

Tattler

Newsletter for the Asia Pacific Flyways & Australian Shorebirds 2020 Project

No. 37 Oct 2015

CONTENTS

I've just had an adventure. Rudong mudflats, China	2
Shorebird surveys SE Gulf of Carpentaria, Aug-Sept 2015	4
Shorebird surveys in Western Alaska	6
Sumatran-flagged Common Redshank seen on breeding grounds	7
Bar-tailed Godwit suffering from capture myopathy rehabilitated	9
A Russian bird's Roebuck Bay stopover	9
Cannon-netting Roebuck Bay, NW Australia	10
Southward migration wader studies West Kamchatka, August 2015	11
Ruddy Turnstone tracked on migration	12
Wader breeding success in 2014 Arctic summer	13
Tomago Wetlands Rehabilitation Project Hunter Estuary, NSW	15
Protecting Latham's Snipe habitat near Bowral, NSW	16
Please contribute to BirdLife Australia's IBA Audit	17
A Stirring of Spoonies	17
Minton Tales – a celebration	17
Wader banding commences in Bangladesh	18
Conserving migratory species	18
Volunteers needed for NWA Wader Banding Expedition 2016	20
Australasian Shorebird Conference, NZ 2016	20
AWSG Membership	20
Arguments for biodiversity conservation in Natura 2000 sites	20

Editorial

Once more, at the southern end of the migration routes, shorebirds are returning to spend the non-breeding season. Those carrying engraved leg-flags proclaim their site-fidelity and allow us to welcome back familiar faces! This edition of Tattler includes accounts of shorebird surveys in remote locations along the East Asian-Australasian Flyway – Western Alaska, Kamchatka, Rudong mudflats in China, Southeast Gulf of Carpentaria – and the personal nature of some of these takes us right into the adventure of different cultures.

Capture of shorebirds by cannon-netting in the non-breeding stopover sites allows analysis of breeding success, provides opportunities for banding, flagging and application of geolocators, but also sometimes results in capture myopathy where the bird suffers cramping in the legs and is unable to stand. Successful rehabilitation of such a bird is detailed here.

Two articles confirm positive responses to efforts to protect and augment shorebird habitat in NSW, with volunteer birdwatchers contributing data to justify government actions – emphasizing once again the importance of local conservationists campaigning for habitat protection.

On a broader scale, researchers discuss conserving migratory species and biodiversity conservation, highlighting the need for multiple arguments to address the wide variety of community attitudes towards conservation.

Liz Crawford, Editor

Contributions are welcome and should be sent to: tattler@awsg.org.au



Adult Curlew Sandpiper post breeding moult during migration. Plumage moult can clearly show the age of many birds during southward migration. Watch out for a whole series of images in Tattler and at AWSG website! Photo: Ian Wilson.

I've just had an adventure . . . Rudong mudflats, China

I always enjoy sitting on my veranda overlooking what is locally known as the Tighes Hill Wilderness in Newcastle, NSW; in fact that is what I am doing right now as I begin to write this piece. For me it is home and the place I can retreat to. Over the last three months I have not spent too much time here at all and certainly the last two months I have been such a long way away in many respects.

I have just had an adventure in China, specifically in Rudong County, where some of the world's rarest shorebirds stopover during migration. This adventure has provided an amazing experience that includes meeting some wonderfully passionate people, working in an incredible environment and enjoying close encounters with fascinating shorebirds.

Upon returning from an outback tour with some mates in early July I was wondering what may lie ahead in the immediate future when a message came to me via a friend via a friend etc. A project in China looking at the stopover ecology of two rare shorebirds (Spoon-billed Sandpiper and Nordmann's Greenshank) was looking for volunteers to help with field work and gather feeding behaviour data. The two species were completely unknown to me but the opportunity to travel to some unfamiliar place and do some good work towards helping a shorebird's future inspired me to apply for a spot on the team.

In a very short time I had been accepted, a visa secured and flights to Shanghai had been arranged. I was off for Rudong to volunteer with the Conservation Leadership Program, a funded project of SBS in China (they are on Facebook so go check it out).

The project is aimed at gathering as much data as possible from this season's southward migration stopover at Rudong with virtually daily observations over the three months from August through to September. Observations are directed at high-tide roost counts, low-tide observations of feeding behaviours, video recording of feeding behaviours and sampling the benthic fauna in areas where these birds have been seen feeding. Well that might seem to be a lot of work and it is, but the experience, while tiring, proved to be very enjoyable and rewarding.

The first few days were just hectic like you wouldn't believe as I was thrust into the work only hours after landing in Rudong. It was go, go, go from the onset and the summer climate of high thirties temperatures, high humidity and haze, exacerbated by some typhoon action wasn't helping matters. The thought did strike me that perhaps I wouldn't last the seven weeks I had so confidently volunteered my services for. It was immediately obvious that several challenges needed to be met.

For a start the work environment is an enormous tidal flat that stretches for as far as you can see (not that far really on some days) and beyond. The flats are measured in kilometres and at one point push out twenty kilometres to seaward. The sheer magnitude of these areas is never lost as many hours of walking are required to chase down the shorebirds of focus as they tend to spread themselves fairly thinly over the place. Adding to this sense of vastness is the amazing array of giant wind turbines that tower over both the flats and the adjacent coastal lands.

Very quickly I learnt that the tidal flats were a complex arrangement of varying conditions that added to the challenge of moving efficiently across the landscape. There were areas of nice firm sandy substrate (easy to walk over), areas of sloppy silt-like shin-deep mud (still easy enough but forget about staying clean), boggy mires that threaten to swallow you up (please stay clear of these) and drainage lines of various depths and widths. Ultimately these drainage lines presented the greatest danger to the unwary as incoming tides can flood these before you know it and leave you stranded on the seaward side. Over the course of the first week or so, exploring the nature of the tidal flats became just as important as finding Spoon-billed Sandpipers. Our new-found local knowledge ultimately proved to be essential in the discharge of the work.

The challenge of identification was also high on the list. Having previously never set eyes on either Spoon-billed Sandpiper or Nordmann's Greenshank I was in for a steep learning curve in this department and as it turned out the Nordmann's proved to be the easiest initially. Most likely because they are larger and more obvious but having previous experience with Common



There are hundreds and hundreds of these structures with new ones being installed all the time.

I've just had an adventure . . . Rudong mudflats, China cont.

Greenshank did help. In the end I found so many differences between the greenshanks that picking the Nordmann's proved to be not too difficult. Later on, after many days of feeding behaviour observations, the Nordmann's actually became fairly predictable out on the tidal flats, much to my joy.

This was also true for the more charismatic Spoon-billed Sandpipers but they did take some concerted effort to nail down initially. It took me over a week to finally get onto a 'spoonie' out on the flats but the close encounter was a classic and the image of it stays with me. The feeding behaviour of these birds is quite different from the other small shorebirds that greatly outnumber them. After many more encounters it was possible to spot the 'spoonie' from three hundred metres; a feat that I could never contemplate upon my arrival.

Once finding and identifying these birds was "mastered" the next challenge presented itself: to secure video footage of the feeding behaviours. I was definitely thinking "you're kidding" as I was introduced to digi-scoping for the first time. What a frustratingly fidgety piece of work this is and my first attempts were decidedly poor. Practice on easy species (stints, there were plenty to play with) was necessary but eventually I was happy (not really the correct word) that I could capture something of value. Well as it turned out my first close encounter with that 'spoonie' presented the opportunity to test my new skills and that day I proudly announced to the team that I had some extensive footage. This was cause for much merriment and celebration.

The tidal flats belong to the shorebirds of course but also to hundreds of people that daily collect all manner of shellfish. Despite the vastness of the landscape you do have a sense of sharing the space with others. Our presence on the flats was soon noticed by curious locals and over the course of my stay a certain rapport was established. Several familiar faces would greet me at particular locations and a friendly wave or a cheery "hello" indicated some level of acceptance. We were given a bundle of pamphlets that described the project to hand out to the locals. These pamphlets were written in Chinese and had a few nice photos of 'spoonies' to point at. These encounters with the



locals proved to be one of the joys of my stay and on each occasion I would encourage them to take a look through the scope. Re-playing some video for them also elicited plenty of excitement and I would wonder at the depth of knowledge these people had of the shorebirds.

The tidal flats of Rudong are obviously very important for these people as well as for shorebirds and it is hoped that this aspect will help garner support for any conservation efforts proposed in the future.

There are plenty of threats to be managed here as more and more land is "reclaimed" for industry and ironically enough, food production in the form of fish ponds. However there is another more insidious threat in the form of an invasive plant, Saltmarsh Cordgrass (*Spartina alterniflora*).



The grass is spreading like mad and covers hundreds of hectares already. The process of the invasion results in loss of habitat for macro-invertebrates as it consolidates ground and changes the nature of the tidal flats. This certainly affects the people that collect the clams as well as the shorebirds that rely on the food-source during migration.

From all the observations the team has made this season it is blindingly obvious how critical the Rudong tidal flats are as a stopover for migration. The incredible numbers of both Spoon-billed Sandpiper and Nordmann's Greenshank encountered there prove it. Also the length of time these birds remain in the area while undergoing primary moult is testament to the richness of the food available.

An added bonus to the observer being in the field over such an extended period was being able to admire many shorebirds I was previously familiar with but in a different light. It was a joy to experience all the changes from full breeding plumage through to winter plumage but the highlight for me was the appearance of the juveniles. How clean and pristine they look dressed in their brand new feathers! My favourite bird right at this moment is juvenile Sanderling; an absolute delight for my mind.

