

Japanese Beetle in BC: 2023 Update

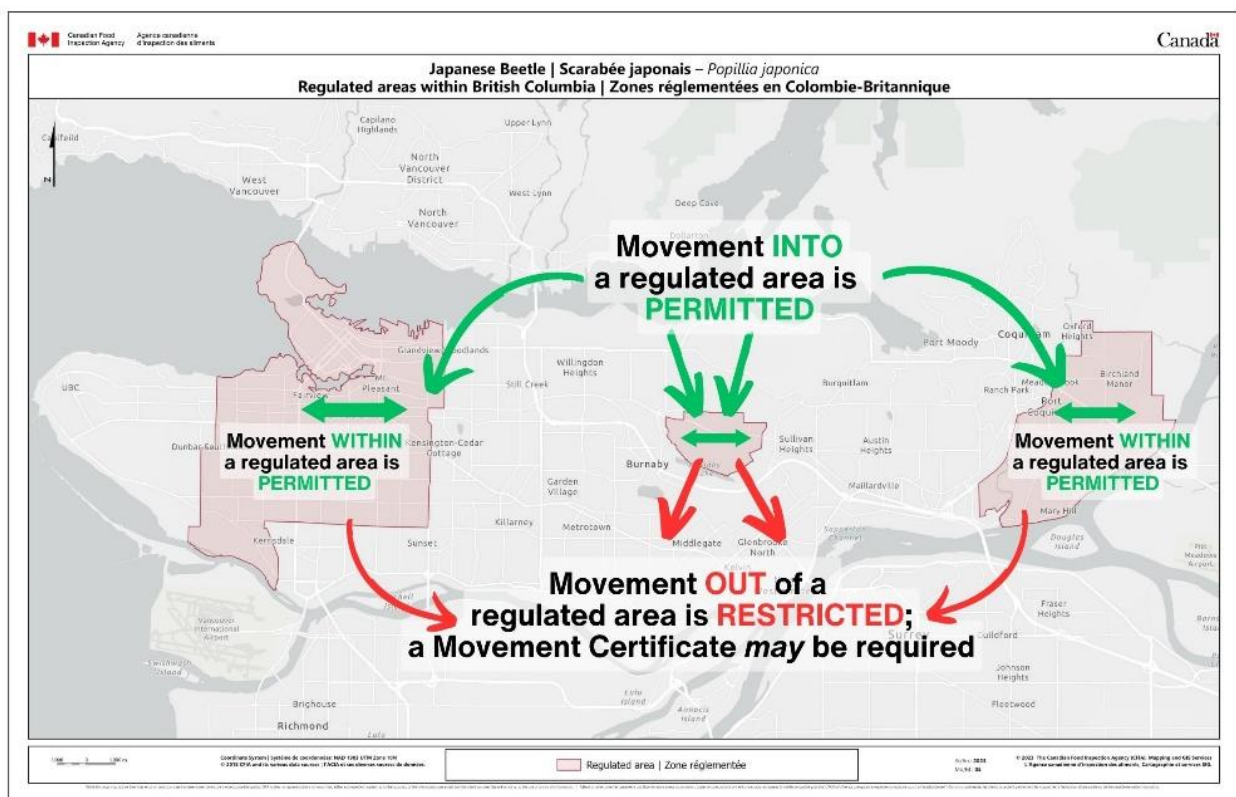
August 9, 2023

The [Japanese beetle \(*Popillia japonica*\)](#), an insect native to Japan, was introduced to eastern North America in 1916. It has since become an invasive, regulated pest in Canada due to its aggressive feeding habits that impact agriculture and horticulture. The adult beetle feeds on the above-ground plant parts of over [300 species of plants](#), including roses, fruits, and vegetables, while the larvae feed heavily on the roots of turf and grasses. The beetle was first detected in Vancouver's False Creek area in July 2017. A collaborative partnership to prevent its establishment, impacts and spread was formed between multiple agencies, including the Canadian Food Inspection Agency (CFIA), the BC Ministry of Agriculture and Food, the City of Vancouver, the City of Burnaby, the City of Port Coquitlam, the BC Landscape and Nursery Association and the Invasive Species Council of BC (ISCBC).



Adult Japanese beetle (*Popillia japonica*) – Key identifying feature are the six white tufts of hair noticeable along the abdomen (D. Holden, CFIA).

