### **CEPF FINAL PROJECT COMPLETION REPORT**

### I. BASIC DATA

**Organization Legal Name:** International Union for Conservation of Nature and Natural Resources

**Project Title (as stated in the grant agreement):** Coordination and Development of Plant Red List Assessments for the Caucasus Biodiversity Hotspot

**Implementation Partners for this Project:** International Union for Conservation of Nature and Natural Resources; Missouri Botanical Garden; Institute of Botany and Tbilisi Botanical Garden, Georgia Academy of Sciences; Institute of Botany, Armenian National Academy of Sciences; Institute of Botany, Azerbaijan National Academy of Sciences; Komarov Botanical Institute, Russian Academy of Sciences; Kuban State University, Krasnodar, Russia; Mountain Botanical Garden, Dagestan Scientific Center, Russia; Istanbul University, Turkey; Kafkas University, Kars, Turkey; Karadeniz Technical University, Trabzon, Turkey

Project Dates (as stated in the amended grant agreements): January 1, 2006 - June 30, 2009

#### Date of Report (month/year): August 2009

#### **II. OPENING REMARKS**

#### Provide any opening remarks that may assist in the review of this report.

The initial grant agreement was amended to reset the start date from July 1, 2005, to January 1, 2006, in response to a request from IUCN following the departure of Project Supervisor Wendy Strahm from IUCN. In her place, George E. Schatz of the Missouri Botanical Garden was contracted by IUCN to assume the role of Project Supervisor. The grant agreement was amended again at the request of IUCN in late 2008 to extend the project end date from December 31, 2008, to June 30, 2009, to permit the rescheduling of the 3<sup>rd</sup> and final workshop, which had been cancelled during the fall of 2008 because of the military conflict between Georgia and Russia. Throughout the project, tensions among participating countries and political instability rendered implementation difficult and impacted the project negatively in both tangible and intangible ways.

The project aimed to provide a series of Red List training and validation workshops specifically tailored to the Caucasus region so that local botanists would be able to use the internationally accepted methods for plant conservation assessment and monitoring (IUCN Red List Categories and Criteria) and the Species Information Service Data Entry Module (SIS DEM) as the tool for data management and analysis. The work has resulted in a comprehensive overview of the distribution and conservation status of the endemic plant species of the Caucasus region based on current knowledge.

### **III. ACHIEVEMENT OF PROJECT PURPOSE**

*Project Purpose:* Local decision-makers, donors and NGOs use the plant Red List to adapt and prioritize their conservation activities using information generated through this project.

Indicator	Actual at Completion	
Purpose-level:		
80% of all threatened plant species assessed	The final product of the project "The Red List of	
in this project included in documentation for	Endemic Plants of the Caucasus Region" to be	
land use and protection within 2 years after	issued in early 2010 will be presented to the	
Project completion.	national Ministries for nature protection of the	
	Caucasian countries with a recommendation to	
	include 80% of all threatened plant species	
	assessed in this project in documentation for land	
	use by the end of 2011.	
A process for identifying Important Plant Areas	A lecture on identification of Important Plant Areas	
and contributing to the updating of Key	and Key Biodiversity Areas was delivered by Dr.	
Biodiversity Areas using information from this	George Schatz, the Project Supervisor, to the	
project started before the end of this project	project consultants at the 3 <sup>rd</sup> Regional Red List	
	Workshop (24-29 May, 2009) to impart the basic	
	knowledge in this area for further work on IPAs and	
	KBAs. The draft Caucasus Regional Plant	
	Conservation Strategy calls for the identification of	
	IPAs throughout the region by 2012.	
	The Armenian team has already started identifying	
	IPAs and creating preliminary maps using data and	
	assessments from this project.	
A regional plant conservation strategy for the	A draft of the Plant Conservation Strategy for the	
Caucasus produced by the Caucasus Plant	Caucasus Region was prepared at the 3 <sup>rd</sup> Regional	
Specialist Group within a year after Project	Red List Workshop (24-29 May, 2009). BGCI and	
completion.	the IUCN Caucasus office will be solicited for	
	support of publication in 2010 of the Caucasus	
	Plant Conservation Strategy, the "Caucasus Plant	
	Conservation Initiative".	

