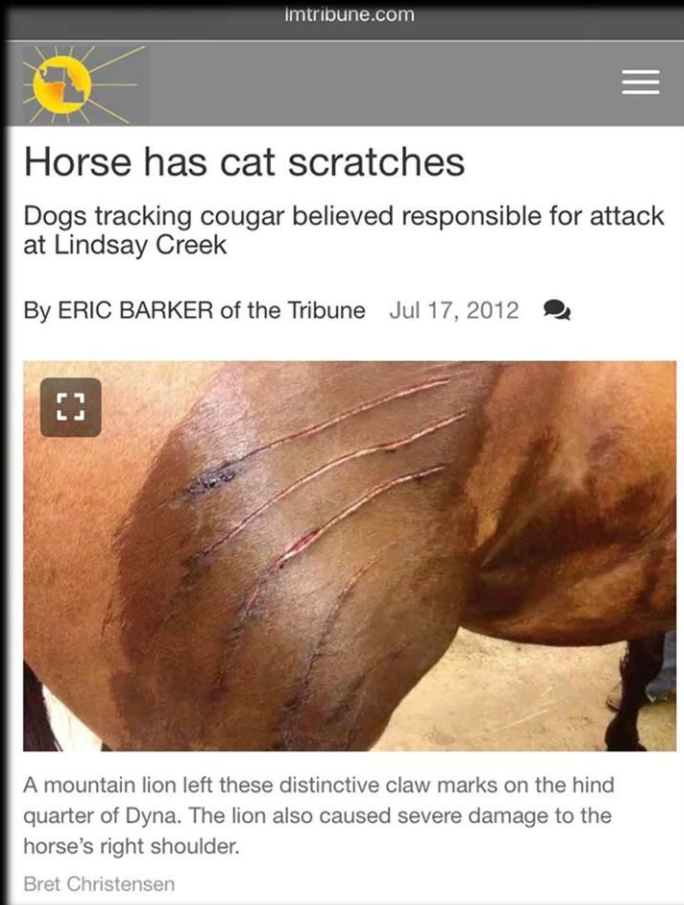


Punctuated Hope – Indicators of Sawfish Return to Georgia Waters

Andrew Lyons, Tonya R. Wiley, R. Dean Grubbs, Jennifer T. Wyffels,
Kady Lyons

What Wounds Tell Us

Physical record of previous interactions
between two individuals



What Wounds Tell Us

Physical record of previous interactions
between two individuals

Time of interaction



What Wounds Tell Us

Physical record of previous interactions
between two individuals

Time of interaction

Species-specific



Trapman Bermagui / Jason Moyce/Trapman Bermagui / Jason Moyce

What Wounds Tell Us

Physical record of previous interactions
between two individuals

Time of interaction

Species-specific

Species presence



What Wounds Tell Us



Drew McDougall

Species presence

2020



2022



What Wounds Tell Us

2020



Little St. Simons Island, GA

Species presence

2022



"Out and About" Sawfish

Acoustic Telemetry

Graham et al. 2021, Dawdy 2026

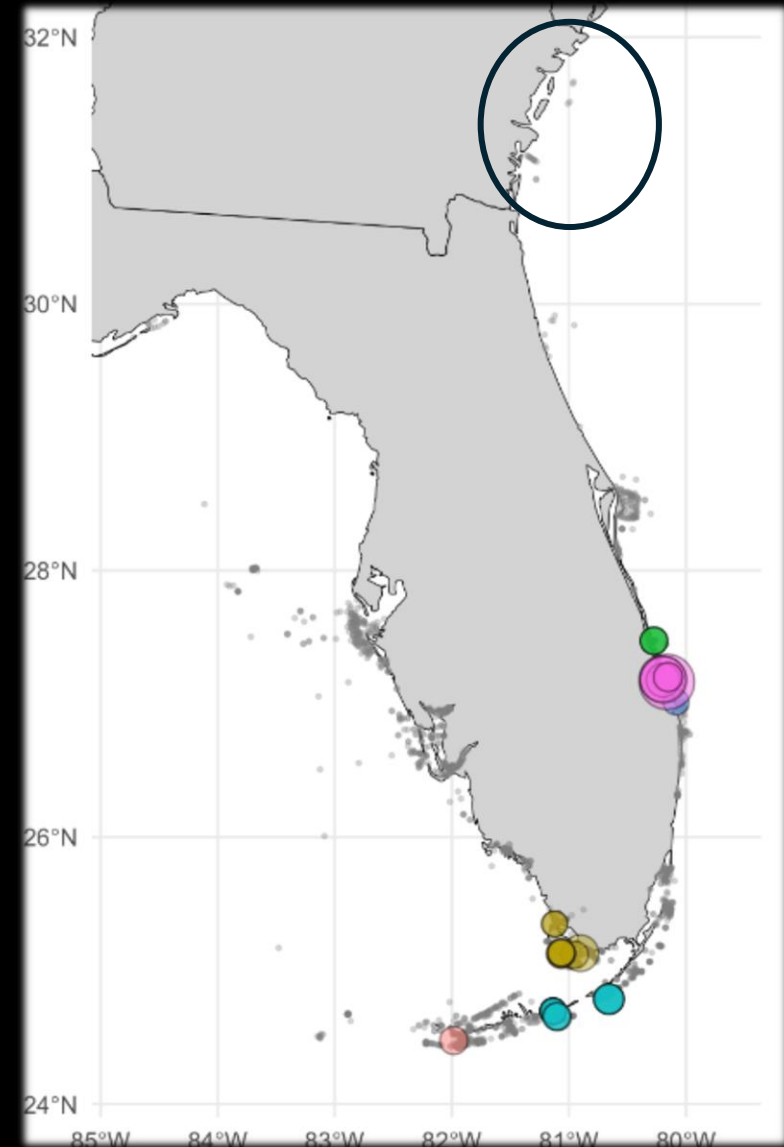
Verified Sightings

Sawfish Encounter reports

eDNA Surveys

Leman et al. 2020

What about wounds?*



Proof of Concept

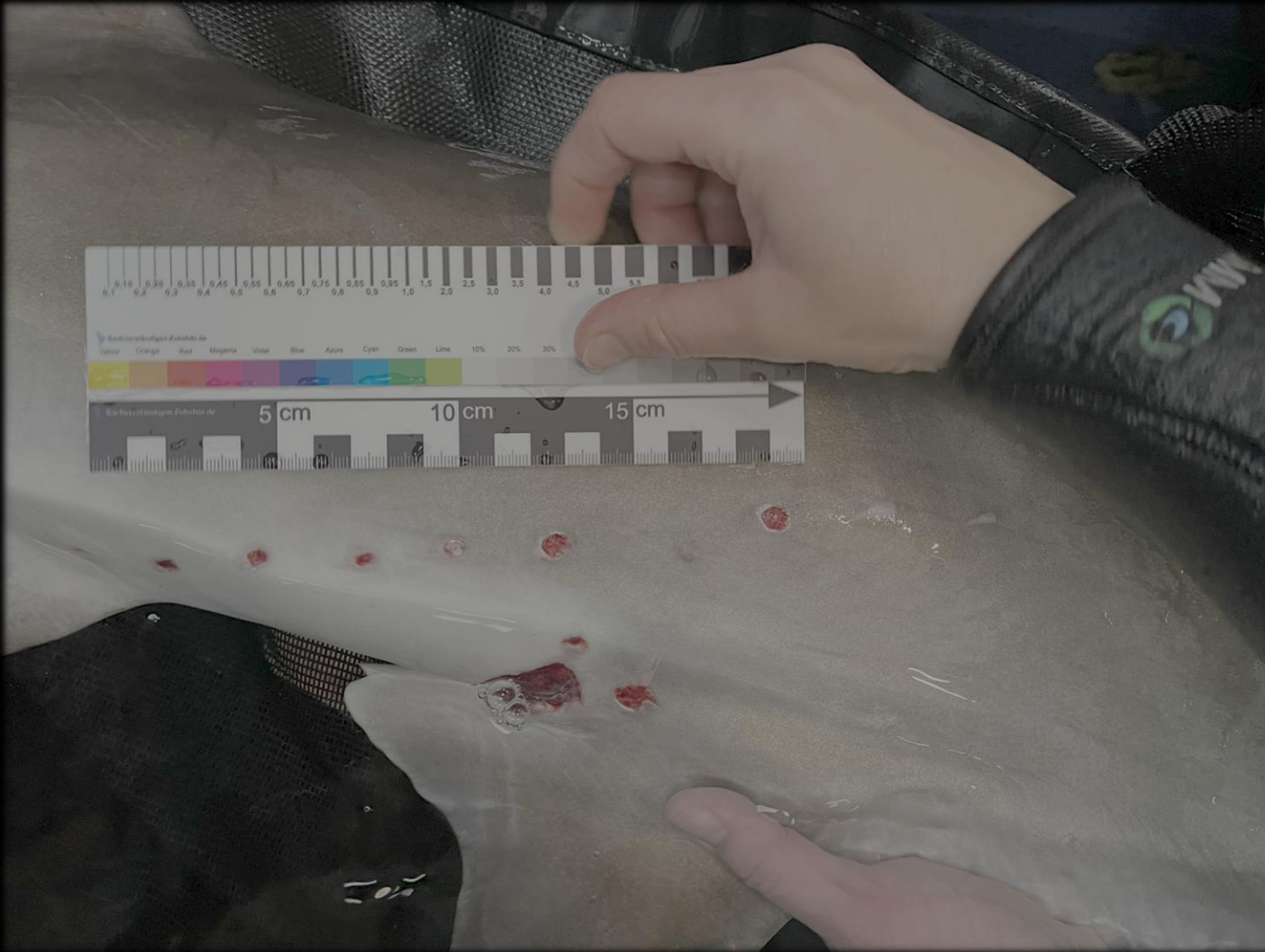
Ripley's Aquarium Myrtle Beach

Two Largetooth Sawfish
Male & Female

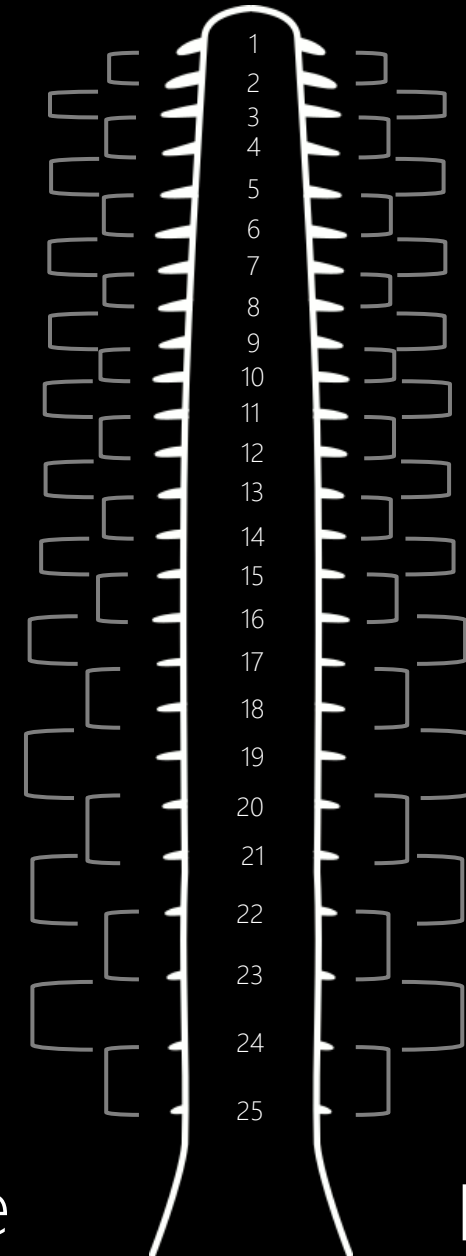
Whodunit??



