



Darwin Initiative

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Final Report

1. Darwin Project Information

Project Reference No.	162/12/031
Project title	Implementing urgent conservation actions in mesotrophic fen mires in Belarus
Country	Belarus
UK Contractor	RSPB
Partner Organisation (s)	APB-BirdLife Belarus
Darwin Grant Value	GBP 109,889
Start/End date	April 1, 2003 / March 31, 2006
Project website	N/a
Author(s), date	

2. Project Background/Rationale

- *Describe the location and circumstances of the project*

Mesotrophic fen mires form a unique ecosystem with a range that is now almost exclusively restricted to Belarus, Poland, Ukraine and Russia. Once widespread across temperate Europe, mesotrophic fen mires and their wildlife have declined greatly in extent during this century. The small area that remains is under continuing threat from drainage, land reclamation, peat extraction, development and vegetation succession as a result of land use and water level changes. Intact mires accumulate organic matter and store large amounts of carbon in the saturated substrate. They are vital habitats for globally-threatened species, such as Aquatic Warbler and Greater Spotted Eagle, as well as a range of other species of conservation concern.

Approximately 60% of the world population of aquatic warbler is found in Europe's largest fen mires Sporovo, Dikoe and Zvanets, situated in south-western Belarus within the Polesie region. The three mires were the focal areas of the first stage of an intervention to support the conservation of Polesian biodiversity, through the joint Darwin-RSPB- and UNDP-funded project "Management Planning for Conservation of Fen Mire Biodiversity in Belarus". In this project, management plans were prepared for the three sites and adopted by the Ministry of

Natural Resources and Environmental Protection of Belarus. As a result of the project, the capacity of the country to develop integrated management plans for specially protected natural areas has been significantly increased.

The present project supports the second stage of the work programme aimed to ensure conservation of these globally significant sites through implementation of the urgent measures recommended in these management plans.

• *What was the problem that the project aimed to address?*

Specifically, the project focused on the implementation of those measures for zakazniks **Sporovsky**, **Dikoe** and **Zvanets** that are priority #1 in the 5-year action plans of the Management Plans. These aim to:

- Establish and maintain a hydrological regime optimal for biodiversity and people
- Elaborate and enforce regimes of ecologically sustainable nature use
- Establish management units for **Zvanets** and **Sporovsky**
- Establish a monitoring system that would enable objective and timely assessment of all activities
- Involve local stakeholders in the implementation of the management plans
- Identify and fill the gaps in the existing regulatory and policy framework for wetland biodiversity management
- Raise public awareness of and participation in biodiversity protection
- Increase the capacity of the government and local agencies in the management of specially protected natural areas in an integrated manner.

Implementation of the above measures has directly or indirectly addressed the following problems identified at the preparatory stage of the project:

- **Insufficient coordination between various agencies/organizations dealing with nature conservation and use**

Most state programmes (such as drainage campaign, river embankment, agricultural planning, forestry) had been carried out by separate agencies/organizations without preliminary consultations with public and/or independent experts in the area of biodiversity conservation.

Procedural practice of nature conservation in Belarus had not in the past included elaboration and implementation of integrated management plans for especially protected sites. Similarly, physical plans, as well as plans of economic and social development of various administrative districts and regions very frequently did not take account of biodiversity conservation interests.

- **Disturbances in the natural hydrological regime:**

The disturbances in the hydrological regime had been brought about by the fact that the operational rules and regulations for water-using facilities in the area had been developed without any account of the need to conserve biological diversity, which is unique for the sites in question.

-**Unfavourable and rapid vegetation succession**

One of the causes was recurring untimely elevation and declines of groundwater table following changes in the hydrological regime. The latter, in turn, derived from uncoordinated

operation of water-using facilities without account of biological diversity interests.

- Fires

Local people burn vegetation in spring presumably to increase the productivity of haymaking fields. Frequency and degree of resulting fires are defined mainly by the level of the groundwater table at the time of burning. Fires are especially damaging when the groundwater table drops below surface.

-Absence of management units for target sites

Before the work on the project procedural practice of nature conservation in Belarus did not include establishment and maintenance of special cross-district management structures for zakazniks. This was introduced during the project period and is now accepted.

- Lack of awareness of the international significance of the sites on the part of local people and authorities

There was no system and/or infrastructure for popularization of the values of the sites for conservation of biological diversity, as well as of the need for their sustainable management. This was partly related to absence of management units that could involve local people and authorities in information dissemination and ecological education.

• Who identified the need for this project and what evidence is there for a demand for this work and a commitment from the local partner?

From 1995 to 1998, several joint Belarusian/German expeditions assessed the situation of the mesotrophic fen mires and the distribution of several bird species, in particular the aquatic warbler. As a result of these surveys it was identified that Belarus is home to the most significant remaining population of this globally threatened species.

In 1997, an International Conference on the Ecology and Conservation of Floodplains and Lowland Mires in the Polesie region was organised in Belarus by the National Academy of Sciences and the Ministry for Natural Resources and Environmental Protection with financial support from the Michael Otto Foundation for Environmental Protection. The list of priorities in the conference action plan contained development of management plans for Dikoe, Sporovo and Zvanets mires and studies of aquatic warbler ecology.

In March 1998, the BirdLife International Aquatic Warbler Conservation Team met in Germany. Aquatic warbler key experts from nine European countries discussed the International Aquatic Warbler Action Plan and highlighted the essential importance of Belarusian mires for the conservation of the aquatic warbler.

In July 1998, the RSPB organised an international participatory project-planning workshop, bringing together scientists, NGOs and local government representatives from Poland and Belarus to explore opportunities for a cross-border mire conservation programme. Subsequently, a project proposal was submitted to and funded by Darwin Initiative and resulted in the 3-year-project, April 1, 1999 – May 31, 2002, "Management Planning for Conservation of Fen Mire Biodiversity in Belarus".

The current project is a logical continuation of the multi-stakeholder initiative, both of the local partner and overseas organizations and experts, taken before the start of the project on elaboration of the management plans. The local partner, APB-BirdLife Belarus, was involved in all the activities preceding the first project funded by the Darwin Initiative and took active part in preparing the project proposal. Commitment of the local partner was clearly demonstrated by the involvement in both Darwin Initiative supported projects. Throughout the implementation of both projects the NGO provided high extent of participation of its experts,

stakeholder consultation, enlightening of the project activities to the national and local authorities. As a result of the projects its capacity in conservation activities has significantly risen.

3. Project Summary

- *What were the purpose and objectives (or outputs) of the project? Please include the project logical framework as an appendix if this formed part of the original project proposal/schedule and report against it. If the logframe has been changed in the meantime, please indicate against which version you are reporting and include it with your report.*

The purpose of the project is to implement the most urgent activities called for in the management plans for Dikoe, Sporovo and Zvanets mires. This aim should be achieved through the following outputs:

- effective establishment and maintenance of project management structures
- management of the hydrological regime at the three sites
- implementation of a system of hydrological monitoring at the three sites
- implementation of Aquatic Warbler (AW) monitoring at the three sites
- inclusion of the entire area of the Dikoie Mire Important Bird Area (IBA) within the boundaries of the Belavezhskaya Pushcha National Park, and alteration of the boundaries of the buffer zone for this park
- establishment of a Zakaznik (protected area) management structure for the Sporovo and Zvanets sites.

The update on project outputs against the logical framework is contained in Appendix IV.

Summary of Project Outputs upon Milestones

Milestone	Progress
Project management	
0.1 – Project planning, monitoring, management and administration. Agreements between partners, terms of reference for Project staff, steering group and management committee.	<p>The project implementation unit was established in October 2002 and functioned successfully through entire project period. During the project implementation period the following changes in the staff took place:</p> <p>Oct 2002-Dec 2004 - Dmitry Goloubovsky. He left the position of the Project Manager to start his new employment with UNDP Belarus. Olga Stsepaniuk was employed for the position of the In-Country Project Manager until the end of the project.</p> <p>Dec 2004 – Feb 2005 - The Project Information Officer Sergei Zuyenok was selected as IBA Officer with APB-BirdLife Belarus and also left the project. Alexey Minchonak was employed as Information Officer.</p> <p>October 2005 - Alexey Minchonak left the position of Information Officer. Ruslan Shaikin was employed in November 2005 on the vacant position. All the project staff members were hired according to the UNDP recruitment procedures on a competitive basis.</p> <p>Changes in UK staff: in July 2003 initial UK Project Manager Aidan Lonergan took over the role of the Project Supervisor from Norbert Schäffer. New UK Project Manager, Lars Lachmann was employed. Since October 2005 Zbigniew Karpowicz was employed for the position of the Project Manager.</p> <p>In spite of the project staff changes the project was successfully completed.</p>
0.2 – Hold steering committee meetings annually	<p>The Project Steering Committee meetings were held regularly on a yearly basis according to the following schedule:</p> <p>Feb 6, 2003 May 28, 2004 Reports on the above meetings were attached to the project yearly reports. April 4, 2005 July 6, 2005 March 10, 2006 (<i>For report see Appendix XIV</i>)</p>
0.3 – Hold management group meetings twice a year	<p>The Project Management Group meetings were held regularly not rarer than twice per year or even more often depending on the need arising from the circumstances. The most significant meetings can be listed as follows:</p> <p>Sep 29, 2003</p>

