

## Investigating trophic level variability in Celtic Sea fish predators

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## ▶ To cite this version:

Emmanuel Chassot, Tristan Rouyer, Verena M. Trenkel, Didier Gascuel. Investigating trophic level variability in Celtic Sea fish predators. Journal of Fish Biology, Wiley, 2008, 73 (4), pp.763-781. <10.1111/j.1095-8649.2008.01938.x>. <ird-00548995>

## HAL Id: ird-00548995 http://hal.ird.fr/ird-00548995

Submitted on 21 Dec 2010

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## **Figure captions**

Figure 1. Location of the ICES subdivisions (VIIf,g,h,j) of the Celtic Sea

Figure 2. Density histograms for all individual trophic levels  $(T_L)$  analysed of the Celtic Sea fish predators

Figure 3. Comparison of trophic level for the five species of interest as estimated in the present study ( $\square$ , derived from stable isotopes of nitrogen in the celtic Sea ( $\square$ ) and the North Sea ( $\square$ ), and extracted from the FishBase database ( $\square$ ). Cod = Atlantic cod; Had = Haddock; Hke = Hake; Meg = Megrim; Whg = Whiting. Vertical lines indicate standard deviation when available

Figure 4. Comparison of trophic levels (mean  $\pm$  standard deviation) estimated for the Celtic Sea fish predators: (a) Different levels of taxonomic resolution for the prey: high resolution in abscissa and low resolution (broad taxonomic group) in ordinate; (b) Different sources of prey T<sub>L</sub>s: prey T<sub>L</sub>s derived from stable isotopes in abscissa and extracted from the FishBase database in ordinate. Cod = Atlantic cod; Had = Haddock; Hke = Hake; Meg = Megrim; Whg = Whiting

Figure 5. Trophic level ( $T_L$ ) as a function of length (generalized additive model GAM, gaussian family, identity link function). No significant effect of length on the  $T_L$  of haddock was detected. Whiskers on the abscissa axis indicate data presence

Figure 6. Boxplots for all individual omnivory indices (O<sub>I</sub>) analysed of the Celtic Sea fish predators