

ANNUAL REPORT 2025

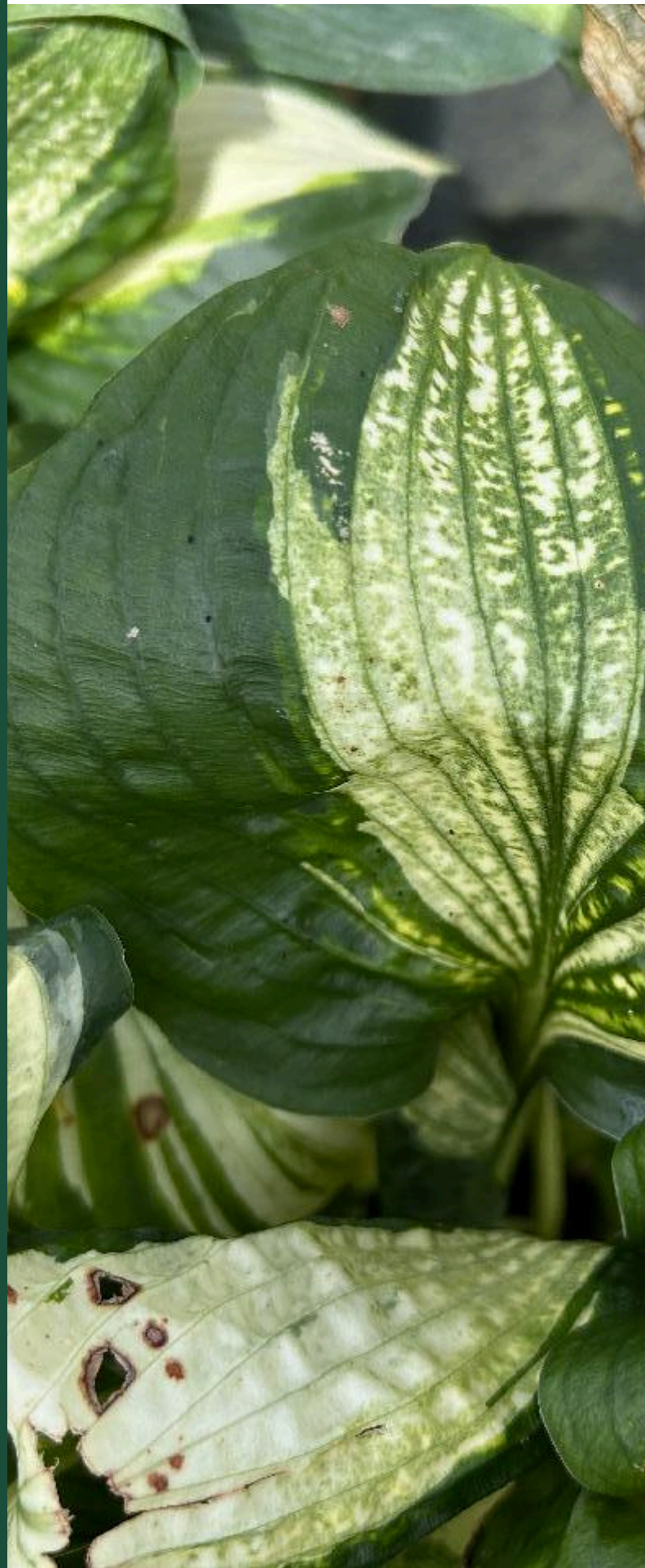
Plant Industry Bureau



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Trade and Consumer Protection
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About the Plant Industry Bureau

The Plant Industry Bureau protects Wisconsin's agricultural and horticultural industries and native plants by overseeing and ensuring compliance with laws and regulations involving plant pests, honey bees, nursery plants, seed, Christmas trees, and firewood. The bureau implements programs designed to prevent the introduction and spread of harmful plant pests and diseases, especially regulated organisms.

Our Mission

To protect Wisconsin's agriculture industry, plant industry, and environment from plant pests and diseases through risk-based surveys, inspections, diagnostics, regulations, and control programs, while also delivering excellent customer service to our state's businesses, stakeholders, and citizens.

Our Programs

Plant Industry Bureau programs include inspection, export certification, quarantine, and survey activities. The bureau also facilitates interstate and international commerce of Wisconsin agricultural products and commodities by certifying plant health and pest-free status.

Our Partners

To carry out its mission, the bureau maintains partnerships with the United States Department of Agriculture Animal and Plant Health Inspection Service (USDA APHIS), the USDA Forest Service (USDA FS), the Wisconsin Department of Natural Resources (DNR), the Universities of Wisconsin (UW), Tribal Nations, and other state and federal agencies.

Executive Summary

Plant Industry Bureau Impact and Value in 2025

- Conducted **204** voluntary apiary inspections and opened a total of **1,445** hives to help support the **\$8.85 million** Wisconsin honey production industry
- Issued licenses to **661** nursery growers and **1,238** nursery dealers to support and protect Wisconsin's **\$2.85 billion** nursery industry
- Inspected **518** Christmas tree fields and issued Plant Health Certificates to protect the **\$22 million** Wisconsin Christmas tree industry and facilitate export nationwide
- Issued **8,856** phytosanitary certificates and conducted **286** inspections of **164,000** logs to facilitate commerce and export of **\$966.7 million** in pest-free Wisconsin plant products
- Analyzed **491** pathology and **984** entomology plant inspection and early detection survey samples to support regulatory actions and prevent the spread of plant pests and diseases while supporting Wisconsin green industries and natural resources

Notable 2025 highlights

- DATCP and USDA APHIS coordinated to add La Crosse County to the spongy moth quarantine in April 2025 based on 2024 trapping and egg mass survey data
- Rapidly responded to remove and destroy **99%** of the **2,200** hemlocks infested with hemlock woolly adelgid and elongate hemlock scale shipped from an out-of-state nursery in violation of state quarantines
- Detected several pathogens intercepted on nursery stock that were new state records, including Tradescantia Mild Mosaic Virus (on spiderwort, also a new U.S. record), Eldervirus C and D (on elderberry), *Phytophthora austrocedri* (on juniper), and Pacific Coast Pear Rust (on serviceberry)

Read more about the exciting work completed in 2025 in the full report!

Our E-Newsletters

The Plant Industry Bureau has used email newsletters for decades, starting with the *Pest Bulletin* in 2001, which was later modernized to *Field Notes*; followed by *What's Growing On?* in 2021 and *Apiary Program News* in 2022. These three publications are written and compiled entirely by bureau staff, with distribution through the GovDelivery platform. Our e-newsletters are direct and effective outreach tools for reporting survey and inspection results, providing updates on plant pest interceptions and new detections, and informing readers about Wisconsin's plant protection regulations.

Apiary Program News

This quarterly newsletter provides program updates, inspection results, apiary import requirements, and honey bee and wild pollinator information. *Apiary Program News* also promotes best management practices in Wisconsin's Pollinator Protection Plan. By the end of 2025, it is now distributed to 5,236 subscribers.

What's Growing On?

Issued monthly, this publication highlights important finds from our nursery and Christmas tree inspections. *What's Growing On?* also provides licensing information and timely program updates. This publication is issued to 7,404 subscribers, including nursery dealers, nursery growers, licensed Christmas tree growers, and the public.

Field Notes

This weekly Pest Survey Program update features articles on economically important plant pests affecting the state's field crops, fruits, vegetables, and forests, along with pest monitoring data and maps. *Field Notes* is emailed regularly during the growing season (April through August), and less frequently during the fall and winter months, to 5,552 subscribers.



Plant Protection Section



Infested hemlock seedling from 2025 interception | DATCP

As the regulatory section of the Plant Industry Bureau, the Plant Protection Section works to detect, intercept, and prevent the spread of harmful plant pests that threaten Wisconsin's native and commercially grown plants and agricultural resources. Licensing, inspection, and certification are the major emphases of the section.

The section enforces Wisconsin statutes and departmental rules pertaining to the movement of plants, plant products, and honey bees.

Plant Protection Programs

Apiary

Nursery

Christmas Tree

Forest Pest Regulatory

Export Certification

Seed

Potato

Apiary Program

The Apiary Program works to reduce the risk and spread of honey bee diseases and pests in Wisconsin, and to promote pollinator protection by maintaining surveillance of the state’s beekeeping industry. According to the USDA National Agricultural Statistics Service (NASS), Wisconsin ranked 11th in the nation for honey production in 2024. Beekeepers with five or more colonies produced 2.51 million pounds of honey valued at \$8.85 million, with 57,000 honey producing colonies in the state. Apiary program activities include providing honey bee hive inspections to beekeepers for free upon request; enforcing Wisconsin Honey Bee Import Report requirements and other honey bee pest regulations; conducting pollinator outreach and education; and inspecting and certifying honey bee colonies leaving the state, typically for pollination services. In 2025, DATCP staff conducted 204 voluntary inspections and opened a total of 1,445 hives.



Apiary Inspection | DATCP

Inspections documented a decrease in the percentage of deformed wing virus (DWV) and chalkbrood in colonies. There were observed increases in the presence of American foulbrood, European foulbrood, Sacbrood virus, and small hive beetle from 2024 to 2025. During field tests, recorded Varroa

infestations ranged from 0-82 mites per 300 bees and averaged 5.2 mites per 300 bees. Varroa mites are efficient vectors of DWV and the number one pest of Wisconsin apiary operations. Inspections in 2025 were reinforced by diagnostic testing at the National Agricultural Genotyping Center (NAGC) in Fargo, North Dakota, which processed 33 samples submitted from nine beekeepers. Lab testing by the NAGC and the USDA Agricultural Research Service (ARS) Bee Disease Diagnosis Lab in Beltsville, Maryland confirmed American foulbrood in nine apiary locations affecting 20 colonies across five counties (La Crosse, Price, Polk, Sauk, and Walworth). This resulted in the issuance of pest abatement orders requiring euthanization of infected colonies and equipment by burning to prevent the spread of this fatal bacterial disease, whose spores can live for decades in used beekeeping equipment.

Table 1 | Apiary Inspection Results, 2022-2025

	2022	2023	2024	2025
Total hives opened	1,462	1,207	736	781
Small hive beetle	2.1%	0.3%	1.9%	3.3%
American foulbrood	0.0%	0.1%	0.4%	2.2%
European foulbrood	0.4%	1.2%	1.4%	2.5%
Chalkbrood	1.4%	3.8%	3.5%	3.0%
Sacbrood	2.2%	3.1%	3.0%	4.2%
Deformed wing virus	1.4%	4.9%	6.9%	5.9%
Est. winter mortality	68%	44%	43%	TBD

Apiary Program

Honey Bee Imports and Exports

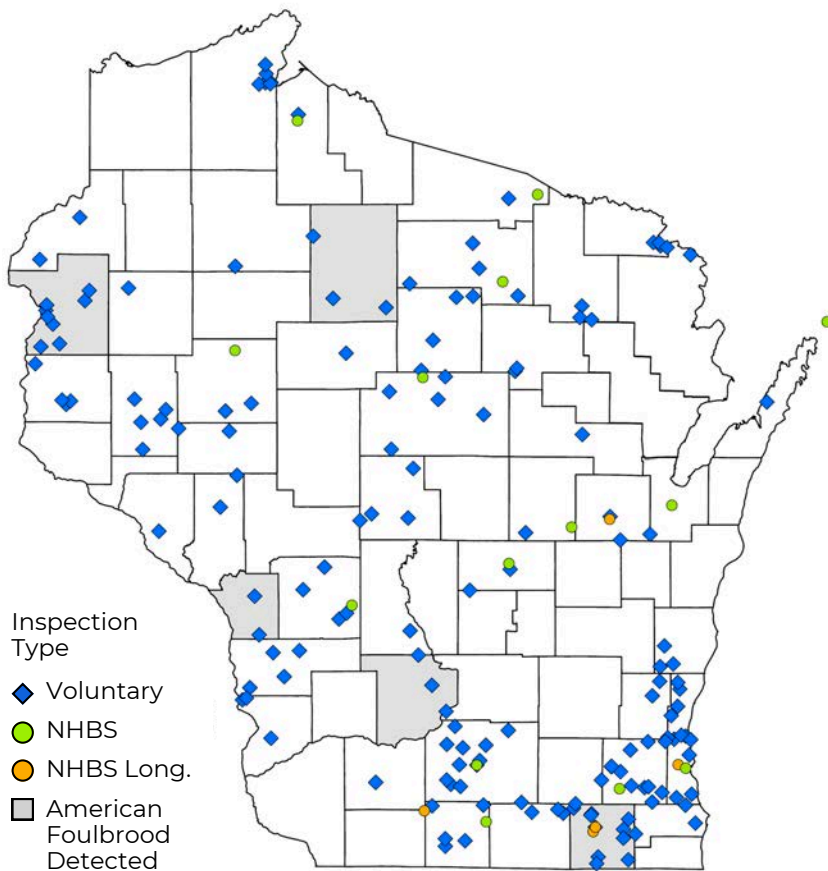
In spring 2025, the apiary program received 38 Wisconsin Honey Bee Import Reports declaring beekeepers brought 27,754 hives, 21,954 packages, 7,812 nucleus colonies, and 7,490 queens into Wisconsin. In fall 2025, the program issued 47 Certificates of Apiary Inspection to 27 migratory beekeepers transporting 34,500 honey bee colonies for interstate movement to fulfill pollination services, queen production, and colony sales. Most migratory hives were destined for California and Texas, with others intended for Arkansas, Florida, Idaho, Mississippi, and Illinois.

National Honey Bee Survey

Annual survey data and hive samples collected by apiary staff are part of the USDA National Honey Bee Survey (NHBS), aimed at tracking markers of colony health and detecting invasive honey bee threats. During the 2025 beekeeping season, inspectors collected 24 samples. Colonies were visually inspected and sampled for *Varroa* mites, *Tropilaelaps* mites, *Nosema* levels, and viral pathogens, with testing performed at the USDA ARS Bee Research Lab. A portion of samples were also analyzed for pesticide residues at the USDA Agricultural Marketing Service (AMS) National Science Lab. No invasive honey bee pests or pathogens were found in the samples. Annual results of the NHBS are available to the public through the USDA APHIS open research portal at usbeedata.org.

Although all Wisconsin samples tested negative for NHBS targets in 2025, concern about the accidental introduction of harmful, invasive

Figure 1 | Map of 2025 Apiary Inspections



pests continues to grow. Currently the leading threat is *Tropilaelaps*, an external, parasitic mite native to Asia that feeds on the brood of honey bees. The range of *Tropilaelaps* is rapidly expanding, and recent detections in Eastern Europe indicate greater adaptability to cold climates than previously known. If *Tropilaelaps* mites were to become established in the U.S., this exotic threat would cause significant losses to honey bee colonies, crop pollination, and honey production. Wisconsin's State Apiarist, as a member of the Apiary Inspectors of America, will be contributing to the development of a *Tropilaelaps* response plan, should this pest reach the U.S.

Wisconsin Colony Loss Data Follows Alarming National Rate

The *U.S. Beekeeping Survey* of managed honey bee colonies reported that Wisconsin beekeepers experienced a summer loss of 56.64% (40 beekeepers reporting), a winter loss of 76.57% (44 beekeepers reporting), and a total annual loss of 90.55% (40 beekeepers reporting) from April 2024 to April 2025. In the United States, 55.6% colony losses were reported for the entire year, the highest reported loss rate since the survey began in 2010-2011.

Outreach Summary

Apiary outreach continued in 2025, with emphasis on providing recommendations for honey bee management and promoting best management practices (BMPs) from Wisconsin's Pollinator Protection Plan. Outreach included emailing the quarterly *Apiary Program Update* e-newsletter to over 5,600 subscribers.



Honey bee on milkweed | DATCP



Apiary Staff | DATCP

Staff posted 27 times on social media about honey bees and pollinators, generating over 1.3 million impressions and 16,000 views across Facebook, Instagram, and X. Staff delivered 28 presentations to over 922 attendees and staffed exhibit booths at both Wisconsin and Minnesota Honey Producers Association conventions, the Wisconsin State Fair, and the PBS Wisconsin Garden & Green Living Expo.



Nursery inspection | DATCP

Nursery Program

The Nursery Program licenses nursery growers and dealers and inspects nursery stock for regulatory pests. Nursery inspections promote the production and sale of healthy plants, help prevent the introduction of invasive pests arriving on imported stock, and facilitate interstate commerce through the issuance of Plant Health Certificates (PHCs) for exported stock. DATCP inspectors also partner with DNR staff to ensure invasive plants regulated under the DNR Invasive Species Rule (NR 40) are not sold at nurseries.

