

SOME AQUATIC INSECTS  
FROM THE GREAT  
SMOKY MOUNTAINS  
NATIONAL  
PARK

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# SOME AQUATIC INSECTS FROM THE GREAT SMOKY MOUNTAINS NATIONAL PARK<sup>1</sup>

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## INTRODUCTION

Interest in the fauna of the Great Smoky Mountains National Park has reached tremendous proportions during the past few years. While a few entomologists have done extensive work in the park, much remains to be done on the aquatic insects inhabiting the abundant streams.

In 1939 the writer had an opportunity to make collections of immature stages of aquatic insects in several streams of the park. Because many of the immature stages of aquatic insects in this region have not been reared and properly associated with the adults, identification to species is not always possible. Those specimens that could be positively identified to species are reported in this paper (Table 1).

Acknowledgment is made of the help of Dr. H. H. Ross, Illinois Natural History Survey, who identified the Tricoptera; Dr. Jay R. Traver, Massachusetts State College, who identified the Ephemeroptera; Dr. T. R. Frison, Chief, Illinois Natural History Survey, who identified the Plecoptera; and Dr. J. Speed Rogers, University of Florida, who identified the Diptera. Grateful acknowledgment is also made of the assistance of Dr. Arthur Stupka, Park Naturalist, and his aides.

## STATIONS

Oconalufly River, at Smokemont, July 2, 1939.

Bradley Fork, July 10, 1939, Air 26°C; pH 6.8.

Indian Creek, July 11, 1939, Air 26°C; Water 15.5°C; pH 6.9.

Deep Creek, July 11, 1939, Air 31°C; Water 19.5°C; pH 7.4.

Deep Creek, at Bryson Place, Aug. 16, 1939, Air 23°C; Water 18°C.

Forney Creek, 2 miles from top Park fire road, Aug. 13, 1939, Air 24.5°C; Water 17°C.

Forney Creek, mile below above station, Air 24°C; Water 18°C., August 13, 1939.

Forney Creek, at CCC Camp, Aug. 13, 1939, Air 28°C; Water 21°C.

Forney Creek, at Checking Station, Aug. 13, 1939, Air 27°C; Water 22.5°C.

<sup>1</sup>Contribution from The Highlands Biological Laboratory, Highlands, North Carolina, and the Department of Biology, Wesleyan College, Macon, Georgia.

TABLE 1. Aquatic insects

NAME OF INSECT	OCONA- LUFTY RIVER	BRAD- LEY FORK	INDIAN CREEK	FORNEY CREEK	DEEP CREEK
<b>EPIHEMEROPTERA:</b>					
Stenonema carolina Banks.....					X
Stenonema ithaca Clemens & Leonard.....					X
Stenonema sp. No. 3.....			X	X	
Heptagenia julia Traver.....		X	X	X	
Heptagenia marginalis Banks.....				X	X
Heptagenia thetis Needham.....		X		X	X
Rithrogena fuscifrons Traver (?).....			X	X	
Iron dispar Traver.....				X	
Iron rubidus Traver.....		X		X	X
Iron subpallidus Traver.....					X
Paraleptophlebia adoptiva McDunnough.....		X			
Paraleptophlebia swannanoa Traver.....	X				
Ephemerella conestee Traver.....				X	
Ephemerella cornutella Mc- Dunnough.....	X			X	X
Ephemerella longicornis Tra- ver.....			X		
Pseudocloeon carolina Banks.....	X				
<b>DIPTERA:</b>					
Blepharocera tenuipes Walker.....	X				
<b>PLECOPTERA:</b>					
Perla hastata (Banks).....			X	X	
Neophasganophora capitata (Pictet).....	X			X	X
Togoperla immarginata (Say).....	X			X	X
Perlesta placida (Hagen).....		X			X
Acroneuria abnormis Newman.....	X	X		X	X
Acroneuria xanthenes (New- man).....				X	
<b>TRICOPTERA:</b>					
Rhyacophila fuscula Walker.....	X			X	X
Rhyacophila sp. A.....					X
Mystrophora nigrior (Banks).....			X	X	X
Philopotamus distinctus Wal- ker.....	X		X	X	
Diplectrona modesta Banks.....			X	X	
Parapsyche cardis Ross.....		X		X	
Athripsodes ancylus Vorhies.....					X

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