



Nicola Kim Carrasco

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Marine Biology

nicola.carrasco@gmail.com

carrasco@ukzn.ac.za



South Africa

I started out my research career by completing a BSc in biological sciences. From there I went on to complete my Honours in Marine Ecology. It was at this point that I started specialising in my main field of interest – estuarine ecology and zooplankton ecophysiology. My Masters degree was upgraded to a PhD where I conducted research in the St Lucia estuarine lake system. My research interests include estuarine ecology and zooplankton physiology. Specifically, species diversity, trophic relations and the response of zooplankton communities to variable biotic and abiotic conditions in estuarine environments.

CURRENT RESEARCH

Topic	Methodology	Application
Zooplankton dynamics and ecophysiology within the St Lucia estuarine lake system	<ul style="list-style-type: none">Stable $\delta^{15}\text{N}$ and $\delta^{13}\text{C}$ isotopesZooplankton abundance, biomass and community structure changesBiomarkers (feeding, respiration & mortality) of stress	Enhance the overall understanding of estuarine ecology, especially in response to climatic changes Inform management on suitable plans of action to improve/sustain ecosystem functioning

Recent Publications

Journal articles

- Peer N, Carrasco NK, Perissinotto R, du Plooy SJ (in press) Flood effects on trophic linkages of selected fish species in the littoral zone of the St Lucia estuarine system, South Africa. *Afr. J. Aquat. Sci.*
- Carrasco NK, Perissinotto R, Whitehead A (2013) Agricultural impact on the pelagic ecosystem of the small temporarily open/closed Seteni Estuary, South Africa. *Mar. Freshw. Res.* 64:1-13.
- Carrasco NK, Perissinotto R, Salome J (2013) Turbidity effects on feeding and mortality of the copepod *Acartiella natalensis* (Connell and Grindley, 1974) in the St Lucia Estuary, South Africa. *J. Exp. Mar. Biol. Ecol.* 446: 45-51.
- Perissinotto R, Taylor RH, Carrasco NK, Fox C (2013) Observations of the bloom-forming jellyfish *Crambionella stuhlmanni* (Chun 1896) in the St Lucia Estuary (South Africa). *Afr. Invertebr.* 54(1): 161-170.
- Dyer DC, Perissinotto R, Carrasco NK (2013) Dietary variation in the Mozambique Tilapia (*Oreochromis mossambicus*) in the St Lucia Estuary: a stable isotope approach. *Mar. Ecol. Prog. Ser.* 476: 199-214.
- Deale M, Perissinotto R, Carrasco NK (2013) Recovery dynamics of zooplankton following a mouth-breaching event in the temporarily-open Mdloti Estuary, South Africa. *Afr. J. Aquat. Sci.* 38(1): 67-78.

Book chapters

- Carrasco NK, Perissinotto R, Jerling H (2013) Zooplankton In: Perissinotto R, Stretch D, Taylor RH (eds) *Ecology and Conservation of Estuarine Systems: Lake St Lucia as a Global Model*. Cambridge University Press pp 247-263.
- Perissinotto R, Carrasco NK, Taylor RH (2013) The physico-chemical environment In: Perissinotto R, Stretch D, Taylor RH (eds) *Ecology and Conservation of Estuarine Systems: Lake St Lucia as a Global Model*. Cambridge University Press pp. 169-183.

For a complete list of publications, visit https://www.researchgate.net/profile/Nicola_Carrasco2/publications/

Interests

Personal: Trail running, swimming, scuba diving, reading, piano.

Research: Estuarine ecology, stable isotope ecology, biodiversity, zooplankton ecology and ecophysiology, trophic functioning, food webs.