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2019 WHITETAIL

# PENNSYLVANIA'S OLDER BUCKS

**A SATURDAY OPENER.** Likely more older bucks across the state. Ample allocations of antlerless deer licenses. Now, if only the weather will cooperate.

Last year, rain put a damper on Pennsylvania's deer firearms season opener, keeping plenty of hunters home, and sending others there long before they normally would've gone. It's fair to say common sense is a virtue among the state's deer hunters, who are on average 51 years old.

But that didn't stop them from shooting more than 30 percent of rifle season's antlered bucks on the season's Monday opener – tops for daily buck kill among the season's 12 days.

In overall deer harvest, however, the opener fell to the third-best harvest day of firearms season, topped by the first Saturday and the last Saturday.

The overall deer harvest for the 2018-19 hunting seasons was 367,159 – 226,940 antlerless deer and 147,750 bucks. It was the highest overall deer harvest in 14 years. But the buck kill was down 10 percent from the 2017-18 seasons.

The 2017-18 deer firearms opening day produced 45 percent of the season's antlered buck harvest. So, it's easy to see how much the opening day buck harvest slipped from one year to the next. Still, that helped to more generously spread the

buck harvest over the firearms season's remaining 11 days, which surely made the season more rewarding for those who continued to hunt until sunset on the last Saturday.

Now, we approach the first Saturday opener for a Pennsylvania deer firearms season in more than half a century. It's a sure first for every Commonwealth deer hunter under 70 years old.

While the move to a weekend opener figures to put more hunters in the woods, it offers no advantage to the science of managing deer. But it will create a different high-hunter-pressure harvest day. There also is no guarantee the Saturday opener will become permanent. Following the season, the Game Commission will extensively examine the impacts of a Saturday opener and hunters' opinions about it, with that information helping to guide what will happen in 2020.

Out of the chute, there were plenty who either liked or disliked the Saturday opener. But until we get through one, it's impossible to get a read on how it will work out. By Christmas, we'll know better.

Game Commission deer biologists believe the opener will retain the distinction of being the best antlered buck harvest day, although the distribution of the harvest likely will change.

“We expect the opening Saturday to become the biggest harvest day for

# FORECAST

bucks,” said Christopher Rosenberry, Game Commission Deer and Elk Section chief. “Monday will play a lesser role, but how much less remains to be seen. The second Saturday, since it is concurrent with the start of antlerless season, will probably become the second biggest harvest day for bucks.”

In the 2018-19 seasons, Pennsylvania hunters shot fewer bucks for the first time in five years – 10 percent lower than in 2017-18, when the take was 163,750.

That opening-day soaker probably is responsible for some of that drop. It’s hard to duplicate the hunter effort and results an ideal-weather opener brings.

But despite the decreased buck harvest, there were more 2½-year-old and older bucks – 64 percent – in the 2018-19 harvest. Over the previous four years, the percentage of 2½-year-old and older bucks in the annual deer harvest was: 2017, 57 percent; 2016, 56; 2015, 59; and 2014, 57.

“Despite the increased harvest in 2½-year-old and older bucks, the buck-age structure in Pennsylvania is not old,” Rosenberry noted. “However, it is a lot older than before antler-point restrictions were started in 2002.”

The lighter buck harvest, however, likely means a few more bucks held over for the coming seasons. Telemetry studies show 92 percent of Pennsylvania bucks that make it through the season survive to the next.

“Those 2½-year-olds that survived will be real slammers as 3½-year-olds,” noted Game Commission deer biologist Bret Wallingford.

The buck harvest rose in six Wildlife Management Units (WMUs) over the 2018-19 hunting seasons. The largest increase – 47 percent – was in WMU 2H. Others had increases of 11 percent or less.

WMUs with the largest buck-harvest

declines, and maybe more older bucks on the hoof in the coming seasons, are: WMUs 3B, 2D, 4D, 2G and 5D, all of which had buck-harvest declines of 20 to 23 percent.

Unlike bucks, antlerless deer are not getting older. For the past five years, the percentage of 2½-year-old and older antlerless deer in the harvest consistently remained between 65 and 70 percent, largely because season structure and success haven’t changed much for those who hunt them.

The overall deer harvest increased in 10 Wildlife Management Units, dropped in 12 others and stayed the same in one WMU. The biggest gainers were WMU 3D, 22 percent; WMU 2C, 20; and WMU 2H, 19. The biggest decreases were seen in WMU 5D, 20 percent; WMU 4D, 9 percent; and WMU 2B, 8 percent.

## BOW DEER

Bowhunters again took about 30 percent of Pennsylvania’s deer harvest, but they made less of a dent in the buck population. The archery antlerless harvest was up some, enough to establish a new archery antlerless deer record at 55,590. The previous antlerless record was set in 2017-18 when 55,280 were taken.

