

Wisconsin Duck Zones and Potential New Options

Wisconsin Department of Natural Resources

Since 1991, the U.S. Fish and Wildlife Service (USFWS) has limited the number of duck hunting zone and split options that a state can use. Each state is only allowed to make changes to duck zone configurations every 5 years, with the next opportunity to make adjustments in 2011. By federal rule, zones must be contiguous and use clearly definable boundaries. Wisconsin has used two duck zones (north and south) with the annual option to split the duck season within each zone (a split is a mid-season closure with the goal of making the ending date for the season later). With a 60 day duck season, 60-70% of the duck hunters have been content with the duck season timing based on public meetings and surveys over the last 6 years. Of the 30-40% that would prefer a different season structure, most are seeking additional days of hunting in late November or December although some would prefer an earlier opening day. Previously, states were limited to one of three options:

1. The entire state can be one zone and the duck season can have up to 2 season closures or splits.
2. The state can be divided into 2 duck hunting zones and the season in each zone can be split once.
3. The state can have 3 zones without the option of splits

After repeated requests from waterfowl biologists, the DNR secretary, Natural Resources Board, other states, and the Flyway Councils, the USFWS is now considering expanding the options available. These include:

1. The entire state can be one zone and the duck season can have up to 2 season closures or splits.
2. The state can be divided into 2 or 3 duck hunting zones and the season in each zone can be split once.
3. The state can have 4 zones without the option of splits.

However, this change in duck zone options is still uncertain and we are operating with a number of unknown factors. Flyway states are being requested to provide some measure of hunter satisfaction related the change, an Environmental assessment still needs to be issued by the USFWS, and the final zone rules will not be published until later in the winter. The process of working with waterfowl hunting regulations is always challenging because the typical WI state processes do not fit well into the federal timelines and processes. The federal guidelines of course, must be followed by the states, so we are often limited in our process. In this specific case of changing duck zones, we must move forward with a state process in order to meet the federal deadline of May 2011 while not knowing for certain the federal parameters.

The following is a tentative outline of the duck zone decision process:

August 2010 - USFWS indicates that their leadership has recommended increasing the duck zone options for states. However, an Environmental Assessment by the USFWS and an evaluation of hunter satisfaction by the flyway councils is required. The USFWS stated that states will need to provide any new duck zone configurations by April 2011 for review. DNR staff presented a process for developing a new duck zone option to the Natural Resources Board at their August meeting.

September 2010 – DNR staff had preliminary discussions with the USFWS and conducted background analysis in support of developing a new duck zone option. An ad hoc Duck Zone committee was organized. Members of this committee included duck hunters from around the state, wildlife biologists and wardens. Several organizations were represented including Wisconsin Conservation Congress, Wisconsin Waterfowl Association, Wisconsin Wildlife Federation, Wisconsin Wetlanders, LaCrosse County Conservation Alliance, Green Bay Duck Hunters and Black Slough Conservation Club.

October –November 2010 - Duck Zone committee met on October 12 and worked well together to develop potential new duck zone configurations using past public input, data on surveys and harvest and group knowledge. Ad hoc Duck Zone committee recommendations are reviewed by staff and DNR Migratory Committee. DNR staff design a survey based on the options developed by these committees.

November – December 2010 - A random survey of 1000 waterfowl hunters is being conducted to provide an objective picture of what the average duck hunter in Wisconsin would want for duck hunting zones. The survey will include the current configuration as well as the new options.

January 2011 – DNR will analyze the duck zone survey results, have additional consultation with the USFWS and develop a draft proposal. January offers regularly scheduled public presentations at the annual Ducks Unlimited and Wisconsin Waterfowl Association conventions where the draft proposal could be shared with duck hunters.

February 2011 - Draft proposal will be reviewed by Wildlife Policy Team and DNR administration. DNR will also receive any final direction from the USFWS this month. There may be some new requirements or issues that develop.

March 2011 - Present the draft proposal to the Natural Resources Board

April 2011 – Spring hearing question on duck zones

April-May 2011 - Submit draft duck zone proposal to the USFWS.

May-June 2011 - Receive feedback from the USFWS and develop a final duck zone boundary. Keep in mind that WI cannot develop an actual "rule proposal" at the state level until the USFWS tells us that a duck zone configuration is acceptable.

July 2011- Share duck zone boundary with duck hunting groups

August 2011 - Public hearings on waterfowl season and new duck zones. Natural Resources Board approval

Progress to date (early December):

In October 2010, an ad hoc committee of duck hunters and staff from around the state developed several options for a new duck zone configuration. Background information

on duck surveys, duck harvest and a summary of years of public input on duck hunting season dates was provided as a basis for the committee's work. Based on past public input, the goal of a new duck zone configuration is to provide some additional late season duck hunting days where late hunting is most likely while minimizing the loss of mid-fall duck hunting opportunities. This committee recommended using a 3 zone with split option in order to maintain the option of annual season splits (temporary closure). They noted that this would be particularly helpful if the duck hunting season was shortened to 45 or 30 days which could be implemented by the USFWS in the event of low spring breeding duck and wetland counts. The committee has recommended a north duck zone, a central duck zone and a U-shaped south/big water zone which is intended to target those areas that would have ducks later in the season.

