

Gopher Tales: A Study in Western Canadian Pest Control

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Abstract

The flickertail gopher was considered one of western Canada's worst agricultural pests. Its ravages were particularly severe when agricultural circumstances provided it with favourable conditions – during the early stages of settlement, or during periods of drought and field abandonment. Local and provincial governments mounted programs – including bounties, contests, and poison distribution – to combat the pest. The populace responded with enthusiasm, trapping, shooting, clubbing, snaring, and poisoning the gophers. Governmental officials and private citizens considered the pest control programs proper and effective; they also welcomed the economic relief conveyed through bounties.

THOSE who participated in the campaigns speak of them with some reluctance – not because of any sense of shame, but because the tales of drownings, clubbings, and shootings from the past seem out of place in the conversations of modern farm homes or suburban backyards. Yet the memories are there, if latent, in the mind of nearly every person with agricultural roots in the Canadian plains of the 1950s or earlier.

The object of these recollections is the flickertail gopher, or prairie gopher, or more properly, the Richardson's ground squirrel (*Spermophilus richardsonii*). This rodent earned a reputation as one of western Canada's worst agricultural pests. The battles to eradicate or at least control the creature waged by generations of agriculturalists on the Canadian plains figure memorably in the common cultural experience of the region. They also pose a remarkable study in pest control, an agricultural activity that tells much of the relationship between farm folk and the natural environment.

To detail the homely and various methods of controlling a mammal pest, and to inquire what they reveal about agricultural folk on the land, are not customary historical approaches to the topic of pest control. In the first place, particularly since publication of Rachel Carson's treatise on DDT, *Silent Spring*, scholars have shared in the public preoccupation with chemical pesticides and

their apparent dangers. Society in general, not the agrarian populace in particular, is the scope of such works. On the other hand, such specialists as Allen E Smith and Diane M Secoy have examined both chemical and non-chemical pest control methods in western civilization from ancient times forward and have concentrated on what farmers did. Their writing approaches the clinical, unlike that of Paul W Riegert, author of a splendid history of entomology in western Canada. Riegert writes that insect pests 'were the common experience of early settlers and immigrants'. So also, although not so noticed by historians, were mammal pests such as gophers.¹

The flickertail gopher is one of the more common and commonly recognized wild

¹ Rachel Carson, *Silent Spring*, Boston 1962; Frank Graham, Jr., *Since Silent Spring*, Boston, 1970; James Whorton, *Before Silent Spring: Pesticides and Public Health in Pre-DDT America*, Princeton, 1974; Smith and Secoy, 'Forerunners of Pesticides in Classical Greece and Rome,' *Jnl Agric and Food Chem* 23, 1975, 1050-1055; Smith and Secoy, 'A Compendium of Inorganic Substances Used in European Pest Control before 1850,' *Jnl of Agri and Good Chem* 24, 1976, 1180-1186; Smith and Secoy, 'Organic Materials Used in European Crop Protection before 1850,' *Chem and Ind*, 1977, 863-869; Secoy and Smith, 'Superstition and Social Practices Against Agricultural Pests,' *Environmental Review*, 5, 1978, 2-18; Smith and Secoy, 'Agricultural Pest Control in Colonial North America,' *Journal of National Agricultural Library Associates New Series*, 5, 1980, 71-75; Smith and Secoy, 'Plants Used for Agricultural Pest Control in Western Europe before 1850,' *Chem and Ind*, 1981, 12-17; Secoy and Smith, 'Use of Plants in Control of Agricultural and Domestic Pests,' *Economic Botany*, 37, 1983, 28-57; Smith and Secoy, 'Pest Control Methods Practised by British Farmers During the 17th and 18th Century,' *Journal of National Agricultural Library Associates*, 10, 1985, 23-35; Paul W Riegert, *From Arsenic to DDT: A History of Entomology in Western Canada*, Toronto 1980.

mammals of the Canadian plains in southern Manitoba, Saskatchewan, and Alberta. A plump, stubby-tailed, full-cheeked ground squirrel ten to twelve inches long when full-grown, its colour varies with locality, but generally is tan or brownish-gray. The flickertail gopher closely resembles the black-tailed prairie dog, of more southerly reaches of the plains, in physical appearance; the gopher is a bit smaller. In its habits the gopher is less communal and more territorial than the prairie dog.

The active season for flickertails stretches from early spring into the fall. They commonly emerge from hibernation in late March or early April and mate during April or early May. Their young, born in May or early June, are precocious, emerging quickly from their burrows and exercising their survival instincts, such as chattering warnings and bottle-brushing their tails. Adult gophers begin their long hibernation in mid-summer, first the males, then the females. Juveniles remain active until cold weather in the fall drives them underground.

