

**NOTES & NEWS  
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**COMPILED BY  
LYS MUIRHEAD  
&  
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**UNUSUAL MORTALITY OF  
SANDPIPERS**

An international expedition studying the northward migration of Red Knots *Calidris canutus rufa* and other shorebirds was based at Lagoa do Peixe, state of Rio Grande do Sul, Brazil from 2-8 April 1997. During the latter three days, a search along over 35 km of Atlantic Ocean beach by the team found over 34 Red Knot, 3 Sanderling *Calidris alba* and 11 White-rumped Sandpipers *Calidris fuscicollis* either dead or lame, lethargic and not responding to any form of handling. The birds were not emaciated (in fact their masses and body moult status were exactly the same as birds caught previously and later that day by cannon netting), and the only other outward sign of illness was some green faeces sticking to their cloacal feathers, an unusual type of faeces for Red Knots. Juveniles as well as migrating adults coming into breeding plumage were affected. The illness appeared rather acute, since two of the 300+ knots released in glorious health the afternoon of 7 April were found in the same lethargic disposition at the edge of the lagoon in the morning of 8 April, together with six unbanded birds in a similar condition. Note that the weather in Rio Grande do Sul was foul on 5 April, with a storm from the south that drove the Atlantic waters high, and filled an almost dried up Lagoa do Peixe to the rim! Almost the only feeding of Red Knots that we observed took place on the beach, although the White-rumped Sandpipers fed extensively in the

lagoon at all times. The cause of death is currently not known though post-mortems of over 30 carcasses collected will it's hoped identify the cause of death. Any comments regarding the probable cause of death would be welcomed by Theunis Piersma, NIOZ, P.O.Box 59, 1790 AB Den Burg, Texel, The Netherlands. e-mail: theunis@nioz.nl

**EELS, CRABS AND SHOREBIRDS**

The provision of bait for a fishery threatens North America's second largest concentration of migratory shorebirds located at Delaware Bay, New Jersey, USA. Since 1986 a significant decline as occurred in the numbers of Sanderlings *Calidris alba* and Semipalmated Sandpipers *Calidris pusilla* at Delaware Bay, and in 1996 the count of Red Knots was the lowest ever. These shorebirds are foraging for Horseshoe Crab eggs and invertebrates enabling rapid refuelling prior to continuation of their migration to arctic breeding grounds. Horseshoe Crabs deposit eggs in masses about 15cm below the surface of Delaware Bay beaches. Females depositing eggs may dig up a previous female's nest if the density of nests is high. Without a high density of Horseshoe Crabs the eggs are not available to the shorebirds. Horseshoe Crabs have been heavily harvested from Delaware Bay to be used as bait for a recently developed fishery catching American Eel. Current data indicate the breeding population of Horseshoe Crabs along Delaware Bay beaches to be about a third of what it was in 1990.

Joan Walsh, Director of Research at Cape May Bird Observatory, in summarising the current findings of various researchers [*Waders-I*: 266], concludes suggesting the evidence supports the following grave scenario. Horseshoe Crabs are being depleted to the point where the density of crabs is not great enough to provide food for shorebirds. This is having a sub-lethal effect on most birds while they are at Delaware Bay, but may lead to a more significant problem when the birds arrive at their breeding grounds underweight. The impact of this will take years to detect, and the current

state of affairs calls for prudent action. The harvesting of Horseshoe Crabs, the most significant and controllable source of mortality for the horseshoe crabs, must be stopped until a sustainable plan is developed which supports the crabs, the birds and the commercial fishery.

**EL NINO IMPACT WADERS?**

The U.S. National Oceanographic and Atmospheric Administration's Climate Prediction Centre is suggesting that the upcoming El Nino/Southern Oscillation (ENSO) event may be a big one, approaching the 1982-83 event in scope (*Scripps News* 18 VI 97). David Duffy (*Seabird* listserver: 564) alerted researchers to the possibility of an "abnormal" year occurring as a major ENSO can affect rainfall, currents, temperature and winds across most continents and oceans. Following the 1982-3 event, nest densities of both Grey Phalaropes *Phalaropus fulicaria* and Red-necked Phalaropes *P. lobatus* dropped rather unexpectedly on study plots in northern Alaska (*Waders-I*: 270). Declan Troy's interpretation of his observations is that the loss of upwelling where these birds (presumably) winter off western South America, could be detrimental to their foraging success and hence condition or even survival. To what extent do such ENSO events affect "non-pelagic" waders?

