

Darwin Initiative Final Report

Darwin project information

Project Reference	19-012
Project Title	Saving the Critically Endangered Spoon-billed Sandpiper from Global Extinction
Host country(ies)	Russia (Breeding grounds); Myanmar (Wintering grounds) Countries of the East Asian-Australasian Flyway coordinated through the BirdLife Asia office in Singapore
Contract Holder Institution	The Royal Society for the Protection of Birds (RSPB)
Partner Institution(s)	Wildfowl & Wetlands Trust (WWT) The Spoon-billed Sandpiper Task Force, working group of the East Asian-Australasian Flyway Partnership Birds Russia Biodiversity and Nature Conservation Association (BANCA) BirdLife International Asia Division
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Project Leader Name	Paul Insua-Cao replacing Rob Sheldon who left the RSPB during the project third year.
Project Website	http://www.saving-spoon-billed-sandpiper.com
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1 Project Rationale

The Spoon-billed Sandpiper (*Calidris pygmaea* formerly *Eurynorhynchus pygmeus*) is a long distance migrant, which breeds in the Chukotka peninsula in the far north-east of Russia and annually migrates more than 8,000 km to winter in South and South-east Asia, with approximately half of the global population understood to winter in Myanmar (see Map 1 in annexes). This species is classified as globally Critically Endangered on the Red List of Endangered Species by the International Union for the Conservation of Nature.

In 2010, the breeding population of the Spoon-billed Sandpiper was estimated to be between 120 and 220 breeding pairs, a decline of 78% to 88% since 2000 when the population was approximately 1000 breeding pairs¹. This represented a decline of 20% to 26% per annum, which was anticipated to lead to the species' extinction within a decade if no action was taken.

¹ Christoph Zöckler, Evgeny E. Syroechkovskiy & Philip W. Atkinson. 2010. *Rapid and continued population decline in the Spoon-billed Sandpiper Eurynorhynchus pygmeus indicates imminent extinction unless conservation action is taken*. Bird Conservation International (2010) 20:95–111 doi:10.1017/S0959270910000316

The Spoon-billed Sandpiper is a flagship species for the East Asian - Australasian Flyway (EAAF), which boasts the largest number of species on any of the major global flyways, but unfortunately also the highest number of Globally Threatened bird species. The flyway extends from far north-east Russia and parts of Alaska along the western Pacific rim, through South-east Asia, then as far as Australia and New Zealand, stretching across 22 countries. The threats faced by the Spoon-billed Sandpiper are pertinent to other migratory bird species on the flyway, but this species is by far the most at risk of extinction. It is also evolutionarily distinct. Loss of the Spoon-billed Sandpiper would be disastrous given what that loss would represent, not only the termination of an evolutionary pathway, but the potential loss and declines in populations of other migratory shorebirds, facing the same and similar threats across the vast flyway.

Prior to this project, surveys conducted on breeding and non-breeding grounds identified the highest immediate threats to the species as taking place on the non-breeding grounds. Survey data collection and analysis was coordinated through the EAAFP Spoon-billed Sandpiper Task Force (SBS TF). This task force comes under the umbrella of the EAAF Partnership, a partnership of over 30 governmental, multi-lateral, non-governmental and private sector organizations. Prior to the project, monitoring the population and identification of threats had already drawn from an extensive international effort, but given the geographical scope, extent and severity of threats, these were still not very well understood for the whole range. Therefore further research was needed, while actions were urgently required in areas which had been already identified as being the most important.

Breeding studies at Meinypil'gyno in Chukotka, Russia, between 2003 and 2007 showed 0.61 chicks fledged per nesting attempt, but that recruitment in to the adult breeding population, i.e. survival of juveniles, was effectively zero. Interventions on the breeding grounds were deemed to be necessary and as an "insurance policy" for the species, and collection of eggs and captive breeding was proposed for the project.

Hunting of shorebirds in the Gulf of Mottama (also known as Martaban), Myanmar, was identified as the priority and most urgent threat to be addressed in the wintering areas. About half of the global population of Spoon-billed Sandpipers spend their winter there. The observed level of shorebird hunting in the gulf demanded priority attention. The Gulf of Mottama is vast with dynamic shifting mudflats covering an area of about 200,000 ha. In 2010, it was estimated that ca. 30,000 waders may have been caught annually through hunting, out of a population of 100,000 to 150,000². Actions to protect this species in Myanmar had already started in 2010, particularly by identifying hunters through socio-economic surveys and raising awareness of the conservation status of the Spoon-billed Sandpiper. Sixty-three hunters had been identified and interviewed by the local Myanmar partner, the Biodiversity and Nature Conservation Association (BANCA). Of those, 22 were observed to have been dependent on hunting shorebirds for their livelihoods, either as a primary source of income or important supplement to fishing. The other hunters only did so occasionally. Agreements were signed with the hunters to cease hunting and they were provided with support for alternative livelihoods. This was only a short-term solution and it was necessary to work more closely with the poor local communities, who were mainly dependent on fisheries, to enhance their livelihoods and encourage their support for conservation of shorebirds. Consuming shorebirds was not part of local culture, but rather a fall-back measure. Fishing is the dominant livelihood.

This project was a critical part of ongoing and planned initiatives to save this species. The project aimed to mitigate the most acute current threat to the Spoon-billed Sandpiper, being hunting in Myanmar, address the broader issue of habitat destruction along the EAAF, and establish a captive population as an essential complement to *in-situ* work. In order to do this, it was designed to address issues throughout the species' vast range by: implementing direct conservation measures in the most important wintering ground; improving knowledge of threats and the species' distribution outside the breeding season; raising awareness among the general public and policy makers across the EAAF; and, establishing a robust captive population. This was achieved by working closely through a broad international partnership.

² Christoph Zöckler, Tony Htin Hla, Nigel Clark, Evgeny Syroechkovskiy, Nikolay Yakushev, Suchart Daengphayon & Rob Robinson. 2010. *Hunting in Myanmar is probably the main cause of the decline of the Spoon-billed Sandpiper Calidris pygmeus*. Wader Study Group Bulletin (2010) 117(1): 1–8.

2 Project Achievements

2.1 Outcome

The outcome of the project (referred to as “purpose” in the agreed log-frame) was to “*implement the highest-priority actions needed to ensure the continued existence of SBS in the wild over the next 10 years and secure the longer-term future of this species’ migratory flyway, taking full account of the need to integrate these conservation goals with the development needs of the people living along the flyway. Actions to include vital livelihood-related activities in the Gulf of Martaban in Burma, building on previous activities to reduce hunting pressure at this key site.*”

This overall outcome has been more than achieved and greatly surpassed. In all areas of activity, the project has established or enabled longer-term programmes to build on the achievements during the three year project timeframe. Most pertinently, results of a survey of the Spoon-billed Sandpiper and other shorebirds in the Gulf of Mottama in January 2015 show that the decline in the numbers of Spoon-billed Sandpipers has been curbed considerably, to either a shallow decline or that the population has stabilised. The estimated number of Spoon-billed Sandpipers recorded was 156, which is within the 95% confidence limits of a similar survey in 2010 and well outside that predicted if the population was still declining at the same rate as between 2000 and 2010, which would have had them down to between 33 and 60. In addition, the survey team was confident that more small and large shorebirds were present than prior to 2010, as a consequence of the cessation of shorebird hunting. The low count of Spoon-billed Sandpipers with leg flags as a proportion of the population led to the conjecture that there may be other important areas for wintering Spoon-billed Sandpipers in the Gulf of Mottama which were not covered, so the result may be an underestimate. The analyses have yet to be published in a peer-reviewed journal. Preliminary results of the survey were published in the spring 2015 edition of the News Bulletin of the EAAFP Spoon-billed Sandpiper Task Force³.

That survey was part of a regional census across non-breeding grounds at 17 sites in five countries, which counted a total of 245 Spoon-billed Sandpipers during the same time period. Surveys were also recently conducted on the mudflats of Rudong County, Jiangsu Province in China in September and October 2014 and May 2015 with counts of 226, 180 and 250 Spoon-billed Sandpipers respectively. Rudong is a very important stop-over migratory site, where the Spoon-billed Sandpipers moult and feed in order to refuel for the rest of the migration. It probably hosts the greatest concentration of Spoon-billed Sandpipers at any one time during the year. This has enabled a global population estimate of 422 adults out of 667 individuals to be calculated, based upon the proportion of recorded individuals with leg flags (*Green in press*). Surveys at the Meinypil’gyno breeding grounds also showed a stable population.

These results show that the first measurable indicator for the overall project outcome, being the continued existence of the species in the wild, has been met with a dramatic reduction in its prior steep population decline.

The second measurable indicator was for key breeding, passage and wintering sites to still be in useable condition at the end of the project. During the project period, wintering Spoon-billed Sandpipers were recorded at more sites and the broad partnership across the range has enabled regular monitoring of priority sites through: direct site-based conservation action, two years of coordinated surveys at wintering and stop-over sites, and surveys at the breeding grounds at Meinypil’gyno. The sheer vastness and remoteness of the breeding grounds in Russia, means that other areas are not as well known.

The most important wintering sites are still considered to be in Myanmar and Bangladesh. As this project focussed on the Gulf of Mottama, the above-cited winter survey population results and regular monitoring by local conservation groups and project staff for incidents of hunting (see Section 2.3 Output 1 below) demonstrate that the situation in the Gulf of Mottama as a wintering site for shorebirds has markedly improved. The second main site in Myanmar at Nan Thar Island also continues to maintain a wintering population; 18 individuals were recorded there in January 2015. An important site in Bangladesh, Sonadia Island, has for the moment been

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http://www.eaaflyway.net/wordpress/new/ouractivities/taskforces/spoonbilledsandpiper/SBS_TF_News_Bull_No_13_Feb_2015.pdf

relieved of the threat of a deep site port, and another important site was discovered in Bangladesh in 2015. Other known sites throughout the range had records of a few individuals, as expected and continue to be viable as important sites for the Spoon-billed Sandpiper.

During the project time frame, the significance of Rudong in China as a stop-over site and growing threats to the site have become increasingly clear. Therefore the site has been given greater attention. Ongoing bi-annual surveys continue to record large concentrations of Spoon-billed Sandpipers there, but the level of threats is increasing, particular from planned land reclamations, but also sporadic hunting, and spread of *Spartina*, an invasive alien grass species. There is close collaboration with a growing network of individuals and organisations in the area, including NGOs, Nanjing University and a Shanghai law firm to support advocacy actions.

In summary the second measureable indicator shows project success with challenges remaining: known sites have been closely monitored, more have been discovered, pressures have been easing at the most significant wintering sites, but there are growing and emerging threats at other important sites, particularly from land reclamations and hunting on the coastal mudflats of China.

The third measureable indicator was to significantly enhance understanding of how to integrate the conservation of Spoon-billed Sandpiper and other birds using the East Asian - Australasian Flyway (EAAF) with the development needs of local people. The project mainly focussed on the Gulf of Mottama in this respect, as the most important wintering site and the site with the greatest need for close engagement with local communities. A series of social surveys were conducted during the project, in particular community-based natural resource management, an assessment of livelihood support to ex-hunters, and development of sustainable resource development plans. Initial direct support to ex-shorebird hunters had limited success in the sense that benefits were short-term and at minimum maintained, rather than developed, household income in the absence of revenue from shorebirds. The main constraints to development of key villages around the Gulf of Mottama were identified. Natural resources are limited and there is a heavy dependency on fisheries, which are declining. Fishing, for most villages, is the most important source of livelihoods. Other important natural resource limitations are the availability of freshwater during the dry season and fuel wood. The project directly addressed village development in support of shorebird conservation through establishing and building the capacity of local conservation groups, as empowered community groups to deliver livelihood interventions.

The project broader vision was to establish a Ramsar Site for the Gulf of Mottama to provide an institutional framework integrating sustainable natural resource management with community development and shorebird conservation. Significant progress was made with having a Ramsar Site designated, including boundary demarcation and formal village-level agreements, although final designation was not achieved during the project timeframe. Parallel and related to this process, the project informed the design of the Community-Led Coastal Management in the Gulf of Mottama Project (GoMP), funded by the Swiss Agency for Development and Cooperation (SDC). This project started in February 2015 and is planned for approximately nine years with an overall budget of CHF 15,000,000 (ca. £10,000,000). The overarching goal of the project is that *the unique biodiversity of the Gulf of Mottama is conserved and sustainably developed in order to benefit human communities that depend on it.*

The fourth measurable indicator was specifically focussed on the provision of freshwater to a minimum of 3,600 people. Overall, eight villages with a population of 8,000 people received freshwater ponds, along with training on water sanitation and hygiene. This is described in more detail in Section 2.3 Output 1 below.

2.2 Impact: achievement of positive impact on biodiversity and poverty alleviation

The intended impact of the project (referred to as sub-goal in the project logframe) was “*to improve the conservation status of the Critically Endangered Spoon-billed Sandpiper so that it is no longer threatened with imminent extinction.*” The project took significant steps to meeting this goal. The measureable indicators were “a wild population stable in 2020 and believed to be in excess of 100 adult birds and the Spoon-billed Sandpiper increasing in the wild by 2025”. The recent survey results as described above (Section 2.1) indicate that the population may be stabilising, or at least that the previous dramatic decline has slowed considerably. Work to stop hunting through close collaboration with local communities on the major wintering ground in the

Gulf of Mottama has clearly had a significant impact. Breeding success has improved through head-starting, a method of hatching eggs and rearing chicks in captivity to improve survival rates and releasing them soon after as juveniles on the breeding grounds. This is described below in more detail (Section 2.3 Output 5). Head-starting was a co-funded activity. Also as a result of the project there is now a stable captive population of 24 birds at WWT Slimbridge in the UK.

