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 2022 through 30 June 2023

COOPERATING AGENCIES: None

WORK LOCATION(S): Statewide

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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 (Ag Tag Program, previously called Red Tag) 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 2022-23 hunting seasons, 2,507 properties enrolled in DMAP. The Game Commission issued 98,556 DMAP coupons, of which 72,906 were redeemed for DMAP permits. Seventy-four percent of DMAP permit holders submitted their mandatory report. Hunters using DMAP reported harvesting 14,142 antlerless deer. In 2022, 427 permits were issued in the Red Tag Program with a reported harvest of 1,330 deer. In 2023, the Agricultural Deer Control Permit Program transitioned from calendar year to license year for reporting period. In 2023 (January-June), 610 properties were enrolled, 12,380 permits were issued, and 785 deer were reported harvested.

OBJECTIVE

Monitor participation and use of the Game Commission's Deer Management Assistance Program (DMAP) and Agricultural Deer Control Permit Program (Red Tag Program, which is now called the Ag Tag Program).

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 2020-21 hunting season, the personal limit remained at 4 permits per enrolled property where landowners distributed coupons to hunters. For all other properties, the personal limit remained 2 permits per enrolled property.

For the 2010-11 hunting season, the Board of Commissioners significantly changed the DMAP. 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. In 2021, the application deadline was moved to July 1, to allow more time for applicants that needed to include forest measures.

The most recent change to eligibility was for the 2023-24 season, where the Board of Commissioners voted to allow lands that charge a fee for access to be eligible.

Applications received by 1 July 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. Since the 2014-15 hunting seasons, hunters who had not reported their DMAP permits were sent reminder postcards and starting in 2022, were sent an email reminder.

Starting in 2017, additional DMAP units were established within Disease Management Areas (DMAs) for the management of chronic wasting disease (CWD). DMAP allowed for antlerless harvest during the first week of the firearms season when it was antlered only. However, starting in 2020-21 increases in WMU antlerless licenses for the management of CWD and a change to two-week concurrent antlered/antlerless firearms hunting opportunity in WMUs where CWD was present replaced the need to continue many of those CWD DMAP units.

The Ag Tag Program provides landowners experiencing agricultural deer depredation a tool to remove antlerless deer outside of the regular hunting season. Prior to 2023, applications were only accepted from persons who were currently enrolled in 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. Landowners would distribute Red Tag permits (numbered red plastic snap tags) to hunters, which were valid from 1 February to 28 September each calendar year, excluding Sundays, during the hours between dawn and dusk only. The permit was not valid from 16 May to 30 June. The landowner was responsible for monthly reports of deer harvests. Tags are only valid for antlerless deer.

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.

The Ag Tag Program was revised in 2022 to mirror DMAP with coupons and harvest tags (no longer using red plastic snap tags), allowing up to 4 tags per hunter, and hunter reporting requirement of harvest/no harvest (rather than the landowner). Further, the BOC removed the requirements for public access and signage, changed the permit dates to coincide with the license year, and condensed the dates (August 1 to September 15 and February 1 to April 15). These changes took effect in 2023 and the program was rebranded Ag Tag. Applications for deer control permits are made through the district game warden with an online renewal option created. 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 (Tables 4 & 5). In 2023 with the development of the new Ag Tag system, data are reported on the license year and are presented to be consistent with DMAP reporting (Tables 7 & 8).

RESULTS

Over 2,500 properties were enrolled in the DMAP in 2022-23 (Table 1). Enrolled acreage increased by over 375,000 acres from 2021-22 to 2022-23, as did coupon requests. Seventy-four percent of DMAP hunters submitted reports to the Game Commission. Deer Management Assistance Program permit holders were sent emails and post cards in mid-January reminding them to report their harvest or lack of harvest by the early February deadline. Hunters reported harvesting 14,142 antlerless deer with these permits. Harvest success of those that reported (26%) was similar to 2022-23 WMU antlerless license success rate (Table 2). In 2022-23, DMAP harvests increased WMU antlerless harvests by 9% or less of the total antlerless harvest, except in WMUs 2F, 2G, 3A, and 3B where DMAP harvest was 18%, 25%, 33%, and 13% of the total antlerless harvest respectively (Table 3).

