



LIFE Project Number
LIFE04NAT/PL/000208
PLBALTBOGS

TECHNICAL FINAL REPORT

Covering the project activities from 02.11.2003 (project starting date) to 30.09.2007 (project end date)

Reporting Date

01/12/2007

LIFE PROJECT NAME

**Conservation of baltic raised bogs in Pomerania,
Poland**

Data Project

Project location	Poland, Pomerania and West Pomerania Region
Project start date:	02/11/2003
Project end date:	30/09/2007
Total Project duration (in months)	47 months
Total budget	968 337 €
EC contribution:	681 080 €
(%) of total costs	70,33 %
(%) of eligible costs	70,33 %

Data Beneficiary

Name Beneficiary	Klub Przyrodników (Naturalists Club Poland)
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1. LIST (I) KEY-WORDS AND (II) ABBREVIATIONS (WHEN APPROPRIATE)

Raised bogs, Baltic bogs, bog forests,
7110, 7120, 91D0 habitats

EG – ecological ground (Polish national conservation form)
NR – nature reserve (Polish national conservation form)
LNA – landscape-nature area (Polish national conservation form)
HAP – Habitat Action Plan
KP – Klub Przyrodników (Naturalist's Club; Beneficiary)
PUW – Pomorski Urząd Wojewódzki (Partner)
ZUW – Zachodniopomorski Urząd Wojewódzki (Partner)

2. EXECUTIVE SUMMARY (1-2 PAGE)

Project objectives:

Overall objective: To maintain or restore the favourable conservation status of active raised bog (7110) and pine/birch bog forest habitats (91D0) and the favourable conservation status of its complexes – baltic raised bogs in Pomerania, Poland. To maintain the Polish resources of specific sub-type of 7110 and 91D0 habitats, connected with the baltic bogs.

Operational:

- To stop the process of draining and following desiccation of the peatbogs
- To cancel local threats for biodiversity, created by species expansive as a result of desiccation
- To fulfill the holes in knowledge on natural values, ecology and hydrology of each raised bog and prepare good management plan on base of this knowledge.
- To propagate modern approach for raised bogs conservation, including appropriate active management techniques
- To build public awareness of baltic raised bogs value and its European importance, and awareness of its conservation needs, especially in influential stakeholders group, but also in local communities and general public.

Key deliverables & outputs achieved:

- § 7 Nature Inventory Reports prepared. 3 of them updated to Nature Reserve proposal
- § 6 documentations for Nature Reserves prepared;
- § 13 Standard Data Forms for Natura 2000 potential sites prepared or updated;
- § 13 peatbogs included to Natura 2000 network, in addition to former Polish government plans;
- § 10 Nature Reserves (total area 2053 ha) + 2 Ecological Ground (total area 43 ha) and 1 Nature-Landscape Area established;
- § 17 Nature Reserve Management Plans prepared and established. Management Plans for all targeted Nature Reserves completed with only exception of Zaleskie Bog (additional reserve established during the project);
- § 13 technical documentations for water damming up prepared and approved;
- § Draft of Habitat Action Plan for baltic raised bogs elaborated, discussed and updated;
- § Water outflow blocked in 724 points by building damming barriers or filling the ditches;
- § Trees & sprouts removing implemented on 727 ha;
- § *Myrica gale* and *Erica tetralix* populations habitats on two bogs improved;
- § Public access facilities prepared on 7 bogs;
- § Ca 365 people targeted by meeting, agreements and discussions

- § Ca 3200 people targeted by printed leaflets
- § Handbook of raised bogs conservation prepared and printed
- § Baltic bogs management planners & conservation managers working group established
- § Project website available in Internet
- § Ca 86 information panels installed on project sites

SUMMARY OF DELIVERABLE PRODUCTS

Product	Reference action	Delivered
Regional Habitat Action Plan for baltic raised bogs in Pomerania Region – 1st draft	A5	with progress report
Site Nature Inventory Reports for sites: 7 (northern part), 13, 17, 19, 20, 21, 22	A1	with interim report
Documentations for Nature Reserve establishing for sites: 1, 3, 9	A2	with interim report
Site Management Plans for Nature Reserves: 2, 14, 4, 5	A3	with interim report
Brochures presenting 13 selected sites	E2	with interim report + with this report
Handbook of Raised Bog Conservation – published book	E4	with interim report
Documentations for Nature Reserve establishing for sites 15, 16	A2	with interim report
Site Management Plans for Nature Reserves: 1, 3	A3	with this report
Regional Habitat Action Plan for baltic raised bogs in Pomerania Region – Revised version	A5	with interim report
Site Management Plans for Nature Reserves: 6, 10, 11, 12	A3	with this report
Site Management Plans for Nature Reserves: 15, 16	A3	with this report
Regional Habitat Action Plan for baltic raised bogs in Pomerania Region – Final version	A5	with this report
Layman's and scientific reports	E7	with this report

ACTIVITY REPORTS

Activity report	Delivered
Progress Report	February 2005
Progress Report	October 2005
Interim Report	September 2006
Final Report	This report (December 2007)

Problem

Baltic raised bogs (= "true raised bogs" according to Ellenberg 1988) are special kind of raised bogs, with limited distribution – around the Baltic sea. Ca 80 Baltic raised bogs were recorded in northern Poland, but no more than 30 are preserved till now. In the Pomerania region, 23 sites, giving any chance for maintaining or restoring the favourable conservation status of bog as a whole, and natural bog habitats, were recorded. All these sites are selected to this project. Formal protection and passive management, applicated as a rule to raised bogs in Poland till now, seems to be not appropriate to successful Baltic bogs conserving. Even on the best preserved bogs, active management, with blocking old anthropogenic drainings, sometimes also with taking other conservation measures, seems to be necessary. Probably it is "the last minute" to stop degradation processes!

LIFE-project framework

The project is implemented in partnership of:

- § Nature conservation NGO (Klub Przyrodników – Beneficiary);
- § Regional nature conservation administration (2 partners – Pomerania and West Pomerania Region);
- § State Forests - Forest districts (2 districts: Kliniska and Szczecinek);

Progress in project actions and achieved results:

Action	Achieved results
A1 Site assessment and inventory	Completed for all bogs as planned
A2 Preparation of formal documentations for Nature Reserve establishing	Completed for all bogs as planned
A3 Preparation of site management plans for Nature Reserves	Completed for all bogs as planned
A4 Preparation of technical projects for water damming up (& necessary permission)	Completed for all bogs as planned, and water damming up implemented
A5 Habitat Action Plan	Final version completed.
C1 Blocking draining ditches	Completed for all bogs as planned (with the modifications according to more detail needs recognitions and management plans)
C2 Trees (birch and pine) removing	Completed for all bogs as planned (with the modifications according to more detail needs recognitions and management plans)
C3 Spruce (alien species) removing	Completed for all bogs as planned (with the modifications according to more detail needs recognitions and management plans)
C4 Experiment with Sphagnum transplantation	Completed as planned
D1 Local improving light conditions for rare plant localities	Completed as planned

E1	Building education infrastructure on selected peatbogs	Completed for all bogs as planned (with the modifications according to more detail needs recognitions and management plans)
E2	Communication with local people & stakeholders	Completed, and expected results achieved, but should be continued also in After-LIFE work Leaflets printed
E3	Work with people responsible for nature management planning	Completed, and expected results achieved, but should be continued also in After-LIFE work
E4	Handbook of Polish raised bogs conservation	Printed.
E5	Project website	Completed, Available in the internet at www.kp.org.pl/plbaltbogs .
E6	Information panels	Completed, although some must be renovated in future or replaced as a result of vandalism
E7	End reports	Completed
F1	Overall coordination and management of project actions	Completed
F2	Monitoring and documentation	Executed as planned, but should be continued also in After-LIFE work

Evaluation and Conclusions

The project implementation meet project objectives and seems to be successful, although with some problems, as a rule related to lack of experience in LIFE project implementation in Poland (first PL project!) and changing legislation environment.

The project is implemented in partnership of nature conservation NGO; regional nature conservation administration (2 partners – Pomerania and West Pomerania region and State Forests, which is a good model of collaboration for nature conservation.

The project was successful with achieving the main ecological objectives. Although time for precise assessment is too short, achieved monitoring results suggest that ditches blocking on targetted sites importantly improve the water conditions.

There is important progress with both establishing national conservation forms protecting project sites and submitting the project sites for inclusion in the Natura 2000 network. All project sites are designed as appropriate formally protected areas.

The project is the first implementation tool of the necessary bogs conservation actions in Poland, using massive, not only experimental scale. In the economic situation of Polish nature conservation, EU LIFE funding was crucial for initiating the real conservation actions.

The project implementation experience has been used / is used in developing of numerous schemes, concepts and methodologies, for example the PROMME scheme and decision support system (LIFE Co-op project), methodology of Natura 2000 habitats monitoring in Poland, future LIFE+ national priorities establishing in Poland.

3. INTRODUCTION (1 PAGE)

Baltic raised bogs (= "true raised bogs" according to Ellenberg 1988) are special kind of raised bogs, with limited distribution – around the Baltic sea. These are typically ombrotrophic, oligotrophic and acidic; as a result they are covered by special kind of vegetation, with many rare and endangered plants.

Typical for baltic bog is a cupola shape peat bog deposit, with flat plateau and slopes. For the natural baltic raised bogs, plateau is typically treeless, with typical microrelief of hollows and hummocks. Slopes are covered by bog woodlands. For transformed bogs, cover of the whole bog by the pine or birch bog forest is typical. Baltic raised bogs are as a rule big complexes of natural habitats of European importance: *7110 – active raised bogs (priority!), 7120 – degraded but still capable for regeneration raised bogs, *91D0 – bog woodlands (priority!); with pine bog forests and *Betula-Sphagnum* bog forests among them.

Ca 80 baltic raised bogs were recorded in northern Poland, but no more than 30 are preserved till now. In the Pomerania region, 23 sites, giving any chance for maintaining or restoring the favourable conservation status of bog as a whole, and natural bog habitats, were recorded. All these sites were selected to this project.

Former, passive management, applied as a rule to raised bogs in Poland till 2003 y., seems to be not appropriate to successful baltic bogs conserving. Even on the best preserved bogs, active management, with blocking old anthropogenic drainings, sometimes also with taking other conservation measures, seems to be necessary. Probably it is "the last minute" to stop degradation processes!

Objective: Overall objective of the project was: To maintain or restore the favourable conservation status of active raised bog (7110) and pine/birch bog forest habitats (91D0) and the favourable conservation status of its complexes – Baltic raised bogs in Pomerania, Poland.

Operational objectives were:

- To stop the process of draining and following desiccation of the peatbogs
- To cancel local threats for biodiversity, created by species expansive as a result of desiccation
- To fulfill the holes in knowledge on natural values, ecology and hydrology of each raised bog and prepare good management plan on base of this knowledge
- To propagate modern approach for raised bogs conservation, including appropriate active management techniques
- To build public awareness of Baltic raised bogs value and its European importance, and awareness of its conservation needs, especially in influential stakeholders group, but also in local communities and general public

Actions and means involved:

- Sites assessment, management plans preparing, habitat Action Plan preparing
- Blocking draining ditches by sluices and dams building or filling the ditches
- Invasive birch and pine trees removing for evapotranspiration decreasing and water balance improving; removing of spruce (alien species here) invading the bogs
- Experimental dry peat earth removing and *Sphagnum* transplantation
- Work with local communities and influential stakeholders for building awareness of bogs value.
- Arrangement of series of workshop and study tours to Estonia (natural bogs) and Scotland (restoring of degraded bogs); publication of "Handbook of Bogs Conservation"
- Public access infrastructure building on 3 selected bogs. Results presentation and propagation.

Expected results foreseen in the application: All Baltic raised bogs in the region assessed and evaluated; all bogs giving chance for maintaining or restoration of its values taken into protection. Management plans prepared for all valuable baltic bogs. All conservation actions, which should be

planned in the existing level of knowledge, planned and executed. 10 new Nature Reserves established. Ca 410 sluices and dams built. Ca 2200m of ditches filled. Trees partially or totally removed from ca 600 ha of bogs surface. Biodiversity of bogs fully preserved. Ca 20 nature conservationists well trained in raised bogs analysis, assessment, conservation planning and monitoring. Ca 300 local persons fully aware of bogs values and needs of its conservation

4. LIFE-PROJECT FRAMEWORK (1 PAGE)

Project is implemented in the partnership between:

Beneficiary - Klub Przyrodników (KP - Naturalists's Club) is a Non Governmental Organization with 20-year tradition of activity, working on the field of nature protection in Poland. Area of activity is the whole country. Annual budget of the Klub is average ca 1 000 000 PLN. (=ca 250 thousand EURO). In last years Klub managed numerous nature conservation projects, concerning for example wetlands conservation in western and northern Poland, rare plants inventory and conservation of forests of the RSFD Zielona Góra, minimalising conflicts between people and beavers using technical equipment for preventing beaver's harms, Agri-Environmental Schemes implementation in Western and north-western Poland, Natura 2000 Polish official proposal and shadow list preparation. Klub employs 10 persons as permanent staff. Profits generated from the Klub activity, for example bookstore, consulting work, are turned to nature conservation activity. Klub publishes quarterly bulletin and quarterly the scientific journal concerning nature of Poland and its conservation. Klub publishes also 5-8 book on nature yearly. Most important publications are for example: Handbook of Local nature Conservation ((3 editions, last 2001), Handbook of Wetland Conservation (2 editions, last 2002). Organization is independent.

Partner 1 - Pomorski Urząd Wojewódzki (PUW) – Wydział Ochrony Środowiska i Rolnictwa, is a public body responsible for nature conservation in Pomerania Region

Partner 2 - Zachodniopomorski Urząd Wojewódzki (ZUW) – is a public body responsible for nature conservation in Western Pomerania Region. According to partner's agreement, project activities were implemented by the division named Nature Conservation Bureau (Biuro Konserwacji Przyrody)"

Partner 3 – Nadleśnictwo Kliniska (N KLINISKA) – Is a unit of Polish State Forests, responsible for forest management and preservation of in-forest natural values on its area

Partner 4 – Nadleśnictwo Szczecinek (N SZCZECINEK) - Is a unit of Polish State Forests, responsible for forest management and preservation of in-forest natural values on its area

For project organigram and more detailed description of project management organization, see Chapter 5, action F1.

5. PROGRESS, RESULTS

A. Preparatory actions/management plan preparation

ACTION A.1:

Name of action: **Sites assessment & Inventory**

Plan:

For sites with general lack of knowledge about its nature, ecology and hydrology, inventory of natural values (flora, fauna, habitats detailed map) should be prepared. Analysis of the peat deposit stratigraphy and ecology should be included. Old maps, historical aerial photographs and contemporary aerial photos should be used for site history analysis. Elements of site management plans should be elaborated and included to the report. Peat borer analysis will be used for peat stratigraphy. This inventory should be enough formal base for establishing appropriate form of protection – Ecological Ground or Nature & Landscape Area (for Nature Reserves special format of more complex documentation is need – see Action A2). For established EG or NLA, this inventory should be a confirmation of its natural values.

Activities & outputs:

Action is finished for all bogs it have been planned in the project.

For sites with general lack of knowledge about its nature, ecology and hydrology, inventory of natural values (flora, fauna, natural habitats map, peat deposit stratigraphy) have been prepared. Aerial photos and old maps were also completed. Elements of site management plans have been prepared. This inventory was enough formal base for establishing appropriate form of protection – Ecological Ground or Nature & Landscape Area. For established EG or NLA, this inventory was a confirmation of its natural values.

The action was implemented for following sites:

Site 7 (northern part): Łebskie Bagno - Nature inventory has been prepared. It was found out that the site is more valuable than expected and should be protected as nature reserve, therefore documentation was upgraded to nature reserve documentation. Also Standard Data Form for Natura 2000 has been prepared. Habitats map for the site has been prepared (habitat 7110 is more abundant, than expected). Needs of conservation actions were assessed more detaily. 11,34 ha of 7110 habitat and 99,98 ha of 91D0 habitat was found. On the base of prepared documentation, Nature Reserve has been established. The site has been submitted officially as pSCI o the Natura 2000

Site 13 (Zaleskie Bagno) - Nature inventory has been prepared. The site is protected as "ecological area", but it has been proposed to upgrade conservation status to nature reserve. Appropriate documentation has been prepared. During the inventory, locality of interesting flora species - *Rubus chamaemorus* - has been found (species very rare in Poland). 34 ha of 7110 habitat and 195 ha of 91D0 habitat has been found. The site was assessed as being in the good conservation status; no active conservation is necessary. On the base of prepared documentation, two Nature Reserves has been established (the site is divided into two administrative Regions because Nature Reserves are established by Regional Authority, two nature reserves must be established for protection one bog) - and the pSCI Natura 2000 border has been corrected to embrace the whole peatbog.

Site 17 (Karsibórz) - Nature inventory has been prepared. The conservation form of the site - "nature & landscape area" (according to Polish nature conservation law) was

assessed as optimal. Also Standard Data Form for Natura 2000 was prepared. Needs of conservation actions have been assessed (ditches blocking). The site is dominated by 91D0 habitat. The site was submitted officially as pSCI o the Natura 2000

Site 19 (Reptowo) - Nature inventory has been prepared. Documentation for formal protection as "nature & landscape area" has been prepared. The site was found as rather strongly degraded. There is not 7110 habitat, only degraded 91D0, which needs restoration. Needs of conservation actions have been identified more precisely. On the base of the documentation, the Nature & Landscape Area has been established. The site is expected to be submitted as pSCI to the Natura 2000 when habitat restoration appears successful (conservation actions necessary for this was completed – see action C1 and C2).

Site 20 (Łazy) - Nature inventory has been prepared. It appears the site is more valuable then expected and should be protected as nature reserve, therefore documentation for nature reserve establishing has been also prepared. Also Standard Data Form for Natura 2000 (as part of bigger site Bukowo Lake) hs been prepared. Conservation needs has been assessed more precisely. Ca 100 ha of 91D0 habitat was found, with small areas of 7110 and 7120. Some important for biodiversity localities of plants rare in Poland (*Myrica gale*, *Dactylorhiza fuchsii*) has been found found. On the base of prepared documentation, the Nature Reserve has been established. The site has been submitted officially as pSCI o the Natura 2000.

Site 21 (Święta) - Nature inventory has been prepared. Needs of conservation actions was assessed more precisely and corrected (ditches blocking has been identified as necessary). The site is dominated by the 91D0 and small fragments of 7120 habitat. Two existing nature reserves have been, as a result of prepared documentation, integrated into single one. Standard Data Form was prepared and the site has been submitted officially as pSCI to the Natura 2000.

Site 22 (Świdne Bagno) - Nature inventory has been prepared. The site was found as rather strongly degraded. There are only degraded 91D0 there, without any chance for restoration (no possibility of ditches blocking). The site is a part of pSCI Natura 2000 and is practically excluded from forest management, no more national protection forms seems to be necessary.

Site 23 (Wielkie Bagno) - Nature inventory has been prepared. Formal documentation for conservation as "ecological ground" has been prepared. 6 ha of 7110 habitat and 21ha of 91D0 habitat were found. Needs of conservation actions (trees removing) has been assessed more precisely and corrected. On the base of prepared documentation, Ecological Ground has been established. The site has been submitted to the Natura 2000 as part of pSCI Jeziora Szczecineckie.

As a result of the action, 8 Nature Inventory Reports have been elaborated (exactly as foreseen). For 3 sites existing national protection status were assessed as optimal. 1 sites was proposed as Ecological Ground, 1 site was proposed as Nature & Landscape Area and 3 sites were assessed as worth of protection as Nature Reserves. All sites were identified as worth of including to Natura 2000, or immediately or after restoration.

All new conservation forms, identified as necessary as a result of action (1 Ecological Ground, 1 Nature-Landscape Area and 4 Nature Reserves), were formally established. Paralelly, the documentation for sites submission as pSCI to Natura 2000 has been prepared (SDFs prepared or updated). All project sites (with only exception of site 19) have been submitted to Natura 2000 by Polish government as a result.

Action A1 was initially foreseen as preparing documentation for establishing “smaller” conservation forms – as Ecological Grounds or NLA. But, as indicated above, for some sites (7, 13, 20), natural features identified as a result of the survey, appear to be more valuable as expected. In such case, the basic nature inventory was upgraded to Nature Reserve proposal documentation (similar as prepared under A2 action) and the Nature Reserves were established. In such cases, the action output is not clearly distinguishable with the output of action A2. Therefore results of A1 and A2 actions (all new conservation forms established) are summarised together below, in A2 action description. The present status of project sites designation as protection forms and Natura 2000 is also summarised in a table in chapter 6 – this table indicates national protection status of all the sites and, whether this status has been obtained as a result of LIFE project activities or already before, or outside the scope of the LIFE project

According to the time schedule, the action is planned to be finished before 2005 Jan 30. Although small delays appears in the practical implementation, finally action was completed for all bogs as planned.