Above and below ground, the flickertails' behaviour is attuned to subsistence and security. Their food comprises both wild and domestic plants — roots, leaves, and seeds. Gophers eat a few insects, and they occasionally turn cannibal: they feed on road-kills of their own kind, at their own peril. Alert gophers, watching for predators, sit on their heels and stretch erect to full height, forelegs on chests, thus inspiring another folk name for them, 'picket pins'. When threatened, they dive for their intricate burrows.²

² My description of *Spermophilus richardsonii* and its habits is based on these sources: A W F Banfield, *The Mammals of Canada*, Toronto 1974, pp. 114-117; David R Michener, 'Notes on Home Range and Social Behavior in Adult Richardson's Ground Squirrels (*Spermophilus richardsonii*)', *Can Field-Nat*, 76, January-March 1972, 77-79; Daniel R Michener, 'Annual Cycle of Activity and Weight Changes in Richardson's Ground Squirrel, *Spermophilus richardsonii*', *Can Field-Nat*, 88, October-December 1974, 409-413; Gail R Michener and Daniel R Michener, 'Population Structure and Dispersal in Richardson's Ground Squirrels', *Ecology*, 58, Early Spring 1977, 359-368; Gail R

Historically, the flickertail gopher is second in prominence only to the grasshopper in the rogue's gallery of western Canadian agricultural pests. Reliable and comprehensive data are scarce, but it is certain that the creature did severe damage to crops over large areas of the Canadian plains and that farmers there regarded the gopher as a serious problem. Gophers ate just-planted seed in the ground; chewed up green, growing stems of crops; and pulled down mature heads of grain to eat and store it. Burrowing and trampling by the animals increased the destruction, so that folk wisdom estimated the economic cost of gophers at one bushel of grain to the animal per year. Consequently western Canadian historian Lewis H Thomas pronounced the gopher 'a pest of considerable economic significance', and mammalogist A W F Banfield termed it 'one of the most serious agricultural pests in Canada'.³

The comment by Thomas, 'It seemed to the early settlers that the gophers thrived and multiplied as grain growing increased,' was accurate as to perception and probable as to fact.⁴ In 1889 a special committee of the Northwest territorial assembly determined that certain districts had suffered 52 per cent losses of crops to gophers. In 1894 twenty-six farmers of the Riversdale district bemoaned the gopher menace in a petition to the legislature: 'there are too

Michener, 'Spatial Relationships and Social Organization of Adult Richardson's Ground Squirrels', *Canadian Journal of Zoology*, 57, January 1979, 125-139; Carl H Nellis, 'Productivity of Richardson's Ground Squirrels Near Rochester, Alberta', *Canadian Field-Nat*, 83, July-September 1969, 246-250; Tim W Clark, 'Early Growth, Development, and Behavior of the Richardson Ground Squirrel (*Spermophilus richardsoni elegans*)', *American Midland Naturalist* 83, January 1970, 197-205; Richard I Yeaton, 'Social Behavior and Social Organization in Richardson's Ground Squirrel (*Spermophilus richardsonii*) in Saskatchewan', *Journal of Mammalogy*, 53, Feb 1972, 139-147; and John H Brown and G Douglas Roy, 'The Richardson Ground Squirrel, *Citellus richardsonii* Sabine, in Southern Alberta: Its Importance and Control', *Scientific Agriculture* 24, December 1943, 176-197.

³ J H Grisdale, *Gopher Destruction*, Canada Department of Agriculture, Experimental Farms Service Bulletin No. 31, 1916, pp 2-3; Thomas, 'Local Government in the Northwest Territories', *Saskatchewan History*, 2, Winter 1949, 8; Barfield, *Mammals of Canada*, p 116.

⁴ Thomas, 'Local Government in the Northwest Territories,' p 8.

many in this county,' they said, 'and have destroyed about 50% of last season crop; some farmers had no harvest at all.' Later the same year one farmer from Grenfall wrote the *Regina Leader Post* that 'we shall soon be as badly off as the Australian colonies are with the rabbit pest'. An 'Ex-Farmer' concurred it was 'well known the gopher is the destroyer of thousands of acres of valuable crop year after year'. Gophers, wrote 'An Old Settler' from East Assiniboia in December, 1894, were worse pests than wolves. 'I have never heard of the whole of a rancher's crop of calves being eaten by wolves,' he observed, 'but the total loss of a year's crop of grain by gophers is no uncommon thing.'⁵

Subsequent pronouncements from the departments of agriculture in the Northwest Territories and later in Saskatchewan (created from the Northwest Territories in 1905) confirmed the gopher as a menace to the agricultural frontier. 'Season after season,' the Northwest territorial report noted in 1901, 'from one district or another, a cry for help is heard against that perennial pest and tax gatherer, the gopher.' Saskatchewan's report of 1907 scored that 'mischievous rodent, *Spermophilus richardsonii*,' for its 'very great' damage 'in the drier and more recently settled districts.' Again in 1908 it mourned 'considerable damage,' as 'usual in dry seasons,' 'in newly settled districts especially, by the flickertail.'⁶

