

Appendix A

The woody species we sampled in the sand forests and mixed woodlands both inside and outside Tembe Elephant Park listed in alphabetical order (Chapters 3 & 4). The values assigned to each species are the ranked position of that species relative to the others in each of the landscapes; the lower the value the higher the species relative abundance. Empty cells imply that the species were not found in that landscape. Species names and authority follows Arnold & de Wet (1993).

Species	Authority	Sand forests		Closed woodland		Open woodland	
		Inside	Outside	Inside	Outside	Inside	Outside
1. <i>Acacia burkei</i>	Benth.	9	68	10	25	2	5
2. <i>Acacia karroo</i>	Hayne				64	39	
3. <i>Acacia nilotica</i>	(L.) Willd. ex Del.			61	57	47	
4. <i>Acacia robusta</i>	Burch.			58	97	15	
5. <i>Acalypha glabrata</i>	Thunb.	36	33	15	40		
6. <i>Acridocarpus natalitius</i>	Juss.	30	35	66	72	33	44
7. <i>Afzelia quanzensis</i>	Welw.	60	69	22	85		

Species	Authority	Sand forests		Closed woodland		Open woodland	
		Inside	Outside	Inside	Outside	Inside	Outside
8. <i>Albizia adianthifolia</i>	(Schumach.) W.F. Wight		63	89	20	25	9
9. <i>Albizia anthelmintica</i>	(A.Rich.) Brongn.				106		
10. <i>Albizia forbesii</i>	Benth.	73					
11. <i>Albizia versicolor</i>	Welw. ex Oliv.			90	51	23	13
12. <i>Aloe marlothii</i>	Berger						
13. <i>Ancylanthos monteiroi</i>	Oliv.	74		34	76		
14. <i>Antidesma venosum</i>	E.Mey. ex Tul.			71	79	34	40
15. <i>Balanites maughamii</i>	Sprague	33	13	51	73	48	31
16. <i>Berchemia zeyheri</i>	(Sond.) Grubov				90		
17. <i>Berchemia sp. nov.</i>		75					
18. <i>Boscia foetida</i>	Schinz	40	34	72	68		
19. <i>Brachylaena discolor</i>	DC.			36	27	3	20

Species	Authority	Sand forests		Closed woodland		Open woodland	
		Inside	Outside	Inside	Outside	Inside	Outside
20. <i>Brachylaena huillensis</i>	O.Hoffm.	8	49			31	
21. <i>Bridelia cathartica</i>	Bertol. f.			13	16	24	12
22. <i>Calodendrum capense</i>	(L. f.) Thunb.				98		
23. <i>Canthium inerme</i>	(L. f.) Kuntze	44	64	25	45	54	52
24. <i>Canthium setiflorum</i>	Hiern	34	22	82	86		
25. <i>Carissa bispinosa</i>	(L.) Desf. ex Brenan		65		14	35	
26. <i>Carissa tetramera</i>	(Sacleux) Stapf						
27. <i>Casearia gladiiformis</i>	Mast.			91			
28. <i>Cassine aethiopica</i>	Thunb.			77	69		
29. <i>Cassine transvaalensis</i>	(Burt Davy) Codd			92			
30. <i>Cassipourea mossambicensis</i>	(V. Brehm.) Alston	48	38	67			
31. <i>Catunaregam spinosa</i>	(Thunb.) Tirvengadam	58	66	3	6	8	8