Based on the recommendations of the committee, a random mail survey was sent out to 1000 waterfowl hunters to get feedback from the average WI duck hunter. Options included no change (retain 2 zones) and a couple of variations of the 3 zone configuration. The exact duck hunting season dates and option for a split will be decided annually, but the zone lines must remain for 5 years once established in 2011. It is anticipated that the 3 zones would have either different starting dates or different lengths to the season splits. We anticipate the results of this survey in January. These survey results along with background data, years of previous public input, and committee recommendations will be used to draft a recommended zone configuration that can be discussed and reviewed in the coming months.

Background Information:

The information that is a basis for development of the new duck zone configuration includes past public meeting/hearing input, past duck hunter surveys, duck harvest, fall duck survey data, staff experience/expertise and committee recommendations. The public input from the last few years indicated that areas for potential change to duck hunting season dates or zone configuration were the Mississippi River, Lake Michigan/Green Bay and those counties currently just north of the north-south duck zone line (Hwy 10).

I. Hunter input

Wisconsin has a history of extensive public involvement in waterfowl hunting regulatory decisions. As a result of this history, we have considerable public input that has identified the major areas of differences and desires among our duck hunters.

The annual public input from our regulatory process has shown that the most highly debated topic in the process is the date of the opening day of duck season and the use and length of duck season splits. Based on the public input during this annual process, most duck hunters in the northern counties prefer to open the duck hunting season the Saturday nearest September 24 and run for 60 days without a split ending in later November (November 20-25 approximately). However, there are some hunters in the counties of St. Croix, Dunn and Pierce counties that would like to see duck hunting available a little later because of stream hunting opportunities when the marshes are freezing. There are also hunters in several counties just north of the current duck zone line and generally east of Wood County that have experienced crowding on opening day because the north zone opens one week earlier than the south. Some hunters from these counties have advocated for being included in the south zone or having the north and south zones open on the same date.

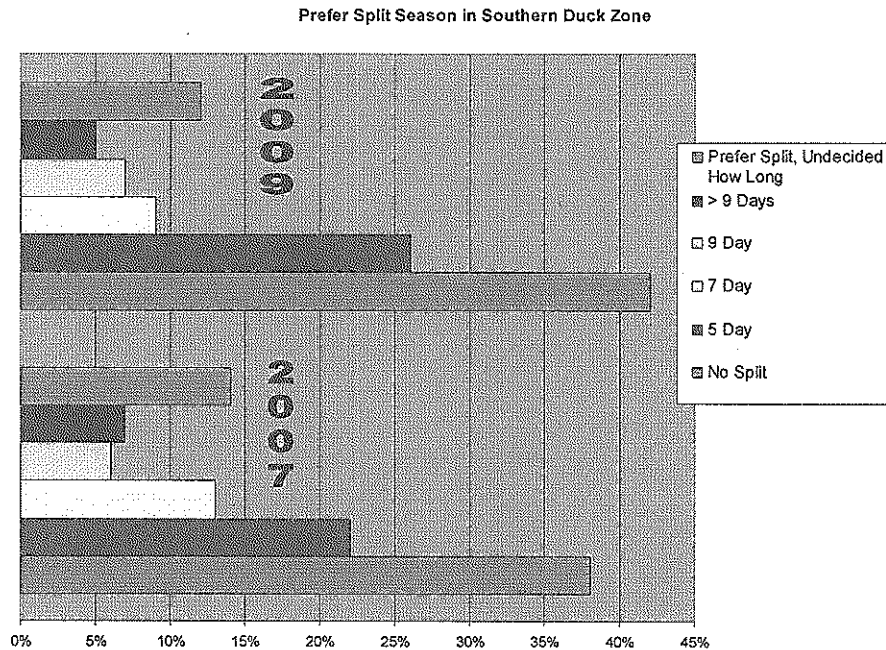
In the south, most hunters have preferred to open the duck season on the Saturday nearest October 1; however, there is considerable debate over the opening day and the length of a south duck zone split each year. Some hunters would prefer the south duck season to open on the Saturday nearest September 24 because they favor harvesting the ducks that are present in Wisconsin early; blue-winged teal, wood ducks and locally breeding mallards. Others who hunt waters that stay open later such as the Mississippi River, Lake Michigan, Green Bay and some south county streams would like the duck season to open later in October so that it closes later in December. Many of these hunters are targeting diving ducks and sea ducks that arrive in Wisconsin later. This diversity of desire among the hunters has settled into a compromise season that opens the Saturday nearest October 1, runs for 9 days, closes for 5 days (Monday-Friday) and reopens on a Saturday which allows

the season to extend a few days into December. Each year we have a variety of proposals to open the south duck zone later or have a longer split in the season with the goal of a later duck hunting season. However, those hunters advocating for a later duck season are not the majority so the shorter split has been the primary season selection.