A description of some typical effects of an ENSO event can be found at <[http://nic.fb4.noaa.gov:80/products/analysis\\_monitoring/impacts/ensco.html](http://nic.fb4.noaa.gov:80/products/analysis_monitoring/impacts/ensco.html)>. David Duffy further points any interested biologists to *Global ecological consequences of the 1982-3 El Nino-Southern oscillation* by Glynn P.W. 1990 (published by Elsevier, New York).

**SATELLITE TRACKING EASTERN  
CURLEW**

The e-mail listserver *Waders-I*, brings news from Peter Driscoll of a project using lightweight satellite transmitters to study the northward migration of Eastern Curlews *Numenius*

*madagascariensis* from Moreton Bay, Queensland (*Waders-I*: 237). It is the first phase of a broader study into the ecology and movements of the species. The work is being undertaken by the Wild Bird Society of Japan and the Queensland Wader Study Group with support from the Queensland Department of Environment. The project is funded by the Governments of Australia and Japan, and assisted by the Japanese Telecommunications Company NTT. American and Japanese PTTs are being used.

Cyclone Justin in the Coral Sea (largest for 15 years), influenced the progress of six birds that left in early to mid March from Moreton Bay. All of these birds made it as far as south eastern Papua New Guinea but no further, three returned to Queensland and one remained in Papua New Guinea. One bird is known to have perished and another almost certainly has, having been located in the eye of the cyclone for several days until contact was lost.

The other six birds satellite tagged left over the period up until the first week in April. They followed a more westerly route, out to sea from the Queensland coast and towards the Central Cordilla of New Guinea, presumably because they were not under the same influence of cyclonic north and north easterly winds. One bird made a conservative return flight of under 700 km to the Great Sandy Strait (another important coastal wetland north of Moreton Bay) but the other five have made substantial flights. One flew to the north of Papua New Guinea but returned to Moreton Bay within a week. Another flew as far as the Caroline Islands (7 degrees north), then returned to Moreton Bay via New Ireland and the south east coast of Papua New Guinea over a period of more than a month, with a final direct flight from PNG to south eastern Queensland of 1800 km.

Of the remaining three birds, two made it to Russia, one ensconced within the breeding range in the Arum Region (50 degrees north, 130 degrees east). The signal from the second of these two birds is weak but it is located somewhere further to the

east and is possibly moving around. The other bird to have made it well into the northern hemisphere recorded a dramatic 6500+ km non stop flight from Moreton Bay but contact was lost somewhere to the east of Taiwan, the transmitter hopefully falling off (as designed to do so in due course).

By about mid May, all long distance flights had ceased with combined flight distances for all twelve birds of over 60,000 km. Five birds had returned to their over wintering quarters, Moreton Bay, two were well within the breeding range, one was in North Queensland, another in Papua New Guinea, two have perished and the other, hopefully, jettisoned the back pack rather than ditched in the sea.

Further details on the project can be viewed on an NTT WEB page <http://www.wnn.or.jp/wnn-n/migrant/english/index.html>

#### TWO-FLAG SYSTEM STARTS IN JAPAN

Some two thousand waders in Japan have been leg flagged since 1992. In consultation with the Wetland International - Oceania and the Australian Bird and Bat Banding Scheme, the Japanese Bird Migration Research Center has recently instigated a two-flag system of marking. The system is in accordance with the draft Protocol for Colour Flagging of Migratory Shorebirds in the East Asian - Australasian Flyway, February 1997. Sites within the central Japan region will use a blue and white flag combination where as those in southern Japan use a blue and orange flag combination. The new flagging programme is aimed at identifying the relationship and importance of the Japanese sites within the East-Asia Australasia Migratory Shorebird Flyway Network. Such information will help in presenting the argument for protecting those threatened wetlands of importance to migratory shorebirds.

In addition to the flagging programme in Japan, waders marked at Yatsu will be identified by a metal ring over

mauve ring on the right tibia and mauve ring on the left tibia.

Please forward any sightings of the above Japanese colour marked waders to Yoshimitsu Shigeta, Bird Migration Research Center, Yamashina Institute for Ornithology, 115 Konoyama, Abiko-shi, Chiba 270-11, JAPAN. Fax: +81-471-82-4342 E-mail: [bxk07401@niftyserve.or.jp](mailto:bxk07401@niftyserve.or.jp)

#### THE STILT

The latest bulletin of the East Asian - Australasian Flyway, *Stilt* 30, has recently been published by the Australasian Wader Studies Group (AWSG). Nine research papers are included, four being the results of wader census work at various localities in Australia. A fifth census paper details wader numbers on Chongming Dao, Yangtze Estuary, China, during early 1996 northward migration and the conservation implications. At the northern end of the Flyway comes a paper on the Eastern Curlew, *Numenius madagascariensis*, in Kamchatka, Russia. From the east, a paper details the population, status, moult and measurements of Great Knot, *Calidris tenuirostris*, wintering in south India. The subjects of the eight short communications are diverse, such as belly-soaking and egg-cooling behaviour in a Red-capped Plover, *Charadrius ruficapillus* and disturbance of Common Sandpipers, *Actitis hypoleucos*, by motor-boats.

