

#### Is the Spoon-billed Sandpiper on the fast road to extinction?

Unique to the East Asian-Australasian Flyway, the Spoon-billed Sandpiper Eurynorhynchus pygmeus is a globally threatened (vulnerable) wader species. The size of its population is unknown, and the largest flock ever recorded is 257 birds in the Ganges delta, Bangladesh (Howes & Parish 1989). The only population estimate based on real data was undertaken in 1970s and resulted in 2,000-2,800 breeding pairs, which seems to be an overestimate even for that time. No information is widely known about the species' population trend. In Juneearly August 2000, a survey of coastal areas in southern Chukotka Autonomous Area, NE Siberia, was undertaken by the International Arctic Expedition of the Institute of Ecology and Evolution, Russian Academy of Sciences. The most unexpected finding of the survey was the almost total absence of Spoon-billed Sandpipers in four locations formerly known as breeding sites for this species. It means that the population number has declined roughly by an order of magnitude during the last one or two decades. The summer of 2000 was generally favourable for breeding of various birds in the surveyed area, and the Spoon-billed Sandpiper is known to be a site-faithful species. This means that seasonal conditions in the summer of 2000 were not responsible for the negligible number of Spoon-billed Sandpipers recorded breeding. Such results throw new light on previous indications of a possible species decline which came from two other more northerly breeding locations.

20 There are no obvious reasons for the



decline within the species' breeding range. Therefore causes should be looked for on migration and/or wintering grounds, where migratory waders are known to meet many threats (e.g. see First Draft for the "Asia-Pacific Migratory Waterbird Strategy: 2001 + 2005" at http:// ngo.asiapac.net/wetlands). A bottleneck for the Spoon-billed Sandpiper population is not known. Thus, there is a big chance of losing one more wader species before we find a clue for the situation, if the current level of knowledge and conservation on the species is not urgently changed/improved. Anyway, there are no doubts that the current status of the Spoon-billed Sandpiper is endangered (possibly even critically endangered), not simply vulnerable anymore.

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#### Look out for leg-flagged Spoonbilled Sandpipers

This summer, we managed to catch and ring 8 adult and 6 young Spoonbilled Sandpiper *Eurynorhynchus pygmaeus* in the breeding area in Chukotka (Russia) with a light green flag. Please look out for these birds, especially if you are birding in Hong Kong, Korea or other places where you are likely to encounter Spoonbilled Sandpipers. The actual situation is according to our (E.E. Syroechkovski, P. Tomkovich and others) surveys is very serious and much worse than expected. Many areas, earlier known as breeding sites were completely deserted (see above). More detailed information will be published soon.

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#### New web-based shorebird project

WASA is an international webbased project designed to promote collaborative efforts among different shorebird researchers, as well as volunteer observers, along the Western Atlantic Flyway (Tierra del Fuego, Argentina to the Canadian Arctic). Research and banding efforts on shorebirds occur in several countries and many states/ provinces along the flyway, with researchers often unknowingly studying the same species, flocks, and even individual birds. To avoid overlap and/or redundancy in these efforts, and to promote collaboration between individual projects, WASA provides a central site for researchers to house (and share, if they choose) their data. Aside from bringing researchers together, the web-based format of WASA allows, and encourages, the participation of volunteer observers in the various participating research projects. We are currently working to train and establish a network of observers along the length of the flyway (both

North & South America) who observe flocks of shorebirds as they migrate along the flyway and report flock sizes and band sightings to the WASA web site. The data they enter is compared to the database(s) of participating researchers and a report is returned to the observer, telling them when & where the bird was banded and where else it has been spotted along the flyway.

Although WASA has "gone public" only this year, we have already witnessed the value of such a project. The inaugural research project of WASA is the International Banding Project (IBP). This project has brought together researchers from Canada, the U.S., Brazil, and Argentina who are using metal bands, colored bands and flags, and radio transmitters to track red knots, ruddy turnstones, and sanderlings along the flyway. This project aims to establish the population sizes and primary stopover sites for these species, as well as the recruitment rates and arctic breeding areas of Red Knots. A group from the IBP just completed an expedition to the Canadian Arctic in July which provided insight into the breeding habits of red knots (see the expedition link on the WASA home page address below), and plans are well underway for expeditions in Argentina and Brazil in Sept./October.

