

Darwin Initiative Annual Report

Darwin Project Information

Project Ref Number	14-019
Project Title	Youth Participation in Protected Area Management in Rodna Mountains, Romania
Country(ies)	UK and Romania
UK Contract Holder Institution	University of Oxford
UK Partner Institution(s)	
Host country Partner Institution(s)	The Administration of Rodna Mountains National Park (APNMR)
Darwin Grant Value	£163,691
Start/End dates of Project	May 2005 – April 2008
Reporting period (1 Apr 200x to 31 Mar 200y) and annual report number (1,2,3..)	1 Apr 2006 to 31 Mar 2007, annual report 2
Project Leader Name	Dr. Anna Lawrence
Project website	http://www.eci.ox.ac.uk/research/humaneco/youthparticipation-romania.php
Author(s), date	Alina Szabo, Claudiu Iusan, Anna Lawrence and Susan Canney; 27 April 2007

1. Project Background

This project is implemented in northern Romania in the Rodna Mountains National Park; geographic coordinates: N 47°25'54" - 47°37'28", E 24°31'30" - 25°01'30" (Fig. 1). It originated from the desire to contribute to the conservation of biodiversity in Romania, a European country with high biological diversity, and to assist the Romanian partner, APNMR, with the development and implementation of a participatory management plan for this national park. The APNMR was established only in 2004 and consequently needed support both in terms of expertise and equipment. Moreover, Romania, in line with other former communist countries does not have a tradition in participation in its stronger forms, and this project addresses this problem by contributing an original approach to participation through the involvement of local students in addition to other more traditional stakeholders.

3. Project progress

3.1 Progress in carrying out project activities

Please report on the progress in implementing the projects activities for this year. **Please report activities under the outputs** that they contribute towards. Have the activities been carried out in the manner and time planned?

Output 1. Baseline and monitoring systems established.

Activity 1.6 Training workshop on participatory biodiversity surveys and monitoring (July 05 and 06): This activity was completed in August 2006. Students from the Darwin Clubs and their coordinators were trained during the two student camps organised. In addition, a booklet on biodiversity inventory and monitoring techniques was developed to be used by the Clubs and the Romanian partner in their participatory biodiversity assessments. This document may also be used by other protected areas and organisations involved in natural resource monitoring and is available in Romanian from APNMR.

Activity 1.7 Training in the use of GIS techniques for protected area management (May and Oct 05, Oct 06, Oct 07): As reported in the half-year report, this activity was affected by the project partner's staff change (IT person on maternity leave); GIS work was taken over by the park's Biologist who was previously trained in the first year of project implementation; he worked with support from the UK partner. Training emphasised georeferenced data collection and GIS database development. Also, collaboration on these aspects was established with IT specialists from the Apuseni Nature Park and the NGO Focal Centre for Biodiversity Monitoring and Conservation to build sustainability beyond project lifespan.

Achievements during this reporting period: **A Digital Elevation Model of the park was created and a database of the monitoring activities undertaken by the Darwin Clubs was developed.**

In the following reporting period focus will be on: further development of the GIS database with an emphasis of systematic and standardised data collection, satellite image processing and interpretation, and working with specialists to create a map of major habitats from the park.

Activity 1.8 Systematic participatory inventories and monitoring (Jul 05-Apr 08): All 18 monitoring plots proposed in the funding application were established. Monitoring activities were carried out in a participatory way with the help of the Darwin Clubs and their coordinators (professors and park rangers). In order to facilitate better communication and data collection, each club was assigned a member of APNMR staff to organise field trips and assist with data collection and centralisation. Monitoring activities are undertaken according to an action plan and are presented in Annexes 3 and 4.

Output 2. Management plan developed and implemented.

Activity 2.7 Training in tourist guiding skills (June 06): Training of students was conducted in August as part of student camps organised by APNMR. An information leaflet was designed for distribution in local communities and schools. Training for local community members will be organised in the summer of 2007 in collaboration with the project LIFE05NAT/RO/000176.

Activity 2.9 Management plan finalised (May 06): The first management plan for this national park was developed with the participation of stakeholders, including the Darwin Clubs. It was discussed in the Consultative Council of the national park which includes representatives of the local communities, ministries, NGOs, and other institutions and it was approved by the Scientific Council of the park, the decision making body for the park. The management plan

was finalised and sent for approval to the Romanian Academy and the Ministry of Environment and Water Management.

Activity 2.10 Annual work plans developed (July 06) and implemented (06-08): The first annual work plan was developed based on the activities included in the management plan. The implementation of the annual work plan started although the management plan awaits approval from institutions responsible for this (not dependent on project partners).

Output 3. Experience evaluated, model developed and promoted.

Activity 3.1 Design of Newsletter (Aug 05 – issued twice per year Aug & Feb): Project newsletter issue 3 was finalised in September 2006; issue 4 is available from February 2007. Both can be obtained in Romanian and English, in printed and electronic form. Designing these project newsletters represented an excellent capacity building exercise. If the first issue was drafted by the project manager (UK) and finalised by the Romanian partner, APNMR, and the second issue required substantial input from the project manager, the third issue was the result of APNMR's initiative and the fourth issue was entirely created by them to a high standard. In addition to the project newsletter, APNMR, designed posters and leaflets for distribution in the local communities, universities, and other institutions from Romania and elsewhere. This gives us confidence in the Romanian partner's ability to develop the project newsletters during the last year of project implementation and to apply these skills in developing other information materials during and beyond this project's lifespan.