	<p>Feb 10 , 2004 May 28, 2004 (PSC) Nov 23, 2004 Dec 13, 2005 March 9, 2006</p>
0.4 – Technical Report Production	Yearly and half-year technical reports were produced and submitted on time.
0.5 – Financial Reporting	Quarterly financial reports and finance claims were delivered on time.
0.6 – Run management plan implementation training workshops	<p>On Sept 30 - Oct 2, 2003 two UK experts from the RSPB (Norman Sills and Jim Glover) met with local subcontractors, project staff and representatives of the Ministry of Environment, to provide on hand best case examples in the field of restoration of the drained mires.</p> <p>On May 24-27, 2004 two UK experts from the RSPB (Norman Sills and Jim Glover) inspected the work done to date and ran a workshop on UK experiences with similar projects (The report was attached to the Project yearly report for the year 2004-2005).</p> <p>On Dec 1, 2005 a workshop was held at Zvanets (Drogichin, Brest region) aimed at enlightening the project activities on implementation of the Zvanets management plan, discussing progress and lessons, discussing plans for the future after the project's completion. At the workshop additional recommendations to the Zvanets management plan on optimizing the hydrological regime of the mire were negotiated and agreed. The recommendations have been included into work plans of the ongoing full sized UNDP-GEF Polesie project.</p>
Hydrological management (See Appendix V for maps of the project sites.)	
Zvanets site:	<p>In 2003-2005 in total fourteen water regulation facilities- overflow weirs (W 1-7), sluices (SL 1, 2, 5), sand-&-gravel blocks (S 1-4) – were built at Zvanets. Additionally, one adjustable sluice (SL-3) was built in 2005 by K.Marksa collective farm and another adjustable sluice (SL-4) was reconstructed by “Novoselki” fish farm as contributions of these enterprises into optimization of the hydrological regime of the mire. Most part of construction (W 1-7, SL 1, S 1-4) took part in the first year of the project.</p> <p>In order to optimize functioning of the built system of water regulating facilities and to ensure optimal water levels in dry years, in 2005 activities on constructing additional water regulating facilities and correction or fortification of the existing facilities were implemented.</p> <p>Activities implemented in 2005:</p> <ul style="list-style-type: none"> • In order to prevent flooding during the nesting periods of the Aquatic Warbler additional adjustable sluice (SL 2) in the outflow of the Povitie canal was built. This will allow to discharge excess water

	<p>during the floods and simultaneously to raise the water level in the unused amelioration system till optimal values.</p> <ul style="list-style-type: none"> • Dam (W 6) in “Orekhovskaya” melioration system has additionally been fortified with crushed stones. • Correction of existing overflow facility on Batyevski canal was performed. In particular, a pipe-regulator (SL 5) was installed. This will allow to discharge excess water during floods. <p>In order to ensure effective functioning of the built facilities after the project’s completion the project experts have elaborated “Additional Recommendations on Improving the Hydrological Regime of the Zvanets Zakaznik”. The recommendations complement the Zvanets management plan. The recommendations have been agreed with the Ministry of Natural Resources and Environmental Protection and approved by the local authorities (Appendix XXI).</p>
<p>1.1 – Adjustment of the operating regulations and building of water-regulating structures at the Radostovo site</p>	<p>Weir #1 – In 2003 an overflow dam was built at the discharge canal of the Radostovo melioration system in order to prevent excess discharge from the south-eastern part of the mire. Additional investigations in the course of the project proved that choice of the construction site was erroneous. Topographic measurements have shown that the canal has insignificant declivities for the space of 4.5 km, but 500 m before the outfall the decline of the ground surface is increasing. The facility was built in the outfall of the canal at the end of the declivity and this proved to be too high for preventing the excess discharge and led to flooding of the agricultural lands illegally cultivated by the local inhabitants. After consultation with the locals the dam was demounted and decision was made to construct a regulating facility 500 m higher upstream than the previously built one (construction of this facility is included into the UNDP-GEF Polesie project work plan for 2006-2007).</p>
<p>1.2 – Adjustment of the operating regulations and building of water-regulating structures at the Travy site</p>	<p>In 2003 overflow weir (W-7) was built in order to prevent excess discharge of water in dry years. At present the weir is also used as a bridge for getting to the mire. Within the full-sized UNDP-GEF Polesie project a road is planned to be built in the weir’s place that will be used for transporting machinery needed for hay-mowing and for other activities.</p>
<p>1.3 – Adjustment of the operating regulations and building of water-regulating structures at the Orekhovo site</p>	<p>A weir (W 6) and a sluice (SL 1) (See Appendix VI for the photo) were built in 2003 and after elevating the crest of the dam till the height recommended by RSPB experts they are functioning in the projected regime. The weir prevents excess discharge of water from the mire but does not solve the problem of flooding of the mire in high water years. A decision has been made to reconstruct a sluice (SL 1) (instead of the pipe 0.8 m in diameter to install a pipe 1.4 m in diameter) thus allowing to regulate water level in dry and high water years. Construction of this facility is included into additional recommendations to the Zvanets management plan mentioned above and into the work plan for</p>

2006-2007 of the full-sized UNDP-GEF Polesie project.	
1.4 – Building of water-regulating structures at the Kirov collective farm site	Weir #5 was built in 2003 and is operating in the projected regime.
1.5 – Withdrawal of a part of the amelioration system from intensive agricultural use and construction of necessary water-retention constructions at the Novoselki site	In 2003 the draining canals of the amelioration system were blocked by two Sand-&-gravel blocks (S 3 and S 4). In 2005 K.Marksa collective farm has constructed a pipe-regulator (SL 3) in the place of S3, which is constantly kept in closed condition.
1.6 – Closing of the unnamed amelioration system, located on the territory of Zvanets	Sand-&-gravel block (S2) is operating as planned. Construction of Sand-&-gravel blocks S2, S4 and an adjustable sluice at Povitie canal allowed to elevate the water level in the whole amelioration system, and thus the system is completely joined to the natural mire.
1.7 – Relieving the negative effect of the Novoselki fish-farm operation on the mire	Weir #4 is functioning as planned by the engineering project. By late July 2004, the existing Novoselki sluice had been upgraded to the necessary height (plus 80 cm) thus allowing for a higher elevation, and the embankment had been fortified with funding provided by Drogichin Environment Inspection. However, the existing facilities are placed 45 cm lower than the mire surface (it is impossible to place them higher due to the requirements of the fish-farm) and this will lead to a certain water loss. Therefore and because of the necessity to prevent flooding in the nesting period, decision was made to build additional sluice at Povitie canal within existing project budget. In 2005 the sluice (SL 2) (See Appendix VI for the photo) was constructed in the outfall of Povitie canal, thus allowing to regulate the water level in the entire northern part of the mire.
1.8 – Diminishing the drainage effect of the Yamnik system on the mire	Not part of the project plan anymore. (The field surveys revealed that Yamnik drainage system is separated from the mire by a mineral island, thus producing no relevant drainage effect on the mire).
1.9 – Building of water-retention structures on all of the mire drainage canals located within Zvanets	In 2003 two weir (W2, W3) and a sand-and-gravel block (S1) were built. Weir #3 (W3) is operating in the projected regime. In 2005 correction of existing overflow facility on Batyevski canal was performed. In particular, a pipe-regulator (SL-5) was installed. This allows to discharge excess water during prolonged floodings (Photo of the facility is presented in Appendix VI.) The inspection by the project experts revealed that the necessity arose to lower weir #2 (W 2) (See Appendix VI for the photo) and sand-&-gravel block #1 (S1) located at draining canals near Beloozerski canal. The decision was based on the dynamics of the water recession. Additional topographic surveys of 2004-2005 revealed that the water is discharged through these canals only in high floods' periods. Closing of the canals led to prolonged flooding of the eastern part of the mire.

