

# Audubon at Home in Northern Virginia kkk"U Xi Vobj Ucf[



First Sighting – Date: Location: Location:



Great Spangled Fritillary, on Butterflyweed

photos by K. Munroe

#### What Fritillaries Need

**Food:** All local fritillary larvae eat the new shoots of <u>violets</u> as their host plant. Fortunately for us, violets are common, as long as we leave space for them in our yards. Adult fritillaries nectar on many plants. They will also obtain nourishment from rotting fruit and dung.

Breeding: The Great Spangled Fritillary has one brood per year. Females lay single eggs on plants near the host plant in the late summer. The young hatch, crawl to the violet plant and over-winter in the leaf litter without eating. The following spring they eat the fresh violet shoots. Caterpillars are black, with orange and black branched spines. Their chrysalis is dappled brown. Adults fly from late May to early Sept.

### Fritillaries (Genera Speyeria, Boloria and Euptoita)

This group of rusty-orange and spotted butterflies depends on violets as food for their larvae. All species found in our area have black spots on the upper side of their wings and most have silver spots on the bottom side of their hind wings. They fly low to the ground and may stay for hours at a single nectar source. They are found in damp meadows, open woodlands and along streams. The most common, and 2<sup>nd</sup> largest, is the Great Spangled Fritillary (Speyeria cybele) - it's quite a sight as it floats along a moist meadow-edge with those glowing orange wings. The adult's favorite nectar plants are milkweed species. Meadow Fritillaries (Boloria bellona) and Variegated Fritillaries (Euptoieta claudia), smaller but equally beautiful, are also both seen in our area. Two species, the Regal Fritillary (Speyeria idalia) and the Silver-bordered Fritillary (Boloria selene), have mysteriously vanished from Northern Virginia since the 1970s, possibly due to habitat loss, pesticides and/or invasive exotics.

#### How You Can Help

- Avoid using pesticides in your yard, as broad-spectrum insecticides kill all insects including caterpillars and adult butterflies.
- Best nectar plants include thistle, cone-flower, joe-pye weed, ironweed, black-eyed susan, dogbane, milkweed, verbena, moutain laurel, bee balm, red clover, lantana, scarlet sage, and button-bush.
- Planting violets will allow Great Spangled Fritillaries to grow in your yard. Birds-foot Violets, a showy native species, likes to be planted under Black Oak trees. The Great Spangled Fritillary is known to lay her eggs on the stems of Birds-foot Violet leaves. Yellow Wood Violet is another showy species that naturalizes easily.
- Variegated Fritillary caterpillars also feed on violets, as well as <u>May Apples</u> and <u>Passionflower Vines</u>.



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Shelter: We do not know exactly where Fritillaries shelter. Your observations as a citizen scientist could help us learn more about their shelter preferences.

Other: No one knows for sure what caused the collapse of the local populations of Silver-spotted Fritillary and Regal Fritillary. One theory is that changing land-use patterns have destroyed the damp fields that held their larval and adult host plants. Newer pesticides that were introduced in the late 1960s and 1970s may also have played a part in their demise.

The Xerces Society, dedicated to invertebrate conservation, is backing a Butterfly Conservation Initiative, www.butterflyrecovery.org that maintains a website with everything from native plants to images of butterfly species and www.pollinator.org provides links to learning resources and protection campaigns.



Great Spangled Fritillary, on Swamp Milkweed K. Munroe

- While we do not know how Fritillaries shelter, many other butterflies roost in thick shrubs where they are protected from the wind. Planting some shrubs, such as Viburnums, shrubby dogwoods and Inkberry Holly on the north side of your yard to act as wind breaks will benefit many butterflies, and birds too. Eastern Red Cedar trees are also excellent wind breaks.
- Habitat loss is critical to the survival of many butterfly species. As patches of nectar plants become scarcer, the butterflies may not find adequate nourishment as they disperse from their larval growth site. Adequate dispersal ensures that the population remains healthy and able to survive if a severe event destroys a local population. Planting patches of nectarproducing flowers in your backyard will help the butterflies as they disperse.
- Supporting local parks that maintain native vegetation will also help maintain healthy populations of butterflies.

Variegated Fritillary: larva, pupa, adult





Jerry Payne



Johnny Dell

#### **Resources:**

Native plants—available at Debaggio Herbs, Nature by Design, Merrifield Garden Centers and other nurseries

#### Model Habitat and Observation Sites:

Huntley Meadows Park- www.fairfaxcounty.gov/parks/huntley/

Occoquan Bay National Wildlife Refuge - <a href="https://www.fws.gov/refuges/profiles/index.cfm?id=51611">www.fws.gov/refuges/profiles/index.cfm?id=51611</a>

Manassas Battlefield Park - www.nps.gov/mana/naturescience/index.htm and Meadowlark Gardens Regional Park

Visit audubonva.org for more information and other Fact Sheets