Activity 3.2 Project web page creation (May 05 – updated continuously): Both project partners created web-pages; these are updated regularly.

Activity 3.3 Presentations in local communities and schools (Sep 05, 06, 07): Achieved. Presentations were held from September to December 2006 in schools and local communities. In total, 20 presentations were given to an audience of 1581 persons of which 1013 were students.

Activity 3.4 Workshops (3) to analyse results and develop model (Aug 06 & Mar and Sep 07):

In preparation for these and to help us analyse our conceptual progress, we prepared a policy brief (included with this report and available on the ECI website at <http://www.eci.ox.ac.uk/research/humaneco/downloads/romania-policybrief.pdf>). A Romanian translation is in preparation.

Furthermore, in preparation for the final conference, and to stimulate reflection on project experience, we organised and participated in two exchange visits to protected areas in neighbouring countries (see section 6 below).

Two seminars were organised, the first on "Participatory protected area management in Romania – current status and future trends" in November 2006 and a second one in March 2007 titled "European funds for people and nature". Participants to the first seminar included other protected area administrators, NGOs, researchers, and local community representatives. The seminar had two parts: presentations made by organisers and guests, and workshops (A. discussing the current role of participation in Romanian protected areas; B. focusing on desired types of participation in PAs; C. looking at opportunities and challenges in implementing strong participatory management of PAs in Romania). The conclusions were written up in a newsletter distributed widely in Romania. Most participants appreciated the model used in Rodna; they considered that APNMR is spearheading the participatory management of PAs in Romania and several were interested in implementing this model in their respective PAs.

The second seminar was motivated by the creation of the EcoRodna NGO and the recent accession of Romania into the EU. EcoRodna was created at the initiative of all those involved in the Darwin Clubs as a means to continue the activities undertaken within this project beyond its termination, and represents an example of institution building and a valuable output of this project. The seminar participants were experts on European funds, NGOs, representatives of the Environmental Protection Agencies, of local communities and local government. In a first part, presentations were made on European funds available for nature protection and biodiversity conservation, while in the second part the participants worked in groups to analyse opportunities and challenges within their respective communities and identified potential project ideas.

3.2 Progress towards Project Outputs

Output 1. Baseline and monitoring systems established.

Indicators:

Workshops and training for 35 participants; 1 database created; 2 lists of species and habitats prioritised for management; 1 list and 1 map of monitoring sites; development of an attractive and popular field guide to the wildlife of PNMR.

Progress:

Most activities under this output were carried out in the first year of project implementation. In the second year, further biodiversity inventory and monitoring activities were undertaken and emphasis was placed on employing scientific methods, collecting georeferenced data and using GIS. The indicators used to measure progress in achieving this output were very useful, facilitating evaluation and quantification of results.

Output 2. Management plan developed and implemented.

Indicators:

Workshops; training; management plan approved; annual work plan developed; 6 student clubs 'Darwin volunteers for PNMR'.

Progress:

The management plan was finalised in May 2006. Its approval depends on the Romanian Academy and the Ministry of Environment and Water Management and it is difficult to say at this stage how long that will take. However, the first annual work plan was developed based on activities included in the management plan and implementation started. Tourism represents a chapter in the management plan and, as presented in the project activities section, training was offered in tourist guiding skills. Indicators selected for this output were straightforward and corresponded to the aims of the output.

Output 3. Experience evaluated, model developed and promoted.

Indicators:

Newsletter; at least 2 academic papers written; 1 model for participatory protected area management developed; 1 conference to present findings; annual presentations of results to local communities and schools; website development.

Progress:

Project results were analysed on several occasions during project workshops with the participation of both partners. Moreover, findings were disseminated locally and internationally through public presentations, conference attendance and seminars organised for this purpose, as well as posters, brochures, and leaflets. The model proposed by this project for participatory

protected area management is being drafted and will be finalised during the third year of project implementation. Work on academic papers has started and at least two will be submitted for publication before the end of this project. Indicators for this output are easily measurable and appropriate in assessing progress on this output.

Output assumptions:

1. Sustained interest and participation of the stakeholders;
2. Commitment of partner institution to fulfilling the programme and continuity of its staff;
3. No major changes in the legal requirements with respect to protected areas;
4. Funding available for the whole duration of the project.

These assumptions included in the funding application are valid and have proved important over the two years of project implementation. In the last part of the first year and the beginning of the second year of the project, a substantial level of concern was introduced through new legislation passed by the Romanian Government at the end of December 2005 (Government Ordinance 195/2005) that prescribed the creation within the Ministry of Environment and Water Management of a National Agency for Protected Areas to which all protected areas and administration must be subordinated. Because this park had been subordinated to the National Forest Administration this ordinance brought in considerable uncertainty with respect to the local partner fulfilling the output assumptions. The situation was clarified towards the end of 2006 and no changes intervened. The project continues as proposed, with the same partner and their motivation to complete the programme as well as to fulfil the co-funding obligations have been reinforced.