As a result decision was made to demount the facilities what was done in 2005.	
Dikoe site:	
1.10 – Close the unsanctioned drainage system construction by the Krasny Partizan collective farm	The system had been legalized before the start of the project activities and therefore could not be closed. Instead, new operational rules for the area have been set up (Appendix XXII), allowing only grass cultivation, but prohibiting arable farming in order to allow a sufficient water level to be held in the system to avoid negative impacts on the adjacent mire. The new operational rules have been approved and agreed with all the land users and submitted to the Belavezhskaya Pushcha National Park administration so that they shall conduct control over their implementation. In order to regulate the water level and to avoid excessive drainage, sluices 1-3 have been closed in accordance with the elaborated operational rules.
1.11 – Alleviate the draining effect on the Dikoie Mire of the Upper Yaselda drainage system by construction of dams at the VP-2 canal and the Yaselda canal	Reconstruction of the existing water regulating facilities (sluices ## 4-5) was implemented in 2005 by Pruzhany Drainage Works Company. As a result the negative impact of the canals on the mire was diminished.
1.12 – Maintenance of an optimal water level in the part of the Dikoie mire adjacent to the Upper Yaselda drainage system by means of pumping water from pond #8	Not part of the project plan anymore (pp.1.11 and 1.13 will secure the desired result).
1.13 – Alleviation of the draining effect of the “Dikoie” peat extraction site drainage network	Construction of dams #1, #2, #3 was completed in 2005 by the Belavezhskaya Pushcha National Park. As a result excess water drainage from this part of the mire was stopped. (See Appendix VI for photos.) The works implemented by the national park were officially accepted in August 2005.
1.14 – Closing of the Viunovka drainage system	Construction works (dams #4) were completed in 2005. This allowed to stop excessive drainage of water from the mire. (See Appendix VI for photos). Though not initially included in the present project for financial reasons, the Narev river damming was called for in the management plan and was essential for the success of the Dikoe rehabilitation plan. Owing to savings from activities 1.10-1.12 construction of two water regulation facilities: on the Narev river (weir #5) and on the Motelyv Rov Canal (weir #6) was implemented by the National Park by August 2005. The weirs were built in accordance with the engineering project and the new operational rules. At dams # 4 and #6 additional screens of planks (50 cm thick) have been constructed. At dam #5 an additional screen of beams (70 cm thick) has been constructed. These additional measures will prevent filtration of water in the future.

Sporovo site:	
1.15 – Repairs of sluice at Selets complex	Repairs of the Selets emergency discharge sluice have been finished. Financing has been provided by the Ministry of Environment as a part of its co-funding towards the project.
1.16 – Modification of Selets operating rules & regulations	<p>The new operational guidelines for “Selets” fish farm, elaborated by “Belgiprovodkhoz” experts within the project, were amended based on consultation and recommendations of the stakeholders, agreed and approved by “Belmeliovodkhoz” concern (Belarusian State Concern on Construction and Use of Melioration and Water Supply Systems). The guidelines have been printed out and sent to all the parties involved. The new operational rules, when implemented, will provide optimal water level at the mire. They prescribe that every spring (in high and low water years), to provide sufficient discharge downstream Yaselda and to ensure optimal water level during the breeding season, the water should be accumulated in fish-farm reservoir.</p> <p>In order to ensure optimal water regime in dry years, an overflow dam was constructed at the Yaselda riverbed in 2004 (with funding provided by the Ministry of Environment). This dam was not part of the original project plan. It was intended to be a test dam to be replicated at further locations downstream, if proven successful. After initial successful functioning the dam was later damaged by high water discharge. Therefore, in 2005 it was initially decided to perform additional correction activities aimed at strengthening the dam. However, fortification works were delayed by high water. In the mean time, an additional agreement with the Selets Fish Farm meant that the hydrological operational guidelines could be improved in a way that does make this overflow dam irrelevant for maintaining an optimal water level in dry years, so that plans for its fortification or the replication of the dam further downstream could be dropped.</p> <p>Instead, the fish farm will now pump water at the outflow of the farm back into the reservoir above the farm during periods of high water in order to always be able to discharge the necessary minimum amount of water during dry periods. Additional costs for these pumping activities will be covered by the UNDP-GEF Polessie project and after that taken over by the responsible state institutions.</p>
1.17 – Monitoring of the implementation of operating guidelines for Selets	As the new operational guidelines came into force only at the beginning of 2006 the monitoring during the project was concentrated on surveying the existing hydrological situation. Monitoring of implementation of new operating rules will be undertaken by hydrologists within the UNDP-GEF Polesie Project.
Hydrological monitoring	
2.1 – Monitoring of water levels at the three sites	<p>Hydrological monitoring was carried out since 2004 at two sites by project hydrologists and local staff of the zakaznik management offices:</p> <ul style="list-style-type: none"> • Zvanets – 3 monitoring posts at weirs #6, and #7 (since 2004), #4 (since 2005) plus 5 posts along transect crossing the mire from south to north (since 2004).

	<ul style="list-style-type: none"> • Sporovo – 2 hydrological monitoring plots (since 2004). <p>Dikoe – hydrological monitoring at the melioration systems and the Dikoe mire is conducted permanently by Pruzhany station of the Institute of Amelioration and Meadow Management and the monitoring data are available for the project experts.</p> <p>Water levels monitoring was conducted since 1997 to 2005 from May to July at the Aquatic Warbler monitoring plots.</p> <p>Calculation of dynamics of the water levels at the mires over the last decades was performed on the basis of comparative monitoring data of last years provided by the meteorological stations located at the Yaselda river (Sporovo), Orekhovski canal (Zvanets), the Narev river (Dikoe).</p>
Species monitoring	
3.1 – Monitoring of Aquatic Warbler Population density and breeding success at three sites	The Aquatic Warbler monitoring was undertaken as part of a series of field trips by project experts to the sites and was conducted since 1997 to 2005. Monitoring data have been collected and analysed (details on AW and hydrological monitoring are presented in Appendix XVI).
Site protection through enhanced designation	
4.1 – Elaboration of a Proposal on changing the boundaries of the Belavezhskaya Pushcha National Park to include the whole area of the Dikoe Mire IBA in the boundaries of the National Park	A proposal on changing the boundaries of the Belavezhskaya Pushcha National Park was prepared and a respective decision was taken in 2003 by the Grodno Regional Executive Committee.
4.2 – Changing the boundaries of buffer zone of the Belavezhskaya Pushcha National Park to take account of the newly included Dikoe Mire IBA	The buffer zone of the Belavezhskaya Pushcha National Park has been included into the National Park as stated in the Decree # 460 of the President of Belarus (27/09/2004).
5.1 – Set up Zakaznik Management Office	<p>Management Offices set up at Zvanets and Sporovo were established at the beginning of the project and have been operating successfully through its entire period. The officers have been working in close collaboration with the Ministry of Environment, drainage works companies and other relevant authorities to secure post-project funding of the offices, which will ensure long-lasting effect of the project activities. The actions of the officers proved effective not only in day-to-day actions for the conservation of the ecosystem but also in raising local awareness of the project activities and enhancing local understanding of the uniqueness of the project target territories.</p> <p>In order to provide post-project functioning of the management units necessity arose to establish legal entities on their basis and to register them according to the acting legislation. At present registration is in its final stage. The Ministry of Natural Resources and Environmental Protection has taken over financing</p>

of the offices after the project's completion. Necessary funds have already been allocated from the republican environmental fund for 2006.

The example of creation of the management structures has recently instigated development of a large-scale campaign by the Ministry of Environment on creating similar structures on other 37 reserves in Belarus. As reported by the Ministry 18 management units had already been established till beginning of 2006.

- Were the original objectives or operational plan modified during the project period? If significant changes were made, for what reason, and when were they approved by the Darwin Secretariat?

Throughout its entire course of implementation, the project never veered away from its original objectives. The operational plan, however, underwent slight changes in order to allow for more effective delivery of objectives.

The initial operational plan was adjusted slightly several times:

- in 2004 due to a delay in starting construction works at Dikoe. This was caused by difficulties in finding a suitable subcontractor to carry out the construction works. But ultimately, a solution was found with the administration of the National Park and, as reported in interim reports, the construction was finished and officially accepted in August 2005;

In 2006 due to high water at the Yaselda river it was impossible to start the correction works before March 31. Therefore decision was made to shift the works for later period when the flooding ends. Although the activities will be conducted after the project's term, agreement was achieved with the UNDP office in Minsk that they would supervise the works after the project's completion, presumably in mid-June.

The above changes in the operational plan were mentioned in interim reports, but since they did not affect outputs nor overall budget, there was no need for official approval by the Darwin Secretariat. However, it can be reported that additional construction works are now being carried out in the Zvanets site (site visit in June 2006).

- Which of the Articles under the Convention on Biological Diversity (CBD) best describe the project? Summaries of the most relevant Articles to Darwin Projects are presented in Appendix I.