Too soon it seemed I was preparing to leave Rudong and handover the baton to another volunteer. Those seven weeks had just flown by. I had sore feet and sunburn but upon reflection was confident that my efforts had contributed to a greater understanding of the lives of these birds. I will cherish the memories of this wonderful adventure for many years as there are so many stories to tell from it. Thanks to the SBS in China people for granting me this privilege and to the extraordinary team mates I had the honour of working with.

Tom Clarke

Editor's Note: Tom Clarke has been rehabilitating and managing shorebird habitat in the Hunter Estuary at Newcastle, NSW for many years. His willingness to wade in mud in the interests of maintaining shorebird habitat is legendary and would have prepared him well for the challenges of the vast Rudong mudflats.

Shorebird surveys SE Gulf of Carpentaria during southward migration, 2015

In March 2013, I took part in the first shorebird surveys in the south-east of the Gulf of Carpentaria in northern Queensland since 1999.¹ This vast area, extending about 350 km along the Gulf coast from Tarrant Point in the west to Point Burrows in the east, is one of the most important areas of international significance for shorebirds in Australia along with Roebuck Bay and Eighty Mile Beach in Western Australia. The estimated total numbers of different species indicates there are 16 migratory shorebird species using the area that have internationally significant numbers (>1% of the East Asian-Australasian Flyway population).

Data obtained from the 2013 surveys, and previous surveys, were used to support the nomination of part of the area, with the highest densities of migratory shorebirds, from just north of Karumba Point township to the mouth of the Smithburne River 43 km to the north, to be included in the Flyway Site Network. In December 2014, after consultations with the traditional owners, the Kurtijar people, and other stakeholders, the Flyway Partnership designated the site as Australia's 20th Flyway Network Site, the 6th in Queensland.²

Indigenous people and ornithologists are presently considering nomination of another part of the Gulf coast to the Flyway Site Network. This part of the coast, within a zone stretching from Tarrant Point in the west to Gore Point in the east, receives the waters of the Leichhardt River, Albert River, Pandanus Creek, Nicholson River and Gin Arm Creek, as well as minor estuaries. Although the Queensland Wader Study Group (QWSG) has conducted some previous aerial and ground surveys in this zone, overall it is far less well known than zones to the east and north. Furthermore, because of the peculiar tides in the Gulf offering only a handful of suitable survey dates during the second half of the year, count data from southward migration are few.

To address these gaps in knowledge and support the potential nomination, Peter Driscoll and I visited this zone in late August and early September 2015 and conducted aerial and ground surveys of shorebirds and other waterbirds. Peter's light aircraft, an Aeroprakt 22, again proved to be ideal for aerial surveys of the roost sites and, having the added advantage of being able to land and take off from the dry salt pans behind the coastal roost sites, enabled us to conduct some ground counts.

On our first day, 29 August, we conducted aerial surveys of roost sites from Gore Point to Tarrant Point finishing with a total of just under 11,500 migratory shorebirds. After flying over the sites,

we landed on a salt pan and walked to a roost site just west of the Albert River to conduct a ground count. The total shorebird count was over 5,100 shorebirds, predominantly Black-tailed Godwit (550), Great Knot (2,610), Red Knot (290), Red-necked Stint (710) and Greater Sand Plover (500).

On our second day, we departed Burketown aerodrome at sunrise to conduct aerial surveys of roost sites from Gore Point east to the mouth of the Norman River and on to Pelican Island at the northern boundary of the recently designated Flyway Network Site.

Having seen from the air a big flock of birds at The Oaks, a roost site about 10 km to the west of the mouth of the Norman River, we returned to conduct a ground count. We landed on a salt pan and then managed to find our way through the almost impenetrable rubber vine (*Cryptostegia grandiflora*) to access the beach. Here we spent about 3 hours counting the birds, reaching an imposing total of 13,280 shorebirds, including three species reaching their flyway 1% threshold: Black-tailed Godwit (4,400), Great Knot (3,325) and Red Knot (1,075). We also recorded significant numbers of the recently declared critically endangered species, Eastern Curlew (215) and Curlew Sandpiper (455). In addition to shorebirds, 93 terns of 3 species and 795 waterbirds, including 700 Grey and Chestnut Teal added to the impressive sight.

When we finished the count as the tide receded, we scanned the flocks for leg flags, picking up 4 Victorian-flagged birds (2 Red Knot and 2 Curlew Sandpiper), a Red-necked Stint banded in Bohai Bay, China, a Black-tailed Godwit sporting leg flag and colour bands from NW Australia and a southeast Queensland-flagged Curlew Sandpiper.

The next day, we planned a couple of ground counts depending on where the birds were roosting and access to the sites. The sight of about 4,000 shorebirds on a large sandbank just to the west of Gore Point was tempting but difficult to access so we decided to count the birds at the Point. Of a total of just over 2,400 birds, in contrast to other sites, the Red Knot (435) outnumbered the Great Knot (15). Other species recorded included Eastern Curlew (286), Whimbrel (76) and Beach Stone-curlew (3).

At the most westerly roost site, Black-tailed Godwit (1,100) again was the most abundant species of the 1,779 shorebirds counted. Over 100 Gull-billed Tern included some birds of the migratory race, *affinis*, also seen among flocks of the species at other sites.

Shorebird surveys SE Gulf of Carpentaria during southward migration cont.

On our last day, 1 September, we were joined by eight of the local indigenous rangers when we went back to the roost site we had counted on our first day, west of the Albert River. Even more shorebirds greeted us as we walked out onto the foreshore: over 7,000, mostly in three large flocks. The migratory species were mainly made up of Black-tailed Godwit (644), Great Knot (4,338), Red Knot (482), Red-necked Stint (400) and Sand Plover species (800). The highlights for the rangers were 2 Great Knot with black and white leg flags having been banded at Chongming Dao, China. Also, 2 Asian Dowitcher were picked out among the knots and godwits.

Taking care not to disturb the birds, our group approached the largest flock to within 30 m. The birds seemed content to continue to rest, many of them sitting on the wet sand as the tide receded rather than feeding. This may well be a sign of their being exhausted after long flights but also of course with only one high tide each day in the Gulf, the birds had more time available to feed.

When planning the surveys, we wondered whether we would be too early for the southern migration but it seems our visit coincided with early arrivals of some species. Interestingly, data from our aerial surveys reveal 80% of the migratory shorebirds (<35,000) were observed on the western side of the Norman River in contrast to the surveys in 2013 during northward migration. This data and data from previous surveys show the distribution of shorebirds from

Tarrant Point to Point Burrows differs early in the season to that after the southward migration when relatively more birds are found closer to the Norman River in the east than to the Albert River in the west. From this, one could speculate the birds make first landfall along that part of the coast explaining the high numbers of migratory shorebirds there and over time work their way eastward and southward.

As the proposed Flyway Network Site nomination is only at an early stage, no site boundary has been agreed. However, it seems likely that a future nomination would include one or more of the roosts that we surveyed on this trip. We identified several instances where a roost would meet the nomination criteria: support of at least 1% of a flyway population (notably Great Knot, probably also Red Knot) and/or support of threatened migratory waterbirds (Eastern Curlew, Great Knot and/or Curlew Sandpiper).

Thanks to QWSG for covering the fuel and accommodation costs for the trip and to Roger Jaensch for his advice and encouragement. My special thanks go to Peter Driscoll; without his unwavering efforts and immeasurable skills, we just would not have been able to conduct the surveys and gain very good data.

Arthur Keates

¹ See the article about the surveys in *Tattler* edition 29 (July 2013).

² See the article about the designation of the Southeast Gulf Flyway Network Site in *Tattler* edition 36 (July 2015).