The archery buck harvest dropped 13 percent from 2017-18 (62,830) to 2018-19 (54,350). Rainy and warmer weather throughout much of the fall likely compelled many bowhunters to hunt less. The drop in archery buck harvest follows three years of consecutive increases. Still, the lower 2018-19 archery buck harvest ranks as the state’s third-best.

The state’s largest archery buck kill came in 2017-18, when bowhunters took 62,830. The second-best occurred a year earlier, when 59,550 bucks were taken with archery tackle.

Collectively, over the past four license years, more than 200,000 bucks and 200,000 antlerless deer have been harvested in archery seasons. Pennsylvania created an archery license in 1951, and no other four-year period has produced a similar harvest total.

The best bow buck-harvest day in 2018-19 was the last Saturday, followed by the next-to-last Saturday. From the fifth Saturday through the Veterans Day holiday, about 43 percent of the bucks taken in the six-week season were harvested.

It's clear many deer hunters take time off from work to hunt, or hunt more in that

last week. It's also apparent bucks are on the move looking for estrous does. That combination of persistence and increased visibility causes buck harvests to peak in November. Every year.

But only for those who get close enough to a buck for a shot. It's hardly ever easy, but it happens regularly.

It's also a good idea to consider hunting days you might not normally hunt with a bow. Although about 11,200 antlerless deer were taken by special firearms hunters in their three-day October season last year, bowhunters took about 7,000 over those same three days.



## FLUORESCENT ORANGE

Regulations requiring hunters to wear fluorescent orange in some seasons have been simplified since last year. Archery deer hunters no longer are required to wear or post orange during overlaps with fall turkey or deer firearms seasons. Requirements for firearms deer hunters have not changed. In any firearms deer season, including the October muzzleloader season for antlerless deer, hunters are required to wear, at all times, 250 square inches of fluorescent orange material on the head, chest and back combined, visible from 360 degrees. Firearms deer hunters using blinds must wear the required 250 square inches of orange, as well as post 100 square inches of orange within 15 feet of the blind. Even when orange isn't required, the Game Commission highly recommends the use of orange.

“Archers might want to consider those three days of fall rifle and muzzleloader season,” Wallingford said. “The potential increase in disturbance may increase deer movements past their stands.”

The higher archery harvests seen in the last decade are somewhat tied to the legalization of crossbows back in 2009. However, there's no denying the attractiveness of a six-week archery season, hunting when it's warmer, and the chance to hunt bucks deeper into the rut.

## NATIONAL RANKER

Pennsylvania was third in the nation in antlered buck harvest and second in antlered buck harvest per square mile – 3.7 per-square-mile – in the Quality Deer Management Association's 2019 White-tail Report, which ranked states based upon their 2017 deer harvests.

For the second consecutive year, Michigan topped Pennsylvania's buck-harvest-per-square-mile with a 4.0 rate. Only Texas and Michigan posted bigger buck harvests. Texas is America's second-largest state; Michigan is 22nd. Pennsylvania ranks 32nd.

For the third consecutive year, Pennsylvania was the only state in the nation to rank in the Top 5 of QDMA's antlered buck harvest, antlered buck-harvest-per-mile and greatest-antlered-buck-harvest-increase-versus-the-five-year-average – 21.

“Sixteen years of antler restrictions have placed Pennsylvania among America's best destinations to hunt bucks,” noted Game Commission Executive Director Bryan Burhans. “The bucks showing up in today's harvests are some of the finest this state has ever seen, and it's not just one here and there – they're everywhere!”

For the second consecutive year, Pennsylvania has nailed down the nation's third-largest antlerless deer harvest. Only Texas and Georgia surpassed it. Pennsylvania also placed third in antlerless-deer-harvest-per-square-mile with a rate of 4.5. It was topped by Maryland with a 5.7 rate, and Delaware, 5.2.

Georgia was the only other state to place in the Top 5 in both antlerless-deer-harvest categories.

Pennsylvania did lead the country in two other statistics: it topped all other states in deer-vehicle collisions – 141,777 – and deer-vehicle collisions per road mile – 0.57, according to statistical information compiled by State Farm Insurance from July 2017 to June 2018. Michigan and New York followed Pennsylvania in total collisions, while Maryland and Delaware followed in collisions-per-road-mile.

## BOOK BUCKS

Despite the larger percentage of older bucks shot in the state in 2018, Bob D'Angelo, who manages the Game Commission's Big Game Scoring Program, said requests to have Pennsylvania bucks measured during 2019 were down from



the recent years. Maybe there are some monsters harvested in 2018-19 that have yet to be scored.

But D'Angelo, also a Boone & Crockett Club official measurer, added 134 entries to the Pennsylvania record book's whitetail categories over the past year.