To date, many observers from different states/provinces and countries have reported sightings of banded birds to the WASA web site, serving to bolster the validity of the IBP's work. For example, a banded red knot was spotted in Massachusetts several days ago that was originally banded in Argentina two years ago! I encourage anyone with an interest to visit our web site at www.hopscotch.ca/shorebirds/ for a more detailed description of WASA, the IBP, or how to participate as a shorebird researcher/bander or volunteer observer (or just to check out great migration maps for many shorebird species). We are currently working to expand both the numbers of research projects involved in WASA, as well as our network of observers. An on-line tutorial for volunteer observers should be posted on the site in the next few months.

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#### Egg reduction - what causes it?

Can anyone tell me if they have identified or suspected any factor which might cause clutch size reduction in breeding waders/ shorebirds?

In a study population of Eurasian common sandpiper Actitis hypoleucos I have been looking at, about 20% of nests 'lost' one (occasionally two) eggs during incubation. On a few occasions the 'missing' egg was located outside the nest but close by (within 30cm). None of these showed any sign of damage. It seems highly likely that the incubating bird/s removed the egg at least in these cases. But what adaptive reason might there be to do this? Infertility? (even assuming that birds can recognise infertile eggs in a clutch, infertile eggs in some clutches were not 'removed') Nest-parasitism? (neither field observations, i.e. five egg clutches, or molecular data show any evidence of this).

In the other nests where egg/s were lost, are there any predators which might take a single egg and leave the rest of the clutch? It seems unlikely to me but maybe you can enlighten me! (I have flushed a corvid in the act of predating a nest, the bird had taken a single egg out of the nest to eat to about 0.5m away. It didn't return after flushing and the rest of the clutch hatched OK).

I'd be really grateful to hear any ideas which might explain this.

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#### Egg reduction - some answers

There is a variety of reasons why single eggs may disappear from wader clutches. Below I list some of them, based on my experience with Ringed Plover population.

(1) Active egg removal by adult bird following egg damage. Even slight damage to an egg, e.g. a small slightly bleeding puncture, very often causes the adult bird to remove the egg from the nest, once the incubating bird spots the damage during egg shuffling. Single eggs can be damaged in a number of ways. In my study area this is mostly because of grazing cattle. I can imagine that other large or medium-sized mammals could be involved, not to mention humans. It also happens and often goes unnoticed when you catch incubating bird on the nest.

(2) Partial predation. It does happen - although most often predators (particularly mammalian ones) take the whole clutch - harriers and magpies can stop after taking a single egg, particularly if flushed from the nest (exactly as in the case you have described). Foxes often take eggs without breaking them to hoard them underground not far from the nest. Occasionally, the fox may lose an intact egg on the way. I recall one instance when fox depredated a Ringed Plover clutch (whole clutch in this case) and had left one of the eggs (identified by numbers I wrote with permanent marker) some 100 m away, where it surprised

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incubating Skylark and attacked it successfully, as judged from a pile of feathers found nearby an intact plover egg and Skylark's nest. Surely, the fox was unable to catch the bird with its mouth full of eggs! Generally, it's not rare for a fox to take a single egg on one night, with the rest left until next few days. Typically however, the whole clutch is eventually depredated.

Although not my experience, I also can easily imagine the loss of a single egg if the predator is a small mammal, particularly some rodent species. One egg would be enough for it and probably predation is possible only during the parent bird's absence from the nest.

(3) "Non-adaptive" behaviours of incubating adults removing an intact egg. At one of the rare five-egg clutches that could be found in my study-population (c.1% in a sample of c.700) I have witnessed adult(s) actively rolling the intact fifth egg out of the nest cup. The tracks of the bird from the nest to the egg left some 10 m away could be easily identified on the pasture sward after morning dew. I re-located the egg back to the nest twice or three-times in the same day, as they tried it repeatedly. Eventually birds gave up and continued to incubate five eggs. Interestingly enough, this was long after the clutch was completed, ruling out he adaptive explanations connected with ejection of suspected parasitic egg. However, this happened to only one of the fiveegg clutches and I have no evidence for such a behaviour associated with normal four-egg clutches.