Inter-Tooth Distance

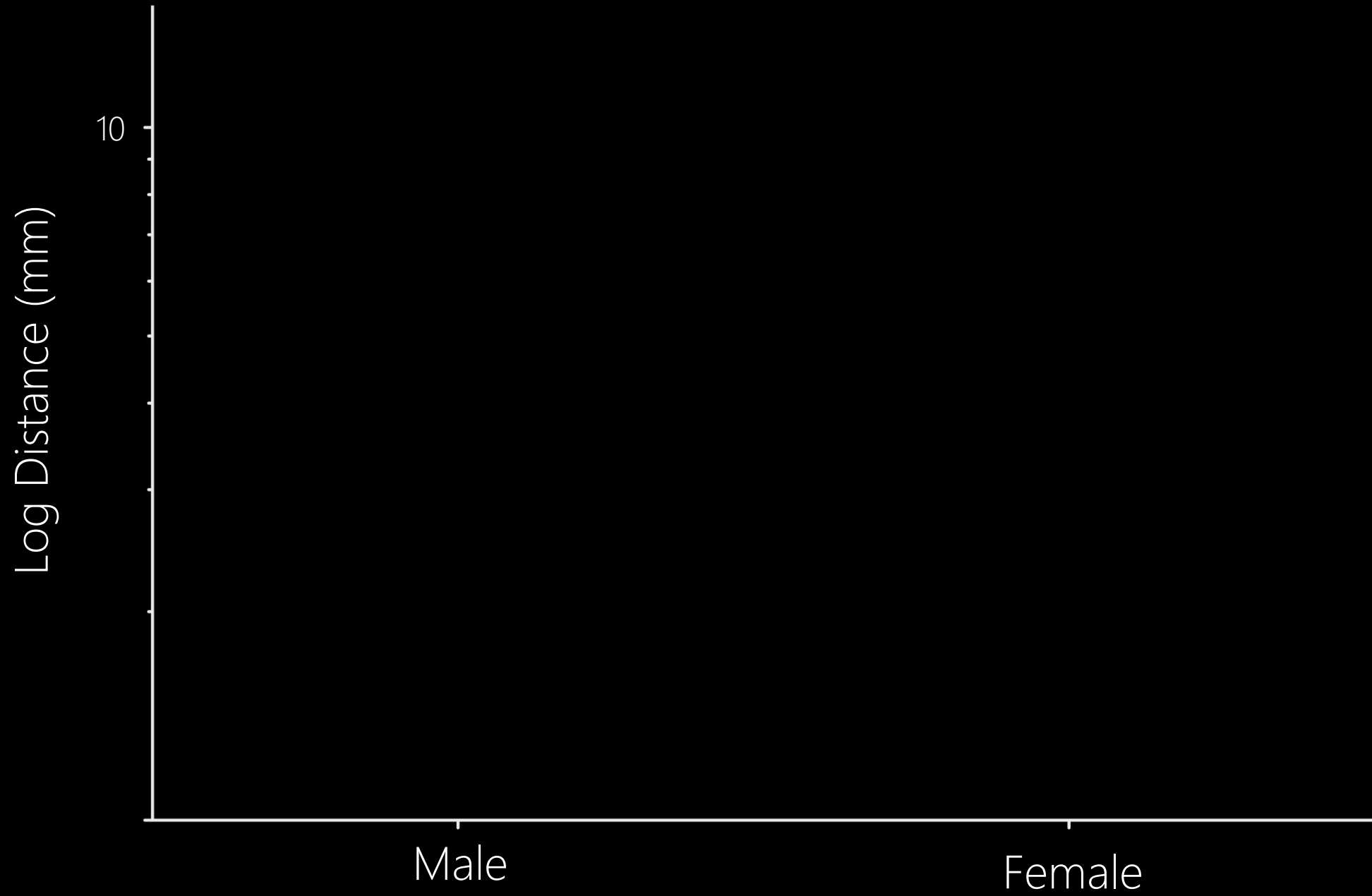


Left Side

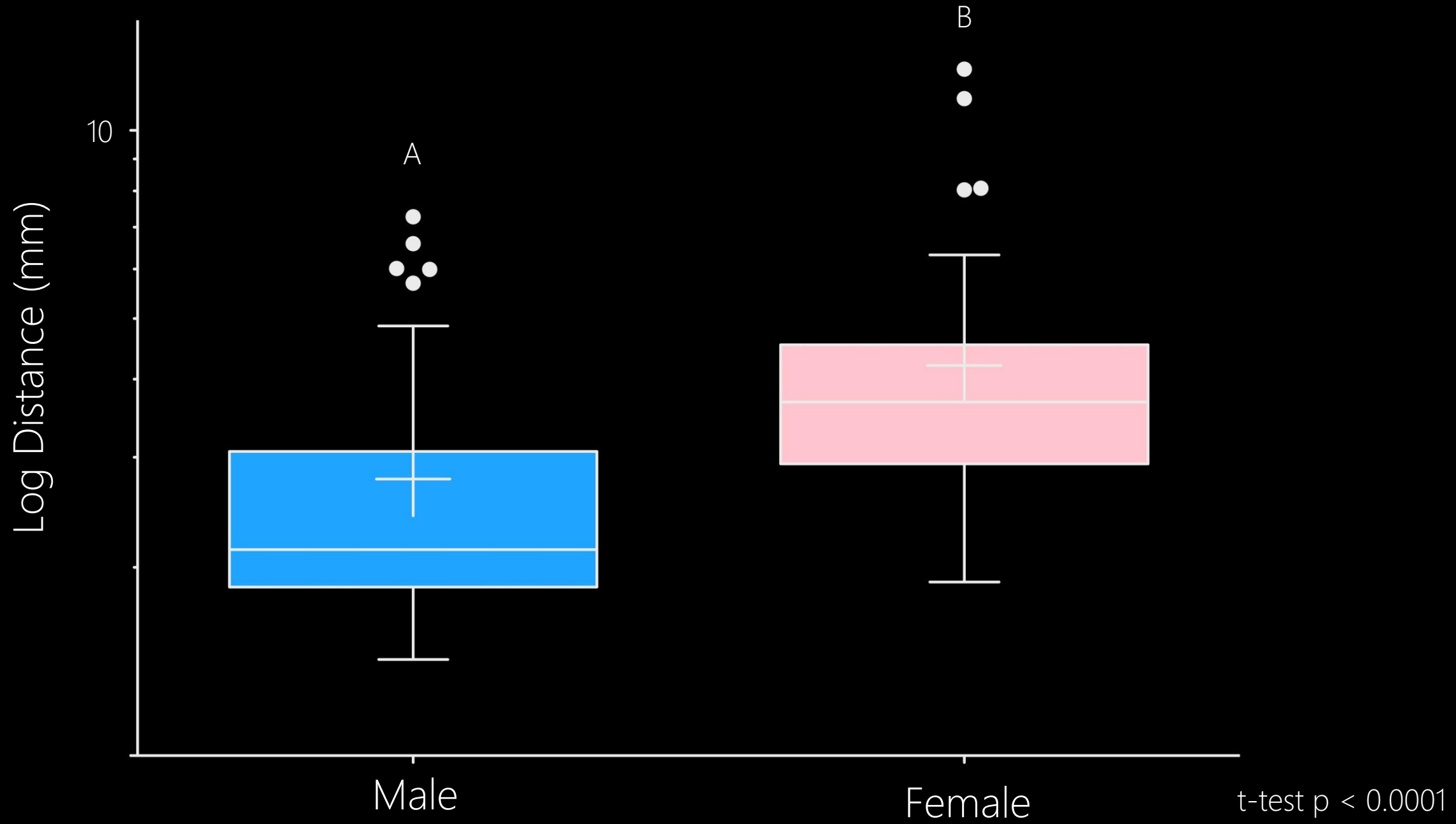


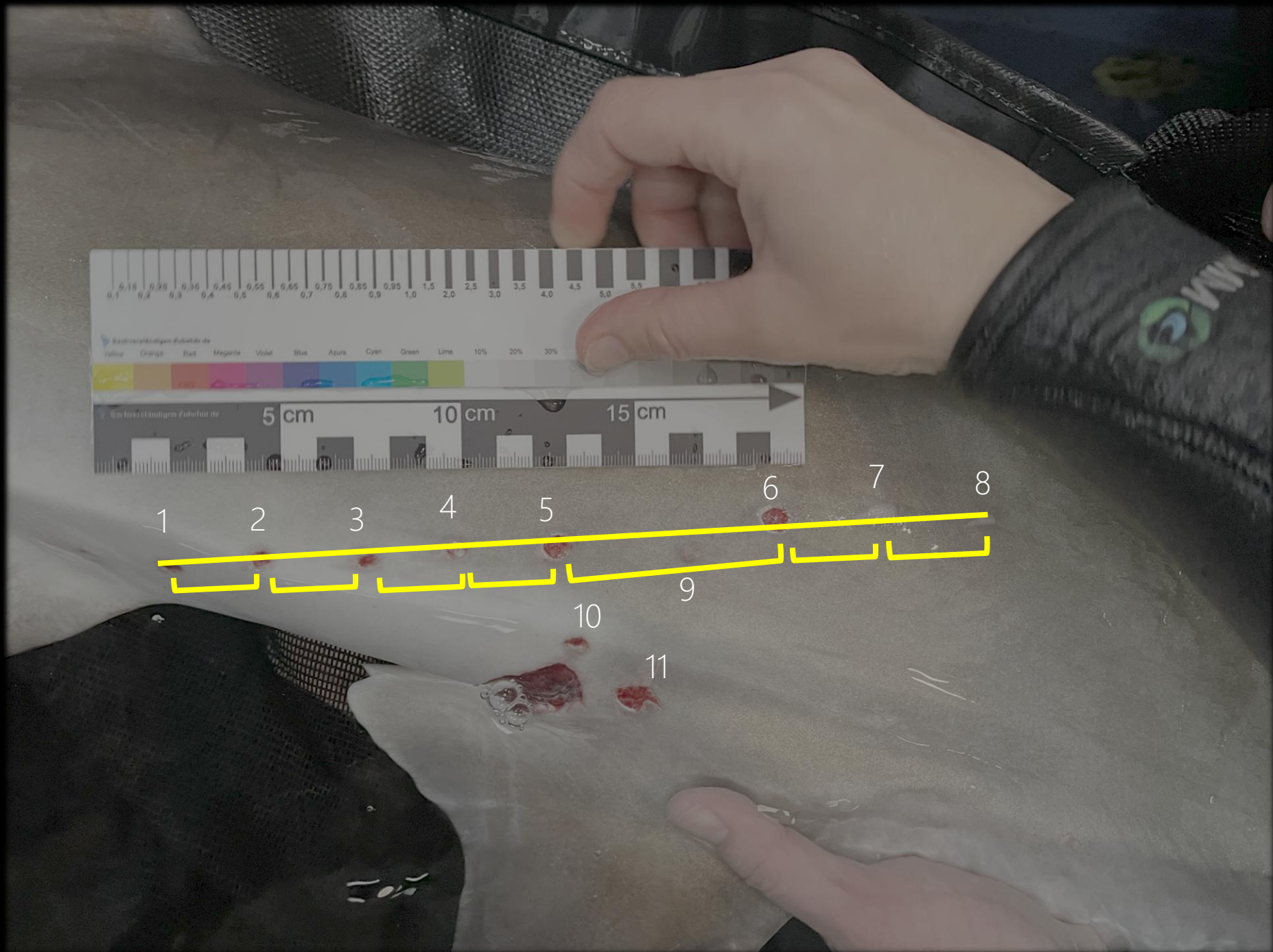
Right Side

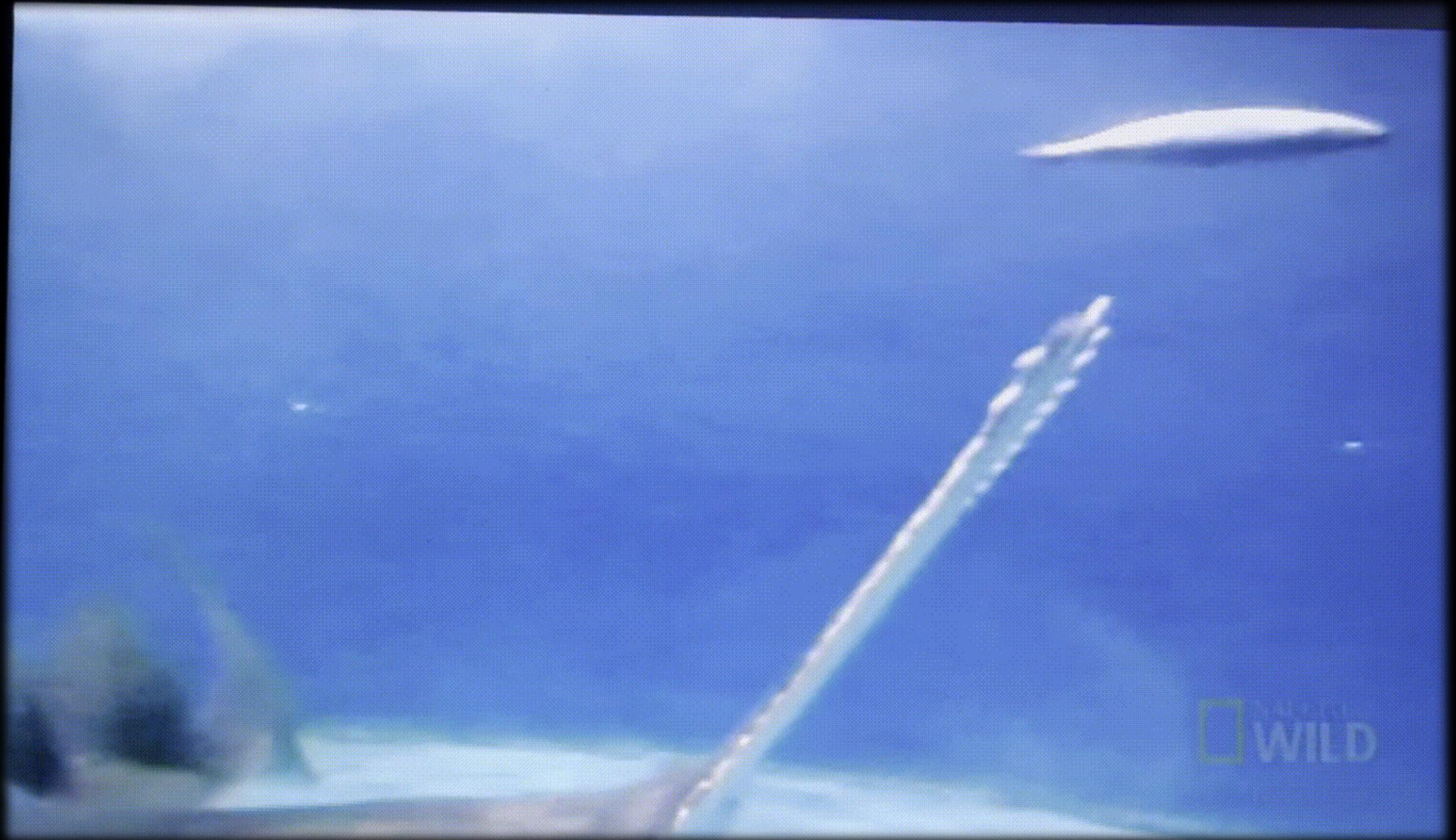
