Table S1. The 197 studies published between 1933 and 2023 with a focus on *Zostera capensis*.

	Year	Author	Title	Journal	DOI
1	1933	Setchel W.A.	A Preliminary survey of the species of *Zostera*	PNAS	https://doi.org/10.1073/pnas.19.9.810
2	1934	Chubb E.C. et. al.	A new variation of Smithfield culture from a cave on the Pondoland coast	Transactions of the Royal Society of South Africa	https://doi.org/10.1080/00359193409519342
3	1937	Isaac Wm.E.	Studies of South African seaweed vegetation: II.—South Coast: Rooi Els to Gansbaai, with Special Reference to Gansbaai.	Transactions of the Royal Society of South Africa	https://doi.org/10.1080/00359194909519854
4	1951	Day J.H.	The Ecology of South African Estuaries, Part 1: A Review of Estuarine Conditions in General	Transactions of the Royal Society of South Africa	10.1080/00359195109519877
5	1951	Scott K.M.F. et. al.	The Ecology of South African Estuaries, Part II: The Klein River Estuary, Hermanus, Cape	Transactions of the Royal Society of South Africa	https://doi.org/10.1080/00359195109519889
6	1953	Isaac Wm.E.	Plants of Land and Sea	The Journal Of The Botanical Society Of South Africa	10.10520/AJA00423203_1567
7	1954	Day J.H. et. al.	The Ecology of South African Estuaries, Part IV: The St. Lucia System	Transactions of the Royal Society of South Africa	https://doi.org/10.1080/00359195409518982
8	1956	Macnae W.	Aspects of life on muddy shores in South Africa	South African Journal of Science	https://hdl.handle.net/10520/AJA00382353_386
9	1957	Macnae W.	The Ecology of Plants and Animals in the Intertidal Regions of the Zwartkops Estuary, Near Port Elizabeth, South Africa	Journal of Ecology	https://doi.org/10.2307/2256924
10	1959	Day J.H.	The biology of Langebaan Lagoon: a study of the effect of shelter from wave action	Transactions of the Royal Society of South Africa	https://doi.org/10.1080/00359195909519025
11	1962	Macnae W. & Kalk M.	The Fauna and Flora of Sand Flats at Inhaca Island, Moçambique	Journal of Animal Ecology	https://doi.org/10.2307/2334
12	1968	Isaac F.M.	Marine botany of the Kenya coast: 4 Angiosperms	Journal of East African Natural History	https://journals.co.za/doi/abs/10.10520/AJA00128317_558
13	1968	Isaac Wm.E. & Isaac F.M.	Marine botany of the Kenya coast: 3 General account of the environment, flora and vegetation	Journal of East African Natural History	https://doi/abs/10.10520/AJA00128317_557
14	1977	Barnabas A.D. et. al.	*Zostera capensis* Setchell, 1: observations on the fine structure of the leaf epidermis	Zeitschrift für Pflanzenphysiologie	https://doi.org/10.1016/S0044-328X(77)80300-0
15	1979	Barnabas A.D. & Guillard V.	Observations on the fine structure of phloem parenchyma cells in the leaves of *Zostera capensis* Setchell	Proceedings-Southern African Electron Microscopy Society	-
16	1980	Barnabas A.D. et. al.	*Zostera capensis* setchell .2. Fine-structure of the cavities in the wall of leaf blade epidermal-cells	Zeitschrift für Pflanzenphysiologie	https://doi.org/10.1016/S0044-328X(80)80118-8
17	1980	McMillan C.	Flowering under controlled conditions by *Cymodocea-serrulata, Halophila-stipulacea, Syringodium-isoeti-folium, Zostera-capensis* and *Thalassia-hemprichii* from Kenya	Aquatic Botany	https://doi.org/10.1016/0304-3770(80)90062-5
18	1980	Edgcumbe D.J.	Some preliminary observations on the submerged aquatic *Zostera capensis* Setchell	Journal of South African Botany	-
19	1980	Howard-Williams C. & Liptrot M.R.	Submerged macrophyte communities in a brackish South African estuarine-lake system	Aquatic Botany	https://doi.org/10.1016/0304-3770(80)90012-1