3.3 Standard Output Measures

Table 1 Project Standard Output Measures

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	TOTAL
4A	Number of undergraduate students to receive training	80	80			80
4B	Number of training weeks	1	1			2
6A	Number of people to receive training (adaptive management, GIS, participatory biodiversity assessment)	16	17 (of which 3 new)			19
6B	Number of training weeks	3	2			5
7	Training material in adaptive management	postponed to year 3 (see section 5)				

8	Number of weeks spent by UK staff on work in host country	14	17			31
9	Management plan	1 (drafted)	1 (finalised)			1
12A	Database	1	1 (updated)			1
14A	Seminars organised to present and disseminate findings		2			2
14B	Workshops/conferences attended to present results		2			2
15A	National press release Romania	1	1			2
15B	Quarterly local press releases in Romania	10	12			22
15C	National Press release UK (ECI annual report)	1	1			2
16A	Newsletter	2	2			4
16B	Circulation in host country	700	2800			3500
16C	Circulation in UK	On website	On website			
18C	Local TV programme in Romania (not included in the original application)	1	2			3
19C	Local radio interviews/features in Romania	2	6			8
20	Value of assets transferred to APNMR	£9602.92				£9602.92
21	Creating the NGO EcoRodna (not included in the original application)		1			1
22	Permanent field plots established	5	13			18

23	Value of resources from other sources (includes in kind contributions)	£26000	£20762			£46762
	Circulation of other printed materials distributed in host country and abroad – Slovakia, Hungary, Poland, Bulgaria (posters and leaflets)		2607			2607

Table 2 Publications

Type *	Detail	Publishers	Available from	Cost £
(eg journals, manual, CDs)	(title, author, year)	(name, city)	(eg contact address, website)	
Policy brief	Anon (2006) Citizen science and community participation in protected area management: a new approach for European transition countries	Environmental Change Institute	http://www.eci.ox.ac.uk/research/humane-co/downloads/romania-policybrief.pdf	Free

3.4 Progress towards the project purpose and outcomes

The project purpose has been achieved through the activities undertaken and by focusing on the outputs. The baseline was established and participatory biodiversity monitoring activities are carried out according to an action plan. The management plan was finalised and submitted for approval – a process that unfortunately takes much longer than first envisaged. However, the Romanian partner drafted an annual plan based on the management plan and implementation started. This experience is continually documented and regularly analysed in order to finalise the model proposed. Project partners are positive about achieving the purpose successfully. Of course, the assumption remains valid: stakeholder commitment to active participation in the programme is essential.

3.5 Progress towards impact on biodiversity, sustainable use or equitable sharing of biodiversity benefits

The project has impact in reducing the threat to biodiversity and increasing equitable benefit sharing as follows:

1. threat to biodiversity is being reduced, by increased awareness of and local pride in the park; by training central and ranger –
2. staff in biodiversity monitoring so that knowledge of the species in the park is increasing; by supporting the Darwin Clubs to contribute data and local knowledge to park management resources; and by promoting the park as a national model, which is attracting increased attention and support from the national administration. As a result of the project, and APNMR's increased capacity and confidence, the park is both better protected, and better known; both of which will help to ensure its biodiversity is conserved in future.

the benefits from improved park management are also being distributed more widely by involving the communities in education; by giving them a stake in the development and

successful implementation of the management plan; and by training community members in tourist guiding.

4. Monitoring, evaluation and lessons

Monitoring and evaluation were conducted in a participatory way by both project partners through regular workshops and informal discussions to assess progress towards achieving the project purpose. A calendar with project activities was drafted and clear responsibilities were allocated to ensure that planned activities would be carried out in due time. Key indicators used included the project milestones and indicators from the logical framework.

Important lessons learned during this year relate to the running of the Darwin Clubs. The task of coordinating activities was given to a member of APNMR staff, in general a ranger. Each club has a person delegated from the park to plan and arrange field work and centralise data. This improved efficiency and generated initiative on the part of the APNMR staff and the Darwin Clubs. This example will be applied in reaching out to local communities – each Darwin Club together with the APNMR coordinator will develop a plan of action for their respective communities.

5. Actions taken in response to previous reviews (if applicable)

Two queries were raised in the review of our previous annual report, which were address in our six-monthly report. We clarified that the aim of the project is to work with the communities through the Darwin Clubs, but that the wider community is involved through the surveys of local knowledge (conducted by the students), through community information meetings, and through training in tourist guiding.

We also clarified that all 18 sites have now been set up. In fact more than 18 monitoring sites are now established (see annexes 3 and 4).

The reviewer suggested some changes to the logframe but after consultation with Darwin we were advised not to proceed with this.

Training in adaptive management was provided at project start-up, but these are very new concepts in the Romanian situation. We have therefore postponed production of further training materials in adaptive management, to year 3. This is because we believe that it will be valuable to include relevant local experiences, and that this output should therefore reflect the project leanings rather than propose methods used elsewhere. We have instead produced a policy brief which elaborates on the reasons for taking an adaptive approach, and explains why the models developed elsewhere are not appropriate for post-communist Europe. It is for these reasons that we believe more finely tuned outputs are needed. However we must clarify that we do not intend to produce a detailed handbook but rather a poster to orientate Romanian and other colleagues, about the issues. As such it will be both based on the materials produced for the initial training, and the posters produced by the project for conferences and workshops (included with this report).

6. Other comments on progress not covered elsewhere

The exit strategy has been enhanced through the support provided to the Darwin Clubs to form a new NGO, EcoRodna (see sections 2 and 3 above).

