
Common Name: A mayfly *SGCN*
Scientific Name: *Ameletus tarteri*
Taxon: Mayflies

Federal Status: Not Listed **Natural Heritage Program Rank:**
New York Status: Not Listed Global: G2G4
New York: Not Ranked
Tracked: No

Synopsis:

Ameletus tarteri is a mayfly of which little is known in New York. Outside of New York, this uncommon species has been reported from West Virginia and Virginia (Burrows 1987). In New York it has only been found at a single location in the Susquehanna watershed in Chemung County. Burrows (1987) reported this species from rocky first- and second-order streams (Burrows 1987). The recent surveys done by Myers et al. (2010) of the Upper Hudson, Lake Champlain, and NE Lake Ontario watersheds provided a wealth of new information on mayflies, but surveys should be done throughout the rest of the state to get a more complete understanding of abundance and distribution.

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			

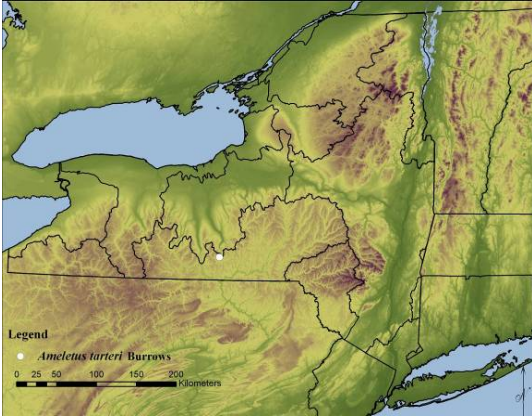
Habitat Discussion:

The habitat preference of *A. tarteri* is vertical rock surfaces, perhaps even slanted beyond the perpendicular for the mature nymphs, while flat rock surfaces in shallow eddies were preferred by the younger nymphs. Nymphs have been found to have a preference for high elevation streams and have been found at elevations >3000 feet (Matthews and Tarter 1989).

Primary Habitat Type
Headwater/Creek
Lake
Riparian

Distribution:

There is one historical record of occurrence at McCorn Creek, Chemung County on April 7, 1976 (Burrows 1987). There are no current records of this species in New York.



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 (salt & road maintenance)	W	L	H

References Cited:

Burrows, W. L. 1987. A new species of *Ameletus* (Ephemeroptera: Siphonuridae) from eastern North America. *Proceedings of the Entomological Society of Washington* 89: 284-287.

Matthews, K.A. and D.C. Tarter. 1989. Ecological life history, including laboratory investigation, of the mayfly, *Ameletus tarteri*. Psych 96:21-38.

Myers L.W., T.B. Mihuc and B.C. Kondratieff. 2010. Mayflies (Ephemeroptera), Stoneflies (Plecoptera), and Caddisflies (Trichoptera) of the Upper Hudson, Lake Champlain, and Northeastern Lake Ontario Watersheds: A baseline inventory with management considerations for SGCN and other rare and possibly imperiled species. Final Report to the New York State Department of Environmental Conservation.

Common Name: A mayfly *SGCN*
Scientific Name: *Dannella provonshai*
Taxon: Mayflies

Federal Status: Not Listed **Natural Heritage Program Rank:**
New York Status: Not Listed Global: G3G4
New York: SNR
Tracked: Yes

Synopsis:

Dannella provonshai is a species of mayfly of which little is known in New York. It is known from one location (in 1923) in the SE Lake Ontario watershed (Cayuga County); there are no recent records. Outside of New York, this uncommon species has been found in Alabama, Arkansas, Kentucky, and Tennessee (McCafferty 1977, Randolph and McCafferty 1998, McCafferty and Webb 2006, Parker et al. 2007). This species is rare in New York but not likely extirpated (L. Myers, personal communication).

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			
> 50%		Rare	X		

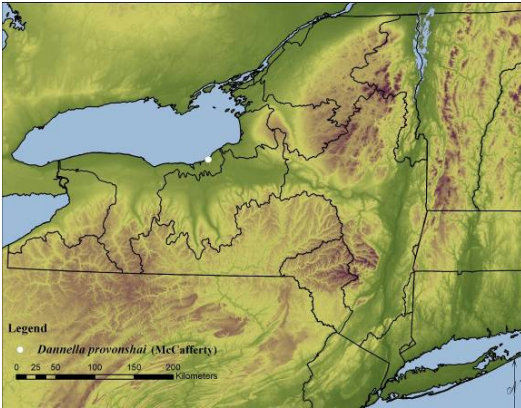
Habitat Discussion:

Merritt et al. (2008) report the habitat of this genus as depositional areas of streams and rivers, but specific requirements are not well understood (Myers et al. 2010).