#### **Planned vs. Actual Performance**

# Describe the success of the project in terms of achieving its intended impact objective and performance indicators.

Insufficient international cooperation between botanists from the states of the Caucasus region and the subsequent lack of data exchange for many years resulted in a great number of taxonomic discrepancies as well as an incomplete knowledge of the distributions of Caucasian plant species. Directly as a result of this IUCN Red Listing initiative in the Caucasus, these gaps are now being filled, such that for the first time it has become possible to compile and validate a comprehensive list of endemic plant taxa of the Caucasus Biodiversity Hotspot and undertake Red List assessments.

The final product of the project "**The Red List of Endemic Plants of the Caucasus Region**" with the full list of endemic plant taxa of the region and species assessments is currentlybeing finalized for issue in early 2010.

The process of identification of IPAs has already been started by the Armenian National Center prior to the end of the project and preliminary maps were presented by the consultants at the 3<sup>rd</sup> Regional Red List Workshop (24-29 May, 2009). Identification of IPAs will be started by the other national teams and project consultants in the coming months, to be completed by 2012, as called for in the draft of the Plant Conservation Strategy for the Caucasus developed at the 3rd Regional Caucasus Red List workshop, 24-29 May, Tbilisi, Georgia.

Targets listed in the draft of the Plant Conservation Strategy for the Caucasus correspond to the targets of the Global Strategy for Plant Conservation. BGCI and the IUCN Caucasus office will be solicited for support of publication in 2010 of the Strategy, to be titled the **"Caucasus Plant Conservation Initiative"**. The Strategy will be presented to all the relevant stakeholders in each of the Caucasian countries.

#### Were there any unexpected impacts (positive or negative)?

Only that despite historical national enmity, political instability and even military conflict, scientists with a common passion and purpose can continue to cooperate and work toward a common goal.

### **IV. PROJECT OUTPUTS**

Project Outputs: Enter the project outputs from the Logical Framework for the project

#### Planned vs. Actual Performance

Indicator	Actual at Completion
Output 1: To provide a conservation	A conservation baseline including
assessment baseline (a plant Red List) for the	identification of threats was provided for 1,164
vascular plants endemic to the Caucasus	endemic plant taxa occurring in 1-3 countries
region, including identification of threats,	of the Hotspot, and therefore more likely to fall
managed through an effective distributed	into one of the threatened categories. All
information system.	information gathered during project is being
	entered into the SIS database, to be
	completed by the end of 2009.

1.1.	
1.1. An agreed list of Caucasus endemic plant species (currently estimated at 1,600 species) and conservation assessments produced for all these endemics by the end of the project.	A consensus list of 2,950 Caucasus endemic plant taxa was compiled and validated, of which 1,164 have been assessed for their conservation status according to the IUCN Red List Categories and Criteria. Incomplete data on 250 additional endemic taxa are deposited at the Project Regional Center for further Red Listing evaluation by the Caucasus Plant RLA. The Caucasus Plant RLA will continue Red Listing of the Caucasus plants to complete assessments of the remaining widespread (4- 6 countries, and thus probable Least
	Concern) endemic taxa.
<b>1.2.</b> The agreed list of endemic species entered into SIS 2 months following the first workshop, and all assessments entered into SIS by the end of the project.	All information gathered during the project has been entered into SIS, to be completed by the end of 2009.
Output 2.	
Conservation actions proposed, with the information managed through an effective distributed information system.	Conservation actions were proposed for each of the assessed taxa and are included in the documentation for each species being entered into SIS. 50 priority "national" endemics were identified for each country of the Caucasus Biodiversity Hotspot.
2.1.	
Threats and conservation action authority files filled in for each endemic species through SIS.	Threats and conservation action authority files are filled in for each endemic taxon through SIS.
Output 3.	
Local botanists engaged and trained in the Red List assessment process, and an active, effective and self-sustaining regional network	Local botanists were engaged and trained in the Red List assessment process through a series of Red List training and validation

