

# Saving the major non-breeding populations of Blue swallows and their habitats in Uganda.

Project report:

with funding from to the BP Conservation Programme

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## **Executive Summary/ Abstract**

The Blue swallow (*Hirundo atrocaerulea*) is a globally vulnerable species whose habitat is disappearing rapidly in both breeding and non-breeding areas. Uganda is one of the major sites for the non-breeding population of this species containing probably over 60% of the non-breeding population especially the northern shoreline of Lake Victoria. The BP Conservation Programme funded survey to assess the distribution and conservation status of the Blue Swallow in Uganda in 2001 and through this survey three important sites for the Blue Swallow were identified (Nabugabo, Sango bay and Mabamba bay). These are Important Bird Areas but none is protected. However the actual habitat requirements for the species in the non-breeding range are not known yet crucial for formulating sustainable conservation actions and this aspect was one of the strong recommendations of the first survey. The project seeks to establish habitat requirements and together with all stakeholders develop a long-term conservation strategy for the Blue Swallow in Uganda. The success in the conservation of the Blue Swallow sites and habitats in Uganda will contribute greatly to the conservation of the overall population of the species.

## **Project description**

### ***Background information***

The Blue Swallow (*Hirundo atrocaerulea*) has a range of ten African countries namely South Africa, Swaziland, Zimbabwe, Mozambique, Malawi, Zambia, Democratic Republic of Congo, Tanzania, Uganda and Kenya. The distribution of the Blue Swallow is fragmented over much of its range and the migratory or dispersal behaviour of this species is sparsely documented and unclear. The global Blue Swallow population is classified as Vulnerable under IUCN/BirdLife International threat criteria, and its habitat is disappearing rapidly (BirdLife International 2000). The South African and Swaziland population is classified as Critically Endangered and the East Africa population is classified as Endangered. The Blue Swallow is a globally threatened sub-Saharan African grassland endemic yet grasslands are one of the most intensively inhabited and altered ecosystems.

The Blue Swallow is an intra-African migrant with breeding populations in South Africa, Swaziland, Zimbabwe, Mozambique, Malawi, Zambia, Democratic Republic of Congo and Tanzania (Turner & Rose 1989). From throughout their breeding range the Blue Swallows migrate in the non-breeding season to Uganda, Kenya, DRC and Tanzania and among these Uganda is known to be the most important non-breeding range (Evans and Byaruhanga 2002). The furthest north that a Blue Swallow has ever been recorded is Kidepo Valley National Park that has its northwestern boundary on the border between Uganda and Sudan in the northeastern part of Uganda.

In Uganda the Blue Swallow is known to occur on the northeastern shores of Lake Victoria where large numbers have been recorded. Some distribution records are also known from Busia grasslands in eastern Uganda, which are adjacent to Kenya grasslands where the species has been recorded, Queen Elizabeth national park in western Uganda and Kidepo National Park in the north eastern Uganda.

In 2001, a Blue Swallow survey was conducted by a team of researchers from NatureUganda and BirdLife South Africa, and students from Makerere University. The major objective of the surveys was to assess the distribution and conservation status of the swallow in Uganda as a major non-breeding range. The team identified major non-breeding sites in Uganda where large numbers of the species were recorded. The total numbers of individuals recorded were 550 representing over 40% of the total population. Considering the inaccessibility of the sites where Blue Swallow occurred

and the suitable habitat judging from the sites where the species was seen, the total number of the Blue Swallows in Uganda may well be over 1000 individuals on Lake Victoria shoreline areas alone.

Description of sites important for Blue Swallows:

### ***1. Mabamba Bay***

Mabamba is an extensive marsh stretching through a long narrow bay, fringed with papyrus towards the main body of Lake Victoria. It covers an area of 2,424 ha in Wakiso and Mpigi districts, located 55 km from Kampala the capital city west of Entebbe airport. The vegetation is dominated by *Miscanthus* and *Cyperus* species, but there is a narrow open water channel and a small patch of *Nymphaea caerulea*. The bay is an IBA with seven globally threatened species and contains one of the best marshy areas along the northern shores of Lake Victoria, popular by tourists for watching Shoebills. During the survey in 2001, over 100 individuals were recorded in and around the site making it one of the critical systems for conservation of Blue swallow in Uganda. The site is important for fishing by the local communities for both domestic and commercial use. Although the site is still relatively intact, seasonal burning by hunters for sitatunga antelope is the major threat to the site. As part of the strategy to conserve the site, NatureUganda in collaboration with Wetlands Inspection Division have proposed the site for designation as Ramsar site and was accepted at the Ramsar COP9 held in Uganda.

