

Deer Hunting

The management plan for the Iowa deer herd is designed to maintain a stable population while providing the maximum amount of quality recreation for hunters, according to the Iowa Department of Natural Resources. This goal is accomplished by monitoring deer population trends and regulating hunting to provide a proper harvest. Beneficial habitat manipulation, a progressive research program and active law enforcement are additional methods utilized to reach this goal. The size of the deer herd must be regulated to prevent excessive crop damage and loss of revenue by landowners. This can best be accomplished by allowing hunting seasons that provide both quality recreation and control of animal numbers, according to the DNR.

Harvest manipulation is the primary tool used for managing deer in Iowa. The most important requirement for a sound harvest strategy is a good knowledge of annual deer population trends on a regional basis. Population trends are determined from changes in the number of deer reported killed in traffic accidents, counted dead deer along rural roads, spring spotlight surveys, and computer simulation models.

Deer Study Advisory Committee

The Iowa deer population goal established by the Deer Study Advisory Committee in 2009 is to sustain an annual harvest of 100,000-120,000 deer. The goal is based on harvest, and not on deer abundance (or an overall population estimate), according to the Iowa DNR. The DNR established a harvest-based goal for a couple reasons. First, there is a robust system in place for tracking harvest annually, and trends in harvest tend to correlate strongly with population trends overall, the DNR says. Second, it's very challenging to estimate with certainty deer abundance statewide for a variety of reasons.

Therefore, Iowa DNR utilizes trends in various indices such as harvest, but generally also includes data from an annual spring spotlight survey, a bowhunter observation survey, and deer-vehicle collisions and deer carcass counts on rural roads to develop a composite deer population trend statewide. From a population management standpoint, it's more effective to manage for a long-term trend than for a specific number, according to the Iowa DNR, especially given the many sources of variability that make estimating that number challenging. At the end of the day, DNR combines the statewide population trend with harvest data to inform management decisions. The DNR obviously also considers input from various stakeholders, which is an important component. As of 2019, Iowa is within the bounds of the established harvest goal and the long-term population trend statewide is fairly stable, according to DNR wildlife research staff.

To put it in perspective, when the deer population peaked in Iowa around 2005, Iowa was harvesting 180,000-200,000 deer annually. This was the time when the harvest-based population goal was first established by the Advisory Committee and when DNR became quite aggressive with population management by increasing antlerless quotas statewide. Iowa has since stabilized the statewide population at the lower end of our harvest goal, the DNR says.

We are lucky in Iowa, relative to other Midwest states, to have several independent data sources in addition to a robust harvest data set that can be used to inform deer population trends, all of

which correlate well. Many other states in the Midwest only have harvest data, and in most states even those data are not nearly as robust as what Iowa has.

Population Trend Surveys

The techniques used to monitor trends in Iowa deer populations are: (1) spotlight surveys conducted by Iowa DNR staff in March and April; (2) the number of deer killed on Iowa's rural highways throughout the year, coupled with annual highway use estimates; (3) the number of animal-related accidents reported to the Department of Transportation; and (4) the bowhunter observation survey coordinated by the Iowa DNR and conducted by volunteers during October-November. All of these surveys correlate well with the reported antlered harvest, and appear to provide reliable long-term trend indices. However, none of these surveys can be considered absolutely reliable indicators of annual changes in the population because of the high variability in the survey conditions, deer behavior, habitat conditions and weather.

According to the Iowa DNR's annual publication Trends in Iowa Wildlife Populations and Harvest (2017-2018), deer populations for the state as a whole have stabilized, according to the Iowa DNR. This is due to the stabilized harvest pressure that has been applied to the female segment of the herd beginning in the 2013-14 hunting season. The goal was to return deer population levels to those that existed in the mid-to-late 1990s. This goal has been achieved on a statewide basis.

The number of deer killed on rural highways increased by 33% in 2017 following a 43% decrease from 2015 to 2016. This trend is puzzling and requires further exploration, although it could be an artifact of changes in how roadkill data are collected. Nevertheless, the trend in road kills (thousands per billion miles driven, KPBM) declined since 2004 as the deer population was decreased by a concerted effort of hunters utilizing the antlerless licenses authorized by the DNR.

