

RECREATIONAL FISHERY, KENYIR LAKE MALAYSIA

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Introduction

Malaysia, with its geographical position and with submontane lakes, reservoirs, natural lakes, and river has many biotypes suitable for many fish species attractive for sport fishing. Lake Kenyir, the largest man-made lake in Malaysia is primarily built for the purpose of hydroelectric generation, now being actively developed for eco-tourism. Besides, providing recreation to many naturalists, it forms a good fishery as a source of food to innumerable fisherman and tribals living in the long stretches of rivers. However, better methods to measure angler effort and harvest are needed to monitor resource trends success, evaluate management tools, and document fisherman satisfaction associated with sport fishery resources. In these contexts, we must reclaim and maintain significant segments of our heritage of natural waters, including good fishing water, for their recreational and aesthetic values. Thus the above evidences strongly imply the necessity to study the status of recreational fishes in Kenyir Lake.

Materials and Methods

A survey was carried out from January 1996 to December, 1998 in Kenyir Lake. Primary data were size, (length and individual weight) and catch composition, obtained twice a week. Creel survey was also carried out and data included catch per unit effort, exploitation rate etc. Visual survey by scuba diving was also conducted according to Moyle and Baltz (1985) in Sungai Buluh nipis, Sg. Cacing, Sg. Kerbat, Sg. Kiang, Sg. Lancang, Sg. Mandak, Sg. Petang, Sg. Petuang, Sg. Terengganu, Sg. Terenggan, Sg. Terbat to observe the habitat utilization by different size of this fish. Some physico-chemical parameters were also conducted. The distribution of *Tor* sp. was also examined in relation to its concentration profile. The observed *Tor* sp. were divided into three categories, fingerlings (>2 mm, <7 mm), juveniles (>7mm, <20 mm) and adult (> 20 mm) in standard length.

Results and Discussion

A total of 38 species from 13 families was caught in the lake, out of which 9 species were potentially good sport fishes (Ambak and Jalal, 1998). These are *Acrossocheilus hexagonolepis*, *Channa micropeltes*, *Hampala macrolepidota*, *Mystus nemurus*, *Scleropages formosus*, *Tor tambroides*, *Osphronemus goramy*, *Notopterus chitala*, *Probarbus jullieni*. The catch statistics from landing stations revealed that

the recreational fishes had declined and highly valued sport fish Kelah seriously lacking and can be considered endangered. The preliminary values of physico-chemical values indicated that the water quality is suitable and favourable for fish production. The fingerlings of *Tor* sp. were mostly found in riffles and rapids while the juveniles were well spread in riffles, rapids, and pools. on the other hand, the adult *Tor* sp. (*Tor soro* and *Tor tambroides*) were found in pools and transition zone associated with cobbles, boulders and bedrock's at a depth of 1-5 m deep. In terms of distribution, there are very few locations with high densities of *Tor* sp. and progressively more location with decreasing densities. This corresponds to concentration 'Type I' profile described by Clark (1982). Thus, CPUE will decrease very rapidly when there is exploitation. According to our research findings, the maturation of Kelah would be at stage three level when they reach to 800-900 gm (>450 mm). But, the proposed regulation of the minimum length to capture Kelah is 300 mm (Chuah et al. 1997). Thus, the minimum total length of Kelah as well as some other recreational fishes will need to revised based on responses of fish populations to management. Based upon our observations it can be concluded that the natural stocks of recreational fishes have been depleted due the following factors: Poisoning, indiscriminate fishing, wanton destruction of brood fish and juveniles of recreational fishes. All sizes of fish are vulnerable to fishing, gears (e.g. Gill net). Thus low fecundity has impeded natural replenishment and extreme vulnerability of early stages and hatchlings of major recreational fishes to predation and increasing environmental degradation. Lack of enforcement officers, unregistered sale of different sizes of recreational fishes and high fishing pressure during breeding seasons are some major factors.

Conclusions

Protection of dwindling stocks, prevention of indiscriminate fishing and observing a close season by suitably revising Present Fisheries Act. Encourage research on the biology, ecology, and stock dynamics of recreational fishes. The restocking programmer should be conducted by establishing of fish farms with suitable facilities exclusively for highly valued recreational fishes. Introduction of exotic sport fish. e.g., Indian mahseer could be initiated.

References

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