As a result of more precise inventory, in some cases Natura 2000 habitats have been identified and assessed more precisely. Habitat maps have been prepared. Also in some cases the conservation needs have been more precisely assessed and corrected. Also conservation needs have been in some cases identified more precisely; as a result small modification in details of localisation of conservation actions (see C1, C2 and C3 action description).

As a result of this action, the gap of insufficient knowledge about some sites nature (habitats, flora, fauna, basic stratygraphy and hydrology) have been fulfilled. Summary of results are included to "Polish Baltic Bogs Catalog", which is a part of Baltic Raised Bogs Habitat Action Plan (see Action A5).

The documentations are important base for discussion with stakeholders (see E2 action). A lot of hard and electronic copies of the documentations had to be disseminated.

All nature inventory reports prepared under this action are attached in electronic forms in Annex 6 (site by site, together with results of A2 and A3 action - as subfolders called “documentation”). All Natura 2000 SDFs prepared or updated are also attached in Annex 6. English summary of the documentations are attached also as a hard copy (site by site – together with the results of A2 and A3 action). Copy of decrees establishing protection forms (fragments of appropriate Official Journals) are attached as pdf files together with documentation and also as a hard copy.

Action has been partially subcontracted (as planned), but partially done by project staff. Subcontractors has been selected in a tender procedure.

The action costs include:

- § cost of subcontracting (external service);
- § costs of materials for preparing and printing documentations and maps, copying service etc.
- § costs of purchase maps and aerial photos etc
- § costs of travels to sites

Protected Natural Areas (selected) according to Polish legislation:

- Nature Reserve (NR) - created by the regional administration. It is a designation of area for nature conservation only. It is "high level form". Detail documentation is necessary for establishing. Management plan is prepared obligatory and established by the regional administration with Ministry consultation;
- Ecological Ground (EG) - created or by regional or by local administration. It is a designation of area for nature conservation only, but it is "lower level form". Not so detail documentation is necessary for establishing. There is no obligation to prepare management plan, but active conservation action may be prescribed in the act establishing this form.
- Nature & Landscape Area (NLA) - created or by regional or by local administration. It is area with combined nature conservation and agricultural or forest management, but as a rule not very intensive. It is "lower level form". Not so detail documentation is necessary for establishing. There is no obligation to prepare management plan, but active conservation action may be prescribed in the act establishing this form.

All forms described above are established by special decree of Regional Authority, published in Official Journal.

Natura 2000 designation and national conservation forms in Poland are independent, i.e. site may be designated as Natura 2000 site even it is not protected by any national form.

ACTION A.2:

Name of action: **Preparation of formal documentations for Nature Reserve establishing**

Plan:

For sites proposed as Nature Reserves, detailed inventory, containing about its nature, ecology and hydrology, inventory of natural values (flora, fauna, habitats detailed map) should be prepared, including analysis of the peat deposit stratigraphy, water and peat chemical composition, and peatbog history and ecology will be included. Old maps, historical aerial photographs and contemporary aerial photos should be used for site history analysis. Peat borer analysis will be used for peat stratigraphy. Documents on ownership status, relations to the forest management plan, water management plan, land use plan should be included. This documentation should be presented in format appropriate and complete for Nature Reserve establishing by competent authority.

Activities & outputs:

Action has been finished for all planned sites:

Site 1 (Słowińskie Bagno) – Documentation has been prepared and Nature Reserve has been formally established on the base of this documentation.

Site 3 (Kusowskie Bagno) - Documentation has been prepared and Nature Reserve has been formally established on the base of this documentation. Additionally small Ecological Ground has been established on the remaining part of the peatbog.

Site 7 southern part (Czarne Bagno) - documentation has been prepared although not foreseen initially. The site was identified as needing protection as nature reserve for achieving the site conservation objective. And the Nature Reserve has been formally established on the base of this documentation.

For site 14 (Warnie Bagno), documentation has been prepared although not foreseen initially. The site was identified as needing protection as big nature reserve for achieving the site conservation objective. Existing small (40 ha) Nature reserve "wierzchomińskie

Bagno” had to be supplemented by new, 500 ha reserve. And the Nature Reserve has been formally established on the base of prepared documentation.

Site 15 (Stramniczka) - Documentation has been and Nature Reserve has been formally established on the base of this documentation.

Site 16 (Roby) - Documentation has been prepared and Nature Reserve has been formally established on the base of this documentation.

For site 9, the action was foreseen in the application, and documentation was prepared (under the partner’s responsibility) and nature reserve was established, but after more detail analyze of the documentation provided by our Partner we found that in fact the documentation was prepared before the project starting date. Therefore we not claim this action cost to the project budget and cannot report the result as project output (although missingly reported before).

As a result of this action, 6 documentations have been prepared (with comparison against 5 foreseen).

As indicated above, as a result of Action 1, some sites have been assessed as more valuable and worth protection as nature reserves, for Łebskie Bagno, Zaleskie Bagno and Łazy (site 7, 13 and 20 the basic inventory have been extended and supplemented by necessary formal documents (copies of land registers, land register maps, more detailed justification of the protection needs etc). Such upgraded results of A1 action (3 documentation for establishing 4 nature reserves) are not clearly distinguishable with the output of A2 action and are indicated together in summarised table below..

The documentations are important base for discussion with stakeholders (see E2 action). A lot of hard and electronic copies of the documentations had to be disseminated.

All 6 nature reserves proposed as a result of the action have been formally established on base of prepared documentation.

All nature inventory reports prepared under this action are attached in electronic forms in Annex 6 (site by site, together with results of A2 and A3 action - as subfolders called “documentation”). All Natura 2000 SDFs prepared or updated are also attached in Annex 6. English summary of the documentations are attached also as a hard copy (site by site – together with the results of A2 and A3 action). Copy of decrees establishing protection forms (fragments of appropriate Official Journals) are attached as pdf files together with documentation and also as a hard copy.

As planned, action has been partially subcontracted. Subcontractors has been selected in a tender procedure. Action has been executed under the responsibility of Beneficiary (sites 1,3, 14, 15, 16) and partially under the responsibility of the Partner – Pomorski Urząd Wojewódzki (site 7).

The action costs contains:

- § the external assistance cost;
- § some costs of project staff and travels to the sites
- § some costs of materials (paper, maps, aerial photos)

The documentations are important base for discussion with stakeholders (see E2 action). A lot of hard and CDs copies of the documentations had to be printed and disseminated.

Achieved results of A1 and A2 actions together (all new conservation forms established) are summarised below. The present status of project sites designation as protection forms and Natura 2000 is also summarised in a table in chapter 6 – this table indicates national protection status of all the sites and, whether this status has been obtained as a result of LIFE project activities or already before, or outside the scope of the LIFE project

The final list of new national protection forms established as a result of project activities (together A1 and A2 action) is as following:

Project Site No	Name	Protection form	Date of formal establishing	Area (ha)	Documentation prepared under action:
1	Słowińskie Błota	Nature Reserve	25.09.2005	192,55	A2
3	Bagno Kusowo	Nature Reserve	25.05.2005	326,56	A2
	Kusowskie Bagna	Ecological Ground	31.03.2006	8,99	A2
7	Czarne Bagno	Nature Reserve	03.04.2006	102,86	A2
7	Łebskie Bagno	Nature Reserve	03.04.2006	111,54	A1
9	Warnie Bagno	Nature Reserve	25.09.2005	518,92	A2
13	Zaleskie Bagna (zachodniopomorskie)	Nature Reserve	27.09.2006	114,24	A1
	Zaleskie Bagna (pomorskie)	Nature Reserve	04.12.2006	287,75	A1
15	Stramniczka	Nature Reserve	27.09.2007	94,49	A2
16	Roby	Nature Reserve	27.09.2007	84,40	A2
19	Reptowo	Nature-Landscape Complex	29.03.2007	580,66	A1
20	Łazy	Nature Reserve	03.08.2007	220,13	A1
23	Wielkie Błoto k. Wierzchowa	Ecological Ground	31.03-2006	34,51	A1
TOTAL				2677,60	

Totally, as a result of action A1 and A2 together, 10 new Nature Reserves, 1 NLA and 2 Ecological Grounds covering total 2677 ha were established (much more than initially foreseen).

As a result of Action A1 and A2, all project sites on the project end benefit the most appropriate legal protection under national law – as required by the LIFE'2004 ruled for Poland: *“in the candidate countries associated to LIFE the targeted sites should already benefit from the most appropriate legal protection under national law or there must be a formal commitment from the competent authority under national law to put in place such a legal protection before the end of the project”*. Additionally, all sites, with only one exception, benefit the official submitting to the Natura 2000 network..

ACTION A.3:

Name of action: **Preparation of site management plans for Nature Reserves**

Plan:

For all Nature Reserves, with exception of sites 8 and 18 (for this reserves management plans are elaborated and established yet) detailed site management plans should be elaborated. Necessary field inventory should be completed.

Activities & outputs:

Management plans in Poland are prepared for all Nature Reserves. First, preparing of detail nature documentation (management plan documentation) is necessary (analyze of flora, fauna, vegetation, formal requirements) There are national requirements for such documentation contents and quality. Then the shorter management plan document is prepared, containing description of threats and conservation action. It can be:

- the long-term management plan (*Plan ochrony*), prepared for 20 years, or;
- the short-term management plan (*Zadania ochronne*), for 1-5 years (if the long-term management plan not exists, for example if it is difficult to plan management for longer period),

The both kinds of plans are adopted by Regional Authority.

The plan is necessary for implementing such conservation actions, which are normally forbidden in nature reserves (for example trees cutting and removing or changing water conditions).

In frames of action A3, documentation for managements plans have been prepared for all nature reserves, i.e. for the sites: 1, 2, 3, 4, 5, 6, 7a, 7b, 9, 10, 11, 12, 14, 15, 16, 20, 21. For site 7, where two nature reserves exists, two documentation were prepared and two separate plans were adopted of course. For site 21, the documentation was prepared although not foreseen initially, because "additional" nature reserve was created. For site 21, the documentation was not foreseen missingly, but of course was necessary for existing nature reserve management and was prepared.

The regional nature conservation authorities confirms formally that these documentations are fulfilling the national legislation requirements

On the base of this documentation:

- long term (20 years) management plans were adopted for 8 nature reserves on sites: 4, 5, 7a, 7b, 10, 11, 12.
- short term management plans were adopted for 9 nature reserves protecting the sites: 1, 2, 3, 6, 9, 14, 15, 16, 20, 21 (for these sites, nature dynamics was found as not fully predictable for long, 20-years period – future conservation should demand on result of present conservation actions).

Long term management planning appears not always possible, The nature reserves management must be in most cases, the "adaptative management", reacting flexible for the monitoring results. For all these cases, monitoring sustainability is guaranted (see description of F2 action and chapter 6)

Additionally:

- the old management plan for the site 18 has been updated accordingly to present legal regulations;
- long-term (20 years) management plan was adopted for the site 8, on the base of documentation prepared before the project.

It means that management plans for all nature reserves have been completed, with exception only of site 13, where "additional" nature reserves have been established during the project. But also for this site, preparing of management plan has been contracted by the regional authority as "after-LIFE" activity.

Conservation actions, foreseen in management plans, are partially implemented in the scope of LIFE project (as C1-C3 or D1 action). All not implemented actions are included to After-LIFE conservation plan and are expected to be implemented in 2008-2010 years.

All finally adopted management plans and its documentations are attached in the electronic form in Annex 6. The plans are collected site by site, in subfolders "Mgm plan".

Documents of management plans, with official confirmation of it's adoption by Regional Authority (which is responsible for this), are attached also as paper copy.

As a result of more precise inventory during preparing management plans, in some cases Natura 2000 habitats have been identified and assessed more precisely. Habitat maps have been prepared. Also conservation needs have been in some cases identified more precisely; as a result small modification in details of localisation of conservation actions (see next chapters) was necessary.

Additionally, we also lobby for including needs of conservation actions, identified in 15 (Stramniczka) and 16 (Roby) sites, to management plan for Natura 2000 for "Trzebiatowsko-Kołobrzeski Pas Nadmorski". The pilot management plan for Natura 2000 has been prepared in 2004 y. by Agrotec consortium for the Polish Ministry of Environment in frames of PHARE project. This management plan was outside the scope of our project, but we found it necessary to harmonize it with our planned actions. As a result of our lobbying, necessary actions for Baltic bogs - sites 15 and 16 – have been included to the proposal of Natura 2000 management plan.

Additionally, we also take part of workshops for preparing "local collaboration plans" for selected Natura 2000 sites, containing our bogs. These workshops were organized in frames of TRANSITION FACILITY Project "PL2004/IB/EN/03: *Elaboration of plans for re-naturalisation of natural habitats and habitats of fauna and flora species in Natura 2000 sites and elaboration of management plans for certain species in Birds Directive and Habitats Directive*". Our project sites: 3 (Bagno Kusowo), 10 (Izbickie Bagno), 9 (Wierzchucino) and 23 (Wielkie Błoto k. Wierzchowa) have been targeted by TF project. These plans were out of scope of our LIFE project, but we achieve inclusion of our conservation needs to the plans.

In both described above cases linking with PHARE projects, there is no budget interferration with the other EU-founded project.

The action has been implemented under the responsibility of Partners: Pomorski and Zachodniopomorski Urząd Wojewódzki) and partially under the responsibility of Beneficiary:

- § Pomorski Urząd Wojewódzki has been responsible for sites 4, 5, 6, 7a, 7b, 9, 10, 11, 12,
- § Zachodniopomorski Urząd Wojewódzki has been responsible for sites: 2, 14, 21
- § Klub Przyrodników has been responsible for sites: 1, 3, 15, 16, 20

The parts under responsibility of partners have been subcontracted (According to Polish law regulations and administration practices, actions taken under the responsibility of public bodies (Partner!) should be subcontracted). The contractors have been selected in public tender procedures. The part under responsibility of beneficiary has been implemented by project staff.

The action costs contains:

- § the external assistance cost;
- § some costs of project staff and travels to the sites

§ some costs of materials (paper, maps, aerial photos).

The documentations are important base for discussion with stakeholders (see E2 action). A lot of hard and CDs copies of the documentations had to be printed and disseminated.

ACTION A.4:

Name of action: Preparation of technical projects for water damming up and sluices building and permissions receiving

Plan:

Technical projects of water damming up and technical project of building sluices should be prepared, according to Polish water and building law regulations. Approved engineer must elaborate and sign the projects. If the authority will demand, participation in public "water management debate" may be necessary.

Activities & outputs:

According to Polish law regulations, for water damming up, so called "Water permission" is necessary. Application for that permission must contain detail technical project of action with its assessment for water resources.

In most cases (especially in nature reserves) also building permission is necessary. Application for that permission must contain detail technical project. As a result, preparing of necessary technical project for water damming is necessary, some months before planned conservation action execution.

There were some problems with implementation of these action: Because of no practical experiences existing in Poland for planning and building dispersed small dams for nature conservation in nature reserves, the procedure was not fully predictable. During the procedure for building permit, purchasing of official, very detailed maps 1:2000 for each reserve has been requested by building authority. For forests and bogs purchase of such maps is time-consuming and expensive, because ready maps usually do not exist and must be specially prepared by cartographic and cadastre authority. We are also requested to purchase official data from land cadaster.

The negotiations for not so rigorous interpretation have not been successful. Even Ministry of Environment (asked for help) cannot solve this problem and to achieve not so strict interpretation of existing regulations. The necessary amendments for changing this regulation are initiated, but it probably will not be implemented in predictable future. Waiting for legislation changes would block the project execution and thus was not acceptable for us. In this situation, we had to fulfill the building authority requirements and purchase official maps and data, even if expensive.

Fortunately, it was possible without substantial changes in budget, before we find other costs overestimated in the initial application. We could buy necessary maps and data using saved money.

Problems describes above caused some month delay in preparing technical documentation and in the implementation of building damming barriers (C1 action). Three month project prolongation was necessary to solve this problem and was accepted by the Commission..

Finally all problems have been solved and all necessary permissions have been achieved. On the base of achieved permits, all conservation actions (C1) have been fully implemented (see next chapters).

As a result of action, technical documentations for preparing the conservation actions for 13 sites have been produced (sites 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 14, 17, 19). But the action output should not be analysed as stand-alone – this is preparatory action for C1, which is also successfully completed

The action has been executed mainly under the responsibility of beneficiary, but for bogs 1 and 2 also under the responsibility of Partner (Zachodniopomorski Urząd Wojewódzki), and for site 19 – under the responsibility of other partner - Forest District Kliniska.

The action costs contains:

- § the external assistance cost;
- § official maps and data from land cadaster purchase costs
- § costs of project staff, travels to the sites and travels to competent authorities
- § other costs – administration fees.

ACTION A.5:

Name of action: **Preparation of Regional Habitat Action Plan for baltic raised bogs conservation in Pomerania, Poland**

Plan::

Analysis of all baltic raised bog resources in the region should be completed and summarised. Habitat Action Plan in a standard HAP format should be elaborated, presenting general perspective and necessary actions.

Activities & outputs:

First version of Habitat Action Plan for baltic raised bogs in Poland has been prepared on the beginning of the project. It has been presented during the 1st workshop (see action E3) 15-16 Nov 2004 and discussed. The Plan contains also the catalog of Polish baltic raised bogs, which is and will be continuously modified, according to increasing knowledge about particular sites. Current status of the baltic raised bogs in Poland was found as not favourable. Most of raised bogs are unprotected. Most of them are artificially drained. The main important current factors affecting habitat is draining, but in order to stop it there is a need there is as a need for establishing formal nature protection form, and long negotiations for ditches blocking are necessary. There is a lot of important bureaucracy barriers. Main objectives of the HAP are: formal protection of all preserved baltic raised bogs (necessary for conservation actions) and stopping artificial draining.

The second revised draft of the HAP has been prepared in 2006 and has been discussed during the 2nd workshop (see E3). The updated version was published on the project website (see action E5) and also described in the published Handbook (see action E4).

The final version of Plan has been prepared in 2007 and has been discussed during the closing workshop in Sasino, 28-29 Sept. 2007 (see action E3), as a part of discussion about future of Baltic bogs conservation. The final version was published on the website (http://www.kp.org.pl/plbaltbogs/hap_03.pdf) and its's summary was described in the Scientific report (see action E7).

It should be accented, that one of the targets established in the 2nd version of the HAP – appropriate implementation of the Baltic bogs to the Natura 2000 network – has been achieved before the project end and is no longer considered as “objective for future” in the HAP final version

The plan was disseminated to all discussion participants and all targeted institutions.

Although in Poland there is no formal procedure for adoption Habitat Action Plans, and no official status for its, the plan will be useful for all targeted stakeholders. During the discussion, we achieve agreement for necessity of Baltic bog's conservation and all participants agree to implement some actions.

Agreed Habitat Action Plan is also the context for After-LIFE working plan, which was also discussed during the Sasino workshop. The After-LIFE working plan (see chapter 8 of this record) is a short-term implementation plan for future implementation Habitat Action Plan for sites which were targeted by the LIFE project.

For final HAP see Annex 7

The action has been executed under the Klub Przyrodników responsibility. There are only project staff costs related to this action.

C. - Non-recurring biotope management

ACTION C.1:

Name of action: **Blocking draining ditches**

Plan:

Ca 410 small, simple barriers and dams have been planned to be built to block draining ditches on the peatbogs and damming up the water level. Ca 2200 m of draining ditches have been planned to be filled up by local material – peat and soil.

Activities & outputs:

This is the key action of the project, crucial for its success and for ecological results.

The action implementation has been little modified in details, as a result of more detailed conservation needs recognition. As a result of preparing detailed management plans for sites (see action A3), and better recognition of the water blocking needs and particular bogs ecohydrology, some details - as dams number & location - have been modified, without changing nor general project objective nor sites objectives.

As a result of long negotiations with the water & building administration (see action A4), some detail technical solutions have been modified, but without modification of objectives and expected hydrological results.

