

Darwin Initiative Annual Report

Project Ref Number	15-032
Project Title	Conserving a flagship steppe species: The critically endangered Sociable Lapwing
Country(ies)	Kazakhstan, Russia, India & Turkey
UK Contract Holder Institution	The Royal Society for the Protection of Birds
UK Partner Institution(s)	Birdlife International
Host country Partner Institution(s)	Association for Biodiversity Conservation in Kazakhstan (ACBK)
Darwin Grant Value	£185,863
Start/End dates of Project	April 2006 – March 2009
Reporting period (1 Apr 200x to 31 Mar 200y) and annual report number (1,2,3..)	1 April 2007 to 31 March 2008; Annual Report 2.
Project Leader Name	Dr RD Sheldon
Project website	Under development – live by end of May 2008
Author(s), date	M Koshkin & Dr RD Sheldon, 25th April 2009

1. Project Background

The project aims to develop effective mechanisms and capacity to improve the conservation status of the critically endangered Sociable Lapwing *Vanellus gregarius* across its range, but particularly in its stronghold in Kazakhstan. The population has fallen by as much as 90% during the past two decades and the population was thought to number fewer than 1000 pairs. The project is initially concentrating on research and monitoring to understand the causes of the observed population decline.

The wintering range and migration routes are poorly known and the project aims to work with range states to identify key sites and implement conservation measures as appropriate. By the end of the project the International Species Action Plan will be revised and the conservation status of the species clarified.

2. Project Partnerships

The partnership between RSPB and ACBK becomes stronger from year to year. Mr Maxim Koshkin, the Sociable Lapwing project national coordinator, ACBK's employee, continued receiving training from the Dr Rob Sheldon from beginning of May until the middle of June. Ksenia Grishina, one of the students from year 2006 received more intensive training from other team members and led her own team in 2007. Additionally, two very promising students received training during the period of 2,5 months. One of them was employed by ACBK later as GIS specialist and is working there since. Another student is going to participate in this years fieldwork.

There is a constant support and interest from the Committee for Forestry and Hunting, which is providing the team with ringing permissions and additional data on Sociable Lapwing locations through the network of local wildlife rangers. In the last 12 months, ACBK and the Committee have started to collaborate on a new large-scale conservation project in Kazakhstan.

The project continued to collaborate closely with the Russian Bird Conservation Union (RBCU), both financially and technically, which allowed them to undertake surveys in two regions in southern Russia which were known to be previously occupied breeding areas. Researchers from ACBK and RBCU have liaised regularly through the last 12 months and are starting to forge close links which will be of benefit in the future.

A contact with another partner in Russia was established this year. Evgeny Murzakhanov, young and talented ornithologist received a small grant from RSPB and will be carrying out surveys in Altay region this year. To receive required knowledge on different survey techniques he was invited to join the project team for a week in the beginning of May, before his own team will start surveying historical breeding grounds in Russia.

The project increased the amount of work undertaken on the migration routes and wintering grounds in the last 12 months due to the satellite tagging of individual Sociable Lapwings. This has led to enhanced collaboration with existing and new project partners.

In Turkey, Doga Dernegi, have undertaken surveys in the spring/autumn of 2007 and spring 2008. In March 2007, 1065 individuals were counted at Ceylanpinnar in south-east Turkey. Turkish ornithologists were alerted to possibility of this flock by a survey team based nearby in Syria. A co-ordinated count between the 2 teams revealed a total count of more than 2500 individuals. Further links have been established with Syrian ornithologists and a meeting was held at the BirdFair in summer 2007 between RSPB project staff, Osama Al-Nouri of Syrian Society for the Conservation of Wildlife (SSCW) and representatives of the Ornithological Society of the Middle East to further collaborative links with the region (OSME).

Ozge Balkiz, Science Co-ordinator for Doga Dernegi, visited the UK for a week in January 2008. Very constructive discussions were held about furthering the survey work in Turkey during 2008.

A new collaborative partnership is being established between the Sociable Lapwing project team and the Sudanese Wildlife Society (SWS). Surveys were undertaken at short notice in January and February 2008 by Ibrahim Hashim of SWS. Further collaboration is planned for the winter 2008/09.

AEWA and the Sociable Lapwing project team continue to work together on a number of initiatives. AEWA have sourced extra funds for future work on satellite tagging of Sociable Lapwings. The Sociable Lapwing team have assisted in the production of publicity material relating to AEWA's work with Sociable Lapwing. Dr Rob Sheldon frequently updates AEWA Secretariat on project progress and plans are currently being developed for a workshop in Almaty to revise the International Species Action plan for the species.

In summary, existing partnerships between the official project partners have been maintained and enhanced which has aided project delivery. Importantly further partnerships are being developed, particularly on the migration routes and wintering grounds, as the project expands its work to cover countries away from the breeding grounds.

3. Project progress

3.1 Progress in carrying out project activities

Fieldwork continued in April 2007 in the core project area, Korgalzhyn, south-west of Astana, built on the previous excellent field season. The field team located and monitored 192 nests. Thirty four adults and 188 chicks were fitted with unique colour-rings. Nest survival was lower than in previous seasons and results from nest cameras appear to show an increase in predation by mammalian predators – two foxes and one polecat were filmed taking eggs. This differs from data collected in 2006 (and the pilot study in 2005). We are considering the hypothesis that mammalian predators were preying on ground-nesting birds due to low numbers of voles. Baseline data on vole abundance was collected to investigate this in the future. Despite the lower nest survival, overall productivity was still reasonably high, with approximately 0.5 fledged chicks fledged per nesting female. In depth statistical analysis will be undertaken in summer 2008 following the final fieldwork season on the breeding grounds.

A survey team led by Johannes Kamp was based in the northern part of Kazakhstan in the Pavlodar area. The key aims were to see how typical the data collected in our core area were to other known breeding areas in Kazakhstan. Additionally, habitat selection models developed from data collected in 2006 in the core study area were tested for spatial applicability. This work was undertaken by Johannes Kamp as part of his Masters thesis at the University of Oldenburg, Germany.

Professor Rhys Green, Professor of Conservation Science, University of Cambridge assisted with additional training of the field teams in Kazakhstan in May 2007. Professor Green gave training on satellite tagging and also offered invaluable advice on furthering studies of ageing sociable lapwings to help estimate population size.

