AN OPEN REPORT ON THE CURRENT STATUS OF HORICON MARSH AS A WATERFOWL REFUGE

By OWEN J. GROMME

Long ago in the pre-drainage days, Horicon Marsh was world renowned as a haven for waterfowl. It consisted of over 20,000 acres of quacking, peeping wetlands, and in its approximate center with radiating arms and bays existed a lake of such size and depth that it was navigable to large steamboats. It was a veritable paradise for wildlife lovers, hunters, trappers and fishermen. Due to the forces and counterforces of nature and before the interference of man, its extensive broad shore lines made of it a more or less stabilized natural sponge, which soaked up excess water during wet seasons and retained moisture during drought. Its general shallowness and countless natural vegetal barriers prevented a too rapid run-off in the spring, and water stored in the absorbent materials of its floor was given up slowly during dry seasons. Having evolved with the retreat of the glaciers it was ideally located and conformed topographically, and it provided a breeding, feeding, and resting ground for countless thousands and possibly millions of water and marsh loving birds. It also served as a means of replenishment for the then vast and seemingly unlimited underground reservoirs.

During nature's violent upsets such as unusual dry or wet periods, thousands of marsh denizens probably perished unnoticed because quick replacements made the loss of less consequence, as the historians tell us that at that time waterfowl literally filled the skies during migration.

That was Horicon Marsh of the fabled days still remembered and spoken of with reverence by old timers who still live to recall.

Disastrous Draining

Then came the despoilers of the land and enormous dredges reduced this once immense wildlife paradise to a barren and parched waste. The dreams and glowing agricultural promises faded away with the retreat of the dredges and the land promoters. The drainage enterprise was a dismal failure, and nature reacted violently with unquenchable peat fires which smouldered for years. The financial loss to numerous small landholders was great, but the loss of a valuable natural water and wildlife resource was incalculable and tragic.

A new generation was born and became accustomed to the sight and acrid smell of this smouldering and now good-for-nothing piece of land known as Horicon Marsh. A tangled growth of willow and popple appeared as the soil dried out and covered large areas of the north end but had no economic value. There were many of us who remembered with sorrow the days in spring when the sky was a living network of clamoring waterfowl heralding a new season as they swarmed in from the south in early March or from the north in the fall.

During the years the increased population and the consequent opening up of more land for agriculture brought about a radical change in the whole wildlife picture, and the realization that with continued waste
our resources would soon run out. Those who remembered realized that this great basin although now drained still held promise, and that possibly something could be done to restore it. Public meetings were held, and enthusiasm grew chiefly through the efforts of Mr. Louis Radke of Horicon who proved to be a very able leader in the restoration of Horicon Marsh as a wildlife sanctuary. Mr. Radke enlisted the cooperation of individuals and many of the conservation organizations of the state. At this point a stroke of good fortune favored the cause. In 1938 the disastrous drought in the Dakotas coupled with heavy rains which filled Horicon to the brim raised favorable enthusiasm for restoration to fever pitch. A literal storm of hungry and thirsty ducks swarmed into Horicon from the drought stricken areas, and for the first time in 20 years visual confirmation of stories of its past proved what the Marsh must have been in the old days, and what it could be again. The puddle ducks congregated chiefly in the great flooded willow patches which afforded protection and cover until the freeze-up, and many hunters still tell glowing stories about the incomparable hunting in 1938 "out in the willows."

The long and bitter legal battles which preceded restoration are now history and were finally won, and acquisition started by the state at the south end.

Waterfowl was disappearing at an alarming rate as similar drainage reduced feeding and breeding grounds elsewhere, and the number of guns increased. The new generation demanded more facilities for outdoor recreation in the face of rapidly shrinking wilderness areas and the coming reflooding of Horicon Marsh offered great promise, and the federal government was finally persuaded to acquire the north two-thirds of the area. Here was to be an immense reservoir sanctuary which was to produce an abundant overflow of birds and other wildlife to help repopulate the depleted areas along the ancestral Mississippi flyway. Here was to be an area held in inviolate trust for the enjoyment of all the people and for future generations who wished to see wild things at home, abundant and unmolested.

**Hopeful Restoration**

Acquisition was finally completed and reflooding commenced. Soon the stinking peat fires were extinguished as water levels rapidly rose. Hunting which was permitted in the federal area up to that time was stopped and signs erected around the perimeter declared that Horicon Marsh was a wildlife refuge. As a tribute to the quick reaction of waterfowl they rapidly learned that here was safety and they began to make it home in slowly increasing numbers.