Inter-Tooth Distance



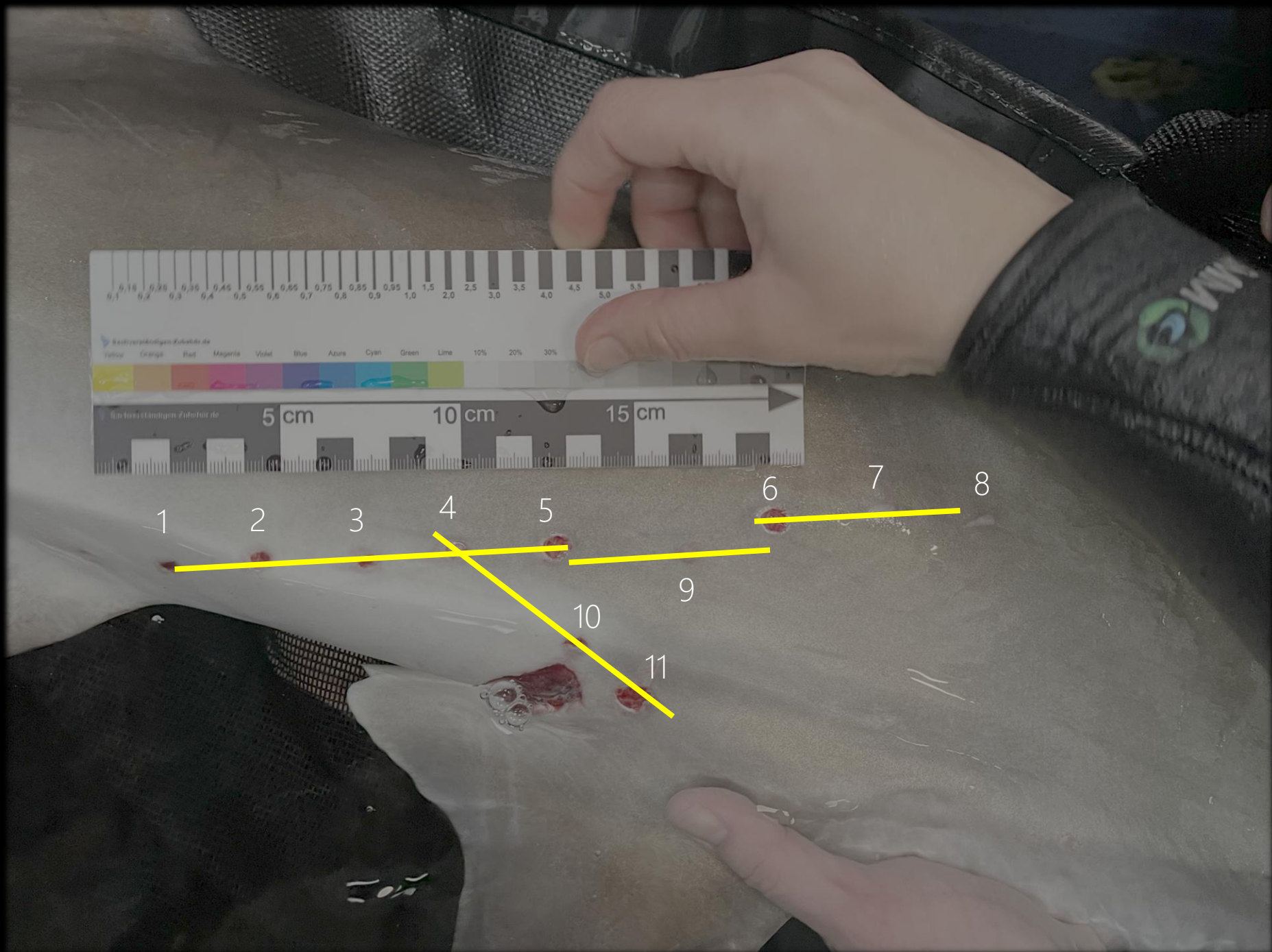
Inter-Tooth Distance



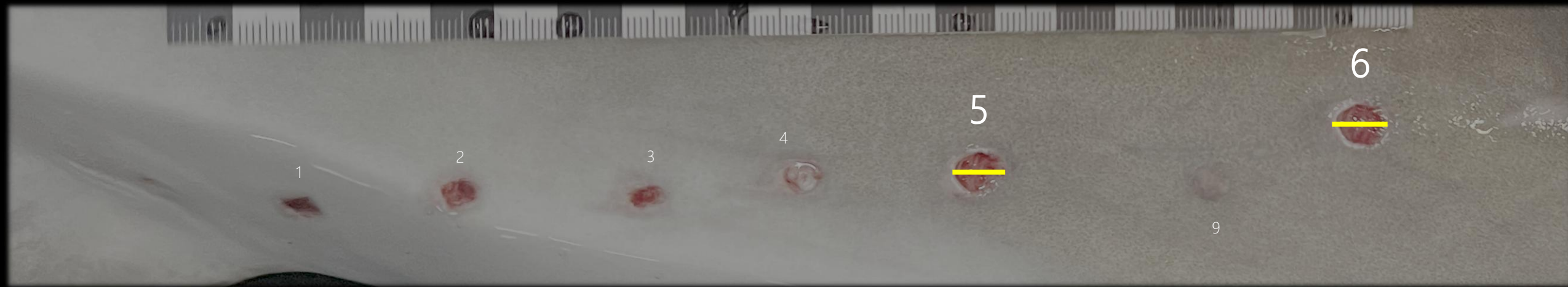




NAT GEO
WILD



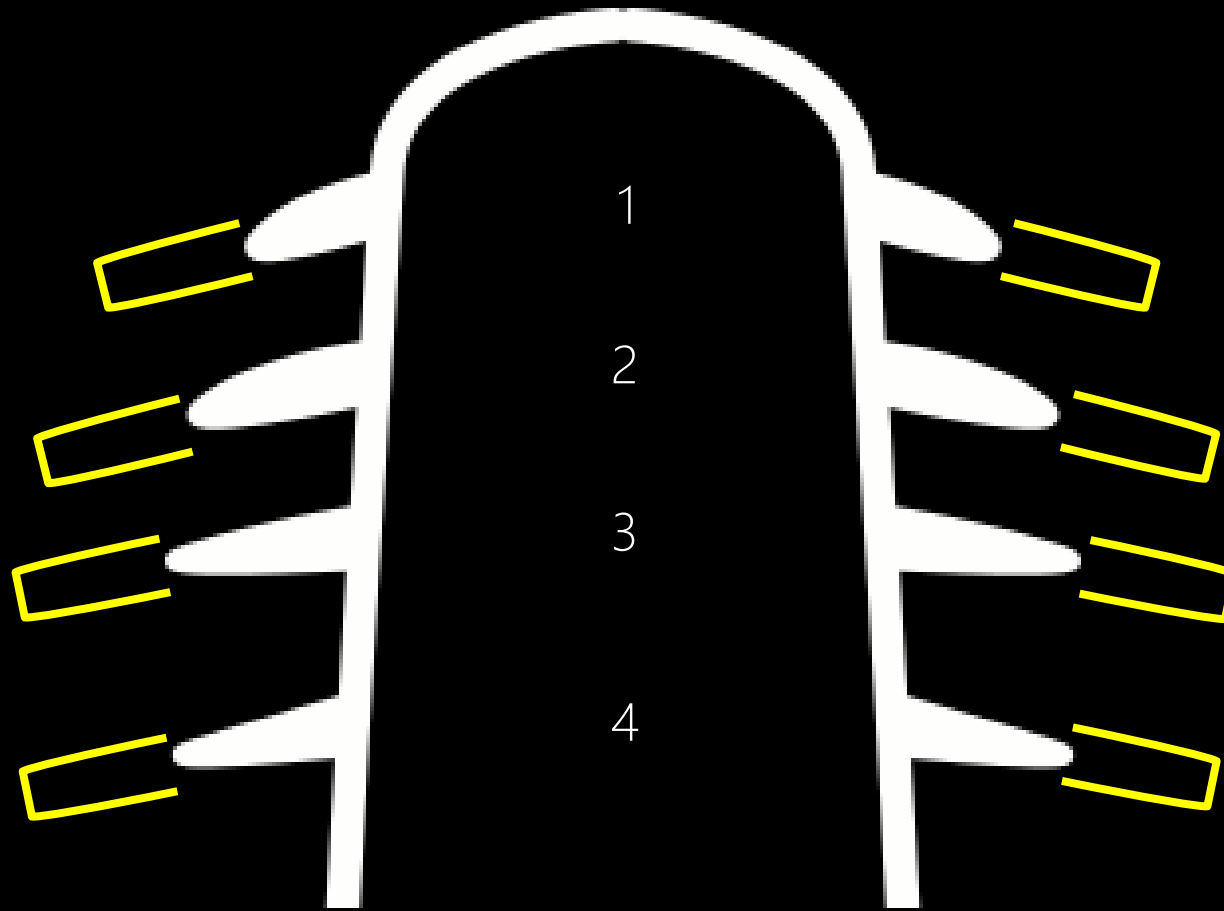
