

Transmittal Letter For Board Meeting

December 11, 2006
(For the Board Meeting of December 21, 2006)

COMMITTEE ON PUBLIC INFORMATION
AND EDUCATION

President Terrence O'Brien and
Members of the Board of Commissioners
O F F I C E

AGENDA SUMMARY: Report on Shorebirds at the Calumet Water Reclamation Plant

Ladies and Gentlemen:

The Calumet Water Reclamation Plant (CWRP) is an important facility for the Metropolitan Water Reclamation District of Greater Chicago (District) to carry out its mission of protecting the water environment. However, it is also important as a place of refuge for shorebirds in their annual migration. On September 16, 2006, a group of 24 birders visited the CWRP to observe the population of shorebirds resting at the site during their fall migration. The group leaders had requested the visit because of their earlier experience in observing shorebirds at this location in the years preceding 2001. The group leaders remarked that this location was one of the best of the areas to observe shorebirds.

Among the group was Joel Greenberg, a resident of Westmont, Illinois, an environmental consultant and a noted author of numerous articles on nature topics and of two books: *A Natural History of the Chicago Region*, University of Chicago Press, Chicago, Illinois, 2002 and *A Birder's Guide to the Chicago Region*, Northern Illinois University Press, Dekalb, 1999. At the request of the General Superintendent, Mr. Greenberg has written a brief explanation of the shorebirds that visit the area and observed at the September 16 visit. This explanation is attached and will be placed on the District's web site.

Respectfully submitted,

Richard Lanyon
General Superintendent

RL:dl
Attachment

Shorebirds of the Calumet Water Reclamation Plant of the Metropolitan Water Reclamation District of Greater Chicago

By Joel Greenberg

Of the 33 species of shorebirds that regularly breed, winter, or migrate through the Upper Mississippi and Great Lakes Region, all but two are known by me to have been seen at the MWRD Calumet Water Reclamation Plant. (These two, the woodcock and the piping plover, have occurred in the Calumet region and may on occasion have visited the treatment plant if there had only been someone there to identify and report them.) In addition, three much rarer shorebirds have also put in appearances: the red phalarope generally winters and migrates off both coasts, while the ruff and sharp-tailed sandpiper are even less frequent visitors from Eurasia. (The presence of the latter, in fact, was only the second recorded instance of the species in Illinois.) There is no place else of comparable size in the state, and few if any in the Midwest, that can boast a list of 34 shorebirds.

The plant not only attracts a wide range of species, but hundreds of individuals as well. To give as one example, birders visiting on an almost weekly basis in 2000 during the peak migration period from July through September had 565 birds as their high count on August 13, and over 365 birds on five other visits. While shorebird numbers at sites in the Chicago region vary greatly from year to year depending on water levels, there is probably no place as reliable as the plant for being assured of seeing seasonally large concentrations of these birds.

Each of our local shorebirds belongs to one of three avian families, the Charadriidae (plovers), Recurvirostridae (avocet), and Scolopacidae (everything else). These are fascinating birds that differ greatly in size, plumage and behavior. Marbled godwits and whimbrels are about 18 inches long with huge bills while the diminutive “peeps”, a colloquial term used by birders to describe such similar looking sandpipers as the least, semipalmated, and western, typically run just over 6 inches. The American avocet is a tall stately bird strikingly marked in black and white whereas the brown-backed semipalmated plover is a squat creature sporting a dark band across its white breast. Dowitchers can be identified from across a pond by their distinctive sewing machine like probing; yellowlegs, on the other hand, feed by sweeping their thin bills from side to side. Perhaps the most unusual group of shorebirds is the phalaropes which differ from their relatives in at least two significant ways. While most shorebirds spend their days wading, members of this genus are just as apt to be swimming. But what most sets them apart is that in breeding plumage the females are more colorful than the males. This works for the phalaropes because it is the inconspicuous males who incubate the eggs and raise the young.

But despite the differences, most of our shorebirds do share things in common. Virtually the whole lot depends on wetlands, where they actively seek invertebrates in saturated ground or shallow water. In the words of one recent study, “the food resource is narrowly

partitioned among species according to body size, leg length, and bill morphology which are closely related to the substrate conditions and water depths where each species forages” (Gates et al 2006).

A large majority of these birds breed in the arctic tundra or boreal forests of Canada and Alaska and winter in Central and South America. Twenty-nine of our species put down only once or twice in between nesting and wintering destinations, in order to rest and build up fat reserves necessary to continue the trip. Some, like American golden plover and solitary sandpiper, may linger up to ten days at stopovers, while others such as stilt sandpipers and willets may only tarry for a day or two.