It is a well known fact that most birds after spending the winter in the south habitually return to the general area in which they were raised. It was realized therefore that it would take time to develop a new breeding stock which would become the ancestral stem for future generations of ducklings and other waterfowl.

As the years went by and more birds returned, the public became more and more interested, and visited the sanctuary in ever increasing numbers, and it became part of the week end recreational program for whole families to slowly cruise the Marsh roads and enjoy the sight and sound of ponds full of ducks, coots and gallinules parading their downy
peeping families for all to see. The migration flights in spring and fall became spectacular.

Up to within a few years preceding drainage, when conservation practices were in their infancy, the hunting of waterfowl was permitted both in spring and fall. Being one of the most wary of wildfowl, the Canada Goose did not then linger long in Horicon because it was a wide open and nationally famous gunning area, and the old wise Canada was our largest wild table bird and much sought for. There were no criteria as to how the geese would react to Horicon as a sanctuary while gunned

previous to drainage, nor during the years it was dry. However, after its establishment as a wildlife refuge the wise geese, like other waterfowl, were soon to learn that here was water, food and protection.

In a few years the numbers during migration grew from a few hundred to many thousands so that now the spring and fall concentrations have attracted national interest and a multitude of human spectators. The Fish and Wildlife Service was quick to perceive that here was a great public relations opportunity. A spectacular show came into being by the simple process of reflooding what nature had previously provided, at a point of easy access where large numbers of people could enjoy the sight without leaving their automobiles. It offered opportunity to dis-
play what could be done on a state and national level by repairing the damage that had been stupidly wrought by man, or having left nature alone in the first place.

As was inevitable, such a concentration of waterfowl aroused the interest of the hunting public. Here was a hunter’s dream come true where with little skill, a short distance from great population centers, the birds could be shot with ease. It is a well known fact that at points of concentration, particularly around sanctuaries, the otherwise wary Canadas lose much of their native fear and come to the guns again and again. Jealousy and heated controversy arose over the fact that farmers around the perimeter outside the refuge were exercising their legal right to hunt and allowed others to hunt on their property. Vociferous demands of the minority but powerful hunting groups were made upon state and federal governments to allow hunting inside the refuge perimeter. This clamor was given impetus by some of the federal and state officials themselves, and finally at the insistence of both agencies and over the strenuous but unorganized objections of the vast majority of wildlife lovers including many hunters who asked that the refuge remain inviolate, the order was given permitting shooting within the refuge.

Enter the Goose Hunter

Its opening for hunting called for a systematic “set up” within the refuge administered by the state on government property. Shooting within the refuge, within and without the perimeter by both state and private agencies has now become an important commercial factor with all of its involvements. The state is advertising their part as “the managed hunt” or so-called “harvest.” The hunting public is advised by both agencies that “we are not killing enough geese,” or that we should show a greater “harvest” on Horicon. The ducks which are at a dangerous low in the flyway are “harvested” along with the geese. The state itself, along with certain of the hunting organizations are “studying flight patterns” and some are urging the arrangement of food patches and further encroachments upon the refuge in order to bring more waterfowl over the guns, rather than to keep them on the refuge.

Hunting in this country is a tradition and privilege and is a grand sport when practiced within reasonable bounds, but official encouragement for further reduction in a depleted flyway is inexcusable and only serving to rob our future American sportsmen of their rightful heritage.

Foregoing and following statements are made to give continuity to a report on a situation which calls for intelligent re-evaluation and review.

On both the state and federal level, wildlife management has become an important part of a huge commercial enterprise which involves multi-millions of dollars and the whole future of our outdoor recreation program, and numerous bureaus, departments, divisions, etc. have come into being. Naturally all agencies are out to make a record for themselves and build up favorable public relations, to justify an ever growing personnel.

The call of the Canada Goose provides one of the greatest thrills experienced by a wildlife lover. Thousands of them clamoring at one time stirs a human reaction difficult to describe. That reaction can now
be experienced by any one who wishes to see and hear them at Horicon Marsh during the spring and fall migration.

This circumstance is providing wildlife managers with the finest public relations tool that could be hoped for and much effort and money is being spent on that one part of the Horicon Marsh set-up. What the average observer does not realize is that during the peak of migration he is looking at a large portion of the entire mid-continental supply of Canada Geese and a large percentage of the ducks in our drainage basin, because they have been driven from the "shot out" areas to the comparative safety of the refuge.