I

No doubt these grievances were real, but the particular alarm expressed during the

pioneer period owed to several circumstances. The first was that the pest was new to many settlers. Coming from Europe or from eastern North America, they were familiar with other burrowing mammals, but this creature of the northern prairies and plains seemed without peer as to prolificness and perniciousness. The second was that the pioneer period was typically a time of want, when every problem seemed critical. The third circumstance, however, was environmental, having to do with land use. The conversion of grassland to cropland obviously placed these two environments, grass and crops, in conjunction. The frontier by definition constituted a massive example of what later wildlife biologists would call 'edge' – undisturbed natural habitat, offering refuge and natural sustenance, adjoined by nutritious crop plants – ideal habitat for many types of wildlife, gophers among them. Ecological studies were to show that large expanses of cropland supported few gophers per acre; expansive grassland harboured a stable, comparatively low number, some eight to the acre; but grassland-cropland edge harboured concentrations of colonies that 'invaded' the crops to do their damage.⁷

Damage continued in succeeding years, but rhetoric subsided. Manitoba Agricultural College reported a 'bad' year for gophers in 1915, threatening an 'epidemic' in 1916. Gophers, college officials said, caused ten cents each in damage to crops. In 1918 the Saskatchewan Department of Agriculture reported that 'a quarter of a million acres of crop each year would be a conservative estimate' of damage. The following year it asserted (in suspiciously

⁵ *Ibid.*; Petition from Farmers of Riverdale district to Legislature of the NW Terr., 1 May 1894, *Ordinances and Unpublished Papers of the Council and Legislative Assembly of the N.W.T.*, microfilm roll 2.95, Saskatchewan Archives, Regina; *Regina Leader Post*, 9 Aug 1894; *Regina Leader Post*, 23 Aug 1894; *Regina Leader Post*, 3 Jan 1895.

⁶ Northwest Territories Department of Agriculture, *Annual Report*, 1901, p. 65; Saskatchewan Department of Agriculture, *Annual Report*, 1907, p. 213, 1908, p. 185.

⁷ Brown and Roy, 'The Richardson Ground Squirrel in Southern Alberta,' pp 183-184. I had helpful conversations on habitat and gopher populations with Lorne Scott, Naturalist for the Wascana Centre Authority and President of the Saskatchewan Wildlife Federation, in Regina, 5 August 1986.

round numbers) that damages were 750,000 acres at a cost of \$7,500,000.⁸

Evidently as the country settled up, people still considered gophers a nuisance, but a routine and less critical one. During the 1930s, however, concern about gophers resurged, and not only because the times were hard economically. It may have been that drought was healthy for the animals, thereby diminishing mortality, but more important, it caused widespread abandonment of crop acreage. As this land grew up in weeds, then went back to grass, gophers once again found ideal edge conditions. Farmers were strident in their complaints: one wrote J G Taggard, Saskatchewan's Minister of Agriculture, that 1934 was the first year in twenty his district had no crop, and that 'it was more the gophers and cutworms which did for us, than the excessive dryness.'⁹

The connection among drought, field abandonment, and gopher proliferation became a commonplace in public and private statements of the Saskatchewan Department of Agriculture. Already in 1931 a rural municipality secretary informed Field Crops Commissioner S H Vigor that the gophers were rampant 'owing to several dry years in succession.' Vigor later wrote of them 'recurring in continued dry periods'; said that 'Drought years have been responsible for a large increase in the gopher population of the province' and for the spread of gophers from open areas even into parklands; and approved of a radio broadcast saying, 'The toll taken by gophers is especially heavy in dry years.'¹⁰

The department's *Guide to Saskatchewan Agriculture* for 1936 said gophers were worse than grasshoppers in some years; its *Annual Report* for 1939 said they were 'Favoured by depleted farm resources and other conditions' and 'particularly troublesome where there is waste or idle land.'¹¹

Again, however, although concern continued, alarm diminished as prosperity and rainfall returned. The Saskatchewan Department of Agriculture's estimates of damages by gophers were 4½ million dollars in 1941 and 4⅔ million in 1942; still, Minister of Agriculture F H Auld advised Vigor not to make much of this. He said 'a good deal of tolerance' for gophers had developed, 'particularly in sparsely settled areas,' and that they should be portrayed as merely one of a number of pests deserving control in the province.¹² Since then gophers have been considered a persistent, somewhat costly, but not momentous pest.¹³

On first encountering the prairie gopher problem, some western commentators expressed the belief that private, individual efforts could handle it. The *Regina Leader Post* asserted in 1887, 'Private enterprise will do much toward abating the gopher menace,' and the paper went on to describe how the operators of a market garden had killed more than 400. The paper also suggested, however, that an agricultural society might stimulate such rodenticide among youngsters by offering prizes for exhibits of gopher tails.¹⁴

Others hoped human hunger would be a stimulus for pest control. In 1890 the *Battleford Saskatchewan Herald* reprinted an

⁸ 'Get the Gopher,' *Canadian Thresherman*, 21, May 1916, 46; Saskatchewan Department of Agriculture, *Annual Report*, 1918, p. 102; 'Re Gopher Damage Estimate,' undated typescript [1919], Ministerial Papers of the Hon Charles McGill Hamilton, GS 36, M 13, File 6 ('Weeds, Insect Pests. Apr. 26, 1920-Sept. 1, 1939'), Saskatchewan Archives, Saskatoon.