Species	Authority	Sand forests		Closed woodland		Open woodland	
		Inside	Outside	Inside	Outside	Inside	Outside
32. <i>Chaetacme aristata</i>	Planch.			93			
33. <i>Cladostemon kirkii</i>	(Oliv.) Pax & Gilg						
34. <i>Clausena anisata</i>	(Willd.) Hook. f. ex Benth.	51	37	9	1	56	
35. <i>Cleistanthus schlechteri</i>	(Pax) Hutch.	22	16	78	92	55	
36. <i>Clerodendrum glabrum</i>	E. Mey.				29	57	45
37. <i>Coddia rudis</i>	(E. Mey. ex Harv.) Verdc.		52	19	3	49	
38. <i>Coffea racemosa</i>	Lour.			83			
39. <i>Cola greenwayi</i>	Brenan	4	5	41	52		
40. <i>Combretum mkuzense</i>	Carr & Retief	28	41		107		
41. <i>Combretum molle</i>	R. Br. ex G. Don			8	15	6	14
42. <i>Commiphora neglecta</i>	Verdoorn	76	48	18	9		19
43. <i>Commiphora zanzibarica</i>	(Baill.) Engl.					42	

Species	Authority	Sand forests		Closed woodland		Open woodland	
		Inside	Outside	Inside	Outside	Inside	Outside
44. <i>Cordia monoica</i>	Roxb.			49	87		
45. <i>Craibia zimmermannii</i>	(Harms) Dunn	61					
46. <i>Crotalaria monteiroi</i>	Taub. ex Bak. f.						
47. <i>Croton pseudopulchellus</i>	Pax	1	4	12	65		
48. <i>Croton steenkampianus</i>	Gerstner	14	18	73	88	43	
49. <i>Cussonia arenicola</i>	Strey				93		
50. <i>Deinbollia oblongifolia</i>	(E. Mey. ex Arn.) Radlk.	53	54	68	48		53
51. <i>Dialium schlechteri</i>	Harms	31	17	1	10	22	22
52. <i>Dichrostachys cinerea</i>	(L.) Wight & Arn.	68	70	33	12	4	1
53. <i>Diospyros dichrophylla</i>	(Gand.) De Winter			4	13	12	17
54. <i>Diospyros inhacaensis</i>	F. White	45	36	94	99		
55. <i>Dombeya cymosa</i>	Harv.	63					

Species	Authority	Sand forests		Closed woodland		Open woodland	
		Inside	Outside	Inside	Outside	Inside	Outside
56. <i>Dovyalis caffra</i>	(Hook. f. & Harv.) Hook. f.	64		95			
57. <i>Dovyalis longispina</i>	(Harv.) Warb.	27	42	42	37		26
58. <i>Drypetes arguta</i>	(Müll. Arg.) Hutch.	3	1				
59. <i>Drypetes gerrardii</i>	Hutch.		44				
60. <i>Drypetes natalensis</i>	(Harv.) Hutch.	24	71	52	80	58	
61. <i>Ehretia obtusifolia</i>	Hochst. ex DC.				49	44	46
62. <i>Ekebergia capensis</i>	Sparrm.			84	60		
63. <i>Erythrococca berberidea</i>	Prain	69	67	55	58		
64. <i>Erythrophleum lasianthum</i>	Corbishley	56	46		70	36	
65. <i>Erythroxylum delagoense</i>	Schinz				53		27
66. <i>Erythroxylum emarginatum</i>	Thonn.	62	55				
67. <i>Euclea divinorum</i>	Hiern			45		40	

Species	Authority	Sand forests		Closed woodland		Open woodland	
		Inside	Outside	Inside	Outside	Inside	Outside
68. <i>Euclea natalensis</i>	A. DC.	23	25	2	4	32	6
69. <i>Euphoria grandidens</i>	Haw.	70	51				
70. <i>Euphorbia ingens</i>	E. Mey. ex Boiss.		72	53	43		
71. <i>Ficus thonningii</i>	Blume						
72. <i>Flueggea verosa</i>	(Roxb. ex Willd.) Pax & K. Hoffm.						41
73. <i>Garcinia livingstonei</i>	T. Anders			56	54	28	37
74. <i>Gardenia volkensii</i>	K. Schum.		73		108		47
75. <i>Grewia caffra</i>	Meisn.	47	59	23	30	45	48
76. <i>Grewia flavescens</i>	Juss.			28		21	
77. <i>Grewia microthyrsa</i>	K.Schum. ex Burret	29	47	39	41	9	42
78. <i>Grewia occidentalis</i>	L.				109		54
79. <i>Grewia subspathulata</i>	N.E. Br.						49