To summarize, I feel that the combination of the factors listed above may explain 20% of clutches showing loss of single egg in Common Sandpipers. In the sample of 156 Ringed Plover clutches I have at hand at the moment, there were 17 cases of partial predation (11%).

22 Przemek Chylarecki, Gdansk



### Survey of current Arctic wader long-term research/monitoring

The group CAFF (Conservation of Arctic Flora and Fauna) under the Arctic Environmental Protection Strategy of the Arctic nations, aims to establish a circumpolar "Pan-Arctic Wader Research Network". This network will be made up of scientists and/or scientific programs that are currently involved in the research or monitoring of one or more Arctic wader species, particularly long-term studies which collect data that be used to investigate the effects of climate change on e.g.. population dynamics, distribution, breeding phenology, or any other aspect of wader ecology.

Dr. Hans Meltofte and I (Elin Pierce) have been asked to organize this research network by conducting a survey of interested wader researchers who have either ongoing arctic wader studies, or have access to/ responsility for relevant existing databases, and to establish contact with relevant ongoing research programs. This will be done in conjunction with the program "Arctic birds: an international breeding conditions survey" run by Mikhail Søloviev for the Wader Study Group and the Goose Specialist Group of Wetlands International.

We would like to bring together researchers and programs that are involve long-term or multi-year monitoring; i.e. over five years or more, collecting data such as (examples only): dates of arrival in the Arctic, population size in fixed census areas, first egg dates, clutch size, egg dimensions, predation rate, hatching success, chick growth, chick survival, fledging success, juvenile production, juvenile ratios in staging and wintering areas.

The data collected by the researchers included this network can, (but need not) be restricted to one or more of the aspects in the above list. Researchers with projects or programs involving these types of data, and other researchers collecting data on other aspects of Arctic wader biology, such as site fidelity, distribution, etc., are kindly encouraged to contact us at the addresses below. Please explain which type(s) of data you collect, the study species, geographical study area, and the time frame of your project. By establishing such a network, we hope to:

1) investigate the possibilities of synthesising data collected on shorebirds during past and present long-term studies conducted by various researchers throughout the Arctic, attempt to relate these data to global climate changes, and publish the results internationally;

2) design and secure a future, longterm, pan-Arctic shorebird monitoring program to collect data on population and breeding biology variables and relate these to trends in climatic, entomological and hydrological variables. It will have a uniform research design and methods, and one or more designated responsible scientists for each Arctic area (country) represented;

3) define common future priorities in terms of research and publishing results, and investigate possibilities for international collaborative grant proposals for project funding;

4) establish strong international collaboration between scientists from institutions world-wide who conduct, or plan to conduct research on breeding Arctic shorebirds, by creating a project web-site and subscriber e-mail bulletin; and



5) organise international workshops.

We hope to hear from as many as possible; any kind of input will be greatly appreciated.

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### Still time to reserve your place at the North-West Millennium event

The Millennium Wader Expedition to the North-West of Australia promises to be a once in a lifetime event. The addition of two one-day symposia during the nine-week expedition period will add a special interest. NW expeditions have been getting bigger and longer in recent years, with 127 people from 17 countries taking part in the last major expedition in 1998. However, it is unlikely that there will ever be such a comprehensive wader event as the NW 2001 expedition anywhere!

The expedition enables people to come in close contact with, and learn about, almost every species of wader and tern occurring in Australia, from the world's experts. The occasional 'day off' provides an opportunity to observe and/or catch bush birds.

It is still possible to reserve a place on the expedition for any length of time (minimum of two weeks suggested). Participants from countries within the East Asia-Australasian Flyway are especially welcome.

## Some interesting recoveries from previous expeditions

Five Great Knot were recovered in August in the SW corner in the Sea of Okhotsk, Russia. This is the place where they are thought to gather before a direct 8,000km flight to the shores of northern Australia.

A first-year Terek Sandpiper banded on the 19<sup>th</sup> May 2000 at 80 Mile Beach was recovered in the Philippines in August. This is especially interesting, as about a third of the Terek Sandpipers (and Greater Sand Plovers) that were caught at that time were extremely heavy. They had disappeared by the end of May and it had been presumed, it now appears correctly, that they were making a partial northern migration in their first year.

