Help Protect Idaho from Japanese Beetle

History in Idaho

In 1990 the Idaho State Department of Agriculture (ISDA) began monitoring the state for Japanese beetles (JB). Each year 200-300 traps have been routinely set out at high-risk sites like plant 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 captures were treated with pesticide and JB never established in Idaho.

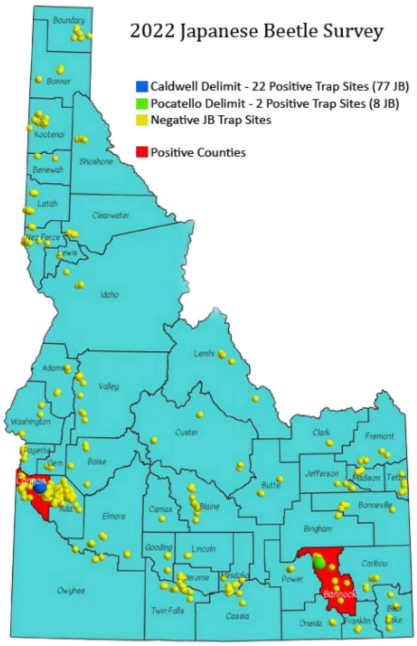
2012-2018 Eradication (Boise)

In 2012, ISDA collected a total of 61 JB in Idaho counties including Kootenai, Bannock and Ada. Follow-up delimit trapping in 2013, determined no JB in Kootenai or Bannock counties, however 3,058 JB were captured in Boise. From 2013 to 2018, ISDA conducted JB eradication protocol in Boise; granular pesticide applications in May and July on turf in locations where JB traps captured adults during the previous summer.

Sixteen parks and more than 3,000 residential and commercial properties were treated throughout the 6 years of ISDA's eradication efforts in Boise. The project was successful because of the cooperation of the property owners in the affected areas. The last year that any JB were trapped in Boise was 2018, when a total of 4 beetles were found with 1,000 delimit traps. The Boise eradication plan is the largest, successful eradication of JB ever documented in the United States. ISDA plans to implement a similar plan for the new detection in Caldwell.

2018-2022 Eradication in Progress (Pocatello)

In 2018 one JB was captured in a Pocatello park, and the following trap numbers in the city significantly increased. JB captures in Pocatello climbed from 1 (2018), 4 (2019), 7 (2020) and then 11 (2021). Even though JB numbers trapped in Pocatello remained low, they were consistently increasing. Two parks where most of the beetles were captured were targeted for treatment following the protocol that was successful for JB eradication in Boise. After treatment of those parks, only 8 JB were trapped in 2022. Treatment plans will continue in 2023.



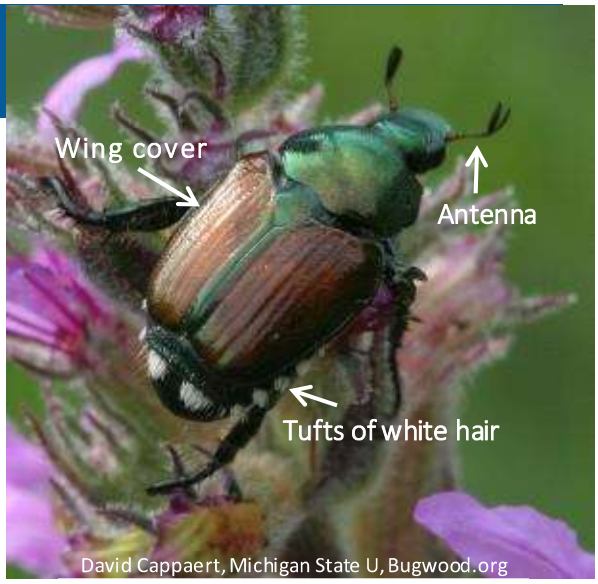
New Detection (Caldwell)

During 2021, one detection trap in a cemetery in Caldwell, collected the first JB specimen ever found in Canyon County. During the 2022 field season, 49 delimit traps were initially set up in Caldwell, centered around the cemetery harboring the 2021 catch. When JB were found in traps south of the cemetery 33 additional traps were added to expand the survey area. Between July and September, 77 JB were collected in the traps, defining an established infestation that appears to be centered in a residential area bordered by Lincoln Rd (N), Franklin Rd (S), I-84 (W) and Smeed Pkwy (E).

Pesticide treatment of 1,065 properties and 310 acres of treatable turf is planned for Caldwell in 2023. ISDA will obtain formal consent to treat JB infested areas from residents, businesses, agencies, or organizations before treatment takes place.

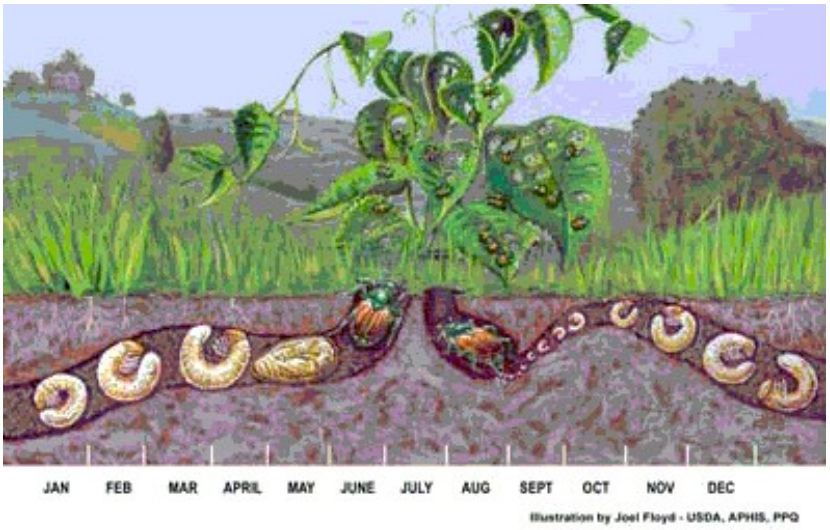
Please help ISDA preserve Idaho's agriculture industry, lands and private property. Visit agri.idaho.gov to find out if your property is in the JB infested area and what you can do to help.

Identifying Japanese Beetles



Adult JB are about ½ 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.

Life Cycle



JB lay **eggs** in the soil in July, which hatch into tiny white **grubs**.Grubs remain underground for about 10 months, where they feed and overwinter. They emerge from the soil as **adults** in June to begin the cycle again.

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

Damage

Skeletonized linden leaf

Adults feeding on a rose

JB often attack plants in groups, which can lead to severe damage. When suitable food is found beetles emit an aggregation pheromone which attracts others to feed with them. Damaged leaves appear “skeletonized”, with only veins left behind. This pattern is typical of feeding by Japanese beetle.

Resources

USDA APHIS Japanese Beetle

- JB Management Handbook
- JB Identification Resources

ISDA - Plant Industries Division:

- (208) 332-8620 – jb@isda.Idaho.gov
- agri.Idaho.gov/main/plants/jb