#### MIGRANTS STAGING IN CHINA

Following on from their 1996 northward migration activities in China (see *Stilt* 30), the Australasian Wader Studies Group has been involved this year with additional training/surveying/wader counting activities at Chongming Dao, in the Yangtze River estuary, and in the Yellow River delta. These have been conducted on behalf of Wetlands International - Oceania with funding from Environment Australia.

At Chongming Dao, a total of 17,107 waders of 29 species was counted at

the prime wader sites over a two day period (9/10 April). Data indicates a very high turnover rate, implying that more than 200,000 shorebirds could be using the site during northward migration. This figure can be expected to rise substantially when southward migration and non-breeding populations are taken into account. The site is now confirmed as internationally significant for at least six species - Eastern Curlew, Spotted Redshank, Nordmann's Greenshank, Great Knot, Dunlin and Spoon-billed Sandpiper. It is good news that the Shanghai Provincial Government plans to declare the prime wader habitat as a Nature Reserve before the end of this year.

The counts in late April/early May 1997 were the most comprehensive that have ever been conducted in the Yellow River Delta. The total shoreline of the Huang He Nature Reserve (140 km) and a number of inland wetlands were counted over a 14 day period (18 April/1 May). A total of 130,122 waders of 38 species was counted. Although significant in itself, this total is considered to be a considerable underestimate of the numbers that were present. The Huang He delta is the first major Little Curlew staging site to be identified. The delta was also found to be internationally significant for 15 shorebird species, i.e. Black-tailed Godwit, Bar-tailed Godwit, Little Curlew, Whimbrel, Eurasian Curlew, Eastern Curlew, Spotted Redshank, Marsh Sandpiper, Common Greenshank, Nordmann's Greenshank, Great Knot, Dunlin, Eurasian Oystercatcher, Grey Plover and Kentish Plover. Additional data would undoubtedly lead to further species becoming internationally significant.

Mark Barter has provided a brief account of the results on the e-mail listserver *Waders-I* (*Waders-I*: 253). Reports on the habitat surveys, wader counts and resource utilisation studies are being prepared.

## CANNON WEAR

For some time now the Wash Wader Ringing Group (WWRG) has been

concerned that the insides of cannons could be wearing thin and, sooner or later, one would rupture on firing. This concern was due to the appearance of the muzzle where the end thickness of the metal looks thinner than on a new cannon, years of rust on the inside of barrel, and projectiles going down some barrels more easily than others.

There is naturally some reluctance to cutting one's cannons in half but we recently decided it had to be done. All of WWRG's standard cannons are at least twenty years old with no way of knowing how many times they have been fired. Suffice it to say that all will have been fired many times, often with lots of sand and grit down them. The cannon was chosen at random, being one that was temporarily out of use awaiting repair.

An electric jig saw was used to cut down the length of the barrel on both sides as far as the top of the cartridge chamber. One side was then cut off, leaving a cross-section of the barrel. The results were reassuring. At the top, approximately 1.5cm was worn thinner than the rest of the barrel; this is presumably due to the projectile starting to slew round. The rest of the barrel appeared just as thick as when new. Even the chamber where the explosion happens was not noticeably thinner although there were a few pock marks. The rust on the inside of the barrel was cleaned off with a wire brush and could easily be cleaned to bare metal.

Although based on a sample of one (other groups are welcome to increase the sample size!) this does indicate that concerns about cannons rupturing through intensive use are unfounded. The only recommendation that needs to be made is to keep the inside of barrels well greased / oiled to prevent an excessive build up of rust. This is a prudent move to reduce the loss of 'O' rings from projectiles. Recent experience with four brand new cannons used alongside older cannons is that 'O' rings are rarely lost when projectiles are fired from new well greased barrels and frequently lost from older cannons with rust. WWRG is investigating making a tool to remove rust more

effectively and subsequently to grease the whole length of a cannon.

The writer has no personal experience of cannons rupturing on firing but there are authoritative reports of this happening. In all cases the problem seems to have arisen during tests of different gunpowders when normal supplies have not been available. The effect on the cannon has been similar in all cases too. The cannon has split open at the chamber and then, to a greater or lesser extent, peeled like a banana. Provided cannons are made of mild steel, and therefore very ductile, it is unlikely that a cannon rupturing will produce "shrapnel" to fly away dangerously.