In order to have a more objective source of data to measure what Wisconsin duck hunters want from their hunting season, the Department mailed surveys in 2005, 2007 and 2009 to a random selection of duck hunters in Wisconsin. The results have been relatively consistent on some of the major issues regarding the duck hunting season. Duck hunters have experienced a 60 day duck season for about 15 years now and for the 3 surveys 65-70% of the hunters thought the length of the duck season was about right. Of the remaining respondents 26-29% thought the season was too short. Since our duck hunting seasons start about as early as possible these data would suggest that 25-30% of Wisconsin duck hunters would like to have some duck hunting days in December while the majority are content with the current framework. The timing of the duck season was about right for 59-73% of the duck hunters surveyed in these 3 years while 23-29% thought it was too early and 6-10% thought it was too late. Overall, about 2/3 of Wisconsin duck hunters have been satisfied with the 2 duck zone structure and season dates provided the last few years. This leaves about 1/3 of the duck hunters looking for other duck hunting season structures.

The surveys also asked about specific dates in these duck hunting zones and while the majority favor the current seasons, a diversity of opinion was again revealed. For the north duck zone 44-48% thought it should open the Saturday nearest September 24 while 25-29% preferred October 1. In the south duck zone, 38-40% preferred opening the season on the Saturday nearest October 1 while 18-20% wanted the Saturday nearest September 24 and 20% wanted the Saturday nearest October 8. Based on these comments, the current south duck zone opening date is a reasonable compromise but reveals that if we had more flexibility in zones then we may satisfy the preferences of more hunters.

The south duck zone split is used to address some of this difference in preference among duck hunters in southern Wisconsin.



However, it is clear that the current 5 day, Monday-Friday, split in the south duck zone is a compromise among different desires and not the preferred season structure for many. The feedback from these surveys shows that of the several options presented, a simpler season with no duck zone split was most popular, however, the majority want some type of duck zone split. The longer split preference reveals a desire of some duck hunters to have more duck hunting days in December than is currently provided. The majority of those desiring these later dates are duck hunters on the Mississippi River and large waters such as Lake Michigan and Green Bay although we have also heard from field hunter seeking late season mallards.

When asked about the current duck zone structure, 55% of the duck hunters preferred the 2 zones (north and south), 27% wanted a single statewide zone and another 18% had no opinion. This reveals again some preference for a simpler duck season structure and some ambivalence on the issue of duck season timing among duck hunters.

- In 2009, we assumed that we would have to continue to function with the 2 duck zone option in Wisconsin so hunters were asked in a survey their preference for one of 4 lines to separate a north and south duck zone. This was initiated primarily because of some complaints that the current location was not beneficial to central Wisconsin duck hunters. However, in the survey a clear majority of hunters (62%) preferred the existing zone

line (Table I). Preferences for the remaining three alternatives were fairly equal; 15 % of the hunters preferred the zone line move north to Highway 29 while 11% preferred the zone line move even further north to Highway 64 or moved south of the current zone line to Interstate 90 / Highway 21. A more detailed analysis showed that those hunters who lived near the existing zone line did not differ in preference for line location from these statewide results.

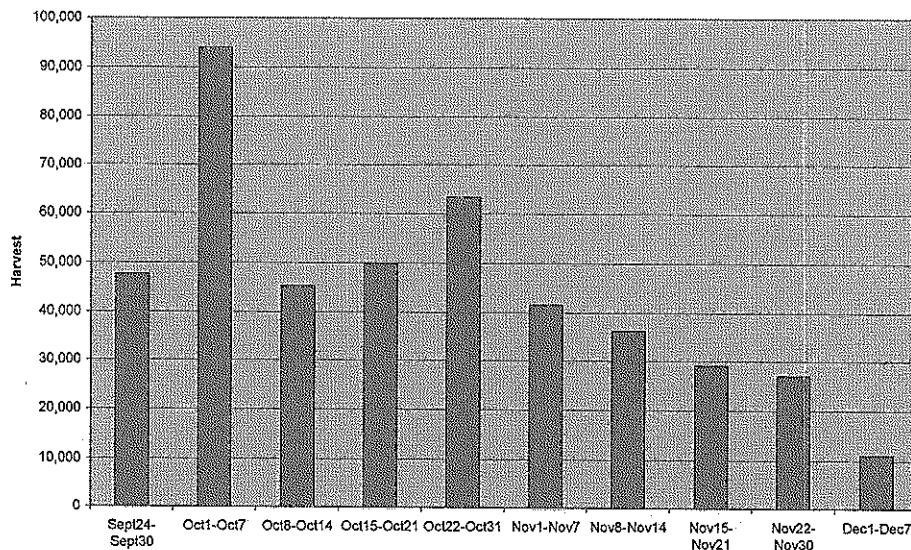
Table I: Preference for location of zone line

Duck zone line	Percent responding
Keep existing line (Hwy 10 to Hwy 41 north)	62%
Move north to Hwy 29, east to Hwy 41 north	15
Move further north to Hwy 64 across state	11
Move south to I-90, east to Hwy 16/Hwy 21, east to Hwy 41 north	11

Duck surveys and harvest data

Analysis of duck harvest data for these locations from the last 10 years suggests some differences in the duck harvest opportunities in different regions of the state. Duck harvest data is collected by the USFWS through the Harvest Information Program which collects harvest data through mail surveys to hunters. These data are collected to be used at the Mississippi Flyway level and are fairly precise at the state level. While these data are used here for groups of counties by date within Wisconsin, it should be cautioned that the sample sizes become quite low at this level. The data presented below are for a 10 year period 1999-2009 which provides a generalized look at duck harvest and increases sample size.

