

Avian Demography Unit

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The Tony and Lisette Lewis Foundation South Africa







The Avian Demography Unit conducts the Coordinated Waterbird Counts in partner ship with BirdLife South Africa.

COORDINATED WATERBIRD COUNTS (CWAC)

Newsletter 22 June 2003

Dear CWACers

Summer 2003 count

The 12th CWAC summer count produced the highest count to date, 415 697 birds, and is the first count to exceed 400 000 birds. It also set a new record for the number of sites covered – 312. Well done to everybody who contributed to this count and let's see if we can maintain the 300+ site coverage for future counts. As volunteers, your efforts and commitment to CWAC are much appreciated. Be assured that the many hours and petrol spent in getting the counts done will ensure that we maintain an up-to-date waterbird database for South Africa's wetland systems and that this information will be used to benefit conservation.

Apart from new sites counted this summer, many existing sites had above average counts and this contributed to the high overall count. However, some important sites were not entirely or thoroughly covered – time constraints allowed only the flamingos to be counted at Kamfers Dam (nevertheless an important exercise), while low water levels at Lake St Lucia required an aerial count to be done. These two sites support some of the greatest concentrations of waterbirds in the country and the overall count would have been substantially higher had these sites been surveyed normally.

Sixteen new sites were registered and these are highlighted in the accompanying tables. Nearly half of these sites are located in the dry, western parts of South Africa, a region where CWAC lacks data: Dr Stephanie Tyler, who is the national coordinator for waterbird counts in Botswana, managed to count four new sites in the Clanwilliam and Van Rhynsdorp districts, while Enrico Oosthuysen, who is based at Goegap Nature Reserve near Springbok, identified three new sites in Namaqualand. Other new sites were in Gauteng, Limpopo, Free State and Kwazulu-Natal. CWAC applauds these compilers for their ongoing commitment to the programme.

An interesting statistic is that Spitskop Dam (26 432), a large impoundment to the west of Warrenton in the Northern Cape, supported nearly as many birds as Langebaan Lagoon (29 820). Interestingly, about 70% of the total count at each site was dominated by one species, albeit very different species: Curlew Sandpiper (71%) at Langebaan Lagoon and Redknobbed Coot (68%) at Spitskop Dam. The latter represents the single highest count (17 928) of Redknobbed Coot for CWAC to date! Spitskop Dam is probably the most important waterbird locality in the interior.

News from Mpumalanga is that Witbank, Middelburg and Barberspan bird clubs have joined forces to coordinate counts at many of the sites that were covered by the late Woden Odendaal and his widow Val. Barberton Bird Club is a relatively new club and this coming winter will see them getting involved with their first CWAC counts. I would like to welcome Barberton bird club to the CWAC programme and hope that they enjoy participating. As another focal point in the Mpumalanga lowveld, I am confident that they will be a valuable link in the CWAC network and will make a valuable

contribution to the programme. A big thank you also goes to Ken Hattingh (Middleburg) and Martin Kerr (Witbank) for assisting in allocating some of Woden's sites to other bird club members. This ensures all-important continuity at these sites.

Interesting highlights

In this issue nine sites are featured, including two Ramsar sites and one new site from the Free State:

Voëlvlei Dam (Western Cape)

Counts at this large (16 km²) Department of Water Affairs dam near Tulbagh, were recently re-instated thanks to the efforts of John Carter of the Somerset West bird club. Although diversity is low (15–20 species), the dam's deep, open-water habitat provides ideal conditions for Egyptian Goose and South African Shelduck which use it as a prime moulting refuge. Congregations of 3178 geese and 1490 shelduck were counted. These figures are significant, the Egyptian Goose count representing nearly 1% of the estimated southern African population, while the shelduck count is almost 3% of its southern Africa population! Past counts have showed similar patterns; maximum counts of Egyptian Goose and South African Shelduck have reached 1864 (Jan. 1996) and 1085 (Jan. 1995) respectively. Other noteworthy species included Caspian Tern and African Marsh Harrier.

Swartkop se Dam (Western Cape)

This farm dam is one of Otto Schmidt's string of wetlands in the Little Karoo that he counts every summer and winter. Holding over 3100 waterbirds this summer, the dam was especially important for Blacknecked Grebe – 455 birds, representing nearly 3% of the southern African population, were counted. The dam also held >300 South African Shelduck and 120 Southern Pochard, the latter representing almost 7% of the total summer count for this species. Thirty Glossy Ibis, 332 Greater Flamingo and nearly 100 Blackwinged Stilt were also present, highlighting the important role these artificial wetlands are playing as waterbird refuges, particularly in dry regions.

Richards Bay wetlands (KwaZulu-Natal)

This site comprises Mhlatuze Lagoon and the major part of Richards Bay harbour. Habitats include open estuary, permanent marsh and pans. This summer, Andrew Sutherland and his team counted 3905 waterbirds that included 120 Wollynecked Stork. The site is well-known for its Palearctic waders and good counts were made of Terek Sandpiper (135), Greenshank (118), Curlew Sandpiper (686) and Whimbrel (291). Terns were also well represented, with 19 Caspian Terns, 53 Lesser Crested Terns and 110 Little Terns counted. Common Terns are regularly recorded (up to 1500 birds), with 1995 producing the highest count (est. 13 000) for this species at Richard's Bay. The site is one of the few coastal wetlands in South Africa at which Greater Sand Plover (up to 70 birds) and Crab Plover (max. 2 birds) are regularly recorded during summer.

