

Regal Raptors: Ferruginous Hawks on the Prairie

Carolyn Gaudet and Shirley Bartz
Saskatchewan Prairie Conservation Action Plan



An adult Ferruginous Hawk is soaring overhead, identified by the rusty-coloured legs. © Brian Sullivan

The Ferruginous Hawk (*Buteo regalis*) is the perfect mascot for the prairies. Its chosen prey is Richardson's ground squirrels, also referred to as gophers, and a pair of these hawks can kill about 480 ground squirrels in a season to feed their nestlings.

At 63 centimetres (25 inches) from head to tail, and with a wingspan close to 1.5 metres (approximately five feet), the Ferruginous Hawk is the largest hawk in North America. This hawk gets the name "Ferruginous" from the rusty colour of the feathers on its back and legs like rusty coloured "chaps" on its legs, like a cowboy. Some Ferruginous Hawks have a reddish-chocolate brown belly and back, but this "dark morph" is quite rare. In flight, when viewed from below, its red legs form a dark V-shape against the bird's bright white belly and tail.

Ferruginous Hawks arrive in the Canadian Prairies in early to mid-March. Males arrive first and frequently return to the general area where they were raised. Pairs are often monogamous, and successful pairs that have fledged chicks in the previous year will use the same nest year after year. If the previous year's nest was unsuccessful, they are likely to search for a new nest or an entirely new territory with a suitable ground squirrel population as prey.

Ferruginous Hawks prefer to nest in open areas, such as native grasslands with only a few scattered trees or shrubs, and ground squirrel populations sufficient to feed their young. They choose to build their nests in isolated trees or other elevated structures, such as a cliff face or rock outcrop. As these birds have evolved on the prairies, they may also use a highly built-up nest directly on the ground. Both adults contribute to building the nest, using sticks, roots, shrubs, shredded bark, dead grass, and cow dung. In the past, or in areas with bison, they also use bison hair and bones in their nests.

Ferruginous Hawks typically lay two to four eggs in April and May, but clutch sizes can range from one to eight eggs. The female, which is larger in body size than the male, will incubate the eggs in the nest for 30 days, while the male feeds her. After hatching, the young remain in the nest for six to eight weeks as they grow and molt into their juvenile plumage. The chicks are dependent on the parents for food, even after they learn to fly.

From each stage of development, young Ferruginous Hawks may be preyed upon by owls, crows, ravens, raccoons, badgers, bobcats, foxes and coyotes. Also, repeated or intense disturbance from humans early in the nesting period can affect young chicks, which are lightly-feathered and unable to regulate their body temperature, effectively. As Ferruginous Hawks tend to select nest locations with minimal cover, female hawks need to provide shade to her nestlings. If human activity repeatedly disturbs the female, flushing her from the nest, the young birds may experience heat stress and perish.

Ferruginous Hawks hunt throughout the day using a variety of methods. In grasslands with short grass and high visibility, they will sometimes hunt standing on the ground and have been observed to walk, hop and run after their prey before striking. Ferruginous Hawks will also scan for prey from a nearby perch, or search while flying.

In Canada, 85 to 95 per cent of Ferruginous Hawks' diet consists of ground squirrels. As mentioned, while raising young, one family of these hawks can consume an average of 480 ground squirrels in a season. If ground squirrels become scarce, they might choose other prey, like jackrabbits and smaller mammals, reptiles, insects and birds.

Ferruginous Hawks leave the Canadian Prairies in September or October to return to grasslands of the southern United States and Mexico for the winter. On wintering grounds in prairie dog colonies where their prey exists in high densities, Ferruginous Hawks will sometimes inadvertently hunt in groups, flapping and hopping in aggressive displays that often draw more Ferruginous Hawks.

Ferruginous Hawks can live 20 years or more. Despite being long-lived, adults have an annual survival rate estimated to be 0.7, meaning each year an adult Ferruginous Hawk has a 70-per-cent chance of surviving the year. Predation of adult Ferruginous Hawks may occur by other large-bodied raptors such as golden eagles. However, adult mortality is more often caused by collisions with vehicles, electrocution on power lines, shooting and pesticide use.

Ferruginous Hawks are listed as a species of special concern in Canada. The population is reduced to a quarter of what it was in the 1800s, before European settlement in Canada. Their range has decreased due to loss and fragmentation of grassland habitat, a lack of nest sites, loss of prey and through disturbance by human activity. However, Breeding Bird Survey data suggests that the population is beginning to rise slightly in Saskatchewan. It has also been suggested

that the population may be able to cope with existing threats, in part, due to recovery efforts.

How can you help?

Installing nest platforms – as nest sites are a limiting factor for breeding pairs, installing artificial nest poles can help increase the number of nesting hawks. The Alberta Conservation Association has a brochure on how to install a successful nest poll at shorturl.at/hiLU5

Keep ranching – like many other species at risk, Ferruginous Hawks can co-exist with ranching practices lacking aggressive gopher eradication and which maintain productive native grassland habitat.

For more information:

COSEWIC Assessment and Status Report on the Ferruginous Hawk *Buteo regalis* in Canada
www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/cosewic-assessments-status-reports/ferruginous-hawk-2021



JEREMY PATZER M.P.
CYPRESS HILLS GRASSLANDS

@jeremypatzermp jeremypatzer.com
jeremypatzer@parl.gc.ca

SASKATCHEWAN CONSERVATION OFFICERS NEED YOUR HELP TO SOLVE THIS CASE. YOU CAN REMAIN ANONYMOUS AND EARN UP TO \$2,000 IN CASH REWARDS, IF THE INFORMATION YOU PROVIDE LEADS TO A CONVICTION.

On March 31, 2024, Creighton conservation officers received information regarding fish that had been abandoned on Deschambault Lake, located in Northeast Saskatchewan. The fish were partially buried under the complainant's ice shack located northeast of Williams Island. Conservation officers discovered 12 whole walleye, 4 perch fillets and 80 walleye fillets. The fish are believed to be abandoned at the location between 9:00pm on March 30 and 8:00am on March 31, 2024.



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