### ***Lake Nabugabo***

Lake Nabugabo area is comprised of Lake Nabugabo and an extensive seasonally flooded swamp dominated by macrophytes such as *Loudetia* and *Miscanthus* with forest patches in and around the fringes of the swamp with permanent swamp that connects the Lake with Lake Victoria. It is located in Masaka district 25 km from Masaka Town. The area also contains several other small lakes that are a refugium for several fish species that were decimated in Lake Victoria due to introduction of carnivorous Nile Perch. The site is an Important Bird Area with several globally threatened species such the Shoebill and Blue Swallow and big migration stopover for Palaearctic migrants. During the survey in 2001, over 215 individuals of Blue Swallow were recorded and the only site where roosting for Blue swallows was observed. The lake is important for local communities for fishing and it has developed as a potential tourism destination with several investments in resorts, camp sites and accommodation areas. The seasonally flooded grasslands is

threatened by overgrazing and there are ‘rumoured’ plans to convert the plains into a palm oil plantation. The area has been proposed for Ramsar designation and the information gathered from this project will strengthen the case for its immediate designation and was accepted at the Ramsar COP9 held in Uganda.

### ***Sango Bay Area***

The Sango Bay area is arbitrarily-defined (Kasoma and Pomeroy, 1996) from the Uganda-Tanzania border covering the permanent and seasonally flooded grassland swamps and the Sango Bay Forest Reserves including Marabigambo, Kaiso and Namatala. It has a mosaic of habitats with large tracks of swamp forest, papyrus swamps especially along Kagera river, sandy and rocky shorelines. The area covers an area of 55,110 ha covering the river Kagera permanent swamp system to the south that separates the border between Tanzanian and Uganda. The area also adjoins Lake Nabugabo area to the north through a mosaic of permanent and seasonal flooded swamps. The main road between Masaka and Mutukula at the Tanzanian border marks its western limits; the eastern limit is the Lake Victoria shoreline. The area is an Important Bird Area and has been proposed for Ramsar designation as Sango bay. Musambwa- kagera complex. The survey in 2001 recorded 232 individuals of the Blue Swallow in Uganda in Sango bay area and the seasonal flooded swamps interspersed between forest reserves were the main strong hold for the species. This information will again strengthen the case for Ramsar designation and was accepted at the Ramsar COP9 held in Uganda.

### ***National importance of the sites***

The above synthesis of sites indicates the importance of the region for the Blue Swallow conservation. The main Blue Swallow localities in Uganda are currently within the identified Important Bird Areas but not protected except the Forest Reserves in Sango bay. Important Bird Areas are selected according to international criteria designed to select sites of global importance for biodiversity conservation using birds as the primary indicators. All the sites above were identified as requiring immediate action during the IBA prioritisation workshop (NIBACS 1999).

The Project Blue Swallow results in 2001 confirmed the importance of Uganda to the conservation and survival of the species. In particular, these results confirmed Lake Victoria basin as the most important non-breeding area for the species in its range

During the site visits under the follow up programme, major threats were documented. The major threat for the Blue Swallow in Uganda is habitat loss due to conversion of the seasonally flooded grasslands and wetland fringing habitats to agricultural land in the three major sites, overgrazing in Nabugabo and Sango Bay and burning in all the three sites mentioned above. Although these threats have been incorporated in the IBA conservation strategy to improve the conservation status of the IBAs, there is need for site, habitat and species specific strategies to conserve the habitats and species.

