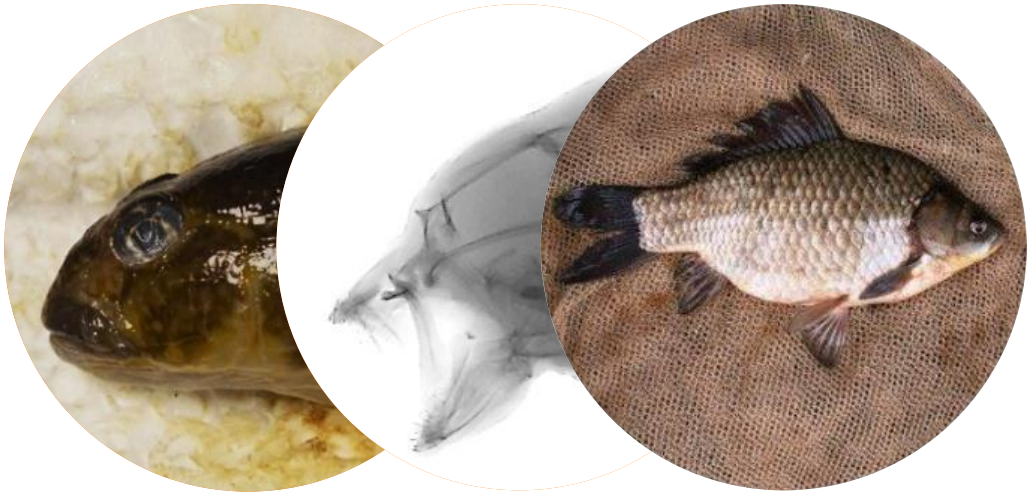
Exoten en het voedselweb - Verklaart voedselcompetitie het succes van exotische vissoorten?

Leo Nagelkerke

Wageningen University & Research, Aquaculture & Fisheries Group, Wageningen, The Netherlands

Vissennetwerk 29 November 2024, Utrecht



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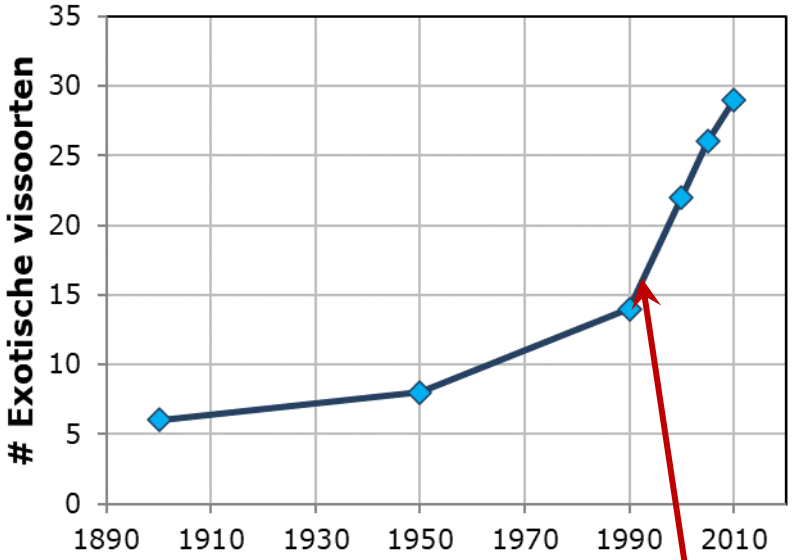
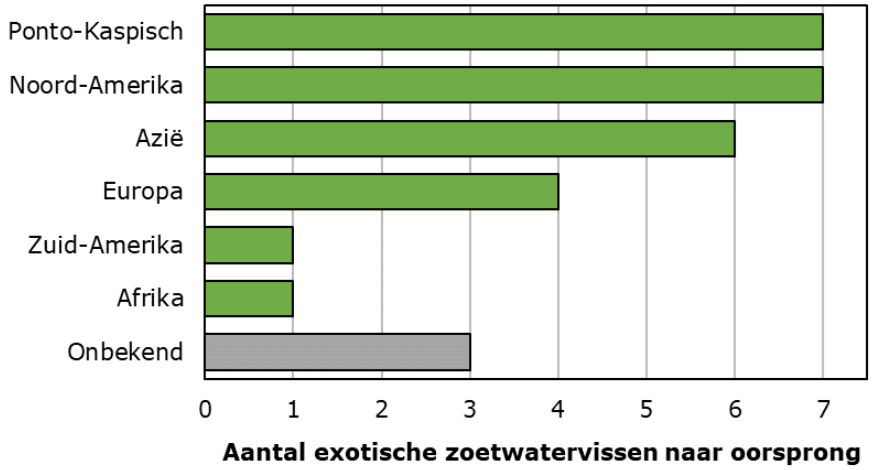
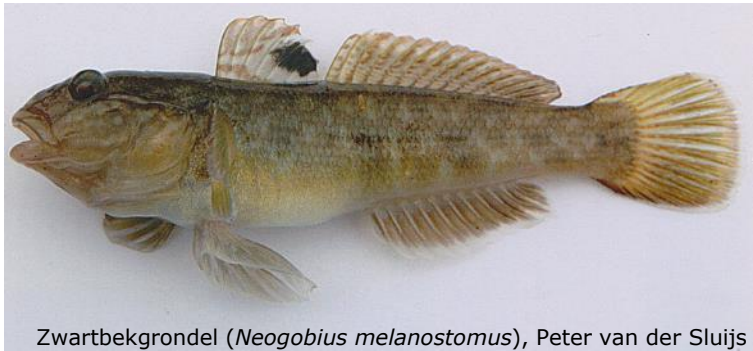
Toenemend aantal exotische vissoorten in Nederland





OPENING MAIN-DONAUKANAAL (1992)

~45 INHEEMSE SOORTEN



Zwartbekgrondel (*Neogobius melanostomus*), Peter van der Sluijs

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Interacties met inheemse soorten

REABIC
Aquatic Invasions (2016) Volume 11, Issue 2: 179 188
DOI: http://dx.doi.org/10.3391/ai.2016.11.2.07
Open Access
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Research Article

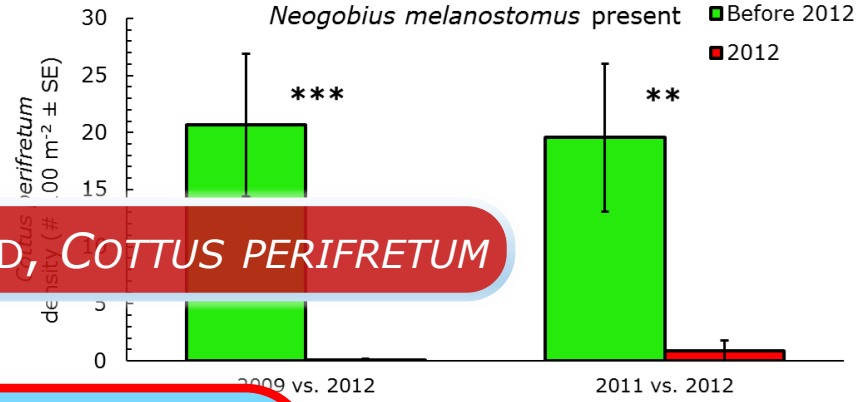
Invasive Ponto-Caspian gobies rapidly reduce the abundance of protected native bullhead

