# Minnesota Experimental September Teal Season-2021

#### Background

Blue-winged teal are one of the most abundant and widely distributed ducks in North America. Blue-winged teal migrate early in the fall, thus avoiding much of the shooting pressure exerted during the "regular" duck season. Blue-winged teal are the 2<sup>nd</sup> most abundant breeding duck in Minnesota in addition to large numbers of migrants that move through the state beginning in late August.

In February 2013, the U.S. Fish and Wildlife Service (Service) and its state partners released a report that assessed the harvest potential of teal. The analyses indicated that optimal harvest rates for blue-winged teal were 2 to 9 times higher than harvest rates that resulted during most hunting seasons conducted from 1965-2009 (both September teal and regular duck hunting seasons combined). Although the report indicated that green-winged teal also could withstand some additional harvest pressure, the difference in the optimal harvest rates from those occurring during most of the 1965-2009 hunting seasons (1.3 to 3 times higher) was less than for bluewinged teal. Therefore, the Service stated that it was willing to entertain proposals for additional opportunities to harvest teal, but that such opportunities should target primarily blue-winged teal because their earlier migration chronology makes them easier to isolate both temporally and spatially. In response, the Mississippi Flyway Council proposed initiation of an experimental September teal season in Minnesota, Iowa, Wisconsin, and Michigan. The proposal was endorsed by the Service in June 2014. Minnesota did not participate until 2021 but the other 3 states held teal seasons each year.

Potential impacts of September teal seasons on non-target waterfowl species have been a concern since the first experimental seasons in the Central and Mississippi Flyways during the mid-1960s. The non-target species take documented during the initial experimentation with these seasons was one reason that prompted the Service to discontinue their use in production states of Minnesota, Iowa, Wisconsin and Michigan. Therefore, states that want to implement September teal seasons must demonstrate that the special season does not have a significant impact on non-target bird species. To address concern of non-target take, Minnesota entered into a Memorandum of Agreement with the Service outlining a three-year plan to assess hunter performance using observation blinds during a 3-year experimental period. Results of this work will help to determine whether the September teal-only season should be permitted in Minnesota.

## Methods

Prior to opening the experimental teal season, Minnesota DNR did extensive outreach to gauge support from hunters, conservation groups, and the public. This began in late fall 2020 when we contacted conservation groups, tribal nations and avid hunters to gauge support for a suite of potential waterfowl regulation changes for 2021, including an experimental teal season. In January 2021, we collected online public input from ~4,000 individuals to evaluate support for teal season. In February 2021, we conducted a mail-out hunter attitude survey that included ~7,000 waterfowl stamp purchasers. In late March, we released a proposed package of changes that included a 5-day teal season. In April, we held a Town Hall meeting and took additional public comment before we selected a 5-day experimental teal season for 2021. In general, there was support for an experimental teal season across all modes of input. In the mail-out hunter survey, 46% supported teal season, 36% were opposed, and 18% were neutral. In the online public input survey, ~1,700 comments were in support of a teal season and ~1,400 were opposed.

We then identified staff across the state from both Wildlife and Law Enforcement divisions with waterfowl ID skills to conduct hunter observations (spy blinds). We held 2 online training sessions to cover the protocols, requirements, sample size, and reporting methods. In most cases, observers found locations to observe parties from shore or a hillside and/or pose as hunters in the marsh to get in locations to observe hunting parties with binoculars.

Observers evaluated the total number of non-target opportunities (any waterfowl or flock of waterfowl) judged to be in range of hunters, total number of non-target attempts (a shot or shots fired at a non-target), and total number of non-target harvested compared to teal harvest. In addition, we conducted some bag checks as well as other information on the hunting parties (using dogs, spinning-wing decoys, etc.).

### Results

From Saturday September 4 through Wednesday September 8, 51 hunting parties were observed. Most observations occurred opening day (Sat: 29; Sun: 11; Mon: 7; Tue: 2; Wed: 2). Observations occurred in 24 different counties and all were on public land, mainly state WMAs (33), federal WPAs (9), and public water (9).