I would like to thank Dave Coker, Nigel Clark, and Clive Minton for comments on an earlier draft of this note.

Technical specification of cannon tube:

Seamless Bright Drawn Steel  
30" (76.2 cm) long  
2.25" (5.715 cm) external diameter  
10 gauge material (3.251mm; 0.128")

*Phil Ireland*

## **NOARD-FRYSLAN BUTENDYKS: a new nature reserve in the Dutch Wadden Sea!**

June 1974 brought a bad omen - "Plan D" was born. The Plan involved the reclamation of 2,800 ha of summer polders, saltmarsh and tidal flats along the North-Frisian mainland coast of the Dutch Wadden Sea for agriculture by constructing a new dyke over the tidal flats, and resulted in along and ugly struggle between nature conservation and agriculture. The Wader Working Group of the Fryske Keriening foar Fjildbiology were able to show the politicians and officials that the area was of outstanding importance for many bird species: Barnacle Goose, Brent Goose, Shelduck, Wigeon,

Oystercatcher, Avocet, Grey Plover, Dunlin, Bar-tailed Godwit, Curlew, Redshank and Spotted Redshank. The co-operating organisations for nature conservation (especially regional committee "A" and the Dutch Society for the Preservation of the Wadden Sea) used these arguments continuously against the proposals of the agricultural lobby. Agriculturalists claimed that the area was exceptionally good for growing seed potatoes. The public debate continued for 14 years and culminated in December 1976 when: 1) letters of objection were sent by the general public to the Minister (the highest number ever sent in our country!) and 2) the Wader Working Group of the Fryske Keriening foar Fjildbiology was no longer allowed to enter the area to count waterfowl. Of course, the counts continued without permission to the anger of wardens and local farmers.

The debate more or less finished in 1988, when the Dutch government decided not to reclaim the area by constructing new dykes but instead to reinforce the old ones along the southern border. This was partly due to a government decision some years earlier in which most of the saltmarsh and tidal flats along the Frisian coast were brought under the legislation of the Nature Conservation Act. However, this decision was also influenced by a decreasing demand for seed potatoes.

After the government's decision in 1988, a new period started in which the richness of the area was admitted but most of the land was still privately owned. It resulted in a somewhat hybrid situation; the grassland and saltmarsh were only suitable for marginal agriculture but they were too intensively farmed to be regarded as a

nature reserve. It was neither fish nor flesh. Then in 1993, the provincial nature conservation society "It Fryske Gea" (in close dialogue with the Province of Friesland and the Dutch Government) applied to the EC for funding to allow them to buy the privately owned land. This funding proposal was made possible after reaching an agreement with the agricultural organisations in 1993 concerning the fate of the summer polders and saltmarsh. The EC Life Fund appeared to be willing to spend 9 million guilders and another 9 million was obtained from the government, province and general public.

Negotiations with the farmers started in early 1995 without much success, only 200 of the 1,700 ha being obtained. The scars of the public debate from the seventies and early eighties were still too fresh in the region. Then, preliminary arrangements with the largest land owner meant the possibility of a further 35%. However, if no agreement was reached before 1 January 1997, it would all have to be cancelled and the money returned to the funding institutions. In the meantime, the agricultural organisations and some conservative political parties became more and more active, pressing for the 1993 agreement to be cancelled because they argued, farmers were really very good at creative conservation and therefore there was no need to change the ownership of the land. However, they did not provide any details of the habitat creation they planned to carry out. Luckily, agreement concerning the ownership of the Noardleech area was reached by mid December 1996. This area is the heart of "Noard-Fryslan Butendyks" and consists of 712 ha of grassland, saltmarsh and tidal flats. Now the balance of

ownership in the area has changed considerably and the fate of the North Frisian coast has become clear. In the future it will cover 2,350 ha at high tide and at least 3,300 at low tide, and it will become one of the largest nature reserves in the Dutch Wadden Sea. It is comparable to the "Boschplaat" on Terschelling, the largest and most famous nature reserve in the Dutch Wadden Sea, which covers over 2,950 ha at high tide and 4,400 ha at low tide. The luxurious position has now been reached where the "how" has replaced the "why" for managing this area. It Fryske Gea are to be congratulated on reaching this agreement.

*Meinte Engelmoer, Wader Working Group of the Fryske Feriening foar Fjildbiology*

#### **ANY EUROPEAN NOTES & NEWS?**

**There has been a lack of news away from the East Asian/Australasian Flyway with which to compile this edition of *Notes & News*. This feature largely relies upon YOU the members feeding the Compilers with your notes and news. Please send any noteworthy news, requests or relevant Press Releases from your organisation to:**

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Thank you!

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And apologies, as ever, to anyone inadvertently omitted!

