



REPUBLIC OF KOSOVO

Ministry of Environment and Spatial Planning
Inter Ministerial Water Council



**The Sida Framework Environmental Programme
For Kosovo**

**C2
A2.01
D2.01.01**

Kosovo Environmental Programme

(2016/07076)

Baseline Report and Database on Animal Species in Kosovo

Draft Version N.002-2019

3 April 2019

Project Title:	Kosovo Environmental Programme (KEP)
Financing:	Swedish International Development Cooperation Agency (Sida)
Reference No:	2016/07076
Starting Date	4 July 2016
End Date (Duration)	3 July 2020
Contract Number:	C00045
Contracting Authority:	Embassy of Sweden in Pristina Mr. Fatos MULLA, Programme Officer Str. Perandori Justinian, No. 111, Pejton – 10000 Pristina Tel.: +381-(0)38-245795, ext.8221 Fax: +381-(0)38-245791 Email: fatos.mulla@gov.se
Beneficiaries	Ministry of Environment and Spatial Planning (MESP) of Kosovo Environmental Protection Department Mr. Muhamet MALSIU, Director and Project Coordinator Relindja Building, 15 th Floor – 10000 Pristina (Kosovo) Tel.: +381-(0)38-20033222; Fax: +381-(0)38-517558 Email: Muhamet.Malsiu@rks-gov.net
	Kosovo Environmental Protection Agency (KEPA) Mr. Afrim BERISHA, Acting Director Relindja Building, 15 th Floor – 10000 Pristina (Kosovo) Tel.: +381-(0)38-20033222; Fax: +381-(0)38-517558 Email: Afrim.Berisha@rks-gov.net
Contractor:	FCG Sweden (Lead Company) Mr. Per GIERTZ Dalagatan 7 – 11123 Stockholm (Sweden) Tel.: +46-(0)8-4067627 / Mob.: +46-(0)70-6749191 Fax: +46-(0)8-210269 Email: per.giertz@fcgsweden.se In Consortium with: EPTISA Servicios de Ingenieria S.L. (Partner) Mr. Juan RUANO MOHALES Emilio Muñoz, 35-37 – 28037 Madrid (Spain) Tel.: +34-915-949500 Fax: +34-914-465546 Email: jruano@eptisa.com
Project Director:	Niklas HERRMANN FCG Sweden Dalagatan 7 – 11123 Stockholm (Sweden) Tel.: +46-(0)8-4067627 Fax: +46-(0)8-210269 Email: Niklas.Herrmann@orgut.se
Programme Manager / Contractor Representative:	Mr. Giuseppe RAZZA c/o Ministry of Environment and Spatial Planning of Kosovo Relindja Building, 15 th floor – 10000 Pristina (Kosovo) Tel.: +377-(0)44-908421 Email: giuseppe.razza@yahoo.it
Title of the Report	Baseline Report and Database on Animal Species in Kosovo [C2-A2.01-D2.01.01]
Date of preparation	3 April 2019 (Draft Version n.002-2019)
Author of the Report	Mr. Halil IBRAHIMI, Senior National Short-Term Expert (SNSTE) with inputs provided also by Mr. Fadil BAJRAKTARI, Director of Kosovo Institute for Nature Protection (KINP)
Quality check	Mr. Giuseppe RAZZA, Programme Team Leader

Disclaimer

The opinions expressed in this Report are those of the authors and do not necessarily reflect the opinions of the Swedish Embassy in Kosovo or any other organisation mentioned. As a result, these will be verified before implementation of any of the recommendations contained herein.

TABLE OF CONTENTS

Page

1	INTRODUCTION.....	1
	1.1 SCOPE OF THE REPORT	1
	1.2 LEGAL BACKGROUND	2
2	BASILINE DATA ON KOSOVO FAUNA	3
	2.1 BIODIVERSITY IN KOSOVO	3
	2.2 EXISTING STUDIES ALREADY IMPLEMENTED AND SOURCES OF INFORMATION.....	5
	2.3 DATABASE (CLASSIFICATION AND DESCRIPTION) OF THE KOSOVAN FAUNA IN ACCORDANCE WITH EXISTING DATA.....	6
	2.3.1 <i>Technical Information about the Database</i>	6
	2.3.2 <i>Content of Database</i>	6
3	METHODOLOGY FOR THE IMMEDIATE UPDATE OF DATABASE WITHIN THE RED BOOK	7
	3.1 INTRODUCTION.....	7
	3.2 CLASSIFICATION OF FAUNA BASED ON IUCN CATEGORIES.....	8
	3.3 CLASSIFICATION OF HABITATS.....	9
	3.4 CLASSIFICATION OF THREATS.....	9
	3.5 CLASSIFICATION OF CONSERVATION ACTIONS AND RESEARCH NEEDED	9
	3.6 USING THE RAMAS RED LIST SOFTWARE.....	9
	3.7 FINALISATION OF A TRAINING AND WORKSHOP PROGRAMME NEEDED FOR THE UPDATE OF DATABASE	10
	3.8 DEFINITION OF EXPECTED ACTIVITIES, ORGANISATION OF THE WORKING TEAM AND COMPLETION OF A WORK PLAN FOR IMMEDIATE ACTION FOR IMPLEMENTATION AND HANDLING OF THE DATABASE	12
	3.8.1 <i>Expected Activities and Working Team</i>	12
	3.8.2 <i>Identification of necessary equipment and related procurement documents</i>	12
4	PROVISION OF GUIDELINES FOR CONTINUOUS UPDATING AND IMPROVEMENT OF THE DATABASE OF ANIMAL SPECIES.....	13
	4.1 LEGAL BASIS FOR THE DATABASE OF ANIMAL SPECIES	13
	4.2 CURRENT ACTIVITIES AND GAPS.....	14
	4.3 RECCOMENDATIONS AND GUIDELINES FOR UPDATE AND IMPROVEMENT	15
5	PROPOSAL FOR THE STRUCTURE OF RED BOOK OF ANIMAL SPECIES OF KOSOVO	17
	5.1 PROPOSED CONTENT OF THE RED BOOK.....	17
6	SOURCES OF INFORMATION AND BIBLIOGRAPHY	19
A	ANNEXES.....	21
	A.1 WORKING PLAN FOR THE RED BOOK OF ANIMAL SPECIES FOR 2017	21
	A.2 IUCN CATEGORIES	36
	A.3 HABITATS CLASSIFICATION SCHEME (VERSION 3.1)	37
	A.4 THREATS CLASSIFICATION SCHEME (VERSION 3.2)	40
	A.5 CONSERVATION ACTIONS CLASSIFICATION SCHEME (VERSION 2.0)	43
	A.6 RESEARCH NEEDED CLASSIFICATION SCHEME (VERSION 2.0)	44
	A.6 THE TEMPLATE FOR SPECIES AFTER EVALUATION WITH THE SET OF DATA	45

GLOSSARY OF ACRONYMS

A-Z

Acronyms	Meaning
AoK	Assembly of Kosovo
AFMR	Amphibian, Fish, Mammals and Reptiles
CSI	Core Set of Indicators
EC	European Commission
EIA	Environmental Impact Assessment
EIS	Environmental Information System
EoS	Embassy of Sweden
EU	European Union
EUOK	European Union Office in Kosovo
EUR	Euro (European currency)
ERA	Environmentally Responsible Action group
FA	Framework Agreement
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GoK	Government of Kosovo
GS	General Secretary
IPA	Instrument for Pre-Accession Assistance
IU	Implementation Unit
IUCN	International Union for the Conservation of Nature
KEP	Kosovo Environmental Programme
KEPA	Kosovo Agency for Environment Protection
KEERC	Kosovo Environmental Education Research Centre
KFA	Kosovo Forestry Agency
KNPI	Kosovo Nature Protection Institute
MAFRD	Ministry of Agriculture, Forestry and Rural Development
MESP	Ministry of Environment and Spatial Planning
NGO	Nongovernmental Organization
NP	National Park
UNDP	United Nation's Development Programme
PD	Project Director
PE	Procurement Expert
PFU	Programme Facilitation Unit
PG	Procurement Guidelines
PM	Project/Programme Management / Programme Manager
PMA	Project monitoring and Audit
PT	Project Team
PTL	Programme Team Leader
RB	Red Book
RBF	Red Book of Fauna
RBM	Result Based Management
SC	Steering Committee
SEK	Swedish Krona (Swedish currency)
Sida	Swedish International Development Cooperation Agency
STE	Short Term Expert
TA	Technical Assistance
UN	United Nations
WB	World Bank
WP	Work Plan

1 INTRODUCTION

1.1 SCOPE OF THE REPORT

This report deals with the background information related to biodiversity features of Kosovo and gives some insight into the previous studies related to the different animal groups in Kosovo. It provides also the legal basis for the protection of animals and compilation of the Red Book of Animal Species.

It further explains the methodology for the classification and field inventory of fauna in Kosovo including the plan and expected activities for realization of the Red Book of Fauna in Kosovo, equipment needed for this purpose and workshops to be conducted during the process. The report also includes the proposed content of the red book and it gives a template of how the species will be evaluated after the analysis in field.

This information is given in context of maintaining the current database, guidelines for its continuous update and the most immediate needs in adding to the existing one.

1.2 LEGAL BACKGROUND

There are thirteen laws which are directly related to nature protection, biodiversity and environment and eighteen other laws which are indirectly related to biodiversity and nature protection. Criminal activities regarding biodiversity are sanctioned through the Criminal Code of Kosovo (chapter XXVIII: criminal activities against environment, animals, plants and cultural objects – Article 347 to Article 364).¹

There is no law-making mandatory compilation of the Red Book of Animal Species. However, all laws concerning nature protection make mandatory protection, conservation and monitoring of animal species. During 2012 MESP has produced the Administrative Instruction 18/2012 with a list of protected and strictly protected wild animal species which are supposed to derive from the Red List. During 2017 this Administrative Instruction was amended for the plant part, after the finalization of the Red Book of Vascular Flora of Kosovo. Consequently, the compilation of Red Book of Fauna of Kosovo will make mandatory amendment of this administrative instruction for the animal part. Currently as this AI contains mainly animal part species which are not present in Kosovo any legal and practical step towards protection and monitoring is almost impossible.

There is a legal basis for nature protection databases where the animal biodiversity is included as well. This will be addressed in the chapter about the Database of Animal Species.

¹ Department of Environment Protection, Ministry of Environment and Spatial Planning of Kosovo, 2011, Strategy and Action Plan for Biodiversity 2011-2020

2 BASELINE DATA ON KOSOVO FAUNA

2.1 BIODIVERSITY IN KOSOVO

Kosovo is characterized as an important part of the Balkan Peninsula's biodiversity hotspot in Europe with many steno endemic, endemic, rare, important but also endangered, threatened and vulnerable plant and animal species. Despite this, the country still faces difficulties in terms of important investments in biodiversity conservation, comprehensive surveys and establishment of baseline information.

Even though important, mainly legislative, steps have been undertaken in terms of designation of protected areas, during the past years in Kosovo, biodiversity still does not receive enough attention in terms of data collection, data reporting and management and creation of effective legal basis for obligatory data flow.