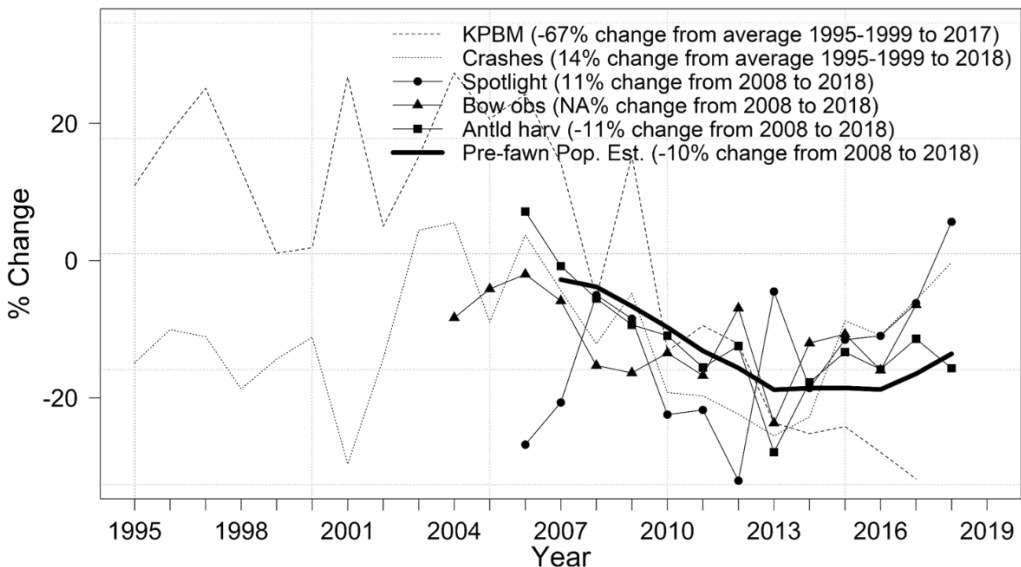
New spotlight routes were initiated in 2006 and replaced the old spotlight routes in 2012. The new routes consist of 199 transects distributed among all counties for a total survey mileage of about 4,750 miles; more than double the transect length of the old spotlight routes. The new spotlight survey transects are also set up to be more representative of the available rural habitats within a county. The average number of deer observed per 25 miles increased by 13% in 2018. The delayed onset of spring in 2018 kept deer in their larger winter groups well into April (when this survey is conducted). Therefore, this increase could be the result of higher numbers of deer recorded in groups due to weather conditions.

The bowhunter observation data, which began to be collected during the 2004 season, has replaced the aerial deer survey as a trend index. This survey represents over 100,000 hours of observation distributed throughout the state and is conducted voluntarily by a randomly selected group of Iowa archers. The tactics typically used during this season (stand hunting) make easier for hunters to gather observational data. Deer observations per hour increased by 11% in 2017.

The estimated harvest from 2006-2017 was utilized in the population model and the resulting "best fit" simulation indicates a stable deer population statewide. The model has its best correlations with the harvest data and bowhunter observation data.

The data indicate that, statewide, the deer herd declined from 2006-2013, and has stabilized after the 2013 hunting season. All of Iowa's counties have reached or are close to the established goal, the DNR says. Now that the deer herd has stabilized statewide, management efforts are being focused at local scales (e.g., single or multiple counties) in response to local population changes because of disease or other population changes.

Recent Survey & Population Trends



Preliminary as of February 20, 2019

Depredation Program

The DNR is responsible for managing Iowa's wildlife for all of Iowa's citizens. One of the DNR's responsibilities is to provide private landowners with guidance and assistance to effectively deal with wildlife damage. [Wildlife Damage Management](#) options for all producers include:

- Technical advice on how to exclude or deter the animals causing damage. A biologist can provide sources and advice on how to use fences, repellents or scare devices to keep animals from damaging crops
- Alternative horticulture or silviculture practices that will minimize or eliminate the damage. A biologist can provide sources for materials and advice on how to use tree tubes, fencing or other practices to prevent deer from having easy access to young trees. These techniques allow the seedlings to grow above the level where most damage occurs.
- Recommendations to increase hunting pressure and take more antlerless deer within existing seasons and with existing hunters.

