R Norman Owen-Smith

List of Publications by Year in descending order

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160 papers 10,387 citations

41344 49 h-index 93 g-index

177 all docs

177 docs citations

times ranked

177

6536 citing authors

#	Article	IF	CITATIONS
1	Effects of Severe Defoliation on the Long-Term Resistance to Insect Attack and on Leaf Chemistry in Six Woody Species of the Southern African Savanna. American Naturalist, 1991, 137, 50-63.	2.1	610
2	Pleistocene extinctions: the pivotal role of megaherbivores. Paleobiology, 1987, 13, 351-362.	2.0	363
3	What Should a Clever Ungulate Eat?. American Naturalist, 1982, 119, 151-178.	2.1	352
4	Effects of plant spinescence on large mammalian herbivores. Oecologia, 1986, 68, 446-455.	2.0	352
5	Chapter 5 Empirical Evidence of Densityâ€Dependence in Populations of Large Herbivores. Advances in Ecological Research, 2009, 41, 313-357.	2.7	285
6	Predator–prey size relationships in an African largeâ€mammal food web. Journal of Animal Ecology, 2008, 77, 173-183.	2.8	273
7	Foraging theory upscaled: the behavioural ecology of herbivore movement. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 2267-2278.	4.0	271
8	Condensed tannins deter feeding by browsing ruminants in a South African savanna. Oecologia, 1985, 67, 142-146.	2.0	259
9	ENSO, rainfall and temperature influences on extreme population declines among African savanna ungulates. Ecology Letters, 2003, 6, 412-419.	6.4	223
10	Demography of a Large Herbivore, the Greater Kudu Tragelaphus strepsiceros, in Relation to Rainfall. Journal of Animal Ecology, 1990, 59, 893.	2.8	211
11	Facilitation versus competition in grazing herbivore assemblages. Oikos, 2002, 97, 313-318.	2.7	210
12	Continuing wildlife population declines and range contraction in the Mara region of Kenya during 1977–2009. Journal of Zoology, 2011, 285, 99-109.	1.7	191
13	Ecological and evolutionary legacy of megafauna extinctions. Biological Reviews, 2018, 93, 845-862.	10.4	183
14	Palatability of Woody Plants to Browsing Ruminants in a South African Savanna. Ecology, 1987, 68, 319-331.	3.2	178
15	On Territoriality in Ungulates and an Evolutionary Model. Quarterly Review of Biology, 1977, 52, 1-38.	0.1	173
16	Humans and Scavengers: The Evolution of Interactions and Ecosystem Services. BioScience, 2014, 64, 394-403.	4.9	173
17	Foliage acceptability to browsing ruminants in relation to seasonal changes in the leaf chemistry of woody plants in a South African savanna. Oecologia, 1988, 75, 336-342.	2.0	172
18	Establishing the causes of the roan antelope decline in the Kruger National Park, South Africa. Biological Conservation, 1999, 90, 69-78.	4.1	163