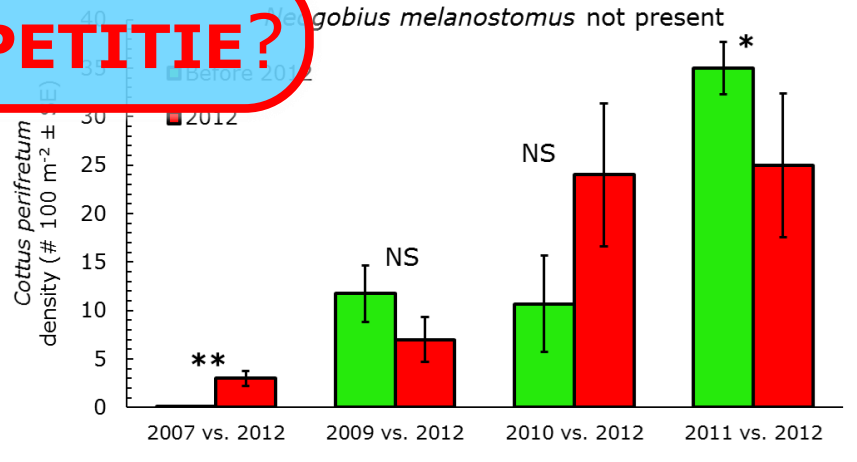
Nils van Kessel[1]
Rob S.E.W. Leuve

STERKE AFNAME RIVIERDONDERPAD, *COTTUS PERIFRETUM*

Cottus perifretum, Ron Offermans

VOEDSELCOMPETITIE?





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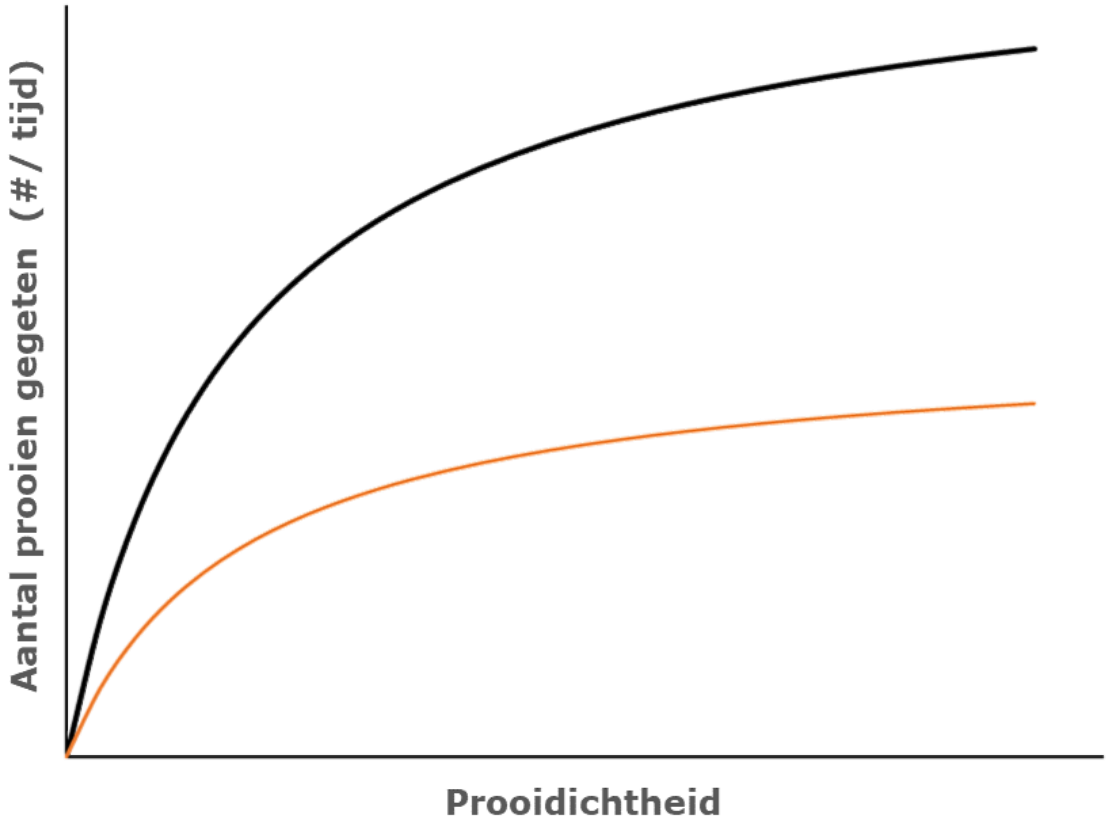
Functionele respons als een verklaring voor invasief succes



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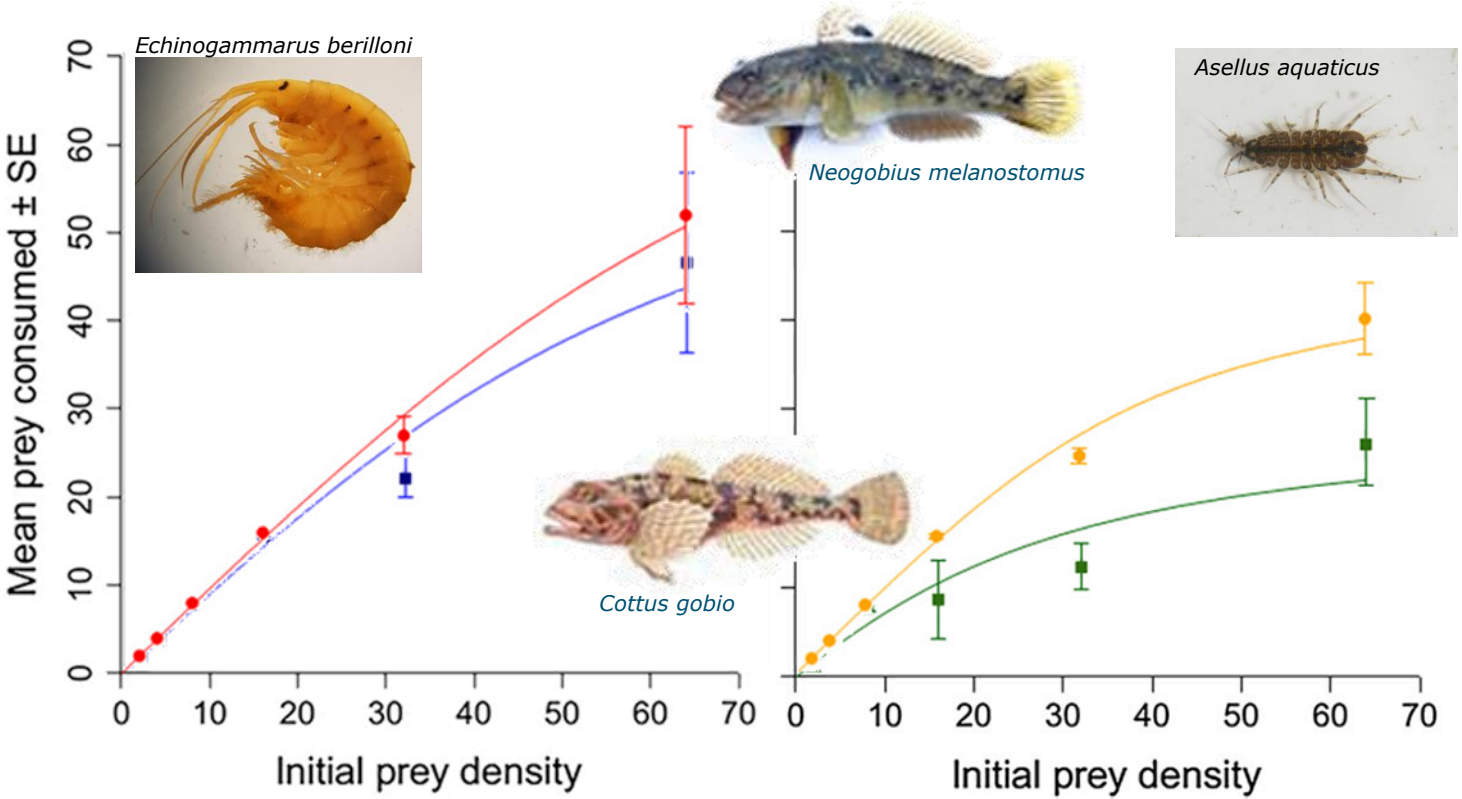
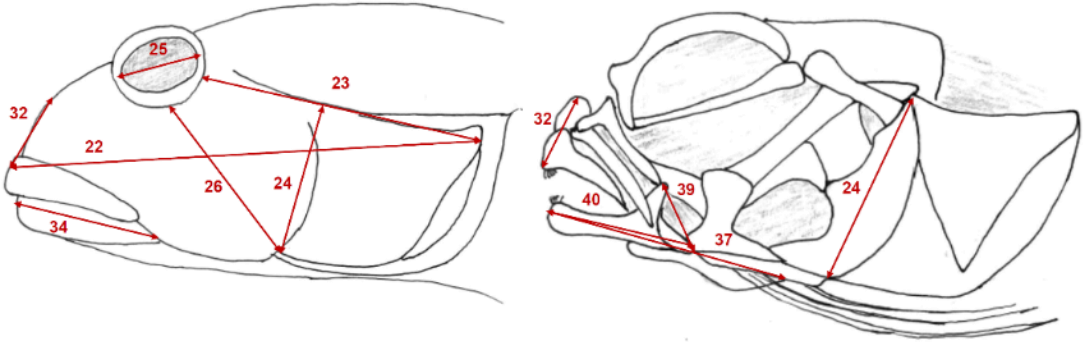
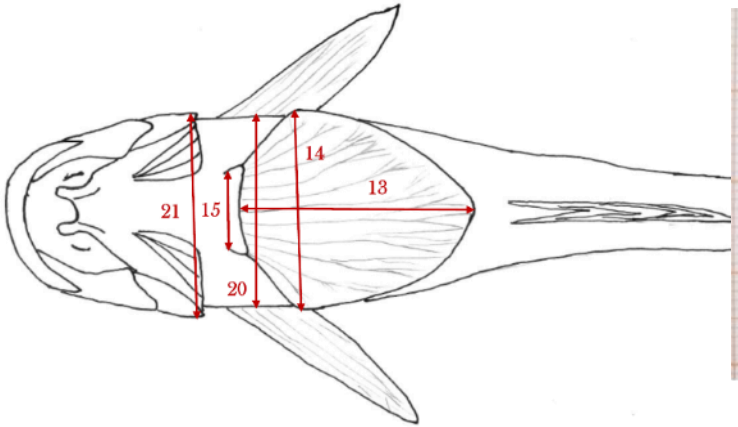
Functionele respons als een verklaring voor invasief succes

