NAMIBIA
Crane Working Group

Namibia Crane News 48

incorporating cranes and other wetland birds

May 2011

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RAMSAR TURNS 20

40 years of the Ramsar Convention

2011 is a very special year for the Ramsar Convention. On 2 February, World Wetlands Day, Ramsar celebrated its 40th anniversary as a Convention, at present with 160 contracting parties. The Ramsar Secretariat hopes that the whole Ramsar family will join hands in celebrating wetlands, and that together we can build momentum and create a global wave of activity throughout the year.

Four wetlands in Namibia are registered as Wetlands of International Importance: the Walvis Bay Wetlands; Sandwich Harbour; the Orange River Mouth; and Etosha Pan. How can we use this year as an opportunity to place wetlands and Ramsar centre stage? In our country, the 40th anniversary of the Ramsar Convention is being celebrated jointly with the international Year of Forests this year (contact Laurens Losper [email: lllosper@yahoo.co.uk] for further details of activities, including public lectures and symposiums).

To find out about the conservation and awareness materials available from the Ramsar, please visit the special section of the web site dedicated to the 40th anniversary (www.ramsar.org/40-Anniversary; www.ramsar.org/CEPA-Programme).

Please join us with making 2011 a gala year for wetlands and Ramsar!

**Also note that World Migratory Birds Day was celebrated on 14-15 May 2011.*

APRIL 2011 CRANE CENSUS

Part of the April 2011 team: (L to R) Holger Kolberg, Sageus Garieseb, Hanjo Böhme, pilot Nad Brain, Wilferd Versfeld, Ann & Mike Scott and Seth Guim (front) (*photo Mathias Stein*)

Our annual aerial/ground crane census at Etosha National Park and northwards took place on 4-8/4/11. This survey is part of a biannual series started in 2006. The census yielded a total count of only 24 adults and 8 chicks (all within the Park) – a further decrease in adult numbers from 32 in April 2010. It thus appears that our recent maximum figure of 35 cranes from 2009 is still no higher at present; and considerably lower than previous estimates of 80 in 1992, 60 in 1994 and 60 in April 2006 (Fig. 1). Due to the exceptional rains this year, Lake Oponono was still heavily flooded. Wilferd conducted a partial count there in January 2011. It had started raining and the area was becoming flooded already, but no cranes were sighted. Our survey area therefore focussed on Etosha, starting at Namutoni and Andoni and then flying westwards across the Oshigambo and Ekuma rivers to Ozonjuitji m'Bari and back via Okaukuejo.

Large expanses of water in the eastern parts of the Pan and at the Ekuma River in April 2011 (*photo Ann Scott*)

The Namibia Crane Action Plan is supported by Namibia Nature Foundation
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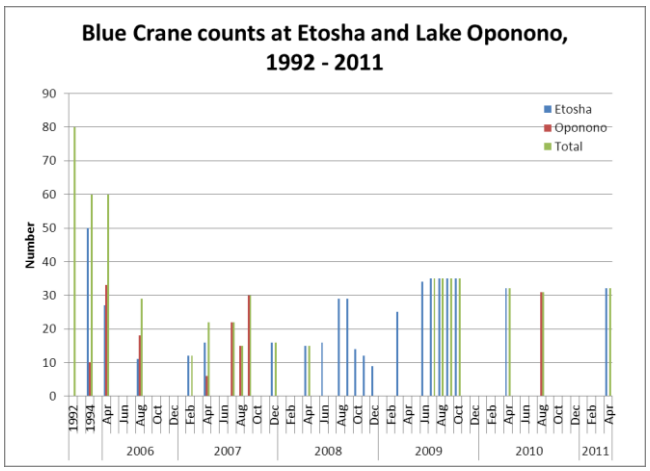


Fig. 1. Blue cranes counts in Namibia (1992-2011).

During our count we found a considerable amount of water in the Pan, especially the eastern part. As with the survey in April 2010, we found a relatively large flock of 12 Blue Cranes at Fischer's Pan, that could have been gathering in preparation to moving off for the dry season.