Conservation of natural areas was initiated during 1950s with the designation of several nature reserves such as Kozhnjer, Rusenica, Gubavc etc with more developments during 1980s when the first National Park, Sharr, was declared. This protected area was further expanded during the 2012. Another National Park was declared during 2014, Bjeshket e Nemuna National Park. Currently approximately 10.9 %of Kosovo territory as of 2013 is under the legally protected area status.

There is still no comprehensive inventory or monitoring of biodiversity in Kosovo and information related to biodiversity and environment are mainly generated through different projects or individual scientific efforts of academic institutions. Biodiversity and environmental data are thus not stored or processed in integrative way. The information systems are still not functional and thus proper management of biodiversity data is still lacking. In addition to this, data flow is ineffective.

Despite fragmentary and unsystematic investigations of fauna in Kosovo, several important results have been produced indicating thus that Kosovo is home to an interesting composition of animal species bearing in itself elements of endemic, rare and interesting species, occurring sometimes in a limited area in Kosovo. For example, during the past five years five new steno endemic species, new for science, have been found in Kosovo².

In addition to this, camera trapping of large carnivores revealed that the endangered and rare mammals which are almost extinct in some parts of Europe or Balkans, are still to be found in a limited number of habitats in Kosovo.

During the 2013 the Red Book of Vascular Plants of Kosovo was produced with some 237 taxa included.

MESP has the primary mandate for biodiversity protection in Kosovo through the Department of Environment. The Division of Nature Protection within the Department of Environment performs administrative and professional services related to the protection and conservation of biodiversity. The Kosovo Agency for Environment Protection (KEPA) which is also a part of the MESP is in charge of management of national parks and protected areas, environmental monitoring, environmental information and continuous reporting on the environmental situation. The Kosovo Institute for Nature Protection (KINP) is mandated to provide scientific support.

The Kosovo Forest Agency (KFA) within MAFRD is responsible for forest management on public and private lands including the collection of non-wood forest products. Part of responsibility of KFA is the hunting and wildlife management based on Hunting law. Department of forestry, in under ministry of Agriculture, Forestry and Rural Development, with main responsibilities of forest policy and strategies in forestry sector, drafting the laws and administrative instruction ensuring sustainable use of forest resources, training and public awareness.

² For example, see Ibrahim H., Vitecek S., Previšić A., Kužinić M., Waringer J., Graf W., Bálint M., Keresztes L. & Pauls S.U. 2016. *Drusus sharrensis* sp. n. (Trichoptera, Limnephilidae), a new species from Sharr National Park in Kosovo, with molecular and ecological notes. *ZooKeys* 559: 107–124.

Baseline Report

The Directorate of National Park "Sharri" and the Directorate of National Park "Bjeshket e Nemuna" are in charge of management of the two National Parks in Kosovo. They also collect sporadically biodiversity and ecosystem information from the field. The Inspectorate for Environment Protection is in charge of inspection regarding nature protection, while the inspectorate of forestry is under KFA, with main responsibility of monitoring of sustainable forest management, wildlife management and non-wood forest products collection.

Institutions dealing with data collection in Kosovo are mainly universities and the Faculty of Mathematics and Natural Sciences of the Pristina University. Information collected in field is mainly related to plant diversity while fauna diversity and other groups are presented at lesser degree.

The category and level of biodiversity collected by data collector stakeholders is different and depends on speciality and expertise of the institution conducting the research. On the whole, plants, invertebrates and vertebrates are the main categories present in the research of involved stakeholders. Faculty of Mathematics and Natural Sciences of the University of Pristina collects biodiversity information related to: vascular plants, algae, aquatic and terrestrial invertebrates, fish and at a lesser degree mammals, lichens, fungi and microorganisms.

The staff of the newly established University of Peja has mainly been involved lately in collection of biodiversity data related to aquatic insects, aquatic macro-invertebrates and vascular plants. Sporadically the Kosovo Institute of Nature Protection has collected biodiversity data and mainly related to mammals and birds.

The FINCH NGO collects only information related to birds, ERA NGO has mainly been involved in collecting biodiversity information related to large carnivores while KEERC as a newly established NGO has collected, during its first year of activity, data on terrestrial insects, fish, aquatic insects, reptiles, birds and amphibians. Important contribution in data collection comes from other NGOs such as Entomologist Society of Kosovo, Society for Protection of Birds and Mammals and Society of Ecologists of Kosovo also collect biodiversity data for particular groups but not continuously or as a structured effort.

Other environmental information, indirectly related to biodiversity is continuously collected by governmental institutions such as Hydrometeorological Institute, Institute for Public Health and other. There have been few projects financed by international organizations which have contributed to biodiversity studies. The UNDP's "Conservation of Biodiversity and Sustainable Land Use Management in Dragash" has contributed to the collection of data about freshwater invertebrates, mammals, amphibians, reptiles, butterflies and other insects in Dragash Municipality and Sharr National Park.³

³ National Biodiversity Information Management and Reporting Report for KOSOVO, prepared by Halil Ibrahim, GIZ 2017

2.2 EXISTING STUDIES ALREADY IMPLEMENTED AND SOURCES OF INFORMATION

Most of the studies involving inventory of particular groups of animals are sporadic, unsystematic and only carried out in particular narrow areas in Kosovo. Since the goal of these studies in most of the cases is either taxonomy, morphology, environmental quality assessment or other pure scientific goals, they lack the most important features important for conservation efforts such as categorisation as per international convention's criteria or local constraints of endangerment.

For example, most of the freshwater biodiversity data are so far gained in the context of water quality assessments and thus lack important taxonomic and ecological features which are important for inclusion in the red lists and books. Freshwater ecosystems being thus one of the most highly diverse ecosystems in Kosovo are poorly investigated.

Few sporadic investigations during the last years produced several new species for science but these species together with many other freshwater taxa are under continuous pressure because they lack legal protection due to the insufficient knowledge on their distribution, rarity and quantification of their status of endangerment. From literature there are only few records of insect species, including aquatic insects, but they still lack exact distributional data for whole Kosovo in order to assess their current status of endangerment.

Beside Trichoptera, other insect orders such as Ephemeroptera, Odonata, Plecoptera, Diptera etc are almost completely unknown. It is expected that the number of aquatic insects in Kosovo will be more than 300. Based on literature data there are important species of prime butterfly fauna mostly in alpine areas and protected zones, but most of the studies related to Lepidoptera are outdated since they are carried several decades ago and in addition to this, they lack distributional exact data for Kosovo and assessment of the status of endangerment.

Only few reptile, amphibian and fish species are currently known based on literature data but most of these data are only vague assessments regarding exact distribution localities, status and trends of rarity and endangerment. Several mammal species are currently known from literature data but without exact locality distribution and status of endangerment for most of these species.

Camera trapping of mammals has produced during the last few years exact data only for very few species such as *Lynx lynx balcanicus*, *Rupicapra rupicapra balcanica* and other associated species.

Information related to bird species has been produced during the last years but mostly from amateurs. These data including literature data and reports also lack scientific verification, exact locality distribution and status of endangerment. Data related to spiders, other insect groups (apart from aquatic ones), bats and snails are almost completely lacking.

In the following chapter the Database of Animal Biodiversity in Kosovo based on previous literature data, reports, documents and atlases are summarised.

2.3 DATABASE (CLASSIFICATION AND DESCRIPTION) OF THE KOSOVAN FAUNA IN ACCORDANCE WITH EXISTING DATA

2.3.1 Technical Information about the Database

For technical purposes and handling, the Database is divided in five parts: Insects (were mostly Trichoptera and Coleoptera are included), AFMR Animals (amphibians, fish, mammals and reptiles), birds and butterflies (mostly prime butterflies). The database is still incomplete and is expected to be fed with information from experts engaged for different fields of expertise during the compilation of the Red Book of Animal Species, including their findings from literature records only.

Most of information in the Database are generated through the excel database worked out within the UNDP financed project named "Conservation of Biodiversity and Sustainable Land Use Management in Dragash Municipality" which was carried out during the period 2010-2013.

The database is in excel format and a set of categories is included for each group of animals (Annex A4).

For insects these categories are included: Taxonomic Information, Albanian, Serbian and English name, Area of distribution, Rareness, Sensitivity, Habitat Directive, Bern Convention, IUCN status, Economic use, coordinates, preferred habitat, and source of information.

For Amphibians, Mammals, Fish and Reptiles the following categories are given: Taxonomic Information, Albanian, Serbian and English name, Area of distribution, Rareness, Sensitivity, Habitat Directive, Bern Convention, IUCN status, Economic use, coordinates, preferred habitat, and source of information.

For Birds the following categories are included: Taxonomic Informations, Albanian, Serbian and English name, Endemism Area, Rareness, Birds Directive, Bern Convention, IUCN Status, Bird Habitat, Bird Movement status, Sensitivity, Habitat Requirements, Observation, Range of activity, Remarks and Source.

For Prime Butterfly Fauna which are classified separately from other insects the following categories are given: Taxonomic Information, Albanian, Serbian and English name, Area of distribution, Rareness, Sensitivity, Habitat Directive, Bern Convention, IUCN status, Preferred Habitat, Season of imago occurrence, geographic, coordinates, preferred habitat, Hibernating stage, Preferred humidity, Preferred Temperature and source of information.

2.3.2 Content of Database

In the chapter of Insect species are included Coleoptera, Myriapoda and Trichoptera orders. In total in this chapter are given 30 species and mostly belonging to the aquatic insect order Trichoptera. In the chapter AFMR species are given in total 64 species in the following categories: Amphibians 12 species, Fish, 6 species, Mammals 31 species and Reptiles 7 species. In the chapter Birds are given in total 168 species. In the chapter Butterflies are given 144 species.

Not all given categories are completed for each species and not all species have exact coordinates. Although there are geographic details for a considerable number of species and in some cases only approximate polygon occurrence is given.

This database will serve as a basis for field investigations during the compilation process of Red Book. Based on same categories of information, adding information which is important for Red Book Assessment, a database of animal species in Kosovo will be compiled during the process of the preparation of the Red Book of Animal Species.

3 METHODOLOGY FOR THE IMMEDIATE UPDATE OF DATABASE WITHIN THE RED BOOK

3.1 INTRODUCTION

The immediate need in updating the Database of Animal Species is the inventory in the function of creation of Red Book of Fauna of the Republic of Kosovo.

This part of database must be developed in accordance with the IUCN Red List Category and Criteria Version 3.1 (IUCN 2012), Guidelines for Using the IUCN Red List Categories and Criteria (Version 13, March 2017: IUCN Standards and Petitions Subcommittee 2017) and the IUCN Guidelines for Application of IUCN Red List Criteria at Regional and National Levels, Version 4.0 (IUCN 2012a).

These documents, together with the other accompanying documents, must be used in order to provide an accurate objective classification framework for species, based on their threatening status.

The scientific names of taxa, as well as other systematic features, must be given according to the European Fauna database (Fauna Europaea) (deJong *et al.* 2014), while for other species such as those newly described lately, for example, or others, the valid corresponding references must be used (e.g. Ibrahim *et al.* 2015, 2016; Glöer & Pešić 2014; Grosser *et al.* 2016; Oláh *et al.* 2013).