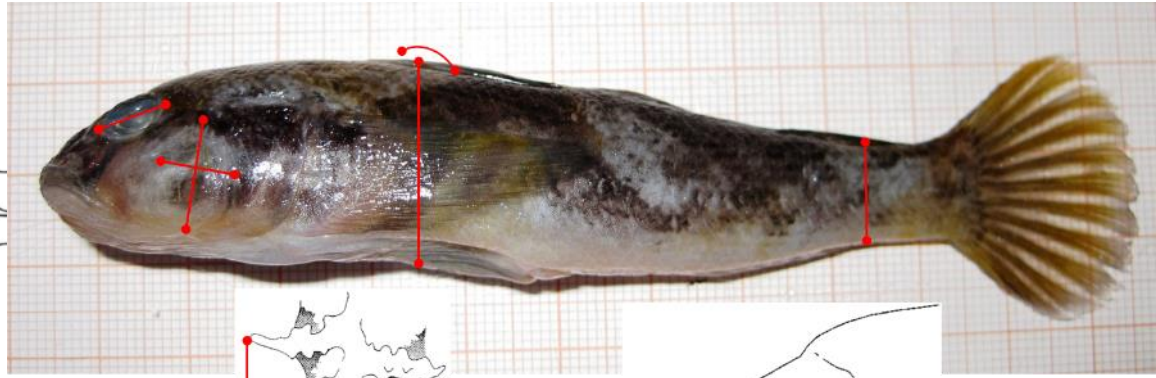


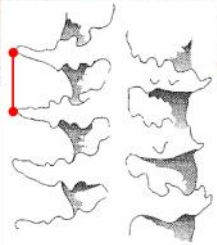
Laverty *et al. Biol. Invasions* (2017) **19**:1653–1665 DOI: 10.1007/s10530-017-1378-4

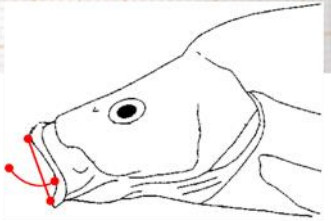
Functionele morfologie bepaalt wat een vis kan eten











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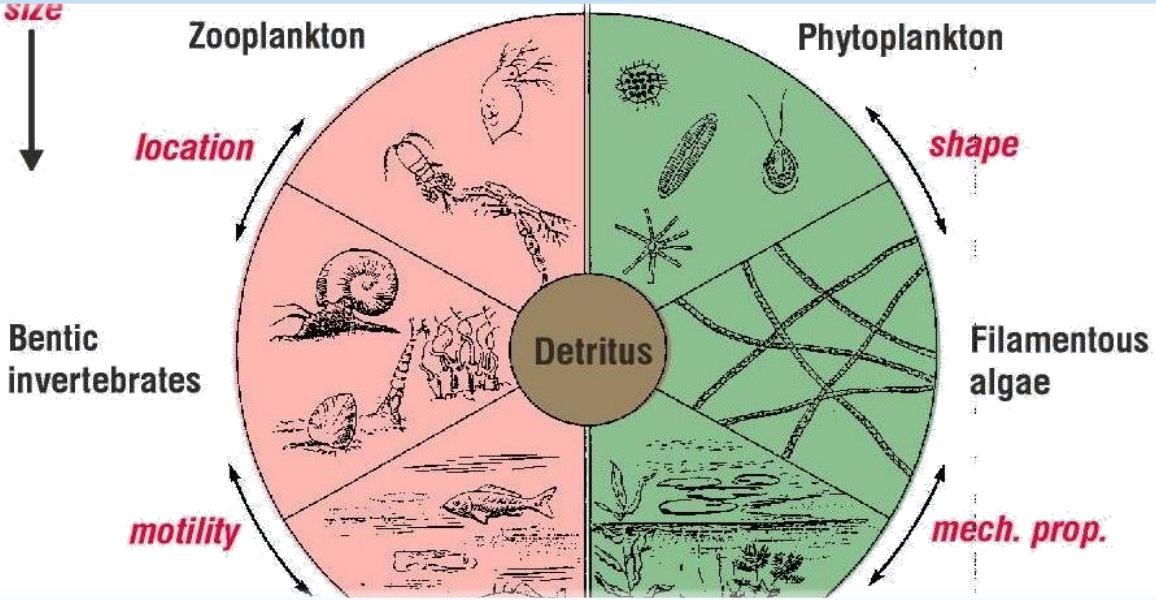
PROOI VS. PREDATOR EIGENSCHAPPEN