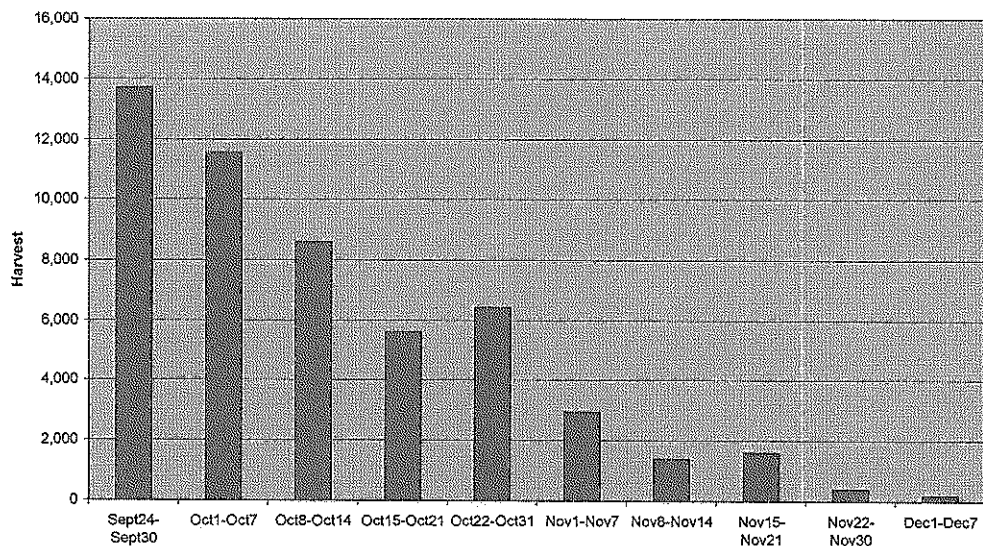
Statewide Harvest by Date



The graph above shows the average total duck harvest by date for the years 1999-2009. Statewide harvest data by approximately 1 week intervals reveals that the two duck zone configuration with an earlier opening date in the north provides a reasonable season structure to match Wisconsin's duck migration and weather. The September harvest numbers come primarily from the north duck zone opening week. The first week in October shows the highest harvest level that would include the opening week in the south duck zone along with the second week of the north duck zone. The significant drop in harvest during the 2nd week of October is likely to be the result of the season closure in the south duck zone reducing days open to duck hunting during this 7 day period. Duck harvest then climbs slightly until about November 1st after which duck harvest in Wisconsin steadily declines to a very low level by December. Overall, this clearly shows that for Wisconsin as a whole, October is the primary month for duck hunting, with duck hunting early in the fall being more productive than later in the fall. However, we have learned from the public input data that there are regional differences in hunter preference and duck migration so looking at the specific regions where hunters have raised issues will help to define the new duck zone boundaries.

Looking first to the northern duck hunting, basic climate and freeze up conditions support an early opening date for duck hunting in northern Wisconsin. This concept is supported by a vast majority of the duck hunters but the question of where the "north" begins is debated. Most of the public input in the last few years has supported the use of a north duck zone but as high as 26% of the hunters surveyed suggested that the duck zone line should be moved further north. This would place counties along the current north-south duck zone line in the south duck zone. For the purposes of this analysis, we have defined this area as the mid-zone counties of St. Croix, Dunn, Eau Claire, Clark, Marathon, Waupaca, Shawano, and Outagamie.

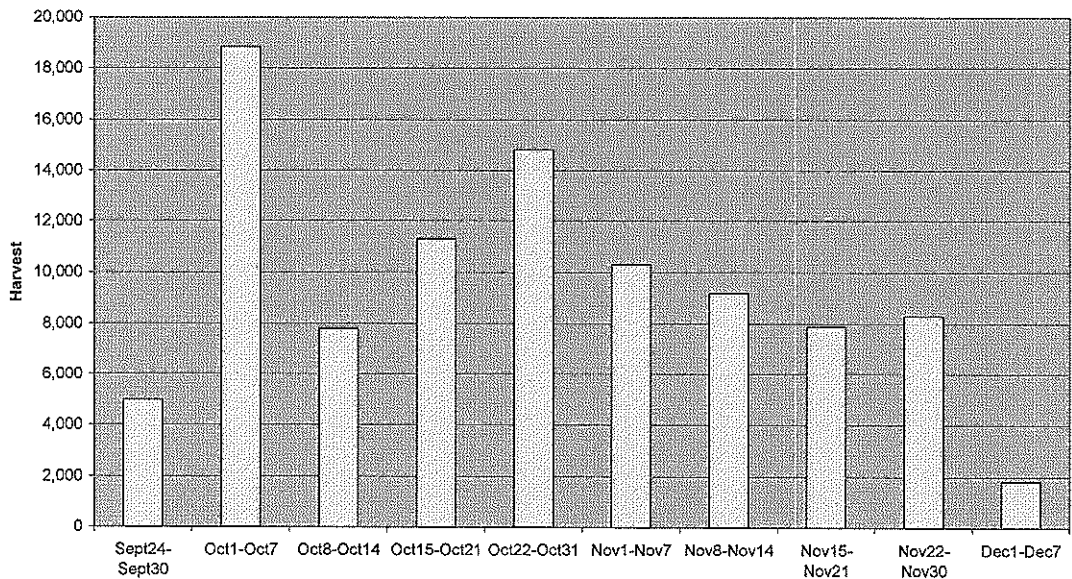
**Mid-zone line, harvest by date
(HIP data 1999-2009)**