of plant experts, with strong supporting institutions, working in partnership with other relevant organizations. <b>3.1.</b>	workshops specifically tailored to the Caucasus region. The Caucasus Plant Red List Authority was established during the project implementation to represent the leading botanical/educational institutions of the countries of the region.
Number of local botanists with technical	The Caucasus Plant Red List Authority has 30
expertise and practical experience in applied	members, 25 of which are local botanists with
conservation work increases by at least 15	technical expertise and practical experience in
additional people before end of Project.	applied conservation work.
<b>3.2.</b>	
Chair of Caucasus Plant Specialist Group appointed with membership in place before	Dr. George Nakhutsrishvili, the Project Regional Coordinator, was appointed Chair of
second workshop.	the RLA and re-appointed in 2008 for the
	current quadrennium through 2012.
3.3.	
A mid-project and final monitoring and	Dr. Helen Temple, Red List Unit, IUCN – The
evaluation of project by questioning project	World Conservation Union, undertook the
participants to ensure that the Red List process	mid-project and final monitoring and
is understood and properly implemented	evaluation of the project and submitted
	relevant documents to Dr. George Schatz, the
Output 4.	Project Supervisor.
Threatened plant information (in particular data	The SIS database will be finalized by the end
to aid project development for subsequent work	of 2009 and the final product of the project,
on Important Plant Areas and Key Biodiversity	"The Red List of Endemic Plants of the
Areas), and information on threats and	Caucasus Region", will be issued in early
conservation actions made readily available for	2010. All data will be made available for
planning purposes.	relevant stakeholders for planning purposes.
4.1.	
Threatened Caucasus plant data available both	The SIS database and "The Red List of
published as well as electronically by project end.	Endemic Plants of the Caucasus Region" will be made available for relevant
	stakeholders for planning purposes in 2010.
Output 5.	
A mid-term and final monitoring and evaluation	A mid-term and final monitoring and

to ensure that the Red List evaluations have	evaluation have been undertaken and
been undertaken in a coherent fashion and	accepted by end-users.
accepted by end-users.	
5.1.	
A mid-term and final questionnaire prepared	Dr. Helen Temple, Red List Unit, IUCN – The
and evaluated by an outside evaluator.	World Conservation Union, undertook the
	mid-project and final monitoring and
	evaluation of project.

#### Describe the success of the project in terms of delivering the intended outputs.

The plant taxa initially suggested as endemic to the Caucasus Biodiversity Hotspot were thoroughly verified with respect to their distribution within the Hotspot borders by the project consultants, which resulted in a comprehensive list of the region's endemic taxa containing up to 2,950 species, subspecies, and varieties, a significant increase over the 1,600 species estimated in the original proposal. Of these, 1,164 endemic taxa occurring in 1-3 countries of the Hotspot, *i.e., all national endemics as well as those occurring in 2 or 3 countries, and therefore those taxa* most likely to fall into one of the threatened categories, were evaluated for their conservation status using the IUCN Red List Categories and Criteria. Figure 1 shows the breakdown of assessment categories for the 1,164 evaluated taxa, with 61% assessed as threatened, i.e., Critically Endangered, Endangered, or Vulnerable. Fifty priority national endemics were identified by each country of the Caucasus Biodiversity Hotspot to highlight plant conservation issues and imperatives. The final product of the project "The Red List of Endemic Plants of the Caucasus **Region**", with the full list of endemic plant taxa of the region, the conservation assessments of 1,164 taxa, and top priorities for conservation action, to be issued in early 2010, will be the first reference manual on the conservation status of Caucasian endemic plants, and will serve as an indispensible resource for the respective governmental and non-governmental organizations in each country upon which to undertake conservation planning to ensure the persistence and sustainable use of the region's endemic plant diversity.