VAN TAXONOMIE NAAR FUNCTIONALITEIT

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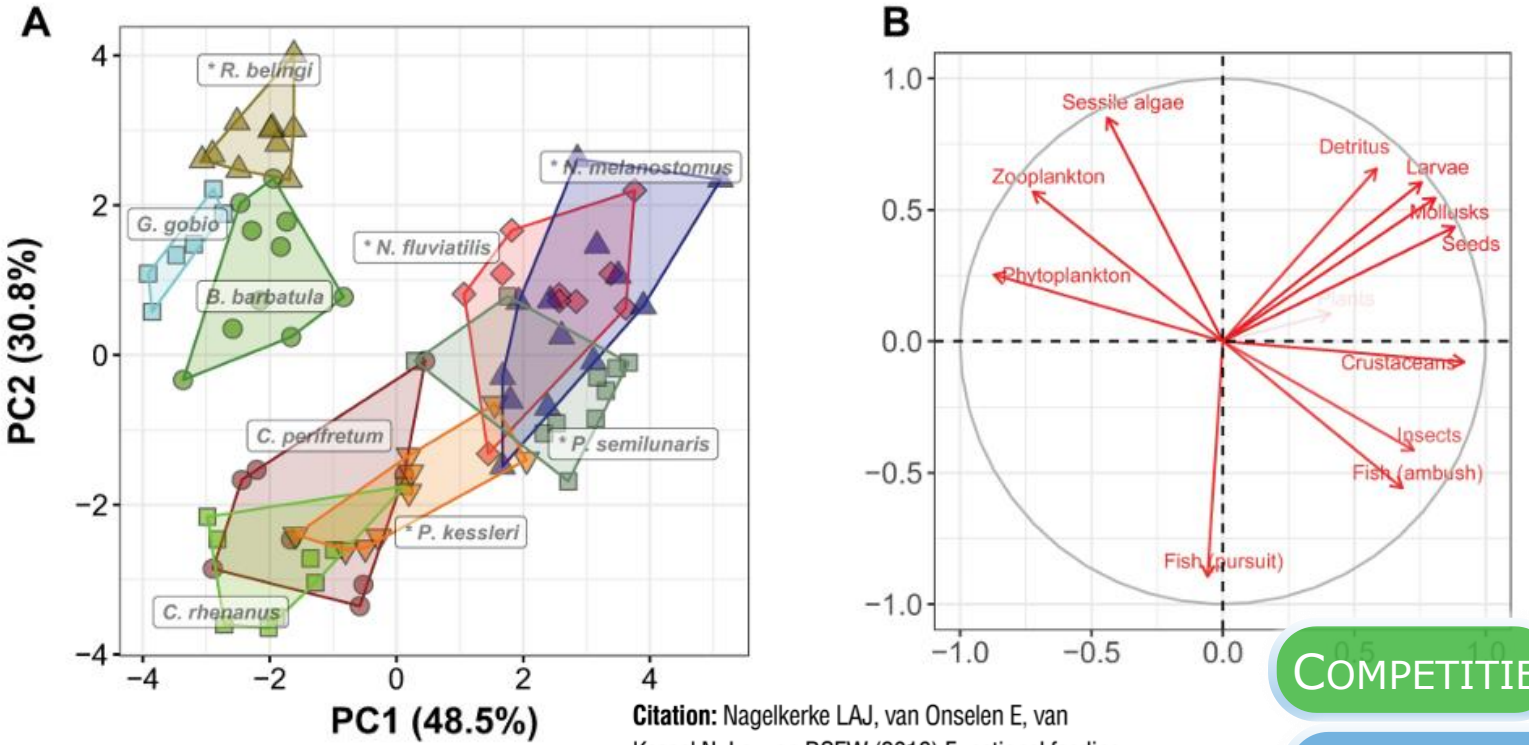
Morfologie, diet en invasiviteit



Citation: Nagelkerke LAJ, van Onselen E, van Kessel N, Leuven RSEW (2018) Functional feeding traits as predictors of invasive success of alien freshwater fish species using a food-fish model. PLoS ONE 13(6): e0197636. https://doi.org/10.1371/journal.pone.0197636

COMPETITIE

'LEGE NICHES'

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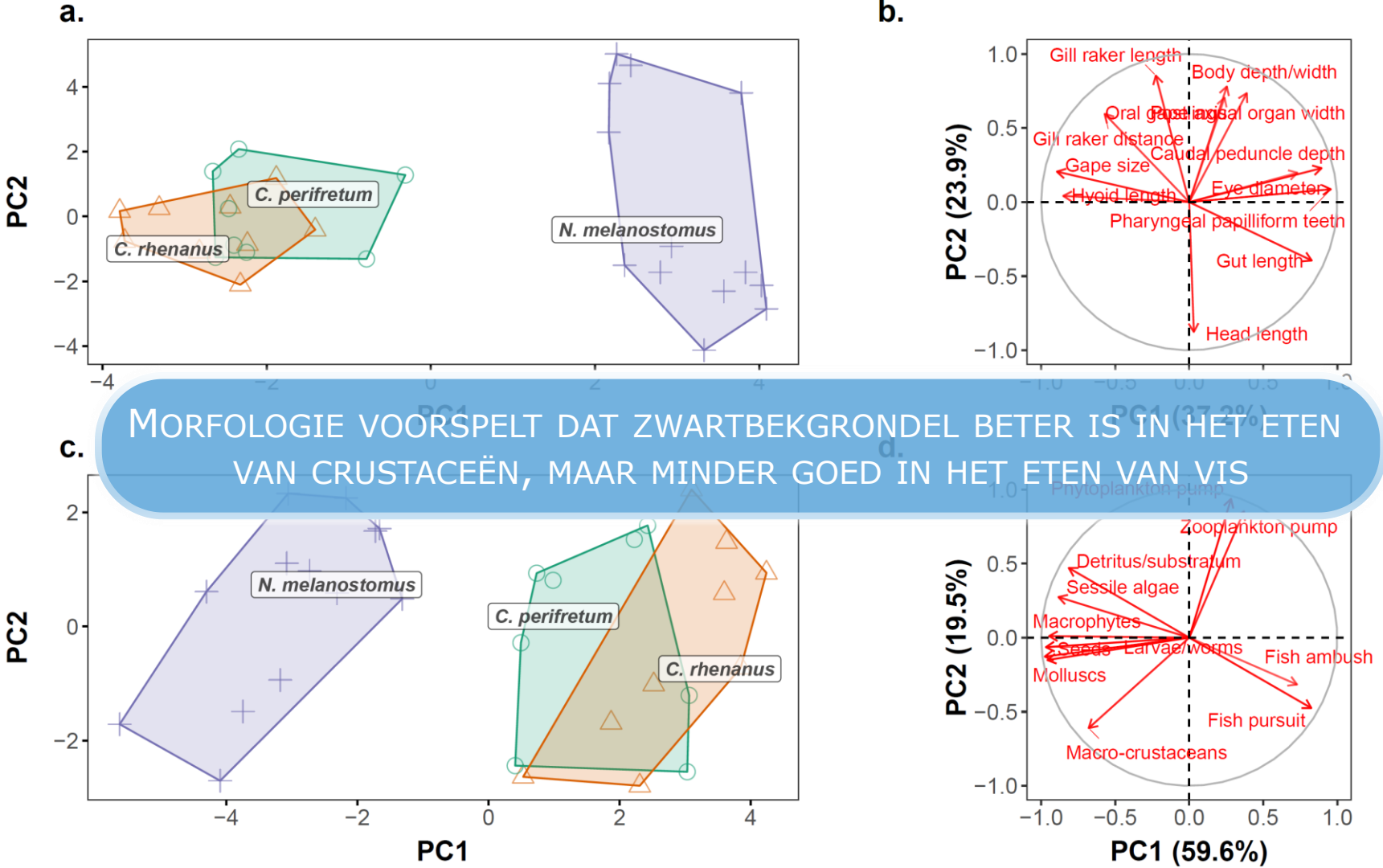
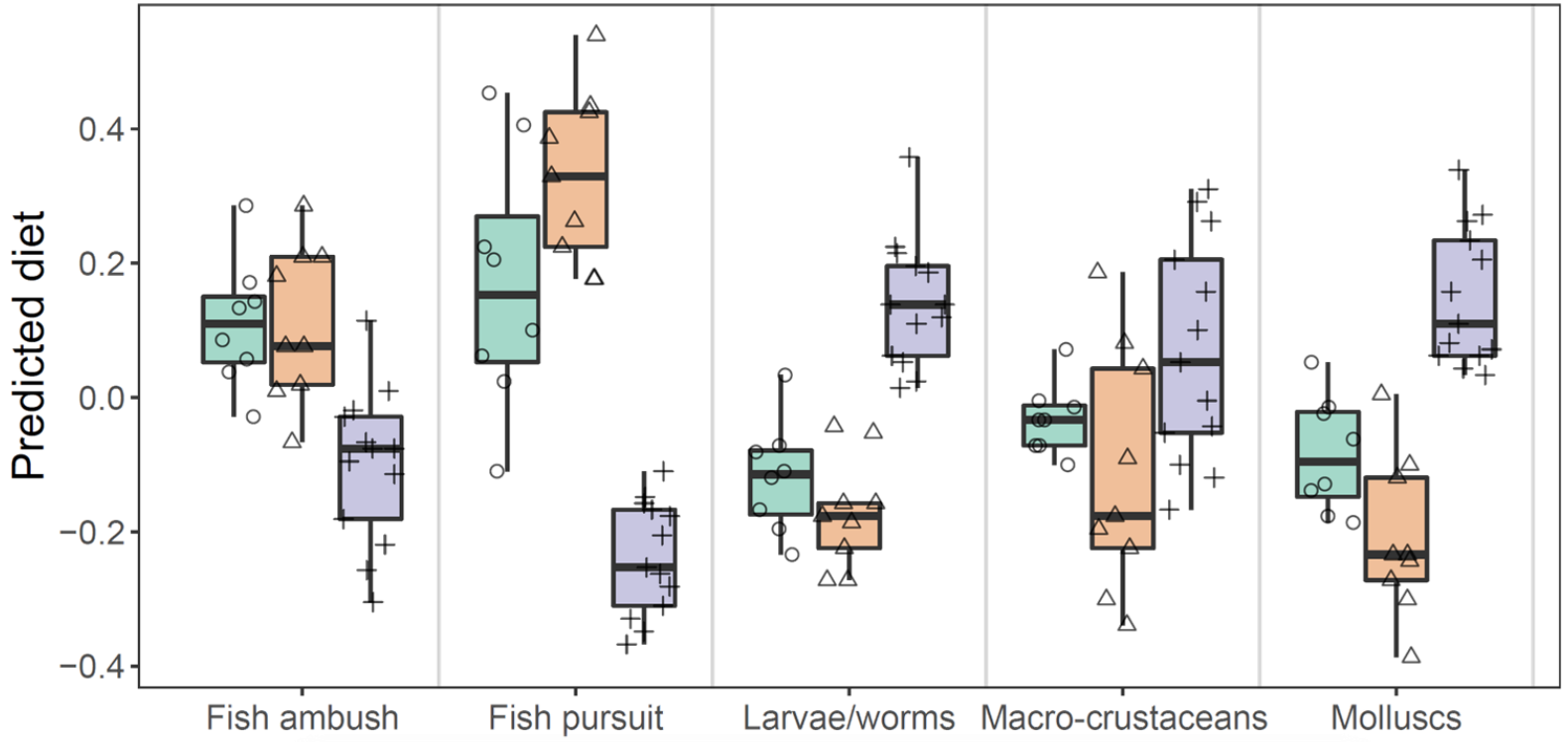