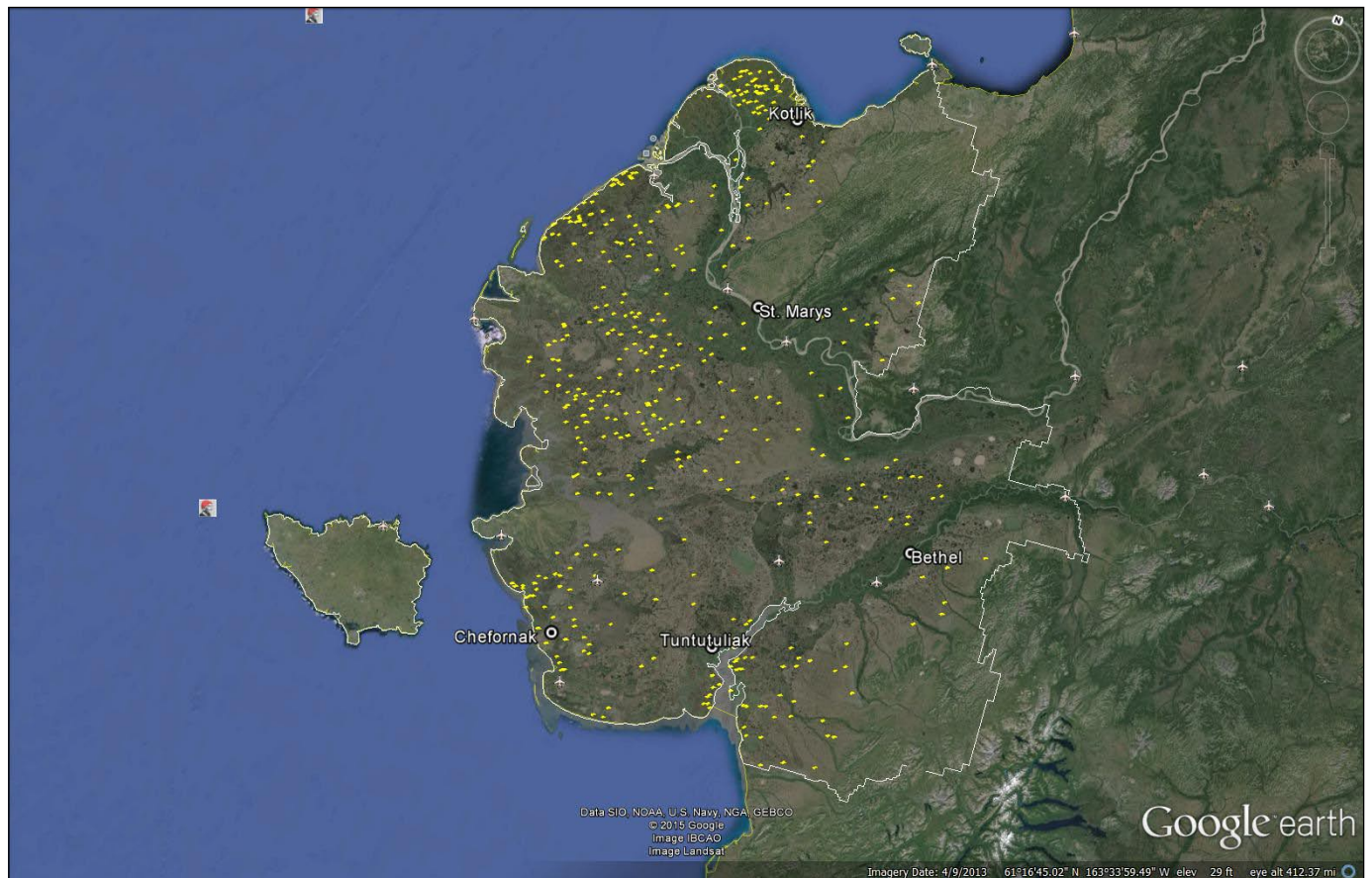
Shorebird surveys in Western Alaska

Shorebird surveys in Western Alaska help us understand human alterations on the non-breeding grounds

To understand the status of shorebirds residing in a given area, we need to know how many birds there are, what habitats they need, and how their numbers are changing over time. In many cases, obtaining a good estimate of bird numbers can best be done on the breeding grounds when birds settle on the tundra and are relatively stable in time. To obtain such estimates, many different organizations in North America started a survey program called the Program for Regional and International Shorebird Monitoring (PRISM). The program includes United States and Canadian government agencies, universities, conservation groups, and native communities. It involves surveying birds across the vast North American Arctic.



Aerial view of wetlands in the southern portion of the Yukon Delta National Wildlife Refuge Photo © Richard Lanctot



Google Earth image showing survey plot locations (yellow) on the Yukon Delta National Wildlife Refuge © Richard Lanctot

In 2015, personnel from the Yukon Delta National Wildlife Refuge, the Migratory Bird Program of the United States Fish and Wildlife Service, and two non-governmental organizations (Manomet Centre for Conservation Sciences and Alaska Audubon) joined together to conduct surveys of shorebirds across the Yukon Delta National Wildlife Refuge in western Alaska. The Refuge became an East Asian-Australasian Flyway Network Site

in 2012. Personnel visited areas that represent the many different kinds of habitats across the Refuge so that they could learn how many birds use each habitat. Areas were visited over a short period in late May and early June when the birds are singing and displaying so biologists can accurately delineate their breeding territories. To cover the entire Refuge (ca. 3.8 million ha) in such a short time means that people must

Shorebird surveys in Western Alaska cont.

move around in helicopters to reach remote plots in this vast, road-less area. Other personnel used fixed-wing planes and boats to access the Central Coast of the Refuge where Native Communities and Refuge staff have agreed not to allow helicopters due to the large amount of subsistence hunting in the area. Each randomly selected 400 m x 400 m plot was surveyed for an hour and a half, before moving on to the next location. The entire survey took place between 15 May and 10 June 2015 and the two helicopter teams and two plane/boat teams surveyed over 250 plots this year. A second round of surveys will take place in 2016.

Survey results from this project when combined with other PRISM information will be used to determine the population size of the many different shorebird species residing on the Refuge. This knowledge and the associated habitat use information will help the Refuge manage the birds, and also put into perspective

the importance of the many sites throughout the nonbreeding grounds in Asia, Australasia and South America. We are particularly interested in learning more about the Bar-tailed Godwit that breeds on the Refuge and migrates along the East Asian-Australasian Flyway. This species is believed to be declining due to habitat alteration in the Yellow Sea; surveys on the breeding grounds will help us estimate their numbers and assess these impacts. By working together, we can better understand changes in bird numbers and focus conservation actions in the right locations so as to allow these birds to recover.

Richard Lanctot¹ and Stephen Brown²

¹ EAAF Shorebird Working Group Chair

² Manomet Inc.

(Source: <http://www.eaaflyway.net/shorebird-surveys-in-western-alaska-help-us-understand-human-alterations-on-the-nonbreeding-grounds/>)

Sumatran-flagged Common Redshank seen on the breeding grounds



Indonesian-flagged Common Redshank in breeding habitat in Sichuan Province. Photo by Phillip Edwards

An observation of a Common Redshank *Tringa totanus* that was flagged orange/black, meaning it was from Sumatra in Indonesia, caused great excitement as the observation was from central China on the bird's breeding grounds. This was the first time a marked bird from Indonesia has been seen on the breeding grounds.

The bird was one of many flagged by Iwan Londo and team when they were capturing birds for the Wildlife Conservation Society and their Global Health Program while they were studying the avian flu virus between 2007 and 2010. There are about 450 Common Redshanks carrying these flags.

While there have also been several hundred Common Redshanks flagged in Thailand, Prof Phil Round says that he is unaware of any sighting to

come from the China breeding grounds, which adds to the excitement of this one. The other region where there have been good numbers of Common Redshank flagged is Singapore and David Li from the Sungei Buloh Wetland Reserve in Singapore says only one of their birds has been seen on the breeding grounds. This was at Xiao Bei Hu Wetlands, near to Qinghai Lake which is some 500km north-west of this Indonesian-flagged sighting.

Evidence of the sighting came when Dr Phillip Edwards from the United Kingdom sent in a photo of the bird taken on the Hongyuan Grasslands in northern Sichuan Province in China on 15 May 2015. The migration undertaken by this bird would have covered 3,800km without any deviations from the banding area of Cemara Beach, Jambi, in Sumatra.

The bird Phil photographed was one of many at this fairly extensive wetland which he described as "a wet grassy marsh with lots of small pools, hummocks, and areas of flower-rich flat grassland". He was trying to photo a display where the bird raised its wings above its head on landing. While he noted that this display is not on its own a sign of breeding, it was clear that most of the birds appeared to be on territory; "they were clearly in pairs, performing many song flights (presumably from birds advertising for mates) and occasionally calling from wooden posts or the top of hummocks" he wrote. All of this behaviour he had seen at breeding areas in Scotland when on many holidays as a child,

Sumatran-flagged Common Redshank seen on the breeding grounds cont.

so he was familiar with it. However, Phil did not see any birds mating and it was too early for chicks. He also noted that they appeared to be "chasing interlopers from other territories." But Prof Bill Hale, the authority on Common Redshank behaviour in Europe, noted that in his experience, territories are rarely protected, and that such aggressive behaviour is actually males attempting to mate with unresponsive females. While he is not familiar with these birds in China and reluctant to be definitive on the bird's behaviour there, it is likely that the behaviour will be similar to how they behave in Europe.

Common Redshanks are widespread across Europe and Asia where they generally spend their non-breeding season at the coast. However, much of their breeding takes place at inland marshy, damp grasslands, such as where this bird was seen.

There are at least six sub-species of Common Redshank recognised and Prof Hale informed us that this bird belongs to *T.t.ussuriensis* that is found in Eastern Russia, Mongolia and North Manchuria. He said that while this sighting is outside the documented breeding range, he has studied skins taken in the breeding season from a similar area to this sighting and they have also been from this sub-species. There are two main colour groupings of *T.totanus*, a brown group and a cinnamon group, with *T.t.ussuriensis* belonging to the latter.