Nursery Licensing, Inspections, Regulatory, and Compliance Actions

DATCP provides an inspection every one to three years to licensed businesses. The program licensed 661 nursery growers and 1,238 nursery dealers in 2025, with staff inspecting 422 (49%) growing field locations and 431 (20%) dealer locations statewide. Annual inspections prioritized the 141 licensed nurseries who purchased PHCs, indicating intent to ship plant stock interstate. Since 2021, all nursery inspections have been completed using the Survey123 app on mobile devices.

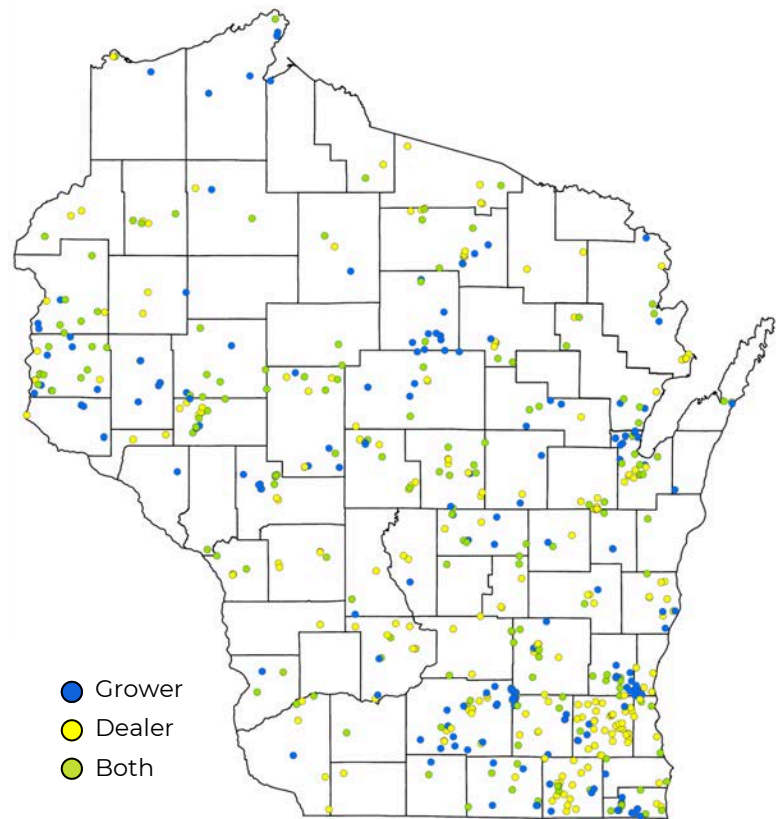
Table 2 | Nursery Program Summary, 2022-2025

	2022	2023	2024	2025
Nursery growers licensed	610	644	664	661
Nursery grower fields inspected	488	493	406	422
Nursery dealers licensed	1237	1253	1265	1238
Nursery dealers inspected	617	452	432	431
Plant Health Certificates	116	119	123	141
Compliance agreements	94	94	103	119
Licensing violations	15	11	5	4
Labeling violations	6	3	8	1
Quarantine violation	2	11	1	14
NR 40 violations	84	36	9	40
Other violations	20	14	11	11
Rejection notices sent	15	9	6	16

Inspectors continued to check for violations of the NR 40 Invasive Species Rule at licensed nurseries in 2025. Inspectors documented 49 nursery locations where restricted or prohibited invasive plants were being offered for sale, including 42 of those retail locations where restricted ‘Trader’ white mulberry stock was received from a Minnesota supplier. Other invasive species found being offered for sale include black alder, burning bush, fiveleaf akebia or chocolate vine, Japanese honeysuckle, Japanese and Chinese wisteria, java waterdropwort, and woodland forget-me-not. Inspectors also recorded 30 nursery locations with invasive plants growing on site, including autumn olive, amur honeysuckle, black alder, black locust, buckthorn, cut-leaved teasel, Japanese knotweed, multiflora rose, and wild parsnip. Entities with multiple violations were referred to DNR for enforcement.

Inspectors issued 70 compliance documents (i.e., activity reports, orders prohibiting sale, pest abatement orders, notices of noncompliance, and releases) in 2025, including 15 licensing violations or other pest or pathogen problems, 40 invasive plant sales, one labeling violation, and 14 quarantine violations. As a measure to increase awareness of Wisconsin’s plant pest regulations, 16 rejection notices were sent to 10 states (Connecticut, Florida,

Figure 2 | Map of 2025 Nursery Inspections



Illinois, Michigan, Minnesota, New Jersey, Ohio, Oregon, Pennsylvania, and Tennessee) following interceptions of invasive plants, virus-infected plants, invasive adelgids, and scale insects that were shipped to Wisconsin.

Nursery Compliance Agreements

Inspectors also assist nurseries in determining if a compliance agreement is needed to import or export stock. Compliance agreements are annual contracts that provide limited pest quarantine exemptions to nurseries or businesses that implement prescribed risk reduction measures. Agreements associated with exterior quarantines are issued to nurseries importing plants from areas infested with regulated pests not found in Wisconsin, such as hemlock woolly adelgid or elongate hemlock scale. Nurseries exporting stock out of a spongy moth quarantine county, or into a state not infested with Japanese beetle, may also enter into an agreement with DATCP.

Table 3 | Nursery Compliance Agreements, 2025

Black stem rust	3
Blueberry for Michigan	2
Boxwood blight cleanliness	3
Elongate hemlock scale	28
Hemlock woolly adelgid	28
Japanese beetle	18
Spongy moth (state)	4
Spongy moth (federal)	33

Nursery Program

Inspection Highlights

A list of the top 10 pests, pathogens, and abiotic stressors observed most frequently during nursery inspections in 2025 is provided in Tables 4-6. Most of the issues found are common from year to year. Noteworthy inspection highlights from 2025 were the general increase in pest counts (i.e., insects, mites, and nematodes) and a decrease in pathogen detections, likely influenced by a return to more average precipitation in 2025 after above average rainfall in the first half of 2024. In addition, spongy moth life stages stayed relatively low on nursery stock as the outbreak phase continued to subside in Wisconsin. Finds increased slightly from 24 growing field detections in 2024 to 30 in 2025.

Hemlock Woolly Adelgid and Elongate Hemlock Scale on Imported Nursery Stock

In April 2025, DATCP was alerted to hemlock seedlings infested with elongate hemlock scale (EHS) and hemlock woolly adelgid (HWA) that had been recently planted in Portage County. DATCP staff inspected the site, confirmed the infestation, and worked with property staff to remove all 50 seedlings that had been planted. DATCP found the Wisconsin nursery in Wood County that supplied those seedlings had purchased 2,200 hemlocks from a nursery in Tennessee. DATCP worked with the Wisconsin nursery to recover and destroy 2,185 hemlock seedlings (99.3%) that had been sold and distributed to customers throughout Wisconsin. Regulatory enforcement was pursued for the hemlock that was exported from Tennessee to Wisconsin without

Tables 4-6 | Top 10 Pest, Pathogen, and Abiotic Issues Detected on Nursery Stock in 2025

Pest Issues with # of Incidents

Leaf and stem galls	231
Spider mites	150
Aphids	148
Japanese beetle	108
Leafhopper damage	49
Deer damage	43
Elm zigzag sawfly	41
Unidentified insect feeding	31
Thrips	28
Red-headed flea beetle	24

Pathogen Issues with # of Incidents

Virus-like symptoms	252
Leaf spot	205
Rust or pustules	187
Powdery mildew	153
Apple scab	67
Tar spot of maple	38
Anthracnose	33
Volutella blight of boxwood	29
Guignardia leaf blotch	21
Island chlorosis of hackberry	21

Abiotic Issues with # of Incidents

Chlorosis/nutrition deficiency	66
Nonviable/mortality	50
Winter injury/frost cracks	31
Pesticide/chemical damage	26
Drought damage/stress	20
Necrosis/dieback	18
Sun scald/leaf scorch	16
Abnormal/stunted growth	12
Trunk wound/mechanical injury	11
Planted too deep or shallow	11

inspection or certification in violation of state quarantines and remedied through civil forfeiture in September 2025.

In early summer, hemlock stock imported from both Pennsylvania and Connecticut at three retail locations were found to be infested with live HWA and EHS. Some material was recalled and destroyed while some trees were approved for chemical treatment with confirmation of HWA extermination before being allowed for sale. For each of these cases, rejection notices were sent to the out-of-state nurseries shipping infested hemlock stock.



Hemlock woolly adelgid | DATCP

Juniper Mortality

Juniper mortality, a disease caused by the oomycete plant pathogen *Phytophthora austrocedri*, was detected for the first time in Wisconsin. This disease was causing severe damage to a field of 'Star Power' Juniper at a Washington County nursery. Infected junipers were imported from a nursery in the state of Oregon, where the disease was first identified in the United States in fall 2024. Once the pathogen was identified by the Plant Industry Bureau Lab, the 720 imported junipers were ordered to be removed from the field and destroyed. The nursery was fully cooperative and destroyed trees by burning on October 3.



Juniper mortality | DATCP

Tradescantia Mild Mosaic Virus

Tradescantia mild mosaic virus (TraMMV) was detected on Tradescantia 'Zwanenburg Blue.' This was a first detection of this virus in the United States, confirmed by both DATCP's Plant Industry Bureau Lab and the USDA's Plant Pathogen Confirmatory Diagnostic Laboratory on samples from two different nurseries in Washington County. Infected material was sourced from Minnesota and New Jersey in the spring of 2025. All stock remaining at the time of inspection was ordered to be removed from sale and destroyed.



Tradescantia Mild Mosaic Virus | DATCP

Nursery Program



Elm zigzag sawfly | DATCP

Elm Zigzag Sawfly

The elm zigzag sawfly (EZS), an invasive folivore, was detected in Wisconsin by DATCP staff in July 2024 and confirmed in 21 counties by the end of the growing season. By the end of 2025, it has been detected in at least 36 counties, with 41 inspection records of the pest on nursery stock in nine counties. In each case, the nursery was required to treat the infested stock before it could be moved or sold. Due to this pest's rapid dispersal throughout the state, DATCP is not tracking EZS or enacting a state quarantine.



Lily leaf beetle | Leslie J. Mehrhoff, University of Connecticut, Bugwood.org

Lily Leaf Beetle

First detected in Marathon County in 2014, the invasive lily leaf beetle was found at three nursery locations in 2025 and has now been confirmed in 34 Wisconsin counties. The adult beetles are remarkable for their bright red color, while the larvae can be found by inspecting Asiatic lily leaves for defoliation.



Bagworm | DATCP

Bagworm

A severe infestation of the bagworm *Thyridopteryx ephemeraeformis* was first observed on arborvitae nursery stock in Kenosha County in 2024. In 2025, the bagworm population expanded into Waukesha County and was observed 23 times in seven nursery fields across the two counties on arborvitae, beech, crabapple, fir, hemlock, juniper, serviceberry, and Norway spruce stock. Although this insect pest sporadically appears in southeastern Wisconsin, it is more common in the southern U.S. and reaches Wisconsin by migrating on weather systems or by hitching a ride on nursery stock.

Viburnum Leaf Beetle

Inspectors found viburnum leaf beetle at 18 locations, primarily in southeastern Wisconsin. This established invasive pest feeds exclusively on the leaves of viburnums, and both the adults and larvae cause severe defoliation and eventual shrub mortality. Native viburnums are an important understory component of many Wisconsin woodlands and are at risk as this insect becomes more widely established. Viburnum leaf beetle has been found in 16 Wisconsin counties since 2009, with new county detections in Fond du Lac and Oneida in 2025.



Viburnum leaf beetle | Whitney Cranshaw, Colorado State University, Bugwood.org

Ramorum Blight

Six symptomatic plant samples collected by DATCP inspectors or forwarded by the UW-Madison Plant Disease Diagnostics Clinic were tested for ramorum blight caused by *Phytophthora ramorum* at the Plant Industry Bureau Lab this year. All tested negative for this invasive pathogen. Although *P. ramorum* has been intercepted at Wisconsin plant nurseries and nursery dealers several times in the past, it has never been detected on plants in the Wisconsin landscape. State and federal quarantines for this water mold restrict and require prenotification for host material shipped from known infected areas in the western U.S.



Ramorum blight on rhododendron | DATCP

Boxwood Blight

This disease of ornamental boxwood plants was first confirmed in Wisconsin in 2018. During 2025 nursery inspections, 30 symptomatic boxwood samples were collected for testing at the Plant Industry Bureau Lab. Two samples from a retail nursery in Ozaukee County were positive for boxwood blight, resulting in the destruction of all 60 pots of 'Green Gem' boxwood that were being held in a confined hoop house. Twenty-eight of the other boxwood samples were diagnosed with different diseases, including Volutella blight, another fungal pathogen affecting this popular ornamental.



Boxwood blight | DATCP

Nursery Program

Boxwood Blight (continued)

In Wisconsin, boxwood blight has been confirmed at nurseries in Kenosha, Milwaukee, and Ozaukee counties; at retailers in Dane and Portage counties; and on landscape boxwoods in Dane, Door, Milwaukee, and Ozaukee counties in the last eight years. In all cases, infected boxwood was properly destroyed. Boxwood production nurseries are able to enter into Boxwood Cleanliness Compliance Agreements with DATCP, agreeing to grow species and cultivars of boxwood blight resistant host plants according to best management practices designed to prevent the introduction and minimize the risk of spreading boxwood blight. Three nurseries renewed DATCP boxwood blight compliance agreements in 2025.



Sod Program

Sod Inspections

Staff inspect sod upon request for growers who purchase PHCs needed for them to ship out-of-state. Because Wisconsin and surrounding states are considered Category 3, meaning that they are generally infested with Japanese beetle (JB), growers shipping JB host material like sod from infested areas must comply with certain requirements of receiving states. In fall 2025, DATCP staff inspected 24 fields belonging to six sod growers. No regulated pests or diseases were found for movement within JB Category 3 states.

Christmas Tree Program



Christmas tree field | DATCP

Wisconsin ranks fifth in the nation for Christmas tree production, behind Oregon, Michigan, North Carolina, and Pennsylvania. Approximately 602,000 Christmas trees valued at \$22 million are harvested annually in Wisconsin (USDA NASS, 2023). The majority of Christmas tree production occurs in the central and northern regions, in Jackson, Langlade, Lincoln, Taylor, and Waushara counties.

Table 7 | Christmas Tree Field Inspections, 2022-2025

Year	Growers Licensed	# Fields Inspected	# Fields with Spongy Moth	% Fields with Spongy Moth
2025	363	518	17	3.2%
2024	369	539	30	5.6%
2023	374	509	49	9.6%
2022	374	519	23	4.4%

Christmas Tree Field Inspections

All Christmas trees originating in the state’s 54-county spongy moth quarantine zone are subject to federal and state spongy moth regulations. Growers shipping trees from the quarantined areas to states or countries where the moth is not established are required to have their trees inspected and certified free of this pest prior to harvest. Choose-and-cut farms and other growers selling solely within the quarantine are not restricted.

Annual Christmas tree field inspections begin September 1. Christmas trees, along with trees and shrubs along field perimeters, are inspected for spongy moth egg masses and other regulated pests, diseases, and abiotic problems (refer to Table 7). Christmas tree growers that plan to ship trees out-of-state and/or request a Plant Health Certificate are the focus of high-

Christmas Tree Program

Christmas Tree Field Inspections (continued)
 priority inspections. In 2025, staff conducted 518 Christmas tree field inspections, detecting spongy moth egg masses in 17 fields (3.2%). This reduction mirrors the reduction found during Slow the Spread egg mass surveys, reflecting a reduction in the spongy moth population following the outbreak in 2023.



Elongate hemlock scale | DATCP

Christmas Tree Lot Inspections

Christmas tree lot inspections are conducted from mid-November until late December. Inspectors survey for presence of pests and diseases and ensure trees are free from regulated pests. They also confirm that Christmas tree lot operators selling trees and decor have the appropriate license with DATCP if trees were grown in Wisconsin, and compliance agreements if they are coming from states regulated for spongy moth or elongate hemlock scale. In 2025, 63 lots were inspected. Elongate hemlock scale was found on Fraser fir wreaths and trees that were purchased from eastern states infested with this quarantined, invasive insect at three lots, resulting in one Pest Abatement Order being issued and requiring destruction of infested material to prevent pest establishment in Wisconsin.