Although record-book bucks were harvested in all regions of the state, Bradford County again was the top producer of record-book bucks. It's a distinction the county has held for some time. An active Big Buck Club in the county does an excellent job of promoting trophy

**John Pendergast, right, of Philadelphia, took this 15-point buck in Tioga County during the 2018 archery season. At 187-3/8 inches, the nontypical was the largest buck added to Pennsylvania's records book in 2019. Meanwhile, Matt Yingling, of Butler, made the most of a rainy firearms opener in taking the big buck below in Venango County.**



scoring and holding measuring sessions, D'Angelo added.

Berks County remained in second for entries, while Chester County was a close third.

The largest whitetail added to the 2019 record book is a 2018 buck taken in Tioga County that scored 187-3/8 inches and ranked 18th in the nontypical archery category. The largest typical buck added is a Mifflin County bruiser that scored 168-7/8 and tied for 41st in the firearms category.

Six new Pennsylvania record-book whitetails also qualified for the Boone & Crockett Club record book.

"I'm always intrigued, but no longer surprised, at the quality of Pennsylvania bucks being taken," D'Angelo said. "There's little doubt our exceptional whitetail management program and antler restrictions have brought hunting for whitetails into a new era!"

## BUCK BEHAVIOR

We all have opinions on bucks. Some are developed from observations afield, others from reading the latest research news. Scrapes are always a topic of discussion and curiosity.

Bucks almost always are ready to breed long before does become recep-



tive. Scrapes are used to communicate that. Sometimes you might encounter a scrape the first week of bow season. What that scrape is, though, is a message of that maker's availability and it's almost always made by an older buck.

It is not a territory marker.

"The buck making a scrape early in the season is not trying to get a jump on competitors; he's communicating with other bucks and does in the area," explained Game Commission deer biologist Jeanine Fleegle.

In early October, a lot of bucks still are in bachelor groups. But as days shorten, Fleegle explained, they produce more testosterone, which increases aggression and decreases their tolerance for other bucks.

Bucks start sparring to establish, or confirm dominance. But when does start going into estrous, older bucks travel widely to find them. As they do, they leave their home ranges. And an absent buck can't defend anything.

Yearling bucks – 1½-year-olds – in their first breeding season usually make scrapes later than older bucks, Fleegle said. Their initial scrapes often are within their established home ranges.

Early scrape-making seems appropriate for the large 2½-year-old and older buck population Pennsylvania has. But buck behavior changes as those bucks get older, based on findings of Mississippi State University researcher Ashley Jones.

Jones has found some bucks take more risks than others during the rut's peak. She classified bucks as either "movers," or "sedentary," tracking 18 movers and 25 sedentary adult bucks on private hunting land. Her research showed 2½ and 3½-year-olds took significantly more risks during the peak rut than bucks 4½ years old and older.

But in the post-rut, Jones found bucks

5½ years old and older were taking more risks. In Pennsylvania, that would help explain why some big bucks are on the move in rifle season: they might be taking advantage of fawns that attain sufficient weight to reach their first estrous cycle in early December, or tending does not bred in their first estrous cycle.

Telemetry doesn't shed much light on buck movements because it shows their movements are unpredictable. However, their increased movements are tied to does coming into estrous.

In Pennsylvania, breeding begins to pick up in late October, according to the Deer-Forest Study, a research venture in which the Game Commission and the Pennsylvania Cooperative Fish and Wildlife Research Unit at Penn State collaborate to study fawn mortality and other deer biology. By the end of October, 10 to 15 percent of breeding females will be pregnant. By Nov. 13, it jumps to 50 percent. The rut peaks in Pennsylvania about a week to 10 days later.

The Deer-Forest Study's telemetry work also uncovered how bucks that were studied got around.

Using telemetry, researchers followed a buck through the peak of the rut from 10/27 through 11/24, wrote Duane Diefenbach, Pennsylvania Cooperative Fish & Wildlife Unit leader, in one Deer-Forest Study blog. In that month, he traveled over 100 miles, which is a little on the high side, but not unusual for the bucks they have followed. He also climbed or descended over 16 miles in elevation.

Despite the distances hoofed, the Deer-Forest Study fieldwork also showed that studied bucks looking for estrous does weren't in a hurry. They just chug along, day and night looking, listening, sniffing for the opposite sex.

As does start to come in to estrous in

late October, hunting pressure also picks up. Do deer respond to that uptick in pressure? It depends on the disturbances they encounter. But deer generally adjust to intrusions.

“They tend to look for places where they are not disturbed, with good vantage points,” noted Fleegle.

And when deer confirm their hiding spot is working, they tend to keep using it – slipping into it well before hunters can see in the morning – until something changes: maybe a drive, or still-hunter drifting too close for comfort.