- On site 1 (Slowinskie Blota) it has been recognized that building additional dams would be better solution than ditches filling (which is almost filled naturally);
- On site 2 (Janiewickie Bagno) it has been recognized that less number of barriers should be enough for achieving hydrological effect;
- On the site 3, filling of short fragment of ditch has been identified as more appropriate from the formal point of view (the same or better hydrological and ecological results, bigger cost of action but much lower costs preparing formal documentation);
- On site 4 more smaller barriers were necessary for achieving the site conservation objectives;

- On site 5 more smaller barriers were necessary for achieving the site conservation objectives;
- On site 6 (Bielawa), by contrast, in a management plan, as a result of hydrological studies, it has been recognized that ditches filling will be more appropriate than numerous dams building (water escape to the underlying mineral layers, cutted by ditches, has been identified as main problem - not water escape along the ditches). On this sites it has also been recognized to build ca 1000 m of simple, earth dam, to block surface water outflow.
- On site 7 (Czarne Bagno) it has been recognized that building additional dams would be better solution than ditches filling (which is almost filled naturally);
- On the site 8 it was recognized existing barriers (built in 2002 y, before the LIFE project, as a result of our previous activities) must be heightened for achieving the site conservation objectives.
- On the site 9, the detailed location of barriers had to be modified,
- On the site 10 it was identified that ditches blocking by building damming barriers is necessary for achieving conservation objectives, although not foreseen initially,
- On the site 12 it has been recognized less number of barriers should be enough to achieve hydrological effect;
- On the site 14, the detailed location of barriers had to be modified,
- On site 21 we previously not plan to block ditches because of conflict with white-tailed eagle nesting place conservation - but after more detailed studies the solution has been found and the dams building was planned;

These changes are not followed by decreasing expected summarized project output nor change of project objectives. They were necessary for achieving the sites conservation objectives. Described changes have character of technical adjustments and modifications, as a result of better information obtained through monitoring and management planning. These changes have been reported in interim report, and provisionally commented by the Commission as technically acceptable.

Finally, the action was implemented on all bogs for which it was foreseen, although sometimes with some technical adjustments. Additionally, on the sites 8, 10 and 21 the damming barriers were identified as necessary (as a result of obtaining more detailed information in the scope of project) and were built or heightened, although not foreseen initially.

The final action implementation, after necessary adjustments, was as following:

Site No	Peatbog name	Sliuces (damming barriers) building Number of built damming facilities			Ditches filling Lenght of ditches fillied (m)		
		Wooden barriers built	Barriers heightened	Peat barriers built	Ditches filling	Ditches partial filling	Dams
1	Słowińskie	7		35			
2	Janiewickie B.	18					
3	Kusowo B.	20			120		
4	Staniszewskie B.	39					
5	Kurze Grzędy	61					
6	Bielawa	18			1155	2850	1050
7a	Czarne Bagno	101					
7b	Łebskie Bagno	62					

8	Chośnickie		11				
9	Wierzchucino	17					
10	Izbickie	40		83			
11	Pobłocie	27					
12	Las Górkowski			12			
14	Warnie B.			32			
17	Karsibórz	10					
19	Reptowo	21					
21	Olszanka	99		11			
	Total	540	11	173	1275	2850	1050

As a result of described technical adjustments, generally more damming barriers were necessary to be built than foreseen. Generally, according to management plans, more smaller barriers have been identified as more appropriate than less bigger barriers and the action has been implemented this way. Finally, water outflow have been blocked in ca 724 points, using various types of damming facilities – in comparison against 410 foreseen. Although we try to save money and we achieved lower individual cost of individual barrier, the general cost of action was overspend. This financial needs were covered using money saved from other actions and categories, especially money saved from overheads. As a result, in project budget the changes caused overspending in the external assistance category, although this overspending (ca 6,50%) is still not substantial in the sense of the article 13.2 of the SAP.

Used technical solutions for blocking outflow are as following:

- Permanent wooden barriers have been used more commonly. Low costs, easy assembling, smooth adjustment to environmental conditions and relatively high durability those are the reasons which often spoke for application of this technical solution.

Such barriers provided guarantee stopping excessive water outflow or water lifting on 2 - 4 m wide ditches. Thick (4-5 cm) although not too much (10-15 cm) wide, various length (1.5 - 2 m) feather key boards were used as the basic material for their construction. Hardwood, mainly oak was applied to this end as the construction material under Project. Natural decay of the material after several dozen years was expected until the moment when the ditch blocked becomes entirely overgrown was one of the Project assumptions. The most commonly applied wall construction technology was to drive home the boards sharpened on their one end, so that when driven single into the ground they could position themselves and hold down the boards which were previously driven. The depth to drive the boards was each time dependent upon both the height of a damming barrier to construct and the ground hardness. In organic ground the depth was even 2-3-fold the damming height. In hard mineral substratum the depth slightly exceeded the damming height.

The construction costs of simple barriers were pretty well differentiated and often resulted from additional constituent elements of the facility in question (e.g. the need to apply fascine, mineral sub-crust, supports in case of wider barriers, etc.) to prevent for instance, bottom erosion at the overflow. When the Project was begun the cost of a simple 2-3 m wide barrier was about 1000 PLN (including about 300 PLN material cost alone), whereas on completion of the Project (September 2007) the cost amounted to about 1500-2000 PLN. Such significant cost rise resulted first and foremost from growing material prices and the labour costs.

- So called double (i.e. wooden-earth or wooden-stone) barriers were one of the most

commonly applied solutions applied under Project. They were constructed on bigger ditches. Such structures formed a cascade composed of two or more wooden walls – i.e. damming barriers separated by space between them that was then filled in with stones, earth or for instance peat, depending upon type of the ground where given barrier was constructed. The stone-earth filling was applied rather on the bog edges, in contact with mineral ground, as a natural substratum component. Peat filling was applied on the sites where barriers were constructed on organic ground - peat. From natural point of view filling the spaces between the walls with low decomposition peat would be more favourable however its acquisition especially for this purpose has been considered unethical activity, because acquisition of not decomposed peat destroy fragment of living peatbog. Therefore decomposed peat (peat-earth) originated from measures carried out before under drainage work, the considerable quantities of which were usually available alongside the ditch edges.

- So called Kartuzy-type barriers were one of many variants of wooden-earth weirs that have been applied in the Staniszewskie Błota and the Kurze Grzędy reserves. These barriers were for the first time at a small scale used a dozen years ago just on the bogs in the Kartuzy Forest Inspectorate as mentioned before. Such type barrier consists of two perpendicular walls made of horizontally laid logs and the space between them filled in with earth or peat. Wooden gutters were positioned on the surface of this structure to provide for water flow and at the same prevent erosion of the material batch between the walls. It seems that the barriers of this type perform the best in newly dug ditches, whereas in silted up ones it was indispensable to secure leaktightness of this structure by means of either getting off the sediments accumulated on the bottom, or providing the structure with tight waterproof wooden board wall.

Technical solutions of various types of wooden barrier are exemplified in Annex 2.

- We make also experiment with plastic barriers. Their advantage consist in their weight – they are considerably lighter and easier in transportation (carrying an oak board 2 m long and 5 cm thick at a distance often longer than 200-300 metres involves much effort to be done by an individual). Unfortunately, the construction costs of this type of weirs are not lower than in case wooden weirs. They were applied experimentally under Project to construct single damming on the Olszanka bog. However, too short operating period of the solution of such type does not provide for assessment of its durability. Also, due to aesthetic reason, this solution has not been applied commonly, and the sites where they were applied have been masked with natural materials (wood, earth, peat, etc.).
- Peat-made barriers were applied on many sites under Project as a measure for durable blocking of the canals and drainage ditches in the bogs. Filling of the ditch on about 2-10 m distance, and sometimes packing the space in between two wooden walls, was applied mostly often. Such solutions perform very well on weak flow watercourses, but this type earth plugs could be however too less resistant to washing out by the higher water stages. The peat dams were applied under Project inter alia in the Janiewickie Bagno and the Słowińskie Błota.

Generally, for standard dams, natural materials (wood, stones, peat) are used. Only in exceptional cases (only if it is condition of agreement with water management authority or neighbouring stakeholders), we use concrete as building material.

Due to various reasons, construction of wooden barriers upon the experience gained seems the best solution, particularly when considering the cost-effectiveness ratio. The solution is relatively inexpensive (provides for quite broad transportation opportunities and low material costs), durable and aesthetic and secures the effects expected. Given the limited percolates through peat deposit next to wooden wall, the reduced erosion and durability of the structure, the double weirs provide for the best performance. The fact is also essential

that in case of the double weir, even when one of its walls becomes damaged or its faulty construction, the action undertaken is not being wasted.

However in legal sense, construction of the wooden barriers does mean implementation of waterworks that requires the respective permit to be granted under Water Law, and yet for Nature Reserves and their protective zones, additional construction permits are required which in turn require that very expensive general altitude map of the barrier location place and full building and construction design be drawn up to this end.

The results of blocking ditches for the bog hydrology are carefully monitored (see F2). The first results are promising: see details in F2 action description.

The action have been implemented:

- on site 19 partially by the Partner (Kliniska forest district) and by the Beneficiary (Klub Przyrodników);
- on other sites by the Beneficiary (Klub Przyrodników).

Some high resolution photos presenting the action output are attached in electronic form, as Annex 8.

The action has been subcontracted in a great part. As we explain in the initial proposal, we are organisation experienced in nature conservation, nature management organisation and project leading, but no in technical aspects of such building. This needs special personnel with special technical skills, and special equipment, as caterpillar for example. This technical work, not covered by skills of our personnel, is "normal" work for numerous businesses and can be easily and effectively subcontracted. Subcontracting such work in public tender is the cheapest and the most effective way to ditches blocking. Each other solution, however possible, seems to be less effective and as a result less nature conservation effects could be achieved using the same amount.

We used public tendering for all subcontracting. This was conducted according the Polish Public Tendering Act, part of national legislation. This rules are also a precaution to avoid any risk of a conflict of interests.

We fail in using unemployed people for this action, which we were going to do according to our proposal. As a result of Poland accession to the European Union, unemployment in the project region practically disappears as a result of emigration to Great Britain. Although official statistical data still presents important unemployment level, in practice there are difficulties with finding people ready to work for building works, forest works and trees removing (see also below).

Costs of these actions are:

- costs of external assistance for building the dams & filling the ditches;
- costs of materials for building the dams;
- costs of project personnel & travel for supervising the action implementation.



Fig: Draining ditch blocked on the Slowinskie Bog



Fig: Damming barrier in the Olszanka Nature Reserve



Fig. Small and simple wooden wall



Izbickie Bog – effect of water damming up as a result of outflow blocking.

ACTION C.2:

Name of action: **Trees (birch and pine) removing**

Plan:

On fragments of 9 peatbogs, pine and birch trees invading the former treeless bog, or trees (especially birch) invading the pine bog forest understory should be partially removed. Trees should be cutted and if possible used for filling the small draining ditches, if not possible transported outside the bog. Detailed trees removing area and thinning level should be determined in Site Management Plans prepared in Action A3.

Activities & outputs:

As a result of preparing detailed management plans for sites (see action A3), and better recognition of the trees removing needs on particular sites, some details - as detail localization & area of action - have been modified, without changing nor general project objective nor sites objectives.

On the sites 1 and 7 (Słowińskie Bagno and Łebskie Bagna), as a result of detail Management Plan preparing (see A3), the trees removing has been assessed as not necessary in this moment. After the detail discussion with the scientists, specialists on bog's ecology, and after discussion with the conservation authority (forming the Project Steering Committee), it has been decided to be better to increase the water level (by ditches blocking) and wait for the ecosystem reaction first, monitoring carefully the pine invasion process. There is possibility, that trees expansion process would be stop by hydrological condition. For the bog's ecology, it would be better to achieve necessary results by blocking ditches only, avoiding "invasive" and partially destructive for the site vegetation trees removing. Therefore the action was cancelled on these bogs.

On the sites 6, 4, 5 the area from trees should be removed has been decided to be less than expected before. Because trees removing is rather "drastic" measure, damaging the bog surface, in management plan it has been decided rather to try dam the water up first, with hope some trees die naturally as a result of increased water level. The trees removing need should be reconsidered after some years. Action on these bogs was implemented, but with reduced area of trees removing.

By contrast, as a result of Management Plans or other documentations preparing, and obtaining the more detailed information, trees removing has been identified as necessary on fragments of the sites: 9, 10, 11, 14, 19, and the necessary action was implemented there. . Such need for sites 10, 11, 14 and 14 was reported in the interim report and provisionally accepted by the Commission. For site 9, the need was identified in nature reserve management plan adopted in autumn 2006, and the action was implemented in 2007 year.

For the site 16, trees removing was considered during the management plan discussion, but finally was not implemented in the scope of LIFE project.

These changes are not followed by decreasing expected summarized project output nor change of project objectives They were necessary for achieving the sites conservation objectives. Described changes have character of technical adjustments and modifications, as a result of better information obtained through monitoring and management planning. These changes have been reported in interim report, and provisionally commented by the Commission as technically acceptable.

Because the summarized area of trees removing in the whole project was more or less stabile, the adjustments described above do not cause any substantial budget changes.

On some sites (4, 5, 8, 18) where the action consists of removing understory from the bog forest. Because this understory is composed of mixture of birch and spruce, there is not always clear division between action C2 and C3 (see below). In practice in such situation we contract the mixed understory removing from the defined area, not dividing the contracts for C2 and C3 part. Because of this reason, the quantitative progress we present in the form summarised for C2 and C3 action:

The final quantitative implementation of C2&C3 action is summarized in the table:

Site No	Peatbog name	Area of implementation of trees, undergrowths or sprouts removing (ha)
1	Słowińskie	cancelled
3	Kusowo B.	16
4	Staniszewskie B.	14
5	Kurze Grzędy	37
6	Bielawa	240
7a	Czarne Bagno	cancelled
8	Chońnickie	20
9	Wierzchucino	9
10	Izbickie	288
11	Poblocie	14
14	Warnie B.	14
18	Ciemino	40
19	Reptowo	10
20	Łazy	11
23	Wierzchowo	7
	Total	720



Fig: Birch removing from the wet heathland and transition bog (7140) on the Bielawa bog site



Fig: Izbickie Bog – during the trees removing



Izbickie bog – wet heaths after the trees removing



Trees removing areas visible on the satellite photo (www.zumi.pl)

The action in the sites 4, 5, 6, 8, 10, 11, 14, 18, is under responsibility of Klub Przyrodników, on the sites 3 and 23 - under the responsibility of Nadlesnictwo Szczecinek (project partner) and on the site 19 - under the responsibility of Nadlesnictwo Kliniska (project partner).

In the initial proposal, we were going to subcontract all this action (For cutting trees specify skills are needed. Subcontracting this work in a form of public tender is easier and cheaper, than qualified workers employment). The action has been subcontracted in a great part, as planned Contractors have been selected in a public tender procedure. But on the Bielawa Bog (site 6) small part of this action has been executed by organizing a voluntary work (it has not been planned in the project, but we use new possibilities to make it cheaper, also linking with the public awareness building). This situation was reported in the progress report and interim report. In collaboration with the regional nature conservation administration, the volunteers have been recruited (mainly students from the different places in Poland), and the volunteers accommodation & feeding have been arranged. As a result of voluntary work ca 30 ha of birch have been removed. This is good way of action execution (additional "social effect" and building public awareness; lower costs per ha), but only some fragments of bogs are appropriate for this method (other fragments are too difficult for volunteers). As a result of executing part of this action by voluntary work, not by subcontracting, some little modification in costs categories appears (costs of volunteers travel to site, accommodation, feeding, insurance and costs of materials in place of subcontracting costs). Of course in kinds work is not included to project budget, only real costs of this work organization. Related budget changes are small and no significant in categories of general budget breakout

Some photo documentation (high resolution photos) of the action is presented in Annex 10.

ACTION C.3:

Name of action: **Alien (spruce) removing**

Plan:

On two bogs (site 4 and 5) spruce trees invading the bog should be removed. Trees should be cutted and transported outside the bog.

Activities & outputs:

As a result of more detail management planning, we identify that:

- Although all spruce trees from the sites 4 and 5 should be removed finally, the removing them from all sites area will be too dangerous for the general bog forest ecology. In management Plan it has been decided, that the process of trees removing from these sites should be extended to a longer time period. In frames of LIFE project, only first part of this action can be and has been executed.
- There is also the need to remove spruce from parts of sites 8 and 18.
- On all targeted sites, both spruce and birch should be removed from the bog forest understory. In practice, there are some difficulties in clear division between action C2 and C3 (see explanation above). Therefore the quantitative progress of the action we present in the form summarised for C2 and C3 action (see above).

These changes are not followed by decreasing expected summarized project output nor change of project objectives. They were necessary for achieving the sites conservation objectives. Described changes have character of technical adjustments and modifications, as a result of better information obtained through monitoring and management planning. These changes have been reported in interim report, and provisionally commented by the Commission as technically acceptable.

As planned, action has been subcontracted (For cutting trees specify skills are needed. Subcontracting this work in a form of public tender is easier and cheaper, than qualified workers employment. Contractors have been selected in public tender procedures.



*Fig. Bog forest (habitat 91D0) after removing the birch and spruce understory
Ciemino Bog (site 18)*

ACTION C.4:

Name of action: **Experiment on *Sphagnum* transplantation**

Plan:

On the site 7 – Czarne Bagno an experiment is planned: in desiccated and degraded part of the bog a peat earth and a dry degraded peat layer will be removed, and used for filling

ditch fragment (link to C1). Then living *Sphagnum* will be transplanted from the other parts of the same bog.

Activities & outputs:

The experimental reintroduction of peatmosses was carried out in the Czarne Bagno reserve in the total 0.9 ha area in two seasons:

- late autumn (30 November 2006);
- late spring (13 June 2007).

In both cases, the same set of species was applied: *Sphagnum palustre*, *S. magellanicum*, *S. russowii*, *S. rubellum*, *S. fallax* and *S. cuspidatum*. Material of *S. fallax* and *S. cuspidatum* was the local origination, whereas that of other species was taken from other bogs. When making the choice the legal procedure in force was complied with (permit was granted by the Pomeranian Voivode to acquire and reintroduce the partly protected *Sphagnum fallax* species, permit was granted also by Minister of the Environment in case of other species under strict protection). The material was collected manually in such a way that at least a half of the local resources be left on the place harvested.

The experimental grounds were prepared in the following manner:

1. The peat-earth and peat layers in 10, 30 and 50 cm depth were removed from the pit surface in order to achieve differentiated humidity.
2. Each of the surfaces achieved in the aforementioned manner was structured into three parts:
 - the first was designated for introduction of peatmosses directly onto bare peat deposit,
 - on the second, the polymer named AgroHydroGel being water absorbing preparation and stabilising soil humidity was applied and mixed with peat prior to introduction of peatmosses; the preparation dose amounted to 25g/1m²,
 - the same preparation dose amounting to 40g/m² was applied throughout the third surface.
3. Experimental plots for all 6 species being introduced into the experiment were designated on each of so prepared surfaces.
4. The vegetation material in form of entire sprouts of particular peatmoss species was manually applied throughout the plots and then covered with losses applied straw layer preventing against desiccation, blowing with the wind, and freezing.

Piezometer was installed on the experimental surface and the water level readings are taken therefrom once two weeks.

Irrespective the peatmoss reintroduction method as presented above 3 additional small survey plots were designated on which peatmosses were planted in form of communities containing 100 sprouts each. The same species likewise on the basic surfaces were reintroduced on these small plots, and additionally *Sphagnum fuscum* was introduced. The same variants with or without addition of AgroHydroGel were also used.

On the surface prepared on 30 November 2006 the first inspection was carried out on 17 January 2007. The bog was in that time neither frozen nor snowed and water stagnated on a part of it. All peatmoss species, irrespective any humidity variant, were in very good condition and a part of them renewed growing.

The subsequent inspection was carried out in late May 2007, during heavy drought and after high air temperature longed for several weeks. The most species were clearly desiccated superficially and only the specimens on the best waterlogged sites did not reveal any reduced vitality.

Another inspection carried out on 21 June 2007 showed that in terms of vitality the plants introduced in last year autumn and those introduced on 13 June 2007 are in similar condition, i.e. very heavily desiccated. That state occurred after three week long warm weather and lacking rainfall.

The last inspection which was carried out on 11 August 2007 after torrential rains showed that all the peatmoss species, irrespective the humidity variant and the AgroHydroGelu dose, have revived and begun growing. At the same time, it was found that on the sites where material was subject to full exposure to sunlight a part of peatmoss heads was apparently damaged by excessive sunshine. The subsequent inspection will show whether the damage has been persistent or rather transitional only.

To summarise the observations carried out so far the conclusion is that there are favourable conditions in the Czarne Bagno reserve for successful management of peatmoss reintroduction in the post-mining pit. Given the water damming which was began on the bog, the tempo and effectiveness of this reintroduction will require year-longing observations while linked to both the measurements of the water level and dynamics on the bog and the course of meteorological phenomena.

