162/06/81

DARWIN INITIATIVE FOR THE SURVIVAL OF SPECIES

BOGS OF TOMSK PROVINCE:

INVENTORY, ASSESSMENT AND BIODIVERSITY ACTION PLAN

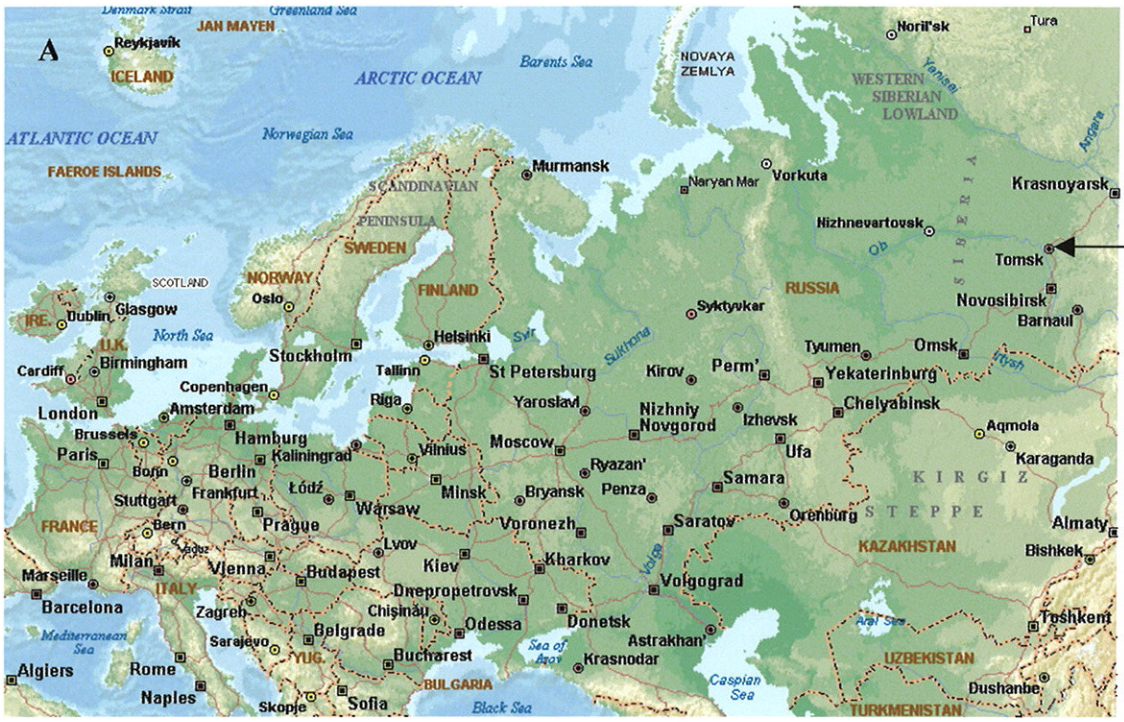
Final Report

October 2000

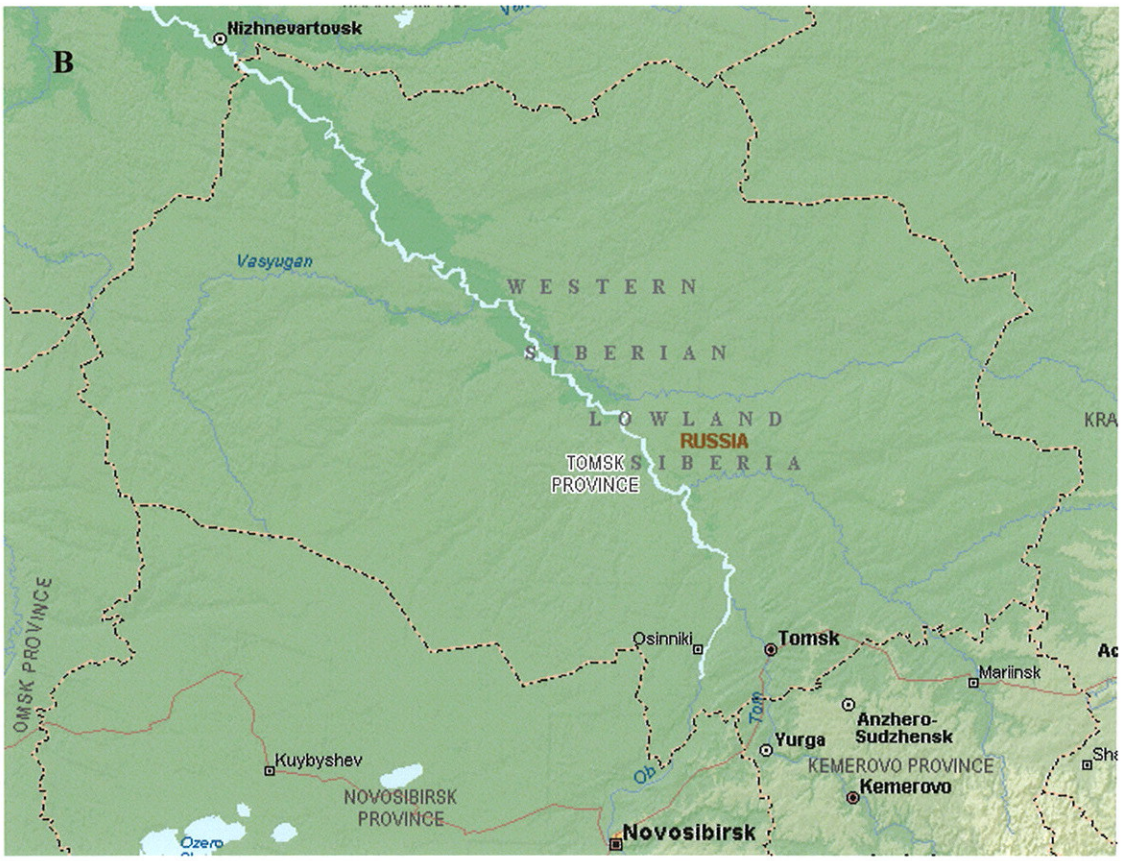
University of Sheffield
in collaboration with
Tomsk State University

