



Pectoral Fins?

BACKGROUND & GOAL

- Contact is used by many social species, such as lions, primates, and elephants for social bonding
- Dolphins create and maintain relationships that last for decades
- Dolphins often initiate contact using their pectoral fins

Goal – To better understand why & how dolphins use their flippers to share contacts

What do we want to know?

1. Do dolphins use their pectoral fins for social bonding?
2. Do dolphins use pectoral fin contact to reduce tension?
3. Is this contact used more between family members (kin) or non-family members (non-kin)?

DATA COLLECTION

Who

41 Bottlenose Dolphins
(*Tursiops truncatus*)
Neonate to 30+ years old
19 Females & 22 Males



Where

The Roatan Institute for Marine Sciences – Anthony’s Key Resort
Roatan, Honduras

When

2003-2018 – Underwater
observational video subset

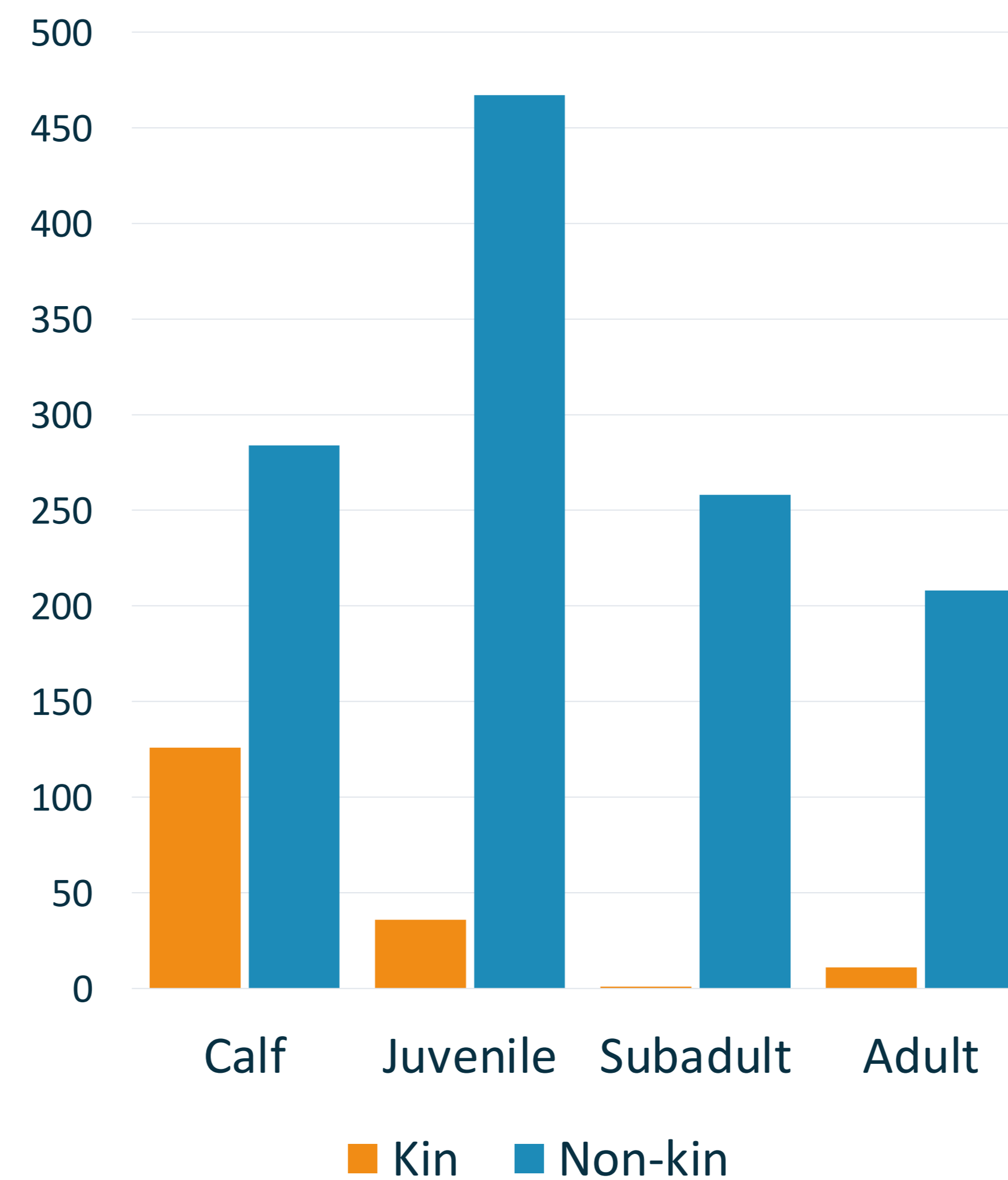
How

Video data recorded using
a mobile video/acoustic array (MVA)

