



MID-ATLANTIC
— WHITETAIL SOLUTIONS, LLC —

Landfill Site 2 - Dickerson, MD

Deer Management Summary 2020-2021

Prepared by Dustin Prievo
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As the 2020-2021 Maryland Regulated Hunting Season comes to a close and a new hunting season is on the horizon, *the Mid-Atlantic Whitetail Solutions, LLC (MAWS)* would like to share with the Montgomery County Department of Environmental Protection, Recycling and Resource Management Division, the results of deer management efforts performed on the future Site 2 Landfill properties, in Dickerson, Maryland during Year 11 of the management effort.

Thorough analysis of the deer population, overall wildlife habitat, and compromise of all those affected by this property, helps us determine the measure of success of this program. The use of our hunter harvest records, trail cameras and observation logs all provide us with information to aide in our program in making future decisions on best practices for the determined goals of Montgomery County and MAWS combined.

Changes for 2020-2021

Mid-Atlantic Whitetail Solutions, LLC Internal Changes

With the pandemic on the rise in early 2020, our members continued to express an eagerness to succeed. Virtual training, meetings and discussions were a must due to safety and health concerns. Our members' shooter qualifications in 2020-2021 were conducted virtually. Our meetings and trainings were also conducted virtually. With social distancing being a must in 2020-2021, our team adapted and was able to overcome with very little impact. Little to no changes occurred overall.



Pre-Hunting Efforts

Growth Through Education

Our dedicated membership continued to grow through education and training as the year began. Each member (22 total) enrolled and graduated in the Level I Deer Steward program from Clemson University, making our program the ONLY organization in the country to have and require collegiate level training, concentrating on whitetail deer and whitetail deer management.

As a company, and as a team, we know that knowledge has a beginning but no end. We trust that in order to continue to grow and provide the best deer management services in the region, we must continue learning. Deer Steward I was a course that provided members “Next Level” training that will help us be more successful as a whole.

Topics in this course included:

- Aging Deer
- Deer Home Ranges & Movement Patterns
- Food Plots & Native Habitats
- The Role of Genetics in Deer Management
- Understanding how to Harvest the Right Number of Deer
- Whitetail Biology
- Whitetail Fawns
- Predation
- Hunter Management
- Collecting and Analyzing Data
- And more...

Our members all graduated and were eager to continue our mission to alleviate the issues created by whitetail deer through safe, effective, and ethical means of wildlife management.



Figure 1-Each member graduated DSI and received their certification in the Spring of 2020.



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Signage & Property Cleanup

Members performed a “workday” on August 8th, 2020 practicing social distancing and wearing masks. During this time members walked the property line checking and hanging necessary “posted” signs. Members also collected over 5 bags of trash, mostly located along the roadways. Members also met and spoke with neighbors to address any growing concerns, introduce and discuss our program and to offer our assistance should it ever be needed in the future for anything, even something as simple as moving a heavy item in their yard. We pride ourselves in community relations and think it is valuable in the success of this type of program.

Trail cameras

This year we changed our trail camera strategies. Years past, and especially when conducting trail camera surveys for a herd analysis, we have used baited camera sites. These baited camera sites require a lot of human traffic and inadvertently create “human pressure” in the area. This will often educate deer on the presence of humans and force deer to become nocturnal. As deer become nocturnal, hunting efforts become more difficult as less deer are moving during legal (daylight) shooting hours.



Figure 2-A doe and 2 fawns caught on a trail camera placed on a deer trail.

This year, we hung 8 cellular trail cameras on the property overlooking natural food sources and game trails. The number of photos taken were much less than normal, but we were able to still get a good look at the deer herd. This information was shared amongst the membership to show areas of higher deer densities and allow us to look at the different age and sex structure of the deer herd. This information is very important in making sound management decisions and is vital to a successful deer management program.



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Property Analysis

Habitat Analysis

I would continue to recommend, following our 2019-2020 year-end report, to conduct tree girdling or hinge cutting in the large, wooded areas. This would allow sunlight to hit the forest floor and help bring back the early successional forest that was destroyed by the previously overpopulated deer herd. Benefits of this would be that deer would use this in supplement to their current food sources, ultimately decreasing the stress on the farmers crop while also providing a habitat for other animals such as ground nesting birds, rabbits and other small game. The goal of a sound whitetail deer management program should be to provide a quality eco-system as a whole and not just euthanize deer.