These data represent the average weekly duck harvest in this group of counties for the period 1999-2009. These counties are wholly or mostly in the north duck zone so the 1st period in the end of September would represent the opening week harvest. The pattern of harvest shows clearly that most ducks are harvested early and the harvest declines each week in a fairly consistent pattern. The small increase in the October 22-31 period may be a result of how these data were grouped in a 10 day period rather than 7 days for the other periods. By November 1, 87% of the duck harvest in these central counties has been completed and by November 8, 93% of the harvest is completed. These data support the inclusion of these counties in the north duck zone with an opening date of the Saturday nearest September 24 with no split.

Looking at the counties that border the Mississippi River we see a different pattern. Hunter feedback has indicated that an opening day for the duck season on the Mississippi River near October 1 allows for blue-winged teal and wood duck harvest opportunities in addition to other duck species. However, the river stays open later in the season than marshes in Wisconsin which results in a movement of ducks from these marshes to the river. The Mississippi River also serves as an important migration stop over for ducks migrating south from the prairies and parklands north of Wisconsin.

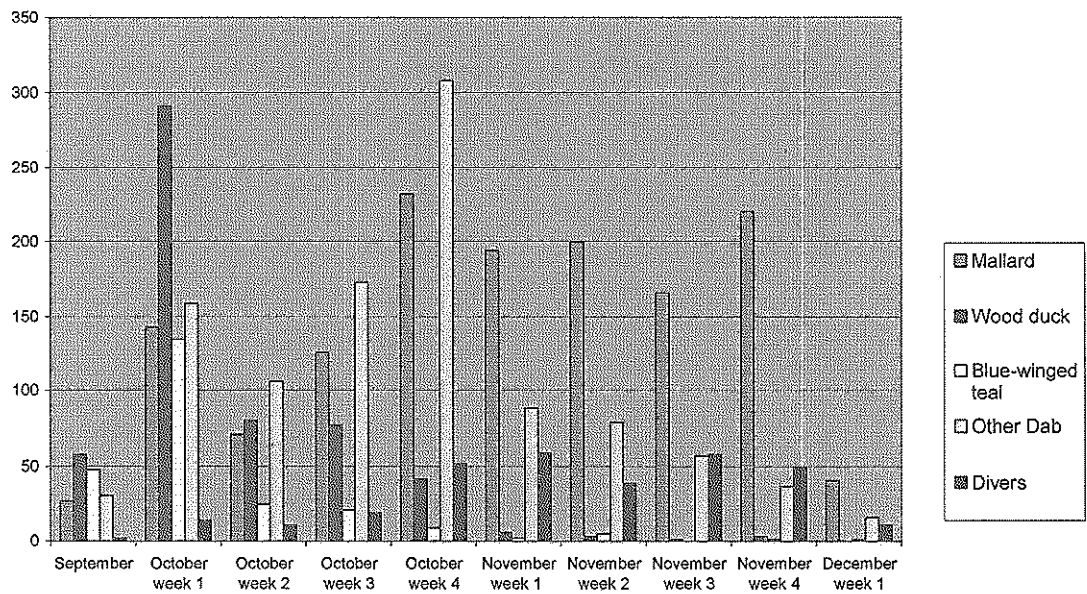
Mississippi counties, harvest by date (HIP data 1999-2009)



Harvest data for these river counties show the expected high harvest level during the opening week of duck hunting which is generally the first week of October. The significant drop in harvest in week 2 of October is again likely a result of the season closure during part of this period. Duck harvest increases through the end of October and then declines in November. However, in

contrast to the steep decline in harvest observed in more northern counties, duck harvest throughout November holds fairly steady on the Mississippi River. The first week of December shows a low harvest because in some recent years even the Mississippi River has been frozen in early December in Wisconsin. However, there are other years when the river still has open water into December while most of the rest of Wisconsin's waters are freezing. These harvest data show later duck hunting opportunities than in northern Wisconsin thus supporting the later opening date and some other strategies such as a season split to extend the season later.

Mississippi River harvest by date/species group (HIP data 1999-2009)