Species	Authority	Sand forests		Closed woodland		Open woodland	
		Inside	Outside	Inside	Outside	Inside	Outside
80. <i>Gymnosporia senegalensis</i>	(Lam.) Loes			40	39	18	32
81. <i>Haplocoelum gallense</i>	(Engl.) Radlk.	41	10	79	62		
82. <i>Harpephyllum caffrum</i>	Bernh. ex Krauss			96	35		
83. <i>Hymenocardia ulmoides</i>	Oliv.	12	6	38	38	29	34
84. <i>Hyperacanthus amoenus</i>	(Sims) Bridson	77					
85. <i>Hyperacanthus microphyllus</i>	(K. Schum.) Bridson	32	8		66		
86. <i>Hyphaene coriacea</i>	Gaertn.					26	15
87. <i>Isoglossa woodii</i>	C.B. Cl.	10	45				
88. <i>Kigelia africana</i>	(Lam.) Benth.				89		
89. <i>Lagynias lasiantha</i>	(Sond.) Bullock	15	27	31	46	37	18
90. <i>Landolphia kirkii</i>	T.-Dyer	16	7				
91. <i>Lansea schweinfurthii</i>	(Engl.) Engl.		74				

Species	Authority	Sand forests		Closed woodland		Open woodland	
		Inside	Outside	Inside	Outside	Inside	Outside
92. <i>Leptactina delagoensis</i>	K. Schum.			85			
93. <i>Maerua angolensis</i>	DC.				110		
94. <i>Maerua nervosa</i>	(Hochst.) Oliv.				111		
95. <i>Manilkara discolor</i>	(Sond.) J.H. Hemsl.	46	23	44	18		55
96. <i>Margaritaria discoidea</i>	(Baill.) Webster	57	60	30	21	50	56
97. <i>Maytenus undata</i>	(Thunb.) Blakelock				112		
98. <i>Memecylon sousae</i>	A. & R. Fernandes	35	56	54			
99. <i>Monanthes caffra</i>	(Sond.) Verdc.	2	3				
100. <i>Monodora junodii</i>	Engl. & Diels	21	21		100		
101. <i>Mundulea sericea</i>	(Willd.) A. Chev.			97	63	7	38
102. <i>Newtonia hildebrandtii</i>	(Vatke) Torre	49	30	74	77		
103. <i>Ochna arborea</i>	Burch. ex DC.	65	61				

Species	Authority	Sand forests		Closed woodland		Open woodland	
		Inside	Outside	Inside	Outside	Inside	Outside
104. <i>Ochna barbosa</i>	N.K.B. Robson			62	61		
105. <i>Ochna natalitia</i>	(Meisn.) Walp.	19	40	59			
106. <i>Oxyanthus latifolius</i>	Sond.	43	43	86	113		
107. <i>Ozoroa engleri</i>	R. & A. Fernandes				91	10	10
108. <i>Pappea capensis</i>	Eckl. & Zeyh.				101		
109. <i>Pavetta revoluta</i>	Hochst.					38	
110. <i>Pavetta schumanniana</i>	F. Hoffm. ex K. Schum.			98	11		57
111. <i>Peltophorum africanum</i>	Sond.			99			
112. <i>Phoenix reclinata</i>	Jacq.						
113. <i>Phyllanthus reticulatus</i>	Poir.				78		24
114. <i>Plectroniella armata</i>	(K. Schum.) Robyns			50	44		
115. <i>Psydrax locuples</i>	(K. Schum) Bridson	13	15	5	8	30	25

