

out

December 7, 1942

REPORT NO. 834

COLORING LAKE MAPS*

by

C. J. D. Brown

The Institute for Fisheries Research has been using colors to represent the various bottom types (surface soils) on lake maps for a period of over ten years. A considerable number of color materials and methods have been tried. The method found to be most suitable for our purposes is described below. We make no claims as the originators of this method. No doubt the fundamental technique was practiced by prehistoric man.

The materials needed include colored wax pencils, artists points and benzene. "Venus" or "Dixon" colored wax pencils are very good for this purpose because of the uniformity of their colors and even texture. Artists points are used to spread the color and benzene is a solvent for the pencil wax.

The method used is as follows. 1. The color is applied by very lightly outlining the area and then filling in with light back and forth stroke of the pencil until the area to be colored is evenly covered.

*Contribution from the Institute for Fisheries Research, Michigan Department of Conservation.

A moderately blunt pencil held so that it makes a sharp angle with the surface of the map will prevent streaking or noticeable lines on finished work. The intensity of the color of course will depend upon the amount of wax applied. 2. An artist pencil with a well rounded point is dipped into benzene. This should not be saturated. It is better to dip this pencil frequently than to allow it to become soaked with benzene. This artist pencil is used as a spreader and with light to moderate pressure and a rotary motion the color is spread evenly so that lines and irregular patches of color disappear into a thin even coat. Our experience has shown that the inexperienced operator seldom does a good job on his first few pieces but with a little practice he is soon able to do satisfactory work.

When it is desirable to combine colors the lightest color is applied and smoothed first. Then the darker color is applied lightly over the top. A very even gradation of colors can be attained by this method.

Most of our maps are blue line prints and when wax colors are applied in this manner, the result is, for all ordinary purposes, waterproof and resistant to fairly rough use.

INSTITUTE FOR FISHERIES RESEARCH

By C. J. D. Brown

Report approved by: A. S. Hazzard

Report typed by: G. Wood