This concentration occurs on both sides of State Highway #49 where it crosses Horicon Marsh. The chief attraction to waterfowl at that point, in addition to the close proximity of water, is more or less than 300 acres of standing corn annually planted for the ducks and geese. Although there is plenty of corn-growing acreage within the range in other and drier parts of the marsh, this easily accessible spot is most naturally chosen to do a big public relations job.

Unfortunately the gradients of depression on Horicon Marsh are very slight, and some of the dikes in such state of disrepair that in order to dry up the north end of the marsh enough for corn crops, the Fish and Wildlife Service is faced with two alternatives, or possibly three. The first alternative is to dike off the corn-growing area and pump it free of water. This has been done, but more acreage is contemplated. The second is to drain the marsh so far south that its value as a general waterfowl refuge would be reduced by a considerable extent to its former drained state. The third is one that could perfectly fit in with the wise proposal of some public officials for disposal of surplus corn which is currently a national headache. If this last practical idea was carried out we would no longer be faced with the alternative of either wrecking the general purpose of the refuge, or expensive diking chiefly to do a public relations job and nurture the managed goose hunt.

Those of us who remember, recall that the original intent of restoration of Horicon Marsh was to establish former water levels to the end that it serve all species of waterfowl, and not be set up as a "managed hunt," for geese, deer or pheasants. We did not fight for years to render impotent great areas of refuge (thousands of acres) in order to raise corn for pheasants and deer or just geese when corn surplus is a pressing problem. Incidentally and paradoxically one of the chief arguments for restoration of Horicon was that as a crop-growing area it was a failure and that it could best serve as a reservoir.

We do realize that the problem at Horseshoe Lake, Illinois caused the Fish and Wildlife Service great embarrassment. They hope to make a population "control point" for geese at Horicon, the control being a "managed hunt," thereby taking the heat off the Horseshoe Lake problem. We hunters appreciate their efforts to split up the flock and redistribute the kill on a wider scale, provided the increased kill does not reduce the capital stock, as determined by the number of birds that can be wintered in the south.

However, the many of us who fought so hard personally and as groups for restoration are deeply interested in management that will
serve all waterfowl to the end that management for one type does not work to the detriment of another equally important species.

My notes, made in June 1955, which refer to whole ponds full of adult and young waterfowl, attest to the fact that simple reflooding had done the job and that year by year we were building up a breeding population that was in fulfillment of all of our dreams. By simply closing the dams nature had come into her own and was repaying us back a million fold. Speeding Blue-winged Teal darted about everywhere; and the showy Shovelers, Mallards, Redheads, Ruddies and others too numerous to mention performed on all sides. Gallinules, Coots, herons, egrets and all the rest literally gobbled up the abundant food. It was a show that made one happy to be alive to see. There was water everywhere and the dry fields adjacent to the marsh as well as the shallows were literally popping with hatching birds. Horicon was back, and improving every year.

On June 19th, 1957 we came up over the hills which form the eastern border of the marsh on the Mayville side. There lay the Horicon Marsh and from all appearances the recent heavy rains had flooded vast flats unnoticed by us before. We were worried because at this season a sudden rise in water levels would cause the destruction of thousands of nests in the lowlands. As we reached the lower levels at the foot of the hills we were aware that our eyes and nature had played tricks on us. Recent windstorms, and ice action since reflooding had leveled large areas of the now rotted popple and willow growth and disclosed to view vast expanses of the natural basin as it has not been seen in this generation. Although the water areas are reduced to a much smaller perimeter by a recent draw down by order of the Fish and Wildlife Service, the visual effect from the hills above is nevertheless very deceiving.

**Water Levels Are Lowered**

Water has been lowered over a foot all over the federal area and the contrast to the former number of waterfowl such as to cause us to rub our eyes in disbelief. We visited all points at which we formerly made our observations, and to say the least we found a pitiful remnant of what we saw in 1955 as described above. Vast areas which contained several inches of water and abundant bird life two years ago are bone dry and there is silence but for the wind. Thousands of acres of cattails are
rapidly taking over on the semi-muck and literally choking out the shallow and semi-dry areas of the marsh.

The question that concerns us is why? What is to be gained by drastically lowering the water levels at a time when concern and alarm is being voiced nationally over our diminishing water tables both on the surface and underground? There are several bills in Congress asking for millions of dollars to be used for immediate reflooding, and the re-establishment of wetlands on the basins like Horicon that nature has already provided for us.

