

APPENDIX 1. Indexes used to measure similarity and diversity

Morisita's index of similarity

This index measures the similarity between two communities, being most easily interpreted as a probability. It varies from 0 (no similarity) to 1 (complete similarity). It is nearly independent of sample size, except for very small samples (Krebs 1999).

Shannon-Wiener

This index assumes that individuals are randomly sampled from an infinite population and that all species are represented in the sample. Its value usually found to fall between 1.5 and 3.5, rarely surpassing 4.5 (Magurran 1988).

Table A.1 – Values used to compare the Shannon-Wiener index through a *t*-test presented in the body text. *N* represents the total number of individuals in the sample and *S* the number of species effectively observed.

	Total items		Fish items	
	1992/93	2002/03	1992/93	2002/03
Variance	0.0013	0.0031	0.0039	0.0049
<i>N</i>	1253	557	558	205
<i>S</i>	46	33	35	24

Rarefaction

It is a method devised for calculating the number of species expected in each sample if all samples were of a standard size (Magurran 1988), meaning that all samples (even if they are of different sizes) are standardized to a common sample size of the same number of individuals (Krebs 1999). In this study, the graphic is answering the question: “If we had sampled only *n* meals, what number of different items we would have expected?”. It is useful to demonstrate graphically the differences in number of different animal items between the two periods.