NatureUganda together with Forest Department through the GEF Crossborder biodiversity Project proposed a conservation strategy for the Blue Swallow and the strategy has been included in the draft management plan for the combined Sango Bay Forest Reserve Management Plan (Ministry of Water, Lands and Environment 2002). NatureUganda also proposed Sango bay to be recognised as wetland of international importance and work has begun on the Ramsar information sheets. The two activities were major achievements to the conservation of the sites since the new boundaries of the forest reserve and the proposed boundaries of the Ramsar sites cover the associated flood plain and some permanent swamps. Nabugabo has been proposed and accepted for Ramsar designation and proposal for Mabamba bay is under consideration at the national level and an announcement is expected by the Ramsar COP9 that will be held in Uganda in October 2009.. These are important opportunities for which Blue Swallow Survey data has tremendously contributed to the conservation of the sites. The Blue Swallow has now been proposed by Uganda Wildlife Authority to be included in the protected species list for the country. A regional Blue Swallow action plan has been developed through a programme funded through BirdLife International Africa Secretariat which highlights strategies for conservation of the Blue Swallow across its range.

### ***Aims, Objectives and Methods***

#### **Aim.**

To establish the habitat requirements of Blue swallows in the non -breeding areas and initiate a long-term conservation management strategy for the species. The aim of the project will contribute to the over goal of the International Species Action, to improve the survival chances of the Blue Swallow across its range (Steve *et al* 2002).

#### ***Objectives.***

To promote the conservation of Blue Swallows and their habitats in Uganda through;

- a) Establishing habitat requirements for the Blue Swallow in the non-breeding range
- b) Developing a participatory long-term conservation strategy for the species
- c) Establishing site and species interest groups for sustainability of the activities
- d) Raising awareness among the local communities on the importance of the species and the habitats

### ***Methods***

1. Ornithological surveys and inventories using standard methods (Bibby et al 1998, Pomeroy 1992, Pomeroy and Tangecho, 1986) and inventories to establish habitat requirements and search for roosting sites
2. Conservation strategy: together with the stakeholders (such Wetlands Inspection Division, Forest Department, Local government authorities and communities etc) undertake to develop a long-term conservation strategy. The strategy will focus on the benefit to the Blue Swallow and other species as well as the local communities in and around the major sites. This will proceed through workshops and meetings through which awareness of the value of conserving the species and its habitat will be created.
3. Monitoring: together with the local communities, the University students will establish a monitoring programme for the species and its habitats through establishment of monitoring sites and development and testing of monitoring procedures. These will be simple protocols that can be relatively easy followed by a non-ecologist especially community members.

### ***Outputs***

The previous Project Blue Swallow identified three main sites suitable for the non-breeding population of the species, which are not protected. This proposed project will build on the previous achievements in order to:

- come up with a long-term conservation strategy for the conservation of the species and its habitat.
- document the habitat requirements of Blue swallows in non-breeding range. This will help to adequately focus and target conservation action.
- establish a monitoring system including a species interest Group and site support groups for the site and the species.
- support a sustainable eco-tourism initiative for the appropriate sites. The major sites identified have great potential for eco-tourism development since they lie on the main tourist route for Uganda. This will help local communities appreciate the Blue swallow together with habitat.

### ***Project justification***

A team of students led by Steven Evans from BirdLife South Africa and Achilles Byaruhanga from NatureUganda spanned the whole of Uganda looking for Blue swallows. The Blue swallow project was funded by the BP Conservation Programme. The idea was to visit all areas with old records to determine the distribution and population of Blue swallows in Uganda. It was suspected that the species occupies similar habitat in non-breeding as in the breeding range. Distribution records obtained during the previous funded project indicated that the species occupies completely different habitat (seasonally flooded/flooded grasslands and wetlands) on the north-west shoreline of Lake Victoria. NatureUganda has since then worked with the Uganda Forest Department and GEF Crossborder Project and a Blue Swallow strategy has been included in the Management Plan of Sango Bay Forest Reserves. UWA has indicated the species could be proposed as a protected species in Uganda. Nabugabo and Mabamba wetland areas have been proposed for Ramsar designation and these sites have now attracted more visitors due to Blue Swallow publicity and other species, which is important for local communities as an income generating activity through eco-tourism. However information on the species in Uganda and indeed in the other non-breeding areas is still very scanty, especially the habitat requirements as a basis for developing a long-term conservation strategy. This BP Conservation Programme follow-up proposal is intended to fill in this information gap in order to enhance the conservation status of the species.

Additionally involving communities in the conservation of the species is considered crucial, as the species is wide-ranging and difficult to protect it in delimited sites. All the major sites identified for the species fall along the major tourist route to western Uganda. There is an opportunity therefore to develop an ecotourism initiative basing on the species and other biodiversity richness of the sites. This activity would help strongly in mobilising communities for the conservation of the IBAs and thus the species especially with accruing livelihood benefits. A site support group at Mabamba has already advanced to this effect and the number of visitors has increased.