In addition to activities planned, the analysis of experience and development of conceptual model has been greatly enhanced through:

- a) preparation of a project policy brief (included with this report)
- b) the fact that the project facilitated visits abroad of a mixed UK-Romanian team to disseminate results, and create a link with other protected areas in the region to exchange

information on similar activities that could be presented to the final conference. Protected areas visited included: Tatra National Park and Sloveny Raj National Park in Slovakia and Hortobagy National Park in Hungary. The experience was very good and the parks have agreed to be in touch and collaborate in the future on aspects linked to park management. A positive outcome of these visits was that the Romanian partner feels more motivated and confident about the results of their work. Two more protected areas will be visited in May 2007: Central Balkan National Park and Russenski Lom Nature Reserve from Bulgaria.

7. Sustainability

The project was promoted through mass-media (see point 3.3, Table 1), presentations and information materials created. Moreover, two seminars were organised with Romanian participants as presented above (point 3.1, activity 3.4). Hence, the public is informed about the project and the general impression generated is one of professional and innovative work and a great value for money due to the numerous achievements.

A significant success of the project this year was represented by the creation of the NGO EcoRodna, at the initiative of all those involved in participatory biodiversity monitoring and working with the Darwin Clubs. This NGO focused on biodiversity conservation includes members from both project partners and the Darwin Clubs as well as numerous local community members and it is in a good position to succeed in carrying forward activities beyond the project deadline. During the last year of project implementation the UK partner will transfer fundraising skills and support EcoRodna to initiate and implement projects targeting biodiversity conservation.

8. Dissemination

The results of this project have been disseminated through mass-media, publications (leaflets, newsletters, posters, etc.), visits to other parks in the region, and the workshops and seminars organised. An overview of these outputs was presented in point 3.3. Moreover, the results were brought to international attention through participation in conferences: “Diversity for Europe”, the first Congress of the European Society for Conservation Biology, 22-26 August 2006 where a poster was presented on “Education for Biodiversity through Youth Participation in Protected Area Management in Romania” and the Europarc conference held on 21 September 2006.

Locally, the project was promoted within local schools and communities by the Darwin Clubs and through public presentations. With respect to the latter, a total of 20 presentations were made between September and December 2006 to an audience of 1581 people of which 1013 were students from local schools. In addition, presentations were made between April and July 2006 to 153 persons (professors, university students and tourists).

The policy brief has been distributed at the Europarc conference 2006, through the ECI website and during exchange visits to neighbouring countries.

These activities will continue during the last year of project implementation and will be carried out by the NGO EcoRodna after the completion of the project as part of their activities and programmes.

9. Project Expenditure

Please expand and complete Table 3.

Table 3 Project expenditure during the reporting period (Defra Financial Year 01 April to 31 March)

Highlight any agreed changes to the budget and explain any variation in expenditure where this is +/- 10% of the budget.

10. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes

[I agree for ECTF and the Darwin Secretariat to publish the content of this section](#) (please leave this line in to indicate your agreement to use any material you provide here)

The value of this project has been greatly enhanced by a very encouraging initiative taken by the coordinators of the Darwin Clubs, together with the directorship of the Rodna Mountains National Park. These clubs were established by the project to encourage and support communities and schools around Rodna Mountains in both learning about the park and contributing to knowledge and management decisions by carrying out biodiversity monitoring projects. The coordinators find that they and their students enjoy the work, and the rewards of working closely with the park administration. Realising that the project lasts only three years, and that their national influence and fund-raising ability depends on their legal constitution, the eight clubs joined together to form their own non-government organisation, EcoRodna. This has already brought benefits; an EU project designed to build capacity in Romania's national parks has focused on working together with EcoRodna rather than developing their own links with the surrounding communities.

Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2006/07

Project summary	Measurable Indicators	Progress and Achievements April 2006 - March 2007	Actions required/planned for next period
<p>Goal: <i>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve</i></p> <p><i>The conservation of biological diversity,</i></p> <p><i>The sustainable use of its components, and</i></p> <p><i>The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</i></p>		<p><i>(report on any contribution towards positive impact on biodiversity or positive changes in the conditions of human communities associated with biodiversity eg steps towards sustainable use or equitable sharing of costs or benefits)</i></p>	<p><i>(do not fill not applicable)</i></p>
<p>Purpose (insert original project purpose statement)</p> <p>To develop and implement in collaboration with park authority and local and national stakeholders a participatory youth-led management plan for the PNMR that will work towards improving local livelihoods and to promote this method as a model of regional relevance.</p>	<p>(insert original purpose level indicators)</p> <p>5. Baseline and monitoring systems established (end y1);</p> <p>6. Management plan developed and approved (end y2) and implementation commenced (end y2 and y3);</p> <p>7. Experience evaluated, model developed and promoted (end y3);</p>	<p>(report on progress towards achieving the project purpose, ie the sum of the outputs and assumptions)</p> <p>The project purpose has been achieved in great proportion. The baseline was established and participatory biodiversity monitoring activities are carried out according to an action plan. The management plan was finalised and submitted for approval – a process that unfortunately takes much longer than first envisaged.</p>	<p>(Highlight key actions planning for next period)</p> <p>Key actions planned for the next reporting period are:</p> <p>8. publishing a field guide to the wildlife of Rodna Mountains NP</p> <p>9. finalising the model used in this project</p> <p>10. organising the final international conference</p>
<p>Output 1. Baseline and monitoring systems established.</p>	<p>Workshops and training for 35 participants; 1 database created; 2 lists of species and habitats prioritised for management; 1 list and 1 map of monitoring sites; development of an attractive and popular field guide to the wildlife of</p>	<p>Most activities under this output were carried out in the first year of project implementation. In the second year, further biodiversity inventory and monitoring activities were undertaken and emphasis was placed on employing scientific methods and collecting georeferenced data and using GIS. The indicators used to measure progress in achieving this output were very good, facilitating evaluation and quantification of results.</p>	