Wound Diameter



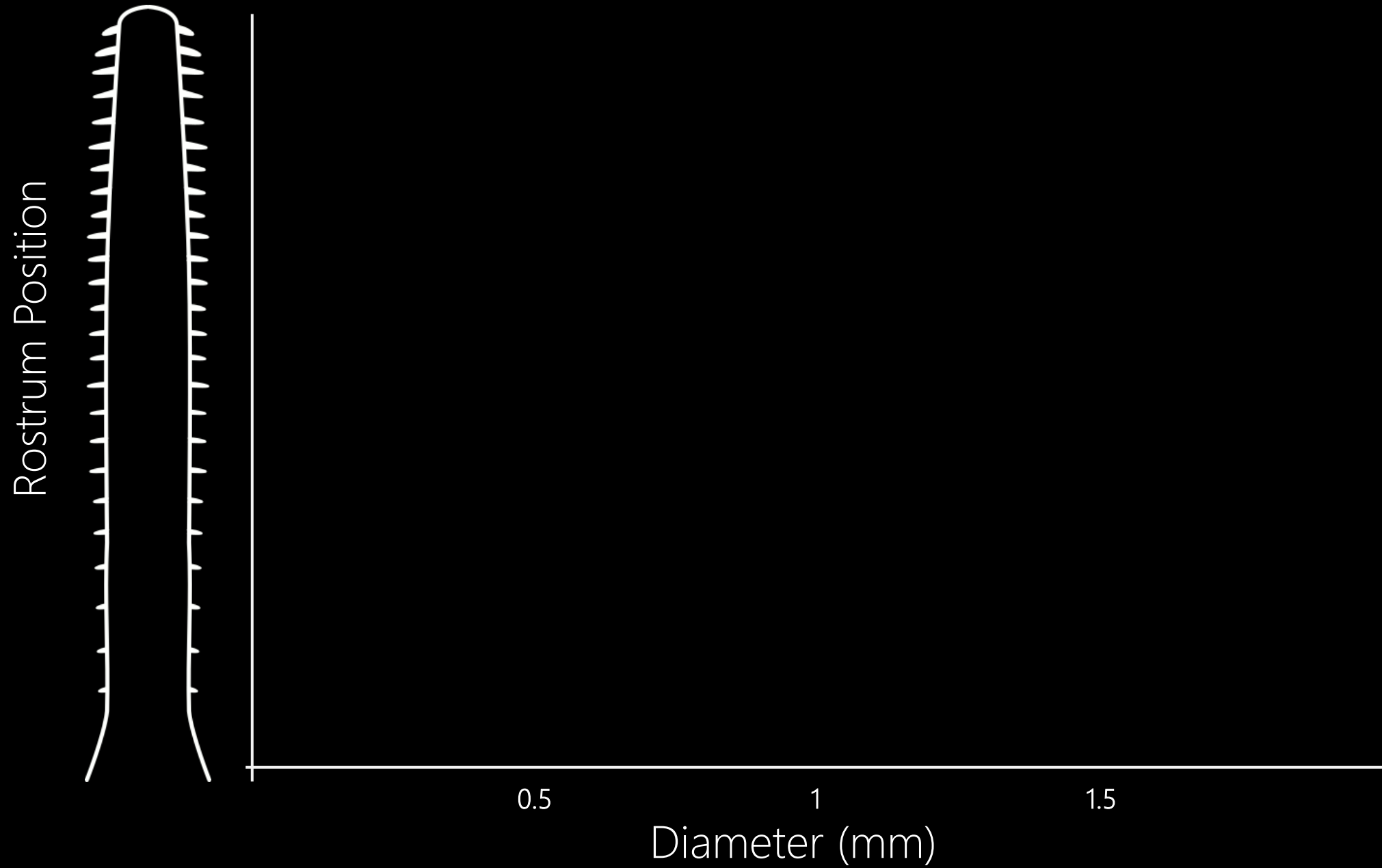
Tooth Diameter

Left Side

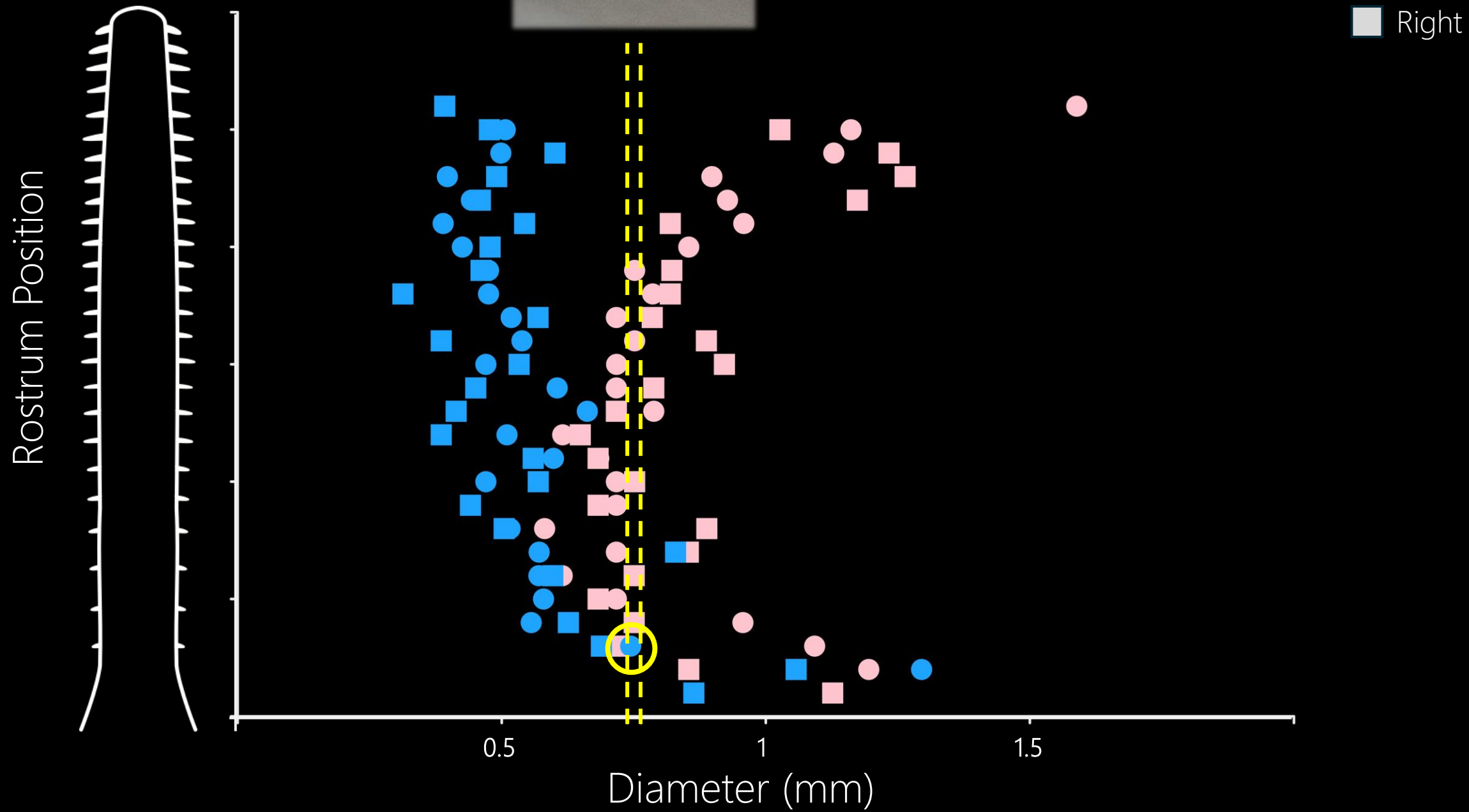
Right Side



Tooth Diameter



Tooth Diameter

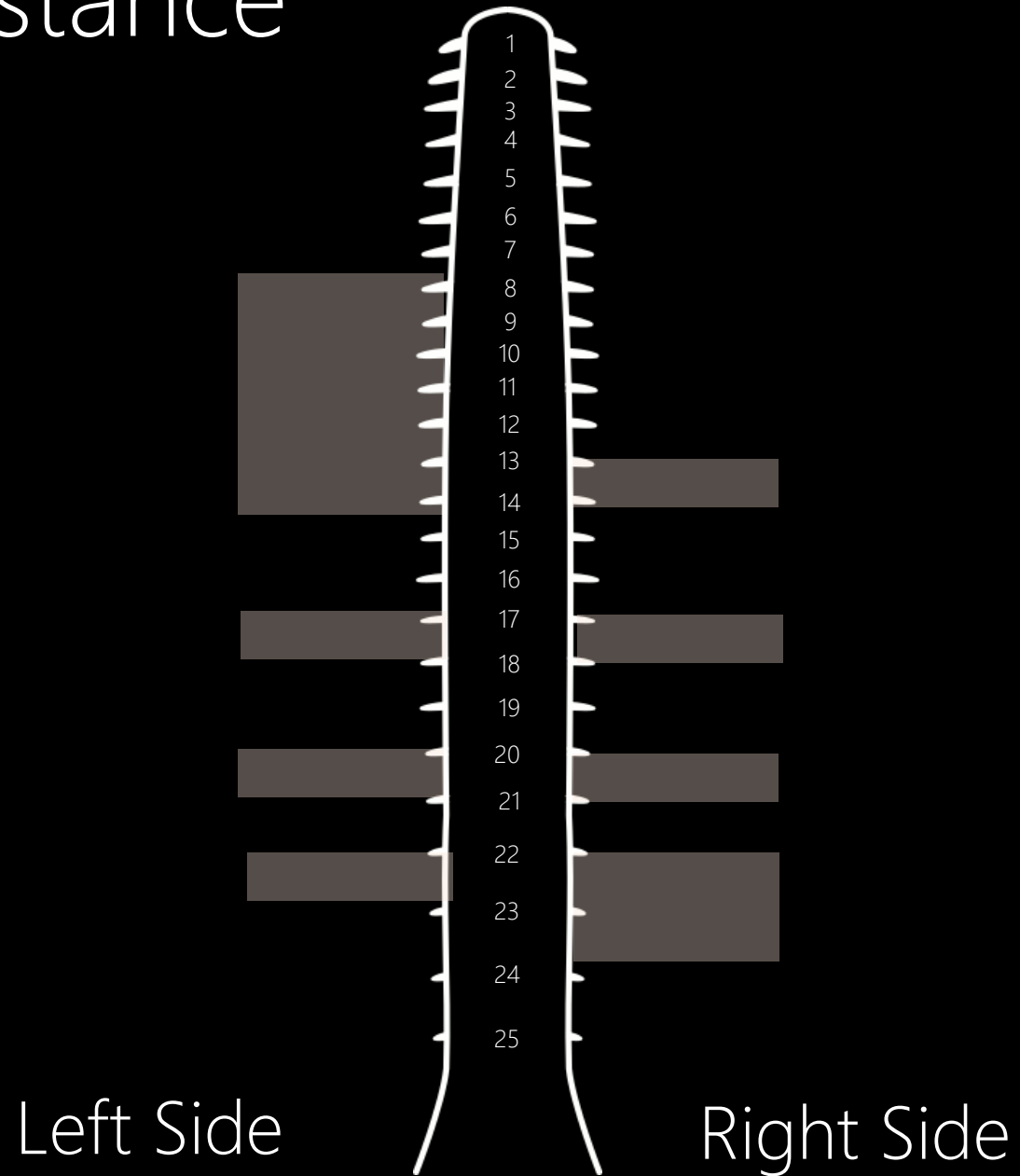