## Achievement of objectives

### Progress report

Objectives	Activity	
<p>Habitat requirements for the Blue Swallow in non-breeding range established</p>	<p>-Surveys of the sites -Search for roost sites</p>	<p>The survey team from NatureUganda visited Mabamba, Nabugabo and Sango bay area including the sugarcane estate towards Mutukula during the period August-October 2004. All localities visited during the 2001 surveys were located and surveyed.</p> <p>Mabamba bay- 576 Blue swallows were recorded in the swamp or surrounding areas. The local bird guides reported regular records of the species for the periods August and September, Blue swallows were observed.</p> <p>Nabugabo Wetlands; 423 Blue swallows individuals were recorded. The seasonal flooded swamp was extensively surveyed. Other species such banded martins, barn swallows and sand martins were recorded. The area was heavily grazed and there were military drills in the area. The shooting and bombing (practice) probably could have scared off some birds.</p> <p>Sango bay area.; 498 Blue swallows individuals were recorded in various sites both wetlands and seasonally flooded areas up to Kagera wetlands.</p> <p>The concentrations of the Blue Swallow records are clearly spelt out on the map attached (red patches). The patches are concentrations of individual records in various sites. Note that most records are within the IBAs and therefore within the proposed Ramsar sites. However in Mabamba Blue swallows occur on the edges of the IBA ie on the fringes of the swamp. In Sango bay most records are within the IBA and proposed Ramsar site,. However birds range across the bigger plains including the sugar estate.</p> <p>In Mabamba and Sango bay contacts were made with local communities</p> <p>However important information was gathered on habitats, threats and conservation activities in the areas. Contacts were made with local governments in the areas to introduce and seek support for Ramsar designation of those areas. Also the waterfowl census for those sites was conducted for July and complete species list made by the team.</p> <p>All the data was shared with the national Biodiversity data bank of Makerere University Institute of Environment and Natural Resources. It was also used in the preparation of the Bird Atlas for Uganda.</p>

		An abstract was presented at PAOC11 in Tunisia on the conservation of Blue Swallows in non-breeding region; A case of Uganda.
Along term conservation strategy developed	<ul style="list-style-type: none"> <li>-Develop a Species Action Plan (SAP) for the Blue Swallow</li> <li>-Publicize the SAP</li> <li>-Implement some of the projects in the SAP</li> <li>-Establish a monitoring programme for all sites</li> </ul>	<p>In February 2004, NatureUganda working together with wetlands management with support from RSPB, proposed Mabamba, Sango bay and Nabaugabo in addition to other wetlands sites in the country proposed the three sites (Mabamba, Nabugabo and Sango bay for Ramsar designation)</p> <p>A workshop was held (August 15<sup>th</sup>) involving all key stakeholders and lead agencies to discuss the conservation strategy for the Blue Swallow in Uganda. The following were the outcomes of the meeting.</p> <ol style="list-style-type: none"> <li>1. That we do not have to formulate another species specific strategy for the conservation of the species that has been incorporated in the management plan for Sango bay forest reserves.</li> <li>2. Nabaugabo, Mabamba and Sango bays have been proposed for Ramsar designation and NatureUganda must concentrate on supporting the designation process since if designated the wetlands and habitats for blue swallows would be management as part of the ecosystem. Ramsar information sheets must be completed in time.</li> <li>3. The meeting advised that NatureUganda and Wetlands Inspection Division takes advantage of the Ramsar COP9 that will be held in Uganda so that the sites can be announced at the conference.</li> <li>4. NatureUganda aims at hosting a side event at the Ramsar COP9 to raise awareness of the importance of the wetlands for blue swallows and importance of designating the sites as Ramsar sites and involving the communities in conservation of the sites as part of support to poverty alleviation programme. See Appendix D for the concept for the side event at Ramsar COP9. A side event was organised at the Ramsar COP9 with a presentation from a renowned conservationists in eastern African and one who was involved in the formulation of Sango bay forests management plan Dr. Allan Rogers. The vent was attended by over 100 delegates.</li> </ol>

