FACT SHEET:

Pests and Nuisance Wildlife

BACKGROUND

Research for this project was conducted by Kendra Schnarr, Canadian Centre for Agricultural Wellbeing

PESTS

Defined broadly, pests are organisms living or growing where they are not wanted and where they can be harmful to plants, humans, structures, and other creatures (PennState Extension, 2025).

Agricultural pests include insects, diseases, weeds, micro-organisms that impact crop and livestock health (BC Climate Change Adaptation Program, n.d.)

Pests can directly damage crops by feeding on them, by transmitting bacterial and fungal infections and viruses, and by inhibiting their growth (Frick & Johnson, 2002).

There are currently 269 pests regulated under the federal Plant Protection Act (Canadian Food Inspection Agency, 2026).

This fact sheet has been designed to complement the Canadian Centre for Agricultural Wellbeing's (CCAW) Response Toolkit for Agricultural Crises.

Find the Toolkit and other crisis-specific fact sheets on the CCAW website.

CANADIAN CENTRE FOR AGRICULTURAL WELLBEING

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NUISANCE WILDLIFE

In some cases, wildlife can become a nuisance and has the potential to cause serious physical and economic damage to farms by damaging crops and livestock (British Columbia SPCA, n.d.; City of Hamilton, 2026; Sooksom & Spencer, 2010).

These nuisance wildlife include large animals (such as wild boar, white-tailed deer, elk, coyotes, bears, and moose), small animals (such as raccoons, squirrels, skunks and other rodents), and birds (such as magpies, house sparrows, and starlings) (Government of Alberta, 2026; Ontario Federation of Agriculture, 2019; Sooksom & Spencer, 2010).

They can damage crops by eating seeds, buds, flowers, etc., consume and spoil livestock food and water, prey on beneficial wildlife, contaminate agricultural facilities, and transmit diseases and parasites to crops and livestock (Government of Alberta, 2026).

INVASIVE SPECIES

Many pests and nuisance animals are invasive species; they are not native to the region where they are now found (Canadian Food Inspection Agency, 2025).

As a result, they grow un-checked, free from any natural enemies and other constraints, and can have significant negative impacts on crops and livestock (Government of British Columbia, 2026).

IMPACTS ON FARMS AND FARMERS

Pests and nuisance wildlife have the potential to have wide-ranging impacts on farms across Canada.

Specific impacts related to farmers' wellbeing and livelihoods are described below.

HUMAN AND ANIMAL HEALTH IMPACTS

Some nuisance wildlife can spread diseases that pose risks to livestock and farmers (such brucellosis and avian influenza) (Invasives Canada, 2025).

Diseases spread by nuisance wildlife may lead to livestock death and/or depopulation, which are often emotionally distressing or even traumatic for farmers and their families.

FINANCIAL IMPACTS

Pests and nuisance animals can devastate grazing lands, reduce crop yields, taint crops intended for feed or food, spread serious diseases, and even completely destroy crops (Frick & Johnson, 2002; Invasives Canada, 2025).

- Pests damage crops by chewing leaves, extracting plant nutrients, and/or transmitting pathogens (Government of Saskatchewan, n.d.). If not destroyed entirely, these damaged crops produce smaller yields and are often of a poorer quality.
- Weeds compete with crop plants for nutrients and resources. As a result, weed overgrowth can result in smaller crop plants and reduced yields (Invasives Canada, 2025). They may also release chemicals that inhibit the growth of other plants, can taint food and feed crops, and harbour insects and crop diseases (Frick & Johnson, 2002).
- In addition to destroying grazing lands and contaminating agricultural facilities, both of which have their own financial impacts, nuisance wildlife can spread diseases to livestock, which may require veterinary treatment and/or depopulation – both of which are costly and almost certainly result in lower production for affected farmers.

The damage caused by pests and nuisance animals often leads to lost production and results in financial losses for farmers – less product to sell at market results in less money made by the farmer. These losses may be emotionally distressing for farmers.

The financial impacts of pests are broader than reduced yields; pest infestations waste the resources (such as water, land, and energy) that were used to grow the crops, which have further financial implications for farmers (Shahbazi et al., 2025).

Pest management also leads to in increased financial burden for farms and farmers; control measures are costly and often require significant labour (Government of Saskatchewan, n.d.).

There are limited insurance options to support losses caused by pests and nuisance wildlife, so farmers often bear the burden of any restoration costs, impacting their livelihoods as well as the Canadian food supply chain (Invasives Canada, 2025) .

IMPACTS ON INDUSTRY

- The yield losses and lower product quality caused by pests and nuisance wildlife affects both local producers and export markets (Agriculture and Agri-Food Canada, 2025).
- The Food and Agriculture Organization of the United Nations estimates that 40% of food crops are lost to plant pests and diseases annually (Food and Agriculture Organization of the United Nations, n.d.).
- Research suggests that pests such as flea beetles, grasshoppers, cutworms and lygus bugs cost Canadian Prairie farmers around $204 million in an average year (Srivastava et al., 2025).
- Invasive plants growing in crops and pastures are estimated to cost $2.2 billion annually in damages (Canadian Food Inspection Agency, 2026).

CLIMATE CHANGE

- Warmer temperatures, extreme weather events, ecosystem disruption and expanded shipping routes are increasing pest threats and accelerating the spread of invasive species (BC Climate Change Adaptation Program, n.d.; Invasives Canada, 2025).
- Milder winters are allowing pests and invasive species to reproduce more quickly and flourish in regions where they may previously have been controlled by cold temperatures (BC Climate Change Adaptation Program, n.d.; Invasives Canada, 2025).
- Hotter temperatures may also potentially make some insect species less vulnerable to current pesticide controls (McIntosh, 2024).

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