

Ornithological Observations



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Ornithological Observations accepts papers containing faunistic information about birds. This includes descriptions of distribution, behaviour, breeding, foraging, food, movement, measurements, habitat and plumage. It will also consider for publication a variety of other interesting or relevant ornithological material: reports of projects and conferences, annotated checklists for a site or region, specialist bibliographies, and any other interesting or relevant material.

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CONTRIBUTIONS OF THE KWAZULU-NATAL ORNITHOLOGICAL TRUST (NOW BIRDLIFE SOUTH AFRICA TRUST) TO BIRD RESEARCH AND CAPACITY DEVELOPMENT

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CONTRIBUTIONS OF THE KWAZULU-NATAL ORNITHOLOGICAL TRUST (NOW BIRDLIFE SOUTH AFRICA TRUST) TO BIRD RESEARCH AND CAPACITY DEVELOPMENT

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Private individuals are often encouraged to make donations, either as voluntary amounts or bequests, to various conservation initiatives or organisations. Rarely are they given feedback about how the monies were spent or what contribution they made, particularly in research output and capacity development. One such organisation that has received monies is the KwaZulu-Natal Ornithological Trust (now BirdLife South Africa Trust). Consequently the contribution that it has made was assessed from 1996 to 2009.

During this period the Trust awarded 54 grants for bird research, research capacity development and teaching. These grants totalled an amount of R178 621. Of this amount, 55,5% was used for the partial funding of 24 postgraduate students, 9% for ringing equipment and training (Fig. 1), 8,2% for teaching, 8,2% for raptor research, 9,8% for subsidising student participation in the annual Cape Parrot Big Birding Day, 5,6% for the translation of "Our Birds" into isiZulu, and 3,7% for ecotourism. On average R3248 has been allocated per project, with grants ranging from R250.00 to R10000.00.

Although the focus was on projects in KwaZulu-Natal in the earlier years, this has now changed. Students from the University of KwaZulu-Natal (an amalgamation of the Universities of Natal and Durban-Westville), the University of Cape Town, the University of



Figure 1 - Monthly bird ringing at Darvil Sewage Works, Pietermaritzburg, where many past students assist and involve the public.

Stellenbosch and the University of South Africa have been supported by the Trust's funding.

Research topics covered by postgraduate projects supported have varied widely and have included bird physiology, ecology, conservation and behaviour. The undergraduate students (30-40 per annum) who participated in the annual Cape Parrot Big Birding Day (Fig. 2) benefited from exposure to field work and bird census techniques. For some it was their first introduction to "birding".

Of the postgraduate students (12 male and 12 female excluding ecotourism ones) supported over the years, nine were registered for Honours, 12 for MSc and two for PhD projects. One is undocumented. All these students graduated, many continued with further studies, some are current students and eight obtained PhDs. Of the postgraduate students supported, four were Black and three were Indian. A number of students have obtained bird ringing



licences and continue to be involved in this activity. Most students that were supported are still involved with research or teaching.

Of particular interest is that a minimum of 102 publications have resulted from the research supported by the Trust for this period. Of these 46% are in international peer-reviewed journals, and 6% are in review or preparation for peer reviewed journals. The other 48% are in other publications, particularly as popular articles (Appendix 1). In addition most grant recipients, either the postgraduates or their supervisors, have presented the research at various local or international conferences where the Trust was acknowledged in these presentations.

Although individual grant sizes have been relatively small in comparison to student fees and research costs, the support of the BirdLife South Africa Trust from 1996 till 2009 has still been very significant in developing research capacity and interest, and in fostering various types of ornithological research. All this has contributed to a greater understanding of our southern African birds. Those who donated financially to the Trust are thanked for their contribution that has encouraged and promoted research and interest in our local birds.



Figure 2 - Some of the students from the University of KwaZulu-Natal, Pietermaritzburg campus, who assisted with the Cape Parrot Big Birding Day in 2008.

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Appendix 1. Research publications from Natal (now BirdLife South Africa) Ornithological Trust.

