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AN APPRAISAL OF THE NO-MALLARD RESTRICTION DURING A PORTION OF THE 1967 WATERFOWL HUNTING SEASON IN SOUTHERN MANITOBA

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Introduction

The mallard breeding population index for southern Manitoba, derived from aerial surveys in May, dropped from about 450,000 in the late fifties to about 170,000 in the mid-sixties (U.S. Bureau of Sport Fisheries and Wildlife Waterfowl Status Report - 1966). That decline seems more reasonably attributed to excessive shooting pressure than to a gradual decrease in breeding habitat, since water area indexes, obtained during the May surveys, have not shown a similar decline.

In an attempt to reduce the harvest of mallards in southern Manitoba in 1967, shooting of that species south of the 53rd parallel of latitude was prohibited during the first 8 hunting days of the waterfowl season, which opened at noon on September 22 (no hunting is allowed on Sunday). After October 1, two mallards could be taken daily and four held in possession. Throughout the season, the limit on other species of ducks was 8 daily and 16 in possession except for canvasbacks for which there was a daily limit of two and a possession limit of four. Before the season opened an extensive publicity campaign was carried out to make hunters aware of the restriction on mallards.

Objectives

The primary objective of this appraisal was to determine, through direct observations, the degree to which hunters were willing and able to abide by the prohibition on shooting of mallards. Other effects of the mallard closure were also assessed.

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Procedures

Hunters were observed under several types of hunting conditions common to southern Manitoba. Special emphasis was placed on the very popular hunting marshes at the southern ends of Lake Manitoba (Delta) and Winnipeg (Netley-Libau). Observers were also sent to western Manitoba where fewer Winnipeg-based hunters turn up and pothole hunting is more prevalent. Most observations were made on the first 2 days of the season, September 22 and 23, although some observations were made during the 8-day period when shooting of mallards was prohibited. Observers placed themselves where hunters were unaware of their presence or mistook them for other hunters. Observations were systematically made and recorded following instructions and field forms used by the Migratory Bird Populations Station, Laurel, Maryland, in its Hunter Performance Survey. Waterfowl passing within range of the observed hunting parties were recorded by number and species and the resulting action of hunters noted. Each party was usually observed only long enough to obtain a clear picture of its reactions to mallards passing within range. The observer then moved on to another hunting party in order to sample as many hunters as possible.

In addition to the systematically recorded data from which the tabulations in this report were derived, other information was obtained from co-operators who provided general observations and impressions in letter or memorandum form.

Results

Observers generally agreed that there were fewer hunters afield during the opening 2 days of the season than in previous years. Field men in western Manitoba reported 50-75 per cent fewer hunters. Comparable figures for the major marshes near Winnipeg are not available, but indications were that hunting was off less than in western Manitoba. The closure on mallards was probably a major reason for the decrease in hunters during the first days of the season. Also, reports of poor waterfowl production and a scarcity of birds probably discouraged some potential hunters. Over-all there were fewer waterfowl hunters during the 1967 waterfowl hunting season in Manitoba than in 1966. Sales of Canada migratory game bird hunting permits decreased from 37,609 in 1966 to 33,843 in 1967.

Table 1 Performance records of individual hunting parties confronted with in-range mallard flights (singles or flocks)

Hunting Area	No. of hunting parties	% of parties that shot at all mallard flights	% of parties that let some mallard flights pass without shooting	% of parties that let all mallard flights pass without shooting
Netley-Libau Marsh	8	87.5	12.5	-
Delta Marsh	26	50.0	30.8	19.2
Western Manitoba	11	45.5	36.4	18.2
Total	45	53.3	28.9	17.8

Table 2 Comparisons of the fate of mallard and non-mallard flights (singles or flocks) that came within range of hunters

Hunting area	Mallard flights			Non-mallard flights		
	No. of flights within range	% of flights shot at	% of flights from which a bird(s) was brought down	No. of flights within range	% of flights shot at	% of flights from which a bird(s) was brought down
Netley-Libau Marsh	19	94.7	31.6	51	96.1	43.1
Delta Marsh	50	64.0	28.0	76	89.5	61.8
Western Manitoba	27	48.1	33.3	64	89.1	71.9
Total	96	65.6	30.2	191	91.1	60.2

Table 3 Comparisons of the fate of mallards and non-mallards that were brought down by hunters

Hunting Area	Mallards				Non-mallards					
	No. brought down	Searched for			% not searched for	No. brought down	Searched for			% not searched for
		% found and kept	% found & discarded	% not found			% found and kept	% found & discarded	% not found	
Netley-Libau Marsh	6	50.0	-	16.7	33.3	23	82.6	-	17.4	-
Delta Marsh	24	45.8	12.5	12.5	29.2	106	66.0	3.8	9.4	20.8
Western Manitoba	13	7.7	53.8	38.5	-	78	61.5	10.3	28.2	-
Total	43	34.9	23.3	20.9	20.9	207	66.2	5.8	17.4	10.6

Results of hunter observations are shown in Tables 1-3. Observations of birds that could not be identified are excluded from these tables.

