

GULL AND TERN CONTROL AT ST. CLAIR BEACH

At the request of George McGordic, Engineering Director of the Huron-Clinton Metropolitan Authority, Merrill Petoskey, Robert Benson and I visited St. Clair Beach, Harrison Township, Macomb County, to observe gull and tern activities. We met John Olson, resident engineer and D. W. Bingham, civil engineer, representing Mr. McGordic. The purpose of this meeting was to discuss possible control measures of the terns and gulls that had taken over the sand beach recently created by dredging operations.

The people in charge of the Parkway development were concerned about the nuisance of terns to the public when the beach is opened. Although construction work is in progress the extensive beach, not officially open to the public, offers solitude that is attractive to these birds.

At the time of our visit, July 17, 1948, we estimated there were approximately 300 common terns using the most easterly point of the beach. This nesting colony was confined to approximately three acres of beach.

The population of the colony has shown a marked reduction in the past five days as the young were taking to the air. Mr. Olson and Mr. Bingham estimated that the peak concentration numbered somewhere between 1500 and 1800 terns. By comparison to tern colonies that I have observed in other parts of Michigan this could be considered a small nesting colony. The marked reduction in numbers of terns at this date appears significant. Our visit to the area was on a Monday morning, and the few visitors who found their way to the incomplected beach (officially closed) during the week-end probably had a marked effect in dispersing the birds that could actually fly. The effects of a few people disturbing these birds indicates what might be expected when the beach is crowded with 20 to 40 thousand bathers and picknickers.

Terns have formerly nested on several small sand islands off the middle channel of the St. Clair Flats a few miles to the east of the present colony. Due to the high lake levels in recent years these islands have been covered with water. It appears that this colony shifted its location because of necessity and the St. Clair beach was selected for lack of a more secluded site.

The concensus of opinion of those present was that development of a parking lot at the present nesting site as called for in the plans, and the intensive use of the park will eliminate the problem. The terns will probably move to a site of less disturbance.

We were somewhat surprised at the large number of dead birds, mainly young, on the nesting site. Approximately 60 carcasses were observed in walking through approximately two acres of nesting grounds. Indications were

that predation was heavy. Another possibility is the conflict with the gulls concentrated at this site. An estimated 150 herring and ring-billed gulls were resting on the beach. Mr. Olson said he had not observed visitors or workmen attempting to destroy the birds. Since the beach is adjacent to a large marsh many natural predators such as mink, weasel, skunk etc. could be responsible.

In the event intensive public use does not disperse the terns several types of control measures are possible. Oil treatment of eggs to kill the embryo is one method that has been used successfully on an experimental basis with gulls on the east coast. Mr. Ivan Spears, Bowdoin College, Brunswick, Maine, has used formalin emulsion and also an elgital emulsion spray to control gulls in Maine. The use of oil sprays were about 70% effective. In order to carry out this egg destroying measure permits will be necessary from the Fish and Wildlife Service, and the Department of Conservation. The National Audubon Society will probably register criticism if this measure is employed.

Another possible measure would be to increase predation sufficiently to disperse the birds from the present site. Biologically these two measures may be feasible but both are subject to severe public criticism.

The least objectionable control measure would be to encourage the birds to move to a more secluded location. Creating an isolated island or barrier reef off the east terminal point of the developed beach could serve dual purposes. A barrier beach off the exposed point would serve to reduce the serious erosion from wave action, collect drifts of sea-weed that now litter the beach and serve as a site for water birds to concentrate. It is suggested that if erosion control structures are considered in future development that the possible value of a barrier beach for birds be considered. With this plan the aesthetic value of having the birds present can be maintained for the public without the objectionable features now experienced. In defense of the birds I wish to add, there is considerable value in encouraging gulls to visit the area from the standpoint of beach sanitation. Gulls serve as excellent scavengers, and are usually considered highly valuable in assisting with clearing the beach of debris. It is also important to note that the gulls do most of their feeding in early morning hours before the beach crowds arrive. The aesthetic value of having the birds present should also be considered.

Serious consideration of developing a barrier island as suggested is of course dependent upon whether or not the terns continue to use the beach, following more development and intensive use. Also, on whether the costs of construction can be justified by a dual purpose structure.

In summary it is suggested that if and when control measures become necessary the latter control measure be considered.

HJM:cb
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