The producer and the hunters already hunting the property may significantly reduce deer numbers by harvesting more antlerless deer. This is especially true if the current harvest is

mainly bucks. In many counties hunters could use the antlerless licenses available in each county to increase the number of does taken during the seasons they already hunt.

Hunters on properties where deer damage is occurring should significantly increase the number of does killed and be selective on the type of bucks. This philosophy is known as Quality Deer Management or QDM. Both hunters and landowners benefit when hunters practice QDM. Bucks are allowed to mature so the quality of the herd is improved yet there will be fewer does remain to produce fawns the next year.

In some instance landowners may need to have frank discussions with their hunters to explain the need to harvest more does if the hunter wants to continue to enjoy the privilege of hunting on the property. To quickly reduce deer numbers, hunters should harvest at least three does for every buck.

Landowners should insist that any hunter who wants to hunt help by taking additional does. If the landowner does not currently have enough hunters to obtain an adequate harvest, the DNR maintains a website of hunters willing to kill antlerless deer. A list of these hunters will be available to the landowner. It is up to the landowner however to contact hunters and the landowner always controls who has permission to hunt on their property.

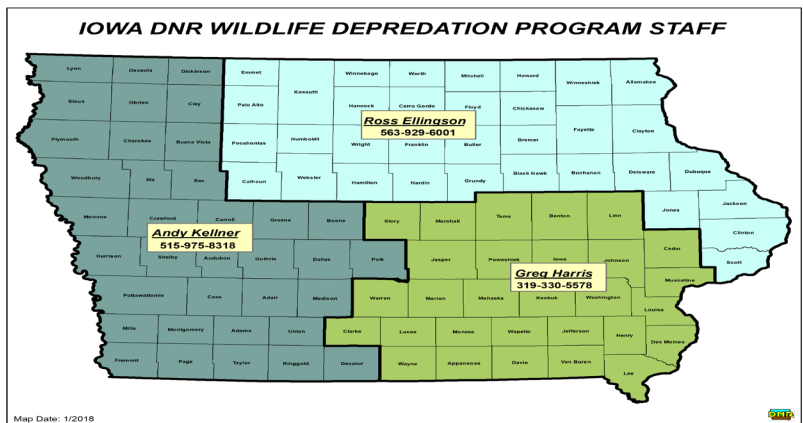
Options for Landowners with Substantial Damage

If a producer has \$1,000 in damage or likely will sustain \$1,000 in damage ([Iowa Code 481C.2](#)) they are eligible to obtain extra in-season hunting licenses or out-of-season shooting permits.

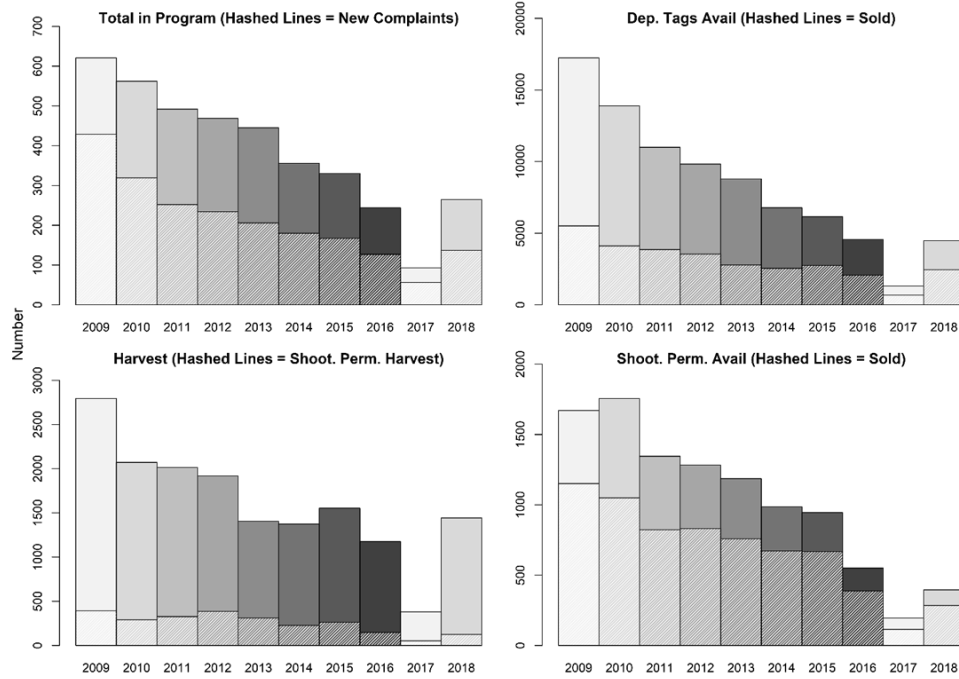
To receive these licenses or permits the depredation biologist will first arrange to meet with the producer to assess the amount and type of damage occurring. If there is substantial damage due to deer, the biologist and producer will write a management plan. The plan specifies how many deer need to be killed and the number of licenses and/or permits that will be needed. The plan will also include recommendations on how regular hunting practices can be used to kill more antlerless deer and any other information that will help the producer reduce or prevent damage. A report card will be sent to the producer at the end of the year showing how depredation licenses and permits were used. It will also show the success of these permits.

