

GRASS CARP IN OKLAHOMA STREAMS

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Grass carp, *Ctenopharyngodon idella*, was first brought into the United States in 1963 when the Fish and Wildlife Service and Auburn University began testing its effectiveness in biological control of aquatic vegetation (1). In Oklahoma, importation and possession of grass carp for the purpose of stocking private waters is permitted with official authorization. However, release of grass carp into public waters is prohibited (2). We report here records of the species in Oklahoma streams.

In 1982, grass carp were collected from three widespread sites. On 17 June an 8.2-kg female was taken in a seine by J. Pigg from the Cimarron River, 3.3 km N. of Orienta, Major County. The fish was 708 mm standard length (SL) and 185 mm in body depth, and its ovaries were poorly developed. It is catalogued in the ichthyology collection at the Oklahoma State University Museum of Natural and Cultural History (OKSU 11356).

A second specimen (OKSU 11355), taken by seine on 17 July 1982 by Anthony A. Echelle and the stream ecology class from the University of Oklahoma Biological Station, was from Caddo Creek, Highway 77 bridge, 1.5 km N. of Ardmore, Carter County. This was a 4.5-kg gravid female that measured 555 mm SL and 170 mm in body depth. Counts of ovarian subsamples yielded an estimate of more than one million eggs.

The third specimen was an 8.2-kg adult caught by Mr. Columbus Snider of Idabel, Oklahoma. It was taken by flag net from the Little River at the Holly Creek Road bridge, 5 km N. of Idabel, McCurtain County on 13 September 1982. A photograph of this fish appeared in the McCurtain Gazette on 15 September.

Concern exists about the possible effects of grass carp on native species (3). The specimens reported here may have escaped from private ponds or may represent a persistent part of the riverine fauna. These specimens were large adults but young-of-year specimens have not yet been found in Oklahoma streams. The distribution of grass carp in Oklahoma and its potential for successful spawning must be monitored to assess its effect on native Oklahoma species.

REFERENCES

1. V. GUILLORY and R. D. GASAWAY, Trans. Am. Fish. Soc. 107: 105-112 (1978).
2. OKLAHOMA WILDLIFE CONSERVATION COMMISSION RESOLUTION F-7-83, January 3, 1983.
3. J. G. STANLEY, Fisheries 1(3): 7-10 (1976).