# Thirty years and still counting
# The history of bird counts in Walvis Bay

**Abstract**
Every year since 1983, a summer and winter count of the birds of the Walvis Bay wetland has taken place. The counts were conducted to determine the number and species of birds and from the results determine if it could be classed as a wetland of international importance. The birds are a good indicator of the health of the wetland and a valuable natural asset in the important and growing tourism industry. Mostly volunteers conducted the counts, with financial assistance from local businesses. Several authors used the data to publish scientific and popular articles.

**Key words**: Bird counts, Walvis Bay, waders, shore birds, wetlands, Ramsar.

## Introduction

In December 1976, birding enthusiasts from the Western Cape Wader Study Group, Cape Town, undertook *An ornithological expedition to the Namib coast*. The group counted the birds between Sandwich Harbour and Cape Cross. Almost a year was spent planning the trip for the party of 11 from Cape Town on a budget of R585. Two participants from the Division of Nature Conservation and Tourism of the South West Africa Administration assisted with the survey. This first small step in the Walvis Bay wetland laid the foundation for the counts that followed continuously for 30 years. This paper documents the origin of the counts, reasons for them and pays tribute to the many people who made it possible.


*Map of whole point from poster with count outline* *Photo: Peter Bridgeford*

**In the beginning**

*Prof. Les Underhill*
*Photo: Dirk Heinrich*

As a result of: *An ornithological expedition to the Namib coast* (Underhill and Whitelaw 1977), a second more comprehensive survey of part of the South West Africa (SWA) coast was planned by the Western Cape Wader Study Group. This took place in January 1978 and extended the count 48 km northwards to Durissa Bay, and a more comprehensive survey of the southern part of Sandwich Harbour (then called Sandvis) was undertaken. The counts were conducted in midsummer when large numbers of Palaearctic waders occur in southern Africa (Whitelaw et al 1978).

The coastal counts in SWA were conducted to establish the number and species of birds, especially the waders, and secondly to interpret the census results in the light of the criteria recommended by the Ramsar Convention for identifying wetlands of international significance (Whitelaw & Underhill 1977). These two authors recommended the following conservation priorities for the Walvis Bay lagoon: Protection from further encroachment by roads and saltpans that reduce the tidal area and registration with the Ramsar Convention as a Wetland of International Importance.

On 31 August 1977 the Walvis Bay Administration Proclamation, R202, resulted in the Walvis Bay Enclave and the Atlantic offshore islands reverting to the electoral division of Namaqualand, Cape Province, in the Republic of South Africa (Dierks 1999). In October 1978, the politicians got into the act and South African Minister Owen Horwood requested *A report on the nature conservation and outdoor recreation potential of the Walvis Bay enclave.* One of the points in the summary of this report was the silting up of the lagoon and the importance of the lagoon as a wader habitat. The author stated that it fulfilled the requirements for classification as a Wetland of International Importance (Morris 1980).

In 1980, Walvis Bay Round Table No. 36 received a directive originating from Round Table Africa and adopted by the Association of Round Tables of Southern Africa, to look into local environmental needs. Dr Paul Coulson and Dr Brian Roberts investigated several environmental issues and in 1982 made their

*Paul Coulsen & Marek Hrywniak* *Photo: M & H Hrywniak*

choice. They would initiate a research and monitoring project on the Walvis Bay lagoon, using the wading birds as an indicator group (M. Hrywniak pers. comm.).

The initial aims of the project were:

1. To determine the importance of the lagoon for purposes of recreation and conservation;
2. To determine the effects of past development on the system;
3. To help the people of Walvis Bay to appreciate and understand the conservation importance of the wetland and
4. To monitor the system so that any changes could quickly be identified and investigated. (Williams 1987).

To start the project it was decided to evaluate the importance of the area to wetland birds. The area has long been famous for the large numbers of flamingos and other wetland birds, entrenched by the coat-of-arms of the Walvis Bay Municipality, which depicts two flamingos and a pelican, and by the numerous businesses in the town using the name 'flamingo'. Walvis Bay Round Table requested the assistance of the Percy FitzPatrick Institute of African Ornithology at the University of Cape Town (Williams 1987).

