

# Examining Gender Authorship *in Aquaculture Journals*

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# WHY LOOK AT AUTHORSHIP ORDER IN AQUACULTURE?



Publications are an important factor for assessing professionals in research and academia for promotions, future funding, and tenure-tracked positions



The process is NOT always straightforward AND authors listed first or last generally receive the most credit (Laurance 2006; Tschardt et al 2007)



Authorship order has intent, can be politically motivated, and is culturally embedded within a system

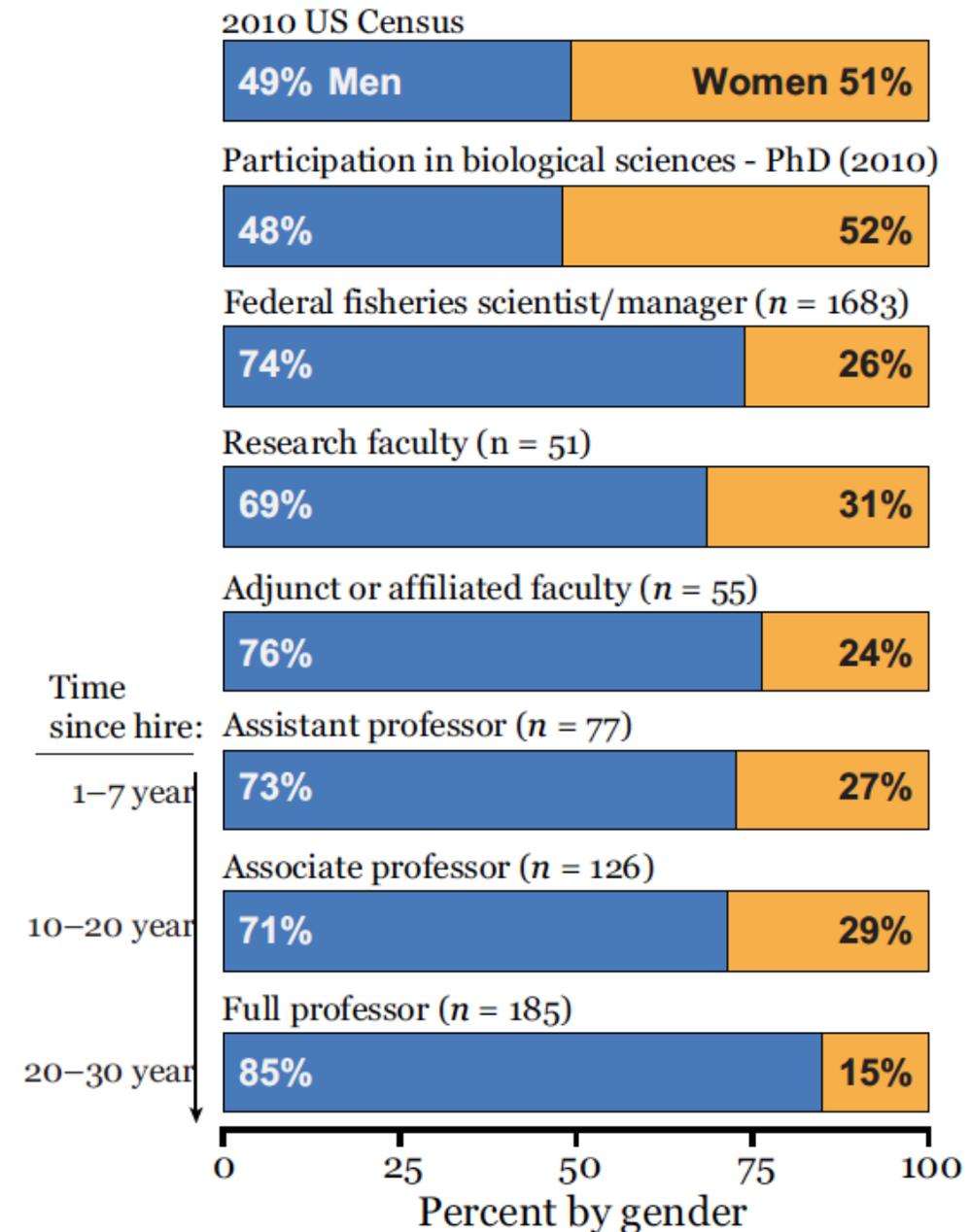


Research Question: Are women publishing in the field of aquaculture proportionately to their involvement in the field?

## Context For Fisheries -- recent research has shown low participation by women authors. No info on aquaculture...

West et al. 2013 (Plos One) found that men predominate in prestigious first and last author positions and that women are underrepresented as single authors. Using their data we found these proportions for the following fisheries disciplines:

Fisheries Discipline	1665-1989	1990-2011
Ichthyology	5.5% Female 94.5% Male	13.9% Female 86.1% Male
Aquatic Ecology	12.7% Female 87.3% Male	24.6% Female 75.4% Male



Source: Arismendi and Penaluna (2016)

# OUR APPROACH



1. Conduct journal meta-analysis on reputable journals in Aquaculture field. We applied the West et al. (2013) methodology to the field of aquaculture to understand how gender has changed in aquaculture over time. We generated a subsample of the JSTOR corpus (8 million peer-reviewed journal articles) for aquaculture, and corrected for unknown gender designations:

- 23,000 articles (43,146 authorships) in 8 aquaculture-related journals from the JSTOR Corpus (published since 1913) were assessed for authorship gender.



