The Small Pelagic *Rastrineobola argentea*: Successful Survivor in Lake Victoria

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The small cyprinid *dagaa (Rastrineobola argentea) is* the only indigenous species from Lake Victoria which still supports an important fishery after the population boom of the introduced Nile perch *(Lates niloticus),* while at the same time it is a major prey species of the perch (Wanink et al. 1996). Rabuor and Polovina (1995) have recently suggested that the increase through the 1980s in the catches from the Kenyan waters were due to a shift in effort to more rewarding areas rather than to an increase in abundance. However, experimental fishing in the Tanzanian part of the lake showed an increase in the abundance of *dagaa,* concomitant with increases in fishing effort and catch, between 1981 and 1989 (Wanink 1991; in press).

Can we explain the thriving of *dagaa* in spite of the increased exploitation by Nile perch and fishers? Since *dagaa* is a more *r*-selected species than the haplochromine cichlids, which strongly declined after the Nile perch boom, a better survival of *dagaa* was expected (Wanink 1991). Furthermore, the drop in zooplanktivorous cichlids may have relieved *dagaa* from competition for food.

Besides Nile perch and fishers, some important avian piscivores intensified their predation pressure on *dagaa* after the collapse of the cichlids (Goudswaard and Wanink 1993). However, the current predators concentrate on adult dagaa, while in former years the cichlids took many juveniles (Wanink et al. 1993, in press). Thus, more fish will reach maturity under the new circumstances.

Wandera and Wanink (1995) found surprisingly low growth rates of *dagaa* after the Nile perch boom. Further analysis of their data revealed that they have underestimated the growth rate in the Tanzanian waters. Between 1982 and 1988 the growth rate of dagaa increased threefold, while L_∞ decreased by 13%. At the same time, the age at first maturity decreased significantly (Wanink et al. in press).

The observed life-history tactics and the shift from juvenile to adult exploitation mortality made *dagaa* a successful survivor in a disrupted ecosystem. Although the prospects for a sustainable fishery are good, the current increase in the use of mosquito seines is dangerous. Not only do mosquito seines yield a lower catch per unit of effort than alternative gear, but they also show a strong selection for juvenile *dagaa* (Wanink 1996; Wanink et al. 1996).

References

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Errata

In the January 1995 issue of *Naga, the ICLARM Q.* the article "Growth and Mortality of Dagaa *(Rastrineobola argentea,* Fam. Cyprinidae) in Lake Victoria" by S.B. Wandera and J.H. Wanink on pp. 42-45 needs correction. In Table 5, ϕ of *S. tanganicae* should be 2.26 and the reference should be "Roest (1977)". Also in Table 5, the parameters L_∞ = 10.0, K = 2.74 and ϕ = 2.44 for *R. argentea* should be linked to the reference "Proude and Stoneman (1973)". In the first paragraph of the Discussion, "the clupeid *Stolothrissa tanganicae* (Roest 1977)" should read *"Engraulicypris sardella* (Rufli and van Lissa 1982)". J.H. Wanink was from the Haplochromis Ecology Survey Team (HEST), working together with the Tanzania Fisheries Research Institute (TAFIRI).