Inferring association patterns and natal pod philopatry in short-finned pilot whales

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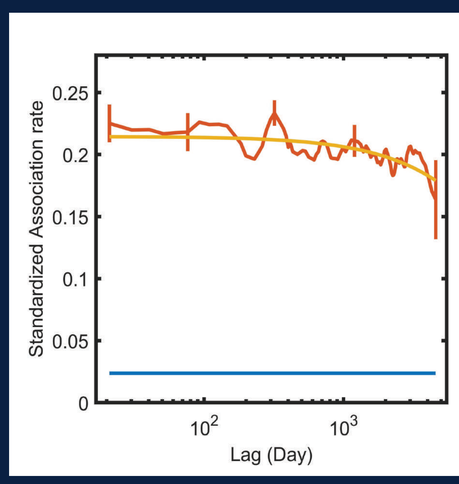
Research question

Do (Atlantic Naisa) short-finned pilot whales of known sex display natal pod philopatry in Madeira

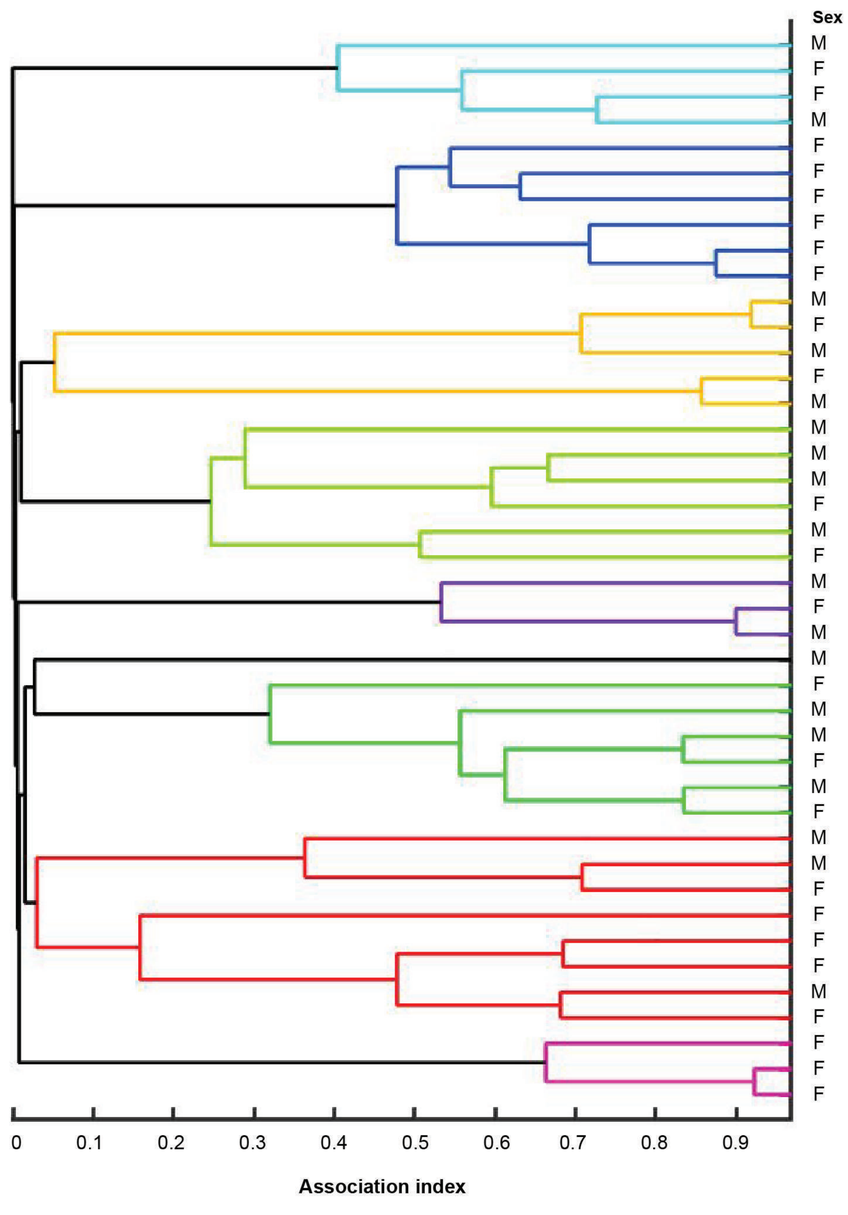


Method 2

Standardized lagged association rates

Findings

Stable associations over an extended period



Method 1

Hierarchical cluster analysis for 42 genetically sexed and distinctive individuals captured on ≥ 4 encounters with high or full coverage (2003-2020; 362 encounters)

Findings

Long-term preferred companions (observed CV=3.223, random CV=3.064, $p<0.001$)

No significant differences in association strength within or between sexes (Mantel test $p>0.4$)

Conclusions

Both males and females display natal group philopatry

SFPWs in Madeira exhibit long-lasting and stable groups of mixed sexes

To confirm matrilineality, additional genetic analyses are needed

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