

## Sebewaing Bay Waterfowl Sanctuary

As the result of a marked increase in hunting pressure on the Saginaw Bay Marshes there has been increasing demands for sanctuaries and waterfowl food plantings. These proposals and demands come directly from sportsmen wishing to improve hunting. There is every indication that hunting pressure in this area will continue to increase for some time. Accompanied with this increased hunting pressure there will be renewed demands for the Department to do something to improve hunting conditions.

The disturbance from this increased hunting pressure drives wildfowl from the area and hurries them along on their southward migration. Keeping this in mind it appears logical that the Department's activities to improve hunting should involve means of holding birds in the vicinity of the shooting grounds. Sanctuaries together with an abundance of choice foods has proven successful in various parts of the United States in holding migrating birds and there is every reason to believe that the same techniques can be applied here. The following project is presented for consideration with the above thoughts in mind. This project differs from those previously proposed by sportsmen in that poorly drained farm land is used for development rather than the marsh itself.

Proposal The proposed program should meet the full approval of the sportsmen as both improved feeding grounds and a sanctuary will be provided.

I wish to propose developing and managing the shore property on Sebewaing Bay in Section 12 and 13 T15N R8E known as the Fred Kroll farm entirely for waterfowl. At present we own about 123 acres of the proposed project site and will need the remaining 206 acres in order to have a sufficient block of land for this project.

The development program includes: (1). Utilizing cultivated fields for grain crops such as millets, smartweeds, buckwheat and barley; a portion of these fields to be flooded in the fall and left for waterfowl. (2). Putting in dikes and water gates so that individual fields will be impoundment units that may be flooded or drained. Complete control of habitat is possible by regulation of the water plus the use of machinery in preparation of the seed bed of the impoundments. (3). Planting trees and shrubs to screen off visual disturbances. (4). Maintain grazing areas for geese. (5). Closing the property to hunting.

I feel certain that the food and protection provided will hold local and migrating birds in the vicinity of Sebewaing Bay and thus contribute greatly towards improved hunting on approximately 22 square miles of public marsh. Under this arrangement an effective sanctuary will be provided without taking a large area of former public marsh from the hunter. Waterfowl food plantings can be economically provided and the habitat can be kept under control.

Judging from the results of past experimental plantings we can be reasonably certain that, with fluctuating water levels, wave action, together with damage

caused to certain species of aquatics by carp, we cannot hope for such success from plantings in the Bay itself. The type of habitat manipulation possible by the proposed method has proven successful and is offered as a substitute.

Although intensive development has not been encouraged in the past I feel that present conditions warrant such a program as outlined for this heavily hunted wildfowl area.

Besides being a productive management measure this development program will also serve as an experimental demonstration area for this type of marsh management. Concentrations of waterfowl and their behavior often prove to be a public attraction.

The property under consideration is ideally located for this type of development. The soils and the natural features such as drainage ditches, beach ridges and other natural features lend to the ease of operation and development.

Attached are maps showing the property considered for development and also the existing natural features. Examination of these maps show narrow, sandy beach ridges, paralleling the shoreline of the bay. These beaches are from three to four feet above the present lake level. Besides serving as natural barriers to hold water they provide ample protection against damage from wave action. Between these old beaches are strips of flat land. The spoil from the drainage ditches that cross the ridges and flat areas provide additional banks to further divide the property into small impoundment units. With the construction of a few more retaining banks, and repair of some of the existing natural banks the entire area could be converted into units capable of being flooded or drained. Small concrete spillways with plank stop logs would be sufficient for water gates in the banks. These impoundment units would range in size from 10 to 30 acres.

Water is available for flooding by pumping from the ditches directly connected to the Bay. These ditches may also be used in draining the water from the same fields when desired. The soils of the flat areas range from clay loam to loamy sand. The better drained parts have produced good crops.

By raising grains and flooding the fields in the fall numbers of wildfowl will concentrate here and a large volume of waterfowl foods can be produced on a relatively small area managed in this way. During years of heavy fall rains I have seen unharvested crops in these same fields attract and hold thousands of ducks in the Bay. This program provides means for duplicating with regularity and improving similar conditions. Besides holding waterfowl, both ducks and geese, to improve hunting there is a good chance of developing a local flock of geese in this area by maintaining breeding stock at the sanctuary. Maintaining a semi-tame flock of Canada geese to serve as breeders and to attract migrating birds is recommended. Resident flocks of geese have resulted from similar releases in Michigan and there is a good possibility of achieving similar results. This area at present is a popular geese concentration area but they do not stay long.



While there is no question about the eventual success of the program it should not be started until we own all necessary lands. Hunting leases and high land prices are likely to prevent future purchases once we start such a program. Since this development program requires the remainder of the Kroll property the first step is to acquire the remaining 204 acres of land. A house and barn suitable for housing a resident caretaker and equipment is on the property. The work at this sanctuary together with the maintenance and development of hunting and fishing access sites on the Saginaw Bay will require the services of a man and equipment. This site also appears to be a good station for this type of maintenance crew.

Costs of development and operation would vary according to the intensity of development. A few of items to be considered are listed as follows:

As much as 160 acres has been under cultivation and is suitable for crop production. Only a portion need be seeded each year. The remainder of the farm was used as pasture land as the land was either too sandy or too wet for cultivation. This pasture land is free of trees and brush and can be used as geese grazing areas.

1. Personnel - one full time man and one seasonal helper to patrol sanctuary, farm the land, maintenance work, etc.
2. Equipment - tractor, plow, disc, and other farm machinery
3. Construction. If the total area is to be prepared for use at one time the following may be considered:

Approximately  $1 \frac{3}{4}$  miles of earthen dikes averaging 2 ft high  
10,000 yds. @ 20¢/yd. = \$2,000.00

Approximately  $\frac{3}{4}$  miles of dredging of old drains an average  
of 3 ft.  
10,000 cu. yds @ 20¢/yd. = \$2,000.00

Approximately 12 concrete water gates, 4 ft. wide and  $2 \frac{1}{2}$  ft.  
high spillway, with plank stop logs.  
Estimated cost \$500.00

4. Development- Planting of 2 miles of strip plantings to serve as  
wind breaks and cover.

Estimated cost \$500.00

A rough estimate of costs for items 3 and 4 will be  
approximately \$5,000.00.

Summary and conclusions:

This project involves intensive development of a small area to improve wildfowling on approximately 22 square miles of public marsh.

It provides a feeding and resting ground in a heavily hunted proven waterfowl area.

This project is certain to have the full support of the public hunters who are demanding action from the Department to improve hunting.

The cost of development is not excessive in consideration of the benefits received.

The project site has many natural features that lend to its ease of development and operation.

It would be difficult to find a more perfect type of project for Pittman-Robertson Aid. This type of project can be duplicated at several other sites on Saginaw Bay.

I wish to submit this project for consideration.

HJM:cb  
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