Biologists will review the plan annually and work with the landowner if more assistance is needed. The goal of the plan will be to reduce deer numbers so damage is less than \$1,000 and deer numbers can be controlled with regular deer licenses and/or permits. the two types options available:

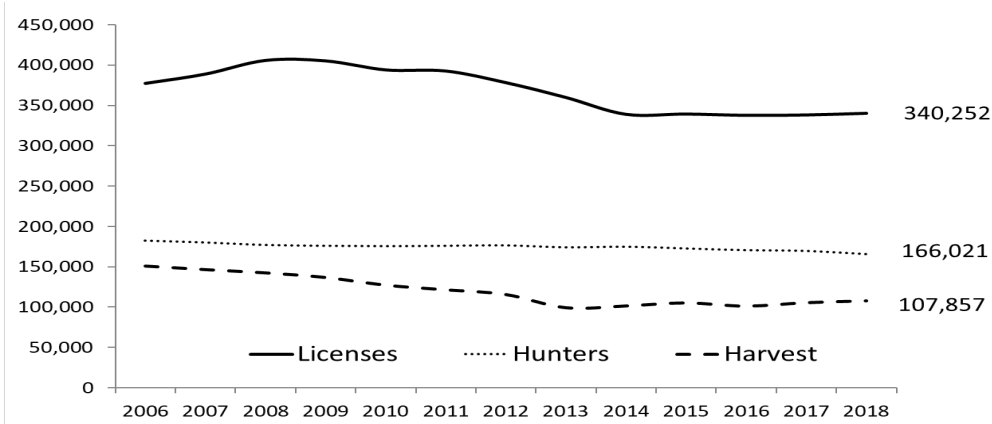
<p align="center">Depredation Licenses hunting deer within existing seasons</p>	<p align="center">Shooting Permits killing deer outside of existing seasons</p>
<p>Depredation licenses are issued to individual hunters who have permission to hunt on the landowner's property. These licenses are issued for a specific season and will be valid for antlerless deer only. They cost the same as other antlerless deer licenses, \$13 each.</p> <p>If the producer signs a depredation agreement they will receive a set of authorization numbers for their property. Each authorization number allows a hunter to purchase an antlerless license which will be valid on the producer's land.</p> <p>The depredation licenses may also be used on adjacent land if the adjacent landowner gives the hunter permission. Hunters may obtain up to three depredation licenses initially. If they harvest a deer they can obtain one additional license for each deer taken. They will need to get an authorization number from the producer for each additional license.</p>	<p>Shooting permits are issued to landowners or their designees in situations where substantial damage is occurring before a hunting season opens and action needs to be taken immediately.</p> <p>These permits are issued for a specific time period and can only be used outside of the hunting season. These permits may be issued for either sex of deer depending upon the type of damage. Antlered deer may need to be killed to prevent damage even though this will not control the population. Producers will however be encouraged to use the shooting permits for antlerless deer. All deer killed must be recovered and the meat processed for consumption. The landowner or his designee may keep the meat or they can donate the deer to a HUSH locker. The producer should check with the locker to make arrangements to take deer outside of the hunting season.</p> <p>All antlers from deer taken using these permits will be turned over to a DNR officer and disposed of according to DNR rules.</p> <p>There is a \$2 fee (\$1 for HUSH and \$1 writing fee) for these permits.</p>