Christmas tree field inspection | DATCP

Table 8 | Top 10 Concerns Found in Christmas Tree Fields in 2025

Pest/Disease/Abiotic Injury	Incidence
Balsam twig aphid	87
Fir needle blight	79
Damage from deer	67
White pine blister rust	38
Broom rust of fir	33
Phytophthora root rot	31
Balsam gall midge	26
Spruce needle cast	24
Spruce needle blight	21
White pine weevil	19

Forest Pest Regulatory Program

The Forest Pest Regulatory Program is responsible for ensuring compliance with state and federal quarantine requirements governing the movement of nursery stock, Christmas trees, and forest products that may harbor regulated pests. Through firewood inspection and dealer certification, as well as outreach to the green and forest products industries, the program works to prevent the introduction and spread of regulated forest pests. In 2025, the program signed 147 DATCP forest pest compliance agreements for elongate hemlock scale, hemlock woolly adelgid, mountain pine beetle, and spongy moth. Program staff also reviewed and signed off on 147 USDA APHIS spongy moth compliance agreements.

Firewood Certification

The movement of firewood within Wisconsin is regulated by quarantines and DNR, federal, and Tribal firewood rules to prevent introduction and spread of forest pests. The spongy moth quarantine prohibits the movement of firewood from the state’s 54 quarantined counties to non-quarantined counties or states. Rules established by the DNR prohibit firewood movement into Wisconsin state parks and other state-managed lands from locations more than 10 miles away. DATCP-certified firewood is exempt from this regulation since an approved treatment method has been used to reduce risk of spreading firewood-vectored plant pests and diseases.

Under the voluntary Firewood Dealer Certification Program, anyone producing at least 20 cords of firewood annually may apply for certification by completing an application form, obtaining a facilities and processes inspection, and by using an approved treatment method such as heat treatment (heating to 140°F for at least 60 consecutive minutes), seasoning (storing the firewood on premises for a minimum of 24 months before sale or distribution), or an alternative method approved by DATCP. In 2025, the program certified 35 firewood dealers across 29 Wisconsin counties.

In 2025, DATCP renewed a two-year contract with [FirewoodScout.org](https://www.firewoodscout.org) in partnership with DNR. DATCP supplies data on local and certified firewood vendors to Firewood Scout web managers, who generate interactive maps that outdoor recreationists can use to source local firewood close to their travel destinations. Wisconsin is one of 13 states that partners with Firewood Scout to share this important information.

Forest and Ornamental Pest Outreach

Program staff worked diligently to provide outreach and educational training on invasive forest pests, diseases, and associated regulations to prevent their introduction and spread in Wisconsin. Priority forest pests highlighted included spotted

Table 9 | Forest Pest Regulatory Compliance Agreements by Industry in 2025

Regulated Pest	Nursery	Christmas Trees & Evergreen Décor	Other Forest Products
DATCP spongy moth	4	4	34
USDA spongy moth	33	63	51
Elongate hemlock scale	28	48	0
Hemlock woolly adelgid	28	0	0
Mountain pine beetle	NA	NA	1

Forest Pest Regulatory Program



DATCP staff wearing spotted lanternfly wings | Wisconsin Science Festival

Forest Pest Outreach (continued)

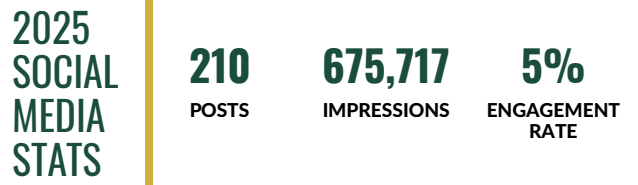
lanternfly, Asian longhorned beetle, elongate hemlock scale, balsam woolly adelgid, hemlock woolly adelgid, box tree moth, emerald ash borer, spongy moth, elm zigzag sawfly, viburnum leaf beetle, and beech leaf disease.

On April 1, 2025, La Crosse County was added to the regulated area for spongy moth, marking the 54th county in Wisconsin to be quarantined. Efforts to promote awareness and industry compliance included a targeted outreach mailing to 111 forest industry, nursery, and Christmas tree businesses, as well as one-on-one regulatory outreach to businesses throughout the year. Sixteen individuals also took online training on spongy moth detection, treatment options, regulations, and certification.

Spotted lanternfly (SLF) outreach efforts in 2025 included a targeted digital billboard campaign in the Milwaukee metropolitan area for the fifth year in a row from mid-August to mid-September during the SLF swarming and mating period, generating an estimated 1.9 million

impressions based on road traffic data. DATCP staff also utilized costume SLF wings, headbands, and origami models to attract and educate attendees on pest biology and reporting at multiple outreach events. Additionally, 44 individuals took the online spotted lanternfly identification training for industry. All outreach efforts stressed the importance of proactive pest identification, reporting, and strategies for reducing spread.

Forest and ornamental pest information was also shared in-person at events and through partners using DATCP literature, and virtually through social media, e-news articles, website content, and media interviews. One of the top pieces of literature produced and distributed in 2025 was an updated Don't Move Firewood brochure that highlights firewood best practices to prevent spreading invasive pests. An "Unwanted in Wisconsin" priority pest list also had high circulation. DATCP distributed these materials and more while discussing forest pest concerns with public, industry, and environmental professionals at 19 events in 2025, reaching over 1 million attendees overall.



Virtual content was posted 70 times each on Facebook, Instagram, and X (210 posts total), receiving a total of 675,717 impressions and 33,057 engagements for an average engagement rate of 5%.

Export Certification Program

Export Certification Program

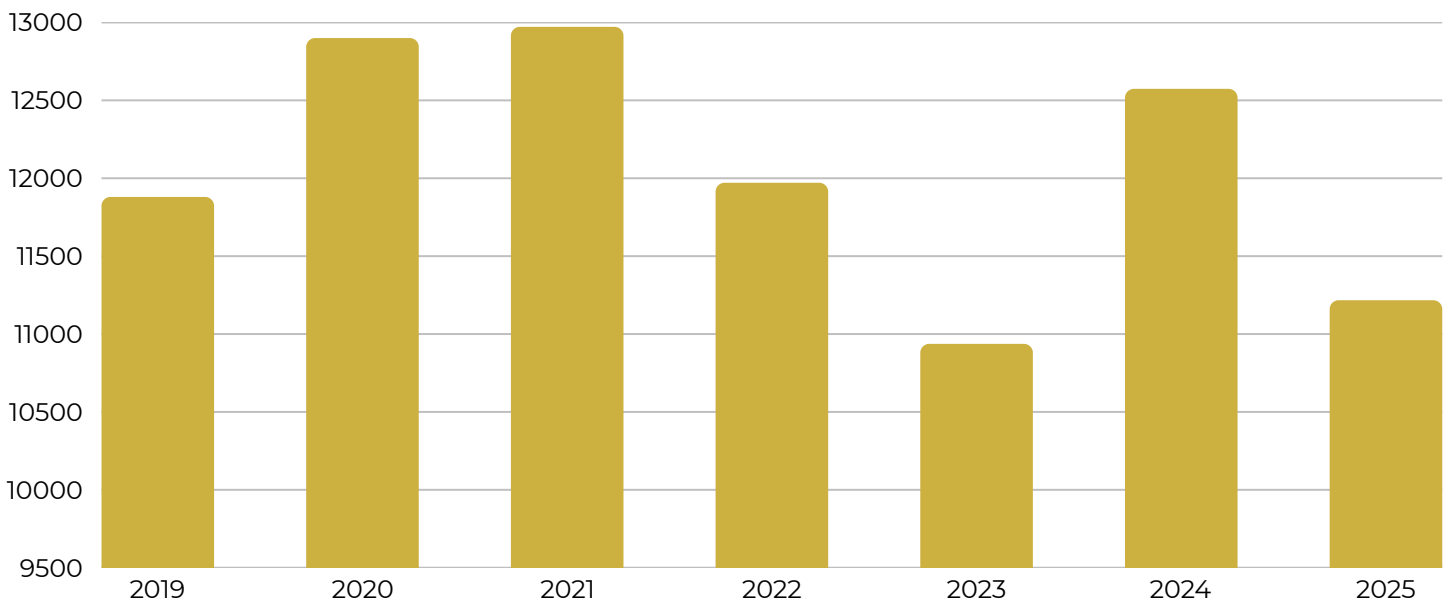
The Export Certification Program inspects and certifies plant products for international export and interstate shipment. Authorized Certification Officials (ACOs) check country and commodity-specific plant pest regulations and assist exporters in understanding phytosanitary requirements for over 200 countries. The program facilitates commerce and certifies exports of pest-free Wisconsin plant products.

The total number of phytosanitary certificates issued was 8,856, down from 9,559 in 2024. Grain exports, including soybean, distillers dried grain, and corn, accounted for 55% of the total commodities certified this year, followed by wood products at 36%. Southeast Asia (Indonesia, Malaysia, Phillipines, Thailand) imported the most

Table 10 | Phytosanitary Certificates, 2024-2025

Status	2024	2025
Printed	9,559 (75%)	8,856 (76%)
Replaced	1,817 (14%)	1,866 (16%)
Voided	1,151 (9%)	691 (6%)
Canceled	77 (1%)	85 (1%)
Returned	18 (<1%)	31 (<1%)
In Progress	158 (<1%)	186 (2%)
Applications Processed	12,604 (99%)	11,460 (98%)

Figure 3 | Federal and State Phytosanitary Certificates - 7 Year Snapshot
INCLUDING REPLACEMENTS



Export Certification Program

Export Certification Program (continued)

Wisconsin plant products in 2025, followed by Vietnam, China, Japan, and the EU. No Wisconsin commodities were rejected or destroyed at destination ports in 2025.

Exports certified by the program in 2025 were valued at approximately \$966.7 million, with soybean grain and distiller dried grain comprising over 70% of the total. Not all grain products certified originate in Wisconsin. If exporters present a completed FGIS 921-2 form, Authorized Certification Officials are allowed to issue the phytosanitary certificate for that commodity.

Figure 4 | Top Commodities and Certificates Issued in 2025

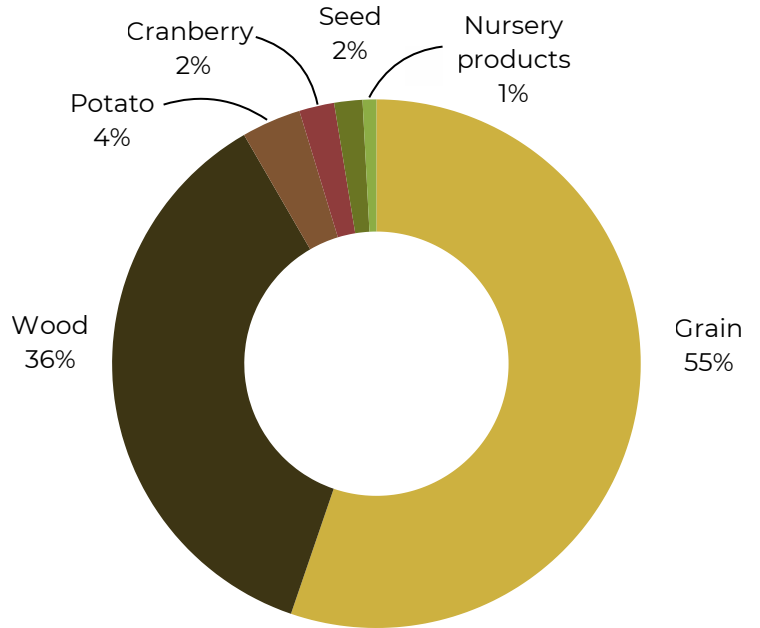
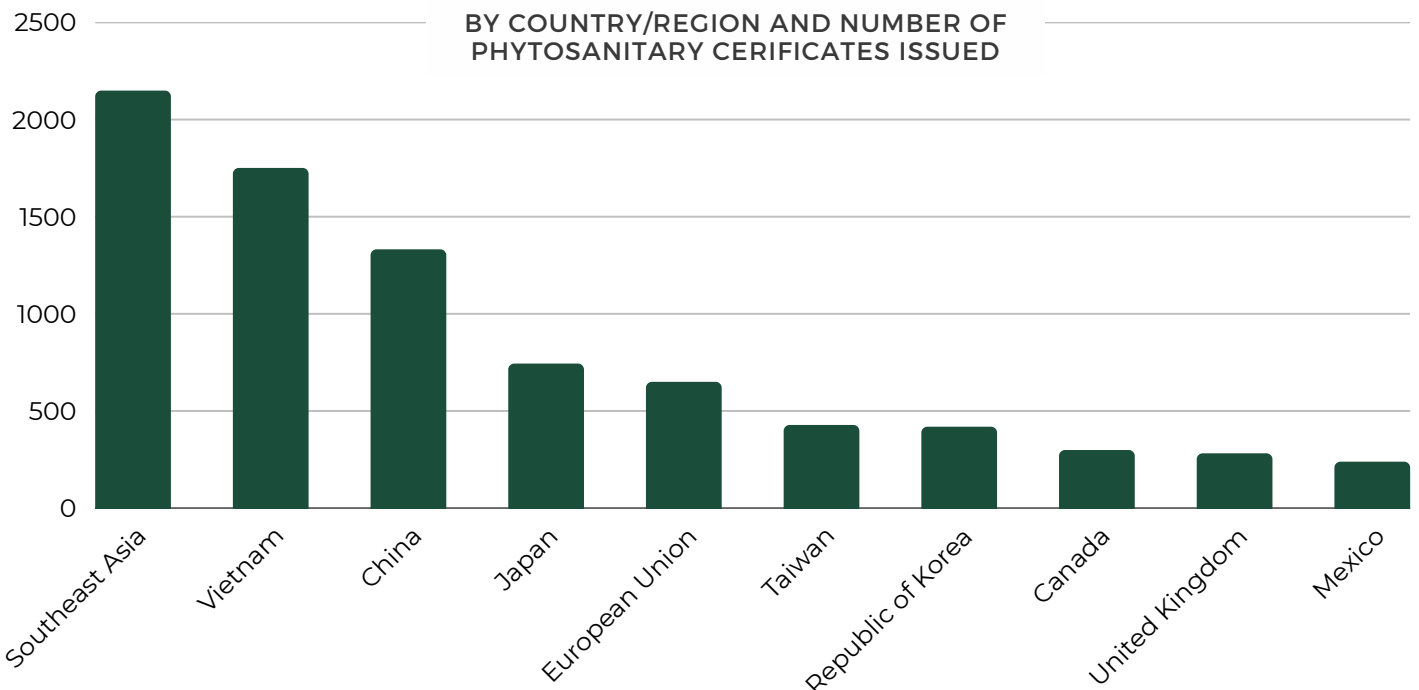


Figure 5 | Top 10 Export Markets in 2025



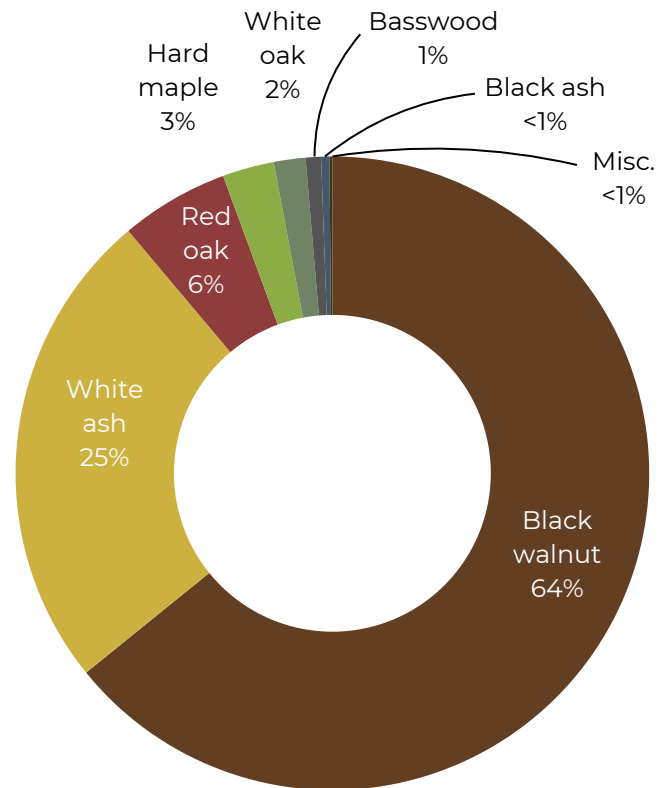
Export Certification Program

Log and Lumber Inspections

Inspections were conducted in 2025 on logs and kiln-dried (KD) lumber to support export certification. Staff conducted 286 total inspections of 164,600 logs over the course of the year. The top log species exported were black walnut (12.2 million board feet (bf)), followed by white ash (4.7 million bf) and red oak (1.1 million bf). The greatest number of exported logs went to Vietnam.