⁹ George F Dacker to J G Taggard, 30 July 1935, Records of Saskatchewan Department of Agriculture, Field Crops Branch, Ag. 3.63 ('Gopher Control, 1921-1947'), Saskatchewan Archives, Saskatoon.

¹⁰ A W Phillips to S H Vigor, 31 Dec 1931, and Vigor to F H Auld, 15 Jan 1935, Ag. 3.63, Saskatchewan Archives; *Regina Leader Post*, 3 Apr 1935; Transcript of radio broadcast No. 167, 6 Apr 1938, Bell's Limited, Prince Albert, in Ag. 3.63, Saskatchewan Archives.

¹¹ *Guide to Saskatchewan Agriculture*, 1936, p. 85; *Annual Report*, 1939, p. 152.

¹² *Annual Report*, 1941, p. 48, and 1942, p. 131; Auld to Vigor, 18 Feb 1941, Ag. 3.63, Saskatchewan Archives.

¹³ This assertion is based largely on conversations with Diane M Secoy, University of Regina; Dan Harvey, Crop Protection Section, Saskatchewan Department of Agriculture; and interviews with farmers Harry and Iris Minifie, Vanguard, Saskatchewan, 9 Aug 1986, Jerry and Roberta England, Eastend, Saskatchewan, 8 Aug 1986, and Hartford A Lewis, Gray, Saskatchewan, 13 June 1985.

¹⁴ *Regina Leader Post*, 2 Aug 1887.

article from a newspaper in North Dakota suggesting that gophers were delicious and that 'If the gopher can be made a regular article of diet its numbers would decrease rapidly.'¹⁵ In his memoir of pioneer life in Saskatchewan, *Homesteader*, James Minifie recalled, 'Fresh meat was a rarity, for there were no storage facilities ... We tried gophers, and found them indistinguishable from rabbit.'¹⁶ Ordinarily, regardless of culinary merit, settlers' prejudices forbade eating gophers, except perhaps in times of extreme hardship.

The majority rapidly concluded that the gopher problem was uncontrollable except through cooperation fostered by government programmes. An individual's efforts to fight the pests on his own property were useless if neighbours did not cooperate. Moreover, farmers desired not only coordination of their efforts but also financial assistance with them. Lobbying by farmers began with petitions to the Northwest territorial assembly at least as early as 1889.¹⁷ A long letter to the editor of the *Regina Leader Post* in 1894 implied a coupling of pest control with economic relief, calling for gopher control programmes to 'help the farmers, both in present cash and in saving to their crops in the future.' The same writer noted the problem of invasion of cultivated lands by 'fresh armies' from uncultivated lands, and suggested that while white settlers went after the pests on their farms, Indians should be employed to kill gophers in the grasslands. Then, he said, 'I believe we should hear little more of the Gopher nuisance.'¹⁸ Another writer concurred that the government 'had no more important work' than pest control, and that with concerted action, 'the plague if not annihilated would be very materially

checked.'¹⁹ 'It is useless to ask emigrants to come to this country to have their crops destroyed either in whole or part year after year,' judged a third letter-writer, 'whilst the Government takes no step to abate the nuisance.'²⁰

Such strident demands recurred during the 1930s. A farmer near Ravenscrag, for instance, complained to the Saskatchewan Department of Agriculture that holders of grazing leases on neighbouring pastures were failing to control gophers, which then destroyed his crops. Another Saskatchewan farmer said in 1935 that his neighbours never poisoned gophers and that the 'roads and highways are pock-marked with holes.' Something had to be done, he insisted; 'Our work is *entirely nullified* by the gophers hords which *continuously* sweep in on us from *unpoisoned* land,' land leased by graziers, 'owned by indifferent farmers,' or idle.²¹

II

Vigorously, if not always consistently, governmental authorities responded. Local governments acted both unilaterally and as conduits for territorial or provincial aid. Manitoba's original Municipal Act encouraged municipal councils to initiate gopher control programs, including bounties for gopher heads. Later legislative revisions encouraged poisoning and empowered the councils to compel railroad companies to destroy gophers on their lands. It was in this context that the Manitoba Department of Agriculture and the Manitoba Agricultural College launched their 'Get the Gopher' campaign of 1916, with the college's biology department providing poison and consultants to farmers.²²

¹⁵ Allan R Turner to Roy Shields, 9 July 1958, clippings file, Saskatchewan Archives, Regina; 'The Newspaper Scrapbook,' *Saskatchewan History* 13, Spring 1960; 31.

¹⁶ James R Minifie, *Homesteader: A Prairie Boyhood Recalled*, Toronto 1972, p 135.

¹⁷ *Regina Leader Post*, 10 Sept 1889.

¹⁸ *Ibid*, 9 Aug 1894.

¹⁹ *Ibid*, 23 Aug 1894.

²⁰ *Ibid*, 3 Jan 1895.

