

Introduction

The Maryland Department of Natural Resources (DNR) is charged with managing the wildlife of Maryland, including the white-tailed deer (*Odocoileus virginianus*). White-tailed deer are one of the most recognizable and well-known species in the state. While they are admired by wildlife enthusiasts who enjoy their gracefulness and are of value to hunters, they are considered by others to be a nuisance since they negatively impact motor safety and the economic livelihood of Maryland farmers and arborists.

In fact in 2021, the Maryland General Assembly expressed concern that Montgomery County is experiencing “uncontrollable deer population growth and that the existing methods of lawfully mitigating their detrimental impact have proven ineffective.” As a result, the budget committees requested that DNR work cooperatively with Montgomery County officials “to develop an enhanced deer management strategy to reduce the Montgomery County deer population by a measurable amount.”

Background

Since 1998, Maryland has developed a 15-year deer management plan that establishes both lethal and non-lethal options to meet management goals and objectives. An extensive public input process is utilized to ensure that divergent opinions and interests are considered as the management plan is developed. The most recent revision occurred in 2020.

Additionally, DNR uses a population reconstruction model to estimate deer population based on the total annual deer harvest and the biological data collected by staff at processors during the hunting season. Maryland’s statewide deer population remains stable, but has been reduced since the first deer plan was created in 1998 (Fig. 1). The deer population was estimated at 232,000 individuals in 2020.

All of the recommendations contained in this report for enhanced deer management in Montgomery County are consistent with Maryland’s deer management plan and state law.

Montgomery County Deer Population Status

DNR uses the annual antlered deer harvest as an index to the deer population size for a given county. This method provides accurate data to assess deer population trends at the county and sub-county level.

Over the past two decades, the deer population in Montgomery County has been stable (Fig. 2). Hunters in Montgomery County harvest approximately 1,300 antlered deer annually. The antlered harvest is comparable elsewhere in the state (Fig. 3) and suggests the deer population density in much of the county is similar to other counties.

Recommendations

In addition to methods already being deployed, DNR makes the following recommendations to enhance Montgomery County's deer management strategy:

LETHAL OPTIONS

Continue and Expand Regulated Hunting and Harvest - Deer hunting remains the most effective way to manage deer in Montgomery County and across the state. Deer hunters in Montgomery County harvest approximately 4,000 total deer annually at no cost to the citizens of the county (Fig. 2). To enhance the effectiveness of regulated hunting, DNR has instituted liberal antlerless seasons and bag limits to encourage the harvest of female deer, which regulate deer population growth. Hunters in Montgomery County harvest approximately 65% antlerless deer annually (Fig. 4). This harvest rate is effective at preventing deer population growth in most parts of the county.

Lack of access to land to hunt deer and inadequate hunting pressure on many properties are primary issues limiting the effectiveness of regulated deer hunting. Encouraging landowners and producers to increase deer hunting opportunities on their properties would control deer numbers more effectively. Landowners can increase the effectiveness of legal harvest by encouraging or requiring those who lease their property to harvest female deer. This can be accomplished through hunting leases. Likewise, if friends and family are hunting the property, they too can be encouraged or required to prioritize harvest of female deer.