2. Calculate women authorship position in 543 international aquaculture publications in a curated db (IACD)

We used our international aquaculture curated database of 543 articles (1706 authors) in 121 journals, all published between 1983-2016.

3. Analyze the IACD to triangulate and verify the JSTOR subsample, against the JSTOR corpus context.

# INITIAL FINDINGS

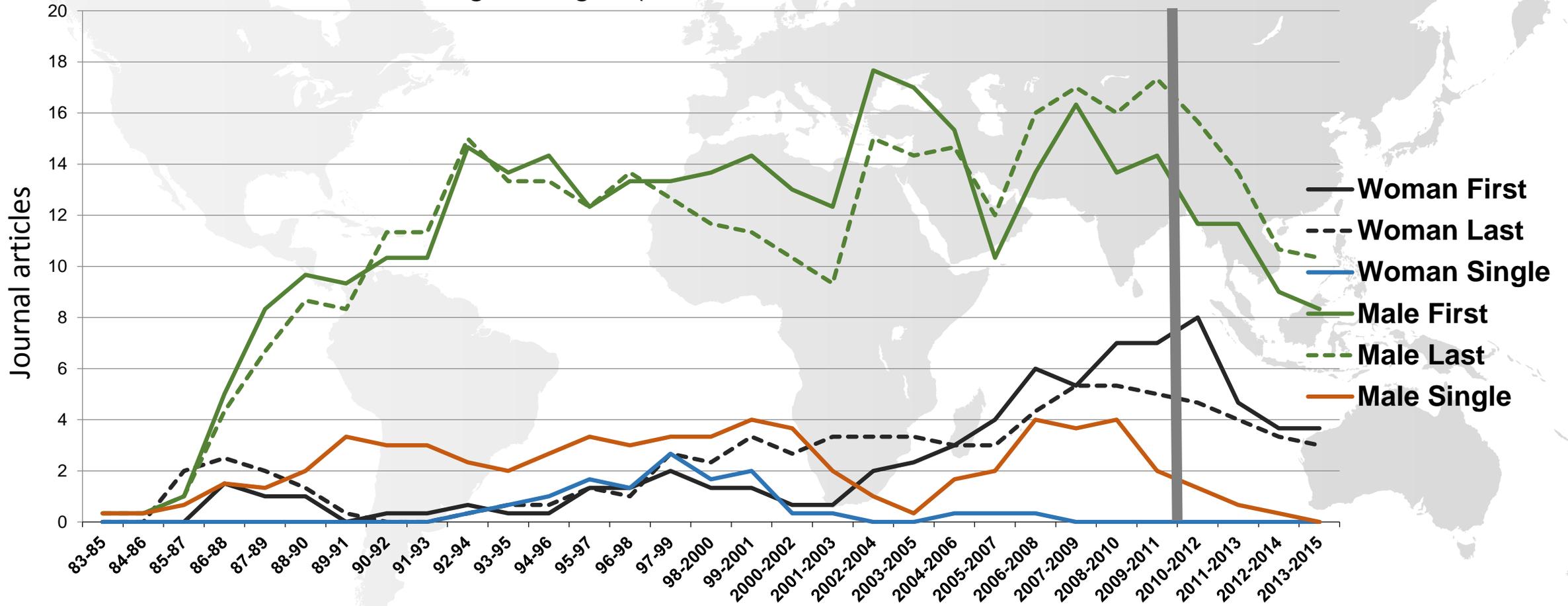
%WOMEN AUTHORS in Three “datasets” of Peer-Reviewed AQUACULTURE Literature

Authorship Position of women	International Aquaculture Curated Database (IACD)	JSTOR – Aquaculture subsample	JSTOR Corpus
Any position	15.7% (5.3% genders unknown)	13.8% (23.7% genders unknown)	16.1% (26.7% genders unknown)
Single Author	>1990: 11.1% <sup>2</sup>	11.0% (All years)	All years: 17.0% <1990: 12.0% <sup>2</sup> >1990: 26.0% <sup>2</sup>
First Author	14.2%	15.8%	19.2%
Last Author	14.0%	16.5%	19.6%

# INITIAL FINDINGS

## WOMEN AUTHORSHIP BY POSITION OVER TIME

Rolling averages (IACD)



## NEXT STEPS

- Compare the gender of authorship positions over time in the JSTOR Corpus and JSTOR-Aquaculture subsample with those in the International Aquaculture Curated Database (IACD).
- Expand the JSTOR dataset and include more journals, examine sub- areas within the field of aquaculture.
- Contextualize data from the IACD and JSTOR with the population of women graduates with aquaculture degrees over time, and of a curated population of professional and student participants in the IACD.



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