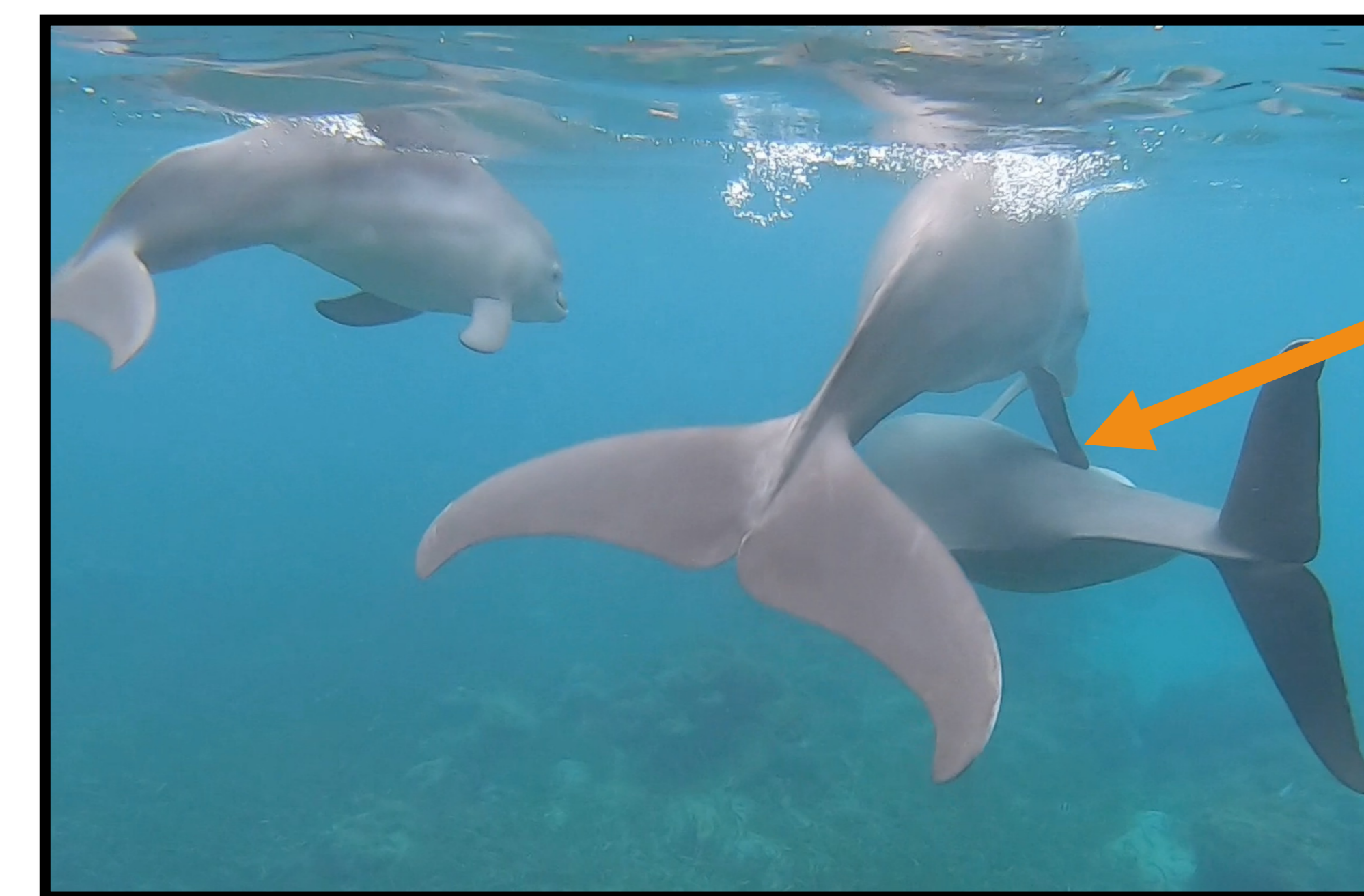
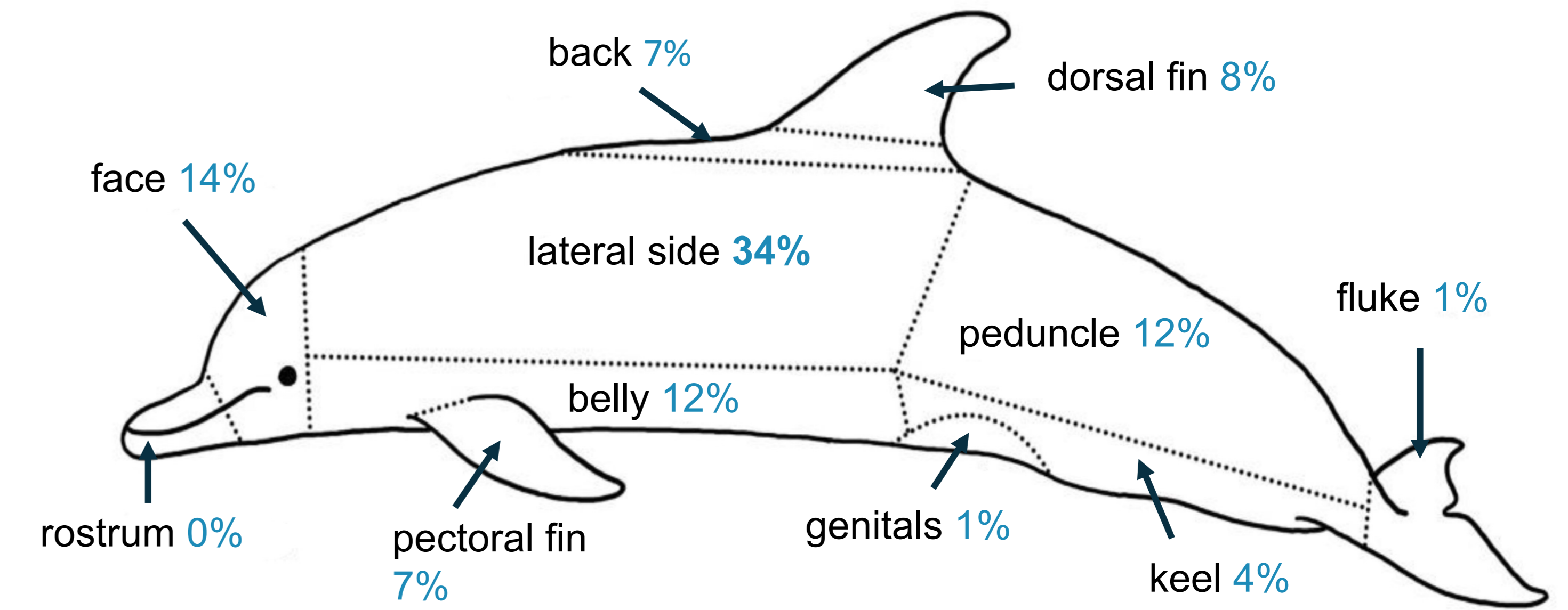