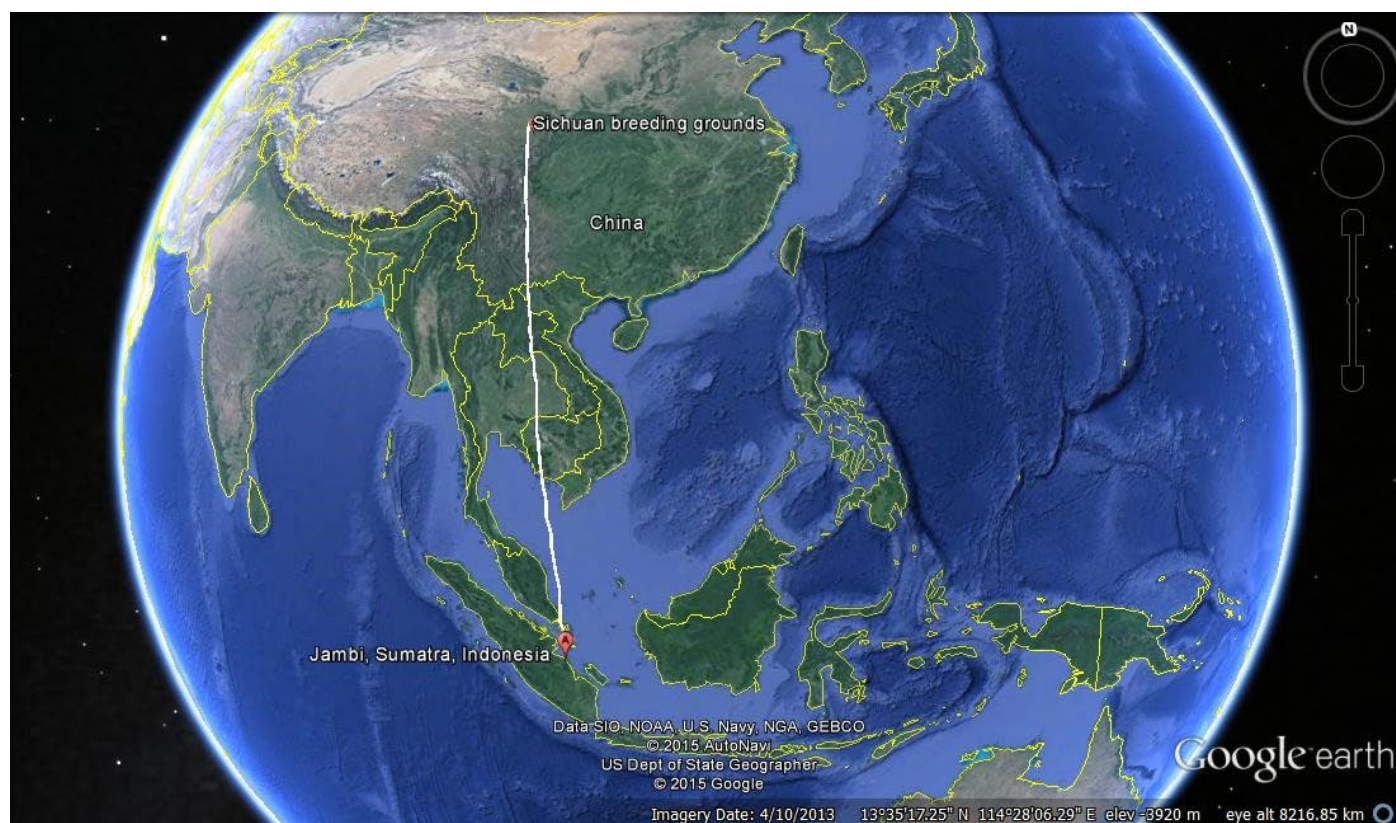
This record is very helpful in strengthening our understanding of the link between the Indonesian non-breeding regions with this particular breeding location and helps affirm that this area does indeed serve as a breeding area for Common Redshank.

As Bill Hale said, "it is nice for someone to see ... behaviour in the field" to really support what had largely been deduced from museum skins collected in the breeding season. Further to this, in an e-mail exchange with Phil Edwards, Sid Francis, who is a local guide in Sichuan, stated that Common Redshank is "the most common and well-distributed breeding wader on the Sichuan portions of the Tibetan Plateau - common on the Ruogergai Grasslands where birds are summer breeding visitors." The broad distribution maps in Handbook of Birds of the World and on the BirdLife International website (<http://www.birdlife.org/datazone/species/factsheet/22693211>) include NW Sichuan as part of this species' breeding range.

Thanks to Phillip and Bill, for their contribution to getting this sighting in context.

Rog Standen and Iwan Londo

22 July 2015



The migration of this Common Redshank has moved it from Sumatra, Indonesia to Sichuan Province in Central China

Bar-tailed Godwit suffering from capture myopathy rehabilitated

A team of volunteers from the AWSG caught shorebirds in Darwin, Northern Territory in September 2014. One of the birds, a Bar-tailed Godwit, presented symptoms of stress myopathy (cramped legs) upon its release. The Bar-tailed Godwit was flagged with yellow over blue flags (representing Darwin), with the yellow flag engraved 'AB'. AB was taken in for care for seven days where it was held in a material sling which allowed the legs to dangle and touch the ground, but supported most of the bird's body weight (as described in Rogers *et al.* 2004). After some consultation with experts that had previously dealt with this issue, I fed the bird 30 water-soaked cat pellets three times a day. I carefully opened the bill using my finger nail and then placed the pellet at the base of the mouth; there was no need to force feed this bird as AB took the pellets easily. After each feeding session I massaged the bird's legs and feet and allowed the bird to walk around, while I supported most of its body weight. The bird was able to stand and hold its own body weight by the sixth day

of rehabilitation so I released AB back at the site of capture and watched the bird fly off and then bathe and preen its feathers for some time.

After its successful rehabilitation and release, a number of birdwatchers observed the bird at a site away from where it was captured, some 15 kilometres away. The bird was last recorded in Darwin in November 2014 and then today, 31 August 2015, I observed the bird at its original site of capture where it was roosting amongst 1000 other shorebirds. It had retained some of its breeding plumage. It was a wonderful moment seeing the bird back in Darwin after its breeding season and knowing that the dedication of rehabilitating the bird had paid off.

Rogers D.I., Battley P.F., Sparrow J., Koolhaas, A. and Hassell, C.J. (2004). Treatment of capture myopathy in shorebirds: a successful trial in northwestern Australia. *Journal of Field Ornithology* **75**: 157-164.

Amanda Lilleyman

A Russian bird's Roebuck Bay stopover

For just over two years I have been fortunate enough to live in Broome and been able to devote much of my time to learning about the wonderful world of migratory shorebirds and where better to learn than the shorebird capital of Australia!

At this time of year, the flocks seem to grow daily as birds return from their northern breeding grounds. Being able to watch these birds roosting and recovering from their long journeys, from the top of the pindan cliffs of Roebuck Bay, is certainly one of life's special experiences.

On the morning of 10 September 2015 a Red Knot with pale green over white engraved flag CKX was seen at a roost known as 'Campsite'. It had been banded by Pavel Tomkovich in southern Chukotka, Russia. As it happens, on 4 October 2014 I had seen the same bird, at the same roost, looking decidedly exhausted, roosting on one leg, that leg in mud up to its tibia, head slumped forward and the tip of its bill resting on the mud. Its roosting behaviour suggested that its flight to Roebuck Bay might have taken its toll.

In response to the 2014 sighting Pavel indicated that the bird was tagged as an adult female (metal band HS009601) on 30 May 2012, it was paired with a flagged male before and after that date and later in that season

the male was attending chicks indicating successful nesting. The female was never recorded again after the pre-nesting period.

It was with much excitement I was able to report another sighting of this bird. My observations of CKX this year were more indicative of a 'normal' roosting bird, although she did still seem to prefer to rest with her head down and bill pointing towards the mud, she was a little more alert and her overall posture was encouraging.

Feedback from Pavel indicated that although many colour-flagged males and several females were back on their breeding territories, this sighting is the only source of information that CKX is alive and continues her annual migrations. Pavel was happy with the fate of the bird and commented that the sighting adds a valuable piece of information to the project's database about survival and movements of the project's marked shorebirds.

He found it interesting that most Red Knots of the *rogersi* subspecies migrate to East Australia and New Zealand and only a few come to NW Australia.

It seems that many of the Red Knots in Pavel's ongoing studies are recorded in Bohai Bay but CKX has never been recorded elsewhere

A Russian bird's Roebuck Bay stopover cont.

and her migration route and current breeding area remain a mystery.

I have not seen CKX again this year but hope to be able to report further sightings in future southward migrations.

A big thank-you to Pavel Tomkovich for his assistance and support in the compilation of this note.

Grace Maglio

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Cannon-netting at Roebuck Bay, Northwest Australia

Typical of any catch day, the wide and welcoming expanse of undisturbed sand, with its boundless possibilities for roosting potential . . . was completely ignored by the shorebirds! However the trusty twinklers successfully moved thousands of birds off Wader Beach and Richards Point roosts and they streamed straight . . . past our hide and the net area and headed out over 'the back of the mangroves'!

But, as predicted, there was no suitable habitat for them there and they returned to the northern shores of Roebuck Bay. These flocks continued to wheel around the eastern section of the bay. It really is a spectacle: the sheer number of birds in the bay as returning migrants are landing on our shores.

The birds remained wary of Minton's Strait, but with decoys deployed (cunningly about 15m from the net), the Eastern Curlews were the first to come in and line up nicely with the decoys. Soon after we had a terrific flock right in front of us, mainly composed of Great Knot, Red Knot, Black-tailed Godwit and Curlew Sandpiper.

The big flock spread out from the decoys and along the tide edge until plenty were catchable. The intention was for us to wait for our twinklers to

return but an oncoming car meant our countdown was swift to avoid raising the flock once again. At this time of year birds seem excessively nervous, maybe an effect of the change from there being 5,000 to share the roosts to there being 25,000.

The catch proved to be incredibly rewarding with a great composition of species including the addition of infrequently caught Black-tailed Godwits and a pleasing number of older birds caught, including seven Great Knot from 10 to 18+ years old and four Red Knot from 10+ to 16+ years old.

Processing went smoothly with most notably a terrific result in the number of birds colour-banded. We also re-caught a Red Knot with a geolocator that we had deployed in February 2015 and has been, to the best of our knowledge, to the New Siberian Islands and back: we shall see when we assess the data.