A total of more than 600 Sociable Lapwing nests have been monitored since the pilot project of 2005, 70 adults and 700 chicks individually colour-ringed and a wide variety of other biological and environmental data collected. This amount and quality of data will enable the project to produce robust statistical analyses and conclusions as the project enters its final year.

Following the conclusions of last years fieldwork season, the Sociable Lapwing project team decided to put more effort in to the study of the species migration routes and identification of the currently unknown wintering sites. One of the most important tasks for the past fieldwork season was to fit satellite tags on 3 adult birds on the breeding grounds, which was successfully done in July. The Sociable Lapwing is the smallest and lightest bird carrying a tag of this kind. Once the tags were fitted we regularly observed the birds to check for any adverse reaction, none were observed, and indeed the 3 tagged birds all went on to successfully complete incubation and fledge young. The birds all moved east as expected and by the end of September were in eastern Kazakhstan and south-west Russia. In October 2007 in southeastern Turkey a group of local ornithologists located a huge flock of 3200 Sociable Lapwings – the largest congregation of birds of this species in last 100 years. The discovery was possible thanks to a satellite transmitter attached to one of the birds in that flock. To reach the stopover sites in Turkey the bird had to cover more than 3000 kilometers. Such a number of Sociable Lapwings at a single stopover site also supports our new population estimate (see annual report – annex 3). Furthermore, two tagged birds carried on their migration down to Sudan where they have remained throughout the winter months. By the end of March one of them reached Turkmenistan on it's way back to the breeding grounds in Central Kazakhstan. This is the first time when one of the main autumn and spring migration routes of Sociable Lapwing was proved and mapped. The fates of two of the satellite tagged birds is unknown one of the tags may have malfunctioned and one tag is still transmitting but the activity counter within the tag suggest that the bird has died. It is unclear if the tags themselves are the cause of the mortality. Further work is needed to determine this.

Survey work on the migration routes and wintering grounds were co-ordinated in Turkey (Doga Dernegi), Syria (Syrian Society for the Conservation of Wildlife & Remco Hofland), Stavropol (Jeff Gordon) and Sudan (Sudanese Wildlife Society). Much of this work was co-ordinated in response to locations of the satellite tagged birds.

The work on the Sociable Lapwing records database has continued, as the team decided to make it as complete as possible. Currently the database holds around 1300 records and the number is constantly growing. Most of the data on records have been collected from different publications, reports, through experts from most of the countries of the species distribution range. And all the data on migration routes

and stopover sites collected this year with the help of the sat tagged birds perfectly matches the data stored in the database when it's plotted on a map. We are currently ground-truthing the data country by country through local experts.

Training of local students was very successful. Ksenia Grishina - one of the students trained during the fieldwork of 2006 joined the team in 2007 and showed excellent results in fieldwork activities and in leading of her own field team. Two more local students were recruited for participation in fieldwork and were trained in a variety of field techniques. At least two of the students are due to return in 2008 to undertake further fieldwork and training.

In August 2007, Maxim Koshkin, Johannes Kamp, Darwin project team members and Stuart Butchart, representative of BirdLife International, assisted in the organization, and participated in the first summer camp for young bird watchers - around 30 biology students gathered in a tented camp on the bank of Shalkar lake, located within the Darwin project study area. Bird watching clubs have been formed by the initiative of one of the project partners, Association for the Conservation of Biodiversity in Kazakhstan (ACBK) in most of the large universities within Kazakhstan. The project team members were invited to take part in introductory training as experienced experts on local birds and territory. Sociable Lapwing Project was presented to all the participants. These bird watching clubs are hugely important for producing future young conservationists in Kazakhstan. Natasha Kucheryavaya, a student working on the project in 2006 has subsequently gone on to lead one of the bird watching clubs at her local university.

Rob Sheldon and Johannes Kamp attended the International Wader Study Group Conference in La Rochelle, France (October 2007). Johannes Kamp gave an excellent talk that was very received by the conference audience on "habitat selection of the Sociable Lapwing in central Kazakhstan – a modelling approach."

Johannes Kamp presented his Masters thesis to examiners in December 2007 and was awarded the top grade for both his written and verbal presentation.

A project workshop was held in January 2008 to present preliminary findings to the project Steering Group. The workshop was chaired by Dr Paul Donald, and presentations were made by Rob Sheldon, Maxim Koshkin and Johannes Kamp. Feedback from the Steering Group was positive and work priorities were agreed for the final phase of the project.

3.2 Progress towards Project Outputs

The experienced team members carried on training young promising biology students from the largest Universities of Kazakhstan. One of the students, Ksenia Grishina, who is also local for the region, trained during the fieldwork of 2006 joined the team in 2007 and showed excellent progress in surveying, ringing and in leading of her own sub-team. Two more local students were recruited for participation in fieldwork and were trained in a variety of field techniques. Albert Salemgareev, one of the students who received training in field in 2007, was employed by ACBK as a GIS assistant. Led by an experienced fieldworker, Johannes Kamp, an additional project team was carrying out an intensive survey and monitoring work in Pavlodar region in northern Kazakhstan throughout the whole fieldwork season.

From the data collected to date, it seems increasingly likely that the causes of the population decline may be associated with factors away from the breeding grounds. We are progressing well to understanding the demographic mechanisms underpinning the decline in the Sociable Lapwing. Data on re-sighting colour ringed individuals, further work on age structure of the population and additional survey effort on the breeding grounds will enable us to develop good estimates of the breeding population in Kazakhstan by the end of the project.

The use of satellite tracking technology and increased collaboration with partner organisations in countries such as Turkey, Syria and Sudan is giving us an increasing understanding of migration routes and wintering grounds. This is backed up by the expanding database of historical records which we hope to publish in conjunction with the results from the satellite tagging work.

