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## Bottom-up and top-down forces in a tropical intertidal ecosystem

THE INTERPLAY BETWEEN SEAGRASSES, BIVALVES AND BIRDS

Jimmy de Fouw

1. The strong dependency on mutualistic interactions incurs a risk: these interactions bind multiple species to one common fate, and disruption due to global change may unexpectedly lead to habitat degradation. *This thesis, chapter 3; Kiers et al. 2010 Ecol. Lett. 13: 1459–1474.*
2. In a healthy seagrass meadow the top-down role of red knots is tempered due to the sulfide toxic- and the prey detection constraint. *This thesis, chapter 8; Oudman et al 2014 Am. Nat. 183: 650–659; van Gils et al 2013 Proc. R. Soc. B 280:20130861; van Gils et al. Science prov. accepted.*
3. In most cases of empirical ecological research you will end up with papers you never imagined. *This thesis, chapter 3 & 6; Prop et al 2015 Front. Ecol. Evol. 3: 33.*
4. While at first sight the increase in prey density would be an advantage for red knots, the ‘simultaneously’ increasing seagrass density leads to a decrease in searching efficiency. This is another example of intake rates declining with increasing prey densities. *This thesis, chapter 6; Bijleveld 2015, PhD Thesis.*
5. Despite the fast developments of new statistical methods during the last decade, detection of alternative stable states in ecosystems remains challenging. *This thesis, chapter 4; Scheffer et al. 2001 Nature 413: 591–596; Hirota et al 2011 Science 334: 232–235.*
6. The expression ‘*You need to lose something to gain something*’ is applicable on red knots, by a failing sixth sense organ in the tip of their bill red knots avoid their sulfide toxic constraint. *This thesis, chapter 6 & 7; van Gils et al. Science prov. accepted.*
7. Perfect is the enemy of good - l meglio è nemico del bene. After: *Orlando, P; Ben-Shahar, T. 2009 The Pursuit of Perfect.*
8. Aangezien er te veel promovendi worden opgeleid dan er vraag naar is en het fundamenteel- en het toegepaste onderzoek steeds meer overlappen, zou je *juist* onderscheid moeten maken tussen fundamenteel- en toegepaste promotietrajecten. Hiermee stem je niet alleen beter af op de vraag van de markt maar ook op de wens van de promovendi. *Gould, J. 2015. How to build a better PhD. Nature 528: 22–25; <http://scienceguide.nl/201512/verbeter-doorstroom-promovendi.aspx>.*
9. Wetenschappelijke vernieuwing is gebaseerd op persoonlijk contact, toeval en de voorbereide geest. Door toeval kom je ergens iemand tegen die aan hetzelfde werkt of aanvullend kan zijn. Samen kom je onverwacht tot volstrekt nieuwe ideeën. ‘*Het toeval begunstigt alleen de voorbereide geest*’- *Louis Pasteur; dit proefschrift; gebaseerd op: Richard Gill 2010.*
10. Corals are sexier than seagrasses. *This thesis, chapter 3; Orth et al. 2006. Bioscience 56: 987–996.*