

uniform in height at an interval of 11 feet while gliding the lizard turned away from the tree lifted up let itself fall on outstretched wings, resulting in a vertical fall of $1\frac{1}{2}$ -2m a short glide at an angle of about 45° to the tree and followed a near horizontal flight path till it landed on the next tree at a point $1\frac{1}{2}$ m from ground, keeping head upwards. All these

took about 3-5 seconds. Slowly spiralling up as it climbed the tree. Insect population may be highest in such river border areas. Srirangan, a tracker from the local forest tribal community "kanis", said that they can be easily killed by whipping with tender branches; are roasted over a fire and eaten, younger tribals are not aware of this practice.

WILDLIFE WARDEN,
MUDUMALAI WILDLIFE SANCTUARY,
UDHAGAMANDALAM-643 001,
TAMIL NADU,
November 12, 1982.

J. MANGALRAJ JOHNSON

23. LONGEVITY OF FISH *MEGALOPS CYPRINOIDES* (BROUSS)

(With a text-figure)

How long does a fish live, has been a common inquiry in ordinary parlance and has usually been replied to as 'we really do not know', though several anecdotes exist raising the longevity to 250 years as in the case of some old carps and the mythical Great Pyke of the Emperor Fredrick II of England, as recorded by Norman (1931). The same author quotes Dr Roger that "Statements concerning most of the very old carps rest on unreliable evidence and although there is good reason for believing that in artificial conditions this fish may attain a good old age, it is doubtful whether it exceeds 50 years in a wild state." Lagler *et al.* (1977) also records the probable long life of carps as about 50 years. This uncertainty persists because of lack of any reliable data. However, available records in the Fisheries Department of Maharashtra and my own observations at Lonavla have provided dependable information about longevity of *Megalops cyprinoides*. This is being recorded here.

The fish is, as many would know, a marine one, the larvae and young ones of which enter brackish water and then into fresh water, to feed on the rich animal life, till they grow upto about 15 cms and then return to the sea for further growth up to about a metre. Its near cousin is the great tarpon which inhabits estuaries of northern America. If the seaward movement of *M. cyprinoides* is obstructed they remain for long years in fresh water, but do not breed. In July 1939, the Fisheries Section of the then Department of Industries decided to stock fingerlings of Catla Rohu, Calbasu, etc in different perennial waters of the then Bombay Presidency in which Walwhan and Shiota lakes of Tata Hydro-Electric Company were included (vide annual report of the Department of Industries, Fisheries Section 1939-40). As the fingerlings of *M. cyprinoides* were also found to be very efficacious in controlling cyclops, an intermediate host (carrier) of the dreaded quineaworm pest (Setna & Kulkarni 1940), one of the con-

signments which completed the tally of 10,000 fingerlings for these lakes consisted of *M. cyprinoides* and was released into the lakes by me. Another reason for this introduction was reported pre-eminence of this fish for angling. The fingerlings thrived in the protected

in the lake in that year indicated its survival over the years and was described as an example of extreme tenacity of the fish. The incident was also noted for the fact that those who ate the fish cursed us for giving them tasteless fish with rubber like flesh. The rub-