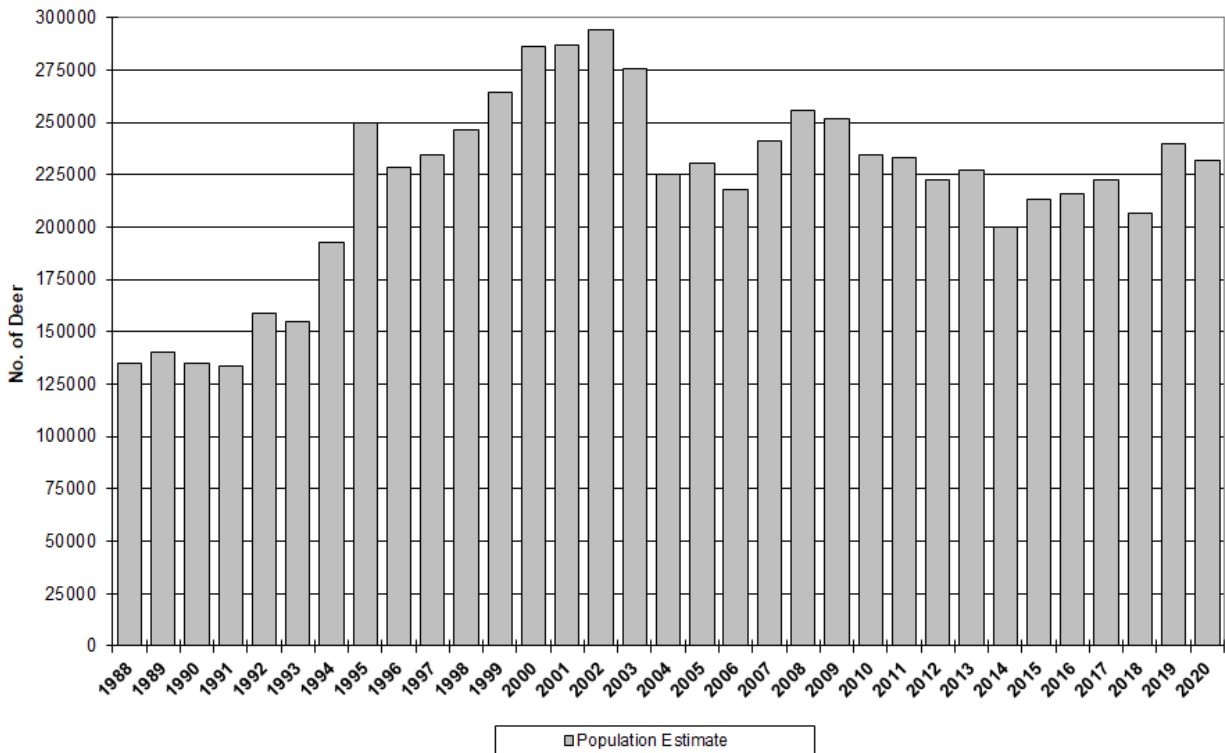


Figure 1. Estimated statewide white-tailed deer population, 1988–2020.

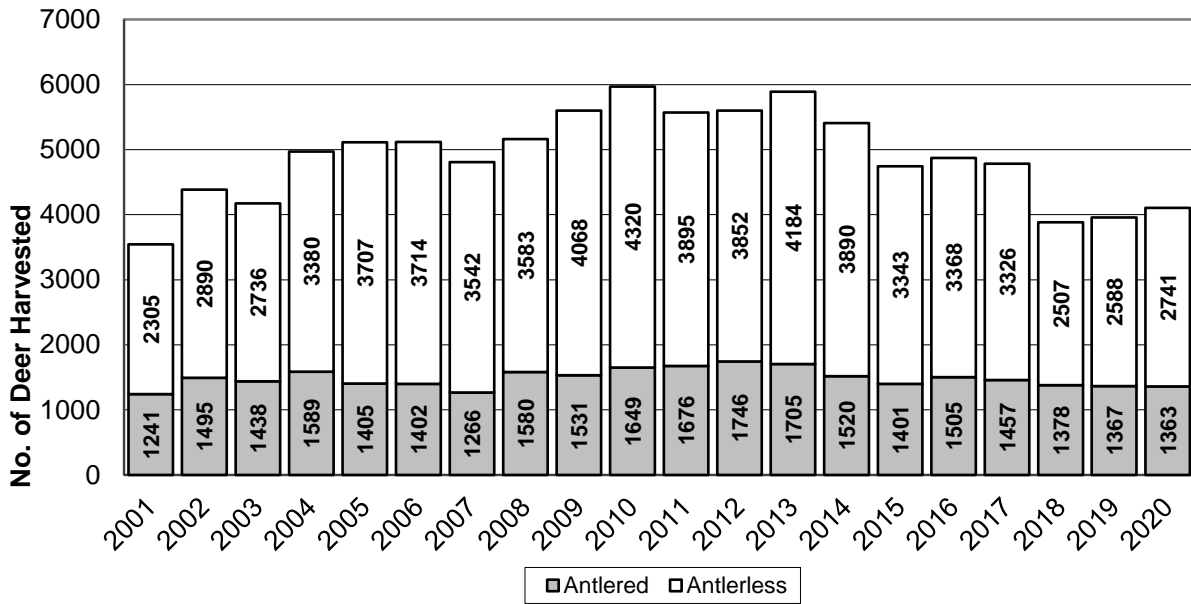


Figure 2. Antlered and antlerless white-tailed deer harvest in Montgomery County, 2001-2020.

