## Trait-based analyses of historical albacore diets

Analytical workflow for section 2.4

## 1. Report on taxonomic and trait diversity in albacore diets

Develop species accumulation curves in relation to ocean basin sampled for all **308 species** identified in albacore diets from **69** independent diet observations (by season, year and location sampled) reported within **26** studies.



## 2. Quantitative classification of albacore prey into trait-based guilds

Use divisive hierarchical clustering technique to classify **292 species** with complete trait information from all **69** observations and all **26** studies

Identify optimal clustering and classification of prey trait guilds

Calculate a normalized frequency of occurrence-based index of contribution to diets for each prey trait guild to illustrate variation in historical trait-based diet composition.



## 3. Statistically compare trait-based vs. taxonomic information in explaining variation in diet composition

Due to low replication of some species and in some ocean basins, trait-based multivariate generalized linear models were developed for **98** species with > 3 occurrences in the dataset and involved **60** diet composition observations from **23** studies.