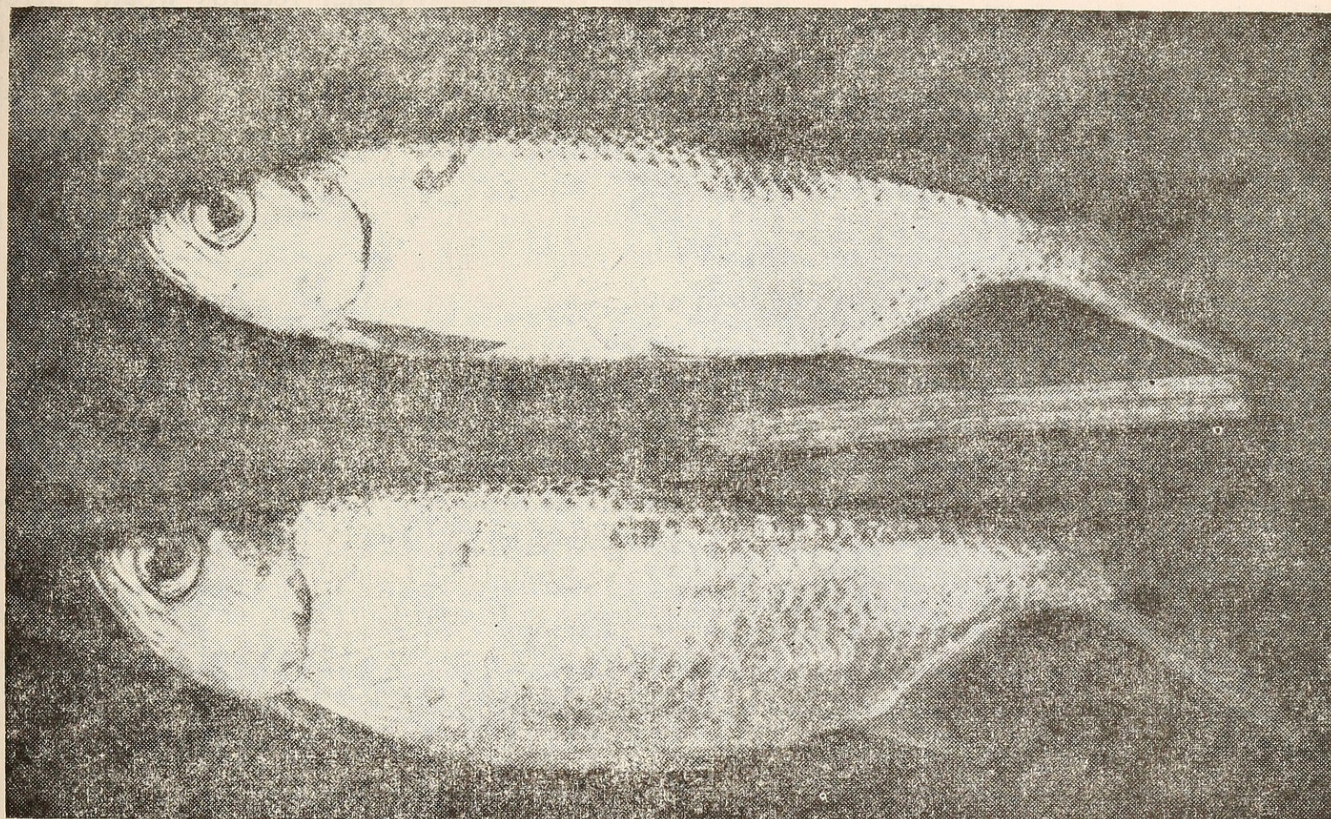


Fig. 1. 44 year old fish *Megalops cyprinoides* (Brouss).

water of Walwhan lake, extending to as much as 650 hectares at full supply level and continued to do so even in the years when the lake reached zero sill level, surviving in the dead storage which was enough for the hardy fish.

Time went on without any incident as fishing with nets was never permitted in these lakes and no fresh stocking was done. When netting was undertaken in 1970 for catching gravid mahseers for artificial breeding (Kulkarni 1971), a few *M. cyprinoides* were also caught. The occurrence of this fish

beroid condition of the flesh, when cooked, was probably due to long years of age (32 years) without substantial increase in size which was only 65 cms in total length and 2.8 kg in weight. A few fish of almost the same size were caught every year but never any young ones, because the fish being a marine type does not breed in fresh water. They were peculiar in being found dead in the nets though the mahseers and others were found alive. This was because of the special feature of the fish in having an accessory respiratory

organ in the shape of vascular bands on the inner walls of its air bladder which enable it to utilize direct surface air for its respiration. When the fish is prevented from reaching the surface, being caught in the nets, it drowns and dies. Other fish which take oxygen dissolved in water can remain struggling. During a trial netting on August 19, 1983 some more fish were caught in similar circumstances. They were 67 cm in total length and varied from 2.75 to 3.1 kg in weight. Gonads were in-

conspicuous. This record gives reliable data that *M. cyprinoides* is capable of living for at least 44 years in fresh water in wild conditions and grow to the length and weight mentioned above. They were so healthy that they appeared capable of living for another 8 or 10 years. Further records would therefore be interesting to assess the longevity of this fish but one can assert from this record that the fish can live at least for 44 years.

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August 29, 1983.

C. V. KULKARNI

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24. EXTENSION OF RANGE OF THE DADIO, *CHELA* (*NEOCHELA*) *DADIBURJORI* (MENON) (PISCES: CYPRINIDAE)

(With a text-figure)

In 1951, A. G. K. Menon published an account of a new species of fish from Cochin. His description was based on a few specimens sent to the Zoological Survey of India by the veteran aquarist, the late Mr. Sam J. Dadyburjor.

The fish, named by Menon as *Laubuca dadiburjori* after this aquarist, is closely related to the species *maassi* from Sumatra, even

to the extent of fin-ray count. The fin-ray formula is :—

D. 2/7, A. 3/11, P. 1/7, V. 1/5, C. 19; L. 1. 30-34, L. tr. 7.

Laubuca dadiburjori, now called *Chela* (*Neochela*) *dadiburjori*, can be distinguished in having a lateral steel blue stripe running along the middle of the body, extending from the angle of the opercle to the caudal peduncle,



Kulkarni, C V. 1983. "LONGEVITY OF FISH MEGALOPS-CYPRINOIDES." *The journal of the Bombay Natural History Society* 80, 230–232.

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