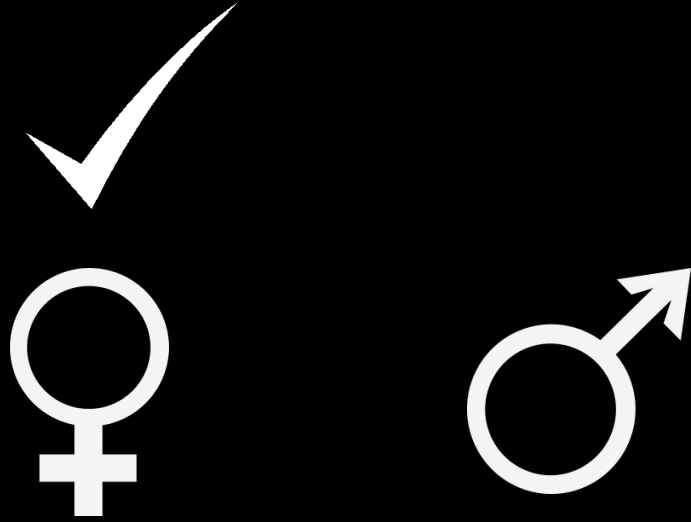


Left Side

Right Side

Inter-Tooth Distance





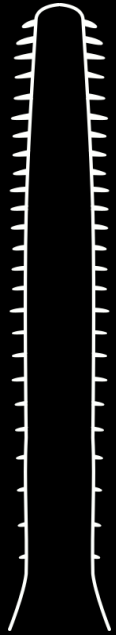
Morphometric differences

Inter-Tooth Distance_(Smalltooth)