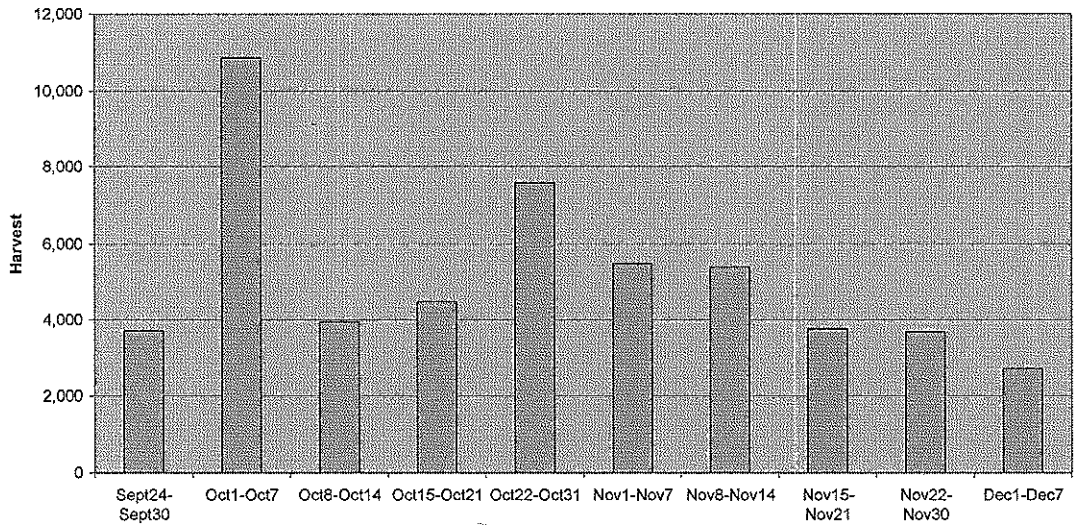


Analysis of the Mississippi River harvest data by species reveals some interesting patterns. These data are from a sample of duck wings mailed in by hunters and are not expanded to represent total harvest. The early October harvest is dominated by mallards, wood ducks, and blue-winged teal which are likely local breeding ducks. As other dabbling ducks migrate south into the Wisconsin portion of the Mississippi River in late October, the "other dabbling duck" harvest increases to a peak in the last week of October. Mallard harvest, however, maintains a relatively steady dominance of the Mississippi River harvest into the last week of November. Beginning the last week of October, diving duck harvest begins to increase and continues steady for the month of November. However, diving duck harvest on the Mississippi River in November remains below mallard/dabbling duck harvest.

In a similar fashion we looked at duck harvest by time period on the counties bordering Lake Michigan and Green Bay. It is important to keep in mind that

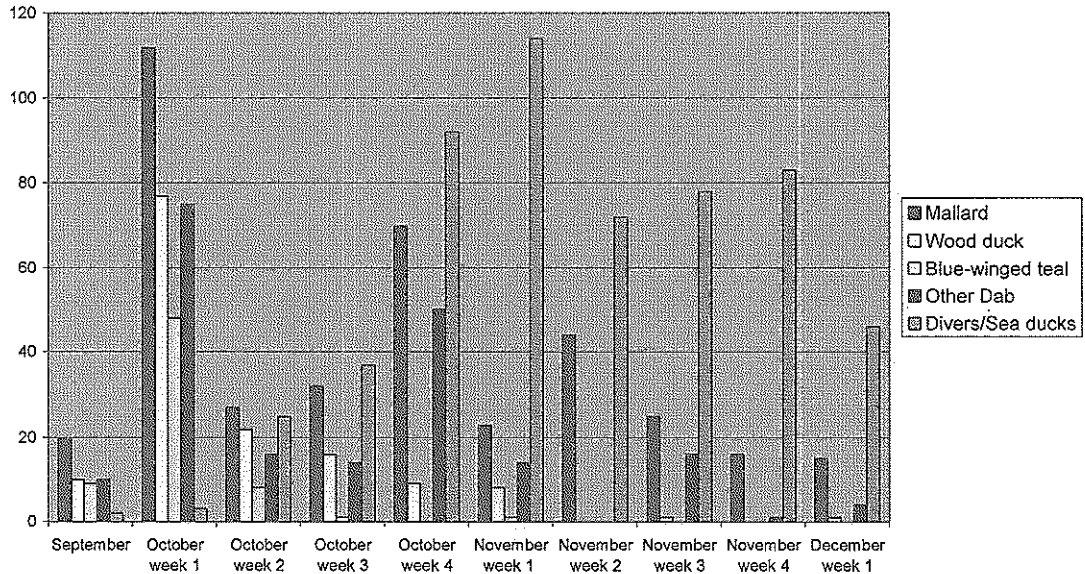
these counties also have important inland duck hunting areas that contribute to these data as well as the harvest from the waters of Green Bay and Lake Michigan. However, even with this influence we can see a pattern similar to that of the Mississippi River. The duck harvest is high the first week of October, declines during the south zone season split, and then increases until about November 1. In November and December harvest declines but continues to provide fairly steady harvest compared to more northern locations in the state.

**Lake Mich/GB border counties, harvest by date
(HIP data 1999-2009)**



These harvest data support an opening date near October 1 and also strategies to continue the harvest later in the season for these counties. However, if Lake Michigan could be separated out from the inland harvest data from these counties, the data might suggest an even later season framework.