For the completion of the Red Book of Animal Species the animal groups has been classified in thirteen fields: Freshwater Biodiversity (Trichoptera, Plecoptera); Freshwater Biodiversity (Ephemeroptera, Diptera); Freshwater Biodiversity (Odonata); Freshwater Biodiversity (Fish); Insects (Lepidoptera); Insects: Coleoptera; Hemiptera and other smaller groups; Mammals; Amphibians and Reptiles; Birds; Soil Fauna, Freshwater Biodiversity: Mollusca, Hirudinea and other smaller groups; Mammals: Chiroptera and Aranea.

It is impossible to include all animal groups at the first versions of Red Books. The selection of these fields was done by taking into account the following criteria: composition of other Red Books in the region and wider, the level of ready to use expertise in the country, inclusion of the most important animal groups, inclusion of animal groups with the highest potential for endemism, inclusion of animal groups with the highest risk towards environmental and anthropogenic threats.

The classification of the fauna, including taxonomic information, hierarchical categorization and author information is done in accordance with Fauna Europaea while for species described lately and not included yet in this European Data Base of Animal Species, particular scientific papers where these species are published, will be taken into consideration.

Other faunistic databases will be also used for this purpose such as: Distributional Atlas of European Trichoptera, Distributional Atlas of European Plecoptera, Red Book of Prime Butterflies of Europe etc.

3.2 CLASSIFICATION OF FAUNA BASED ON IUCN CATEGORIES

Threatened species are all those that are susceptible to extinction or candidate for extinction in the near future, if the threatening factors are increased or not treated on time. The IUCN (International Union for the Conservation of Nature) treats threatened species not as a single category, but as a group of three categories: vulnerable, endangered and critically endangered, depending on the threat degree and intensity. Other categories used by the IUCN, prescribe either the degree of approximation of species with these categories, or the qualification of the species to be assessed against IUCN criteria, or even the extinction of the species itself.

These categories according to the IUCN are: Extinct EX, Extinct in the Wild EW, Regionally Extinct RE, Critically Endangered CR, Endangered EN, Vulnerable VU, Near Threatened NT, Vulnerable VU, Least Concern LC, Data Deficient DD, Not Applicable NA and Not Evaluated NE. In Annex 2 is provided the explanation of these categories in accordance with IUCN Manual "IUCN Red List Categories and Criteria (Version 3.1)" (obtained from IUCN 2012).

All species are subject to assessment against IUCN criteria, except for the species considered to belong to the Not Applicable NA category. Some species may not be evaluated at present and these are grouped under the Not Evaluated NE category. It does not mean that species that are in this category are not threatened, but simply that they are not assessed at the moment. All other species are further evaluated for one of the remaining categories. If the actual data is not sufficient to make an assessment for the categories Least Concern LC, Near Threatened NT, Vulnerable VU, Endangered EN, Critically Endangered CR, Regionally Extinct RE, Extinct in the Wild, EW then, such species are classified under the Data Deficient DD category. For such species, more data should be collected in order to be classified later in one of the mentioned categories.

Species that are not under a serious extinction risk are classified under the Least Concern LC category, whereas other species which are under the threat of extinction, depending on the degree of threat, are placed in the categories Vulnerable VU, Endangered EN and Critically Endangered CR. Species that are under such threats that may soon qualify for these three categories are placed in the Near Threatened NT category.

Species for which there is evidence of extinction are placed under the Extinct in the Wild EW, Extinct EX or Regionally Extinct RE categories. In Annex 2 of the Introduction, a summary of the five criteria (A-E) used to evaluate if a taxon belongs in an IUCN Red List threatened category (Critically Endangered, Endangered or Vulnerable) is provided.

Such evaluation is valid for a certain period. A subsequent reassessment may result in the change of the status of the species, and the reasons for such moves within the categories may relate to the change in the conditions of the species in nature or change in the dataset for the species. Change in conditions of the species means that since the previous assessment was done, the threats have increased or decreased and thus the state of the populations have deteriorated or improved. The change of category due to the addition of data implies that since the past evaluation, new more reliable data have been collected or the taxonomic status of the species has changed (e.g. populations belonging to a single species have been divided into several subspecies or species, which reduces their spatial distribution and consequently changes the state of the threats that threaten each of the earlier subpopulations of the species that are now populations of new species), or an error has been found in previous data or in previous assessment.

In any case, in order to monitor the situation and change in the status of biodiversity, it is essential that the species are re-evaluated periodically, in order to have adequate measures for protection based on the real status of the species, and also to have additions of new species that for variety of reasons previously have not been evaluated against IUCN criteria.

3.3 CLASSIFICATION OF HABITATS

In the Red Book of Fauna of the Republic of Kosovo, classification of habitats according to the Habitats Classification Scheme (Version 3.1) has been used. Habitat types under this scheme are standard terms used to describe the main habitats in which taxa are located. Three levels of hierarchy use habitats that take into account biogeography, latitudinal zoning, and depth in case of marine systems. The inland aquatic habitats are mainly based on the classification system of habitats used by the Ramsar Convention. This habitat classification scheme is given in Annex 3 of the Introduction.

In addition, in most cases more detailed data on habitat characteristics for species have been provided, taking into account specific requirements of species for certain parts of the habitat, both in Kosovo and in the whole species range.

3.4 CLASSIFICATION OF THREATS

In the Red Book of Fauna of the Republic of Kosovo, the threat categories according to the Threat Classification Scheme (Version 3.2) have been used. Direct threats are human activities or processes that have affected, are affecting, or may affect the status of the assessed taxa (e.g. unstable fishing, logging, commercial development etc.). This threat classification scheme is provided in Annex 4 of the Introduction.

In addition, in most cases, more detailed information on the characteristics of threats to the assessed species was provided. There was a lack of data on the timing of threats, and thus in some cases, it was impossible to quantify them in relation to time and magnitude. In this context, in the Red Book of Fauna of the Republic of Kosovo, threats have been used more in terms of factors that have influenced or can affect the status of populations of the species without any direct quantification.

3.5 CLASSIFICATION OF CONSERVATION ACTIONS AND RESEARCH NEEDED

In the Red Book of Fauna of the Republic of Kosovo, classification of the conservation actions needed has been used as per Conservation Actions Classification Scheme (Version 2.0). In this scheme are included actions that are most urgent, important, and which can be reached at a certain future time. In most cases, there were no current conservation actions for the respective species. Hierarchical scheme for needed research activities is also given in accordance with the Research Needed Classification Scheme (Version 2.0). Here are included research actions that are necessary in order to improve the status of the assessed species and which can be realistically achieved within a certain short-term period. The Conservation Actions Classification Scheme and the Research Needed Classification Scheme are given in Annexes 5 and 6.

3.6 USING THE RAMAS RED LIST SOFTWARE

The data collected for the Red Book of Fauna of the Republic of Kosovo have been processed with the Ramas Red List software (Akçakaya and Ferson 2001) in cases where the quantity and quality of data have enabled this. This software program implements threat criteria according to IUCN and operates under three modules: Ramas Red List 3.0, Temporal Analysis Module and Spatial Analysis Module. Ramas Red List 3.0 is the basic module that carries out the assessment of the species. The Temporal Analysis Module operates according to these parameters: generation length over the years, population reduction, continuous population decline, and population fluctuations. The Temporal Analysis Module operates according to these parameters: extent of occurrence, area of occupancy, trends in extent of occurrence (% per year), trends in area of occupancy, continuous decline of extent of occurrence, continuous decline of area of occupancy, extreme fluctuations in extent of occurrence and extreme fluctuations in area of occupancy. This software also takes into account number of populations / sub-populations, number of locations, main threats, number of adult individuals, population/subpopulation size (expressed as number of adult individuals), the likelihood of extinction of taxon in nature within a certain period of time etc.

3.7 FINALISATION OF A TRAINING AND WORKSHOP PROGRAMME NEEDED FOR THE UPDATE OF DATABASE

During the process of compilation of the Red Book of Animal Species of Kosovo there will be organized nine workshops dedicated to the training on monitoring of animals in Kosovo, presentation of results gained from the field and presentation of the finalized version of the Red Book. The first workshop dedicated to the Methodology of the Red Book of Animal Species was completed during June 2016 with participation from University of Pristina, Experts engaged for compilation of the Red Book, Kosovo Environmental Programme and MESP.

The following five workshops (2, 3, 4, 5 and 6) are theoretical and on job training workshops for monitoring of different groups of animal species targeting staff from National Parks, NGO's and Universities. Trainees will be experts engaged in the process of assessing animal species in field during the compilation of the Red Book. During the first half of 2018 will be organized a workshop where preliminary results gained from field observations and investigations conducted during 2017 will be presented. By the end of 2018 the final workshop on presenting the published Red Book of Animal Species will be organized.

1. Workshop on Methodology for the Red Book of Animal Species

Short Description: Criteria for species to be included in RB; Number of categories for species' criteria; International conventions and lists to be used; Local / Regional classification for species

Approximate Date: July 2017

Targeted Audience: Universities, MESP

Approximate Number of Participants: 15

Duration: ½ day

Persons Responsible: Halil Ibrahim

Place: Pristina

Note: Completed

2. Training on collecting methods and monitoring of freshwater fauna

Short Description: Sampling methods for aquatic insects; Sampling methods for aquatic molluscs; Storing of specimens; Monitoring techniques

Approximate Date: September 2017

Targeted Audience: Staff of National Parks, Bachelor students, Interested NGO's

Approximate Number of Participants: 30

Duration: 1-day training and 1½ -days field work

Persons Responsible: Halil Ibrahim

Place: Bjeshket e Nemuna

Note:

3. Training on collecting methods and monitoring of amphibians and reptiles

Short Description: Sampling methods for amphibians; Sampling methods for reptiles; Storing of specimens; Monitoring techniques

Approximate Date: September 2017

Targeted Audience: Staff of National Parks, Bachelor students, Interested NGO's

Approximate Number of Participants: 25

Duration: ½ -day training and 1-day field work

Persons Responsible: Daut Rexhepaj, Linda Grapci Kotori, Halil Ibrahim

Place: Sharr National Park

Note:

Baseline Report

4. Training on monitoring of mammals

Short Description: Monitoring techniques for mammals; Camera trapping; Trace identification

Approximate Date: October or December 2017

Targeted Audience: Staff of National Parks, Bachelor students, Interested NGO's

Approximate Number of Participants: 25

Duration: ½ -day training and 1-day field work

Persons Responsible: Daut Rexhepaj, Halil Ibrahim

Place: Sharr National Park

Note:

5. Workshop on monitoring of birds

Short Description: Presentation of preliminary results; Data processing and analysis

Approximate Date: March 2018

Targeted Audience: Staff of National Parks, Universities, MESP, Interested NGO's

Approximate Number of Participants: 40

Duration: 1 day

Persons Responsible:

Place: Prishtina

Note:

6. Workshop on preliminary results of RB

Short Description: Presentation of preliminary results; Data processing and analysis

Approximate Date: March 2018

Targeted Audience: Staff of National Parks, Universities, MESP, Interested NGO's

Approximate Number of Participants: 40

Duration: 1 day

Persons Responsible: Halil Ibrahim, Agim Gashi, Daut Rexhepaj, Ferdije Zhushi, Linda Grapci Kotori, Institute for Nature Protection

Place: Prishtina

Note:

7. Workshop on awareness regarding fauna diversity

Short Description: Main threats to fauna of Kosovo; Policies on protection of fauna; Amendment of legislation related to biodiversity; Management plans, strategic documents related to biodiversity

