MAR-ECO
Patterns and process of the eco-systems of the northern mid-Atlantic

Presentation of MAR-ECO Students

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Title of project: Phylogenetic analysis of suborder alepocephaloidei (Slickheads & tubeshoulders)

Object of Study: The suborder alepocephaloidei comprise three families; alepocephalidae (slickheads), platytroctidae (tubeshoulders) and bathylaconidae, the latter being questionable in having its own family. Alepocephaloidei has been associated with several groups of fishes and the group is still an issue of controversy. Despite good morphological studies lower and higher taxonomic relationships remains partly unresolved. Argentinoids, salmonoids and osmeroids have all been regarded sister groups to the alepocephaloids. New molecular results indicate an earlier view proposed, namely that clupeoids are the closest living sister group of the alepocephaloids.
The alepocephaloid group contain a great diversity of adaptations so interrelationships of this group have proven difficult.
This study combines morphological- and molecular data in inferring a phylogeny of the alepocephaloidei.
Mar-Eco caught fishes (ZMB) and North Atlantic specimens (ZMUC) provide the base of this study with a fairly broad representation of alepocephaloids.

Abundance studies have shown alepocephaloids to be an important part of deep sea communities worldwide. North Atlantic species are frequently caught and MAR-ECO based research has shown alepocephaloids to be associated with topological features such as the Mid-Atlantic Ridge.