



Darwin Initiative - Final Report

(To be completed with reference to the Reporting Guidance Notes for Project Leaders (http://darwin.defra.gov.uk/resources/) it is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

Darwin project information

Project Reference	18-013
Project Title	Building capacity for wild felid conservation in China
Host country(ies)	China
Contract Holder Institution	Department of Zoology, University of Oxford
Partner Institution(s)	Beijing Forestry University
Darwin Grant Value	£293,438
Start/End dates of Project	01/04/2010 – 31/03/2013
Project Leader Name	Dr Philip Riordan
Project Website	www.chinacats.org; www.chinacats.org.cn; www.wildcru.org
Report Author(s) and date	Dr Philip Riordan & Dr Shi Kun. July 2013

1 Project Rationale

Wild felids are both particularly threatened and particularly good umbrella species. Intensive IUCN/SSC International Red List assessments, hosted by WildCRU in 2008, highlighted the threats posed to wild felid species by habitat loss, with many larger species further endangered by conflict with humans. Dependence on often declining and imperilled prey exacerbates the risks, raising the serious prospects of extinction. Evaluating the magnitude of the risks and the effectiveness of conservation interventions is made difficult because wild felids are secretive, often in inaccessible areas. Yet surveying and monitoring their numbers and distributions is the foundation for their conservation. Recent technological advancements, in which WildCRU is expert, including camera trapping and faecal genetic analyses provide a breakthrough. These relatively inexpensive techniques, when supported by tailored capacity building for practitioners, can be efficiently applied to large scale, cost-effective, coordinated survey programmes. Capacity and expertise are often lacking within the countries containing the richest wild felid assemblages, and we propose here to deliver these for China.

China holds 13 of the world's 37 wild cat species, six of which are listed in CITES Appendix I (Asiatic golden cat, *Catopuma temminckii*; Marbled cat, *Pardofelis marmorata*; Clouded leopard, *Neofelis nebulosa*; Leopard, *Panthera pardus*; Tiger, *Panthera tigris*; Snow leopard, *Panthera uncia*), and seven listed in Appendix II (Chinese mountain cat, *Felis bieti*; Jungle cat, *Felis chaus*; Pallas' cat, *Felis manul*; Wildcat, *Felis silvestris*; Eurasian lynx, *Lynx lynx*; Leopard cat, *Prionailurus bengalensis*; Fishing cat, *Prionailurus viverrinus*). China represents a significant part of the global range of many felid species, and one species (*Felis bieti*) and several potential subspecies are endemic making it one of the most important countries for felid conservation.

The IUCN Cat Specialist Group (CSG) recently scoped the development of a network for cat conservation in China, culminating in a workshop at the SCB Conference in Beijing during July 2009 (attended by PR and SK). Preliminary assessment and subsequent discussions with stakeholders highlighted urgent priorities to enhance coordination of conservation effort across China, strengthen capacity and expertise to monitor and manage wild felid species and collate sparse data, for example from Chinese scientific publications and reports, and a diversity of institutions. Many recent species accounts for example, are from skins found in markets (e.g. Asiatic golden cat, Leopard cat; snow leopard, Eurasian lynx) or seizures made from traditional Chinese medicine (TCM) trade (e.g. Asiatic golden cat, leopard). Known hunting pressure on Leopard cat, for example, exceeds 200,000 cats per year being harvested during the 1980s. Currently in China no framework exists to collate these diverse information streams, nor is there sufficient capacity to use the data efficiently. However, relationships, enthusiasm and opportunities exist to create such a network.

In common with many countries, China has long since viewed protected area designation as a key mechanism for meeting its Convention on Biological Diversity (CBD) targets. Between 1978 and 2007, the number of PAs in China increased from 34 to 2531 (SFA data). Capacity and expertise in China to manage these PAs has not kept pace with this rapid development. However, each PA has an available staff, for whom SFA are seeking opportunities to provide training – training that this project will provide. To scope the feasibility of our proposal, and at the request of SFA, we have already provided well-received basic field and classroom training for five staff members in Taxkurgan Nature Reserve, which will contribute to snow leopard conservation in Xinjiang. In this initial node of our proposed distributed network, we therefore already have in place a field staff competent to undertake surveys.

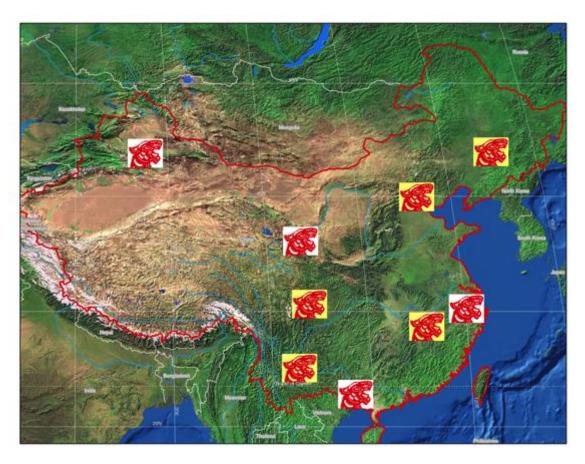


Figure 1. Wild Felid Capacity Building Centres in China, indicated by papercut tiger heads. Primary centres (yellow background): Beijing, Jiangxi, Jilin, Sichuan, Yunnan. Subsidiary centres (white background): Gansu, Guangxi, Xinjiang, Zhejiang.

