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BADGER AND COYOTE: A CURIOUS PARTNERSHIP



If you spot a badger in open country, look around you—is there a coyote nearby? You might be lucky enough to observe cooperative hunting.



Not only does this unusual teamwork speak volumes on animal intelligence; it may also help us better understand two of our prairie neighbours.

Observers of prairie wildlife have long noticed an association between the badger and the coyote. Although by no means a common sight, their relationship is well documented across the North American prairies.

Badgers and coyotes will sometimes team up for hunting purposes, but that's not all. As early as the 1880s, wildlife naturalists recorded what they termed a "mutual attraction" between the two species. In some instances, individuals appear to "know" one another and to form a bond.

Dr. Paul Paquet, of Meecham, professor adjunct at the University of Victoria and wildlife biologist with Raincoast Conservation Foundation, is a wild canid specialist, and has observed badger and coyote associations on several occasions. "It's clear to me that the badger and the coyote related to one another," he says. "There was no aggression in their interaction, which was similar to what I would expect to see between two dogs, or perhaps between a dog and cat who knew each other."

Paul admits this observation involves some speculation on his part, but it's based on his understanding of canid behaviour. Canids display clear signs of play, affection, and hunting intention—we see this in our own dogs. Paul points out that other canids in the wild sometimes develop relationships with different species. Wolf pups and grizzly bear cubs, for example, have been known to interact, and these friendly relationships sometimes continue over time.

There are other examples of predators of different species cooperating—crows and wolves, ravens and large predators—but the only "friendly" association documented between two wild species (besides man and other species, and between domesticated and semi-domesticated animals) is between the badger and the coyote.

Having a diet in common has something to do with their cooperation. Here on the prairies, rodents are the primary prey of coyotes and badgers. But why would two species with the same prey interest decide to team up? One reason may be that each brings a different skill to the hunt.

The coyote is swifter and taller than the badger, equipped with swiveling ears and sharp sight, ideal for spotting movement in

▲ Boomtown's first building was moved from the old WDM site on 11th St. West in late fall, 1971. Credit: Western Development Museum Archives, George Shepherd Library

➤ (Top) Boomtown from the far end of the street. Buildings from right to left: Chinese laundry, Easterlea School, St. Peter's Church, Coad's Drug Store with doctor's office upstairs, and general store, April 5, 1972. Credit: Western Development Museum Archives, George Shepherd Library

➤ (Bottom) Fred Leigh, who came out of retirement to head up construction of Boomtown, built Easterlea School to look like the one he'd attended as a youngster northeast of Viscount. It's heated with a pot-bellied stove.



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tall grass or brush. The badger, low-slung and slower, has powerful forelegs and claws to dig out prey. Working together means neither has to expend the same energy to search, stalk, chase, and dig out prey.

At first glance, it may seem unlikely that coyotes, accustomed to hunting in pairs or packs, would team up with the more solitary badger. However, coyotes typically hunt only larger mammals in packs. Their hunting habits for small prey are usually solitary.

One might suspect the wily coyote has simply learned that badgers scare up ground squirrels—easy pickings for the coyote. What, then, is the advantage for the badger? Paul suspects the badger has learned that the coyote will drive prey underground where it can be more easily caught.

“Working together is probably a learned behaviour,” he says, “but it might also be opportunistic. Some blending of the two is likely—as with human behaviour, some observational and some chance association.”

Mutualism amounts to a win-win for both species. Each has more to gain than lose by partnering. The coyote is a vigorous digger, but the badger has long rakes for claws and excavates with incredible power and



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speed. The badger's head is cone-shaped, excellent for underground tunnels, and its third eyelid, the nictitating membrane, helps keep dirt out of its eyes. The coyote's best assets are speed and intelligence. Not much gets past the coyote.

On some occasions the relationship between the two *is* competitive. Two coyotes may team up to, well, "badger the badger." This may quickly deteriorate into toothy rivalry. Paul has seen, on at least four occasions, badger-coyote interactions that were obviously antagonistic.

But the opposite is also true. "On one occasion, I watched a coyote corral two ground squirrels, and the badger came in and took one of them. What was most interesting was that when the badger approached the coyote, with the two ground squirrels above ground, the coyote was receptive to that."