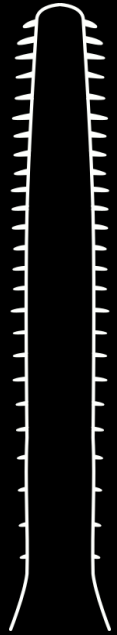
YOY
STL 62 cm



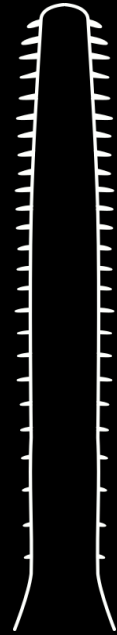
Young Juv
STL 109 cm



Older Juv
STL 263 cm



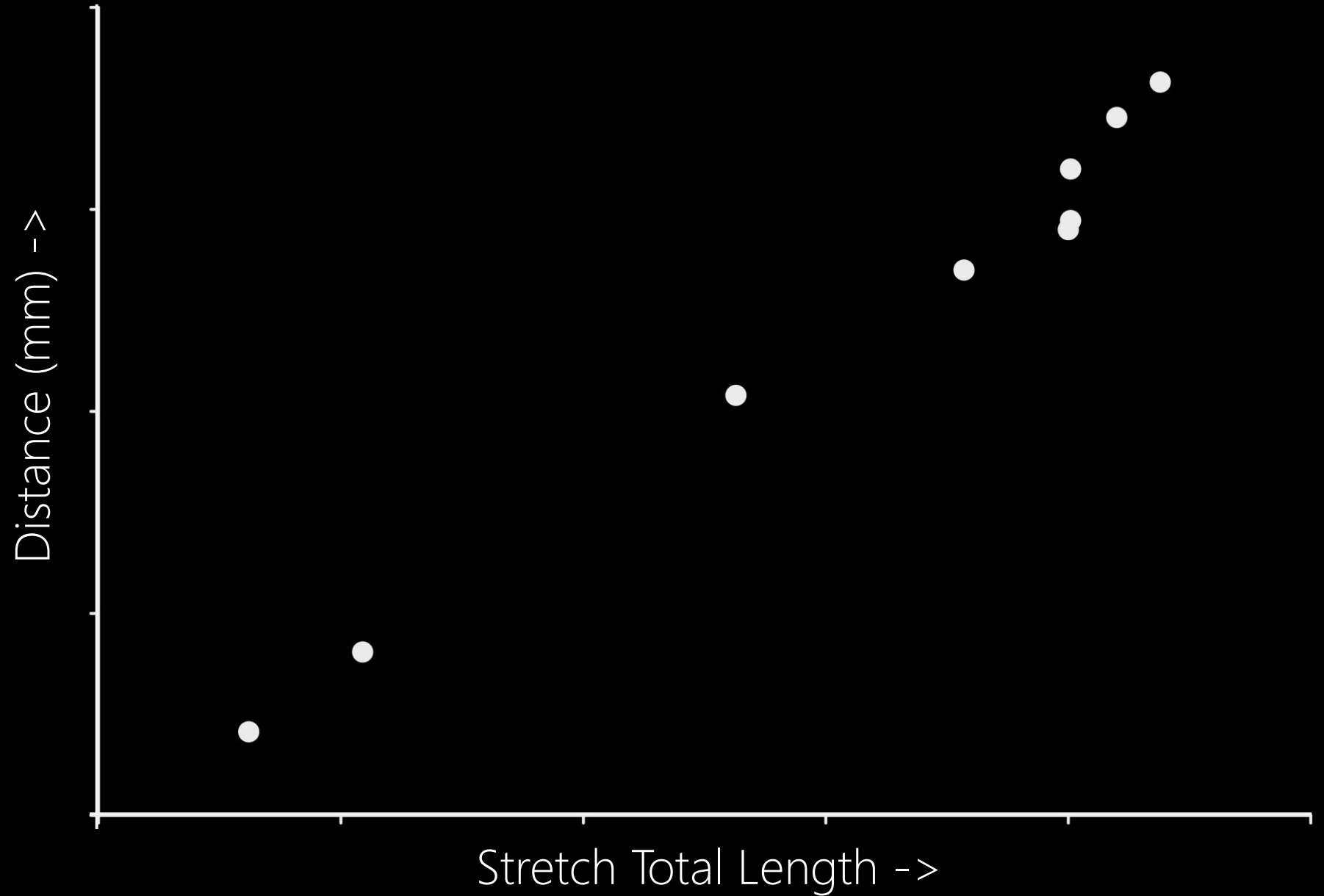
Maturing
STL 357 cm



Adults