The main intervention of the project on direct human welfare was for villages in the Gulf of Mottama, although this was not articulated in the project sub-goal. The project had a direct positive impact on human welfare through provision of freshwater ponds to about 8,000 people, engagement of 125 villagers in local conservation groups who received direct support and support to ex-hunters. The project has also supported planning for a Ramsar Site and the SDC-funded development project.

2.3 Outputs

1. *Mortality due to trapping in the Gulf of Martaban is further reduced, and this reduction is secured for the long term through the creation of local plans and institutions to promote sustainable and equitable use of the gulf's natural resources*

This output was achieved. Mortality of shorebirds in the Gulf of Mottama was considerably reduced and maintained during the project period and a framework established for long-term conservation and support to local livelihoods.

By 2014, local conservation groups (LCGs) had been established in seven villages comprising about 125 individuals, including many of the ex-shorebird hunters. Those villages are Kyar Zi Aung, Koe De Su and Kyan Dine Aung in Bilin Township, Aung Kan Thar in Thaton Township and Ahlat in Paung Township, Mon State and Sartalin and Mayan in Thone Gwa Township, Yangon Region. Map 2 at the end of this report shows where these and other villages are located. The LCGs were the main village-level institutions for delivering livelihood interventions and had strong overlap in terms of members with village development committees. Four LCGs were provided with boats for patrolling and fishing and all LCGs were provided with fishing gear.

The level of conservation activity varies between LCGs. Koe Te Su and Aung Kan Thar are key villages and generally the groups patrol for four or five days per month, while fishing. At Ahlat, patrolling is usually four days per month when there is a high tide. Other LCGs have no scheduled patrols but monitor shorebird hunting during fishing trips. There are log-books for each LCG, detailing when patrols were conducted and any incidents. These log-books are kept in the villages and viewed by BANCA project staff several times per year, depending on project activities.

When hunting is observed it is reported in the log-book and BANCA is informed. Members of the LCG will also inform the village head and the hunter is approached to request him to cease hunting and to inform him of the wildlife law. In this way, an amicable resolution has been reached on each occasion, bearing in mind again that these are *ad hoc* hunting activities using old fishing nets by individuals who have other main livelihoods. There were three incidents of nets being found near Aung Kan Thar. In December 2013, a Spoon-billed Sandpiper was found trapped in a fishing net and reported to the LCG in Aung Kan Thar. It was then immediately released after its photo was taken as a record.

Local conservation groups have been given training on environmental awareness raising, Spoon-billed Sandpiper ecology and conservation and patrolling techniques. Two to three members from each LCG were trained on wetlands management in 2014. Bird watching training was provided over the period December 2013 to March 2014 for four LCGs. Twelve people received training on education and awareness-raising in late 2014 through an additional grant from the Critical Ecosystem Partnership Fund, which also funded publication of a Myanmar language photographic field guide to shorebirds in the Gulf of Mottama. Two members from each LCG from the east coast attended consultation meetings about local fishery issues organized by BANCA. The low number of recorded incidents indicates both the success of the project in reducing the hunting threat through awareness raising and discussions with individuals, but also the need to maintain monitoring efforts. BANCA staff regularly participated in patrols and international project staff also visited the mudflats, particularly for field surveys. From December to March in the last year of the project, local markets were systematically

monitored by BANCA and LCG members at least once a month and data gathered indicated shorebirds were still no longer being sold.

In June 2015, BANCA conducted evaluations of the five conservation groups in Mon State to assess their capacity and needs. Forty-eight members were also provided with final household micro-grants through the project. The assessment identified capacity building needs (bird identification training, improved patrolling systems, improved coordination with local authorities), equipment (boats, binoculars, cameras) and financing and awareness raising needs. Three of the villages will be target villages during the first phase of implementation of the Swiss-funded development project, to which BANCA is a partner. The RSPB is funding other LCGs and with BANCA is advocating for them to be included within the institutional framework of the Ramsar Site and within the SDC project, as that project broadens its geographical scope.

In October 2012, training for eight BANCA staff was conducted on community-based natural resource management (CBNRM) by a specialist consultant during a one week field visit to the Gulf of Mottama in two villages. The skills and experience from the training were used by BANCA staff in 2013 in seven villages along the east coast of the Gulf of Mottama (i.e. Mon State) to conduct surveys for Sustainable Resource Use and Development Plans (SRUDP). Villages were selected based upon presence of an LCG, proximity to known Spoon-billed Sandpiper wintering grounds, inclusion within the proposed Ramsar Site and potential for eco-tourism. The initial results of this work helped BANCA to prioritise villages for construction of freshwater ponds and identify micro-grant support for LCGs. This work was developed further in 2014 by a Myanmar livelihood consultant, who spent a further two to three days in each of the seven villages. The output was a concept paper for sustainable resource use and development, which guided inputs into designing the SDC-funded project.

Freshwater ponds were provided to five villages by the project; Aung Kan Thar, Kyar Si Aung, Ywar Tan Shay, Ma Yan and Zokali; three in Mon State and two in Yangon Region. Freshwater ponds were provided as the groundwater salinity of the target villages made tube-wells inappropriate. The planned impact was the same, the technology different. The population of the five villages was 4,446 people and the capacity of the freshwater ponds was nearly 30,000 m³. For each village a water management committee was also established. Due to interest and demand from other villages, BANCA raised an additional US\$ 23,000 from the Thailand Environment Institute (TEI) to build three more freshwater ponds, improve surrounding infrastructure on the five previously built and provide training on water sanitation and hygiene. In the end, eight villages with a population of 8,000 people received freshwater ponds. The number of people benefitting is larger as people from neighbouring villages will also use the ponds. The number of villages directly supported by the Darwin project was lower than planned (five instead of seven), as a result of using more expensive technology, but more people benefitted than planned, and with leveraged funding more villages than planned were supported with freshwater.

In December 2013, BANCA interviewed all 22 ex-hunters who had received livelihood support during the previous three years. The support provided by the project was significant in replacing income from shorebird hunting, and has had a beneficial short-term impact. The project continued to support them. The main support provided was fishing materials; primarily nets, storage boxes, and some with small boats and outboard motors. Fishing nets and materials have a short life, so the project provided additional fishing equipment to the ex-hunters. Generally fishing was the preferred option for support. Some requested livestock with mixed success as livestock occasionally died through inexperience in good husbandry practice. No families suffered a drop in standards of living as a result of the cessation of shorebird hunting, although ten of the ex-hunters still barely managed to get by. Family circumstances varied considerably among them. Older ex-hunters had become dependent upon their adult children for support, some had younger families so were the main income generator, while some had other members of the family who were also working. A couple of ex-hunters lived on their own. Two of the ex-hunters had died during the intervening years, one in a drunken accident on the mudflats, and the other due to age-related illness. The wife of one of the deceased sold the equipment provided by the project and had successfully started her own small business. One ex-hunter had emigrated to Thailand to seek work, a common strategy, especially among young men in this area. Nine of the ex-hunters were supporting conservation measures as a result of the project, either through participation in LCGs or through individual activities with BANCA staff.

In June 2015, final micro-grants were provided to 48 LCG members, based on their requested needs and requirements: 16 for fishing nets, 18 for pigs, 6 for ducks, 5 for investing in a small business, 2 for accessories for a fishing boat and 1 to invest in materials for carpentry.

In general livelihood support to ex-hunters was tailored to individual needs and requests. The ex-hunters are widely dispersed throughout the project area, with usually only one ex-hunter in a village and no more than three. Transportation to many villages is difficult at the best of times and near impossible at some times of the year. This prevented the project targeting the ex-hunters collectively for support, which would have been more efficient. Nevertheless, those individuals were the priorities for support, having been dependent on shorebird hunting and among the most disadvantaged in their respective communities.

The experience of the project will feed into the SDC-funded project, which has one major component on improving fisheries to support local communities and will tackle the issue of unsustainable fishing practices and management, which was beyond the scope of this project.

Two evaluation missions of the livelihood work in March 2014 and 2015 were conducted by RSPB staff with BANCA. In all villages visited, BANCA had established good relations with the local communities. There was a high level of awareness of the Spoon-billed Sandpiper and conservation of shorebirds throughout. Villagers supported shorebird conservation, which is understandable as hunting shorebirds was not deemed important by most and ex-hunters had been provided livelihood support. There was also support for a Ramsar site, although the usual reason given was that there was an expectation that it would bring additional benefits like the freshwater ponds.

2. Proposal developed for a Protected Area within the Gulf of Martaban, together with a Zonation Plan for critical parts of the Burmese coastline specifying which areas can be developed and which should be protected

Significant progress was made in having the Gulf of Mottama designated as a Ramsar Site.

Preparations for the process of designating the Gulf of Mottama as a Ramsar site began in 2012 with technical preparations to collect data, plan the process and provide training for BANCA and government officials. The Ramsar National Focal Point in Myanmar is in the Forestry Department of the Ministry of Environmental Conservation and Forestry (MOECAF). A multi-agency approach was needed as the Forestry Department has no direct jurisdiction for the Gulf of Mottama, because there is no forest land within and it is outside the protected area system.

In 2012, a former RSPB staff and recognized authority on the Ramsar Convention, David Pritchard, worked with BANCA and the RSPB to collate available information for designating the Ramsar Site, and identified information gaps and needs for ground-truthing. The justification for a Ramsar Site was already straightforward, based on the presence and size of the global population of the Spoon-billed Sandpiper using the site. Still the Gulf of Mottama overwhelmingly met Ramsar criteria in other ways too, in summary: the extreme nature of its tidal cycle giving it unique characteristics as a wetland, presence of other globally threatened migratory birds, importance for significant populations of other migratory waders, importance for fisheries, and size of wintering shorebird population. A tentative boundary was designed to ensure ecological integrity of the site and include all important mudflats, covering coastal areas of two regions and one state and enclosing the gulf and shallow sea area within. One challenge of defining the boundary is that the important mudflats and streams into the gulf are remarkably dynamic, being subject to the immense energy of a tidal bore, which displaces great volumes of sediment. In July 2012, a first draft of a Ramsar Information Sheet and boundary map was submitted by Mr Pritchard, as a starting point to implement the designation process in the field.

In July 2012, the current chairman of BANCA, Dr Htin Hla, participated in the Ramsar COP 11 in Romania, where he presented the Gulf of Mottama as a potential Ramsar Site. This was followed by a workshop with the government on World Wetlands Day, 2 February 2013, in Naypyitaw, with the Gulf of Mottama as a focus to raise awareness of the proposed Ramsar Site more broadly.

In March 2014, the Government of Myanmar became a signatory to the EAAFP and MOECAP was supported to submit an application for the Gulf of Mottama to be designated as an EAAFP Flyway Network Site. The Ramsar Convention is also a signatory to the EAAFP and the Flyway Network Site designation intentionally follows a simplified process based upon Ramsar. The designation of the Gulf of Mottama as a Flyway Network Site was approved soon after. The boundary includes the whole Gulf of Mottama covering coastal areas of the two regions and Mon State. While a Flyway Network Site is not as strong as a Ramsar Site, it demonstrates the commitment of the Government of Myanmar to the international community to protect the biodiversity values of the entire gulf, particularly its migratory shorebirds. The Site Information Sheet can be found at <http://www.eaaflyway.net/about/the-flyway/flyway-site-network/#myanmar>.

Boundary demarcation was conducted in March and April 2013 in Yangon Region, Bago Region and Mon State. The process was led by government staff of the Forestry Department and supported by BANCA. The boundary demarcation team also had participants from the State/Regional Land Record Department, State/Regional General Administrative Department, Township Development Committees and Village Development Committees. The team identified the high-tide water mark as the outer boundary of the protected area. Mapping the boundary was the responsibility of the Land Record Department for each area and took several months to complete. In Mon State, on the eastern side of the gulf, progress was reasonably quick. Most of BANCA's work to date had been in Mon State and relations were fairly well developed. In Yangon Region in particular progress was stalled to address overlapping land-use claims by different government agencies. MOECAP was reticent to proceed immediately with designation for several reasons: the size of the area proposed was very large, there was no protected area already in place nor was there any forest land over which they had jurisdiction, the area covered three administrative authorities and the management authority for the Ramsar site was unclear. By the end of 2013 and following a meeting with MOECAP in November, there was consensus between BANCA, the RSPB and MOECAP that a phased approach be taken, by which a smaller area in Mon State would be designated first and the Ramsar Site expanded in due course.

Following a meeting with Mon State government on 1 April 2014, a state-level process was agreed for steps to designate the coastal areas including villages of two townships, Kyaikhto and Bilin, as the first phase. From 26 June to 9 July 2014, BANCA organised a village-level and township-level consultation to obtain agreement on designating a Ramsar site in 14 villages, the proposed area being 83,784 acres, i.e. 33,906 ha. Meetings were also held at each township with 23 participants in Kyaikhto Township and 60 in Bilin, including representatives from each of the villages. Meetings were also held at each village with the village development committees. All participants were asked to provide written comments and sign their support or opposition to the Ramsar site. Support was unanimous.

From 11 August to 19 September 2014, BANCA ran a broader education programme in 29 villages. 2,980 people participated in the meetings, i.e. about 100 per village, of whom about 43% were women. These village meetings presented Ramsar and the ecological values of the gulf and provided opportunities for questions and discussions. Information materials were widely distributed. Where possible, members of local conservation groups gave the presentations in their villages about the Ramsar site. The Ramsar Site was seen as a benefit to local communities with the potential to bring in more development projects and at minimum it was not seen as detrimental.

In October 2014, twelve signboards were placed around the Ramsar site in all the townships of Mon State bordering the Gulf of Mottama. The signboards showed a map of the proposed area and the justification and benefits for establishing a Ramsar site.