Loskop Dam (Mpumalanga)

A large (±20 km²) impoundment situated on the Olifants River, Loskop Dam is refuge to a relatively high diversity and abundance of waterbirds. Summer counts average over 1000 birds, dropping to around 700 in winter. The number of species averages about 30 for both winter and summer. The dam is particularly important for Whitebreasted Cormorant and African Darter. Both species breed at the site: in July 2001, at least 100 Whitebreasted Cormorant nests were counted, with 23 African Darter nests evident in January 2002. The abundant fish fauna no doubt contributes to their occurrence at the dam, and this summer 252 (2% of the southern African population) Whitebreasted Cormorants were counted while African Darter numbers peaked in January 2002 with 178 individuals. Good numbers of Little Egret (53) and Greenbacked Heron (10) – a rather infrequently recorded species for CWAC – were also recorded. African Fish Eagle is the most abundant raptor and up to 11 birds have been counted (Jan. 2003). One of the specials at Loskop Dam is African Finfoot which was counted in July 2000. Counts at the dam are coordinated by Lientjie Cohen of Mpumalanga Parks Board. She is assisted by members of the Middelburg Bird Club.

Hartebeesdraai Farm Dam (Free State)

A new site for CWAC, this c. 1 km² farm dam is bisected by the R710 about 18 kms from Bultfontein. Compiler and CWAC regional organiser, Brian Colahan, counted an incredible 11 178 birds at the end of January. Thirty species were recorded with nearly 9300 Ruff being counted. The Ruff were standing and swimming in open water and apparently concentrated in three large flocks. This is the largest Ruff count, to date, for CWAC; the highest prior count was 3000 at Voëlvlei (southern Cape) in summer 1993, while the most recent high count was 1102 from Du Toit's Pan (near Kimberley) during summer 2000. It is estimated that 50 000–500 000 Ruff migrate to southern Africa each year. Taking the upper end of this range, the 9300 birds counted at Hartebeesdraai represents almost 2% of this estimated migratory population! Other notable counts included 103 Dabchick, 96 Greater Flamingo, 76 Fulvous Duck, 1137 Redknobbed Coot and 38 Avocet.

Barberspan (North West)

The only Ramsar site in North West Province, Barberspan, together with De Hoop Vlei, was declared one of South Africa's first wetlands of international importance, in 1975. Situated in the dry grasslands near Delareyville, the 3000-ha pan holds permanent water, providing an ideal refuge for many thousands of waterbirds. Declared a provincial nature reserve, the pan is another famous site for Redknobbed Coot and up to 16 000 birds have been counted in the past (1999). One of the largest inland Whitebreasted Cormorant breeding colonies is located within the reserve, and during May 2000, up to 500 nests were seen. They generally occur in large numbers at the pan and this summer, Henk Bouwman and his team from BirdLife Wesvaal and Potchefstroon University counted 315 individuals, representing almost 2.5% of the estimated southern African population. Two ardeids, Goliath Heron and Great White Egret also occur here in relatively good numbers, 15 and 27 being counted respectively this past January. Other notable records from the summer count included Blackwinged Pratincole (690), Caspian Tern (136), Whiskered Tern (444) and Whitewinged Tern (762).

Rooiwal Sewage Works (Gauteng)

Waste water treatment works usually provide ideal habitats for waterbirds and their permanent water ensures that waterbirds are present throughout the year. Rooiwal, situated to the northeast of Pretoria, is no exception and is fast becoming a prime birding spot in Gauteng. This January saw André van der Walt and his team from Pretoria Bird Club count just over 3200 birds at the site, that includes an area of ploughed fields adjacent to the purification plant that is irrigated with treated sewage water from the works. Good rains in the previous three weeks, coupled with irrigation of the plots, provided excellent muddy habitats for waders, as was evidenced by 1500 Ruff and 181 Wood Sandpipers. Other good counts included 336 Cattle Egret and 212 Southern Pochard. In previous counts, the ponds in the works supported up to 1215 Whitefaced

Duck, which mainly use the site as a post-breeding winter refuge. A quick look at past counts (since January 1993 when counting began) seems to suggest that Whitefaced Duck numbers are on the increase.

Swartkops River Estuary (Eastern Cape)

Compiled by Dr Paul Martin, counts at this large estuary near Port Elizabeth have been ongoing since CWAC started in 1992, although Paul monitored waterbirds at the site prior to this. This summer recorded the second highest count for the estuary, 6168, the highest being 6235 in January 1995. The following species were present in good numbers: Little Egret (71), African Black Oystercatcher (50 – nearly 1% of global population), Grey Plover (562), Turnstone (359), Greenshank (251), Whimbrel (635) and Little Tern (155). The African Black Oystercatcher also breeds near the mouth, and up to 10 pairs have been confirmed breeding. This site also supports Greater Sand Plover, which occurs regularly ever summer (max. 25 birds), with up to 3 birds remaining all year round. Osprey and Broadbilled Sandpiper are two summer vagrants that have also been seen at the estuary.