2 Project Achievements

2.1 Purpose/Outcome

Project purpose ("Strengthened national and local capacity for conservation and monitoring of wild felid species throughout China") was achieved, insofar as we initiated substantial progress towards enabling Chinese authorities to achieve these aims in the longer term.

Indicator 1. An engaged and committed network for wild felid conservation and related issues, gathering and collating information

Philip Riordan and Shi Kun initiated the Cat Specialist Group of China (CSGC) through this project. With a two-year rotating secretariat, initially held by Shi Kun (2010 – 2012) and currently held by Prof. Ma Jianzhang, Emeritus Professor at the Northeast Forestry University. From 2014, Prof Jiang Zhigang at the Institute of Zoology, Chinese Academy of Sciences will hold the CSGC Secretariat. This group now forms the focus for wild cat conservation and research in China, with 210 members distributed across the country. Members come from academic, governmental and non-governmental institutions, with many members spanning multiple sectors as government advisors.

The established network for cat conservation in China is maintained by annual meetings of CSGC, which was integrated into the Zoological Society of China (ZSC) from 2013. As part of the group's activities, the Wildlife Institute at BFU convened a symposium at the Annual ZSC 2013 meeting in Wuhan, which included talks and discussion by members from across China.

Wider outreach from CSGC and associated members is facilitated through micro-blogging websites, which are well used within China, principally QQ and Baidu. All members have access and frequent updates are posted, including new records and technical queries and discussions.

Indicator 2. Monitoring programmes established in protected areas across China and data collated in centralised databases

Monitoring programmes have been established in Jiangxi, Guangxi, Hunan, Henan, Sichuan, Yunnan and Gansu, as a result of the work of this project. Working in close collaboration with SFA's Protected Areas unit, headed by Dr Meng Sha, we have provided guidance and training to SFA staff for the incorporation of robust monitoring into new procedures for the management of PAs across the country. Implementation of the protocols emerging from this process will be started by SFA following the completion of the 2nd National Biodiversity Assessment for China in 2016. The surveys being undertaken for cat species as part of this national assessment are derived from materials produced by this project, principally the handbook given to participants of training workshops.

Data from these surveys are being collated by SFA for analysis and incorporation into biodiversity action planning processes. Online databases have not been established as envisaged due to changes to Internet security legislation within China. Licencing website material has become an increasingly complex procedure since leadership changes in 2012 prompted security reviews. Internet sites are now governed by five separate governmental bodies, each of which has authority to restrict content. New contracts were introduced by Chinese ISPs during 2012, which restricted dissemination of information and online data access. Chinese State Forestry Administration is yet to consented to hosting these data in online repositories outside of China.

Further trust issues need to be overcome in relations between provincial and national government layers. We encountered significant resistance from provincial leaders to having data from their reserves stored with other provinces. Suspicions were voiced about comparative analyses being used to place further pressure on their already overstretched resources. National government were appraised of these concerns during project debrief sessions.

Indicator 3. Access to centralised database permitted to relevant stakeholders and data used to inform species management plans

Data access agreements and rights are still being considered by SFA, in coordination with Internet security agencies. Data are being collated and used by SFA to develop several key species action plans, including snow leopard, tiger and leopard. Training and protocols from this project are also being included in revised elephant action planning in China, for which PR and SK are providing input.

Indicator 4. Protected areas managers and staff report improvements in effectiveness and efficiency of conservation efforts for wild cats and ecosystems.

Whilst it can be consider early in the project legacy life cycle to consider the outcomes from this project, initial feedback from managers and civil servants is good. Feedback from participants and the wider ensemble of conservationists in the CSGC and using the online service we have established report great benefits from having access to resources and other peers with whom they are able to communicate. This level of communication about biodiversity conservation across the country, particularly between provinces, is unprecedented and participants report significant improvements in their ability to perform their jobs (feedback forms attached).

Indicator 5. Our approach is applied to other species and/or habitats

Conservation action for other species is now following the example of participatory capacity building set by this project. For example, elephant conservationists in Yunnan are developing wider ranging coordination of actions between the current main loci for the species. Online groups have been formed to supplement and continue training activities started in the class and field-based workshops, with knowledge being widely shared and enhanced in similar fashion to the wild cats. Although not as widespread, these forums and groups are also starting to engage more with international organisations, for which the WI is providing assistance.