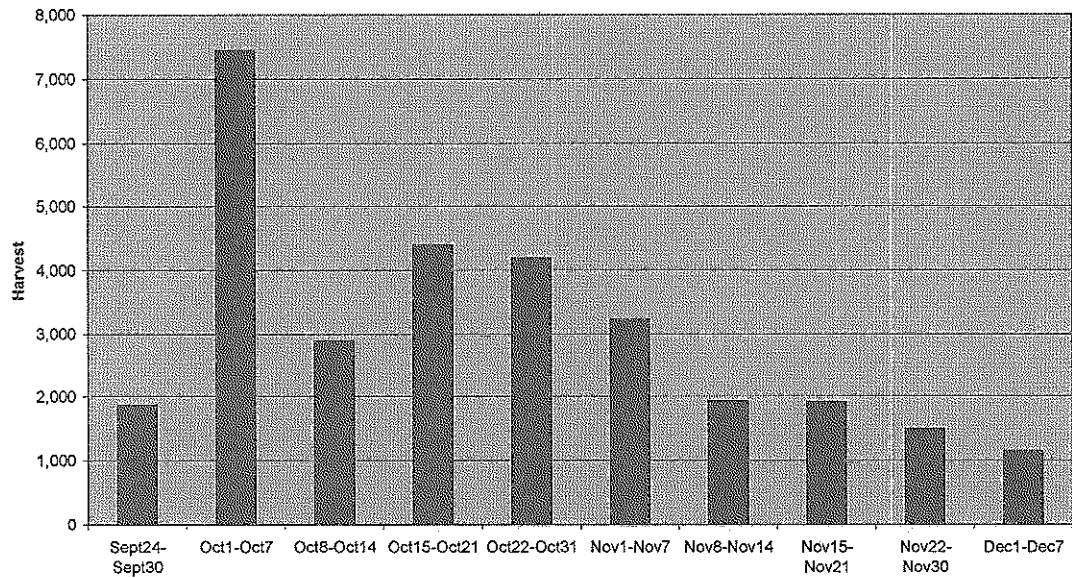
Lake Mich/GB harvest by date/species group (HIP data 1999-2009)



We can look at the difference between duck harvest on Lake Michigan and the inland portions of these counties by analyzing the data by duck species. These data are from a sample of duck wings mailed in by hunters and are not expanded to represent total harvest. During the opening week of duck hunting mallard, wood duck, other dabblers and blue-winged teal are the dominant ducks harvested for these counties. As October progresses, the blue-winged teal and wood duck harvest declines while the diving duck and sea duck harvest increases. Mallards and other dabbling ducks provide a significant portion of the harvest through early November but in November and December diving duck/sea ducks provides the bulk of the duck harvest. In early November the diving duck/sea duck harvest is dominated by scaup and bufflehead while late in November/early December it is dominated by long-tailed ducks. These species specific data show the duck harvest opportunity on Lake Michigan in November and December.

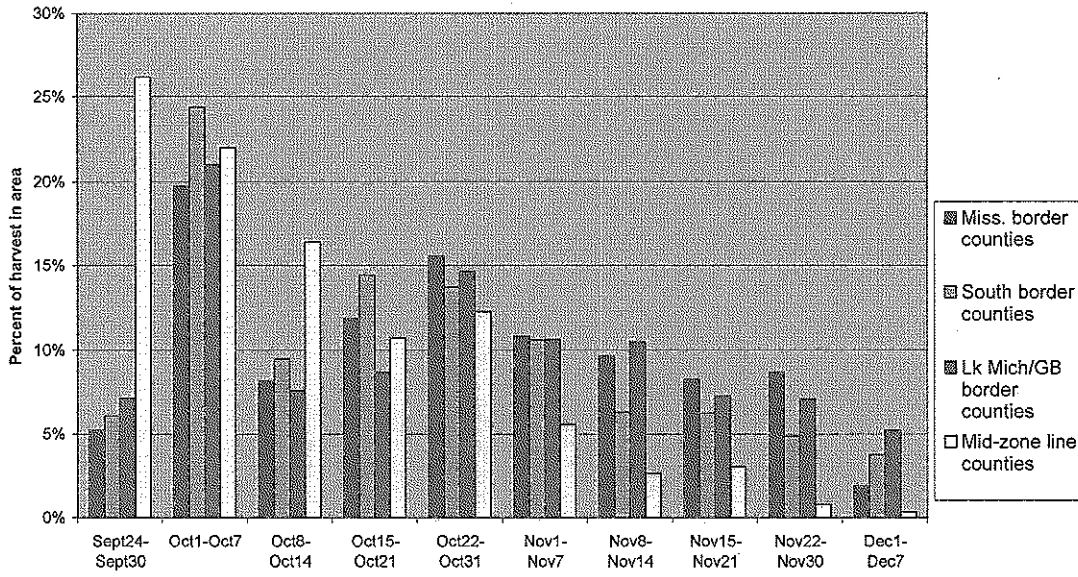
The harvest data reviewed above has shown that the Mississippi River provides later season hunting of mallards, migrating dabblers, and diving ducks than northern portions of Wisconsin and that Lake Michigan/Green Bay provide later season hunting of diving and sea ducks so what about the most southern counties of Wisconsin. Data on duck harvest for the southern most counties of Grant, Lafayette, Green, Rock, Walworth, Kenosha, and Racine reveals a pattern similar to the statewide duck harvest and later than the counties in the middle of the state. The harvest in these counties is slightly later than farther north but the largest proportion is still earlier than either the Mississippi River or Lake Michigan.

South border counties, harvest by date (HIP data 1999-2009)



When presenting all 4 groups together with the percent of the harvest for that group analyzed by date, the southern counties pattern similar but slightly earlier than Lake Michigan or the Mississippi River county groups.

