## Ground squirrels face tough life of survival

## By Helen Branswell

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CALGARY (CP) — Richardson's ground squirrels face death square on.

The normally timid little rodents rise on their hind legs to peer fearlessly at the speed-blurred shapes that are the chariots of their death.

They get mowed down by the thousands each spring and summer. Prairie highways become giant griddles for their pancake-like remains.

In a truly bizarre ritual, those remains are gobbled up by other ground squirrels risking their own lives to munch on friends and relations.

This is one strange breed of rodent.

They're so common most residents of the Prairies could claim to have flattened a few.

But not many people know much about these curious highway martyrs.

Commonly called prairie dogs or gophers, the frisky, tan-colored rodents are in fact neither. They are Richardson's ground squirrels.

Prairie dogs are similar to ground squirrels but are larger, don't hibernate and are found more in the United States than in Canada.

As their name suggests, Richardson's ground squirrels are burrow-dwelling relatives of the grey, black and red squirrels that scamper along tree branches and telephone wires across Canada.

Gail Michener has been studying Richardson's ground squirrels for 20 years and is the leading authority on the animals. The University of Lethbridge biology professor became intrigued by the rodents when, after migrating from Australia, she discovered virtually nothing was known about them.

When Michener began studying ground squirrels science didn't even know such basic information as the timing of their mating season or the length of their gestation period.

She has since filled in many of the gaps and thinks she knows the answer to the most perplexing and frequently asked question about ground squirrels: "Why do they stand up there and let you run over them?"

Ground squirrels sit complacently on the blacktop, gazing unflinchingly at oncoming traffic because they can't recognize the risk a speeding car represents, Michener says.

"They just haven't been equipped through evolution to assess something of that size and speed," she insists.

Ground squirrels are herbivores, living on a diet of grasses and seeds. But they aren't averse to a little cannibalism if the opportunity arises.

"They will take advantage of a free protein meal," says Michener. "They will scavenge road kills."

Despite their propensity for pavement death, ground squirrels aren't stupid. They can remember the location of burrows from one year to the next and they recognize their parents and their offspring.

"They retain these kinship relationships throughout their lives," which average three years but can stretch out to five or six.

They're also slaves to lust — or the instinctive drive to reproduce.

Michener says ground squirrels mate almost immediately after ending their eight- or ninemonth hibernation in early spring. Females are generally pregnant within three or four days of coming above ground.

That may be hard on the females but the frenzied pace of mating season can be deadly for the males. Male ground squirrels compete ferociously in a bid to impregnate as many females as possible—even though there are generally four or five females for every male.

Male survivors of the mating season go back into hibernation by late May or early June. The adult females follow about a month later.

They are replaced on the short-grass prairies of southern and central Alberta, Saskatchewan, Manitoba and the northwestern U.S. by their plentiful offspring, which don't begin hibernating until late August or September.

There are about seven young to a litter, all gamboling about, creating the impression of a population explosion.

"It's at this point farmers start to panic," Michener says.

Ground squirrels get into cereal crops and love

to share grazing grounds with cattle.

Not surprisingly, farmers hate ground squirrels. They shoot them, gas them, even on occasion poison them. These are just temporary solutions—empty burrows might as well sport "for sale" signs aimed at young male squirrels, who generally set out from their home colonies in the summer of their youth.

Over the course of that summer, nature thins out the population. Michener says fewer than 20 per cent will survive the highways, predators and target practice of prairie children.

Despite the hazards and an ever-shrinking habi-

tat, ground squirrels are very resilient.

"Given what we've done to them and their habitat over the last 100 years, it's amazing they've

managed to hang on," Michener says.