

**PENNSYLVANIA GAME COMMISSION
BUREAU OF WILDLIFE MANAGEMENT
PROJECT ANNUAL JOB REPORT**

PROJECT CODE NO.: 06210

TITLE: White-tailed Deer Research/Management

PROJECT JOB NO.: 21011

TITLE: Deer Management Assistance and Agricultural Deer Control Permit Programs

PERIOD COVERED: 1 July 2018 through 30 June 2019

COOPERATING AGENCIES: None

WORK LOCATION(S): Statewide

PREPARED BY: Jeannine Tardiff Fleegle and Christopher Rosenberry

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ABSTRACT To assist landowners in achieving their deer management goals, the Game Commission developed a number of landowner assistance programs. The Agricultural Deer Control Permit Program (Red Tag Program), established in 1995, and the Deer Management Assistance Program (DMAP), established in 2003, provide landowners with additional permits for hunters to take antlerless deer. During the 2018-19 hunting seasons, 1,748 properties enrolled in DMAP. The Game Commission issued 78,822 DMAP coupons, of which 78,820 were redeemed for DMAP permits. Eighty percent of DMAP permit holders submitted their mandatory report card. Hunters using DMAP reported harvesting 16,889 antlerless deer. In 2018, 370 permits issued in the Red Tag Program and reported a harvest of 1,552 deer.

OBJECTIVE

To monitor participation and use of the Game Commission's Deer Management Assistance Program (DMAP) and Agricultural Deer Control Permit Program (Red Tag Program) programs.

METHODS

Prior to 2005, information on the DMAP was reported in Project Job No. 21001. Landowner participation and deer harvest for the Red Tag Program were not reported before 2005.

The DMAP provides landowners with a method to increase antlerless deer harvests to meet individual landowner deer management goals. Eligibility requirements changed throughout the first 3 years of this program. In 2003, public landowners and private landowners enrolled in a

Game Commission public access program such as Farm-Game, Safety Zone, or a Forest-Game Cooperative were eligible to participate. In 2004, DMAP was expanded to public landowners, private landowners who do not charge a fee to hunt, and hunting clubs of 1,000 or more acres that were established prior to 1 January 2000. In 2005, the 1,000 or more acres requirement for hunting clubs was removed. In addition, hunters could receive up to 2 permits per enrolled property.

For the 2010-11 hunting season, the Board of Commissioners significantly changed the DMAP program. Adopted changes included: 1) reducing the 2010-11 antlerless allocation in each Wildlife Management Unit (WMU) by the number of DMAP coupons from 2009-10, and 2) capping the 2010-11 DMAP coupon number to not exceed the 2009-10 coupon number. As a result of these regulation changes, administration of DMAP changed. Because of the DMAP coupon cap, DMAP applications were prioritized to determine which applicants received DMAP coupons for the 2010-11 hunting season. First priority was given to private landowners enrolled in a Game Commission public access program. Second priority was given to public lands. Third priority was given to private landowners not enrolled in a Game Commission public access program. In addition, the application deadline was moved up from 1 July to 12 June. The Board of Commissioners approved an additional 2,761 coupons above the cap to be issued to private landowners not enrolled in a Game Commission public access program.

For the 2011-12 hunting season, the Board of Commissioners again changed DMAP regulations by requiring public landowners to submit a management plan with an application and advancing the application deadline to 1 June. In 2014, the application deadline was advanced to 1 May to accommodate application data entry and upload to Pennsylvania Automated License System (PALS) prior to hunting licenses going on sale the first Monday of June. Limiting the number of DMAP coupons and inclusion of DMAP coupon in the general antlerless allocation was abandoned.

Applications received by 1 May were reviewed by Regional Wildlife Management Supervisors. Following application approval, coupons were sent to landowners for distribution to hunters. Hunters then redeemed a coupon for a permit to harvest an additional antlerless deer on that specific DMAP property. Landowners also could choose a 'no coupon' option where hunters could purchase DMAP permits from license vendors. Under the 'no coupon' option, hunters only needed to know the DMAP unit number to purchase a DMAP permit.

Hunters are required to return a postage paid report card regardless of hunting success. In the first year of the program, 2003-04, approximately 50% of all DMAP participants returned report cards by the deadline in February. Because it was a new program and the reporting requirement differed from regular hunting license reporting requirements, where report cards are only required when a deer is harvested, letters were sent to non-respondents to remind them of the need to report regardless of harvest. A second mailing was then made to the remaining non-respondents. Following the second mailing, 99% of DMAP participants had reported. The second year, 2004-05, nearly 80% of hunters submitted their DMAP report cards. No additional mailings were made. However, hunters who did not submit a report card were not eligible to participate in 2005-06. Following numerous complaints and disputes regarding whether a report card was returned, this requirement was relaxed, and hunter application ineligibility provision was removed if a report card was not received in 2006. Following the 2014-15, 2015-16, 2016-17, 2017-18, and

2018-19 hunting seasons, hunters who had not reported their DMAP permits were sent reminder postcards.