Primary Habitat Type
Headwater/Creek
Lake
Riparian

Distribution:

There is one record from Cayuga County in 1923. There are no current records.



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

References Cited:

McCafferty, W. P. 1977. Biosystematics of *Dannella* and related subgenera of *Ephemerella* (Ephemeroptera: Ephemerellidae). *Annals of the American Entomological Society* 70: 881-889.

McCafferty, W.P. and J.M. Webb. 2006. Insecta, Ephemeroptera: range extensions and new Alabama state records. *Check List*, 2(1): 6-7.

Merritt, R. W., K. W. Cummins, and M. B. Berg (Editors). 2008. *An Introduction to the Aquatic Insects of North America*, Fourth Edition. Kendall Hunt Publishing Company, Dubuque, Iowa. 1158 pp.

Myers L.W., T.B. Mihuc and B.C. Kondratieff. 2010. Mayflies (Ephemeroptera), Stoneflies (Plecoptera), and Caddisflies (Trichoptera) of the Upper Hudson, Lake Champlain, and Northeastern Lake Ontario Watersheds: A baseline inventory with management considerations for SGCN and other rare and possibly imperiled species. Final Report to the New York State Department of Environmental Conservation.

Parker, C. R., O. S. Flint Jr., L. M. Jacobus, B. C. Kondratieff and J. C. Morse. 2007. Ephemeroptera, Plecoptera, Megaloptera, and Trichoptera of Great Smoky Mountain National Park. *Southeastern Naturalist* Special Issue 1: 159-174.

Randolph, R. P. and W. P. McCafferty. 1998. Diversity and distribution of the mayflies (Ephemeroptera) of Illinois, Indiana, Kentucky, Michigan, Ohio, and Wisconsin. *Ohio Biological Survey Bulletin*, New Series 13: 1-188.

Common Name: A mayfly *SGCN*
Scientific Name: *Epeorus punctatus*
Taxon: Mayflies

Federal Status: Not Listed **Natural Heritage Program Rank:**
New York Status: Not Listed Global: G2G3
New York: SNR
Tracked: Yes

Synopsis:

Epeorus punctatus is a mayfly of which little is known in New York State. This infrequently collected species has been reported previously in Arkansas, Ohio, West Virginia, New York, Quebec, and Ontario (McDunnough 1925, Walley 1927, Traver 1935, Webb and McCafferty 2006, McCafferty 2009). There is only one occurrence documented in New York, from the Lake Erie watershed (Buffalo, Erie County) (Traver 1935). Suitable habitat for this species has likely been eliminated in the Buffalo metropolitan area (Myers et al. 2010). This species is rare but is likely not extirpated in New York (L. Myers, personal communication).

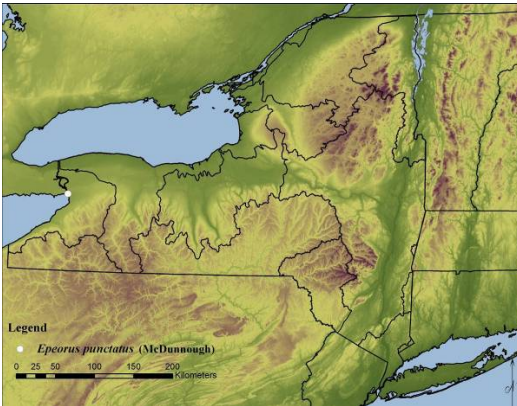
Distribution (% of NY where species occurs)		Abundance (within NY distribution)		NY Distribution Trend	NY Abundance Trend
0% to 5%	X	Abundant		Unknown	Unknown
6% to 10%		Common			
11% to 25%		Fairly common			
26% to 50%		Uncommon			
> 50%		Rare	X		

Habitat Discussion:

Specific habitat characteristics for this species are unknown.

Primary Habitat Type
Headwater/Creek
Lake
Riparian

Distribution:



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 (salt & road maintenance)	W	L	H

References Cited:

McDunnough, J. 1925. Ephemeroptera. pp. 104-106 In N. Criddle (editor). The entomological record, 1924. Annual Report of the Entomological Society of Ontario 55: 89-106.

McCafferty, W. P. 2009. New state and provincial records for 100 Ephemeroptera species. *Transactions of the American Entomological Society* 135: 353-368.