The Caucasus Plant Red List Authority was established under the IUCN Species Survival Commission during the project implementation. After the project completion the RLA will continue its activities including further Red Listing of the Caucasus endemic plants to complete assessments of the remaining widespread (4-6 countries), probable Least Concern (LC) endemic taxa, and update national assessments using IUCN Regional Guidelines (along with other activities included in the draft for the Plant Conservation Strategy for the Caucasus).

## Were any outputs unrealized? If so, how has this affected the overall impact of the project?

Approximately 1,786 plant taxa endemic to the Caucasus Region remain unevaluated with respect to their conservation status. However, these represent the most widespread species among the endemic taxa, occurring in at least 4 of the countries within the Hotspot, with many occurring in either 5 or all 6 countries. Although some of these taxa may be threatened, it is likely that the overwhelming majority will be assessed as Least Concern, and thus would not factor as significantly into conservation planning processes. Nevertheless, their conservation status should be evaluated as soon as possible to confirm whether they are indeed LC, or in fact threatened despite wider distribution. Their status as endemics to the Hotspot as a whole also contributes to the identification of Important Plant Areas within the region, for which adequate representation should ultimately be encompassed within the region's protected area network.

#### **V. SAFEGUARD POLICY ASSESSMENTS**

Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project.

#### VI. LESSONS LEARNED FROM THE PROJECT

## Describe any lessons learned during the various phases of the project. Consider lessons both for future projects, as well as for CEPF's future performance.

The first important lesson learned at the very earliest stage of project implementation was the clear necessity for scientific cooperation among the countries of the region. The lack of such cooperation historically has resulted in large gaps in the knowledge of species distributions within the region, as well as a great number of taxonomic discrepancies. Although species distributions were determined using all the sources available to the project consultants, a number of taxonomic questions that were not within the scope of this project are still to be resolved.

The second important lesson learned was that continuous consultations among the project participants (and now among the members of the Caucasus Plant Red List Authority) on specific questions related to the Red Listing process are essential for correct and consistent assessments.

The third lesson is that close contact with the IUCN Caucasus Office, WWF Caucasus Office, and governmental and non-governmental organizations dealing with nature protection in each country will be of paramount importance with respect to the future activities of the Caucasus Plant RLA in fulfillment of its mission to further the conservation of the plants of the Caucasus Region.

# Project Design Process: (aspects of the project design that contributed to its success/failure)

The series of three Red List training and validation workshops successfully introduced participants to the IUCN Red List process during the first workshop, then reinforced proper practices and in some instances corrected mistaken concepts during the second workshop, and finally highlighted the use and relevance of assessments for conservation planning and the development of a regional plant conservation strategy during the third workshop. The project management structure and hierarchy, as represented by the Project Supervisor, the Technical Coordinator, and the Regional and National Centers provided an efficient means for communication and information flow, particularly with regard to logistical arrangements for workshops, administrative and financial reporting, additional training in certain aspects of the Red Listing methodology, and the collection of species documentation from the national consultants.

In retrospect, the work flow at the Regional Center would have been more efficient had the project envisaged separate units for SIS DEM data management and GIS mapping. Ideally, the functioning of the Regional Center, and therefore its support of and feedback to the National Centers, would have benefited greatly from a dedicated GIS specialist working closely with the Regional Coordinator Assistant.

#### Project Execution: (aspects of the project execution that contributed to its success/failure)

The profound expertise and hard work of the project consultants resulted in the first ever comprehensive list of the endemic plant taxa of the Caucasus Biodiversity Hotspot, an absolutely essential precursor to conducting Red List assessments. The fully vetted and validated distributional occurrences of the endemic taxa in each of the 6 countries within the Hotspot that were incorporated into the comprehensive list permitted the definitive identification of single-country (= national) endemics and taxa restricted to 2-3 countries, which were therefore most likely to fall into one of the threatened categories. The compilation of a comprehensive list with distribution by country was thus one of the main factors that contributed to the success of the project.

#### **VII. ADDITIONAL FUNDING**

Provide details of any additional donors who supported this project and any funding secured for the project as a result of the CEPF grant or success of the project.

