The magnitude and importance of herbivory in the Kimberley

KIMBERLEY SCIENCE NODE

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BARDI JAWI RANGERS
The main questions

How important is herbivory in the Kimberley?

- What are the main species of herbivores?
- How much do herbivores eat?
- How much do they rely on different plants?

Focus on seagrass habitats

Enhalus

Thalassia
What are the main species?

- Abudefduf bengalensis
- Acanthurus grammoptilus
- Ammialaba caudavittata
- Chelonia mydas
- Dischistodus darwiniensis
- Pelates octolineatus
- Scarus sp.2
- Siganus lineatus
- Siganus punctatus
How much do herbivores eat?
How much do herbivores eat?

mean: 401%
median: 131%

mean: 166%
median: 95%
How much do herbivores rely on different plants?

**Green turtles**
*Goorlil*

**Golden-lined rabbitfish**
*Barrbal*

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<tr>
<th></th>
<th>Seaweed</th>
<th>Seagrass</th>
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<tbody>
<tr>
<td><strong>Proportion of diet</strong></td>
<td><img src="image1" alt="Graph" /></td>
<td><img src="image2" alt="Graph" /></td>
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<tbody>
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<td><strong>Proportion of diet</strong></td>
<td><img src="image3" alt="Graph" /></td>
<td><img src="image4" alt="Graph" /></td>
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Not all turtles are the same

Stomach contents of *Chelonia mydas*

- Seagrass
- Brown algae
- Green algae
- Red algae
- Unknown algae
Green turtle habitat use
Green turtle habitat use
Community engagement

Involvement of the Bardi Jawi community critical

School involvement in turtle tagging

School visits by scientists

Popular science articles (Landscope, Double Helix, Coastlines)
Acknowledgements

Bardi Jawi rangers (Daniel, Bibido, Trevor, Kevin G, Dwayne, Chris, Zac, Kevin D, Azton)

Bardi Jawi traditional owners

Seagrass team (Gary, Andrea, James, Doug, Mel)

Students (Lucie, Emy, Lisa)

James Brown and all the staff at KMRS