Orange River Mouth (Northern Cape)

One of the few perennial wetlands on the west coast of Southern Africa, the Orange River Mouth is the first transfrontier Ramsar wetland in the subregion, being shared by Namibia and South Africa. The 2000-ha site provides an array of different habitats, including extensive saltmarshes, sheltered open water, islands and beach. This habitat mosaic supports up to 10 000 waterbirds of nearly 60 species. Thirteen Red Data waterbird species are regularly recorded and the site supports more than 1% of the global populations of Hartlaub's Gull and Damara Tern. This summer count coordinated by Mark Anderson (South Africa) and Holger Kolberg (Namibia), recorded significant counts for four species -Great White Pelican (237), Lesser Flamingo (1432), Avocet (283) and Hartlaub's Gull (242), all surpassing their 1% regional population threshold levels. Other notable counts included 57 Little Egret, 464 South African Shelduck (almost reaching the 1% level), 1226 Curlew Sandpiper and 1065 Little Stint. Waterbird numbers regularly used to exceed 20 000 individuals in the 1980s, but this figure rarely reaches 10 000 nowadays. Habitat degredation, particularly of the saltmarshes, and human disturbance have been identified as the two major threats to the site's ecological importance.

AfWC Meeting, February 2003

From 26–28 February, I attended the fourth African Waterbird Census (AfWC) steering committee meeting in Naivasha, Kenya. This annual meeting brings together Regional Coordinators from around Africa, together with BirdLife and Wetlands International representatives, to discuss progress and developments of the AfWC, to which CWAC submits data from South Africa. The meeting included:

- (1) Discussion about the need to find funding to maintain and develop waterbird monitoring in Africa. Although funds are limited, South Africa's programme is well established in this regard.
- (2) Identification of the possibility of AfWC obtaining funds via a GEF grant to establish a network of critical sites for migratory birds in Africa, and a major training programme.
- (3) Opportunities to link with related waterbird and wetland programmes and projects (e.g. BirdLife International's IBA programme).

It was also confirmed that the next AfWC report (i.e. the orange-cover reports) would be available by August 2003. Due to financial and resource constraints, Wetlands International had to postpone the publication of annual reports after 1998. Subsequently, a combined report covering the period 1999–2001 has been published. The output of the report has changed from an A5 to A4 format primarily to conform to Wetlands International's standard reporting format for its International Waterbird Census reports. All compilers will receive copies as soon as they arrive from Senegal.

CWAC personality profile

Unfortunately, space limitations could not permit inclusion of a famous CWAC personality for this issue, but Joe Grosel from Limpopo has agreed to feature in the next newsletter (Dec. 2003).

Monitoring issues

One aspect that is becoming more and more apparent and that I would like to highlight to counters, is the frequency and timing of counts for CWAC. To date, counts have been conducted on a sixmonthly basis, in mid-summer (January) and mid-winter (July). These times were selected mainly to record peak seasonal abundance and variation at sites. The January count is also the official count for the AfWC and, as CWAC is the South African arm of AfWC, this count is mandatory. Many other African countries do not include a July census, due mainly to resource and manpower constraints.

From a waterbird perspective, a wetland's biological and conservation importance is usually assessed in terms of the occurrence and frequency of peak numbers of species' utilising the site. Although this may vary, there is usually a time in which a maximum is reached. Although it is assumed that January is the time during which waterbird numbers will peak (due largely to the influx of Palearctic and intra-African migrants), many sites are known to hold maximum numbers either earlier or later in the season, and this may be independent of the occurrence of migrants. For some sites, especially those that are seasonally wet (e.g. pans), the January count may miss this maximum and the site's importance may go unnoticed. Permanent waterbodies may not be subject to the extreme variation encountered by seasonally inundated sites, but nevertheless their numbers will also peak at specific times, some even supporting maxima during the dry season when birds congregate at these sites.

For CWAC to be an effective conservation tool, we would like CWAC to deliver the best possible results, and this means maximum counts for each annual cycle. Therefore, without placing pressure on counters, I would particularly like to encourage any counters who are monitoring seasonal sites, to try, whenever possible, to monitor the site throughout the period of inundation. This will not only assist in gauging when maximum numbers occur, but will provide useful information on how diversity and abundance changes as the water-levels subside. This may mean that a pan needs to be counted soon after it fills as this is when bird numbers could peak. Although this may not fall within the designated CWAC periods, it is desirable to do a count and to submit the results to CWAC.

For permanent sites, quarterly or monthly counts do provide better results but financial and time constraints will often not allow this frequency to be attained. It will be up to each compiler to consider his/her own sites and determine what frequency would best suit his/her needs. Currently, there are numerous sites that are counted on a quarterly and/or monthly basis and I thank all these compilers for their dedication in this regard. However, please do not feel obliged to do more frequent counts – we greatly appreciate the effort and commitment shown by all of our volunteers in counting in January and July each year.