## DEER EYESIGHT

As a prey species, the eyes of a white-tail are set wide on its face. It’s an arrangement that decreases its ability to determine depth, but maximizes its field of vision, Fleegle explained.

“Vision in deer is probably not exceptionally sharp, but it’s exceptional at detecting movement,” Fleegle said. “So, determining a stationary hunter from other stationary objects isn’t easy for a deer.

“There also is evidence that whitetails can see some color, and that they are sensitive to the blue to blue-green part of the

color spectrum. Hunters also should avoid washing hunting clothes in any detergents containing whiteners and brighteners.”

## FALL FOODS

Through July, growing conditions for domestic and wild plants has been exceptional. Acorns shaken free from branches by winds indicate they’re well developed on oaks that have them. Farm reports indicate corn, hay, soybeans, apples and peaches all have had good-to-excellent growing seasons, but strong summer storms have caused damage in some areas.

More than a quarter of Pennsylvania – 11,406 square miles – remained in agricultural land in 2018, slightly lower than in 2017, according to the U.S. Department of Agriculture.

Cornfields, totaling more than 2,109 square miles, surpassed hayfields – 1,859 square miles – in 2018 to become the largest land investment in farm country. Soybeans were planted on about 1,000 square miles.

Fall food conditions afield for soft and hard mast also were shaping up, according to Dave Gustafson, Forestry Division chief in the Game Commission’s Bureau of Habitat Management. But white oaks have been experiencing widespread anthracnose fungus the past two years, which likely has suppressed white-oak-group acorn production; most reports show production as poor-to-non-existent.

“Red oak this year is best described as spotty, some areas seem decent-to-good, others are devoid of acorns,” Gustafson said. “Hickory-nut reports are above average and widespread, but that’s better for black bears.

“Beechnuts are reported as above average in the state’s northwestern counties; but foresters are reporting almost everywhere else that beechnuts are in poor

## CWD IN 2019

Chronic Wasting Disease continues to affect more Pennsylvania hunters. Since last year, 123 additional free-ranging deer tested positive for CWD. Disease Management Area 2 has been expanded by more than 2,100 square miles. It now totals 6,715 square miles and includes all or parts of Adams, Bedford, Blair, Cambria, Centre, Clearfield, Cumberland, Franklin, Fulton, Huntingdon, Indiana, Juniata, Mifflin, Perry, Snyder, Somerset and Westmoreland counties. DMA 3 also expanded and now totals 1,119 square miles and includes all or parts of Armstrong, Clarion, Clearfield, Jefferson and Indiana counties. More information and DMA maps can be found at [www.pgc.pa.gov](http://www.pgc.pa.gov).

supply. Black cherry also is below average across its range.”

Apple, blackberry, dogwood, sumac, hawthorn, crabapple and elderberry are average-to-above average across most of the state, he added.

## INVESTED

Hunting is a pursuit that doesn't necessarily provide a return for your investment. The best deer gun and ammo, fastest bow, high-grade lures and calls, high-tech trail cameras and premium camouflage clothing won't buy you a deer. You still must find one that's legal and take it. And they don't come willingly.

In 2017, the average number of days afield deer hunters spent nationwide was 12, according to the QDMA's 2019 Whitetail Report. Mississippi led the nation with deer hunters spending in average of 25 days afield. Indiana had the lowest average, three days.

Pennsylvania weighed in at 10 days, on average. Maybe that's tied to the tremendous opening-day success so many Commonwealth deer hunters have. It also might be related to the family, community or work commitments of a 51-year-old whitetail hunter. But if it's accurate, it sure speaks to why more Pennsylvania deer hunters aren't taking deer.

The Game Commission's most recent Deer Hunter Survey showed about 75 percent of antlerless hunters and 80 percent of buck hunters didn't take a deer in the 2017-18 seasons. Previous agency surveys reported similar rates.

Knowing where deer are as hunting season is about to open is important, so is knowing where other hunters will go. Each helps you make an informed decision on where to hunt. Scouting will help you, so will paying attention to your surroundings while you hunt. Each helps get



**Nicole Helm, of Centre Hall, grips the antlers of a nice Centre County buck she downed in the 2018 firearms season. Deer hunters in 2019 could find themselves in prime position to take home a trophy. A lighter harvest in 2018 likely means a few more bucks held over.**

you close to deer and to make adjustments to counter moves by deer and hunters.

Days spent afield don't necessarily represent effort. It's up to you to make them count by paying your dues and paying attention. Hunt the sign. Don't hunt anywhere too often. Wait for a good shot. And recognize deer for the crafty game they are.

Best of luck afield in the coming deer seasons and if you don't take a deer early, let's hope it means you're in line for something big later.

Make some memories! **G**