The Plant Industry Bureau, along with USDA APHIS, enters into compliance agreements (CAs) with producers of KD lumber to help expedite exports around the world. In 2025, 35 KD lumber CAs were signed and renewed from October to December following biannual mill inspections and audits. These CAs ensure kilns are operating properly and that best management practices are being followed by exporters to meet the requirements of receiving countries. Companies that sign CAs benefit from expedited certification of overseas lumber shipments. CAs also reduce inspector workload by requiring just one KD lumber inspection per year, saving time and money for all by avoiding the need to inspect individual shipments.

Figure 6 | Logs Board Feet by Species, 2025



Lumber inspection | DATCP

Export Certification Program

Seed Field Inspection and Lab Testing for Export Certification

Agricultural, horticultural, and specialty crops grown for seed and exported globally are inspected during the growing season for regulated plant pests. DATCP provides field inspection and lab testing services to Wisconsin seed producers to meet domestic and foreign phytosanitary requirements before the crops are harvested. Seed produced in Wisconsin was exported to 31 foreign countries in 2025, with top export destinations for seed including Argentina, Brazil, Canada, Chile, Kazakhstan, Mexico, Ukraine, and the EU.

In 2025, 84 seed fields totaling 232 acres were inspected for 14 seed exporters. Specialists inspected fields for a total of 124 different plant diseases and submitted 83 samples for laboratory testing. A total of 894 diagnostic tests were performed at the Plant Industry Bureau Lab. Several regulated corn diseases were detected, including anthracnose (*Colletotrichum graminicola*), brown spot (*Physoderma maydis*), common corn smut, Goss's wilt, grey leaf spot, Northern corn leaf blight, stalk rot (*Fusarium subglutinans* and *Gibberella fujikuroi*), and sugarcane mosaic virus. One regulated carrot disease, leaf spot (*Cercospora carotae*), was also found. All these diseases are known to occur in Wisconsin.

Specialists also inspected fields for 12 insect and 43 weed species. European corn borer, Khapra beetle, and witchweeds (*Striga* spp.) were the most frequently inspected organisms at a field location. European corn borer, which occurs throughout Wisconsin, was the only regulated insect or weed species detected.

In addition to seed field inspections, 37 blueberry samples, five garlic samples, one potato sample, and one Schuette's oak sample were tested for phytosanitary certification. No regulated diseases were diagnosed in those samples.



Table 11 | Phytosanitary Test Results

Crop	Number of Samples	Regulated Diseases Tested	Regulated Diseases Detected
Blueberry	37	2	None
Carrot	1	11	Cercospora leaf spot
Corn	54	69	***
Cucurbit	5	11	None
Garlic	5	1	None
Oak	1	1	None
Oats	1	2	None
Onion	1	2	None
Pepper	8	5	None
Potato	1	6	None
Sorghum	1	1	None
Soybean	2	6	None
Sunflower	1	2	None
Tomato	9	6	None

***Anthracnose; Gray leaf spot; High Plains virus; Northern corn leaf blight; Sugar cane mosaic virus

Seed Program

The Seed Program monitors agricultural, lawn, and vegetable seed to ensure labeler and dealer compliance with standards prescribed by the Wisconsin Seed Law. Expired seed, or seed that does not meet label guarantees or conform to purity, germination rate, and noxious weed seed restriction standards, may be removed from the marketplace and labelers may be subject to penalties. Seed program inspectors perform a range of duties, such as evaluating labels for compliance, issuing stop sale orders, and collecting samples for analysis.

In 2025, DATCP offered the option for online licensing and payments. There were 683 entities licensed through the new system with an additional 14 licensed outside the new system for a total of 697 licenses. One hundred and sixty-two (23%) of licensed labelers were inspected and 101 (15%) were sampled for a total of 437 samples. The goal of the seed program is to collect samples and inspect all licensed labelers in the state on a three-year rotation while continuing to target labelers and seed kinds/mixtures with a violation trend exceeding the current state average.

The overall violation percentage of 3% is lower than the violation percentage from 2024. However, violations were of higher concern. There were two minor violations, both for germination claims. There were 11 serious violations, including seven for germination claims and four for prohibited noxious weed seeds present or restricted noxious weed seeds exceeding double the tolerance. All serious violations were removed from sale and returned to the labelers, and the minor violations were relabeled. The types of seed sampled found



Table 12 | Seed Labeler Program: Inspection, Sampling, and Compliance Summary (Past Five Years)

Year	2021	2022	2023	2024	2025	Average
Labelers Licensed	797	739	725	713	697	734
Labelers Inspected	175	268	142	137	162	165
Samples Collected	368	409	371	392	437	395
% Labelers Sampled	12%	14%	12%	13%	15%	13%
Number of Violations	15	16	25	26	13	19
% Violation	4.1%	3.9%	6.7%	6.6%	3.0%	4.9%

to have violations in 2025 included oat (three of 19 samples taken had violations), grass mix (two of 19), smooth bromegrass (four of eight), alfalfa (three of 24), and vegetable (one of 59).

Three of the 2025 year's samples containing *Amaranth* spp. seeds were sent for further determination. None were identified as the prohibited noxious weeds Palmer amaranth (*Amaranthus palmeri*) or waterhemp (*Amaranthus tuberculatus*), listed under ATCP 20.01 (27). Table 12 summarizes the number of inspections completed, samples collected, and violation rates over the last five years.

Potato Program



Potato Program

The Potato Program includes potato rot nematode inspections, late blight response, and coordination of the Wisconsin Seed Potato Certification Program (WSPCP) in partnership with the University of Wisconsin-Madison.

In February 2025, Plant Protection staff engaged with Universities of Wisconsin partners and seed potato growers to address a shortage of certified seed potatoes for the 2025 growing season, particularly the Silverton variety. The shortage follows an outbreak of Potato Virus Y (PVY) in 2023. Sixteen waivers were issued to allow commercial potato growers to plant uncertified seed potatoes in Adams, Marathon, Portage, Sauk, and Waushara counties. To aid growers in complying with statutory requirements, the waivers were issued well in advance of planting season.

The following month, Plant Industry Staff conducted the State National Harmonization Plan annual audit of the WSPCP in Stevens Point, Wisconsin. The audit focused on potato cyst nematode soil sampling records.

Additionally, records for two certified seed potato producers were reviewed as part of the audit.

In May 2025, outreach was provided through an article in *Field Notes* and in social media posts reminding growers to dispose of cull piles by the May 20 deadline established in Wisconsin administrative code. Disposal of cull piles is a plant protection strategy to mitigate late blight.

2025 Wisconsin Act 66 was passed into law on December 9, 2025. This act amended and recreated specific sections of Wisconsin State Statute § 94.36, the requirement to plant certified seed potatoes. Statute language now includes critical plant health safeguarding measures to protect the health of all potatoes planted in Wisconsin and gives DATCP additional authorities for issuance of waivers and modified penalty provisions in the event of non-compliance. Social media posts alerting growers of the regulatory change were shared December 12, 2025.

2025 Wisconsin Act 66 amended Wisconsin State Statute § 94.36 to include critical plant health safeguarding measures to protect the health of all potatoes planted in Wisconsin and gives DATCP additional authorities in the event of non-compliance.

Potato Rot Nematode

Program staff conducted fall inspections for potato rot nematode (*Ditylenchus destructor*, PRN) in 2025. Potato rot nematode is a quarantine pest which occurs in localized areas of Asia, Europe, and North America. Wisconsin is one of 10 states where PRN is found. There are 3,080.25 acres with a history of infestation (refer to Table 13). Seed potato fields with a history of PRN are released from quarantine after fumigation and two successive potato crops with no evidence of the nematode. Commercial potato fields can be released without fumigation but need two successive crops with no evidence of PRN.

Potato fields prioritized for PRN inspection include fields entering the WSPCP and previously infested fields with a current crop of potatoes. Five seed potato fields were inspected for PRN in 2025, which included a total of 142.4 acres in Adams, Langlade, and Marinette counties. All five fields were found to have no evidence of potato rot nematode and were released into the seed potato certification program.

Potato rot nematode has never been reported or intercepted in-state or out-of-state in seed potatoes or commercial potatoes from Wisconsin.



Potato rot nematode sample | DATCP

Table 13 | Number of Fields and Acres by County and Current Potato Rot Nematode Status

County	Current Status	Acres	Fields
Forest	Released/not used	15.00	1
Kenosha	Released/not used	1.00	1
Langlade	Infested	446.60	19
Langlade	Released/not used	122.47	8
Langlade	Released/certified seed	1697.44	50
Langlade	Released/table stock	640.34	25
Lincoln	Released/certified seed	37.00	1
Manitowoc	Released/certified seed	9.30	1
Marathon	Infested	8.40	1
Marathon	Released/certified seed	64.50	2
Portage	Released/table stock	38.20	1

Pest Survey and Control Section



Staff setting spongy moth trap | DATCP

The Pest Survey and Control Section conducts surveys for the early detection of exotic plant pests and diseases of economic and regulatory significance and responds to new pest introductions by initiating strategic control or eradication measures. Surveys supply information to the Plant Industry Bureau's regulatory programs and may be used to determine pest presence or absence, substantiate pest-free status, or to establish or revise a quarantine regulation. The section includes the Plant Industry Bureau Lab in Madison, which provides plant pest and disease diagnostic services to the bureau's regulatory and survey programs.

Pest Survey Programs

- Plant Industry Bureau Lab
- Forest Pest Survey
- Spongy Moth Program
- Commodity Crop Survey
- Specialty Crop Survey
- Plant Pest Permits

Plant Industry Bureau Laboratory

The Plant Industry Bureau Laboratory processed 491 plant samples for diseases and 54 samples for insect and mite concerns in support of DATCP's Christmas tree, Nursery, Pest Survey, and Phytosanitary programs in 2025. In addition, 984 insect trap samples were screened for regulated and non-native pests. The lab performed 2,250 diagnoses on the 491 samples processed for diseases, using techniques including microscopy, culturing, enzyme-linked immunosorbent assay (ELISA), polymerase chain reaction (PCR), recombinase polymerase amplification (RPA), and sequencing to identify pathogens.

National Plant Diagnostic Network Member Lab

As a member laboratory in the National Plant Diagnostic Network (NPDN), the Plant Industry Bureau Lab represents Wisconsin as part of an extensive system of diagnostics labs throughout the U.S. The NPDN system of more than 70 labs protects national plant health by providing accurate, rapid pest and disease identification and reporting.

The lab also participates in the USDA APHIS PPQ Science and Technology's Plant Pathogen Diagnostics Certification Program, which administers proficiency testing for select lab methods. In 2025, two of the lab's diagnosticians maintained certification in *Phytophthora ramorum* real-time PCR assay interpretation and became certified in nucleic acid extraction and real-time PCR. Participation in this program is a requirement for testing PPQ regulated plant samples, including *P. ramorum* suspects.



Staff culturing in Plant Industry Lab | DATCP

New Diagnostic Tests

The lab increased its testing capacity in 2025 by adding two new tests, a USDA-approved multiplex qPCR for *Phytophthora austrocedri*, the pathogen that causes the disease juniper mortality; and an RT-PCR for cycas necrotic stunt virus. The lab now offers 31 conventional PCRs, 11 RT-PCRs, 14 qPCRs, six RT-qPCRs, as well as other diagnostic tests.

New Disease Reports

The lab reported five diseases for the first time in Wisconsin in 2025 from Nursery Program samples. These five diseases were tradescantia mild mosaic virus, juniper mortality (*Phytophthora austrocedri*), elderberry virus C, elderberry virus D, and Pacific coast pear rust (*Cymnosporangium libocedri*) on an 'Autumn Brilliance' serviceberry.

This is the first report of tradescantia mild mosaic virus in the United States. This virus was previously



Pacific coast pear rust on 'Autumn Brilliance' serviceberry | DATCP



Juniper mortality on 'Star Power' juniper | DATCP



Tradescantia mild mosaic virus on Tradescantia 'Zwanenburg Blue' | DATCP

Plant Industry Bureau Laboratory

New Disease Reports (continued)

reported infecting *Tradescantia* spp. in Germany, Hungary, Italy, and New Zealand. Infected *Tradescantia* 'Zwanenburg Blue' plants were intercepted, removed from sale, and destroyed at two Washington County nurseries. The identification was confirmed by USDA's Plant Pathogen and Confirmatory Diagnostics Laboratory. The infected plants were co-infected with tobacco rattle virus, a common disease detected in ornamentals. Plants showed symptoms of leaf distortion, chlorosis, necrosis, and flower breaking.

The lab detected juniper mortality, a disease caused by the oomycete *P. austrocedri*, for the first time in Wisconsin. This disease, first detected in North America at two Oregon State nurseries in 2024, was previously only reported in Argentina and the U.K. *Phytophthora austrocedri* infects plants in the Cupressaceae family, including native common juniper, creeping juniper, eastern redcedar, and northern white-cedar, in addition to common nursery plants such as arborvitae, juniper, and false cypress. In Wisconsin, it was detected in a planting of 'Star Power' junipers at a Washington County nursery. As a safeguarding measure, the field of 720 junipers were removed and burned in early October 2025 with full cooperation of the nursery. Excessive rainfall in August 2025 and *Phytophthora's* affinity for movement in saturated soils makes movement of this pathogen into neighboring fields a concern. In response, DATCP plans to monitor the field and neighboring fields for signs of disease development in 2026.

In addition, the lab detected a common pathogen, white mold (*Sclerotinia sclerotiorum*) on a previously unreported host, Ohio buckeye (*Aesculus glabra*).

Table 14 | Viruses on Ornamentals Diagnosed in 2025

Virus Name	No. of Positives	No. of Samples Tested	% Positive
Alfalfa mosaic virus	1	13	8%
Arabis mosaic virus	1	20	5%
Clematis chlorotic mottle virus	1	1	100%
Cucumber mosaic virus	2	32	6%
Cycas necrotic stunt virus	3	5	60%
Dahlia mosaic virus	23	33	70%
Elderberry virus C	1	1	100%
Elderberry virus D	1	1	100%
Hosta virus X	11	24	46%
Illarvirus group	0	7	0%
Impatiens necrotic spot	1	22	4%
Lilac leaf chlorosis virus	1	1	100%
Potyvirus group	8	30	27%
Tobacco mosaic virus	0	21	0%
Tobacco rattle virus	38	63	60%
Tobacco ringspot virus	0	8	0%
Tobacco streak virus	17	41	41%
Tomato ringspot virus	0	8	0%
Tomato spotted wilt virus	1	36	3%

Viruses of Nursery Ornamentals

Plant viruses continue to be a serious problem in nursery stock production. Besides lowering the commercial value and productivity of ornamental plants, many viruses can be transmitted to agricultural crops. DATCP’s Plant Industry Bureau Lab and nursery inspectors have conducted sampling and testing for viruses in Wisconsin nurseries and greenhouses for over 20 years.

This season, nursery inspectors collected 135 ornamental samples for virus testing at the lab. Tobacco rattle virus (TRV) was detected most often, with 38 positives (mainly in astilbe, bleeding heart, hosta, and peony). Dahlia mosaic virus (DMV), confirmed on 23 dahlias, was the second most detected virus. Tobacco streak virus (TSV) was confirmed on 12 astilbes and five dahlias. Hosta virus X (HVX) was diagnosed in 11 hosta samples. In addition, potyviruses were confirmed in hosta (1), iris (3), miniature hollyhock (1), phlox (1), and sedum (2), for a total of eight detections.