Migration, of course, allows birds to utilize resources when and where those are in greatest abundance, be it the northern summer, temperate spring and fall, or austral winter. But as a chain in the avian life cycle, migration is only as strong as its weakest link. For many shorebirds that weak link may well be finding suitable feeding areas in the vast country they must traverse as they make their way to and from the breeding and wintering grounds. This is especially true for those birds migrating over the interior portions of the continent. Agriculture, urbanization, beachfront development, and other activities have reduced the capacity of inland North America to support migrating shorebirds.

A look at the Calumet region provides an excellent case study of an area long known to attract shorebirds. Its geographic location at the southern end of Lake Michigan helped concentrate birds, for migrants following the lakefront would be funneled southward towards some of the best shorebird habitat in the Midwest. The Illinois portion alone once held 22,000 acres of marshland. Native people valued the place as a prime hunting ground, as did the Europeans who followed. Old descriptions attest to the time when waterbirds darkened the sky. Scientific-minded bird seekers began exploring the area in the mid to late 1800s and found much to occupy themselves. In 1873, for example, they discovered the Midwest’s last nesting long-billed curlew, the largest of all shorebirds and one that has been reported from the Chicago area only three times since 1900.

Although the miles of rippling reeds and verdant flats that once adorned the Calumet have largely disappeared under an expanding city, genetic impulses and geography continue to bring birds. (The Gates study cited earlier identifies the Calumet area as still being a significant migration staging area for shorebirds.) They try to eke out a living where the water gathers in suitable quantities, neither too much, nor too little. In most years there are a few acceptable locations, among which are often Dead Stick Pond (South of 122nd Street, east of Stony Island Avenue) and Big Marsh (East of Stony Island Avenue, north of 116th Street). The existence of these areas creates a synergy whereby more shorebirds can be sustained over a longer period of time thus increasing the numbers visiting any one site, including the MWRD Calumet plant. It is therefore vital to protect the wetlands (permanent and temporary) that still remain in the Calumet region. But, as of now, no local shorebird habitat is as good or reliable as the Calumet plant, which has more and more become an isolated oasis in the midst of inhospitable ground.

For both shorebirds, and the people who study them, the Calumet plant is an extremely important place.

Sources

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**SHOREBIRDS THAT HAVE BEEN RECORDED
AT THE METROPOLITAN WATER RECLAMATION DISTRICT'S CALUMET
WATER RECLAMATION PLANT**

Black-bellied Plover	Fairly common to uncommon
American Golden Plover (4)	Fairly common to uncommon
Semipalmated Plover	Fairly common to uncommon
Killdeer	Common
American Avocet	Rare
Greater Yellowlegs (4)	Fairly common to uncommon
Lesser Yellowlegs	Common to fairly common
Ruff	Very rare
Solitary Sandpiper (4)	Fairly common to uncommon
Willet	Rare
Spotted Sandpiper	Common to fairly common
Upland Sandpiper (4)	Uncommon to rare
Whimbrel (4)	Rare
Hudsonian Godwit (4)	Rare
Marbled Godwit (4)	Rare
Ruddy Turnstone	Fairly common to uncommon
Red Knot	Rare
Sanderling	Fairly common to uncommon
Semipalmated Sandpiper	Fairly common to uncommon
Western Sandpiper	Uncommon to rare
Least Sandpiper	Common to fairly common
White-rumped Sandpiper	Uncommon to rare
Baird's Sandpiper	Uncommon to rare
Pectoral Sandpiper	Fairly common
Sharp-tailed Sandpiper	Very rare
Dunlin	Fairly common to uncommon
Stilt Sandpiper	Uncommon
Buff-breasted Sandpiper (4)	Uncommon to rare
Short-billed Dowitcher (4)	Fairly common to uncommon
Long-billed Dowitcher	Uncommon to rare
Wilson's Snipe	Fairly common to uncommon
Wilson's Phalarope (4)	Uncommon to rare
Red-necked Phalarope	Rare to very rare
Red Phalarope	Rare to very rare

Note 1: Species marked (4) are those that are common or locally abundant within the Midwest, with large numbers known or suspected to occur, and the region is known or suspected to be important to supporting hemispheric or regional species populations (Gates et al. 2006).

Note 2: Status relates to Chicago region and is from Carpenter and Greenberg (1999).