STL 400 - 438 cm

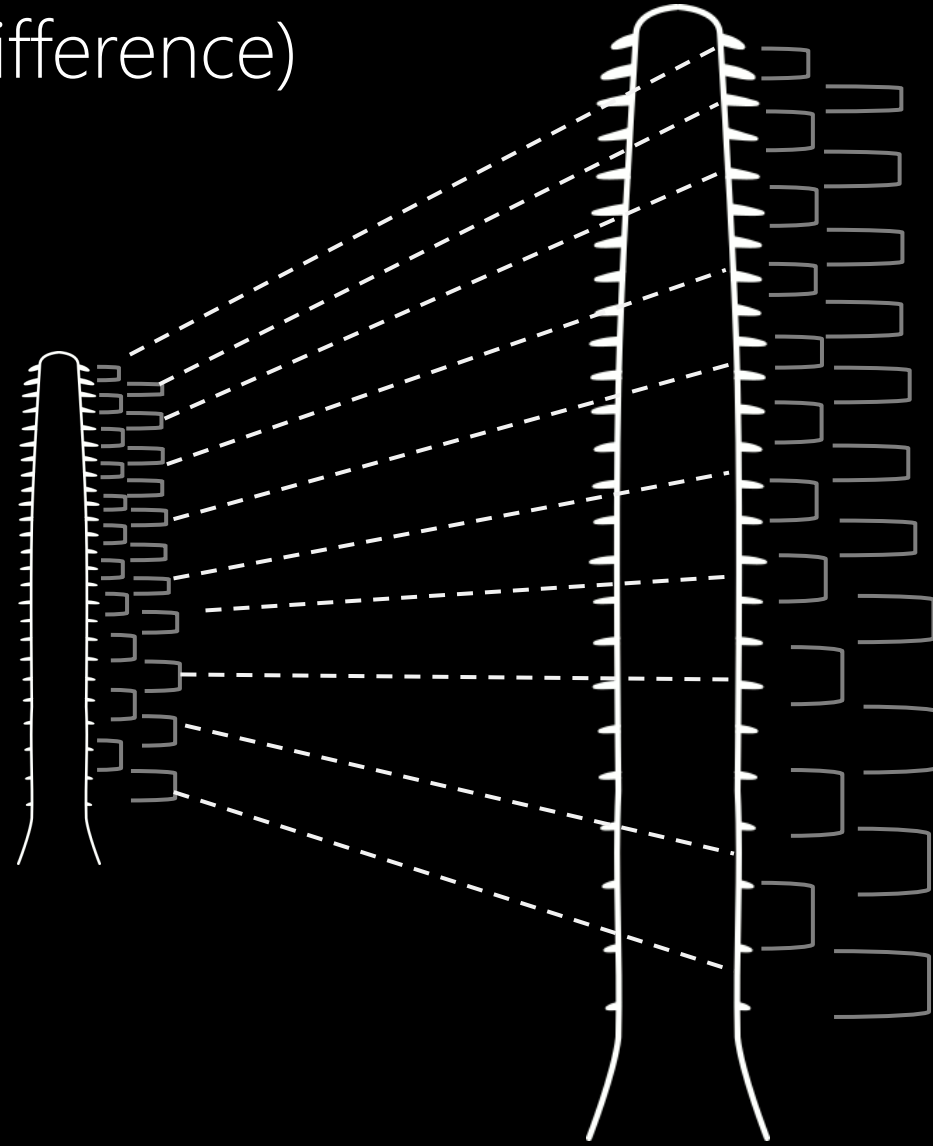
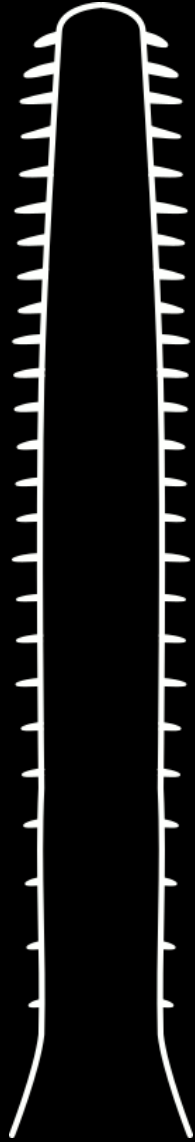


Inter-Tooth Distance (Maximum)



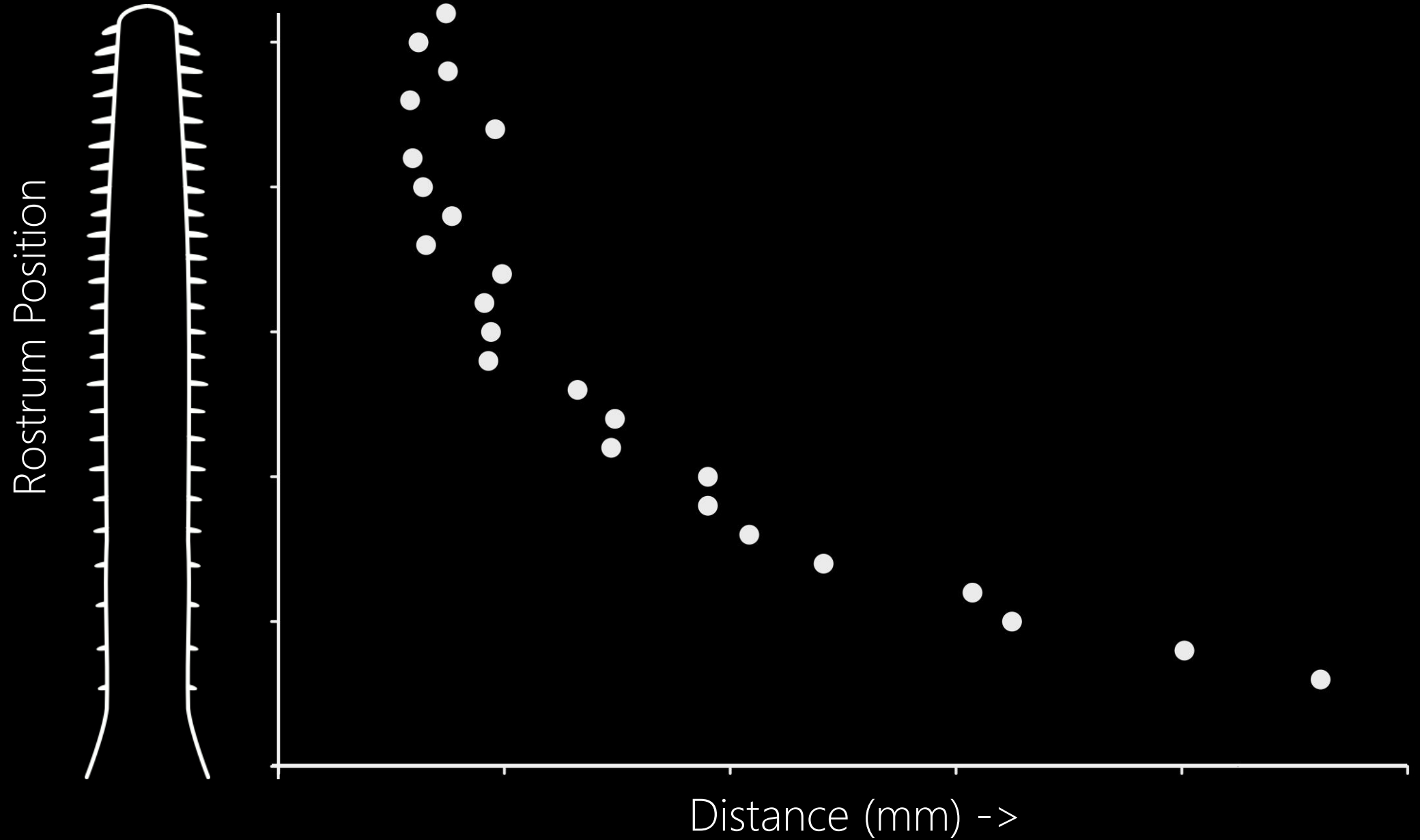
Inter-Tooth Distance (Difference)