RESEARCH PUBLICATIONS DIRECTLY FROM TRUST SUPPORT

Peer-reviewed articles

1. **Jordaan LA, Johnson SD, Downs CT 2011.** The role of avian frugivores in germination of seeds of fleshy-fruited invasive alien plants. *Biological Invasions* DOI: 10.1007/s10530-011-0013-z.
2. **Wellmann A, Downs, CT 2010.** Nocturnal pectoral tuft display in the Malachite Sunbird *Nectarinia famosa*. *African Zoology* 45: 342-347.
3. **Bowker MB, Taylor R, Downs CT 2010.** Numbers and distribution of the Great White Pelican (*Pelecanus onocrotalus*) and the Pink-backed Pelican (*P. rufescens*) in north eastern KwaZulu-Natal, South Africa. *Ostrich* 81: 179–188.
4. **Lindsay CV, Downs CT, Brown M 2010.** Seasonal variation in hematocrit levels of Amethyst Sunbirds (*Chalcomitra amethystina*) over an altitudinal gradient. *Journal of Ornithology* 151: 851-855.
5. **Nzama S, Downs CT, Brown M 2010.** Seasonal variation in the metabolism-temperature relation of House Sparrows (*Passer domesticus*) in KwaZulu-Natal, South Africa. *Journal of Thermal Biology* 35: 100-104.
6. **Downs CT, Wellmann A, Brown M 2010.** Diel variations in blood glucose concentrations in Malachite Sunbirds *Nectarina famosa*. *Journal of Ornithology* 151: 235-239.
7. **Chamane SC, Downs CT 2009.** Seasonal effects on metabolism and thermoregulation abilities of the Red-winged Starling (*Onychognathus morio*) *Journal of Thermal Biology* 34: 337-341.
8. **Malan G, Seoraj-Pillai N, du Plessis MA 2009.** Alarm calls of Bronze Mannikins communicate predator size to familiar conspecifics. *Ostrich* 80: 177-184.
9. **Wilson JW, Symes CT, Brown M, Bonnevie BT, de Swardt DH, Hanmer D 2009.** A re-evaluation of morphological differences in the Karoo Thrush *Turdus smithi* – Olive Thrush *Turdus olivaceus* species complex. *Ostrich* 80: 171-175.
10. **Lindsay CV, Downs CT, Brown M 2009.** Physiological variation in Amethyst Sunbirds (*Chalcomitra amethystina*) over an altitudinal gradient in summer. *Journal of Thermal Biology* 34: 190-199.
11. **Lindsay CV, Downs CT, Brown M 2009.** Physiological variation in Amethyst Sunbirds (*Chalcomitra amethystina*) over an altitudinal gradient in winter. *Journal of Experimental Biology* 212: 483-493.
12. **Wellmann A, Downs CT 2009** A behavioural study of sleep patterns in the Malachite Sunbird Cape White-Eye and Fantailed Widowbird. *Animal Behaviour* 77: 61-66
13. **Bush NG Brown M, Downs CT 2008.** Effects of short-term acclimation on thermoregulatory responses of the Rock Kestrel *Falco rupicolus*. *Journal of Thermal Biology* 33: 425-430.
14. **Bush NG Brown M, Downs CT 2008.** Seasonal effects on thermoregulatory responses of the Rock Kestrel *Falco rupicolus*. *Journal of Thermal Biology* 33: 404-412
15. **Bowker MB, Downs CT 2008.** Fluctuations in numbers of great white pelicans at Lake St Lucia in response to changing water-levels. *African Journal of Ecology* 46: 282-290.
16. **Potgieter D, Brown M, Downs CT 2008.** Is commercial Protea farming causing a change in the seasonal range of Gurney's Sugarbird *Promerops gurneyi* in the KwaZulu-Natal Midlands South Africa? *Ostrich* 79: 61-66.
17. **Bowker MB, Downs CT 2008.** The status of habitat of Great White and Pink-backed Pelicans in north eastern KwaZulu-Natal South Africa: a review. *African Zoology* 43: 90-98
18. **Bowker MB, Downs CT 2008** Breeding incidence of the Great White Pelican *Pelecanus onocrotalus* and the Pink-backed Pelican *P rufescens* in south eastern Africa from 1933 to 2005. *Ostrich* 79: 23-35.
19. **Smit B, Brown M, Downs CT 2008.** Thermoregulatory responses in seasonally acclimatized captive Southern White-faced Scops-owls. *Journal of Thermal Biology* 33: 76-86.