3.3 Standard Measures

Table 1. Project Standard Output Measures

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	TOTAL
2	Number of people to attain Masters qualification		1			
4A	Undergraduate students receiving training (Kazakh)	2	3			
4B	Number of training weeks	24	26			
4C	Number of postgraduate students receiving training (German)	1	1			
4D	Number of training weeks to be provided	14	12			
6A	Number of people to receive other training (Kazakh)	1	1			
6B	Number of training weeks to be provided	5	2			
7	Number of training materials to be produced for use by host country		1			
8	Number of weeks to be spent by UK project staff on work in the host country	25	32			
11A	Number of papers to be published in peer reviewed journals		1 (in Russian)			
11B	Number of papers to be submitted to peer reviewed journals	1	1			
12A	Number of computer databases to be established and handed over to the host country	1	1			
14B	Conferences/workshops/seminars attended & findings presented	3	1			
15A	Number of national press releases in host	2	2			

	country					
15C	Number of national press releases in UK		2			
17A	Number of dissemination networks to be established		1			
18A	Number of national TV features in host country	2				
19A	Number of national radio interviews/features in host country	3				
19B	Number of national radio interviews/features in UK		1			
23	Value of resources raised from other sources	£2.7k	£15,220			

Table 2. Publications

Type *	Detail	Publishers	Available from	Cost £
(eg journals, manual, CDs)	(title, author, year)	(name, city)	(eg contact address, website)	
Journal "Steppe Bulletin" (in Russian)	"Sociable Lapwing" Project goes on... - Koshkin et al, 2008	Ecoclub, Novosibirsk, Russia	http://ecoclub.nsu.ru/books/Step-23-24/Sb23-24.pdf (page 36)	
Bird Conservation International *	Population size, breeding performance and habitat selection of the black-winged pratincole	Cambridge University Press	Bird Conservation International (currently in review)	

3.4 Progress towards the project purpose and outcomes

Substantial progress has been made towards identifying the causes of the population decline in the critically endangered Sociable Lapwing. As reported in the previous annual report, prior to the start of the project it was widely expected that the principal cause of the decline would be associated with factors on the breeding grounds. However, high breeding success in two out of three years, coupled with low return rates of colour-ringed birds, suggests that the main causes may be associated with factors on the wintering grounds and/or migration routes. This has opened up a challenging new avenue of research against which we have made excellent progress in the last 12 months. Additional financial resource has been required to develop and extend the amount survey work in countries outside of Kazakhstan. This in itself has been challenging but c£15k has been raised through a variety of donors to allow this work to be implemented. We are confident that through extra fundraising that we can further develop this new area

of project work. Planning is underway with partner organisations for further survey work in south-west Russia, Turkey, Syria, Sudan, India and possibly Iraq.

On the breeding grounds research work has now given us a clear understanding of the habitat requirements of sociable lapwing and we will be able to use this information to target future survey effort.

The capacity of the key partners, particularly ACBK in Kazakhstan has been substantially enhanced in the last two years. Maxim Koshkin continues to develop into an outstanding advocate of the Sociable Lapwing project and wider conservation work within Kazakhstan. Three Kazakh students are trained to a high level of competence that would enable them to undertake independent ornithological research projects.

We remain confident that the conservation status of Sociable Lapwing will be clarified by the end of this project and that a revised Species Action Plan will be implemented for the benefit of the species. Our work with conservation partners on the breeding grounds in Kazakhstan and Russia, as well as on the migration routes and wintering grounds should ensure conservation benefits across the species' range.

3.5 Progress towards impact on biodiversity, sustainable use or equitable sharing of biodiversity benefits

This project is furthering knowledge of steppe ecosystems, a relatively poorly studied habitat, and we have been developing links with other organisations to liaise over future conservation research and management. In particular, the Altyn Dala project is underway with the aim of developing a large protected area that will benefit the endangered Saiga Antelope. Other steppe species, including Sociable Lapwing, will benefit from the Altyn Dala project. The research results from our project and the skills that are being acquired by ACBK staff will be important in developing future conservation initiatives in Kazakhstan. Both Johannes Kamp and Maxim Koshkin are currently looking for PhD research opportunities to research aspects of steppe biodiversity.

4. Monitoring, evaluation and lessons

In January 2008 an internal workshop was held to review the progress of the Darwin project to date. Presentations of various aspects of the project were made by Maxim Koshkin, Johannes Kamp and Rob Sheldon. Feedback from the steering group was positive and priorities were identified for the future.

Professor Rhys Green of the University of Cambridge worked with the field teams in Kazakhstan in 2007 and was complimentary on the quality of the work we were undertaking.

We have continued to make substantial progress with understanding the requirements of Sociable Lapwings and we're currently preparing a further paper for peer review. A number of additional research papers are being proposed for preparation in summer 2008.

5. Actions taken in response to previous reviews (if applicable)

Cattle grazing distributions – the reviewer questioned the use of GPS data loggers and our study of the way animals graze around villages. This piece of work was required so we could get a better understanding of how domestic livestock utilise the steppe grassland around villages. The work we undertook achieved this by providing daily traces from tagged livestock that clearly showed how animals leave villages in the morning and are then led away to graze areas several kilometres from villages. The animals are then led back to the village in the evening and returned to their owners. To clearly demonstrate this with quantitative data collected through the use of GPS collars would have been useful had we needed to advocate adaptations to grazing management. It is increasingly likely that trampling by livestock is less of an issue than was thought at the start of the Darwin project. It is worth noting that the GPS units that were used were provided free of charge by Garmin and the cost was not taken out of the core Darwin budget. An additional advantage of this aspect of the research was to demonstrate to local staff and students how technology can be adapted to collect useful quantitative data.

The reviewer made a very valid point about the spatial resolution of this work not being suitable for directly assessing nest trampling rates, but our emphasis was always on exploring grazing patterns. Finally, although we don't think that grazing is the main cause of the population decline in sociable lapwing we can't rule out local effects at the village scale. For example, we do know of some villages

where trampling rates appear higher than normal and to get a greater understanding of grazing is still important in some instances. With the work we have undertaken in the last 2 years of the project we think we have sufficient understanding of how grazing systems work in our study area and we will be able to make some general recommendations in the future once data analysis is complete.

Project implementation – due to the recent discoveries of sociable lapwing on migration routes and wintering grounds the reviewer recommended a review of the log frame and proposed activities. The project will continue to undertake its research work on the breeding grounds to increase our knowledge of the breeding biology of the species. We're also building up a colour ringed population – this is important to derive annual survival rates – and we are getting good numbers of re-sightings to enable us to do this. The reviewer questioned this aspect of the work in the general assessment section of the report review. We think annual survival is an important demographic parameter to quantify and we are starting to get sufficient data to do this. It will also be one of the legacies of the project which ACBK are looking to continue once the Darwin project is completed. However, we intend to (indeed we have) increase the amount of work on the migration routes and wintering grounds. We have co-ordinated and supported work in south-west Russia, Turkey, Syria and Sudan, and this will be greatly expanded in 2008/09. This is all being financed through additional funding but co-ordinated under the auspices of the Darwin project. We think that this area of work is covered in the log frame outputs 2, 4 and 5.