The Red Tag Program provides those landowners experiencing agricultural deer depredation a tool to remove antlerless deer outside of the regular hunting season. Applications are only accepted from persons who are currently enrolled and have participated in 1 of the Game Commission's public access programs (Farm Game Project or Safety Zone) for a minimum of 2 years, except for applicants in WMUs 5C and 5D. Applications for deer control permits are made through the district game warden. Following application approval, a permitted landowner is authorized to enlist the aid of a limited number of hunters. Landowners distribute Red Tag permits to hunters that are valid from 1 February to 28 September each calendar year, excluding Sundays, during the hours between dawn and dusk only. The permit is not valid from 16 May to 30 June. Only antlerless deer may be taken under this program. Because of uncertainty about reporting consistency and procedures prior to 2005, summary data prior to 2005 are not included in this report. Beginning in 2014, Red Tag was included in a new Game Commission intranet reporting system. As a result, summary data provided changed.

In 2011, the Board of Commissioners approved the use of bait on approved properties enrolled in the Red Tag Program in WMU 5C and 5D. Hunters on these approved properties would be allowed to distribute bait beginning 2 weeks prior to and continue through the end of the permit period. Bait accumulation in any 1 location may not exceed 5 gallons total volume at any given time.

RESULTS

Over 1,740 properties were enrolled in the DMAP in 2018-19 (Table 1). Enrolled acreage increased by 1.47 million acres from 2017-18 to 2018-19. Subsequently, coupons increased as well (Table 1). Eighty percent of DMAP hunters submitted report cards to the Game Commission which is identical to 2017-18. All DMAP permit holders were sent post cards in mid-January reminding them to report their harvest or lack of harvest by the early February deadline. Hunters reported harvesting 16,889 antlerless deer with these permits. Harvest success of those that reported was similar to 2017-18 WMU antlerless license success rate (Table 2). In 2018-19, DMAP harvests increased WMU antlerless harvests by 7% or less of the total antlerless harvest, except in WMUs 2E, 2F, 2G, 2H, 4A, 4D, and 4E where DMAP harvest was 16%, 26%, 20%, 33%, 28%, 13%, and 10% of the total antlerless harvest respectively (Table 3).

Three hundred seventy permits were issued through the Game Commission's Red Tag Program in the 2018 calendar year (Table 5). These 370 permits resulted in the distribution of 6,944 tags. Mandatory monthly reporting by permitted landowners showed 1,552 deer taken by hunters on Red Tag enrolled properties (Table 5). However, of the 370 permit holders, only 289 submitted at least 1 monthly report. Eighty-four percent of the deer harvested were female and harvest levels varied by WMU (Table 6).

RECOMMENDATIONS

1. Continue to collect and summarize DMAP and Red Tag Program participation and

harvest data by WMU.

2. Maintain current DMAP regulations.
3. Annually send reminders to permit holders to increase DMAP reporting rates.
4. Given that less than 80% of Red Tag Program permit holders submitted at least 1 monthly report, efforts should be made to increase the number of permit holders submitting monthly reports.

Table 1. Number of units, acres enrolled, and coupons requested, approved, and redeemed by year, Pennsylvania's Deer Management Assistance Program (DMAP).

Year	Units enrolled	Acres enrolled	Coupons requested	Coupons approved	Coupons redeemed
2003-04	176	696,309	31,898	31,783	23,348
2004-05	696	1,722,619	47,848	47,812	34,135
2005-06	691	1,945,759	42,279	42,235	31,641
2006-07	758	1,877,850	36,841	36,816	28,432
2007-08	801	1,470,306	32,379	32,379	22,148
2008-09	841	1,502,896	30,474	30,476 ^a	23,520
2009-10	920	1,650,783	33,637	33,642 ^a	26,877
2010-11	870	1,658,732	29,169	27,588	23,736
2011-12	766	1,448,521	27,168	27,519 ^a	23,915
2012-13	832	1,479,477	28,108	28,170 ^a	24,664
2013-14	795	1,733,899	30,280	30,276	26,962
2014-15	1,092	1,829,567	35,461	35,461	31,708
2015-16	1,058	1,699,814	33,669	33,533	30,336
2016-17	1,103	1,762,206	36,450	36,429	32,733
2017-18	1,385	2,614,949	54,857	54,620	48,679
2018-19	1,748	4,085,542	78,292	78,822	78,820

^a This number is higher than Coupons requested due to approval to replace lost coupons and administration issues.