CONTENTS

Figure 1. General location of (A) the city of Tomsk and (B) Tomsk Province, within the Western Siberian Lowland of central Russia.



Scale: 1cm = c. 400km



Scale: 1cm = c. 65km

2. PROJECT EXPENDITURE

Total grant expenditure

£103,500.42

Breakdown of expenditure

(using expenditure categories in the original application form)

	Predicted	Actual	% variation
Staff salary costs:			6.0
Postage, telecoms & stationery			22.9
Travel etc.:			-3.4
Printing etc.			35.3
Conferences, seminars etc.:			15.3
Other: Capital items, consumables, computerware, data costs			-1.7
Total			3.6

Explanation of any variations in expenditure +/- 10%

Stationery/printing costs were higher than originally envisaged due to a combination of inflation rises in Russia, processing / printing of photographs and use of colour printing in the final outputs (including large-sized maps).

The total conference/seminar budget was slightly exceeded due to a contribution made to the travel costs of a UK participant presenting a paper about the project at an international conference.

The extra costs incurred under these headings were found from other parts of the budget.

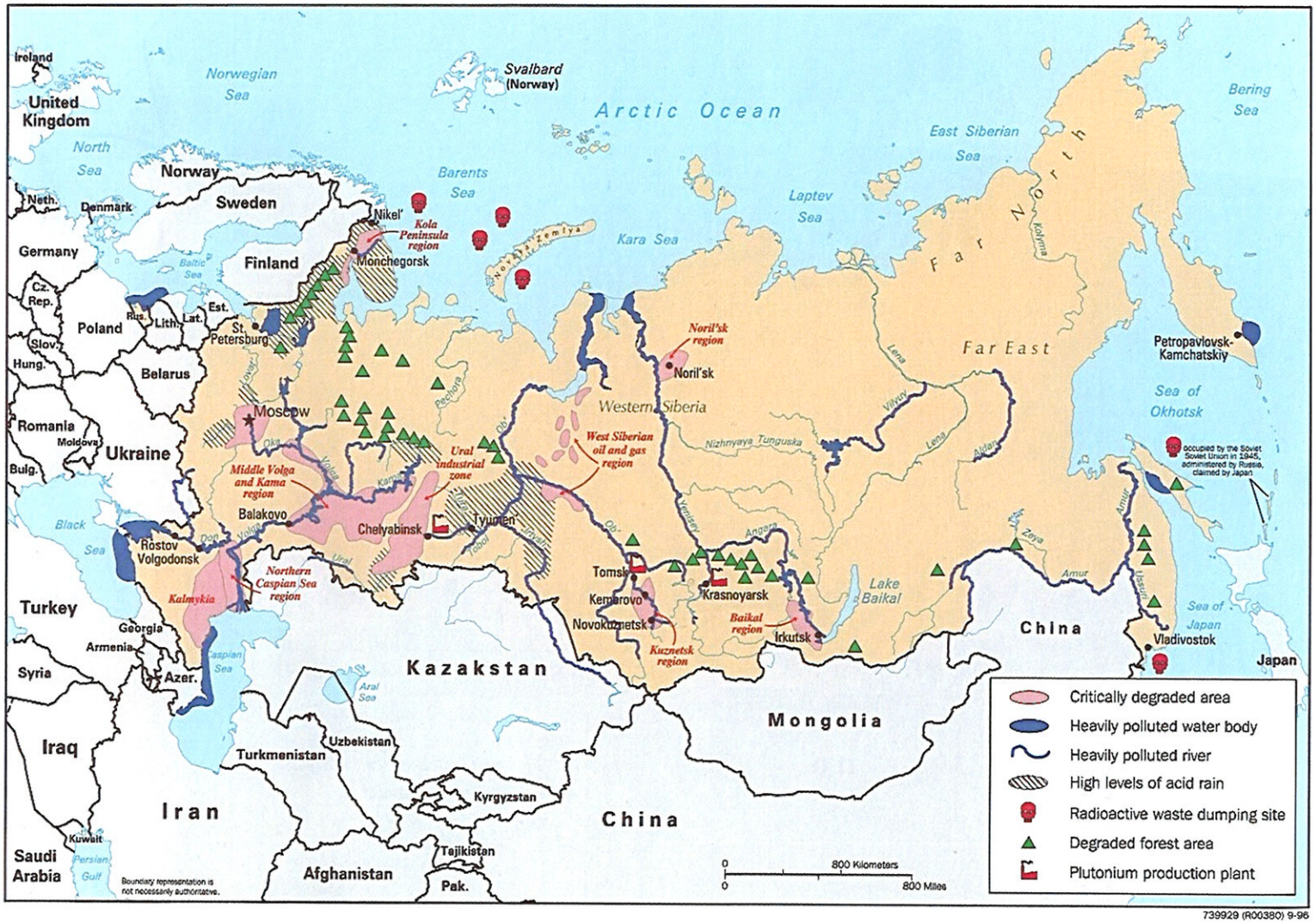
of greatest ecological interest and of highest agricultural value, that are also the most threatened, and it was therefore on this area that it was decided to focus the project.

