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REPRODUCTIVE BEHAVIOR AND CAPTIVE SPAWNING OF *BELONTIA SIGNATA*, AN ENDEMIC BEOLONTID OF SRI LANKA

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Belontia signata (Combtail) is an endemic fish, which is predominantly distributed in the Wet and the Intermediate zones of Sri Lanka. This fish has declined in numbers due to pollution of its natural habitat and exploitation by the freshwater aquarium fish export industry. Hence this fish has been categorized as threatened by the IUCN, Sri Lanka. This study concentrates on the reproductive behavior of this species to facilitate its conservation.

First, the conditions necessary for the initiation of the courtship display were determined. Second, Five adult pairs of Combtails were placed separately in 1.2x0.45x0.45 m tanks with sympatric fish from its natural habitat to test its territoriality towards these species. Third, the courtship behavior, nest construction, spawning behavior and early brood care were observed in 75L tanks. A floating plant (*Pistia*) was put into the tank to provide anchorage to the anticipated bubble nest.

Addition of new, de-chlorinated (or rain) water, a temperature ranging from 27-30°C, and a pH of 6-7.5 induced the Combtails to initiate their courtship display. Both females and males intensified in color. The males became very active, flaring their fins, circling and biting the females. The females were mostly (60%) bitten anterior to the pectoral fins. The slow moving, bottom dwelling *Lepidocephalichthys thermalis* (Common Spiny Loach) were attacked vigorously while fast swimming *Danio malabaricus* and *Esomus thermoicos* escaped the aggression. The aggression on mid-water, moderately fast swimming fishes, *Puntius nigrofasciatus* (Black Ruby Barb) and *Puntius cuningii* (Cuming's Barb) were moderate. (This information will be important for possible future re-introductions of Combtails to their natural habitats).

The males gulped in air at the water surface and blew out bubbles through their mouths and opercula to build the bubble nests. These nests were large and scattered unlike that of many other belontids. The males took 2-4 days to complete the nests and initiate the spawning activities. Before the spawning proper, there were 9-15 false runs where the males encircled the females without shedding milt or eggs. The spawning occurred under floating plants. The Combtails laid a mean number of 493.2 (SD 49) eggs, which floated up towards the surface of the water. The behavior of the males changed after the completion of spawning. The females were chased violently away from the eggs, but the females always returned to tend the eggs. No cannibalism was observed up to two weeks after spawning.