Four hundred twenty-seven permits were issued through the Game Commission's Red Tag Program in the 2022 calendar year (Table 5). These 427 permits resulted in the distribution of 7,676 tags. Mandatory monthly reporting by permitted landowners showed 1,330 deer taken by hunters on Red Tag enrolled properties (Table 5). However, of the 427 permit holders, only 288 (67%) submitted at least 1 monthly report. Eighty-three percent of the deer harvested were female and harvest levels varied by WMU (Table 6).

In 2023, Red Tag Program transitioned to Ag Tag which follows the license year. This change was implemented in January 2023. Therefore, the 2022-23 Ag Tag reporting year only covers January to June 2023. During this period, 610 properties enrolled, 12,380 permits were issued, and 785 deer were reported harvested (Tables 7 & 8).

RECOMMENDATIONS

1. Continue to collect and summarize DMAP and Ag 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. Continue efforts to make the Ag Tag Program more efficient and user-friendly.

| 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 | $78,822^{a}$ | 78,820 |
| 2019-20 | 1,984 | 5,512,623 | 144,198 | 154,700 ^b | 105,868 |
| 2020-21 | 2,223 | 3,819,346 | 86,268 | 84,170 | 71,938 |
| 2021-22 | 2,492 | 3,449,200 | 93,115 | 93,049 | 72,803 |
| 2022-23 | 2,507 | 3,825,162 | 98,711 | 98,556 | 72,906 |

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

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

^b This number is higher than Coupons requested due to an increase in Coupons approved after 3 Chronic Wasting Disease DMAP units sold out.

Table 2. Number of antlerless deer reported harvested, hunter success, and reporting rate on permits by year, Pennsylvania's Deer Management Assistance Program (DMAP). Note: Success only includes reported harvest divided by coupons redeemed and does not factor in reporting rate.

| | Antlerless | Hunter success | Reporting rate |
|---------|------------|----------------|-----------------------|
| Year | harvest | (%) | (%) |
| 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} |
| 2019-20 | 22,813 | 28 | 77^{b} |
| 2020-21 | 16,214 | 28 | 81 ^b |
| 2021-22 | 11,582 | 26 | 61 ^b |
| 2022-23 | 14,142 | 26 | 74 ^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.

| | | Increase in |
|-----|---------------------|----------------|
| | Reported | WMU antlerless |
| WMU | DMAP harvest | harvest (%) |
| 1A | 83 | 1% |
| 1B | 972 | 6% |
| 2A | 14 | 0% |
| 2B | 0 | 0% |
| 2C | 245 | 1% |
| 2D | 325 | 1% |
| 2E | 292 | 3% |
| 2F | 2,582 | 18% |
| 2G | 1,714 | 25% |
| 3A | 875 | 33% |
| 3B | 852 | 13% |
| 3C | 764 | 8% |
| 3D | 565 | 4% |
| 4A | 472 | 6% |
| 4B | 83 | 1% |
| 4C | 240 | 3% |
| 4D | 699 | 8% |
| 4E | 1,014 | 8% |
| 5A | 1,233 | 9% |
| 5B | 272 | 4% |
| 5C | 788 | 5% |
| 5D | 24 | 0% |

Table 3. 2022-23 Deer Management Assistance Program (DMAP) reported harvest by Wildlife Management Unit (WMU) and subsequent increase in antlerless harvest in comparison to regular WMU antlerless license harvests.

| 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 |

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

^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 reported |
|-------------------------------------|---------------------|--------------------------------|
| harvest in Pennsylvania, 2014-2022. | | |

| | Permits | | Acres | |
|------|---------|-------------|----------|---------|
| Year | issued | Tags issued | enrolled | Harvest |
| 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 |
| 2019 | 390 | 7,452 | 58,307 | 1,403 |
| 2020 | 412 | 7,846 | 60,733 | 1,616 |
| 2021 | 452 | 8,210 | 65,622 | 1,339 |
| 2022 | 427 | 7,676 | 59,566 | 1,330 |