Heronries and colonies

A reminder about this important project to identify and document all active heronries and/or breeding colonies of waterbirds in South Africa. Please keep a lookout for any heronries either during your CWAC counts, or on other birding ventures, and record (a) **the location of the colony**, (b) **number of species and adults of each species**, (c) **number of active nests** (estimates for large colonies) and (d) **surrounding land use or habitat**. This information should be submitted to the ADU on a NERCS heronry/colony card so that it can be included in the NERCS database. I have enclosed a card with this newsletter but you can also download it together with the NERCS manual from the heronries webpage (http://www.uct.ac.za/depts/stats/adu/heronries.htm). Feel free to make photocopies of the cards as you need them. Alternatively, you can fax or e-mail this information to me at the ADU (contact details are at the top of the first page).

As mentioned in the previous newsletter (No. 21) a colour-ringing project to track the dispersal and movements of juvenile colonial waterbirds in the southwestern Cape got underway in September 2002. The main target species include Sacred Ibis and Cattle Egret but also several herons and African Spoonbill. A total of 600 birds were ringed in 2002 from three localities, each locality having a designated colour: Rondevlei Nature Reserve (red), Paarl Bird Sanctuary (yellow) and Robben Island (green). To date, we have had several interesting re-sightings: a Sacred Ibis ringed at Rondevlei was caught and released on a fish farm near Riebeeck West, about 100 km to the north; a Blackcrowned Night Heron was re-sighted on a farm dam near Darling after being ringed at Paarl Bird Sanctuary, a distance of nearly 80 km; and a Sacred Ibis ringed on Robben Island was recently re-sighted at Strandfontein Sewage Works.

For more information about this project, which will continue in 2003, please visit http://www.uct.ac.za/depts/stats/adu/colony_colring.htm.

Website update

The CWAC webpage has undergone some changes recently. An updated map is now available showing all registered sites as at April 2003. Regional maps have also been developed for the Western Cape and Gauteng. A few selected sites are available to view in each of these regions. Hopefully by the end of the year a few more provinces and sites will have been added. If you have any photographs or slides of your site and would like to include them in a site page on the CWAC website, please post or email them to me. All contributions will be acknowledged. To view these updates, please go to http://www.uct.ac.za/depts/stats/adu/p_cwac.htm.

Winter 2003 count

A reminder that this count takes place on any day(s) during the **month of July** with the preferred dates being the weekend of 19–20th, or as close to these days as possible.

Hope you all have an enjoyable winter CWAC.

Doug Harebottle Project Coordinator

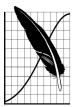












Summer 2003 CWAC counts



Entries in *italics* indicate new sites for CWAC.

* denotes the count results that have not yet been received.

Sites are listed in descending order of abundance per province.

Sites not listed were either not counted or have been discontinued altogether.

The official site codes (centre point coordinates) are included for your quick reference.

MPUMALANGA	Site code	Compiler	Count
Kanhym Pan 3	25522932	Ken Hattingh	2131
Arnot Pan	25462946	Jan de Vries	1740
Otter Pan	25552956	Hannes Hoffman	1597
Leeuwpan	26352857	Piet vd Westhuizen	1431
Loskop Dam	25262919	Lientjie Cohen	1330
Rustig Pan	25452936	Steve Roos	1255
Bosmansfontein Pan	26062941	Ken Hattingh	1195
Bosmanslaagte Pan	26072942	Ken Hattingh	1123
Goedenhoop Pan	25552928	Ken Hattingh	916
Lemoenfontein Dam 1	25482940	Ken Hattingh	785
Blinkpan Oranje	26032931	Martin Kerr	783
Hendrina Municipal Dam	26092944	Ken Hattingh	755
Kanhym Pan 1	25502931	Ken Hattingh	729
Witbank Dam	25532918	Martin Kerr	671
Arnot Vlei	25462947	Jan de Vries	624
Masibekela Wetlands	25533150	Lientjie Cohen	492
Oranjevallei Pan	26122945	Ken Hattingh	490
Grootpan	25552954	Hannes Hoffman	452
TNC Proposed Bird Sanctuary	26082922	Ken Hattingh	401
Kwena Dam	25213022	Lientjie Cohen	365
Woestaleen Spruit Dam	25562937	Ken Hattingh	359
Ogies Pans	26052904	Andy McLetchie	275
Lakenvlei (East)	25353006	David Gaynor	260
M avella Pan	25542924	Hannes Hoffman	236
Bosmanspoort Dam	26052941	Ken Hattingh	184
Blinkpan (Arnot)	25542953	Hannes Hoffman	178
Rustig North Pan	25442936	Steve Roos	132
Goedehoop Pan 3	26193017	Martin Kerr	101
Ly denburg Fisheries	25073028	Lientjie Cohen	86
Swadini Dam	24333048	Lientjie Cohen	76
Coetzerspruit	25552936	Ken Hattingh	71
Nooitgedacht Pan	25442947	Jan de Vries	65
Kanhym Pan 2	25512941	Ken Hattingh	57
Lemoenfontein Dam 2	25472939	Ken Hattingh	55
Goedehoop Pans 1&2	26203018	Martin Kerr	49
Lemoenfontein Pan	25472938	Steve Roos	45
Lemoenfontein Dam 3	25472941	Ken Hattingh	24
Klein Riet Pan	25562940	Ken Hattingh	15
Kanhym Pan 4	25512933	Ken Hattingh	0
TOTAL		<u> </u>	21533