If the methodology of peatmosses reintroduction will appear successful, it can be used for renaturalisation numerous Baltic bogs, degraded by peat excavation. Necessity of renaturalisation of such bogs and necessity of elaborating appropriate method of its renaturalisation are mentioned in Baltic Bogs Habitat Action Plan as one of the plan objectives.

The method, if will appears successful, can be also transferred to other Central European countries.

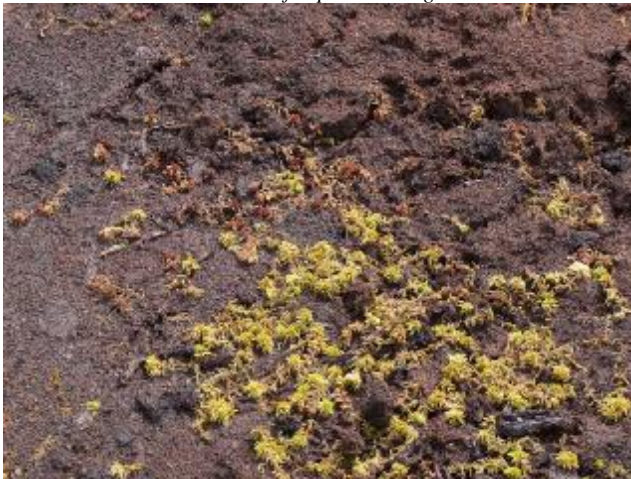
Because all peatmosses are protected in Poland, special permissions from the Regional Authority and Ministry of Environment have been necessary for this action implementation (especially for collecting the peatmosses). They have been obtained.

Preparing of the experimental grounds has been subcontracted, because special equipment (caterpillar, tractor) was necessary. The transplantation has been conducted by the project personnel and volunteers.

Action results will be monitored in the future in frames of scientific activity of University of Gdańsk. Next steps of this experiment are developed and are funded by the Regional Fund for Environment, as part of After -LIFE conservation program (see below)



General view of experimental grounds



Transplanted peatmosses



Detail study

D - Recurring biotope management

ACTION D.1:

Name of action: **Local improving light condition for rare plants localities**

Plan:

On the 3 peatbogs (site 10, 20, 21), when the "hot points of biodiversity threat" was recognized, and the rare plants populations are in danger of local extinction, the invasive plants should be reduced by cutting them. This should be repeated after 3 years. This action concerns:

- *Osmunda regalis* population in site 21, shadowed by *Betula pendula*, *Alnus glutinosa* and *Fraggula alnus*
- *Myrica gale* population in site 20, shadowed by *Frangula alnus*
- *Myrica gale* population in site 10, shadowed by *Betula pendula* and *Frangula alnus*.

Activities & outputs:

As a result of nature inventory & assessment with elements of management plans (Action A1), and as a result of local assessment on the field before the action, it was identified:

- the action on site 21 was identified as NOT necessary, because population of *Osmunda* seems to be out of danger. On this site there is *Osmunda regalis* population in the bog forest. Some ecologists previously propose to cut some trees for improving light conditions for this rare plant here. But after the field assessment, we recognise that the population is generally in good conservation status. Only some individuals of *Osmunda* live in unfavorable conditions, but not as a result of too much shadow, but rather as a result of whole bog forest changes. After discussion with the regional conservation authority (responsible for protected species), we conclude that it is no sense to cut trees, and the action will not improve the conditions for *Osmunda*. In place of cancelled part of action here, it is better to clear more area of *Erica tetralix* and *Myrica gale* on sites 10 and 20;
- The area of action in site 20 (Łazy) had to be increased in area. The shrubs cutting was necessary in two points, not only in one.
- The area of action in site 10 (Bagna Izbieckie) had to be strongly increased, and action should be concentrated not only on *Myrica gale*, but also on the *Erica tetralix* population and related habitat.

The first turnover of action has been implemented in 2004-2005 y. In the spring 2007, the conservation needs of the targeted plants are reassessed. It was identified that repetition of the action is not necessary. Therefore the second action turnover was cancelled. Detail monitoring of the conservation status of the targeted species is a part of After-LIFE conservation plan, and action will be repeated accordingly to needs in the future.

Despite some implementation modification, caused by obtaining better information (result of monitoring and management planning), the action objective (rare plants stands out of threat on the targeted bogs) has been achieved.

The action has been (as foreseen) subcontracted and executed under the responsibility of Klub Przyrodników.



Cross-leaved heath locality before the action (spring 2004)and after (autumn 2004)



Bog Myrtle stand on the site 20 after the action implementation

E - Public awareness and dissemination of information

ACTION E.1:

Name of action: **Building education facilities on selected peatbogs**

Plan:

On 3 selected bogs education trails have been planned to be built. These bogs were especially selected for public access; they are not the most valuable; public access not cause to threat to bog's natural values. These bogs are recognized as important for local communities and recognized as "potentially attractive places". Action has been planned to be completed in III quarter of 2006 year.

Activities & outputs:

As a result of meetings with stakeholders, discussion with local authorities and nature conservation authorities, more precise recognition of public access needs and possibilities

have been achieved and more precise necessary access infrastructure projects have been prepared.

For improving the education & awareness building results and for minimalizing impact on nature, after discussion with the Project Steering Committee (regional nature conservation authority) and with Szczecinek Forest district (project partner) we decided to move planned public access from site 18 (Ciemino Bog Forest) to the site 3 (Kusowo Bog), in the same forest district and in the same local community. This change has been reported in the interim report and provisionally accepted by the Commission. The reasons are following:

- In the Ciemino Bog Forest the white-tailed eagle *Haliaetus albicilla* started to nest in 2004 y, and it is necessary not to disturb around the nesting place;
- The Kusowo Bog, located near the road, seems to be more appropriate to public access; the starting point of the nature trail on the Kusowo Bog can be achieved by car. Ciemino Bog is far away from public roads;
- From the sociological point of view, there is great need to create any "tourists interests" at Kusowo Bog. Three years ago this bog was planned to peat extraction, and its taking under conservation (project result!) is good for nature but not very good for local economy. Expected economical benefit for local community (more tourists) should improve the public awareness for conservation of this site.

In the Karsibórz Bog Forest (site 17) following access facilities have been installed:

- 11 short wooden gangways with one-side barrier, across the most wet places;
- 2 observation platforms on the bank of dystrophic lakes;
- 9 information pannels and way markers;

The facilities have been completed in the autumn 2005. As we notice in 2006, the school children groups with teachers use the trail often in 2006 and 2007, especially in spring (May-June) and in September. We estimate ca 2500 persons have used the path till the end of project. Information about the new nature trail has been presented in the local radio and in the local newspapers.

On the Wielkie Błoto site (site 23), following facilities have been installed:

- wooden gangway across the bog & regenerating peat excavation carrier;
- 1 observation platform, with view to the regenerating bog surface;
- 5 information pannels;

The facilities have been completed in the autumn 2005. As we notice in 2006 and 2007, the trail was used mainly by individual tourists. The biggest number of visitors are in summer months. The trail is easily accessible from the public road. Also some education events with the school children groups have been organised on the trail in collaboration with the Szczecinek forest district. We estimate ca 1200 persons have used the path till the end of project.

On the Kusowo Bog site (site 3) following facilities have been installed:

- Wooden gangway on the peatbog surface;
- 14 wooden bridges across the ditches, with one-side barrier;
- 1 wooden bridge across the ditch on the forest road;
- Narrow wooden pavement across the wet fragment of bog forest;
- Observation platform on the bank of lake adjoined to the bog, inside the same Natura 2000 site;
- 8 information pannels;

The facilities have been completed in the autumn 2006. As we notice in spring and summer 2007, it is used mainly by individual tourists. The trail is easily accessible from the public road. Also some education events with the school children groups have been organised on the trail in collaboration with the Szczecinek forest district. We estimate ca 600 persons have used the path till the end of project.

For the safety reasons, and as a result with stakeholders, interested tourist representatives and forest administration, we decide not to build high observation towers, but rather 3-4 m high observation platforms, which is enough to have general view and impression of the bog landscape. As a result of this change, some money were saved, giving the possibility to organise some additional facilities needed for achieving action objectives (see below)

During the implementation of other project activities (stakeholders meeting and discussion – see E2) we have recognised important needs of preparing public access to bogs also in Damnica, Kartuzy an Lipusz forest district. Because giving public access to these bogs was necessary for achieving the project objectives (building public awareness of value and importance of these bogs), we organized additional trails equipped with small access facilities:

- On the Izbickie Bog (site 10), which is crossed by public road, we established small observation platform with short wooden gangway. As we observed in summer 2007y, it was intensively visited by tourists, travelling to the Izbica village on the Łebsko lake bank. It was aimed to improve local awareness of the value of the nature reserve.
- On the Pobłockie Bog (site 11) and Chośnickie Lakes (site 8), we identified the needs and prepare small access facilities, wooden gangways and observation platforms, preparing small education trails. In summer 2007 y. it was visited by ca 200 people.
- On the Kurze Grzędy and Staniszewskie Błota (site 4 and 5), we organize education trails preparing wooden gangways. The trails were organized in late summer 2007 y, therefore no estimation of visitors number are available yet.

These facilities, although rather simple and cheap, improved public access to above mentioned bogs, meeting stakeholders' expectations. These additional public access facilities did not cause any substantial budget modifications in the sense of the article 13.2 of the SAP.

On the Kurze Grzędy site, prepared wooden gangway was unexpectly flooded as a result of parallel very successful water damming (C1 action). The gangway was corrected (heightened).

All nature trails are equipped with information panels, prepared under the action E6.

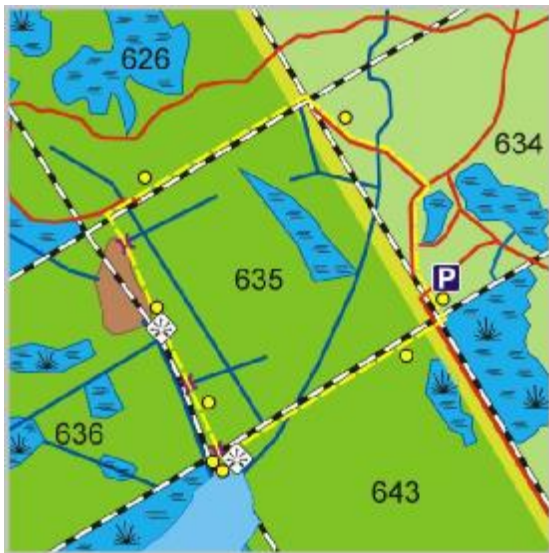
For the photographic documentation of the action output, see Annex 8.

Establishing of access infrastructure have been executed:

- by the Szczecinek Forest District (Partner) on the site 23
- by the Klub Przyrodników (Beneficiary) on the other sites

Cost of these action include costs of consumable materials necessary to establishing gangways, platforms and panels (for example if some facilities were installed by personnel of project partner – Nadleśnictwo Szczecinek), and cost of external assistance (if installation on the field have been subcontracted, as planned in the initial proposal). Contractors have been selected in the "public ask for offer" procedure, according to Polish public orders legislation.

Such – simple, wooden and rather cheap - facilities are not considered as "infrastructure" according to Polish law, therefore they are not considered as "infrastructure" in the project proposal nor claimed into infrastructure in the final project financial report.



Karsibórz (site 17) - the trail location map platform on the dystrophic lake bank



Wielkie Błoto (site 23) - map of the trail wooden gangway and observation platform



Wielkie Błoto near Wierzchowo(site 23) - example of information panel



Gangway on Kusowo Bog (site 3)



Gangway on Staniszewskie Błota bog (site 4)

ACTION E.2:

Name of action: **Communication with locals peoples & authorities**

Plan:

Ca 26 meetings with local stakeholders have been planned, for ca 10-15 persons each, concerning elaboration the best solutions for each bog conservation.

13 colour brochures / leaflets have been planned to print and disseminate in the local communities (with total print ca 2000 issues).

Communication actions have been planned for bogs: 1, 2, 3, 7, 9, 13, 14, 15, 16, 19, 20, 21, 22, where social problems and constraints have been expected.

Activities & outputs:

Needs of the work with stakeholders have been underestimated in the initial project proposal. During the project implementation, much more communication problems appear. Not only in the 13 initially selected bogs, but on almost all sites, some communication problems had to be solved.

The most important stakeholders groups are:

- Foresters, which are often afraid of negative influence of bogs conservation actions (blocking ditches) on the forest stands around;
- Water management authorities, which are often afraid of negative influence of blocking ditches on the local water management.

Both above mentioned groups are very influential. In the project sites, their acceptance is necessary for the long-term conservation success.

By contrast, local authorities are as a rule not interested in bogs at all, neither supporting nor disturbing conservation. With some exceptions, bogs are perceived as "useless grounds", with no interests for local communities.

In such situation, more effort has been directed to the communication with the foresters and water managers, which seems to be crucial for project success (successful conservation, achieving conservation objectives). But communication with the general community has not been abandoned – if possible, actions for building awareness bogs value have also been implemented.

Generally, much more number of meetings, bit with the less number of persons each, were necessary. In practice, meetings and discussion with local stakeholders, including both discussion in the office and short discussion on the field, had to be organised in relation to almost all field visits of the project team. As a result, real meeting schedule has been in great part combined with other field actions (for example combining stakeholders meeting & field vision with one travel).

By the end of the project , we organise and participate in 66 small meetings:

Place (local forest or water administration)	Number of meetings	Number of participants (sum)	Related project sites
Sławno	5	29	1, 2
Szczecinek	7	31	3, 23, 18
Kartuzy & Kościerzyna	5	30	4, 5
Władysławowo & Puck	7	52	6
Lębork	5	22	7, 12
Lipusz	1	6	8
Choczewo	2	11	9
Damnica & Słupsk	4	26	10, 11

Ustka	4	19	13
Gościno & Koszalin	6	32	14, 15
Trzebiatów & Mrzeżyno	1	4	16
Świdwin	2	11	17
Kliniska	4	21	19
Karnieszewice & Koszalin	5	24	20
Goleniów	2	14	21
Międzyzdroje	2	9	22
Others	4	24	
TOTAL	66	365	

Costs of meeting are mainly travel costs. Room for meetings as a rule has been delivered by local offices or forests communities without charge. In some cases, if the meeting took all day with the field visit, food costs have been funded from the project budget.

Example: Slowinskie Bog (project site 1). The forest administration was initially in opposition to plans to block the ditches, being afraid increased water level will be followed by trees dying. After 5 meetings and field visits on the bog, and presenting facts on bogs ecology and hydrology, the fears disappeared and forest administration agreed with nature reserve establishing and ditches blocking.

Till the reporting date, 3200 leaflets have been printed in 9 "mutations" (200-500 copies each, depending on estimated needs), covering 15 bogs . These are mutations presenting:

1. general project presentation;
2. bogs in forest district Szczecienk (project sites 3, 18, 23);
3. bogs in forest district Goscino (project sites 14, 15);
4. Karsibór Bog (project site 17);
5. bogs in forest district Kartuzy (project sites 4, 5);
6. bogs in forest district Lębork (project sites 7, 12);
7. bogs in forest district Damnica (project sites 10, 11);
8. bogs in forest district Sławno (project sites 1,2);
9. Bielawa Bog (project site 6).

Leaflets present: general project idea and actions and particular project sites on the background of Baltic bogs conservation problem. These leaflets have been distributed in local communities, forest districts, and used during the meetings.

Leaflets have been disseminated with help of local forest district, which are as a rule with close contacts with our target groups for leaflets: local authorities, tourists' organisations, schools etc. Ca 50% of each issue was given to local forest districts for further dissemination to other stakeholders.

Costs of leaflets are: material for printing and printing costs.

Samples of 7 leaflets have been included to the Progress report 2. Samples of leaflets are also attached to this report. Leaflets are also available for download on the project website as pdf files.

Additionally, project personnel took also participation in series of 6 workshops organised for some Natura 2000 sites in frames of the Poland - United Kingdom - Netherlands Twinning Project Reference No: PL2004/IB/EN/03: "*Elaboration of plans for re-naturalisation of natural habitats and habitats of fauna and flora species in Natura 2000 sites and elaboration of management plans for certain species in Birds Directive and Habitats Directive*" funded by Transition Facility instrument. Owing to our participation in these workshops, bogs conservation needs are included to the "local collaboration plans" generated by this project. But costs of participation in these workshops are not accounted to the LIFE project budget, to avoid cross-financing.

ACTION E.3:

Name of action: **Work with people responsible for nature management planning**

Plan:

The "Baltic bogs management planners working group" has been planned to establish, containing ca 20 persons: mix of nature management planners and people directly responsible for bogs conservation, for example representatives of nature conservation administration, land managers, water managers. For this group (20 persons), the series of workshop and study tours has been planned:

- Ist workshop in September 2004, especially on Habitat Action Plan discussing
- Study tour to Estonia in autumn 2005, to see baltic raised bogs not anthropogenically transformed, to observe natural mechanisms of its ecology
- IInd workshop in 2005, to discuss work in progress
- Study tour to Scotland in 2006, to see restoration methods for strongly degraded raised bogs.
- IIIrd workshop on the project end, in spring 2007.

Cost was estimated on the base of personnel, travel and material cost analysis. Multimedia projector is needed for effective presentations during the workshops.

Activities & outputs:

In 2004 the working group of ca 30 people was created. This is mix of: nature conservation planners, scientists, specialists on peatbog ecology (from the Agricultural University in Szczecin and Olsztyn, University in Gdańsk), regional nature conservation authority (Szczecin, Gdańsk), regional landscape parks, forest administration (especially forest department; in Poland, in ca 80-90% of cases forest departments are land managers for bogs).

The first workshop (two days) for this group focused on the general problems of bog's conservation and discussing the first version of Habitat Action Plan for Baltic bogs, was arranged at 15-16 November in Sulęczyno in Cassubians (Pomerania District). 36 persons participated. The workshop program and participant's list (with institutions represented by the participants) are attached in annex I.

Second, 1-day workshop was organized in Szczecinek, at 1 August 2005, focused on field presentation of conservation actions and discussion on the draft of Baltic Bogs Action Plan. 19 persons participated. The workshop program and participant's list (with institutions represented by the participants) are attached in annex I.

Field visit to Latvian and Estonian bogs has been organized at 15-20 August 2005, to give the impression of "true", near untouched bogs to Polish people, responsible for Polish (rather strongly transformed) bogs. We have visited the Cena and Kemeru bogs in Latvia and Nigula Bog in Estonia, and discuss these sites ecology and conservation problems with Latvian and Estonian bog ecologists. During this visit, guided by Mara Pakalne, we have visited implementation sites and seen results of three other LIFE-Nature projects in Latvia and Estonia:

- **LIFE04 NAT/LV/000196** Implementation of mire habitat management plan for Latvia;
- **LIFE02 NAT/LV/008496** - Conservation of wetlands in Kemeru National Park;
- **LIFE00 NAT/EE/007082** - Restoration and management of the Häädemeste wetland complex

28 persons participated. The study visit program and participant's list (with institutions represented by the participants) are attached in annex I.

Field visit to Scotland has been organized at 2-7 August 2006, to give more impression of bogs ecology and values and to give examples of practical conservation of blanked bogs and true raised bogs. We have visited Flow Country in northern Scotland, Rannoch Moor and Flanders Moor. During this visit, guided by Olivia Braggs and Peter Hulme, we have visited implementation sites and seen results of former and present LIFE-Nature projects in Scotland:

- ☐ **LIFE00 NAT/UK/007075** Restoring active blanket bog of European importance in North Scotland
- ☐ **LIFE94 NAT/UK/000802** Conservation of active blanket bogs in Scotland and Northern Ireland
- ☐ **LIFE92 NAT/UK/013400** Conservation of Scottish lowland raised bogs
- ☐ **LIFE00 NAT/UK/007078** Restoration of Scottish raised bogs

28 persons participated. The study visit program and participant's list (with institutions represented by the participants) are attached in annex I.

Next, 1,5 day workshop has been arranged at 27-28 October 2006 in Smoldziński Las (with field visit to the site 10 – Izbiekie Bog). The workshop subject was mainly recapitulation of experiences from the Estonia and Scotland field visit. Possibilities of implementing some Scottish and Estonian experiences in Poland has been discussed. Also, the second draft of the Baltic Bogs Action Plan has been discussed. 21 persons participated. The workshop program and participant's list (with institutions represented by the participants) are attached in annex I.

Last, 1,5 days workshop has been arranged on the project end, 29-30 September 2007 in Sasino (with field visit to sites 7 and 11). Project actions have been summarized. Habitat Action Plan for Baltic bogs and the After-LIFE conservation plan have been discussed. Possibilities of future actions and financing them were discussed. 28 persons participated. The workshop program and participant's list (with institutions represented by the participants) are attached in annex I.