	PNMR.	
Activity 1.6 Training workshop on participatory biodiversity surveys and monitoring (July 05 and 06)		Achieved. In addition, a booklet on biodiversity inventory and monitoring techniques was developed.
Activity 1.7 Training in the use of GIS techniques for protected area management (<i>May and Oct 05, Oct 06, Oct 07</i>)		As reported in the half-year report, this activity was affected by the project partner's staff change (IT person on maternity leave); GIS work was taken over by the park's Biologist with support from the UK partner. Training emphasised georeferenced data collection and GIS database development. Also, collaboration on these aspects was established with IT specialists from the Apuseni Nature Park and the NGO Focal Centre for Biodiversity Monitoring and Conservation to build sustainability beyond project lifespan.
Activity 1.8 Systematic participatory inventories and monitoring (Jul 05-Apr 08)		All 18 monitoring plots established. Monitoring activities carried out.
Output 2. Management plan developed and implemented.	Workshops; training; management plan approved; annual work plan developed; 6 student clubs 'Darwin volunteers for PNMR'.	The management plan was finalised in May 2006. Its approval depends on the Romanian Academy and the Ministry of Environment and Water Management. However, the first annual work plan was developed based on activities included in the management plan and implementation started. Tourism represents a chapter in the management plan and as included in the project activities training was offered in tourist guiding skills. Indicators selected for this output were straightforward and corresponded to the aims of the output.
Activity 2.7 Training in tourist guiding skills (June 06)		Training of students was conducted in August as part of student camps organised by APNMR. An information leaflet was designed for distribution in local communities. Local community members will be trained in the summer of 2007 in collaboration with the project LIFE05NAT/RO/000176.
Activity 2.9 Management plan finalised (May 06)		The management plan was finalised and sent for approval to the Romanian Academy and the Ministry of Environment and Water Management.
Activity 2.10 Annual work plans developed (July 06) and implemented (06-08)		The first annual work plan was developed; implementation partially started as management plan awaits approval from institutions responsible for this (not

		dependent on project partners).
Output 3. Experience evaluated, model developed and promoted.	Newsletter; at least 2 academic papers written; 1 model for participatory protected area management developed; 1 conference to present findings; annual presentations of results to local communities and schools; website development.	Project results were analysed on several occasions during project workshops with the participation of both partners. Moreover, findings were disseminated locally and internationally through public presentations, conference attendance and seminars organised for this purpose, as well as posters, brochures, and leaflets. The model proposed by this project for participatory protected area management is being drafted and will be finalised during the third year of project implementation. Work on academic papers has started and at least two will be submitted for publication before the end of this project. Indicators for this output are easily measurable and appropriate in assessing progress on this output.
Activity 3.1 Design of Newsletter (Aug 05 – issued twice per year Aug & Feb)		Project newsletter issue 3 finalised in September 2006; issue 4 available from February 2007. Both can be obtained in Romanian and English, in printed and electronic form.
Activity 3.2 Project web page creation (May 05 – updated continuously)		Both project partners created web-pages; updated regularly.
Activity 3.3 Presentations in local communities and schools (Sep 05, 06, 07)		Achieved. Presentations were held from September to December 2006 in schools and local communities.
Activity 3.4 Workshops (3) to analyse results and develop model (Aug 06 & Mar and Sep 07)		Two workshops were organised, first on “Participatory protected area management – current status and future trends” in November 2006 and a second one in March 2007 titled “European funds for people and nature”.