What is really noteworthy is that, of the nine nests/ pairs that were breeding, six relatively young birds were ringed (38%). Is this an indication that the older birds are not surviving, thereby making way for the younger birds (all ringed since 2006)?

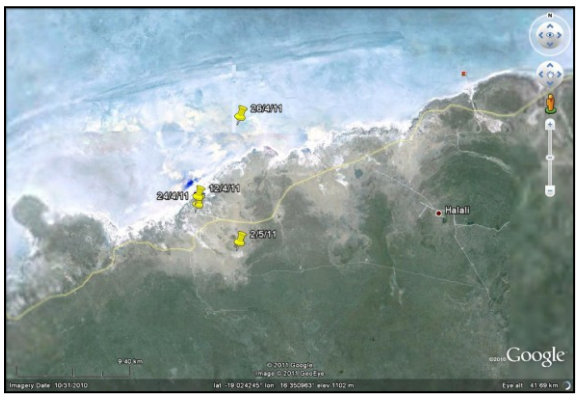
In total nine chicks were recorded for the 2011 season; the eight that survived were produced by pairs with at least one ringed bird. The ringed birds were:

- NHM (Polly 151.190; 2 years old) at Salvadora – 2 chicks survived; this bird is exceptionally young to have bred
- NBW (3 years) west of Aroe – 2 chicks survived
- NBZ (3 years) at Namutoni causeway – chicks did not survive
- NHD (4 years) at Halali Seep – 2 chicks survived
- NHF (4 years) and NHH (3 years) at Charitsaub – 2 chicks survived

The pair at Springbokfontein produced a chick but it does not seem to have survived, while the pairs/nests at Twee Palms, Chudop/Doringdraai and west of the Namutoni causeway were not successful.

One of the first birds ringed, NHD (ringed at Halali on 12/4/06) was first seen with a mate at Halali Seep on 24/3/09, 35 months old. Blue Cranes become sexually mature at 3-5 years, although breeding may start only from the fourth year onwards (females 4-7 years and males 5-8 years, in captivity). NHD took up the same breeding site in 2010 (then four years old) and produced its first small chick by 16/2/2010, although it did not survive. NHD bred successfuly in 2011 (now at the age of five).

Top: Family group with two young chicks at Halali seep. 2nd from top: A small chick is captured near Salvadora. 2nd from bottom & bottom: A radio transmitter is fitted to the adult in moult at Halali seep (*photos Ann Scott*)



Top & centre: A satellite transmitter (PTT) is fitted to a large juvenile east of Salvadora (*photos Mathias Stein*); Bottom: Fixes from the PTT (yellow markers) show that the crane remained in the same area (up to 2/5/11).

Our intrepid ringing team once more excelled itself, capturing and ringing five chicks/juveniles and one adult that was moulting. This brings the total number of chicks ringed to 22 to date.

Exciting news is that we were able to fit the second satellite transmitter (PTT; no. GC008; NAG) to a large, just-fledging juvenile east of Salvadora on 7/4/11. So far the bird seems to have remained in the area east of Salvadora, although there are indications that the group is now starting to move off. A radio transmitter was also fitted to the adult in moult (frequency 151.330; NAE) on 6/4/11.

While we are still hoping that there may be a splinter group elsewhere (due to the good rainfall in recent years), we will continue to investigate why Blue Crane numbers have declined. Could it be due to changing environmental conditions? Increased predation? Increasing disturbance outside the Park? We would like to do a follow-up dry-season count August 2011, when the cranes are more concentrated around the water points.

A big thank you to Wilferd Versfeld and Holger Kolberg for their ongoing enthusiasm and assistance with organizing the logistics for this work; to the Ramsar Small Grants Fund for sponsorship of the census; to the MET for the use of a plane and fuel; Nad Brain for the safe and dedicated flying and delicious campfire dinners; Sageus Garieseb and Seth Guim for their willing assistance in the field, especially with the capture of the cranes; Hanjo Böhme for his ongoing assistance and support; Mathias Stein and Tamas Székely, who joined us in the field and provided many stimulating discussions; and John Mendelsohn for his ongoing assistance with the satellite tracking data.