Following the consultations in Mon State, the Ramsar Information Sheet (RIS) was updated with support from Dr Christoph Zöckler, coordinator of the EAAFP Spoon-billed Sandpiper Task Force. On 4 December 2014 he supported BANCA to present the RIS to MOECAP, along with the signed agreements from local stakeholder consultations. The Director General of the Forestry Department agreed to proceed first with two townships Kyaikhto and Bilin and to organise a workshop to inaugurate the first step in designating the site in Mon State and establish a management committee by the Mon State. It was also recommended that Yangon and Bago Regions be invited to the workshop to consider future expansion of the Ramsar Site.

On 28 February 2015, a multi-stakeholder consultation workshop for the Ramsar Site was held in Mawlamyine, the administrative capital of Mon State, jointly organised by the State government and BANCA, with participation from a broad group of stakeholders from village level to various state government departments. Eighty-nine people participated, of whom 51 were from Mon State, mainly from various government departments. There were also representatives from Yangon and Bago Regions and 22 journalists. The Chief Minister of the State expressed his support for the Ramsar Site. The major outcomes were general agreement on establishing a Ramsar site, a general proposal on the composition of a Ramsar Site Management Committee and recognition of a strong need for community involvement in management at the grassroots level and support for developing local livelihoods within management plans.

By the time the project closed, the progress made so far has been fully integrated into the SDC project for the Gulf of Mottama. That project includes a component on establishment and management of the Ramsar Site, implemented by the IUCN. BANCA is now a full partner within that project, working closely with the IUCN, and the RSPB is regularly consulted. The SDC project has just closed its six-month inception phase and in September held a national workshop on Ramsar implementation and discussion addressing the institutional arrangements for the Ramsar Site in Mon State. BANCA was given the platform to present the work of the project, alongside representation from the RSPB.

There were institutional constraints within the project to delivering this output. Sadly the chairman of BANCA, Dr Htin Hla, died towards the end of 2013. He had been a backbone to BANCA for several years and a dynamic leader for work in the Gulf of Mottama. Dr Htin's Hla's death was a devastating loss felt by all involved. There was also change in management within BANCA which led to the departure of senior BANCA members who had provided guidance to the project and had close ties within MOECAF. Nevertheless, the project field staff organised themselves into a strong team, which provided some stability for continuation of the project. The project has also enabled them to build their capacity and develop close relations with local communities, which will be very valuable for their continued work.

The project was able to build strong grassroots support for a Ramsar Site on the Gulf of Mottama, but it was not designated within the project timeframe and the area to be designated first is smaller than meets the need for the ecological integrity of the site. To provide long-term protection for the gulf as a functioning ecosystem a very large area needs to be protected. The Ramsar Site will eventually cover areas in two regions and one state. While MOECAF remains supportive of the overall need to designate the area, they remained cautious due to their limited jurisdiction and concerns about funding and capacity to manage the site within the Ministry. These are understandable but not entirely well-founded concerns, and result from limited experience within MOECAF of the Ramsar Convention and Ramsar site management. In addition, several other sites with less complex issues were also being proposed to be designated as Ramsar sites and these rose in priority as simpler to deal with administratively.

3. Knowledge of the distribution of SBS outside the breeding season enhanced, together with knowledge of the use made of key sites by local communities

Knowledge of the distribution of the Spoon-billed Sandpiper outside the breeding season has been considerably improved. The main areas with suitable wintering habitat are mostly known now, but there are likely to be other sites with smaller numbers of wintering birds. There still remain gaps in knowledge where a significant proportion of the Spoon-billed Sandpiper population winter, and the Gulf of Mottama remains a prime site for more surveys. There has been active monitoring and surveying in five wintering countries (Bangladesh, Myanmar, Thailand, Vietnam and China) supported directly or indirectly through this project and directly by the RSPB.

In Bangladesh, surveys have been coordinated by the Spoon-billed Sandpiper Conservation Project. RSPB staff provided training to the project team in December 2013, during winter surveys of the Spoon-billed Sandpiper. Additional funding from SOS – Save Our Species http://www.sospecies.org/sos_projects/birds/sbs/ supported activities in Bangladesh, particularly by working with local hunters with alternative livelihoods to reduce trapping of shorebirds. Surveys were conducted during each wintering season.

In Myanmar, the project worked through BANCA. The work with local communities is described for outputs 1 and 2 above. BANCA staff were trained in surveying in November 2013 and January 2015, during winter surveys in the Gulf of Mottama with staff from the RSPB and partner organisations. At the other main site in Myanmar, Nan Thar Island in Rakhine State, the project through BANCA supported the Sittwe Nature Conservation Association (SNCA). Ethnic unrest and social instability in the area has hindered close engagement with local communities there.

In Thailand, the RSPB works with the Bird Conservation Society of Thailand (BCST) for monitoring the Spoon-billed Sandpiper in the Inner Gulf of Thailand, the only area of Thailand with recent records until November 2014, when an individual bird was recorded at Pak Prasae in Rayong Province. Records of this species are collected during the annual Asian Waterbird Census when BCST organises a few hundred volunteers to take part. BCST works with local communities in the Inner Gulf of Thailand, where salt pan farming provides important roosting habitat for shorebirds at high tide. BCST staff have also been visiting other sites on the coast of peninsular southern Thailand, but with no further records of Spoon-billed Sandpiper.

In Vietnam, the RSPB supported Viet Nature (a national NGO established in 2013 from the former BirdLife office) to coordinate winter surveys in December 2013 and January 2015 in the Red River Delta and in the Mekong Delta, with a local partner. In May 2014, a visit was conducted to key southern sites by Viet Nature and the RSPB to identify potential community-based conservation actions, such as sustainable clam fishing and establishing local conservation groups.

In China several organisations have been involved in surveying and monitoring wintering Spoon-billed Sandpiper at six sites. The Hong Kong Birdwatching Society (HKBWS) has been coordinating surveys with Fujian Bird Watching Society, Zhanjiang Bird Watching Society, Guangdong Zhanjiang Mangrove National Nature Reserve, South China Institute of Endangered Animals, Guangxi Mangrove Research Center and Guangxi Beilun Estuary National Nature Reserve. Mist-netting shorebirds is emerging as one of the most serious threats to the Spoon-billed Sandpiper in southern China. HKBWS has been making progress in engaging with local stakeholders to reduce mist-netting.

Coordinated surveys were conducted across wintering countries during one week periods in December 2013 and January 2015. In October 2013, RSPB staff with BCST organised a two-day training workshop in Thailand, also including participants from Mahidol University (Bangkok), BANCA, HKBWS, Fujian Birdwatching Society, Viet Nature and Bangladesh Bird Club. The workshop provided an opportunity for participants to give updates from their respective countries, identify the main gaps in knowledge and agree on timing and locations of surveys in the coming winter. During the workshop a technical leaflet produced by the project on recording information on the Spoon-billed Sandpiper was presented and distributed. It gives descriptions and encourages precise and detailed collection of data on plumage of Spoon-billed Sandpipers to ascertain their age. This leaflet has now been translated into Chinese, Korean and Thai and is available at <http://www.eaaflyway.net/our-activities/task-forces/spoon-billed-sandpiper/>. The workshop was followed by another one-day workshop on updating the Spoon-billed Sandpiper Action Plan for Thailand with local stakeholders.

From 5 to 16 October 2014 the EAAFP Spoon-billed Sandpiper Task Force convened in Rudong, China. The project supported participants to attend from Myanmar and the RSPB was represented by three staff. Most of the time was spent conducting surveys of the Spoon-billed Sandpiper on the mudflats of Rudong. One day was set aside for a Task Force meeting, with updates from countries and planning the coordinated winter survey set for mid-January 2015. The dates for the winter survey were set around the most suitable time for a survey in the Gulf of Mottama. Results of the surveys in the Gulf of Mottama and the other wintering survey locations are summarised above in Section 2.1.

A paper on the winter distribution of the Spoon-billed Sandpiper has just been approved for publication in the journal *Bird Conservation International*. The paper uses records of Spoon-billed Sandpipers from surveys until 2013 and describes a species distribution model based on records of locations and remote sensing imagery across the region. Key results are a recorded wintering population estimate between 242 and 378 Spoon-billed Sandpipers. The paper concludes that *“Most of the larger areas identified as suitable are already known to be used by wintering Spoon-billed Sandpipers, but there would appear to be less extensive but still potentially suitable areas south of the Mekong delta. Small parts of the coast of western*

Myanmar, eastern Bangladesh and the Guangxi and Guangdong regions of China may also merit further investigation.” The results of the winter 2014/15 coordinated survey were too late to be included, and adding sites where individuals were recorded more recently would not alter the conclusion. The major wintering sites have been identified and the priority is to continue protecting those sites. Nevertheless where about 50% of the population winters is still unclear and the Gulf of Mottama may still hold many more than previously estimated.

Survey results and reports of activities, including surveys, in range states are reported twice a year in the Spoon-billed Sandpiper Task Force News Bulletin⁴.

4. *Awareness raised among decision-makers and the public in relevant countries of the importance of intertidal habitats along the EAAFP for ecosystem services, local livelihoods and biodiversity, and of the urgent need for key threats to these habitats to be tackled*

The project enabled a Flyways Policy Officer to be recruited by BirdLife International, based in Singapore at BirdLife’s Asia Division Office. Her main task was to deliver this component of the project, while developing the programme of BirdLife across the East Asian - Australasian Flyway. Through this role, the project was able to support approval and implementation of several regional policy initiatives for protection of coastal wetlands, including a key decision at the UN Convention of Biological Diversity on coastal restoration and Decision XII/19 on ecosystem conservation and restoration welcoming the ‘Caring for Coasts’ Initiative. Outreach to policy makers and scientists about the critical value of the region’s intertidal habitats to development as well biodiversity has been extensive through a series of high-level meetings and workshops. Through the BirdLife partnership (who are partners of the EAAFP) there have been co-ordinated grassroots awareness raising events at priority sites throughout the flyway. The project has also enabled BirdLife to prepare an East Asian Intertidal Habitats Conservation Action Plan, drawing from ongoing and planned actions of the national partners partnership. The project has thus enabled BirdLife to strengthen its support to the partnership and co-ordinate more fully the strengths and potentials at the grassroots level.

During the early stages of the project, there was close collaboration with the IUCN on preparing a “*Situation analysis on East and South-east Asian intertidal habitats, with particular reference to the Yellow Sea (including the Bohai Sea)*”⁵. A draft of this was discussed at the Ramsar Convention Conference of the Parties in Bucharest in July 2012, organised by RSPB/BirdLife and hosted by the EAAFP with involvement of the Governments of Cambodia, China and Myanmar. It was then formally launched at the IUCN World Conservation Congress in South Korea in September 2012. The report examined drivers for threats to intertidal habitats and consequent impacts on livelihoods, especially for fisheries, and biodiversity.

The report paved the way for the adoption at the IUCN World Conservation Congress in 2012 of Resolution 28 on the “*Conservation of the East Asian - Australasian Flyway and its threatened waterbirds, with particular reference to the Yellow Sea*”. RSPB and BirdLife Asia led the development of this, which was co-sponsored by 26 IUCN member organizations and adopted with 100% support from the governments and >99% from the NGO house. Together, the IUCN report and Resolution 28 have given an unprecedented springboard for concerted action to conserve Asian tidal habitats essential to migratory waterbirds and coastal communities, especially in the Yellow Sea of China and South Korea.

For each of the major conferences in 2012, a tailored version of the BirdLife Asia Migratory Birds and Flyway Programme leaflet “*East Asian Flyway coastal wetlands face an ecological crisis*” was produced by the RSPB and other NGO partners summarising the IUCN report and the resolution. A banner was also produced to display at these and other events, as were stickers to promote the website where the documents could be downloaded.

⁴ <http://www.eaaflyway.net/our-activities/task-forces/spoon-billed-sandpiper/>

⁵ https://www.iucn.org/knowledge/publications_doc/publications/?uPubsID=4695

The project has supported significant steps in the implementation of Resolution 28. Three meetings across the flyway were organised by BirdLife in 2014. These meetings brought together academics, site managers and government representatives from across South-east Asia to raise awareness of the importance of conservation of, and threats to, the intertidal zone of the EAAF, with significant progress made towards their planning. The project has also enabled engagement in other important regional and national initiatives to protect coastal habitats.

In April 2014, the Flyways Policy Officer, participated in the first workshop of the 'China Coastal Wetland Conservation Blueprint Project' hosted by the Paulson Institute, the Chinese Academy of Sciences and the Lao Niu Foundation in Beijing. This meeting enabled BirdLife to share experience of conservation projects to conserve key species such as the Spoon-billed Sandpiper. Since that meeting BirdLife has been sharing data, which fed into recommendations for protecting important intertidal habitats that will be an outcome of this project. During the visit to Beijing, BirdLife also established relationships with the Beijing Forestry University and WWF-China, which together with the RSPB led to co-organisation of the International Workshop on Intertidal Wetland and Management in the Yellow Sea Provinces of China in Beijing on 15-17 September 2014. This workshop supported implementation of Resolution 28, bringing together over 160 government representatives (including from the State Forestry Agency, State Oceanic Agency and the National Reform Development Council of China) with site managers and academics to raise awareness of the need to conserve intertidal areas in the Chinese Yellow Sea. A declaration was produced outlining six priority actions for implementation in China, in summary; 1) recognition of ecosystem services from intertidal habitats, 2) protection of wetlands, including specifically Rudong in Jiangsu Province, 3) using ecosystem-based approaches to identify important areas for protection, 4) development of a national action plan and strategy for protecting coastal wetlands of the Yellow Sea, 5) strengthening international collaboration and information exchange, 6) research and monitoring of coastal wetlands.

Soon after this workshop, alarming news reached BirdLife International and RSPB of the imminent threat of land reclamation to the stop-over site at Rudong. BirdLife International commissioned a small team of Chinese conservationists on the ground to gather details on the level of threat to the site and develop an internal advocacy plan to prevent the area from being destroyed. The plan is now being implemented.