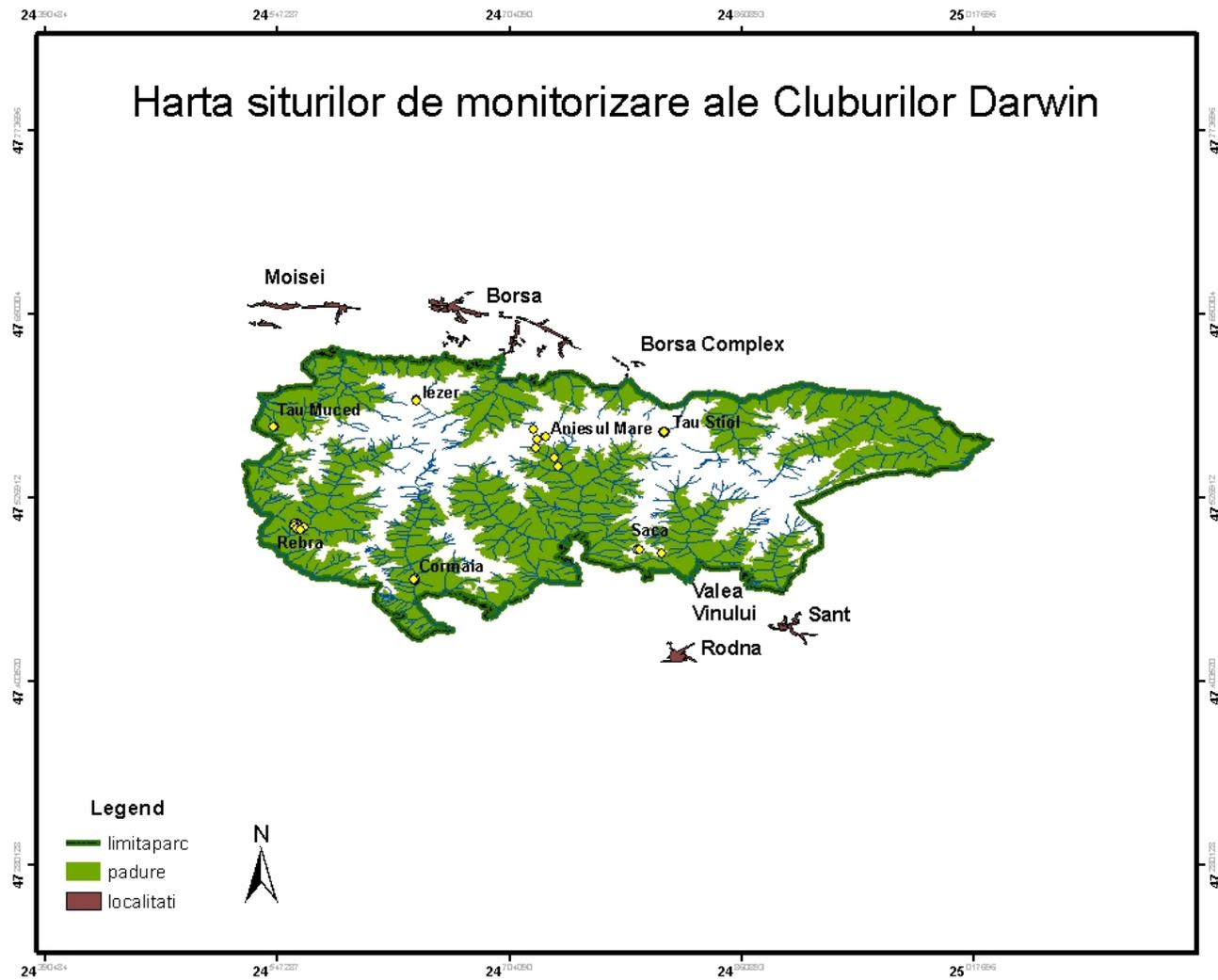
Annex 2 Project' s full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Goal:</p> <p>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve</p> <ul style="list-style-type: none"> • the conservation of biological diversity, • the sustainable use of its components, and • the fair and equitable sharing of benefits arising out of the utilisation of genetic resources 			
<p>Purpose</p> <p>To develop and implement in collaboration with park authority and local and national stakeholders a participatory youth-led management plan for the PNMR that will work towards improving local livelihoods and to promote this method as a model of regional relevance.</p>	<p>11. Baseline and monitoring systems established (end y1);</p> <p>12. Management plan developed and approved (end y2) and implementation commenced (end y2 and y3);</p> <p>13. Experience evaluated, model developed and promoted (end y3);</p>	<p>14. Reports;</p> <p>15. Datasets and maps;</p> <p>16. Management plan;</p> <p>17. Publications;</p>	<p>Stakeholder commitment to active participation in the programme.</p>
<p>Outputs</p> <p>1. Baseline and monitoring systems established.</p>	<p>Workshops and training for 35 participants; 1 database created; 2 lists of species and habitats prioritised for management; 1 list and 1 map of monitoring sites; development of an attractive and popular field guide to the wildlife of PNMR.</p>	<p>List of participants; training materials; field reports; datasets – maps and inventory results; field guide compiled.</p>	<p>18. Sustained interest and participation of the stakeholders;</p> <p>19. Commitment of partner institution to fulfilling the programme and continuity of its</p>

2. Management plan developed and implemented.	Workshops; training; management plan approved; annual work plan developed; 6 student clubs 'Darwin volunteers for PNMR'.	List of participants; workshop documents; draft and final version of management plan; comments from interested parties; letters of approval from the competent institutions; work plan for the first implementation year; statute and plan of activities for student clubs.	staff; 20. No major changes in the legal requirements with respect to protected areas; 21. Funding available for the whole duration of the project.
3. Experience evaluated, model developed and promoted.	Newsletter; at least 2 academic papers written; 1 model for participatory protected area management developed; 1 conference to present findings; annual presentations of results to local communities and schools; website development.	Issues of the newsletter; acknowledgement of submission of papers; document detailing methodology used; list of participants and conference proceedings; project web page.	
Activities	Activity Milestones (Summary of Project Implementation Timetable)		
1. Baseline and monitoring systems established.	Planning workshop (May 05) Collect information and studies on Rodna Mountains biodiversity (May-Jul 05) Collect information on traditional use of natural resources (May-Jul 05) Collect information on stakeholders' perception of the protected area and the role of its administration (Jul-Aug 05 and Jun-Jul 07) Purchasing of equipment needed for field surveys (May-Jul 05) Training workshop on participatory biodiversity surveys and monitoring (Jul 05 and 06) Training in the use of GIS techniques for protected area management (May and Oct 05, Oct 06, Oct 07) Systematic participatory inventories and monitoring (Jul 05-Apr 08) Field guide compiled (Sep 07)		