²¹ Vigor to Auld, 15 July 1931, George F Dacker to Taggard, 30 July 1935, and Dacker to Vigor, 24 Aug 1935, Ag.3.63, Saskatchewan Archives, Saskatoon.

²² *Revised Statutes of Manitoba*, 1891, Winnipeg 1892, Vol. II, p 1246; *Revised Statutes of Manitoba*, 1913, Winnipeg 1914, p. 1840; 'Get the Gopher,' p. 5.

The governments of the Northwest Territories built on the private precedents of the Bell Farm at Indian Head, which offered a half-cent bounty for gopher tails in 1884, and the *Moosomin Spectator*, which sponsored a gopher-tail contest for boys in 1894. In 1889 the assembly voted funds to buy 8000 gopher traps and distribute them through local agricultural societies. During the next few years the territorial governments also distributed small amounts of poison through postmasters, while municipalities supplemented these supplies and also offered bounties of up to 2½ cents per tail.²³

The newly-organized province of Saskatchewan expanded such efforts. Its Department of Agriculture, beginning in 1907, began refunding to local improvement districts part of what they spent on gopher bounties, the first year's refunds totaling more than \$2000 on expenditures of more than \$6000; the next year's refunds were more than \$6000; such refunds evidently then ceased. Nevertheless, with the Rural Municipality Act of 1909, the government affirmed the authority of rural municipalities to combat 'such animals as are found to injure or impede agriculture.' An amendment in 1911 provided more emphatically that should a landowner fail to take 'proper steps' to 'exterminate gophers,' the council of the municipality could send someone onto the infected property to do the job and bill the owner with taxes. Further legislation in 1917 specifically authorized the payment of bounties for gopher tails.²⁴

By this time the provincial Department of Agriculture had re-entered the fray. In

1916 the department designated May 1 Gopher Day and asked rural municipal officials, farm organization officers, local weed inspectors, and most important, school teachers to encourage children to kill gophers. The municipalities offered bounties. One council opined, 'The destruction of gophers which do so much harm to the crops is a patriotic duty to the British Empire in these strenuous days of war when every bushel of grain produced helps to win the war. It has been said that every gopher destroyed is a bullet fired in the defence of the Empire.' The department provided plaques and medals as prizes to champion gopher-killers who turned in the tails to their teachers. The minister himself donated a gold watch as grand prize.²⁵

Response, although not tabulated in 1916, was sufficiently good that the department repeated similar campaigns from 1917 through 1921. The prizes for both individuals and schools became grander, the point systems more elaborate each year. Six Shetland ponies headed the prize list in 1921, by which year the tail total topped two million (see Table 1).²⁶

TABLE 1
Gopher Tail Totals for Saskatchewan, 1917-1921

Year	Gopher Tails
1917	514,140
1918	864,000
1919	no data
1920	1,236,000
1921	2,019,233

Sources: Annual Reports of the Saskatchewan Department of Agriculture

The competitions then ceased, although the rural municipalities continued paying bounties for tails for thirty years or more thereafter. The Saskatchewan Department of Agriculture meanwhile turned its attention to the province's local improvement

²³ 'Bounty on Gophers,' undated typescript by A R T [Allen R Turner], and Turner to Shields, 9 July 1958, Clippings File, Saskatchewan Archives, Regina; *Regina Leader Post*, 9 Aug 1894, 10 June 1890, and 9 Aug 1894; 'Petition from Farmers of Riversdale district,' 1 May 1894, microfilm roll 2.95, Saskatchewan Archives, Regina; Thomas, 'Local Government in the Northwest Territories,' p. 8.

²⁴ Saskatchewan Department of Agriculture, *Annual Report*, 1907, p. 213, 1908, p. 185; *Statutes of the Province of Saskatchewan*, 1910-1911, Chapter 21, pp. 3-4; *Statutes of the Province of Saskatchewan*, 1917, Chapter 14, p. 154.

²⁵ *Annual Report*, 1916, pp 102-103.

²⁶ *Annual Report*, 1917, p. 104, 1918, pp 102-103, 1919, pp 88-92, 1920, pp 10-12, 1921, pp 79-80.

districts, where there were no bounties. Here, beginning in 1919, as authorized by new legislation, the department distributed strychnine poison to farmers through grain growers' associations and postmasters. Such distributions of poison, along with directions and recipes for its use, continued through 1929, when the Department of Municipal Affairs took over the job. Certain hard-hit rural municipalities also received poison during the mid-1930s; most had to purchase their own. The Department of Agriculture renewed its encouragement and coordination of province-wide efforts in 1935. That year the department mailed out 10,000 posters urging citizens to 'Go for the Gopher.' It also partially reimbursed the rural municipalities that year for farmers' purchases of poison. Over the next few years the department's agricultural representatives frequently were involved in organizing the control campaigns of the municipalities.²⁷

The gopher control policies of Alberta were patterned after those of Saskatchewan, but were applied more persistently. The province's legislation, in language lifted from that of its neighbour to the east, similarly authorized its rural municipalities to combat pests in general and gophers in particular. The municipal secretaries offered poison to farmers free or for cost and paid bounties for tails.²⁸

