## Pennsylvania 5, Iowa 4: Caterpillar Report

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Happy Valley is not as happy as it used to be. But maybe the news I report here will help Penn State people perk up a bit (well, o.k., a tiny bit). My younger sister (I throw her that sop to make up for needling her on every birthday about becoming an old geezer) proudly reported that the milkweeds she planted in her backyard had not only attracted a few Monarchs, they were now harboring four Monarch larvae (caterpillars).

This seemed to be consistent with other reports of substantial Monarch numbers in the Midwest (<u>A Magical Moment</u>). Given the recent paucity of Monarchs in Pennsylvania, I became suspicious that the Monarchs' DNA is specific to a path from Mexico to Canada and back, e.g., via the Midwest or via Eastern states. If milkweeds have become particularly sparse in Eastern states, that might explain the near disappearance of Monarchs in Pennsylvania. In turn that fueled my speculation that the East coast Monarchs may have passed a point of no return, because their numbers did not provide sufficient male-female encounters. And that led to the suggestion that future Monarch sightings might depend on the Flamingo solution (<u>Butterflies and Flamingos</u>).

That torturous tortuous logic may be unnecessary. This summer we have seen several more Monarchs than in the last two years. Unlike last year, at least one female produced fertile eggs. Of our several milkweed patches, the one next to the butterfly bush has five caterpillars (Fig. 1). While not as impressive as the 25-30 produced by the legendary broken-wing female (Quest of a Broken-Wing Butterfly), the increased Monarch sightings suggest the possibility that the number of Monarchs reaching Mexico this (2015-16) winter could rise well above the 2013-14 minimum.

As discussed in a letter to my granddaughter (<u>Quest of a Broken-Wing Butterfly</u>), I like the vision of biologist Ed Wilson, who suggests that our present extreme abuse of the planet is temporary, causing a bottleneck this century for species. Most species may be able to pass through the bottleneck, if we take the actions to stabilize climate and do a better job of sharing the planet with the other life. And sharing the planet is necessary for our own good, as well as theirs.



Fig. 1. One of five (they all look the same) Pennsylvania Monarch larvae on a common milkweed.



Fig. 2. There are about 50 million Monarchs per hectare as they cluster together to hibernate, so the estimated population in the 2014-15 winter was 55-60 million.