A video clip taken in 2020 in the Santa Cruz Mountains of California confirms the association may be more than merely opportunistic. A coyote, entering a culvert under a highway, turns back to wait for the badger, wagging its tail and play-bowing as if inviting the badger to follow. The badger lifts its tail and quickens its pace to keep up with the coyote. They both disappear into the culvert like a couple of pals. A second video clip, taken by remote wildlife cameras, show a badger and coyote following one another on a game trail through a forest, both of them looking purposeful and relaxed.

Seeing this unusual hunting cooperation is rare, and observing bonded individuals even rarer. Does this association begin

◀ (Top) Ron in a canoe approaching the shoreline while a film crew documents his arrival at the Batoche National Historic Site.

◀ (Bottom) Ron helps push the rail cart portage down the track to gain access to Kingsmere Lake in Prince Albert National Park.

▶ (Top) Ron and the Blind Adventures camera crew filming in the rain on a sailboat on Lake Diefenbaker for episode four of season two.

▶ (Bottom) Ron is wearing a bison hide jacket in front of the cameras while filming episode one at the Historic Reesor Ranch in the Cypress Hills.





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with mere proximity? Curiosity? Play? Paul questions if seasonality has something to do with it. “An overabundance or scarcity of prey may impact the association.”

The two species have more in common than just a shared taste for ground squirrels. Both are at the top of the food chain, and have no natural predators but man. Importantly, both play a critical role in grassland ecosystems. As Paul points out, both species help to stabilize the ecological community, and humans benefit from those systems in balance.

“A healthy biological community helps to control disease and infestation. It also provides benefits for other species—for example insects, plants, the avian community, fungi and soil bacteria. Mange, for example, a disease found in ground squirrels, affects other wildlife populations. Flea infestations may also lead to other diseases that infect domestic animals, livestock and people.”



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Some people voice concern that nesting birds fall prey to coyotes and badgers, but research shows that birds and their eggs make up a small proportion of the coyote and badger diet. On the other hand, when badgers and coyotes are eliminated from an area, an increase in foxes and raccoons tends to result, and those two species do prey largely on bird populations.

Unfortunately, both the badger and coyote also share a poor reputation among humans—badgers for making troublesome holes in fields, and coyotes for occasionally harassing livestock and domestic animals.

“Most often on the prairies, coyotes are not killing larger domestic animals,” says Paul. “Culling and bounty-hunting of coyotes in particular tends to lead to an imbalance in natural populations.”

An increase in other predators is one direct consequence of attempted elimination; another is reproductive increase. “Coyotes will have larger litters to compensate



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for mortalities,” says Paul. “This happens in wolves, too, from a combination of social and biological factors. Coyotes have a complex social order with the dominant pair of a group breeding once a year. If left alone, family groups and populations remain stable and first year pup mortality is usually 50–70 per cent. But if pack members are killed, other members of the group begin breeding more often. With more food available, more pups survive, and the result is more coyotes.”

In ranching communities, many ranchers avoid killing coyotes unless they are obviously causing trouble with livestock. The coyote is territorial, and these ranchers know if they kill a coyote that isn't harassing livestock, another coyote may move in that does harass stock.

The badger suffers from the same prejudice and interference. The largest of the weasel family, it is mainly active at night or in the early morning, and, like the coyote, is opportunistic in its feeding habits. It will prey on small mammals, snakes, amphibians and sometimes carrion. Part of the badger's unpopularity may be its ferocity, but mainly its burrow openings are unwelcome.

The badger's main diet is rodents, which cause extensive damage to crops and grazing ranges, especially during drought conditions, when rodent numbers tend to increase. One of the most direct benefits of balanced coyote and badger populations is rodent predation. “You are not likely to have an explosion in gophers where you have a healthy population of coyotes and badgers,” says Paul.

The coyote's playful nature is one of its hallmarks, and the badger's grumpy demeanor is renowned. Native American legend portrays the badger and coyote as hunting companions and sometimes brothers. At the risk of anthropomorphizing (i.e., interpreting non-human behaviour in terms of human characteristics), understanding these two species as potential collaborators may help us humans to perceive the impact of our own varied and complex interactions.



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