A juvenile Ruddy Turnstone banded in SE South Australia on the 13th December was seen near Auckland, New Zealand on the 30th December (and again in early February). Part of the metal band was read through a telescope enabling individual identification. About 25% of the juveniles caught on 13th December were very heavy and apparently still on their southern migration. This is the second Turnstone from SE Australia to turn up in NZ and it is especially interesting to note that significant migration was still taking place in mid December

Please contact Clive Minton at: <u>mintons@ozemail.com.au</u> if you would like to join this exciting expedition. Phone/fax: 61 3 5989 4901, or write to him at 165 Dalgety Road, Beaumaris, VIC 3193

### Wetland Management & Conservation Course

The 3rd International Training Course on Wetland Management and Conservation is being organised by the Scientific and Cultural Society of Pakistan at Karachi from June 4 - 14, 2001. Its objectives are as follows:

1. To introduce key concepts and major issues of wetland management.

2. To provide practical training about management planning and conservation of wetlands.

3. To increase understanding on important approaches and problems in implementing wetland planning, inventory and monitoring techniques.

4. Upgrade to advance knowledge of previously trained staff.

5. Establish international scientific and cultural co-operation.

To take part, you will need a B.Sc. or equivalent degree, or field experience equal to such level, and a command of English. Upon completion of the training, participants are granted a Certificate. The total tuition fee is US\$400, which includes administration fees, workshop materials, travelling during the workshop where this is part of the program, and certificate awarding ceremony. The course fee does not include board and lodging, international travel and other personal expenses.

Accommodation in Karachi City will be available at hostels and hotels ranging from US\$15 to \$20 per night. Meals are available at hotels at around US\$15 per day. Participants may be financially supported by their governments, employers, NGOs or by fellowship granting organizations.

Admission application should be sent directly to the Director Training Program, The Scientific and Cultural Society of Pakistan, Head Office: B-7 Sheet No. 25 Model Colony Karachi-75100 Pakistan. E-mail: <u>zaheerk2k@yahoo.com</u>. Fax: (92-21)409-336

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## Yet another landfill threat to wader habitat in Japan

A landfill plan that will destroy Awase tidal flats in Japan has now, rather suddenly, been authorized.

Despite the importance of Awase tidal flat, the environmental impact assessment for the landfill project was extremely inadequate. Proposed re-planting mitigation for seagrass beds slated for destruction was recently called into question by a seagrass restoration expert from the United States.

In addition, national authorities have not performed a cost-benefit analysis of the mainly resort oriented land use plan for the land-filled area. The fact of the matter appears to be that channel dredging in another national development project in Nakasuku Bay has produced more dredge spoil than originally estimated, and under the pressure of this problem, the national authorities have latched onto the Awase landfill project. With a land use plan of questionable necessity and practicality, it is in reality merely an excuse to dump dredge spoil. In view of Awase's importance, this can only be called rude negligence of Japan's responsibility to protect wetlands.

On top of this, although the project will ultimately destroy 187 hectares of tidal flats and shoals, the administrative process has gone ahead without normal environmental safeguards. Up until now relevant administrative procedures included an opinion statement by the Environment Agency. However, a new omnibus law aimed at devolving more responsibilities onto local governments has come into force and has revoked the procedure that allows the Director-General of the Environment Agency to issue an opinion. Thus, in direct opposition to the trend of the times, the Environment Agency has lost its right to officially express an opinion about

24 landfill projects promulgated by



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national authorities. Awase is the first case of a landfill promoted under this new legal regime. Permission granted by the Transportation Minister to Okinawa prefecture for the 9-hectare portion has also not been reviewed because the Environment Agency can only issue an opinion about landfills by local governments over 50 ha. The result is that the review and licensing procedures are being carried out by the same entities that have planned and will execute the development, all within a neatly closed circle.

Okinawa requested permission of the Transport Ministry on December 4th, and permission was granted only two weeks later, on Dec. 18th, raising doubts as to whether the Ministry really reviewed the request. They may even have rushed the job before Japan's national ministries are re-organized next year. Moreover, the Ministry issued the permission on the same day they gave an appointment to local citizens' groups, JAWAN and World Wide Fund for Nature Japan to discuss problems with the project. If intentional, this displays hostility, if not intentional, negligence, towards public opinion. The way Okinawa prefecture merely rubber-stamped the notification of the Transport Ministry also exhibits an irresponsible attitude.