Approximate Date: October 2018

Targeted Audience: Staff of National Parks, Universities, MESP, Interested NGO's, Municipalities

Approximate Number of Participants: 40

Duration: 1 day

Persons Responsible: Halil Ibrahim, Agim Gashi, Daut Rexhepaj, Ferdije Zhushi, Linda Grapci Kotori, Institute for Nature Protection

Place: Prishtina or Bjeshket e Nemuna

Note:

8. Presentation of published RB

Short Description: Presentation of published RB

Approximate Date: December 2018

Targeted Audience: Media, University, MESP, SIDA

Approximate Number of Participants: 50

Duration: 1 day

Persons Responsible: Halil Ibrahim, Institute for Nature Protection, KEP

Place: Prishtina

Note:

3.8 DEFINITION OF EXPECTED ACTIVITIES, ORGANISATION OF THE WORKING TEAM AND COMPLETION OF A WORK PLAN FOR IMMEDIATE ACTION FOR IMPLEMENTATION AND HANDLING OF THE DATABASE

3.8.1 Expected Activities and Working Team

During the 2017 Terms of Reference and Working Plan has been prepared for five fields: Freshwater Biodiversity (Trichoptera, Plecoptera); Freshwater Biodiversity (Ephemeroptera, Diptera); Freshwater Biodiversity (Odonata); Freshwater Biodiversity (Fish); Insects (Lepidoptera). The detailed working plan for these groups of animals (Annex A2) has been prepared including the most valuable hotspots of biodiversity in Kosovo with particularities for each group of animals. The rest of the animal groups will be covered during the 2018. The field work for the first group of animals to be monitored in field during 2017 has started in July 2017 and is expected to end by the end of 2017. The processing of collected samples will be done continuously during the same period and by the first quarter of 2018 is expected to have results from field inventory.

Beside experts engaged to conduct field work, an important number of students has been engaged to assist and also to be trained during this process. The whole process of the completion of Red Books is expected to be finished by the end of 2018.

The Workplan is given in Annex 1.

Field of Red Book	Expertise	Local Experts (number of days)	Regional or International Experts (n. of days)	Students to be engaged (n. of days)
Freshwater biodiversity	Trichoptera, Plecoptera	29	0	70
Freshwater biodiversity	Ephemeroptera, Diptera	30	0	70
Freshwater biodiversity	Odonata	8	0	15
Freshwater biodiversity	Fish	20	0	40
Insects	Lepidoptera	20	0	70
Insects	Coleoptera, Hemiptera, other smaller groups of insects	15	0	50
Mammals	Mammals	30	18	30
Amphibians and reptiles	Amphibians and reptiles	30	15	30
Birds	Birds	30	15	20
Soil fauna	Soil biodiversity	10	5	20
Freshwater biodiversity	Other groups, Hirudinea, Molluscs (terrestrial & freshwater)	10	5	20
Mammals	Chiroptera	0	10	10
Aranea	Aranea	10	5	20

Tab.3.2.1: The groups of fauna and associated expertise, number of days for experts and students to be engaged during 2017 and 2018 for realization of the Red Book

3.8.2 Identification of necessary equipment and related procurement documents

A list of 42 items needed for fieldwork is needed for realization of Red Book. These items include: ultraviolet light traps for insects, storing equipment for insects, entomological nets and nets for sampling aquatic fauna, traps for reptiles, storing equipment for reptiles and amphibians, digital cameras, outfit for field work, observation equipment for birds, camera traps for mammals etc. This list is given in Annex 3 with detailed information for every item such as technical description, purpose of usage and approximate price in Euro.

The list does not include all equipment needed for realization of Red Book of Animals. A certain number of equipment is not included because of considerably high price and because of the reason that this equipment is present in the Faculty of Mathematics and Natural Sciences of the University of Pristina. This equipment can be used for this purpose since there is a Memorandum of Understanding between Ministry of Environment and Spatial Planning and Faculty of Mathematics and Natural Sciences. In this category are included but not restricted the following items: eletrofischer, stereomicroscopes, microscopes etc.

4 PROVISION OF GUIDELINES FOR CONTINUOUS UPDATING AND IMPROVEMENT OF THE DATABASE OF ANIMAL SPECIES

4.1 LEGAL BASIS FOR THE DATABASE OF ANIMAL SPECIES

Law on Nature Protection No.03/L-233 (9 November 2010) in Article 72 says that The Institute (for Nature Protection) shall manage the Nature Protection Information System as a part of an integral information system of the Ministry, in compliance with internationally agreed standards and commitments.

This Law in its Article 7, which provides definitions, mentions the Register of nature protected values which has to do with protection areas: - strict nature reserve, national park, special area, nature park, nature monument, protection landscapes and monument of park architecture, - protected plant species, mushrooms and animals including exemplars of carrion of protected wild species based on this Law and international legal acts, parts of their derivatives and also minerals, fossils, and protected exfoliations. Furthermore, Article 28 this Law explains that the content and keeping manner of the Register of nature protected values, shall be determined by the minister through a bylaw.

Some Article also stipulates that data from the Register of nature protected values shall be public, except if it is determined that data of nature protected values shall remain confidential for the sake of protection thereof. This law makes mandatory creation of a Speleological Cadastre which is foreseen to be part of the Register of Nature Protected Values and which is also to be drafted by the Institute for Nature Protection. Article 38 of this law mentions another register, which is Register of important habitat types in danger, which is to be issued by the minister. According to Article 148 a register of data concerning the state and protection of nature is also mandatory and to be kept by Municipal authorities. Article 46 mentions another cadastre to be kept in the Institute of Nature Protection, which is Cadastre of Ecosystems.

Law on Environment Protection No. 03/L-025 (26 February 2009) dedicates its Article 52 to the System of Environmental Information as a tool for more efficient identification, classification, processing, monitoring and record keeping of natural values and environmental management in Kosovo. According to this Article, SEI shall serve as platform with gathered, classified, maintained, presented and distributed numerical, descriptive and spatial databases on: 2.1. quality of the environmental media; 2.2. monitoring the state of the environment; 2.3. legal, administrative and organizational and strategic measures, 2.4. scientific-technological information about planning measures of pollution prevention; 2.5. exchange of information with other information systems etc. Thus, SEI shall provide access for other information systems and harmonization of all relevant information and data at national and international level.

Therefore, all information systems and databases mentioned in Law on Nature Protection are to become part of this System of Environmental Information. At the end of 2016 Ministry of Environment and Spatial Planning issued a new administrative instruction (no 07/2016) dedicated solely to the Environmental Information System where it is further emphasized that this system will serve as a platform where all other systems dealing with environment are linked.

According to this, the Database on Animal Species is planned to be part of the general information system to be kept and updated by KINP.

4.2 CURRENT ACTIVITIES AND GAPS

Kosovo Institute for Nature Protection has undertaken an effort in collecting all biodiversity information for Kosovo in an excel database. The part of database dealing with fauna includes only the elementary data such as taxonomic information and locality data without GIS reference. The part of database dealing with flora diversity is more detailed and is mostly extracted from the Red Book of Vascular Flora of Kosovo.

The Environmental Information System Sector of KEPA, in charge of creating and maintaining EIS, as mandated by law, does not have any system developed currently. The plan for near future is to design a website which would link all existing databases related to environment. NGOs have their own Excel databases with the most elementary information and which are mostly limited to particular areas in Kosovo. In their database, FINCH maintain information related to the birds of Sharr Mountains and Prizren area mostly. ERA maintains a database where mostly medium and large carnivores are included. EkoViciiana has a database of birds of the whole territory of Kosovo. Entomological Society of Kosovo maintains more detailed database of insects, but mostly aquatic insects, all over Kosovo, with GIS reference, habitat preferences and other conservation criteria and information.

Several laws of the Kosovo legislative system envisage and make obligatory the establishment and maintenance of information systems which are directly or indirectly related to biodiversity and environment with the law on Nature Protection and Law on Environment Protection specifically stipulating that the Kosovo Institute for Nature Protection and the Environmental Information Sector are institutions which create and maintain the Nature Conservation Information System and Environmental Information System, accordingly. Secondary legislation is still not completed in terms of defining the content, structure, maintenance procedure, information verification, technical requirements and financial constraints for the Nature Protection Information System and its constituent parts such as Register on Natural Protected Values, Register of Important Habitats and Cadastre of Ecosystems Information systems dealing with biodiversity and environment has not been functional up to now. The Institute for Nature Protection is only at the beginning stages of gathering unstructured biodiversity information.

The current model where this information is stored is very basic and will not be able to incorporate important information produced in some previous or actual databases which are owned by other institutions. The Register on Natural Protected Values and Cadastre on Ecosystems are currently not completed. While there exists specific expertise in academic institutions for some biodiversity groups in general capacities of responsible institutions for data collection, data processing and data analysis are not satisfactory in terms of staff, equipment as well as training for standardized data collection and usage of software solutions for this purpose. Comprehensive inventory and monitoring of biodiversity data is not established yet, monitoring programme and methodology are not developed and standardized. Accordingly, the infrastructure for meeting proper and adequate reporting towards international conventions is still not in place. The legal infrastructure in Kosovo related to biodiversity and environmental information systems are being continuously updated. However, it is still not clear and specific who feeds biodiversity and environmental information systems with information, what are the mandatory duties of institutions producing biodiversity and environmental data versus EISs. Data flow between institutions dealing with biodiversity and environment is conducted mainly on individual and voluntary basis. Procedures of data flow between institutions dealing with biodiversity are not adequately described in the existing legislation.

It is only the Law on Plant Protection no. 04/L-120 which is specific in terms of flow of information at local but also international level. As for the legislation there is no clear and understandable relation between the Nature Conservation Information System (as per the Law on Nature Protection) and Environmental Information System (as per the Law on Environment Protection). There is almost no national budget dedicated mainly to biodiversity conservation in general (including data collection, data processing, verification of existing data).⁴

⁴ Ibrahim H., 2017 National Biodiversity Information Management and Reporting Report for KOSOVO, GIZ Report

4.3 RECOMMENDATIONS AND GUIDELINES FOR UPDATE AND IMPROVEMENT

In order to have an effective and practical Database of Animal Species the following recommendations are needed to be taken into consideration:

- KINP to create a centralized database of animal species with categories included in the preliminary database based on literature records and also after the completion of the Red Book including also the categories as per the IUCN threat category. By the end of finalization of the Red Book of Animal Species, the template which will be used can be developed further by KINP in order to include the previous data and future ones within the given set of categories used for the Database of Animal Species of the Red Book of Fauna of Kosovo.
- KINP to create more operational coordination with the Faculty of Mathematical and Natural Sciences and other academic institutions and NGO's who work in Kosovo as data gatherers in field for different groups of animals.
- KINP to create a monitoring programme for animal species and accordingly all monitoring results to be presented in the categorized database of animal species. The legal obligations for this monitoring must be precisely envisaged in secondary legislation which is still missing. without adequate and continuous monitoring of the update of the Database of Animal Species will not be able to carry out.
- Training for staff of the Kosovo Environmental Protection Agency, including directorates of national parks, in biodiversity data analysis and processing.
- Increase the number of staff, including IT experts, at the offices dealing with the Environmental Information System and Nature Conservation Information System within the Environmental Protection Agency.
- Assistance to governmental institutions dealing with biodiversity and environmental information in identifying all relevant biodiversity studies conducted during the last 30 years by foreign scientists and inclusion of this information in EISs and management plans for nature and biodiversity.
- Provide legal and technical conditions for efficient exchange of biodiversity data between institutions responsible for nature conservation with institutions responsible for management of natural resources;
- Ministry of Environment and Spatial Planning and Ministry of Agriculture, Forestry and Rural Development to coordinate in terms of streamlining their databases concerning biodiversity: Nature Conservation Information System, Environmental Information System (with their constitutive registers and cadastres), Forestry Information System, etc.
- In-site training for biodiversity data collection for local and regional staff employed and responsible for protected areas in Kosovo.
- Prepare ready to use software solution for biodiversity data collection institutions, especially for staff in charge of managing with protected areas.
- Introduce tools in management of protected areas such as Management Effectiveness Tracking Tool (METT) and generate important information related to biodiversity and environment through these tools.



