MAKING A BETTER CALL

FWP aims to improve its post-hunting season phone surveys to gather more accurate harvest information.

By Andrew McKean

If you've hunted Montana for many years, you've doubtless received some variation of "The Call."

It often comes just as you're sitting down to supper, or must-see television. Your phone rings with a call from a pleasant stranger at Montana Fish, Wildlife & Parks asking you to recount a select portion of the past big-game hunting season. Though you may have hunted deer, elk, pheasants, and wild turkeys, most of FWP's calls focus on big game because those species require intensive, district-by-district population management and harvest quotas.

"Did you get a chance to hunt deer last year? Did you harvest a deer? Was it a mule deer or whitetail? A buck, doe, or fawn? If it was a buck, how many points per antler? In which hunting district did you harvest the deer? How many days did you hunt? Did you see a wolf while deer hunting?"

For some of us, The Call is an opportunity to revisit a memorable moment of deer (or elk, antelope, turkey, or upland bird) season in all its detail. For others, it bears a vague resemblance to the hunting season as we struggle in February to recall how many days and precisely where we hunted back in October.

The questioner on the other end of the phone connection is a FWP harvest-survey technician, and their job is to collect hunting-success data from you that will then be compiled with that of tens of thousands of other respondents. That information, a district-by-district and species-by-species estimate of harvest, is then used by FWP biologists to recommend bag limits and other adjustments to the following year's hunting seasons.

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Telling harvest surveyors about your lack of success is just as important as telling them about that big buck or bull you killed, says Ken McDonald, FWP's Wildlife Division administrator.

"Over the years, we've been asking 'effort' questions," McDonald says. "Knowing how many days you hunted in a particular area gives us an understanding of hunter success. And how many days you hunted and whether you filled your tag provides a good indicator for us whether game populations are shifting upwards or downwards. We combine that with our live-animal counts to look at the whole picture of a hunting district."

If the season structure and tag allocation for any given district lead to an especially high harvest, it may prompt biologists to scale back quotas in subsequent years to help that game population rebound. Or, if surveys show an overabundant and increasing population, they may increase the number of antlerless tags available to hunters.

Using the results from a half-century of telephone harvest surveys, FWP biologists have been able to track the rises and falls of statewide deer and elk populations and detect abnormally high or low harvest in a hunting district, prompting a deeper look to help pinpoint why.

Andrew McKean is the hunting editor for Outdoor Life *and a frequent contributor to* Montana Outdoors. *He lives on a ranch outside of Glasgow.*

OPPOSITE PAGE: ILLUSTRATION BY BLAKE CALE; HUNTER PHOTO BY JOHN HAYNER

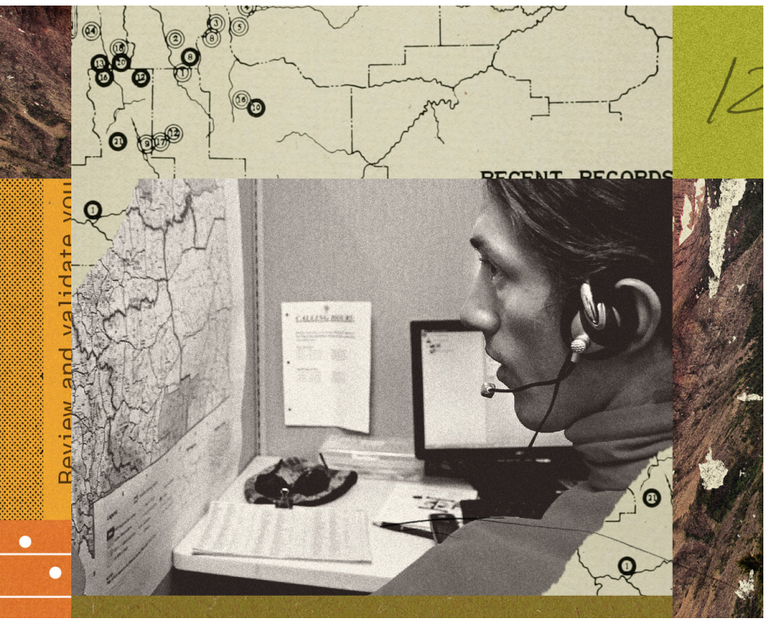
Post-season harvest estimates "are one of the tools in the biologists' toolbox for making informed management decisions," notes Kevin Podruzny, a wildlife biometrician with FWP's harvest survey program. "But in some hunting districts, it's the only tool they have. In [northwestern Montana's] Region 1, the landscape is so heavily forested that aerial counts aren't possible, so biologists rely on hunters' harvest data as a key index of the overall population" of deer and elk there.