**The first count**

The Percy FitzPatrick Institute sent Dr Phil Hockey and Ms Alison Bosman to do the survey in May 1983. They surveyed the lagoon, some of the evaporation pans, saltpans to the south of the lagoon and Pelican Point. The count total was 66 071 birds of 30 species. As the count was done in May, many Palaearctic migrants had left (Hockey & Bosman 1983). Since then the salt works has expanded and changed considerably and the present counts. Thirty years later, the counts cover a larger area of the wetland and about 50 species are recorded.

*Dr Phil Hockey*
*Photo: UCT website*

*Dr Chris Brown*
*Photo: Dirk Heinrich*

The Walvis Bay Round Table funded the survey by Hockey and Bosman and they submitted a report to Round Table on the *Conservation management of the Walvis Bay lagoon with special reference to its importance as a bird habitat*. In the report, the researchers made several recommendations and advocated further regular monitoring of the wetland bird population in different seasons and over a number of years to establish natural fluctuation in bird numbers (Williams 1987).

As a result of the recommendations in the report, Walvis Bay Round Table requested the support of the SWA/Namibia Round Tables. The proposal was adopted by all member clubs and was known as the Namibia Area Wetland Project. They continued to support the long-term monitoring of bird numbers in the lagoon and surrounding wetland areas (M. Hrywniak pers. comm.). The conservation aims were redefined as follows:

1. The promotion of investigations by professional bodies in order to evaluate the Wetland area;
2. The identification of potential threats to the wetland ecology and the promotion of the implementation of viable solutions;
3. The promotion of having the wetland proclaimed as a reserve;

4. The promotion of international recognition of the importance of the wetlands and
5. The promotion of environmental awareness within Walvis Bay enclave (Williams 1987).

In mid-1983, the ornithologists of the SWA/Namibia Directorate of Nature Conservation and the Bird Group of the SWA Scientific Society were requested by Walvis Bay Round Table to help organise professional and amateur birdwatchers to carry out a number of surveys of the birds at the Walvis Bay lagoon. The 'Tablers' would provide financial and logistical support. This first count by professionals and amateurs took place in November 1983 and was organised by Dr Chris Brown, a 'Tabler' himself, who was the Directorate of Nature Conservation ornithologist stationed in Windhoek. A total of 74 981 birds were counted (Williams 1987).

**Methods**

Since the first count in 1983, all counts have been carried out over two days during a morning low tide. Five to eight teams of observers conduct counts in the mornings, between about 09:00 and 13:00 on a Saturday and Sunday, before the heat haze or afternoon winds start. The number and size of teams depended on availability of counters. The counts in November 1983 and March 1984 took place under similar conditions, but the division of count areas evolved over time by trial and error towards the optimum block arrangement used today. The counters range from professional ornithologists to complete beginners. Each team is led by an 'expert' with a variable number of less experienced people. Most observations are made using binoculars or telescopes whilst walking or from vehicles along roadways around the lagoon or within the saltpans (Williams 1987).

The huge size of some blocks and pans means the counts represent the minimum number of birds present. Counts follow the same methodology to make them as repeatable as possible to facilitate a meaningful comparison of counts over time. Radios are used by the count teams to keep in contact and to reduce duplicate counts of birds if they move between count blocks. The size of the area and a limited number of volunteer counters precludes the possibility of completing the count in one day, resulting in a two-day count. However, by dividing the two major habitat types, tidally influenced and saltpans, between the two days the similarity of tidal and the short-term unchanged conditions of

the area is thought to minimise bird movement between areas during the count period (Williams 1987).

Today, 30 years on, the counts follow the same methodologies, with a count in January/February and a second count in June/July to get a sample of each season, with minor improvements such as GPS units to guide groups of counters across the featureless mudflats and embankments within the salt works. Novices and younger birders are encouraged to join the count in an effort to attract new enthusiasts who will take the counts into the next 30 years.

**People involved in the bird counts**

*Tony Williams*
*Photo: M & H Hrywniak*

In 1984, 1985 and 1986 summer and winter counts were conducted and organised by ornithologist Dr A J (Tony) Williams with the continued support of Walvis Bay Round Table. In 1987, Dr Tony Williams produced a commissioned report for the Association of Round Tables in Southern Africa, entitled *Conservation management of the Walvis Bay wetland with particular reference to coastal bird numbers and their conservation significance.* This report stated 'These counts, and at other wetlands along the Namib Coast, revealed that the bird populations which it supports are of major international significance'. He continued: 'This report is the first scientific evaluation of the counts made in 1977 through 1986 although data have been used to support moves for conservation of the wetlands in the symposium on coastal conservation held in Swakopmund in June 1986 and in various lectures to interested bodies'.