Myers L.W., T.B. Mihuc and B.C. Kondratieff. 2010. Mayflies (Ephemeroptera), Stoneflies (Plecoptera), and Caddisflies (Trichoptera) of the Upper Hudson, Lake Champlain, and Northeastern Lake Ontario Watersheds: A baseline inventory with management considerations for SGCN and other rare and possibly imperiled species. Final Report to the New York State Department of Environmental Conservation.

Traver, J. R. 1935. Part II: Systematic. pp. 237-739. In J. G. Needham, J. R. Traver, and Y. C. Hsu. *The biology of mayflies, with a systematic account of North American species*. Ithaca, Comstock Publishing.

Walley, G. S. 1927. Ephemeroptera, pp. 59-61 In N. Criddle (editor). *The entomological record, 1926*. Annual Report of the Entomological Society of Ontario 57: 47-62.

Webb, J. M. and W. P. McCafferty. 2006. Contribution to the taxonomy of eastern North American *Epeorus* Eaton (Ephemeroptera: Heptageniidae). *Zootaxa* 1128: 57-64.

Common Name: A mayfly *SGCN*
Scientific Name: *Epeorus suffusus*
Taxon: Mayflies

Federal Status: Not Listed **Natural Heritage Program Rank:**
New York Status: Not Listed Global: G1Q
New York: SNR
Tracked: Yes

Synopsis:

Epeorus suffusus is a mayfly of which little is known in New York. Outside of New York, this species has been found in Maine, Ontario, and Quebec. One historic occurrence in New York, in the Upper Hudson watershed (Hudson River at Corinth) from 1916, has likely become extirpated due to habitat degradation (Traver 1935, Jacobus and McCafferty 2001). A new occurrence of this species was recently found in the Lake Champlain watershed (Clinton Co.). Its habitat is described as medium to large swift rivers (Myers et al. 2010).

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			
> 50%		Rare	X		

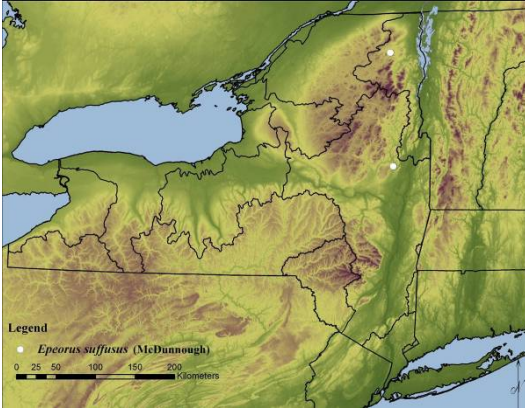
Habitat Discussion:

This species occurs in medium to large swift rivers (Myers et al. 2010).

Primary Habitat Type
Headwater/Creek
Lake
Riparian

Distribution:

There is one recent record in Clinton County (Myers et al. 2010) and one historic record from Saratoga/Warren County (Traver 1935).



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 (salt & road maintenance)	W	L	H

References Cited:

Myers L.W., T.B. Mihuc and B.C. Kondratieff. 2010. Mayflies (Ephemeroptera), Stoneflies (Plecoptera), and Caddisflies (Trichoptera) of the Upper Hudson, Lake Champlain, and Northeastern Lake Ontario Watersheds: A baseline inventory with management considerations for SGCN and other rare and possibly imperiled species. Final Report to the New York State Department of Environmental Conservation.

Traver, J. R. 1935. Part II: Systematic. pp. 237-739. In J. G. Needham, J. R. Traver, and Y. C. Hsu. The biology of mayflies, with a systematic account of North American species. Ithaca, Comstock Publishing.

Common Name: A mayfly *SGCN*
Scientific Name: *Siphonurus barbaroides*
Taxon: Mayflies

Federal Status: Not Listed **Natural Heritage Program Rank:**
New York Status: Not Listed Global: G3
New York: SNR
Tracked: Yes

Synopsis:

Siphonurus barbaroides is a species of mayfly about which little is known in New York. There is only one historical occurrence in New York, from the SE Lake Ontario watershed (Tompkins County) (Traver 1935), but it is not likely extirpated (L. Myers, personal communication. Outside of New York, this seldom-reported species occurs in Nova Scotia and New Brunswick (McDunnough 1929, Whiting 1992, Jacobus and McCafferty 2001).