The Alberta Department of Agriculture also offered prizes and conducted contests similar to those by the department in Saskatchewan, except that the Alberta contests were for adults, too, not just school-children, and they ran for a longer period

TABLE 2
Gopher Tail totals for Alberta, 1924-1938

Year	Gopher Tails		Total
	By Children	By Adults	
1924	(total only data available)		220,950
1925	(total only data available)		195,525
1926	192,528	13,783	206,311
1927	103,644	23,492	127,136
1928	63,858	20,745	84,603
1929	199,805	60,696	260,501
1930	410,254	94,747	505,001
1931*	486,248	549,917	836,165
1932	465,223	156,563	621,786
1933	564,739	160,514	725,253
1934	449,517	150,260	599,746
1935	447,517	223,009	670,616
1936	(no data available for this year)		
1937	338,139	123,127	461,266
1938	538,244	68,305	606,549

Sources: Annual Reports of the Alberta Department of Agriculture

*An error in reporting for 1931. The counts for children and adults do not add up to the total given. The conservative way to deal with the error is to accept the 836,165 total and assume one of the other counts (possibly the adult) was mistaken.

of years - 1924 to 1938 (see Table 2). The resulting mayhem, as reported by the Game Commissioner, never equalled the higher annual totals of Saskatchewan, but it racked up more than 800,000 tails in 1931. The campaigns ceased only with the discovery that gophers were carriers of sylvatic plague, whereupon the province no longer wished to encourage people to handle the animals. The same circumstances also discouraged rural municipalities from offering bounties.²⁹

III

With all these government programmes in place, it still fell upon the citizenry to execute the control measures against gophers. The response was prompt, the methods direct. Neither scientists nor farmers discovered any cultural controls effective against gophers, and so the methods

²⁷ *Annual Report*, 1920, pp 12-13; 1921, p 79; 1922, pp 232-234; 1923, p 165; 1927, p 144; 1928, p 15; 1929, pp 17-18; 1930, p 240; 1940, p 6; 1941, p 50; *Regina Leader Post*, 3 Apr 1935; M P Tullis to Auld, 30 Jan 1922, Tullis to Auld, 18 Apr 1922, John Cameron To Vigor, 16 Dec 1927, Vigor to Auld, 5 Jan 1929, Vigor to Auld, 15 Jan 1935, Auld to Taggard, 11 March 1935, poster, 'Go for the Gopher in 1935,' and list of mailings, all in Ag. 3.63, Saskatchewan Archives, Saskatoon.

²⁸ *Office Consolidation of the Public Statutes of the Province of Alberta, 1906-1915*, Edmonton 1915, p. 1047; *Revised Statutes of Alberta, 1942*, Edmonton; 1942, Vol. II pp 66-67; Brown and Douglas, 'The Richardson Ground Squirrel in Southern Alberta,' pp 176-177.

²⁹ Gopher tail totals are in the annual reports of the Alberta Department of Agriculture, 1924-1938; Brown and Douglas, 'The Richardson Ground Squirrel in Southern Alberta,' pp 176-177.

were of two kinds: mechanical and chemical.

Of mechanical means, a favourite among boys was snaring the animals at their burrow entrances. According to the explorer-turned-publicist John Macoun, the Metis boys of Manitoba snared gophers with string before white farmers settled in the region. James Minifie learned from the hired man how to snare gophers. His nephew, Harry, who grew up near Vanguard, Saskatchewan, recalled that during the 1950s he and his schoolmates snared gophers with their shoelaces while awaiting the schoolbus. The snaring craft required considerable patience, however — waiting for the gopher to put his head into the loop of twine or lace laid over his hole.³⁰

Lacking such patience, and spurred by bounties and prizes, serious gopher hunters turned to drowning them out. Buckets of water poured down burrows flushed the creatures out, but not always from the hole where they were expected. The hunters went after them with clubs. A good dog was a great help.³¹

Traps were another mechanical means. Various folk inventors claimed to have built the better gopher trap. For example, one fellow from Avonlea announced in 1915 his invention of a fantastic, spring-loaded contraption which, if set in a dead furrow, would smack one hungry gopher after another a death-blow on the head and fling each into the air and out of the furrow. He nagged Saskatchewan Minister of Agriculture W R Motherwell for government funds to develop the invention, receiving courtesy, but no money, in

return. Ordinary spring traps, commonly No. 0, were plenty effective.³²

So also was the .22 rifle. 'I kept practising, and was able before long to tumble over a good many to save my garden,' recalled a pioneer farm woman from Findlater, Saskatchewan.³³ Harry Minifie bragged of shooting more than 460 gophers in one pasture on one afternoon, thereby earning forty-six dollars in bounty money.³⁴

The enthusiasm with which youngsters implemented these mechanical methods was legendary. A common folksong, 'Knockin' Around the Yard,' commemorated a ragged boy who was determined to accumulate enough gopher tails 'To buy a hat, a fancy shirt, and pants what have a cuff.' The tail bounties, as the song implied, were to some extent a relief measure for impoverished farm families. Understandable, then, was the practice by some boys of wringing off the tails of live, captured gophers and freeing the animals to breed again. A common folk belief even contended that the creatures thus dismembered would grow new tails!³⁵