BUILD-UP TO THE BREEDING SEASON

Blue Crane Report: December 2010

Eckart Demasius, email e-b.de@iway.na

My wife and I arrived at Namutoni for our annual wellness retreat in Etosha on 26 December. She always does the paper work in the office so that she can also study the big book of sightings recorded.

She was queuing behind an English speaking gentleman in a wheelchair who tried to pass on some information on ringed Blue Cranes to the lady behind the counter, but the lady was not in the least interested. So much for the staff of Namibia Wildlife Resorts!!

My wife gratefully accepted the information offered; it was the recorded sighting of two Blue Cranes at Charitsaub. Both cranes were ringed and the following information was obtained from the gentleman: Green ring on left leg, inscription on ring: NHF. Green ring on right leg (of second crane), inscription on ring: HHN. Furthermore he also reported having seen two Blue Cranes at Salvadora.

We commenced our tour through Etosha with a visit to Fischer's Pan. It was full of water and plenty of birds were present. One Blue Crane was seen at a pool of water at the Pan's Edge road turn off. We could not detect any ring on the bird.

Last year we saw a pair of Blue Cranes on the plains around Chudop and our expectations were met once again. At the culvert some 200 metres beyond the turn off to Chudop on the main road to Halali we met the next pair directly next to the road. Neither crane was ringed.

Our destination was Halali and at Springbokfontein we recorded the next pair of Blue Cranes: both birds were unringed.

We made good progress to Halali and so we decided to move on to check on the reported cranes at Salvadora. We found the two cranes at the waterhole, one was incubating and the second was searching for food around waterhole. The latter bird was also ringed. This was not reported by the English gentleman.

We then drove on to Charitsaub were the ringed pair had been reported and indeed both ringed cranes were present at the shallow waterhole.

So, on the first day of our Etosha visit we recorded nine Blue Cranes, three of which were ringed birds!!!

The next day we spent around Halali and the cranes reported the previous day were all seen again.

The incubating crane at Salvadora.

Pair of cranes at Charitsaub.

On 28 December we visited the area around Namutoni but on our way to Namutoni we did not see the cranes at Springbokfontein.

The Chudop cranes were feeding on the plains towards the water hole.

On our way to Twee Palms we saw three more Blue Cranes, possibly parents with a juvenile bird. This was difficult to distinguish as they were not as close to the car as the other birds. None of the three birds was ringed.

On our way back to Halali we met up with the Chudop pair at the culvert again. They crossed the road in front of us…

…. and went on feeding quite unperturbed next to the road. It was good to see how many cars stopped and watched the cranes, as if they were lions!!!

On 29 December we moved on to Okaukuejo and we experienced some incredible rains on the way to our new destination. Shortly before Rietfontein we saw a new Blue Crane, also unringed.

We popped in at Salvadora, the two cranes were there, both taking a rest from the incubation duties and then the rain caught up with us again.

The Charitsaub cranes were not at their water hole when we passed there.

No further cranes were seen by us over the next two days around Okaukuejo.

Note : All photographs in this report by Eckart Demasius

Postscript by Richard Niddrie

The by now abundant rains and cool weather certainly aided the sighting of cranes. New Year's eve produced the perfect ending to 2010 when Christiane Maluche and Richard Niddrie sighted the Chudop pair in the morning and, in the late afternoon, a flock of 10 Blue Cranes 10 km west of Aroe. We could not see whether any of the cranes were ringed. This was the first time that I had seen so many cranes together. It was a truly awesome sight with the heavy clouds and Fisher's Pan in the background providing the perfect setting. Only after absorbing this spectacle could the photographing commence.

(*Photo Richard Niddrie*)

(*Photo Richard Niddrie*)

On 2 January the same Chudop cranes were sighted and in the evening the Salavadora pair. On the way back to Halali a lone Blue Crane was seen patrolling the main road 10 km east from Rietfontein.