Also as part of support to Resolution 28, a 'Symposium on Intertidal Conservation in South-east Asia' was organised by BirdLife at Sungei Buloh Wetland Reserve in Singapore on 11-12 June 2014, bringing together over 80 decision-makers and site managers from 11 countries across South-east Asia along with academics and experts in the field of coastal management to raise awareness of the need to conserve and effectively manage intertidal areas.

The project has also led to BirdLife establishing a project at the Geum Estuary in South Korea to conserve the intertidal mudflats, with funding from Rio Tinto. This is the most important site for migratory birds in South Korea, and a regular stopover site for Spoon-billed Sandpiper. A monitoring workshop, to identify a methodology for data collation, was held from 1-5 September 2014. MOUs have been signed between BirdLife and the local government of Seocheon County, and between BirdLife and the UN World Tourism Organisation.

A BirdLife Asia Partnership Meeting was held in Bangkok, Thailand in November 2014, bringing together all BirdLife Partners and Affiliates in Asia, along with BirdLife Australia and BirdLife Partners from across the world who work closely within Asia, such as the RSPB, and members of the BirdLife Global Secretariat. The meeting was focussed on increasing the effectiveness of flyways advocacy work, encouraging the Partnership to work together and share experience, and planning more effectively for their work in the East Asian - Australasian and Central Asian Flyways. Another day of the meeting was dedicated to increasing communications and collaborations amongst the BirdLife Partnership.

The BirdLife Asia Flyways Policy Officer attended CBD COP12 for two weeks in the Republic of Korea in October 2014, including giving two presentations and supporting a visit to the Geum Estuary. The Caring for Coasts Initiative, a call for a global initiative to restore coastal wetlands, was endorsed as a decision at CBD COP12. This was a major achievement, brought about by intensive lobbying by BirdLife International.

A report on “*The Problem of Bird Hunting in Asia*” was finalised in August 2014. This report looks more generally at the issue of bird hunting throughout the region and the significance for birds to local livelihoods, drawing from the knowledge and experience of BirdLife Partners in Asia. It is used to inform BirdLife Asia in developing a regional programme to tackle the issue of bird hunting, which is a major issue for Asia.

At the grassroots level, ‘*Welcome to the Birds*’ is a flyway-wide annual festival on migratory birds, launched in October 2013 by BirdLife Asia and designed and run by national Partners to coincide with the arrival of migratory birds into southern countries across the Asian region. The objective is to raise awareness of birds and their migration throughout the EAAF through a series of events held across the flyway. In its second year in 2014, twelve organisations from across the flyway held events, ranging from site visits to expert lectures to music concerts, and included schools, adults and businesses. This is now an annual feature in the calendar of BirdLife Partners in the region.

The East Asian Intertidal Habitats Conservation Action Plan was finalised at the end of the project and shared amongst the BirdLife Partnership, drawing extensively from the inputs of Partners. It is designed to be used primarily by the BirdLife International Partnership for prioritisation, planning, and implementation on the ground, but also to guide the work of others to support conservation along the flyway.

The Flyways Policy Officer also coordinated the inputs of BirdLife International into the East Asian - Australasian Flyway Partnership. In 2014-2015, this included a ‘Flyway Site Network report’ consultation, a ‘Science Needs’ consultation, a consultation on the ‘Terms of Reference for an Independent Review of EAAFP’, reporting on progress and plans for the EAAFP Meeting of Parties 8 (held in Japan in January 2015), and others.

5. Robust captive population established to act as a source of birds for augmentation of the wild population, to prevent it falling below a critical level from which recovery is impossible (or for rapid reintroduction, if the worst happens and the wild population goes extinct) – and Russian capacity in this field significantly enhanced

In 2012, the expedition to the main breeding grounds of Meinypil’gyno was undertaken by a large multi-national team of professional staff and volunteers. The international field team was led by Christoph Zöckler, and comprised 16 members from six countries. Three experienced staff from WWT were part of the team to ensure a high standard of avicultural support and an expert in the breeding of waders from the New Zealand Department of Conservation. A video of the expedition can be seen at <http://www.saving-spoon-billed-sandpiper.com/>.

A total of 20 eggs were collected for the conservation breeding programme in 2012. These were shipped to WWT Slimbridge between 25 June and 5 July. Eighteen hatched and 17 were reared to fledging. Staff from Moscow Zoo and Birds Russia visited the UK in August 2012 and spent several days at the conservation breeding facility at WWT Slimbridge discussing avicultural techniques and witnessing the practicalities of captive breeding programmes.

Twenty-four birds (16 males and eight females) are now being cared for in specially-designed biosecure facilities at WWT Slimbridge from the two expeditions in 2011 and 2012. To date there has been no breeding, which has been disappointing. Nevertheless, the males at least have been showing all the signs of breeding behaviour. Females haven’t yet shown full breeding plumage and this may be due to lighting conditions, which are artificially controlled to mimic light in the arctic. The environmental conditions are closely controlled and monitored in the enclosures at WWT Slimbridge to try to replicate conditions on the tundra at Chukotka, and adjustments are being made and lessons learned. This is pioneering work.

In addition to the collection of eggs for the conservation breeding programme, the project team also trialled an innovative technique known as ‘head-starting’, where eggs are placed in incubators, the chicks hatched and reared in temporary predator-proof holding pens on the tundra before being released alongside wild-reared birds. This increases breeding productivity at least five-fold, and should lead to a stabilisation of the wild population. Head-starting acts as a further safety net for this fragile population, and should also help maintain genetic diversity within the population. The head-starting programme is run by WWT and Birds Russia. Through head-starting, 81 birds have been released already: 9 in 2012, 18 in 2013, 26 in 2014, and 28 in 2015. Head-started birds are marked with uniquely coded leg-flags (light green in 2012 and white in subsequent years), which field survey teams are encouraged to look for throughout the region.

The first resightings of head-started birds were reported in November 2013: one at a salt pan near Bangkok in Thailand, and another in Fucheng, southern China. To date there have been 34 confirmed resightings of headstarted birds (13 individuals) from five flyway countries: China, Japan, South Korea, Thailand and Russia. The first head-started female to return and breed was recorded in 2014. She also returned in 2015 to breed along with four other head-started birds from 2013 and 2014. The resightings on migration and return rate to the breeding grounds indicates that head-starting is proving successful and is making an important contribution to the species survival. Head-starting was co-funded by SOS – Save our Species.

Monitoring of breeding pairs is conducted at Meinypil'gyno where the head-starting takes place. The number has remained quite stable and increased slightly during the project period, with nine breeding pairs (plus two to three probable pairs) each year from 2011 to 2013, 11 pairs in 2014 and 12 (plus one probable pair) in 2015.

3 Project Partnerships

The success of the project has been built entirely on the close partnerships of the RSPB. There are three “networks” within which the RSPB is closely involved to save this species.

The RSPB is the BirdLife Partner in the UK and has been working closely with the BirdLife Asia Regional Office and BirdLife Partners in range states of the Spoon-billed Sandpiper. In Myanmar and Thailand, the RSPB has been providing institutional support directly to BirdLife Partners and working with them on the conservation of this and other species. In 2013, a new RSPB Partner Development Officer was recruited based in the region and has strengthened working ties in Thailand, Myanmar and Vietnam. Through recruiting a Flyways Policy Officer, the project has enabled the BirdLife Asia Office to more actively coordinate activities for conservation of the Spoon-billed Sandpiper and its Migratory Birds and Flyway Programme for the East Asian - Australasian Flyway⁶. The Hong Kong Birdwatching Society, another BirdLife Partner, has been coordinating work for the Spoon-billed Sandpiper in southern China. The RSPB is committed in its strategy to support and build the BirdLife partnership for more effective global conservation.

In 2013, the RSPB started to provide institutional support directly to BANCA in Myanmar build its capacity into a strong, resilient BirdLife Partner. That support enabled BANCA to recruit core staff, such as director and finance manager, establishing a financial management system, and develop its own strategy. Soon after, BANCA went through an exceptionally turbulent time, with the sad death of the chairman and a radical change of management resulting from a large grant for organisational development, which led to the departure of senior BANCA members, including those with close involvement in the project. As a result, the RSPB needed to work more closely with the project team of junior staff and re-establish institutional relations. The partnership with BANCA now is strong; the institutional foundations established in 2013 remain intact and the Spoon-billed Sandpiper conservation team have greater capacity for project management and implementation.

Outside of the BirdLife network the RSPB has also been directly supporting the Spoon-billed Sandpiper Conservation Project in Bangladesh, where there is not yet a BirdLife Partner. Sayam Chowdhury who leads the project was awarded a Darwin Fellowship grant in April 2014, and has just completed a one-year MPhil on Conservation Leadership at Cambridge University. He has just recently been recruited by BirdLife to the part-time position of Assistant Coordinator to the EAAFP Spoon-billed Sandpiper Task Force, supported by the RSPB.

The EAAFP Spoon-billed Sandpiper Task Force has been another important network of organisations and individuals. The project supported the role of the Task Force coordinator, Dr. Christoph Zöckler at the beginning of the project. The Task Force is supervised by BirdLife International under the EAAFP. It includes representatives of all range countries and supporting organisations, such as the RSPB, from the UK. The Task Force is in regular communication and had one formal workshop during the project period in October 2014, the previous one was in March 2012.

⁶ <http://www.birdlife.org/worldwide/programme-additional-info/migratory-birds-and-flyways>

The third “network”, which is less formal, is the UK Spoon-billed Sandpiper Support Group, which brings UK technical and financial support to global efforts to save this species, and includes the RSPB, WWT, the British Trust for Ornithology and BirdLife International, among others.

These are all active networks of overlapping individuals and organisations. They all meet and communicate on a regular basis. These close partnerships and networking have enabled good monitoring of the Spoon-billed Sandpiper across its vast range, prioritisation of threats and the ability to address threats wherever they occur.

Another relationship developed towards the end of the project has been with Helvetas, the IUCN and SDC for their Project in the Gulf of Mottama. BANCA is contracted as a full partner to that project, which is expected to last at least nine years and the RSPB is invited to advise on different aspects of planning and implementing the project.

4 Contribution to Darwin Initiative Programme Outputs

4.1 Project support to the Conventions (CBD, CMS and/or CITES)

Support to Aichi Targets of the Convention on Biological Diversity

Target 1: People are aware of the values of biodiversity The project contributed to this target at all levels of society; thousands of people in local communities in Myanmar, thousands of people in 12 countries through Welcome to the Birds events organized by BirdLife Partners, hundreds of policy makers in EAAF countries through workshops.

Target 2: Biodiversity values integrated into national and local development and poverty reduction strategies and planning processes In Myanmar, work in the Gulf of Mottama has laid the ground work and contributed to design of a 15 million CHF (ca. £10,000,000) poverty alleviation project. IUCN WCC Resolution 28 recognises the need to protect intertidal mudflats for the benefits of fisheries and other important economic sectors.

Target 4: Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption See target 2.

Target 5: The rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced. The project has made important progress to ensure the long-term protection of the Gulf of Mottama. In China, high-level workshops have led to agreements on the need to protect coastal habitats on the Yellow Sea. There has been monitoring of important sites for the Spoon-billed Sandpiper.

Target 6: All fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches The project provided the groundwork for a larger project focussed on sustainable fisheries, livelihoods and protection of biodiversity in the Gulf of Mottama.

Target 9: Invasive alien species and pathways are identified and prioritized The spread of *Spartina* grass on important mudflats on Chinese coasts is being monitored and steps are being taken to address its spread.

Target 11: At least 17% of terrestrial and inland water, and 10% of coastal and marine areas are conserved Strong progress was made towards having the Gulf of Mottama established as a Ramsar Site. The whole gulf has been designated as an EAAFP Flyway Network Site, recognising the extent which must be protected to ensure its ecological integrity. Two sites in Thailand have also been designated as Flyway Network Sites, partly on the basis of wintering Spoon-billed Sandpipers.

Target 12: The extinction of known threatened species has been prevented..... The project may have turned around the fortunes of the Spoon-billed Sandpiper and at minimum has halted its rapid decline. Without interventions at this time, the species was predicted to be extinct by 2020. At the same time, the project has supported the conservation of other threatened species, in particular the Endangered Nordmann’s Greenshank, which uses some of the same stop-over and wintering sites.

Target 14: Ecosystems that provide essential services are restored and safeguarded The project has taken ground breaking steps to promote the protection of intertidal mudflats and to raise awareness of their ecosystem values throughout the region. In Myanmar a Ramsar Site is close to being established following a bottom-up approach involving widespread consultation with local communities. In China there is growing commitment to protecting mudflats, as shown through the Beijing Declaration and concerted efforts by many institutions all working in mainland China to influence the red-lining policy of government to conserve important sites for Spoon-billed Sandpiper recently discovered on the coast of mainland China.

Target 17: Each Party has developed and has commenced implementing an updated national biodiversity strategy and action plan. BANCA staff have been involved in the preparation of the latest NBSAP for Myanmar, raising the prominence of the Spoon-billed Sandpiper and the Gulf of Mottama.

Target 19: Knowledge, the science base and technologies relating to biodiversity are improved, widely shared and transferred, and applied. The project has contributed to knowledge of the status and distribution of the Spoon-billed Sandpiper and supported pioneering husbandry practices for the species at WWT Slimbridge and in Russia.