LIMPOPO PROVINCE	Site code	Compiler	Count
Den Staat Irrigation Dams	29162213	Joe Grosel	8376
Turfloop Dam	23532946	Joe Grosel	1582
Naboomspruit Sewage Works	28432431	Saartjie Kidson	1107
Nylsvley Nature Reserve	24392841	Koos van Dyk	801
Rondepan Farm Dams	23472924	Joe Grosel	770
Rooibosrant Dam (KNP)	23153110	John Sewards	566
Namakgale Sewage Works	23573102	John Sewards	527
Kalkfontein Irrigation Dams	23372923	Joe Grosel	409
PMC wetlands	24013110	John Sewards	403
Pietersburg Bird Sanctuary	23512927	Conrad van Tonder	116
Sterkloop Wetlands	24362924	Joe Grosel	112
Polokwane NR - Retention Dams	23522930	Joe Grosel	87
Doornbult Farm Dam	23472927	Joe Grosel	22
TOTAL			14878

GAUTENG	Site code	Compiler	Count
Rooiwal Sewage Works	25342814	Andre van der Walt	3264
Rietspruit (Rooikraal)	26202817	Andy McLetchie	2773
M arievale Bird Sanctuary	26212830	Stan Madden	2192
Stan Madden Bird Sanctuary	26242828	Stan Madden	2052
•		Craig Whittington-	
Roodeplaat Dam	25382821	Jones	1543
Korsman Bird Sanctuary	26112818	Andy McLetchie	1402
•		Craig Whittington-	
Mooirivier Loop 1 (Abe Bailey NR)	26192720	Jones	1173
		Craig Whittington-	
Leeupan	26142819	Jones	1151
Diepsloot Nature Reserve	25572800	Henk Alting	1122
Anglo Reserve	26182830	Stan Madden	870
-		Craig Whittington-	
Apex Pan	26132820	Jones	819
Bronkhorstspruit Dam	25542842	Pauline Leinberger	802
Grootvaly on Blesbok	26162830	Stan Madden	631
Elandsvlei 414	25592827	Koos van Dyk	613
Grootvaly Wetland Reserve	26142829	Stan Madden	607
Groenfontein Pan	25522852	Andre Marx	557
Sandpan	26072819	Lynn Randell	461
Rolfe's Pan	26102813	Koos van Dyk	447
		Craig Whittington-	
Mooirivier Loop 2 (Abe Bailey NR)	26212716	Jones	374
Parkhaven Pan - South	26092816	Henk Alting	367
		Craig Whittington-	
Blaauwpan	26072816	Jones	320
		Craig Whittington-	
Mooirivier Loop 3 (Abe Bailey NR)	26212715	Jones	301
Con Joubert Bird Sanctuary	26112741	Henk Alting	264
Bonaero Park Pan	26072816	Andy McLetchie	261
Cowles Dam (Springs Bird Sanctuary)	26132828	Stan Madden	157
Rust de Winter Dam	25132830	Andre van der Walt	152
		Craig Whittington-	
De Pan	26132726	Jones	147
		Craig Whittington-	
Steward's Pan	26122817	Jones	117
Varkfontein Pans	26032822	Anne Mearns	79
Lakefield Pan	26112817	Henk Alting	28
Bullfrog Pan	26082819	Anne Mearns	27
Parkhaven Pan - North	26082816	Henk Alting	6
Rietvlei & Marais Dams	25532817	Rihann Geyser	*
TOTAL			25079

NORTH WEST	Site code	Compiler	Count
Barberspan	26352535	Sampie vd Merwe	11737
Vaalkop Dam	25202728	Koos van Dyk	2847
Leeupan	26322536	Sampie vd Merwe	854
TOTAL			15438