Project finances should all have been reconciled since the first annual report of April 2007.

6. Other comments on progress not covered elsewhere

The design of the project has been enhanced in the last 12 months by increased collaboration with both existing and new partner organisations. We are looking to strengthen these partnerships in the final year of the project, and furthermore we're exploring options to enhance and continue the projects work after March 2009.

7. Sustainability

The whole project team spent a lot of effort to ensure the future research and conservation not only for Sociable Lapwing but also for other steppe species and for the whole biodiversity in general. In the country being the ninth largest country in the world with the total of maximum 30 amateur ornithologists, the project played a very important role in training young specialists. 5 post graduate students were extensively trained a variety of field techniques. Close connections were established between the project and the developing network of student birdwatching clubs within the biggest universities of Kazakhstan. This network was initiated and is supported by the IBA Central Asia project of ACBK. Through the Sociable Lapwing project activities ACBK has become an increasingly well known nature conservation organization of Kazakhstan and the main expert on several steppe species. Further collaboration with the Altyn Dala Project is being developed, which aims to protect the Saiga antelope through the conservation of vast areas of steppe habitats.

8. Dissemination

In the last 12 months dissemination within the host country has focused on face to face contact through regular liaison with government agencies in relation to ACBKs broader conservation work in Kazakhstan. The feedback from the Committee of Hunting and Forestry (the Statutory Agency for protected areas in Kazakhstsan) has been positive. We envisage a greater emphasis on the dissemination of our results during the next phase of the project. In November 2008 we are planning a species action plan review workshop which will be attended by a number of key people from within Kazakhstan, as well as others across the species' range. We expect this to be one of the key methods of disseminating the results of our project. In conjunction with this workshop we are planning a number of press releases and articles in the popular press within the host country.

In both the UK and also Germany we are about to produce popular articles in the RSPBs Birds magazine (sent to all RSPB members) and Der Falke in Germany. Copies of these articles will be sent to the Darwin Secretariat and pdfs will be appended to the final project report in 2009.

Talks are planned at the Ornithological Society of the Middle East's annual meeting in July 2008, The Birdfair in August 2008, and at RSPBs members weekend in April 2009. A full communications plan, including the dissemination of project results is currently being completed.

9. Project Expenditure

Item	Budget ¹	Expenditure	Balance
Rent, rates, heating, overheads etc			
Office costs (e.g. postage, telephone)			
Travel and subsistence			
Printing			
Conferences, seminars, etc			
Capital items/equipment			
Others			
Salaries			
<hr/>			
<i>TOTAL</i>			

Note 1 – Budget amendment revising 07/08 grant budget from application request to version shown above submitted 7th March 2008. Approval for amendment received from DEFRA 20th March 2008.

10. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes

[I agree for ECTF and the Darwin Secretariat to publish the content of this section](#)

The project has continued to collect a wealth of biological data on the breeding biology of the Sociable Lapwing, which will greatly enhance our knowledge of the species, and our ability to implement effective conservation measures. Through the use of satellite tracking technology we have followed and documented for the first time a migratory route and the wintering grounds of individual sociable lapwings. As a consequence, we have enhanced our work with existing partner organisations and developed new partnerships in countries such as Sudan. A flock of 3200 birds found in Turkey represents the largest flock recorded for more than 100 years, and birds were located in Sudan for the first time in 50 years. Our work is continuing to expand within countries along the migration routes and also on the wintering grounds.

Capacity building within Kazakhstan is progressing well, with key personnel from ACBK (Kazakhstan partner) continuing to respond well to the experiential and direct training that the project has offered to date. A greater proportion of the fieldwork and preparation is now being undertaken by Kazakh researchers which again highlights the success in one of the key aspects of the Darwin project – capacity building.

Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2007/08

Project summary	Measurable Indicators	Progress and Achievements April 2007 - March 2008	Actions required/planned for next period
<p><i>Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve</i></p> <p><i>The conservation of biological diversity,</i></p> <p><i>The sustainable use of its components, and</i></p> <p><i>The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</i></p>			<p><i>(do not fill not applicable)</i></p>
<p><i>Purpose</i></p> <p>To develop effective mechanisms and capacity to improve the conservation status of the critically endangered Sociable Lapwing</p>	<p>Species' conservation status clarified by end of year 3.</p> <p>Targets to reverse decline agreed by key decision makers through adoption of revised Species Action Plan by end of year 3.</p>		
<p>Output 1.</p> <p>Causes of decline of Sociable Lapwing identified</p>	<p>Demographic mechanisms and causal processes demonstrated</p>		
<p>Activity 1.1</p> <p>Undertake field-based research in Kazakhstan to estimate productivity and survival and their correlates</p>			<p>To date more than 600 nests have been located and monitored to determine survival rates and causes of nest loss. Nest cameras have revealed predation is the most likely cause of nest loss rather than trampling. Seventy adults and approximately 700 chicks have been colour ringed to determine chick and adult survival. A variety of correlates quantified to</p>

	<p>enable future analysis to determine correlates of nest survival. The return rate of colour-ringed birds continues to be low suggesting that the explanations behind the population decline may be linked to the wintering grounds and/or migration routes.</p> <p>Three individuals have been satellite tagged to help identify migration routes, stop-over sites and wintering grounds. Initial results are encouraging, with a key stop over site in Ceylanpinnar, Turkey, identified, and the first wintering records in Sudan for 50 years.</p> <p>Work will continue in 2008 to further quantify nest and chick survival. Sightings of colour ringed birds will enable a quantification of first year and adult survival. By the end of the field season we will have a clear understanding of the demographic parameters underlying the population decline in Sociable Lapwing.</p>
<p>Activity 1.2 Research on grazing systems</p>	<p>Developed and tested the use of GPS collars to determine grazing patterns of livestock which proved successful. We collected a small amount of data on grazing patterns of cattle. In addition to this we have data on livestock numbers associated with each village in our study area. Our data suggests that trampling by livestock is not a major issue for sociable lapwing, but livestock is a good indicator of suitable nesting habitat – this has been addressed through the habitat selection work by Johannes Kamp.</p>
<p>Output 2. Breeding and wintering populations and distribution estimated and migratory routes clarified</p>	<p>Population estimates and range maps based on accepted scientific methods available by end of project</p>
<p>Activity 2.1 Surveys of wintering populations</p>	<p>Surveys were supported financially in Turkey, south-west Russia and Sudan. We also collaborated with teams in Syria. Sightings of large numbers of birds (see press releases in annex 3) in Ceylanpinnar in both spring and autumn 2007, suggests that this is a key stop over site for migrating sociable lapwing.</p>