Although hunters seemed well aware of the closure on mallards, compliance with the restriction was generally poor. Approximately half of the 45 parties observed, totaling 94 hunters, shot at all mallard flights (singles or flocks) that came within range, while only 18 per cent of the observed parties let all mallards pass without shooting (Table 1). (Had all parties been observed through their entire hunt, both the proportion of parties shooting at all mallards and the proportion shooting at no mallards would probably have been lower.) On the average, hunter performance was considerably poorer at Netley-Libau Marsh than at Delta and in western Manitoba. Although samples were small, this perhaps indicates that hunters at Netley-Libau are, as a group, less experienced and capable at distinguishing mallards.

We expected that the better equipped hunters, with decoys and boats, might also be more experienced and thus better able to identify mallards. However, our observations did not indicate that this was so. Among seven parties hunting from boats over decoys, four shot at all mallards within range while only one party completely refrained from shooting at mallards. Most other observed hunting parties were either pass shooting along marsh edges or wading through the marsh.

Hunters fired at 66 per cent of mallard flights within range and brought down birds from 30 per cent of in-range mallard flights (Table 2); they shot at 91 per cent of in-range flights of legal species. Most legal birds not fired at were teal.

The hunters observed showed little ability to select legal birds from mixed flocks containing mallards and other species. They fired on 18 of 21 mixed flocks containing mallards, bringing mallards down from 9 of the flocks and legal birds down from 13.

Only three in-range mallard flights were observed during the half-hour periods before sunrise and after sunset when shooting was legal. Two of the flights were fired at. Species identification would be exceptionally difficult during these dawn and dusk periods.

On the average, hunters exhibited less ability to bring down mallards than legal birds. For each mallard brought down they fired an average of 4.8 shots, but only 2.7 shots to bring down a legal bird. Moreover, birds were brought down from only 46 per cent of mallard flights shot at, while birds were dropped from 66 per cent of legal flights fired on. We found no indication that that was because hunters who fired at mallards were poorer shots than those who did not. Parties that fired at all in-range mallards brought down birds from 57 per cent of the legal flights they fired at, while parties that completely refrained from shooting at mallards knocked down birds from a similar 59 per cent of the legal flights they fired upon. Perhaps mallards are intrinsically more difficult to bring down than many other species. Also, suspicion that the bird they were shooting at was a mallard may have inhibited some hunters.

Among mallards whose fate could be followed after they were brought down, 35 per cent were found and kept at least temporarily, while 23 per cent were immediately discarded (Table 3). By comparison, 66 per cent of legal birds were found and kept while 6 per cent were discarded. Shovelers were the most frequently discarded legal species; however one party at Delta Marsh discarded three canvasbacks even though they had not exceeded the limit for that species. A variety of species was not searched for. Most, including all mallards not searched for, were "sailers" that fell some distance from the hunter.

Observations of hunters indicated that mallards made up about 19 per cent of ducks bagged during the 8-day mallard closure period. This high percentage of mallards was not shown in a wing collection mail survey conducted by the Canadian Wildlife Service to determine species composition in the harvest. Since hunters discarded many illegally shot mallards and were undoubtedly reluctant to mail in wings from those they did keep, the mail survey data incorrectly indicated that mallards constituted only 0.6 per cent of the harvest during the first 8 days of the season in southern Manitoba.

The mallard restriction undoubtedly discouraged some hunters from shooting over grain fields where mallards predominate. Several co-operators commented that hunters were avoiding ducks on grain fields. However, one instance of field shooting was noted near Delta Marsh.

Several co-operators prepared statements on their observations. Quotations from these statements follow:

Observer A - "The stiff south wind held hunters close to the marsh edges, but helped to induce heavy movement of ducks throughout the course of the day until the wind subsided around 5:30 p.m. Visibility was good throughout the day, even during the thunderstorm of late afternoon. Some mallards were present at all three locations I shot from. They were usually in small bands of their own or in company with other ducks. I saw no large flocks of mallards.