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'THEY NEVER CALLED ME!'

All successful hunters for some species—mountain lions, black bears, and bighorn sheep among them—are required to report their harvest. But the subset of other hunters who get The Call is based on more than a century of statistical sampling theory, says Podruzny. Because nearly 300,000 hunters buy about 600,000 big-game licenses in Montana, it would be both impossible and expensive to contact everyone. Instead, as with Gallup polls and Nielsen ratings, the survey calls enough randomly sampled hunters to comfortably achieve a statistically accurate sample.

This scientific snapshot has successfully guided wildlife managers for decades. As it is, harvest surveys cost the department about $400,000 per year.



"We randomly sample about 60 percent of holders of licenses and permits because that's what we need to understand our harvest based on the number of licenses issued," says Podruzny. "We can make population inferences from that level of random sampling so we don't have to talk to every single license-holder."

But in recent years, FWP has seen softening participation by hunters who decline to answer phone calls from unknown numbers. Some hunters have publicly questioned the survey's results and called for mandatory harvest reporting. Even the Montana Legislature has gotten involved. In the 2025 session, legislators introduced three separate bills to compel FWP to require hunters to report their big-game harvest, though none made it into law.

"It's fair to say that in the last few years, skepticism of our harvest survey has increased exponentially," says McDonald. "That corresponds with our interest in modernizing it. Given those two perspectives, we are looking at some changes."

Mandatory harvest reporting works for states that issue fewer licenses and with fewer places to hunt. But in a state like Montana with more than a quarter-million hunters and general deer and elk licenses available nearly statewide, low compliance rates for mandatory reporting could produce fewer responses than telephone surveying.

Plus, the "stick" required to compel mandatory harvest reporting—a surcharge on the next year's licenses or a prohibition on buying a license for the following season—would be imposed too late to help biologists adjust bag limits for the following season.

Technology is helping FWP rethink its harvest surveying.

"As an alternative to mandatory reporting, we're interested in self-reporting," says McDonald. "With the popularity of using the internet and cell phones to buy and apply for licenses, we think that we can get a large number of hunters to voluntarily report online whether or not they succeeded at harvesting an animal."

BLAKE CALE. PHOTO BY ERIK PETERSEN

The more hunters who voluntarily provide detailed harvest information using their computer, tablet, or smartphone, the fewer hunters that harvest-survey technicians have to call, saving the department both effort and money. And unlike a missed or unanswered call, it ensures their information is received and recorded.

NEXT-GEN HARVEST REPORTING

In future years, FWP may be able to leverage some of the information embedded in electronic licenses—called e-tags—to further assist with harvest reporting.

"There's no doubt that we'd still have to use the telephone survey to follow up with hunters," even with a self-reporting model, says McDonald. Telephone surveys would probably be used to contact those hunters who either failed to self-report or provided scant information. And no matter what kind of survey is used, McDonald emphasizes that reporting lack of success is just as important as reporting success.

"Our harvest surveys gather a lot of other information beyond harvest," he says. "We ask Montana big-game hunters for moose and wolf sightings, which feed into population estimates for those species. And we ask if they harvested animals on different ownerships like public or Block Management, helping to guide some of our management decisions. These details are important enough that we'd like the ability to ask those same questions in a self-reporting system."

The integration of various digital platforms is so complicated that any changes to the harvest reporting mechanism probably wouldn't take effect until after the 2027-28 hunting season. Even then, The Call would likely remain an important part of FWP's harvest surveying, even with self-reporting, notes Podruzny.

"The downside of self-reporting is that the hunters who are more successful are the most likely to report," he says. "So you could easily overestimate the harvest because hunters who were unsuccessful are not reporting, resulting in a skewed response. That's where we'd deploy our phone survey—to interview people who didn't self-report, which helps address any nonresponse bias."

The conversation around the nuances and efficacy of harvest reporting raises an important question: What if FWP abandoned harvest reporting entirely, and devoted that $400,000 annual expenditure to alternative survey methods. In other words, has The Call outlived its utility?