	<p>The use of satellite tags have helped us identify the western migration route.</p> <p>In 2008 we'll be fitting a further six satellite tags. Three birds will be tagged in the far east of Kazakhstan to try to identify the eastern migration route into India, and three birds will be tagged in the far west of Kazakhstan.</p> <p>In 2008/09 we are planning survey work on the wintering grounds in India, Sudan and Iraq, as well as further work on the migration routes in Turkey and Syria (and possibly other countries).</p>
<p>Activity 2.2</p> <p>Collation of historical records</p>	<p>Excellent progress has been made in collating historical records (c1300 records to date). For most countries we are satisfied that we have the majority of records. We are in the process of getting country data validated by experts in each country.</p> <p>The initial plan was to publish this work as a stand alone paper, but we are now planning to link the satellite tagging work and prepare one paper for submission to a peer reviewed journal</p>
<p>Output 3.</p> <p>Conservation solutions identified and tested</p>	<p>Conditions for Sociable Lapwing improve demonstrably where recommended measures are implemented</p>
<p>Activity 3.1.</p> <p>Identify, test and advocate research-based solutions</p>	<p>Initially it was suspected that problems on the breeding grounds, probably linked to grazing, were the main causes of the population decline. However, our results to date suggest that this may not be the case as both nest and chick survival is high. Thus we are currently not advocating or testing any conservation solutions for the breeding grounds.</p> <p>We've increased our work on the migration routes and wintering grounds, and one theme that is emerging is the possibility that hunting may be problematic in some areas. We have reports of a hunting party near a large flock in Syria, and confirmed hunting in Iraq. Discussions are currently underway with Birdlife and other partners at how best to tackle this in the</p>

		winter 2008/09.
Output 4. Capacity of key partners for research and conservation management increased	Proportion of research undertaken by partners increases through the life of the project, and strategies for future research developed by partners	
Activity 4.1 Run training workshops		Fifteen students attended a training workshop led by Dr Paul Donald (RSPB) in spring 2006. A follow-up workshop currently underway, again led by Dr Paul Donald.
Activity 4.2 Provide expert training and advice throughout		<p>The project leader (Dr Rob Sheldon) provided intensive experiential training and advice for two 3-week periods in May and June 2007 to M Koshkin and two Kazakh students. Dr Rob Field (RSPB) worked in the core study area for a 3-month period, Apr-July 2007. M Koshkin attended a project workshop at the RSPB in January 2008. Rob Sheldon and Johannes Kamp attended the Wader Study Group conference in France (September 2007). Johannes Kamp received the highest grade for his verbal and written presentation of his Masters thesis.</p> <p>This level of training will be a fundamental part of the project in the final year. Rob Sheldon will be working with Maxim Koshkin and Johannes Kamp in the core study area and will be training a minimum of 4 Kazakh students.</p>
Output 5. Capacity of key partners for conservation advocacy established	Partners working with key decision makers to implement species action plans. Advocacy strategy prepared.	
Activity 5.1 Appoint and train staff		It is planned to appoint an advocacy officer in August 2007.

Output 6. System for monitoring impact of conservation actions developed	Appropriate monitoring protocol developed and tested	
Activity 6.1. Identify, test and advocate research-based solutions		See output 3 above. Re breeding grounds. On the wintering grounds we plan further collaborative work and will look into how we can further understand the problem of hunting. Much of this will be addressed during the species action plan review in November 2008.
Output 7. International Species Action Plan (SAP) revised and national plans published in key states	SAP meetings held and plans published and accepted	
Activity 7.1. Update International Species Action Plan, and develop national action plans		The project has been liaising with the Threatened Steppe Waders Project Officer (appointed by AEWA Secretariat). Species Action Plan workshop is planned for November 2008.
Output 8. Resources for key partners to continue activities listed in the revised SAP are being sought before end of project	Project proposals submitted to potential funding bodies	This is due for discussion between Dr Rob Sheldon and ACBK during May 2008.

Annex 2 Project's full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Goal:</p> <p>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve</p> <ul style="list-style-type: none"> • the conservation of biological diversity, • the sustainable use of its components, and • the fair and equitable sharing of benefits arising out of the utilisation of genetic resources 			
<p>Purpose</p> <p>To develop effective mechanisms and capacity to improve the conservation status of the critically endangered Sociable Lapwing</p>	<p>Species' conservation status clarified by end of year 3</p> <p>Targets to reverse decline agreed by key decision makers through adoption of a revised Species Action Plan by end of year 3</p>	<p>BirdLife/IUCN reports</p> <p>Species Action Plan agreed by key range states and approved by the AEWA Meeting of the Parties</p>	<p>Species does not become extinct before conservation measures can be implemented</p>

<p>Outputs</p> <p>0. Project management and steering structures developed</p> <p>1. Causes of decline of Sociable Lapwing identified</p> <p>2. Breeding and wintering populations and distribution estimated and migratory routes clarified</p> <p>3. Conservation solutions identified and tested</p>	<p>0. Project steering group established and monitored</p> <p>1. Demographic mechanisms and causal processes demonstrated</p> <p>2. Population estimates and range maps based on accepted scientific methods available by end of project</p> <p>3. Conditions for SL improve demonstrably where recommended measures are implemented</p>	<p>0. Steering group minutes, web site</p> <p>1. Three scientific papers, articles, reports</p> <p>2. Three scientific papers, reports, web site</p> <p>3. One scientific paper, reports, national and international species action plans</p>	<p>Political stability and security in range states does not preclude research there</p> <p>Cause of decline is reversible</p>
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<p>4.Capacity of key partners for research and conservation management increased</p> <p>5.Capacity of key partners for conservation advocacy established</p> <p>6.System for monitoring impact of conservation actions developed</p> <p>7.International Species Action Plan (SAP) revised and national plans published in key states</p> <p><u>8. Resources for key partners to continue activities listed in the revised SAP are being sought before end of project</u></p>	<p>4.Proportion of research undertaken by partners increases through life of project; strategies for future research developed by partners</p> <p>5.Partners working with key decision makers to implement species action plans; advocacy strategy prepared</p> <p>6.Appropriate monitoring protocol developed and tested</p> <p>7. SAP meetings held and plans published and adopted</p> <p>8. Project proposals submitted to potential funding bodies</p>	<p>4.Progress reports, work plans, research strategy documents, two workshop reports</p> <p>5.Minutes of meetings, Government documents; advocacy strategy documents, one workshop report</p> <p>6.One scientific paper, progress reports</p> <p>7.Workshop reports, SAP documents</p> <p>8. Project proposal documents</p>	<p>N.B this is a new output</p>
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Annex 3 onwards – supplementary material.