Donor	Type of Funding*	Amount in USD	Notes
BP-Georgia	C	5,000	Project title: Assessment of conservation statuses of endemic species of Georgia's flora threatened with extinction / serious genetic erosion (according to IUCN Categories and Criteria)
Trust for Mutual Understanding	C	27,000	An International Symposium on Plant Conservation in the Caucasus Region, 2-7 October 2009, St. Louis, USA

\*Additional funding should be reported using the following categories:

- A Project co-financing (Other donors contribute to the direct costs of this CEPF project)
- **B** Complementary funding (Other donors contribute to partner organizations that are working on a project linked with this CEPF funded project)
- **C** Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF funded project.)
- **D** Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)

## Provide details of whether this project will continue in the future and if so, how any additional funding already secured or fundraising plans will help ensure its sustainability.

Funds have already been secured from the Trust for Mutual Understanding to bring project participants to the Missouri Botanical Garden in St. Louis, USA, 2-7 October 2009, for an "International Symposium on Plant Conservation in the Caucasus Region". The objectives for the Symposium will be: 1) to resolve the remaining questions concerning synonymy and conservation assessments, and finalize the manuscript format for the Red Data Book; 2) to provide the Caucasian botanists with the opportunity to learn modern herbarium methods and technologies to inform plant conservation; and 3) to disseminate up-to-date information about the flora of the Caucasus and its conservation to both Caucasian colleagues and American specialists, and chart the way forward for future plant conservation efforts.

#### **VIII. ADDITIONAL COMMENTS AND RECOMMENDATIONS**

Funds initially allocated for publication of the hard copy "**Red List of the Endemic Plants of the Caucasus Region**" could not be expended within the term of the project. Therefore, additional funds will need to be obtained to subsidize publication costs. Red Books constitute essential documents to publicize and galvanize conservation action, bestowing a tangible face on threatened species for government officials, donors, and the public at large. It is hoped that additional funds may become available through CEPF during 2010 when the manuscript is ready to go to print.

### **VIII. INFORMATION SHARING**

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned and results. One way we do this is by making programmatic project documents available on our Web site, www.cepf.net, and by marketing these in our newsletter and other communications.

These documents are accessed frequently by other CEPF grantees, potential partners, and the wider conservation community.

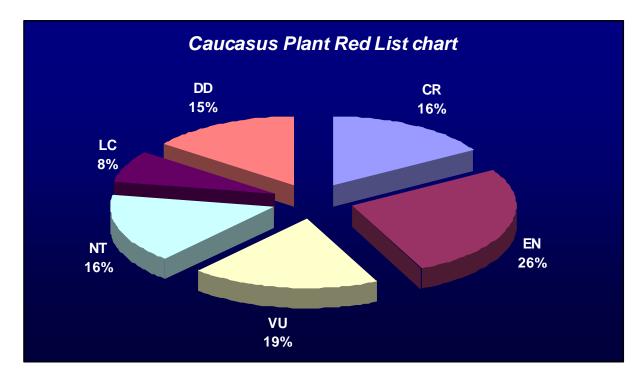
#### Please include your full contact details below:

Name: George E. Schatz Organization name: Missouri Botanical Garden Mailing address: P.O. Box 299, St. Louis, Missouri 63166-0299, USA Tel: +1 609 647 9109 Fax: E-mail: george.schatz@mobot.org

Name: Ketevan Batsatsashvili Organization name: Tbilisi Botanical Garden and Institute of Botany Mailing address: Kojori Rd 1, 0105 Tbilisi, Georgia Tel: (995 32) 98 82 7 Fax: E-mail: ketevan\_batt@yahoo.com

Name: Jane Smart Organization name: IUCN Mailing address: Rue Mauverny,28, CH-1196 Gland, Switzerland Tel: +41 22 999 0157 Fax: +41 22 999 0015 E-mail: jane.smart@iucn.org

## Figure 1



CR	190
EN	312
VU	217
NT	187
LC	88
DD	170
	1164