Contribution to the Convention on Migratory Species

Most range states of the Spoon-billed Sandpiper are not signatories to CMS. The project has supported CMS through its support to the EAAFP, to which CMS is a partner, and the fact that the species is listed on Appendices 1 and 2 of the convention and is a high priority for the CMS secretariat. The goal of the EAAFP is “*Migratory waterbirds and their habitats in the EAAF are recognised and conserved for the benefit of people and biodiversity*” and the project has contributed directly to all the objectives of the EAAFP:

1. *Develop the Flyway Network of sites of international importance for the conservation of migratory waterbirds.....* The project supported the establishment of a Flyway Network Site in Myanmar.
2. *Enhance communication, education and public awareness of the values of migratory waterbirds and their habitats.* See Aichi Target 1 above.
3. *Enhance flyway research and monitoring activities, build knowledge and promote exchange of information on waterbirds and their habitats.* Monitoring and ecological knowledge of the Spoon-billed Sandpiper and key sites has been enhanced by the project and communicated among professionals, particularly through the EAAFP Spoon-billed Sandpiper Task Force News Bulletin, scientific papers, workshops and conventions.
4. *Build the habitat and waterbird management capacity of natural resource managers, decision makers and local stakeholders.* Training has been provided to local stakeholders in the Gulf of Mottama on wetland management. Solutions for the sustainable development of coastal wetlands and protection of important habitats have been discussed in China.
5. *Develop, especially for priority species and habitats, flyway wide approaches to enhance the conservation status of migratory waterbirds.* The project has supported the work of the EAAFP Spoon-billed Sandpiper Task Force across the flyway and supported BirdLife International to strengthen its support to Partners and develop an action plan for the flyway.

CITES is not relevant to this project.

4.2 Project support to poverty alleviation

4.2.1 Programme indicators

- *Did the project lead to greater representation of local poor in management structures of biodiversity?* Yes. In Myanmar the project used a bottom-up approach, mainly working with local communities and establishing village-level local conservation groups.
- *Were any management plans for biodiversity developed?* An application for establishing the Gulf of Mottama as a Ramsar Site was prepared.
- *Were these formally accepted?* Not yet. The institutional management arrangement is in the process of being finalised.

- *Were they participatory in nature or were they 'top-down'? How well represented are the local poor and women, in any proposed management structures?* The process for developing the Ramsar Site application was entirely bottom-up. Ex-bird hunters, who were among the poorest in the communities, were closely involved in the project.
- *Were there any positive gains in HH income as a result of this project?* In Myanmar, gains in HH income were marginal and it was not feasible to separate them from other economic influences. The project benefitted more than 8,000 people through provision of freshwater ponds, which is not directly translatable into income, but addresses a fundamental human need.
- *How many HH saw an increase in their HH income?* See above
- *How much did their HH income increase (e.g. x% above baseline, x% above national average)? How was this measured?* Incomes were only measured for ex-bird hunters who received individual micro-grants, through individual interviews.

Additionally, the profile of the project within the main breeding grounds of Meinypil'gyno was high with local people benefitting from the project through the provision of goods and services to the expedition teams, and direct employment of a number of individuals.

4.3 Transfer of knowledge

The project's main approach to knowledge transfer has mainly been through direct communication to individual stakeholders and policy makers; through organising local, national and international workshops and meetings and participating in others. Organised meetings have been output-oriented, seeking discussion and consensus as opposed to passive reception of information. Printed materials have been produced in local languages where required or English (for an international context). In Myanmar, public awareness signboards have been installed in prominent places throughout the proposed Ramsar Site.

4.4 Capacity building

The project team (four men and one woman) of BANCA in Myanmar have developed considerable capacity through implementation of the project. In addition, to the skills learnt through training and experience they are now able to actively plan activities, develop their own programme by designing projects and raising funds, manage budgets and engage with government. One team member (Pyae Phyo Aung) was promoted to Project Manager in 2013 and now plays a senior role in BANCA. He has recently been nominated as CEPA NGO Focal Point for Myanmar by the government. The financial management of BANCA has also been transformed and become more professional. The Finance Manager of BANCA is a woman. Through the project, BANCA has been supporting the government of Myanmar revise its NBSAP. Training has been provided in Myanmar on the Ramsar Convention and wetlands management to BANCA and union and state governments.

Birds Russia and Moscow Zoo have received considerable training and support in developing the head-starting programme. Annual supervision from the UK is now being phased out.

RSPB staff have supported government training for Vietnam, the latest signatory to the EAAFP.

The capacity of BirdLife Asia has been strengthened through establishment of the Flyway Officer position, which has enabled greater coordination and support to national Partners. BirdLife Asia has supported partner organisations throughout the flyway, in particular through training workshops, advocacy and communications training in June 2013, conducted in Malaysia with project support and organised by the Flyway Policy Officer with BirdLife and RSPB staff support.

There has been substantial training on field survey techniques by British volunteers and RSPB staff throughout the region.

The project has supported hosting a number of visitors for study visits to the UK focused on management of inter-tidal areas and bird-focused tourism and education. Visitors from Yangcheng Nature Reserve (close to Rudong) visited London and Slimbridge reserves of WWT. In August, a delegation from Seocheon County, lead by the Vice Mayor, visited the British Bird Fair, followed by a study tour to the RSPB's Titchwell Nature Reserve.

Sayam Chowdhury, from Bangladesh, has just completed an MPhil on Conservation Leadership at Cambridge University and is now the Assistant Coordinator of the EAAFP Spoon-billed Sandpiper Task Force.

4.5 Sustainability and Legacy

The project has been a springboard for work throughout the region, which will grow.

- The 24 Spoon-billed Sandpipers being cared for at WWT Slimbridge have yet to breed but staff have learnt a lot about their husbandry and are optimistic of success in the 2016 breeding season. It was understood from the outset that it will take years before a sufficiently large assurance population has been established and birds can be transferred into the wild population. There are currently no more plans to collect more eggs from the wild for the captive population.
- Head-starting was initiated during this project as a novel technique to stimulate growth of the wild population and its value has been demonstrated. The RSPB and WWT remain committed to continue to support head-starting. Russian staff are being trained in headstarting techniques and taking on more responsibility for head-starting, and there is already reduced support from UK experts.
- The work in the Gulf of Mottama will be built upon by a nine-year SDC-funded project. BANCA has been contracted to work on that project and ensure the development of local conservation groups and the RSPB will continue to engage with the project in an advisory role. This will be the first Ramsar Site in Myanmar for an area not already protected and will be a demonstration project for community-led conservation in Myanmar.
- BirdLife International in Asia will continue to support partners and coordinate conservation across the flyway, as a result of the role played by the Flyway Policy Officer. The flyway work will remain a key area of work for BirdLife International in Asia.
- Three important wintering sites for the Spoon-billed Sandpiper in the Gulf of Mottama and the Gulf of Thailand have been designated as part of the EAAFP Flyway Site Network under the EAAFP. BirdLife is providing technical advice to the local government of Seocheon County, South Korea, on the development of their coastal zone management plan which will include the Geum Estuary.

5 Lessons learned

The project benefitted from the RSPB's well-established networks and partnerships and close working relations with and between partners. This was essential for a project on this geographic scale and with this level of complexity. RSPB's close involvement in BirdLife International and the EAAFP Spoon-billed Sandpiper Task Force, ensured gaps left by one or other network could be covered.

Generally the project was well planned. Some of the expected outputs in Myanmar were over-ambitious; rapid establishment of such a complex and large Ramsar Site, population impacted where villages are quite small and ex-hunters dispersed over a wide area and number of villages. Making a strong link between conservation and local livelihoods was not always relevant, especially bordering the Yellow Sea, where threats mainly come from land reclamation.

The project alone would not have been sufficient to deliver all outputs. It was however very beneficial in supporting the coordination and catalysis of partners' resources. The RSPB contributed direct financial and in-kind support and indirectly through country programmes building the institutional capacity of BirdLife partners in Thailand and Myanmar. Additional funding was raised for complementary work in Bangladesh and to support the head-starting. WWT staff time and facilities were necessary for captive breeding and head-starting. An enormous amount of time, support, energy and enthusiasm was contributed by individuals in the EAAFP Spoon-billed Sandpiper Task Force. BANCA was supported to raise additional funds for further activities, which complemented their work in the Gulf of Mottama. The BirdLife Asia office also sought additional funds, facilitated by the recruitment of the Flyways Policy Officer.

5.1 Monitoring and evaluation

There were no major changes in project design once the logframe had been approved.

The M&E system proposed was suitable for the project. The key indicators were the numbers of captive and wild individual Spoon-billed Sandpipers, the latter being difficult to estimate with great precision, but nonetheless necessary and sufficient monitoring over a vast area of the planet indicated that appropriate conservation actions were being undertaken.

The close networks and the well-established relations between institutions and individuals meant that communications were effective and regular. Contracted partners, Birds Russia, BirdLife Asia and BANCA, were requested to provide formal written reports on project progress, which were discussed if issues appeared, which hadn't already been addressed.

In Myanmar, project implementation required more attention, particularly because of the emerging complexity of the proposed Ramsar Site, but also a drop in capacity of partner, BANCA, resulting from the sad death of the chairman and management changes. There were regular visits by RSPB to Myanmar to monitor project progress and provide support.

Overall, the project is very high profile and subject to the scrutiny of a broad group of stakeholders, particularly birdwatchers, intensely interested in this species, for which there is a plethora of information now in the public domain.

5.2 Actions taken in response to annual report reviews

The previous annual report review was discussed in detail with the project partner in Myanmar. Feedback from that report has been responded to above.

6 Darwin identity

Both the RSPB and WWT use SBS in a wide-range of communications to their membership and beyond, RSPB has included SBS work in its magazine to its membership, which totals more than 1.2 million. Similarly WWT have had several feature articles in 'WaterLife' which has a readership of over 90,000 individuals.

There are regular project updates via www.saving-spoon-billed-sandpiper.com through blogposts and news items and in August 2015 through a live webcast hosted by Kate Humble called Spoonievision, which can still be viewed www.wwt.org.uk/spoonievision. The site is maintained by WWT, and is widely read. The Darwin Initiative is listed as one of the main sponsors of the project.

In Myanmar, the Darwin Initiative has been widely promoted through project activities and use of the logo on project materials, leaflets, posters, signboards (for freshwater ponds and promoting the Ramsar site). BANCA has had regular articles on the Spoon-billed Sandpiper in the national media with mention of Darwin as a supporter of the project. Therefore the Darwin Initiative is familiar at the grassroots level and to a certain extent among the international community with an interest in conservation or aware of UK interests in the country.

The Spoon-billed Sandpiper webpage of EAAFP has project outputs which include the logo of the Darwin Initiative and there is frequent mention in the six-monthly News Bulletin.

In Myanmar, the Darwin Initiative was promoted as the main donor to activities conducted in the Gulf of Mottama. Across the flyway, the Darwin Initiative mainly supported the role of the Flyways Policy Officer, so support from the Darwin Initiative was seen as part of a larger programme of work, particularly where specific events and activities were funded from other sources. In Russia, the Darwin Initiative contributed funding as part of a broader programme. www.saving-spoon-billed-sandpiper.com clearly shows the Darwin Initiative as one of three main sponsors for the work of captive breeding and head-starting.

7 Finance and administration

7.1 Project expenditure

Project spend (indicative) since last annual report	2014/15 Grant (£)	2014/15 Total actual Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)			+10%	In Myanmar more focus on direct implementation of community activities for BANCA staff time, reducing consultancy costs.
Consultancy costs			-24%	Myanmar. A local rather than international consultant supported livelihood work. A short time for international consultant on Ramsar site advocacy for days in Myanmar.
Overhead Costs			0%	
Travel and subsistence			+10%	Additional travel costs for Birds Russia. Contribution to SBS survey costs in Myanmar.
Operating Costs			0%	
Capital items			0%	
Others (see below)			-37%	Additional staff costs in Myanmar and travel
TOTAL				

Staff employed (Name and position)	Cost (£)
Becky Rush – BirdLife Asia, Flyways Policy Officer	
Pyae Phyo Aung – BANCA, Project Manager, Myanmar	
Aung Kyaw Nyunt – BANCA, Education & Livelihood Officer, Myanmar	
Tin Aung Tun – BANCA, Species Officer, Myanmar	
Thaw Phyo Shwe – BANCA, Project Assistant, Myanmar	
Aung Myin Tun – BANCA, Project Assistant, Myanmar	
TOTAL	

Capital items – description	Capital items – cost (£)
None purchased	
TOTAL	

Other items – description	Other items – cost (£)
Contingency – 10% expedition costs	
Flyway Officer – Supplies/Comms etc	
Storage & Shipping of expedition equipment	
Expedition – Permits & Permissions	
Birds Russia – Supplies/Comms etc	
TOTAL	

7.2 Additional funds or in-kind contributions secured

Source of funding for project lifetime	Total (£)
RSPB core funds for Spoon-billed Sandpiper	
RSPB support for Bangladesh coordinator	
SOS – Save Our Species (Supporting livelihoods in Bangladesh and Head-starting in Russia)	
BBC to RSPB via WWT Myanmar Gulf of Mottama	
CEPF funds raised through BANCA (US\$ 19,916) for training for local conservation groups and producing a shorebirds field guide in Myanmar language	
Thailand Environment Institute funds raised through BANCA (US\$22,955) fo	

freshwater ponds and water sanitation training.	
WWF funds raised through BANCA (US\$ 7,000) for a workshop on wetlands management in the Gulf of Mottama	
British Birdwatching Fair for BirdLife Asia	
Seocheon County, South Korea (in kind)	
Embassy of Norway in China through BirdLife Asia	
NParks (in kind) for workshop in Singapore	
TOTAL	

*Approximate figure based upon current exchange rate

Source of funding for additional work after project lifetime	Total (£)
RSPB core funds for 2015/16. Funding from the RSPB will continue after 2016 at levels based upon needs and priorities.	
Individual donor for surveys in Myanmar in January 2016	
Swiss Development Cooperation for the Gulf of Mottama implemented by the IUCN and Helvetas with BANCA as a partner Approximately 15,000,000 CHF for nine years.	
Ministry of Environment Korea (for workshop in Korea)	
Corporate funding in South Korea	
TOTAL	

7.3 Value for Money

This project was exceptionally good value for money and achieved a great deal across a vast area to halt the rapid decline in the Spoon-billed Sandpiper population and give it a chance for the future as has been demonstrated above. In so, doing the project also contributed to the survival of other migratory shorebirds on the world's most threatened flyway. The project was able to achieve this by being focussed where most important; breeding and addressing hunting at the most important wintering area, but also being broad in its scope where it needed to be; monitoring the Spoon-billed Sandpiper and important sites and policy and advocacy. Being able to achieve this much across such a large geographical range on the budget provided was possible due to strong relationships with partners and knowing in advance their total commitment to the success of the project. All partners were also able to leverage further substantial support to the project either financial or in-kind as shown in table 7.2 above. The project has left a strong legacy in all components of work.

