

FISH WILDLIFE AND TRANSLOCATION IN
LAKSI, TERENGGANU

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FISH DIVERSITY AND EFFECTS OF TRANSLOCATION IN LATA BELATAN,
TERENGGANU

By

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LIST OF ABBREVIATIONS

°	-	degree
%	-	percentage
\leq	-	smaller than
\geq	-	greater than
mg	-	miligram
L	-	liter
SL	-	standard length
W	-	weight
N	-	total

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ABSTRACT

This study was conducted on fish diversity and translocation of freshwater fishes in Lata Belatan, Kuala Terengganu. The objectives of this study are to determine species composition and abundance of fish at downstream before and after rainy season and to examine the effect of translocation of fish from the lower section to the upper section of the waterfall. The process of electrofishing was done during the capturing of fish. A total of 183 fish were collected and identified into 33 species from 13 families from the samplings on fish diversity. Family Cyprinidae is the most dominant family accounted for about 30% (10 species) of the total fish caught during this study. This study revealed that *Batasio havmolleri* is the dominant species, accounting for 14% (25 individuals) of the total fish captured. Shannon-Weiner diversity index, Simpson index, Margalef index and Menhinick index for the whole sampling has proven that fish diversity in Lata Belatan is relatively high with a value of 3.13, 0.95, 28.60 and 13.53, respectively. Overall, the species diversity of fish in Lata Belatan is quite high due to the suitable environment for the development of freshwater fish. Flooding due to heavy rain falls, fast-flowing water, low levels of dissolved oxygen and inefficiency of electrofishing gear contribute toward the low diversity of fishes in Lata Belatan after rainy season. The translocation activity was unsuccessful due to the flooding that occurred during heavy rainfalls, a short period of time in monitoring the translocated fish and difficulties while handling the fish.

KAJIAN KE ATAS KEPELBAGAIAN IKAN DAN KESAN TRANSLOKASI DI LATA BELATAN, TERENGGANU

ABSTRAK

Kajian ini telah dijalankan bagi mengkaji kepelbagaian ikan dan translokasi ikan air tawar di Lata Belatan, Terengganu. Objektif kajian ini adalah untuk menentukan komposisi dan kelimpahan ikan di hilir sungai pada sebelum dan selepas musim hujan dan untuk menyelidik kesan translokasi ikan dari bahagian bawah ke bahagian atas air terjun. Proses penangkapan ikan dengan menggunakan elektrik telah dilakukan semasa penangkapan ikan. Sejumlah 183 ikan telah dikumpul dan dikelaskan kepada 33 spesies dan 13 famili daripada pensampelan tentang kepelbagaian ikan. Famili Cyprinidae adalah famili yang paling dominan menjelaskan lebih kurang 30% (10 spesies) dari jumlah ikan yang ditangkap dalam kajian ini. Kajian ini mendapati bahawa spesies dominan ialah *Batasio havmolleri* iaitu sebanyak 14% (25 individu) dari jumlah keseluruhan ikan yang ditangkap. Indeks kepelbagaian Shannon-Weiner, indeks Simpson, Indeks Margalef dan indeks Menhinick untuk keseluruhan pensampelan telah membuktikan bahawa kepelbagaian ikan di Lata Belatan adalah agak tinggi dengan masing-masing mencatatkan nilai 3.13, 0.95, 28.60 dan 13.53. Secara keseluruhan, kepelbagaian spesies ikan di Lata Belatan adalah agak tinggi disebabkan oleh persekitaran yang sesuai untuk perkembangan ikan air tawar. Banjir yang disebabkan oleh hujan lebat, air yang mengalir laju, paras oksigen terlarut yang rendah, dan ketidakcekan alatan proses penangkapan

ikan dengan menggunakan elektrik menyumbang kepada kepelbagaian ikan yang rendah di Lata Belatan selepas musim hujan. Aktiviti translokasi tidak berjaya disebabkan oleh banjir yang melanda semasa hujan lebat yang turun, tempoh yang pendek untuk mengawasi ikan yang telah ditranslokasi, dan kesukaran semasa mengendalikan ikan.