2.2 Goal/ Impact: achievement of positive impact on biodiversity and poverty alleviation

The resultant monitoring programmes being developed by SFA across China are a direct consequence of the actions of this project. We take great pride in the fact that, through our efforts, we have provided a significant demonstration of how nation government can mobilize local effort to provide robust monitoring for elusive wildlife species. In doing so, this also has wider benefit for efforts concerning non-target species, though the identification of either previously unknown areas of importance, or areas requiring urgent management intervention.

Although not a requirement for this project, we are pleased to confirm that the wider monitoring efforts being implemented following this project are bringing a wider stakeholder group into the process of local biodiversity action planning. This includes greater involvement of poor communities and we are hopeful that these efforts will assist with future poverty alleviation efforts being undertaken by Chinese government.

2.3 Outputs

Output 1. Capacity strengthened for wild felid monitoring and conservation

Indicator 1. Trained personnel undertaking felid surveys in protected areas Surveys established (transects, camera traps deployed); new data emerging

Indicator 2. Training and workshop proceedings showing clear development Workshop reports and follow-up outputs. Training reports and educational materials.

Indicator 3. Chinese students successfully undertaking dissertation studies

High quality student theses: Wang (2011) Diet and habitat of snow leopard in China; Sun (2012) Ecosystem carbon flux and biodiversity indicators; Chen (2012) Landscape impacts, corridors and protected area management; Pan (2013) Modelling predator-prey relationships in tiger reintroduction areas.

Output 2. Information about wild felid species status across China produced and disseminated Indicator 1. Scientific and popular publications

Publications and reports and are in preparation from this work and we anticipate published materials appearing in 2014.

Indicator 2. Media exposure highlighting wild cat conservation and the established network

Coverage on TV, radio and popular news publications has been relatively good in China. We have had 10 articles written in national daily papers and four appearances on national television by SK (CCTV 1 an 3) and two appearances by PR (CCTV 1 and 3). SK and PR have also appeared on Beijing TV (BTV), which is also distributed widely across China.

BBC Wildlife and The Economist magazines have also interviewed PR. Neither has been published at time of writing.

Indicator 3. Annual reports
Submitted throughout project

Indicator 4. Website content and accessibility

Functioning and frequently accessed website. Out international website (www.chinacats.org) received a total of 12,342 hits during the project, mostly from outside of China. Our QQ and Sina Weibao profile pages have received more than 10,000 hits and we currently have 1,349 registered users, with profiles showing their work on cat conservation. Our forum has over 200 threads originated and a total of 500 active respondents to requests and discussion.

Indicator 5. International conference to be held by the end of year 3.

Our team presented a symposium on cat conservation at the China Zoological Society International meeting, held in Wuhan in 2013. Conference proceedings are in preparation, for which we are contributing eight papers. The symposium was well attended, with over 100 participants and included discussion time. This event highlighted our work and that of the Darwin Initiative.



Photo: China Zoological Society International Conference, Wuhan 2013. The WI-Oxford team held a symposium, showcasing work arising from the Darwin Project. [L-R, Back row: Dr Joelene Hughes, predator-prey dynamics; Mr Wang Jun, PhD student, snow leopard in China; Dr Philip Riordan; Dr Shi Kun, Ms Alice Laguardia, PhD student, common leopard in China; Ms Eve Bohnett, MSc student, clouded leopard in China. Middle row: Ms Charlotte Wytham, PhD student, tiger conflict and ecosystem services in China; Ms Justine Alexander, PhD student, carnivore community dynamics in high elevation ecosystems in China; Mr Pan Guoliang, MSc student, clouded leopard predator-prey dynamics. Front row: "Little Tiger" and "Little Bear" – the next generation of conservationists in China...

Output 3. Pathways collectively identified for conservation action plan developments for wild felid species in China

Indicator 1. Preliminary action plan documents compiled and presented to government
Preliminary action plan documents have been drawn up and submitted to the Wildlife Division of
SFA, for Indo-China tiger in Yunnan and common leopard across Central China. In addition, project
participants and trainees have contributed to action plans for snow leopard, Amur tiger and Amur
leopard. PR and SK are leading IUCN Red List assessments for Chinese Desert Cat and contributing to
assessments for clouded leopard, Pallas's Cat and snow leopard in China, which is also drawing
participants from this project into these teams.

Indicator: Project reports showing clear strategic directions for conservation plan developments
Project participants have developed reports within provincial and national government, bringing
knowledge imparted from this project into strategies for implementing government policies, such as
the recently launched "Beautiful China" initiative.

Indicator: Conference and workshop outputs showing clear commitment to process by participants Conference and workshop outputs, including feedback show that participants have been influenced to think and plan more efficiently when considering the management of biodiversity in protected areas. The introduction of a logical framework for development of management planning and the reductionist approach to problem solving were either new concepts for many participants, or ones that they were previously unable to apply to their work.

