

With Adaptability Comes Wisdom – Great-Horned Owl Populations Increase Across the Prairies

Tara Mulhern Davidson

In ecosystems everywhere, including Saskatchewan's native prairie grasslands, diverse species must co-exist in the same habitat, including predators, prey, livestock and humans.

What makes some birds, insects or wildlife susceptible to population declines? What makes other species thrive?

Great-horned owls are a well-known bird whose population is on the upswing. Tory Hartley-Cox, a graduate student at University of Regina, recently shared her insight on this phenomenon during a Saskatchewan Prairie Conservation Program (SK PCAP) webinar presentation entitled "Great horned owls: a human-tolerant species thriving in an altered grassland ecosystem."

Hartley-Cox says that in Saskatchewan,

prior to 1940, the population of great-horned owls would have been comparatively low, and limited to the transitional edges of grasslands and riparian areas.

The great-horned owl has proven to be very adaptable. Today, they have the largest range in North America of any owl species, occupying habitats as diverse as old growth forests and deserts.

Part of their adaptability is due to their modest habitat requirements.

Hartley-Cox says great-horned owls only have four main habitat requirements — they need perches for hunting, an abundance of easily accessible prey, and an availability of nests.

She says that hunting perches are very

important because great-horned owls are heavier, which makes them less agile than other birds of prey.

"Great-horned owls are sit-and-wait ambush predators," she said. They rely on their superior eyesight to see their prey and swoop in for a quick kill.

Hartley-Cox also says that great-horned owls do not build their own nests, but steal nests from other birds. They often move into nests built by other raptors like Swainson's or red-tailed hawks, but have been known to occupy large magpie nests.

The population of great horned owls continues to increase in the prairies, likely due in part to fire suppression, increased tree and shrub cover, and the establishment of structures like power

lines, fence posts and buildings.

Hartley-Cox said that great-horned owls absolutely love old abandoned houses and farmyards. She added that owls use them for shelter, as perches for hunting — and they are often a readily available source of small rodents.

Why are great-horned owl numbers increasing significantly while other raptors are not? Tory says this is due in part to the fact that they are a synanthropic species, meaning they benefit from being associated with humans or human-caused disruptions.

She explains that scientists can learn a lot about which prey species live in an area, based on what is in the owl's diet.

"Small rodents make up a good percentage of their diet," said Hartley-Cox, and added that the most common prey species differs between nests. She has found everything from salamanders to gophers, deer mice and even ducks in a nest.

"If they have an abundant source, ready to go, they will stockpile food for their offspring. It's not uncommon for me to go up to a nest and find two or three prey items for the nestlings," she said.

A great-horned owl's need for abundant prey can lead to unintended consequences. "There's footage of great horned owls taking ferruginous hawk nestlings right out the nest; so, they are a potential risk to species at risk," said Hartley-Cox.

"We know they take sharp-tail grouse all the time and also kill greater sage grouse," she said, adding that great-horned owls are fully capable of taking on larger prey, so a larger bird like a sage grouse would be no match for the owl.

Producers may be interested in a number of citizen science opportunities to share owl observations through a survey. Interested people can find a link to the survey at www.royalsaskmuseum.ca or send observations via email to

continued on page 60



Great-horned owls have adapted well to humans and often use abandoned farmyards, which provide shelter, hunting perches, and prey as their home base. Photo courtesy of Tory Hartley-Cox

Rawes Ranches

A LONG-STANDING PROGRAM
Volume Bulls . Quality Genetics . Integrity and Customer Confidence

Philip & Marie Harty | 780.376.2241 | 780.385.5977
John & Myrna Rawe | 780.376.3598 | 780.679.7725

WWW.RAWESRANCHES.COM

40th ANNUAL

SINCE 1957

PERFORMANCE TESTED CHAROLAIS BULL SALE

TUESDAY, FEBRUARY 21, 2023
AT THE RANCH, STROME AB

200 TWO-YEAR-OLDS

SASKATCHEWAN CONSERVATION OFFICERS NEED YOUR HELP TO SOLVE THIS CASE. YOU CAN REMAIN ANONYMOUS AND EARN UP TO \$2000 CASH REWARDS IF THE INFORMATION YOU PROVIDE LEADS TO A CONVICTION.

On November 25th, 2022, at 5pm, Outlook Conservation Officers received a call regarding a White-tailed deer buck that was unlawfully shot on private land without permission 13km East of Dinsmore in the Anerley Valley. A witness observed an individual carry the head and antlers to a nearby truck, described as an older model, black Ford F-250. Officers attended the scene and located a carcass which had the head and some meat removed, leaving the rest to waste.

HOW YOU CAN HELP

IF YOU HAVE ANY INFORMATION, CALL THE TOLL-FREE TURN IN POACHERS & POLLUTERS LINE **1-800-667-7561** OR **#5555** FROM A SASKTEL CELL (NO TEXT MESSAGES). CALLS ARE TAKEN 24 HOURS A DAY, 7 DAYS A WEEK. YOU CAN ALSO REPORT ONLINE AT www.saskatchewan.ca/tipp.

For the latest unsolved cases, visit www.sasktip.com and follow @sasktip

STEWARDSHIP

Great Horned Owl
cont. from pg. 59

uofowlresearch@gmail.com. Hartley-Cox says uptake in the citizen science program is unprecedented, with more than 570 participants.

"There are plenty of opportunities for landowners to get involved," she said. As she connects with producers to put nest cameras up or capture owls to install transmitters, she appreciates help and a hands-on approach.

"I encourage landowners to come out and catch the owls with me," she said. When landowners get their hands on owls or get to see their nestlings on camera, it puts smiles on people's faces.

Owl Fast Facts

- Great-horned owls weigh three to four pounds, stand up to 25 inches tall, and have a wingspan of four to four-and-a-half feet.
- Great-horned owls do not migrate; instead, they stay in their home habitat year-round.
- The females nest as early as late-February and can lay one to five plain white eggs; although, laying two to three eggs is considered normal. Hartley-Cox says that a



Female owls provide support to their nestlings for longer than most bird species.
Photo courtesy of Tory Hartley-Cox

- female owl on her nest covered in snow is not an uncommon sight.
- The "horns" or ear tufts are not ears at all. Tory says great-horned owls definitely use them in communication, but we don't quite understand the nuances of that yet. For example, when a mother owl snuggles her nestlings, her tufts often go down. Owls will put their tufts up when a male and female are displaying courtship behaviour.

- Hartley-Cox describes great-horned owls as "silent and deadly killers." Their unique feathers help break up turbulent air making their flight seemingly noiseless.
- Great-horned owls care for their young longer than most. Tory says they provide a lot of parental care to their nestlings well beyond the point that most other birds have left their young to fend for themselves.

Tory Hartley-Cox is partway through her project, which she hopes will provide her with a better understanding of habitat use and diet of great-horned owls, and that she will learn about the management implication for prey species, including species at risk.

The latest Canadian beef & forage research & innovation

YOUR GATEWAY TO TOOLS & RESOURCES



LEARN MORE



To watch the webinar recording, learn more about owls and watch unique data collection methods, scan the code:

