

Peer Review

Review of: "Feeding Ecology and Activity Rhythms of the Critically Endangered Hawksbill Turtle"

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The authors are to be praised for their study. It is well-written, is based on current literature, and uses new technology to solve long-standing research questions that are essential to preserve critically endangered hawksbills.

Abstract:

- Maybe clarify what taxa Aplysinidae is at the first mention. Potentially, mention the broader groups that dominated their diets, working your way into the specifics.
- "Spongin content and brominated metabolites are proposed among the plausible factors that could define turtle food preferences and strategies." Does that mean that these nutrients are important for hawksbills and drive their dietary choices? Please clarify.

Second paragraph of introduction:

- Several populations can be found in the Caribbean, right?
- Maybe calling Islands by their names, rather than by who colonized (French West Indies), may be more palatable for readers across the board?

Introduction:

- The introduction is on the long side and covers too broad a range of topics. Streamline it and walk the reader more objectively to the research question.

Methods:

- Figure 2: Panel A looks great! Panel B is a bit crowded. Suggest removing gridlines (you can still leave the ticks marking the gridlines on the border of the map). Also, consider only including labels for a few of the major Islands in the Caribbean in addition to your study area.

2.4. Diet Composition:

- “At the Diamant, the seascape is dominated by sea sponges in terms of diversity and biomass. Some of the walls of the submarine caves are 100% covered by sponges, including some encrusting specimens. ‘Le Rocher du Diamant’ is an area with strong current and wave action, therefore ideal for sponge development.” This seems more relevant to results/discussion than to methods.
- The following paragraph jumps abruptly from this habitat description to the dietary analyses.

2.5. Prey selection

- So, did you collect samples for Prey Selection analyses by collecting items that you observed hawksbills eating during the videos?

3.3. Diet composition:

- Something like this is missing from the abstract, a broader description of what turtles ate rather than jumping directly to telling the reader sponge family names.

4.1. Size of individual:

- I am not sure this required its own discussion subsection when you already showed these sizes in a Table.
- The discussion should progress from your more important findings to your least important findings. CCL being similar to other studies is definitely not your most important finding.
- You are not required to discuss every single result you obtained. Choose wisely the most important ones.
- Correlates means that you ran stats on it. Maybe “are similar to” or “fall within the same ranges as”?

4.2. Time-budget:

- These results are very cool, and this should be your first discussion point.
- The fact that they rest for the remainder of the day they were captured suggests that they may actually be stressed out by the capture process or have their energy reserves momentarily depleted.

- “Resting areas are particularly important for reproductive females, who allocate energy toward clutch development. Coral reefs can function as foraging habitats, resting sites, or refuges against predators, depending on the reproductive strategy employed—capital versus income breeding—particularly during the internesting period. In our study, one female exhibited intense foraging activity during ten hours of monitoring, consistent with an income-breeding strategy at the end of the nesting season, while males engaged in resting behavior across both days, suggesting inter-individual variability in energy allocation.”
 - Were your turtles nesting/mating? Are they residents and breed and forage in the same area, or do they migrate to nesting/foraging grounds?
 - If they may have been breeding, please clarify in the methods, because then the foraging behavior would be considered in a whole different context.
 - If they were not breeding, why all this discussion on the energy allocation into reproduction?

Discussion:

It is always good when ideas flow in a logical sequence. Consider enhancing the transition between ideas in the discussion. Breaking the discussion into more subsections may help.

Declarations

Potential competing interests: No potential competing interests to declare.