Annex 1 Project's logframe, including indicators, means of verification and assumptions.

Note: Insert your full logframe. If your logframe was changed since your Stage 2 application and was approved by a Change Request the newest approved version should be inserted here, otherwise insert the Stage 2 logframe.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Goal: Effective contribution in support of the implementation of the objectives of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related targets set by countries rich in biodiversity but constrained in resources.</p>			
<p>Outcome: To implement the highest-priority actions needed to ensure the continued existence of SBS in the wild over the next 10 years and secure the longer-term future of this species' migratory flyway, taking full account of the need to integrate these conservation goals with the development needs of the people living along the flyway. Actions to include vital livelihood-related activities in the Gulf of Martaban in Burma, building on previous activities to reduce hunting pressure at this key site</p>	<ul style="list-style-type: none"> • SBS still extant in the wild at end of project (EOP) • Key breeding, passage and wintering sites still in useable condition by EOP • Understanding of how to integrate the conservation of SBS and other birds using the East Asian – Australasian Flyway (EAAF) with the development needs of local people significantly enhanced • Approximately 3,500 people living around the Gulf of Martaban given access to safe water through the construction of tube-wells 	<ul style="list-style-type: none"> • Species monitoring data for 2015 • Site monitoring data for 2015 • Local and regional plans created under Outputs 1 and 2, reports produced under Output 3, reports and materials under Output 4 • Reports from assessments of well usage, project reports, project evaluation reports 	<p>The diagnosis that mortality due to trapping in Martaban, which is a key focus for the project, is the most acute current threat to SBS is correct (as strongly indicated by recent scientific papers and fieldwork in Martaban)</p> <p>Integration of conservation and development needs proves to be achievable</p>
<p>Outputs: 1. Mortality due to trapping in the Gulf of Martaban is further reduced, and this reduction is secured for the long term through the creation of local plans and institutions to promote sustainable and equitable use of the gulf's natural resources</p>	<ul style="list-style-type: none"> • Sustainable Resource Use and Development Plans (SRUDPs) prepared for ten key villages around the gulf, housing approximately 25,000 people in total • Local Conservation and Development Groups (LCDGs) established in these villages to lead implementation of the SRUDPs, monitor birds and threats, raise awareness of relevant laws, and support & monitor families that have previously received microgrants to ensure that the alternative livelihood 	<ul style="list-style-type: none"> • Plan documents, project reports, project evaluation reports • Documents recording LCDG establishment and activities, project reports, project evaluation reports • LCDG technical and financial reports, project reports, project evaluation reports • Well construction records, reports from assessments of the numbers of people using the wells, LCDG reports, project reports, project evaluation reports 	<p>Local communities continue to be happy to be involved in conservation and development activities, as has been the case to date</p>

	<p>activities made possible by these grants are sustained</p> <ul style="list-style-type: none"> • Community Livelihood Improvement Grants given to seven of the ten focal villages, housing approximately 17,500 people in total • These grants used to improve access to safe water through the construction of one tube-well per village, serving an average of 100 households (500 people) in each village, or approximately 3,500 people in total • Incomes of the 30 ex-bird-hunting families who have previously received microgrants, comprising approximately 200 people in total, remain equal to or greater than their pre-grant incomes throughout the project period (with the increase in income ranging from 0% to 100% and averaging 50%) • Number of waders sold in local markets further reduced, so at least 75% below 2010 levels by EOP • Number of community members involved in trapping further reduced, so close to zero by EOP 	<ul style="list-style-type: none"> • Results from before-and-after income surveys • Market monitoring data • Reports from LCDGs 	
<p>2. Proposal developed for a Protected Area within the Gulf of Martaban, together with a Zonation Plan for critical parts of the Burmese coastline specifying which areas can be developed and which should be protected</p>	<ul style="list-style-type: none"> • Protected Area proposal and Zonation Plan created through a fully participatory process, including implementation of a robust social survey to assess potential positive and negative impacts on local communities • Proposal and plan submitted to relevant authorities by EOP 	<ul style="list-style-type: none"> • Proposal and plan documents, plus survey results and other outputs from the development process • Submission records (e.g. dated cover letters to authorities) 	<p>It proves possible to reach consensus with local communities on both the Protected Area proposal and the Zonation Plan</p>
<p>3. Knowledge of the distribution of SBS outside the breeding season enhanced, together with knowledge of the use</p>	<ul style="list-style-type: none"> • At least five potential stop-over and wintering sites surveyed for SBS by teams from local birding/ conservation groups, based on information obtained 	<ul style="list-style-type: none"> • Reports from survey visits • Reports on site usage 	<ul style="list-style-type: none"> • No major assumptions: there are no external factors that are likely to stop us achieving this objective

made of key sites by local communities	<p>through analysis of remotely sensed data</p> <ul style="list-style-type: none"> • Data on the use of these sites by local people gathered by these same teams, to inform future discussions about how these sites can best be protected 		
4. Awareness raised among decision-makers and the public in relevant countries of the importance of intertidal habitats along the East Asian–Australasian flyway for ecosystem services (e.g. flood protection), local livelihoods (e.g. through the support of vital shellfisheries) and biodiversity, and of the urgent need for key threats to these habitats to be tackled	<ul style="list-style-type: none"> • Desk-based studies carried out to identify and monitor the drivers of habitat destruction along the flyway and the threats to key sites • Awareness-raising and advocacy work carried out in Russia, Korea, China, Vietnam, Malaysia, Thailand, Burma and Bangladesh, informed by this research and using all relevant socio-economic, ecological and legal arguments 	<ul style="list-style-type: none"> • Research reports • Awareness-raising and advocacy materials and reports 	<ul style="list-style-type: none"> • Target audiences are receptive to our awareness-raising efforts
5. Robust captive population established to act as a source of birds for augmentation of the wild population, to prevent it falling below a critical level from which recovery is impossible (or for rapid reintroduction, if the worst happens and the wild population goes extinct) – and Russian capacity in this field significantly enhanced	<ul style="list-style-type: none"> • Expedition to the breeding grounds in summer 2012 successfully collects at least five clutches of eggs, supplementing an initial expedition in 2011* • At least 10 sub-adult or adult SBS healthy in captivity by end 2012 • At least one pair of SBS attempts to breed in captivity in 2013 • Russian colleagues involved in all avicultural tasks (e.g. incubation, chick rearing, transport) 	<ul style="list-style-type: none"> • Expedition report, project reports • Reports from breeding facility at Slimbridge • Project reports 	<ul style="list-style-type: none"> • SBS proves to be amenable to captive breeding (as expected on the basis of extensive research and consultation and trials on other small waders at Slimbridge) • Sufficient wild birds left in 2012 to allow collection of enough eggs (as expected from analysis of recent population trend) • Russian authorities give permission for 2012 expedition (as they have for the 2011 expedition, due partly to Birds Russia's excellent links)
<p>Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to output 1)</p> <p>1.1. In collaboration with community members and the relevant Township Authorities, create and implement Sustainable Resource Use and Development Plans for ten key villages around the Gulf of Martaban</p> <p>1.2. Create Local Conservation and Development Groups in these villages and provide them with the financial and technical support they need to become fully established</p> <p>1.3. Give Community Livelihood Improvement Grants to seven of the ten focal villages, and provide support as necessary to ensure that these grants are used effectively</p> <p>1.4. Monitor household incomes of ex-hunters who have previously received microgrants, and the utilisation and impact of the Community Grants</p>			

1.5. Visit local markets on a regular basis to monitor the numbers of waders for sale

2.1. Based on existing data and, if needed, additional fieldwork, determine where the boundaries of the proposed Protected Area should be ensuring that any negative impacts to locally resident communities are minimised and benefits maximised

2.2. In consultation with UK and local experts and local communities, identify the best management regime for this area

2.3. Prepare a detailed proposal explaining why a Protected Area is needed, where it should be, how it should be managed and how it will deliver tangible livelihood benefits to local residents

2.4. Submit this proposal to the Burmese authorities

2.5. Prepare a Zonation Plan for critical parts of the Burmese coastline, based on a pre-existing analysis of which areas can be developed without causing undue damage to biodiversity, ecosystem services and local community livelihoods, and which should be protected

2.6. Submit this plan to the Burmese authorities

3.1. Identify the bird clubs or other groups that are best placed to survey potential unrecorded stop-over and wintering sites, taking full account of existing relationships and initiatives (e.g. the China Coastal Waterbird Census, which has been underway since 2005 and with which additional SBS survey work will be fully integrated)

3.2. Provide these groups with the training and support they need to survey these sites for birds and assess use by local communities, and to manage and analyse the resulting data

3.3. Collate the findings and disseminate them to all relevant stakeholders, for example through papers in scientific journals

4.1. Undertake research into and documentation of drivers of habitat loss and threats to key sites along the flyway, in collaboration with national and local colleagues

4.2. Develop compelling messages, informed by this research, about the importance of intertidal habitats along the flyway for ecosystem services, local livelihoods and biodiversity

4.3. Communicate these messages proactively and effectively to all relevant policy- and decision-makers in the region

5.1. Travel to the breeding grounds in Chukotka in spring 2012 and establish expedition base, building on a successful first expedition carried out in 2011 (activity led by Bird Russia)

5.2. Survey and carefully monitor each breeding territory to identify the optimal timing for egg collection, taking account of the desirability of permitting re-laying, and collect eggs accordingly

5.3. Incubate the eggs collected, and (once they are old enough to move) transport the resulting chicks back to a purpose-built facility at Slimbridge via Anadyr (the nearest large town to the breeding grounds) and Moscow Zoo

5.4. Care for these birds at Slimbridge, together with those obtained through the 2011 expedition, with the aim of encouraging breeding and thus generating additional birds for supplementation of the wild population.

Annex 2 Report of progress and achievements against final project logframe for the life of the project

Note: For projects that commenced after 2012 the terminology used for the logframe was changed to reflect DFID's terminology.

Project summary	Measurable Indicators	Progress and Achievements in the last Financial Year (2014-2015)	Actions required/planned for next period
<p>Goal/Impact:</p> <p>To improve the conservation status of the Critically Endangered Spoon-billed Sandpiper <i>Eurynorhynchus pygmeus</i> (SBS) so that it is no longer threatened with imminent extinction</p>		<p>Winter surveys, especially on the Gulf of Mottama have shown that the rate of decline of the population of the Spoon-billed Sandpiper has decreased dramatically and that the population may even have stabilised. However there are increasing threats on the major migration stop-over site at Rudong in China, particularly from planned large-scale land reclamation. Nevertheless the status of the Spoon-billed Sandpiper is currently improved as a result of cessation of hunting in Myanmar, demonstrated success from head-starting and a captive population. In Myanmar, a Ramsar Site is close to being established.</p>	<p>Do not fill not applicable</p>
<p>Purpose/Outcome</p> <p>To implement the highest-priority actions needed to ensure the continued existence of SBS in the wild over the next 10 years and secure the longer-term future of this species' migratory flyway, taking full account of the need to integrate these conservation goals with the development needs of the people living along the flyway. Actions to include vital livelihood-related activities in the Gulf of Martaban in Burma, building on previous activities to reduce hunting pressure</p>	<p>SBS still extant in the wild at end of project (EOP)</p> <p>Key breeding, passage and wintering sites still in useable condition by EOP</p> <p>Understanding of how to integrate the conservation of SBS and other birds using the East Asian – Australasian Flyway (EAAF) with the development needs of local people significantly enhanced</p> <p>Approximately 3,500 people living around the Gulf of Martaban given access to safe water through the</p>	<p>Coordinated surveys on wintering sites in six countries, the passage site at Rudong China and numbers at one breeding ground confirm the population is at a similar level to the beginning of the project and sites are still useable, but of most concern is the threat of planned land reclamation at Rudong.</p> <p>Community consultations in June and July 2014 and a state level multi-stakeholder workshop in February 2015 give formal local support for designation of the Gulf of Mottama Ramsar Site.</p> <p>Engagement with SDC Project, which started in February 2015, and inclusion of BANCA as a partner to the project, will ensure continued</p>	<p>Do not fill not applicable</p>