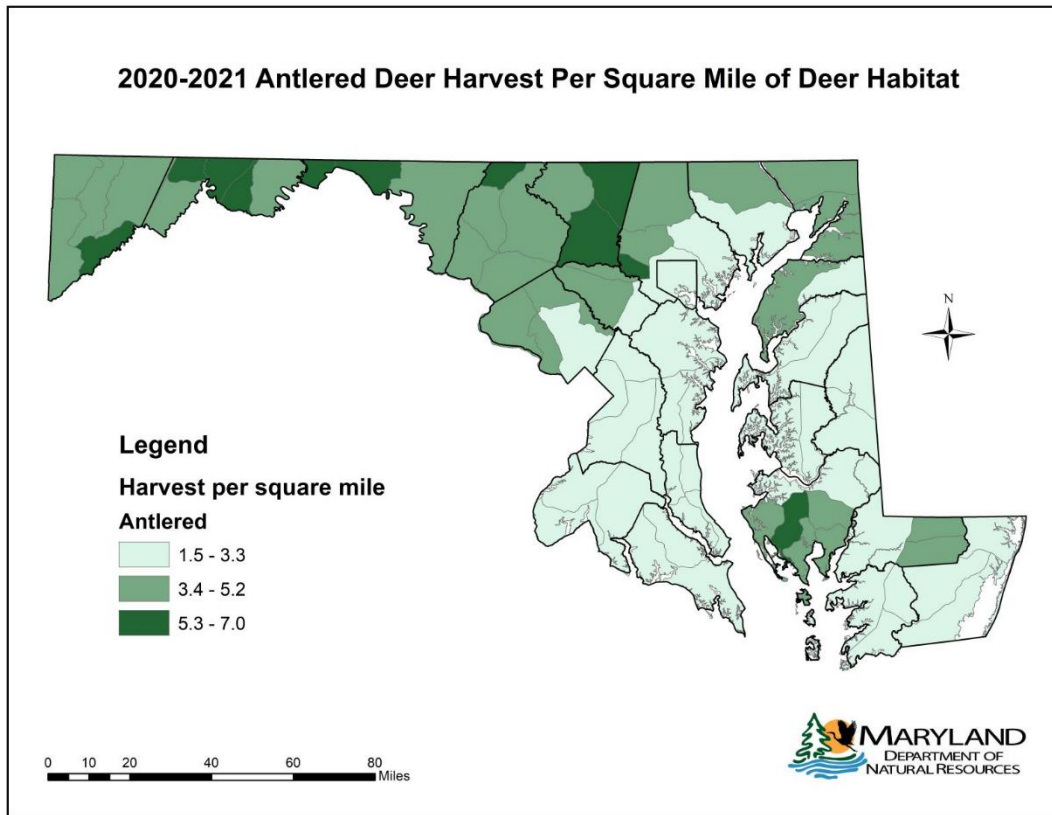


Figure 3. Antlered white-tailed deer harvest per square mile of deer habitat in Maryland, 2020-2021.

