**Are warming temperatures accelerating fish growth? A case-study of Common sole in North East Atlantic waters**

**Higher temperature, faster growing fish? A case-study of Common sole in the Bay of Biscay**

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*Solea solea*—or Common Sole—is a flatfish that inhabits sandy or muddy ocean floor areas throughout Europe and Africa, including the Bay of Biscay, located west of France and north of Spain. The Bay of Biscay faces pressures such as fishing, shipping, tourism, nutrient enrichment, extraction of species, and substrate loss; another potentially important stressor to this area is climate change. In the study area,, temperatures are projected to increase by 1.5°C to 3.0°C above mean conditions by 2099 due to climate change. These temperature changes can affect fish biological processes such as sexual maturation, community structures, population distribution, and body size and growth. A well-known concept involving the influence of temperature on body growth is the Bergmann's rule, which states that organisms inhabiting areas of lower temperatures display slower growth and larger asymptotic sizes. A useful tool in the study of temperature influence in fish are otoliths, structures found in the inner ear cavity of all teleost fish that develop annuli, or rings, as fish grow. These growth rings can be used to determine the animal’s age by determining daily, seasonal, or annual growth patterns. This study focused on studying the effects of sea bottom temperature on the annual growth of *Solea solea* in the Central and Northern Bay of Biscay by measuring and analyzing the distances between the growth rings in otoliths from *S. solea* captured in this area during the period of 1989-2020. This research contributes to the FWO PhD research entitled "Warm and wanted: effects of climate change and fisheries on fish growth".

Kelly, your writing is really smooth. I like it! I also appreciate that you’re focusing on introducing your study rather than already presenting results. However, it will be much more appealing for readers/listeners if you already shed a light on preliminary results. If you could mention that you’ll show the changes in otolith increment and its correlation with temperature, that would rank your chance of being selected for an oral presentation instead of a poster somewhat higher. If you already have that correlation, then you can mention the numbers/figures. If you don’t have it but if it’s doable to present it at the time of the conference, then you can already mention that you’ll do so. If you won’t get the correlation yet, you may also present the results from the otolith readings, e.g. do you already see much changes which may be related to changes in growth?

I totally agree that by presenting some prelimary results, the abstract will be more attractive. You can state ‘Preliminary analyses indicate……’

*Keywords:* *Solea solea*, otolith, fish growth, climate change, temperature size rule