PIED CHANNEL CATFISH—A COLOR MUTATION

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ABSTRACT

A pied or variegated six inch fingerling channel catfish, *Ictalurus punctatus*,[1] was discovered when a pond of normal colored fingerling channel catfish was harvested in the fall of 1959 at the Joe Hogan State Fish Hatchery, Lonoke, Arkansas. This fish was saved and reared for two additional years before it was finally lost in the spring of 1962. The authors believe this to be further evidence supporting the belief held by many fish culturists that the "Arkansas Strain" of channel catfish is domesticated. Previous color mutations discovered in this strain was a solid, sooty-black individual and albinism which is common.

INTRODUCTION

Channel catfish, *Ictalurus punctatus*, have been propagated in the Arkansas Game and Fish Commission's fish hatcheries for approximately twenty years. During the first ten years, production, at times, was hardly enough to maintain a supply of broodstock. During the past ten years, production of fry and fingerlings has become more sure and dependable (Crawford 1957) resulting in increased interest in the propagation of channel catfish by other states, the U. S. Fish and Wildlife Service and commercial fish farmers.

The reputation of the Commission's strain of channel catfish is that they are easier to propagate, which has resulted in a demand for broodstock from the local commercial fish farmers, various States and the U. S. Fish and Wildlife Service. These fish have been provided upon demand.

As in the case with all wild animals and plants that are tamed and propagated by man, color variations or mutations soon appear which are different from the wild or normal color patterns.

Previous to 1959, two color variations had been found in channel catfish in Arkansas. One of these, albinism, was reported by Nelson, (1956 and 1958). Nelson also had selected a solid black individual and held it for several years.

THE NEW MUTANT

During the routine harvesting and shipping of channel catfish fingerlings from the rearing ponds at the Joe Hogan State Fish Hatchery, Lonoke, Arkansas, in 1959, a freakish colored fingerling of about six inches total length was picked out of the many thousands of normal or wild color individuals.

By the summer of 1962, this fish (a male) weighed approximately three pounds and had a distinct appearance similar to a big "speckled" butter bean. On one side of the fish, precisely separated by the median line, the color was an opaque white with velvety black splotches and the color of the other side was a velvety black with opaque white splotches. This color pattern was even apparent on the fins and barbels. Eye color was normal (Figure 1).

Inasmuch as the albino channel catfish is homozygous recessive for color, it was hoped that by breeding the male pied channel catfish to a female albino that a pied strain of channel catfish could be developed. However, while holding the pied fish in an outside concrete holding vat, it either jumped out or was fished out by a predator and was lost.

[1] Names of fish used are the accepted common and scientific names as listed in American Fisheries Society, special publication No. 2, 1960.

Fig. 1. Pied channel catfish. Joe Hogan State Fish Hatchery, Lonoke, Arkansas.

LITERATURE CITED

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THE RESULTS OF POPULATION ALTERATION AND FACTORS AFFECTING BALANCE IN FARM PONDS IN GEORGIA [1]

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ABSTRACT

Methods and results of population investigation and alteration in Georgia farm ponds for approximately seven years is presented. Results of fishing pressure is also included.

INTRODUCTION

The dynamics of fish populations in Georgia farm ponds have been investigated for several years to determine methods of management best suited to

1 This work was undertaken with Federal Aid to Fish Restoration Funds under Dingell-Johnson Project F-6-R, Evaluation of Pond Management Practices