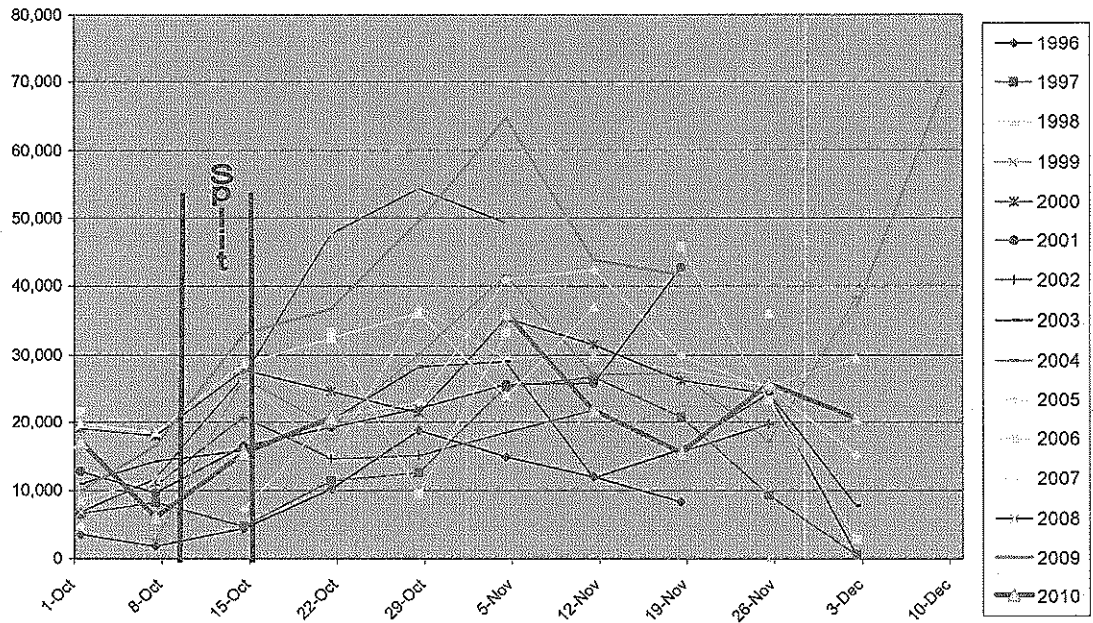
Comparison of harvest, by % of area total (HIP data 1999-2009)



Duck Surveys

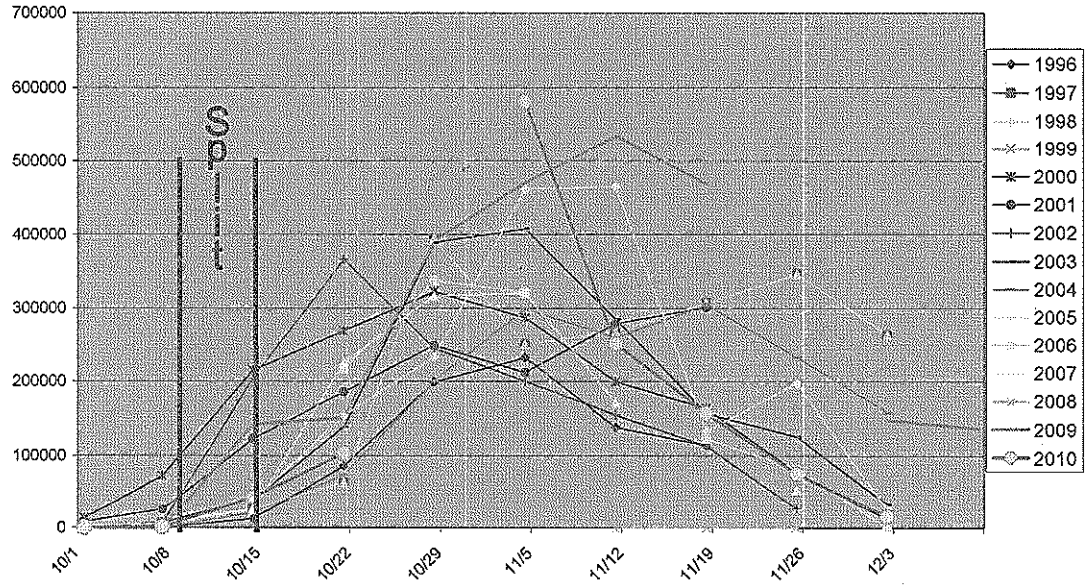
The best source of fall duck survey data has been developed from the surveys conducted cooperatively by the Wisconsin DNR and the US Fish and Wildlife Service on the Mississippi River. These data are useful for showing the peak numbers and dates for the Mississippi River but should not be used as a representation of Wisconsin as a whole.

USFWS Miss. Survey- Dabblers (pools 7, 8, 9)



The dabbling duck data show an increasing number of dabbling ducks on the Mississippi River during October with a peak for dabbling duck numbers in most years during the first two weeks of November. This is followed by a general decline into late November and December in most years. However, in some years as the rest of Wisconsin waters freeze an increase in dabbling duck numbers on the Mississippi River is observed just before ducks fly south out of Wisconsin.

USFWS Miss River Surveys- Divers (pools 7, 8, 9)



The diving duck numbers on the Mississippi River show a similar pattern as the dabbling ducks although the peak in numbers is sharper and the pattern starts a little later. Diving duck numbers do not begin to climb until the 2nd or 3rd week in October but then increase quickly to peak number of early to mid November. The diving duck numbers steadily decline through late November and surveys show relatively few diving ducks in early December.