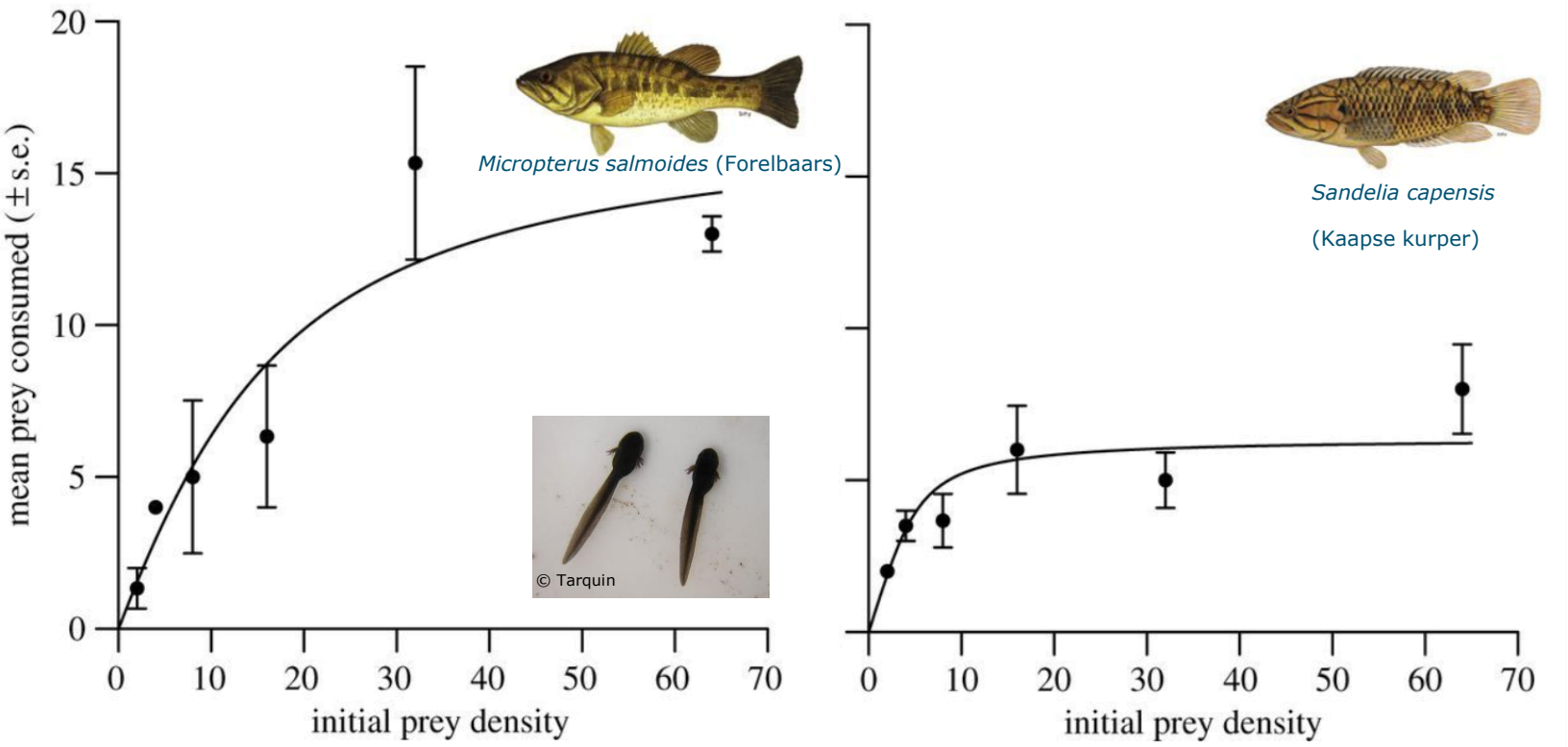
MORFOLOGIE VOORSPELT DAT ZWARTBEKGRONDEL BETER IS IN HET ETEN VAN CRUSTACEËN, MAAR MINDER GOED IN HET ETEN VAN VIS