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19	Foraging Responses of Kudus to Seasonal Changes in Food Resources: Elasticity in Constraints. Ecology, 1994, 75, 1050-1062.	3.2	157
20	Comparative Mortality Rates of Male and Female Kudus: The Costs of Sexual Size Dimorphism. Journal of Animal Ecology, 1993, 62, 428.	2.8	154
21	Ecology of grazing lawns in Africa. Biological Reviews, 2015, 90, 979-994.	10.4	149
22	Megafaunal Extinctions: The Conservation Message from 11,000 Years B.P Conservation Biology, 1989, 3, 405-412.	4.7	137
23	Facultative predation and scavenging by mammalian carnivores: seasonal, regional and intraâ€guild comparisons. Mammal Review, 2014, 44, 44-55.	4.8	134
24	Correlates of survival rates for 10 African ungulate populations: density, rainfall and predation. Journal of Animal Ecology, 2005, 74, 774-788.	2.8	123
25	Interâ€specific interactions linking predation and scavenging in terrestrial vertebrate assemblages. Biological Reviews, 2014, 89, 1042-1054.	10.4	120
26	The functional roles of mammals in ecosystems. Journal of Mammalogy, 2019, 100, 942-964.	1.3	116
27	MANIFOLD INTERACTIVE INFLUENCES ON THE POPULATION DYNAMICS OF A MULTISPECIES UNGULATE ASSEMBLAGE. Ecological Monographs, 2006, 76, 73-92.	5.4	114
28	Carcass size shapes the structure and functioning of an African scavenging assemblage. Oikos, 2015, 124, 1391-1403.	2.7	113
29	Body Size, Population Metabolism, and Habitat Specialization Among Large African Herbivores. American Naturalist, 1989, 133, 736-740.	2.1	111
30	How high ambient temperature affects the daily activity and foraging time of a subtropical ungulate, the greater kudu (Tragelaphus strepsiceros). Journal of Zoology, 1998, 246, 183-192.	1.7	110
31	The Social Ethology of the White Rhinoceros <i>Ceratotberium simum</i> (Burchell 1817*). Zeitschrift Fýr Tierpsychologie, 1975, 38, 337-384.	0.2	107
32	Functional heterogeneity in resources within landscapes and herbivore population dynamics. Landscape Ecology, 2004, 19, 761-771.	4.2	105
33	Nutritional ecology of a browsing ruminant, the kudu (<i>Tragelaphus strepsiceros</i>), through the seasonal cycle. Journal of Zoology, 1989, 219, 29-43.	1.7	96
34	Comparative changes in adult vs. juvenile survival affecting population trends of African ungulates. Journal of Animal Ecology, 2005, 74, 762-773.	2.8	93
35	SHIFTING PREY SELECTION GENERATES CONTRASTING HERBIVORE DYNAMICS WITHIN A LARGE-MAMMAL PREDATOR–PREY WEB. Ecology, 2008, 89, 1120-1133.	3.2	91
36	Coping with savanna seasonality: comparative daily activity patterns of <scp>A</scp> frican ungulates as revealed by <scp>GPS</scp> telemetry. Journal of Zoology, 2014, 293, 181-191.	1.7	88

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37	Resource partitioning by grass height among grazing ungulates does not follow body size relation. Oikos, 2008, 117, 1711-1717.	2.7	79
38	CONSERVATION:Sustaining Natural and Human Capital: Villagers and Scientists. Science, 1999, 283, 1855-1856.	12.6	76
39	Changing vulnerability to predation related to season and sex in an African ungulate assemblage. Oikos, 2008, 117, 602-610.	2.7	7 5
40	Territoriality in the White Rhinoceros (Ceratotherium simum) Burchell. Nature, 1971, 231, 294-296.	27.8	74
41	Selective feeding by a megaherbivore, the African elephant (<i>Loxodonta africana</i>). Journal of Mammalogy, 2012, 93, 698-705.	1.3	73
42	Oscillations in large mammal populations: are they related to predation or rainfall?. African Journal of Ecology, 2005, 43, 332-339.	0.9	71
43	Age, size, dominance and reproduction among male kudus: mating enhancement by attrition of rivals. Behavioral Ecology and Sociobiology, 1993, 32, 177.	1.4	66
44	Evaluating optimal diet models for an African browsing ruminant, the kudu: How constraining are the assumed constraints? Evolutionary Ecology, 1993, 7, 499-524.	1.2	64
45	DEMOGRAPHIC DETERMINATION OF THE SHAPE OF DENSITY DEPENDENCE FOR THREE AFRICAN UNGULATE POPULATIONS. Ecological Monographs, 2006, 76, 93-109.	5.4	64
46	Comparative resprouting response of Savanna woody plant species following harvesting: the value of persistence. Forest Ecology and Management, 2006, 232, 114-123.	3.2	63
47	Contrasts in the large herbivore faunas of the southern continents in the late Pleistocene and the ecological implications for human origins. Journal of Biogeography, 2013, 40, 1215-1224.	3.0	63
48	Assessing Food Preferences of Ungulates by Acceptability Indices. Journal of Wildlife Management, 1987, 51, 372.	1.8	62
49	Dynamics of ungulates in relation to climatic and land use changes in an insularized African savanna ecosystem. Biodiversity and Conservation, 2012, 21, 1033-1053.	2.6	55
50	The role of companionship in the dispersal of white rhinoceroses (Ceratotherium simum). Behavioral Ecology and Sociobiology, 2002, 52, 255-261.	1.4	50
51	Habitat and resource partitioning between abundant and relatively rare grazing ungulates. Journal of Zoology, 2012, 287, 175-185.	1.7	49
52	Diet composition and habitat selection of eland in semi-arid shrubland. African Journal of Ecology, 2000, 38, 130-137.	0.9	47
53	Dynamic spatial partitioning and coexistence among tall grass grazers in an African savanna. Oikos, 2012, 121, 891-898.	2.7	46
54	Ten lessons for the conservation of African savannah ecosystems. Biological Conservation, 2013, 167, 224-232.	4.1	44