6. General Measures for Conservation & Sustainable Use	<p>Develop national strategies which integrate conservation and sustainable use.</p> <p>Two zakaznik management structures have been created at the Zvanets and Sporovo mires and have been registered as legal establishments that will be able to function after the project's completion. The example created by the project became a basis for amending national environmental legislation and instigated development of a large-scale campaign by the Ministry of Natural Resources and Environmental Protection in 2005 on creating similar structures in other 34 reserves in Belarus. As reported by the Ministry, 18 management units have already been created at the beginning of 2006.</p>
7. Identification and Monitoring	<p>Identify and monitor components of biological diversity, particularly those requiring urgent conservation; identify processes and activities which have adverse effects; maintain and organise relevant data.</p> <p>The project focused on implementing the most urgent measures of the three management plans elaborated in the</p>

	<p>previous project. The plans identified particular threats to biodiversity at the three project sites, proposing a list of conservation actions to prevent further degradation and foster sustainable use.</p> <p>The globally endangered species – Aquatic Warbler has been the biodiversity indicator species in the project and the population of the species has been monitored regularly so as to confirm correctness of the activities implemented within the project.</p>
8. In-situ Conservation	<p>Establish systems of protected areas with guidelines for selection and management; regulate biological resources, promote protection of habitats; manage areas adjacent to protected areas; restore degraded ecosystems and recovery of threatened species; control risks associated with organisms modified by biotechnology; control spread of alien species; ensure compatibility between sustainable use of resources and their conservation; protect traditional lifestyles and knowledge on biological resources.</p> <p>During the project implementation period urgent conservation measures of the management plans for Zvanets, Sporovo and Dikoe were implemented. Among the urgent measures Zvanets and Sporovo reserves management units have been established and efforts have been taken to ensure post-project functioning and financing of the units.</p> <p>At the project's beginning a Proposal on changing the boundaries of the Belavezhskaya Pushcha National Park to include the whole area of the Dikoe Mire IBA in the boundaries of the Park was elaborated. In the course of the project the Belavezhskaya Pushcha buffer zone, including Dikoe IBA, was included into the National Park area.</p> <p>A feasibility report aimed at reorganizing the Zvanets zakaznik has been prepared and submitted to the Ministry of natural resources for consideration and approval. This work was started within the previous project and was continued in the current one. Reorganization of the Zvanets zakaznik will have positive impact on maintaining biological diversity of the mire ecosystem. It is proposed in the report to revise the conservation and usage regimes of the zakaznik, to increase its borders, to change the status of the zakaznik from biological reserve to landscape reserve, thus ensuring protection of not only specific species but also the landscape in general; to amend the zakaznik Statute so as to conserve more rare and disappearing flora and fauna species.</p> <p>Recommendations were introduced or amended for maintaining optimal hydrological regime at the three mires that will allow to maintain necessary conditions for nesting of the threatened species. Post-project application was prepared</p>

	aimed at sustainable land use by the local inhabitants at Zvanets.
10. Sustainable Use of Components of Biological Diversity	<p>Integrate conservation and sustainable use in national decisions; protect sustainable customary uses; support local populations to implement remedial actions; encourage co-operation between governments and the private sector.</p> <p>Local population and authorities have been involved into implementation of the urgent actions of the management plans. The zakaznik management units established at Zvanets and Sporovo will function after the project's implementation.</p>
12. Research and Training	<p>Establish programmes for scientific and technical education in identification, conservation and sustainable use of biodiversity components; promote research contributing to the conservation and sustainable use of biological diversity, particularly in developing countries (in accordance with SBSTTA recommendations).</p> <p>Within the project original studies of various components of fen mire ecosystems (insects, vegetation, birds, small mammals) and their the determining factors (water levels, water quality, fires, mowing) were conducted. On the basis of these studies requirements for dynamics of water levels for sustainable functioning of the fen mire ecosystems were elaborated. Based on these requirements engineering projects aimed at optimizing water levels in the fen mires were elaborated and implemented.</p> <p>The project provided necessary technical training to a number of graduates and post-graduates in hydrological and AW monitoring.</p> <p>Within the project transfer of experience from RSPB to the in-country partner was practiced. Exchange of experience between the RSPB and Belarusian hydrologists was extremely necessary for establishing methods for optimizing the hydrological regime of the three mires.</p>
13. Public Education and Awareness	<p>Promote understanding of the importance of measures to conserve biological diversity and propagate these measures through the media; cooperate with other states and organisations in developing awareness programmes.</p> <p>Public awareness formed a significant component of the project strategy, which aimed at publicizing project activities to a wider possible audience as well as to propagate project successes. Special efforts were taken and significant results were obtained in raising environmental awareness in the</p>

	<p>following aspects: global value of fen mires and of the biodiversity connected with them; impact of spring fires, overgrowing of open mires by shrubs, importance of maintaining optimal water levels, importance of management of specially protected areas.</p> <p>Within the project specific effort was taken in order to encourage understanding by the locals of the importance of biological diversity and measures for conserving the mire ecosystems. This was achieved through consultation, meetings, workshops, dissemination of printed materials.</p>
<p>14. Impact Assessment and Minimizing Adverse Impacts</p>	<p>Introduce EIAs of appropriate projects and allow public participation; take into account environmental consequences of policies; exchange information on impacts beyond State boundaries and work to reduce hazards; promote emergency responses to hazards; examine mechanisms for re-dress of international damage.</p> <p>While elaborating engineering projects special attention was paid to preventing and non-admission of negative impact of the constructed water regulating facilities on the adjacent agricultural lands. In case of conflicts the engineering projects were amended.</p>
<p>17. Exchange of Information</p>	<p>Countries shall facilitate information exchange and repatriation including technical scientific and socio-economic research, information on training and surveying programmes and local knowledge.</p> <p>During the first project supported by the Darwin Initiative the RSPB experience was transferred to the Belarusian project experts. Afterwards this experience was tested on the project sites and disseminated to other areas. At present as a result of transfer of the current project experience in Belarus management plans for four other Ramsar sites are being elaborated within national and international projects. Besides, Belarusian experts share their experience in protected area management with other countries in Eastern Europe and Asia.</p>

- Briefly discuss how successful the project was in terms of meeting its objectives. What objectives were not or only partly achieved, and have there been significant additional accomplishments?

The main objective of the project - **to secure conservation and sustainable management of Polesian biodiversity through assistance to the Ministry of Natural Resources and national NGO APB-BirdLife Belarus in implementation of integrated management plans for key protected sites and the facilitation of better coordination between various stakeholders involved in management and conservation of natural resources** – has been achieved. Thus, the project can be evaluated as highly satisfactory.

In particular, the project was aimed at implementing urgent conservation measures for the fen mires and mainly at fulfilling urgent measures for optimization of the hydrological regime. The urgent measures have been implemented and the task of optimizing the hydrological regime is 90 per cent completed. To ensure complete realization of the task and to implement other activities of the management plans the UNDP-GEF Polesie project was elaborated with participation of the current project experts. The project has started in 2006.

All the outputs as per the logical framework have been successfully delivered. More over, additional outputs not stated in the logical framework have been implemented. These are feasibility study on reorganizing the Zvanets zakaznik, elaboration of **instruction** for introducing principles of sustainable management into forestry management. These results were envisaged by the management plans but were not prescribed by the current project.

Though not being specifically targeted, social aspects of human development were in a way tackled through improvement of natural environment, which directly affects people's lives, e.g. flood-prevention schemes.

The project has significantly improved the attitude of the local community around project sites what was evidenced by two workshops held in last four months of the project. *The reports on the workshops are presented in the attachments.* The workshops were aimed at presenting the results of the project activities and discussing post-project activities that can be implemented by the stakeholders. Active participation of the local authorities in the workshops revealed interest in continuing efforts for conserving the mire ecosystems, for instigating sustainable uses of the natural resources by the local inhabitants.

The prominent accomplishment of the project is a side-effect of establishing zakaznik management structures at Zvanets and Sporovo: the example of creating the management units has been highly appreciated by the Ministry of Natural Resources and has become a basis for starting a campaign on creation of a network of offices for management of zakazniks of international importance. According to the National Program for Development of Tourism for 2006-2010 a network of management units for 37 zakazniks must be created within 2006-2007. Till present 20 such offices for 22 zakazniks have been established by the Ministry.

4. Scientific Training, and Technical Assessment

- Please provide a full account of the project's research, training, and/or technical work.

The project focused on implementing the most urgent conservation actions of the management plans for the three largest fen mires in Belarus. Parallel to these actions hydrological and biodiversity monitoring were conducted as means for checking correctness of the implemented activities.

On the whole the project implementation process based on the following principles and approaches:

-Planning and assessment:

Yearly operational plans were discussed and approved by the Project Steering Committee at the beginning of each project's year. The project management group constantly saw to implementation of the current activities in strict accordance with the operational plans and compared the achieved interim results with those stipulated by the plans.