Morphological predictions of trophic capacity

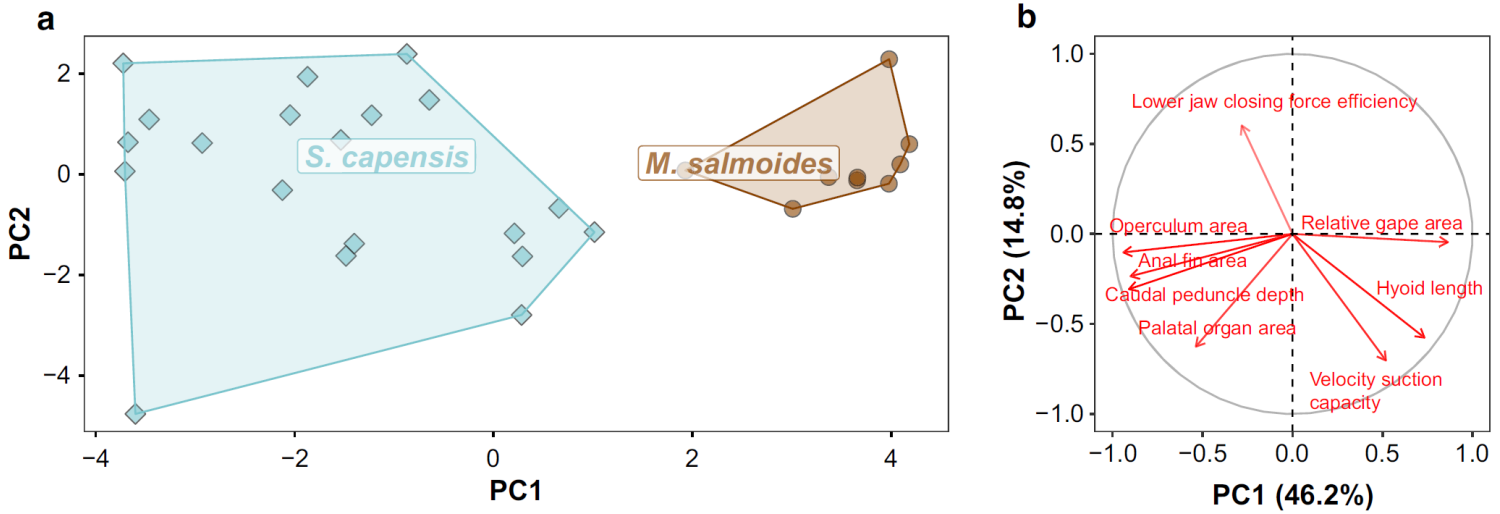


RELEVANTIE VAN DE 'PROOICONTEXT' VAN INVASIES

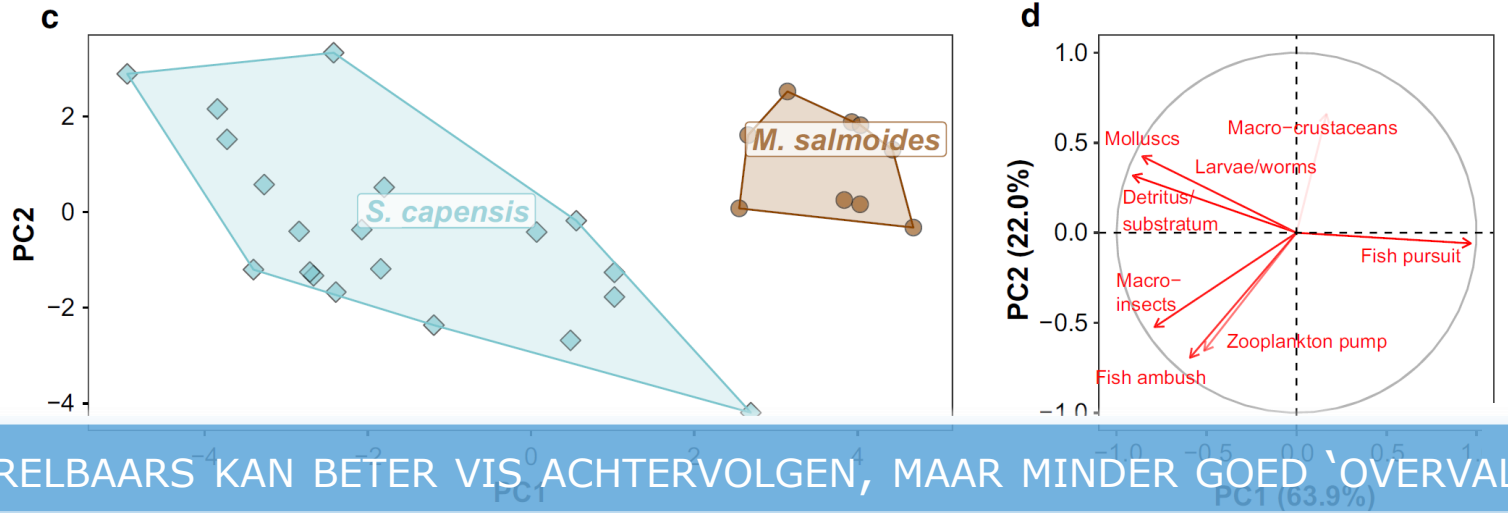
Een Afrikaans voorbeeld



Alexander *et al. Biol. Lett.* (2014) **10**:20130946 DOI: 0.1098/rsbl.2013.0946

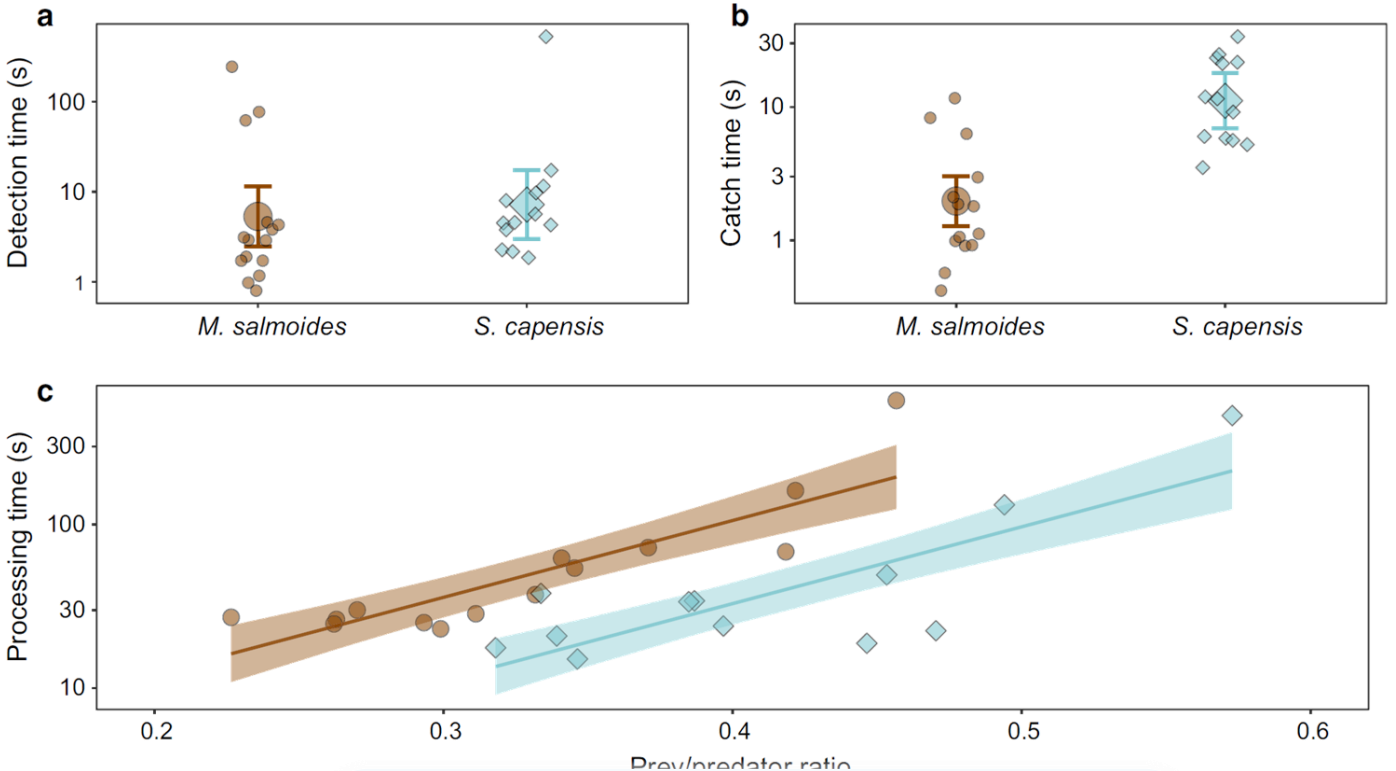


Luger *et al. Biol. Invasions* (2020) **22**: 2223–2233 DOI:10.1007/s10530-020-02252-2



