A trans-Atlantic examination of haddock Melanogrammus aeglefinus food habits

The food habits of Melanogrammus aeglefinus were explored and contrasted across multiple north-eastern and north-western Atlantic Ocean ecosystems, using databases that span multiple decades. The results show that among all ecosystems, echinoderms are a consistent part of M. aeglefinus diet, but patterns emerge regarding where and when M. aeglefinus primarily eat fishes v. echinoderms. Melanogrammus aeglefinus does not regularly exhibit the increase in piscivory with ontogeny that other gadoids often show, and in several ecosystems there is a lower occurrence of piscivory. There is an apparent inverse relationship between the consumption of fishes and echinoderms in M. aeglefinus over time, where certain years show high levels of one prey item and low levels of the other. This apparent binary choice can be viewed as part of a gradient of prey options, contingent upon a suite of factors external to M. aeglefinus dynamics. The energetic consequences of this prey choice are discussed, noting that in some instances it may not be a choice at all.

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