The main thrust of the project was therefore to increase the knowledge of the natural biodiversity of the wetlands. The project aimed to make use of the current economic 'window of opportunity', where little development work is in progress, in order to identify natural associations of rare plant species and vegetation communities and thereby make recommendations for the protection of the most valuable sites. It was hoped that identification and protection of these sites before further damage was caused would ensure the conservation of these internationally-important wetlands, and help to avoid the many problems with which ecologists of western countries are now faced, in trying to restore former 'natural' biodiversity on damaged peatlands.

These programmes were seen as the best way to ensure future protection for wetland species and habitats of the Western Siberian Plain. The process of further development of the project as it progressed included the following main stages:

1. Establishment of constant contact between scientific collaborators (project partners), with detailed discussion of the work programme and its progress;
2. Scientific exchange between the project partners and exchange of experience concerning the organisation of protection of wetlands and their biodiversity in UK and Tomsk Province;
3. Review and analysis of the published Russian literature on wetlands (principles of classification, vegetation, structure of peat deposits) in Russia with special focus on Western Siberia and approaches to their conservation;
4. Organisation and completion of field surveys for the collection of data about the vegetation of peat bogs in Tomsk Province;
5. Development and filling of a computer database on the vegetation of peat bogs of Tomsk Province;
6. Drawing up of an electronic "GIS" map of wetlands of the southeast of Tomsk Province, where natural conditions are most variable, and wetlands have been most affected by human activities over the past centuries;
7. Training in the preparation of, and subsequent development of a Biodiversity Action Plan for the preservation of the biodiversity of peat bogs and other types of wetlands in Tomsk Province;
8. Establishment of a better working relationship between the project partners and the bodies of state authority of Tomsk Province and Regional State organizations, which are responsible for ecology and are interested in the practical results of the project for planning future work.

Figure 2. Key Environmental Problem Areas in Russia



This map was downloaded via the Internet from the University of Texas Map Collection (Russian_Env96.jpg)

rare animals, and initiation of monitoring systems focusing on the status of biological diversity. Some biodiversity projects are necessarily undertaken at the federal level, but there has been a gradual shift of efforts from the centre to the regions, where the activities of the executive authorities are seen as in many aspects crucial for the fate of Russian biodiversity.

The State Committee of the Russian Federation for Environment Protection published the first CBD National Report of the Russian Federation "Biodiversity Conservation in Russia" in 1997, under a GEF-funded project. Thus, at the time when the current project was first discussed, initiatives which were primarily directed towards fulfilling Convention obligations were a relatively recent development, particularly at a regional level, and with funds for such work being limited, the current project was particularly welcomed and seen as having a direct influence on Russia's obligations for International Biodiversity Convention.

Bogs and other types of wetlands are the dominant types of landscape in the study area of the Project. Wetland landscapes possess enormous value in forming and maintaining the biodiversity of the region. However, protection of wetland biodiversity is currently inadequate in the Province, and there was insufficient primary data on which to base ecologically-sound decisions. Specially-protected natural territories occupy about 6 % of the area of Tomsk Province, but practically all of these are represented by zoological 'zakazniks' and ecologically-valuable forest sites. Bogs and other types of wetlands are certainly present within the boundaries of protected areas, but the management regime of such areas is mainly determined by the interests of regulation of use of forest resources and game (hunting) fauna. There are no nature reserves ('zapovedniks') within the territory of Tomsk Province, where, according to the Russian nature protection legislation, the whole area and all natural resources are subject to strict protection. 12 'Monuments of Nature' were organized for preservation of separate small mire sites and parts of large bog systems; these are concentrated mainly in the highly developed southern areas of the Province and the majority of them have lost their nature conservation importance as a result of human influence (drainage, peat extraction) and intensive economic use of adjacent sites.