Output 4. Participatory consultation process to elevate status of key Protected Areas

Indicator: Nomination documents and key information compiled from within network

Several reserves are now applying to increase their status level, based on findings and strategic ideas arising from this project. These include Matoashan in Jiangxi, Momoge and Xianghai in Jilin, Nangunghe in Yunnan, Qilianshan in Gansu and Taxkurgan in Xinjiang. Documentation has been presented to policy makers within SFA, with support from higher governmental levels

3 Project support to the Conventions (CBD, CMS and/or CITES)

Our project has had regular interaction with CITES China, though Dr Zhang Shaning in SFA and Dr Meng Sha (former head of CITES China). Dr Meng is now Head of Protected Areas in SFA and our contact with him provides an excellent link. Both SK and PR attend CBD and CITES CoPs, where they have highlighted the project with other participants.

4 Project Partnerships

The Wildlife Institute in Beijing Forestry University and the University of Oxford have a long-standing partnership, embodied in Dr Shi Kun and Dr Philip Riordan. Both have a good understanding and act in a mutually respectful manner and fully include each other in decision making and strategic development of joint projects in China and globally. This project was a key step in cementing this partnership and demonstrating the international importance of the team to Chinese officials and colleagues.

5 Contribution to Darwin Initiative Programme Outputs

5.1 Technical and Scientific achievements and co-operation

We are evaluating survey methods for wild cats the results of which will be submitted for publication in peer-reviewed academic journals.

5.2 Transfer of knowledge

We have introduced government officers in China to new systematic approaches to developing biodiversity action plans and managing protected areas. This is achieved though workshops and training materials. We have also facilitated exchange of information between PA managers in China and counterparts in other countries, including South Africa, Tanzania, Kenya, USA, Laos and India.

5.3 Capacity building

We have provided direct training to over 1,000 people working in protected areas across China. We have trained over 50 national government officials to develop better the planning and strategic thinking surrounding biodiversity conservation more generally, and the management of protected areas more specifically. We have furthermore contributed to conferences, workshops and meetings, influencing the capacity of others by demonstrating the approach we have taken. We have provided background training for law enforcement officers in border posts along some of the most problematic routes for illegal trade in wildlife and we have provided briefings and guidance on reintroduction strategies for south China tiger.

5.4 Sustainability and Legacy

Our dissemination networks and contributions to policy strategy through planning will endure beyond the scope of the project. The capacity that we have developed through training and the new skills given to participants will continue to benefit both those people and the furtherance of biodiversity conservation in China. Our team have also benefitted and gained valuable experience, and all are progressing onto further work or qualifications in the field of ecology and conservation.

6 Lessons learned

Working on *in-situ* biodiversity conservation projects in China remains challenging. Our team was appropriately experienced and we have good connections with leaders in government and provinces. However, despite this there remain obstacles in terms of getting higher level authorisation and support for activities. Our team worked hard to establish and maintain good *guanxi* with key individual with whom we were advised to work. It seems that this inevitably leads to other contacts being excluded by the initial choice of partners and networks. There is no way around this and each project must select its partners with care from the outset, as these relationships will determine the success or otherwise of the entire project. There is also a time element: the more senior and influential leaders require longer investment of time and this is rarely possible within a 3 to 4 year project. In our case, this project had the advantage of existing relationships built by the team in previous years.

6.1 Monitoring and evaluation

N/A

6.2 Actions taken in response to annual report reviews

N/A

7 Darwin identity

The support of the Darwin Initiative has been acknowledged throughout the project, though inclusion of the logo on all materials and promotion of the opportunities others might seek. This project was clearly identified as a stand-alone activity, though of course links to other programmes within our groups were made where synergistically advantageous. The Darwin Initiative is well know to academics and government officials, though recent changes suggest that projects in China are no longer eligible, so people no longer view it as an option for support of projects.

8 Finance and administration

8.1 Project expenditure

Project spend since last annual report	2012/13 Grant (£)	2012/13 Total actual Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Others (see below)				
TOTAL	92,354	92,302	>1%	

Staff employed (Name and position)	Cost (£)
Dr Philip Riordan (Senior Researcher)	
Dr Shi Kun (Director WI)	
Mr Wang Jun (Project Assistant)	
TOTAL	

Capital items – description	Capital items – cost (£)
TOTAL	

Other items – description	Other items – cost (£)	
TOTAL		

8.2 Additional funds or in-kind contributions secured

Source of funding for project lifetime	Total (£)
Chinese State Forestry Administration	
Chinese Ministry of Science and Technology	
TOTAL	

Source of funding for additional work after project lifetime	Total (£)
Chinese State Forestry Administration	
Robertson Foundation	
TOTAL	

8.3 Value for Money

In terms of impact for conservation, with national, provincial and local government, along with the wider alignment with international activities, we have provided very good value for money. The continued development of initiatives started within this project provide a longevity within one of the most important countries in the world for conservation. We have established the Cat Specialist Group of China, which has been incorporated into the China Zoological Society and is being linked with the IUCN Cat Specialist Group. We have established protocols for biodiversity monitoring that are now being used by Chinese government for the management of their protected areas. We have trained more people than we anticipated, across China, that are now actively engaged with their tasks and building careers that have genuine significance for them and their roles. We have established an online communication network for conservationist to seek advice or discuss professional aspects with their peers across the country, breaking down barriers between provinces and professional tiers. We have provided opportunities for people to gain qualifications and further their own lives in pursuit of careers that are genuinely beneficial for society and themselves and will assist in bringing people out of poverty.

