GEORGIA

Adopt-A-Stream

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Environmental Protection Division

Hydropsychidae: The Net Spinning Caddisflies

By Becky Blasius and Kristen Sanford - EPD Watershed Planning and Monitoring Program

Order: Trichoptera Family: Hydropsychidae

Members of the family Hydropsychidae are commonly known as net spinning caddisflies. Hydropsychid larvae are most commonly known for the intricately spun silk capture nets for straining food out of moving waters. There are approximately 145 species of Hydropsychidae north of Mexico.

All hydropsychid larvae spin nets as a means of capturing food. The nets consist of silk strands produced by salivary glands that have been modified for this particular purpose. Different genera,

however, weave meshes of varying dimensions. This means that each genera specializes their nets in order to capture food particles within a certain size range. Algae, fine organic particles, and small aquatic invertebrates are prey found within these different size nets.

Places you can find them

Due to the method of feeding, hydropsychids build their concave nets, facing upstream, in flowing water. In many streams, it is common to find thousands of these nets fastened to rocks and boulders located within the current. They might also be found underneath waterfalls and other cascading waters.

What their presence indicates about water quality



According to the EPT Index, freshwater quality is generally considered good if members of the Ephemeroptera, Plecoptera, and Trichoptera orders are found. However, Hydropsychids have evolved to become fairly tolerant to pollution. Therefore, be careful of assessing the quality of your

stream. Just because you find hydropsychids does not mean that the stream is free of pollution.

Fun Facts

Hydropsychid larvae are able to produce sound by rubbing their femora (femur) across ridges located on the bottom surface of the head. The purpose of producing these sounds might be to repel potential predators, or keep other hydropsychids from constructing nets within its territory.

Life Cycle

Caddisflies go through a complete metamorphosis, including five larval instars, a pupal stage, and a winged adult stage. Complete metamorphosis takes approximately 3 weeks. When the larva is full grown, it attaches its case to a stationary object in the water and closes the case to pupate. The pupa uses its mandibles to work its way out of the case. It then crawls out of the water onto an object in order to complete its final molt to adulthood.

The order, Trichoptera, generally indicates good water quality, but the Hydropsychidae are fairly tolerant to pollutants.



BY THE GOVERNOR OF THE STATE OF GEORGIA

A PROCLAMATION RIVER CLEANUP WEEK

WHEREAS: The Georgia Department of Natural Resources (DNR) and its

Adopt-A-Stream program will coordinate Georgia's annual River Cleanup Week on October 9-17, 1999, with the theme

Rivers Alive; and

WHEREAS: The Adopt-A-Stream program encourages individuals and

communities to adopt sections of streams, wetlands, lakes or rivers through public-private partnerships with local schools,

businesses and government agencies; and

WHEREAS: The Adopt-A-Stream program provides citizens with the tools

and training to evaluate and protect their local waterways and increases public awareness of our state's nonpoint source

pollution and water quality issues; and

WHEREAS: DNR seeks to recruit 5,000 volunteers statewide to help

preserve and protect Georgia's rivers, streams and wetlands by removing trash from the waters and the adjacent banks

during River Cleanup Week; and

WHEREAS: River Cleanup Week requires the concerted effort of our

citizens and communities to clean, restore and beautify our

state's water-based ecosystems; now

THEREFORE: I, Roy E. Barnes, Governor of the State of Georgia, do hereby

proclaim the week of October 9-17, 1999, as RIVER CLEANUP WEEK in Georgia and urge our citizens to participate in this

worthy effort to keep Georgia's rivers alive.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the Executive Department to be affixed this 14th

day of September 1999.



GOVERNOR

CHIEF OF STAFF

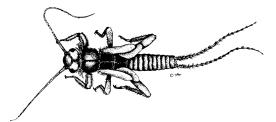
Adopt-A-Stream Calendar of Events

The following are workshops, taught by certified AAS trainers, which provide training in visual, biological and chemical monitoring of streams and wetlands. Please call to register.

What	Who	When	Where	To Register
Visual/Chemical	Augusta AAS	Jan. 15	Augusta	706-821-0632
Biological	Fulton AAS	Jan. 29	Sandy Springs	404-730-8006
Visual/Chemical	Fulton AAS	Feb. 5	S. Fulton	404-730-8006
Biological	Ga. Wildlife Federation	Feb. 12	Newton Co.	770-929-3350
Biological	Fulton AAS	Feb. 19	S. Fulton	404-730-8006
Visual/Chemical	Fulton AAS	March 4	N. Fulton	404-730-8006
Biological	Fulton AAS	March 11	N. Fulton	404-730-8006
Visual/Chemical	Augusta AAS	March 18	Augusta	706-828-2109
Biological (same day)	Augusta AAS	March 18	Augusta	706-828-2109
Biological	Chattooga AAS	April 22	Polk/Floyd Co.	706-802-5322

There's more! AAS workshops are conducted throughout the State. Call one of these numbers to learn about upcoming workshops in your region of the State.