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55	Restricted habitat use by an African savanna herbivore through the seasonal cycle: key resources concept expanded. Ecography, 2014, 37, 969-982.	4.5	44
56	A metaphysiological modelling approach to stability in herbivore–vegetation systems. Ecological Modelling, 2002, 149, 153-178.	2.5	43
57	The importance of postâ€fire regrowth for sable antelope in a Southern African savanna. African Journal of Ecology, 2010, 48, 526-534.	0.9	41
58	EFFECTS OF ELEPHANTS ON ECOSYSTEMS AND BIODIVERSITY., 2008, , 146-205.		41
59	MODELING THE POPULATION DYNAMICS OF A SUBTROPICAL UNGULATE IN A VARIABLE ENVIRONMENT: RAIN, COLD AND PREDATORS. Natural Resource Modelling, 2000, 13, 57-87.	2.0	40
60	Evidence of reduced individual heterogeneity in adult survival of long-lived species. Evolution; International Journal of Organic Evolution, 2016, 70, 2909-2914.	2.3	38
61	Rethinking megafauna. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20192643.	2.6	35
62	Spatial and temporal components of the mating systems of kudu bulls and red deer stags. Animal Behaviour, 1984, 32, 321-332.	1.9	34
63	Alternating sexual segregation during the mating season by male African buffalo (Syncerus caffer). Journal of Zoology, 2005, 267, 291.	1.7	34
64	Coping with Spatial Heterogeneity and Temporal Variability in Resources and Risks: Adaptive Movement Behaviour by a Large Grazing Herbivore. PLoS ONE, 2015, 10, e0118461.	2.5	33
65	Comparative use of grass regrowth following burns by four ungulate species in the Nylsvley Nature Reserve, South Africa. African Journal of Ecology, 2002, 40, 201-204.	0.9	32
66	Mechanisms of coexistence in diverse herbivore–carnivore assemblages: demographic, temporal and spatial heterogeneities affecting prey vulnerability. Oikos, 2015, 124, 1417-1426.	2.7	32
67	Quantifying water requirements of African ungulates through a combination of functional traits. Ecological Monographs, 2020, 90, e01404.	5.4	32
68	Browse and browsers: Interactions between woody plants and mammalian herbivores. Trends in Ecology and Evolution, 1993, 8, 158-160.	8.7	31
69	THE WHITE RHINO OVERPOPULATION PROBLEM AND A PROPOSED SOLUTION. , 1981, , 129-150.		31
70	Circularity in linear programming models of optimal diet. Oecologia, 1996, 108, 259-261.	2.0	30
71	Seasonal selection of soil types and grass swards by roan antelope in a South African savanna. African Journal of Ecology, 1998, 36, 57-70.	0.9	30
72	A METAPHYSIOLOGICAL POPULATION MODEL OF STORAGE IN VARIABLE ENVIRONMENTS. Natural Resource Modelling, 1999, 12, 197-230.	2.0	29