The core group of the workshops and study visit participants was the same all time, with some fluctuation. We estimate ca 30 persons were "deeply involved" in the workshops & study visits program and now this is a "core action group" for future collaboration for bogs conservation. This group contains people really working for bogs, or officially or voluntary.

Work with people involved in bogs conservation seems to be crucial for the sustainability of sites conservation after our LIFE project. As a result of this "stakeholders management", deep involvement of local Forest Service to the bogs conservation was built by their participation in the workshop.

The assumption of creating informal but permanent "working together" group seems to be successful. Although some participants changed, the core of the group is the same from the first workshop till now; some informal interpersonal relations have been developed, and daily collaboration with the group participants became much more easier. We notice that awareness of bogs conservation needs & methods is now much better than on the beginning.

Participants list and detail programs of all workshops and study visit are attached as Annex 1. The participant's institutions are indicated on the list, and also relations to the scope of the action is explained.

For photographic documentation of the study visits, see Annex 9.

Action costs are travel costs and different costs related to workshop & visits organisation (food, local transport, room, accommodation during the workshops).

ACTION E.4:

Name of action: **Handbook of Polish raised bogs conservation preparing and printing**

Plan:

Handbook of raised bog conservation in Polish natural conditions, taking pattern by 'Conserving bogs: the management handbook' Brooks S., Stoneman R. 1997, was planned to be prepared and printed. This book should present modern methods of raised bogs recognising, assessment, management planning and conservation, including experiences from the project.

Activities & outputs:

The handbook has been published in 1500 copies. This is ca 200-pages book containing 6 chapters:

- § general ecology of Baltic bogs in Poland;
- § technical solutions for water damming up on bogs;
- § social, ecological and technical aspects of public access infrastructure on the bogs;
- § formal procedures important for bogs conservation;
- § catalogue of Polish raised bogs;
- § action plan for Baltic bogs conservation in future

The book is illustrated by numerous bogs photos (including project achievements presentation), stratygraphy profiles and drawings. "Typical technical projects" for wooden dams and calculating sheets for costs are included.

The book has been prepared by the project staff. The costs related to this action are materials for printing and printing costs (external assistance) only.

The book has been disseminated to organisations, authorities and other bodies involved in bogs conservation in Poland:

- ca 400 copies to forest service in forest districts containing the project sites on their territory (ca 20 copies for forest district);
- ca 300 copies to other forest districts in Poland (1-2 copy for district);
- ca 100 copies personally to project collaborators and volunteers;
- ca 100 copies disseminated by the Project partners to related bodies and people;
- ca 50 copies to nature conservation authorities in Poland;
- ca 100 copies to nature NGO's in Poland
- ca 200 copies to interested people asking for the copy.

We still have ca 250 copies, which are distributed on request.

The hard copy of the handbook was provided with the interim report. The electronic copy is attached also to this report as Annex 3.

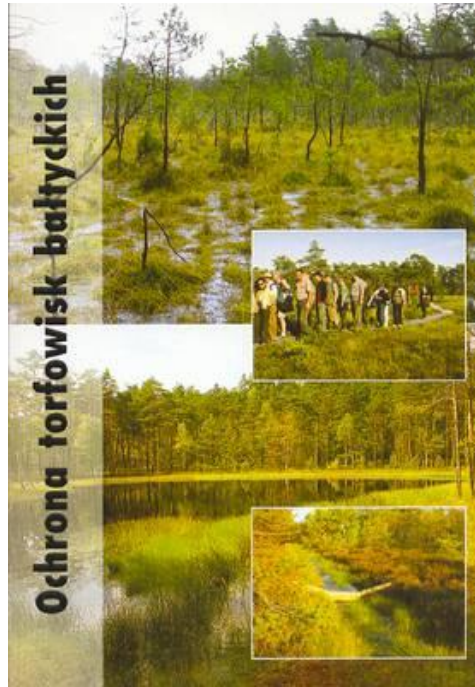


Fig: The cover of the handbook

ACTION E.5:

Name of action: **Project website**

Plan:

A project website in Polish and in English has planned to be compiled, designed and made available in Internet, in the www.lkp.org.pl portal. This website should be regularly updated, according to project progress.

Activities & outputs:

Project website have been initiated and is available on <http://www.kp.org.pl/plbaltbogs> or <http://www.kp.org.pl/life>. The webpage contains:

- § general description of problem,
- § list of project partners,
- § list of main project actions
- § detailed project description as pdf
- § project progress reports, interim report and final report as pdfs
- § directory of baltic raised bogs in Poland
- § project sites description (available by list or by map)
- § actual version of Polish Baltic Bogs Action Plan (see action A5)
- § ditches blocking project kit for download,
- § report about Polish baltic bogs including to Polish Natura 2000 proposal,
- § links to LIFE website,
- § link to main Klub Przyrodników homepage
- § link to and to Natura 2000 website in the Klub Przyrodników service.
- § project publications as downloadable pdf files: handbook of raised bogs conservation (in Polish – see action E4), leaflets (in Polish – see action E2), Layman's report (bilingual Polish-English – see action E7), Scientific report (bilingual Polish-English – see action E7).

The main elements of website are bi-lingual (Polish and English), but some detail materials are only in Polish language, and project progress reports are only in English (as originally written).

All progress reports, interim report and final report are available at the website, in the section "Documents"/"Materialy".

Interim reports was published on the website, as requested by the Commission in the letter from 22./12/2006. The direct link to this report is:
<http://www.kp.org.pl/plbaltbogs/progressAug2006.pdf>:

All project publications are available on the website as pdf files in the section ""Documents"/"Materialy".

The LIFE-project webpage is linked from the main Naturalists Club website.

Additionally, we input description of some project sites (Warnie Bagno, Słowińskie Bagno) to the main polish botanical website "Lonicera". There are information of mentioned sites, photos, informations about conservation activities and links to LIFE project website.

The location of the bogs targetted by the project was also uploaded to wikimapia.org service.

We have no visitors counter specifically on the LIFE-project webpage, but ca 40 000 people visit main Naturalists Club website every month. If only 5% of them visit LIFE project part, it means ca 50 000 visitors totally till the reporting date.

During the project, we receive and answer by email ca 200 questions & requests for information from interested people.

Website preparing and maintaining is a duty of project staff. Cost of this action are included in the project staff salary.



Fig: Project website

ACTION E.6:

Name of action: **Information panels**

Plan:

Information panels with the LIFE logo and information about the project and its activities have been planned to be prepared and placed in a field, in all targeted sites.

Activities & outputs:

80 standard information panels A3 format have been prepared; 66 have been installed, covering all project targeted sites. The rest 14 panels were stored in the office as "reserve".

The panels have been installed in all identified "entry points" to sites. The standard panel contains LIFE logo, Natura 2000 logo and the message that this bog is a target of the conservation project financed by the European Union - LIFE-Nature. The short text describes (very generally) the Baltic bogs threats in Poland and general activities for its conservation.

The standard panel's contents is reproduced below:



Fig: Text of standard panel



Fig: The standard panel on site

The problem of numerous thefts appears. 14 panels have been stolen before the project end. In such situation we react by installing "reserve pannels". Finally all 80 "standard pannels" have been used. As a result of action, standard information panels are on the project end present in 66 points on the field.

Additionally, on bogs visited by people (incl. organized nature trails – see action E1) additional panels have been installed, with extended and individual information about the

specific bog and conservation actions implemented here. 20 such panels have been installed.



Fig: Example of “extended panels”



Fig. “Extended” information panel in the starting point of nature trail

Finally, as a result of action, 86 information panels are on the field.

The action is implemented by Beneficiary.

ACTION E.7:

Name of action: End reports preparing and printings

Plan: “And the end of the project a layman’s report will be produced. The report will summarise the project, its objectives, actions, monitoring and results in manner understandable to the wide public. The report will be available in Internet, on the project website (link to Action E5), and also printed as a colour brochure.

Parallel, a scientific-technical report will be prepared, summarising project results and collected information on targeted bogs nature and ecology. It will be addressed to ecologists and nature conservationists. It will be available in Internet, on the project website (link to Action E5), and printed as black-and-white brochure..

Both reports will be produced in Polish and English”.

Activities & outputs:

Both reports have been printed as planned. They are attached to the report as annexes 4 (Layman's report) and 5 (Scientific report), both as a hard copy and electronic copy.

The Layman's report is a 32-pages, bi-lingual (parallel Polish and English text) colour publication for general public. The volume of the brochure, exceeding "standard" for layman's report is caused by bi-lingual text in the same brochure and by necessity to give at least rough description of numerous project sites. The brochure presents the project idea, objectives, sites and actions with its results. The brochure contains also the information about access facilities prepared during the project and possibilities to see project's bogs. The report is available in Internet.

The Layman's report was printed in 1000 copies, disseminated to:

- all institutions and all people collaborating in implementation of the project action;
- all nature conservation authorities in Poland (as example of successful nature conservation implementation);
- Ministry of Environment, regional authorities;
- local communities targetted by the project.

The report is also send by post to interested people & institution on request.

The Layman's report is available on the project Internet website as pdf file, at: http://www.kp.org.pl/plbaltbogs/pierwszy_proj_life.pdf

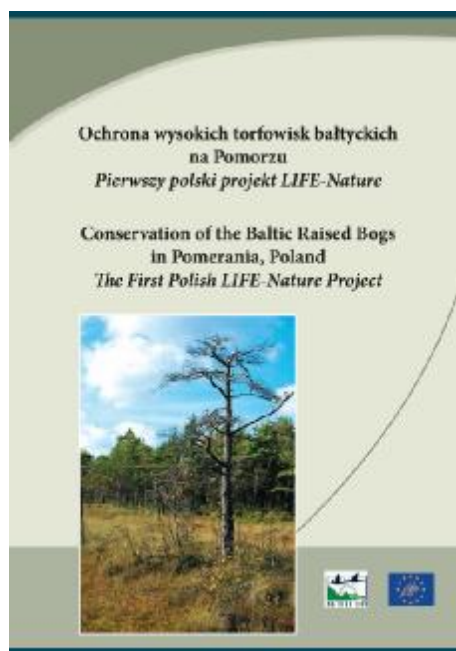


Fig: the cover of Layman's report

The scientific-technical report is a bigger, scientific-manner publication, published with parallel Polish and English text. It contains following chapters:

1. Introduction
 - 1.1. General characteristics of the Baltic raised bogs
 - 1.2. Hydrology, development paths and typical vegetation cover of the Baltic raised bogs
 - 1.3. Anthropogenic transformation of the Baltic bogs

- 1.4. Conservation status of the Baltic raised bogs in Poland – the reasons for launching this Project
- 1.5. The LIFE Project
- 1.6. Project activities
- 1.7. Project results
2. The sites covered by this Project and the methods for their conservation (description of all project sites, with information about implemented actions and achieved results)
3. Practical experience of the conservation activities in raised bogs
 - 3.1. Reduction of excessive water outflow from and raising water level on the bog sites
 - 3.2. Practical solutions
 - 3.3. Removal of trees
4. Experimental reintroduction of *Sphagnum* genus species into the industrial peat post-excavation areas
5. Monitoring and its preliminary results
 - 5.1. Methodology for the basic hydrological monitoring of the Baltic bogs as applied for the purpose of this Project
 - 5.2. Results
 - 5.3. Summary and conclusions
6. The perspectives to the further conservation of the Baltic bogs

The Scientific report was printed in 1000 copies, disseminated to:

- all institutions and all people collaborating in implementation of the project action;
- scientific institutions and scientists working on bog's conservation and general nature conservation
- all nature conservation authorities in Poland (as example of successful nature conservation implementation);
- Ministry of Environment;
- Interested NGO's working for nature conservation

The report is also send by post to interested people & institution on request.

The Scientific report is available on the project Internet website as pdf files, at:

http://www.kp.org.pl/plbaltbogs/1_6897.pdf, [2_6897.pdf](http://www.kp.org.pl/plbaltbogs/2_6897.pdf), [3_6897.pdf](http://www.kp.org.pl/plbaltbogs/3_6897.pdf), [4_6897.pdf](http://www.kp.org.pl/plbaltbogs/4_6897.pdf)

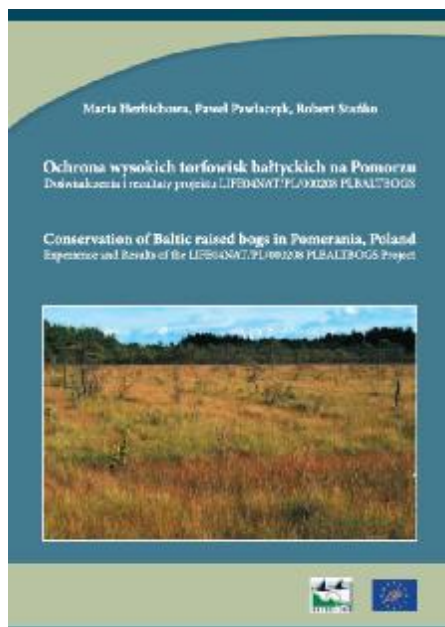


Fig. The cover of scientific report

The text of the reports and all photos and figures was prepared by the project staff. The cost of the action contains the cost of professional translation of the reports to English and the printing costs. The printing company was selected on the base of comparison of different offers.

Although initially we plan to print the scientific report as black-and-white publication, we finally decide to print it as a high-quality publication with colour photos. It was necessary for achieving effectiveness of this communication tool. In the time 2003-2007, the average quality of publications in Poland improved rapidly. We must achieve our project publications to be “competitive” with other publications available in nature conservation. Additionally, colour figures, colour maps and colour aerial photos were necessary for communication. Of course, this decision has consequences for the budget of the action, which is overspend with comparison to foreseen initially. Printing of both reports costs ca 10 000 Eur, twice more than foreseen (5000). But this change is not followed by substantial modification of the general budget structure, because we use for this money saved from overheads and other actions. According to our experiences with dissemination, our strategy to print both reports as high quality publications, is right. Both publication are attractive for targeted people and both publications works in practice as good project advertising.

F- Overall project management

ACTION F.1:

Name of action: **Overall coordination and management of project actions**

Plan:

There should be a Project Steering Committee, comprising representatives of nature conservation authorities responsible for nature reserves and other nature protection forms conservation. Project Steering Committee is 2-persons body, comprising 2 representatives

of public nature conservation authorities for 2 involved regions - Pomerania and West Pomerania. PSC will meet with the Project Management Unit twice a year, observing and analysing project implementation. It is a form of public control under project implementation. PSC will also receive and accept some deliverable project products - documentation for nature conservation forms creating and management plans for nature reserves - for its legal implementation (these public nature conservation authorities are legally responsible for this).

There should be a Project Management group, containing a project manager, scientific coordinator and book-keeper. That group should manage and coordinate all actions of the applicant and partners during the project as well as being responsible for contracting and reporting.

Activities & outputs:

The project was started in 2003, November, 02, parallel with the application for its co-financing to the LIFE-Nature 2004.

In period 2003 Nov.02 - 2004. Dec 31, waiting for the LIFE-Nature decision, the project was implemented by Klub Przyrodników and partners, and project actions were financed by Global Environment Fund - Small Grants Facility (non-EU funds, official project co-financer) and beneficiary & partners own funds. The decision about LIFE-Nature co-financing was taken in 2004, August, but as a result of problems with bank guarantee, the first LIFE funds were available in 2005, January, with 4 month delay according to preliminary plan.

Because of uncertainty of project LIFE financing, in 2004 project personnel and management was not fully developed. In 2005 the full project personnel team has been completed.

The Project Steering Committee meet 6 times: in the November 2004, July 2005, January 2006, June 2006, January 2007 and September 2007, reviewing the project progress. Meetings were organised in the Szczecin or Gdansk, in the regional authority offices, without any extra costs. Sometimes they had been combined with other consultations and negotiations and do not generate independent travel costs. Additionally, there was permanent email and telephone contact between Project Management Unit and nature conservation authorities (members of Project Steering Committee).

The Project Steering Committee discussed and accepted all situation, in which some minor changes in implementation of project actions were necessary (after the more detailed recognition of conservation needs in prepared documentations and management plans, and after the negotiations with related stakeholders and authorities, some changes in detail localisation and number of ditches blocking points, trees removing areas, localisation of public access infrastructure etc. were necessary, as explained in the action descriptions).

In Szczecin Region (West Pomerania), the nature conservation authority – represented by dr Maciej Trzeciak – was deeply involved in the project implementation, he was more active member of Steering Committee and he was very helpful in case of project implementation problems. In Pomerania region nature conservation authority person changed three times during the project implementation; as a result she was not so involved and interested. But the "stability of collaboration" was guaranteed by the lower-level staff in Pomerania Regional Authority, which is continuously working with our project.

Project Management Unit consisted of three persons:

- Pawel Pawlaczyk, project leader;

- Maria Herbich, scientific coordinator;
- Robert Stańko, responsible for administration and financing, and working also as peatbog ecologist for the project implementation

The Project Management Unit coordinated all project actions. Pawel Pawlaczyk was responsible for the general management, Maria Herbich - for the scientific side of the project implementations, Robert Stańko - for the financial decisions, financial documents acceptations etc. Above persons were responsible not only for the project coordination, but were also directly involved in the implementation of some other project actions.

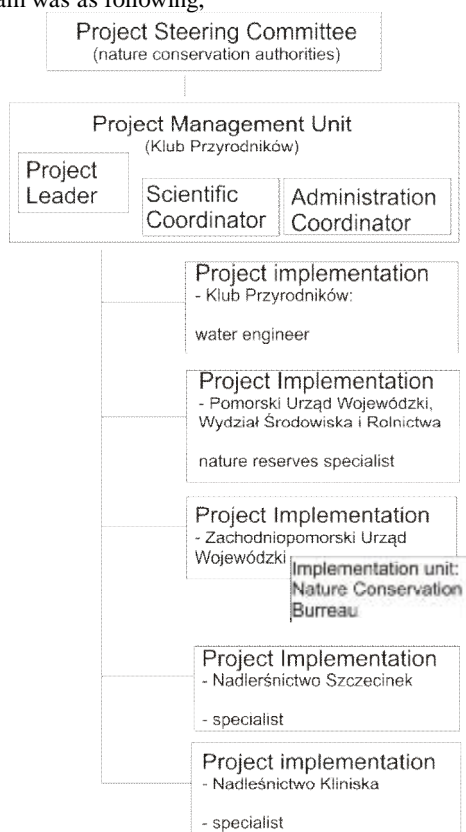
The Project Management Unit personally organised all meetings and workshops during the project, and organised and controlled technical actions implementation.

Rest of project implementation staff consisted of:

- Maria Stankiewicz, responsible for bookkeeping;
- Tomasz Zdanowicz, responsible for technical projects and negotiations with water & building authorities;
- Partner's staff partially delegated to the project: Dorota Siemion from Pomerania Regional Authority, Maciej Jaguś from the Kliniska forest district and Małgorzata Kin from the Szczecinek forest district.

Main part of project actions was implemented under the direct responsibility of the Beneficiary. Partners - forest district were responsible for part of the actions on sites within their territory. Partners - Regional Authorities (Urzędy Wojewódzkie) were responsible for the management plans for nature reserves preparing.

The project organigram was as following;



There were signed partners agreement between beneficiary and all partners.
According to Partner's agreement, Zachodniopomorski Urząd Wojewódzki implemented project by their implementation unit – Nature Conservation Bureau (Biuro Konserwacji Przyrody)

In February 2005 the first progress report (below cited as Report 1) was prepared, describing the actions from the project beginning to the end of 2004.

In April 2005 the project was visited by Ms Yolaine Boutelier (Ecosphere - LIFE Monitoring Team).

The second progress report was prepared in October 2005.

In October 2005, the project has been visited by Mr Rolands Ratfelders (Astrale - the new LIFE Monitoring Team).

In the end of June 2006, the project has been visited by the European Commission: Mr Arno Kaschl and Ms Aneta Gajda, and by Roland Ratfelders from the Monitoring Team.

In the September 2006, Interim report has been prepared and submitted

In the February 2007, the project modification request has been submitted to EC, with request for 3-month prolongation and modification the co-financers structure. The modification has been granted by the Commission.

In the June 2007, the project was visited by Mr Rolands Ratfelders from the Monitoring team.

In the December 2007, finalised project was visited by Mr Rolands Ratfelders from the Monitoring team.