Site and species support groups established for sustainability	<ul style="list-style-type: none"> <li>-Establish Species Interest Groups (SIG)</li> <li>-Establish Species and site Support Groups (SSGs)</li> <li>-Promote income generating activities such as eco-tourism</li> </ul>	<p>A workshop was organised in October 2004 (Ndere cultural Centre in Kampala) involving all stakeholders and a species interest group was agreed involving; Achilles Byaruhanga, NatureUganda, Aggrey Rwetsiba, Uganda Wildlife Authority , Paul Mafabi Wetlands Inspection Division, Prof. Derek Pomeroy, Makerere University. The team to co-opt other members as necessary.</p> <p>Three site support groups were established on Mabamba, Nabugabo and Musambwa Islands in Sango bay areas. The SSG on Mabamba has been established and successful in eco-tourism. The main species of attractions are the Shoebill and Blue Swallow. Five bird guides have been trained in guiding and are responsible for guiding visitors and tourists.</p> <p>On Musambwa Islands communities were supported to start income generating activities based on sustainable fishing.</p> <p>One Dianah Nalwanga supported the project during the field surveys and community mobilisation.</p>
Awareness in local communities raised	-Avail communities with publicity materials, plus electronic and print media	<p>One community meeting was held with Mabamba SSG on eco-tourism development and a signpost was raised part of marketing the sites with details of the attractions of the site.</p> <p>A poster was published to public the sites at the national level and the project supported the publication of a NatureUganda newsletter where materials on the Blue Swallow were published.</p>

### ***Budget***

#### **Blue Swallow Project Financial Report 2004-2005**

<b>Item</b>	<b>Details</b>	<b>Budgeted (USD)</b>	<b>Expenditure (USD)</b>	<b>Comments</b>
<b>Staff costs</b>	Field assistant at Nabugabo and Sango bay 300*1*12	3,600	2,601	Volunteer input and NU staff time during BP activities
	Support to site support group at Mabamba	1,200	1,516	Construction of bus shelter at Mabamba bay being improvement of ecotourism facilities and publicity at the bays
<b>Capital item/equipment</b>	Binoculars, motorcycle, bicycle, fuel for maintenance of motorcycle supervisors travel	9,700	9,579	Procurement of vehicle for BP field programmes and monitoring
<b>Travel</b>	Field travel for survey team	8,100	8,497	BP field surveys and facilitation during field work

<b>Workshops and meetings</b>	National stakeholders meeting	1,950	3,048	BP national stakeholders workshop and NU side events during COP9 meeting
	Workshop facilitation	1,000		
<b>Awareness and publicity</b>	Materials such as posters, brochures, electronic and print media	1,000	989	Printing posters and newsletters
<b>Administrative support</b>	10% of overall budget	2,790	2,790	Support to NU admin costs
Other	Communication (telephone, e-mails, fax, post)	700	998	Contribution for internet connectivity
<b>TOTAL</b>		<b>30,040</b>	<b>30,018</b>	

### ***Overall, achievements***

The major achievement of the project and follow up fund for the BP conservation programme is the designation of the blue swallow sites as Ramsar sites. This ultimately achieves the intended goal of ‘the conservation action is to save the Blue Swallow through the protection of the species and its habitats’. The information detailing the habitat requirements and critical sites was documented and contained in site accounts. The formation of the species interest groups was important in keeping the species on the conservation agenda of lead conservation agencies such as Uganda Wildlife Authority and Wetlands Inspection Division. Establishing the site support groups at Mabamba and Sango bay help to keep communities engaged and involved in monitoring of the species. Both the SSG and SIG are important for the sustainability of the conservation activities.

The Blue Swallow has now been proposed by Uganda Wildlife Authority to be included in the protected species list for the country. The recognition of the species in the protected species of the country will be an important step. UWA has been involved in all Blue Swallow discussions including training its staff in species action planning and involvement in formulation of the International Species Action Plan for the Blue Swallow.

### **Personnel**

The team involved Makerere University students who participated in the field surveys and community mobilisation, with technical backup from BirdLife Partners in South Africa, Dr. Steve Evans. Supervision was provided by Makerere University, Institute of Environment and natural Resources especially through Prof. Derek Pomeroy and Dr. Panta Ksoma and overall coordination was made by NatureUganda the BirdLife partner in Uganda particularly Achilles Byaruhanga. The SSG and SIG are all linked to NatureUganda for guidance and support.

### ***Students’ team***

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