5 PROPOSAL FOR THE STRUCTURE OF RED BOOK OF ANIMAL SPECIES OF KOSOVO

5.1 PROPOSED CONTENT OF THE RED BOOK

TABLE OF CONTENTS

PREFACE

1 INTRODUCTION

1.1 The Red Book of Fauna of the Republic of Kosovo and the Protection of the Biodiversity

1.2 Methodology of Work

1.2.1 Classification of Fauna Based on IUCN Categories

1.2.2 Definition of the terms used in the Red Book of Fauna

1.2.3 Classification of Habitats

1.2.4 Classification of Threats

1.2.5 Classification of Conservation Actions and Research Needed

1.2.6 Using the Ramas Red List Software

1.2.8 Photos of the species

1.2.7 Findings of the Red Book of Fauna

1.2.8 Conclusions

A1 Annexes to Introduction

A1.1 IUCN Categories (according to IUCN Red List Categories & Criteria: Version 3.1-2012)

A1.2 Summary of the five Criteria (A-E) used to evaluate if a Taxon belongs in an IUCN Red List Threatened Category (Critically Endangered, Endangered Vulnerable)

A1.3 Definitions of terms related to the criteria used for species evaluation (according to the IUCN Red List Categories and Criteria: Version 3.1-2012)

A1.4 Habitat Classification Scheme (Version 3.1)

A1.5 Threats Classification Scheme (Version 3.2)

A1.6 Conservation Actions Classification Scheme (Version 2.0)

A1.7 Research Needed Classification Scheme (Version 2.0)

2 CRITICALLY ENDANGERED (CR) SPECIES

2.1 Insecta

2.2 Actinopterygii

2.3 Aves

2.4 Mammalia

3 ENDANGERED (EN) SPECIES

3.1 Bivalvia

3.2 Oligochaeta

3.3 Insecta

3.4 Actinopterygii

3.5 Amphibia

3.6 Aves

3.7 Mammalia

4 VULNERABLE (VU) SPECIES

4.1 Gastropod

4.2 Malacostraca

4.3 Diplopoda

4.4 Insecta

4.5 Actinopterygii

4.6 Amphibia

4.7 Reptilian

4.8 Aves

4.9 Mammalia

5 NEAR THREATENED (NT) SPECIES

5.1 Gastropoda

Baseline Report

5.2 Oligochaeta

5.3 Insecta

5.4 Cyclostomata

5.5 Actinopterygii

5.6 Reptilia

5.7 Aves

5.8 Mammalia

6 LEAST CONCERN (LC) SPECIES

6.1 Oligochaeta

6.2 Arachnida

6.3 Insecta

6.4 Actinopterygii

6.5 Amphibia

6.6 Reptilia

6.7 Mammalia

7 DATA DEFICIENT (DD) SPECIES

7.1 Oligochaeta

7.2 Clitellata

7.3 Arachnida

7.4 Malacostraca

7.5 Diplopoda

7.6 Insecta

7.7 Actinopterygii

7.8 Amphibia

7.9 Reptilia

7.10 Aves

7.11 Mammalia

REFERENCES

6 SOURCES OF INFORMATION AND BIBLIOGRAPHY

1. Administrative Instruction 18/2012 on Wild and Strictly Wild Species in Kosovo
2. Department of Environment Protection, Ministry of Environment and Spatial Planning of Kosovo, 2011, Strategy and Action Plan for Biodiversity 2011-2020
3. Ibrahim H., 2017 National Biodiversity Information Management and Reporting Report for KOSOVO, GIZ Report
4. IUCN Red List Categories and Criteria. Version 3.1
5. Law on Environment Protection No. 03/L-025 (26 February 2009)
6. Law on Fishery and Aquaculture No. 02/L-85 (10 October 2006) Law on Forestry no 2003/3 (14.10. 2004) Law on Hunting 02/L-53 (16 December 2005)
7. Law on Livestock No. 04/L-191 (6 June 2013)
8. Law on Nature Protection No.03/L –233 (30 September 2010)
9. Law on Plant Protection no. 04/L-120 (13 December 2012)
10. Law on Spatial Planning No. 04/L-174 (31 July 2013)
11. Law on Waters of Kosovo No. 04/L-147 (19 March 2013)
12. Millaku, F., Rexhepi F., Krasniqi E., Berisha N., 2013. The Red Book of Vascular Flora of Kosovo
13. Regulation of MESP no 13/2014 of Responsibilities, Internal Organization and Systematization in the Kosovo Environmental Protection Agency
14. UNEP Vienna ISCC, 2010, Feasibility Study on establishing a transboundary protected area Prokletije/Bjeshkët e Nemuna Mountains



A ANNEXES

A.1 WORKING PLAN FOR THE RED BOOK OF ANIMAL SPECIES FOR 2017

Freshwater diversity: Ephemeroptera and Diptera

Period of time	Area of investigation and scope of duties
Day 1 June	Sample larvae and adults of spring species of Ephemeroptera and Diptera in spring areas of Kopaonik Mountains (from Bollosicë village towards the border line with Serbia). At least five spring areas between 1300 and 1700 m are sampled. Sample larvae and adults of spring species of Ephemeroptera and Diptera in spring areas of Kopaonik Mountains (from Vullakët neighborhood and Marincë village towards the Municipality of Leposaviq). At least five spring and adjacent areas between 1200 and 1800 m are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 2 June	Sample larvae and adults of spring species of Ephemeroptera and Diptera at midstream areas of Llap River and tributaries at Murgull, Pollatë and Brecë villages and surrounding areas. At least four localities between 700 and 1300 are sampled. Sample larvae and adults of spring species of Ephemeroptera and Diptera in spring areas and upstream areas of Prishtina River (from Gërmia Mountains towards Makovc and Grashticë village). At least five localities between 800 and 1200 m are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 3 June	Sample larvae and adults of spring species of Ephemeroptera and Diptera in spring areas and upstream areas of Lumbardhi i Lloqanit and Lumbardhi i Deçanit Rivers (localities to be designated in Bjeshkët e Nemuna Mountains including Lloqan village and Lloqan Mountains, Krojet e Gusicë springs). At least 10 localities are sampled. Sample larvae and adults of spring species of Ephemeroptera and Diptera in spring area of Erenik River and Gjeravica lake (localities to be designated from 1000 up to 2000 m altitude in villages). At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 4 June	Sample larvae and adults of spring species of Ephemeroptera and Diptera in spring areas, midstream and downstream segments of streams and rivers in Karadak Mountains. At least ten localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 5 June	Sample larvae and adults of spring species of Ephemeroptera and Diptera in spring areas and upstream areas of Gollak Region (in villages Orllan, Keqekolle, Brus and Prapashticë). At least five localities between 800 and 1100 m are sampled. Sample larvae and adults of spring species of Ephemeroptera and Diptera in spring areas and upstream areas of streamlets in Prishtinë Municipality as well as downstream of Prishtina River throughout its length up to discharge in Sitnica River. At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 6 June	Sample larvae and adults of spring species of Ephemeroptera and Diptera in spring areas and upstream areas of Drenica River and its tributaries (in villages Pjetërshticë, Shalë, Nekoc and adjacent areas in Drenica Mountains). At least six localities between 500 and 1000 m are sampled. Sample larvae and adults of spring species of Ephemeroptera and Diptera in midstream and downstream segments of Drenica and Sitnica Rivers (localities to be designated in Municipalities of Lipjan, Glllogoc, Fushë Kosovë and Prishtina). At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 7 June	Sample larvae and adults of spring species of Ephemeroptera and Diptera in midstream and downstream segments of Klinë River and Drini i Bardhë River (localities to be designated in Klinë and Istog Municipalities). At least eight localities are sampled. Sample larvae and adults of spring species of Ephemeroptera and Diptera in spring area of Drini i Bardhë River, Lumbardhi i Pejës River (in villages: Radac, Haxhaj, Boge, Stankaj and Cakor Mountains). At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 8 June	Sample larvae and adults of spring species of Ephemeroptera and Diptera in midstream areas of Ibër River and adjacent rivers in Mitrovicë, Leposaviq and Zveqan municipalities (localities to be designated in field). At least six localities are sampled. Sample larvae and adults of spring species of Ephemeroptera and Diptera in upstream and midstream segments of Kujavqe river, spring area of Istog River and adjacent springs (in Suhogërrllë village, Istog town, Vrellë village and adjacent areas). At least seven localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.