20	1980	McMillan C. et. al.	$^{13}C/^{12}C$ ratios in seagrasses	Aquatic Botany	https://doi.org/10.1016/0304-3770(80)90025-X
21	1980	Barnabas A.D. & Naicker S.	Some observations on the fine structure of the roots of *Zostera capensis* Setchell	Proceedings-Southern African Electron Microscopy Society	-
22	1981	Barnabas A.D. & Naidoo V.	Structural features of the rhizome of *Zostera Capensis* Setchell	Proceedings-Southern African Electron Microscopy Society	-
23	1981	Day J.H.	Summaries of current knowledge of 43 estuaries in southern Africa	Estuarine Ecology with Particular Reference to Southern Africa	-
24	1982	Barnabas A.D. et. al.	*Zostera capensis* Setchell: III. Some aspects of wall ingrowth development in leaf blade epidermal cells	Protoplasma	https://doi.org/10.1007/BF01281534
25	1983	Beckley L.E.	The ichthyofauna associated with *Zostera capensis* Setchell in the Swartkops estuary, South Africa	South African Journal of Zoology	https://doi.org/10.1080/02541858.1983.11447809
26	1984	Hanekom N. & Baird D.	Fish community structures in *Zostera* and non-*Zostera* regions of the Kromme estuary, St Francis Bay	African Zoology	http://dx.doi.org/10.1080/02541858.1984.11447897
27	1985	Barnabas A.D. et. al.	Ultrastructural features of the roots of *Zostera capensis* Setchell	American Journal of Botany	-
28	1986	Emmerson W.D.	The ecology of *Palaemon-pacificus* (Stimpson) associated with *Zostera-capensis* setchell	Transactions of the Royal Society of South Africa	https://doi.org/10.1080/00359198609520108
29	1987	Talbot M.M.B. & Bate G.C.	The distribution and biomass of the seagrass *Zostera-capensis* in a warm-temperate estuary	Botanica Marina	https://doi.org/10.1515/botm.1987.30.1.91
30	1987	Hodgson A.N.	Distribution and abundance of the macrobenthic fauna of the Kariega estuary	South African Journal of Zoology	https://doi.org/10.1080/02541858.1987.11448037
31	1987	Walters W.L. & Griffiths C.L.	Patterns of distribution, abundance and shell utilization amongst hermit crabs, *Diogenes brevirostris*	South African Journal of Zoology	https://doi.org/10.1080/02541858.1987.11448057
32	1987	Emmerson W.D.	Tidal migration and feeding of the shrimp *Palaemon pacificus* (Stimpson)	South African Journal of Science	https://hdl.handle.net/10520/AJA00382353_5352
33	1988	De Villiers L.	Sedimentation changes in the Breede River estuary: A study of sedimentation changes on the flood tide delta in the estuary, with reference to the hydrology of the river	MSc thesis. Department of Environmental and Geographical Science, University of Cape Town, Rondebosch, South Africa	http://hdl.handle.net/11427/17329
34	1988	Hanekom N. & Baird D.	Distribution and variations in seasonal biomass of eelgrass *Zostera capensis* in the Kromme Estuary, St Francis Bay, South Africa	South African Journal of Marine Science	https://doi.org/10.2989/025776188784379099
35	1988	Whitfield A.K.	The fish community of the Swartvlei estuary and the influence of food availability on resource utilization	Estuaries	https://doi.org/10.2307/1351968
36	1988	Whitfield A.K.	The role of tides in redistributing macrodetrital aggregates within the Swartvlei estuary	Estuaries	https://doi.org/10.2307/1351967
37	1989	Whitfield A.K.	The benthic invertebrate community of a southern cape estuary: Structure and possible food sources	Transactions of the Royal Society of South Africa	https://doi.org/10.1080/00359198909520160
38	1989	Whitfield A.K. et. al.	Composition, species richness and similarity of ichthyofaunas in eelgrass *Zostera capensis* beds of southern Africa	South African Journal of Marine Science	https://doi.org/10.2989/02577618909504565