Against this background, the project was seen as being able to help Russia meet its CBD obligations in the following areas:

- collection and analysis of extensive factual material on the biodiversity of wetlands of the southeast part of the vast West Siberian region – the project was the first attempt at comprehensive study of these wetlands;
- enhancement/establishment of databases and reference collections on plant materials;
- training of local people in survey and identification of flora;
- training of local people in conservation and management techniques;
- collaboration with western scientists in the development of a Biodiversity Action Plan for the wetlands of Tomsk Province, in order to provide a basis and incentive for the local Tomsk authorities to carry the project forward into appropriate concrete actions for the conservation and management of this important wetland resource;
- identification of particularly valuable wetland sites, and contribution to the development of national and regional networks of protected sites;
- contribution of information on rare species for Red Data Books;
- dissemination of information to the international scientific and conservation communities;

4. PROJECT OBJECTIVES

What were the objectives of the project (as stated in the original application form)?

- to use British expertise for collaboration with and training of local scientists, in order to develop a programme for a detailed biological inventory and evaluation of the bog resource of Tomsk Province.
- to carry out the necessary survey work to establish a basic inventory of bog sites in Tomsk Province and description and classification of their vegetation.
- building upon ECUS experiences of developing wetland classifications and inventories in the UK, to develop and set up a database which will help to evaluate the information gathered on wetland sites and prioritise the use of resources in their conservation and management.
- to facilitate the exchange of information with western experts on techniques for appropriate evaluation and management of bog vegetation for maintenance of the current resource;
- to collaborate on the production of a Habitat Statement and Biodiversity Action Plan for the bogs of Tomsk Province;
- to establish close links between Sheffield and Tomsk to subsequently provide advice on these and other peatland issues, and monitor progress/achievements;
- to promote the widest possible dissemination of the biodiversity value of Tomsk wetlands to the world scientific, 'conservation' and political communities.

Were the objectives of the project revised? If so, how?

No

Have the objectives (or revised objectives) been achieved? If so, how?

We consider that the original objectives have been achieved, as detailed below:

i. ***to use British expertise for collaboration with and training of local scientists, in order to develop a programme for a detailed biological inventory and evaluation of the bog resource of Tomsk Province***

Three British scientists visited Tomsk at the start of the project in order to facilitate collaboration with four Russian scientists on the initial development of the survey work programme, and establish appropriate sampling protocols. One British scientist spent six weeks in the field in the first year and three weeks in the second year in order to provide advice as necessary and to assist with the survey work. In addition, regular contact between project partners was maintained, mainly through email, to discuss any issues as they arose. Thus, the success of the programme was promoted by the use of British expertise in the field of detailed inventory and resource assessment of wetlands and their vegetation.

ii. ***to carry out the necessary survey work to establish a basic inventory of bog sites in Tomsk Province and description and classification of their vegetation***

A large study programme on the wetlands of Tomsk Province has been executed, involving collation and review of available published information on mires in West Siberia as well as primary survey work. In only two field seasons, vegetation and environmental data were recorded from more than 2000 sample locations, representing 17 key plots, of around 100 sq.

conservation bodies, other government agencies, industry and local people, which promoted much useful subsequent discussion and exchange of ideas.

During the study visits of Tomsk project partners to the UK (Sept. 1998 and March 2000), arrangements were made to meet with representatives of UK statutory agencies (English Nature, Broads National Park Authority, Countryside Council for Wales and Environment Agency). The programme included visits to 18 wetland sites (in East Anglia, Yorkshire, Lincolnshire, Cumbria and Anglesey), and the Russian visitors were able to see for themselves the considerable conservation management activities which are required to maintain many of the best UK wetland sites, and to learn more about the mechanisms through which this is achieved.

v. ***to collaborate on the production of a Habitat Statement and Biodiversity Action Plan for the bogs of Tomsk Province***

Close collaboration between partners and the Tomsk local authorities was needed to produce a combined Habitat Statement/Biodiversity Action Plan (see attached documentation), which is based on the UK model and experience, but adapted to the Russian context. The study visit to Tomsk in July 1998 involved an intensive programme of meetings with the various representatives of the Regional Government (administration), Regional Committee for Ecology, Department of Geology and Regional Centre "Tomsk-geomonitoring". Intensive training was given to project staff in the content and preparation of a Biodiversity Action Plan, both in person, and via email discussions. Final revisions to the Action Plan were discussed during the UK workshop in March/April, and the Action Plan was 'handed over' to and ratified by the Tomsk Province Administration in a seminar in Tomsk on 15 June 2000. The Plan is based around the UK model, although incorporates much more background detail as it was felt that this would provide useful context in a situation where production of such a plan was a new concept.

