# GIANT SWALLOWTAIL (*Papilio cresphontes*)

***Pennsylvania Invertebrate Species of Concern***
**State Rank: S2 (imperiled) Global Rank: G5 (secure)**

## – Introduction –

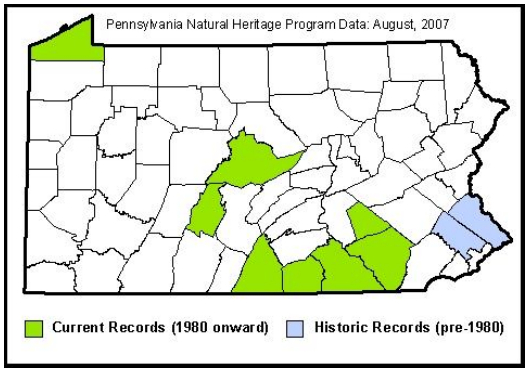
The Giant Swallowtail is a large (4-6.25" wingspan), black butterfly with a bright yellow cross-bar on its forewings. The undersides of the wings are primarily yellow. It is a strong and swift flier, feeding on the nectar of plants such as goldenrod and milkweed.


## – Life History –

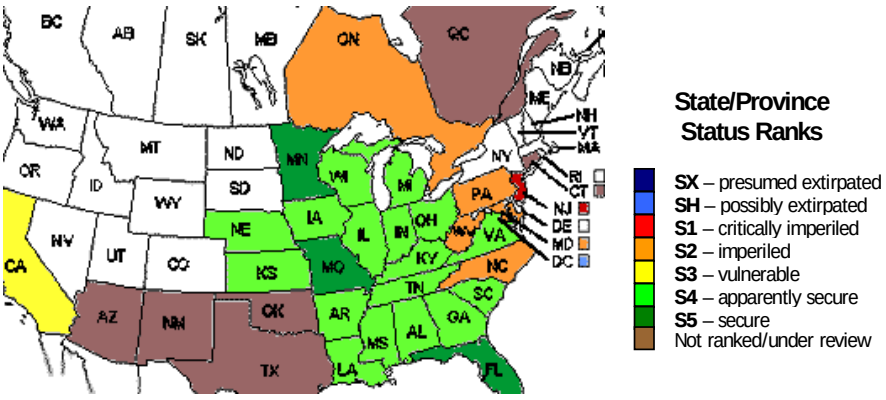
In Pennsylvania the Giant Swallowtail has two broods. The first adults of the season emerge from the chrysalis in which they overwintered and are observed during the first weeks of May. These adults mate, lay their eggs on prickly ash (*Xanthoxylum americanum*), then die. The eggs hatch and the larvae feed upon leaves of prickly ash. The larvae pupate and emerge as the second brood of adults in August. The larvae of the second brood feed on prickly ash into October, in order to grow large enough to pupate and overwinter in their chrysalis. The larvae are called "orange dogs", and have a unique coloration of white blotches on a black background that make them resemble bird droppings. The larvae are also equipped with a chemical defense. They have a rancid smelling gland called the osmeterium tucked into the back of the head used to deter small predators. When threatened, they rapidly extrude this rancid smelling gland that looks like a bright orange-red Y.

## – Current Status –

This species is reaching the northern extent of its range in PA. While its populations are secure range-wide, it is considered imperiled in the state due to its rarity. BT residue has been shown to be very lethal to this species. Currently there are eight known extant populations in the state, primarily located in the southeast corner of Pennsylvania.




**North American State/Province Conservation Status**
Map by NatureServe (2007)




## – Management and Protection –

The larval host plant, prickly ash, is typically found along trails in the woods and in clearings. Existing populations of prickly ash should be mapped and protected. Prickly ash can be planted to provide additional host plants for larvae. Old fields with abundant nectar sources can be maintained to provide food for adults.

Pennsylvania Natural Heritage Program

**Reference:**


- NatureServe. 2007. NatureServe Explorer: An online encyclopedia of life [web application]. Version 6.2. NatureServe, Arlington, Virginia. Available http://www.natureserve.org/explorer. (Accessed: September 6, 2007).