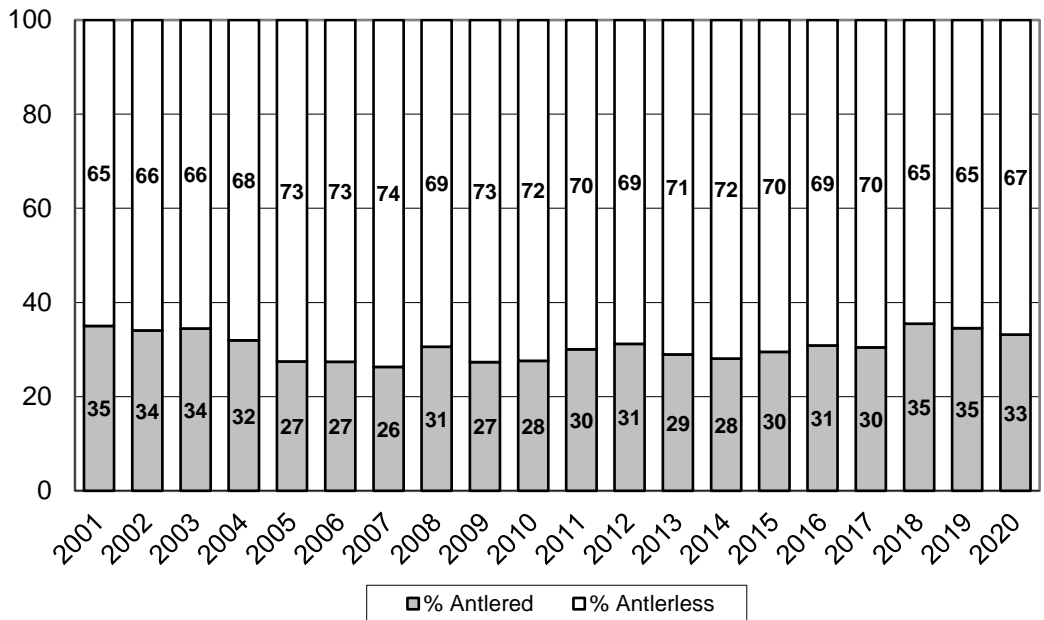


Figure 4. Percentage of antlered and antlerless deer harvested annually in Montgomery County, 2001-2020.

Reduce Liability for Landowners - One reason that private landowners may not want to allow hunting on their property is due to liability concerns. Lawmakers should consider a statutory change to reduce those concerns. In *Martinez v. Ross*, the Court of Special Appeals held that a landowner was liable despite the provisions of Maryland’s recreational use statute because the landowner did not open their land to the general public. The court interpreted that as a requirement for landowners to leverage the protections of the recreational statute. This was a great departure from how the statute had been previously interpreted. A clarification that the law does not require a landowner to make their property open to the public-at-large would likely result in more willing landowners providing hunting opportunities on their property.

Deer Management Permits - Producers (i.e., farmers, arborists, etc.) can apply for DNR Deer Management Permits (DMPs) in situations where established deer hunting seasons do not provide adequate deer population regulation for commercial farming operations. DMPs allow farmers to harvest deer 365 days a year without regard for deer season bag limits. These permits also add another mechanism for DNR to regulate the deer population. The vast majority of deer taken under DMPs are antlerless. On rare occasions, a nursery owner may receive permission to take individual antlered deer doing damage to nursery stock with their antlers during the breeding season. If antlered deer are harvested under a permit, all antlers must be turned over to the department.

Most DMPs are issued for a 12-month period. Landowners, agricultural lessees, or designated farm employees can apply for DMPs through DNR, and additional agents can act as shooters under the permits. Operations with severe deer damage and economic loss to commercial agricultural crops, orchards, or nursery stock qualify for DMPs. In addition, DMPs may be acquired for deer browse damage to natural woodland areas that have a forest management plan written by a professional forester.

Approximately 50 agricultural producers obtain a DMP annually in Montgomery County and were authorized to harvest 1,245 deer under authority of DMPs in 2020-2021, however only 480 deer were harvested (Fig. 6). Annually, Montgomery County is averaging the harvest of 400-500 deer (Fig. 5).

DNR recommends engaging local natural resources staff, county farm bureaus, or extension to educate landowners on the availability and benefits of DMPs to encourage more landowners to apply.

