

Regal Fritillary (*Speyeria idalia*)

Pennsylvania Invertebrate Species of Concern

State Rank: S1 (critically imperiled) Global Rank: G3 (vulnerable)

Identification

Our only large, reddish-orange butterfly with forewings variously spotted and marked with black, and the upper surfaces of the hind wings greatly darkened (blue-black in the larger female) and marked by two rows of large spots. The sexes; the outer row white in the female, orange in the male.

Biology-Natural History

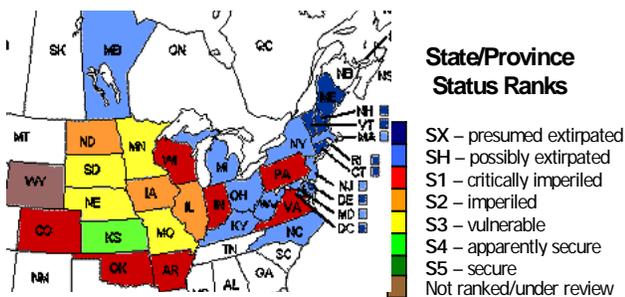
Adults may be found from late May to mid-October, but most males are active between mid-June and mid-July, and females between early July and mid-August. Flight each day is low and steady, after an early morning period of "sunbathing." Both sexes imbibe nectar from various milkweeds and thistles. Females deposit eggs primarily in late summer on various plants as they walk through vegetation close to the ground. Eggs hatch in the fall, and the young larvae (caterpillars) over winter. Growth is rapid during the following spring and early summer as the larvae feed at night, only on various violets. The mature larva is velvet black with yellowish or orange mottlings and six rows of barbed spines, which are silver with black tips along the back, and yellow-orange at the base along the sides. When mature, the larva pupates and completes its development to the adult stage within a chrysalis with a brown and yellow abdomen and pink-brown wing cases, both spotted with scattered dark brown patches.



Photo Credit: Clark Shiffer

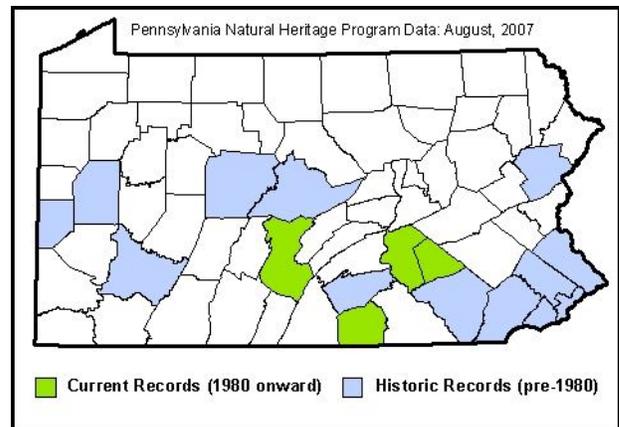
North American State/Province Conservation Status

Map by NatureServe (August 2007)



Habitat

The regal fritillary requires open damp meadows, old fields or pastures with marshy or boggy patches which also support the violets, milkweeds thistles and other nectar sources the animal requires.



Reasons for Concern

Further study is necessary before listing this ancient North American species as a federal endangered or threatened species. It no longer occurs in the Canadian Maritime provinces and most of New England. It occurs only in local colonies in its limited Appalachian, northern and mid-western range, largely because of the habitat destruction and/or disruption of critical stages of its life cycle.

Management Practices

Either formal or informal habitat protection agreements have been made with the owners of public and private properties supporting the few viable colonies remaining in Pennsylvania. Field surveys have been made to determine the status of historical and new sites, and to determine the nature of necessary changes in planned public use projects where regal fritillary habitat is involved.

References:

- NatureServe. 2007. NatureServe Explorer: An online encyclopedia of life [web application]. Version 6.2. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: August 21, 2007).



Pennsylvania Natural Heritage Program

Fact Sheet adapted from: Felbaum, Mitchell, et al. Endangered and Threatened Species of Pennsylvania. Harrisburg, PA: Wild Resource Conservation Fund, 1995.