During the project implementation, the project idea and project progress have been presented on some conferences and workshop, as example of nature conservation in Poland. There were:

- Naturalists Club Annual Meetings 2005, 2006, 2007;
- Conference "Wet Work", Warszawa, 27.04.2005;
- Natura 2000 workshop, 19.07.2005;
- Scientific botanical seminar Gdańsk, 06.2005;
- LIFE Coop workshop, Latvia & Estonia, 25.08.2005;
- Scientific conference on nature (plants & vegetation) conservation; Kraków 30.05.2006;
- Polish Botanical Society Meeting, Szczecin, 6-8.09.2007
- Restitution and Reintroduction Conference, Institute of Nature Conservation Krakow, 23.11.2007
- CEEWEB workshops: Banja Vrnjuci (7.11.2005), Kitten (24.08.2006);

All the presentations were made by project personnel, mainly by project leader (Pawel Pawlaczyk) or scientific coordinator (Maria Herbich).

The project personnel was also responsible for project presentation via media to general public. For example:

- the project was presented in radio TOK FM broadcast;

- the project was presented in a fragment of TV film prepared by Regional TV in Gdańsk;
- the project was presented in article published in regional newspaper "Dziennik Bałtycki";
- the nature trails organised in scope of project were presented in local radio broadcast

Important part of project management was also lobbying for including the project sites to the Natura 2000 network (some meetings & discussions with the Ministry of Environment, input to Shadow List preparing).

Lessons learned from the project are also important for proposals of legislation changes, which are necessary for successful nature conservation in Poland. We are lobbying for simplifying the water & building permissions procedures for small nature conservation infrastructure (ditches damming). On the base of our experiences with LIFE-Nature, we are also involved in preparing LIFE+ National Annual Program in Poland.

In the June 2006, the project has been visited by team & stakeholders from Slovak LIFE project: **LIFE05 NAT/SK/000112 Restoration of Wetlands at Zahorie Lowland**. Experiences have been exchanged.

The work of Project Scientific Coordinator, prof. Maria Herbich, was awarded by the Regional Fund for Environment in Gdańsk by "Annual Award for Special Achievements in Environment Protection" for 2007 year.

ACTION F.2:

Name of action: **Monitoring and documentation**

Plan:

On each targeted site, monitoring transect of piezometers should be established on the project beginning, parallelly with the site assessment or documentation preparation (link with A1, A2). The water level in the peat should be monitored every month. The chemical composition, pH, conductivity of the ground water should be measured twice a year. This information should be stored and should be analysed, for recurrent assessment of processes ongoing in peat deposit.

On each targeted site, peatbog conservation status and conservation status of all important habitats, should be assessed on the project end. "Hot points of biodiversity threat" will be checked and controlled. Biodiversity of each site should be assessed on the beginning and on the end of the project.

All the project sites and actions should be documented using photos.

Activities & outputs:

Ca 100 piezometers have been installed in the project sites, and the water level in the peat layer has started to be recorded. Piezometers consist of plastic pipe (sometimes two pipes different length) put into peat.

The points to install the piezometers were positioned on early designed transects, in the vicinity of which the bog stratygraphy survey was carried out. That was an essential element, which provided for linkage between the bog hydrological conditions and the geological structure of the peat deposit. In order to formulate conclusions on the bog hydrological conditions on the basis of the groundwater monitoring system the precise knowledge on terrain topography was required, or at least the setting out of the differences in elevation that exist between particular measurement points. Therefore, the location points for piezometers, on which the altitude measurements were carried out for the

purpose of surveying the deposit stratigraphy, were determined, where possible, already in the transects determination phase. In case of tests managed prior to implementation of this Project, precise bog altitude measurement were carried out, with particular regard to the measurement points, prior to attempting to installation of piezometers. For each site, at least one optically levelled transects was determined alongside which from several to a dozen measurement points were assigned at regular (between 40 and 80 m) distances. In these points, depending upon depth of peat deposit, 1 - 2 piezometers were installed while filter depth being about 90 and 150 cm. Installation in one point of piezometers provided with filters in various depths often enables surveying of the interdependencies between the impacts from groundwater and precipitation water that is of essential importance for planning the protective measures linked to improvement in water conditions. Data on fluctuation of the groundwater level enable also to assess the scale of changes in hydrological conditions in both the particular bog and its broadly understood vicinity.

Monitoring results are presented in the scientific report (annex 5). Despite certain weaknesses (time and labour consuming activities, various factors restricting regular measurements – in particular human factor, e.g. limited possibilities to take the measurement results of water level in case when water table was frozen in piezometer, etc.) the methodology used has provided reliable data to enable adequate determination of the bog hydrological conditions.

In case of the Kusowskie Bagno and the Zaleskie Bagna nature reserves, the measurement results acknowledged the occurrence of relatively favourable hydrological conditions (permanently retaining pretty high water level), which were unfortunately as a rule only limited to the central part of the bog cupola.

In case of several bogs mentioned below (given the water deficit periods and considerable fluctuations of water level occurring there) their prevalent water conditions have to be assessed as although not optimal, but can provide the opportunity for the peat forming vegetation to survive in its present character and range. Those are: Słowińskie Błoto, Janiewickie Bagno, Kurze Grzędy, Staniszewskie Błoto, Łebskie Bagno, Jeziorka Chośnickie (in part), Izbickie Bagna, Torfowisko Pobłockie, Warnie Bagno, Torfowisko Łazy, Bagno Ciemino (in part) and Wielkie Błoto. It seems that for existence of the peat forming open moss communities occurring there the critical value of the short-time low water level retaining there amounts to about 60-70 cm below the ground surface.

In case of other 9 sites (Bielawa, Czarne Bagno, Wierzychucińskie Bagno, Las Górkowski, Stramniczka, Torfowisko Roby, Torfowisko Karsibórz, Torfowisko Reptowo, Uroczysko Święta, Świdne Bagno) the water conditions have to be assessed as not favourable. Frequent and long periods of water level decline below 1 m and often also below 160 cm could be noted there.

Given the relatively short (about 30 months) observation period of the changes in the groundwater level, particularly after application of the conservation measures, and mostly differentiated weather conditions in particular years (mostly variable precipitation values in particular comparable periods), no likelihood exists to fully assess reliably of the conservation measures undertaken for all the sites. Nevertheless, in case of several of them the improvement in water conditions (the lower fluctuation amplitude of water level, the higher mean water level, and the shorter water deficit periods) has to be linked with installation of facilities reducing water outflow or liquidation of drainage ditches. The group of sites where rapid improvement was noted in the state of humidity include: Słowińskie Błota, Janiewickie Bagno, Kurze Grzędy, Staniszewskie Błota, Torfowisko Bielawa, Czarne Bagno, Torfowisko Reptowo, Torfowisko Olszanka and Bagno Ciemino. It has to be clearly emphasised that in case of many sites the expected increase in water level and its stabilisation is possible no earlier than after several years. The monitoring

will be continued also after the project end, to document this expected effect. According to detail project prepared in frames of LIFE-project, the two weeks observations will be replaced by electronic data registrators (expected to be funded by EcoFund in 2008). This way monitoring will continue also in the after-LIFE period in order to verify the effectiveness of the management activities performed within the scope of the project. Continuation of water level monitoring is a part of after-LIFE conservation programme.

Monitoring is implemented mainly by project staff – with exception of site Reptowo (19), where is implemented under the responsibility of Partner (Kliniska forest district) and subcontracted. In some cases, part of monitoring work (collecting observations) is subcontracted with small amount (250-300 Eur). The re-designing of monitoring network, for making possible to maintain monitoring also in the future, has been subcontracted. Huge part of monitoring is implemented on the voluntary basis – in such cases there are no personnel costs, but sometimes travel, accommodation & food costs refunded to volunteers.

The chemical composition, pH, conductivity of the ground water on the bogs has been measured twice a year by project personnel. Travel for making these measurements has been combined with the other project activities on the bogs.

Ca 600 photos have been made as documentation of project sites nature and project actions (especially study visits in Latvia & Estonia described above). For selection of high resolution photos, see annexes 6-9.

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6. EVALUATION AND CONCLUSIONS (2-8 PAGES)

a. The process

The project implementation meet project objectives and was successful, although no avoid of some problems.

As a result of lack of knowledge on sites nature, ecology and hydrology on the beginning of the project (this factor has been identified as important threat and obstacle in the application) some minor changes in details of action implementation were necessary. After the more detailed recognition of conservation needs in prepared documentations and management plans, and after the negotiations with related stakeholders and authorities, some changes in detail localisation and number of ditches blocking points, trees removing areas, localisation of public access infrastructure etc. were proposed and discussed with the Project Steering Committee. These changes do not change the project objective or site objectives (otherwise – they are necessary for achieving these objectives!), and do not change importantly expected general project output. These changes also not cause substantial budget modification

As a result of no previous experience with working with LIFE, the project implementation was not easy and simple. Some unexpected obstacles and problems appeared during the project implementation (see below). On the beginning of the project, problems with the bank guarantee were followed by delay of starting some project activities. Not fully economical stability of Poland cause some important changes of Euro:PLN rate, which varried from 4,63 PLN/EUR when we applicate, to 3,64 on the project end, and created some difficulties in balancing project budget. But finally all these problems have been successfully solved.

Polish government policy for Natura 2000 practically stop the process of proper Natura 2000 network creating in Poland for almost one year during the project lifetime. But finally, in September 2006, most of the project sites were officially submitted by Polish government to the Natura 2000 network (see chapter 6e of this report). As a final result, all project sites with one exception are officially submitted by Poland to the Natura 2000 network. Sites submitted in 2004 were formally adopted by the Commission in November 2007, the rest of sites are expected to be adopted by the Commission in October 2008.

Also remaining site 19, which is “restoration site”, is expected to be submitted officially by the Polish government as pSCI in 2008. Documentation necessary for this is ready (prepared in the scope of project), and after new election and change of government in Poland, the policy for Natura 2000 designation is expected to be significantly improved. One of the project partner – Maciej Trzeciak, Regional Nature Conservator from West Pomerania –= at 21 December 2007 became Deputy Minister of Environment responsible for nature conservation, including Natura 2000.

Delay in Natura 2000 establishing in Poland causes some problems with public communication: for example exposing Natura 2000 logo and related message (which is important for good nature conservation communication) is not possible in sites still not included in the network. But all these problems disappeared before the project end.

Unexpected legislation changes in Poland causes (and will cause in the remaining project time) some formal obstacles in project implementation (necessity of preparing much more detail technical documentation for water damming up; public partners’ problems with budget).

As a result of not expected problems with the technical documentation and formal water permit and building permit procedures (result of recent legislation changes in Poland, see description of A4 action), some delays in action A4 implementation appeared, following by some delays in implementation of other related actions (C1-blocking ditches). As a result of other legislation changes, some delays in formal establishing of conservation forms and management plans appeared.

But finally, after 3-months project prolongation, all delays have been caught up and the relevant actions successfully finalised.

b. The project management

The project is implemented in partnership of:

- § Nature conservation NGO;
- § Regional nature conservation administration (2 partners – Pomerania and West Pomerania region);
- § Forest districts (2 districts);

The main partnership management problems were mainly related to instable situation of governmental administration and legal limitations for their activities (no possibility for long-term budget planning, late annual budget approvals, obligation to subcontract practically all activities, long terms of public tenders organised by government administration, two changes of person responsible for nature conservation in Pomerania district. Sometimes it caused delays in starting particular project actions, but – by the end of the project – all these problems were successfully solved.

Such kind of partnership creates a model of good and successful collaboration between public bodies responsible for nature conservation, nature conservation NGO and Polish state forests – which can be (and is in practice) transferred to other situations.

c. Success and failures

The project is successful with achieving the main ecological objectives, but the detail results achieved till the project end are differentiated among sites. On less degraded sites (for example Slowinskie Bog, site 1), ecological effect seems to be visible even after one year. Although time for precise assessment is too short, first monitoring results show that ditches blocking on targeted sites importantly improve the water conditions. By contrast, on more degraded sites (for example site 19 – Reptowo), the effect is not so evident, and only a little improving of water conditions has been recorded. It is probably influenced also by very dry summer 2006. In 2007 .the monitoring results was much better and very promising. The monitoring will be continued also after LIFE project end, to documents long-term results.

We fail in assumption to use unemployed people for some project work. After the EU accession and huge temporal emigration, in project region unemployment exists only in official statistics, not in the practice. In practice, there are difficulties in finding employers ready to work, even for simple works as ditches filling and trees removing.

d. Comparison against the project-objectives.

Overall objective: *To maintain or restore the favourable conservation status of active raised bog (7110) and pine/birch bog forest habitats (91D0) and the favourable conservation status of its complexes – baltic raised bogs in Pomerania, Poland. To*

maintain the Polish resources of specific sub-type of 7110 and 91D0 habitats connected with the baltic bogs.

We can expect the conservation status of 7110 and 91D0 habitats inside project sites will be importantly improved. Although this effect cannot be visible immediately, the drainage blocking seems to be effective for improving water conditions, which should be followed by improving habitats conservation status. First monitoring results confirm this assessment.

Operational objectives:

To stop the process of draining and following desiccation of the peatbogs.

Water damming up seems to be successful and effective. On some bogs (especially less degraded on the beginning – for example Slowinskie Bog), positive results can be seen almost immediately. On other sites (especially in degraded bog forests), the damming up effect is less evident, and the ecosystem restoration progress is slow and not visible yet, although positive effects are expected in the nearest future.

To cancel local threats for biodiversity, created by species expansive as a result of desiccation

These threats seem to be successfully cancelled, but positive effect persistency is still difficult to predict. On some bogs we expect that combining water damming up and the invasive vegetation removing should be followed by long-term positive ecological effect. But there is (especially on more degraded sites) also the threat of re-growing and re-expansion of invasive vegetation (especially birch and spruce). In such situation, the conservation actions should be repeated. Establishment of monitoring procedures, building public awareness on the natural value of the project sites and conservation needs, preparing and formal approval of the management plans and general building "after LIFE plans" create good base for permanent care for the targeted sites and good possibilities to continue conservation actions where necessary.

To fulfil the holes in knowledge on natural values, ecology and hydrology of each raised bog and prepare good management plan on base of this knowledge.

Prepared nature inventories, documentation and management plans are good base for conservation measures. Real conservation actions became possible as a result of project "preparatory" activities. Project activities meet the naturalists' and conservationists' 20-years postulates for necessary expertises and conservation actions. Establishing of new nature reserves and submitting sites to Natura 2000 create new possibilities of nature management planning.

To propagate modern approach for raised bogs conservation, including appropriate active management techniques.

Awareness of bogs conservation techniques seems to be successfully built in the group of naturalists, foresters, nature management planners and nature conservation officers responsible for bogs and bog forests conservation. The awareness seems to be importantly improved in comparison with the beginning of the project, although it is difficult to establish quantitative indicators. There is influential group of ca 30 persons specialists in successful bogs conservation created, with knowledge both about Polish conservation actions and experiences from other countries. Initiated collaboration seems to be self-sustainable in the after LIFE future.

To build public awareness of Baltic raised bogs value and its European importance, and awareness of its conservation needs, especially in influential stakeholders group, but also in local communities and general public.

Awareness seems to be importantly improved, place of bogs in some local stakeholders awareness seems to be changed from "non-useful places" to "places with important natural value". The process has been initiated, but still ongoing. Preparing public access infrastructure seems to be very important for this process and should be extended in the after LIFE future.

Expected project result	Achieved results
Draining ditches on 13 peatbogs blocked everywhere when needed. Ca 2200 m of ditches filling. Ca 440 sluices blocking ditches built. As a result, hydrology of 13 sites importantly improving, with keeping the water level average no deeper than 0,3m under the ground level.	Water dammed up on 17 bogs, according to conservation needs identified in management plans. Outflow blocked in 724 points. 4 km ditches fully or partially filled. As a result, water conditions of 17 bogs significantly improved.
Trees degrading peatbogs removed from 9 sites. Trees removed or thinned on ca 650 ha. As a result, water balance of these bogs importantly improving, see above.	Trees removed from or thinned on 13 bogs, according to conservation needs identified in management plans. Action implemented on the area ca 720 ha
Full today's biodiversity (species list) of open bogs and bog forests on all sites preserved. 9 "hot points of threat" important for biodiversity on 3 bogs safe (light conditions improved for rare plants populations)	Needs revised as a result of more detailed inventory and management planning. On one bog action cancelled (no needs and no sense of action identified after detail field expertise), but on 2 remaining bogs executed on extended area (12 points targeted)
Spruce removed from 2 bogs. As a result no important threat of spruce invasion anywhere.	Needs revised as a result of more detailed inventory and management planning – action implemented in 4 project sites, but with smaller targeted area each..
Natural values, stratigraphy and hydroecology of all 23 bogs recognized. Site management concept for all bogs prepared, and if necessary, formally established as site management plan. Necessary nature protection forms established, basing on prepared documentation. Established Site Management Plans, according to Polish law, for all Nature Reserves.	Basic nature inventory for all bogs completed. Documentations for establishing necessary nature protection form completed for all bogs when planned. 10 Nature Reserves, 2 Ecological Grounds and 1 Nature Landscape Complex (national conservation forms) formally established, with total area 2677 ha. All sites – with one exception – submitted to the Natura 2000 till the project end. Submitting of the one remaining site is also expected in the nearest future. Management Plans for all nature reserves completed and adopted as a base for future conservation actions. Agreement of all stakeholders for conservation actions implementation in the nearest 2-3 years achieved as “After-LIFE plan”.

Local public, local authorities, forest administration and water authorities aware of natural values of each site and aware of need of its conservation, including appropriate methods of its conservation. Popular brochures presenting each bog printed and disseminated. Website created and maintained. Project of active raised bogs conservation propagated in public: layman's report printed and disseminated.	Public awareness increased: info about project disseminated among foresters and Polish conservationists. 66 meetings & negotiations sessions with the local authorities, water management bodies, or foresters responsible for the sites conducted, ca 365 persons targeted. 3200 leaflets presenting project sites published and disseminated for 15 project sites in 9 modifications. Website available in the Internet.
Group of ca 20 persons, nature management planners and nature conservation authority and administration, trained in raised bogs ecology and appropriate methods of its conservation. Handbook of raised bogs conservation in Polish conditions prepared, printed and disseminated. Report with technical and planning solution examples printed.	Group of ca 30 persons established and work with this group is continued. Handbook prepared, printed and disseminated.

Comparison against deliverables list :

All planned deliverables have been completed. The table below presents when the particular deliverables were delivered to the Commission and to the Monitoring Team. Electronic copies of all deliverables are additionally attached to this report

SUMMARY OF DELIVERABLE PRODUCTS

Product	Reference action	Delivered
Regional Habitat Action Plan for baltic raised bogs in Pomerania Region – 1st draft	A5	with progress report
Site Nature Inventory Reports for sites: 7 (northern part), 13, 17, 19, 20, 21, 22	A1	with interim report
Documentations for Nature Reserve establishing for sites: 1, 3, 9	A2	with interim report
Site Management Plans for Nature Reserves: 2, 14, 4, 5	A3	with interim report
Brochures presenting 13 selected sites	E2	with interim report + with this report
Handbook of Raised Bog Conservation – published book	E4	with interim report
Documentations for Nature Reserve establishing for sites 15, 16	A2	with interim report
Site Management Plans for Nature Reserves: 1, 3	A3	with this report
Regional Habitat Action Plan for baltic raised bogs in Pomerania Region – Revised version	A5	with interim report
Site Management Plans for Nature Reserves: 6, 10, 11, 12	A3	with this report
Site Management Plans for Nature Reserves: 15, 16	A3	with this report
Regional Habitat Action Plan for baltic raised bogs in Pomerania Region – Final version	A5	with this report
Layman's and scientific reports	E7	with this report

ACTIVITY REPORTS

Activity report	Delivered
Progress Report	February 2005
Progress Report	October 2005
Interim Report	September 2006

All project reports are available on the project website

e. **Environmental benefits, policy and legislation implications**

The project was very important for establishing national protection forms protecting project sites and preparing project sites for submitting to the Natura 2000 network. 10 new nature reserves covering totally 2000 ha were formally established owing to the project. On the project end, all project sites are established as appropriate nature protection form. Additionally, the idea of extension of two existing nature reserves has been developed as a result of stakeholders meeting during the project, to implementation in the nearest future.

Although Polish government was generally in opposition to Natura 2000 designation, finally all project sites, with one exception, have been submitted officially by Poland to the European Commission as proposed pSCIs.

The exception is site 19- this is "restoration site", which should be included to Natura 2000 after successful restoration. Restoration actions were implemented in a project scope, and first results are promising,. The site is submitted to the Polish government as "Natura 2000 shadow list site" and is expected to be submitted by government to the EC in the nearest future. Documentation necessary for this is ready (prepared in the scope of project), and after new election and change of government in Poland, the policy for Natura 2000 designation is expected to be significantly improved. One of the project partner – Maciej Trzeciak, Regional Nature Conservator from West Pomerania - at 21 December 2007 became Deputy Minister of Environment responsible for nature conservation, including Natura 2000.