Construction works presented a significant part of the project activities. In terms of construction activities the 'planning and assessment' principle was applied as follows: The engineering plans for the three sites were elaborated during the first year of the project. Since then the project team has been coordinating construction works at the three sites by means of regular field visits, inspection of the state of the built facilities, control of meeting deadlines as per the work plan; the project hydrologist and Belgiprovodkhoz experts visited the sites and gave recommendations on improvement or strengthening the facilities.

-Training:

Training visits in Sept 30 - Oct 2, 2003; May 24 -27, 2004, by the RSPB experts Norman Sills and Jim Glover were very helpful for local subcontractors, project staff and representatives of the Ministry of Environment, as it gave them opportunity to learn foreign experience in this field of restoration of the drained mires. The training was combined with inspection during which the RSPB experts gave necessary recommendations on fortifying the built weirs so that they would serve for a long period.

- Monitoring:

Simultaneously with the construction, scientific monitoring was conducted, which concentrated on the one side on development of Aquatic Warbler populations as a key biodiversity indicator species of the project, on the other side on development of water levels before and after the construction of the hydrological facilities within the project.

Monitoring of the Aquatic Warbler built on a well-tested method already used in the preceding project supported by Darwin Initiative on elaboration of the management plans for these sites (1999-2002). Hydrological monitoring has only been established within the framework of the present project.

Both types of monitoring have been performed during the reporting period on the initially determined monitoring plots. Hydrological monitoring was performed regularly in 2003 during the Aquatic Warbler nesting period, in 2004-2005 from March to November (See Appendix XVI).

- Maximum stakeholder involvement:

The project team succeeded in involving the stakeholders into each stage of the project implementation and the processes of planning and assessment, so that the project goals are at present realized as a common matter of all the parties involved. Involving stakeholders was achieved through consultation, meetings, workshops.

- **Research** - this should include details of staff, methodology, findings and the extent to which research findings have been subject to peer review.

In the research activities within the project the following scientific personnel was involved: one Doctor, four candidates of biology, 7 research officers without academic degrees of the Institutes of Zoology, Experimental Botany of the National academy of sciences. Besides, 5

students of the ecology and zoology departments of the Belarusian State University and the Pedagogical Institute took part in the studies.

The studies were conducted at 6 monitoring plots on the three mires. With standard geobotanical methods condition of the vegetation (its structure and correlation of associations), species composition, density, abundance of insects and birds were assessed. Additionally peculiarities of nest arrangement, timing of nesting, breeding success, reasons for destruction of nests of Aquatic warbler and other dominating species were studied. Besides, mechanisms for impact of environmental factors on the condition of the birds' and insects' populations, vegetation structure were determined.

In 2005 and 2006 the methods of census and the results of density of the birds populations were approved by the International Aquatic Warbler Conservation Team. The research data have been published or are being prepared for publishing in peer reviewed journals, thus providing additional assessment of the reliability of the obtained data.

- ***Training and capacity building activities*** – this should include information on selection criteria, content, assessment and accreditation.

The project has provided the following training opportunities:

1. Training in ecological techniques in Belarus.

- Four Belarusian undergraduates received в 2003-2005 a total of six-week training in ecological methods:

Mr. M.Koloskov – methods for crane census, AW density estimation, AW nest mapping, AW ringing, study of AW nesting diet;

Mr. A.Kozulin - hydrological regimes at the mires, study of water quality;

Ms. I.Likhachevskaya, Mr. V.Yarokhovich - study of species composition and density of small insectivorous mammals.

Four students have prepared and defended the following graduation papers:

Mr A.Kozulin - "Geographical Fundamentals for Restoration of Lake-and-Mire Systems in Belarus" in 2005.

Mr M.Koloskov – "Ecology and Spread of Crane in Belarus" in 2005.

Ms. I.Likhachevskaya – "Ecological Characteristics of Small Mammal Communities in Zvanets Zakaznik" in 2006.

Mr. V.Yarokhovich – "Small Mammal Communities of Different Types of Forest Biotopes in Belarus" in 2006.

- Six Belarusian postgraduates (Ms. Liubov Vergeichik, Mr. Edward Mongin, Mr. Dmitry Zhuravlev, Ms. Margarita Minets, Dr. Alexander Derunkov, Mr. Valery Yurko) received a total of 6-week training in ecological methods – estimation of density and abundance of rare bird species (great snipe, aquatic warbler), AW nest mapping, AW ringing, sampling and study of AW nesting diet, breeding success, nestlings growth, study of species composition and density of small insectivorous mammals, studies of habitat requirements of great snipe).

The following Belarusian postgraduates have obtained MS qualifications:

Edward Mongin – defended PhD thesis in 2005 on the following theme: "Ecology and Spread of *Sandpipers* in Belarus"

Ms Liubov Vergeichik, Ms Margarita Minets have prepared PhD thesis, defending is planned for 2007.

Mr Yasep Stepanovich took part in collecting data within the project. He has defended PhD thesis based to a great extent on the data collected at the project sites.

2. Training visits by RSPB hydrologists mentioned above. Reports of the RSPB hydrologists are presented in the attachments.
3. A pre-final project workshop at Zvanets held 1 Dec, 2005, aimed at presenting the project results to the local representatives and explaining the essence of the project activities. Report on the workshop is presented in the attachment.

5. Project Impacts

- **What evidence is there that project achievements have led to the accomplishment of the project purpose? Has achievement of objectives/outputs resulted in other, unexpected impacts?**

The project accomplishments have led to positive impact on the natural and social environment. This impact was envisaged by the elaborators of the management plans and during the course of the project it was very important to follow the prescriptions of the management plans and simultaneously to be ready to amend the prescriptions being guided by the actual results of the monitoring. The task of the project team was to inform the local population and, in general, the population of Belarus and to enlist their support.

The project achievements have led to the accomplishment of the project purpose. The evidence of this is confirmed by the following facts:

Conservation and sustainable management of the Polesian biodiversity is secured:

- monitoring results evidence of improvement of the water level dynamics;
- management units are functioning;
- stabilized AW population size (as a result of monitoring);
- prescriptions of the recommendations for maintaining optimal water levels elaborated by the project experts, approved by the state bodies and have binding force;
- the water regulation facilities are functioning and their operational state is regularly checked by representatives of the water users.

Implementing of the project activities has lead to other important impacts that will significantly improve conservation and management of the protected areas in Belarus:

- The Ministry of Environment has realized necessity of elaboration and realization of management plans and creation of reserve management units;
- The Ministry of Environment has made decision to create management units in 37 protected areas (20 units for 22 protected areas have already been created);
- The Ministry of Environment initiated, with the direct support and encouragement of APB, the introduction of amendments into the Laws "On WildLife" and "On Specially Protected Areas". The amendments are containing article on necessity of elaboration of the management plans for protected areas and some other positive changes;
- The Ministry of Environment has allocated funds for preparing management plans for two Ramsar sites – Yelnia and Zvanets;

- the project UNDP-GEF Polesie with the total budget of more than USD (GEF contribution is USD) has been elaborated and approved. The project is aimed at realization of the management plans for Zvanets and Sporovo mires; and the elaboration of management plans for the Mid-Pripiat and Prostyr protected areas. A full list of the actions that have been catalysed as a result of the Darwin project are described in the next Chapter.
- **To what extent has the project achieved its purpose, i.e. how has it helped the host country to meet its obligations under the Biodiversity Convention (CBD), or what indication is there that it is likely to do so in the future? Information should be provided on plans, actions or policies by the host institution and government resulting directly from the project that building on new skills and research findings.**

Within the project the ground has been prepared for development of environmental legislation in terms of improvement of the management system for protected areas and of conservation of globally threatened species.

Works have been started on development of management of specially protected area not only at the project sites, but also throughout the state.

The project has initiated elaboration of National plans for conservation of globally threatened bird species.

By the project an example has been set of involving local authorities into solving biodiversity conservation by organizing of sustainable nature management.

- **Please complete the table in Appendix I to show the contribution made by different components of the project to the measures for biodiversity conservation defined in the CBD Articles.**
- **If there were training or capacity building elements to the project, to what extent has this improved local capacity to further biodiversity work in the host country and what is the evidence for this? Where possible, please provide information on what each student / trainee is now doing (or what they expect to be doing in the longer term).**

M.Koloskov – successfully defended graduation thesis “Ecology and Spread of Crane in Belarus” in 2005. At present he serves in the army

Ms. I.Likhachevskaya – has defended graduation thesis “Ecological Characteristics of Small Mammal Communities in Zvanets Zakaznik” in 2006. She is planning to stay to work at the ecology department of the Belarusian State University.

Mr. V.Yarokhovich – has defended graduation thesis “Small Mammal Communities of Different Types of Forest Biotopes in Belarus” in 2006.