20. **Pain DJ, Martins TLF, Boussekey M, Diaz SH, Downs CT, Ekstrom JMM, Garnett S, Gilardi JD, McNiven D, Primot P, Rouys S, Saoumoé M, Symes CT, Tamungang SA, Theuerkauf J, Villafuerte D, Verfaillies L, Widmann P, Widmann ID 2006.** The impact of protection on nest-take and nesting success of parrots in Africa Asia and Australasia *Animal Conservation* 9: 332-330.
21. **Brown M 2006.** Annual and seasonal trends in avifaunal species richness in a coastal lowlands forest reserve in South Africa. *Ostrich* 77: 58–66.
22. **McInnes AM, Allan DG, Malan G 2005.** Key sites for the conservation of waterbirds (Aves) in Durban Bay South Africa. *Durban Museum Novitates* 30: 1-14.
23. **Soobramoney S, Downs CT, Adams NJ 2005.** Morphological variation in the Common Fiscal Shrike *Lanius collaris* along an altitudinal gradient in southern Africa. *Ostrich* 76: 130-141.
24. **Downs CT 2005.** Artificial nest boxes and wild Cape Parrots *Poicephalus robustus*: persistence pays off. *Ostrich* 76: 222-224.
25. **Soobramoney S, Campbell GK, Downs CT, Adams NJ 2005.** Genetic variability of South African Fiscal Shrikes *Lanius collaris* across an altitudinal gradient in South Africa. *African Zoology* 40: 193-204.
26. **Downs CT 2005.** Abundance of the endangered Cape Parrot *Poicephalus robustus* in South Africa: the implications for its survival. *African Zoology* 40: 15-24
27. **Brown M, Brown KJ 2004.** Nest defense in Crowned Lapwings – influences of nesting stage and ambient temperature. *Ostrich* 75: 162-164
28. **Symes CT, Brown M, Warburton L, Perrin MR, Downs CT 2004.** Observations of Cape Parrot *Poicephalus robustus* nesting in the wild. *Ostrich* 75: 106-109.
29. **Downs CT, Symes CT 2004.** Snag dynamics and forest structure in Afromontane forests in KwaZulu-Natal South Africa: implications for the conservation of cavity-nesting avifauna. *South African Journal of Botany* 70: 265-276
30. **Soobramoney S, Downs CT, Adams NJ 2004.** Variability in foraging behaviour and prey of the Fiscal Shrike *Lanius collaris* along an altitudinal gradient in South Africa. *Ostrich* 75: 133-140.
31. **Soobramoney S, Downs CT, Adams NJ 2004.** Territorial behaviour and time budgets of the Fiscal Shrike *Lanius collaris* along an altitudinal gradient in South Africa. *African Zoology* 39: 137-143
32. **Brown M, Downs CT 2004.** Daily and seasonal differences in body and egg temperatures in free-ranging Crowned Lapwings (*Vanellus coronatus*) *African Zoology* 39: 115-122
33. **Saunders J, Slotow R 2004.** The evolution of song structure in southern African birds: an assessment of the acoustic adaptation hypothesis. *Ostrich* 75: 147-155.
34. **Soobramoney S, Downs CT, Adams NJ 2003.** Physiological variability in the Fiscal Shrike *Lanius collaris* along an altitudinal gradient in South Africa. *Journal of Thermal Biology* 28: 581-594.
35. **Calf KM, Downs CT, Cherry MI 2003.** Territoriality of Cape Sugarbirds (*Promerops cafer*) between and within seasons. *Ostrich* 74: 125-128.
36. **Calf KM, Downs CT, Cherry MI 2003.** Foraging and territorial behaviour of male Cape and Gurney's sugarbirds (*Promerops cafer* and *Promerops gurneyi*). *African Zoology* 38: 297-304.
37. **Calf KM, Downs CT, Cherry MI 2003.** Territoriality and breeding success in the Cape Sugarbird (*Promerops cafer*). *Emu* 103: 29-35.
38. **Brown M, Downs CT 2003.** The role of shading behavior in the thermoregulation of breeding Crowned Plovers (*Vanellus coronatus*). *Journal of Thermal Biology* 28: 51-58.
39. **Calf KM, Downs CT 2002.** Breeding biology of the Gurney's sugarbird *Promerops gurneyi* in Qwaqwa National Park eastern Free State. *Ostrich* 73: 1-4.
40. **Allan DG, McInnes AM 2002.** A catalogue of birds' eggs in the Durban Natural Science Museum. *Durban Museum Novitates* 27: 3-27.