Although we work hard and successful for including project sites to Natura 2000, it should be accented that in LIFE'2004 rules for Poland "*the targeted sites should already benefit from the most appropriate legal protection under national law or there must be a formal commitment from the competent authority under national law to put in place such a legal protection before the end of the project.*" – this was achieved without any exceptions.

9 project sites (indicated below – sites 1, 2, 3, 4, 5, 8, 10, 16, 22), submitted by Polish government to the EC in 2004, were officially adopted by the Commission as SCIs at 12 November 2007. The rest of project sites were submitted officially by Polish government to the EC in 2006 and 2007 year, and are waiting for formal adoption by the EC.

As a result of problems with Natura 2000 designation, European Commission started legal procedure for inappropriate designation – now in stage of Reasoned Opinion.

The summary of achievements is as below (achievements in a scope of project are marked by bold):

Site Nr	Site Name	Polish Protection Form	Natura 2000
1	Słowińskie Błota	Nature Reserve has been established during the project	On the official Polish list, officially adopted by the EC

2	Janiewickie Bagno	existing Nature Reserve, planned to be extended	On the official Polish list, officially adopted by the EC
3	Bagno Kusowo	Nature Reserve have been established during the project	On the official Polish list, officially adopted by the EC
4	Kurze Grzędy	existing Nature Reserve	On the official Polish list, officially adopted by the EC
5	Staniszewskie Błoto	existing Nature Reserve	On the official Polish list, officially adopted by the EC
6	Bielawskie Błota	existing Nature Reserve	On the official Polish list
7a	Łebskie Bagno	Nature Reserve has been established during the project	On the official Polish list
7b	Czarne Bagno	Nature Reserve has been established during the project	On the official Polish list
8	Jeziorka Chośnickie	Existing Nature Reserve	On the official Polish list, officially adopted by the EC
9	Wierzchucińskie Błota	Nature Reserve has been established	On the official Polish list
10	Bagna Izbickie	Existing Nature Reserve planned to be extended	On the official Polish list, officially adopted by the EC
11	Pobłocie	Existing Nature Reserve	On the official Polish list
12	Górka	Existing Nature Reserve	On the official Polish list
13	Zaleskie Bagno	Nature Reserve has been established during the project	On the official Polish list
14	Warnie - Wierzchomińskie Bagno	Partially existing nature reserve, on the rest of the area Nature Reserve has been established during the project	On the official Polish list
15	Stramniczka	Nature Reserve has been established during the project	On the official Polish list
16	Roby	Nature Reserve has been established during the project	On the official Polish list, officially adopted by the EC
17	Karsibórz	Existing NLA	On the official Polish list
18	Bagno Ciemino	Existing Nature Reserve	On the official Polish list
19	Reptowo	NLA has been established during the project	Expected to be added after success of restoration
20	Łazy	Nature Reserve has been established during the project.	On the official Polish list

21	Święta	Nature reserve has been established	On the official Polish list
22	Świdne Bagno	Not necessary	On the official Polish list, officially adopted by the EC
23	Wielkie Błoto - Wierzchowo	EG has been established during the project	On the official Polish list, officially adopted by the EC

***bold** = established / achieved as a result of project*

The project success is also an important argument showing the conservation possibilities related to Natura 2000 (implementation of LIFE as Natura 2000 financial instrument). For all Polish nature conservation, the project is a good example of using EU funds linked to Natura 2000, Habitats and also Birds Directives and European environmental policy.

The project has important input to the Natura 2000 habitats monitoring in Poland:

- § some project sites (site 1, 2, 3, 4, 5, 8, 13, 14, 17, 18, 23) have been included as reference sites to "pilot" field habitat monitoring for selected sites & habitats, which has been implemented in 2006 and 2007, for testing the general habitat monitoring idea and methodology, prepared by Polish Institute for Nature Conservation
- § Discussions during the project workshop are important for elaborating the conservation status indicators for bogs (7110 and 91D0 habitats) in Poland. The set of habitat's conservation status indicators, elaborated in our project frame, was proposed as fragment of standard monitoring methodology for 7110 and 91D0 habitats in Poland.

The methodology and preliminary results of Polish habitats monitoring is available at Internet website <http://www.iop.krakow.pl/gios/monitoring/>

Elaborating proposals of Natura 2000 management concepts during the project is important for general discuss on Natura 2000 sites management and management planning in Poland.

The direct project effect – improving conservation status of project sites with the 7110 and 91D0 habitats – is important for general conservation status of these habitat types in Poland. Stopping degradation of Baltic raised bogs is important for stopping biodiversity loss.

f. **Innovation, demonstration value.**

The project is in Poland the first implementation of bogs conservations actions using massive, not only experimental scale. The project is a practice implementation of 20-years postulates of Polish nature conservation, concerning:

- § nature reserves establishing;
- § ditches blocking (for site 4 and 5 ditches blocking was posulated till 1930, but fully implemented not till this project!).

The project was important practical demonstration of new possibilities for nature conservation funding. The LIFE funds accelerate also national funding for targeted bogs (especially EcoFund and Regional Fund for Environment and Water Management – which are expected to fund next necessary steps of conservayion)

The project practical experiences are fully transferable for other raised bogs in Poland (for example Baltic bogs in eastern Poland but also other types of raised

bogs). Handbook of Raised Bogs Conservation has been prepared, printed and disseminated to the nature conservation authorities, real site managers, scientists and NGO's during the project, as important tool of such knowledge transfer. Experience transfer was included also to Habitat Action Plan prepared during the project.

Although main conservation activities are well-known in European bogs conservation, the project is an additional proof that they are useful also in natural, economical, sociological and administration conditions of Poland.

The project experience has been presented during the workshops in frames of **LIFE Nature Co-op Project "Dissemination of ecological knowledge and practical experiences for sound planning and management in raised bogs and sea dunes"** LIFE2003NAT/CP/NL/000006 and became part of common experience for development the PROMME concept and the decision support system (for downloading presentation of our project, see http://www.barger.science.ru.nl/life/work2005_index.html).

g. Socio-economic effects

Creating of public access infrastructure for selected bogs create small, but important benefit for tourism development.

Local communities in northern part of Poland are looking for new sources of incomes. Tourism based on natural values is often recognized as such potential source. From this point of view, each action creating new tourist attractions, will be perceived as benefit for local communities. The project meet this expectation.

We identified additional needs and possibilities to develop more public access facilities to the project sites and their use for environmental education. This will be done in the after LIFE future.

We fail in preventing unemployment effect. After the EU accession and huge temporal emigration, in project region unemployment exists only in official statistics, not in the practice. In practice, there are difficulties in finding employers ready to work, especially for simple works as ditches filling and trees removing.

The project was very important for building public awareness of bog's values and necessity of it's conservation. For this, especially important were project presentation via media to general public:

- the project was presented in radio TOK FM broadcast;
- the project was presented in a fragment of TV film prepared by Regional TV in Gdańsk;
- the project was presented in article published in regional newspaper "Dziennik Bałtycki";
- the nature trails organised in scope of project were presented in local radio broadcast

h. The future: sustainability

All project sites have been designed as appropriate protection form or/and Natura 2000, which guarantee the sites safety against investments, proposals of peat excavation afforestation or plans affecting the water conditions.

The good collaboration (especially with the forest districts acting as site managers) built during the project, and the established “group of people interested in bogs conservation) guarantee the sustainability of project sites protection.

Continuation of conservation actions and monitoring is necessary. For this, the action plan for next 2-3 years was discussed and agreed by all interested and involved institutions. The necessary activities for 2008 and 2009 are expected to be funded by EcoFund and Regional Fund of Environment and Water Management. For details, see after-LIFE conservation plan below

Long term perspective of Baltic bogs conservation is also discussed and agreed between all stakeholders, as Habitat Action Plan for Baltic Bogs in Poland.

i. Long term indicators of the project success.

The main success indicator will be the conservation status of the EU habitat types 7110 and 91D0 , expressed by:

- § water level and water level dynamics during the year;
- § floristic composition (*Sphagnum* presence);
- § stopping the process of trees invasion and transforming open bogs to the bog forests

These parameters are under the monitoring established during the project.

7. COMMENTS ON FINANCIAL REPORT

COMMENTS ON FINANCIAL REPORT

Answers to the Commission's requests to financial report, raised in the letter dated 22/12/2006

1. The VAT certificate submitted by the partner Nadleśnictwo Kliniska is a self certificate (not from the relevant tax authorities) and for other partners the certificates have not been submitted. Therefore at this stage only the Vat incurred by the beneficiary can be recognised as eligible. Please be reminded that only non recoverable Vat can be claimed in the report. Since the percentage of non recoverable VAT varies from year to year, please make sure that the independent auditor in his report clearly confirms the VAT claimed is only the NON recoverable one.

Because Nadleśnictwo Kliniska was not able to provide appropriate certificate, VAT incurred by this partner was excluded from the report.

Because our second Partner, Zachodniopomorski Urząd Wojewódzki, also did not provide the appropriate certificate, the VAT is not claimed for this partner.

We confirm only non recoverable VAT is claimed in the report. Finally, only non-recoverable part of VAT paid by Beneficiary is partially claimed.

The % of non recoverable VAT for Beneficiary, particular years is as following:

Year	The % of non-recoverable VAT as part of total VAT paid
2004	63
2005	65
2006	55
2007	23

The calculation of this percentage is confirmed by the independent auditor in his report. The certificate from the relevant tax authority is re-submitted

2. The annual working time seems to be reported incorrectly, as only the time worked on the project seems to be reported as annual time worked. This is not correct. For the final report please report the total annual working time for each person and the annual salary in the relevant columns

The report was corrected according to request.

For all personnel employed by the Beneficiary of by the Partners and working partially for the project and partially for the other activities, the total annual working time and the total annual salary was reported.

Pawel Pawlaczyk worked full-time for the project only, therefore in this case the annual time worked for the project is equal to the total annual working time.

Maria Herbich and Tomasz Zdanowicz were part-time employed by Klub Przyrodnikow, but for the project only. Therefore their annual time worked for the project is equal to the total annual working time but less then full-time employer equivalent.

3. Additionally you are requested to submit payslips and timesheets for the following persons for 2005 and 2006: M. Herbich, T. Zdanowicz, R. Stańko, M. Jaguś (2005 only) and D. Siemion (2005 only)

Requested documents are attached

Please also confirm that all persons reported as personnel are indeed personnel of your organization and not external assistance providers. Please correct the reporting for final report as necessary.

All persons reported as personnel are personnel of Beneficiary or Partner as employment basis (working under the supervision and under responsibility of employer) and not external assistance providers.

4. The costs of services for which the dates when they were provided were not indicated, are found ineligible at this stage. Please be reminded for the final report that all the cells in the financial reporting forms have to be filled in properly

All cells are filled in. Services ineligible before provided before the project starting date were excluded from the report.

5. The personnel of participants cannot act as external assistance providers. Their time is already claimed (as it should be) under personnel. Therefore the costs of M. Herbich (11373,75 EUR) and R. Stańko (381,67 EUR) are found ineligible.

These costs are excluded from the report, as ineligible.

6. Please clarify if Piotr Herbich and Jacek Herbich are related to Maria Herbich. If so, please explain how the contractors were chosen and how the best value for money was assured.

Piotr Herbich and Jacek Herbich are related to Maria Herbich, but also are one of the best specialists in Poland for bogs hydrology and bogs vegetation. The contractors were chosen in a procedure according to Polish legislation:

- for contracts bigger than 6000 Euro (for example Bielawa Bog management plan): in public tender procedure;
- for contracts smaller than 6000 Euro: in "offers competition" procedure (some potential service providers has been requested for offers, all offers were analyzed and considered, best offer was chosen).

Proposed service price is one of the most important elements of selection. Offers in which Piotr and Jacek Herbich participated, were not more expensive than others. In both cases the selection procedure was conducted by the Partner (Pomorski Urząd Wojewódzki). Maria Herbich (who was Klub Przyrodników employer) was not involved in this procedure at all. (Pomorski Urząd Wojewódzki did not consult the result of selection procedure with the Klub Przyrodników. All results of contracts were reviewed by the independent reviewer from the Regional Council for Nature Conservation and by the national authority (Ministry). This guarantees the quality of service provided by the mentioned contractors must be at least as good as services of other contractors. In that case the value of money is assured.

7. Additionally please explain how Doradztwo i Ekologia and Przyroda W. Zyska subcontractors were chosen. Please submit all contracts, invoices and proofs of payments (in concern of this project with these subcontractors).

Doradztwo i Ekologia was contracted twice:

1. By Beneficiary (Klub Przyrodników), for preparing nature survey reports (A1 action);
2. By Partner, (Pomorski Urząd Wojewódzki), for preparing elements of nature reserve management plan (A3 action)

For 1, subcontractor was selected in a public tender procedure. Documentation of this tender is attached.

For 2, subcontractor was selected in a negotiation procedure. This is according to Polish legislation. Some potential subcontractors were asked for offer and the best offer was selected. Documentation is attached.

Przyroda W. Zyska was selected by Partner (Pomorski Urząd Wojewódzki) as subcontractor for preparing nature reserve management plan. subcontractor was selected in a negotiation procedure. This is according to Polish legislation. Some potential subcontractors were asked for offer and the best offer was selected. Documentation is attached.

Requested documents are attached

8. DHL costs are also claimed under Other Costs. You are requested to be consistent and claim these costs under Other Costs category. These costs of 17,56 Eur are found ineligible at this stage as it is not clear if they were not charged to the project twice.

DHL costs were moved to Other Costs category, as requested. Costs charged twice were excluded from the report.

9. Please provide more information on the costs named "installing public access infrastructure" and "Building observation platform". These seems to be clearly infrastructure costs, therefore you are requested to reclassify them under the infrastructure costs category,

Public access facilities prepared in frames of project are simple, wooden construction, normally not recorded in the inventory of durable goods as a result too small economical value. They should not be considered as infrastructure. in the initial project proposal, costs of such facilities were not planned as infrastructure costs.

The word "infrastructure", which causes misunderstanding, was removed from the description of these costs.

10. Some travel costs (accommodation and food (if daily allowance was not paid), mini-bus rental for the study tour) were claimed under this cost category,. This does not seems correct. Costs related to a given travel need to be claimed under the Travel costs category. Please make the necessary corrections in costs classification for the final report and please be reminded that all the persons that took part in the study tour travels have to be dully listed in the report

Such costs were reclassified under Travel category.

Lists of all participants of study tours are attached.

11. An unforeseen cost of 73,00 EUR (RAM 256 MB) was reported under this cost category. Please confirm if this is indeed listed in your organization's inventory and if not please, reclassify it under Consumables.

This cost was removed from the report

12. You are also kindly requested to submit invoice and proof of payment for the Nissan pickup and to explain how the provider was chosen

The provider was chosen in a public tender procedure. Related documentation is attached. Requested documents are attached

13. Costs named “wood for building public access infrastructure” are in fact infrastructure costs thus they should be reclassified under infrastructure

Public access facilities prepared in frames of project are simple, wooden construction, normally not recorded in the inventory of durable goods as a result too small economical value. They should not be considered as infrastructure. in the initial project proposal, costs of such facilities were not planned as infrastructure costs.

14. You are kindly requested to recheck the costs named toner, paper, stamps and envelopes, small office equipment etc. as general stationary should be classified under overheads (and only part of the cost should be attributed to the project). If these are indeed direct costs for the project, please explain what system is put in place to monitor these costs attributed to the project in 100% from other office costs.

The costs were rechecked and all general office stationary costs were reclassified under Overheads (and only partially attributed to the project). All costs presently classified under Consumables are strictly related to the project.

15. Please also explain why computer sparse parts costs are attributed in 100% to the project.

This issue has been rechecked and some costs are reclassified under Overheads. Only sparse parts used exclusively for the project notebook (used only by project personnel for project purposes) are classified under Consumables.

16. Please explain what exactly the bank charges relate to and if they are directly linked to the project.

There is separate bank account for the LIFE payments in advance. This account is not used for any other money. The bank charges claimed under Other Costs are charges for keeping this account and for the money transfers from this account.

17. Please also fill in the names of the volunteers for whom insurance was paid.

The list is too long for filling in, but is attached as annex.

18. A reasonable methodology for calculation of overheads was submitted only for year 2004, thus these overheads costs are eligible. However overheads for 2005 and 2006 are found ineligible at this stage as no explanation for their calculation was provided in the form 8.2. You are thus kindly reminded to submit the relevant explanation for the final report.

The calculations for 2005, 2006 and 2007 are provided in the form 8.2.

Comments to the report:**General:**Final budget breakdown:

Categories of expenditure	Foreseen	Final	Overspending/ Underspending	%
1. Personnel	175124,00	192232,10	17108,10	9,77%
2. Travel	26910,00	28792,29	2128,60	7,91%
3. External assistance	511711,00	544966,90	33255,90	6,50%
4. Durable goods	35797,00	41636,28	5839,28	16,31%
5. Land/rightspurchase/lease	0,00	0,00	0,00	
6. Consumable material	123466,00	116280,46	-7185,54	-5,82%
7. Other Costs	34000,00	33829,74	-170,26	-0,50%
8. Overheads	61329,00	12832,48	-48496,52	-79,08%
TOTAL	968337,00	970570,25	2479,56	0,26%

EURO exchange rate used for reporting: 1 EURO = 3,6468 PLN (Rate set on 03/12/2007 – the first working day of the month, when the final statement of expenditures is be submitted, valid for December 2007, from InforEuro webpage)

It should be accented that EURO exchange rate was importantly decreased during the project. On the beginning of the project (November 2003) 1 Euro was equivalent to 4,67 PLN, in the interim report date (August 2006) – 3,93 PLN, in the project ending date (September 2007) – 3,83 PLN and in the reporting date (December 2007) – 3,64 PLN. The problem was successfully managed, but finally it causes some (still not substantial) overspendings of the costs which was paid in PLN on the beginning or in the middle of the project, but for the final report had to be recalculated according to present exchange ratio.

All costs are fully paid before the submission of the final report.

Beneficiary, Partners and Cofinancers contribution to the project.

Position in the Project	Name	Contribution		Difference	
		foreseen	real	Euro	%
Beneficiary	Naturalists Club	10386	10000,00	-386	-3,2
Partners	Pomorski Urząd Wojewódzki	69077	64079,83	-4997,17	-7,23%
	Zachodniopomorski Urząd Wojewódzki	23924	18389,79	-5534,21	23,13%
	Nadleśnictwo Szczecinek	11 880	9426,90	-2453,10	-20,65%
	Nadleśnictwo Kliniska	6900	9174,14	2274,14	32,96%
Cofinancers	GEF	34394	41353,40	6959,40	20,23%
	EkoFundusz	130696	148872,98	18176,98	13,91%

The real contribution of Beneficiary, Partners and Cofinancers to the project was different than foreseen, but any partner decrease their contribution more than 30%, therefore differences should not be considered as substantial. Although, as a result of budgetary problems, some public

partners were not able to provide full foreseen contribution, the problem was managed by increased contribution of cofinancers and Nadleśnictwo Kliniska.

Contributions of Pomorski Urząd Wojewódzki and Zachodniopomorski Urząd Wojewódzki were decreased as a result of budgetary problems of these public bodies.

The contribution of Nadleśnictwo Szczecinek was decreased because this partner provide their contribution in a form of financing some conservation action on the forest district territory, and as a result of more detailed needs recognition, decreasing of area targeted by trees removing on the Kusowo Bog was necessary (see technical report).

Increased contribution of Nadleśnictwo Kliniska is caused by EURO exchange ratio fluctuation. The contribution equal to foreseen amount 6900 EURO was provided in the 2005 year, but in the final report this amount must be recalculated according to present EURO exchange ratio.

Increased contribution of GEF is caused by EURO exchange ratio fluctuation. The grant equal to foreseen amount 34 394 EURO was provided in the PLN on the beginning of the project, but in the final report this amount must be recalculated according to present EURO exchange ratio, which change 24%.

Increased contribution of EkoFundusz is caused by EURO exchange ratio fluctuation. The grant equal to foreseen amount 130696 EURO was provided in the PLN in the autumn of 2006 year, but in the final report this amount must be recalculated according to present EURO exchange ratio.

The costs of the last project implementation phase (not covered by the payments received in advance) were covered by money borrowed from:

- Regional Fund for Environment and Water Management in Gdańsk (134 836,02 EUR);
- money borrowed from the Partner's and Beneficiary's budget, which according to the Partner's agreements should be reimbursed after the balance payment.

