

The threat of plastic debris for juvenile loggerhead sea turtles in the North-Atlantic



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The Azores archipelago



Seaturtles

• Azores: 5/7 species, 3 common



- Key area for oceanic-stage loggerhead (*Caretta caretta*):
 - Originating from SW Florida (>90%)¹
 - 8-80 cm CCL

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- 9 – 12 years old $^{\rm 2}$







¹ Bolten et al. 1998 ² Bjorndal et al. 2000

Marine debris



Monitoring marine debris



Monitoring ingestion in <u>seaturtles</u>: stranded and bycatch specimens











Loggerhead turtles



- 32 individuals sampled
- 81% Frequency of occurence
- Average: 20 items/ind. (± 8, SE)
- 100% plastics
- Majority being fragments
- Higher abundance in intestine



Size class (mm)

Green turtles (Chelonia mydas)

- 7 individuals sampled
- 86% Frequency of occurence
- Average: 28 items/ind. (± 8, SE)
- 100% plastics

Pham et al. (unpublished)

Examples of plastic items recovered in sea turtles

657 VER

Examples of plastic items recovered in sea turtles

Examples of plastic items recovered in sea turtles

Summary

- **1.** Plastic pollution in the Azores is prevalent
- 2. Microplastic (≤5mm) pollution is dominating
- 3. Incidence of plastic ingestion in seaturtle is high
- 4. Likely resulting from location at the edge of the N.A Gyre and that loggerheads are oceanic-stage
- 5. Although more data on seaturtle ecology in the Azores is needed, our data suggest that they are potential indicators of marine litter

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