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BANDED KILLIFISH, FUNDULUS DIAPHANUS,
INCREASING IN LOWER COLUMBIA RIVER

The first known capture of a banded killifish, Fundulus diaphanus, in the Columbia River was on 19 August 1971 in a beach seine at Jones Beach, Oregon (River Kilometer 75) (Misitano and Sims, 1974). The recorded geographic range for this species is in fresh and brackish water along the Atlantic coast from South Carolina north to the Maritime Provinces and Newfoundland and west through New York, Pennsylvania, and southern Canada in the Great Lakes Basin to the Yellowstone River in eastern Montana (Scott and Crossman, 1973; and Lee et al., 1980). Misitano and Sims concluded that the presence of the fish in the Columbia River was probably due to an unauthorized release.

The National Marine Fisheries Service¹ continued sampling with beach seines at Jones Beach in 1972 and from 1977 to 1983. The fishing effort between May and August averaged more than 900 sets annually. On 9 July

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1981, a second specimen was captured, and between 24 May and 21 July 1983, seven additional killifish were netted (Table 1).

This species, although not common, apparently has established itself in the Columbia River. Another specimen was collected from the Columbia River system on 10 June 1982 at Weston Bend in the Willamette River, near Salem, Oregon (Li²). Another occurrence was reported by Stockley (1983) in a Columbia River backwater near Vancouver, Washington on 14 July 1983.

In the future, banded killifish captured in the lower Columbia River will be preserved and forwarded to Dr. Carl E. Bond, Department of Fisheries and Wildlife, Oregon State University, Corvallis, OR 97331, for determination of subspecies and to possibly determine the origin of the specimens occurring in the Columbia River.

²H. Li. Oregon Department of Fish and Wildlife, Fisheries Cooperative Unit, Oregon State University, Corvallis, OR 97731, pers. commun. 1984.

LITERATURE CITED

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Table 1.--Occurrence of the banded killifish at Jones Beach in the Columbia River, 1971-83.

Date captured	Disposition	Standard length (mm)	River temp. (°C)
19 Aug 71	Preserved ^a	59	19
09 Jul 81	Preserved ^b	69	17
24 May 83	Liberated	-- ^c	16
29 Jun 83	Liberated	--	17
14 Jul 83	Liberated	--	18
14 Jul 83	Liberated	--	18
16 Jul 83	Preserved ^d	68	18
18 Jul 83	Liberated	--	18
21 Jul 83	Liberated	--	19

^aHammond Field Station, Northwest and Alaska Fisheries Center, National Marine Fisheries Service, Hammond, OR.

^bOregon State University, Corvallis, Department of Fish and Wildlife, specimen No. OS10806.

^c-- = not available.

^dOregon State University, Corvallis, Department of Fish and Wildlife, specimen No. OS10805.