<p>at this key site.</p>	<p>construction of tube-wells</p>	<p>integration of livelihood and biodiversity conservation needs in the Gulf of Mottama.</p> <p>Two meetings to promote the importance of inter-tidal areas for migratory birds along the EAAF were organised by BirdLife Asia in 2014 – one hosted in Singapore and one in Beijing, China.</p> <p>Endorsement of the Caring for Coasts Initiative at CBD COP12 emphasized the critical importance of coastal wetlands for ecosystem services.</p> <p>A strategic plan for BirdLife's work at key sites in the EAAF finalised.</p> <p>Co-funding led to three more freshwater ponds being built bringing the total to eight, serving freshwater to more than 8000 people in the Gulf of Mottama.</p>	
<p>Output 1.</p> <p>Mortality due to trapping in the Gulf of Martaban is further reduced, and this reduction is secured for the long term through the creation of local plans and institutions to promote sustainable and equitable use of the gulf's natural resources</p>	<p>Sustainable Resource Use and Development Plans (SRUDPs) prepared for ten key villages around the gulf, housing approximately 25,000 people in total</p> <p>Local Conservation and Development Groups (LCDGs) established in these villages to lead implementation of the SRUDPs, monitor birds and threats, raise awareness of relevant laws, and support & monitor families that have previously received microgrants to ensure that the alternative livelihood activities made possible by these grants are sustained</p> <p>Community Livelihood Improvement Grants given to seven of the ten</p>	<p>SRUD Planning was conducted in seven villages, with a follow-up consultancy in the same villages compiling plans in one report. These were the main villages the project worked in throughout the project. The figure of 25,000 people was not appropriate for the target 10 villages, where the populations are smaller, than average and closer to the mudflats.</p> <p>Seven local conservation groups have now been established with an additional one in the final year. Further training and 48 microgrants for households were provided in the final year.</p> <p>Community livelihood grants funded five freshwater ponds, and co-funded an additional three, in total bringing freshwater to more than 8,000 people, beyond the original target. Tube-wells were not appropriate in the targeted villages, due to the salinity of ground water. The freshwater ponds were requested by the villagers and are rain-fed. The number of people expected to be served by the community livelihood improvement grants was not appropriate as the populations of villages in the Gulf of Mottama are much smaller.</p> <p>An assessment of socio-economic conditions of 22 (not 30) ex-hunters originally supported before and during the project does not show an</p>	

	<p>focal villages, housing approximately 17,500 people in total</p> <ul style="list-style-type: none"> • These grants used to improve access to safe water through the construction of one tube-well per village, serving an average of 100 households (500 people) in each village, or approximately 3,500 people in total • Incomes of the 30 ex-bird-hunting families who have previously received microgrants, comprising approximately 200 people in total, remain equal to or greater than their pre-grant incomes throughout the project period (with the increase in income ranging from 0% to 100% and averaging 50%) • Number of waders sold in local markets further reduced, so at least 75% below 2010 levels by EOP • Number of community members involved in trapping further reduced, so close to zero by EOP 	<p>increase in incomes in most cases, but there is not a decrease either.</p> <p>No waders have been seen in markets during the past year.</p> <p>Old fishing nets set up for bird hunting have been found on three occasions and the hunters have been asked to remove them by community members.</p> <p>There is a high level of awareness among target communities about the biodiversity value of the Spoon-billed Sandpiper. BANCA has established good relations throughout and there is support for shorebird conservation as it doesn't negatively impinge on local livelihoods and the project has been seen to bring livelihood benefits.</p>
<p>Activity 1.1. In collaboration with community members and the relevant Township Authorities, create and implement Sustainable Resource Use and Development Plans for ten key villages around the Gulf of Martaban</p>		<p>The activity for SRUDP was completed in 2014 using CBNRM tools and led by a consultant with two to three days spent in each village. This was only completed in seven villages as a heavy monsoon prevented access to the other three villages during the planned period for the activity. A concept document for implementing the Sustainable Resource Use Development Plans was compiled and provided to the SDC project.</p>
<p>Activity 1.2. Create Local Conservation and Development Groups in these villages and provide them with the financial and technical support they need to become fully established</p>		<p>Seven local conservation groups have now been established with an additional one in the final year. Further training and microgrants provided in the final year. Co-funding supported further training to groups on wetlands management in May 2014 and birdwatching and awareness raising during the winter of 2014/15.</p>

		An assessment of five groups was conducted at the end of the project to identify further support needed. 48 microgrants were provided to group members. Terms of reference were also revised for the LCGs.
Activity 1.3 Give Community Livelihood Improvement Grants to seven of the ten focal villages, and provide support as necessary to ensure that these grants are used effectively		The project provided five villages with freshwater ponds during the previous year. Before the provision of freshwater ponds, village-level water management committees were established. Three more villages received freshwater ponds during the final year with funding from TEI, which also provided funds for extra infrastructure to extant freshwater ponds, e.g. steps and gangways to facilitate access, tree planting around ponds. All villages with freshwater ponds also received training workshops on water sanitation and hygiene.
Activity 1.4. Monitor household incomes of ex-hunters who have previously received microgrants, and the utilisation and impact of the Community Grants		From 16 to 28 December 2013, BANCA staff conducted a reassessment of socio-economic conditions of the 22 ex-bird hunters. The report was completed in English in April 2014. Livelihoods of ex-hunters were no worse, but it was not feasible to show a significant increase in incomes, except two had become significantly better off, nine households just broke even. Livelihoods were also affected by other socio-economic factors outside of the project control, e.g. changes in family situation, new sources of income, emigrations.
Activity 1.5. Visit local markets on a regular basis to monitor the numbers of waders for sale		From December to March in the last year of the project, local markets were systematically monitored by BANCA and LCG members at least once a month. There were no records of shorebirds being sold.
Output 2. Proposal developed for a Protected Area within the Gulf of Martaban, together with a Zonation Plan for critical parts of the Burmese coastline specifying which areas can be developed and which should be protected	Protected Area proposal and Zonation Plan created through a fully participatory process, including implementation of a robust social survey to assess potential positive and negative impacts on local communities Proposal and plan submitted to relevant authorities by EOP	There has been a strong bottom-up participatory process and support from all villages and Mon State government. A proposal for a Ramsar site has been revised and presented to the government. At the end of the project there was general all round support, although the national Ramsar Authority is requesting further clarification on the management structure before submitting the documentation to the Ramsar Secretariat. The SDC Project will complete the designation, led by IUCN with support from BANCA and advice from the RSPB. Progress is currently on hold as the project includes Ramsar designation within its plans, and aligns community development to the management of the Ramsar site. Initially, a smaller area will be designated only in Mon State.
Activity 2.1. Based on existing data and, if needed, additional fieldwork, determine where the boundaries of the proposed Protected Area should be ensuring that any negative impacts to locally resident communities are		From 26 June to 9 July 2014, 14 village consultations were conducted and two multi-stakeholder township workshops to review the proposed boundaries for the initial Ramsar site.

minimised and benefits maximised		
Activity 2.2. In consultation with UK and local experts and local communities, identify the best management regime for this area		Completed previously.
Activity 2.3. Prepare a detailed proposal explaining why a Protected Area is needed, where it should be, how it should be managed and how it will deliver tangible livelihood benefits to local residents		A Ramsar Information Site was revised based upon community consultations in June and July 2014.
Activity 2.4. Submit this proposal to the Burmese authorities		An EAAFP Flyway Network Site designation for the Gulf of Mottama was approved in 2014, covering the whole Gulf of Mottama. A revised Ramsar Information Sheet for two townships in Mon State as part of a phased approach to develop a Ramsar Site was presented to the Forestry Department in November 2014 and received support from the Director General.
Activity 2.5. Prepare a Zonation Plan for critical parts of the Burmese coastline, based on a pre-existing analysis of which areas can be developed without causing undue damage to biodiversity, ecosystem services and local community livelihoods, and which should be protected		The boundary has been decreased to about 34,000 ha to allow for a phased approach.
Activity 2.6. Submit this plan to the Burmese authorities		Presented above in activity 2.4.
Output 3. Knowledge of the distribution of SBS outside the breeding season enhanced, together with knowledge of the use made of key sites by local communities.	At least five potential stop-over and wintering sites surveyed for SBS by teams from local birding/ conservation groups, based on information obtained through analysis of remotely sensed data Data on the use of these sites by local people gathered by these same teams, to inform future discussions about how these sites can best be protected	At least 15 known stop-over and wintering sites in five countries were surveyed during the winter of 2014/15. An analysis of remote sensing data for potential Spoon-billed Sandpiper habitat shows that it is likely that the main wintering sites are known now, although there are probably additional sites where the species could winter. However it is still unclear where about 50% of Spoon-billed Sandpipers spend the winter. The estimates for the Gulf of Mottama may be too low. At important sites in Bangladesh, Myanmar, Thailand and Vietnam and uses of the sites by local people are understood. Plans have been developed or activities undertaken for priority sites in these countries.
Activity 3.1. Identify the bird clubs or other groups that are best placed to survey potential unrecorded stop-over and wintering sites, taking full account of existing relationships and initiatives (e.g. the China Coastal Waterbird Census, which has been underway since 2005 and with which additional SBS survey work will be fully integrated)		Well known during previous years of the project for all countries. These groups were involved in winter surveys for 2014/15

<p>Activity 3.2. Provide these groups with the training and support they need to survey these sites for birds and assess use by local communities, and to manage and analyse the resulting data</p>	<p>Training provided in previous years. For the Gulf of Mottama a survey methodology was developed in order to more accurately extrapolate a population estimate based upon numbers of Spoon-billed Sandpipers recorded as proportion of flocks of small waders and numbers of flagged birds recorded. The survey was conducted in January 2015 by a joint UK-Myanmar team. Training was provided to Myanmar bird surveyors.</p> <p>Data from winter surveys is compiled by the coordinator of the EAAFP Spoon-billed Sandpiper Task Force, and shared within the Task Force.</p>
<p>Activity 3.3. Collate the findings and disseminate them to all relevant stakeholders, for example through papers in scientific journals</p>	<p>All survey results are reported in the News Bulletin of the Spoon-billed Sandpiper Task Force on the website of the EAAFP.</p> <p>A paper on the winter distribution of the Spoon-billed Sandpiper has just been accepted for publication in Bird Conservation International.</p>
<p>Output 4. Awareness raised among decision-makers and the public in relevant countries of the importance of intertidal habitats along the East Asian – Australasian flyway for ecosystem services (e.g. flood protection), local livelihoods (e.g. through the support of vital shellfisheries) and biodiversity, and of the urgent need for key threats to these habitats to be tackled</p>	<ul style="list-style-type: none"> • Desk-based studies carried out to identify and monitor the drivers of habitat destruction along the flyway and the threats to key sites • Awareness-raising and advocacy work carried out in Russia, Korea, China, Vietnam, Malaysia, Thailand, Burma and Bangladesh, informed by this research and using all relevant socio-economic, ecological and legal arguments <p>The final year was exceptionally busy in hosting workshops, participating in meetings and conferences to deliver messages and launch initiatives developed during the previous years of the project, especially resulting from IUCN WCC Resolution 28.</p>
<p>Activity 4.1. Undertake research into and documentation of drivers of habitat loss and threats to key sites along the flyway, in collaboration with national and local colleagues</p>	<p>Additional outputs during the past year:</p> <p>BirdLife’s East Asian Intertidal Habitats Conservation Action Plan was finalised by the Asia Flyway Policy Officer and shared amongst the BirdLife Partnership.</p> <p>‘The Problem of Bird Hunting in Asia: An overview of the situation, successful case studies and recommendations for BirdLife International’ finalised in August 2014.</p>
<p>Activity 4.2. Develop compelling messages, informed by this research, about the importance of intertidal habitats along the flyway for ecosystem services, local livelihoods and biodiversity</p>	<p>The following brochures, banners and other materials to promote conservation messages for the flyway have been produced by BirdLife Asia:</p> <ul style="list-style-type: none"> • Banner on Spoon-billed Sandpiper conservation

	<ul style="list-style-type: none"> • Banner on BirdLife’s migratory birds and flyways programme • Brochure on BirdLife’s migratory birds and flyways programme • A Korean language version of the information booklet, “Recording information on Spoon-billed Sandpipers to aid their conservation”, , bringing the total to four languages (English, Thai, Chinese and Korean). Available at http://www.eaaflyway.net/our-activities/task-forces/spoon-billed-sandpiper/ • ‘Help Save the Spoon-billed Sandpiper!’ posters, designed by Hong Kong Bird Watching Society. Available at http://www.eaaflyway.net/our-activities/task-forces/spoon-billed-sandpiper/ for download in English, Korean and Chinese. <p>‘Welcome to the Birds’, a flyway-wide annual festival on migratory birds, was organised by twelve organisations from countries across the flyway between October and December 2014.</p>
<p>Activity 4.3. Communicate these messages proactively and effectively to all relevant policy- and decision-makers in the region</p>	<p>BirdLife Asia contributed to exhibition on migratory birds and flyways held in Singapore in May and June by the Canadian Embassy at Sungei Buloh Wetland Reserve.</p> <p>‘Symposium On Intertidal Conservation In South-east Asia’ organised by BirdLife at Sungei Buloh Wetland Reserve in Singapore on 11-12 June 2014.</p> <p>‘International Workshop on Intertidal Wetland and Management in the Yellow Sea Provinces of China’ co-organised by BirdLife Asia, the RSPB and other organisations in Beijing on 15-17 September 2014.</p> <p>BirdLife Asia Partnership meeting on coordinating conservation across flyways was held in Bangkok, Thailand in November 2014.</p> <p>BirdLife Asia Flyway Policy Officer attended CBD COP12 in the Republic of Korea in October 2014 where The Caring for Coasts Initiative was endorsed.</p>
<p>Output 5. Robust captive population established to act as a source of birds for augmentation of the wild population, to prevent it falling below a critical level from which recovery is impossible (or for rapid reintroduction, if the worst happens</p>	<ul style="list-style-type: none"> • Expedition to the breeding grounds in summer 2012 successfully collects at least five clutches of eggs, supplementing an initial expedition in 2011* • At least 10 sub-adult or adult SBS <p>There are now 24 birds held at biosecure facilities at WWT Slimbridge from the expeditions in 2011 and 2012. Males and females have shown active breeding behaviour but are yet to produce eggs..</p> <p>Russian colleagues are directly involved in all work on the breeding grounds and supervision for head-starting is being phased out.</p>

and the wild population goes extinct) – and Russian capacity in this field significantly enhanced	healthy in captivity by end 2012 <ul style="list-style-type: none"> • At least one pair of SBS attempts to breed in captivity in 2013 • Russian colleagues involved in all avicultural tasks (e.g. incubation, chick rearing, transport) 	
Activity 5.1. Travel to the breeding grounds in Chukotka in spring 2012 and establish expedition base, building on a successful first expedition carried out in 2011 (activity led by Bird Russia)		Completed in year 1
Activity 5.2. Survey and carefully monitor each breeding territory to identify the optimal timing for egg collection, taking account of the desirability of permitting re-laying, and collect eggs accordingly		Completed in year 1. Monitoring of breeding pairs and territories continues each year at Meinypil'gyno.
Activity 5.3. Incubate the eggs collected, and (once they are old enough to move) transport the resulting chicks back to a purpose-built facility at Slimbridge via Anadyr (the nearest large town to the breeding grounds) and Moscow Zoo		Completed in year 1. Hatching success of 90% and rearing success of 94%.
Activity 5.4. Care for these birds at Slimbridge, together with those obtained through the 2011 expedition, with the aim of encouraging breeding and thus generating additional birds for supplementation of the wild population.		Ongoing. Excellent facilities provided by WWT and high standard of care from dedicated aviculturalists. Captive birds are developing well and breeding behaviours have been exhibited by individuals, but as yet no eggs have been produced. Facilities and management practices are continually evolving and being changed as more is learned about keeping this species in captivity and encouraging breeding.