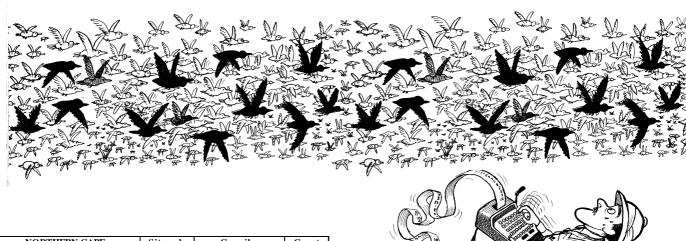




KWAZULU-NATAL	Site code	Compiler	Count
Lake St Lucia	28043227	Caroline Fox	5920
Malandeni Sewage Works	28342948	Ken Gordon	4043
Richards Bay Wetlands	28493202	Andrew Sutherland	3906
Umvoti River Estuary	29233121	Shirley Jex	1613
Blood River Vlei (Central)	27503035	AP Keeve	1548
Thulazihleka Pan	28473203	Andrew Sutherland	1473
Yengweni Pan	27393226	Craig Mulqueeny	1408
Musi Pan	27243237	Alistair Kilpin	1350
M avuya Pan	28303212	Caroline Fox	1130
Umgeni River Estuary	29493102	Steve Davis	1090
Kosi Bay Lake System	26583250	Scotty Kyle	813
Nsumu Pan	27403219	Craig Mulqueeny	758
M fazana Pans	28153228	Caroline Fox	747
Watermead Dam	29502935	Stuart McLean	529
Durban Bayhead	29533101	Roy Cowgill	510
Midmar Dam (Reserve only)	29313011	Shirley Bennett	505
Waterford Farm Dams	29512919	John Crowson	491
Vasi Pan	27123242	Andrew Sutherland	465
Albert Falls Dam	29263024	Shirley Bennett	461
Nyamithi Pan (Ndumo)	26533218	Catherine Hanekom	392
Sodwana Bay to Cape Vidal	27523236	Caroline Fox	368
M bozambo Waste Water Lagoon	29173117	Iain Kerr	300
Mpenjati Wetland	30563018	Richard Dobson	276
Klipfontein Bird Sanctuary	27483048	Duncan McKenzie	251
Neshe Pan	27393224	Craig Mulqueeny	223
Reichenau Mission Dam	29482938	Stuart McLean	217
Harding Dam	30342952	Neville Bentley	201
Lenjane Wetland	27533101	Darryl Baxter	175
Lake Eteza	28213209	Caroline Fox	163
M lalazi River Estuary	28573147	Callum Beattie	117
Nseleni River	28403200	Andrew Sutherland	82
St Lucia Sewage Works	28233225	Caroline Fox	73
Two Pans	28263217	Caroline Fox	70
Banzi Pan (Ndumo)	26523217	Catherine Hanekom	69
Mtwalume River Estuary	30283038	Neville Bentley	62
Shokwe Pan (Ndumo)	26533213	Catherine Hanekom	56
Ndlebeni Pan	27423237	Craig Mulqueeny	55
Mtunzini Prawn Hatchery	28573146	Callum Beattie	41
Lake M futululu	28253215	Caroline Fox	29
Dieu Donne Farm Dam	29292941	John Crowson	25
M hlazi Pan	27363238	Craig Mulqueeny	25
Kudu Pan	28273246	Caroline Fox	11
M fula Pan	27373233	Craig Mulqueeny	0
Nhlonhlela Pan	27363212	Craig Mulqueeny	0
Tshanetshe Pan	27403226	Craig Mulqueeny	0
Northern Treatment Works	29483100	Richard Boon	*
Scafell Farm Dam	29422926	John Crowson	*
TOTAL			32041
EDEE CTATE	61.4	ode Commiler	Count

FREE S TATE	Site code	Compiler	Count
Vaalbank Farm Dam	29052549	Brian Colahan	12128
Hartebeesdraai Farm Dam	28082615	Brian Colahan	11178
Gariep Dam	30382550	Brian Colahan	9394
Kalkfontein Dam	29322515	Brian Colahan	7452
Krugersdrift Dam	28522600	Brian Colahan	5956
Rusfontein Dam	29182637	Brian Colahan	4725
Erfenis Dam	28342650	Brian Colahan	4586
Allemanskraal Dam	28182712	Brian Colahan	3210
Bloemhof Dam	27412540	Stephan Els	3201
Koppies Dam	27152741	J.J. Joubert	3140
Welbedacht Dam	29522653	Brian Colahan	3117
Samenwerking Farm Dam	30042639	Brian Colahan	1872
Leeukop Farm Dam	29212623	I. Van Rooyen	1354
Knellpoort Dam	29462653	D. Hayter	1348
Knellpoort Dam - Upper reaches	29452650	D. Hayter	983
Seekoeivlei	27352935	G. Wandrag	725
Donkerpoort Farm Dam 1	29172629	Stephanie Gerber	705
Moutloasi Setlogelo Dam	29182651	Jeremy Jones	292
Sunny side Pan	28392608	Brian Colahan	277
Skop Pan	28462606	Stephan vd Walt	60
Brandmag Farm Dam	29162630	Stephanie Gerber	47
Donkerpoort Farm Dam 2	29162629	Stephanie Gerber	5
Leeupan	29082541	Nick van der Walt	4
Benfontein Dam	28502450	Mark Anderson	0
Benfontein Pan	28492449	Mark Anderson	0
Danielskuil Pan	29022554	Brian Colahan	0
Rietpan	28402618	Brian Colahan	0
Vendutiekop Farm Dam	29442538	Christiaan de Wit	0
Bloemspruit Sewage Maturation Ponds	29072616	Herman Kleynhans	*
Deelpan	29102545	Brian Colahan	*
Sterkfontein Dam	28262901	Stephan vd Walt	*
TOTAL			75759

