

# 2021-2022 PLANT HEALTH SURVEY REPORT

## What is a plant health survey?

- A scientific process to collect and record data on plant pests – where they are and are not. We do this by trapping insects, sampling soil or plants, looking for signs and symptoms of pests, laboratory identifications, and other procedures.
- **Plant pests** include insects, invasive plants or micro-organisms that can threaten Canada's environment and economy.

### The team

- CFIA is dedicated to preventing and limiting the spread of plant pests to protect Canada's plant resources.
- Our team of survey biologists design new surveys, improve how we monitor for pests and educate inspectors and collaborators.
- Inspectors collect data and submit specimens to CFIA plant laboratories across Canada.
- Plant laboratory scientists and technicians perform tests on specimens to identify insects, diseases and invasive plants.

### Our work

- CFIA conducts surveys for priority plant pests based on current threats to inform regulatory decisions and to help protect the environment, Canada's economy and trade.
- We assess new technologies such as unmanned aerial vehicles (UAVs) and environmental DNA (eDNA) to help us increase our survey capacity and efficacy. Our collaborations with industry, other levels of government, academia and community scientists help us gather data to inform regulatory decisions. The box tree moth community science monitoring program is a great example of how we work with the public to support early detection of plant pests.
- Our annual report provides a summary of survey results.
  - We monitored more than 12,500 sites and looked for agricultural and forestry pests in 20 different national surveys.
  - We worked with provinces, municipalities and other collaborators, but also with communities on four of our surveys. More than 1,500 additional sites were monitored through their work.

To see the list of activities for each survey: [inspection.canada.ca/plantsurvey](https://inspection.canada.ca/plantsurvey)

### Why surveys matter

- Preventing and limiting the spread of plant pests is vital to the protection of Canada's environment, forests, agriculture, trade, economy and livelihoods of growers and producers.
- Plant health surveillance is also used to maintain a claim of "pest-free" status for an area. This allows Canadian producers to export their agricultural and forestry products or sell their products in other provinces and territories.
- Detecting pests early and having reliable information about their populations is important for making decisions about how to respond to new plant pests and to slow or prevent their spread.

### Research projects

**Our unit supports valuable research to help refine our methods and optimize our detection capacity**

- Plant health diagnostic project with the Biodiversity Institute of Ontario, University of Guelph to assess potential for eDNA metabarcoding for detecting species of regulatory concern.
- Assessing the efficacy of a community science monitoring program for box tree moth.
- Improving detection survey methodology of wood boring insects.
- Searching for hemlock woolly adelgid biocontrol agents and developing tools to detect and quantify predatory fly populations (*Leucotaraxis* spp.).
- Determining spotted lanternfly cold tolerance strategies and temperature limitations to highlight Canadian areas at risk.
- Assessing the placement of Japanese beetle traps in canopy to improve detection.
- Evaluation of an LED-based light trap for surveillance in high-risk areas.

## What we found / Highlights

### Great news!

This year, we had no detections of Asian longhorned beetle, oak wilt, oriental fruit moth, and apple maggot. We will continue to survey for these pests.

### British Columbia



**What we found:** The number of Japanese beetles caught has decreased for the 3rd consecutive year, but in addition to Vancouver, the pest has also been detected in localized areas in Burnaby and Port Coquitlam.



**Our action:** Plants and soil must not be moved outside the regulated areas in order to limit the pest's spread.



**What it means:** Plants and soil must not be moved outside the regulated areas in order to limit the pest's spread.



### Ontario



**What we found:** Hemlock woolly adelgid (HWA) was detected in the Niagara peninsula.



**Our action:** We will expand the HWA regulated areas to include the new infested areas.



**What it means:** Plants, forest products and other material must not be moved outside the regulated areas in order to limit the pest's spread.



### British Columbia and Alberta



**What we found:** Spongy moth was detected at a record number of sites. This includes the detection of two AGM moths in Langley, BC.



**Our action:** We will continue our surveillance and will work closely with our collaborators to address these detections.



**What it means:** Eradication measures will be implemented at sites where the spongy moth appears to be established.

### Nova Scotia



**What we found:** Hemlock woolly adelgid (HWA) was detected in Kings and Lunenburg counties.



**Our action:** We will expand the HWA regulated area to include the counties of Kings and Lunenburg.



**What it means:** Plants, forest products and other material must not be moved outside the regulated areas in order to limit the pest's spread.



### Prince Edward Island



**What we found:** Potato wart was detected in additional fields in PEI.



**Our action:** Regulatory measures continue to ensure that affected fields are controlled in a manner that protects Canada's important agriculture sector and communities.



**What it means:** The movement of potatoes and farm equipment is restricted in order to limit the pest's spread.

## How you can help

We all play a part in helping to prevent and control the spread of invasive species.

### What the general public can do:

- Buy local, burn local. Don't move firewood.
- Learn how to identify plant pests and how they spread.
- Inspect your footwear and your outdoor gear before your travel outside your area and when you return home.
- Report suspected sightings to CFIA and share information about invasive species. Spread the word, not the bug.
- Don't let the spotted lanternfly in! Inspect camping gear and vehicle if you are coming back from a US infested state.

### What industry can do:

- Know and respect the regulated areas for the pests present in your region.
- Do not move logs or untreated firewood outside of regulated areas.
- If you are in a regulated area or sourcing wood from a regulated area, inform your clients of the risks of moving purchased firewood to another location.