Annex 3 Standard Measures

Code	Description	Total	Nationality	Gender	Theme	Language	Comments
Training Measures							
1a	Number of people to submit PhD thesis	0					
1b	Number of PhD qualifications obtained	0					
2	Number of Masters qualifications obtained	0					
3	Number of other qualifications obtained	0					
4a	Number of undergraduate students receiving training	0					
4b	Number of training weeks provided to undergraduate students	0					
4c	Number of postgraduate students receiving training (not 1-3 above)	0					
4d	Number of training weeks for postgraduate students	0					
5	Number of people receiving other forms of long-term (>1yr) training not leading to formal qualification(e.g., not categories 1-4 above)	3	Russian	2 males, 1 female	Head-starting	English	Three Birds Russia staff have received 2–3 months informal training per year (2012–2015) in head-starting techniques
6a	Number of people receiving other forms of short-term	8	Myanmar		CBNRM, field	English	BANCA staff

Code	Description	Total	Nationality	Gender	Theme	Language	Comments
	education/training (e.g., not categories 1-5 above)				surveys		
		40	Myanmar		Bird conservation and birdwatching, wetlands, management, awareness raising	Myanmar	Local conservation groups
		3	Russian	Male	Headstarting	English	Three expedition members have received 2-3 months informal training in one or more years 2012–2015 in headstarting techniques
6b	Number of training weeks not leading to formal qualification	8	Myanmar				BANCA staff
		6	Myanmar				Local conservation groups
		40 10 weeks per year	Russian				Ongoing through breeding seasons

Code	Description	Total	Nationality	Gender	Theme	Language	Comments
		2012–2015					
7	Number of types of training materials produced for use by host country(s) (describe training materials)						

Research Measures		Total	Nationality	Gender	Theme	Language	Comments
9	Number of species/habitat management plans (or action plans) produced for Governments, public authorities or other implementing agencies in the host country (ies)						
	SBS action plan		Myanmar			English and Myanmar	
	Ramsar Information Sheet		Myanmar			English	
	Flyway Information Sheet		Myanmar			English	
	SBS action plan		Vietnam			English	(to be translated)
	BirdLife East Asian Intertidal Habitats Conservation Action Plan		Regional			English	
10	Number of formal documents produced to assist work related to species identification, classification and recording.						
	Spoon-billed Sandpiper identification guidelines		International			English Chinese Thai Korean	
	Field guide to the shorebirds of the Gulf of Mottama		Myanmar			Myanmar	Co-funded
11a	Number of papers published or accepted for publication in peer reviewed journals						

	The winter distribution of the Spoon-billed Sandpiper, Bird Conservation International					English	Just accepted
11b	Number of papers published or accepted for publication elsewhere						
	Saving the Spoon-billed Sandpiper: an update on the conservation programme. British Birds. August 2014					English	
	Bi-annual News Bulletin of the EAAFP Spoon-billed Sandpiper Task Force					English	
12a	Number of computer-based databases established (containing species/generic information) and handed over to host country						
12b	Number of computer-based databases enhanced (containing species/genetic information) and handed over to host country						
13a	Number of species reference collections established and handed over to host country(s)						
13b	Number of species reference collections enhanced and handed over to host country(s)						

Dissemination Measures		Total	Nationality	Gender	Theme	Language	Comments
14a	Number of conferences/seminars/workshops organised to present/disseminate findings from Darwin project work						
	World Wetlands Day in Naypyitaw, Feb 2013					Myanmar, English	
	Workshop on monitoring Spoon-billed Sandpiper on the wintering grounds, Thailand, October 2013					English	
	'Symposium On Intertidal Conservation In South-east Asia' organised by BirdLife at Sungei Buloh Wetland					English	

	Reserve in Singapore on 11-12 June 2014						
	'International Workshop on Intertidal Wetland and Management in the Yellow Sea Provinces of China' in Beijing on 15-17 September 2014					Chinese, English	
	BirdLife Asia Partnership meeting on coordination of conservation across the flyway, Bangkok, Thailand in November 2014					English	
	Stakeholder Workshop in Mon State for Ramsar Site Designation, February 2015					Myanmar	
14b	Number of conferences/seminars/ workshops attended at which findings from Darwin project work will be presented/ disseminated.						
	IUCN World Conservation Congress, 2012					English	
	World Wetlands Day at Moeyingyi Wetlands, Feb 2014					Myanmar, English	
	In April 2014, Workshop of the 'China Coastal Wetland Conservation Blueprint Project' in Beijing					Chinese, English	
	BirdLife Asia Flyway Policy Officer attended CBD COP12 in the Republic of Korea in October 2014.					English	
	EAAFP Spoon-billed Sandpiper Task Force Meeting, Rudong, China, in October 2014					English	
	Training workshop for the EAAFP, November 2014, Hanoi					Vietnamese, English	

Physical Measures		Total	Comments
20	Estimated value (£s) of physical assets handed over to host country(s)	£17389.32	LED monitor Toshiba laptop Boat BirdLife Asia BirdLife Asia BirdLife Asia

			Tent Cameras for the expedition Meteostation for the expedition Water heater Computer Satellite phone Telescope Telescope Thermal imager Sound Box (12") Projector (NEC VE-281G) Two timber boats for LCG Canon Camera for LCG 5 freshwater ponds	Birds Russia Birds Russia Birds Russia Birds Russia Birds Russia Birds Russia Birds Russia Birds Russia Birds Russia BANCA BANCA BANCA BANCA
21	Number of permanent educational, training, research facilities or organisation established			
22	Number of permanent field plots established			

Financial Measures		Total	Nationality	Gender	Theme	Language	Comments
23	Value of additional resources raised from other sources (e.g., in addition to Darwin funding) for project work						

See section 7.2 above

Annex 4 Aichi Targets

	Aichi Target	Tick if applicable to your project
1	People are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.	Yes
2	Biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.	Partly
3	Incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.	Partly
4	Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.	
5	The rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.	Yes
6	All fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.	
7	Areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.	
8	Pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.	
9	Invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.	
10	The multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.	
11	At least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.	Yes
12	The extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.	Yes
13	The genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.	
14	Ecosystems that provide essential services, including services related to water, and	Yes

	contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.	
15	Ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.	
16	The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.	
17	Each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.	Yes
18	The traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.	
19	Knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.	Yes
20	The mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.	

Annex 5 Publications

Type * (e.g. journals, manual, CDs)	Detail (title, author, year)	Nationality of lead author	Nationality of institution of lead author	Gender of lead author	Publishers (name, city)	Available from (e.g. contact address, website)
	Species action plan for the conservation of Spoon-Billed Sandpiper (<i>Eurynorhynchus pygmeus</i>) in Myanmar	Pyae Phyo Aung (BANCA)	Myanmar	Male	BANCA, Yangon	http://www.banca-env.org/index.php/publication-multimedia/reports
6 th monthly Newsletter	News Bulletin of the EAAFP Spoon-billed Sandpiper Task Force	Usually the Editor is Dr. Christoph Zöckler	N/A	Male	EAAFP	http://www.eaaflyway.net/our-activities/task-forces/spoon-billed-sandpiper/
Annual report	Annual reports of the headstarting expeditions. Published in 2012, 2013, 2014 & 2015. Authored by WWT and Birds Russia.	UK	UK	Female	WWT	Rebecca Lee
Brochure	Recording information on	Dr. Nigel Clark	UK	Male		http://www.eaaflyway.net/our-activities/task-forces/spoon-billed-sandpiper/

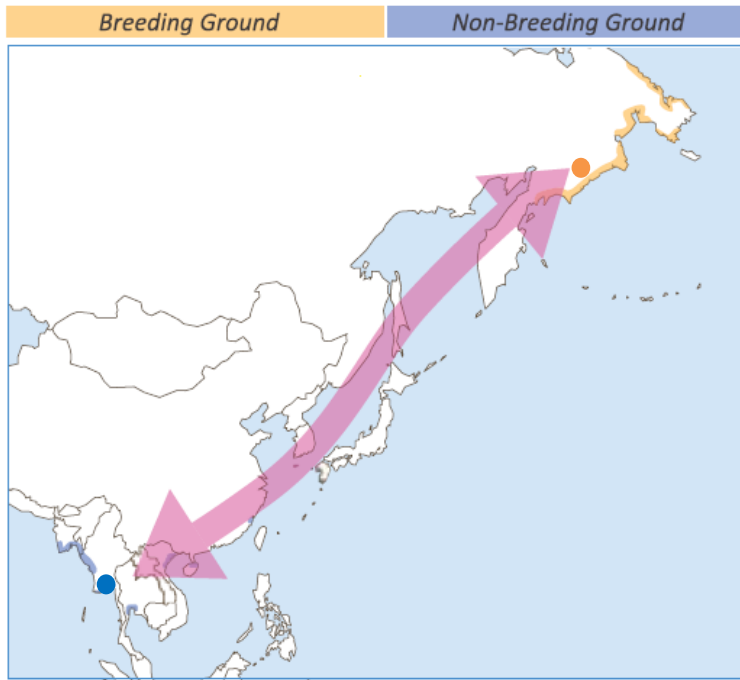
	Spoon-billed Sandpipers to aid their conservation					
Resolution	WCC-2012-Res-028-EN Conservation of the East Asian - Australasian Flyway and its threatened waterbirds, with particular reference to the Yellow Sea					http://cmsdata.iucn.org/downloads/resolutions_and_recommendations_in_english.pdf
	Species action plan for the conservation of Spoon-Billed Sandpiper (<i>Eurynorhynchus pygmeus</i>) in Vietnam	Le Trong Trai (BANCA)	Vietnam	Male	Viet Nature, Hanoi	
Information Sheet	Site Information Sheet for the Gulf of Mottama				EAAFP, Incheon	http://www.eaaflyway.net/about/the-flyway/flyway-site-network/eaaf117-gulf-of-mottama/
Information Sheet	Site Information Sheet for Khok Kham				EAAFP, Incheon	http://www.eaaflyway.net/about/the-flyway/flyway-site-network/eaaf122-khok-kham/
Information Sheet	Site Information Sheet for Pak Thale – Laem				EAAFP, Incheon	http://www.eaaflyway.net/about/the-flyway/flyway-site-network/eaaf121-pak-thale-laem-phak-bia/

	Phak Bia					
	BirdLife East Asian Intertidal Habitats Conservation Action Plan	Becky Rush	Singapore	Female	BirdLife Asia, Singapore	
Book	Field guide to the Shorebirds of the Gulf of Mottama	Pyae Phyo Aung	Myanmar	Male	BANCA, Yangon	
Journal publication	The winter distribution of the Spoon-billed Sandpiper, Bird Conservation International	Dr. Christoph Zöckler		Male	Bird Conservation International, Cambridge	in press
Journal publication	Saving the Spoon-billed Sandpiper: an update on the conservation programme. British Birds. August 2014	Dr. Nigel Clark	UK	Male	British Birds, St. Leonards on Sea	http://britishbirds.co.uk/article/saving-the-spoon-billed-sandpiper-an-update-on-the-conservation-programme/

Annex 6 Darwin Contacts

Ref No	19-012
Project Title	Saving the Critically Endangered Spoon-billed Sandpiper from Global Extinction
Project Leader Details	
Name	Paul Insua-Cao
Role within Darwin Project	Project team leader
Address (postal)	
Address (office)	
Phone	
Fax/Skype	
Email	
Partner 1	
Name	Cristi Nozawa
Organisation	BirdLife International Asia Division
Role within Darwin Project	Line manager to Flyway Policy Officer
Address	
Fax/Skype	
Email	
Partner 2	
Name	Pyae Phyo Aung
Organisation	Biodiversity and Nature Conservation Association
Role within Darwin Project	Spoon-billed Sandpiper Conservation Project Manager (in Myanmar)
Address	
Fax/Skype	
Email	
Partner 3	
Name	Dr. Baz Hughes, Head of Conservation Science
Organisation	Wildfowl & Wetlands Trust
Role within Darwin Project	WWT Project team leader
Address	
Fax/Skype	
Email	

Map 1. Range of Spoon-billed Sandpiper and scope of project activities.



Map of the range of the Spoon-billed Sandpiper and overall project area showing breeding and non-breeding grounds and main field project sites: the Gulf of Mottama (blue circle) in Myanmar and the breeding grounds near Meinyopil'gyno (yellow circle) in Russia. (Adapted from East Asian - Australasian Flyway Partnership website: <http://www.eaaflyway.net/resources/eaafp-publications/>)

Map 2. Villages in the Gulf of Mottama with project activities.