Other virus finds included alfalfa mosaic virus (1), arabis mosaic virus (1), clematis chlorotic mottle virus (1), cucumber mosaic virus (2), cycas necrotic stunt virus (3), elderberry virus C (1), elderberry virus D (1), impatiens necrotic spot virus (1), lilac leaf chlorosis virus (1), tomato spotted wilt virus (1), and tradescantia mild mosaic virus (2). Laboratory test results are summarized in Table 14.

Cereal Cyst Nematode Survey

During 2025, soil collected in 2022 and 2024 from 259 fields across 20 counties was screened and tested for exotic cereal cyst nematodes which, if introduced to Wisconsin, could potentially impact trade and crop yield. Nematodes are microscopic worm-like organisms that parasitize crops and decrease their health and productivity. Female cereal cyst nematodes form pinhead-sized cysts containing eggs that can remain in the soil for decades. Upon hatching, nematodes feed on small grains, causing stunted growth; reduced tillering; chlorotic leaves; and shallow, bushy roots.

The targets of this survey were the cereal cyst (*Heterodera avenae*), exotic cereal cyst (*Heterodera filipjevi*), the Mediterranean cyst (*Heterodera latipons*), and the false root-knot nematode (*Nacobbus*

Plant Industry Bureau Laboratory

Cereal Cyst Nematode Survey (continued)

aberrans). In addition to screening and testing for these species, staff recorded other cyst nematode species detected during the survey. No exotic cyst nematodes were detected in any of the fields sampled.

Nematode Survey

The Plant Industry Bureau Lab conducted a survey of ornamental nursery stock for root-knot (*Meloidogyne* spp.) and root lesion (*Pratylenchus* spp.) nematodes for a third year in 2025. The plant-parasitic nematodes in these genera are known for their broad host ranges and capacity to cause disease in hundreds of agricultural and horticultural plants worldwide. Of the 90 samples screened for these nematodes at the lab, three were positive for root-knot nematodes and five were positive for root lesion nematodes. The ornamentals infested with root-knot nematodes were hosta (2) and hydrangea (1), while root lesion nematodes were detected in astilbe (3), lungwort (1), and peony (1). In addition, foliar nematodes were found on four hosta plants out of eight samples screened.

Soil-borne root-knot and root lesion nematodes may be spread by contaminated tools and soil, natural movement through the soil, and by contaminated plant propagules (e.g., plant cuttings). Although nematode infestation may not be directly lethal to the host plant, their feeding interferes with proper root function (i.e., water and nutrient movement), reduces plant vigor, and the root lesions or damage created can become an infection point for other plant pathogens. It is important for consumers and nursery industry workers to be aware of the prevalence of nematodes in the nursery trade and to monitor plants for signs and symptoms of infestation.



Foliar nematodes | DATCP

Manoomin Survey

Manoomin (*Zizania palustris*), also known as northern wild rice, is an important traditional food and cultural resource of upper Midwest Indigenous peoples. Recently, Tribal Nations across the upper Midwest have noticed a decline in the health of wild rice beds and an increase in disease symptoms. In 2025, the Wisconsin Tribal Conservation Advisory Council (WTCAC) conducted a PPA 7721 funded survey to identify diseases found in upper Midwestern manoomin beds. The Plant Industry Bureau Lab partnered with WTCAC as a contract lab to provide disease diagnostic support for the survey.

Wild rice samples were collected by Tribal representatives and submitted to the Plant Industry Bureau Lab. Survey targets were bacterial blight (*Xanthomonas oryzae* pv. *oryzae*), bacterial leaf streak (*Xanthomonas oryzae* pv. *oryzicola*), and fungal brown spot (*Bipolaris oryzae*). Bacterial blight and bacterial leaf streak are serious pathogens of rice and are on the USDA Select Agents list. They have never been reported in the United States. Fungal brown spot is a common disease of manoomin that causes lesions and significantly reduces yields. Other diagnostic work completed included the identification of fungal leaf spots and insect damage present on the samples. The diagnostic information was provided to WTCAC and the sample submitters for their use in better understanding and managing disease in wild rice beds.

Early Detection Surveys

DATCP's Pest Survey Program is part of a national network of cooperators that works to protect U.S. agriculture and natural resources from high-risk exotic plant pests, diseases, mollusks, and weeds. Each year, the USDA APHIS develops a National Priority Pest List (NPPL) to guide pest detection priorities and survey targets for Wisconsin and other participating states. Plant pests selected for inclusion on the NPPL are frequently intercepted during inspections at seaports, airports, and land border crossings and are predicted to have a significant impact on agriculture or the environment if introduced into the U.S.

Box Tree Moth

Recent confirmation of the invasive box tree moth (*Cydalima perspectalis*, BTM) in Michigan and Ohio, two states where Wisconsin boxwood imports are sourced, has made early detection surveys especially important in Wisconsin. DATCP's Pest Survey Program conducted surveys for BTM for the second year in a row in 2025, setting 20 traps at 10 big box retail stores in the southeastern part of the state. The 10 stores are known to import a high volume of boxwood from counties in Ohio near the BTM quarantine area. Traps were deployed June 3 and checked through September 5. Screening found no BTM in the samples collected this season. Despite no Wisconsin detections to date, box tree moth populations continue to spread in eastern states, with infested states now totaling nine, including two new state detections in 2025 in Virginia and West Virginia.

European Cherry Fruit Fly

A Customs and Border Protection (CBP) interception this season prevented the European cherry fruit fly (*Rhagoletis cerasi*, ECFF) from reaching Wisconsin. In June, CBP specialists at the Detroit Metro Airport stopped a traveler headed for Door County carrying a five-pound bag of cherries infested with live ECFF larvae and pupae. Had the infested cherries been transported into the state, they could have become an introduction point source for a pest that is a significant threat to Wisconsin's \$2 million tart cherry industry.



European cherry fruit fly has been reported in North America since 2016 and currently occurs in 11 western New York counties bordering Lake Ontario. DATCP's Pest Survey Program has been aware of the ECFF threat for the last decade and has conducted large-scale early detection surveys for it since 2018. These surveys involve setting hundreds of yellow sticky traps (refer to photo above) that attract ECFF adults. So far, all traps have been negative and ECFF has never been found in any of the state's cherry orchards.

Old World Bollworm

DATCP pest survey specialists carried out pheromone trapping for the Old World bollworm (*Helicoverpa armigera*, OWB) at 40 southeastern Wisconsin sites in 2025. This

Early Detection Surveys

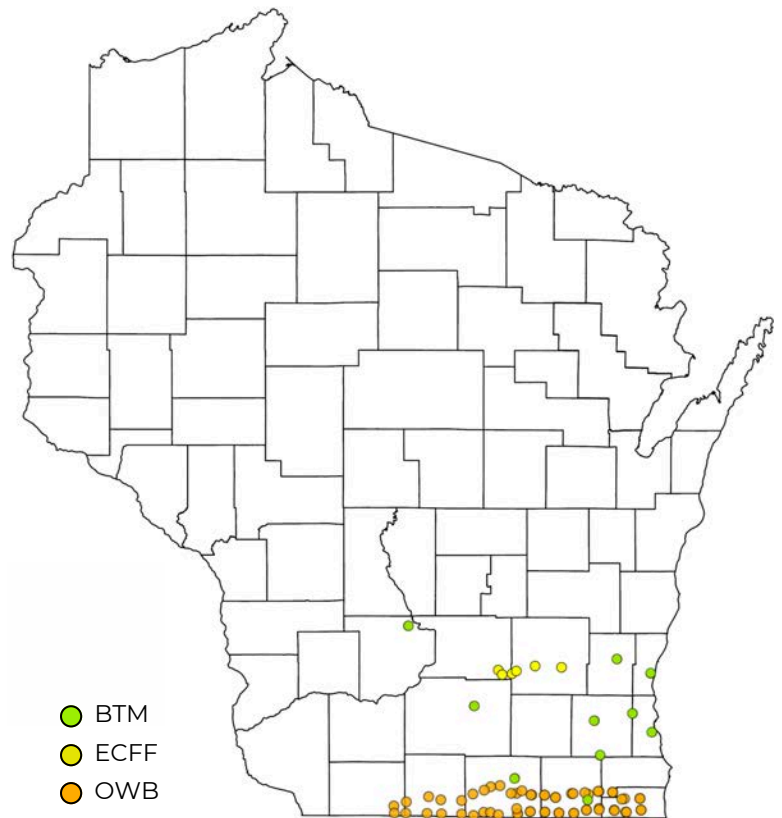
Old World Bollworm (continued)

exotic migratory moth species is closely related to our native corn earworm (*Helicoverpa zea*) and is a damaging agriculture pest with a host range that includes corn, small grains, soybeans, tomatoes, and more than 100 other plants. Interceptions of OWB larvae at U.S. ports and borders are common and usually occur in association with fresh produce such as basil and mint, cut flowers, and other plant material.

As part of DATCP's OWB survey, green bucket traps were set in Green, Kenosha, Lafayette, Racine, Rock, and Walworth counties, along the Illinois border. Trapping occurred in late July to early September to coincide with the annual corn earworm migration. All moths collected were sent to an official USDA identifier for molecular analysis. Lab results did not detect OWB.

DATCP has surveyed for OWB intermittently since 2017 and no OWB have been detected in trap samples. Wisconsin's survey work is particularly important as a northern detection line for OWB since moths have been periodically collected in survey traps near O'Hare International Airport in Illinois and in Florida, although the pest has never been found in agricultural areas in the U.S.

Figure 7 | Map of Box Tree Moth (BTM), European Cherry Fruit Fly (ECFF), and Old World Bollworm (OWB) Surveys



Cut Flower Pathway Survey

Import and distribution of cut flowers provide a pathway for introduction of non-native pests into the U.S. In 2025, year two of PPA 7721 funded survey was conducted targeting three invasive moth species commonly intercepted on cut flower imports from overseas: the cotton cutworm (*Spodoptera litera*), Old World bollworm, and silver Y moth (*Autographa gamma*). Pheromone baited traps for each of these species were placed at five wholesale flower importer locations in southeastern and central Wisconsin. The survey began in early May and was completed in October. All samples were negative for the target species.



Old world bollworm larva | Gyorgy Csoka, Hungary Forest Research Institute, Bugwood.org

Forest Pest Surveys

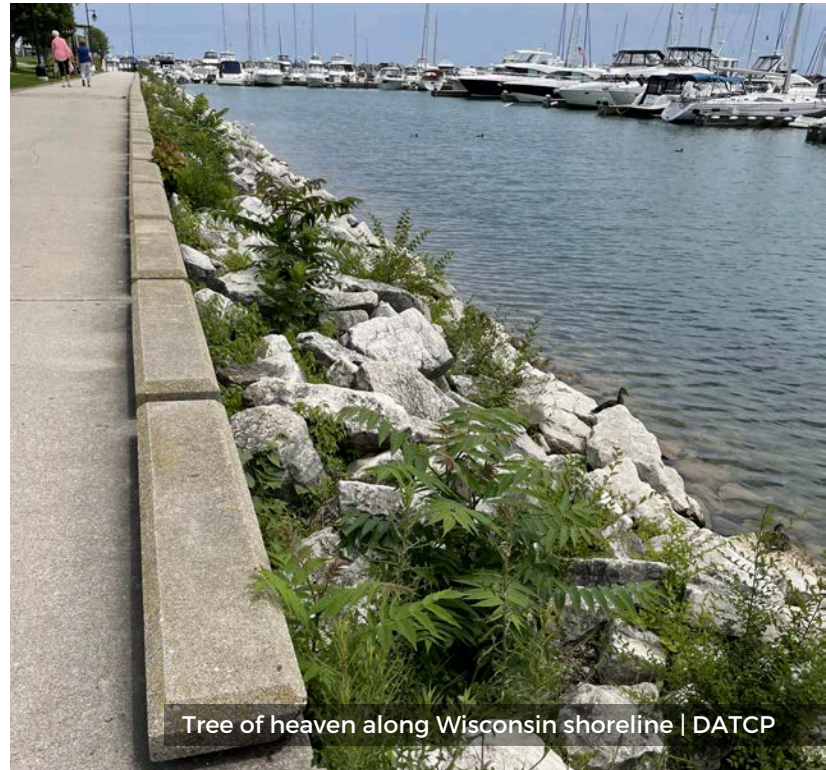
Spotted Lanternfly and Asian Longhorned Beetle Visual Surveys

As the invasive spotted lanternfly (*Lycorma delicatula*, SLF) spreads across the country and closer to Wisconsin, DATCP continues to monitor high-risk introduction pathways, primarily in urban areas of southeastern Wisconsin where climate and suitability maps indicate SLF is most likely to become established. The Asian longhorned beetle (*Anoplophora glabripennis*, ALB), another invasive insect, is much slower at spreading but could severely damage forests and landscape trees if it makes its way to Wisconsin. It also has a higher chance of being able to survive in cooler regions of the state.

With support from a PPA 7721 Cooperative Agreement, survey and early detection efforts were combined for SLF and ALB due to overlap in plant hosts and survey methods. Visual surveys are used to detect both species since effective traps are not currently available. DATCP staff surveyed over 180 miles at 158 sites in 16 counties and did not detect signs of either of these species.

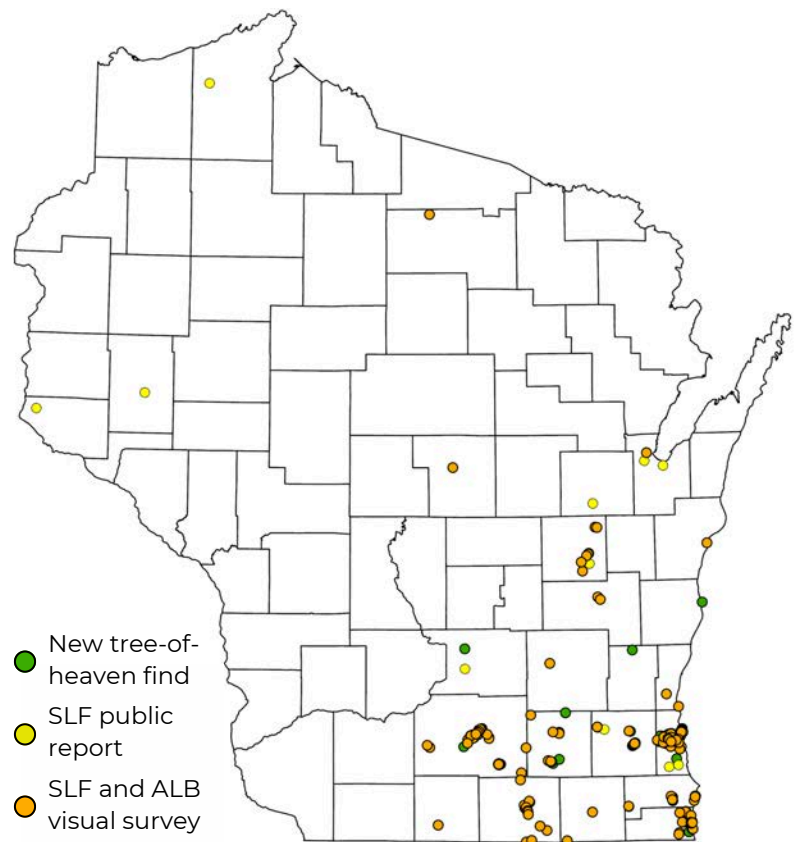
While SLF has not yet been found in Wisconsin, U.S. Customs and Border Protection notified DATCP of an SLF interception on a Lake Michigan barge heading to Milwaukee in 2025. All SLF life stages were killed with insecticide prior to docking in Wisconsin, and follow-up surveys by DATCP at the port found no further signs of the invasive insect.

Tree-of-heaven population locations were also mapped by DATCP staff in 2025 to help inform future SLF monitoring sites. Field staff added 504 new sites, bringing the total number of known tree-of-heaven locations in Wisconsin to 1,006.