FORELBAARS KAN BETER VIS ACHTERVOLGEN, MAAR MINDER GOED 'OVERVALLEN'

Differentiatie binnen de voedselopname



HABITATCONTEXT KAN BELANGRIJK ZIJN

Habitatkwaliteit kan invasiviteit beïnvloeden

African Journal of Aquatic Science 2021, 46(3): 353–360

AFRICAN JOURNAL OF AQUATIC SCIENCE
ISSN 1608-5914 EISSN 1727-9364
https://doi.org/10.2989/16085914.2021.1882376

Habitat structure differentially mitigates predation impact of juvenile largemouth bass and Florida bass

Dumisani Khosa[1,2,3,4*], Josie South[2,3,4], Ryan J Wasserman[5] and Olaf LF Weyl[1,2,3,4†]

[1] *Department of Ichthyology and Fisheries Science, Rhodes University, Makhanda, South Africa*
[2] *DSI/NRF Research Chair in Inland Fisheries and Freshwater Ecology, South African Institute for Aquatic Biodiversity (SAIAB), Makhanda, South Africa*
[3] *Centre for Invasion Biology, SAIAB, Makhanda, South Africa*
[4] *South African Institute for Aquatic Biodiversity (SAIAB), Makhanda, South Africa*
[5] *Department of Zoology and Entomology, Rhodes University, Makhanda, South Africa*
[†]*Deceased*
**Correspondence: d.khosa@saiab.ac.za*

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Is functionele morfologie nuttig om risico's in te schatten?

Environ Biol Fish (2010) 87:39–40
DOI 10.1007/s10641-009-9564-6

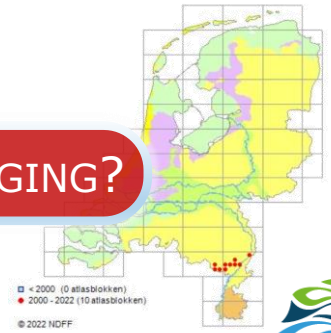
Threatened fishes of the world: *Misgurnus fossilis* (Linnaeus, 1758) (Cobitidae)

Petr Hartvich · Stanislav Lusk · Jitka Rutkayová

Received: 31 December 2008 / Accepted: 19 October 2009 / Published online: 30 October 2009

Keywords Threatened fishes · Europe · Cobitidae · Misgurnus fossilis

IS DE CHINESE WEERAAL EEN POTENTIËLE BEDREIGING?



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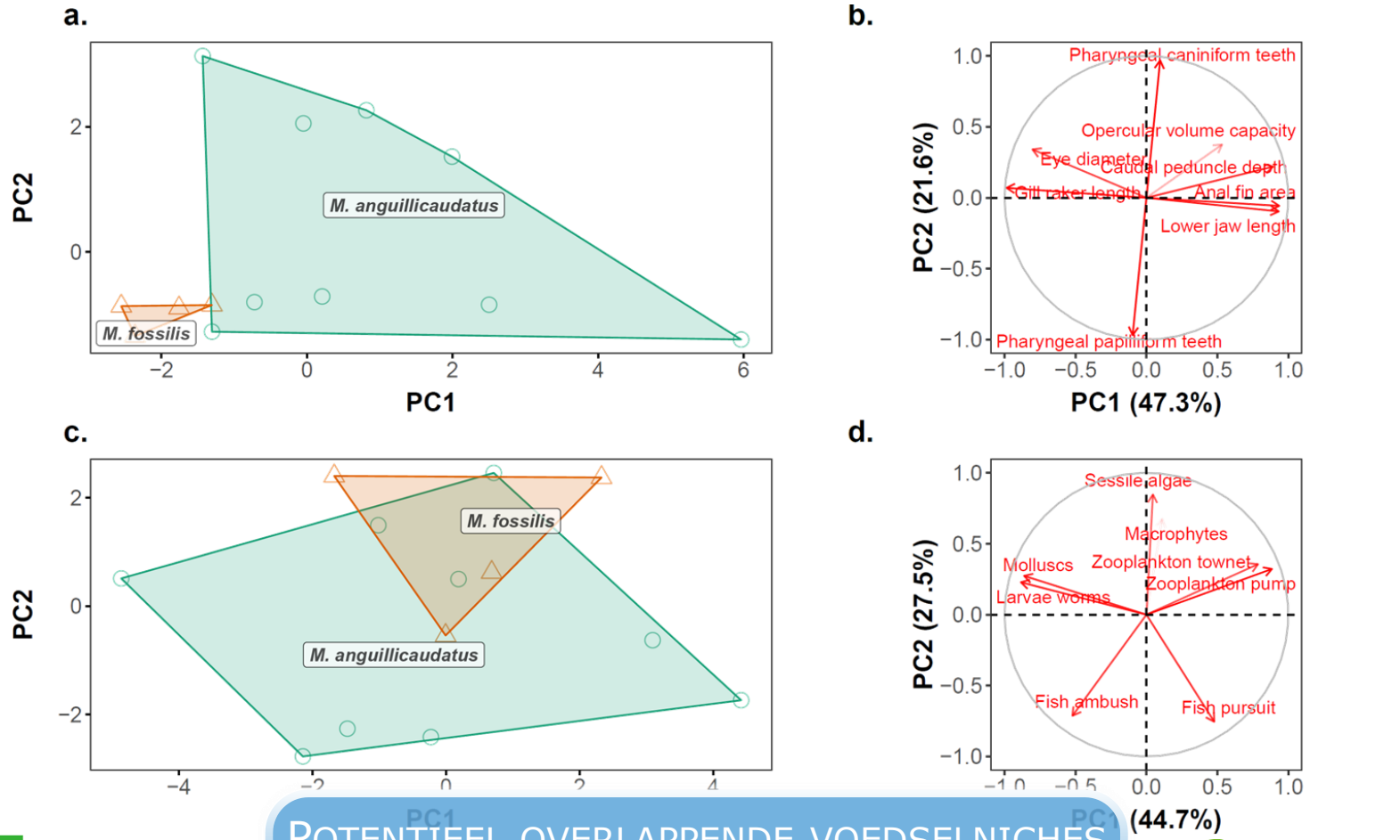

POTENTIEEL OVERLAPPENDE VOEDSELNICHES

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Vissenr

Conclusies

- Morfologie kan (deels) voedselopnamecapaciteit verklaren en is in een aantal gevallen consistent met functionele responsen;
- Aanbod van type en abundantie van prooien in het habitat kan invasiviteit beïnvloeden (‘prooicontext’);
- Habitatstructuur kan van belang zijn voor invasiviteit (‘habitatcontext’);
- Een (eco-)morfologische aanpak kan nuttig zijn om risico’s in te schatten

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Dank aan:

Johan van Giels
Nils van Kessel

Olav Dobber
Allison Luger
Eline van Onselen
Tim Persoon

e.v.a.