39	1990	De Wet P.S. & Marais J.F.K.	Stomach content analysis of juvenile Cape stumpnose *Rhabdosargus holubi* in the Swartkops Estuary, South Africa	South African Journal of Marine Science	https://doi.org/10.2989/025776190784378880
40	1990	Talbot M. M. B. et. al.	The Dynamics of Estuarine Macrophytes in Relation to Flood/siltation Cycles	Botanica Marina	https://doi.org/10.1515/botm.1990.33.2.159
41	1991	Kalejta B. & Hockey P.A.R.	Distribution, abundance and productivity of benthic invertebrates at the Berg River estuary, South Africa	Estuarine, Coastal and Shelf science	https://doi.org/10.1016/0272-7714(91)90005-V
42	1991	Wooldridge T.H	Exchange of two species of decapod larvae across an estuarine mouth inlet and implications of anthropogenic changes in the frequency and duration of mouth closure	South African Journal of Science	
43	1992	Adams J.B. et. al.	The distribution of estuarine macrophytes in relation to freshwater	Botanica Marina	https://doi.org/10.1515/botm.1992.35.3.215
44	1992	Adams J.B. & Talbot M.M.B.	The Influence of River Impoundment on the Estuarine Seagrass *Zostera capensis* Setchell	Botanica Marina	https://doi.org/10.1515/botm.1992.35.1.69
45	1993	Iyer V. & Barnabas A.D.	Effects of varying salinity on leaves of *Zostera capensis* Setchell. I. Ultrastructural changes	Aquatic Botany	https://doi.org/10.1016/0304-3770(93)90042-U
46	1994	Adams J.B. & Bate G.C.	The tolerance to desiccation of the submerged macrophytes *Ruppia cirrhosa* (Petagna) grande and *Zostera capensis* setchell	Journal of Experimental Marine Biology and Ecology	https://doi.org/10.1016/0022-0981(94)90156-2
47	1994	Adams J.B. & Bate G.C.	The Ecological Implications of Tolerance to Salinity by *Ruppia cirrhosa* (Petagna) Grande and *Zostera capensis* Setchell	Botanica Marina	https://doi.org/10.1515/botm.1994.37.5.449
48	1994	Ter Morshuizen L.D. & Whitfield A K.	The distribution of littoral fish associated with eelgrass *Zostera capensis* beds in the Kariega Estuary, a southern African system with a reversed salinity gradient	South African Journal of Marine Science	https://doi.org/10.2989/025776194784287049
49	1995	Wakibya, J.G.	The potential human-induced impacts on the Kenya seagrasses	Coastal systems and sustainable development in Africa. Proceedings of a UNESCO Regional Seminar on Human Impacts on Coastal Ecosystems, their Response and Management Problems, ROSTA, Nairobi, 5-9 April 1993.	http://hdl.handle.net/1834/7160
50	1996	Barnabas A.D.	Casparian band-like structures in the root hypodermis of some aquatic angiosperms	Aquatic Botany	https://doi.org/10.1016/S0304-3770(96)01072-8
51	1997	Paterson A.W. & Whitfield A.K.	A stable carbon isotope study of the food-web in a freshwater-deprived South African Estuary, with particular emphasis on the ichthyofauna	Estuarine, Coastal and Shelf Science	https://doi.org/10.1006/ecss.1997.0243
52	1997	Wortmann J. et. al.	A mathematical model of an estuarine seagrass	Ecological modelling	https://doi.org/10.1016/S0304-3800(96)01910-2
53	1998	Wortmann J.	A modelling approach for determining the freshwater requirements of estuarine macrophytes	PhD Thesis. Department of Mathematics,, University of KwaZulu-Natal, South Africa	http://hdl.handle.net/10413/4767
54	1999	Przybyłowicz W.J. et. al.	Micro-PIXE mapping of sodium and chlorine in selected seagrasses	Nuclear Instruments & Methods in Physics Research Section B: beam Interactions With Materials and Atoms	https://doi.org/10.1016/S0168-583X(98)00940-9
55	2000	Allanson B.R. et al.	Benthic macrofauna richness and diversity in the Knysna Estuary: A 50 year comparison	Transactions of the Royal Society of South Africa	https://doi.org/10.1080/00359190009520442