Another great day and huge effort by everyone all round. With thanks to 5:30am net setters and special thanks to 'the two Ricks' for net mending and packing, leaving us to merely put it in the trailer at the end of a long day.

Table 1: Catch totals for 13 September 2015

SPECIES	NEW	RETRAP	Age 1 1st Year of Life	Known Age 2	Age 3+ 3rd year of life or older	TOTAL
Bar-tailed Godwit	2	0	0	0	2	2
Black-tailed Godwit	14	0	0	1	13	14
Curlew Sandpiper	6	3	0	3	6	9
Great Knot	117	33	0	48	102	150
Red Knot	106	27	0	51	82	133
TOTALS	245	63	0	103	205	308

Jane Taylor

(Broome Bird Observatory Assistant Warden)

Southward migration wader studies on West Kamchatka, August 2015

Southward migration of waders has been studied on the western coast of Kamchatka Peninsula, Russia with support of Birds Russia using RSPB financial support. These investigations were continuations of last year's studies which were conducted in the same area. Field work was carried out on Vorovskaya River Lagoon from 1 to 30 August 2015. The lagoon is 40 km long and 1–1.5 km wide. We investigated only the southern part of the lagoon between Ustyevoe Village and the mouth of the river (54° 11' N, 155° 49' E). The length of the study area is about 5 km. This part of the lagoon is most interesting for wader studies.

Our work included daily counting of waders on mudflats during low tide, observation of visible migration with counting of birds flying past, banding and flagging, and searching for flagged waders. During low tide, 29 mudflat counts of waders were conducted and 30 species of waders were recorded. The maximum number of waders – 17,000 individuals – was counted on 13 August 2015; the average count for 28 days (excluding the very foggy day of 16 August) was 7000 individuals (**Figure 1**).

The international significance of the study area has been confirmed for 7 wader species.

The Mongolian (Lesser Sand) Plover maximum count was made on 29 August 2015. It reached 1532 individuals or 11.8% of total population. Criteria of international significance for this species were exceeded during 18 counts (62% of days). The criterion of 1% population level for this species was exceeded during 7 counts (24%),

and 0.25% population level was additionally exceeded during 11 counts (38%).

The maximum number of Whimbrels was counted on 10 August 2015 and reached 3528 individuals or 6.4% of total population estimate. The 1% level was exceeded 4 times. Maximum Whimbrel numbers were recorded 8–10 August when birds came from the tundra to mudflats near our camp for roosting. But on the adjacent tundra area, the maximum number of Whimbrels – about 5000 individuals in one compact concentration (not one flock but flying up simultaneously) – was observed on 11 August. Additionally one more concentration – about 500 birds – was seen in the distance about 3 km from our camp. In this case we did not see the Whimbrels stop for roosting on the mudflats.

The Red-necked Stint maximum count was made on 18 August 2015 when 3709 individuals or 1.2% of the total population estimate were feeding on mudflats. Criterion of international significance for this species was exceeded during 48% of counts.

Maximum number of Dunlins on mudflats was recorded on 13 August 2015 when the count reached 13,770 individuals or 1.4% of total population estimate. Criterion of international significance for this species was exceeded during 86% of counts.

The number of Black-tailed Godwits was significantly lower than in 2014. Criterion of international significance for this species was exceeded during only two days – 1 August (367

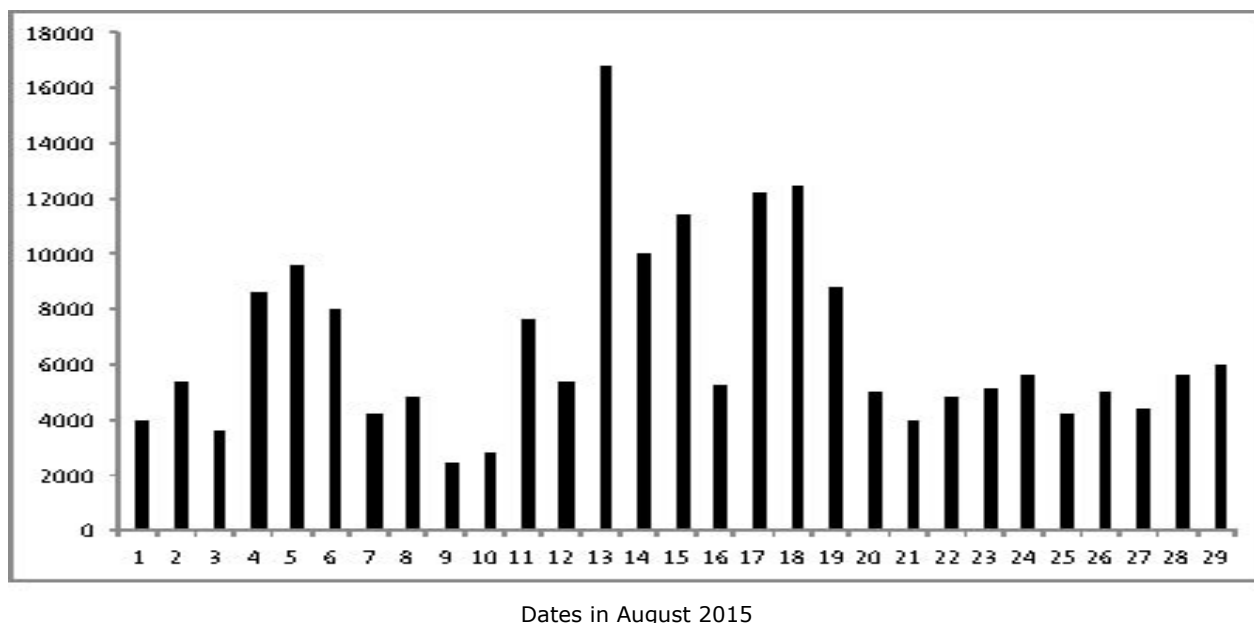


Figure 1. Daily count of waders (all species together) on mudflats in August 2015

Southward migration wader studies on West Kamchatka, August 2015 cont.

individuals) and 6 August (516 individuals).

Maximum number of Ruddy Turnstones was seen on 2 August 2015 and reached 332 individuals – 1.2% of total population estimate. Criterion of international significance was exceeded during 7 days – 1–7 August.

As in 2014, additional observation of passing migration was conducted with counting of species which mainly do not stop on the mudflats of the studied area. We could not see such an active visible migration of Whimbrel as last year, when 28,000 individuals flew past our study area during 5 hours on 25 August 2014.

Also during August, 2986 waders were banded and flagged, including 2563 Dunlin, 309 Red-necked Stint, 52 Mongolian Plover, 29 Great Knot,

6 Western Sandpiper, 6 Black-tailed Godwit, 5 Spoon-billed Sandpiper, 4 Long-toed Stint, 3 Grey-tailed Tattler, 2 Terek Sandpiper, 2 Broad-billed Sandpiper, 1 Ruff, 1 Wood Sandpiper, 1 Common Sandpiper, 1 Red Knot and 1 Common Snipe.

During our investigations special attention has been given to the Spoon-billed Sandpiper. We could observe 1–3 Spoon-billed Sandpipers almost every day feeding on mudflats from 13 August till the end of work on 29 August 2015. Also, 6 Spoon-billed Sandpipers were caught during our mist-netting. All birds were juvenile. Five birds received yellow flags with individual codes. One more bird was flagged on Chukotka.

Yuri Gerasimov, Alexander Matsyna, Ivan Tiunov, Rimma Bukhalova

Ruddy Turnstone tracked on migration

We visited Flinders Island Ocean Beach in Bass Strait on 20 September 2015, primarily to obtain a sample of newly returned adult Red-necked Stints for Deakin University's study of avian flu and other diseases (Marcel Klassen/Alice Risely). We knew, however, that there was also a Ruddy Turnstone there carrying a geolocator put on in King Island, Bass Strait.

We were lucky to catch three Ruddy Turnstone (out of eight present) in with 54 Red-necked Stints. Fortunately one of the Turnstone (engraved flag ZTV) was the one carrying the geolocator. This has now been downloaded by Ken Gosbell and has provided another cog in our gradually accumulating pile of excellent data derived from geolocators deployed on Ruddy Turnstone.

This bird (metal band 052-70126) had originally been banded as a second-year bird at Manuka Beach on King Island on 17 November 2012. When it was recaptured on 28 March 2013, a geolocator was added. At this stage it could be identified as a male, was aged as 2+ and was just about to set off on its first northward migration. It departed on 14 April 2013 travelling up the well-worn path through Asia, including the South China Coast and the Yellow Sea, to its breeding grounds in the New Siberian Islands off the north coast of Siberia. It returned to King Island, again via Asia, arriving back there around 10 September 2013.

The bird remained in King Island throughout the 2013/14 non-breeding season and was not recaptured. The geolocator continued to gather data until just after the bird had set off northward on its 2014 migration on 11 April 2014.

All this data was obtained when the bird was recaptured at Manuka Beach on 25 November 2014. At this time the original geolocator was replaced with a new one.

Northward migration in 2015 again started a few days earlier than the previous year, on 9 April. The migration northward followed a similar path to 2013 with the bird again covering the first 7,500 km in a non-stop flight of just over six days at an average ground speed of 55 km per hour. The breeding grounds were reached in late May, but this year there was no indication that the bird had tried to breed. The bird was already on its way south again by 14 July 2015. The lack of breeding activity is further evidence supporting advance information from Russia that the 2015 Arctic Summer was an extremely poor breeding season for waders across much of Siberia.

