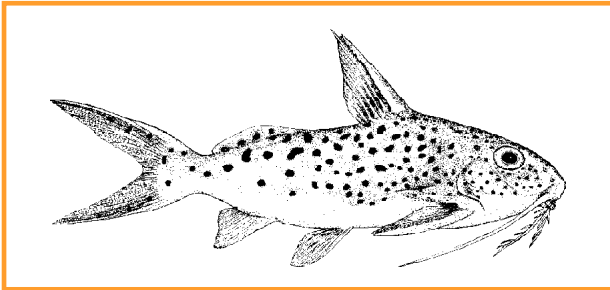


BIOSS' Training in Taxonomy

by Alexis Bashonga

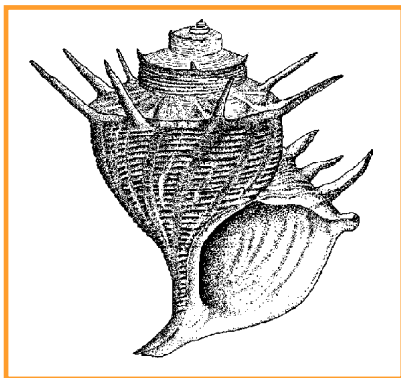
The Biodiversity Special Study (BIOSS) teams from the four Tanganyika riparian countries participated in a regional training course in fish and mollusc taxonomy organised by the Lake Tanganyika Biodiversity Project in Kigoma, Tanzania from 10-18 March 1999.

The taxonomic training course directly followed a SCUBA dive training course in which eight new divers, two each from Burundi, DR Congo, Tanzania, and Zambia, joined the BIOSS team to reinforce its existing capacity. All BIOSS team members then participated in the taxonomic training course designed to improve their skills in identifying fishes and molluscs. The course was co-ordinated by Richard Paley, the BIOSS facilitator, and taught by Drs. Gaspard Ntakimazi, Muderhwa Nshombo, and Kelly West.

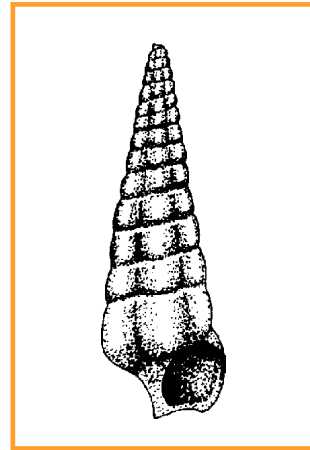


Synodontis multipunctatus, a parasitic mouthbrooding catfish (after Coulter, 1991)

The course began with a general introduction to Lake Tanganyika's history, geography, biotopes, and fauna. Students were then introduced first to the overall taxonomy of Tanganyika's fishes and then to each family, genus, and species of fish in the lake. Lectures emphasised the diagnostic features, habitat, and distribution of each species. Slide shows and books on aquarium fish were used as teaching aides in lecture. In addition to physical descriptions, students used diagnostic keys and specialist literature to identify fish. Fishes were gill-netted or purchased at the market for students to practise their identification skills in laboratory sessions. However, as a dead fish in one's hand may look very different than a live fish in the lake, students also refined their identification skills by snorkelling and diving.



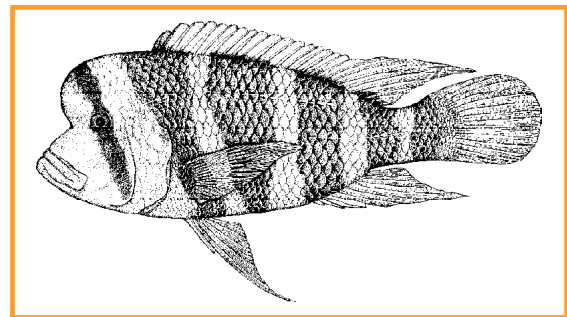
Tiphobia horei, one of Lake Tanganyika's most ornate snail shells.



Anceya giraudi, one of Tanganyika's many snail species that resembles marine species.

Students also became familiar with Lake Tanganyika's bivalve and gastropod molluscs, their taxonomy, diagnostic features, habitat, and distribution through lecture and laboratory sessions.

Generally speaking, Lake Tanganyika consists of a mosaic of biotopes containing at least 294 fish species, including 111 non-cichlid species distributed among 45 genera and 18 families and 183 cichlid species distributed among 56 genera in the single family Cichlidae. The lake also hosts 86 species of molluscs, including 15 bivalve species distributed among 10 genera and 5 families and 71 gastropod species representing 8 families and 32 genera. Like Tanganyika's fishes, much of the mollusc diversity is concentrated in a single family, Thiaridae, which includes 20 genera and 50 species of gastropods, most of which are found only in Lake Tanganyika.



Cyphotilapia frontosa, a highly sought after aquarium cichlid (after Coulter, 1991).

BIOSS team members practised and reinforced their taxonomic expertise immediately following the training course with an aquatic survey of Mahale Mountains National Park, along the southern Tanzanian coast (see page 6).

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