56	2000	Colloty B.M. et. al.	The use of a botanical importance rating to assess changes in the flora in the Swartkops Estuary over time	Water SA	https://www.wrc.org.za/wp-content/uploads/mdocs/WaterSA_2000_02_1247.pdf
57	2000	de Boer W.F. et. al.	Tides - tidal currents and their effects on the intertidal ecosystem of the southern bay: Inhaca Island Mozambique	Hydrobiologia	https://doi.org/10.1023/A:1004030605474
58	2000	de Boer W.F.	Biomass dynamics of seagrasses and the role of mangrove and seagrass vegetation as different nutrient sources for an intertidal ecosystem	Aquatic Botany	https://doi.org/10.1016/S0304-3770(99)00072-8
59	2000	Paterson A.W. & Whitfield A.K.	The Ichthyofauna Associated with an Intertidal Creek and Adjacent Eelgrass Beds in the Kariega Estuary, South Africa	Environmental Biology of Fishes	https://doi.org/10.1023/A:1007629328937
60	2001	Compton J.S.	Holocene sea-level fluctuations inferred from the evolution of depositional environments of the southern Langebaan Lagoon salt marsh	The Holocene	https://doi.org/10.1191/095968301678302832
61	2001	Bandeira S.O. & Björk M.	Seagrass research in the eastern Africa region: emphasis on diversity, ecology and ecophysiology	South African Journal of Botany	https://doi.org/10.1016/S0254-6299(15)31158-3
62	2001	Martins A.R.O. & Bandeira S.O.	Biomass distribution and leaf nutrient concentrations and resorption of *Thalassia hemprichii* at Inhaca Island, Mozambique	South African Journal of Botany	https://doi.org/10.1016/S0254-6299(15)31161-3
63	2001	Froneman P.W.	Stable isotope (ð13C) composition of the food web of the temperate Kariega estuary (Eastern Cape)	African Journal of Aquatic Science	https://doi.org/10.2989/16085910109503724
64	2001	Paula J. et. al.	Patterns of Abundance of Seagrasses and Associated Infaunal Communities at Inhaca Island, Mozambique	Estuarine Coastal and Shelf Science	https://doi.org/10.1006/ecss.2001.0809
65	2001	de Boer. W.F. et. al	The Impact of Artisanal Fishery on a Tropical Intertidal Benthic Fish Community	Environmental Biology of Fishes	https://doi.org/10.1023/A:1011043510100
66	2002	Weerts S.P. and Cyrus D.P.	Occurrence of young and small-sized fishes in different habitats within a subtropical South African estuary and adjacent harbour	Marine and Freshwater Research	https://doi.org/10.1071/MF01155
67	2002	Bandeira S.O.	Diversity and distribution of seagrasses around Inhaca Island, southern Mozambique	South African Journal of Botany	https://doi.org/10.1016/S0254-6299(15)30419-1
68	2002	Colloty B.M. et. al.	Classification of estuaries in the Ciskei and Transkei regions based on physical and botanical characteristics	South African Journal of Botany	https://doi.org/10.1016/S0254-6299(15)30392-6
69	2002	Froneman P.W.	Food web structure in three contrasting estuaries determined using stable isotope (13C) analysis	African Journal of Aquatic Science	https://doi.org/10.2989/16085914.2002.9626582
70	2003	Bandeira S.O. & Gell F.R.	The seagrasses of Mozambique and southeastern Africa	EP Green, FT Short (Eds) World Atlas of Seagrasses	-
71	2003	Strydom N.A.	An Assessment of Habitat Use by Larval Fishes in a Warm Temperate Estuarine Creek Using Light Traps	Estuaries	https://doi.org/10.1007/BF02803633
72	2003	Bell E.M. et. al.	First field studies of an Endangered South African seahorse, *Hippocampus capensis*	Environmental Biology of Fishes	https://doi.org/10.1023/A:1024440717162
73	2003	De Vos Siebert T-L.	The ecological effects of bioturbation on the eelgrass *Zostera capensis*: community interactions and the impacts on the biota of an intertidal sandflat.	MSc Thesis. Department of Biological Sciences, University of Cape Town, South Africa	http://hdl.handle.net/11427/6970