The southward migration through Asia followed the normal course and the bird arrived at Flinders Island on 17 September 2015. It is interesting that Rob Patrick actually saw the bird there that day (and again the next day, with Penny Johns then seeing it on 19 September 2015!). When we caught it on 20 September 2015 and removed the geolocator it weighed only 90 g – at the bottom end of the normal fat-free range. The bird was presumably planning to spend a few more days at Flinders Island before continuing on its last 200 km journey back to its usual non-breeding area on King Island.

Clive Minton

Wader breeding success in the 2014 Arctic summer, based on juvenile ratios of birds which spend the non-breeding season in Australia

Each year since 2000 the Australasian Wader Studies Group and Victorian Wader Study Group have published the proportion of juvenile birds in cannon-net catches made in Australia during the non-breeding season. Results have been published each year in *Arctic Birds*, and in the AWSG journal *Stilt*. Earlier this year a paper analysing all the Australian data, and comparing

it with data from Western Europe and elsewhere, was published (Aharon-Rotman *et al.* 2015).

This article provides results and discussion of the latest compilation of cannon-net catches, which will be published in full in the next edition of *Stilt*.

RESULTS

Table 1. Percentage of juvenile (first-year) waders in cannon-net catches in south-east Australia 2014/2015.

Species	No. of catches		Total caught	Juveniles		Long-term median * % juvenile (years)	Assessment of 2014 breeding success
	Large (>50)	Small (<50)		No.	%		
Red-necked Stint <i>Calidris ruficollis</i>	8	10	3494	647	18.5	15.3 (36)	Average
Curlew Sandpiper <i>C. ferruginea</i>	1	7	490	25	5.1	10.0 (35)	Poor
Bar-tailed Godwit <i>Limosa lapponica</i>	1	0	103	15	14.6	19.5 (25)	Below average
Red Knot <i>C. canutus</i>	0	2	11	11	(100)	58.0 (18)	(Very good?)
Ruddy Turnstone <i>Arenaria interpres</i>	0	21	485	81	16.7	10.0 (24)	Good
Sanderling <i>C. alba</i>	1	4	146	20	13.7	10.1 (23)	Average
Sharp-tailed Sandpiper <i>C. acuminata</i>	2	5	289	45	15.6	13.3 (33)	Average

All birds cannon-netted in the period 2 November to 25 March except Sharp-tailed Sandpiper and Curlew Sandpiper to end February only and some Ruddy Turnstone and Sanderling to early April and one Sanderling catch in late April (2015).

*Does not include the 2014/2015 figures.

Table 2. Percentage of juvenile birds in cannon-net catches in south-east Australia 1998/1999 to 2014/2015.

Species	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	Average (16yrs)
Ruddy Turnstone	6.2	29	10	9.3	17	6.7	12	28	1.3	19	0.7	19	26	10	2.4	38	17	14.6
Red-necked Stint	32	23	13	35	13	23	10	7.4	14	10	15	12	20	16	22	17	19	17.4
Curlew Sandpiper	4.1	20	6.8	27	15	15	22	27	4.9	33	10	27	(-)	4	3.3	40	5.1	17.3
Sharp-tailed Sandpiper	11	10	16	7.9	20	39	42	27	12	20	3.6	32	(-)	5	18	19	16	18.7
Sanderling	10	13	2.9	10	43	2.7	16	62	0.5	14	2.9	19	21	2	2.8	21	14	15.1
Red Knot	(2.8)	38	52	69	(92)	(86)	29	73	58	(75)	(-)	(-)	78	68	(-)	(95)	(100)	58.1
Bar-tailed Godwit	41	19	3.6	1.4	16	2.3	38	40	26	56	29	31	10	18	19	45	15	24.5

All birds cannon-netted between 15 November and 25 March, except Sharp-tailed Sandpiper and Curlew Sandpiper to end February only and some Ruddy Turnstone and Sanderling to early April and one Sanderling catch in late April (2015). Averages (for previous 16 years) exclude figures in brackets (small samples) and exclude 2014/2015 figures

Wader breeding success in the 2014 Arctic summer cont.

Table 3. Percentage of first-year birds in wader catches in north-west Australia 1998/1999 to 2014/2015

Species	98/ 99	99/ 00	00/ 01	01/ 02	02/ 03	03/ 04	04/ 05	05/ 06	06/ 07	07/ 08	08/ 09	09/ 10	10/ 11	11/ 12	12/ 13	13/ 14	14/ 15	Aver- age
Red-necked Stint	26	46	15	17	41	10	13	20	21	20	10	17	18	24	15	19	10	20.7
Curlew Sandpiper	9.3	22	11	19	15	7.4	21	37	11	29	10	35	24	1	1.9	23	18	17.4
Great Knot	2.4	4.8	18	5.2	17	16	3.2	12	9.2	12	6	41	24	6	6.6	5	6	11.8
Red Knot	3.3	14	9.6	5.4	32	3.2	(12)	57	11	23	12	52	16	8	1.5	8	13	17.0
Bar-tailed Godwit	2.0	10	4.8	15	13	9.0	6.7	11	8.5	8	4	28	21	8	7.6	17	5	10.8
Non-arctic northern migrants																		
Greater Sand Plover	25	33	22	13	32	24	21	9.5	21	27	27	35	17	19	28	21	20	23.5
Terek Sandpiper	12	(0)	8.5	12	11	19	14	13	11	13	15	19	25	5	12	15	12	13.7
Grey-tailed Tattler	26	(44)	17	17	9.0	14	11	15	28	25	38	24	31	20	18	16	19	20.7

All birds cannon-netted in the period 1 November to mid-March. Averages (for previous 16 years) exclude figures in brackets (small samples) and exclude 2014/2015 figures.

DISCUSSION

The Northern Hemisphere 2014 breeding season was much less favourable than that of 2013 for wader populations which visit south-east Australia. In only one species, the Ruddy Turnstone, was breeding success assessed as 'good'. Most outcomes were average and that of Curlew Sandpiper was rated as 'poor'. In the previous year the outcome of the 2013 breeding season for these south-east Australian wader populations was generally 'good', or even 'very good'.

A similar reduced breeding success in 2014 compared with 2013 was also noticeable in wader populations in north-west Australia. Again, only Ruddy Turnstone was assessed as being 'good'. In three species their breeding performance was assessed as 'poor', with Great Knot and Bar-tailed Godwit outcomes being particularly bad.

The quite marked levels of year-to-year variations in breeding success in the Arctic are illustrated in **Tables 2** and **3**. It is interesting that these 16-year data series do not seem to show any marked trend, upwards or downwards, in breeding success over the years.

The recent analysis of all the AWSG and VWSG percentage juvenile data (Aharon-Rotman *et al.* 2015) also showed that there is currently no sign of a strong three-yearly cycle (good, bad, medium) in our breeding success data such as was originally present in western European/South African populations of the Curlew Sandpiper (Summers & Underhill 1987). This analysis

suggests that any semblance of a three-year cycle in our the East Asian-Australasian Flyway, such as is slightly apparent in Red-necked Stint and Curlew Sandpiper figures from the 1980s, is no longer present. Furthermore the recent analysis showed that even in Western European/African populations of Curlew Sandpiper the strong three-year cycle is no longer apparent. This corresponds with the reported breakdown of a similar cycle in Lemmings (Ims *et al.* 2008). This has been attributed to the effects of climate change in Arctic regions.

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Clive Minton, Roz Jessop & Chris Hassell

Tomago Wetlands Rehabilitation Project, Hunter Estuary NSW

Floodgates, allowing tidal water to flow into previously drained estuarine wetlands, were recently opened by Alister Henskens, Member of the NSW Parliament representing the Minister for the Environment. Opening these floodgates initiates Stage 3 of the Tomago Wetlands Rehabilitation Project, which is located in the Hunter Wetlands National Park, the largest single estuarine reserve in NSW. It is also within the Hunter Estuary Ramsar site, recognised as a wetland of international importance because of the valuable habitat for migratory shorebirds that spend almost seven months of each year here. The following extracts from Alister Henskens' speech highlight the need for cooperation between many government departments, non-government organisations and volunteers to achieve the long-awaited rehabilitation of this previously estuarine wetland.

"With the opening of the floodgates, water from the Hunter Estuary will be reintroduced into land that was originally inundated with saltwater, returning the land to an estuarine tidal environment.

"A report compiled for the Commonwealth Government in 2010 examining the ecological character of the Hunter Estuary Ramsar area, showed that saltmarsh vegetation, an important migratory bird habitat in the Hunter Estuary, was declining due to habitat loss.

This project aims to allow the creation of additional habitat for migratory birds and improve water quality.

"Stage 1 of the project was opened in 2008 and Stage 2 in 2012. Stages 1 and 2 have already demonstrated great success. Between 2012 and 2015, 10 hectares of saltmarsh and 57 hectares of tidal mudflats and shallow ponds have been created, contributing important migratory wader habitat.

"In February this year, 3000 migratory Sharp-tailed Sandpipers were sighted in one of the new tidal mudflats. This is almost two per cent of the total population of this species. These birds migrate between these wetlands and Siberia; a round trip of more than 20,000 kilometres.

"Stage 3 will allow the flushing of the 3.5 kilometre ring drain. The reintroduction of tidal water into this section will rapidly improve water quality, benefiting prawn and fish stocks.