Species	Authority	Sand forests		Closed woodland		Open woodland	
		Inside	Outside	Inside	Outside	Inside	Outside
116. <i>Ptaeroxylon obliquum</i>	(Thunb.) Radlk.	25	32	35	94	59	50
117. <i>Pteleopsis myrtifolia</i>	(Laws.) Engl. & Diels	18	19	46	32	60	51
118. <i>Rhoicissus digitata</i>	(L. f.) Gilg & Brandt				102		
119. <i>Rhus gueinzii</i>	Sond.	54	57	20	42	14	29
120. <i>Rothmannia fischeri</i>	(K. Schum.) Bullock	20	24	69	81		
121. <i>Salacia leptoclada</i>	Tul.	5	14	87			
122. <i>Sapium integerrimum</i>	(Hochst.) J. Leonard	59		21	26	19	35
123. <i>Schotia brachypetala</i>	Sond.			63	82		
124. <i>Sclerocarya birrea</i>	(A.Rich.) Hochst.			80	83	27	16
125. <i>Scolopia zeyheri</i>	(Nees) Harv.				19		
126. <i>Scutia myrtina</i>	(Burm. f.) Kurz				95		
127. <i>Senna petersiana</i>	(Bolle) Lock				114	51	

Species	Authority	Sand forests		Closed woodland		Open woodland	
		Inside	Outside	Inside	Outside	Inside	Outside
128. <i>Sphedamnocarpus pruriens</i>	(Juss.) Szyszyl.						
129. <i>Spirostachys africana</i>	Sond.	71		11	24	16	21
130. <i>Strychnos decussata</i>	(Pappe) Gilg	37	28	27	28		
131. <i>Strychnos henningsii</i>	Gilg	26	11	100	50		
132. <i>Strychnos madagascariensis</i>	Poir.			16	2	5	2
133. <i>Strychnos spinosa</i>	Lam.		75	7	5	20	3
134. <i>Suregada africana</i>	(Sond.) Kuntze		29	88		61	
135. <i>Suregada zanzibariensis</i>	Baill.	39		75	103	62	
136. <i>Synaptolepis kirkii</i>	Oliv.	11	12				
137. <i>Tabernaemontana elegans</i>	Stapf	72	76	14	34	17	11
138. <i>Tarenna junodii</i>	(Schinz) Brem.				96		
139. <i>Tarenna littoralis</i>	(Hiern) Bridson			47			

Species	Authority	Sand forests		Closed woodland		Open woodland	
		Inside	Outside	Inside	Outside	Inside	Outside
140. <i>Tarenna supra-axillaris</i>	(Hemsl.) Brem.	38	20	43	23		58
141. <i>Teclea natalensis</i>	(Sond.) Engl.			76	74		
142. <i>Tecomaria capensis</i>	(Thunb.)						
143. <i>Terminalia sericea</i>	Burch. ex DC.			32	17	1	4
144. <i>Thespesia acutiloba</i>	(Bak. f.) Exell & Mendonca				104	52	
145. <i>Toddaliopsis bremekampii</i>	Verdoorn	6	2				
146. <i>Trema orientalis</i>	(L.) Blume				67		
147. <i>Tricalysia africana</i>	(Sim) Robbrecht	66					
148. <i>Tricalysia capensis</i>	(Meisn. ex Hochst.) Sim	67	50	64	55		
149. <i>Tricalysia delagoensis</i>	Schinz	42	26	26	71		
150. <i>Tricalysia junodii</i>	(Schinz) Brenan	7	9		56		
151. <i>Tricalysia lanceolata</i>	(Sond.) Burt Davy			17	84		