WES TERN CAPE	Site code	Compiler	Count
Langebaan Lagoon	33081804	Doug Harebottle	29820
Strandfontein Sewage Works	34051831	Dick Barnes	12242
Lower Berg River			12049
Berg 1: M outh & Estuary	32471809	Cliff Dorse	2232
Berg 2: Cerebos Saltpans Berg 3: Hotel M udflats & Estuary	32481810 32471811	Keith Harrison Keith Harrison	1779 1441
Berg 4: Hotel Saltpans	32481811	M el Tripp	2286
Berg 5: De Plaat	32481812	Vince Ward	2629
Berg 6: K liphoek Saltpans	32501812	Rob Satchel	1115
Berg 7: Kliphoek River & Floodplain	32491813	Rob Satchel	65
Berg 8: Kruisp ad Floodplain Berg 9: Langrietvlei Floodplain	32521815	Sy lvia Ledgard Rene Navarro	207
Berg 10: Kersefontein Floodplain	32521817 32531819	Warwick Board	80
Berg 11: Doornfontein Floodplain	32521819	Elsje vd Linde	162
Berg 12: M elkp laas Floodp lain	32511814	Elsje vd Linde	289
Berg 13: Springersbaai Floodplain	32481813	Elsje vd Linde	66
Botriviervlei	34211906	M ariana Delport	10025
Wilderness Lakes - Touw System	33592240	Ian Russell	6217
Voëlvlei Dam Rietvlei Wetland Reserve	33221903 33501831	John Carter Koos Retief	5065 4842
Wilderness Lakes - Swartvlei System	34002245	Ian Russell	4810
K ny sna Lagoon	34032302	Joy van Korff	4379
Houdenbek Dam	33001928	Jap ie Claassen	4143
Theew aterskloof Dam	34021913	Gerry Jooste	3846
Radyn Dam	33181845	Otto Schimdt	3711
Verlorenvlei Droëvlei	32201825 33381843	K evin Shaw M ariana Delport	3633 3172
Swartkop se Dam	33061946	Otto Schimdt	3172
Zandvlei - estuary & marina	34071828	Brian Herman	2301
Paarl Bird Sanctuary	33411858	Yvonne Weiss	2258
K leinriviers vlei	34251921	M ike Ford	1812
Rocklands Dam	33081917	Japie Claassen	1505
Verkeerdevlei M acassar Waste Water Treatment Works	33192052 34041845	Otto Schimdt John Carter	1378 1207
Slent Farm Dam	33381849	Judy New	1199
Wellington Waste Water Works	33391858	Johan Rousseau	1190
Olifants River M outh (South Bank)	31421812	Kevin Shaw	1134
Leeu Gamka Dam	32362201	Japie Claassen	1126
Clanwilliam Dam	32131854	Stephanie Tyler	1047
Keurbooms River Estuary Suikerbosrand/Rietvlei Dams	34022324 32521928	Brian Denman Japie Claassen	997 958
Rocher Pan	32361818	Kevin Shaw	875
Driefontein Farm Dam	33211846	Otto Schimdt	865
Zeekoegat Dam	33382209	Ian M ileham	827
M ud River M outh	33291818	M el Tripp	766
Bitou River	34012323	Brian Denman Eric Barnes	751
Wildevoëlvlei Springfontein Dam	34081821 32192238	M aria Andela	692 543
W adrif Saltp an	32131821	Kevin Shaw	534
M ossel Bay Sewage Works	34072206	Frans de Graaff	511
Noord Agter Paarl Irrigation Dam	33401858	Yvonne Weiss	511
Diep River Estuary - R27 bridge to mouth	33531830	Koos Retief	488
Groenvlei Lake	34012252	Rhett Hiseman	464
Bolshoek Dam Gemsbok Dam	32021848 31281857	Stephanie Tyler Stephanie Tyler	431 390
K ny sna Sew age W orks	34042302	Joy van Korff	388
Noordhoek Dam	32572158	Japie Claassen	384
Edith Stephens Wetland Park - Flood			
retention Dam	34011831	Doug Harebottle	381
Rondevlei Nature Reserve Jakkalsvlei	34041830	Dalton Gibbs Kevin Shaw	379
Eerste River Estuary	32051819 34051846	John Carter	354 350
De M ond Estuary	34432007	Pieter Albertyn	337
Beaufort West Sewage Works	32222237	M aria Andela	330
Hartebeeskuil Dam	34062200	Joy van Korff	329
Kluitjieskraal Wetland	33261910	M ariana Delport	260
George Sewage Works	33592227	Frans de Graaff	251
Duiwenhoks River: Mouth-Melkhoutkraal Mossgas Dams	34222100 34112201	M atthew Prophet Frans de Graaff	217 200
Goukamma River M outh	34042257	Rhett Hiseman	191
Paardevlei Dam	34051849	Sheila Walker	181
Nature's Valley (Groot River)	33592332	Joy van Korff	115
Dick Dent Bird Sanctuary	34061849	Sheila Walker	101
Oudtshoorn Sewage Works	33372214	Ian M ileham	101
K leinmond River Estuary K lavervlei	34211905	M ariana Delport Sheila Walker	75 43
Vermont Salt Pan	34021845 34251910	M ike Ford	10
Edith Stephens Wetland Park - Seasonal	34231910	Doug Harebottle	0
Raapenberg Bird Sanctuary	33561828	Doug Harebottle	0
Voëlvlei	34162149	Joy van Korff	0
De Hoop Vlei	34262023	?	*
Bellair Dam	33422035	Andrew Schofield	
TOTAL		1	142 825