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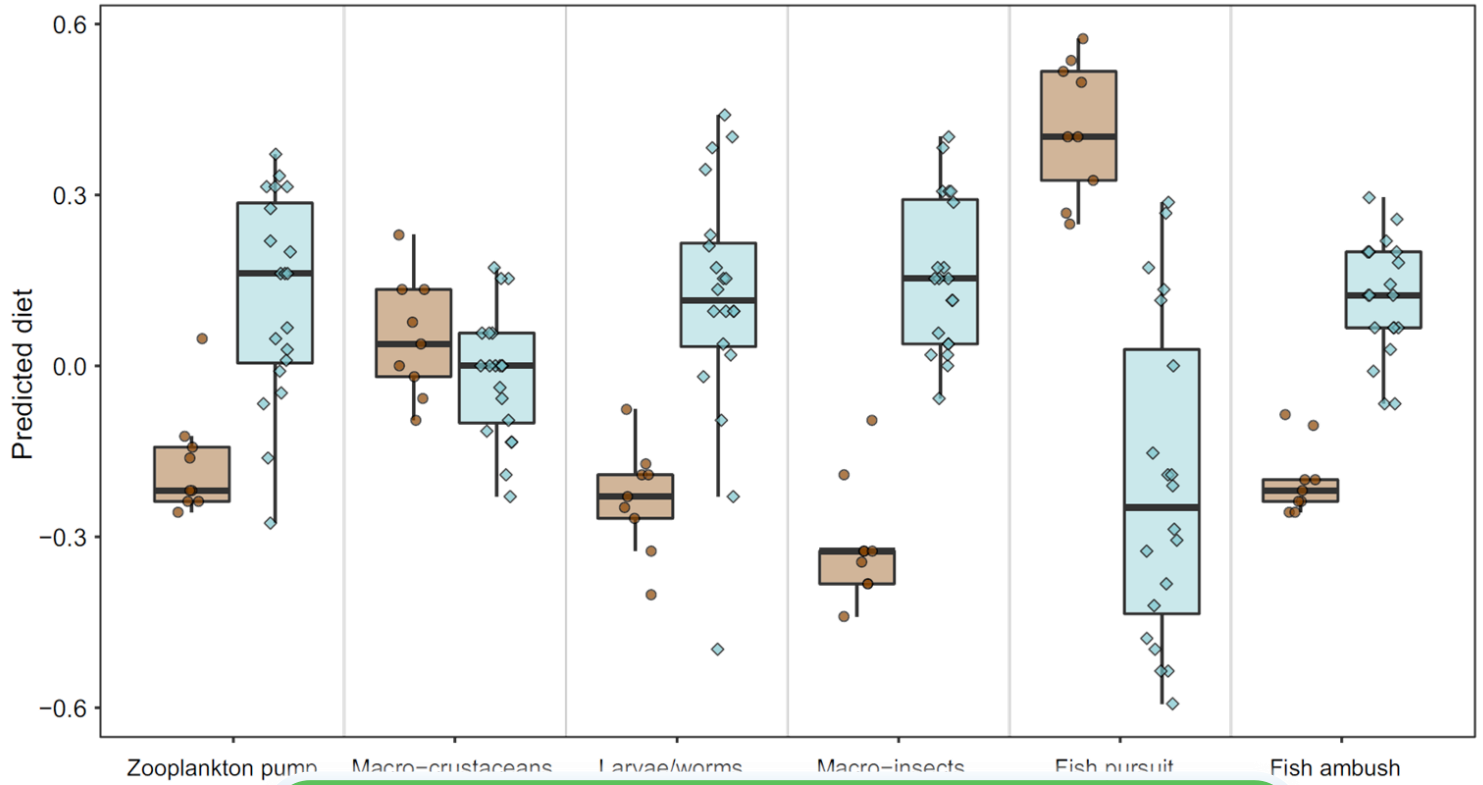
Can morphological traits explain trophic differences?

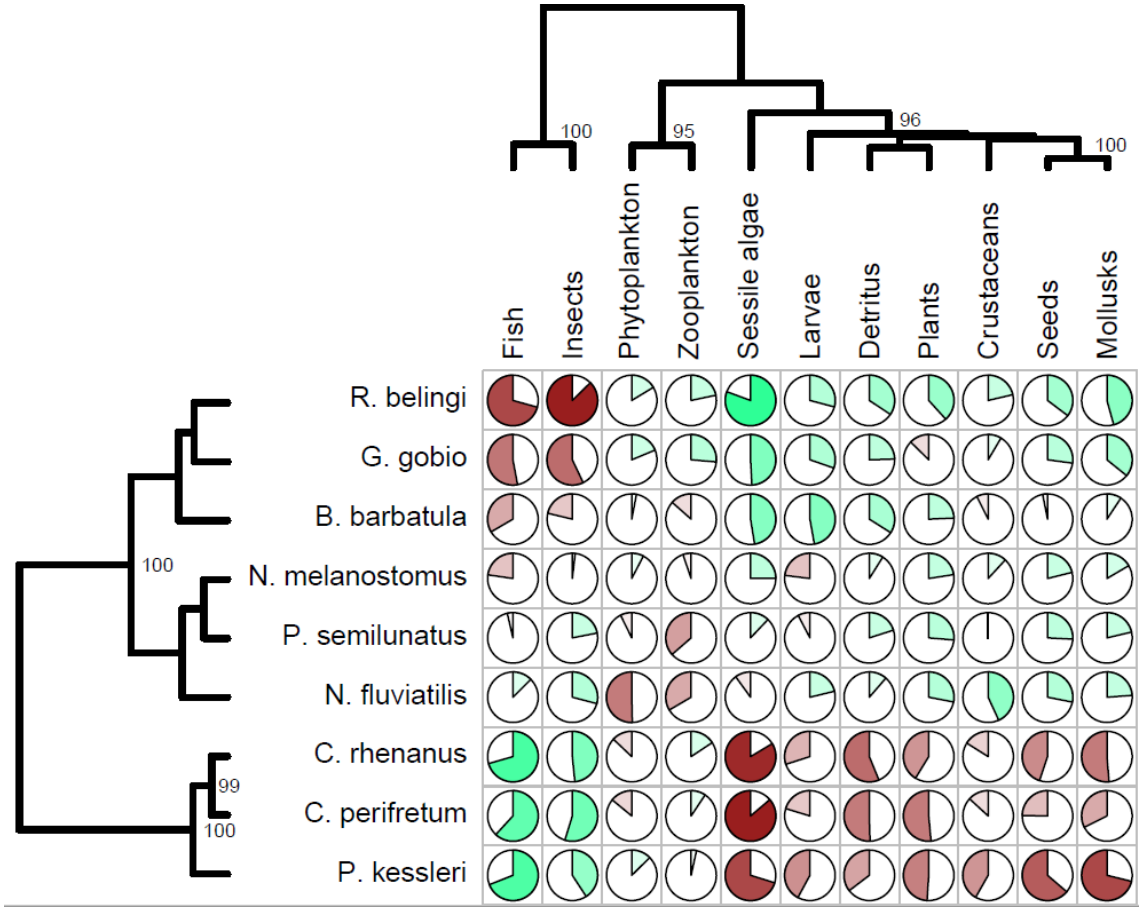


THE NATIVE SPECIES CAN HAVE AN ADVANTAGE

Luger *et al. Biol. Invasions* (2020) **22**: 2223–2233 DOI:10.1007/s10530-020-02252-2

Trophic profiles

- Bullheads are very similar to Bighead goby
- Cyprinids and loach cluster together
- The ability to eat macro-insects and fish appears discriminatory



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