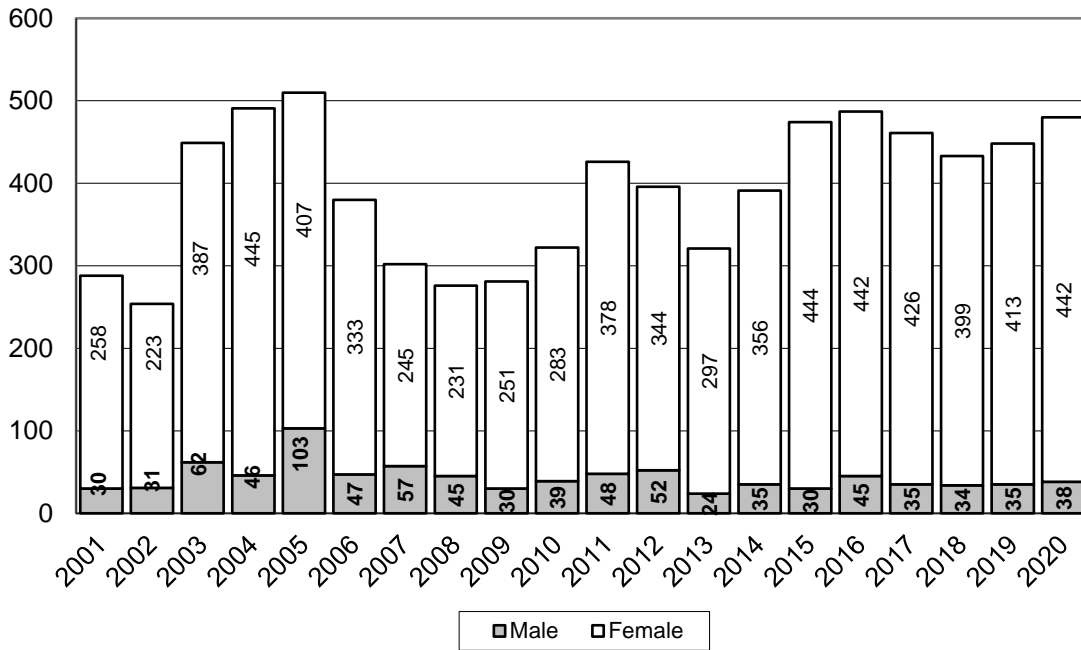


Figure 5. Number of deer harvested under authority of Deer Management Permits in Montgomery County, 2001-2020.

County	No. Permits Issued	No. Shooters Authorized	No. Successful Shooters	No. Deer Authorized to Harvest	Whitetail Males Harvested	Whitetail Females Harvested	Sika Males Harvested	Sika Females Harvested	Total Harvested	Tags Utilized (%)
Allegany	49	249	90	433	24	229			253	58
Anne Arundel	27	200	43	830	31	143			174	21
Baltimore	87	624	93	1,855	70	402			472	25
Calvert	20	129	23	605	6	58			64	11
Cardine	30	184	57	490	41	229			270	55
Carroll	170	776	207	3,935	101	756			857	22
Cecil	39	292	62	915	52	265			317	35
Charles	51	255	37	1,730	14	144			158	9
Dorchester	70	535	145	1,995	31	319	27	327	704	35
Frederick	121	746	181	2,125	67	670			737	35
Garrett	425	1,897	523	3,566	181	1,350			1,531	43
Harford	54	465	74	1,160	31	281			312	27
Howard	44	310	75	910	23	262			285	31
Kent	32	285	57	670	40	245			285	43
Montgomery	51	408	97	1,245	38	442			480	39
Prince George's	29	245	49	1,120	22	174			196	18
Queen Anne's	43	271	75	660	16	262			278	42
St. Mary's	68	445	67	2,240	39	207			246	11
Somerset	41	362	67	858	24	250	0	1	275	32
Talbot	61	400	110	1,415	70	423			493	35
Washington	99	527	126	1,275	28	419			447	35
Wicomico	76	451	99	1,296	47	416	0	16	479	37
Worcester	92	635	160	1,835	56	645			701	38
Total	1,779	10,691	2,517	33,163	1,052	8,591	27	344	10,014	30

Figure 6. Deer Management Permit statistics by county, 2020-2021.

Deer Cooperator Permits - The DNR Maryland Deer Cooperator Permit (DCP) certifies private individuals and animal control businesses to lethally and non-lethally address deer overpopulation issues (for profit, if they choose) in areas where regulated hunting is not feasible or not effective alone. Beginning in 2018, the program was modified to include an Agricultural Deer Cooperator Permit (ADCP) for producers suffering deer damage.

Sharpshooting is the primary method used to remove deer under a DCP or ADCP. The permit allows sharpshooting deer at night as well as the use of rifles in counties that do not allow rifles for deer hunting, as long as the appropriate county officials approve of the plan and shooters satisfy all other requirements. Shooting is restricted to February and March for agricultural deer cooperator permits. The vast majority of deer taken under DCPs and ADCPs are antlerless and a quota restriction is typically placed on the taking of antlered deer. The usable meat of deer taken under a DCP or ADCP must be donated to charity or otherwise used, and antlers from any deer removed must be turned over to the department.

To become a deer cooperator, applicants must take a written test about deer biology and management and pass a shooting qualification test. There is a \$100 annual permit fee. Cooperators are required to submit an operation plan to the department for approval for each project. Cooperators must also submit quarterly and final project reports. Site visits by DNR may also be warranted. To date, there have not been any ADCPs requested in Montgomery County. DNR encourages the use of this tool as part of enhanced deer management in Montgomery County.