<p>2. Management plan developed and implemented.</p>	<p>2.1 Planning workshop (May 05) 2.2 Memorandum of Understanding signed (<i>Apr 05</i>) 2.3 Identification of priority areas and formation of work teams (May 05) 2.4 Workshops (3) to analyse and synthesise findings (<i>May & Sep 05 and Feb 06</i>) 2.5 Establishment of 'Darwin volunteers for PNMR' student clubs (<i>May 05</i>) 2.6 Training in adaptive management techniques (<i>May and Oct 05</i>) 2.7 <i>Training in tourist guiding skills (June 06)</i> 2.8 Management plan drafted and distributed for comments (Mar 06) 2.9 Management plan finalised (May 06) 2.10 Annual work plans developed (July 06) and implemented (06-08)</p>
<p>3. Experience evaluated, model developed and promoted.</p>	<p>3.1 Design of Newsletter (Aug 05 – issued twice per year <i>Aug & Feb</i>) 3.2 Project web page creation (May 05 – updated continuously) 3.3 Presentations in local communities and schools (Sep 05, 06, 07) 3.4 Workshops (3) to analyse results and develop model (<i>Aug 06 & Mar and Sep 07</i>) 3.5 Conference to disseminate results (Nov 07) 3.6 Conference proceedings, final report written, academic papers submitted (Mar 08)</p>

Annex 3 map of sampling site locations



Annex 4 Data collection by Darwin clubs

Club	Title of project	Question(s) the club is investigating	Data being collected					APNMR		
			What is being measured	How? (2)	Sampling strategy ? (3)	Quality control (4)	Progress so far	Why does the APNMR need to know this?	Management issues this will help with?	What has APNMR done with the data?
Clubul Copiilor si Scoala Generala Nasaud	Monitoring environmental parameters in Taul Muced (bog lake) area	How do environmental parameters vary with seasons; how is the bog changing with time	Lake area, bog area, depth, pH, temperature (water and environment), soil nitrate content, snow and ice layer thickness	GPS, digital pH-metre, chemical analysis kit, digital photo camera	1-2 times /season; direct measurements and lab analyses	Club coordinators are chemistry teachers; analyses performed in the school laboratory; proposed collaboration with the Water Testing Centre in Bistrita	6 measurements	Taul Muced is a very important bog area for the Rodna Mountains; it has been proposed for a higher protection status.	Action in the management plan (Theme 1, Objective 1 biodiversity conservation, action 12 glacial and bog lakes)	data centralisation
	Monitoring biodiversity parameters in Taul Muced (bog lake) area	What plant species are found in the bog area; bog successions; impact of natural factors (wind, snow) on	number of plant species, trees DBH and number; each tree was identified and assigned a number	GPS, field guides, plant collection and preservation, callipers	all trees have been counted and measured; plants counted in 1x1m quadrats	Literature and APNMR (at least 1 ranger accompanies the club in the field); plants that cannot be identified are	twice / year	Taul Muced is a very important bog area for the Rodna Mountains; it has been proposed for a	Action in the management plan (Theme 1, Objective 1 biodiversity conservation, action 1, inventory and	data centralisation

Club	Title of project	Question(s) the club is investigating	Data being collected					APNMR		
		tree health and anthropic impact from wood extraction. Attempting to find a carnivorous plant species (<i>Drosera</i> sp.) which was quoted in literature				collected (1 specimen) brought to APNMR and then will be sent to specialists at the University in Cluj Napoca.		higher protection status.	distribution maps for important species and habitats)	
	<i>Arnica montana</i> , species distribution and monitoring of populations from the park and one found in the ecological area Posuci outside park	Species distribution and abundance; comparison between the area inside park with no major anthropic influence and the area located outside park where it is mown.	species distribution inside park + Posuci area; abundance and size of individual plants, associated plant species, soil nitrate.	GPS, measuring tape, ruler, callipers, quadrats, digital photo camera	inventory: species are mapped with the help of GPS; 1x1m quadrats for monitoring	APNMR	Distribution known from 3 areas of which 2 are georeferenced and monitored	Arnica is an important medicinal plant although it's economic potential hasn't been realised yet in Rodna. There is a potential for an increase human pressure if commercial success is realised in Apuseni Mountains ensuing the Darwin	Theme 1, Objective 1 biodiversity conservation, and Theme 2, Sustainable management of natural resources	data centralisation

Club	Title of project	Question(s) the club is investigating	Data being collected					APNMR		
								Initiative project there.		
	Inventory of Gentians in the park area and monitoring of a <i>Gentiana punctata</i> population	Where are gentians distributed in the park; <i>Gentiana punctata</i> distribution and abundance; anthropic impact on the species	species distribution in the park, abundance of individual plants and their size, soil nitrates.	GPS, measuring tape, ruler, callipers, quadrats, digital photo camera, field guides	inventory: species are mapped with the help of GPS; 1x1m quadrats for monitoring	APNMR, unidentified species collected, APNMR will send them to specialists	1 monitoring plot in the Anies Valley, approx. 5 ha	<i>Gentiana punctata</i> is a protected species and an important medicinal plant with potential to suffer negative anthropic impact	Theme 1, Objective 1 biodiversity conservation, and Theme 2, Sustainable management of natural resources	data centralisation

