Chapter Three

Data Analysis

Descriptives statistics included the enumeration of all individuals caught during the study. The individuals caught were enumerated according to their family, local name species name, the mean size in total body length and their mean body weight. This stage provided a list table of all animals caught during the study.

The analysis then focused on the target species which included the anguillid eels. The number of anguillids caught were illustrated in table showing their counts in accordance with their life stages which are the glass eels and elvers stages. The catch per unit effort was explored by determining the number of individuals caught per net per day for every life stage.

The morphometrics of the individual species were conducted in terms of means and standard deviations. The morphometrics of the individual species included total length, dorsal fin to anal fin distance, (add the other morphometrics). The morphometrics were illustrated for each species and each life stage. The significance of differences in morphometrics was determined using a one-way analysis of variance. Therefore, after determining which species is the largest and which is the smallest, the significance of the differences was ascertained by use of a one-way anova for all morphometric measurements.

Factors influencing recruitment of anguillids that included seasonality, temporal variability and biotope were analyzed using percentage proportions whereby chi-square tests of association were conducted to determine whether there existed any association between anguillid species caught and seasons, months and biotopes. The factors influencing recruitment of anguillids was conducted separately for every life stage. All statistical significance tests were performed at 95% confidence intervals. The seasonal patterns and monthly patterns were the major influencers of recruitment in this study.