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			
> 50%		Rare	X		

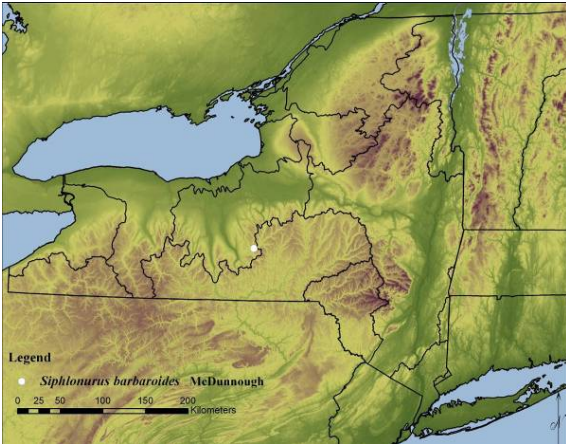
Habitat Discussion:

The habitat for this species is described as overflow areas and in-stream habitats (Myers et al. 2010).

Primary Habitat Type
Headwater/Creek
Lake
Riparian

Distribution:

There is one historical record from Tompkins County (Traver 1935); there are no recent records in New York.



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. Climate Change & Severe Weather	Droughts	W	H	H

References Cited:

Jacobus, L. M. and W. P. McCafferty. 2001. The mayfly fauna of New York State (Insecta: Ephemeroptera). Journal of the New York Entomological Society 109: 47-80.

McDunnough, J. 1929. Notes on North American Ephemeroptera with descriptions of new species, II. *The Canadian Entomologist* 61: 169-180.

Myers L.W., T.B. Mihuc and B.C. Kondratieff. 2010. Mayflies (Ephemeroptera), Stoneflies (Plecoptera), and Caddisflies (Trichoptera) of the Upper Hudson, Lake Champlain, and Northeastern Lake Ontario Watersheds: A baseline inventory with management considerations for SGCN and other rare and possibly imperiled species. Final Report to the New York State Department of Environmental Conservation.

Traver, J. R. 1935. Part II: Systematic. pp. 237-739. In J. G. Needham, J. R. Traver, and Y. C. Hsu. *The biology of mayflies, with a systematic account of North American species*. Ithaca, Comstock Publishing.

Whiting, E. R. 1992. New records of mayflies (Ephemeroptera) from Nova Scotia and New Brunswick, Canada. *Entomological News* 103: 185-192.

Common Name: A mayfly *SGCN*
Scientific Name: *Siphonurus barbarus*
Taxon: Mayflies

Federal Status: Not Listed **Natural Heritage Program Rank:**
New York Status: Not Listed Global: G1G3
New York: SNR
Tracked: Yes

Synopsis:

Siphonurus barbarus is a species of mayfly about which little is known in New York. There is only one historical occurrence for this species, from the Upper Hudson watershed (Ulster Co.) (McDunnough 1924). This infrequently collected species has been reported previously from limited collections in Maine, Nova Scotia, and Quebec (McDunnough 1932, McCafferty and Randolph 1998, McCafferty 2009). Myers et al. (2010) did not encounter this species during recent field surveys of Big Indian Hollow in Ulster County; however, he states that the species is not likely extirpated in New York (personal communication).

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			
> 50%		Rare	X		

Habitat Discussion:

The habitat for this species is described as overflow areas and in-stream habitats (Myers et al. 2010).

Primary Habitat Type
Headwater/Creek
Lake
Riparian

Distribution:

There is one historical record of this species from Ulster County, Big Indian Valley, Catskill Mountains (McDunnough 1924). There are no recent records in New York.



Myers et al. (2010)

Threats:

Experts did not identify threats for this species.

References Cited:

McCafferty W. P. and R. P. Randolph. 1998. Canada mayflies: a faunistic compendium. *Proceedings of the Entomological Society of Ontario* 129: 47-97.

McCafferty, W. P. 2009. New state and provincial records for 100 Ephemeroptera species. *Transactions of the American Entomological Society* 135: 353-368.

McDunnough, J. 1924. New Canadian Ephemeridae with notes, II. *Canadian Entomologist* 56: 90-98.

McDunnough, J. 1932. New species of North American Ephemeroptera II. *Canadian Entomologist* 64: 78-81.

Myers L.W., T.B. Mihuc, and B.C. Kondratieff. 2010. Mayflies (Ephemeroptera), Stoneflies (Plecoptera), and Caddisflies (Trichoptera) of the Upper Hudson, Lake Champlain, and Northeastern Lake Ontario Watersheds: A baseline inventory with management considerations for SGCN and other rare and possibly imperiled species. Final Report to the New York State Department of Environmental Conservation.