A.Kozulin – defended graduation thesis “Geographical Fundamentals for Restoration of Lake-and-Mire Systems in Belarus” in 2005. At present is working as a hydrologist at RUP “Belgiprovodkhoz”.

Mz Margarita Minets – in 2007 is planning to defend PhD thesis “Phenetics of Mass Species of *Carabus* Ground Beetles”, at present is working at the ecology department of the Belarusian State University.

Ms Liubov Vergeichik – in 2007 is planning to defend PhD thesis “Peculiarities of Ecology of Aquatic Warbler in the Centre of the Present Range”.

- Discuss the impact of the project in terms of collaboration to date between UK and local partner. What impact has the project made on local collaboration such as improved links between Governmental and civil society groups?

The RSPB has been actively involved in project implementation through a number of visits of the Head of European Programmes and Training Department Mr Norbert Schäffer, European Country Programmes Manager Mr Mark Day, Country Programmes Officer for Poland and Belarus Mr Lars Lachmann/Zbigniew Karpowicz (the new employee for the position), and two training visits by RSPB experts Jim Glover and Norman Sills.

Successful collaboration of the RSPB with APB-BirdLife Belarus gave start to a number of initiatives that were applied for or launched during the course of the project. Among them are:

- Elaboration of a post-project proposal “Application of practical rural development instruments for the long term sustainable development of Belarus mires”. The main objective of the proposal is to prepare and test practical activities on habitat management that will be used throughout the country in the long-term sustainable use of mires. The follow-up project will base on the original Darwin and continue cooperation with the Zvanets zakaznik management structure. As a result of the original project the natural hydrological regime on the mires has been restored and this provides preservation of the mires’ ecosystem and biodiversity. The follow-up project is aimed in general at decision of another main problem – overgrowing of open mires with shrubs and reeds. Major aim is to prepare, test and document the habitat management activities which are the second stage of the long-term management plan for these areas as well as prepare a series of supporting operations which will use the natural resources and will benefit biodiversity. Although tightly linked to the original project and based on its results the follow-up initiative will be not only biodiversity-oriented but will also contribute into development of sustainable livelihoods of local people to a higher extent than the original one. This will be achieved by development of a range of sustainable uses such as development of ecotourism infrastructure and hunting service.
 - o Initiative of APB-BirdLife Belarus in cooperation with UNDP Belarus, the Royal Society for the Protection of Birds, and the Ministry of Education of Belarus on development of a Biodiversity Module for Inclusion in the Secondary School Curriculum in Belarus. The goal of the project is to raise the awareness of environmental issues in Belarus thus setting in place a generation more able to make better decisions in favor of good environmental management and future sustainable development. The project will aim at introducing the new biodiversity course in the 7th-8th grade of ALL biology special schools in Belarus (about 400 schools with some 12,000 students in each grade) and involve as much common schools as possible in teaching the new course. Funding not yet secured.
 - o The Forest Mapping Project (See point 12 for more detail)
 - o Greater and Lesser Spotted Eagle in Belarus 2005 – an initiative supported by the Frankfurt Zoological Society, aimed at learning the nesting and habitat use ecology of the Greater Spotted Eagles in Belarus and at studying the threat posed through hybridization of Greater and Lesser Spotted Eagles
 - o Project “Building on EU experience in local communities and administrations networking in conservation important areas in Belarus” within EU TACIS programme. The project is aimed at reviving the pre-transition partnership of

local environmental initiatives and authorities through establishment of a network of local environmental clubs supported by local authorities, drawing on the EU experience. The project targets school teachers in rural areas (close to environmentally significant areas) who will play a key role in the establishment and functioning of local initiatives.

- APB and RSPB have been involved in the preparation of a GEF medium-sized project proposal on rehabilitation of 42,000 ha of degraded peatlands in Belarus at 17 sites.
- GEF PDF-B Project aimed at conservation and sustainable management of globally valuable biodiversity in the unique Polesie Region (2004-2005) and a full sized GEF project on the same subject (launch in 2006). (See point 12 for more detail)
- The BirdLife International/CMS (Bonn Convention) International Aquatic Warbler Conservation Officer has taken up his post, based at APB-BirdLife Belarus. (See point 12 for more detail)

- **In terms of social impact, who has benefited from the project? Has the project had (or is likely to result in) an unexpected positive or negative impact on individuals or local communities? What are the indicators for this and how were they measured?**

The main beneficiaries of this project include the biodiversity and people in the targeted areas. Local land-users and authorities benefited from the project through infrastructure improvements and area organization, which serve both with their economic demands and environmental interests. Firstly, local communities were involved into the project implementation process, in the course of it more than 20 local inhabitants obtained jobs. Secondly, as a result of the project 10 local people obtained permanent jobs in the area of management and monitoring of the areas that are financed by the state.

The improvement of environment was noticed and appreciated by the local population. E.g., possibilities of regulation of the water regime, allowing for flood- and fire-prevention. Owing to joint efforts of the project office and the management structure awareness of the local population of the on-going environmental activities in the region has been raised. Ecological consciousness of the local authorities and population has been raised – in total more than 5 workshops were conducted, more than 50 local inhabitants took part in them. At the seminars and meetings conducted with the local representatives at the end of the project it was noted that the local population supports and is interested in the development of activities on restoration of the ecosystem and sustainable use of the mire.

APB-BirdLife Belarus has enhanced its capacity in the area of management planning and implementation. Various stakeholders involved in the conservation of biodiversity, use and maintenance of lands and facilities (Ministry of Natural Resources, research institutes, NGOs, executive authorities, public and commercial economic sector) benefited from better coordination between each other's activities and a forum for continuous dialogue that the project has established.

Finally, the national and international community in general benefited from better preservation of unique natural areas of the Belarusian Polesie.

6. Project Outputs

- **Quantify all project outputs in the table in Appendix II using the coding and format of the Darwin Initiative Standard Output Measures.**
- **Explain differences in actual outputs against those in the agreed schedule, i.e. what outputs were not achieved or only partly achieved? Were additional outputs achieved? Give details in the table in Appendix II.**

All project outputs are quantified in Appendix II.

- **Provide full details in Appendix III of all publications and material that can be publicly accessed, e.g. title, name of publisher, contact details, cost. Details will be recorded on the Darwin Monitoring Website database.**
- **How has information relating to project outputs and outcomes been disseminated, and who was/is the target audience? Will this continue or develop after project completion and, if so, who will be responsible and bear the cost of further information dissemination?**

The target audience for disseminating specific recommendations for the project sites included local population of the specific territories, the bodies coordinating implementation of the requirements and other parties involved, e.i. land and water users.

Thus, "Additional Recommendations on Improving the Hydrological Regime of the Zvanets Zakaznik" elaborated by the project experts in addition to the Zvanets Management plan were presented at the regional workshop and the copies were distributed among Drogichin inspection for natural resources and environmental protection, Drogichin and Kobrin drainage Works companies (PMS), Drogichin regional executive committee.

In a similar way the new operational guidelines for "Selets" fish farm, elaborated by "Belgiprovodkhoz" experts, were approved accordingly, presented at the Project Steering Committee meeting and disseminated between the parties involved: the Selets fish farm, "Belmeliovodkhoz" concern (Belarusian State Concern on Construction and Use of Melioration and Water Supply Systems), Bereza Drainage Works Company, regional inspection for natural resources and environmental protection.

Specific recommendations for maintaining necessary water levels at the Belavezhskaya Pushcha National Park were presented at the PSC meeting, copies were submitted to the Ministry of Natural Resources and Environmental Protection and the National Park authorities.

The posters on Aquatic Warbler and Zvanets mire were targeted at both the local population of the project sites and the Belarusian public at large. The posters were disseminated during the field visits at Zvanets, Sporovo and Dikoe; at the joint meetings with the project stakeholders, at the workshops attended by the project team.

7. Project Expenditure

Expenditure Category	Budget (£)		Expenditure (£)				Variance (%)
	Original	Final	Y1 (03-04)	Y2 (04-05)	Y3 (05-06)	Total	
Rent, rates...							

Office costs			
Travel and subsistence			
Printing			
Conferences			
Capital items			
Others			
Staff costs			
TOTAL			

The following amendments from the original budget were implemented during the course of the project.

- The underspend on the 'rent, rates...' budget line during Year 2 was carried forward to Year 3 and added to the 'office costs' budget line to cover increased costs in this category during the year. This was part of a larger carry-forward of grant between Year 2 and Year 3, although for all other categories, the overall costs remained as per the original budget.

Variations in expenditure of +/- 10% of budget were observed on the following categories:

- Rent, rates, heating, lighting, cleaning, overheads (under budget). This was due to a higher-than-expected percentage of the costs attributed to this category being covered from a different funding source.
- Conferences, seminars (under budget). This appears to be due to slight over-budgeting on this line during Year 2. Note, however, that the value of this underspend is only £.