| WMU | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1A | 32 | 34 | 19 | 18 | 25 | 40 | 22 | 26 | 53 | 50 | 13 | 30 | 45 | 46 | 36 | 23 | 39 |
| 1B | 11 | 0 | 0 | 6 | 11 | 16 | 4 | 4 | 21 | 16 | 3 | 18 | 36 | 71 | 124 | 72 | 87 |
| 2A | 139 | 134 | 79 | 127 | 42 | 77 | 81 | 73 | 133 | 104 | 61 | 67 | 55 | 54 | 86 | 79 | 109 |
| 2B | 12 | 20 | 13 | 11 | 10 | 4 | 14 | 12 | 32 | 16 | 11 | 10 | 10 | 17 | 7 | 18 | 22 |
| 2C | 34 | 37 | 24 | 30 | 14 | 42 | 59 | 65 | 52 | 86 | 86 | 92 | 94 | 120 | 78 | 105 | 128 |
| 2D | 273 | 154 | 180 | 281 | 240 | 350 | 344 | 444 | 383 | 356 | 181 | 294 | 307 | 221 | 210 | 182 | 202 |
| 2E | 51 | 68 | 67 | 76 | 58 | 75 | 51 | 104 | 138 | 125 | 32 | 144 | 207 | 159 | 232 | 146 | 118 |
| 2F | 14 | 13 | 2 | 0 | 8 | 1 | 11 | 0 | 9 | 6 | 2 | 14 | 24 | 33 | 81 | 81 | 21 |
| 2G | 5 | 5 | 3 | 17 | 5 | 6 | 6 | 6 | 8 | 0 | 7 | 4 | 17 | 14 | 21 | 3 | 11 |
| 3A | 21 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 4 | 1 |
| 3B | 0 | 0 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 2 | 43 | 24 | 20 | 21 | 28 |
| 3C | 22 | 5 | 0 | 0 | 0 | 8 | 22 | 0 | 29 | 18 | 0 | 16 | 44 | 20 | 58 | 18 | 28 |
| 3D | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 30 | 19 | 0 | 0 | 6 | 6 | 10 | 0 | 8 |
| 4A | 109 | 50 | 69 | 77 | 43 | 75 | 64 | 41 | 6 | 0 | 27 | 34 | 59 | 37 | 7 | 35 | 23 |
| 4B | 0 | 2 | 34 | 18 | 0 | 0 | 10 | 24 | 5 | 36 | 3 | 0 | 21 | 30 | 78 | 58 | 35 |
| 4C | 30 | 63 | 29 | 54 | 24 | 65 | 70 | 46 | 6 | 9 | 55 | 95 | 206 | 107 | 136 | 132 | 136 |
| 4D | 51 | 78 | 105 | 128 | 59 | 39 | 75 | 51 | 51 | 22 | 51 | 49 | 94 | 95 | 89 | 70 | 78 |
| 4E | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 3 | 24 | 4 | 13 | 36 | 68 | 55 | 68 | 43 |
| 5A | 9 | 14 | 38 | 24 | 45 | 58 | 51 | 69 | 42 | 1 | 75 | 52 | 37 | 22 | 53 | 56 | 58 |
| 5B | 35 | 17 | 34 | 53 | 46 | 47 | 44 | 51 | 13 | 64 | 23 | 45 | 68 | 86 | 62 | 53 | 60 |
| 5C | 138 | 218 | 221 | 194 | 163 | 152 | 151 | 65 | 20 | 36 | 74 | 127 | 125 | 89 | 81 | 47 | 73 |
| 5D | 26 | 51 | 77 | 139 | 171 | 104 | 69 | 32 | 90 | 48 | 68 | 70 | 18 | 82 | 90 | 68 | 22 |

Table 6. Reported Agricultural Deer Control Permit Program harvest by Wildlife Management Unit (WMU), Pennsylvania 2006-2022.

Table 7. Number of units, acres enrolled, and coupons requested, approved, and redeemed by year for Pennsylvania's Agricultural Deer Control Permit Program.

| Year | Units | Acres | Coupons | Coupons | |
|-------------------|----------|----------|----------|----------|--|
| | enrolled | enrolled | approved | redeemed | |
| 2023 ^a | 610 | 68,495 | 12,830 | 4,084 | |

^a 2023 includes only January through June.

Table 8. Reported Agricultural Deer Control Permit Program (Ag Tag) harvest by Wildlife Management Unit (WMU), Pennsylvania 2023.

| WMU | 2023 ^a |
|-----|--------------------------|
| 1A | 33 |
| 1B | 54 |
| 2A | 93 |
| 2B | 9 |
| 2C | 59 |
| 2D | 106 |
| 2E | 72 |
| 2F | 54 |
| 2G | 10 |
| 3A | 7 |
| 3B | 11 |
| 3C | 5 |
| 3D | 4 |
| 4A | 3 |
| 4B | 17 |
| 4C | 83 |
| 4D | 4 |
| 4E | 29 |
| 5A | 16 |
| 5B | 45 |
| 5C | 41 |
| 5D | 30 |

^a 2023 includes only January through June.