A minimum of 19 possibly 20 confirmed sightings of Blue Cranes in the space of eight days must surely give hope for the future of Etosha's Blue Crane population.

Other crane sightings

Wilferd Versfeld (WV email wversfeld@met.na)
16/12/10: The cranes have started nesting, the two cranes at Two Palms are on two eggs to the west of the parking area. So we can use this as an indication to organize our timing for the aerial survey, and wetland count for next year. The pair (NHD) at Halali seepage was also seen doing the mating dance, so should be nesting shortly? Other sightings were two (NHM) at Salvadora at the water (radio bird 151.190) and two (both with rings) on Charitsaub plains near the main road. The two at Chudop triangle were not found so could be on a nest somewhere and the Springbokfontein three were not found.

WV 23/12/10

The two cranes at Two Palms are still on the nest, four in Chudop triangle (no rings), two at the Namutoni causeway (one ringed NBZ - on 10/4/08 east of Fischer's Pan causeway), two at Springbokfontein, two at Halali seepage, none at the next seepage on Halali plains and Polly (NHM, radio bird 151.191 ringed on 23/4/09) is sitting on a nest at Salvodara waterhole, on the edge of the water in the sedges. If this bird is breeding it is amazing as it is only two years old.

Beate Hillmann (email: hillbeat@web.de), via Holger Kolberg

End of last year I was with a tour group in Etosha and on **28/12/10** and saw altogether three Blue Cranes: 14h50 at Salvadora one crane, no tag seen; 15h00 two cranes just behind Charistaub towards Sueda, each with a green leg tag (right leg NHH; left leg NHE). And Fisher's Pan was pink with flamingos.

Richard Niddrie (email richard.niddrie@mtcmobile.com.na), via Holger Kolberg
13/1/11: My year end trip to Etosha produced some good Blue Crane sightings, namely
- 31/12/10 & 2/1/11: two on the Chudop plains
- 31/12/10: ten 8 km west from Aroe along Fisher's Pan - first time I have seen so many together
- 2 & 3/1/11: two at Salvadora with one appearing to be on nest at the water hole
- 2/1/11: one patrolling the main road between Rietfontein and the Halali turnoff

WV 21/1/11

The Salvadora pair have two chicks that hatched last week. The chicks are very small and they stayed close to the water hole. So good luck on Polly 1, at two years old.

WV 28/1/11

The cranes at Chudop triangle seem to have lost their eggs, observed the two birds alone and the nest was empty with digging activity in it. Good news is that the first satellite transmitter bird ("James") is at Chudop triangle area in a group of five birds, you can clearly see the antennae in the photo (below). More good news is that the pair at Halali seepage have two chicks, ring NHD who is five years old. The Springbokfontein pair are still on the nest. Saw one crane on the northern side of Fischer's Pan.

The first crane fitted with a PTT (GC007 - "James") has unfortunately preened the solar panel into its feathers (*photo Wilferd Versfeld*)

WV 1/2/11

I booked the MET plane to do a nest survey of the pan edge for nesting and radio tracking. I think we can now say that the two of the radio collars are history, the very first collar from 2007 and the third collar from November 2009 (Polly 2). I have radio tracked from the ground and air and these two could not be located. However, we did not see many cranes. I also looked for the flamingos and there were at some of the nest sites on the pan, starting with building nests or sitting on nests. Most looked like Lesser Flamingos, about 15-20 000, in small bands (see p9-10 below).