Article published in RSPBs Fellows News (sent to all RSPB Life members)

SOCIABLE LAPWINGS



This rare plover reveals an eye-catching wing pattern.

Our work on the sociable lapwing is at a critical stage after three years of research on the species' breeding and habitat needs, says ecologist **Robert Sheldon**.

The sociable lapwing – you may have books that call it the sociable plover – is a Critically Endangered species that has suffered a large population decline in recent years. The total breeding population may be as low as 200-600 pairs. These are believed to be concentrated in the steppes of Kazakhstan with small numbers in south-central Russia. A large-scale sociable lapwing research project was initiated in 2005, in Kazakhstan, by a team from the RSPB collaborating under the BirdLife International partnership with the Association for Biodiversity Protection in Kazakhstan (ACBK), to understand the causes of the decline. In 2006, the RSPB secured funding through the UK Government's Darwin Initiative programme that will allow work to continue, primarily on the breeding grounds, until 2009.

The team has been investigating the decline at a breeding site in the

Korgalzhyn region of central Kazakhstan. The results suggest that the cause may not be associated with the breeding grounds, but could be found on either the migration routes or the wintering grounds.

Exciting finds in Stavropol, south-west Russia, in September 2005 and 2006 proved that the area is an important stop over site for migrating sociable lapwings from central Kazakhstan on their way to wintering grounds in north-eastern Africa and Middle East. A flock of up to 600 was seen in September 2005, and two colour-ringed birds, from Korgalzhyn, were seen in September 2006.

In spring 2007, conservationists hit the jackpot with further large flocks found by teams, partly funded by the RSPB, surveying areas in Syria and Turkey. A team of Dutch ornithologists, local conservationists and guides searched for wintering sociable lapwings in Syria. In the last week of March, the project team discovered large flocks in north-eastern Syria, counting more than 1,200 birds in one day – equaling the total known adult world population! There was real concern that the flocks were close to a hunting party, but conservationists from the survey team, with the support of BirdLife Middle East and the RSPB, collaborated with

the hunters to ensure that the lapwings were not disturbed.

Following this discovery, a team of Turkish ornithologists from the local BirdLife partner, Doga Dernegi, surveyed an area adjacent to the Syrian border in southern Turkey. On the third day, they had their biggest count of 1,017 sociable lapwings. Co-ordinated counts by the two teams showed that these flocks were different birds – highlighting the importance of the general area and also their susceptibility to factors such as hunting.

We are keen to increase both survey work and site protection measures to protect this Critically Endangered species. Conservationists need to increase co-operation between scientists, local conservationists and BirdLife International to secure the future of the sociable lapwing in the areas it uses on migration and in the winter.

The findings in Syria and Turkey have given a burst of optimism to conservationists. The discoveries of such large numbers of birds, and the realisation that the decline may not be wholly associated with the breeding grounds, present a number of challenges. The project team is currently looking at ways to expand winter survey work to help identify and protect key sites along the migration routes and wintering grounds. This summer, three sociable lapwings were fitted with satellite transmitters to allow us to track the birds to their wintering grounds. We're trying to get funding to enable us to set up a team that can undertake survey work in whichever countries the satellite tagged birds migrate to. This will enable us to unravel the mystery of where these birds migrate to, and identify what we can do to secure the future for this superb steppe species.

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media *release*

Sociable lapwing finds some friends

Hopes are rising for one of the world's rarest birds after the discovery of the largest flock seen for more than 100 years.

More than 3,000 critically endangered sociable lapwings have been found in the Ceylanpınar district of south-eastern Turkey after a satellite tag was fitted to one of the birds migrating from breeding grounds in Kazakhstan.

The tracked lapwing had flown more than 2,000 miles from its nesting site, where numbers of the species have plunged following the collapse of Soviet farming. The bird flew north of the Caspian Sea, then down through the Caucasus and south into Turkey.

Other birds including geese, albatrosses and bald ibis have been fitted with satellite tags before but the sociable lapwing is the smallest bird yet to carry such a tracking device.

The RSPB's Dr Rob Sheldon, who tagged the bird in Kazakhstan, said: "This discovery is something we didn't dare dream of. The sociable lapwing is one of the rarest birds on earth and suddenly it's been found in these large numbers.

"It shows just how important both Kazakhstan and Turkey have become for the survival of this species. The next step is to protect the bird, both on its breeding grounds and at all the key sites on its migration route."

Only 200 pairs of sociable lapwing were thought to remain in 2003 when the bird was classified as critically endangered, the highest level of threat there is.

Nests at breeding sites were being trampled where land was still farmed and elsewhere, vegetation was too dense for young chicks to survive. Breeding has improved more recently, however, and conservationists feared that hunting and habitat change on migration routes were reducing the bird's numbers.

Then, last Friday, researchers from the Turkish conservation group Doğa Derneği found 1,800 sociable lapwing in Ceylanpınar and the next day, a total of 3,200 of the birds. They were following the co-ordinates provided by satellites for the bird that had flown from Kazakhstan.

Özge Balkız, a scientist at Doğa Derneği, said: "This is a major breakthrough in efforts to help these birds and will be enormously significant in planning their protection. They could still move on to Iraq or East Africa but if they stay in Turkey, it will be much easier to make them safe. We can keep an eye on them here, raise awareness amongst local people and work with the Turkish government to protect the areas they are using."

The tagging project is partly paid for by the UK government's Darwin Initiative and conservationists from Britain and Kazakhstan hope to win new funds to tag more birds next summer.

The long-term hope is that other migrating flocks will be found and that researchers can relax their efforts to help the bird.

Maxim Koshkin of the Association for the Conservation of Biodiversity in Kazakhstan, said: "Understanding the migration from breeding sites in Kazakhstan is essential for the future protection of this species, so the news of such a large flock is a great cause for celebration."

