



## Japanese Beetles Munching Through Area Landscapes and Fields

A relatively new plant feeding beetle to our area is the Japanese Beetle. This stout, metallic green beetle with bronze wing covers and white tufts on its sides and rear, can be extremely damaging to a wide array of plants. It is still spreading northward in our area, but is definitely found throughout the southern half of Oconto County, the southern quarter of Marinette County, and far southern Menominee County.

It may be easier to list the plants this beetle does not feed on during its 6-8 week long adult life. However, there are some plants which are known to be high on its list of menu options. Many fruits are on the list, but most notably apple, grape, and raspberry. Vegetable gardens are a bit safer, but they will feed on basil, beans, and some other species. Field crops are also afflicted, most notably soybean and the silks of corn cobs (field and sweet).

Landscapes are where they do the most damage, feeding on dozens of different trees and shrubs commonly found in our area. The linden family of trees is a big time target, but the list includes crabapple, birch, Norway & Japanese maple, American elm, mountain ash, and others. They target roses and a long list of flowering shrubs, as well as some herbaceous ornamentals.

In the areas in which it is established, it can be a very serious pest of the plants listed above. The feeding pattern usually employed by these beetles is to eat in groups and start in the upper canopy of the tree or shrub. The leaves are not completely eaten, but the leaf material between veins is eaten and the remaining skeleton of a leaf nearly always turns brown and dies. This causes a brown pallor to work down from the top of the tree, sometimes encompassing the entire plant.

Biology: The adult beetle is somewhat pretty, until you know what it does. It is about 1/2 inch long, with black legs that often obviously protrude from the body. They overwinter as grubs in the soil, feeding for a while in the spring and then pupating and emerging from early to mid-late July, depending on the year's temperatures. Unlike native relatives, Japanese Beetle will lay eggs in managed lawns and they like decent soil quality. The grubs can cause extensive damage to turf root systems, or any roots in the area where eggs were laid.

Control: Japanese Beetles are likely to become an annual phenomenon in many areas of our region. They will be more likely to have high populations where soil is not sandy, but they may be able to have some survival nearly anywhere. Planning to manage them is advisable.

Grub control in lawn areas can assist in managing adult populations. The larger your lawn, the more likely you will notice a difference in populations due to successful treatment. Two control timing options are available: mid-August and May-July. Mid-August treatments should utilize carbaryl, trichlorfon, or clothianidin containing insecticides. The May-July treatment window includes imidacloprid, clothianidin, thiamethoxam, or chlorantranilipole active ingredients.

Adult beetle control can be difficult due to their feeding habits in the tops of trees/shrubs. A number of active ingredients are valid options, but spraying them properly and safely where the beetles are feeding can be the difficulty. Active ingredients to consider include acephate, carbaryl, cyfluthrin, disulfoton, and esfenvalerate.

Another management option for some types of plants is to use a chemical/physical barrier. Surround (kaolin clay) can be sprayed onto plants and this acts as a barrier to feeding. To the beetles, it is like us having to eat really sandy spinach, so they go elsewhere for better eating. This works pretty well on fruit crops, but is akin to white-washing, so many people don't like this option on ornamentals. In addition, it needs to be reapplied after a rain event. Surround is tricky to apply, as it is a powder that you need to keep in suspension while you are spraying it, but it can work very well.

Make sure that you read and follow the label directions carefully, If you decide to use any type of insecticide. First, make sure that Japanese Beetles will be controlled by the product. Second, make sure that the product is labeled for use on the plants which you want to spray. Third, make sure you follow all mixing, safety, and storage instructions. Also, remember that insecticide applications onto blooming plants are likely to kill pollinator insects. You can attempt to minimize this very negative effect by spraying in the late afternoon, as most pollinators are more active earlier in the day. The insecticide will hopefully form a repellent to them by the next day and minimize their exposure.

You can learn more about these beetles by reading the publication found at:

<https://cdn.shopify.com/s/files/1/0145/8808/4272/files/A3737-E.pdf>

This is the listing of WI labeled fruit insecticides:

[https://pddc.wisc.edu/wp-content/blogs.dir/39/files/Fact\\_Sheets/FC\\_PDF/Home\\_Fruit\\_Insecticides.pdf](https://pddc.wisc.edu/wp-content/blogs.dir/39/files/Fact_Sheets/FC_PDF/Home_Fruit_Insecticides.pdf)

Look at the brambles section, not the apples, for the full listing of Japanese Beetle recommendations.

This publication is a listing of active ingredients for use on landscape plants:

[https://pddc.wisc.edu/wp-content/blogs.dir/39/files/Fact\\_Sheets/FC\\_PDF/Home\\_Landscape\\_Insecticides.pdf](https://pddc.wisc.edu/wp-content/blogs.dir/39/files/Fact_Sheets/FC_PDF/Home_Landscape_Insecticides.pdf)

You can also contact Scott Reuss, Marinette County Agriculture & Horticulture Agent, at 715-732-7510 or e-mail to [scott.reuss@wisc.edu](mailto:scott.reuss@wisc.edu) to get more information on this beetle or if you have any other horticultural or agricultural questions.