

Palaemonetes kadiakensis Rathbun in Oklahoma (Crustacea: Decapoda)

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Freshwater shrimp in Oklahoma have received little attention. Most studies have concentrated on the genus *Macrobrachium*, a brackish and freshwater river shrimp which can be cultured for commercial consumption (1). Members of the other genus, *Palaemonetes* (prawns), are poorly known because of their limited commercial value and overall similarity. Meehan (2) and Strenth (3) have discussed the biology of this genus. The purpose of this report is to describe the abundance and distribution of *Palaemonetes* in Oklahoma.

Palaemonetes is divided into several species. *Palaemonetes paludosus* (*P. exilipes*) has been recorded from Oklahoma (4). The species found in the present study is *Palaemonetes kadiakensis*, a common prawn found in the central and southern U.S. (5).

Specimens were collected by Mr. Jim Pigg and associates in the summer of 1982. The animals were preserved in alcohol and sent to me for identification. Animals were identified to species by using available keys. They were sexed and measured to the nearest millimeter. Mean size was determined for juveniles, males, females, gravid females, and all animals per collection site, as well as for all collection sites combined.

Animals were collected in south-central, southeastern, eastern, and southern Oklahoma (Table 1). Table 2 shows the size range, sex ratio and mean size for all specimens at all collection sites. Juveniles were designated as animals whose sex I could not determine readily (the smallest-sized animal that I could recognize as a male was 15 mm). Note that females were slightly larger than males but gravid females were much larger. The smallest animal was 12 mm and the largest 46 mm. Finally, the sex ratio was just under two females per one male.

These data concur with what has been published on this genus in other areas (4, 5). More information is needed on the abundance and distribution of *Palaemonetes* in Oklahoma and surrounding areas.

TABLE 1. Collection sites of *Palaemonetes kadiakensis*

Drainage	County	Nearest Town	No. Specimens
South Canadian R.	Pottawatomie	Byars	276
South Canadian R.	Hughes	Calvin	16
Arkansas R.	Leflore	Sallisaw	1
Poteau R.	Leflore	Arkoma	1
Cow Creek	Jefferson	Waurika	18
Kiamichi R.	Pushmataha	Clayton	2
Blue R.	Bryan	Blue	2
Muddy Boggy R.	Atoka	Ferris	68
Little R.	McCurtain	Idabel	16
Mountain Fork R.	McCurtain	Broken Bow	8
Red R.	McCurtain	Harris	138
Red R.	Jefferson	Terral	206
Red R.	Love	Thackerville	78
Red R.	Choctaw	Arthur City, TX	11
Lake Raymond Gary	Choctaw		2
TOTAL			843

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TABLE 2. Size range, mean length, and sex ratio of *Palaemonetes kadiakensis* in Oklahoma.

	Size range (mm)	Mean length (mm)	Sample size
Juveniles	12—14	13.4	30
Males	15—37	23.1	291
Females	15—44	23.7	522
Gravid females	26—46	34.5	58
TOTAL	12—46	23.2	843

Sex Ratio 1:1.8
(male:female)

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