Guven Eken, Executive Director of Doğa Derneği, said: "By tracking a single bird from its Kazakh breeding grounds, we have found the location of most of the world population of these birds in Turkey. Sociable lapwings are finally living up to their name."

Contact:

Cath Harris, Media Officer, RSPB: 01767 693554 / 07739 921464.

Notes to editors:

- The sociable lapwing, *Vanellus gregarius*, or sociable plover, at 30 cm long is slightly smaller than the northern lapwing. It has a striking white eye stripe and black crown and a harsh call. Unlike the northern lapwing, it is not dependent upon water, breeding on dry grassland where pairs lay three or four eggs in shallow scrapes.
- The last evidence of large flocks of sociable lapwing was published in 1890 when between 8,000 and 10,000 were seen in Kazakhstan.
- Sociable lapwings are occasionally seen in the UK, most recently at the RSPB's Rainham Marshes reserve in east London in December 2005.
- The Darwin Initiative is a small grants programme that aims to promote biodiversity conservation and the sustainable use of resources around the world. The Initiative is funded and administered by Defra.
- The tags used for the sociable lapwing weighed just 9.5 grammes. Previously, a bar-tailed godwit, a large wading bird, was the smallest bird tracked by satellite. The RSPB and Syrian conservationists last year tracked three bald ibis to find their over-wintering sites. The tags attached to those birds weighed 12g. Tracking equipment is expensive. Each tag costs £1,500 with data collection costing another £50 per month.
- The bird tracked by scientists left the breeding grounds near Korgalzhin in central Kazakhstan on August 3 and arrived at Viranşehir, Turkey around October 8.
- Level of threat for wildlife is graded by the IUCN – World Conservation Union. More details at <http://www.iucnredlist.org/>



media *release*

I would fly 5,000 miles...

Rare Asian birds have turned up in Sudan for the first time in 50 years.

Two sociable lapwings, satellite tagged in Kazakhstan last summer, have flown more than 5,000 miles to central Sudan where they are spending the winter before their return flight to breeding grounds in the central Asian republic.

The species is one of the smallest birds ever to carry a tracking device and its journey has revealed far more about its migration than scientists expected.

Only now are conservationists realising how important African countries are to sociable lapwings. There are few recent records of the birds in Africa but new surveys could find more. The last sighting of sociable lapwings so far south in Africa was by the RSPB's Dr Mark Avery, who saw a small flock in Kenya 20 years ago.

The tagging project began last year when scientists from the RSPB and Association for the Conservation of Biodiversity of Kazakhstan fitted satellite-tracking devices to three birds on their breeding grounds on the barren steppe expanses of central Kazakhstan.

Their journey will be featured on BBC Radio 4's World on the Move series, being broadcast on Tuesday mornings and Wednesday evenings.

Dr Rob Sheldon, an RSPB ecologist, said: "The fact that these birds have reached Sudan is remarkable because we had no idea that they would fly that far.

"A Sudanese team is going out to find them this week and if they see more birds, our efforts to help them will become more complicated but also more gratifying. Their appearance in Sudan is fantastic news and has turned the whole tracking project into a hugely exciting conundrum."

The sociable lapwing, closely related to the northern lapwing seen in the UK, was given the highest threat status by the World Conservation Union (IUCN) in 2003, after numbers fell 95 per cent to just 200 pairs.

A flock of more than 3,000 in Turkey last October was the largest seen for more than 100 years and a huge boost to efforts to reverse the bird's fortunes.

Conservationists from the Sudanese Wildlife Society, part funded by the UK government's Darwin Initiative, will try

to locate the Sudanese birds, count them and find out more about the sites they are using.

Dr Sheldon said: "The more we know, the easier it will be to improve their protection and help them increase their numbers."

Dr Avery saw eight sociable lapwings near the Kenyan coast in 1988. He said: "I had stopped by a water hole in the middle of no-where and the birds were just standing there. It was fantastic to see them but it's only now that I'm appreciating how lucky I was."

Ibrahim Hashim, a Research Professor at the Sudanese Wildlife Society, said: "Finding these birds will not be easy because they are in a remote region where few people go. But that will benefit them because it means they should suffer little disturbance.

"We feel privileged to have these birds in Sudan and are very happy that we can play a part in increasing their numbers. These birds are now being protected on their breeding grounds in Kazakhstan and we hope very much to give them equal protection in Sudan."

Contact:

Cath Harris, Media Officer, RSPB: 01767 693554 / 07739 921464.

Notes to editors:

- The sociable lapwing or sociable plover, *Vanellus gregarius*, has rarely been studied. It is the same size as the northern lapwing but its markings, call and courtship display are quite different. It has a striking, white eye stripe and black crown and a harsh call.
- The birds tracked by scientists left breeding grounds near Korgalzhin in central Kazakhstan on August 3, 2007 and arrived at Viranşehir, Turkey around October 8. They left Turkey in late October, arriving in Sudan on November 3.
- The tags used for the sociable lapwing weighed just 9.5 grammes. Previously, a bar-tailed godwit, a large wading bird, was the smallest bird tracked by satellite. The RSPB and Syrian conservationists last year tracked three bald ibis to find their over-wintering sites. The tags attached to those birds weighed 12g. Tracking equipment is expensive. Each tag costs £1,500 with data collection costing another £50 per month.
- The last evidence of large flocks of sociable lapwing was published in 1898 when between 8,000 and 10,000 were seen in Kazakhstan.
- Sociable lapwings are occasionally seen in the UK, most recently at the RSPB's Rainham Marshes reserve in east London in December 2005.
- Sociable lapwings last bred in Europe in the 1980s. They continue to breed in the Asian Russian regions of Orenburg and Chelyabinsk although about 95 per cent of the world's population is thought to breed in Kazakhstan.
- The Darwin Initiative is a small grants programme that aims to promote biodiversity conservation and the sustainable use of resources around the world. The Initiative is funded and administered by Defra.

- Level of threat for wildlife is graded by the IUCN – World Conservation Union. Critically endangered is the highest level of threat there is. More details at <http://www.iucnredlist.org/>

Newspaper article – The Times, Friday October 19, 2007.

Rare bird turns out to be sociable after all

Lewis Smith

Hopes for the survival of one of the world's most endangered birds have been boosted by the discovery of a huge and previously unknown flock.