Annex 1 Report of progress and achievements against final project logframe for the life of the project

Note: For projects that commenced after 2012 the terminology used for the logframe was changed to reflect DFID's terminology.

Project summary	Measurable Indicators	Progress and Achievements in the last Financial Year (2012 – 2013)	
Goal/Impact:			Do not fill not applicable
Effective conservation requirements identified and actions initiated for wild felid species throughout China. Strengthened national and local capacity for conservation and monitoring of wild felid species throughout China		Further training workshops to regional and provincial PA staff; training to national government officials in Beijing	
Purpose/Outcome Strengthened national and local capacity for conservation and monitoring of wild felid species throughout China	An engaged and committed network for wild felid conservation and related issues, gathering and collating information Monitoring programmes established in	Further training workshops to regional and provincial PA staff; training to national government officials in Beijing	Do not fill not applicable
	protected areas across China and data collated in centralised databases Access to centralised database permitted to relevant stakeholders and data used to inform species management plans Protected areas managers and staff report improvements in effectiveness and efficiency of conservation efforts for wild cats and ecosystems. Our approach is applied to other species and/or habitats	Action plans submitted for Indo-China tiger and common leopard. Workshop organised with World Bank Global Tiger Initiative (GTI) in Yunnan. National and provincial officials reporting outcomes from our project to international audience. WI/Oxford team asked by SFA to develop similar approach for elephant in China	
Output 1 Capacity strengthened for wild felid monitoring and conservation	Trained personnel undertaking felid surveys in protected areas Training and workshop proceedings showing clear development Chinese students successfully undertaking dissertation studies	Surveys established (transects, camera traps deployed); new data emerging Workshop reports and follow-up outputs. Training reports and educational materials. High quality student theses: Wang (2011) Diet and habitat of snow leopard China; Sun (2012) Ecosystem carbon flux and biodiversity indicators; Chen (201 Landscape impacts, corridors and protected area management; Pan (2013) Modelling predator-prey relationships in tiger reintroduction areas.	

Project summary	Measurable Indicators	Progress and Achievements in the last Financial Year (2012 – 2013) Actions required/planned for next period
Output 2. Information about wild felid species status across China produced and disseminated	Scientific and popular publications Media exposure highlighting wild cat conservation and the established network Annual reports Website content and accessibility International conference to be held by the end of year 3.	Publications and reports and are in preparation from this work and we anticipate published materials appearing in 2014. Coverage on TV, radio and popular news publications has been relatively good in China. We have had 10 articles written in national daily papers and four appearances on national television by SK (CCTV 1 an 3) and two appearances by PR (CCTV 1 and 3). SK and PR have also appeared on Beijing TV (BTV), which is also distributed widely across China. Functioning and frequently accessed website. Out international website (www.chinacats.org) received a total of 12,342 hits during the project, mostly from outside of China. Our QQ and Sina Weibao profile pages have received more than 10,000 hits and we currently have 1,349 registered users, with profiles showing their work on cat conservation. Our forum has over 200 threads originated and a total of 500 active respondents to requests and discussion. Our team presented a symposium on cat conservation at the China Zoological Society International meeting, held in Wuhan in 2013. Conference proceedings are in preparation, for which we are contributing eight papers. The symposium was well attended, with over 100 participants and included discussion time. This event
Output 3. Pathways collectively identified for conservation action plan developments for wild felid species in China	Preliminary action plan documents compiled and presented to government Project reports showing clear strategic directions for conservation plan developments Conference and workshop outputs showing clear commitment to process by participants	Preliminary action plan documents have been drawn up and submitted to the Wildlife Division of SFA, for Indo-China tiger in Yunnan and common leopard across Central China. In addition, project participants and trainees have contributed to action plans for snow leopard, Amur tiger and Amur leopard. PR and SK are leading IUCN Red List assessments for Chinese Desert Cat and contributing to assessments for clouded leopard, Pallas's Cat and snow leopard in China, which is also drawing participants from this project into these teams. Project participants have developed reports within provincial and national government, bringing knowledge imparted from this project into strategies for implementing government policies, such as the recently launched "Beautiful China" initiative. Conference and workshop outputs, including feedback show that participants have been influenced to think and plan more efficiently when considering the management of biodiversity in protected areas. The introduction of a logical framework for development of management planning and the reductionist approach to problem solving were either new concepts for many participants, or