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73	Applying mixture models to derive activity states of large herbivores from movement rates obtained using GPS telemetry. Wildlife Research, 2012, 39, 452.	1.4	27
74	Shrinking sable antelope numbers in <scp>K</scp> ruger <scp>N</scp> ational <scp>P</scp> ark: what is suppressing population recovery?. Animal Conservation, 2012, 15, 195-204.	2.9	27
75	Distributional niche of relatively rare sable antelope in a South African savanna: habitat versus biotic relationships. Ecography, 2013, 36, 68-79.	4.5	27
76	Episodic severe damage to canopy trees by elephants: interactions with fire, frost and rain. Journal of Tropical Ecology, 2009, 25, 341-345.	1.1	26
77	Ramifying effects of the risk of predation on African multi-predator, multi-prey large-mammal assemblages and the conservation implications. Biological Conservation, 2019, 232, 51-58.	4.1	26
78	Spatially nested niche partitioning between syntopic grazers at foraging arena scale within overlapping home ranges. Ecosphere, 2015, 6, 1-17.	2.2	25
79	Control of energy balance by a wild ungulate, the kudu (Tragelaphus strepsiceros) through adaptive foraging behaviour. Proceedings of the Nutrition Society, 1997, 56, 15-24.	1.0	24
80	The Comparative Population Dynamics of Browsing and Grazing Ungulates. Ecological Studies, 2008, , 149-177.	1.2	24
81	Habitat selectivity influences the reactive responses of African ungulates to encounters with lions. Animal Behaviour, 2016, 116, 163-170.	1.9	24
82	Identifying Space Use at Foraging Arena Scale within the Home Ranges of Large Herbivores. PLoS ONE, 2015, 10, e0128821.	2.5	24
83	Viability of a diminishing roan antelope population: predation is the threat. Animal Conservation, 2003, 6, 231-236.	2.9	21
84	Competition and coexistence among short-grass grazers in the Hluhluwe-iMfolozi Park, South Africa. Canadian Journal of Zoology, 2011, 89, 900-907.	1.0	21
85	Spatial ecology of large herbivore populations. Ecography, 2014, 37, 416-430.	4.5	21
86	How Rainfall Variation Influences Reproductive Patterns of African Savanna Ungulates in an Equatorial Region Where Photoperiod Variation Is Absent. PLoS ONE, 2015, 10, e0133744.	2.5	20
87	Forage selection of sable antelope in Pilanesberg Game Reserve, South Africa. South African Journal of Wildlife Research, 2008, 38, 35-41.	1.4	19
88	Incorporating fundamental laws of biology and physics into population ecology: the metaphysiological approach. Oikos, 2005, 111, 611-615.	2.7	18
89	BLACK RHINOCEROS (<i>DICEROS BICORNIS</i>) NATURAL DIETS: COMPARING IRON LEVELS ACROSS SEASONS AND GEOGRAPHICAL LOCATIONS. Journal of Zoo and Wildlife Medicine, 2012, 43, S48-S54.	0.6	18
90	Space use patterns of a large mammalian herbivore distinguished by activity state: fear versus food?. Journal of Zoology, 2017, 303, 281-290.	1.7	18