Understandable also, and often pathetic, were the stories told by teachers whose poor pupils participated in the gopher campaigns. Jesse Ewing of Clifton Bank district in Saskatchewan wrote in 1920 of how her pupils bought playground equipment with their bounty money, and how, inspired by the common effort, 'they came into school bright and happy in their school work.' The students of Mrs Thora

³⁰ John Macoun, *Manitoba and the Great Northwest*, Guelph 1882, p. 347; Minifie, *Homesteader*, p. 95; personal interviews with Harry and Iris Minifie, 9 Aug 1986, and Hal Lewis, 13 June 1985.

³¹ Minifie, *Homesteader*, p. 103; Harry and Iris Minifie interview.

³² Leonard Thompson to Provincial Government of Saskatchewan, 11 October 1915; W. R. Motherwell to Thompson, 16 Oct 1915; Thompson to Motherwell, Nov 1915 (pencil sketches enclosed); and Motherwell to Thompson, 25 Nov 1915, all in W R Motherwell Papers, M 12, II.49 ('Gophers, 1911-1915'), Saskatchewan Archives, Saskatoon; John H Leslie to Hamilton, no date, GS 36, M 13, File 6, Saskatchewan Archives, Saskatoon.

³³ Allan R Turner, 'Pioneer Farming Experiences,' *Saskatchewan History*, 8, Fall 1955, 51-52.

³⁴ Harry Minifie interview.

³⁵ Folksong, 'Knockin' Around the Yard,' quoted as sung by Tim Rodgers (former President of the Canadian Folksong Society), University of Calgary; interviews cited above; Turner to Shields, Clippings File, Saskatchewan Archives, Regina.



Mr. Gopher gets no warning when the grain is poisoned with

GOPHERCIDE

ONE big trouble with ordinary strychnine is that its intensely bitter taste gives it away. The gopher "gets wise" before he has swallowed enough to kill him.

Gophercide is a preparation of strychnine without this bitter taste. Gophers actually like grain poisoned with it—eat it greedily—and trouble you no more.

Perhaps you know how hard it is to dissolve ordinary strychnine and get enough soaked into the grain to be deadly. Gophercide is just the opposite. It dissolves freely in warm or even cold water, making a strong solution which poisons every grain through and through. Rains won't wash it off, for it goes right into the grain, and though the gopher may not get it for days, it gets him—quick.

Mr. W. E. Wright, of Vancouy, Sask., says this about it:—"Gophercide" has given me complete satisfaction. It is easy to prepare, and is a sure killer. I used it on land that was full of gophers, and it certainly did its work well."

A 50c package of Gophercide, dissolved in half a gallon of water, poisons a gallon of wheat—and that's enough to kill 350 to 400 gophers—7 for a cent. Get a package from your druggist, and start after the gophers early.

NATIONAL DRUG AND CHEMICAL CO.
7 OF CANADA, LIMITED, MONTREAL.



You saw this advertisement in this magazine. Don't forget to say so when writing.

FIGURE 1

Advertisement for commercial gopher poison from the *Canadian Thresherman*, March 1914 (Courtesy of Saskatchewan Library).

Hansson at Amelia, however, were crest-fallen when they learned they had won no prize—'I even saw tears in some of the little eyes,' she wrote Minister of Agriculture Hamilton. The district had raised almost no crops since 1915.³⁶

Adults generally used chemical controls, or poison, mainly strychnine. The Saskatchewan Department of Agriculture first gave out instructions for mixing strychnine bait in 1912 and did so frequently thereafter. Recipes for such bait included not only grain, strychnine, and water but also sweeteners and flavours to disguise the bitter poison. Molasses, saccharine, fruit juice, and oil of anise served such purpose. In the mid-1930s sodium arsenite also came into general use as gopher poison, mainly

³⁶ Miss Jessie Ewing to Hon C A Dunning, 16 Dec 1920, Mrs. Thora Hansson to Chas. M Hamilton, 15 Oct 1920, and Hamilton to Hansson, 22 Oct 1920, all in Gs 36, M 13, File 6, Saskatchewan Archives, Saskatoon.

because it was being used in grasshopper campaigns at the same time.³⁷

The poisons were effective, no doubt. The strychnine killed instantly. The sodium arsenite worked more slowly, but still surely, as tests by the Saskatchewan Department of Agriculture proved. There were two problems with poisoning gophers, however, the first of which was incidental effects on other animals, especially game birds. Complaints of this were frequent, but public officials discounted them. In 1918 the Saskatchewan Department of Agriculture released test results purporting to prove that strychnine would not harm prairie chickens (game birds, not domestic fowl)—that the birds 'have some power' to digest the poison. In 1942 Harold W Pope, President of the Saskatchewan Fish and Game League, publicly protested the widespread dissemination of gopher poison, only to be chided by federal entomologist K M King for hampering the pest control campaign.³⁸