After discussing the prepared plan with the State Ecological Committee of Tomsk Province it was submitted for consideration to the Department of Environmental Management and Oil Industry of the Administration of Tomsk Province. As a result, a draft decree of the Governor of Tomsk Province "On preparation and implementation of Biodiversity Action Plan for the Wetlands of Tomsk Province" was compiled.

This brief document consists of two main items:

1. A description of work undertaken to date and its importance for the Province;
2. An implementation order for the Biodiversity Action Plan and use of its content in the activity of the State Ecological Committee of Tomsk Province for planning work on conservation of biodiversity and improvement of the network of specially protected natural territories.

There are two appendices attached to the draft decree, compiled from different parts of the text of the Biodiversity Action Plan, namely:

1. Information describing the status of wetlands,
2. Statement of targets, aims and supposed practical actions.

The draft decree, with appendices, was submitted to the Secretariat of the Regional Administration for preparation of a final version and observance of the general procedures for adoption of legal acts in the field of ecology and rational nature use.

It is gratifying to hear that the local Administration is already thinking of working towards preparing Action Plans for other habitats in the Province.

If relevant, what objectives have not been achieved, or only partially achieved, and why?

It was initially our intention to prepare a Habitat Statement for each of the main wetland habitat types, based on the UK model, as well as a Biodiversity Action Plan. However, it became clear that this was largely inappropriate in the context of the vast scale of the wetlands under consideration, but also due to the lack of time for collation of sufficiently-detailed information regarding the current status of each habitat type and factors which adversely impact upon them. The BAP we produced therefore provides information about the status of Tomsk wetlands in general, and impacting factors, as well as making recommendations for actions.

While considerable effort has already gone into disseminating information about and results from the project, we are still in the process of preparing the results from the project in a form appropriate for publication in international journals. However, both teams are committed to continuing the work in order that this can be achieved. [see Section 5: Project Outputs]

Date	Output Ref. No.	Details	Description/Commentary
September	12A	Database on the wetlands of Tomsk established	A computer database containing detailed information about the floristic composition of 2597 relévées, plus associated environmental information (representing 17 key plots) has been established and handed over to the host country. This contains a total of 77583 individual species records. A second, smaller database includes information on lichens, and contains details of 846 relevées, with 1876 individual records.
1998/1999			
July	8	One UK staff member involved in study tour in Tomsk	One UK staff member involved in the workshop/study tour in Tomsk in July 1998 (1 week).
August	8	One UK staff member involved in fieldwork in Tomsk	One UK staff member involved in field work in Tomsk in July 1998 (3 weeks).
June or September	6A/B	3 members of Tomsk team in UK for training and discussions	3 members of Tomsk team (E. Lapshina, A. Zverev, N. Semenova) in UK for 10-day workshop/training, sites visits and discussions in September 1998.
1999–2000			
September	14A	Workshop to discuss data evaluation and dissemination of results	The 6-day visit to Tomsk by two UK scientists took place in August 1999, and involved an intensive programme of meetings with the various representatives of the Regional Government (administration), Regional Committee for Ecology, plus detailed discussions about the project, both at Tomsk State University, and in the field.
February	9	Habitat Statement and Action Plan produced	A preliminary draft of the "Biodiversity Action Plan for the Wetlands of Tomsk Province" was produced at the end of the second year of the project, in both Russian and English. Further work on the Plan, in collaboration with the local authorities, culminated in its final production in April 2000, and ratification by the Tomsk Province Administration and Regional Committee for Ecology in June. The Plan will certainly provide a valuable framework for wetland conservation and will help to ensure that these important habitats are taken into consideration in future planning issues in the Province.
March	11A	"X" of papers published in international journals	Plans for publication of papers in International Journals have been discussed in detail, but as yet these have not yet been prepared (see below).

- ***Were any additional outputs achieved?***

Details of additional outputs are given below.

Output Ref. No.	Description/Commentary
1997-8	
4A/B	Three Russian students were trained in survey and identification skills during the field work: Rudenko, V.V. (5 weeks); Perevodchikov, J.P. (3 weeks); Alexeeva, L.I. (1 week). (total = 9 weeks)
14	6 members of the host department or other institutions in Tomsk (not directly involved in the project) were present at the sessions of the workshop held in Tomsk in July 1997 to learn about the project and participate in the seminars. (NB: overlap with output 6A)
14D	A presentation about the project was given to delegates at the December 1997 conference of the British Ecological Society. The work was also reported at an Inter-regional ecological conference in Tomsk (February, 1998) and at a conference on the Ecology of Siberia, in Abakan (November, 1997).
15D	Project details were supplied to several organisations and journals. 3 short pieces about the project appeared in the local press (UK). Long articles appeared in the newsletters of the International Peat Society and the Mires Research Group of the British Ecological Society, both of which have an International readership.
19B	1 national radio interview: Radio 5-Live (UK)
19D	1 local radio interview: BBC Radio Sheffield (UK)
23	At least $4500 raised from other sources (mainly "in kind")
1998–9	
4A/B	Three Russian students were trained in survey techniques and identification skills during the field work: Rudenko, V.V. (6 weeks); Perevodchikov, J.P. (5 weeks); Safiannikova, K. (6 weeks). (total = 17 weeks)
6A/B	The 6-week field-work period involved eight Russian nationals: the four Scientists, plus four temporary/trainee research workers: T. Ivchenko (5 weeks), Volkova, I.I. (2 weeks); O. Pisarenko (4 weeks); A. Korolyk (2 weeks). (total = 13 weeks)
6A/B	A one-week workshop was held in Tomsk (1-7 July 1998), involving 1 Russian (& 1 UK) project participant together with other local scientists, and members of the Regional Government (administration), Regional Committee for Ecology and Natural Resources and Tomsk Geomonitoring. Included intensive training in the content and preparation of a Biodiversity Action Plan.
7	Two educational videos were prepared from material 'shot' during the summer fieldwork in Tomsk and the visit to UK wetlands, and were shown to students during seminars at Tomsk University.
11A	2 papers were published or accepted for publication in peer-reviewed journals (see appended lists).