"I want more information rather than less information as we look at season recommendations, and my sense is that sportsmen

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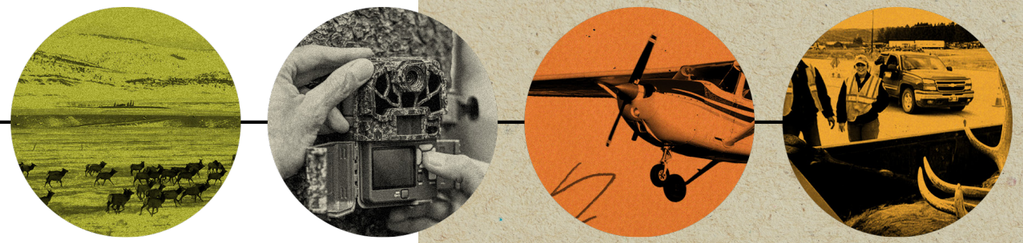
Shapeshifting Surveys

Though the main goal behind "The Call" is to gather data used to set next year's hunting quotas, that's far from its only use. One FWP study is using information from phone surveys to help calculate resident and nonresident hunter expenditures to reveal the economic value of hunting in each district. A similar project is examining how many days on average hunters spend afield in different regions to help assess crowding. Biologists also use hunter reports from those phone calls to help tabulate moose and other species that are difficult to survey by aircraft.

"Every piece is important, and everything we collect is put to good use by somebody at FWP," says wildlife biometrician Kevin Podruzny. "Whenever a new question is added to the harvest surveys, you can bet there are people at FWP who are intensely interested in seeing what new feedback we get."

The data collected from harvest surveys is also available to the general public on FWP's website at myfwp.mt.gov/fwpPub/harvestReports. Hunters can use it to analyze success rates and other data when planning the next year's hunts, one of many ways that "The Call" can come full circle to help those willing to answer a few questions from FWP phone survey staff members.

—Braden Collard



do, too," says FWP wildlife biologist Ryan Williamson, whose extreme northeastern Montana district experiences wild swings of deer abundance and depletion depending on weather. "Harvest information is an important data point as I make decisions, especially about antlerless quotas. And if that information is only—or mainly—available through a phone survey, I'd want to keep that tool."

Harvest data from the previous season is an important indicator for Williamson as he decides whether to recommend higher or lower quotas for antlerless whitetail and mule deer. The antlerless segment of the population is a valid proxy for the health of the entire herd. Without harvest information collected by The Call or some other harvest reporting method, Williamson would be guessing about both the short- and long-term health of northeastern Montana's deer herd.

As a result, he might recommend more antlerless harvest than the population can bear, thus hampering a recovery. Or recommend a harvest that's too small to curb a surging population.

"It's not the only data we use," he says. "We look at our aerial survey data, habitat conditions, weather, and public comments at our season-setting meetings. But harvest data is important, and I consider it a reliable indicator of the overall health of our deer herd."

McDonald encourages every Montana hunter to do their part and answer the phone when they get The Call, then provide as much information as they can. "We don't call everyone, but if we do call you, your feedback is incredibly important."

Other Ways to Count

"The Call" isn't the only method FWP uses to gather data on wildlife in Montana. Every fall, the agency sets up roughly 20 hunter check stations across the state to flag down hunters as they're heading back to town, with the aim of collecting real-time information similar to phone harvest surveys. While many of these are in the same locations each year, others move around.

Many big game species such as elk, deer, pronghorn, and bighorn sheep are also surveyed from the sky using small planes or helicopters. Aerial surveys are often conducted in late winter when these large animals stand out against the snow and herds tend to be at lower elevations and in more open country such as sagebrush steppe. In addition to simply counting animals and marking their location, biologists record herd demographics such as cow:calf and bull:cow ratios for elk and doe:fawn and buck:doe ratios for deer.

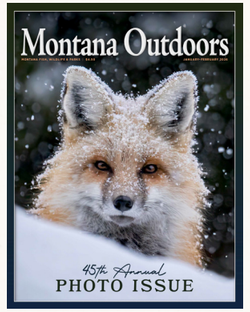
FWP also employs camera traps in certain areas, especially for uncommon species like lynx. Akin to the motion-activated trail cameras sold in sporting goods stores, the cameras are now the primary way FWP detects furbearers such as fishers and martens—species impossible to count on foot much less from the air. Some species such as the greater sage-grouse are counted in early spring when the males are displaying on their leks.

"We need a big tool kit to successfully count Montana's broad mix of wildlife, and over the years we've gotten very creative on how we approach each of those challenges," says Justin Gude, FWP's chief of research.

—Braden Collard

BLAKE CALE

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