On 18 August 1987, the South African Department of Environment Affairs held a meeting in Walvis Bay. Round Table was invited to attend and welcomed the forum for discussions leading to the establishment of a master plan for the Walvis Bay enclave. The commissioned reports were submitted for discussion. The interests and conservation aims of Round Table were supported and represented by ornithologists Dr C Brown and Dr A J Williams, Mr J Glazewski (Institute of Marine Law UCT), Dr M Seely (Desert Research Unit Gobabeb) and Dr J Ward (Geological Survey). Other parties at this meeting included the

CSIR, SA Transport Services, Department of Forestry, SWA Directorate of Nature Conservation, Cape Department of Nature and Environmental Conservation, Round Table, Percy FitzPatrick Institute of African Ornithology, Salt and Chemicals (Pty) Ltd and certain sporting organisations (M. Hrywniak pers. comm.).

The summer and winter counts continued in 1987, 1988, 1989 and 1990. Namibia gained its independence on 21 March 1990, but the Walvis Bay Enclave remained under South African control as part of the Cape Province. Cape Conservation appointed conservation staff and one of those was Dr Tony Williams, supported by Allisdair MacDonald and Shawn Marshall. Despite the political upheaval and uncertainty, the bird counts in Walvis Bay continued.

Sandwich Harbour counts, initiated by ornithologist Dr Rob Simmons from the Ministry of Environment and Tourism, Namibia, started in 1991. Dr Simmons set up count-blocks on the 20 square kilometres large mudflats south of the Sandwich Lagoon with the assistance of Dave Ward, Marek and Hannelore Hrywniak and Gerd Rössler. Neither the Walvis Bay wetland nor Sandwich Harbour can be seen in isolation. Birds move from one to the other. This is the reason why attempts are made to count the two wetlands at the same time.

*Dr Rob Simmons*
*Photo: Dirk Heinrich*

From 1981 to 1991, Round Table had organised, managed and supported the wetland counts. Over the years, the individual members of Round Table 36 had accommodated and hosted the counters. Scientific evaluations based on 10 years of count data had been published. Because of the August 1987 Department of Environment Affairs meeting, the necessary recognition, proclamation and legislation followed. Round Table had successfully achieved its conservation aims.

A provincial nature reserve was proclaimed and Round Table completed the environmental information stand. The Cape Provincial Administration appointed conservation officials, opened an office in Walvis Bay and agreed to manage

the stand and maintain the exhibits. The establishment of a Cape Provincial Administration conservation presence now allowed for professional management with continued research and monitoring. With these assurances, Round Table concluded their successful involvement.

An environmental information stand was funded by Round Table in Namibia, designed by architect Bob Mould from Round Table Hochland Park 154 (Brown 1987). The Walvis Bay Municipality supported the project and state land at Lovers Hill was made available for the project. The centre was officially opened on 7 August 1991 by the Administrator of the Cape Province, Mr J H W Meiring. Dignitaries and members of Round Table Namibia attended this auspicious occasion (M. Hrywniak pers. comm.).

*Counting on the Paaltjies Road* *Photo: Peter Bridgeford*

In 1993, Dr Rob Simmons became involved in the bird counts as Dr Tony Williams left Walvis Bay (R. Simmons pers. comm.). On 21 March 1994, Walvis Bay was reintegrated into Namibia. Simmons continued with the bird counts in Walvis Bay and Sandwich Harbour. During this time, Keith Wearne and his team became involved in the Walvis Bay wetland counts and in 1994 he took over the organisation of these, while Rob Simmons concentrated on Sandwich Harbour (R. Simmons pers. comm.).

All this dedicated hard work by professional ornithologists, conservationists, keen members of the public and the Walvis Bay Round Table chapter bore fruit. On 23 December 1995 the Government of Namibia acceded to the Convention on Wetlands of International Importance and designated four Namibian Ramsar sites: Orange River Mouth, Sandwich Harbour, Walvis Bay Wetland and Etosha Pan (Shaw et al 2004).

