

Japanese Beetle in Idaho

The Japanese beetle (*Popillia japonica*) is a highly destructive plant pest that can be difficult and expensive to control. Feeding on grass roots, JB grubs, the immature stage of the insect, damage lawns, golf courses and pastures. JB adults consume the foliage, flowers, and fruits of more than 300 different ornamental and agricultural plants.



First found in the United States in 1916 in a New Jersey nursery, JB most likely entered the country earlier in a shipment of iris bulbs from Japan, before inspections of commodities entering the country began.

Since then JB has spread throughout most states east of the Mississippi River. Partial infestations also occur in states such as Arkansas, Iowa, Kansas, Minnesota, Missouri and Oklahoma. Usually infestations in western states are eradicated before the insect becomes established.

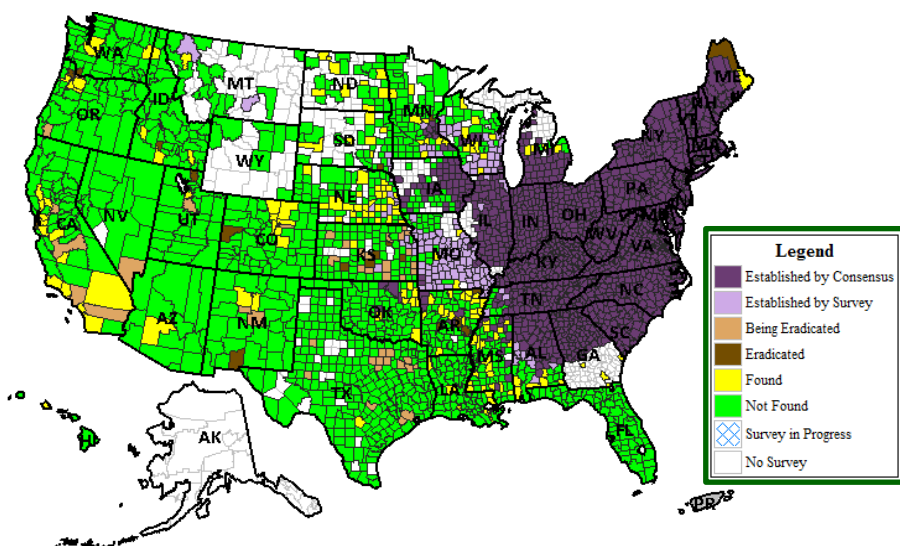
History in Idaho

In 1990 the Idaho State Department of Agriculture (ISDA) began monitoring for JB. Each year 200-300 traps have been routinely set out at high risk sites like nurseries and airports. On rare occasions (1992, 1997 and 2011) ISDA trapped single specimens at nurseries, most likely hitchhikers on nursery stock from other states. Locations of beetle capture were treated with pesticide and JB never established in Idaho.

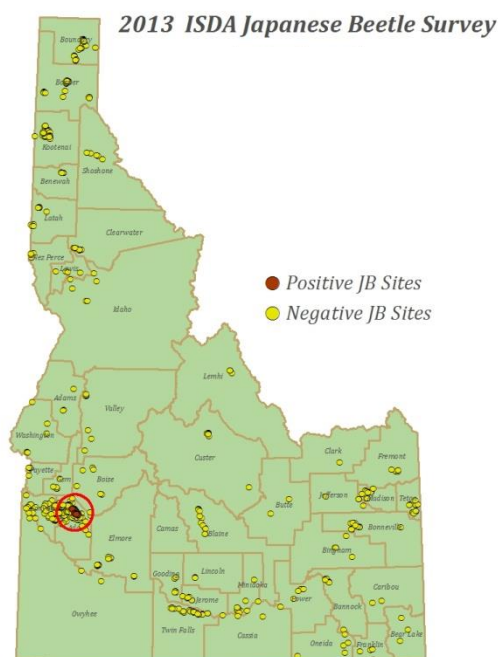
During summer 2012 ISDA collected a total of 61 Japanese beetles: 4 near a nursery in Kootenai County, 1 near a nursery in Bannock County, and 56 in Boise in Ada County. Most in Boise were from a residential area on the city's east side. Pesticide treatment was undertaken at the 3 sites.

In 2013, with the number of traps increased statewide to 1,553, beetles were collected nowhere except in east Boise, however, numbers there increased to 2,999 individuals. At this time 95 residential properties and 11 city parks were treated with insecticides to control grubs and adults.

A program to eradicate JB in Idaho has been instituted with increased numbers of traps and an expanded area of pesticide treatment planned for 2014. A similar program in Utah recently met with success.



Survey Status of Japanese Beetle (all years)
(USDA Pest Tracker - <http://pest.ceris.purdue.edu/>)



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Identifying Japanese beetles



Clemson U, USDA,
Bugwood.org
Life sized
adult beetle

Adult Japanese beetles are about $\frac{1}{2}$ inch long with **metallic green bodies** and **coppery wing covers** that do not quite cover the tip of the abdomen. They have **5 distinctive tufts of small white hairs** lining each side of the abdomen. The **antennae** are clubbed at the end and spread to a fan-like form.



Illustration by Joel Floyd - USDA, APHIS, PPQ

Life cycle

Japanese beetles lay **eggs** in the soil in June, which hatch into tiny white **grubs**. Grubs remain underground for about 10 months, where they feed and overwinter. They emerge from the soil as **adult beetles** and begin feeding in June.

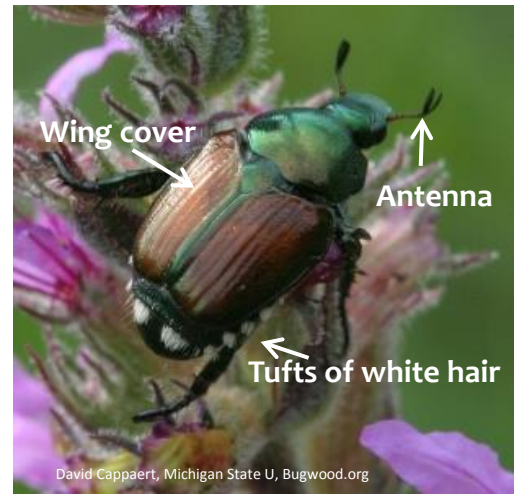
Damage



Skeletonized linden leaf



Adults feeding on a rose



David Cappaert, Michigan State U, Bugwood.org

The larval or grub stage of the Japanese beetle is "C" shaped and lives in the **soil**. Its primary food source is roots of grasses.



David Cappaert, Michigan State U, Bugwood.org

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Japanese beetles often attack plants in groups, which can lead to severe damage. Leaves appear "skeletonized", with only veins remaining after attack. This pattern is typical of damage by Japanese beetle.

More information

For information on **management** of Japanese beetle from USDA, visit:

http://www.aphis.usda.gov/publications/plant_health/content/printable_version/JB3-07.indd.pdf

For information on Japanese beetle in Idaho, contact the **Idaho State Department of Agriculture, Division of Plant Industries:**

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