41. **Allan DG, Mcinnes AM, Wicks L, Wood T 2002.** Patterns of seasonal abundance of waterbirds (Aves) in Durban Bay South Africa. Durban Museum Novitates 27: 61-71.
42. **Brown M, Downs CT 2002.** Development of Homeothermy in Hatchling Crowned Plovers *Vanellus coronatus*. Journal of Thermal Biology 27: 95-101.
43. **Malan G & Shultz S 2002.** Nest-site selection of the Crowned Hawk-Eagle in the forests of KwaZulu-Natal South Africa and Taï Ivory Coast Journal of Raptor Research 36: 300-308
44. **Calf KM, Downs CT, Cherry MI 2001.** Territoriality and breeding success in Gurney's Sugarbirds (*Promerops gurneyi*). African Zoology 36: 189-195.
45. **Seagram R, Adams NJ, Slotow R 2001.** Time of feeding and possible associated thermoregulatory benefits in Bronze Mannikins *Lonchura cucullata* Comparative Biochemistry and Physiology 130A: 809-818.
46. **De Swardt DH 2001.** Notes on the post-nestling period and breeding success of Gurney's Sugarbird *Promerops gurneyi*. Ostrich 72: 200-201.
47. **De Swardt DH, Peach WJ 2001.** Annual survival of Gurney's Sugarbird *Promerops gurneyi* Ostrich 72: 206-209.
- Submitted or in preparation
48. **Jordaan LA, Johnson SD, Downs CT.** Digestion of fruit of alien invasive plants by three southern African frugivores. Provisionally accepted.
49. **Seoraj-Pillai N, Malan G, du Plessis MA** in prep. Vocal response to predator's distance from the group: does the degree of sociality have an effect on rate duration or complexity of alarm calls International Journal of Zoology
50. **Ally E, Downs CT.** Does sugar type and concentration affect food selection by frugivorous South African birds: A combined methodology approach. In prep.
51. **Ally E, Downs CT.** Will frugivorous birds select hexose and sucrose proportions to maximize assimilation efficiency? In prep.
52. **Ally E, Downs CT.** Does size matter? Can beak size be used to predict fruit selection in avian frugivores? In prep
53. **Ally E, Downs CT.** Use of colour in fruit to attract avian dispersers. In prep
- Other articles
54. **De Swardt DH 2008.** Family *Promeropidae* (Sugarbirds). In: del Hoyo J, Elliott A, Christie DA (eds). Handbook Birds of the World Vol 13 Penduline-tits to Shrikes. Lynx Edicions Barcelona: 486-497.
55. **Downs CT 2008.** Counting Parrots - report on the 2008 Cape Parrot Big Birding Day. Report University of KwaZulu-Natal Pietermaritzburg.
56. **Downs CT 2007.** Counting Parrots - report on the 2007 Cape Parrot Big Birding Day. Report University of KwaZulu-Natal Pietermaritzburg
57. **Allan DG, Mcinnes AM, Wondafrash M 2006.** White-winged Flufftail *Sarothrura ayresi* in Ethiopia: notes on habitat densities morphometrics nests and eggs and associated waterbirds. Bulletin of the African Bird Club 13: 28-36.
58. **Downs CT 2006.** Counting Parrots - report on the 2006 Cape Parrot Big Birding Psittacene 18(3):12.
59. **Downs CT 2006.** Going to seed: what dispersers coral trees? Africa Birds & Birding 11(1):20
60. **McInnes AM, Allan DG, Bryan MC, Merson-Davies M 2005.** A speargun-driven net for catching gulls. Afring News 34: 46-50
61. **McInnes AM, Allan DG 2005.** Identifying large gulls in KZN. KZN Birds 13: 20-21.
62. **Downs CT 2005.** Counting Parrots - report on the 2005 Cape Parrot Big Birding Day. Africa Report University of KwaZulu-Natal Pietermaritzburg.
63. **Downs CT 2005.** Cape Parrot. Africa Birds & Birding.
64. **McInnes A, Allan DG 2004.** Key sites for waterbirds in Durban Bay KZN. Birds 7: 14-17.