*Keith Wearne*

*Photo: G. Wearne*

After the reintegration of Walvis Bay into Namibia, the rapid development and at times environmentally unfriendly projects caused concern among some citizens. Retired conservationist Ernst Karlowa with Keith Wearne, Alan Louw and Danie Malherbe formed the Environmental Action Group in 1996 to raise awareness about the concerns over the haphazard and at times controversial developments in the harbour town and the silting-up of the lagoon. This organisation changed its name in 1997 to the Coastal and Environmental Trust of Namibia (CETN).

In 1997 CETN in conjunction with the Municipality of Walvis Bay, the Ministry of Environment and Tourism and the Ministry of Fisheries and Marine Resources initiated a workshop on the future of the Walvis Bay Lagoon. Because of the lagoon's importance, CETN in partnership with the Danish International Development Agency and the Municipality of Walvis Bay undertook and completed a three-year feasibility study of the Ramsar Site. To inform and educate the public, information signboards were erected along the lagoon promenade. These were removed in 2005 as they disintegrated because of rust. CETN was registered as a non-profit trust on 26 April 2000, with Keith Wearne as chairman. The bird counts in the Walvis Bay wetland and the promotion of environmental awareness in schools, the town and surrounding communities became an important function of CETN and Keith Wearne was active in this field. This was possible because of local and international financial support.

The summer and winter bird counts in Walvis Bay continued to be organised by Keith Wearne, and Walvis Bay Salt Refiners allowed access to their property during these occasions. In November 2000 the Walvis Bay Salt Refiners paid tribute to his unflagging environmental battles and promotion of Walvis Bay.


*Volunteers counting birds* *Photo: Peter Bridgeford*

They named a specially built facility on the way to the pump-station the *Keith Wearne lookout.* The Lookout was designed and built by Deon van Tonder of Walvis Bay Salt Refiners and is used for board meetings and staff functions. The peace and tranquillity of this spot, enhanced by thousands of feeding flamingos and other birds, is an ideal place to relax or have a meeting. Thanks to Walvis Bay Salt Refiners, this building is still being used during the bird counts as the central meeting point and lunch spot.

*Counters 9. February 2013* *Photo: Peter Bridgeford*

**Organisers and sponsors**

Keith Wearne continued organising the counts while Gail Wearne provided the lunches. It was rumoured that people came to the count just to partake in the post-count feast provided by Gail at their home on Sundays. Here tribute is paid to Probst Bakery, Walvis Bay Salt Refiners and Namibia Breweries who provided brötchens, funds and beers/soft drinks to feed the hungry volunteers. In July 2008 the Walvis Bay wetlands lost its most loyal and strongest supporter when Keith Wearne passed away after a short illness. After 15 years of Keith's inimitable organising of the counts and fighting for the protection of the lagoon and its birds, an era came to an end. CETN also lost its hard-working chairman. This was a week before the scheduled winter count, but long-time CETN trustee and regular bird-counter Sue Roux came to the rescue, took over and organised a successful count, no mean feat at such short notice.

In January 2009 the author took over the organisation of the counts. He and the bird-counters survived the transition and he is still organising this biannual

*Sunday lunch in the Wearnegarden after the count - July 2009*

*Photo: Peter Bridgeford*

event. Two thousand and thirteen marks the 30th year of the Walvis Bay counts. It also marks the passing of one of the pioneers of the Walvis Bay bird counts, Prof. Phil Hockey, who did the first count in 1983.

Large long-term projects of this nature are impossible without the help of the volunteers. Be they birders, 'twitchers' or interested citizens, the counts of the past 30 years could not have been done without them. Today these people are known as *citizen scientists* and their valuable contributions have been recognized by scientists in several scientific publications. Secondly, assistance with these projects by local and national businesses, whether financial, logistical or equipment, is just as important. In this regard we have to thank a number of long-time sponsors. Nedbank's Go-Green Fund provided financial support to CETN. Alan Louw of Namibia Marine Services provides the boats to ferry volunteers across the bay to the mudflats. Gerd Rössler of Radio Electronics provides radios to keep groups in contact. Namibia Breweries provide drinks for thirsty bird counters. Astrid Deetlefs of Probst Bakery helps feed the hungry. Roy Stanton of Walvis Bay Salt Refiners allows access to their property and supports the counts financially. Buccaneers Squash Club is the venue for the pre-count briefings; transport has been provided by the volunteers and Wilderness Safaris, Uri Adventures, SafariWise, Sandwich Harbour 4x4, Catamaran Charters and Namibian Dolphin Project. Kevin Milne has looked after the communications and arranged the harbour permits. Many friends have helped with preparing the food and keeping the volunteers fed and happy.