Blue Crane nesting sites at Etosha, 2011 (top to bottom): Salvadora, Springbokfontein and Chudop (*photos Ann Scott*); bottom: detail of nest and eggs at Chudop (*photo Wilferd Versfeld*)

WV 3/2/11

Some feedback on these elusive cranes. I found another nest with two eggs at Fischer's Pan west of the causeway at Namutoni on 2/1/11. It is not quite on an island yet, but if the rain continues it will become an island. Not sure if two eggs hatched at Twee Palms, they are not at nest site and the pair has not been seen since end of December. The Chudop nest must have been disturbed and the two eggs taken. The pair is still there but no chicks seen on 27/1/11. The Springbokfontein pair are still incubating on the island (number of eggs unknown). Two chicks were seen at the Halali seepage on 27/1/11; oneof the adults was ringed in April 2006 making it five years old, last year it hatched one chick which disappeared. The Salvadora radio bird (Polly 1, ringed as a chick in March 2009) produced two chicks on 20/1/11. So a very good year for nesting, out of the six nests we so far have two pairs with four chicks and another two pairs still incubating. Can we then say that there is no shortage of breeding sites, or is it climatic conditions determining breeding, or something else? If some of these chicks survive we can then ring and put on telemetrys as they will be about 10 weeks old. We just need runners ...

WV 18/2/11

Some of the the cranes are doing well and not so well. The nesting pair at Namutoni causeway have abandoned the nest which was disturbed, with many animal footprints and the water level did not rise as the peninsula did not make an island. The two birds are still in the area. Our rains have not been that great the last few weeks. The two at Chudop are still there. Found a pair with two tiny chicks 6 km west of Aroe, one bird is ringed (NBW, ringed at Salvadora in 2008). The egg(s) at Springbokfontein have hatched? as the pair is in the grassy areas to the pan side but it is too far to see if they have chicks; however the way they were staying in one place in the grass and feeding indicates that they could have young. There is a fair bit of water in that area. Could not find the pair at Halali seepage, but Halali staff have seen them and a tourist reported them this week. The Salvadora pair are doing well and the chicks are nice and big and moving about the area from Salvadora to the Y junction. See photo of "James" with his PTT well groomed in.

Robert Thomson (email rob@stripydonkey.com)
23/2/11: Gail Potgieter spotted a couple more Blue Cranes in Etosha. They were just off the road that runs NW from Namutoni; about mid-way between Namutoni and the tur-off for Aroe at 18h40.

Peter Cunningham (email: pckkwrc@yahoo.co.uk)

The following recent observations by my brother Andrew:
19/3/11: two pairs at pan between Namutomi and Chudop; and one pair with two chicks at Fisher's Pan near turnoff to Namutoni – no rings.

Ann & Mike Scott 12/4/11

We found all of the cranes, except the PTT/Polly 1 group (also no signal): the Aroe group close to Twee Palms; pair still west of Doringdraai; pair at Springbokfontein (no chick seen); four at Halali seep (received radio signal); and the four at Salvadora.

WV 20/4/11

Went to try and locate our cranes yesterday. Not many are around and only saw the Seepage two plus two chicks and the Namutoni pair (one with ring). I picked up the signal of Polly 1 in the morning in the area of the PTT but I think they are on the edge of the pan away from us. The good news is that both radio transmitters are working well and I could locate the birds.

STUDENT PROJECT TO INVESTIGATE POSSIBLE HUMAN IMPACTS ON BLUE CRANES OUTSIDE THE ETOSHA NATIONAL PARK

We are pleased to report that, as a direct follow-up to the Blue Crane Action Plan (November 2010, see issue no. 47), a third-year Polytechnic student, Teofelus Ntinda has been appointed to initiate a vitally important project to investigate possible human impacts on Blue Cranes outside the Park. This study has been generously funded by the Namibian Environment & Wildlife Society (NEWS). Apart from his Polytechnic supervisors, the student will also work closely with the MET Wildlife Protection Services (WPS) and the Namibia Crane Working Group.

Background

As a result of an apparent 50% decline in numbers of Blue Cranes in Etosha National Park and surrounds from 60 in 2006 to only 31 in August 2010, the Namibia Crane Working Group held an assessment and planning workshop on 15 November 2010. The workshop produced a Blue Crane Action Plan (see issue no. 47) which identified four main actions:

- Collate, map, analyse and write up existing data
- Determine where the cranes are and how they use the landscape
- Investigate possible habitat changes and causes
- Investigate possible human impacts on Blue Cranes outside the Etosha National Park

The present project addresses the fourth action above.