65. **McInnes A, Allan DG 2004.** Survey of colonially breeding large waterbirds at Clairwood Race-course 14 November 2003. *KZN Birds* 7: 17-18.
66. **Allan DG, McInnes A 2004.** Waterbird counts at Durban's three big dams. *KZN Birds* 11: 24-25.
67. **Downs CT 2004.** Counting Parrots - report on the 2004 Cape Parrot Big Birding Day. *BirdLife SA magazine*.
68. **Allan DG, McInnes A 2003.** White-backed Night Heron breeding on the Nseleni River Zululand. *KZN Birds* 3: 13-14
69. **Allan DG, McInnes A 2003.** Out-of-season roller. *KZN Birds* 3: 26-27.
70. **Allan DG, McInnes A 2003.** Jewels from the past. *KZN Birds* 4: 26-27.
71. **Brown M, Brown K 2003.** Garden ringing – a heap of information waiting to be harvested. *Afring News* 32: 2-5.
72. **Ward VL, Oschadleus HD, Symes CT, Brown M 2003.** Review of ringing and biometry of Forest Canaries *Serinus scotops*. *Afring News* 32: 65-68.
73. **Downs CT, Warburton L 2003.** Counting Parrots- report on the 2003 Cape Parrot Big Birding Day. *KZN Birds* 6: 13-15.
74. **Symes CT, Downs CT 2002.** Occurrence of Cape Parrot *Poicephalus robustus* at non-forest feeding sites in South Africa: threats to a declining population. *Bulletin of the African Bird Club* 9: 27-31.
75. **McInnes A, Allan DG 2002.** Request for Lanner breeding locations. *Albatross* 346: 22-23.
76. **Warburton L, Symes CT, Brown M 2002.** Every Chick Counts. *Avizandum* 14: 23-25.
77. **Warburton L, Symes CT, Brown M 2002.** South Africa's Cape Parrots: flying into extinction. *Parrots* 58: 36-39.
78. **Downs CT, Warburton L 2002.** Counting Parrots- report on the 2002 Cape Parrot Big Birding Day. *Indaba Inyoni* (July) 5(3): 15-17.
79. **Downs CT, Warburton L 2002.** Cape Parrot big birding day May 11th (pm) and May 12th (am) 2002. *Avizandum* 14(3): 26-27.
80. **Downs CT 2002.** Participate in the Cape Parrot Big Birding Day 2002. *Indaba Inyoni BirdLife South Africa* 5(1): 32.
81. **Downs CT 2002.** Counting Parrots. *Wildside* 2(2):28-29.
82. **Brown M 2001.** Nesting of Crowned Plovers in Pietermaritzburg. *Bird Numbers* 10(1): 37-38.
83. **Brown M, Symes C, Downs CT 2001.** The successful release of wild-caught birds used in laboratory experiments. *Afring News* 30: 42-43.
84. **Symes CT Downs CT & Brown M 2001.** Movements and timing of moult and breeding of the Cape White-eye *Zosterops pallidus* in KwaZulu-Natal. *Afring News* 30:35-39.
85. **Brown M, Symes C, Downs C 2001.** Biometrics and moult of the Thickbilled Weaver in Pietermaritzburg. *Afring News* 30: 60-63.
86. **Downs CT 2001.** Report on the Cape Parrot Big Birding Day 2001. *Indaba Inyoni BirdLife South Africa* 4(3): 17-19.
87. **Downs C 2001.** Help is needed to monitor the endangered Cape Parrot. *NU Info* 11(12):3.
88. **Downs CT 2001.** Cape Parrot Big Birding Day 2000. *Psittascene* 13: 14.
89. **Devereux C, Slotow R, Perrin MR 2000.** Fiscal Shrike (*Lanius collaris*) foraging behaviour in natural and human-changed habitats. *Ring* 22:27-35.
90. **Devereux C, Slotow R, Perrin MR 2000** Territoriality and habitat use of Fiscal Shrikes *Lanius collaris* in South Africa. *Ring* 22:95-104.
91. **Symes C Wirminghaus JO & Downs C 2000** Ringing efforts in two South African Mistbelt Mixed *Podocarpus* Forests. *Safring News* 29: 59-66.
92. **Downs CT 2000.** The Cape Crusader Parrots (UK) 36: 47-49.
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 101. **Downs CT, Symes CT 1998.** Cape Parrots: Report on the second Cape Parrot Big Birding Day (25 April 1998) Psittascene 10 (3): 5-7.
 102. **Robinson PM, Downs CT, Symes CT 1998.** Cape Parrot Big Birding Day Avizandum 10:13.