In 2010 the Environmental Fund of the Walvis Bay Municipality donated N$25 000 to CETN. They purchased bird books to donate to schools and binoculars to use for school groups and during bird counts.

**Publications**

Count data have been used by ornithologists and researchers to show the importance of Walvis Bay and other wetlands along the Namibian coast.

Sandwich Harbour hit the birding headlines when, in 1998, Rob Simmons and Tony Tree saw an estimated 187 000 terns (±157 000 Common *Sterna hirundo* and ±30 000 Black Terns *Chlidonias niger*) attracted by huge concentrations of small euphasids – krill-like invertebrates. Besides the terns a further 49 100 other shorebirds were counted, bringing the count total to a staggering 236 100, the largest single concentration of coastal shorebirds in southern Africa ever

recorded (Simmons 1999). However, records are made to be broken and in the summer of 2004 Keith Wearne and his volunteers recorded 242 000 birds at Walvis Bay wetlands. Again, an aggregation of ±100 000 terns pushed up the numbers. At Sandwich Harbour, during the same weekend, another 202 000 birds were recorded.

*The important bird areas of Southern Africa* was published in 1998. In this, Walvis Bay is regarded as the most important coastal wetland in the Southern African sub-region in terms of bird numbers and one of the three most important coastal wetlands in Africa (Simmons, Boix-Hinzen, Barnes, Jarvis & Robertson 1998).

In 2000 Dr Rob Simmons published a short article about Chestnut-banded Plovers *Charadrius pallidus* and stated that Walvis Bay wetland seasonally holds 60% of the world population, while Sandwich Harbour holds 39% (Simmons 2000). Another publication during the year was *Why is shorebird density so high in Walvis Bay? Delayed blooming and Benguela upwellings* (Simmons & Cordes 2000).

In 2005 Keith Wearne and Prof Les Underhill published an article entitled *Namibia: a key wetland for waders and other coastal bird in southern Africa* (Wearne & Underhill 2005).

*The status of Curlew Sandpipers Calidris ferruginea on the Namib coast* was published in 2006 (Williams & Simmons 2006).

The most recent publication is *Are global declines in wader numbers reflected in trends from southern Africa's premier wetlands? A 20-year analysis from Namibia's two top wetlands.* This paper will be published in 2013 and three people involved in wetland counts for many years, Rob Simmons, Rod Braby and Holger Kolberg teamed up with statistician Birgit Erni to look at trends in bird numbers (Simmons, Erni, Kolberg & Braby 2013).

**The Future?**

The Walvis Bay bird count has become an institution and the longer it continues, the greater the value of the counts become. Scientists can use the information to spot long-term trends and fluctuations which can be warning signs of problems in the Walvis Bay wetland or other areas used by the birds.

With the support of the many citizen scientists and local businesses, the count has a positive outlook and in 20 years time we can celebrate a half-century of bird counts in the Walvis Bay wetland.

**Acknowledgements**
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The citizen scientists, past and present, who volunteer year after year to brave cold wet weather or hot sunny days, wade though the water and mud to count the birds, 'thank you' seems so inadequate.

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**Appendix**

Participants of the Ornithological Expedition to the Namib Coast, December 1976/January 1977

Dr Les Underhill, Dr Dave Whitelaw, Miss Shan Davies, Charles Helm, Dr Sue Jessop, Miss Kathy Moss, Steve Pringle, Dr Ron Summers, Mrs Judy Summers, Manfred Waltner, George Winter.

SWA Dept. of Nature Conservation and Tourism: Charles Clinning, Hentie Schrader.

**The first count 1983.**

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Some interesting websites:
http://ec.europa.eu/environement/integration/research/newsalert/pdf/316na5.pdf
http://travelnewsnamibia.com/news/walvis-bay-bird-count-february-2013/#.USht8aVho21
http://worldwaders.wordpress.com

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