"I did not operate a spy-blind, but had opportunity to watch several hunters at close range and questioned others whom I encountered with bags, as follows:
Number of hunters - 18, Total bag of ducks - 81;
Number of mallards bagged - 17."

Of the 18 hunters encountered by Observer A, 16 were observed either shooting at mallards or with mallards in the bag. Two of the 18 were not observed while hunting and did not have mallards in the bag when checked. Observer A's statement continues:

"In my own experience I found it difficult to identify mallards under hunting conditions. Against the light or low over the water I could not easily distinguish between mallard, shoveler, pintail, gadwall, and baldpate until they were within gun range. I know all of these well and do not believe further reference to educational material or further field experience would improve my score. In my attempts to be sure of mallard identification I could not help but expose myself more than usual, and was always off balance. Accordingly, my shooting was poor and my cripple loss three times as high as my average for the past ten years. If one does not expose one's self to be certain of identification, or if one becomes unbalanced, then shooting is delayed. In a precise, split-second action, this inevitably increases the chances for crippling loss."

Observer B hunted in pothole country near Basswood, Manitoba, on the opening Friday and Saturday of the season:

"We shot our limits without difficulty and shot no mallards. My companions were extremely careful and passed up many good chances on pintail preferring to

shoot only at teal which were readily identifiable due to size. Mallard, pintail, and gadwall were difficult to separate in a head-on approach. At shooting range I had the most difficulty between mallard and gadwall and passed up several opportunities on the latter, I know.

"I saw some of the activities of three other parties in our vicinity. Since I was also shooting, I observed what they were doing only part of the time. However, while I watched them they made no effort to distinguish between species and shot at absolutely everything. I saw three mallards killed and they may have killed many more because I saw only a small part of the shots I heard them fire. One of my companions talked with another hunter who admitted killing a mallard and regretted doing so. He said there was a pile of five or six mallards in the grass left by one of the earlier parties, but I did not have an opportunity to confirm this.

"I spoke to an old-time duck hunter who shot at Delta. He has been shooting ducks for 50 years and is above average in duck recognition and is conservation oriented. He and his party shot seven mallards in spite of their best efforts at identification. The mallards were fighting the wind and coming in low, and they were confused with redheads. He was very much distressed by what went on at Delta where, according to him, the firing was continuous at everything that flew and he said most of the birds moving were mallards. He was probably confusing mallards and gadwall for others said there were a large number of gadwall at Delta a few days before the season opened.

"My observations leave me very discouraged regarding the future of species management in Manitoba. I am still supporting the Wildlife Branch in their decision to try it. It had to be done sooner or later. The Department certainly did an excellent publicity job. A hunter would have to be deaf and blind not to know mallards were protected and what they looked like.

"Perhaps if the season had been opened earlier and restricted to blue-winged teal, the recognition would not have been as difficult. There would have been enough teal around at that time to supply good shooting. Opening day would then have been directed against a species that could stand it and hunting interest might have lessened by the time the general season opened. I realize the problem of motivating the hunter to want to identify ducks would still remain, but he wouldn't have the argument that it was impossible."

Observer C checked geese at the West Shoal Lake firing line north of Winnipeg on the afternoon of September 22 and the morning of September 23:

"Observations were incidental to my checking geese killed and are certainly very incomplete. Sometimes geese would be in the air at the same time as ducks and because of the large number of hunters standing so close to one another, it was usually impossible to be certain who fired at what and when.

"On Friday afternoon, there were several flocks of 25-100 ducks, mostly mallards with some pintails in the same flocks, that flew over the 'firing line'. I can positively state that four flocks containing mostly mallards were shot at: one flock, where there was a chance to bag some, was not fired on. I saw one mallard drop, but I had no idea who shot it and as far as I know, no one picked it up. I saw one each, pintail, gadwall, baldpate, and redhead in the bag. Three of these were shot by a group who obviously knew what they were doing and were confident of their ability; they even knew sex and age. On Saturday morning most ducks had left before shooting hours and few flew low enough on the way back to the refuge at sunrise to be shot at. I saw one flock of mallards fired at.

"In conversation with hunters, several said they would not shoot at any ducks and this appeared true. Others obviously fired at anything at any distance, including some cranes about 500 yards high. Two different hunters told me of two swans shot in the fields south of the 'firing line'."