NORTHERN CAPE	Site code	Compiler	Count
Spitskop Dam	28042433	Mark Anderson	26380
Kamfers Dam	28402446	Mark Anderson	12904
Orange River Estuary	28381627	Mark Anderson	7091
So Ver Myn Dam	28132431	Mark Anderson	2239
Bosduiwekop Dam	30152445	Johan Jonk	1681
Sakrivierspoort Wetlands	31502208	Japie Claassen	1230
Ganspan B	27542447	Mark Anderson	1118
Vaalharts Weir	28072455	Mark Anderson	1031
Pedroskloof Farm Dam	30081806	Enrico Oosthuysen	915
Nourivier Dam	30141808	Enrico Oosthuysen	821
Nooitgedacht	29542434	Mark Anderson	730
Dampoort Dam	28112429	Mark Anderson	722
Faugh A Ballagh	30522438	Johan Jonk	445
Espagsdrift Vlei	27562444	Mark Anderson	324
Kraankuils Dam - Weir	29522413	Ronelle Visagie	316
Orange River: Hohenfels-Bridge	28301639	Mark Anderson	249
Hertzog van Wyk Dam	30121756	Enrico Oosthuysen	218
Springbok Sewage Works	29401753	Enrico Oosthuysen	195
Hopetown Sewage Works	29422405	Ronelle Visagie	166
Wortelfontein Dam	31082408	Francois Taljaard	165
Nieuwoudtville Dam	31221905	Stephanie Tyler	157
Vanderkloof Dam (Seekoei River			
Tributary)	30202500	Johan Jonk	115
Nantwich Saltpan	28292446	Mark Anderson	86
Orange River: Brandkaros-Hohenfels	28341635	Mark Anderson	86
De Aar Sewage Works	30412402	Francois Taljaard	69
Kamieskroon Sewage Works	30121755	Enrico Oosthuysen	45
Danielskuil Dams	28112333	Mark Anderson	0
Grootpan	28182335	Mark Anderson	0
Hanskop fontein Pan	28282448	Mark Anderson	0
Holpan/Graspan Pans	28412426	Mark Anderson	0
Klipkolk Farm Dam	26522005	Ben von Wielligh	0
Kraankuil Dam - Irrigation Dam	29522412	Ronelle Visagie	0
Kraankuils Dam - Main Dam	29522411	Ronelle Visagie	0
Marrick Pan	28462436	Mark Anderson	0
Platfontein Pans	28392437	Mark Anderson	0
Pudu Farm Dam	27482244	Mark Anderson	0
Rooifontein Pan	28482449	Werner Sinclair	0
Rooipan	28222335		
Strydenburg Pan	29562341	Ronelle Visagie	0
Volstruis Pan	28402410	Mark Anderson	0
TOTAL			59498

EASTERN CAPE	Site code	Compiler	Count
Zwartkops River Estuary	33522538	Paul Martin	6168
Chatty Saltpans	33512535	Paul Martin	3325
Krom River Mouth	34082450	Chuck Cook	2912
Kabeljous River Estuary	34002456	Chuck Cook	2292
Gamtoos River: Mouth - 6km upstream	33582502	Chuck Cook	1676
Redhouse Saltpan	33502535	Paul Martin	1633
Ncqweba Dam	32132432	Judy Caryer	1607
Umtata Dam	31302842	Sonja Vorster	1406
Gamtoos River (False Mouth)	33582505	Chuck Cook	1305
Riet River Bay (Three Sisters-Riet Point)	33332701	Tony Tree	789
Malangskraal Dam	32442607	Bo Bonnevie	785
Seekoei River Estuary	34052454	Chuck Cook	762
Bar None Saltpan	33502533	Paul Martin	736
Mondplaas Ponds	33572458	Chuck Cook	666
Great Fish River Estuary	33292707	Tony Tree	494
Kowie River Estuary	33352653	Tony Tree	484
Bushmans River: Mouth - Ghio Bridge	33402635	Laurie Wood	374
PE Power Station Pans	33522536	Paul Martin	337
Ghio Pans	33382634	Laurie Wood	285
Retreat Farm Dam	31562525	Alan Collett	196
Perseverance Vleis	33502532	Paul Martin	157
Cape Recife Reclamation Works	34012541	Paul Martin	143
Tyolomnqa River Estuary	33112735	Dave Stewart	114
De Hoop Dam	32262424	Judy Caryer	0
TOTAL			28646











