

## Lot – 14 (Part VII)

( ... In continuation of Lot – 14 Part VI )

### HABITAT PREFERANCES

BY

#### *Lepidocephalichthys*, *Acanthocobitis* and *Schistura* sp.

All the samples of **Lot – 14** belonging to **Family – Cobitidae** [Latin *cobitis* or Greek *kobitis* = a gudgeon like fish + *-idea* = form; ‘*gudgeon*’ is species of *Gobio*, having a habit of burying at the bottom gravel or sand; Aristotle used the term to refer to ‘**small fishes that bury**’, like *gudgeon*] occupy similar kind of habitats and are highly adapted to live at the bottom zone of diverse aquatics *viz.*, bottom with stony and pebbly bed, bottom with fine gravel of rheophilic or slow moving streams, where they have ample hiding (under stones, boulders, pebbles) and burying (into fine sand or gravel) places. Additionally, the marshy habitats with submerged or emergent rooted plants are also preferred, especially by *Lepidocephalichthys guntea* along with *Acanthocobitis botia*. The rheophils (up to about 900m msl) are found to be the favourite dwelling grounds for *Schistura* sp., followed by *Acanthocobitis*. *Lepidocephalichthys* sp. preferably venture between 300 – 500 m msl altitudes.

The **long barbels** around bottom-facing inferior mouth, associated with mental lobes and hypertrophied lips of these scavenger omnivores, are designed in a manner to sensing and manipulating the food (small invertebrates or debris) at the bottom. The horizontally spread-out paired fins with thickening of inner or outer fin rays (especially the **wedge - shaped extension** and **lamina circularis** on fused 7<sup>th</sup> and 8<sup>th</sup> pectoral fins rays in *Lepidocephalichthys* sp.) are adapted for dredging, wriggling and borrowing on occasions or aiding in getting some hold on the stones or pebbles (especially by *Schistura* sp.). *Acanthocobitis botia* is aptly named as ‘**Sand Loach**’ due to its liking for digging and hiding in substrates of sand, fine gravel or rubble.

Curiously enough, all of them are also well-adapted to live under low oxygen regime and respiring through highly vascular intestine by gulping up atmospheric oxygen on occasions.

As for entertainment value, all Cobitids are popular among **aquarium-keepers**.



**Suswa River at Raiwala (Eastern Doon): Shallow, stony, pebbly bed with some vegetation; the ideal dwelling ground of the benthic Cobitids.**

**[Inset photo showing *Athacobitis botia* (blue arrows), along with *Puntius* sp.]**



**Song River at Teen Paani, Golatappar (Eastern Doon): A slow moving rheophilic stretch, found to be the habitation of *Laepidocephalichthys annandelei* (inset photo); along with *Lepidocephalichthys guntea* and *Acanthocobitis botia*.**



**River Tons at Robber's cave (Western Doon): A fast flowing stretch with stony and pebbly bed, found to be the ideal dwelling ground for *Schistura* sp. e.g., *S. montana* (the inset photo).**



**River Tons at Robber's cave (Western Doon): A fast flowing stretch (cave stream) found to be the ideal dwelling ground of *Schistura* sp. e.g., *S. rupicola* (the inset photo).**



## **SEGREGATION OF FISH GENERA / SPECIES** **[FISHES OF DOON VALLEY]**

**Episodes: Lot 1 – 14**

**End here**

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**More Episodes on Fishes will follow in due course of time**