74	2003	Paterson A.W. & Whitfield A.K.	The fishes associated with three intertidal salt marsh creeks in a temperate southern African estuary	Wetlands Ecology and Management	https://doi.org/10.1023/B:WETL.0000005535.19911.52
75	2004	Nsubuga Y.N.	Towards Sustainable Utilisation of the Fishery Resources of the Kowie Estuary, South Africa	MSc Thesis. Department of Environmental Science, Rhodes University, Grahamstown, South Africa	http://hdl.handle.net/10962/d1007154
76	2004	Mbande S.	Fishes of the Mngazi and Mngazana estuaries, with particular emphasis on the community structure and primary carbon sources	MSc Thesis. Department of Zoology and Entomology, Rhodes University, Grahamstown, South Africa	http://hdl.handle.net/10962/d1005386
77	2004	Barnes R.S.K.	The distribution and habitat in the Knysna Estuary of the endemic South African mudsnail *Hydrobia knysnaensis* and the influence of intraspecific competition and ambient salinity on its abundance	African Journal of Aquatic Science	https://doi.org/10.2989/16085910409503811
78	2004	Mbande S. et. al.	The primary carbon sources utilised by fishes in the Mngazi and Mngazana estuaries, South Africa: a preliminary assessment	African Journal of Aquatic Science	https://doi.org/10.2989/16085910409503810
79	2005	Siebert T. & Branch G.M.	Interactions between *Zostera capensis*, *Callianassa kraussi* and *Upogebia africana*: deductions from field surveys in Langebaan Lagoon, South Africa	African Journal of Marine Science	https://doi.org/10.2989/18142320509504094
80	2005	Siebert T. & Branch G.M.	Interactions between *Zostera capensis* and *Callianassa kraussi*: influences on community composition of eelgrass beds and sandflats	African Journal of Marine Science	https://doi.org/10.2989/18142320509504095
81	2006	Angel A. et. al.	Causes of rarity and range restriction of an endangered, endemic limpet, *Siphonaria compressa*	Journal of Experimental Marine Biology and Ecology	https://doi.org/10.1016/j.jembe.2005.12.031
82	2006	Siebert T. & Branch G.M.	Ecosystem engineers: Interactions between eelgrass *Zostera capensis* and the sandprawn *Callianassa kraussi* and their indirect effects on the mudprawn *Upogebia africana*	Journal of Experimental Marine Biology and Ecology	https://doi.org/10.1016/j.jembe.2006.06.024
83	2007	Pillay D. et. al.	Effects of *Callianassa kraussi* on microbial biofilms and recruitment of macrofauna: a novel hypothesis for adult-juvenile interactions	Marine Ecology Progress Series	https://doi.org/10.3354/meps07054
84	2007	Richoux N.B. & Froneman P.W.	Assessment of spatial variation in carbon utilization by benthic and pelagic invertebrates in a temperate South African estuary using stable isotope signatures	Estuarine Coastal and Shelf Science	https://doi.org/10.1016/j.ecss.2006.09.007
85	2007	Wooldridge T.H.	Biotic Response to Altered Freshwater Inflow Patterns to The Kromme River Estuary, South Africa	WIT Transactions on Ecology and the Environment	https://doi.org/10.2495/WRM070641
86	2007	Boucher C. & Jones L.	Estuarine and floodplain vegetation	Berg River Baseline Monitoring Programme Final Report – Volume 2. Berg River Estuary, September 2004	-
87	2007	Siebert T. & Branch G.M.	Influences of biological interactions on community structure within seagrass beds and sandprawn-dominated sandflats	Journal of Experimental Marine Biology and Ecology	https://doi.org/10.1016/j.jembe.2006.08.007
88	2007	Short F. et. al.	Global seagrass distribution and diversity: A bioregional model	Journal of Experimental Marine Biology and Ecology	https://doi.org/10.1016/j.jembe.2007.06.012

89	2007	Booth T.L.	The ichthyofauna associated with Taylor's salt marsh, Kariega Estuary (Eastern Cape), South Africa	MSc Thesis. Department of Zoology and Entomology, Rhodes University, Grahamstown, South Africa	http://hdl.handle.net/10962/d1005396
90	2007	Siebert T. & Branch G.M.	Influences of biological interactions on community structure within seagrass beds and sandprawn-*dominated sandflats*	Journal Of Experimental Marine Biology and Ecology	https://doi.org/10.1016/j.jembe.2006.08.007
91	2007	Teske P.R. et al.	Does the endangered Knysna seahorse: *Hippocampus capensis* have a preference for aquatic vegetation type, cover or height?	African Zoology	https://doi.org/10.1080/15627020.2007.11407373
92	2008	Gordon N. et al.	Epiphytes of the St. Lucia Estuary and their response to water level and salinity changes during a severe drought	Aquatic Botany	https://doi.org/10.1016/j.aquabot.2007.08.009
93	2008	Cyrus D.P. et. al.	Intrusion of beach-disposed dredger spoil into the Mhlathuze Estuary, South Africa, and its impact on *Zostera capensis*	African Journal of Aquatic Science	https://doi.org/10.2989/AJAS.2008.33.3.4.616
94	2008	Kumar C.S. et. al.	Antibacterial activity of three South Indian seagrasses, *Cymodocea serrulata*, *Halophila ovalis* and *Zostera capensis*	World Journal of Microbiology and Biotechnology	https://doi.org/10.1007/s11274-008-9695-5
95	2008	Bornman T.G. et. al.	Environmental factors controlling the vegetation zonation patterns and distribution of vegetation types in the Olifants Estuary, South Africa	South African Journal of Botany	https://doi.org/10.1016/j.sajb.2008.05.002
96	2008	Whitfield A.K. et. al.	A multidisciplinary study of a small, temporarily open/closed South African estuary, with particular emphasis on the influence of mouth state on the ecology of the system	African Journal of Marine Science	https://doi.org/10.2989/AJMS.2008.30.3.2.636
97	2008	Pillay D. et. al.	Habitat change in an estuarine embayment: anthropogenic influences and a regime shift in biotic interactions	Marine Ecology Progress Series	https://doi.org/10.3354/meps07631
98	2009	Talbot M.M.B. & Bate G.C.	The distribution and biomass of the seagrass *Zostera capensis* in a warm-temperate estuary	Botanica Marina	https://doi.org/10.1515/botm.1987.30.1.91
99	2009	Wilson G. et al.	Comparative salinity tolerances of four siphonariid limpets in relation to habitat restriction of the rare and endangered *Siphonaria compressa*	African Journal of Marine Science	https://doi.org/10.2989/AJMS.2009.31.3.4.992
100	2010	Pillay D. et. al.	Ecosystem change in a South African marine reserve (1960-2009): Role of seagrass loss and anthropogenic disturbance	Marine Ecology Progress Series	https://doi.org/10.3354/meps08733
101	2010	Barnes, R.S.K.	Regional and latitudinal variation in the diversity, dominance and abundance of microphagous microgastropods and other benthos in intertidal beds of dwarf eelgrass, *Nanozostera spp.*	Marine Biodiversity	https://doi.org/10.1007/s12526-010-0036-1
102	2010	Barnes R.S.K.	Spatial variation in abundance and diversity of the smaller surface and near-surface eelgrass-associated intertidal macrobenthos within a warm-temperate estuarine bay in the Garden Route National Park, RSA	Aquatic Conservation: Marine and Freshwater Ecosystems	https://doi.org/10.1002/aqc.1152