Tree of heaven along Wisconsin shoreline | DATCP

Figure 8 | Map of Spotted Lanternfly (SLF) and Asian Longhorned Beetle (ALB) Surveys



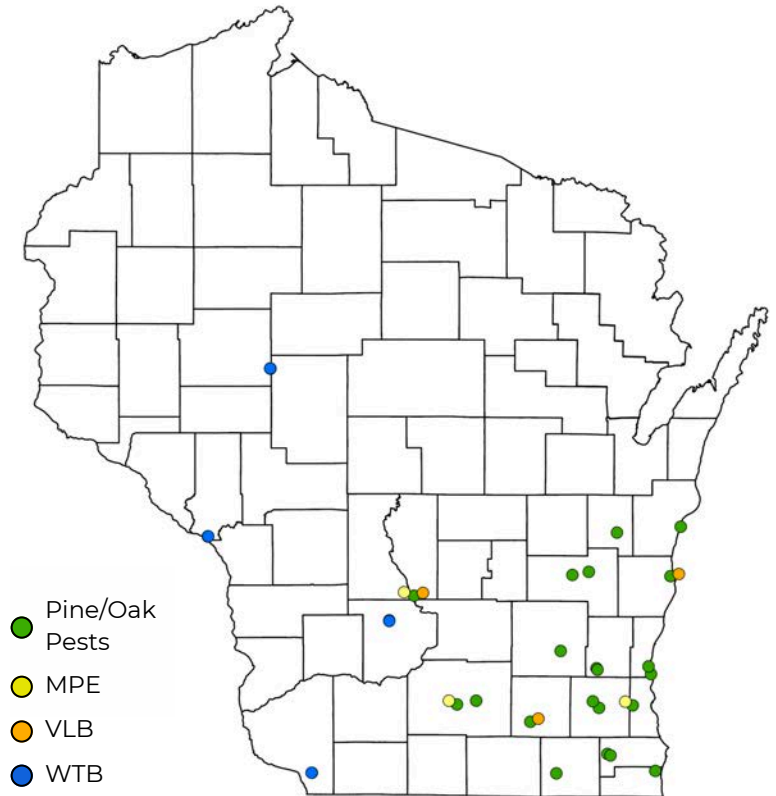
Forest Pest Surveys

Pine and Oak Pest Trapping Survey

Also supported through a PPA 7721 Cooperative Agreement, DATCP conducted a trapping survey for 11 non-native pine and oak pests in 15 eastern Wisconsin counties in 2025. Sites were chosen based on proximity to major rail lines and transportation routes which pose a high-risk pathway into the state. Survey targets included five defoliator moths: black-arched tussock moth (*Lymantria monacha*), oak processionary moth (*Thaumetopoea processionea*), pine-tree lappet (*Dendrolimus pini*), rosy moth (*Dryocampa rubicunda*), and Siberian silk moth (*Dendrolimus superans*); and six wood-boring beetles: black fir sawyer beetle (*Monochamus urussovii*), black spruce beetle (*Tetropium castaneum*), brown spruce longhorned beetle (*Tetropium fuscum*), European spruce bark beetle (*Ips typographus*), large pine weevil (*Hylobius abietis*), and six-toothed bark beetle (*Ips sexdentatus*). None of the 11 target pests were detected in the 105 survey traps. In total, 840 individual trap collections were screened, resulting in the identification of 1,972 longhorned beetles and 6,532 bark and ambrosia beetles by DATCP’s forest entomologist. These 2025 results align with the outcomes of similar surveys in 2021, 2023, and 2024 that found no target pine or oak pests in traps set throughout Wisconsin.

In addition, a state priority survey was conducted for the invasive Mediterranean pine engraver (*Orthotomicus erosus*), a potentially injurious bark beetle that is killing pines in the southwestern U.S. Traps placed in Milwaukee, Madison, and the Wisconsin Dells did not detect this pest.

Figure 9 | Map of Pine/Oak Pests, Mediterranean Pine Engraver (MPE), Velvet Longhorned Beetle (VLB), and Walnut Twig Beetle (WTB) Surveys



Velvet Longhorned Beetle Trapping Survey

The exotic wood-boring beetle, velvet longhorned beetle (*Trichoferus campestris*, VLB), has been intercepted several times in Wisconsin in rustic log furniture imported from China and was initially detected in Milwaukee County survey traps in 2017. DATCP has been conducting surveys for the last several years to understand its distribution and potential to act as a pest in the state.

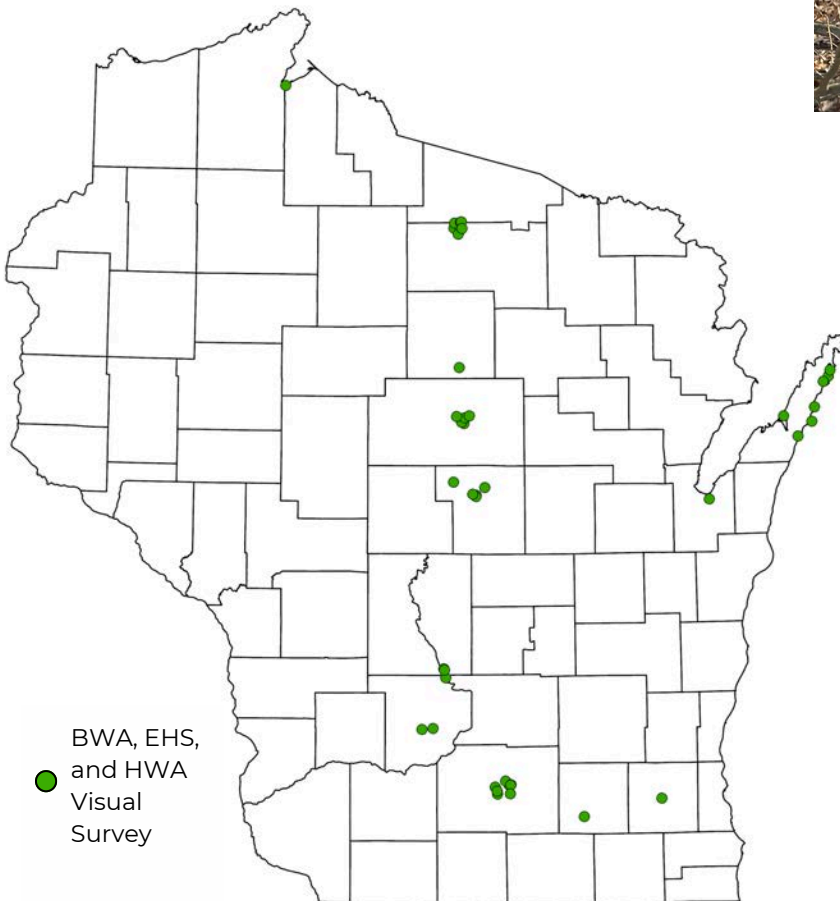
The 2025 survey included three trap locations in counties where VLB has not been documented. A total of two VLB were collected from the Sheboygan County trap, a new county detection and now raising the number of counties with detections to 14.

Walnut Twig Beetle Trapping Survey

The walnut twig beetle (*Pityophthorus juglandis*, WTB) feeds on phloem beneath the bark of walnut trees and carries the *Geosmithia morbida* fungus that causes thousand cankers disease. This season, 11 multi-funnel traps were set at four sawmills in western Wisconsin. The traps captured 106 bark beetle specimens, none of which were identified as the invasive WTB. DATCP has conducted annual presence/absence surveys for WTB at sawmills in Wisconsin for over a decade, but neither WTB nor thousand cankers disease have been found. Walnut twig beetle is a regulated pest for walnut exports.



Figure 10 | Map of Balsam Woolly Adelgid (BWA), Elongate Hemlock Scale (EHS), and Hemlock Woolly Adelgid (HWA) Survey



Conifer Pest Visual Surveys

Each winter, DATCP conducts visual surveys to detect invasive, conifer-killing pests such as balsam woolly adelgid (BWA), elongate hemlock scale (EHS), and hemlock woolly adelgid (HWA). Visual surveys scanned hemlock and balsam trees for signs and symptoms of these pests and recorded locations of 178 areas with hemlock to inform future survey planning efforts.

None of these pests were found in 2025 surveys, which spanned from Milwaukee County in the south up to Ashland County in the north. DATCP will continue to monitor for future introductions, including the addition of eDNA surveys for HWA in 2026, due to the close proximity of these pests in Michigan.

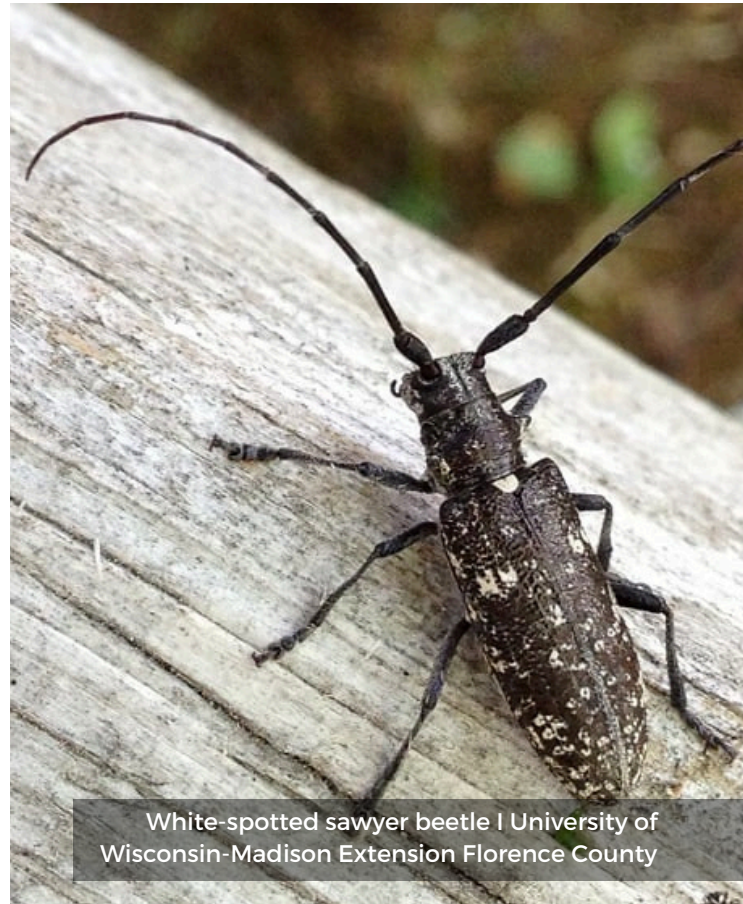
Forest Pest Surveys

Public Reporting and Pest Hotlines

DATCP operates the Wisconsin Pest Hotline and Wisconsin Spotted Lanternfly Hotline to allow for the reporting of new and emerging plant pests and diseases. In total, these hotlines received 273 reports in 2025, compared to 132 reports in 2024. The influx in reports was largely due to high engagement with outreach on social media, especially for the invasive Asian longhorned beetle which accounted for over half of all reports. Asian longhorned beetle has never been detected in the state but has many native lookalikes, such as white-spotted sawyer beetle, which makes misidentification a frequent and common occurrence.

No new pest detections resulted from citizen reports in 2025, with the majority of reports being either lookalikes or known established pests. Spotted lanternfly (17 reports), northern giant hornet (six reports), and hemlock woolly adelgid (five reports) were commonly misidentified invasives that are not yet in Wisconsin. Many pests established in the state, including Japanese beetle, jumping worm, and the bald-faced hornet, were also reported. The species reported each year vary due to changes in pest populations and public awareness, and are often impacted by the ever-changing media coverage that different invasive species receive.

DATCP also partners with DNR and UW-Madison Extension to operate the Spongy Moth Hotline. This collaborative effort allows state staff to answer questions concerning treatment, trapping operations, and control efforts; collect reports of spongy moth in non-quarantined counties; and provide management information. There were 59 requests for information received throughout the year, which is 78% less than 2024 (268) and 83% less than 2023 (353). This mirrors the population peak for spongy moth that occurred in 2023 and started to subside in 2024. The reason for contacting the hotline also changed during this time, from



about 55% of contacts with outbreak concerns in 2023 and 2024 to only 10% in 2025. The reasons for contacting the hotline in 2025 varied greatly, with the top reason (27%) for help identifying or reporting spongy moth. These reports were mostly native Wisconsin forest pests such as forest tent caterpillar moth and fall webworm. There were a couple of reports of spongy moth outside of quarantined counties, which are taken into consideration with other Spongy Moth Program data to determine what actions may be necessary to slow the spread of this invasive species in western Wisconsin in 2026.

Spongy Moth Program



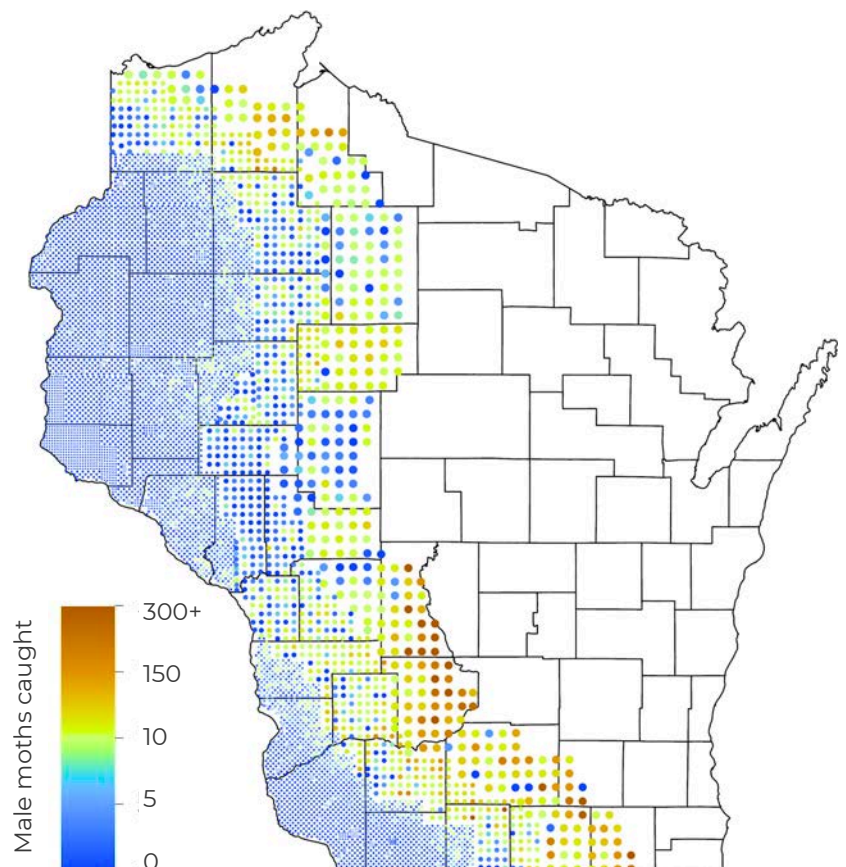
Spongy moth larvae hatching | DATCP

The Slow the Spread of Spongy Moth Program is a collaborative interagency effort between DATCP, USDA Forest Service, and additional government agencies in 10 other participating states. The program's goal is to reduce the rate of spongy moth spread by detecting and treating isolated pockets where spongy moth is advancing westward. This season, 22 personnel contributed to treatment, trapping, and egg mass survey efforts in Wisconsin, including several staff who have been with the program for nearly three decades.

Aerial Treatments

The spongy moth aerial spray program, in coordination with the USDA Forest Service Slow-The-Spread Program, treated 17 sites for a total of 47,966 acres. *Bacillus thuringiensis* var. *kurstaki* treatments were applied to 1,180 acres across seven sites in late May, while mating disruption treatments were applied to 46,786 acres in late June and early July.

Figure 11 | Map of Spongy Moth Trap Catches in 2025



Spongy Moth Program

Trapping and Egg Mass Surveys

The annual trapping program recorded a total catch of 47,344 male spongy moths in 7,849 traps deployed throughout 36 counties in central and western Wisconsin. This year's total catch (6.0 moths per trap average) is less than a quarter of the total moths caught in 2024 (24.0 moths per trap average).

Trapping surveys pinpointed the current boundaries of Wisconsin's contiguous spongy moth population and identified scattered pockets of outlier moth catches in western Wisconsin. Follow up egg mass surveys at these outlier sites were completed in October. New egg masses were found in seven of the 18 non-quarantined counties: Buffalo, Dunn, Grant, Lafayette, Pepin, Trempealeau, and Washburn. Egg mass locations will either be treated or trapped more intensively during subsequent years. Overall, surveys yielded slightly fewer egg mass finds and lower infestation densities as compared to previous years. This suggests a slowing of the westward spread of new spongy moth populations for the time being.