Loss of human life was not so easily dismissed. In 1941 a young girl died from drinking sodium arsenite, left over from grasshopper campaigns, that had been distributed as gopher poison. Municipal officials had given it to farmers in whatever containers they brought—including wine bottles. Still, no concerted protest arose.³⁹

The general public acceptance of gopher poisoning prompted many entrepreneurs, and some charlatans, to offer commercial poisons for sale to individuals and to governments. Perhaps the most heavily advertised poison of the early twentieth century was Mickelson's Kill-Em-Quick, developed

³⁷ Saskatchewan Department of Agriculture, *Annual Report*, 1912, p 307; 1922, pp 233-234; 1936, p 139; 1937, p 81; 1938, p 90; Vigor to Stewart Criddle, 23 May 1936, Criddle to Vigor, 27 May 1936, and Vigor to Auld, 12 March 1937, all in Ag.3.63, Saskatchewan Archives, Saskatoon.

³⁸ *Annual Report*, 1918, pp 213-215; K M King to Harold W Pope, 13 June 1942, and King to Auld and Vigor, 20 Nov 1942, Ag.3.63, Saskatchewan Archives, Saskatoon.

³⁹ L Beal to Auld, 30 April 1941 (report from investigator G B Gilmour attached), Ag.3.63, Saskatchewan Archives, Saskatoon.

and sold by the immodest Anton Mickelson of Winnipeg. All such poisons were strychnine-based, and as government tests showed, were not much better or worse than bulk strychnine properly mixed, but the claims of the manufacturers were extravagant.⁴⁰

In 1935 the Saskatchewan Department of Agriculture conducted a thorough survey of rural municipalities to find out what they were doing about gophers and how well it worked. The results were surprising. Most municipalities had tried distribution of strychnine, but the reports on this were distinctly mixed. Although some reported good success with it, others spoke of indifferent results, especially during drought, and many officials remarked on the dangers of the poison – 'dangerous stuff,' said one, 'a menace to children' said another. On the other hand officials whose main reliance had been on bounties were enthusiastic about their results. Children covetous of bounties hunted the varmints ruthlessly. 'After spending considerable money on different kinds of gopher poison, including strychnine,' wrote one municipal secretary, 'we finally adopted the bounty system, and the gopher disappeared until this past two years we have not even used the bounty.' Wrote another, 'In this way we find that we are actually killing the gophers and that the money is being spent among our own rate payers. We have instances where the amount of bounty paid has been used to purchase a pair of shoes for a child or other necessities of that nature.'⁴¹

IV

Long before the time this survey was

taken, local and provincial governments had accepted gopher control as a customary function and as a legitimate object for public concern. They served to organize and subsidize the citizenry against the nuisance. It was remarkable, therefore, that to this time there had been no previous serious inquiry as to whether all the programmes instituted to deal with gophers had been effective.

One explanation for this is that the gopher control programmes were so direct and visible that it seemed unquestionable they were effective. Gophers poisoned or killed obviously were dead. The reports of provincial ministers of agriculture, in particular, give this impression when they total the hundreds of thousands of tails turned in. This concrete evidence, however, was not necessarily to the point. A count of gophers killed proved the control programmes effective only if it could be shown that the kill significantly decreased the gopher population and its depredations on crops. This may have been believed, but it never was proven, if it was susceptible to proof.

Another explanation is that public officials did not care whether gopher control programmes were, in the narrow sense, effective. Periods of severe gopher problems corresponded roughly to those of hard times economically. Perhaps economic relief, through the distribution of bounties, poison contracts, and other benefits, was the hidden purpose of the gopher programmes.

In all likelihood both explanations are true to a degree. Although entomological historian Paul Riegert has discounted bounties as worthless in insect pest control, this was not necessarily the case with mammal pests such as gophers. Given the documented evidence of massive killings of gophers for bounties and prizes, and the logical assumption that poison distribution accounted also for numerous gophers, then the gopher control programmes no doubt

⁴⁰ Advertisements for gopher poison are scattered throughout Canadian farm periodicals, including *Canadian Thresherman*, *Farm and Ranch Review*, and *Western Producer*, which I have perused. On Alexander Laboratories see numerous letters during the year 1933 in Ag. 3.63, Saskatchewan Archives, Saskatoon.

⁴¹ Letters and reports from this survey are in a folder labelled 'Questionnaire, 1940,' in Ag. 3.63, Saskatchewan Archives, Saskatoon.

had marked effect, at least in localities. If economic relief was a side effect of the programmes, it was a welcome one.

Perhaps modern residents of the Canadian plains need not be sheepish about their recollections of the gopher campaigns. When they attacked the animals directly, with water, clubs, traps, guns, and dogs, they offered a natural and effective

response to their pest problem. Their actions seemed not at all grotesque at the time. They were deadly, but certainly no more cruel than poisoning, and they had no harmful side effects. The gopher control methods of farm folk in western Canada were signs of personal mettle and of public responsiveness to governmental programmes for community benefit.

Notes on Contributors

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