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Marine and Freshwater Research

## **Supplementary Material**

Trends in eastern blue groper (*Achoerodus viridis*) abundance along south-eastern Australia (New South Wales): the influence of latitude, climate change and potential depth refuges

Nathan A. Knott<sup>A,\*</sup>, Matthew J. Rees<sup>A</sup>, Tom R. Davis<sup>B</sup>, David Harasti<sup>C</sup>, Hamish A. Malcolm<sup>B</sup>, Matthew D. Taylor<sup>C</sup>, Belinda G. Curley<sup>D</sup>, Stephen Morris<sup>E</sup>, Neville S. Barrett<sup>F</sup>, Rick D. Stuart-Smith<sup>F</sup>, Graham J. Edgar<sup>F</sup>, and Rachel Przeslawski<sup>A,G</sup>

- <sup>A</sup> NSW Department of Primary Industries and Regional Development, Marine Ecosystems, Fisheries Research, Huskisson, NSW 2540, Australia.
- <sup>B</sup> NSW Department of Primary Industries and Regional Development, Marine Ecosystems, Fisheries Research, Coffs Harbour, NSW 2450, Australia.
- <sup>c</sup> NSW Department of Primary Industries and Regional Development, Marine Ecosystems & Fisheries Resource Assessment, Fisheries Research, Taylors Beach, NSW 2316, Australia.
- <sup>D</sup> Department of Primary Industries and Regional Development, Marine Estate Management , Taylors Beach, NSW 2316, Australia.
- <sup>E</sup> NSW Department of Primary Industries and Regional Development, Biometry, Fisheries Research, Wollongbar, NSW 2477, Australia.
- <sup>F</sup> Institute for Marine and Antarctic Studies, University of Tasmania, Taroona, Tas. 7053, Australia.
- <sup>G</sup> School of Earth, Atmospheric and Life Sciences, University of Wollongong, Wollongong, NSW 2522, Australia.
- \*Correspondence to: Nathan A. Knott. NSW Department of Primary Industries and Regional Development, Marine Ecosystems, Fisheries Research, Huskisson, NSW 2540, Australia. Email: nathan.knott@dpi.nsw.gov.au

Table S1. Baited remote video sampling sites per bioregion and year.

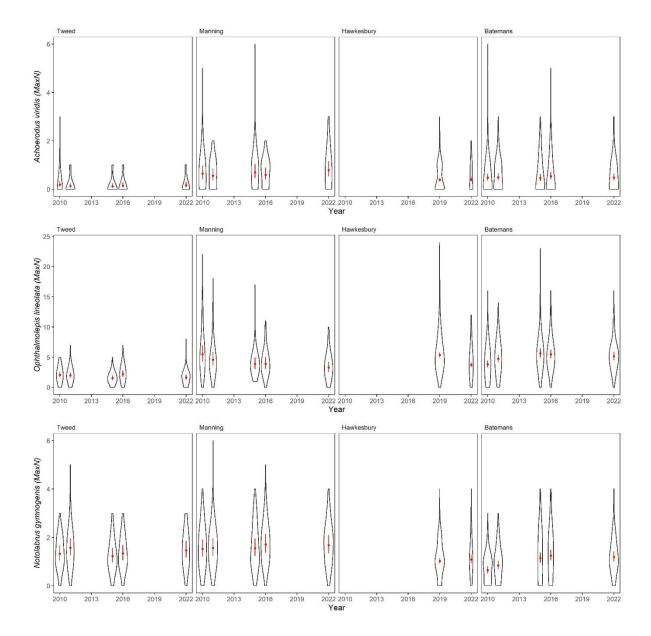
Year	Batemans	Hawkesbury	Manning	Tweed
2010	39	0	7	16
2011	40	0	8	18
2015	40	0	8	18
2016	40	0	8	18
2019	0	50	0	0
2022	44	50	9	18

Each site was sampled with between 3 and 8 BRUVs.

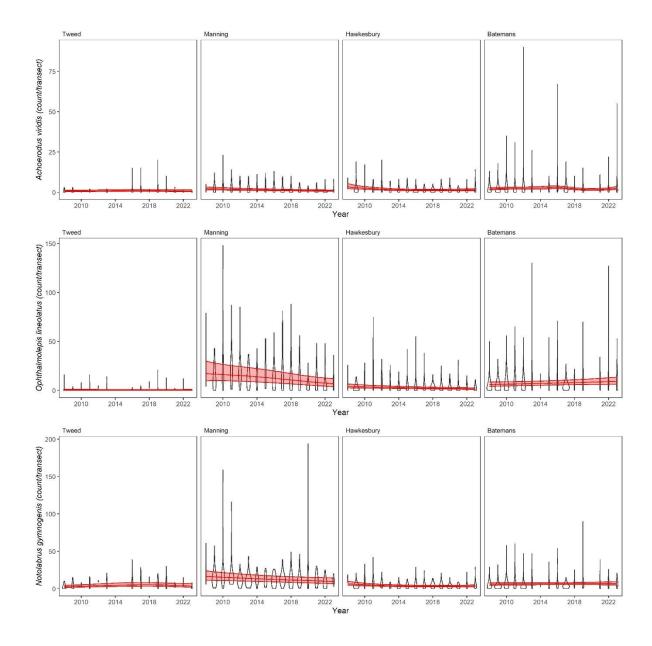
Table S2. Underwater visual census sites sampled per bioregion and year.

Year	Batemans	Hawkesbury	Manning	Tweed
2008	40	4	5	7
2009	37	18	12	9
2010	36	10	13	3
2011	29	14	14	5
2012	38	14	18	1
2013	19	14	17	8
2014	2	20	12	0
2015	15	19	10	0
2016	14	20	15	11
2017	40	19	12	10
2018	9	24	16	2
2019	13	17	10	11
2020	0	23	4	9
2021	9	13	9	5
2022	17	13	9	2
2023	14	16	5	2

Each site was sampled with a 50- to 200-m transect (RLS and ATRC respectively).



**Fig. S1.** Abundance patterns (MaxN) for *Achoerodus viridis* (eastern blue groper), *Notolabrus gymnogenis* (crimson banded wrasse) and *Ophthalmolepis lineolata* (southern Maori wrasse) along the New South Wales coastline over the last decade. Observed counts are represented by violin plots where the width of the plotting symbol is proportional to the number of observations for each unique count. Points and vertical bars show the mean relative abundance and 95% confidence interval.



**Fig. S2.** Abundance patterns (MaxN) for *Achoerodus viridis* (eastern blue groper), *Notolabrus gymnogenis* (crimson banded wrasse) and *Ophthalmolepis lineolata* (southern Maori wrasse) along the New South Wales coastline over the last twelve years. Observed counts are represented by violin plots where the width of the plotting symbol is proportional to the number of observations for each unique count. Lines and shaded regions show the mean relative abundance and 95% confidence interval.