DNR recommends engaging local natural resources staff, county farm bureaus, or extension to educate landowners on the availability of ADCPs. A common complaint that DNR receives is that the ADCPs are limited to February and March. As a result, the permit does not allow enhanced harvest during the planting and growing seasons. DNR is scoping a regulatory change that would extend the timeframe for ADCPs to July 31 of each year.

DNR also recommends that local jurisdictions invest funding and resources in venison donation programs, and provide supporting infrastructure (i.e., cooler boxes, carcass transport, etc.) to provide an avenue for DMP/DCP-harvested deer to be used, particularly during the hunting off-season.

Venison Donation Programs - Natural Resources Article Section 10-404(e) prohibits the “sale, barter, trade or exchange” for a game mammal taken from the wild. This prohibition is codified in state law because programs that induce hunting or reward killing of animals put additional pressure on the wildlife populations that cannot be accounted for in scientific modeling. Such incentives also ignore basic, fundamental principles of good natural resources management, and ethics in hunting for deer and all wildlife.

Requiring hunters to kill a deer in order to receive a ‘reward’ is therefore prohibited under state law; however, incentivizing the donation of venison or rewarding hunter participation in a venison donation program is not. Howard County recently enacted a good county model. Prizes are offered through a raffle for any deer hunter that participates in the program and donates the venison. No payments are made nor prizes are offered to hunters in exchange for dead deer. The donated venison goes from participating processors directly to the local food bank, which helps ensure food safety. The program has also proven to be cost effective. The cost is approximately \$60 per deer. That means that 300 deer were processed for less than \$20,000. The result is 15,000 pounds of edible venison at approximately \$0.75/pound.

DNR recommends that Montgomery County consider implementing a program modeled after Howard County’s program.

Promote Recently Passed Legislation - Recently, legislation has been passed to incentivize the donation of venison. In 2018, House Bill 7 and Senate Bill 182 - *Income Tax Credit - Venison Donation - Feed the Hungry Organizations* was passed. The legislation allows a person who hunts and harvests an antlerless deer to claim \$50 for expenses against state income tax if they donate to a venison donation program administered by a 501(c)(3) organization. The credit has a maximum of \$200 per taxable year, unless the individual harvested each deer for which the credits are claimed in accordance with a DMP.

DNR is encouraging hunters to take advantage of the tax credit for deer donations and has included information on it in every deer hunting season press release and announcement released during the 2021-2022 hunting year. It is also highlighted in our digital hunting guide and has been shared on social media.

Building on the 2018 legislation, House Bill 7 *Venison Donation Expenses - Income Tax Credit and Grant Program* was passed in 2021. The legislation expands the state income tax credit in

Montgomery County to include certain hunting trip expenditures. The maximum credit per tax year is \$200 (four deer at \$50 each). The bill replaces the tax credit program with a venison donation grant program within DNR beginning in FY23. The grant program is being drafted by the department with a scheduled implementation date of July 1, 2022.

Both of these initiatives incentivize the donation of venison, which is a worthy cause and supports an important purpose. DNR recommends continued promotion of these programs by state, local, private, and nonprofit partners.

NON-LETHAL OPTIONS

Given the density and geography in some regions of Montgomery County, non-lethal deer management options may be more viable. DNR recommends that Montgomery County farmers, landowners and producers consider implementing a pilot program with the following elements:

Vegetative Fencing - Several farmers and landowners in Maryland have had success with vegetative fencing. Montgomery County, DNR, and the Maryland Department of Agriculture (MDA) could establish a voluntary pilot program with willing landowners to study the effectiveness of various types of crops.

Mechanical Fencing - Several farmers and landowners in Maryland have also had success with mechanical fencing. Montgomery County, DNR, MDA could establish a voluntary pilot program with willing landowners to study the effectiveness of this.

Repellents - Another option that Maryland farmers and landowners have deployed is the use of repellents. Montgomery County, DNR, MDA could establish a voluntary pilot program with willing landowners to study the effectiveness of this.

Any producer or landowner interested in conducting such a pilot program should contact DNR. DNR will coordinate with MDA and the farmer, landowner or producer to establish baseline data sets and evaluate the effectiveness of these methods.