Where	Who	To Register
Coastal GA	Dr. Joe Richardson	912-356-2809
West GA	Dr. Becky Champion	706-687-4090
Central GA	Sylbie Yon	706-485-9243
South GA	Dr. David Hedgepeth	912-333-5611



Community Watershed Workshops Begin Their Fourth Year

The Community Watershed Workshops began in 1997 through a joint effort by DeKalb County Department of Parks and Recreation, Upper Chattahoochee Riverkeeper and Georgia Adopt-A-Stream. The steering committee has grown to include Peavine Watershed Alliance, City of Atlanta, Fulton County and Gwinnett County and has officially named itself the Community Watershed Network. Along with offering workshops, the Community Watershed Network is preparing a *Watershed Owners Manual* and will be distributing a video called "Building a Watershed Alliance," which is being developed by the Peavine Watershed Alliance. This year's workshops will be held on March 14, May 9, September 12, and December 5. The workshops provide opportunities for people to meet, share information and obtain resources to start or sustain watershed management activities. If you live in the Metro Atlanta area and are not receiving workshop invitations, call 404-675-1636.

Environmental Education Alliance Conference

This conference will focus on Watersheds and Water Education. It will be held March 3-5 in Gainesville. For registration information call Peter Gordon at 770-535-1976 or go to the website at www.eealliance.org.

The Sixth National Volunteer Monitoring Conference

Will be held April 27-29 in Austin, Texas. For more information and to pre-register, go to www.epa.gov/owow/monitoring/notice.html

Citizen Soil Watch Workshop

The City of Roswell and Upper Chattahoochee Riverkeeper are sponsoring a Citizen Soil Watch Workshop on Tuesday, January 26 at 7:00 p.m. at the Roswell City Hall Courthouse. To register, call Alice Champagne at 404-352-9828, ext. 16.

Georgia Adopt-A-Stream Workshops in 2000						
To Register Call 404-675-1636						
Workshop Title	Brief Description	Date	Time	Location		
Getting Started with	This workshop takes you through the steps of	February 12	9:00 a.m. – 1	Roswell		
Adopt-A-Stream, Lake	selecting a waterbody, developing a monitoring plan	April 15	9:00 a.m. – 1	Rockdale County		
and Wetland	and registering your project with Georgia Adopt-A-	June 17	9:00 a.m. – 1	Forsyth County		
	Stream. Then you'll learn how to use maps and site visits to assess the quality of the waterbody and its watershed.	Sept. 30	9:00 a.m. – 1	Clayton County		
Advanced	If you have been conducting biological monitoring	June 3	10:00 a.m 3	Dahlonega		
Macroinvertabrate	and wish to learn more in-depth identification			-		
Identification	methods, this is the workshop for you!					
Walking Through A	Learn about wetlands, their functions and values and	May 13	10:00 a.m. – 2	Newman Wetland		
Wetland: Wetlands Of	the various types of wetlands in Georgia. Learn how			Center, Clayton Co.		
Georgia	you can monitor and protect wetlands.					
				GWF Alcovy River		
		Sept. 2	10:00 a.m. - 2	site, Newton County		
Advanced Chemical	The Advanced Chemical Workshop will take place in	January 26	7:30 p.m. – 9	City of Canton		
Monitoring	a private water testing lab. Duncan Cottrell, Lab	Feb. 15	1:30 p.m. – 9			
	Manager and AAS trainer, will compare lab methods to the AAS methods for testing water samples. He will discuss Quality Assurance and demonstrate lab procedures to test for fecal Coliform.	March 11	10 a.m11:30			
Affective Outreach:	The most important thing you can do as an AAS	August	9:00 a.m12	DeKalb County		
Educating others about	participant is teach others about water quality,	(TBA)				
water quality, watersheds	nonpoint source pollution and watersheds. This					
and nonpoint source	workshop will provide affective ways to conduct					
pollution.	outreach activities.					
Reduce NonPoint Source	We all contribute to nonpoint source pollution.	April 11	6:00 p.m. – 8	EPD Tradeport,		
Pollution In Your Home	Learn simple ways you can reduce nonpoint source			Water Protection		
	pollution in your home.			Branch Office		











The Georgia Adopt-A-Stream Newsletter is published six times per year. For More information about the Georgia Adopt-A-Stream program or to contribute to the newsletter, call or write to:

Georgia Adopt-A-Stream Environmental Protection Division 4220 International Parkway, Suite 101 Atlanta, GA 30354 (404) 675-1639