

MUSK OX? — OVIBOVINI?

Specimens: One phalanx (270).

ACKNOWLEDGMENTS

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DISPLAYING FISH SPINE SECTIONS WITH A 35 MM PROJECTOR

THOMAS M. FREEZE
Murray State University
Murray, Kentucky 42071

ABSTRACT

A method for displaying spine sections with a standard 35 mm projector was devised as part of an age and growth study of channel (*Ictalurus punctatus*) and blue catfish (*Ictalurus furcatus*) in Kentucky and Barkley Lakes, Kentucky.

METHODS

Age determination of many species of fish requires the examination of sectioned spines or fin rays. Previously, the time required to prepare permanent study sections prevented the direct comparison of large numbers of fishes. As part of an age and growth study of channel (*Ictalurus punctatus*) and blue catfish (*Ictalurus furcatus*) in Kentucky and Barkley Lakes, Kentucky, a procedure was devised whereby numerous spine sec-

tions could be compared using a standard 35 mm projector (Fig. 1).

Thin cross sections of dried pectoral spines were taken at the distal end of the basal groove using a small power saw on a stationary platform, an apparatus similar to that of Witt (1961). The sections were then polished on a fine carborundum stone to increase the transparency and the clarity of the projected image (DeRoth, 1965). Prior to mounting, each section was quickly examined for proper thickness with a microscope using transmitted light.

Each spine section was framed between the supplied pieces of glass, using Lindia snap-in mounts for photographic slides (Karl Heitz, Inc., New York); a label giving the relevant data was attached to the side of the frame. The frames were then placed in a 35 mm projector for viewing.

Spine sections thus prepared are free of mounting imperfections and provide a useful teaching aid, since they can be viewed by large numbers of people. The rapidity and ease with which the slides can be produced and projected facilitates the comparison of various fishes.

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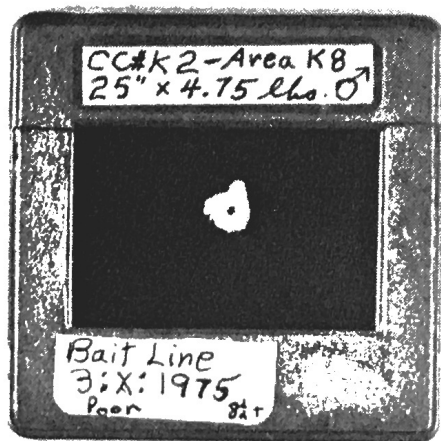


FIG. 1: Mounted cross section of a pectoral spine that is ready for viewing.