Rostrum Position

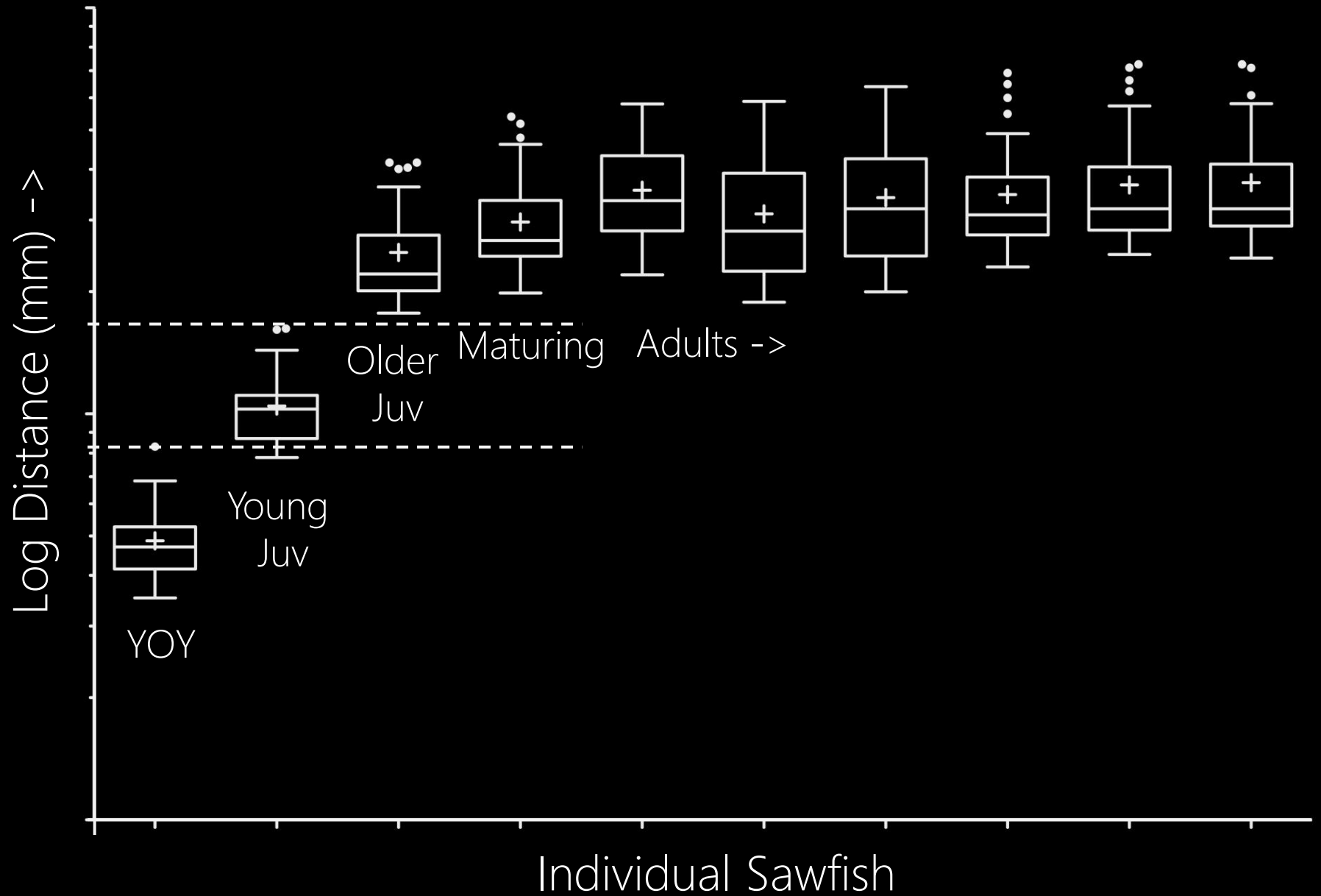


Distance (mm) ->

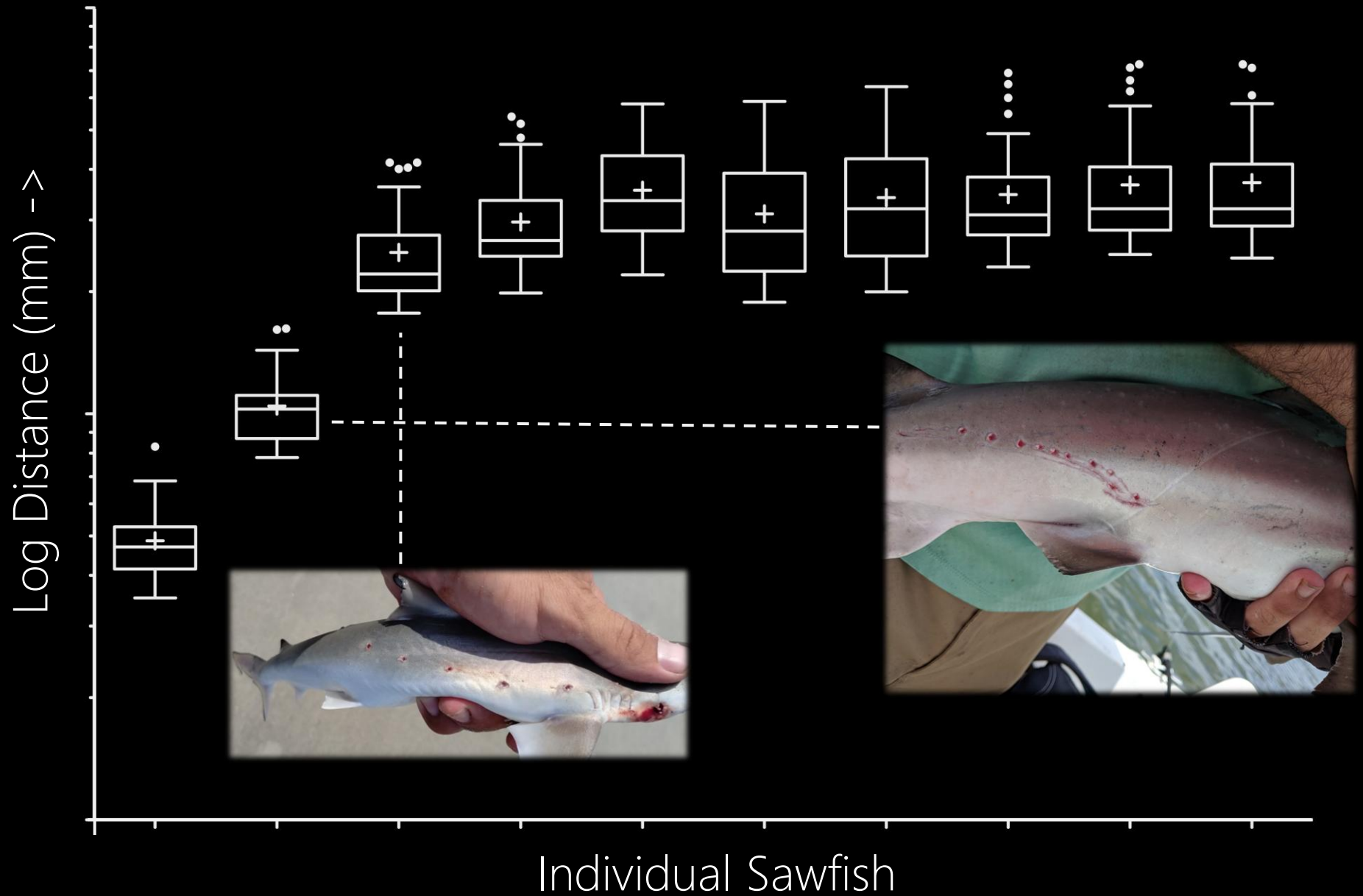
Inter-Tooth Distance (Difference)



Inter-Tooth Distance (Range)



Inter-Tooth Distance (Range)



Conservation Implications

Sawfish not listed



Tooth Utility



Thank You Symposium Sponsors!

Acknowledgements

Frank Bullman

Becca Thomas

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Section 7 Consultation
#SERO-2024-00402

and

ESA Section 10 permits
to Gregg Poulakis,
Tonya Wiley, John Carlson, and
Colin Simpfendorfer



save our seas
foundation

