


Pilot Study - Signature whistles of bottlenose dolphins (*Tursiops truncatus*) in the Cedar Keys, Florida

Jolinde M.R. Vlaeyen^{1,2}, Rebecca Hamilton³, and Stefanie Gazda⁴

¹ Animal Behaviour and Cognition, Utrecht University, the Netherlands | ² Institute of Cognitive Science, Comparative BioCognition, University of Osnabrück, Germany |

³ School of Health Sciences, University of Manchester, UK | ⁴ University of Florida, Florida, USA

BACKGROUND

-  **Signature Whistles** = Necessary for communication:
- Important for social interactions
 - Convey identity and location information
 - **Unique** to each individual

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SIGNATURE IDENTIFICATION (SIGID) → Reliably identify signature whistles in a dolphin population

CEDAR KEY DOLPHIN POPULATION - DRIVER BARRIER:
 foraging tactic with division of labor with role specialization

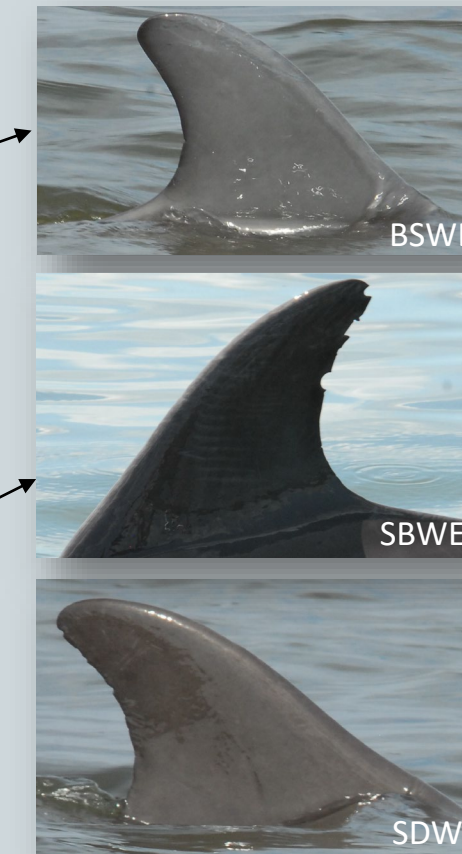
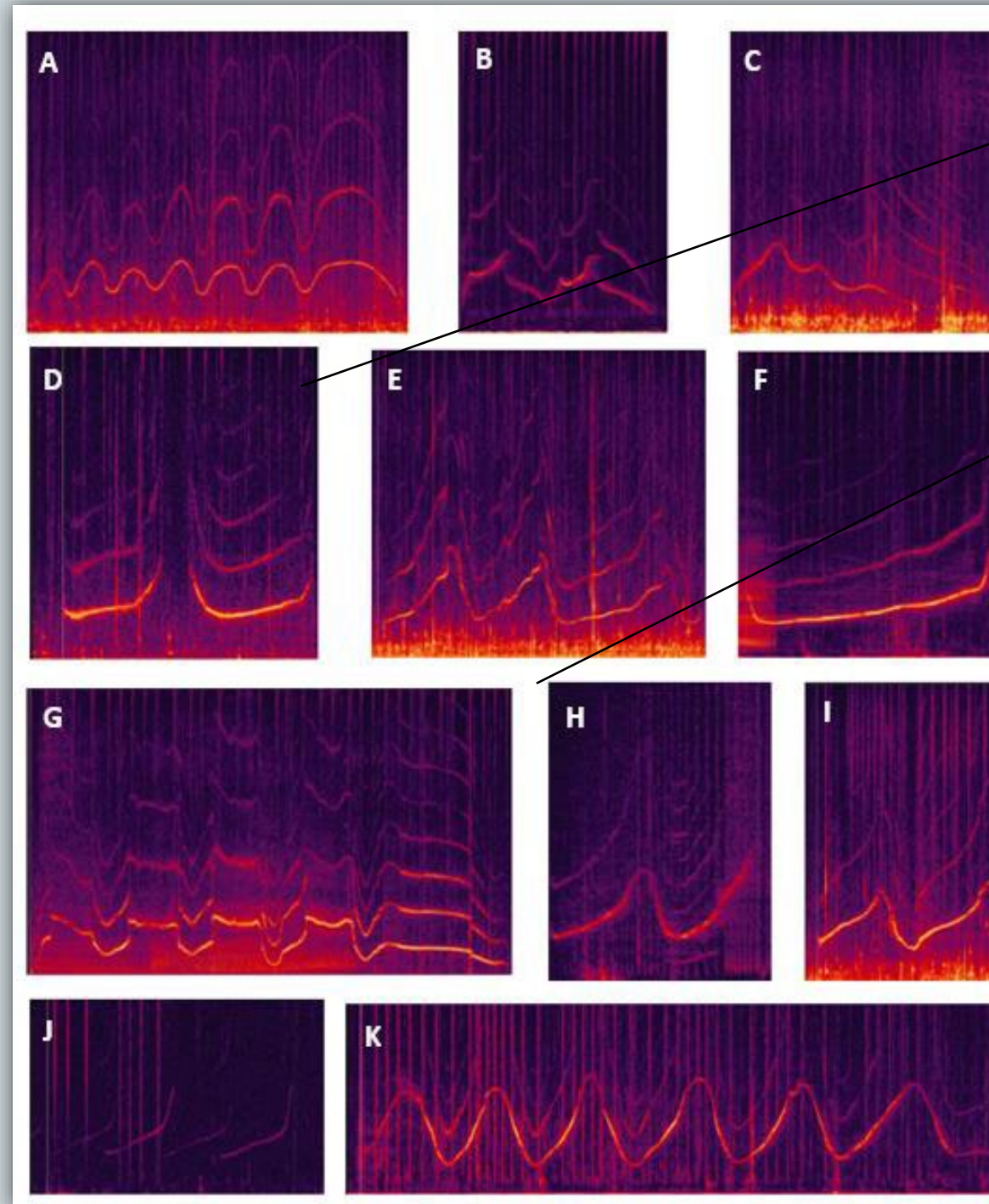


METHODS


 Since 2011
 

 2018 - 2019
  SIGID
  Adobe Audition

RESULTS



➤ From 16 encounters and 36 dolphins
 → **11 signature whistles found (30%)**

➤ Most **common behavior** in encounters with signature whistles:

- **Driver-Barrier**
- Bottom-grubbing

PRELIMINARY MATCHING

➤ Certainty = 3/11
 ➤ 2 options = 6/11
 ➤ > 2 options = 2/11

CONCLUSION

➤ 1st evidence of signature whistles in this population
 ➤ Signature whistles during foraging → will shed light on driver-barrier behaviours (who calls, when, and why)
 ➤ **Next step:** More encounters + *Beluga* & *ARTWARP* for more precise analysis

Photo-ID + acoustic monitoring of the Cedar Key population will be key for advancing research on this unique foraging strategy.