Of equally serious concern: Why is the whole vast perimeter of productive nesting and feeding grounds being rendered useless when our waterfowl populations are at an all time low and dangerous threshold?

In reply to these questions we were told that “If water levels are not lowered the central portions of Horicon Marsh could well become another Lake Sinnissippi.” On account of its shallow gradients and in the light of its past history that is inconceivable. Furthermore, the former Sinnissippi Marsh became a lake only after its depth was increased by damming to a higher comparative level that is now permitted by law at neighboring Horicon.

We were also informed that “Due to wind and wave action the central water areas are becoming too expansive, and that their food producing capacity can be much improved by a periodical lowering of water levels. Furthermore, the consequent regrowth of vegetation resulting from lowered water will stop wave erosion and provide more nesting cover, and that it is a temporary food restoration measure.”

We understand that periodic aeration of the marsh floor by occasional let-downs or complete drainage in some cases is desirable and that this method of habitat improvement has long been recognized as a simple tool of good game management. Such measures, however, are practical only when water levels on the managed area are under complete control in smaller parcels or diked reservoirs. In this way the depth of water can be exactly regulated and small impoundments dried and flooded in rotation, and the productive capacity of small sections only are affected by specialized or selective management.

In the light of present circumstances the current draw-down at Horicon does not seem justifiable.

An entirely different problem presents itself at the Horicon Marsh. At present it is difficult or impossible to handle water levels on any part without affecting much of the whole area.

It is our firm conclusion that under the present physical circumstances and lack of adequate water control, the extent of redrainage of Horicon Marsh is ill advised and catastrophic, and that the temporary gain is far outweighed by the loss of nesting waterfowl and worsened public relations.

Horicon was improving year by year until water was lowered in 1956. The build-up of an ancestral breeding stock (particularly Redheads and Ruddies) and favorable habitat had progressed far beyond expectations due to simple reflooding. This was obvious even to those untrained in marsh ecology.

Its potential or carrying capacity had by no means reached a static
stage where full use of existing possibilities was accomplished, at the then current water levels.

While the water was at the 1955 level there were innumerable openings in the extensive cattail areas. These were made and kept free of vegetation by muskrats, and afforded habitat for certain types of waterfowl attested to by the fact of their then abundance in such areas.

In its original state (pre-drainage in the early 1900's), as pointed out in paragraph one, there were expansive open deep water areas which may or may not have been abundantly productive of food, but which were deeper than now (except some areas which were burned out during the drained period), and consequently more vulnerable to extension by wind and wave action.

Those devegetated deep water openings are equally as important now as they were then to furnish contiguous diversification of supporting area to the more shallow perimeter.

In the light of the vast peripheral breeding and feeding expanses now existing, these central places do not need revegetating any more than they did at that time.

The reduction of the vast productivity of the 1955 perimeter to a much reduced area (in the light of past history and recent success) seems to be analogous to the story of the farmer who said he could raise as much corn on 20 acres as 1000 with all conditions being equal, or the cow that gave a good pail of milk and then kicked it over.

As has been demonstrated, Horicon produced sufficient food and cover or the birds would not have utilized it in abundance up to within two years of its present state. The drying out of thousands of acres of feeding and breeding habitat to recreate the same condition on a much reduced scale out in the middle, and to cause the intervening acres to become non-productive of either water or waterfowl, calls for more convincing answers.

In the present state of decline in waterfowl population and habitat in this flyway we cannot afford to reduce the breeding potential on Horicon by one single duck, and until we have better control, and over smaller impoundments there, it would seem the better part of wisdom to leave well enough alone.

There then remains only one other possible reason which I am told is not the case—namely, that it is done to enlarge upon the corn raising areas in the north end. The big show up there and the "managed goose hunt," do not justify the large financial outlay spent for acquisition, and the terrific waste of potential breeding grounds at a time when we need every duck we can put on the wing in this flyway.

The above thoughts are set forth after careful consideration of facts as observed and noted by the writer on Horicon Marsh for over 40 years.

Undoubtedly the Fish and Wildlife Service is sincere in its attempts to do the very best job with what they have to work with. I am personally acquainted with a number of their game managers, including Mr. Russell at Horicon, who are fine dedicated men, and am offering the above statements in an honest attempt to help accomplish an immediate and pressingly needed public service.

Milwaukee Public Museum
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