103	2010	Jafta N.	The botanical importance and health of the Bushmans estuary, Eastern Cape, South Africa	MSc Thesis. Department of Botany, Nelson Mandela Metropolitan University, Port Elizabeth, South Africa	-
104	2010	Short F.T. et. al.	*Zostera capensis*. The IUCN red list of threatened species 2010: e. T173370A7001305	IUCN Red List of Threatened Species	http://dx.doi.org/10.2305/IUCN.UK.2010-3.RLTS.T173370A7001305.en
105	2011	Henninger T.O. & Froneman P.W.	Macrofaunal community structure in the littoral zone of a freshwater-deprived, permanently open Eastern Cape Estuary	African Zoology	https://doi.org/10.1080/15627020.2011.11407500
106	2011	Bezuidenhout C.	Macrophytes as indicators of physico-chemical factors in South African Estuaries	PhD Thesis. Department of Botany, Nelson Mandela Metropolitan University, Port Elizabeth, South Africa	http://hdl.handle.net/10948/1387
107	2011	Arendse, B.	Physico-chemical factors influencing the spatial and temporal distribution of the seagrass *Zostera capensis* in Langebaan lagoon	BSc Honours Thesis. Department of Biological Sciences, University of Cape Town, Cape Town, South Africa	http://hdl.handle.net/11427/25942
108	2011	Barnes R.S.K. & Ellwood M.D.F.	The significance of shore height in intertidal macrobenthic seagrass ecology and conservation	Aquatic Conservation: Marine and Freshwater Ecosystems	https://doi.org/10.1002/aqc.1234
109	2011	Bezuidenhout C.	Response of Macrophytes to Physico-chemical Factors in Estuaries	PhD thesis. Department of Botany, Nelson Mandela Metropolitan University, Port Elizabeth, South Africa	-
110	2012	Becker A. et. al.	Influence of tides on assemblages and behaviour of fishes associated with shallow seagrass edges and bare sand	Marine Ecology Progress Series	https://doi.org/10.3354/meps09695
111	2012	Nunes M.	Microalgae and Macrophytes as Indicators of Ecological Health in the Great Brak Estuary	MSc Thesis. Department of Botany, Nelson Mandela Metropolitan University, Port Elizabeth, South Africa	-
112	2012	Källén, J. et. al.	Seagrass-epifauna relationships in a temperate South African estuary: Interplay between patch-size, within-patch location and algal fouling	Estuarine, Coastal and Shelf Science	https://doi.org/10.1016/j.ecss.2012.08.006
113	2012	Barnes R.S.K. & Barnes M.K.S.	Shore height and differentials between microbenthic assemblages in vegetated and unvegetated areas of an intertidal sandflat	Estuarine, Coastal and Shelf Science	https://doi.org/10.1016/j.ecss.2012.05.011
114	2012	Barnes R.S.K. & Ellwood M.D.F.	Spatial variation in the microbenthic assemblages on intertidal seagrass along the long axis of an estuary	Estuarine, Coastal and Shelf Science	https://doi.org/10.1016/j.ecss.2012.07.013
115	2013	D'Souza N.	A marine chemical ecology study of the sea hare, *Bursatella leachii* in South Africa	MSc Thesis. Department of Chemistry, Rhodes University, Grahamstown, South Africa	http://hdl.handle.net/10962/d1002952
116	2013	Barnes R.S.K.	Distribution patterns of macrobenthic biodiversity in the intertidal seagrass beds of an estuarine system, and their conservation significance	Biodiversity and Conservation	https://doi.org/10.1007/s10531-012-0414-z
117	2013	Mead A. et. al.	Human-mediated drivers of change — impacts on coastal ecosystems and marine biota of South Africa	African Journal of Marine Science	https://doi.org/10.2989/1814232X.2013.830147
118	2013	Barnes R.S.K. & Hamylton S.	Abrupt transitions between macrobenthic faunal assemblages across seagrass bed margins	Estuarine, Coastal and Shelf Science	https://doi.org/10.1016/j.ecss.2013.08.007
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170	2022	Beltrand M. et. al.	Warming effects on two autogenic engineers (*Zostera capensis* and *Gracilaria gracilis*): consequences for	Estuaries and Coasts	https://doi.org/10.1007/s12237-021-00949-8