The average length of the observations lasted 121 minutes and most observations (95%) occurred in the morning. Hunting party size ranged from 1-7 and averaged three hunters. About 41% of the parties observed used spinning-wing decoys and 41% of the parties used dogs.

In most cases, observers were only able to watch partial hunts (68%) compared to the entire hunt (32%). In 96% of the hunts, hunting parties were not aware they were being observed.

Bag checks were conducted for 38 hunters who averaged 2.5 ducks/hunter and 84% were bluewinged teal and 16% green-winged teal. A total of 459 duck flocks were observed over the 51 hunts, with 56% identified as teal (bluewinged, green-winged, or unknown teal) and 39% non-target ducks and 5% unknown. Mallards comprised 38% of the non-targets followed by wood ducks (32%). Seven other species of nontargets were observed but all in relatively low numbers.

The attempt rate at teal was 85% and non-targets was 10±4% (95% CI) (Table 1).

During observations, 157 teal were observed harvested compared to 9 non-targets (mallard and wood duck) which is 5.4% non-target kill rate (Table 2).

Table 1. Number of hunting parties, teal flocks and non-target duck flocks in range encountered during legal shooting hours during experimental teal season evaluation in Minnesota in 2021 and Iowa, Michigan and Wisconsin in 2014-16.

State	Year	Parties	Teal	Teal	%	Non-	Non-	%	Upper
			flocks	flocks	Teal	targets	targets	Non-	67%
			in	shot at	shot	in	shot at	targets	CI (%
			range		at	range		shot at	shot
									at)
Minnesota	2021	51	225	191	85%	178	18	10%	14%
Iowa	2014-	60	285	219	77%	220	13	6%	7%
	16								
Michigan	2014-	43	59	41	69%	210	10	5%	6%
_	16								
Wisconsin	2014-	38	60	37	61%	102	7	7%	8%
	16								

Table 2. Number of teal and other ducks killed during legal shooting hours during experimental teal season evaluation in Minnesota in 2021 and Iowa, Michigan and Wisconsin in 2014-16.

State	Year	Teal	Non-	% non-target	Teal	% Blue-
		killed	target	kill	harvest	winged teal
			killed			
Minnesota	2021	157	9	5.4%	51,000	84%
Iowa	2014-16	231	4	1.7%	41,000	94%
	avg.					
Michigan	2014-16	40	6	13.1%	7,000	52%
_	avg.					
Wisconsin	2014-16	32	3	8.6%	15,000	86%
	avg.					

Table 3. Number of waterfowl law enforcement violations that were recorded statewide Sept. 4-8, which included teal season but also early goose season.

No license	7
License not in possession	2
No federal duck stamp	7
Unsigned federal duck stamp	1
Closed season	19
Closed hours	2
Illegal weapon/manner	1
Overlimit	1
Wanton waste	2
Unplugged shotgun	16
Toxic shot	5
Loaded firearm	6

### Discussion

Overall, the 5-day experimental teal season in 2021 was a success despite extremely dry conditions statewide. We had very good support finding qualified observers from both law enforcement and wildlife. There was some concern voiced about the season before it opened with potential for high non-target attempt rates and/or impacts to the regular duck season. Based on a separate mail out survey we conducted, participation was good with an estimated 13,000 hunters harvesting 51,000 teal with 70% satisfaction rate. Our 2 main metrics (attempt rates at non-targets and kill rate of non-targets) were similar to what other states had observed and both were well below the overall criteria to hold a season (<25% attempt rates at non-targets; <10% kill rate of non-targets). Law enforcement violations were not excessively high when you consider many of those violations could have been early season goose hunters (Table 3). We did have 2 of our tribal nations in northern Minnesota close their wild rice lakes to teal hunting just before the season opened due to potential safety concerns with wild rice harvesters and teal hunters on the same lakes.

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