Figure 12 | Map of Spongy Moth Egg Mass Surveys, 2025

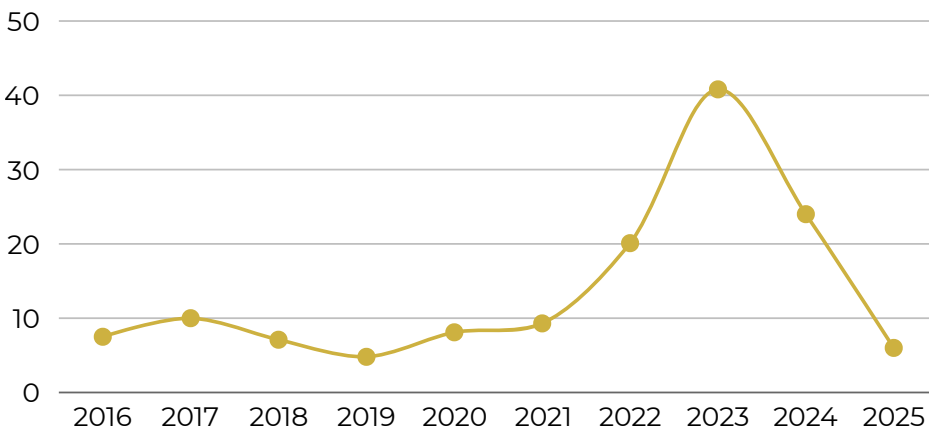
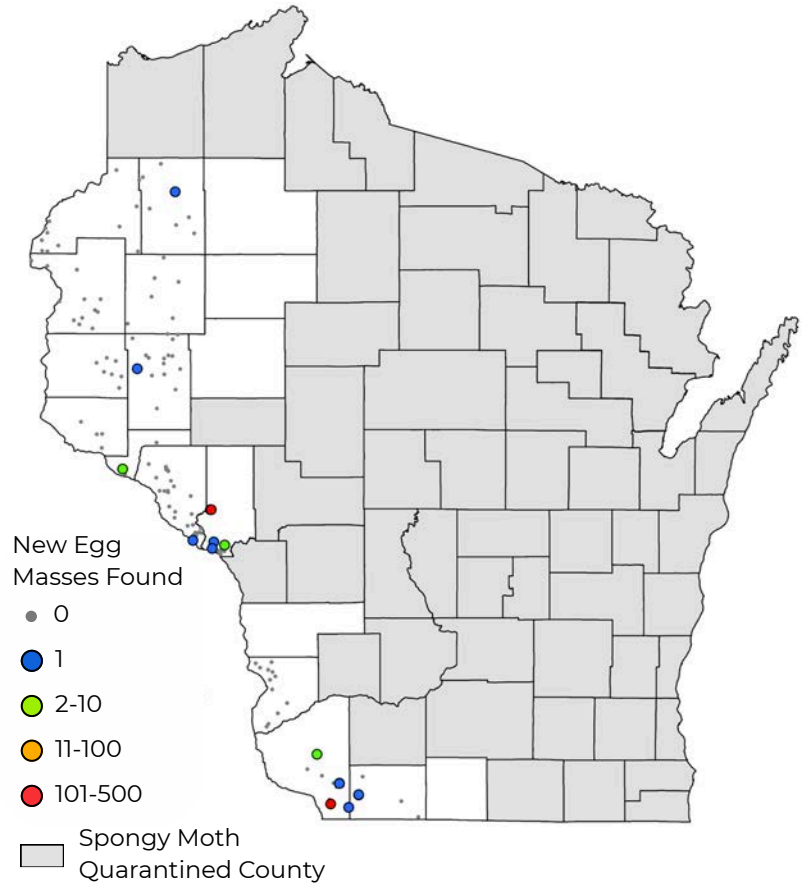


Figure 13 | 10-Year Spongy Moth Trapping Trends

Annual average moth counts hit a low in 2019 at 4.8 moths per trap before populations grew to 40.8 moths per trap in 2023 during peak outbreak. Counts came back down to 6.0 average moths per trap in 2025 after the outbreak subsided.

Commodity Crop Surveys

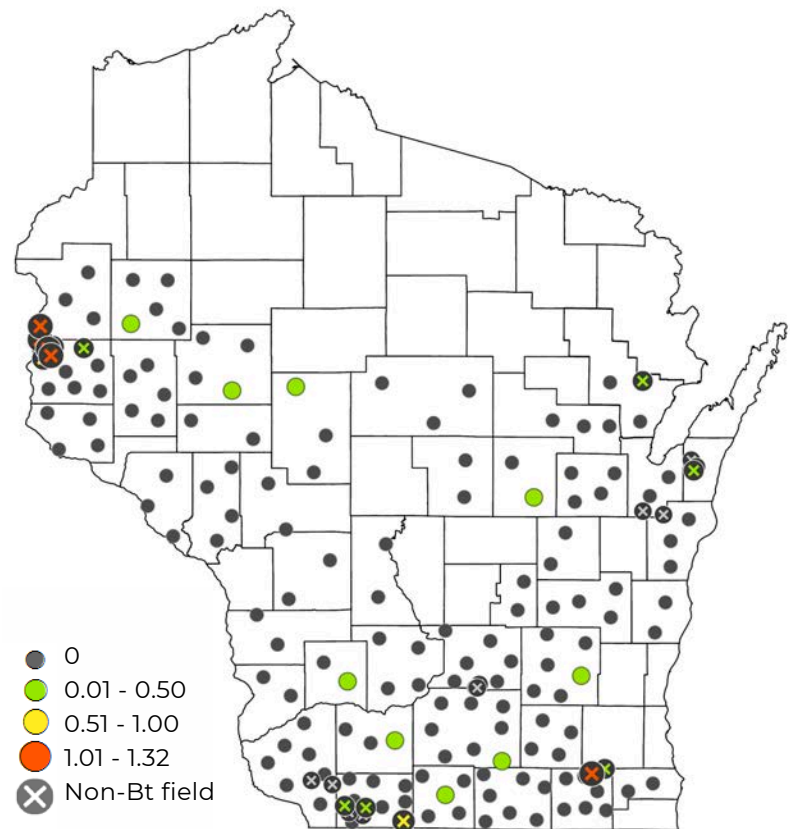
Each growing season, DATCP Pest Survey field specialists survey alfalfa, corn, soybeans, and small grains across the state to collect data on the leading economic pests of concern to Wisconsin crop producers. Crop surveys also target invasive national priority pests that are currently not known to occur in Wisconsin or have limited distributions in the state. This work is funded in part by the USDA Cooperative Agricultural Pest Survey (CAPS) Program and is conducted from April through October.

European Corn Borer

DATCP's historic, 84-year-old European corn borer (ECB) survey has gained new importance as cases of Bt corn resistance continue to rise in the U.S. and Canada. Dating back to 1942, when ECB was an emerging invasive threat to Wisconsin and the Corn Belt, the objective of this long-term effort has been to assess the fall overwintering larval population and its damage to the state's grain corn crop. Detecting Bt resistance became an added goal two years ago when DATCP began collaborating with University of Minnesota (UMN) researchers to find and document field-evolved Bt-resistant ECB populations.

In 2025, the annual ECB and Bt-resistance survey included 146 randomly selected fields and 30 volunteered non-Bt fields sampled September 3 to October 9. The survey found a pronounced difference in ECB prevalence and infestation rates in the non-Bt vs. random fields. As expected, ECB was more prevalent in the non-Bt fields, with larvae and infested stalks found in 57% of the non-Bt sites compared to only 6% of the random fields. This year's 57% prevalence rate in the conventional fields is well above last year's 35%, suggesting a general increase in ECB pressure from 2024 to 2025.

Figure 14 | Map of European Corn Borer Survey, 2025



Infestations were also much heavier in the non-Bt fields in comparison with the random fields. The average across the 30 non-Bt fields was 41 larvae per 100 corn stalks, or 0.41 larva per stalk, while the average count in the 146 random fields was one larva per 100 corn stalks, or 0.01 borer larva per stalk. For the second and univoltine generations of ECB in fall, an infestation of 50 larvae per 100 corn stalks, or 0.50 larva per plant, indicates high pressure and likely yield loss.

Larvae collected from infested fields have been sent to the Dr. Fei Yang Lab at UMN for Bt resistance testing for the past three seasons. Bioassays in 2024 and 2023 confirmed the state's first two cases of the Cry2Ab2 resistance allele—one in 2023 in a larva from Waupaca

Commodity Crop Surveys



True armyworm larva | DATCP

European Corn Borer (continued)

County and a second in 2024 in a Richland County larva. This is the first documentation of the Cry2Ab2 resistance allele in Wisconsin ECB larvae. Bioassay results from 2025 are not yet available.

True Armyworm

A classic outbreak of second-generation true armyworm larvae developed in crops and lawns in the southern, central, and northwestern areas of the state during 2025. The earliest reports of armyworm activity began in mid-July, and the week of July 18 to 24 brought many armyworm sightings, most of which involved larvae migrating through residential yards to nearby crop fields. By July 31, reports of locally heavy larval populations came in from Barron, Burnett, Chippewa, Clark, Columbia, Crawford, Dane, Dunn, Eau Claire, Green Lake, Iowa, Jackson, Jefferson, Monroe, Taylor, Vernon, and Washburn counties.

The timing of infestations was characteristic of second-generation armyworms and was foreshadowed by large spring moth flights tracked by DATCP's true armyworm trap network. Heavy migration flights in May laid the foundation for a second round of large, late June flights that produced the damaging larval populations in July. DATCP's 2025 true armyworm trap network captured a cumulative total of 14,488 moths in 53 traps (273 moths per trap average) from April 1 to July 31. Peak spring moth flights were recorded the week of April 25 to May 1, while the summer flight peaked June 27 to July 3. Additional heavy flights in July signaled a potential for more larvae and feeding to extend into late summer, but the outbreak subsided by early August.

Corn Rootworm Beetle

Conducted during peak beetle emergence in August, the 2025 corn rootworm survey found moderate overall beetle pressure, similar to levels recorded in 2024 and 2023. The

Corn Rootworm Beetle (continued)

state average based on counting beetles in 229 corn fields was 0.5 beetle per plant, the same average documented the previous two seasons. This trend continues to be lower than the economically significant count of 0.75 beetle per plant and is in line with the 10-year survey average for Wisconsin at 0.5 beetle per plant.

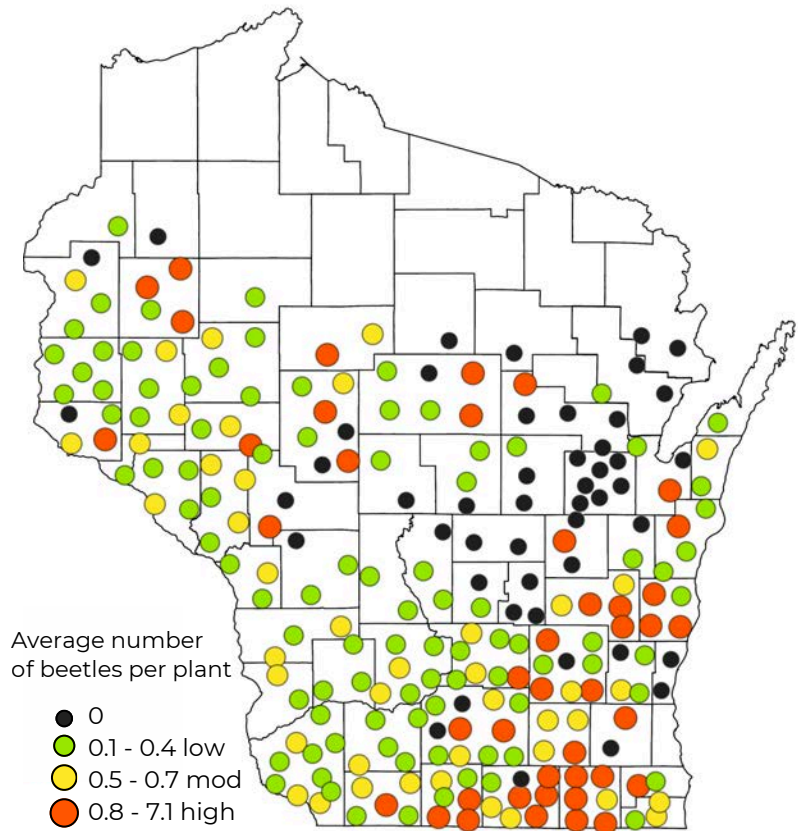
Across the state's nine crop reporting districts, average beetle counts decreased or remained static in six districts and increased in three districts. The most significant change observed in 2025 was a shift in beetle pressure into the southeastern counties, away from the usual corn rootworm hotspots in southwestern Wisconsin. The highest averages were recorded in the southeast (0.9 beetle per plant), north-central (0.8 beetle per plant), and south-central (0.7 beetle per plant) regions, though only the first two districts had average beetle counts exceeding the 0.75 beetle per plant economic threshold. Corn fields with above-threshold beetle populations comprised 19% of this year's 229 sites, an increase from last year's 15%. In addition, the 2025 total count of 1,118 rootworm beetles on 2,290 corn plants sampled statewide was very comparable to the 1,151 beetles tallied in 2024.

Although the survey documented mostly low and moderate beetle populations in Wisconsin corn fields for the third year in a row, individual fields with high rootworm counts were found across the southern and north-central districts. For these higher pressure areas, rootworm management programs will require a multiyear approach that combines crop rotation and varied control tactics for delaying resistance to Bt-rootworm traits.

Corn Earworm

Observations of early corn earworm moth flights and high moth counts in July prompted

Figure 15 | Map of Corn Rootworm Beetle Survey, 2025



Wisconsin sweet corn growers to begin management programs about a month ahead of the usual mid-August schedule. Moths started arriving in the state June 30 to July 3, when monitoring sites in Dane, Dodge, and Rock counties registered incoming flights of 100 to 276 moths per week. Migration flights leveled off in July but surged during the second and third weeks of August before waning in September.

DATCP's pheromone trap network collected a cumulative total of 12,435 corn earworm moths in 12 traps this season (1,036 moths per trap average), with the largest flights recorded August 15 to 21. Flights peaked at 189 moths per night near Burlington in Walworth County, 159 moths per night at Beaver Dam in Dodge County, and 97 moths per night at Clinton in Rock County in this timeframe. The trap location with the highest cumulative catch was Burlington in Walworth County, where 2,417 moths, or one-quarter of the 2025 total moth catch, were collected.

Commodity Crop Surveys

Corn Earworm (continued)

This year's moth count was 41% higher than the 8,849 moths collected in 14 traps in 2024 (632 moths per trap average), though comparable to the 13,996 moths collected in 12 traps in 2023 (1,166 moths per trap average). The protracted migration posed a mid- and late-summer threat to fresh market and processing sweet corn. Corn earworm larvae were unusually prevalent by September and were observed in 30% of the grain corn fields sampled as part of the fall corn pest survey, well above the 9% rate recorded last season.

Western Bean Cutworm

Moth counts registered during the June to mid-August flight period decreased sharply in 2025. The western bean cutworm trap network captured an average of 107 moths per trap (7,803 moths in 73 traps), less than half of the 227 moths per trap average (15,685 moths in 69 traps) collected in 2024 when a 20-year survey record was set. The annual flight peaked July 18 to 31 across southern and central Wisconsin and July 25 to August 14 in the north. Six sites recorded counts of 250 or more moths (versus 23 sites in 2024), while the highest individual catch for the 11-week trapping period was 866 moths in Barron County. Although the exact cause of the steep decline in moth numbers is unknown, deeper-than-normal frost depths last winter (up to 36 inches in some parts of the state) may have contributed to increased mortality of western bean cutworm pre-pupae overwintering in the upper 3-9 inches of the soil profile.



Corn earworm larva | DATCP

Fall Armyworm

DATCP's fall armyworm trap network monitored late summer moth migration flights from August 1 to September 18. During the 2025 survey, the 27 network traps captured a cumulative total of 11,992 moths, or an average of 444 moths per trap. Most of the traps registered seven-week totals of 250 moths or less, though four sites in Grant, Sauk, and Sheboygan counties captured 1,000 or more moths. The heaviest flights were documented in the southwest area September 5 to 18, and the single highest cumulative count was 3,901 moths in Grant County. The September flights occurred too late to produce damaging larval populations and, unlike the true armyworm which reached outbreak levels in July, fall armyworm was not a major threat to crop production in Wisconsin this season.