Species	Authority	Sand forests		Closed woodland		Open woodland	
		Inside	Outside	Inside	Outside	Inside	Outside
152. <i>Trichilia emetica</i>	Vahl			101	22	53	28
153. <i>Uvaria caffra</i>	E. May. ex Sond		77				
154. <i>Vangueria cyanescens</i>	Robyns			81	105	46	36
155. <i>Vangueria infausta</i>	Burch.			48	36	13	7
156. <i>Vepris lanceolata</i>	(Lam.) G. Don	17	62	6	31	63	43
157. <i>Vernonia colorata</i>	(Willd.) Drake			57		64	
158. <i>Vitex amboniensis</i>	Guerke		53				
159. <i>Vitex obovata</i>	E. Mey.	50		65	33	41	59
160. <i>Wrightia natalensis</i>	Stapf	52	31		115		
161. <i>Ximenia caffra</i>	Sond.	78		70	59		39
162. <i>Xylothea kraussiana</i>	Hochst.		58	60	7		33
163. <i>Zanthoxylum capense</i>	(Thunb.) Harv.	55	39	24	47	65	23

Species	Authority	Sand forests		Closed woodland		Open woodland	
		Inside	Outside	Inside	Outside	Inside	Outside
164. <i>Ziziphus mucronata</i>	Willd.			37	75	11	30

Appendix B

Alphabetical list of the peer-reviewed articles used in the meta-analysis in Chapter 6.

- Afolayan, T.A. (1973) The ecological problems facing a wildlife manager in east Africa: possible solutions to similar problems in Nigeria. *The Nigerian Journal of Forestry*, **3**, 21-25.
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Appendix C

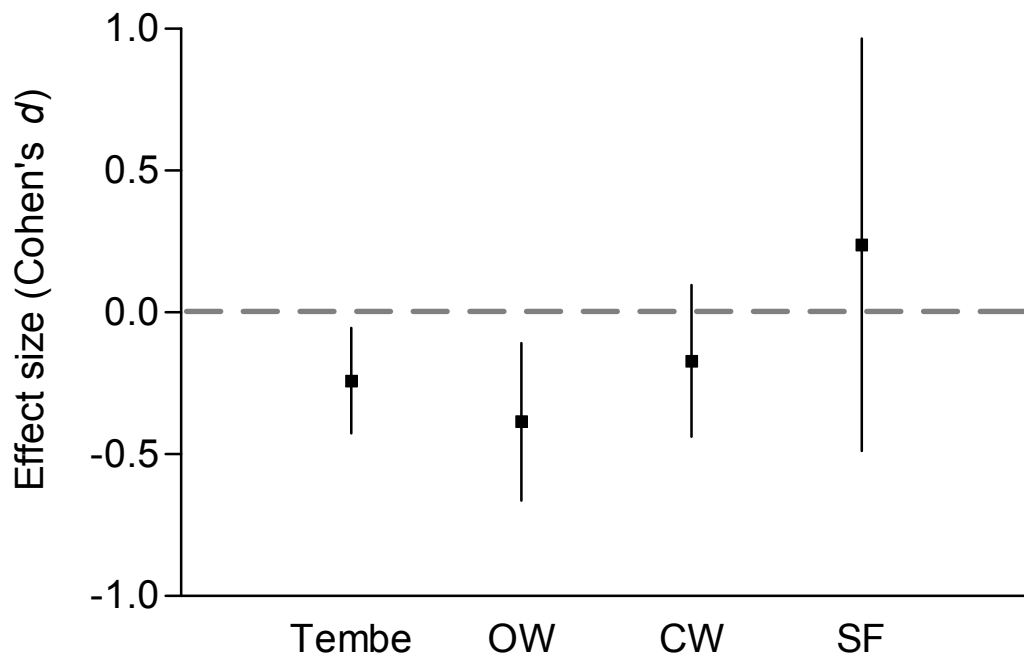


Fig. 7.1 The overall effect size (using the Cohen's *d* statistic) is significantly negative (the 95% confidence interval does not overlap with the zero dashed line) for Tembe Elephant Park. The open woodlands (OW) in the Park contributed mostly to this overall negative effect, with the closed woodlands (CW) and sand forests (SF) showing non-significant effect sizes (see text in Synthesis for details).