Table 2. Number of antlerless deer harvested, hunter success, and reporting rate by year, Pennsylvania's Deer Management Assistance Program (DMAP).

Year	Antlerless harvest	Hunter success (%)	Reporting rate (%)
2003-04	6,250	27	99 ^a
2004-05	7,946	23	81
2005-06	7,644	24	84
2006-07	7,396	26	78
2007-08	5,006	23	79
2008-09	5,744	24	78
2009-10	4,305	16	54
2010-11	4,423	19	54
2011-12	3,933	16	52
2012-13	3,852	33	47
2013-14	4,583	37	46
2014-15	5,822	18	78 ^b
2015-16	5,652	23	81 ^b
2016-17	6,731	25	81 ^b
2017-18	10,745	28	80 ^b
2018-19	16,889	30	80 ^b

^a Hunters failing to report were contacted by mail; 2 mailings were sent.

^b Hunters who had not reported were sent a reminder postcard in mid-January.

Table 3. 2018-19 Deer Management Assistance Program (DMAP) Harvest by Wildlife Management Unit (WMU) and subsequent increase in antlerless harvest in comparison to regular WMU antlerless license harvests.

WMU	Reported DMAP harvest	Increase in WMU antlerless harvest (%)
1A	75	1%
1B	453	3%
2A	17	0%
2B	0	0%
2C	232	2%
2D	206	1%
2E	1713	16%
2F	2634	26%
2G	1878	20%
2H	909	33%
3A	437	6%
3B	505	6%
3C	584	5%
3D	360	6%
4A	2526	28%
4B	436	6%
4C	506	7%
4D	1303	13%
4E	1001	10%
5A	362	7%
5B	701	5%
5C	15	0%
5D	36	1%

Table 4. Agricultural Deer Control Permit Program (Red Tag) participants and harvest in Pennsylvania 2005-2013.

Year	Participants	
	enrolled^a	Harvest
2005	168	867
2006	197	1,013
2007	223	982
2008	169	1,002
2009	189	1,261
2010	165	964
2011	160	1,160
2012	208	1,159
2013	182	1,120

^a This is the number of individual participants in the program, not the total number of permits issued.

Table 5. Agricultural Deer Control Permit Program (Red tag) participants and harvest in Pennsylvania, 2014-2018.

Year	Permits		Acres	Harvest
	issued	Tags issued	enrolled	
2014	308	6,067	50,312	1,177
2015	292	5,925	50,275	1,099
2016	286	5,670	48,600	785
2017	287	6,326	51,094	1,176
2018	370	6,944	59,086	1,552

Table 6. Reported Agricultural Deer Control Permit Program (Red Tag) harvest by Wildlife Management Unit (WMU), Pennsylvania 2006-2018.

WMU	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1A	32	34	19	18	25	40	22	26	53	50	13	30	45
1B	11	0	0	6	11	16	4	4	21	16	3	18	36
2A	139	134	79	127	42	77	81	73	133	104	61	67	55
2B	12	20	13	11	10	4	14	12	32	16	11	10	10
2C	34	37	24	30	14	42	59	65	52	86	86	92	94
2D	273	154	180	281	240	350	344	444	383	356	181	294	307
2E	51	68	67	76	58	75	51	104	138	125	32	144	207
2F	14	13	2	0	8	1	11	0	9	6	2	14	24
2G	5	5	3	17	5	6	6	6	8	0	7	4	17
2H				0	0	0	0	0	0	0	0	0	0
3A	21	19	0	0	0	0	0	0	0	0	0	0	0
3B	0	0	8	8	0	0	0	0	0	0	9	2	43
3C	22	5	0	0	0	8	22	0	29	18	0	16	44
3D	1	0	0	0	0	0	0	7	30	19	0	0	6
4A	109	50	69	77	43	75	64	41	6	0	27	34	59
4B	0	2	34	18	0	0	10	24	5	36	3	0	21
4C	30	63	29	54	24	65	70	46	6	9	55	95	206
4D	51	78	105	128	59	39	75	51	51	22	51	49	94
4E	0	0	0	0	0	0	11	0	3	24	4	13	36
5A	9	14	38	24	45	58	51	69	42	1	75	52	37
5B	35	17	34	53	46	47	44	51	13	64	23	45	68
5C	138	218	221	194	163	152	151	65	20	36	74	127	125
5D	26	51	77	139	171	104	69	32	90	48	68	70	18