8. Project Operation and Partnerships

- **How many local partners worked on project activities and how does this differ from initial plans for partnerships? Who were the main partners and the most active partners, and what is their role in biodiversity issues? How were partners involved in project planning and implementation? Were plans modified significantly in response to local consultation?**

APB-BirdLife Belarus was the chief local partner in the implementation of the project. As initially planned, the project involved close collaboration with the UNDP, National Academy of Sciences of Belarus (NASB), Project Institute for Land Reclamation and Drainage (Belgiprovodkhov). The project has successfully forged strong partnership with the Ministry of Natural Resources and Environmental Protection of Belarus and its regional and local branches. Local environmental committees of Drogichin and Beryoza districts, Belavezhskaya Pushcha National Park have been actively involved in the project at all stages of its implementation.

The opinion of all the partners involved in the project was carefully studied and adhered to during the preparation of additional recommendations to the management plans, e.i. additional recommendations for Zvanets zakaznik and Belavezhskaya Pushcha on

maintaining optimal hydrological regimes, operational guidelines for Selets fish farm.

- **During the project lifetime, what collaboration existed with similar projects (Darwin or other) elsewhere in the host country? Was there consultation with the host country Biodiversity Strategy (BS) Office?**

During the project lifetime collaboration existed with a GEF PDF-B Project aimed at conservation and sustainable management of globally valuable biodiversity in the unique Polesie Region. (See point 12 for more detail)

Collaboration between APB BirdLife Belarus and Wetlands International Russia Programme resulted in a field seminar-excursion that took place on 7-11 October, 2004, in Belarus. The seminar was aimed at exchanging experience on the planning and implementation of peatlands rehabilitation projects in Russia and Belarus.

Members of the Belarusian project team have been involved in the BirdLife International Aquatic Warbler Conservation Team (AWCT) for many years. This team brings together all experts working on this species and the protection of its fen mire habitat. The practical experience, especially in terms of breeding population monitoring, management planning and hydrological restoration of the APB representatives is most valuable within this team. Once a year with funding from the RSPB this expert group meets to do practical fieldwork and exchange experience. Thus, the relevant Belarusian experience could be spread to other European countries and projects, amongst others an EU LIFE project in Spain and to the Aquatic Warbler conservation work in the Ukraine.

The Polish BirdLife Partner OTOP, with support from the RSPB, has developed a similar conservation project to safeguard the German and Polish population of Aquatic Warblers. This project has been submitted for funding to the EU LIFE Nature programme in late 2004. Belarusian experts from the Darwin project were heavily involved in the development of this project and will take part in the advisory group of this project, if it receives funding approval.

During the project lifetime the project collaborated with all the RSPB- and APB- initiated project mentioned in Point 5. Project Impacts.

Was there consultation with the host country Biodiversity Strategy (BS) Office?

At all stages of project implementation, APB worked in close coordination with the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus, the agency in charge of implementing UNCBD in Belarus. Especially tense collaboration has been established with the ministerial Inspection of Control over Use and Conservation of Wildlife, Hunting, and Condition of Especially Protected Area, that is in charge of supervising the condition and activities in protected natural areas.

- **How many international partners participated in project activities? Provide names of main international partners.**

Throughout the entire project the main international partners actively involved in the project implementation were RSPB, UNDP. The activities of the project experts were supported by UNESCO, Secretariats of Bonn and Ramsar Conventions.

Together with UNESCO the project experts transferred experience in preparing management plans for transboundary areas of Belarus and Ukraine.

Owing to ties with the Bonn Convention International Memorandum of Understanding Concerning Conservation Measures for the Aquatic warbler (*Acrocephalus paludicola*) was signed.

The Ramsar Convention Secretariat facilitated dissemination of the project experience in sustainable management of mires.

- **To your knowledge, have the local partnerships been active after the end of the Darwin Project and what is the level of their participation with the local biodiversity strategy process and other local Government activities? Is more community participation needed and is there a role for the private sector?**

Upon completion of the project, activities on further implementation of the management plans will be continued within the full sized GEF Polesie project mentioned above, which will insure continuous involvement of local partners and community. Zvanets and Sporovo feature also as GEF Polesie project sites.

In the Belavezhskaya Pushcha National Park, the local administration keeps track of all activities and implementation of management recommendations, including additional measures for maintaining optimal hydrological regime, prepared by the current project.

The Ministry of Environment has taken over the financing of the two new management offices created by the project at Zvanets and Sporovo, and will thus guarantee the sustainability of the project achievements.

9. Monitoring and Evaluation, Lesson learning

- **Please explain your strategy for monitoring and evaluation (M&E) and give an outline of results. How does this demonstrate the value of the project? E.g. what baseline information was collected (e.g. scientific, social, economic), milestones in the project design, and indicators to identify your achievements (at purpose and goal level).**
- **What were the main problems and what steps were taken to overcome them? C**
- **During the project period, has there been an internal or external evaluation of the work or are there any plans for this?**
- **What are the key lessons to be drawn from the experience of this project? We would welcome your comments on any broader lessons for Darwin Initiative as a programme or practical lessons that could be valuable to other projects, as we would like to present this information on a website page.**

The project monitoring strategy: The main objective of the project was to organize effective management of the protected areas (water regime, habitats, globally endangered species) and to demonstrate on the example of these areas advantages of sustainable use.

For assessment of efficiency of the implemented engineering activities monitoring of hydrological regime, vegetation, bird species composition, condition of the population of aquatic warbler were organized. The monitoring data proved that as a result of engineering activities and elaboration of the new operational guidelines for the amelioration systems and water reservoirs dynamics of the level regime of the groundwater table approached its natural regime that had been observed before draining of the catchment area. Besides, the built facilities and observation of the new rules for water use allowed both to avoid abrupt reduction of the water levels and to prevent summer floods significantly. Improvement of condition of the mire ecosystems is also evidenced by data on condition of the population of the mire indicator species – Aquatic Warbler (stabilizing and increase of density, breeding success on the monitoring plots). The scientific significance of the project is proved by the

fact that the detailed studies of Aquatic Warbler ecology allowed for the first time to obtain data on adaptation of the species to habitat conditions of different fen mire types and to identify factors determining condition of the population in nesting sites. These data allowed to set correct tasks for management of the water regime and habitats.

Achievement of another result – creation of the management units for protected areas - allowed to change the strategy of the management system for protected areas in Belarus to a great extent. Owing to the example of the project the Ministry of Environment amended environmental legislation (elaboration of management plans and establishment of management units for protected areas became obligatory) and created 20 management offices for 22 zakazniks. At present the project experience is being disseminated in other East European states.

10. Actions taken in response to annual report reviews (if applicable)

- Have you responded to issues raised in the reviews of your annual reports? Have you discussed the reviews with your collaborators? Briefly summarise what actions have been taken over the lifetime of the project as a result of recommendations from previous reviews (if applicable).

The project has addressed all the issues raised in the annual report reviews or provided implementation of response actions in the future. The detailed responses were addressed in interim reports. **Detailed response to the 2nd annual review is presented in the attachment.** In brief, the measures taken in response to the reviews are described in Table 2:

Table 2. Response to the Annual Project Reviews

First project year review (April 1, 2003- March 31, 2004):	
Major issues risen by the annual reports reviews	Response actions
At the Zvanets site the construction of weir #1 caused flooding on neighbouring farmland where unauthorized traditional ploughing is practiced. The dam was then damaged presumably by farmers and needed to be rebuilt. Has this accidental flooding had any negative impacts on the relationship between the project and the local community?	As of late June 2004, weir #1 was reconstructed at the originally planned level. The Head of Zvanets Management Unit has had a series of meetings with the local community (personal meetings, school visits etc.) and proper understanding of the project activities around the area was ensured.
Hydrological management of the first project year showed that some alterations to three weirs were needed.	Progress on resolving the problems with the three weirs was included into the interim report (2004 half-year report). The changes were made within the existing project budget.
Construction and longevity of some dams were doubted by the RSPB hydrologists.	Response actions were taken: W 6 was elevated by about 20 cm and solidified with cement to better withstand continuous water flow. The adjustment was done within the existing project budget. The dams where no/little water flow is expected were additionally fortified with more willows that were planted in the spoil below the bundles.
The report mentions the effects of fires on aquatic warblers, are there any plans to work with locals to manage and reduce these fires?	A poster, a TV plot were produced explaining to the population the damage caused by the uncontrolled burning. Simultaneously an amended variant of Statute of Zvanets zakaznik was prepared and submitted to the Ministry of Environment, that contains rules and methods of controlled vegetation burning.
The concern risen by RSPB hydrologists concerning longevity and design of the dam at Sporovsky.	At the Steering Committee meeting decision was made to correct the water carrying capacity of the dam at Sporovo within the existing project budget. The correction works will be carried out in 2006 (See Table 1. Summary of Project Outputs Upon Milestones)
Second project year review (April 1, 2004- March 31, 2005):	
Major issues risen by the annual reports reviews	Response actions
The project has received several recommendations from RSPB experts, in particular those made by Jim namely: A. That unofficial ploughed sites, like those previously	The issue will be addressed in the full-sized UNDP-GEF Polesie Project. Within the project special