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185	2023	Wasserman J. et. al.	Blue carbon stocks in southern Africa's Endangered seagrass *Zostera capensis*	Estuarine, Coastal and Shelf Science	https://doi.org/10.1016/j.ecss.2023.108296
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Text S1: Additional data and references on the geographic distribution of *Z. capensis* (see Figure 1)

Data collected by (Ward 1980) indicates that *Zostera capensis* was predominantly found along the south coast, tolerating a range of salinity conditions. According to Taylor (2006), it is absent from northern estuaries due to significant salinity fluctuations, which rarely remain within a suitable range for the establishment of the plant. Since 2005, *Z. capensis* has been absent from St Lucia due to prolonged drought, low water levels, and the lack of intertidal conditions resulting from a closed mouth (Forbes et al. 2020). Although other submerged macrophytes germinated from seed during periods of increased water levels, such as *Ruppia cirrhosa* and *Stuckenia pectinatus*, there was no recovery of *Z. capensis*, as it rarely sets seed.

The Berg Estuary (206 ha) and Knysna Estuary (238 ha) harbour the largest and more permanent *Z. capensis* beds. However, the reported value for the Berg Estuary may overestimate the actual area, as it includes intertidal mudflats with seagrass, which may also support other submerged macrophytes. In the Berg Estuary, *Z. capensis* biomass ranges from 70 to 400 g DW m^{-2} at the Blind Lagoon and 70 to 430 g DW m^{-2} at 7.85 km from the mouth.

The Knysna Estuary is considered a stronghold for *Z. capensis* in South Africa, estimated to cover an area of 350 to 390 ha (Barnes & Ellwood 2011). Schmidt (2013) mapped a slightly smaller area cover of 238 ha, which is consistent with measurements from aerial photographs taken in 1942. Other significant populations of *Z. capensis* are found in estuaries such as Olifants (47.74 ha), Langebaan Lagoon (85.8 ha), Keurbooms (64 ha), Kromme (34 ha), Swartkops (44.7 ha), and Bushmans (39.8 ha). These estuaries are characterised by being continuously open to the sea, and possessing large intertidal areas, creeks, and bays that are conducive to seagrass colonisation.

Langebaan Lagoon on the west coast is an embayment characterised by estuarine conditions and has historically supported a substantial area of *Z. capensis*. Although Pillay et al. (2010) recorded a reduction to nearly 25 ha, Van Der Linden (2014) mapped the submerged macrophyte area at 85.8 ha. Angel et al. (2006) reported two major seagrass decline in Langebaan Lagoon in 1976 and 2003. The first decline coincided with blasting and dredging activities during the development of the nearby Saldanha Bay harbour, which altered the circulation and current velocities in both Saldanha Bay and Langebaan Lagoon, (Luger et al. 1999), potentially affecting the distribution and biomass of *Z. capensis*.

In larger permanently open estuaries like Olifants, submerged macrophytes, including *Z. capensis* (47.72 ha), are distributed along a salinity gradient. In the upper reaches, pondweed *S. pectinatusa* forms dense beds, while *Z. capensis* is distributed in the lower and middle reaches of the estuary. In estuarine lakes such as Klein, *R. cirrhosa* thrives in the shallow, less saline areas of the middle and upper reaches, while *Z. capensis* occurs in deeper, more saline waters of the middle and lower reaches near the mouth (De Decker 1989). *Zostera capensis* plays a crucial role in the Klein Estuary, acting as an ecosystem engineer by facilitating sandbank expansion and providing stable habitats in the otherwise strong wind-driven circulation, exceeding 0.5 m s^{-1} (Lamberth SJ 2016, pers. comm.).

