



## Research Question

### Are women more likely to study female bird song?

- Female bird ornamentation and song have been widely ignored until recently (Langmore 1998; Odom et al. 2014).
- Many key female song papers have been written by women.
- We tested whether female song research is conducted disproportionately by women.

## Background

- Ideas about female bird song evolution and presence have reversed historic assumptions.
- Diversity contributes to innovation, creativity, complex thinking, and information processing (Østergaard et al., 2011; Díaz-García, 2013; Galinsky et al, 2015).
- Potential for novel hypotheses and to reduce bias in science

## Methods

- Collected author gender information for all female bird song papers published between 1997 and 2016
- Found match-pair “bird song” publications for each female song paper based on journal and publication date
- Chi-square analysis based on author position, author sex, and publication type

## Results

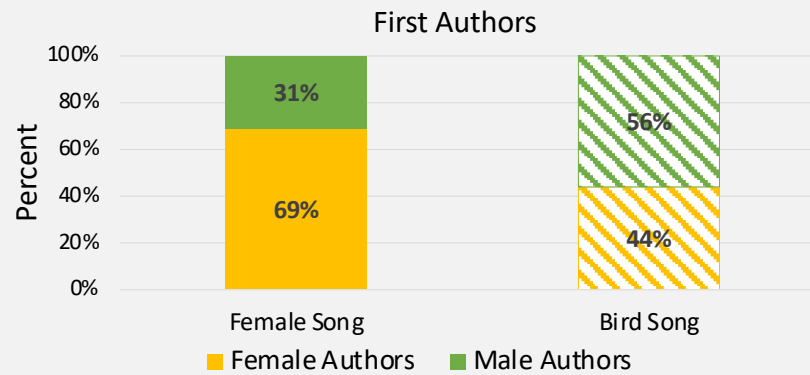


Fig. 1. Percentage of female and male authors for either bird song or female bird song papers. 69% of first authors of "female song" papers are women, whereas only 44% of first authors of "bird song" papers are women.

Author Position	FS/Female	FS/Male	BS/Female	BS/Male	P-value
First Author	41 (69%)	18 (31%)	26 (44%)	33 (56%)	0.0092*
Last Author	19 (42%)	26 (58%)	13 (27%)	36 (73%)	0.1658
Middle Authors	31 (50%)	31 (50%)	25 (39%)	39 (61%)	0.2920
Total Authors	91 (55%)	75 (45%)	64 (37%)	108 (63%)	0.0016*

Table 1. Number of authors based on gender, author position, and paper type. FS represents female bird song papers and BS represents bird song papers. Numbers in parenthesis show the percentage of authors of a gender based on paper type. Asterisks denote statistical significance (\* P < 0.01).

## 1997-2016 Publications

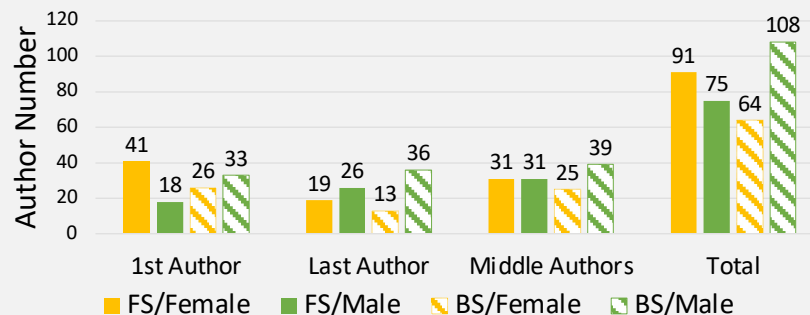


Fig. 2. Author count by author gender and author position. FS represents female bird song papers and BS represents bird song papers. Yellow indicates women authors, green indicates male authors. Solid bars represent female song papers and dashed bars represent bird song papers.

## Key Findings

- Women are significantly more likely to first author papers on female song.
- However, majority of final / senior authors on female song papers are still men.

## Implications

- Increased diversity in science leads to unique approaches in understanding in behavior, management, and conservation.
- New ideas about animal behavior, ecology and evolution may increase as diversity of researchers increases.
- Diversity may correct current research biases and lead to discoveries relevant to all communities and parts of the world.

## References

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