Period of time	Area of investigation and scope of duties
Day 9 June	Sample larvae and adults of spring species of Ephemeroptera and Diptera in spring areas and upstream areas of Lumbardhi i Prizrenit and Lepenc river (localities to be designated in Sharr Mountains starting from 1400 up to 2000 m altitude). At least 10 localities are sampled. Sample larvae and adults of spring species of Ephemeroptera and Diptera in spring area of Restelice and Brod River as well as other springs and rivers of Dragash Municipalities (localities to be designated from 1000 up to 2000 m altitude in villages Restelice, Zlipotok, Brod, Plavë, Rrence, Brezne). At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 10 June	Sample larvae and adults of spring species of Ephemeroptera and Diptera in spring areas , midstream and downstream segments of Nerodime River and its tributaries in Jezerc and Nerodime Mountains. At least 10 localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 11 August	Sample larvae and adults of summer species of Ephemeroptera and Diptera in spring areas of Kopaonik Mountains (from Bollosicë village towards the border line with Serbia). At least five spring areas between 1300 and 1700 m are sampled. Sample larvae and adults of summer species of Ephemeroptera and Diptera in spring areas of Kopaonik Mountains (from Vullakët neighborhood and Marincë village towards the Municipality of Lepasaviq). At least five spring and adjacent areas between 1200 and 1800 m are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 12 August	Sample larvae and adults of summer species of Ephemeroptera and Diptera at midstream areas of Llap River and tributaries at Murgull, Pollatë and Brecë villages and surrounding areas. At least four localities between 700 and 1300 are sampled. Sample larvae and adults of summer species of Ephemeroptera and Diptera in spring areas and upstream areas of Prishtina River (from Gërmia Mountains towards Makovc and Grashticë village). At least five localities between 800 and 1200 m are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 13 August	Sample larvae and adults of summer species of Ephemeroptera and Diptera in spring areas and upstream areas of Lumbardhi i Lloqanit and Lumbardhi i Deçanit Rivers (localities to be designated in Bjeshkët e Nemuna Mountains including Lloqan village and Lloqan Mountains, Krojet e Gusionë springs). At least 10 localities are sampled. Sample larvae and adults of summer species of Ephemeroptera and Diptera in spring area of Erenik River and Gjeravica lake (localities to be designated from 1000 up to 2000 m altitude in villages). At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 14 August	Sample larvae and adults of summer species of Ephemeroptera and Diptera in spring areas, midstream and downstream segments of streams and rivers in Karadak Mountains. At least ten localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 18 August	Sample larvae and adults of summer species of Ephemeroptera and Diptera in midstream areas of Ibër River and adjacent rivers in Mitrovicë, Lepasaviq and Zveqan municipalities (localities to be designated in field). At least six localities are sampled. Sample larvae and adults of summer species of Ephemeroptera and Diptera in upstream and midstream segments of Kujavqe river, spring area of Istog River and adjacent springs (in Suhogërlle village, Istog town, Vrellë village and adjacent areas). At least seven localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 19 August	Sample larvae and adults of summer species of Ephemeroptera and Diptera in spring areas and upstream areas of Lumbardhi i Prizrenit and Lepenc river (localities to be designated in Sharr Mountains starting from 1400 up to 2000 m altitude). At least 10 localities are sampled. Sample larvae and adults of summer species of Ephemeroptera and Diptera in spring area of Restelice and Brod River as well as other springs and rivers of Dragash Municipalities (localities to be designated from 1000 up to 2000 m altitude in villages Restelice, Zlipotok, Brod, Plavë, Rrence, Brezne). At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 20 August	Sample larvae and adults of summer species of Ephemeroptera and Diptera in spring areas , midstream and downstream segments of Nerodime River and its tributaries in Jezerc and Nerodime Mountains. At least 10 localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 21 October	Sample larvae and adults of autumn species of Ephemeroptera and Diptera in spring areas of Kopaonik Mountains (from Bollosicë village towards the border line with Serbia). At least five spring areas between 1300 and 1700 m are sampled. Sample larvae and adults of autumn species of Ephemeroptera and Diptera in spring areas of Kopaonik Mountains (from Vullakët neighborhood and Marincë village towards the Municipality of Lepasaviq). At least five spring and adjacent areas between 1200 and 1800 m are sampled. Assessment of habitat requirements, habitat deterioration and threats.

Period of time	Area of investigation and scope of duties
Day 22 October	Sample larvae and adults of autumn species of Ephemeroptera and Diptera at midstream areas of Llap River and tributaries at Murgull, Pollatë and Brecë villages and surrounding areas. At least four localities between 700 and 1300 are sampled. Sample larvae and adults of autumn species of Ephemeroptera and Diptera in spring areas and upstream areas of Prishtina River (from Gërmia Mountains towards Makovc and Grashticë village). At least five localities between 800 and 1200 m are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 24 October	Sample larvae and adults of autumn species of Ephemeroptera and Diptera in spring areas, midstream and downstream segments of streams and rivers in Karadak Mountains. At least ten localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 25 October	Sample larvae and adults of autumn species of Ephemeroptera and Diptera in spring areas and upstream areas of Gollak Region (in villages Orllan, Keqekolle, Brus and Prapashticë). At least five localities between 800 and 1100 m are sampled. Sample larvae and adults of autumn species of Ephemeroptera and Diptera in spring areas and upstream areas of streamlets in Prishtinë Municipality as well as downstream of Prishtina River throughout its length up to discharge in Sitnica River. At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 26 October	Sample larvae and adults of autumn species of Ephemeroptera and Diptera in spring areas and upstream areas of Drenica River and its tributaries (in villages Pjetërshticë, Shalë, Nekoc and adjacent areas in Drenica Mountains). At least six localities between 500 and 1000 m are sampled. Sample larvae and adults of autumn species of Ephemeroptera and Diptera in midstream and downstream segments of Drenica and Sitnica Rivers (localities to be designated in Municipalities of Lipjan, Glllogoc, Fushë Kosovë and Prishtina). At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 27 October	Sample larvae and adults of autumn species of Ephemeroptera and Diptera in midstream and downstream segments of Klinë River and Drini i Bardhë River (localities to be designated in Klinë and Istog Municipalities). At least eight localities are sampled. Sample larvae and adults of autumn species of Ephemeroptera and Diptera in spring area of Drini i Bardhë River, Lumbardhi i Pejës River (in villages: Radac, Haxhaj, Boge, Stankaj and Cakor Mountains). At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 28 October	Sample larvae and adults of autumn species of Ephemeroptera and Diptera in midstream areas of Ibër River and adjacent rivers in Mitrovicë, Leposaviq and Zveqan municipalities (localities to be designated in field). At least six localities are sampled. Sample larvae and adults of autumn species of Ephemeroptera and Diptera in upstream and midstream segments of Kujavqe river, spring area of Istog River and adjacent springs (in Suhogërlle village, Istog town, Vrellë village and adjacent areas). At least seven localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 29 October	Sample larvae and adults of autumn species of Ephemeroptera and Diptera in spring areas and upstream areas of Lumbardhi i Prizrenit and Lepenc river (localities to be designated in Sharr Mountains starting from 1400 up to 2000 m altitude). At least 10 localities are sampled. Sample larvae and adults of autumn species of Ephemeroptera and Diptera in spring area of Restelice and Brod River as well as other springs and rivers of Dragash Municipalities (localities to be designated from 1000 up to 2000 m altitude in villages Restelice, Zlipotok, Brod, Plavë, Rrence, Brezne). At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 30 October	Sample larvae and adults of autumn species of Ephemeroptera and Diptera in spring areas, midstream and downstream segments of Nerodime River and its tributaries in Jezerc and Nerodime Mountains. At least 10 localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 32 November	Identification of collected material in laboratory. Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level. Presentation of results.
Day 33 November	Identification of collected material in laboratory. Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level.
Day 34 November	Identification of collected material in laboratory. Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level.
Day 35 November	Identification of collected material in laboratory. Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level.

Freshwater diversity: Odonata

Period of time	Area of investigation and scope of duties
Day 1 July	Sample larvae and adults of species of Odonata in freshwater ecosystems of of Kopaonik Mountains in Podujevë, Mitrovicë, Zveçan and Leposaviq Municipalities. At least 10 localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 2 July	Sample larvae and adults of species of Odonata at midstream and downstream areas of Llap River and Sitnica River including Henc pond, Batllavë Lake and Badovc Lake. At least seven localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 3 July	Sample larvae and adults of species of Odonata in freshwater ecosystems of Bjeshkët e Nemuna Mountains in Deçan and Pejë Municipalities. At least 10 localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 4 July	Sample larvae and adults of species of Odonata in freshwater ecosystems of Karadak Mountains. At least ten localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 5 September	Sample larvae and adults of species of Odonata in freshwater ecosystems of Dragash Municipality including Brezne Lake. At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 6 September	Sample larvae and adults of species of Odonata freshwater ecosystems of Drenicë River and Ibër River throughout their length in Mitrovicë, Skenderaj, Gillogoc and Malishevë Municipalities. At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 7 September	Sample larvae and adults of species of Odonata in freshwater ecosystems of Sharr Mountains in Prizren and Shtërpce Municipalities. At least seven localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 8 September	Identification of collected material in laboratory. Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level. Presentation of results.

Freshwater diversity: Trichoptera and Plecoptera

Period of time	Area of investigation and scope of duties
Day 1 June	Sample larvae and adults of spring species of Trichoptera and Plecoptera in spring areas of Kopaonik Mountains (from Bollosicë village towards the border line with Serbia). At least five spring areas between 1300 and 1700 m are sampled. Sample larvae and adults of spring species of Trichoptera and Plecoptera in spring areas of Kopaonik Mountains (from Vullakët neighborhood and Marincë village towards the Municipality of Leposaviq). At least five spring and adjacent areas between 1200 and 1800 m are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 2 June	Sample larvae and adults of spring species of Trichoptera and Plecoptera at midstream areas of Llap River and tributaries at Murgull, Pollatë and Brecë villages and surrounding areas. At least four localities between 700 and 1300 are sampled. Sample larvae and adults of spring species of Trichoptera and Plecoptera in spring areas and upstream areas of Prishtina River (from Gërnia Mountains towards Makovc and Grashticë village). At least five localities between 800 and 1200 m are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 3 June	Sample larvae and adults of spring species of Trichoptera and Plecoptera in spring areas and upstream areas of Lumbardhi i Lloqanit and Lumbardhi i Deçanit Rivers (localities to be designated in Bjeshkët e Nemuna Mountains including Lloqan village and Lloqan Mountains, Krojet e Gusisë springs). At least 10 localities are sampled. Sample larvae and adults of spring species of Trichoptera and Plecoptera in spring area of Erenik River and Gjeravica lake (localities to be designated from 1000 up to 2000 m altitude in villages). At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 4 June	Sample larvae and adults of spring species of Trichoptera and Plecoptera in spring areas, midstream and downstream segments of streams and rivers in Karadak Mountains. At least ten localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 5 June	Sample larvae and adults of spring species of Trichoptera and Plecoptera in spring areas and upstream areas of Gollak Region (in villages Orllan, Keqekolle, Brus and Prapashticë). At least five localities between 800 and 1100 m are sampled. Sample larvae and adults of spring species of Trichoptera and Plecoptera in spring areas and upstream areas of streamlets in Prishtinë Municipality as well as downstream of Prishtina River throughout its length up to discharge in Sitnica River. At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 6 June	Sample larvae and adults of spring species of Trichoptera and Plecoptera in spring areas and upstream areas of Drenica River and its tributaries (in villages Pjetërshticë, Shalë, Nekoc and adjacent areas in Drenica Mountains). At least six localities between 500 and 1000 m are sampled. Sample larvae and adults of spring species of Trichoptera and Plecoptera in midstream and downstream segments of Drenica and Sitnica Rivers (localities to be designated in Municipalities of Lipjan, Gllogoc, Fushë Kosovë and Prishtina). At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 7 June	Sample larvae and adults of spring species of Trichoptera and Plecoptera in midstream and downstream segments of Klinë River and Drini i Bardhë River (localities to be designated in Klinë and Istog Municipalities). At least eight localities are sampled. Sample larvae and adults of spring species of Trichoptera and Plecoptera in spring area of Drini i Bardhë River, Lumbardhi i Pejës River (in villages: Radac, Haxhaj, Boge, Stankaj and Cakor Mountains). At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 8 June	Sample larvae and adults of spring species of Trichoptera and Plecoptera in midstream areas of Ibër River and adjacent rivers in Mitrovicë, Leposaviq and Zveqan municipalities (localities to be designated in field). At least six localities are sampled. Sample larvae and adults of spring species of Trichoptera and Plecoptera in upstream and midstream segments of Kujavqe river, spring area of Istog River and adjacent springs (in Suhogërlë village, Istog town, Vrellë village and adjacent areas). At least seven localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 9 June	Sample larvae and adults of spring species of Trichoptera and Plecoptera in spring areas and upstream areas of Lumbardhi i Prizrenit and Lepenc river (localities to be designated in Sharr Mountains starting from 1400 up to 2000 m altitude). At least 10 localities are sampled. Sample larvae and adults of spring species of Trichoptera and Plecoptera in spring area of Restelice and Brod River as well as other springs and rivers of Dragash Municipalities (localities to be designated from 1000 up to 2000 m altitude in villages Restelice, Zlipotok, Brod, Plavë, Rrence, Brezne). At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 10 June	Sample larvae and adults of spring species of Trichoptera and Plecoptera in spring areas midstream and downstream segments of Nerodime River and its tributaries in Jezerc and Nerodime Mountains. At least 10 localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.