As part of the collaborative response to the initial detection of the Japanese beetle in Vancouver, a regulated area (RA) was established, [restricting the seasonal movement of soil, plants, and plant parts](#). Revised regulated areas were enacted in May 2023, including the City of Burnaby, Port Coquitlam, and an extension to the RA in Vancouver. Along with the revised RA, there are also changes to the material that is restricted from leaving an RA for 2023. Restrictions now apply year-round to the movement of outdoor plants with soil or soil-related matter attached only. The movement of plants and plant parts that are free of soil (e.g., pruning waste, grass clippings, leaves, weeds, or spent flowers), soil without plant parts, and house plants that have been grown indoors are no longer restricted from moving out of the RA. It is important for the public and industry not to move [regulated articles](#) outside of an RA, however, if the [movement of regulated articles](#) is necessary, a movement certificate may be required. The CFIA has created a new [interactive map](#) where anyone can search their postal code to identify whether they are in a Japanese beetle RA.



See the CFIA Webpage to save a [full-size RA map](#).

Adult beetles begin to emerge when temperatures are consistently over 21°C. Although moving vegetables, fruit, plants, and plant parts free of soil are not restricted, there are some best practices for gardeners to avoid accidental spread.

- » Adult beetles are excellent hitchhikers, and they can secure themselves in flowers or even corn husks. “Shake it before you take it!” Be sure to wash, shake and inspect any harvested produce or plants to help dislodge hidden beetles before

removing goods offsite between the beetle flight period from June 15th and October 15th each year.

- » When considering the disposal of regulated articles, leave plants with soil attached on-site or use a municipal green bin if possible.
- » Consider checking your clothing, picnic blanket, or any gardening tools before moving them for any beetles trying to catch a ride.
- » If you see any of the lace-like feeding damage on foliage or suspect adult Japanese beetles, capture them, take high-resolution photographs, and email them to the CFIA along with your location and contact information (BCPF.Japanese.Beetle@inspection.gc.ca). You can also report suspect beetles using the Report Invasives App, available on iPhone and Android.



Lace-like feeding damage to foliage created by high numbers of adult beetles (ISCBC).

If landscapers or residents need to move regulated articles out of an RA, they are required to get a [movement certificate](#) from the CFIA. Once a movement certificate is issued, regulated articles can be disposed of at the [Vancouver South Transfer Station](#), the [Vancouver Landfill](#), and the [Burnaby Eco-Centre](#). Ensure that you follow the guidelines for each transfer station, as they have specific guidelines to process regulated articles. When moving regulated articles out of an

RA, ensure that the load is secured with a tarp while being transported to an approved disposal site and travels directly from the RA to the disposal site. If you are unsure whether you need a Movement Certificate, contact the CFIA by phone at 604-292-5742 or by email at BCPF.Japanese.Beetle@inspection.gc.ca.

The treatment of turf grass on public and private property within the treatment zones occurred during the spring. The BC Ministry of Agriculture and Food coordinates treatment plans with the City of Vancouver, Burnaby, Port Coquitlam, CFIA, landscapers, and other partners based on the identified priority areas. Private property owners would have received a notice from your municipality about treatment by licensed applicators if you were in a treatment zone in 2023. The product used to treat this pest, Acelepyrn® (chlorantraniliprole), is a reduced-risk larvicide approved by Health Canada. It is only applied manually by ground application once a year, where the *P. japonica* larvae contact or ingest the chemical while they are feeding on the roots. Acelepyrn was selected due to its low toxicity, favourable environmental profile, and specificity. The larvicide controls only root-eating grubs and does not impact people, pets, mammals, birds, bees, butterflies, other plants, animals, or any mammals or birds that eat the treated grubs.

This year surveillance efforts have increased in the Lower Mainland with close to 6,000 traps to check regularly for the presence of Japanese beetle. The CFIA's 2022 trap [surveillance](#) recorded an increase in detections, with 201 beetles found in 68 traps compared to 79 beetles found in 45 traps in 2021. This increase was partly due to significantly more traps being set, as well as the new populations of Japanese beetles found in Port Coquitlam and Burnaby, which led to the revised RAs. These new populations highlight the need for more awareness within our communities to reduce the spread of the Japanese beetle to new areas. While there was an overall increase in 2022, the Vancouver population had decreased from 73 beetles found in 2021 to 39 beetles in 2022, indicating that the treatments in the municipality are working. The final survey results for 2023 will be available in the fall after all traps are collected.

For more Japanese beetle information and to find links to program partners, please visit the ISCBC [website](#) and stay updated with the latest Japanese beetle information by signing up for the Japanese beetle e-newsletter. Be sure to read the [Japanese Beetle Look-Alikes Factsheet](#) to learn more about this pest and look-alike species that are commonly reported. ISCBC's updated factsheets for both Yard Waste and Community Gardens are soon to be uploaded on our website.

If you have any questions, please do not hesitate to reach out to Diane Watson, ISCBC Special Projects Coordinator, at dwatson@bcinvasives.ca.