<p>flooded were made more formal and their location recorded</p> <p>B. The project should consider open days</p> <p>C. A more formal programme of education resources and materials could be developed for the local schools</p> <p>D. Consider active promotion of the importance of the fen mires as a vital component of the biodiversity of the area</p> <p>E. Working with the park authorities to deliver education should be a high priority for APB</p> <p>There is no evaluation of graduate and postgraduate training from the students.</p>	<p>mapping of the territories will be performed so that the unofficially ploughed sites will be indicated.</p> <p>Although open days as such have not been planned within the current project, much effort was taken to provide communication and dissemination of information to the local community. The project poster with the map of Zvanets mire reflecting the hydrological system was disseminated between the local people. The dissemination activities will continue after the project's completion due to collaboration with other projects. E.g., TACIS project implemented by APB ("Building on EU Experience in Local Communities and Administrations Networking in Consideration of Important Areas in Belarus") aims at establishing a network of pupils' clubs in the different areas of Polesie including the target territories of our project. An agreement has been reached with the TACIS project team concerning highlighting of our project activities through this network.</p> <p>Within the full-sized UNDP-GEF Polesie Project creation of an ecological information centre is planned that will be based in one of Polesie districts and will act in close collaboration with the zakazniks' management structures. The centre will, among others, consider the raised issue.</p> <p>This was achieved by disseminating posters and through the partnership with the TACIS project (See p.B). In the "Belarusian Polesie, PDF B" Project in November 2005 a seminar dedicated to the management plans was conducted. The aim of the seminar was to present recommendations elaborated by the project experts on implementing the management plans to the local stakeholders and to discuss with them the ways of implementing the recommendations and possible concerns. Through this workshop the results of our project as the one implementing the urgent recommendations of the management plans were promoted. Besides, large-scope disseminating activities have been planned in the full-sized UNDP-GEF Polesie project.</p> <p>It is presumed that the ecological educational centre that will be created within the UNDP-GEF Polesie project will consider the above issue and will submit information materials to the park's administration.</p>
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11. Darwin Identity

- What effort has the project made to publicise the Darwin Initiative, e.g. where did the project use the Darwin Initiative logo, promote Darwin funding opportunities or projects? Was there evidence that Darwin Fellows or Darwin Scholars/Students used these titles?
- What is the understanding of Darwin Identity in the host country? Who, within the host country, is likely to be familiar with the Darwin Initiative and what evidence is there to show that people are aware of this project and the aims of the Darwin Initiative?
- Considering the project in the context of biodiversity conservation in the host country, did it form part of a larger programme or was it recognised as a distinct project with a clear identity?

As planned, the project has tried its best at promoting the Darwin Initiative logo at every occasion. *The Darwin Initiative's contribution was acknowledged in scientific papers, in articles published in Birds magazine (circulation 1.9 million), in the RSPB annual report and in all press releases and media interviews related to the project.* The Darwin logo was depicted in the offices of APB and other project collaborators. The logo was promoted at all workshops conducted within the project.

All PR publications produced by the project team carried either a logo or the name of the Darwin Initiative. Thus, at present Belarusian population is familiar with the name and is aware of the activities promoted by the Darwin Initiative in Belarus and its invaluable contribution toward conservation of the country's nature.

12. Leverage

- During the lifetime of the project, what additional funds were attracted to biodiversity work associated with the project, including additional investment by partners?

APB and RSPB have been involved in the preparation of a GEF medium-sized project proposal on rehabilitation of 42,000 ha of degraded peatlands in Belarus at 17 sites. At present the project is being launched. The implementing agency of the project - the Ministry of Forestry - will work in close cooperation with APB-BirdLife Belarus and the main activities will be based on the experience of hydrological engineering obtained in the current Darwin project.

Among other projects connected with the current one is a full sized GEF Polesie Project , again developed and promoted by APB and RSPB helped improve the quality of key policies for important productive sectors such as agriculture, forestry, and flood defense in parallel to strengthening of institutional capacity at key protected areas of Polesie. It also assisted the Government of Belarus in strengthening cooperation with Ukraine on establishment of the trans-boundary Pripyat-Stokhid-Prostyry reserve. This PDF-B project was a preparatory stage for a full sized GEF project on the same subject. The latter has been approved by GEF, currently it is being launched and will be implemented by the Ministry of Natural Resources and Environmental Protection.

The Forest Mapping Project financed by Jensen Foundation and initiated by the BirdLife Forest Task Force and APB is also an initiative connected with the present project. The purpose of the initiative is to scan the national forest database as well as other specialized national databases (such as rare bird or flora databases) for forests of probable High (or Higher-than-average) conservation value. By providing a national overview of where High

Conservation Value Forests (HCVFs) are located and concentrated, it will be possible to take these values better into account during planning of forestry activities.

Since April 2005, the BirdLife International/CMS (Bonn Convention) International Aquatic Warbler Conservation Officer has taken up his post, based at APB-BirdLife Belarus and managed by the APB Conservation Director (Chief Technical Advisor of the Darwin project). His post was created to support the implementation of the International Memorandum of Understanding for the Conservation of Aquatic Warbler under the Convention on Migratory Species (CMS) and is funded by the German Otto Foundation for a period of three years. His job is to build on the experience of APB gathered during the Darwin projects in Belarus and to support conservation activities for Aquatic Warblers and fen mires in other countries of the species' range.

- What efforts were made by UK project staff to strengthen the capacity of partners to secure further funds for similar work in the host country and were attempts made to capture funds from international donors?

The project itself has laid the basis for a series of follow-up actions both directed at the project sites themselves and in the wide area of the peatlands. As a result of the expanded nature of the work, there has been a recognition that the technical capacity of the partners (APB) needed strengthening. In this context, a proposal has been made that the RSPB financial contribution to the UNDP GEF Peatlands project should include the costs of a new 'peatlands expert'. This request has been passed to UNDP. In addition, and looking into the longer term financial sustainability of the work on peatlands, RSPB has approached the German GTZ organisation on the possibility to second two experts on carbon sequestration and carbon credit monetization. A meeting with the Minister of Environment of Belarus was held at the beginning of June at which this suggestion was fully approved. Negotiations are continuing. Future funding of the work from international sources is also being actively sought with a focus on selected German Foundations and the GEF under the OP Climate Change and Biodiversity.

13. Sustainability and Legacy

- What project achievements are most likely to endure? What will happen to project staff and resources after the project ends? Are partners likely to keep in touch?
- Have the project's conclusions and outputs been widely applied? How could legacy have been improved?
- Are additional funds being sought to continue aspects of the project (funds from where and for which aspects)?

During the year, the project team strived to accentuate on the explanatory work with the local communities at the project's target sites. This is necessary to ensure careful attitude of the locals to the biodiversity, non-destructive actions towards the newly built hydrological facilities, realization of the global importance of the unique treasures of the Belarusian nature.

The zakaznik management offices created within the project at Zvanets and Sporovo sites have been highly appreciated by the Ministry of Environment and are planned to be used by the Ministry as sample structures for the creation of a network of 35 offices for the management of zakazniks of international importance.

The two Darwin projects have laid the foundation for the GEF-funded peatland Project. Another full-size GEF-funded initiative, now in its PDF B stage, was initiated by the Ministry of Environment and APB to achieve sustainable management of key sites in the Polesie region through improvement of forestry, land use and hydrology policies. (See point 6 for more details).

The Ministry will take over the financing of the two new management offices and will thus guarantee the sustainability of the project achievements. Two of the three project sites feature also as project sites of the upcoming GEF Polesie project mentioned above. Further work has to be done to ensure a sustainable vegetation management system that deals with the threat of increasing succession of the sites (second phase of the implementation of the site management plans). Several sound ideas for sustainable systems have already been put forward and two project applications to secure funding for the setup of these systems had been submitted, but have been unsuccessful to date. Further work will be done to secure funding for these measures.

14. Value for money

- Considering the costs and benefits of the project, how do you rate the project in terms of value for money and what evidence do you have to support these conclusions?

Considering that the resources available to the project virtually exactly matched the requirements and enabled the delivery of all the objectives, the project can be rated as to have achieved practically the maximum possible value-for-money ratio.

15. Darwin Contacts

To assist us with future evaluation work and feedback on your report, please provide contact details below.

Project Title	Implementing urgent conservation actions in mesotrophic fen mires in Belarus
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