Project title and content

Project title:

An investigation into possible human impacts on Blue Cranes outside the Etosha National Park.

Project content:

1. Conduct a survey and document human activity in the Lake Oponono area: *investigate cattle herding, fishing, settlements, power lines, other developments, e.g. forestry, military, water provision.*

The Lake Oponono area is being used increasingly for cattle herding and other activities; this is also the area that the Blue Cranes visit during the dry months (*photos Ann Scott*)

2. Promote outreach, environmental education & awareness
   - *Conduct a survey of attitudes towards the conservation of cranes (and other birds/wildlife and wetland habitats) amongst stakeholders (including old herders, fishermen, elders/leaders);*
   - *Based on the results, design and start implementing a crane awareness programme for the Oponono region in order to promote conservation and dissuade hunting/disturbance of cranes;*
   - *Investigate ways of ensuring the sustainability of this initiative (e.g. by building upon existing awareness initiatives in the area and working closely with MET Wildlife Protection Services [WPS] staff).*
3. Investigate the possibility that cranes are being used for muthi in Namibia
   - *Conduct a survey of traditional healers/other cultural uses of cranes in Namibia*
4. Investigate potential crane mortality on power lines in and around Etosha
5. Make strong recommendations for future actions, including a sustainable awareness programme.

We wish Teofelus every success, and look forward to hearing about progress in the next issue of this newsletter!

DO CRANES HAVE PERSONALITIES?

Consistent avoidance of human disturbance over large geographic distances by a migratory bird

Zsolt Végvári [*], Zoltán Barta, Pekka Mustakallio, Tamás Székely ([*] *Email: vegvari@hnp.hu*)

Tamas Székely [email: bssts@bath.ac.uk]
In this paper we show that an individual European Crane preserves its behaviour (shy or relaxed about disturbance) both in its natal site as well as on its migratory stopover site. So cranes - like people - have personalities.

Human disturbance has a large effect on the distribution, ecology and behaviour of animals, for instance, the spatial distribution of human settlements and density of roads influence avian habitat selection. We hypothesised that the cranes' behavioural responses to human disturbance are consistent between their natal site and their migratory stop-over site that are separated by over 1000 km.

The paper (summarized below) will be published in Biological Letters in spring 2011.

Summary:

Recent works on animal personalities have demonstrated that individuals may show consistent behaviour across situations and contexts. These studies were often carried out in one location and/or during short time intervals. Many animals, however, migrate and spend their life in several geographically distinct locations, and they may either adopt specific behaviours to the local environment or keep consistent behaviours over ecologically distinct locations. Long-distance migratory species offer excellent opportunities to test whether the animals maintain their personalities over large geographic scale, although the practical difficulties associated with these studies have hampered such tests. Here we demonstrate for the first time consistency in disturbance-tolerance behaviour in a long-distance migratory bird, using the common crane *Grus grus* as an ecological model species. Cranes that hatched in undisturbed habitats in Finland choose undisturbed migratory stop-over sites in Hungary, 1300 - 2000 km away from their breeding ground. This is remarkable, because these sites are not only separated by large distances, they also differ ecologically: the breeding sites are wooded bogs and sub-Arctic tundra, whereas the migratory stop-over sites are temperate zone alkaline grasslands. The significance of our study goes beyond evolutionary biology and behavioural ecology: local effects on behaviour may carry over large distances, and this hitherto hidden implication of habitat selection needs to be incorporated into conservation planning.

Key words: carry-over; human disturbance; personality; common crane; wetland conservation

ARE BLUE CRANES MOVING UP NORTH-WESTWARDS FROM SOUTH AFRICA?