Everything about the Awase landfill project goes against the grain of the international Ramsar Convention on Wetlands and most particularly tramples underfoot the resolution on intertidal wetland conservation adopted by the Convention's 7th Conference of the Parties in May 1999.

If you would like to lend your support to the campaign to protect a beautiful wetland, please contact Maggie Suzuki, Japan Wetlands Action Network International Liaison (E-mail: <u>BYG05310@nifty.ne.jp</u>).

# Russian conference, English translation

"Waders of Eastern Europe and Northern Asia at the Edge of Centuries". An English translation of the table of contents of the abstract book of the 5th Meeting on Problems of Study and Conservation of Waders Moscow 2-4 February 2000, is available from Jevgeni Shergalin zoolit@hotmail.com

### Early winter shorebird counts in Bangladesh

Comprehensive counts of shorebirds were conducted in Damar Char, central coastal area of Bangladesh. A total of 29 species containing 13,5302 individuals, including 6,093 unidentified shorebirds, were observed in the above site. Significant number of Kentish Plover proved that these extensive mudflats are very important feeding sites for migratory shorebirds during both southward and northward migration periods. Largest flock size of this species has been recorded as 45,000 (in south-eastern part of Damar Char during 22<sup>nd</sup> October 2000) and a total of 79,500 individuals were recorded. Second largest population density has been observed of Little Ringed Plover, which comprises 20,400 individuals.

Other dominant species included Common Sandpiper (2,290 individuals), Common Redshank (5,000), Terek Sandpiper (1,522), Ruddy Turnstone (1,683), Little Stint (3,020), Temminck's Stint (6,002), Black-tailed Godwit (800) and Lesser Sand Plover (880).

Small Pratincole, Pacific Golden Plover, Marsh Sandpiper, Wood Sandpiper, Asian Dowitcher and Great Knot were also observed. A total 592 Greater Sand Plover, 1 Pied Avocet, 885 Whimbrel and 125 Eurasian Curlew were also recorded. For details on waders of Bangladesh please contact: Mohammad Sazedul Islam msislam2000@yahoo.com

#### Request for preen gland wax of shorebirds

Birds produce fatty substances from their preen gland - a small gland on the rump - that are preened into the plumage to provide protection against getting soaked and feather wear. There are possibly more functions of preen gland waxes.

At the Netherlands Institute for Sea Research (NIOZ) we recently discovered drastic changes in the composition of the preen waxes that are very consistent between several long-distance migrating shorebird species. Throughout most of the annual cycle, the waxes that are produced consist of so-called monoesters, but at departure to, and arrival onto, the High Arctic breeding grounds, the waxes produced are composed solely of very special diester waxes. Di-esters are very interesting both from a biochemical and evolutionary point of view. They are rarely found in nature and due to relatively high melting points, are more difficult to preen into the feathers. The function of the drastic change in preen waxes is however still unknown and it is the topic of my PhD research.

Di-esters are only produced during the breeding season. Because they are more difficult to smear into the plumage it has been suggested that only birds in a good shape can produce these special waxes. They possibly serve as a kind of 'avian make-up'. Birds may attract mates and show that they are a good parent this way. Another possibility is that di-esters are specialised antiparasitic compounds that protect feathers against feather-lice or mites. I want to get some first ideas about possible functions of the (changes in) wax-composition by comparing preen-waxes of many shorebird species during different

times of the year. Amongst other outcomes we hope to discover whether the production of the special di-esters only occurs in long- distance migratory shorebirds breeding in the High Arctic or also in non-migrating shorebirds breeding at lower latitudes. The collection of preen gland waxes is a very simple procedure; by gently massaging the gland with a cotton bud a sufficient amount of wax can be collected for detailed analysis in the laboratory. We therefore would like to ask the help of anyone catching shorebirds, to help us expand our comparative database. Every shorebird species, anywhere in the world at any time of the year, is of interest!!

Anyone who wants to help will receive detailed instructions and the required 'equipment'. Just send an email to: <u>reneer@nioz.nl</u> or write to Jeroen Reneerkens, Netherlands Institute for Sea Research, P.O. Box 59, 1790 AB Den Burg, Texel, The Netherlands

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