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91	How free-ranging ungulates with differing water dependencies cope with seasonal variation in temperature and aridity., 2019, 7, coz064.		18
92	Abundance and guild structure of grasshoppers (Orthoptera: Acridoidea) in communally grazed and protected savanna. South African Journal of Zoology, 1996, 31, 120-130.	0.5	17
93	Phenological influences on the utilization of woody plants by eland in semiâ€arid shrubland. African Journal of Ecology, 2002, 40, 65-75.	0.9	17
94	Controls over reproductive phenology among ungulates: allometry and tropicalâ€temperate contrasts. Ecography, 2013, 36, 256-263.	4.5	17
95	Movement ecology of large herbivores in African savannas: current knowledge and gaps. Mammal Review, 2020, 50, 252-266.	4.8	17
96	Territorialit: The Example of the White Rhinoceros. Zoologica Africana, 1972, 7, 273-280.	0.2	16
97	Daily movement responses by African savanna ungulates as an indicator of seasonal and annual food stress. Wildlife Research, 2013, 40, 232.	1.4	16
98	Indicators of Adaptive Responses in Home Range Utilization and Movement Patterns by a Large Mammalian Herbivore. Israel Journal of Ecology and Evolution, 2007, 53, 423-438.	0.6	15
99	Comparative diet and habitat selection of puku and lech we in northern Botswana. Journal of Mammalogy, 2014, 95, 933-942.	1.3	15
100	Reassembly of the Large Predator Guild into Hluhluwe-iMfolozi Park. , 2017, , 286-310.		15
101	Foraging ecology of roan antelope: key resources during critical periods. African Journal of Ecology, 2006, 44, 228-236.	0.9	14
102	Changes of population trends and mortality patterns in response to the reintroduction of large predators: The case study of African ungulates. Acta Oecologica, 2012, 42, 16-29.	1.1	14
103	Are relatively rare antelope narrowly selective feeders? A sable antelope and zebra comparison. Journal of Zoology, 2013, 291, 163-170.	1.7	14
104	Movement patterns of sable antelope in the Kruger National Park from GPS/GSM collars: a preliminary assessment. South African Journal of Wildlife Research, 2007, 37, 143-151.	1.4	13
105	Accommodating environmental variation in population models: metaphysiological biomass loss accounting. Journal of Animal Ecology, 2011, 80, 731-741.	2.8	12
106	Assessment of wildlife populations trends in three protected areas in Tanzania from 1991 to 2012. African Journal of Ecology, 2017, 55, 305-315.	0.9	12
107	Elephantâ€mediated compositional changes in riparian canopy trees over more than two decades in northern Botswana. Journal of Vegetation Science, 2018, 29, 585-595.	2.2	12
108	Assessing the constraints for optimal diet models. Evolutionary Ecology, 1993, 7, 530-531.	1.2	11

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109	Stable carbon isotope analysis of eland (Taurotragus oryx) diet in the Suikerbosrand Nature Reserve. South African Journal of Wildlife Research, 2007, 37, 127-131.	1.4	10
110	The refuge concept extends to plants as well: storage, buffers and regrowth in variable environments. Oikos, 2008, 117, 481-483.	2.7	10
111	Changing distributions of larger ungulates in the Kruger National Park from ecological aerial survey data. Koedoe, 2012, 54, .	0.9	10
112	The Functional Ecology of Grazing Lawns: How Grazers, Termites, People, and Fire Shape HiP's Savanna Grassland Mosaic., 2017, , 135-160.		10
113	Dry season browsing by sable antelope in northern <scp>B</scp> otswana. African Journal of Ecology, 2012, 50, 513-516.	0.9	9
114	Megaherbivores., 2013,, 223-239.		9
115	Home range occupation and habitat use of sable antelope in the <scp>O</scp> kavango <scp>D</scp> elta region of northern <scp>B</scp> otswana. African Journal of Ecology, 2014, 52, 237-245.	0.9	9
116	Comparison of Kernel Density and Local Convex Hull Methods for Assessing Distribution Ranges of Large Mammalian Herbivores. Transactions in GIS, 2017, 21, 359-375.	2.3	9
117	Successful Control of the Invasive Shrub <i>Chromolaena odorata</i> in Hluhluwe-iMfolozi Park., 2017,, 358-382.		9
118	New Insights into the Physiology of Natural Foraging. Physiological and Biochemical Zoology, 2006, 79, 242-249.	1.5	8
119	Resource use and the nutritional status of sable antelope in the Okavango Delta region of northern Botswana. African Journal of Ecology, 2013, 52, n/a-n/a.	0.9	8
120	Smaller ungulates are first to incur imminent extirpation from an African protected area. Biological Conservation, 2017, 216, 108-114.	4.1	8
121	The role of El Niño–Southern Oscillation in the dynamics of a savanna large herbivore population. Oikos, 2011, 120, 1175-1182.	2.7	7
122	Faecal nutritional indicators in relation to the comparative population performance of sable antelope and other grazers. African Journal of Ecology, 2013, 52, n/a-n/a.	0.9	7
123	Contrasting capabilities of two ungulate species to cope with extremes of aridity. Scientific Reports, 2021, 11, 4216.	3.3	7
124	Functional heterogencity in resources within landscapes and herbivore population dynamics. Landscape Ecology, 2005, 20, 317-317.	4.2	6
125	Impact of elephants (Loxodonta africana) on woody plants in Malolotja Nature Reserve, Swaziland. African Journal of Ecology, 2006, 44, 407-409.	0.9	6
126	Megaherbivores, Competition and Coexistence within the Large Herbivore Guild., 2017, , 111-134.		6