Project summary	Measurable Indicators	Progress and Achievements in the last Financial Year (2012 – 2013)	Actions required/planned for next period
		ones that they were previously unable to	apply to their work.
Output 4. Participatory consultation process to elevate status of key Protected Areas	Nomination documents and key information compiled from within network	Several reserves are now applying to increase their status level, based on findings and strategic ideas arising from this project. These include Matoashan ir Jiangxi, Momoge and Xianghai in Jilin, Nangunghe in Yunnan, Qilianshan in Gansi and Taxkurgan in Xinjiang. Documentation has been presented to policy makers within SFA, with support from higher governmental levels	

Annex 2 Project's full logframe, including indicators, means of verification and assumptions

Project summary	Measurable Indicators	Means of verification	Important Assumptions			
Goal:						
Effective contribution in support of the implementation of the objectives of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related targets set by countries rich in biodiversity but constrained in resources.						
Sub-Goal: Effective conservation requirements identified and actions initiated for wild felid species throughout China.	Functioning network for felid conservation, with participants trained to deliver robust information in support of wild felid conservation and management Initial baseline status information for wild felids in China. Preliminary policy and management plans developed	Trained and engaged team of conservationist working across China Mutual exchange of information and ideas as indicated from activity on web-based network portal Data collated from monitoring programmes initiated within protected areas across China Status reports and management plans generated from network				
Purpose Strengthened national and local capacity for conservation and monitoring of wild felid species throughout China	An engaged and committed network for wild felid conservation and related issues, gathering and collating information Monitoring programmes established in protected areas across China and data collated in centralised databases Access to centralised database permitted to relevant stakeholders and data used to inform species management plans Protected areas managers and staff report improvements in effectiveness and efficiency of conservation efforts for wild cats and ecosystems. Our approach is applied to other species and/or habitats	Active network participation by conservation professionals throughout China Information flow from protected areas and database population Stakeholders report good access to database resources and demonstrable application to species management within PAs Local measures identified through monitoring process put in place by PA management and staff to improve wild cat conservation Conservation plans emerge that use our project outputs and would have been impossible or less effective with out it	National government policies remain supportive Provincial government and local Protected Area teams remain supportive Data access via internet protocols remains viable within China Inter-ethnic relations within regions of China remain peaceful			

Outputs (add or delete rows as necessary) 1. Capacity strengthened for wild felid monitoring and conservation	Trained personnel undertaking felid surveys in protected areas Training and workshop proceedings showing clear development Chinese students successfully undertaking dissertation studies	Surveys established (transects, camera traps deployed); new data emerging Training reports and educational materials. Workshop reports and follow-up outputs Reports of biannual project meetings High quality student theses	Individuals participating in training and workshops remain in position and maintain commitment to project and goals Dissertation options sufficiently attractive to high calibre students
Information about wild felid species status across China produced and disseminated	Scientific and popular publications Media exposure highlighting wild cat conservation and the established network Annual reports Website content and accessibility International conference to be held by the end of year 3.	Publications and reports Coverage on TV, radio and popular news publications Functioning and frequently accessed website Conference proceedings.	Adequate species-specific data can be collected for sufficient species of wild felid Media interest can be developed and maintained Web access remains permissible within China
Pathways collectively identified for conservation action plan developments for wild felid species in China A Participatory consultation process.	Preliminary action plan documents compiled and presented to government Project reports showing clear strategic directions for conservation plan developments Conference and workshop outputs showing clear commitment to process by participants	Preliminary action plan documents Project reports Conference and workshop outputs	Clear consensus can be arrived at for conservation plans Government continue to be supportive of future conservation plan developments Key champions within SFA remain supportive of project
Participatory consultation process to elevate status of key Protected Areas	Nomination documents and key information compiled from within network	Documentation presented to policy makers within SFA to be championed at higher governmental levels	Policy makers remain committed to project and goals; and national policies remain supportive

