

**Common Name:** Tomah mayfly  
**Scientific Name:** *Siphonisca aerodromia*  
**Taxon:** Mayflies

**SGCN – High Priority**

**Federal Status:** Not Listed  
**New York Status:** Endangered

**Natural Heritage Program Rank:**  
 Global: G2G3  
 New York: S1  
 Tracked: Yes

**Synopsis:**

The Tomah mayfly (*Siphonisca aerodromia*) is currently listed as Endangered in New York and is known to occur only in New York and in northern Maine. It was first collected in 1907 along the Sacandaga River; that population was subsequently lost when the Sacandaga Reservoir was constructed in the 1930s. Still without a common name, this mayfly was not reported in the United States again until 1978 when it was found in Tomah Stream in northern Maine. Several new occurrences of this species have been documented in Maine since then, and in New York since 1995.

Surveys of the Black River indicate that this species is locally abundant where suitable habitat exists on lower reaches of the river in Lewis and Jefferson counties. Surveys of the Sacandaga River were unsuccessful in locating any remnant populations of Tomah mayfly. Potential habitats were located on the East Branch of the Sacandaga River; however surveys of these habitats were likely too late in the season to encounter this species (Myers et al. 2010).

This species has also been reported historically from several locations in Quebec, Newfoundland, Labrador, and Nova Scotia (Needham 1908, Magnin and Harper 1970, Fiance 1978, Hutchinson 1989, Burian and Gibbs 1988, Burian and Gibbs 1991, Jacobus and McCafferty 2001). McCafferty and Edmunds (1997) suggest that this species is not as rare as others have suggested, and that there are many other species of mayflies that are known from fewer locales.

Distribution (% of NY where species occurs)		Abundance (within NY distribution)		NY Distribution Trend	NY Abundance Trend
0% to 5%	X	Abundant		Unknown	Unknown
6% to 10%		Common			
11% to 25%		Fairly common			
26% to 50%		Uncommon	X		
> 50%		Rare			

**Habitat Discussion:**

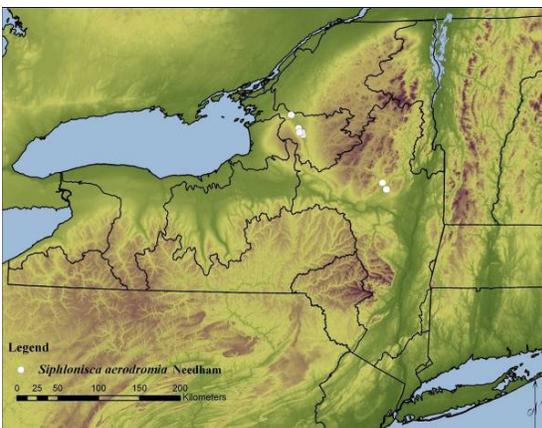
In Maine the Tomah mayfly inhabits small rivers and streams bordered by extensive areas of seasonally flooded sedge meadow. This is a dynamic habitat, characterized by a short period of flooding from snow and ice melt during April-May, followed by receding water from the floodplain during summer months. Standing water often remains until May or June as pools, channels, or isolated ponds. Tussock sedge and rushes are typically the dominant vegetation in these habitats. The inundated, decomposing sedge provides shelter, bottom surface, and abundant food for an unusually diverse and abundant aquatic invertebrate community (Maine Dept. of Inland Fisheries and Wildlife).

In New York this species has been reported from similar floodplain habitats on the Black River on the flanks of the Adirondack Mountains and the Tug Hill Plateau. This particular river is much larger in size than streams inhabited by *S. aerodromia* in Maine. This area receives some of the highest snowfall totals in the state and despite a number of flood control structures, is still prone to annual spring flooding (Carter 1980).

Primary Habitat Type
Riparian
Wet Meadow/Shrub Marsh

**Distribution:**

There is one location in Jefferson County and ten locations in Lewis County.



Myers et al. (2010)

Threats to NY Populations				
Threat Category	Threat	Scope	Severity	Irreversibility
1. Natural System Modifications	Dams & Water Management/Use (altered hydrology)	R	M	H
2. Pollution	Agricultural & Forestry Effluents (nutrient runoff, pesticides)	W	H	H
3. Pollution	Industrial & Military Effluents (heavy metals)	W	H	H
4. Pollution	Excess Energy (artificial light)	W	H	V
5. Climate Change & Severe Weather	Temperature Extremes	P	H	V
6. Invasive & Other Problematic Species & Genes	Invasive Non-Native/Alien Species (Didymo)	R	M	H
7. Transportation & Service Corridors	Roads & Railroads (road maintenance)	W	L	H
8. Climate Change & Severe Weather	Droughts (reduced water run in floodplains)	W	H	H
9. Pollution	Household Sewage & Urban Waste Water (salt application)	W	L	H

**References Cited:**

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[http://www.maine.gov/ifw/wildlife/species/endangered\\_species/tomah\\_mayfly/index.htm](http://www.maine.gov/ifw/wildlife/species/endangered_species/tomah_mayfly/index.htm)

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