Output Ref. No.	Description/Commentary
Non-standard outputs	Considerable effort has been expended over the past year in the production of an electronic (GIS) map of the south-eastern part of Tomsk Province, showing the distribution of the main different geomorphological types of wetland, which has not previously been available, even on paper. The region chosen for mapping is the most diverse, and has also suffered the most from human activities – it is thus the area most relevant to the Biodiversity Action Plan. Details, and an example of the map output, are provided in the Scientific Report. The scope of the project was considerably increased from that originally envisaged, particularly with regard to work on preparation of the Biodiversity Action Plan (BAP). The main focus of research within the project was directed towards the study of peatlands and their botanical diversity. However, during the course of the project, information on the fauna was also collected, and the BAP therefore includes recommendations for actions necessary for preservation of wetland flora and fauna.

Two more of the project partners started to learn English, at their own expense, during the course of the project, which has helped greatly over the past year. We would therefore support the Darwin Initiative Secretariat in encouraging projects to 'build-in' funding for some training in English at the start of a project.

It became evident that we were too optimistic in our project objective of having two papers published in International Journals within the three year period. This is, paradoxically, a reflection of the strong Russian commitment to the project, and willingness to derive that maximum possible scientific and conservation benefits from a complex study. It has primarily stemmed from the collection of a massive amount of data during the first two years of the project, and, in particular, the need for identification and verification of vegetation samples collected in the field, as well as collation of environmental details, before the data could be entered into the database for analysis. This necessitated some unscheduled visits to St. Petersburg (taking the opportunities for combining the work with trips undertaken for other purposes) in order to consult experts and herbarium specimens. That the Russian partners have chosen to be so thorough in the study is greatly to their credit.

The following actions can be specifically highlighted as being a direct result of the project, all of which will contribute towards biodiversity conservation in Russia:

In 2000, the work on preparation of the Russian strategy of preservation of wetlands was completed, and as a direct result of undertaking the Darwin project, the Russian partners were able to participate in, and positively contribute to, this work.

Based on past experience and new data collected during the Darwin Initiative project, four large wetland areas were chosen in the territory of Tomsk Province which fulfil the criteria for Ramsar designation: [see Maps in appended documents]

1) Great Vasyugan Bog, on the watershed of the Ob and Irtysh on the border between Tomsk and Novosibirsk Provinces (Semenova et al., 1998);

2) The valley of the River Polta and left bank of River Tym. A complex of lakes and flood plain meadows, forming important fish feeding-grounds and supporting a notable concentration of migratory and breeding waterfowl;

3) The mire system "Latary", in the central part of watershed of Ket and Chulym rivers (right tributaries of the River Ob);

4) The mire system "Ulukh-Thayakh", on the left side of the Chulym river valley in the vicinity of Teguldet settlement.

5) The mire "Chilinskoye" on old river-beds within the left bank flood plain of the Ob River in the south of Tomsk Province, between the villages Baturino and Yelovka. This is a calcareous rich fen, characteristic for the southern forest zone of West Siberia.

Site descriptions and conservation evaluations have been prepared for these sites. The results have been presented (in both Russian and English) to the Russian co-ordination centre of Wetlands International for inclusion on the Russian list of Ramsar areas (Wetlands International Publication No. 49, 1999; Wetlands International Global Series No.2, 2000).

Together with the scientists from Novosibirsk, the conservation assessment and evaluation of the Great Vasyugan Bog has been carried out in order to make the case for its special protection. The data have been presented to the relevant administrations and Committees of Ecology of Tomsk and Novosibirsk Provinces. Two project members, E. Lapshina and N. Semenova, have been made members of the Inter-Regional Commission on the Great Vasyugan Bog, set up to promote the protection of this internationally-important, vast wetland area. The commission consists of representatives of scientific community and employees of the Committees of Ecology of Tomsk and Novosibirsk Provinces.

