 contacts were made with Common Yellowthroats visits 1-4; ten were made visits 5-8. No Yellowthroat contacts were made in 3 separate territories, visits 6, 7, 8.

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