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DEPARTMENT OF THE INTERIOR

INFORMATION SERVICE

FISH AND WILDLIFE SERVICE

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Anglers who have objected to catching hatchery trout because of their pale coloration will be unable in the future to decide whether their prize is a wild trout or a reasonable facsimile produced by a new coloration method developed by the U. S. Fish and Wildlife Service.

Dr. Ira N. Gabrielson, Service director, reported to Secretary of the Interior J. A. Krug today that a new method for coloring hatchery-reared brown or brook trout, which requires the use of paprika in the trout's diet, will be tried in Federal hatcheries all over the country during the coming season as well as in some of the State hatcheries.

To A. V. Tunison, assistant chief of the Service's Division of Game-fish and Hatcheries, goes credit for the development of this method whereby hatchery trout are colored to resemble wild trout. The experiments were carried on in cooperation with the State of New York and Cornell University while Mr. Tunison was stationed at the Service's laboratory in Cortland, N. Y.

Hatchery-raised fish which were fed on gull eggs on an experimental basis in 1942 were the first to show the natural coloring. By analysis of these eggs, biologists discovered that a carotenoid compound, occurring only in aquatic animals upon which gulls feed, was the compound producing the pigmentation. Tests demonstrated that chicken eggs, alfalfa meal, and corn gluten meal produced a yellow color in the trout.

Since gull eggs were not commercially available, other substances were sought that would produce similar pigmentation. Paprika was found to produce very nearly the same coloration. In experiments conducted in 1944 and 1945 coloration similar to that of wild trout could be produced by using 2 percent paprika in the diet. The fins became colored and spots characteristic of wild fish appeared. Larger quantities of paprika produced brilliant coloration of the entire body. It was found that fish taken off the paprika diet still retained their color from six weeks to two months after coloration had been developed. The paprika does not produce any toxic effect and colors only the exterior of the fish. The taste of the flesh is not affected. Tests on taste made at the Michigan State College have shown that there is little difference between hatchery-reared and wild trout except under certain specialized conditions.

Now that paprika is available again in the large quantities required for hatchery use, the Service proposes to give the new method an extensive try-out.

Although the new method is successful with brown and brook trout, the Service states that no method of coloring rainbow trout has yet been found.

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