Sociable lapwings were thought to be down to their last 400 breeding adults four years ago, but a flock of at least 3,200 has been found in Turkey.

The flock was detected when ornithologists tagged a sociable lapwing with a satellite tracker in Kazakhstan and followed it to Turkey. It was the smallest bird to have been fitted with the device.

When researchers set out to check on the bird feeding in a remote area of Ceylanpinar they were astonished to come across thousands of them.

Researchers from the Turkish conservation group Doga Dernegi counted 1,800 sociable lapwings last Friday and 3,200 a day later.

"This discovery is something we didn't dare dream of. The sociable lapwing is one of the rarest birds on Earth and suddenly it's been found in these large numbers," said Rob Sheldon, of the Royal Society for the Protection of Birds (RSPB), who tagged the bird in Kazakhstan. Özge Balkiz, a Doga Dernegi scientist, said: "This is a major breakthrough in efforts to help these birds and will be enormously significant in planning their protection."

"They could still move on to Iraq or East Africa, but if they stay in Turkey, it will be much easier to make them safe. We can keep an eye on them here, raise awareness among local people and work with the Turkish Government to protect the areas they are using."

The tagged bird flew 2,000 miles to reach the Turkish feeding ground. Its route took it north of the Caspian Sea, through the Caucasus and southwards into Turkey.

Güven Eken, the director of Doga Dernegi, said: "By tracking a single bird from its Kazakh breeding grounds, we have found the location of most of the world population of these birds in Turkey. Sociable lapwings are finally living up to their name."

The sociable lapwing, *Vanellus gregarius*, below, is slightly smaller than the northern lapwing, which can be found in Britain. It got its name because it used to be seen in huge flocks and with so many birds calling at the same time it sounded as if they were chattering to each other.

The RSPB said that the last evidence of large groups of the sociable lapwing was published in 1890 when up to 10,000 were seen in Kazakhstan.

The bird was tagged in a project part-funded by the Darwin Initiative, which is controlled by the Department for Environment, Food and Rural Affairs.

● **The fortunes of Britain's farmland birds have reached their lowest point since records began in 1970, with populations cut by more than half (Lewis Smith writes).**

Skylarks, corn buntings and turtle doves are among the worst-hit. Specialist farmland birds have suffered the severest decline though generalists such as wood pigeons have increased in number.

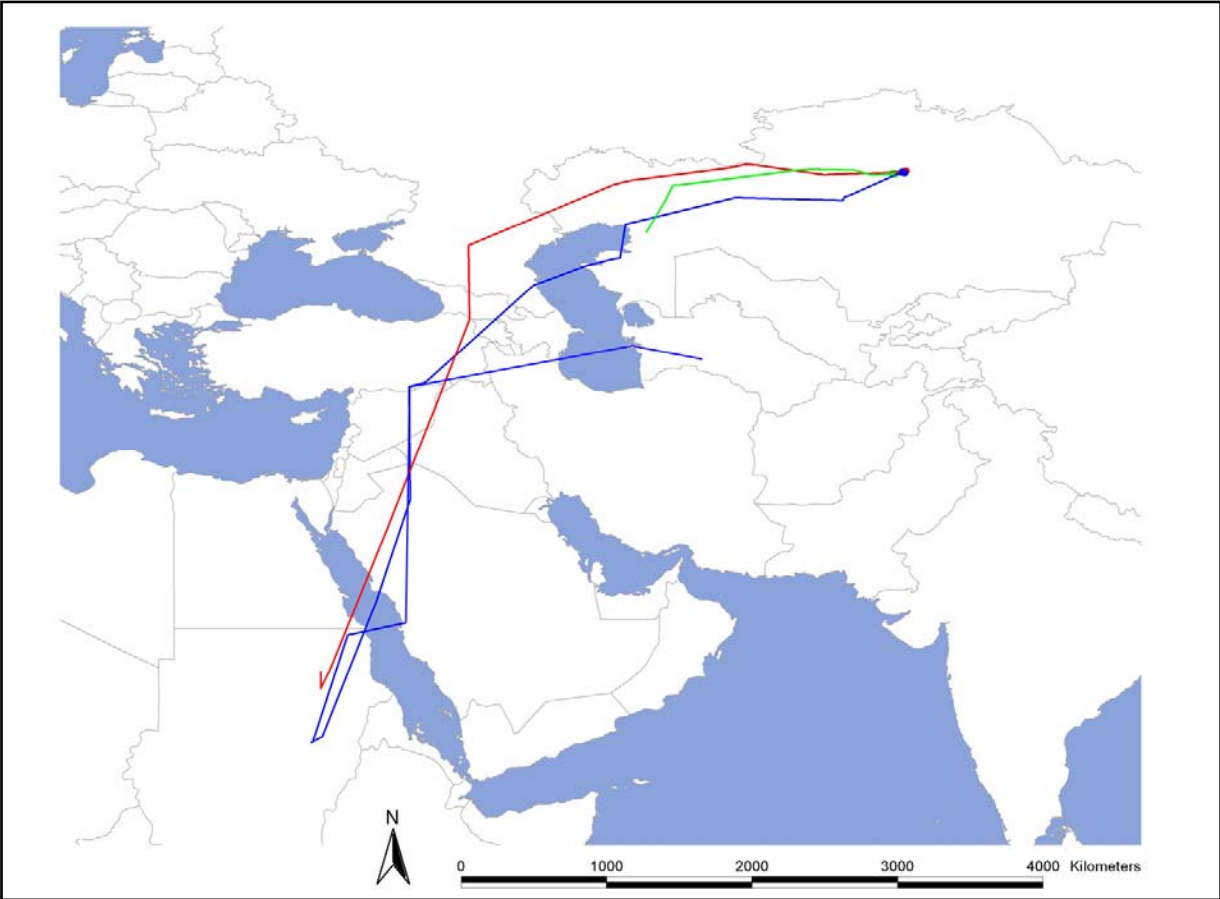
Woodland species have suffered similar declines. However, the overall number of birds in Britain is slightly up, the Department for Environment, Food and Rural Affairs said, due to rising numbers of seabirds and wetland species.



Photo 1 – satellite tag being fitted to an adult sociable lapwing in June 2007.



Map 1 –routes taken by satellite tagged birds June 2007 – April 2008.



Map 2 - Predicted occurrence probabilities across the study area and location of all nest sites from 2006 (n=168).
 Johannes Kamp (2007).