Period of time	Area of investigation and scope of duties
Day 11 August	<p>Sample larvae and adults of summer species of Trichoptera and Plecoptera in spring areas and upstream areas of Lumbardhi i Lloqanit and Lumbardhi i Deçanit Rivers (localities to be designated in Bjeshkët e Nemuna Mountains including Lloqan village and Lloqan Mountains, Krojet e Gusisë springs). At least 10 localities are sampled.</p> <p>Sample larvae and adults of summer species of Trichoptera and Plecoptera in spring area of Erenik River and Gjeravica lake (localities to be designated from 1000 up to 2000 m altitude in villages). At least eight localities are sampled.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 12 August	<p>Sample larvae and adults of summer species of Trichoptera and Plecoptera in spring areas, midstream and downstream segments of streams and rivers in Karadak Mountains. At least ten localities are sampled.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 13 August	<p>Sample larvae and adults of summer species of Trichoptera and Plecoptera in spring areas and upstream areas of Gollak Region (in villages Orllan, Keqekolle, Brus and Prapashticë). At least five localities between 800 and 1100 m are sampled.</p> <p>Sample larvae and adults of summer species of Trichoptera and Plecoptera in spring areas and upstream areas of streamlets in Prishtinë Municipality as well as downstream of Prishtina River throughout its length up to discharge in Sitnica River. At least eight localities are sampled.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 14 August	<p>Sample larvae and adults of summer species of Trichoptera and Plecoptera in spring areas and upstream areas of Drenica River and its tributaries (in villages Pjetërshticë, Shalë, Nekoc and adjacent areas in Drenica Mountains). At least six localities between 500 and 1000 m are sampled. Sample larvae and adults of summer species of Trichoptera and Plecoptera in midstream and downstream segments of Drenica and Sitnica Rivers (localities to be designated in Municipalities of Lipjan, Glllogoc, Fushë Kosovë and Prishtina). At least eight localities are sampled.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 15 August	<p>Sample larvae and adults of summer species of Trichoptera and Plecoptera in spring areas and upstream areas of Lumbardhi i Prizrenit and Lepenc river (localities to be designated in Sharr Mountains starting from 1400 up to 2000 m altitude). At least 10 localities are sampled.</p> <p>Sample larvae and adults of summer species of Trichoptera and Plecoptera in spring area of Restelice and Brod River as well as other springs and rivers of Dragash Municipalities (localities to be designated from 1000 up to 2000 m altitude in villages Restelice, Zlipotok, Brod, Plavë, Rrence, Brezne). At least eight localities are sampled.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 16 August	<p>Sample larvae and adults of summer species of Trichoptera and Plecoptera in spring areas , midstream and downstream segments of Nerodime River and its tributaries in Jezerc and Nerodime Mountains. At least 10 localities are sampled.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 17 September	<p>Sample larvae and adults of autumn species of Trichoptera and Plecoptera in spring areas of Kopaonik Mountains (from Bollosicë village towards the border line with Serbia). At least five spring areas between 1300 and 1700 m are sampled.</p> <p>Sample larvae and adults of autumn species of Trichoptera and Plecoptera in spring areas of Kopaonik Mountains (from Vullakët neighborhood and Marincë village towards the Municipality of Leposaviq). At least five spring and adjacent areas between 1200 and 1800 m are sampled.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 18 October	<p>Sample larvae and adults of autumn species of Trichoptera and Plecoptera at midstream areas of Llap River and tributaries at Murgull, Pollatë and Brecë villages and surrounding areas. At least four localities between 700 and 1300 are sampled. Sample larvae and adults of autumn species of Trichoptera and Plecoptera in spring areas and upstream areas of Prishtina River (from Gërmia Mountains towards Makovc and Grashticë village). At least five localities between 800 and 1200 m are sampled.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 19 October	<p>Sample larvae and adults of autumn species of Trichoptera and Plecoptera in spring areas and upstream areas of Lumbardhi i Lloqanit and Lumbardhi i Deçanit Rivers (localities to be designated in Bjeshkët e Nemuna Mountains including Lloqan village and Lloqan Mountains, Krojet e Gusisë springs). At least 10 localities are sampled.</p> <p>Sample larvae and adults of autumn species of Trichoptera and Plecoptera in spring area of Erenik River and Gjeravica lake (localities to be designated from 1000 up to 2000 m altitude in villages). At least eight localities are sampled.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>

Period of time	Area of investigation and scope of duties
Day 20 October	Sample larvae and adults of autumn species of Trichoptera and Plecoptera in spring areas, midstream and downstream segments of streams and rivers in Karadak Mountains. At least ten localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 21 October	Sample larvae and adults of autumn species of Trichoptera and Plecoptera in spring areas and upstream areas of Gollak Region (in villages Orllan, Keqekolle, Brus and Prapashticë). At least five localities between 800 and 1100 m are sampled. Sample larvae and adults of autumn species of Trichoptera and Plecoptera in spring areas and upstream areas of streamlets in Prishtinë Municipality as well as downstream of Prishtina River throughout its length up to discharge in Sitnica River. At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 22 October	Sample larvae and adults of autumn species of Trichoptera and Plecoptera in spring areas and upstream areas of Drenica River and its tributaries (in villages Pjetërshticë, Shalë, Nekoc and adjacent areas in Drenica Mountains). At least six localities between 500 and 1000 m are sampled. Sample larvae and adults of autumn species of Trichoptera and Plecoptera in midstream and downstream segments of Drenica and Sitnica Rivers (localities to be designated in Municipalities of Lipjan, Gillogoc, Fushë Kosovë and Prishtina). At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 23 October	Sample larvae and adults of autumn species of Trichoptera and Plecoptera in midstream and downstream segments of Klinë River and Drini i Bardhë River (localities to be designated in Klinë and Istog Municipalities). At least eight localities are sampled. Sample larvae and adults of autumn species of Trichoptera and Plecoptera in spring area of Drini i Bardhë River, Lumbardhi i Pejës River (in villages: Radac, Haxhaj, Boge, Stankaj and Cakor Mountains). At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 24 October	Sample larvae and adults of autumn species of Trichoptera and Plecoptera in midstream areas of Ibër River and adjacent rivers in Mitrovicë, Leposaviq and Zveqan municipalities (localities to be designated in field). At least six localities are sampled. Sample larvae and adults of autumn species of Trichoptera and Plecoptera in upstream and midstream segments of Kujavqe river, spring area of Istog River and adjacent springs (in Suhogërrllë village, Istog town, Vrellë village and adjacent areas). At least seven localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 25 October	Sample larvae and adults of autumn species of Trichoptera and Plecoptera in spring areas and upstream areas of Lumbardhi i Prizrenit and Lepenc river (localities to be designated in Sharr Mountains starting from 1400 up to 2000 m altitude). At least 10 localities are sampled. Sample larvae and adults of autumn species of Trichoptera and Plecoptera in spring area of Restelice and Brod River as well as other springs and rivers of Dragash Municipalities (localities to be designated from 1000 up to 2000 m altitude in villages Restelice, Zlipotok, Brod, Plavë, Rrence, Brezne). At least eight localities are sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 26 October	Identification of collected material in laboratory. Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level.
Day 27 November	Identification of collected material in laboratory. Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level.
Day 28 November	Identification of collected material in laboratory. Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level.
Day 29 November	Identification of collected material in laboratory. Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level. Presentation of results.

Fish

Period of time	Area of investigation and scope of duties
Day 1 June	<p>Sample fish midstream sections and downstream sections of streams and rivers of Ibër River and adjacent tributaries throughout its length in Kosovo. At least eight localities are sampled in the area with electrofisher.</p> <p>Interviews with fisherman associations are conducted in order to extract possible specimens from them and data from the field.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 2 June	<p>Sample fish in spring areas, midstream sections and downstream sections of streams and rivers of Kopaonik Mountains in Mitrovicë and Zveçan Municipalities. At least six eight localities are sampled in the area with electrofisher.</p> <p>Interviews with fisherman associations are conducted in order to extract possible specimens from them and data from the field.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 3 June	<p>Sample fish in spring areas, midstream sections and downstream sections of streams and rivers of Kopaonik Mountains in Podujevë Municipality. At least six eight localities are sampled in the area with electrofisher.</p> <p>Interviews with fisherman associations are conducted in order to extract possible specimens from them and data from the field.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 4 June	<p>Sample fish in spring areas, midstream sections and downstream sections of streams and rivers of Lumbardhi i Lloqanit and Lumbardhi i Deçanit Rivers (localities to be designated in Bjeshkët e Nemuna Mountains including Lloqan village and Lloqan Mountains, Krojet e Gusisë springs). At least six localities are sampled.</p> <p>Interviews with fisherman associations are conducted in order to extract possible specimens from them and data from the field.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 5 June	<p>Sample fish in spring areas, midstream sections and downstream sections of streams and rivers in Karadak Mountains. At least ten localities are sampled.</p> <p>Interviews with fisherman associations are conducted in order to extract possible specimens from them and data from the field.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 6 June	<p>Sample fish in spring areas, midstream sections and downstream sections of streams and rivers of Drenica and Sitnica Rivers and its tributaries (in villages Pjetërshiticë, Shalë, Nekoc and adjacent areas, in Fushë Kosovë Municipality, Lipjan Municipality). At least six localities between 500 and 1000 m are sampled.</p> <p>Interviews with fisherman associations are conducted in order to extract possible specimens from them and data from the field.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 7 June	<p>Sample fish in spring areas, midstream sections and downstream sections of streams and rivers in midstream and downstream segments of Klinë River, Lumbardhi i Pejës River and Drini i Bardhë River (localities to be designated in Pejë, Gjakovë, Klinë and Istog Municipalities). At least eight localities are sampled.</p> <p>Interviews with fisherman associations are conducted in order to extract possible specimens from them and data from the field.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 8 June	<p>Sample fish in spring areas, midstream sections and downstream sections of streams and rivers in midstream and downstream segments of Lumbardhi i Prizrenit and Lepenc river (localities to be designated in Sharr Mountains starting from 700 up to 1200 m altitude). At least 10 localities are sampled.</p> <p>Interviews with fisherman associations are conducted in order to extract possible specimens from them and data from the field.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 9 June	<p>Sample fish in spring areas, midstream sections and downstream sections of streams and rivers in midstream and downstream segments of Nerodime River and its tributaries in Jezerc and Nerodime Mountains. At least 10 localities are sampled.</p> <p>Interviews with fisherman associations are conducted in order to extract possible specimens from them and data from the field.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>