Observer D made observations in western Manitoba on September 22 and 23:

"Probably the most striking feature was the scarcity of hunters in the Rapid City - Newdale - Sandy Lake areas. I was able to obtain only two observations of hunter parties, despite the fact that I covered more than 300 road miles on September 23, from Rapid City to Newdale, Strathclair, Salt Lake, Oakburn, Wisla, Olha, Sandy Lake, and Rackham. During this survey, I encountered less than 10 parties of hunters between the hours of 0600 and 1200, and there was virtually no hunting pressure on many lakes and sloughs holding large concentrations of birds. One of the few areas heavily hunted was Dirty Lake, one mile south of Basswood, but the hunters were tipped off to my presence."

Observer E spent opening day through the second weekend at Delta Marsh:

"Waterfowl populations at Delta Marsh showed a marked drop after the opening weekend. Many birds, especially pintails, apparently moved out with a cold front that passed through on Friday night. Mallards were relatively common species throughout the period of observation; many drakes still had their drab summer plumage. Most parties observed seemed unable to identify positively the species of birds in flight, and a 'shoot-first-ask-questions-later' attitude apparently prevailed. I noted only a few mallard flights passing within range of hunters that were not shot at.

"Hunters, as well as birds, were uncommon during mid-week; the few opportunities I had to observe week-day hunters confronted with in-range mallards provided no indication that they were, as a group, better able to abide by the restriction than Friday afternoon and Saturday hunters. In fact, as ducks became less common following opening weekend, hunters seemed even more reluctant to pass up any of the less frequent shooting opportunities they had.

"I had difficulty determining the species of many passing ducks even though I was using binoculars and was not faced with the excited hunter's additional burdens of concealing himself until the last moment, then aiming and firing. In most cases there seemed to be only seconds between the time a duck was close enough to identify and the moment a shot would have been taken. Even during mid-day some in-range ducks appeared only as black silhouettes. Others passed over rapidly from behind and were nearly out of range before noticed, requiring that a quick snap shot, if any, be taken."

Observer F spent the afternoon of the opening day of the season observing along the southeastern edge of the Delta Marsh:

"At noon I proceeded east towards Flee Island. There were a few cars parked in the field near the marsh between Tin Town and Flee Island. At approximately the half-way mark I stood on the top of my car and used binoculars to observe the hunters. The majority of the ducks were mallards and it appeared that many of them were being shot or shot at. The wind was extremely strong, at times gusting to 52 mph and the mallards were coming over the reeds very low and flying very slowly. During the first 15 or 20 minutes of shooting, four hunters directly in

front of me shot at least 12 mallards. By 1:00 p.m. six hunters were checked, one of whom was known to have shot a mallard, but no mallards were found in their possession.

"I then proceeded to Flee Island where there were 18 cars parked with some cars still arriving. By this time the shooting had slowed down considerably but most of the ducks being shot at again were mallards. Two R.C.M.P. constables were checking this area so I worked my way to St. Ambrose where I stayed until almost dark. The majority of the hunters here seemed to be from hunting lodges and very few mallards were being shot. People staying at the lodges were observed through binoculars and it appeared that they all had good bags and no mallards."

Observer G observed hunters in the eastern end of Whitewater Lake, southwestern Manitoba, on the opening afternoon and the second day of the waterfowl season:

"Hunter behaviour was mixed. Of the seven hunting parties checked, one was encountered with three mallards in the bag. The hunters thought the birds were legal because the heads were not green. Three other of the seven parties were seen to fire at mallards. One of the three appeared to shoot indiscriminately; the other two let some mallards go by without firing at them. Two other of the seven parties were not observed while hunting but had no mallards in their bags on the completion of their hunts, and claimed, quite convincingly, that they were after geese primarily and purposely avoided shooting at mallards. The seventh party was observed to allow mallards to pass by without shooting at them."

Conclusions

To manage our waterfowl resource most effectively, the ability to regulate harvest - by species - is certainly desirable. However, for mallards under conditions such as encountered during this study, it must be concluded that prohibiting the species from the bag is an ineffective means of regulating harvest. Species identification under hunting conditions often seemed impossible, and most hunters frequently misidentified waterfowl or were unwilling to pass up opportunities at the many hard-to-identify birds.

It is therefore concluded that the prohibition imposed on mallards in Manitoba did little to conserve that species and probably did more harm than good for species management. Many mallards that would have been taken home and eaten were left in the field. Some mallards were undoubtedly saved in cases where hunters did not go afield or occasionally passed up shooting opportunities. However, there likely were other cases where more mallards were shot in attempts to obtain a limit of legal birds than would have been shot had mallards been allowed to contribute to the bag. Furthermore, many ducks of other species would probably not have been killed if accidentally shot mallards could have been kept. Just as important, the restriction made violators out of many otherwise law-abiding citizens and created an atmosphere of waste, resentment, and guilt among hunters.

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