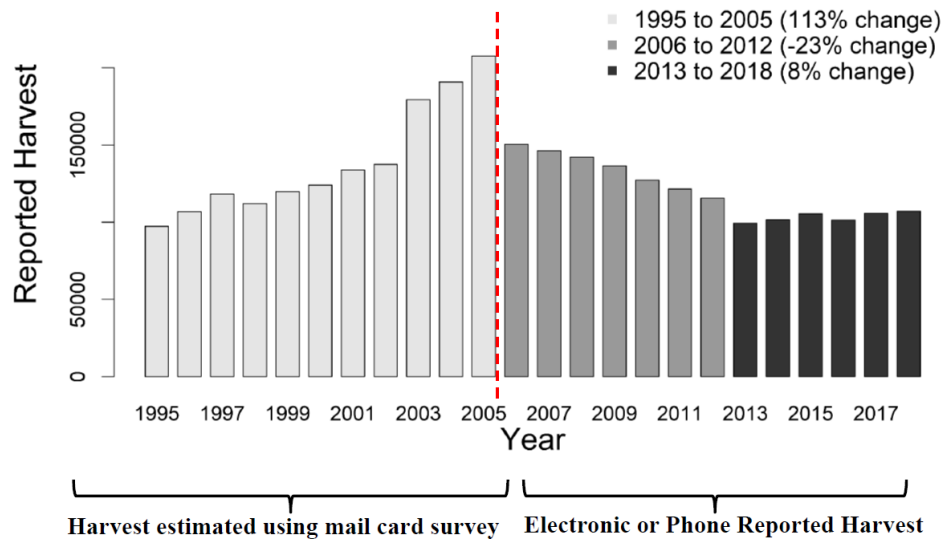
Depredation Program Use Summary



License, Hunter & Harvest Trends



Statewide antlered harvest



Outlook and Actual Harvest for 2018

After 10 years of increased doe harvest from 2003 to 2013, the deer population declined from all-time highs in the early 2000's. The goal is a stable population at a level comparable to the mid-to-late 1990s. A population at this level should sustain an annual reported harvest of 100,000 to 120,000 deer, a goal that has been met since the 2012 hunting season. To stabilize populations, the regulations for 2018 restricted the harvest to antlered deer during the early muzzleloader and first shotgun seasons in 27 north-central and northwestern counties. This is the same as it was during the 2017 hunting season.

Additionally, the number of non-resident any-deer and antlerless licenses in non-resident hunting zones 1, 2, and 10 were decreased by 50% for 2018, resulting in a total decrease of 280 non-resident any-deer and antlerless licenses in these zones. These 280 tags were re-allocated to zone 9. This change is yet one more step to stabilize a declining deer population in northwest and north-central Iowa. The total number of non-resident licenses available statewide will not change.