In certain estuaries, *Z. capensis* is found only in small scattered patches. A field survey conducted by Adams (2013) attributed the patchy distribution in the Gouritz Estuary to strong river and tidal flows and high turbidity (Adams 2016). De Villiers (1988) documented changes in the area covered by *Z. capensis* in the Breede Estuary from 1942 to 1987, noting a decrease from 22.8 ha to 2.5 ha due to high sedimentation rates and bank erosion caused by boating activities. Subsequently, increased marine intrusion resulting from reduced freshwater inflow led to the expansion of *Z. capensis* in the middle reaches, increasing the area cover to 6 ha (Department of Water and Sanitation, 2015a, 2015b, 2015c, 2015d). This indicates the species' dynamic response to flooding cycles and its ability to quickly re-establish itself, likely attributed to its persistent rhizome structure and vegetative regrowth.

Extensive field surveys are necessary to verify the distribution of *Z. capensis* in estuaries along the east coast. In 2015 (Adams 2016), large beds of *Z. capensis* were discovered in the Kobonqaba Estuary, previously unrecorded. (Hoppe-Speer 2012) recorded *Z. capensis* in several estuaries, but area coverage was not measured, as the study focused on mangroves. Interestingly, *Z. capensis* predominantly occurs in estuaries with mangroves, as both species favour saline intertidal habitats. *Zostera capensis* typically occupies lower regions in the intertidal zone compared to *Avicennia marina* (the white mangrove) which can facilitate mangrove recruitment, as evidenced by germinating propagules at Nxaxo Estuary (Adams 2016).

Zostera capensis has been lost from certain KwaZulu-Natal estuaries due to disturbances from development, changes in sediment load from the catchment, and increased turbidity. In Durban Bay, localised extinction of *Z. capensis* were recorded when the mangroves were decimated in the 1960s, as a result of reclamation and dredging (Begg 1984). Day (1951) described *Z. capensis* beds in the Umgababa Estuary, and it may still exist there, as this system is less disturbed compared to neighbouring estuaries. Herbarium records indicate the loss of *Z. capensis* from other estuaries, such as its presence in the Mahlongwana Estuary in 1938. *Zostera capensis* seems to be absent from southern KwaZulu-Natal, likely due to the dominance of small, temporarily open/closed estuaries with freshwater influence, characterised by floods and high turbidity. However, freshwater abstraction and catchment disturbance may also contribute to mouth closure and the loss of intertidal habitat.

Large *Z. capensis* beds that previously existed at Mhlathuze (Richards Bay Sanctuary) have experienced reduced coverage due to flooding, dredging, or potentially pollution (Cyrus et al. 2008). Under natural conditions, *Z. capensis* in Mhlathuze Estuary occupied its current area plus the entire area of the Port of Richards Bay, hosting one of the last extensive beds of *Z. capensis* in KwaZulu-Natal at that time (Venter 1972). Port expansion at Richards Bay harbour and the disposal of dredge spoils continue to pose a threat to *Z. capensis*. A recent population was discovered at the Rail Balloon area in the harbour, necessitating protection as an important nursery habitat (Cyrus & Vivier 2014). Small beds of *Z. capensis* have also been observed recently at Mlalazi Estuary (Adams 2016).

In Mozambique, Maputo Bay is the region with the largest *Z. capensis* coverage, encompassing approximately 4,016 hectares (Bandeira & Gell 2003). However, within Maputo Bay, the population of *Z. capensis* has shown high variability and has decreased by over 33% (Bandeira & Gell 2003). Similarly, a decline in coverage has been observed for all seagrass species in Bairro dos Pescadores and Inhaca Island. *Zostera capensis*, which used to dominate Bairro dos Pescadores with an area of 1,732 hectares in 1991, has experienced a drastic decline to 73 hectares in 2003 (a loss of 95.8%). Presently, it exists only in small patches due to disturbances like trampling and clam collection (Amone-Mabuto et al. 2023). Inhaca Island has also witnessed a decrease from 871 hectares in 1991 to 808 hectares in 2003 (a loss of 7.2%; Bandeira & Gell 2003). The decline in coverage can be attributed to sedimentation from flooding and habitat destruction caused by clam collection (Bandeira et al.2014; Bandeira & Gell 2003).

The overall extent of *Z. capensis* in Tanzania remains unknown, with the last confirmed sighting in Zanzibar recorded in 2006 (Ochieng & Erftemeijer 2003). Similarly, the total area in Kenya is uncertain, sightings near the Tanzanian border in Shimoni in 2003 (Ochieng & Erftemeijer 2003) and 2019 (Phair et al. 2019). Historical records suggest that *Z. capensis* was more abundant on the north Kenya coast in a few isolated locations compared to the south, despite similar favourable habitats (Isaac 1968). The complete range and area of *Z. capensis* in northwest Madagascar also remain unknown (Den Hartog 1970; Den Hartog et al. 2006).

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