Annex 3 Project contribution to Articles under the CBD

Project Contribution to Articles under the Convention on Biological Diversity

Article No./Title	Project %	Article Description
6. General Measures for Conservation & Sustainable Use	10	Develop national strategies that integrate conservation and sustainable use.
7. Identification and Monitoring	20	Identify and monitor components of biological diversity, particularly those requiring urgent conservation; identify processes and activities that have adverse effects; maintain and organise relevant data.
8. In-situ Conservation	20	Establish systems of protected areas with guidelines for selection and management; regulate biological resources, promote protection of habitats; manage areas adjacent to protected areas; restore degraded ecosystems and recovery of threatened species; control risks associated with organisms modified by biotechnology; control spread of alien species; ensure compatibility between sustainable use of resources and their conservation; protect traditional lifestyles and knowledge on biological resources.
9. Ex-situ Conservation	0	Adopt ex-situ measures to conserve and research components of biological diversity, preferably in country of origin; facilitate recovery of threatened species; regulate and manage collection of biological resources.
10. Sustainable Use of Components of Biological Diversity	5	Integrate conservation and sustainable use in national decisions; protect sustainable customary uses; support local populations to implement remedial actions; encourage cooperation between governments and the private sector.
11. Incentive Measures	5	Establish economically and socially sound incentives to conserve and promote sustainable use of biological diversity.
12. Research and Training	30	Establish programmes for scientific and technical education in identification, conservation and sustainable use of biodiversity components; promote research contributing to the conservation and sustainable use of biological diversity, particularly in developing countries (in accordance with SBSTTA recommendations).
13. Public Education and Awareness	10	Promote understanding of the importance of measures to conserve biological diversity and propagate these measures through the media; cooperate with other states and organisations in developing awareness programmes.
14. Impact Assessment and Minimizing Adverse Impacts		Introduce EIAs of appropriate projects and allow public participation; take into account environmental consequences of policies; exchange information on impacts beyond State boundaries and work to reduce hazards; promote emergency responses to hazards; examine mechanisms for re-dress of international damage.
15. Access to Genetic Resources		Whilst governments control access to their genetic resources they should also facilitate access of environmentally sound uses on mutually agreed terms; scientific research based on a country's genetic resources should ensure sharing in a fair

Article No./Title	Project %	Article Description
		and equitable way of results and benefits.
16. Access to and Transfer of Technology		Countries shall ensure access to technologies relevant to conservation and sustainable use of biodiversity under fair and most favourable terms to the source countries (subject to patents and intellectual property rights) and ensure the private sector facilitates such assess and joint development of technologies.
17. Exchange of Information		Countries shall facilitate information exchange and repatriation including technical scientific and socio-economic research, information on training and surveying programmes and local knowledge
19. Bio-safety Protocol		Countries shall take legislative, administrative or policy measures to provide for the effective participation in biotechnological research activities and to ensure all practicable measures to promote and advance priority access on a fair and equitable basis, especially where they provide the genetic resources for such research.
Other Contribution		Smaller contributions (e.g. of 5%) or less should be summed and included here.
Total %	100%	Check % = total 100

Annex 4 Standard Measures

Training Measures 1a Number of people to submit PhD thesis 1b Number of PhD qualifications obtained 2 Number of Masters qualifications obtained 3 (Mr Wang Jun; Mr Sun Qiaoqi; Mr Dai Quai; Ms Chen Ying; Mr Pan Guoliang) 3 Number of other qualifications obtained 4a Number of undergraduate students receiving training weeks provided to undergraduate students receiving training (not 1-3 above) 4b Number of training weeks provided to undergraduate students receiving training (not 1-3 above) 4c Number of training weeks for postgraduate students receiving training (not 1-3 above) 4d Number of training weeks for postgraduate students receiving training (not 1-3 above) 4d Number of training weeks for postgraduate students receiving training (not 1-3 above) 5 Number of people receiving other forms of long-term (>1yr) training not leading to formal qualification (i.e. not categories 1-4 above) 6a Number of people receiving other forms of short-term education/training (i.e. not categories 1-5 above) 6b Number of training weeks not leading to formal qualification 7 Number of training weeks not leading to formal qualification 6c Number of tweeks spent by UK project staff on project work in host country(s) 7 Number of species/habitat management plans (or action plans) produced for Governments, public authorities or other implementing agencies in the host country (s) 10 Number of papers published or accepted for publication in peer reviewed journals 11b Number of papers published or accepted for	Code	Description	Totals (plus additional detail as required)	
Justine Alexander; Ms Alice Laguardia	Trainin	g Measures		
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Mr Dai Quai; Ms Chen Ying; Mr Pan Guoliang) Number of other qualifications obtained 10 (Diploma courses at University of Oxford and BFU) Number of undergraduate students receiving training weeks provided to undergraduate students Number of postgraduate students receiving training (not 1-3 above) 60 - PR & SK lectures to universities in Beijing and elsewhere 6 Number of training weeks for postgraduate students receiving training (not 1-3 above) 60 - PR & SK lectures to universities in Beijing and elsewhere 6 Number of training weeks for postgraduate students 60 - PR & SK lectures to universities in Beijing and elsewhere 6 Number of training weeks for postgraduate students 61 - PR & SK lectures to universities in Beijing and elsewhere 61 - PR & SK lectures to universities in Beijing and elsewhere 62 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities in Beijing and elsewhere 75 - PR & SK lectures to universities	1b	Number of PhD qualifications obtained		
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training universities in Beijing and elsewhere 4b Number of training weeks provided to undergraduate students 4c Number of postgraduate students receiving training (not 1-3 above) 4d Number of training weeks for postgraduate students 5 Number of people receiving other forms of long-term (x1yr) training not leading to formal qualification (i.e. not categories 1-4 above) 6a Number of people receiving other forms of short-term education/training (i.e. not categories 1-5 above) 6b Number of training weeks not leading to formal qualification 7 Number of training weeks not leading to formal qualification 7 Number of training materials produced for use by host country(s) 8 Number of weeks spent by UK project staff on project work in host country(s) 9 Number of species/habitat management plans (or action plans) produced for Governments, public authorities or other implementing agencies in the host country (s) 10 Number of papers published or accepted for publication in peer reviewed journals	3	Number of other qualifications obtained		
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qualification Number of types of training materials produced for use by host country(s) Research Measures Number of weeks spent by UK project staff on project work in host country(s) Number of species/habitat management plans (or action plans) produced for Governments, public authorities or other implementing agencies in the host country (s) Number of formal documents produced to assist work related to species identification, classification and recording. Number of papers published or accepted for publication in peer reviewed journals	6a	short-term education/training (i.e. not categories	1,018	
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project work in host country(s) Number of species/habitat management plans (or action plans) produced for Governments, public authorities or other implementing agencies in the host country (s) Number of formal documents produced to assist work related to species identification, classification and recording. Number of papers published or accepted for publication in peer reviewed journals 5 (Indo-China tiger, Yunnan; Leopard, Central China; Snow leopard, west China; Amur tiger and Amur leopard in NE China) 10 Number of formal documents produced to assist work related to species identification, classification and recording.	Resear	ch Measures		
(or action plans) produced for Governments, public authorities or other implementing agencies in the host country (s) Number of formal documents produced to assist work related to species identification, classification and recording. Number of papers published or accepted for publication in peer reviewed journals Leopard, Central China; Snow leopard, west China; Amur tiger and Amur leopard in NE China) 10 Number of formal documents produced to assist work related to species identification, classification and recording.	8		42	
work related to species identification, classification and recording. 11a Number of papers published or accepted for publication in peer reviewed journals	9	(or action plans) produced for Governments, public authorities or other implementing	Leopard, Central China; Snow leopard, west China; Amur tiger	
publication in peer reviewed journals	10	work related to species identification,		
11b Number of papers published or accepted for	11a			
	11b	Number of papers published or accepted for		