Rob Simmons, email Rob.Simmons@ust.ac.za

Apparent north-west range extension of Blue Cranes in South Africa

Simmons R 2011. Ornithological Observations 2:3-x URL: http://oo.adu.org.za/content.php?id=14

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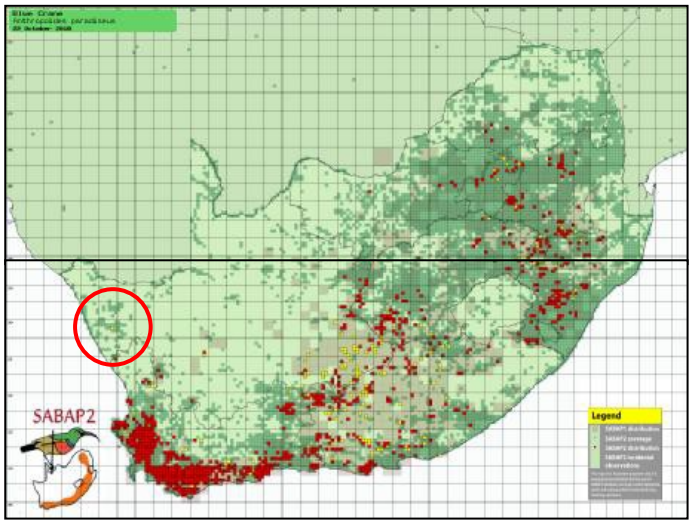
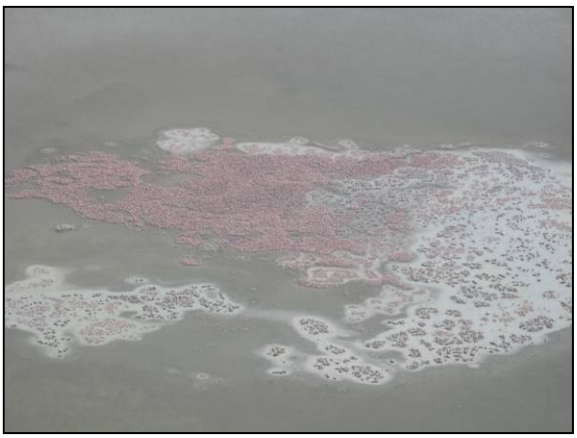


Recent sightings of Blue Cranes recorded in South Africa up to October 2010 in the SABAP2 atlas scheme (2007- October 2010) suggest a recent extension north-westwards (see circled area). Small red spots indicate recent verified crane records, yellow dots ad-hoc sightings, small dull green spots the SABAP2 coverage and larger pale (quarter-degree) squares, positive records for Blue Cranes from theSABAP1 scheme (1987–1992).

Ed: It is not impossible that some of these birds could eventually end up in Namibia – moving up to agricultural areas such as Stampriet – where a Blue Crane was recorded in a lucerne field by a budding young birder, Warwick Tarboton on 6 July 1960.

FLAMINGO BREEDING ON ETOSHA PAN, 2011

Wilferd Versfeld, email wversfeld@met.na



Massed flamingos breeding on Etosha Pan, 5 April 2011 (*photo Wilferd Versfeld*)

The flamingos move towards the Pan's edge in the Halali area on 19 April 2011 (*photo Wilferd Versfeld*)

29/4/11: Some good news - the Lesser Flamingos are breeding on the Etosha Pan. Earlier in the month we flew over the pan and saw them breeding at two main locations with some isolated nests scattered around the one site (see photo of the biggest group).

We estimate about 30 000 flamingos on the pan, not all at the nesting sites. About 20-30 000 were at the two nesting sites.

The main flood water from Southern Angola started entering the pan toward the end of March, and by then the chicks had hatched, although still small. This was just in time, as in the past few years when the main flood reached the pan, all the nests were under water. This water on the pan will last until late in the year.

NAMIBIA FLAMINGO AND POWER LINE PROJECT

A ground-breaking project has recently been launched in order to promote the conservation of flamingos by mitigating collisions with power lines. The main outputs are (1) the determination of flamingo flightpaths in Namibia; and (2) the mitigation of flamingo collisions in areas where known flight paths intersect with power line routes. Generous funding of N$150 000 has been granted by the Nedbank Go Green Fund, cofinanced by the NamPower/NNF Strategic Partnership.