Soybean Surveys

Surveys for economic soybean pests conducted July 3 to 31 found mostly low insect pressure throughout Wisconsin. Soybean aphids were observed in 160 of the 239 fields (67%) sampled. Fieldwide average counts were very low at less than 25 aphids per plant in all but two of the sites. The exceptions were one field in Fond du Lac County with 60 aphids per plant and a Dane County site with 43 aphids per plant. None of the soybean fields had heavy aphid populations exceeding the 250 aphid-per-plant threshold during the survey, although scattered fields may have developed higher aphid pressure and qualified for treatment by mid-August.

Soybean Surveys (continued)

Japanese beetle counts and defoliation were also measured as part of the soybean survey. Japanese beetle pressure in soybean fields was below normal in 2025, as was the case in 2024. The average count in 239 fields was 3.6 beetles per 100 sweeps, up incrementally from 2.3 beetles per 100 sweeps in 2024, but the second lowest average in eight years (since 2018). Areas of the state with the highest beetle averages were the southwest (4.9 beetles per 100 sweeps) and west-central (5.7 beetles per 100 sweeps) districts. According to DATCP survey data, Japanese beetle counts and defoliation did not reach economic levels in most Wisconsin soybean fields in 2025.

In addition to aphids and Japanese beetles, Wisconsin soybeans were scouted for bean leaf beetles, corn rootworm beetles (all three species), grasshoppers, green cloverworm larvae, and stink bugs. Sweep net counts for these pests were also very low. Two emerging soybean pests—soybean gall midge (*Resseliella maxima*) and soybean tentiform leafminer (*Macrosaccus morrisella*)—were not detected by this year's survey and have not yet been found in Wisconsin.

Alfalfa and Wheat Surveys

DATCP field crop specialists conducted surveys in 332 alfalfa and small grains fields May 1 to July 3 to estimate populations of up to 25 different insects and to detect new threats. Survey targets included Wisconsin's top economically important forage pests, such as alfalfa weevil, potato leafhopper, and true armyworm; as well as several USDA APHIS national priority pests—Old World bollworm; sunn pest (*Eurygaster integriceps*); and two snail species, maritime garden snail (*Cernuella virgata*) and Cochlicellid snail (*Cochlicella* spp.).

Surveys of first-crop alfalfa documented peak alfalfa weevil defoliation May 23 to June 5 across southern Wisconsin. High sweep net counts during this two-week window ranged from five to nine larvae per sweep. Approximately 20% of the first-crop fields sampled had heavy tip feeding



Staff sweeping a wheat field | DATCP

damage above the 40% economic threshold. The first alfalfa harvest concluded by mid-June and carryover of weevil larvae into the second crop resulted in only minor feeding damage (less than 20%).

Small grains survey work was conducted June 5 to 12 in wheat fields from Dane County northeast to Door County, and found generally low insect pressure. Cereal leaf beetle adults and larvae were collected from 25 of the 50 fields checked, true armyworm larvae were found in very low numbers in seven fields, and aphids (including bird cherry-oat aphid and English grain aphid) were common at low levels in almost all (46) of the fields. Overall, insect counts were below economic levels and damage was not apparent. Field surveys and trapping for USDA target pests yielded no Wisconsin detections this season.

Cooperator Networks

Cooperator networks are an efficient, cost-effective approach DATCP’s Pest Survey Program has used for more than 30 years to accomplish Wisconsin pest surveillance and early detection priorities. The program enlists volunteer cooperators throughout the state to collect and report data on the leading economic pests of concern to crop producers. Insect trapping data supplied by the networks indicates current risk level and helps growers prepare for pest threats. Cooperators represent a variety of agricultural backgrounds, such as apple growers, agronomists, farmers, crop consultants, gardeners, and UW-Extension staff.

In 2025, the Pest Survey Program maintained seven networks consisting of 80 cooperators:

- **53 cooperators** in **41 counties** provided precise emergence and flight data on corn earworm, fall armyworm, true armyworm, western bean cutworm, and other significant pests of field crops. Data from the **267 pheromone and black light traps** included in these networks is especially useful for forecasting outbreaks of priority corn pests.
- **27 apple growers** participated in the apple pest monitoring network, covering **21 counties** and setting **162 traps** for six orchard pests.
- **Seven cooperator networks** set a total of 456 traps that collected over 79,500 insect pests, yielding an enormous volume of data from areas of the state DATCP’s limited number of Pest Survey staff cannot otherwise access on a regular basis.
- Cooperator reporting successfully transitioned to the Survey123 digital data collection platform in 2025. The upgrade resulted in **2,745 monitoring reports** submitted by cooperators this season, a 45% increase from 1,900 reports logged in 2024.

Figure 16 | Map of Insect Monitoring Network Sites, 2025

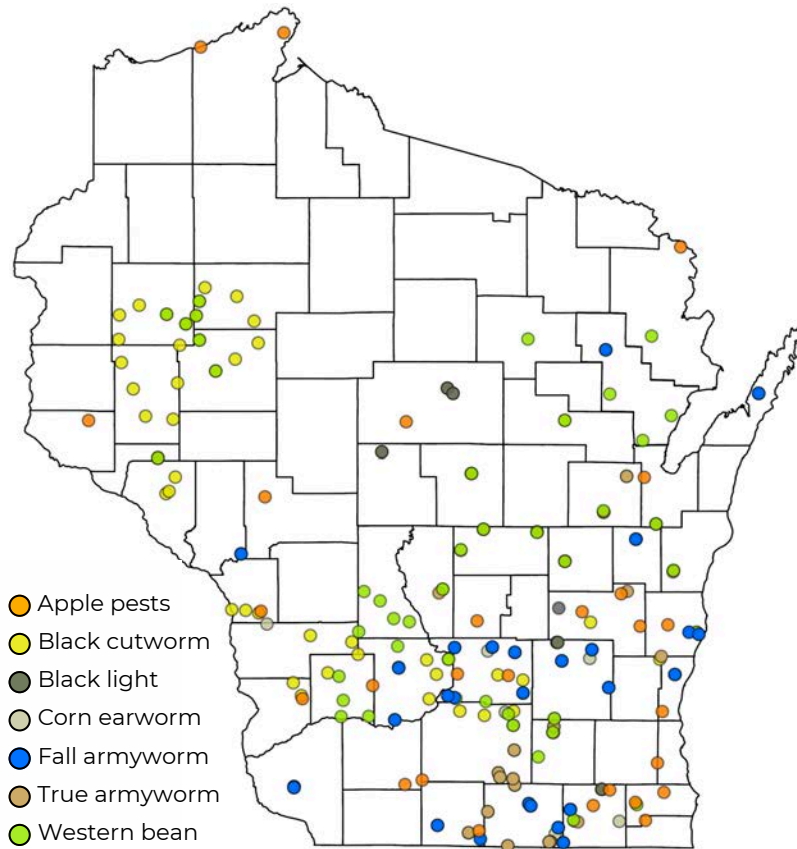


Table 15 | Insect Monitoring Network Trap Numbers, 2025

Pest Type	Cooperators*	Traps Set	Trap Type
Apple orchard	27	164	Pheromone
Black cutworm	42	96	Pheromone
Black light	6	6	Black light
Corn earworm	10	12	Hartstack
Fall armyworm	20	27	Pheromone
True armyworm	35	53	Pheromone
Western bean	40	73	Pheromone

**Several cooperators participate in more than one network.*

Plant Pest and Biological Control Permits

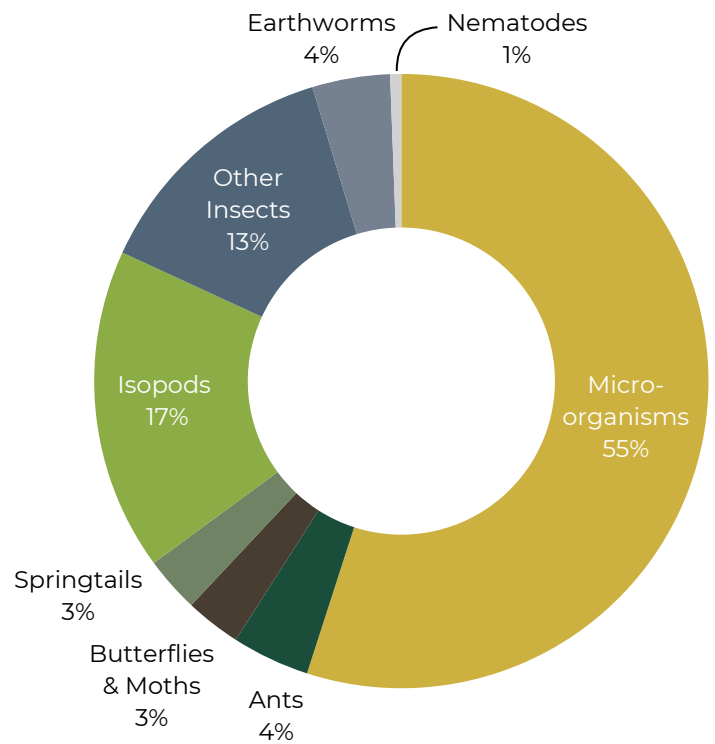
The Plant Industry Bureau reviews USDA APHIS Plant Protection and Quarantine (PPQ) 526 permit applications to import or distribute plant pests, biological control agents, certain microorganisms, and noxious weeds in Wisconsin. Requests for PPQ 526 permits are approved only if the organism is widely established in the state, an environmental risk assessment indicates little risk of adverse effect from the importation, or the organism will be properly contained in a laboratory or greenhouse environment. Conditions on containment and disposal methods may be imposed, facility inspections may be conducted to ensure permit conditions are met, and state and federal PPQ officials must concur to allow importation.

Microorganisms (bacteria, fungi, and viruses) accounted for 55% of the 171 PPQ 526 permits issued in 2025, followed by insects and arthropods at 40%. Insect and arthropod permit requests included ants, butterflies, moths, springtails, isopods, and others. In addition, 4% of permits were issued for earthworms, and 1% for nematodes. Permit request trends in 2025 included a continued high volume of applications for isopods, namely *Armadillidium* spp., *Cubaris* spp., and *Porcellio* spp. Isopods (also known as pill bugs or woodlice) are used for cleanup in terrariums and are valued by hobbyists for their aesthetics.

In addition to PPQ 526 permits, Plant Industry Bureau staff also reviews federal PPQ 525-A permits to receive soil, PPQ 588 Controlled Import Permits



Figure 17 | PPQ 526 Permits Issued in 2025



to import plants or plant products for experimental or developmental purposes, and PPQ 546 permits for Post-entry Quarantine Agreements. Staff approved 30 PPQ 588 permits submitted as new applications, amendments, or renewals; and three PPQ 525-A permits, for a total of 204 PPQ permits processed in 2025.

Plant Pest & Biological Control Permits



Spotted knapweed | Rob Routledge,
Sault College, Bugwood.org

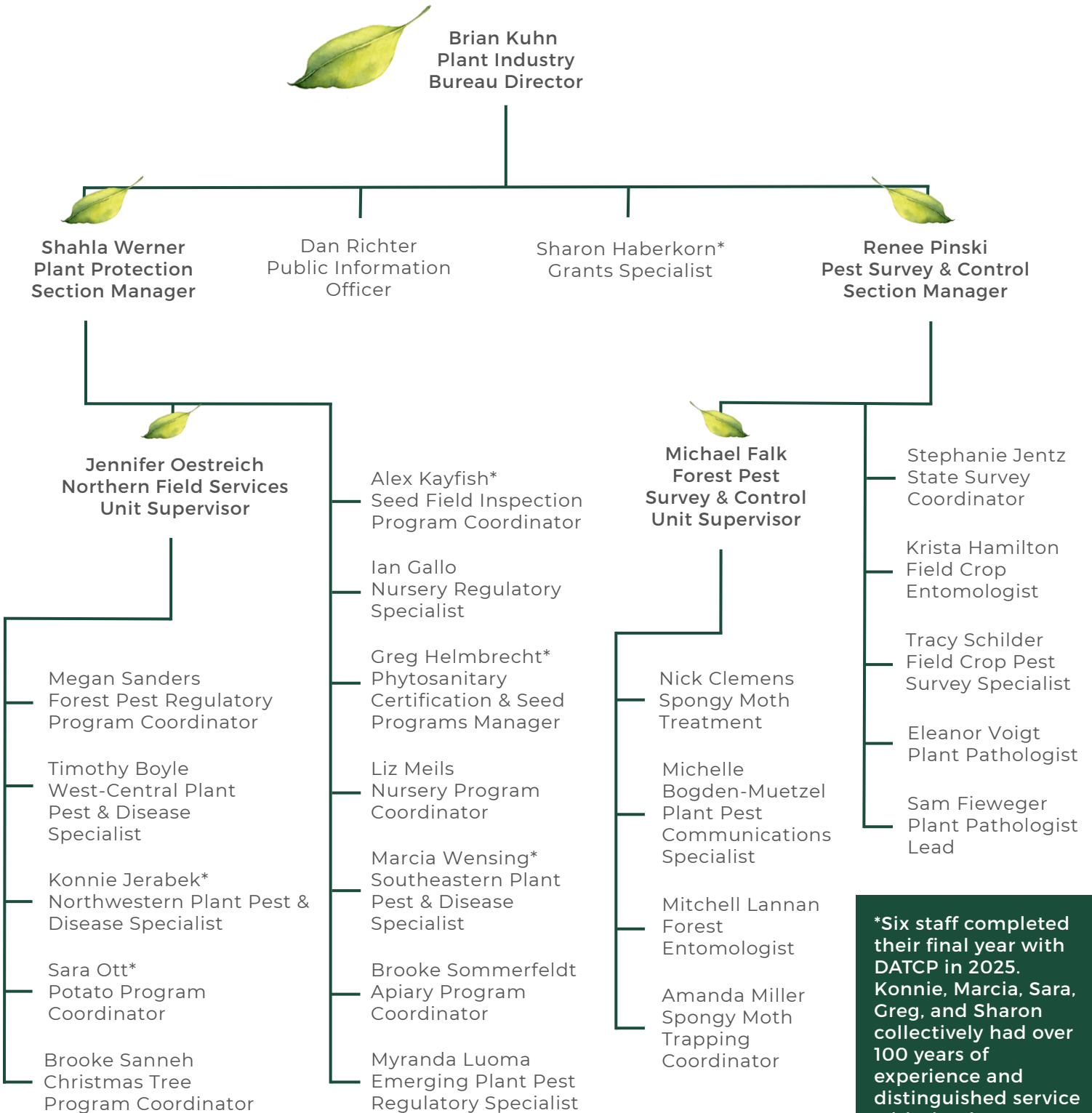
A Wisconsin 414 permit is required for intrastate movement and environmental release of biological control agents and regulated plant pests. Permitting staff issued 16 Wisconsin 414 permits in 2025. Permit applications requested approval to release 10 different biological control organisms used for the management of spotted knapweed (12 permits), emerald ash borer (two permits), leafy spurge (one permit), and Japanese beetle (one permit). The species released included four parasitic wasps to manage emerald ash borer, three beetle species to control spotted knapweed, two beetles to control leafy spurge, and one research permit to control Japanese beetle. 2025 saw an increase in permit requests compared to the seven requests in 2024 related to spotted knapweed and emerald ash borer biocontrol.

Biotechnology Regulatory Services (BRS) Permits

The USDA APHIS regulates the importation, interstate movement, or environmental release (i.e., outdoor field trials) of certain organisms developed using genetic engineering (including plants, insects, and microbes) that may pose a plant pest risk. Permit applications are carefully reviewed by USDA APHIS regulatory scientists and, in Wisconsin, by DATCP staff.

In 2025, DATCP reviewed and issued concurrence for 172 BRS permits for genetically engineered plants, up significantly from 105 in 2024. Genetic modifications for herbicide tolerance and insect resistance continued to comprise most of the notification applications. Each year, a subset of Wisconsin permits are inspected by the USDA APHIS PPQ staff, often with assistance from a DATCP Plant Industry Bureau representative. However, there were no BRS inspections assigned for Wisconsin in 2025.

Plant Industry Bureau Organization



***Six staff completed their final year with DATCP in 2025. Konnie, Marcia, Sara, Greg, and Sharon collectively had over 100 years of experience and distinguished service with the department during their tenure before retiring.**



2025

ANNUAL REPORT

Wisconsin Department of
**AGRICULTURE, TRADE
AND CONSUMER
PROTECTION**

Division of
**AGRICULTURAL
RESOURCE
MANAGEMENT**

Bureau of
PLANT INDUSTRY

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