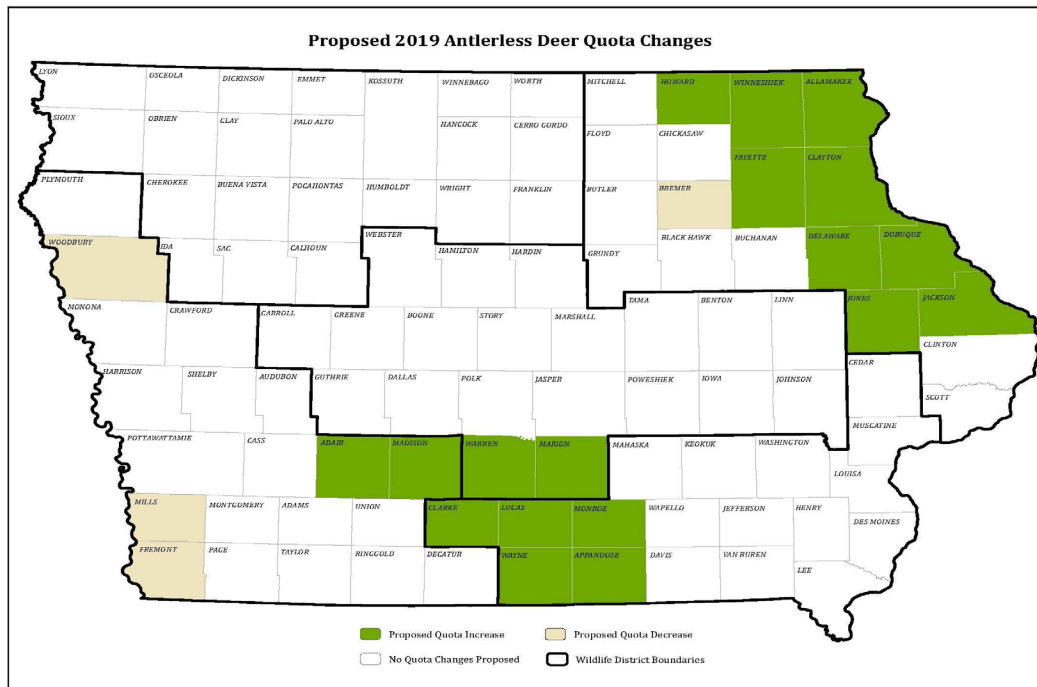
County antlerless quotas were increased in eight counties and decrease in one county, largely in response to local population changes and management needs. Statewide, the number of county antlerless quotas will increase by 1,550. Deer numbers during 2018 were still higher than the department's goals in some areas. However, most of these areas are near urban areas, parks, or private refuges and the special hunts and depredation licenses provide the best management opportunity to fine tune the harvest in these areas.

Changes in Statewide Harvest 2017-2018 to 2018-2019

Season	2017 - 2018		2018 - 2019		% Change	
	Licenses	Harvest	Licenses	Harvest	Licenses	Harvest
Youth	9,377	3,217	9,693	3,650	3%	13%
Disabled	437	143	397	138	-9%	-3%
Archery	89,129	22,665	87,559	21,344	-2%	-6%
Early Muzzleloader	11,285	3,423	10,514	3,594	-7%	5%
Shotgun 1 (Paid)	64,600	26,604	60,087	24,142	-7%	-9%
Shotgun 2 (Paid)	61,242	19,955	64,508	23,259	5%	17%
Shotgun LOT	42,017	11,161	42,302	11,837	1%	6%
Late Muzzleloader	40,272	9,629	39,972	9,885	-1%	3%
Special Hunts	2,701	1,221	2,827	1,405	5%	15%
Depredation	3,565	1,907	3,875	2,242	9%	18%
Nonresidents ⁴	14,869	5,578	15,002	5,476	1%	-2%
Jan. Antlerless	NA	NA	3,059	797	NA	NA
Total	339,651	105,578	339,795	107,857	0%	2%

Likely Hunting Season Changes Expected in 2019-2020

- 19 counties with proposed quota increases
 - In northeast Iowa
 - In south-central Iowa
- 4 counties with proposed quota decreases
 - Bremer, Woodbury, Mills, Fremont
- January antlerless season continues in 5 counties
 - Allamakee, Clayton, and Winneshiek



For More Information

[Deer Hunting in Iowa](#) – Iowa DNR webpage

[Prevention and Control of Wildlife Damage](#) – The Center for Wildlife Damage Management

Discussion Questions:

1. In the last five years, what has been the trend for the number of deer on your farm? In your county? In your region?
2. In the last five years, what has been the trend for deer damage to crops, trees or property on your farm? In your county? In your region?
3. What do you do to deal with deer damage to crops, trees or property?
4. Would you like to see the number of deer on your farm increase, decrease or stay the same? Your county? Your region?
5. What do you do to deal with deer damage on your farm?
6. What should be the goal of the state deer herd management plan?