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127	Consumer-Resource Dynamics: Quantity, Quality, and Allocation. PLoS ONE, 2011, 6, e14539.	2.5	6
128	Animal Ethics and Ecotourism. South African Journal of Wildlife Research, 2012, 42, iii-v.	1.4	4
129	Rhino Management Challenges: Spatial and Social Ecology for Habitat and Population Management. , 0, , 265-285.		4
130	A Mathematical Model of Black Rhino Translocation Strategy. Journal of Mathematical and Fundamental Sciences, 2015, 47, 104-115.	0.5	4
131	How high ambient temperature affects the daily activity and foraging time of a subtropical ungulate, the greater kudu (Tragelaphus strepsiceros). Journal of Zoology, 1998, 246, 183-192.	1.7	3
132	How spatial and dietary overlap with domestic livestock affect African wild ass nutrition on the Messir Plateau (Eritrea). Journal of Mammalogy, 2021, 102, 1174-1185.	1.3	2
133	The megaherbivore syndrome: alternative life style or different time frame?., 1989,, 441-457.		2
134	How successful was Edwards' linear programming model for marmots?. Oecologia, 1997, 112, 331-332.	2.0	1
135	Resource production: regeneration and attrition., 2002,, 162-183.		1
136	Habitat suitability: resource components and stocking densities., 2002,, 232-263.		1
137	How Large Herbivores Transform Savanna Ecosystems. , 2021, , 199-219.		1
138	Consumer–resource models : theory and formulation. , 2002, , 13-37.		0
139	Conceptual origins : variability in time and space. , 2002, , 1-12.		O
140	Resource abundance: intake response and time frames., 2002,, 38-60.		0
141	Resource quality: nutritional gain and diet choice., 2002,, 85-109.		O
142	Resource constraints: physiological capacities and costs., 2002,, 110-135.		0
143	Resource allocation: growth, storage and reproduction., 2002,, 136-161.		0
144	Resource competition: exploitation and density dependence., 2002,, 184-204.		0

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145	Resource-dependent mortality: nutrition, predation and demography., 2002,, 205-231.		O
146	Population dynamics: resource basis for instability., 2002,, 301-334.		0
147	Resource distribution: patch scales and depletion., 2002,, 61-84.		O
148	Resource partitioning: competition and coexistence., 2002,, 264-300.		0
149	An adaptive resource ecology: foundation and prospects., 2002,, 335-345.		0
150	Protagonists of Healthy Ecosystems. Conservation Biology, 2007, 21, 888-888.	4.7	0
151	Big Fierce Carnivores: Hunting Versus Scavenging. , 2021, , 170-180.		0
152	Herbivore Abundance: Bottom-up and Top-down Influences. , 2021, , 181-198.		0
153	How an Ape Became a Hunter., 2021,, 271-300.		0
154	Niche Distinctions: Resources Versus Risks. , 2021, , 145-169.		0
155	Primate Ecology: From Forests into Savannas. , 2021, , 253-270.		0
156	Paleo-faunas: Rise and Fall of the Biggest Grazers. , 2021, , 220-242.		0
157	Reticulate Evolution Through Turbulent Times. , 2021, , 329-339.		0
158	How Trees and Grasses Grow and Compete., 2021,, 97-117.		0
159	The refuge concept extends to plants as well: storage, buffers and regrowth in variable environments. Oikos, 2008, .	2.7	0
160	Resource partitioning by grass height among grazing ungulates does not follow body size relation. Oikos, 2008, , .	2.7	0