By bringing together different groups with an interest in wetland conservation, the project attracted the attention of federal ecological organizations to the problem of preservation of wetlands in Western Siberia. Also it increased awareness of the necessity for more well-reasoned choices of nature protection priorities at the state level. As a result, there has been an increase in the number of particularly-valuable Russian wetlands subject to conservation protection.

Semenova, N.M. (senior researcher) – provides an important link between the scientific community and the local authorities on biodiversity matters. Following her intensive training in the preparation of a Biodiversity Action Plan, she will be well-placed to advise on their preparation for other habitats. She is now actively involved in local and national conservation initiatives and liaison with local authorities over issues affecting wetlands.

Mouldiyarov, E.Ya. (senior researcher) – will continue to work on biodiversity-related projects where possible. He is currently working on the preparation of a handbook (key) for the liverworts of Tomsk Province, which it is hoped to publish in 2002. His teaching duties within the University will enable him to promote biodiversity conservation and to pass on the experience and skills gained during the project to many students undertaking both pure and applied studies.

E. Lapshina, N. Semenova and A. Zverev had the opportunity to visit UK during the project and to become acquainted with practical activities in the field of protection and management of wetlands in Great Britain; the knowledge gained will be invaluable in their future activities in Russia.

In 2000, the work on preparation of the Russian strategy for preservation of wetlands was completed, and as a direct result of undertaking the Darwin project, the Russian partners were able to participate in, and positively contribute to, this work. They will continue to be increasingly involved in biodiversity issues at a national level, as well as continuing to liaise with the local authorities in Tomsk Province.

E. Lapshina and N. Semenova have been made members of the Inter-Regional Commission on the Great Vasyugan Bog, set up to promote the protection of this internationally-important, vast wetland area. Together with the scientists from Novosibirsk, they were involved in the conservation assessment and evaluation of the Bog in order to make the case for its special protection..

Borisenko, A.L. (postgraduate student) – is involved in further processing of the collection of sampled mosses, and plans to prepare his PhD "Bryoflora of the southeast of Tomsk Province", to be submitted in 2002. He plans to continue working in the scientific/conservation field, for which the training received during the project will provide a good background.

Rudenko, V.V. (master degree student) – continues her involvement in the processing of the lichen collection, and plans to submit her master degree thesis in 2001. She plans to continue her education as postgraduate student, which will include using the data collected during implementation of the Darwin Project.

Ivchenko, T.G. & Volkova, I.I. (postgraduate students) – they have received their first experience of independent (self-dependent) work within the framework of the project, in the study of flora and vegetation of wetlands and field surveys. Currently they work on their own scientific topics, which are connected with the study of biodiversity of wetlands in areas adjacent to Tomsk Province (PhDs): Volkova I.I. – "Wetlands of Kuznetsk Alatau reserve: flora, vegetation, history of development"; Ivchenko T.G. – "Map-making of mire complexes of the Southern Urals". After finishing their PhD Theses, they are planning to continue scientific activity in the field of environmental investigation and conservation of Siberian wetlands.

Perevodchikov, J.V. &, Sofiannikova, K.V. (students) – have received training in survey techniques within the framework of the project. Using the materials of the project they have prepared the scientific dissertations: Perevodchikov J.V. – "Dynamics and development of wetlands of the Ob-Tom watershed"; Sofiannikova K.V. – "Flora and vegetation of wooded fens of the Ob-Tom watershed". They have continued their

8. SUSTAINABILILTY

Did the host country institute(s) contribute resources to this project (these may have been provided in-kind, for example staff, materials etc)?

Yes

If so, what is the monetary value of the resources committed to the project by the host country institute(s)?

The monetary value of the use of equipped premises (laboratories) and office facilities (fax machine, photocopier, computers, Internet access etc.) can be estimated at around $4500 per year (in addition to equipment funded by the project).

The involvement of students of the Faculty of Biology and Soil Sciences for participation in field surveys helped to keep project costs down – the monetary value of this can be estimated as $3900 in total. Student's work during the project time includes 26 week of fieldwork ($1300) and about 13 months of computer work and herbaria (lichen) determination ($2600).

To what extent was Darwin funding a catalyst for attracting resources (including in-kind contributions) from other sources? Please provide details on the other sources from which resources were secured for this project.

No monetary resources were obtained from other sources specifically for this project. However, we are grateful to staff of the UK statutory agencies: Environment Agency, English Nature, Countryside Council for Wales, Broads Authority, who freely gave their time to the project to meet with the project group, and discuss biodiversity initiatives, conservation issues, mechanisms and actions, mostly during field visits.

Similarly, the local Authorities and other Institutions in Russia provided 'in kind' support for the project, for example "Tomskgeomonitoring" permitted use of the archive data and provided facilities for the use of mapping software; staff of The Institute of Main Botanical Garden, Moscow and Komarov Botanical Institute, St. Petersburg helped with consultations and revision of difficult samples of cormophyte mosses and liverworts; staff of the Central Siberian Botanical Gardens, Novosibirsk and Baikal State Biosphere Reserve helped in determination of lichens; and staff of Forest Institute, Krasnoyarsk and Tomsk University provided valuable discussion on wetland classification.