Figure 3- This heat map represents deer observation and trail camera data collected from the 2020-2021 deer season.

Herd Analysis

Similar to last year, we continue to see lower deer densities. Through the use of our trail cameras, we are finding there to be slightly more bucks than does. Most of these bucks are 1.5-2.5 years old. Most does are seen with at least one fawn which lets us know our recruitment rates are doing well. Without conducting an official deer trail camera survey, we cannot provide adequate, numerical data on the current deer herd. Ultimately, however, knowing this deer herd very well, I can confidently say that the deer density is much lower than years past. I believe a lot of this is still to do with the impact of EHD (2018-2019 report) in combination with our continued deer culling efforts.



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Hunting Efforts

Harvest Records

MAWS put a combined hunting effort of over 357 hours of hunting on Site 2 from September 2020 to February 4th, 2021. In total, MAWS had successfully removed 29 white-tailed deer from the Property between September 2020 and February 4th, 2021. Of the 29 deer, 97% of all deer harvested were does (female). Since 2010 Patriot NR/Mid-Atlantic Whitetail Solutions, LLC have removed a total of 644 deer.

2020-2021 MAWS Results (Site 2)
Dickerson Property (~850 acres) – 29 whitetail deer removed
[28 Does – 0 BB – 1 Buck – 0 fetus’] 97% Does – 0% BB – 3% Bucks
Population reduction equivalent for 2021 = 66 deer removed *based on targeting of reproductive age of mature does*
43.5 actual tons of forage saved (Average Deer consumes 1.5 tons per year)
Economic loss reduction of \$16,269 in actual crop damage saved (\$374 per ton 2018 US Average)

Most female deer possess reproductive potential by 1.5 years of age, with older deer accounting for the highest reproductive potential, often bearing twins, and in some cases triplets. Therefore, the targeting of this upper age structure in a population will further expand on this *effort vs. result* equation. Harvesting 3 deer of lower reproductive potential is not as effective as harvesting 3 deer with a high reproductive potential, although the exact same amount of effort is expended in both cases. Of the 28 does harvested, 82% were 2.5 years old or older while 14% were 1.5 years old. Of the total harvest, 3% were less than 1.5 years of age. This was our best year, two years in a row, at harvesting does of the upper age class and the fewest fawn and yearling does killed on the property since the inception of the program. This follows our previous best year, which was last year, 2019-2020.



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For the second year in a row, zero button bucks (fawn male deer) were harvested, which again, is nearly unheard of in general hunting as well as in whitetail deer management. We, of course, continue to target mature does allowing for a buck of a higher age class to be taken by a hunter if he has his required amount of does harvested and the deer meets the minimum buck requirements. This allows a “lottery ticket” in a volunteer system, to the hunters for their efforts and although our hunters have a minimum age and size requirement in our rules and regulations, most hunters are much stricter in their own practices which results in even fewer bucks being harvested on the property.

In 2020-2021, only one buck was removed from the property. This buck was shot using archery equipment and was aged at 5.5 years old scoring 130 3/8”. This buck was shot by Dustin Prievo on 11/19/2020.



Figure 4- Dustin Prievo's 11/19/2020 Archery Buck | 5.5 Years old | 165lbs | 130 3/8" 8-Point

Deer Management Permit (DMP) Issue

This year we had some confusion on renewing our Deer Management Permit. This permit allows our hunters to harvest deer outside of the general hunting season or harvest deer during the general hunting season using a shotgun during the archery only season. With COVID, we were allowed to extend our previous permit into the new year and use the remaining tags available. Our members had prepared for this permit to be completely gone and adapted rather quickly. Many members purchased high end crossbows which allow for greater shot distance and better accuracy and spent more time afield. Our concern was the increased hunting pressure would educate deer to become nocturnal. With this in mind, we methodically communicated areas that we were hunting and areas that weren't being hunted as much to ensure hunting pressure didn't exceed in certain areas.

Even though we were able to use last year's permit and had tags available, our members focused on hunting without the permit to ensure we could provide adequate management in the total loss of the



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permit. We harvested only 9 deer using the DMP, most of which could have been killed using a crossbow or compound bow had the hunter chose to hunt with that weapon instead. The other 20 deer were killed on our general hunting license. No longer having the permit, of course, could have some impact. It must be remembered that just because a deer was harvested using the permit (i.e., through the use of a shotgun during archery season) this does not mean that that particular deer could not have been harvested with the use of archery equipment instead. Thus, making it a kill that counted towards the hunter's general hunting license instead of the permit. If granted the continuation contract, our goal would be to bring more of our hunters onto the property to help, but ultimately, our current members would just no longer use a shotgun during archery season and use their archery equipment. In the end, I don't see the loss of the permit as much of an impact as one may think, given the unlimited doe tags available through a hunter's general hunting license.