"Initial infrastructure works started in 2007, and since that time many individuals and agencies have contributed to the project's success. Funding

from the NSW Government via the Environmental Trust, NSW Fisheries grants, Hunter Local Land Services and National Parks and Wildlife Service, along with Caring for Country grants through the Commonwealth Government have allowed for the construction of water management infrastructure and environmental assessments.

"Construction of the infrastructure to enable Stage 3 was secured through an Environmental Services Order issued by the Land and Environment Court and NSW Environmental Trust funding.

"I'd like to recognise the significant contribution of the volunteers of the Hunter Bird Observers Club who have been monitoring the bird diversity and numbers here at Tomago for several years. It is through the work of the Bird Observers that the success of this project can be demonstrated. Their figures on the migratory birds using this wetland highlight the significant contribution of this wetland to global bird conservation and help to justify the investments made by successive governments.

"A project of this scale, reintroducing salt water for habitat creation, needs specialist advice to ensure that the aims are achieved without adversely affecting neighbouring properties. I'd like to acknowledge the contribution of Dr Will Glamore and his colleagues at the University of NSW, Water Research Laboratory, for the expert advice on managing the water inundation levels for the project. I note that the Water Research Laboratory was awarded a NSW Engineers Excellence Award last year for the engineering aspects of this project, and its nomination to the National Trust in 2013 resulted in a Natural Heritage Award for the project.

"Local companies and contractors have also provided specialist services such as engineering, construction, ecological monitoring, project management and weed management.

"I would also like to congratulate staff of the NSW National Parks and Wildlife Service, Hunter Local Land Services and the Department of Primary Industries. In particular, I'd like to recognise Mr Robert Quirk and Mr Mick Murphy of the National Parks and Wildlife Service and Ms Peggy Svoboda of Hunter Local Land Services for having the foresight to start the project eight years ago."

"Thank you all for your support and passion for conserving this great resource."

Alister Henskens, MP
NSW Parliament

Protecting Latham's Snipe habitat near Bowral, NSW

In 2011 the Wingecarribee Shire Council (WSC) announced that a Botanic Garden would be created on 15 hectares of Council-owned land situated at the south-western corner of the East Bowral subdivision.

The presence of Latham's Snipe on this site was immediately brought to the attention of both the Botanic Gardens Committee and the WSC by BirdLife Southern Highlands in late November, 2011. Neither organization appears to have been aware of the significance of the habitat associated with this migratory species under the terms of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). It is possible that Latham's Snipe have been visiting this site since it was cleared in the nineteenth century to establish a dairy farm.

As a result of advice from BirdLife Australia's Conservation Manager, Dr Jenny Lau, and some successful lobbying, the WSC was persuaded to refer the matter to the Commonwealth Department of Sustainability, Environment, Water, Population and Communities.

The Department required WSC to commission an independent assessment of the site and this fell to Dr Rod Kavanagh. He conducted a survey in late March 2012 when Latham's Snipe were found in numbers far in excess of the 18 birds required to have the site declared significant under the terms of the EPBC Act.

The WSC Consultant recommended that an alternative site should be chosen for the Botanic Garden but if the garden were to go ahead, the core area of Snipe habitat should be protected and proposed plans for the garden should be modified to protect that habitat.

In September 2012 a positive Referral Decision was announced by the Department of the Environment and this included several mandatory

provisions. One stated that approximately 2 hectares of the core Snipe habitat must be fenced to exclude dogs. Another was the requirement for the provision of signage stating that entry to the protected area between 1 September and 31 March was not permitted.

However during the following two years no action was taken to implement this Referral Decision although other developments on the site continued. WSC then announced it was intending to lease the site to the Southern Highlands Botanic Garden Board (SHBG) who would henceforth assume control of the area including the restricted Snipe habitat area.

At this point BirdLife Southern Highlands brought the lack of action on the Referral Decision to the attention of the Department of the Environment and made further representations to WSC. This advocacy resulted in a visit to the site by two departmental field officers early in 2015. The required fencing and signage were finally put in place in July 2015.

BirdLife Southern Highlands offered to provide four interpretative signs explaining the significance of the site and showing the migratory route Latham's Snipe follow each year. Although these signs were accepted by Council staff they were rejected by the SHBG Board. However, BLSH and the Board are now working co-operatively on other ways to highlight all the birdlife which can be seen on the site.

BLSH has conducted three surveys per season to monitor the presence of Latham's Snipe on the site since they were first notified to Council. These results are provided to all interested parties. The surveyors sweep the site in a slowly moving line. Results to date are provided in **Table 1**.

Peter Dewey
BirdLife Southern Highlands

Table 1 - Latham's Snipe survey results

Season	Date	No. of Surveyors in the Line	No. of Snipe Recorded
2011-2012	December 20	5	18
	January 10	6	25
	March 27	5	30
2012-2013	October 30	9	25
	January 7	6	32
	March 25	8	0
2013-2014	November 8	8	35
	January 10	12	12
	March 7	4	0
2014-2015	November 7	12	60
	January 10	6	20
	March 6	8	10
2015-2016	October 2	13	120

Please contribute to BirdLife Australia's IBA Audit

About half of Australia's 314 Important Bird and Biodiversity Areas (IBAs) have been nominated for one or more shorebird species occurring there in significant numbers. While for many of these areas bird populations are monitored well through the Shorebirds 2020 program, we are looking to improve support for (volunteer) conservation work in these areas. To this end we have developed an Audit that aims to quantify volunteer effort, threats, conservation activities and other aspects that will help BirdLife Australia to be targeted and efficient in its conservation work. If you are monitoring or regularly visiting an IBA you are quite likely able to help us with the Audit here: <http://goo.gl/forms/xwg8krsSST> Please complete the Audit by the end of October. This should not take longer than about 30 minutes.

Not sure if your birding or monitoring area is an IBA? Check the Map:
<http://birdlife.org.au/projects/important-bird-areas/iba-maps>

If you have any questions please get in touch with Golo Maurer (golo.maurer@birdlife.org.au; 0467 444 114).

The findings of the Audit will be presented at the Australasian Ornithological Conference in Adelaide in November 2015.

A Stirring of Spoonies

Today, 30 July 2015, is one of the most important days in the calendar of the 2015 Headstarting expedition and a very important one in the recovery of the Spoon-billed Sandpiper. Today is the day the World Wildlife Trust and Birds Russia team release the birds they have known from the newly-laid egg stage... today is the day the team releases bright-eyed, feather-perfect, just-fledged Spoon-billed Sandpiper chicks. All chicks have been hatched, raised and released inside the month of July 2015!!

I can only imagine how very stirring it must be for the team to see so many young sandpipers, with the knowledge its population numbers only a few hundred individuals. I certainly felt stirred when I phoned Roland yesterday evening between his regular forays for chick food – shrimps and mosquitoes netted from icy pools near Meinypil'gyno. Roland described how incredible it was for all team members when the first brood of four hatched on 7 July, followed by one chick every 90 minutes throughout the 8th! Although this then meant exhausting round-the-clock nursery duty for many team members, they were all delighted with the synchrony of hatching. The 'synchrony of hatch' meant the chicks would reach flying stages at around the

same time which in turn meant a single large release of birds was a possibility. The team have always felt that by releasing the group as one flock, they would provide the youngsters with the best chance of joining flocks of other small waders just before the exodus south.

Before our telephone call ended, Roland told me that over the next few days the team plan to observe the birds as closely as possible, without disturbing them. The team will respond to any of the birds' needs if they can – for example they will move extra food to 'here and there' positions to keep the birds well-fed and safe in the days they take to acclimatise to the Chukotkan wilderness, ahead of their southward migration in a fortnight or so.

When my phone conversation with Roland ended I was left imagining, once again, how emotionally stirring this time must be for the team. We don't have a collective noun for a flock of spoonies but I'm beginning to think a stirring may be appropriate – "a stirring of spoonies", perhaps?

Nigel Jarrett

Source: <http://www.saving-spoon-billed-sandpiper.com/2015/07/news/conservation/a-stirring-of-spoonies/>

Minton Tales – a celebration

To celebrate Clive Minton's 80th birthday late last year, stories from people around the world who have joined with him at various places and times were compiled into a book. The book was presented to Clive in front of a small gathering of 'cohorts' on behalf of the Victorian Wader Study Group (VWSG). We can all share these tales by accessing a pdf of the book from the VWSG website.:

<http://www.vwsg.org.au/Mintontales.pdf>

You can read it on your computer or get a copy printed at your local stationery store if preferred.

Rog Standen

Wader banding commences in Bangladesh

The Bangladesh Bird Club (BBC) has commenced the flagging of migratory waders using the double yellow flag code allocated to them for the EAAF.

Samiul Mohsanin, from the BBC informed me that they applied the flags to 49 waders of seven species on the northern migration this year. The list of species includes Common Redshank, Curlew Sandpiper, Lesser Sand Plover, Little Stint, Red-necked Stint, Temminck's Stint and Terek Sandpiper.

They are going to be putting an alpha-engraved flag above a numeric-engraved flag on the right tibia and a metal band on the left tarsus (although some of the earlier birds could have the flags the other way around and on either leg).

The banding site is at Domar Char, Hatia, Bangladesh (22°2'14.30"N, 91°3'54.05"E).

Please be on the look-out for any of the BBC flagged birds and report them directly to Samiul at samiul.mohsanin@gmail.com.