Code	Description	Totals (plus additional detail as required)
	publication elsewhere	
12a	Number of computer-based databases established (containing species/generic information) and handed over to host country	3
12b	Number of computer-based databases enhanced (containing species/genetic information) and handed over to host country	
13a	Number of species reference collections established and handed over to host country(s)	
13b	Number of species reference collections enhanced and handed over to host country(s)	
Dissem	ination Measures	
14a	Number of conferences/seminars/workshops organised to present/disseminate findings from Darwin project work	4
14b	Number of conferences/seminars/ workshops attended at which findings from Darwin project work will be presented/ disseminated.	6
15a	Number of national press releases or publicity articles in host country(s)	
15b	Number of local press releases or publicity 4 articles in host country(s)	
15c	Number of national press releases or publicity articles in UK	2
15d	Number of local press releases or publicity articles in UK	3
16a	Number of issues of newsletters produced in the host country(s)	150 (weekly email bulletin – China Cat News)
16b	Estimated circulation of each newsletter in the host country(s)	1200
16c	Estimated circulation of each newsletter in the UK	12
17a	Number of dissemination networks established	2
17b	Number of dissemination networks enhanced or extended	
18a	Number of national TV programmes/features in host country(s)	5
18b	Number of national TV programme/features in the UK	
18c	Number of local TV programme/features in host country	7
18d	Number of local TV programme features in the UK	
19a	Number of national radio interviews/features in	

Code	Description	Totals (plus additional detail as required)
	host country(s)	
19b	Number of national radio interviews/features in the UK	
19c	Number of local radio interviews/features in host country (s)	
19d	Number of local radio interviews/features in the UK	1
Physic	cal Measures	,
20	Estimated value (£s) of physical assets handed over to host country(s)	
21	Number of permanent educational/training/research facilities or organisation established	4 (field studies centres in Mataoshan, Xishuangbanna, Sichuan and Yanchiwan)
22	Number of permanent field plots established	12
23	Value of additional resources raised for project (See Section 8.2 above)	
Other I	Measures used by the project and not currently i	ncluding in DI standard measures

Annex 5 Publications

Type *	Detail	Publishers	Available from	Cost
(e.g. journals, manual, CDs)	(title, author, year)	(name, city)	(e.g. contact address, website)	£

Annex 6 Darwin Contacts

Ref No	18-013
Project Title	Building capacity for wild felid conservation in China
Project Leader Details	
Name	Dr Philip Riordan
Role within Darwin Project	Co-PI
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Phone	
Fax/Skype	
Email	
Partner 1	
Name	Dr Shi Kun
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Name	
Organisation	
Role within Darwin Project	
Address	
Fax/Skype	
Email	