What is the monetary value of resources generated for the project from other sources (please provide an estimate for each funding source)?

It is impossible to estimate the monetary value of the resources described above with any degree of accuracy, as they mainly represent time inputs by staff of various organisations and institutions. However, had these services been paid for, the costs would have undoubtedly run into several thousand pounds.

To what extent is work begun by the project likely to be continued in the future (if this is relevant - some projects may come to a natural end at completion)? This is more likely to be relevant for research-based projects.

In the first instance, it is planned to carry out an audit of existing nature protection territories ("Monuments of Nature") in Tomsk Province; and to prepare descriptions and other necessary documents for their protection. It is also proposed to designate additional sites as

9. OUTCOMES IN THE ABSENCE OF DARWIN FUNDING

Had Darwin funding been unavailable for the project, what would have been the most likely outcome:

1. **The project would have proceeded with other funding? From whom?**
2. **The project would have proceeded at a reduced scale? Please explain.**
3. **The project would have been delayed? Please explain.**
4. **The project would not have proceeded?**

If Darwin funding had been unavailable, research on Tomsk wetlands would have been organized, but would have been carried out on a much more limited scale. Basic attention would be given only to pure scientific study of a small number of sites, and studies would have been subject to the limited funding for such projects available through Tomsk State University or a limited number of national scientific funding sources. The studies would not have been directed to the more practical aspects and use of the information in the development of a specific plan of actions (BAP) for the preservation of wetland biodiversity.

Had this project not been undertaken, how would the users/beneficiaries of the project have met their requirements? Would other organisations/ initiatives have been able to meet their needs (at least to some extent)?

Had the project not been undertaken, the users/beneficiaries of the projects would not have been able to meet their requirements, at least in the short term, unless other sources of international funding could have been found, which is extremely unlikely. It is possible that in the longer term, some of the national initiatives promoted under the CBD may have provided some limited funds, but within such a huge country, these would not be likely to provide the funds necessary for such intensive survey and evaluation work.

What were the main problems/difficulties encountered by the project?

1. There were some unforeseen, but necessary expenses, for example currency exchange and medical expenses which had to be found from other parts of the budget. We underestimated the actual costs of ensuring medical health for all participants, e.g. charges for vaccinations, provision of medical supplies (including insect repellants and nets) etc.
2. In the first year, some delays and problems were experienced through lack of available large-scale maps, and difficult travelling and living conditions during the fieldwork. In some instances, problems were due to lack of planning and foresight, some of which were addressed before the second fieldwork season.
3. There were some misunderstandings over who was to be responsible for particular tasks on the project, presumably because of linguistic problems and heavy reliance on email communications. However, the reciprocal visits helped considerably in resolving these issues, and agreeing responsibilities for the final outputs.
4. There were some difficulties engendered by the Russian economic problems, but it was fortunate that (i) our Russian colleagues insisted on not using the banks for transfer and holding of money, (ii) the main part of the current crisis started towards the end of the second field season, and (iii) that we were able to purchase flight tickets and send them out for our colleagues to travel to the UK.

What are the key lessons to be drawn from the experience of this project? Please try to provide as much information on this point as you can so that others can learn from the experiences of your project.

Communication

1. Setting up the project and getting the six-monthly reports in on time requires good communication links. Maintenance of regular links (in our case mainly via email) were important, especially due to the differences in language and culture. Reciprocal visits, including a preliminary planning workshop, are essential in planning and execution of the projects, and increasing understanding between partners.
2. Being reliant on one individual to undertake all the necessary interpretation/translation work can be a constraint, and use of interpreters/translators without the necessary technical background can cause confusion! We would support the suggestion of 'Darwin' to include/fund some training in English in the first few months of the project for the partners.
3. The host country partners should be encouraged from the start to take joint 'ownership' of the project, and it should be made clear that UK partners are not there to tell them what to do! Set out a programme of work at the start of the project, and make individual responsibilities clear.

Reporting

1. We would suggest that partners are provided with copies of the report formats needed by Darwin (or amended as appropriate), and required to provide their own version to UK partners - preferably a couple of weeks before the deadlines. That way, everyone is clear 'up front' about what is required, and the full onus for reporting does not fall on the UK partners. This is also helpful for everyone in making sure the project is kept on track, and to identify any problems as they arise.

Skill level/data handling

1. Identifying the right project team, with complementary skills, at the outset, both in the UK and host country, is crucial.

welcome the setting up of a DETR 'training day' for new project participants, as well as the proposed development of a Darwin web site with details of projects (etc.), but also where news, views and problems can be shared.

Otherwise, we have found the arrangements for managing the projects and reporting relatively straightforward. The ability to claim money in advance has been particularly helpful.

4. Project trainees/students

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5. Other project beneficiaries

Department of Forest Management. 634021, Tomsk, Shevchenko str., 17.

6. Other key players involved in the funding/operation/utilisation of the project.

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