Congratulations to the BBC team and all the best for your research endeavours. This project was supported by The Asian Waterbird Conservation Fund.

Rog Standen

Operator of the AWSG Leg Flag Sighting database

August 2015

Conserving migratory species

The multiple challenges of planning for complex migratory networks

Migratory species are pretty amazing. Some species travel vast distances in a single migration. An individual bar-tailed godwit, a migratory wading bird, was once tracked as travelling an incredible 11,000 km in a single flight! Arctic terns travel the equivalent of to the moon and back three times over the course of their life. But it's not just the distances they cover that is awe inspiring. Some of them return year after year to the same location, navigating across landscapes that have been transformed by humans. Given such Herculean feats, it seems tragic that many of the world's migratory species are now in serious decline (see 'Birds in the red', *Decision Point* #59). Unfortunately, addressing the causes of these declines presents a major conservation challenge. Migratory species rely on many different landscapes, often across multiple political boundaries. Even if we had the capacity to save habitat in distant parts of the world – far beyond our own borders – there's enormous uncertainty about which part of the network of sites used by migratory species we should focus on.

The good news is that in some cases conservation actions for migratory species can result in rapid benefits. For example, zebra migration in Botswana spontaneously resumed when fences were removed. These fences had blocked the traditional migration route for decades.

Connections between places

Migrant species rely on multiple sites including breeding grounds, non-breeding grounds and the places they travel through on the way between

the two. This reliance on multiple sites makes migrants particularly vulnerable to habitat loss or degradation (consider Figure 1). In the extreme, if all individuals of a species regularly move between two areas, the area in worst condition will dictate the overall status of the species. Conservation measures taken in the less critical area may make little difference. Places such as stopover sites or drought refuges can also be crucial to a large proportion of the population even though they might be occupied only for a short period of time. Conservation interventions for migrants need to take these connections between places into account and ensure that migratory species have the resources they need across their breeding grounds, non-breeding grounds and the stopover sites or corridors they use along the way. This can be difficult, particularly where migrants move across jurisdictions or habitats. But it can be crucial for their long-term survival.

For example, the number of migratory shorebirds using the East Asian-Australasian Flyway has declined dramatically in the past few decades, and evidence implicates habitat loss at important stopover sites in the Yellow Sea (see 'Between a rock and a hard place', *Decision Point* #81). If this hypothesis is correct, then action to manage shorebird habitat elsewhere in the Flyway might fail to halt the decline of these birds without corresponding management at stopover sites in eastern Asia. Similarly, the migratory leatherback sea turtle is declining as a result of a combination of egg-poaching at its nesting sites and mortality from both inshore fisheries and pelagic long-line fishing. International restrictions on pelagic long-line fishing will not halt the decline of this species without corresponding effort at inshore locations and nesting sites.

Conserving migratory species cont.

Planning across networks

One of the key challenges in the conservation of migratory species is developing ways to design conservation plans across a complex network of sites. Conservation planning has tended to assume that the targets of management, such as species or ecosystems, are static in space and time. Of course, we have to start somewhere so it's not really surprising that management targets are static because accounting for migratory movements can be pretty complicated. However, the growing sophistication of conservation planning tools means it's now possible to incorporate the dynamic needs of migrants into our conservation plans. Spatial prioritisation software such as Marxan and Zonation have already been used to design conservation networks which manage migrants across the whole migratory cycle.

Some of the approaches we need for migratory species conservation have yet to be developed. We should be able to design solutions that maximize future evolutionary potential, or minimize the chance of random events, like cyclones or bushfires, wiping out populations. Such solutions, which will be needed to address the dual threats of climate change and habitat loss, might focus on the conservation of multiple sub-populations and dynamic migratory corridors.

Learn or act?

Given financial and time constraints, an intensive research-driven approach to conservation will not be feasible for the vast majority of migrants, especially where little is known about the connections between parts of their range. Where information is limited, planners have basically three choices:

1. Invest in activities that improve current knowledge (i.e. 'learning more')
2. Use existing information to estimate the optimal conservation plan, or
3. Undertake a combination of learning while taking action (i.e. adaptive management)

Although it is what we often fall back on, 'learning more' is not always the most effective way to achieve the best conservation outcomes. Delays in action, the risk of catastrophic population declines while new knowledge is acquired, and the fact that resources might be diverted from on-the-ground management all mean that postponing action may result in unacceptable losses. A lot of the time we know a lot more than we think. Tracking studies, stable isotopes measurements, or genetic studies can be used to get information on the connections between parts of migratory species' ranges, though these approaches can be costly, time consuming and require specialist knowledge. Luckily, we can

often use expert elicitation (a formal way of obtaining expert opinion, see 'So you think you're an expert', *Decision Point* #58) to get a good approximation of migratory connectivity between parts of a species range, and use this to guide our conservation decisions when we have limited resources.

Similarly, the use of decision-theoretic approaches and artificial intelligence can aid decision making where data are scarce. These techniques can also demonstrate how to optimally allocate time and resources between learning and taking action across space and time. The application of decision science to solve migratory species conservation problems follows the same basic principles as any well-designed prioritization process: (1) define a clear objective (e.g., what to minimize or maximize); (2) specify a set of conservation actions from which a subset will be chosen as priorities; (3) make hypotheses on how specific conservation actions will help meet the conservation objective; (4) consider resource constraints (i.e., time and money); and (5) implement decisions in a way that promotes learning.

A future with migratory species

Large-scale conservation schemes are yet to incorporate the needs of migratory species. That's not surprising given the complex, multijurisdictional challenge of migratory conservation. However, the need is great and, as I hope I have convinced you here, the tools are now available. With a little care and some well-designed investment, it's a challenge we can meet. And in doing so, future generations will hopefully be able to experience the amazing and inspiring phenomenon that is wildlife migration.

Claire Runge

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Reference

Runge, C.A., Martin, T.G., Possingham, H.P., Willis, S.G. & Fuller, R.A. (2014). Conserving mobile species. *Frontiers in Ecology and the Environment* **12**: 395–402. <http://dx.doi.org/10.1890/130237>

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Decision Point is the magazine of the Environmental Decision Group (EDG), which is a network of conservation researchers working on the science of effective decision making to better conserve biodiversity. Our members are largely based at the University of Queensland, the Australian National University, the University of Melbourne, the University of Western Australia, RMIT University and CSIRO. *Decision Point* magazines can be downloaded from: <http://ceed.edu.au/>

Volunteers needed for NWA Wader & Tern Banding Expedition 2016

Optimum dates for the **North West Australia 2016 Expedition** are **Saturday 6 February to Sunday 28 February 2016**. We will stay at Anna Plains/80 Mile Beach for the first half of the Expedition, and Broome Bird Observatory/ Roebuck Bay for the second half. We usually catch around three thousand waders and terns

during the three-week period, of a huge variety of species. Participants are most welcome, especially from overseas, even if they do not have any previous wader banding experience.

Would anyone interested please contact **Clive Minton: mintons@ozemail.com.au**

Australasian Shorebird Conference – New Zealand 2016

The tenth Australasian Shorebird Conference will be held at the Unitec Campus, Auckland, New Zealand, (where the Australasian Ornithological Conference was held in 2013) over the weekend of 1 - 2 October 2016 with field trips to Pukorokoro Miranda and the Manukau Harbour on Monday 3 October 2016. The conference will be hosted by the Pukorokoro Miranda Naturalists' Trust.

Membership - Australasian Wader Studies Group

Membership of the Australasian Wader Studies Group is open to anyone interested in the conservation of and research on waders (shorebirds) in the East Asian-Australasian Flyway. Members receive the twice-yearly journal *Stilt*, and a quarterly newsletter, *Tattler*.

Please direct all membership enquiries to:

BirdLife Australia
Supporter Services
Suite 2-05, 60 Leicester St
Carlton, VIC 3053, Australia.
Ph: 1300 730 075

Annual subscriptions:

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Arguments for biodiversity conservation in Natura 2000 sites

Abstract

Achieving acceptance among local stakeholders is crucial for biodiversity conservation, as their often diverging interests can hamper the success of conservation projects. While research exists on the different narratives and arguments used in the international policy debates, there is not much evidence on how effective alternative arguments are in communicating the value of biodiversity to local stakeholders. This paper used a multiple case study design for sites of the European Union's Natura 2000 network to investigate which arguments have been successfully used to persuade local stakeholders of restoration projects, funded under the EU's LIFE program. Particular focus is given to the role of ecosystem services as arguments for nature conservation and how these relate to other instrumental and non-instrumental arguments. Instrumental arguments appeared particularly effective for commercial users, where economic interests stood against the conservation activities. But also stakeholders without commercial interest tended to be more receptive to arguments that implied a benefit for themselves or their communities, such as recreation or a cultural value. Regarding

ecosystem services this study found that they should be understood as an addition to the category of instrumental arguments. Where pure economic factors were not sufficient to create a business case for conservation, ecosystem services were frequently applied to make the case for conservation stronger. Finding consensus among the different stakeholders is a key factor in achieving any conservation at all. The argument strategy should therefore always consist of a mix of instrumental and non-instrumental arguments, as only focusing on instrumental arguments might repel those individuals who seek a strong ethical motivation.

Angelika Müller and Joachim Maes

European Commission – Joint Research Centre,
Institute for Environment and Sustainability

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Editor's Note: The Natura 2000 network is the European Union's main instrument for biodiversity conservation. The network was established in 1992 under the Habitats Directive in order to protect key habitats and species in Europe.