Club	Title of project	Question(s) the club is investigating	Data being collected					APNMR		
	Orchids distribution in the park	Where are various species of orchids found in the park	Several species have been identified in the field, in the Cormaia, Rebra and Anies Valleys, and Romuli area, unfortunately without GPS	Field guides and digital photo camera			four areas identified	Attractive species; potential tourist interest	Theme 1, Objective 1, biodiversity conservation; Theme 5 Tourism management, action 7 identifying new areas of tourist value	data need to be georeferenced - summer 2007
Grup Scolar Silvic Nasaud	Forest plant diversity in the Gusetu Valley.	Forest health; forest plant diversity and anthropic impact	Forest composition; presence of bark beetle infestation	GPS, field guides, plant collection	monitoring plot -2 ha-marked in the field; representative for a natural mixed forest; plant species identified along 15 lines inside the plot	Club coordinator - forestry specialist	3 visits	Forest health is an important issue; there is an ongoing debate whether or not intervention is needed in cases of bark beetle infestation	Forest management; theme 1, objective 1 biodiversity conservation; theme 2 sustainable management of natural resources	data centralisation; more data are needed on bark beetle infestation - controls, plots with infestation where there was human intervention.

Club	Title of project	Question(s) the club is investigating	Data being collected					APNMR		
Rodna	Monitoring the Wild Daffodil Meadow on the Saca Peak	Is the meadow expanding or contracting?	Area of the meadow, Daffodil abundance, soil nitrates, other plant species associated, phenology - time of flowering	GPS, quadrats, soil samples	contour of the meadow with the GPS; 1x1m quadrats for abundance		once / year	The only Daffodil meadow in the Rodna Mountains; daffodils occur naturally at one of the highest altitudes in the country; tourist appeal	Theme 1, Objective 1 biodiversity conservation	data centralisation
	Monitoring the impact of grazing on the Saca peak	How does flora differ with various grazing regimes	number of plant species, abundance of individuals from each species	GPS, quadrats, field guides, plant collection and preservation	2 plots marked in the field, 10x10m each; plants identified and individuals counted in 3 quadrats of 1x1m selected randomly inside each plot	unidentified plant species collected by APNMR to be sent to specialists for identification	1 visit	Grazing impact and the evolution of alpine pastures after being abandoned is of great interest for pasture management	Theme 1, Objective 1 biodiversity conservation, and Theme 2, Sustainable management of natural resources	data centralisation
Singeorz Bai	Distribution of mineral water springs in the southern part of the park	Where are mineral water springs located and what are their curative properties	number of springs, chemical composition and curative properties	literature reviews and water samples collected ; sent to Cluj		Complexul Sanatorial Hebe (Singeorz-Bai health spa) and the University	1 sample collected from 10 springs	Contributes to the uniqueness of this park and has tourism potential	Theme 2, sustainable management of natural resources; Theme 5	data collection

Club	Title of project	Question(s) the club is investigating	Data being collected					APNMR		
				Napoca for analysis		of Pharmacy and Medicine Cluj Napoca			Tourism management, action 7 identifying new areas of tourist value	
	Ichtiofauna of Cormaia River	What species of fish are found in the Cormaia river	number of species	fishing rod			once	There isn't much information on these aspects	Theme 1, objective 1 biodiversity conservation	the study begun before the start of the project; the person conducting it is a teacher and joined the Singeorz club.
	Monitoring beetle species in the Cormaia Valley ecotone	What species of beetles are found in the forest/grassland and grassland/river ecotones	number of species and individuals of each species	GPS, Barber traps	Two 100m long transects, 10 traps on each spaced at 10m intervals; traps are left in the field for 5 nights and then contents collected and labelled	Samples sent to Bucharest to a specialist for identification	once	Beetles are good indicators of environmental quality	Theme 1 objective 1 biodiversity conservation	data centralisation
Borsa ,	Monitoring the	How does the	lake area; water	GPS;	for plants: 2,		once	The	Theme 1,	data

Club	Title of project	Question(s) the club is investigating	Data being collected					APNMR		
Scoala Generala Nr. 2 Garlea	lezer glacial lake	water level fluctuate; what species of plant are found in the lake area	level in the lake; number of plant species	marked pole left permanently in the lake; quadrats	10x10m plots			meteorological station found nearby are taking water from the lake; recently some interventions have been made and more water is being lost from the lake	objective 1 biodiversity conservation	centralisation
	Monitoring the Taul Stiol bog	Is the bog expanding or contracting	area of the bog and number of plant species present	GPS, wood stakes marking permanently the plots, measuring tape	1 plot 10x10m		once	Taul Stion bog is of European interest, Natura 2000 habitat, EMERALD priority habitat; endemic habitat found only here (Carex chordorrhiza present)	Theme 1, objective 1 biodiversity conservation	data centralisation

Club	Title of project	Question(s) the club is investigating	Data being collected					APNMR		
Anies	Bird diversity in the park area	Which species of birds are found in the park , where and when	Bird species presence/absence; monitoring anthropic impact - noise and dust from the marble processing station on the Anies Valley	Literature reviews, bird watching: binoculars, field guides	species lists	Literature	3 times; anthropic impact - once	birds are good indicators of environmental conditions	Theme 1, objective 1 biodiversity conservation	data centralisation

Checklist for submission

	Check
Is the report less than 5MB? If so, please email to Darwin-Projects@ectf-ed.org.uk putting the project number in the Subject line.	No
Is your report more than 5MB? If so, please advise Darwin-Projects@ectf-ed.org.uk that the report will be send by post on CD, putting the project number in the Subject line.	Yes
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number.	No.
Have you completed the Project Expenditure table?	Yes
Do not include claim forms or communications for Defra with this report.	OK