

Food of Two Species of Darters in Glover River, Oklahoma

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In flowing waters, logperch and channel darters feed primarily upon chironomids (1-7). In streams that cease to flow for extended periods, it is possible that foods taken more closely approximate those selected in lakes. Microcrustaceans are the predominant food of logperch in lakes (1,2,8) and are also an important food source of channel darters (3,4,9).

The Glover River has long slow pools separated by short turbulent riffles. Flow varies greatly; during summer low flows, there is often no discernible surface water movement from pool to pool (10). Under these conditions, pools often produce large numbers of microcrustaceans (11). We hypothesized that logperch (*Percina caprodes*) and channel darters (*P. copelandi*) might feed heavily on microcrustaceans in Glover River.

In 1978-80 we collected data on foods consumed by these two darter species in the Glover River, southeastern Oklahoma, coincident with a larger study. The study area and 14 sampling locations have previously been described (12). Data were collected from darters taken by electroshocking. Fish were preserved in formalin in the field and stomachs subsequently removed in the laboratory. Food items were identified to genus and data were pooled over all seasons and years.

Dipterans (54%), principally chironomids (40%), were the most common items in the stomachs of logperch (Table 1). Ephemeropterans--primarily *Pseudocloeon*, *Stenonema*, *Caenis*, and *Baetis*--contributed 21%, and trichopterans, primarily *Chimarra*, 10%. Plecopterans and Gastropoda were also present. Microcrustaceans (36%), chironomids (32%), and *Pseudocloeon* sp. (20%) were the most numerous items in the stomachs of channel darters (Table 1).

The data did not entirely support our hypothesis. Channel darters fed primarily on microcrustaceans and chironomids but logperch fed primarily on chironomids.

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TABLE 1. Important food items ($\geq 2\%$) found in the diet of two species collected Glover Creek, Oklahoma from November 1978 to July 1980.

Food Item	Percent of Items by Number	
	Logperch ^a	Channel Darter ^b
Gastropoda	6	-
<i>Ferrissia</i>	5	-
Copepoda	-	22
Cladocera	3	14
Ephemeroptera	21	21
<i>Baetis</i>	3	-
<i>Pseudocloeon</i>	5	20
<i>Stenonema</i>	5	-
<i>Caenis</i>	4	-
Plecoptera	2	-
Trichoptera	10	-
<i>Chimarra</i>	3	-
Unidentified	4	-
Diptera	54	34
<i>Simulium</i>	14	2
Chironomidae	40	32
Fish eggs	-	6

^a52 individuals (total length 85-146 mm).

^b21 individuals (total length 35-59 mm).

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