Observation & Harvest Data

Hours spent hunting were recorded for each hunt from our MAWS members. On average, it took 12.3 hours for each deer harvested. As we move forward this number should continue to increase and plateau as long as no additional changes occur.

Having harvested 28 does and 1 buck, we have continued to assist with crop protection for the farmers. On average a deer consumes 1.5 ton per year. With 29 deer harvested, that amounts to roughly 44 actual tons of forage saved. In talking with the farming lease holders, they continue to be happy with the progress of the program.



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Notable Events

Year-Round Issue:

2020 was the year of the dogs. We have had multiple instances where neighbors' dogs have been getting out and chasing deer around the property. This became such an issue in November that animal control services were called on Mr. Beach of 19410 Wasche Road who had two pitbull dogs



continually roam the property and push deer. This occurred while hunters were hunting as well as found through trail cameras. More than 15 incidents were reported or captured on camera while additional, unknown dogs, were also found on the property as well. In communication with neighbors and other hunters in the area, this has become a HUGE problem and we are all working to contain it in a safe and effective manner.

Fishing Trespassers:

-Multiple incidents of fishermen had occurred throughout the summer of 2020. Many of which were found through social media investigating but also through the use of our security trail cameras that monitor the property. Those found trespassing were spoken to directly and warned that a second offense would deem contacting the appropriate authorities. Many of these seemed to be innocent issues, however, many were repeat offenders with no regard to the law as they assumed "County Owned" meant "Public Access"

Deer/Venison Donation:

In 2020-2021, MAWS donated **over 55 deer** through Farmers & Hunters Help Feed the Hungry (from all properties) and will continue to take part in the program to help our communities and those in need.



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Overall Experience:

This was a slightly different year than normal, but we were able to overcome and succeed. With COVID and the pandemic, members were forced to adapt to a more virtual means of communicating, many of which will be adopted into normal practice moving forward.

As a brand, company and team, we will continue to learn through education and experience to provide the best deer management solutions to our clients in the region. This year our members were able to adapt to the pandemic, pressure from dogs pushing deer and forcing them to become nocturnal, fear of the loss of the deer management permits and more.

Safety will always be our number one priority and we continue to uphold this through communication, experience and knowledge. This property surely has seen a tremendous decline in deer density, making the hunting very difficult, but through our experience and familiarity with the property, we are still able to obtain extraordinary harvest numbers and we couldn't be prouder of our decade long commitment to this property and those apart of the program.



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Goals for 2021-

2022 (Year 12)

- Year 12 Harvest Goals: 20-25 Deer
- Continue to practice Safety
- Continue to enforce, internally, our rules and regulations, upholding the highest level of respect for ourselves, neighbors, property, property owners, the habitat and the law.
- Add additional hunters (archers) from the MAWS membership to Site 2. (These members are hunters with high level of experience who solely hunt our other contracted properties. This will provide the ability to maintain our level of management without a DMP.)
- Create “Sanctuaries” on the property to help with deer bedding to better pattern and harvest deer. (These areas will be deemed DO NOT ENTER UNDER ANY CIRCUMSTANCES which decreases hunting pressure and allows the deer to feel safe, creating a more patternable deer herd, which results in a more successful hunting program)
- Continue to enforce trespassing and poaching and work with local DNR and police to ensure the property is secure and monitored for such.

The Mid-Atlantic Whitetail Solutions, LLC would like to thank the Montgomery County Department of Environmental Protection, Recycling & Resource Management Division, and the County’s local residential advisory group, and all other interested parties for allowing us the opportunity to assist in the deer management efforts during the 2020-2021 hunting season. This type of program takes a great deal of time to see results and since the beginning of the program, 12 years ago, we have worked to get to where we are today. There is a great deal of room for improvement as far as habitat management goes, however, we stand strongly that the members in this organization have completed a respectable amount of work and effort to get this property and program to where it is today. This takes a vision, experience and a desire to want to improve the habitat, not just “hunt deer”. MAWS is dedicated to Site 2 and has been for over a decade. We hope to continue our efforts moving forward.