RESULTS – What did we find?

Pec Fin Contacts between Kin and Non-Kin



Body Parts Touched by Non-Kin’s Fins



Example:

Elli using her pec fin to rub Alita’s belly area. These 2 dolphins are adult, non-kin females.

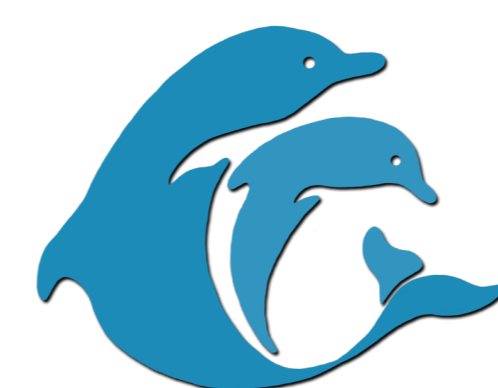
DISCUSSION

- All age classes of dolphins used pectoral fin contact with non-kin more often than kin
- Non-kin dolphins were more likely to reciprocate contact
- Most contacts were on the central body and included sensitive areas such as the face and belly

- Pectoral fin contact may play a larger role in relationships between non-kin
- Touching different body parts could have different functions
- Future research on pectoral fin contact preferences is needed to gain a better understanding of dolphin social networks

ACKNOWLEDGEMENT

Thank you to the Roatan Institute for Marine Sciences, Anthony’s Key Resort for allowing DCP to study the dolphins. Thank you to the numerous interns, volunteers, field course student participants (from CSU, URI, StMU), and Institute for Marine DCP ecotourists for help collecting and processing data over our 20+ years. Thank you, Hannah Mertz, for helping create this poster during an independent study in the Kanatous Lab at CSU.



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