Project objectives

1. Determine flamingo flight paths in Namibia

- Collaborate with an existing research initiative in Botswana and fit five telemetry devices to Greater Flamingos and Lesser Flamingos; study sites to include Etosha and possibly Botswana.
- Track the movements of the flamingos by telemetry, and map data (including flying heights, habitats used when flying, impacts of wind) to determine/ confirm flight paths in Namibia on a seasonal and annual basis; compare the habitat requirements and movements of Greater Flamingos and Lesser Flamingos.
- Initiate a project at Polytechnic student level to analyse existing bird count data in order to establish seasonal and annual abundance in different localities in Namibia (i.e. on the coast, Etosha and Bushmanland), to support results of satellite telemetry; correlate the results with annual rainfall as a means of predicting movements.

2. Mitigate flamingo collisions in areas where known flight paths intersect with power lines

- Once flight paths have been determined, overlay these corridors with both NamPower and Regional Electricity Distribution (RED) lines to determine key areas of potential impacts.
- Monitor potential impact areas during seasonal flamingo migration periods, to investigate rates and severity of impacts.
- Assess existing mitigation measures and apply relevant methods on an experimental basis; also try out innovative methods.
- Monitor the success of mitigation measures, and adapt as necessary.

3. Publicize results on an ongoing basis in order to promote awareness and raise incident reporting levels, and to promote proactive mitigation

CHESTNUT-BANDED PLOVER RESEARCH IN NAMIBIA

Tamás Székely, University of Bath, T.Szekely@bath.ac.uk

12/4/11: This is the first time I am in Namibia, and I very much hope, not the last. Why somebody would choose to study a small insignificant-looking bird, the chestnut-banded plover *Charadrius pallidus*, in a country that boast so many charismatic mammals and birds?

We only know a modest amount about chestnut-banded plover that is currently classified "Near Threatened" by IUCN. We know for instance that they breed along highly saline lakes, and they congregate in massive roosts during the non-breeding season. Males are pretty and females are somehow duller, and there were some research on their

Tamás collects the all-important data from a Chestnut-banded Plover, assisted by Wilferd Versfeld (*photos Mathias Stein*)

nesting ecology and behaviour. The main reason why I joined the Blue Crane Team in Etosha National Park between 3 and 8 April 2011 was to search for plovers, and collect blood samples for DNA analyses. Taking blood samples is entirely harmless for the birds if properly done, and using these samples molecular ecologists can decipher vast amount of information. For instance, using DNA it is possible to sex the birds (adults and chicks), quantify how diverse genetically a breeding population is, and work out how much gene flow exists between different populations.

The main objective of my fieldwork in Etosha (and then on the coastal areas around Swakopmund) was to collect DNA samples to infer the phylogenetic position of Chestnut-banded Plover in regards to other small plovers. Chestnut-banded Plovers could have descended from the ancestor of extant African plovers (eg Kittlitz's Plover, White-fronted Plover, Three-banded plover), or they might have affinities to the Double- or Triple-banded *Charadrius* plovers in South America and New Zealand. The DNA sequences will also tell us whether the Chestnut-banded Plovers in southwestern Africa (*C. pallidus pallidus*, Namibia, S Africa and Botswana) are genetically separated from the West African breeders (*C. pallidus venustus*, Kenya, Tanzania). The two populations exhibit different body sizes, and have fully separated geographical distributions, although the genetic data may (or may not) confirm their distinctness at subspecies level. Finally, if the two subspecies has indeed separated genetically, we can date their split.

This joint project with Wilfred Versfeld, Holger Kolberg and Mark Boorman will use information from several genes and latest advances in phylogenetic reconstruction to draw robust conclusions about the affinities of the chestnut-banded plover. By assessing the phylogenetic status of chestnut-banded plover between populations and their affinities to other plover species, will be important for conservation as well. Watch this space!