Comments to budget categories:

Personnel:

The calculation of personnel cost was corrected and improved, according to the Commission's suggestions raised in the letter dated 22/12/2006.

Beneficiary (Klub Przyrodników): Project implementation staff. is described detaily in the description of action A1 in the technical report. In exceptional cases, for some actions (for example Handbook layout preparing to printing, some extra needs for technical assistance) some other employers of Klub Przyrodników have been temporality moved to work for the project for short term (0,5-2 month). Such cases are documented by work sheets. related costs are reported as personnel costs.

West Pomerania Regional Authority: No personnel costs reported because Partner was not able to provide appropriate documentation of this costs and they cannot be considered as eligible.

Pomerania Regional Authority: only small costs related to one of the Parter employers, participating in the project. Only covers costs of her activity exceeding "normal" duties, and clearly related to the project activities.

Kliniska Forest District: only small costs related to one of the Partner employers, participating in the project. Only covers costs of his activities exceeding "normal" duties, and clearly related to the project activities.

Szczecinek Forest District: only small costs related to one of the partner's employers, participating in the project. Only covers costs of her activity exceeding "normal" duties, and clearly related to the project activities.

For implementation some project actions (part of actions: C1, A1, A2, F2) volunteers have been used. The value of in kind work is of course not included to the project costs, but related costs of organising such work (volunteers travels and accommodation, rubber boots, gloves, axes etc. are reported in appropriate categories (travel, consumable materials, other costs).

Personnel costs are importantly (9,77%) overspend. This is basically result of project prolongation. After 3-month prolongation, the project time was 6,78% longer than foreseen. The rest of overspending is caused by fluctuations of EURO exchange rate during the project (see general explanation). The costs increasing in this category was still less than 10% of foreseen budget and should not be considered as substantial.

Timesheets and payslips requested by the Commission in the letter dated 22/12/2007 are provided in annex.

All persons reported as personnel are indeed personnel of Beneficiary or Partners and not external assistance providers.

Travel:

Klub Przyrodników: Because project sites are dispersed, a lot of travels has been necessary. We always try to combine some activities with one travel – in such cases only main travel goal (main action the travel is related with) is indicated on the travel documentation form.

If volunteers have been involved in project actions, there are also costs of their travels (of course only if documented by travel forms. These are travels:

- § of persons participating in the trees removing from the Bielawa Bog (list of persons is attached as annex)
- § of Arkadiusz Gawroński, Jolanta Kujawa-Pawlaczyk, Iwona Melosik, who on the voluntary basis make monitoring observations of fauna and flora for particular bogs.

Accidentally, some other members of Beneficiary of Partners personel (Andrzej Jermaczek, Małgorzata Gruca, Urszula Bierznoj, Joanna Jarosik) were asked to travel for project purposes. In such cases related costs are claimed into this category, although these persons are not the project personnel.

The costs of travel were calculated strictly according to national legislation rules as:

- § reimbursement of ticket costs in case of travelling by train, bus etc.;
- § km ratio (according to Ministry decree) in case of travelling by private car;
- § melas and accomodation costs according to the invoices if the invoices were provided by traveller, or on the daily allowance basis if the detail costs were not documented.

Costs of foreign workshop's accomodation and meals are also claimed into this category.

Foreseen costs of this category are exceeded, but the overspending (2128 Eur) should not be considered as substantial. The costs of travels in initial project were underestimated. During the project implementation, numerous meetings and negotiations were necessary for allowing to implement the project action. More numerous travels were necessary as a result. Money saved in Consumables and Overheads categories were used for necessary travels.

Equipment:

According to Polish legislation rules, we calculate life expectancy of equipment purchased during the project as follows:

- off-road car – life expectancy to: March 2010
- peat borer – life expectancy to: May 2011
- photometer – life expectancy to: November 2009
- thermoreactor - life expectancy to: November 2009

Legal base: *The Tax act for legal persons (act from 15 February 1992), Appendix 1: annual depreciation rates (Załącznik do ustawy z dnia 15 lutego 1992 r. o podatku dochodowym od osób prawnych Załącznik nr 1 - Wykaz rocznych stawek amortyzacyjnych).*

We certify that all equipment will be used for nature conservation purposes, and only to this, in all its life period.

Overspending in this category (5839 Eur) is result of changing Euro:PLN rate (see general explanation). All durable goods have been purchased between January and September 2005.. The real purchase cost in the moment of purchase (using the Euro / PLN ratio for this moment) was 36 691,02 Euro (vs 35 797 planned in the approved project application). As a result of change of exchange rate during the project, the same cost in the final report must be recalculated (using the ratio for December 2007) as 41 613,46 Eur.

The cost of spectrophotometer was importantly underestimated in the initial proposal, but the costs of thermoreactor – similarly overestimated. As a result, purchase of both these elements of equipment was implemented with the foreseen amount.

External assistance:

Overspending in this category (6,40% - still not substantial) is caused by increased number of damming barriers, which had to be built for achieving the conservation objectives.

As explained in the technical report, for achieving project objectives, it was necessary to block draining ditches in more points as foreseen. These needs was precisely identified in management plans prepared in the scope of project. In situations explained in the technical report, more smaller damming barriers were necessary in a place of foreseen bigger ones. Finally, the ditches were blocked in 729 points, in comparison to 440 foreseen. This was necessary for achieving foreseen project objectives fir each site. The problem of such technical modification has been reported in interim report and preliminary accepted by the Commission.

For bigger contracts (>6000 Eur, according to Polish legislation), contractors have been selected on the base of public tendering.

After taking consideration the EC comment to Interim Report, costs of services provided by project personnel (Maria Herbichowa and Robert Stańko) are not reported as eligible and were excluded from the report (see above answer for the Commission's request).

Costs of installing wooden access facilities on bogs are reported here. These facilities according to Polish law are too small and too cheap to be considered as infrastructure. –

Consumable materials:

This category contains:

- maps and aerial photos purchase, necessary for actions A1-A4;
- materials for information panels and public access infrastructure;
- wood for dams building
- materials for organisation voluntary work on the site Bielawa (in frames action C2)
- fuel, necessary for the car exploitation + some other exploitation materials;
- materials for piesometers construction
- etc.

Materials necessary to prepare wooden access facilities on bogs are reported here. These facilities according to Polish law are too small and too cheap to be considered as infrastructure.

All the materials declared under consumables are direct costs paid by Beneficiary / Partners.

The costs related to car (fuel, spare parts) claimed under this category, are (if no other indicated) related to the Nissan Pickup – project car, used exclusively to project. The costs related to other Klub Przyrodników's cars, accidentally used for project, are claimed under Overheads.

Also car maintenance materials costs claimed here are related only to the Nissan Pickup – project car, used exclusively to project.

Computer spare parts claimed here are used for project computer then are in 100% attributed to project.

Although normally electricity & water (for the office) were claimed under Overheads, in the two cases '*Electricity for volunteers field accomodation*' (Nota ks.01/2005) and '*Water for volunteers field accomodation*' (Rach.1/10/2005) the costs are claimed under Consumables and in 100% attributed to the project. Special accomodation for the volunteers has been organised in a wagon on the field, and mentioned above electricity and water have been provided there, to exclusive use of the volunteers working for trees removing (C2 action).

The underspending in this category is a result of overestimation in the project planning phase.

Other costs

This category contains:

- bank guarantee costs;
- administration costs related with land owner identification;
- administration fees related with water and building permits;
- bank charges related to project account;
- delivery service costs;
- costs of formal, geodesic maps necessary for planning purposes;
- etc.

Overheads

Overheads calculation ratio is based on the relation of number of project employers : total number of employers in the beneficiary's office. Please refer that the overheads calculation method is described in the financial reporting form 8.2.

Partners did not provide reasonable overheads calculation methodology, therefore partner's overheads are not reported.

The underspending in this category (78%) is a result of initial huge overestimating. Saved money were used for direct nature conservation actions (overspended costs of damming barriers building and trees removing)

VAT

Klub Przyrodników: According to the Article 90 Polish VAT Act, for Klub Przyrodników VAT is partially recoverable and partially not recoverable. Refundable part of VAT is calculated using formula:

$$(\text{VAT taxed sale in previous year} / \text{total sale in previous year}) \times 100\%$$

According to Klub Przyrodników sale balance, the non recoverable VAT is as following:

For 2004 and 2003, before EU accession, we used mainly co-finance funds from GEF, and Polish legislation gave possibility to recover all VAT paid in relation to abroad financial support.

For 2005-2007, according to Klub Przyrodników sale balance, the non recoverable VAT % is as following:

The % of non recoverable VAT for Beneficiary, particular years is as following:

Year	The % of non-recoverable VAT as part of total VAT paid
2004	63
2005	65
2006	55
2007	23

According to Standard Administrative Provisions, the not recoverable part of VAT is calculated as eligible cost.

Eligibility of the VAT declared by the beneficiary is confirmed by the certificate form the competent tax authority X (Annex X)

For Zachodniopomorski Urząd Wojewódzki VAT is non recoverable, but this Partner was not able to provide certificate. Therefore we not claim VAT for this partner as eligible cost.

For other partners VAT is recoverable and not eligible as project costs.

8. LAYMAN'S REPORT

The Layman's report is attached as hard copy and pdf file (annex 4), and also available on the website at: http://www.kp.org.pl/plbaltbogs/pierwszy_proj_life.pdf

The Layman's report is a 32-pages, bi-lingual (parallel Polish and English text) colour publication for general public. The volume of the brochure, exceeding "standard" for layman's report is caused by bi-lingual text in the same brochure and by necessity to give at least rough description of numerous project sites. The brochure presents the project idea, objectives, sites and actions with its results. The brochure contains also the information about access facilities prepared during the project and possibilities to see project's bogs. The report is available in Internet.

The Layman's report was printed in 1000 copies, disseminated to:

- all institutions and all people collaborating in implementation of the project action;
- all nature conservation authorities in Poland (as example of successful nature conservation implementation);
- Ministry of Environment, regional authorities;
- local communities targeted by the project.

The report is also send by post to interested people & institution on request.

Printing the report as a high-quality publication with colour photos was necessary for achieving effectiveness of this communication tool. In the time 2003-2007, the average quality of publications in Poland improved rapidly. We must achieve our project publications to be "competitive" with other publications available in nature conservation.

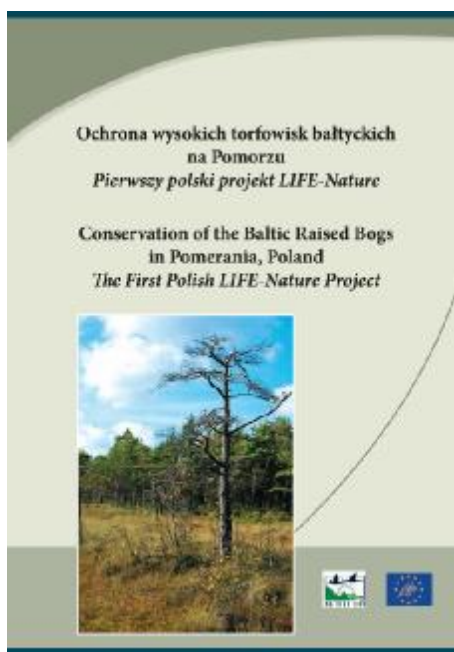


Fig: the cover of Layman's report

9. AFTER-LIFE CONSERVATION PLAN

Long term (20 years) perspective

Habitat Action Plan for Baltic Bogs in Poland have been discussed during the project. Finally, the group of stakeholder involved in Baltic Bogs conservation, containing representants of responsible nature conservation authorities, agreed for following objectives and actions:

- A. Good system of national protection forms
 1. Each valuable bog covered by appropriate conservation form. For detailed objectives for each site see sites catalog
 - § documentation preparing;
 - § formal applications
 - § lobbying, argumentation
 - B. Protection against peat excavation, draining, other negative impacts
 1. No more Baltic bogs used for peat extraction
 - § See objectives B (formal protection).
 - § participation in mining permission procedures;
 2. Cancelling continuous impacts
 - § preparing "callendar" of extraction permissions expiring;
 - § initiation "water management debates"
 - § participation in formal procedures
 - C. Protection against schematic forest management
 - § See objectives B (formal protection).
 - § preparing "callendar" of Forest Management Commissions
 - § participation in FMC
 - § CEPA with foresters (see G)
 - D. Successfull active conservation
 1. Completing Site Management Plans for nature reserves and Natura 2000 sites;
 - § management plans preparing;
 - § participation in procedures of management plans & management decisions for nature reserves
 2. Stopping drainage
 - § dams building;
 - § filling ditches;
 3. Elimination of invasive species
 - § elimination of spruce (alien species)
 - § partial elimination of birch and pine from open bogs;
 4. Financing nature conservation;
 5. Necessary legislation improvement (cancelling regulations blocking nature conservation)
 - E. Restoration of degraded bogs
 1. Restoration after peat excavation
 - § "natural restoration" standards;
 - § experiments for new restoration methods
 - § restoration financing;
 - § participation in formal procedures for restoration
 2. Restoration of bogs degraded by drainage and agricultural use or forestry
 - § "natural restoration" standards;
 - § experiments for new restoration methods
 - § restoration financing;

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§ CEPA with foresters and farmers

F. Building public awareness

1. Awareness of nature conservation authorities conservation management planners

§ serie of workshop, incl. field workshops & study visits ;

§ Handbook of Baltic Book Conservation;

§ participation in procedures of management plans & management decisions for nature reserves

2. Awareness of foresters, water authorities, land-use planners

§ dissemination of information about sites;

§ participation in Forest TMC, water debates, procedures for environmental impact assessment, procedures for land-use planning;

§ dissemination of Handbook of Baltic Book Conservation

3. General Public Awareness

§ public access to selected bogs!

§ leaflets, education events, web site.

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This list of objectives and actions creates long-term perspective for Baltic bogs conservation (both the project sites or the other Baltic Bogs in Poland).

It should be noticed that for Project sites:

- Objectives A1, B1, C, D1 were achieved as a result of LIFE project and no more effort is necessary;
- Objective B2 should be applied only to the site 19 (Reptowo), where it is necessary to buy land after peat excavation and implement the renaturalisation actions);
- Objectives D2, D3, D4, D5 should be applied also to LIFE-project sites;
- Objectives E1 and E2 should be applied rather to the degraded bogs, out of scope of present LIFE project; although some LIFE project experiences (for example peatmosses transplantation experiment) may be useful.
- Objective F1-3 requires continuous work for all sites.

Short (3 year) term perspective

Creating good collaboration between foresters (site managers) and nature conservation services and nature conservation NGO, achieved in the LIFE project, is crucial for the sites conservation sustainability. The good partnership between Klub Przyrodników and two forest districts (Szczecinek and Kliniska – Project Partners) is a model example of such collaboration for nature conservation. As a result of propagation of this example, numerous meetings, discussions etc., in most cases informal but good collaboration have been done between forest districts managing the area and nature conservation administration and NGO. It express for example in voluntary involvement of forest districts in the monitoring data collecting, and also in some forest districts initiatives to extend the project actions (build more dams or education trails). This is good base for sites conservation sustainability in after-LIFE future.

As a result of preparing management plans for all project sites, all conservation needs were identified. Although great part of necessary actions were implemented in scope of LIFE project, there are also remaining needs for the nearest future.

Necessary actions are as following:

- continuing the hydrological monitoring;
- building additional damming barriers;
- continuing removing birch sprouts;
- finalising extension of two nature reserves

There is possibility to cover costs of these actions using EcoFund grant. Application will be possible in March 2008 and granting in autumn 2008 and 2009. Additional funding possibilities will be provided also by Regional Fund for Environment and Water Management and EU Structural Funds – V axis of the Polish Operational Programme “Infrastructure and Environment”.

As a result of discussion, conducted during the LIFE project, the following conservation actions for the period 2008-2010 are agreed by all interested stakeholders. Conservation actions mentioned below are the implementation of management plans, preparing and adopted in scope of LIFE project:

Where (site)	What (action)	When	By whom	What source of finance
1. Słowińskie Blota	building of next damming barriers	2009	Naturalists Club	EkoFund grant expected 2008
	heightening the existing barriers	2009	Naturalists Club	EkoFund grant expected 2008
	removing of trees from the former peat exploitation hollows	2009-2010	Naturalists Club	EkoFund grant expected 2008
	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest Inspectorate	Own resources
2. Janiewickie Bagno	extending of Nature Reserve and extending of NR management? plan	2008-2009	Regional Nature Conservation Authority	Own resources
	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest Inspectorate	Own resources
3. Bagno Kusowo	next ditches blocking	2009	Naturalists Club	EkoFund grant expected 2008
	continuation of monitoring	continuously.	Regional Nature Conservation Authority & Forest Inspectorate	Own resources
4. Staniszewskie Błota	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest Inspectorate	Own resources
5. Kurze	continuation of	continuously	Regional	Own resources

Grzędy	monitoring		Nature Conservation Authority & Forest Inspectorate	
6. Bielawa	continuation of trees & sprouts removing	2008 and next	Nadmorski Landscape Park	Grant from Regional Fund for Environment, EkoFund or Operational Program, expected 2008
	continuation of monitoring	continuously	Nadmorski Landscape Park	Own resources
7. Czarne Bagno and Lebskie Bagno	continuation and extending the transplantation experiment	2008 and next	Maria Herbich & research team from Gdańsk University	Grant from Regional Fund for Environment (confirmed)
	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest Inspectorate	Own resources
8. Jeziora Chośnickie	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest Inspectorate	Own resources
9. Długosz Królewski w Wierzchucine	extending of trees removing	2009-2010	Naturalists Club	EkoFund grant expected 2008
	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest Inspectorate	Own resources
10. Bagna Izbickie	extending of Nature Reserve and extending of NR management plan	2008-2009	Regional Nature Conservation Authority	Own resources
	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest Inspectorate	Own resources
	next damming barriers	2009-2010	Naturalists Club	EkoFund grant expected 2008
11. Torfowisko Pobołckie	continuation of monitoring	continuously	Regional Nature	Own resources

			Conservation Authority & Forest Inspectorate	
12. Las Górkowski	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest Inspectorate	Own resources
13. Zaleskie Bagna	NRs management plan	2008	Regional Nature Conservation Authorities	Own resources & Regional Fund for Environment grant, expected 2008
	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest Inspectorate	Own resources
14. Warnie Bagno	extending of trees removing	2009	Naturalists Club	EkoFund grant expected 2008
	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest Inspectorate	Own resources
15. Stramniczka	blocking outflow	2009	Naturalists Club	EkoFund grant expected 2008
	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest Inspectorate	Own resources
16. Roby	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest Inspectorate	Own resources
17. Karsibórz	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest Inspectorate	Own resources
18. Bagno Ciemino	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest	Own resources

			Inspectorate	
19. Reptowo	purchase of grounds after peat exploitation and restoration	2009	Naturalists Club	EkoFund grant expected 2008
	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest Inspectorate	Own resources
20. Łazy	blocking outflow	2009	Naturalists Club	EkoFund grant expected 2008
	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest Inspectorate	Own resources
21. Olszanka	next damming barriers	2009	Naturalists Club	EkoFund grant expected 2008
	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest Inspectorate	Own resources
22. Swidne Bagno	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest Inspectorate	Own resources
23. Wielkie Błoto k. Wierzchowa	blocking outflow	2009	Naturalists Club	EkoFund grant expected 2008
	continuation of monitoring	continuously	Regional Nature Conservation Authority & Forest Inspectorate	Own resources

9. ANNEXES

Paper annexes:

ANNEX 1: WORKSHOPS PARTICIPANTS LIST & PROGRAMS OF WORKSHOPS;
ANNEX 2: STANDARD TECHNICAL PROJECTS OF DAMS USED;
ANNEX 3: PROJECT PUBLICATIONS (HANDBOOK FOR RAISED BOGS CONSERVATION,
LEAFLETS);
ANNEX 4: LAYMAN'S REPORT
ANNEX 5: SCIENTIFIC REPORT

Electronic annexes (on CDs):

ANNEX 6: RESULTS OF ACTION A1-A3 FOR PROJECT SITES (NATURE INVENTORY
REPORTS & CONSERVATION FORMS DOCUMENTATIONS & MANAGEMENT PLANS &
NATURA 2000 SDFS);
ANNEX 7: BALTIC RAISED BOGS HABITAT ACTION PLAN;
ANNEX 8: PHOTOS:
- DOCUMENTATION OF DITCHES BLOCKING;
- TREES REMOVING;
- EXPERIMENTAL PEATMOSES TRANSPLANTATION
- ACCESS FACILITIES
- STUDY VISITS & MEETINGS & WORKSHOPS;