Baseline Report

Period of time	Area of investigation and scope of duties
Day 10 June	<p>Sample fish in spring areas, midstream sections and downstream sections of streams of Erenik Rivers and tributaries. At least six localities are sampled.</p> <p>Interviews with fisherman associations are conducted in order to extract possible specimens from them and data from the field.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 11 August	<p>Sample fish in midstream sections and downstream sections of streams of streams and rivers in Gjilan and Kamenicë Municipalities. At least six localities are sampled.</p> <p>Interviews with fisherman associations are conducted in order to extract possible specimens from them and data from the field.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 12 August	<p>Sample fish in midstream sections and downstream sections of streams of streams and rivers belonging to Plava River in Dragash and Prizren Municipalities. At least six localities are sampled.</p> <p>Interviews with fisherman associations are conducted in order to extract possible specimens from them and data from the field.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 13 August	<p>Sample fish in upstream areas, midstream sections and downstream sections of streams and rivers in Dragash Municipality, namely Brod and Restelica rivers and adjacent tributaries. At least six localities are sampled.</p> <p>Interviews with fisherman associations are conducted in order to extract possible specimens from them and data from the field.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 14 August	<p>Sample fish in Batllava and Badovc Lake. At least six localities are sampled.</p> <p>Interviews with fisherman associations are conducted in order to extract possible specimens from them and data from the field.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 15 August	<p>Sample fish in Përlepnica and Radoniq Lakes. At least six localities are sampled.</p> <p>Interviews with fisherman associations are conducted in order to extract possible specimens from them and data from the field.</p> <p>Assessment of habitat requirements, habitat deterioration and threats.</p>
Day 16 August	<p>Identification of collected material in laboratory. Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level.</p>
Day 17 August	<p>Identification of collected material in laboratory. Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level.</p>
Day 18 August	<p>Identification of collected material in laboratory. Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level.</p>
Day 19 September	<p>Identification of collected material in laboratory. Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level.</p>
Day 20 September	<p>Identification of collected material in laboratory. Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level. Presentation of results.</p>

Insects: Lepidoptera

Period of time	Area of investigation and scope of duties
Day 1 June	Sample spring species of Lepidoptera in Mitrovicë Municipality suburb and forested areas as well as Bajgorë area. At least eight localities are sampled in the area. Primary focus must be on prime butterfly fauna, but Noctuidae family where possible must also be sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 2 June	Sample Lepidoptera spring species in Vushtrri Municipality suburb and Qyqavica Mountains. At least eight localities are sampled in the area. Primary focus must be on prime butterfly fauna, but Noctuidae family where possible must also be sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 3 June	Sample Lepidoptera spring species of Kopaonik Mountains in Podujevë Municipality. At least eight localities are sampled in the area. Primary focus must be on prime butterfly fauna, but Noctuidae family where possible must also be sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 4 June	Sample spring species of Lepidoptera in Lloqan Mountains. At least six localities are sampled. Primary focus must be on prime butterfly fauna, but Noctuidae family where possible must also be sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 5 June	Sample spring species of Lepidoptera in Karadak Mountains. At least ten localities are sampled. Primary focus must be on prime butterfly fauna, but Noctuidae family where possible must also be sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 6 June	Sample spring species of Lepidoptera of Drenica Mountains. At least six localities between 500 and 1000 m are sampled. Primary focus must be on prime butterfly fauna, but Noctuidae family where possible must also be sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 7 June	Sample spring species of Lepidoptera in forested areas in Gjakovë, Deçan and Klinë municipalities. At least eight localities are sampled. Primary focus must be on prime butterfly fauna, but Noctuidae family where possible must also be sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 8 June	Sample spring species of Lepidoptera of Sharr Mountains in Shtërpce and Prizren Municipalities from 700 up to 1200 m altitude. At least 10 localities are sampled. Primary focus must be on prime butterfly fauna, but Noctuidae family where possible must also be sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 9 June	Sample spring species of Lepidoptera in Nerodime Mountains. At least 10 localities are sampled. Primary focus must be on prime butterfly fauna, but Noctuidae family where possible must also be sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 10 June	Sample spring species in Bjeshkët e Nemuna Mountains in Pejë and Deçan Municipalities. At least six localities are sampled. Primary focus must be on prime butterfly fauna, but Noctuidae family where possible must also be sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 11 October	Sample Lepidoptera autumn species of Kopaonik Mountains in Podujevë Municipality. At least eight localities are sampled in the area. Primary focus must be on prime butterfly fauna, but Noctuidae family where possible must also be sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 12 October	Sample autumn species of Lepidoptera in Lloqan Mountains. At least six localities are sampled. Primary focus must be on prime butterfly fauna, but Noctuidae family where possible must also be sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 13 October	Sample autumn species of Lepidoptera in Karadak Mountains. At least ten localities are sampled. Primary focus must be on prime butterfly fauna, but Noctuidae family where possible must also be sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 14 October	Sample autumn species of Lepidoptera of Drenica Mountains. At least six localities between 500 and 1000 m are sampled. Primary focus must be on prime butterfly fauna, but Noctuidae family where possible must also be sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 15 October	Sample autumn species of Lepidoptera in forested areas in Gjakovë, Deçan and Klinë municipalities. At least eight localities are sampled. Primary focus must be on prime butterfly fauna, but Noctuidae family where possible must also be sampled. Assessment of habitat requirements, habitat deterioration and threats.
Day 16 October	Sample autumn species of Lepidoptera of Sharr Mountains in Shtërpce and Prizren Municipalities from 700 up to 1200 m altitude. At least 10 localities are sampled. Primary focus must be on prime butterfly fauna, but Noctuidae family where possible must also be sampled. Assessment of habitat requirements, habitat deterioration and threats.

Baseline Report

Period of time	Area of investigation and scope of duties
Day 17 November	Identification of collected material in laboratory. Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level
Day 18 November	Identification of collected material in laboratory. Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level
Day 19 November	Identification of collected material in laboratory. Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level.
Day 20 November	Identification of collected material in laboratory. Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level. Presentation of results.

Mammals

Period of time	Area of investigation and scope of duties
Day 1 June	Monitor and observe mammal species in Kopaonik Mountains in Podujevë, Leposaviq, Zveçan and Mitrovicë Municipalities. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 2 June	Monitor and observe mammal species in Kopaonik Mountains in Podujevë, Leposaviq, Zveçan and Mitrovicë Municipalities. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 3 June	Monitor and observe mammal species in Bjeshkët e Nemuna Mountains in Deçan and Junik Municipalities. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 4 June	Monitor and observe mammal species in Bjeshkët e Nemuna Mountains in Deçan and Junik Municipalities. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 5 June	Monitor and observe mammal species in Bjeshkët e Nemuna Mountains in Pejë and Istog Municipalities as well as Mokna Mountains in Istog and Zubin Potok Municipalities. Prepare and follow up camera traps in 7 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 6 June	Monitor and observe mammal species in Bjeshkët e Nemuna Mountains in Pejë and Istog Municipalities as well as Mokna Mountains in Istog and Zubin Potok Municipalities. Prepare and follow up camera traps in 7 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 7 June	Monitor and observe mammal species in mountainous areas of Klinë, Skenderaj and Glllogoc municipalities. Prepare and follow up camera traps in 7 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 8 June	Monitor and observe mammal species in mountainous areas of Klinë, Skenderaj and Glllogoc municipalities. Prepare and follow up camera traps in 7 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 9 June	Monitor and observe mammal species in mountainous areas of Sharr Mountains in Prizren and Shtërpçe Municipalities. Prepare and follow up camera traps in 7 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 10 June	Monitor and observe mammal species in mountainous areas of Sharr Mountains in Prizren and Shtërpçe Municipalities. Prepare and follow up camera traps in 7 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 11 July	Monitor and observe mammal species in mountainous areas of Sharr Mountains in Dragash Municipality. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 12 July	Monitor and observe mammal species in mountainous areas of Sharr Mountains in Dragash Municipality. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 13 July	Monitor and observe mammal species in mountainous areas of Bajgorë area in Mitrovicë and Podujevë Municipalities. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 14 July	Monitor and observe mammal species in mountainous areas of Bajgorë area in Mitrovicë and Podujevë Municipalities. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 15 July	Monitor and observe mammal species in mountainous areas of Oshtrokoplje Mountains in Mitrovicë and Podujevë Municipalities. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 16 December	Monitor and observe mammal species in mountainous areas of Oshtrokoplje Mountains in Mitrovicë and Podujevë Municipalities. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 17 December	Monitor and observe mammal species in mountainous areas of Nerodime and Jezerc Mountains in Ferizaj and Kaçanik Municipalities. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 18 December	Monitor and observe mammal species in mountainous areas of Nerodime and Jezerc Mountains in Ferizaj and Kaçanik Municipalities. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 19 December	Monitor and observe mammal species in mountainous areas of Karadak Mountains in Viti, Ferizaj and Kaçanik Municipalities. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.

Baseline Report

Period of time	Area of investigation and scope of duties
Day 20 December	Monitor and observe mammal species in mountainous areas of Karadak Mountains in Viti, Ferizaj and Kaçanik Municipalities. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 21 December	Monitor and observe mammal species in mountainous areas of Gollak Region in Prishtinë and Kamenicë Municipalities. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 22 December	Monitor and observe mammal species in mountainous areas of Gollak Region in Prishtinë and Kamenicë Municipalities. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 23 December	Monitor and observe mammal species in mountainous areas of Koritnik Mountains in Prizren and Dragash Municipalities. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 24 December	Monitor and observe mammal species in mountainous areas of Koritnik Mountains in Prizren and Dragash Municipalities. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 25 January	Monitor and observe mammal species in mountainous areas of Koritnik Mountains in Prizren and Dragash Municipalities. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 26 January	Monitor and observe mammal species in mountainous areas of Pashtrik mountains and adjacent areas in Gjakova Municipality. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 27 January	Monitor and observe mammal species in mountainous areas of Pashtrik mountains and adjacent areas in Gjakova Municipality. Prepare and follow up camera traps in 5 localities of this area. Assessment of habitat requirements, habitat deterioration and threats.
Day 28 February	Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level.
Day 29 February	Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level.
Day 30 February	Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level. Presentation of results.

Amphibians and Reptiles

Period of time	Area of investigation and scope of duties
Day 1 June	Monitor and observe amphibian and reptile species in Kopaonik Mountains in Podujevë, Leposaviq, Zvečan and Mitrovicë Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 2 June	Monitor and observe amphibian and reptile species in Kopaonik Mountains in Podujevë, Leposaviq, Zvečan and Mitrovicë Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 3 June	Monitor and observe amphibian and reptile species in Bjeshkët e Nemuna Mountains in Deçan and Junik Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 4 June	Monitor and observe amphibian and reptile species in Bjeshkët e Nemuna Mountains in Deçan and Junik Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 5 June	Monitor and observe amphibian and reptile species in Bjeshkët e Nemuna Mountains in Pejë and Istog Municipalities Municipalities as well as Mokna Mountains in Istog and Zubin Potok Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 6 June	Monitor and observe amphibian and reptile species in Bjeshkët e Nemuna Mountains in Pejë and Istog Municipalities Municipalities as well as Mokna Mountains in Istog and Zubin Potok Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 7 June	Monitor and observe amphibian and reptile species in mountainous areas of Klinë, Skenderaj and Glogoc municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 8 June	Monitor and observe amphibian and reptile species in mountainous areas of Klinë, Skenderaj and Glogoc municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 9 June	Monitor and observe amphibian and reptile species in mountainous areas of Sharr Mountains in Prizren and Shtërpçe Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 10 June	Monitor and observe amphibian and reptile species in mountainous areas of Sharr Mountains in Prizren and Shtërpçe Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 11 July	Monitor and observe amphibian and reptile species in mountainous areas of Sharr Mountains in Dragash Municipality. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 12 July	Monitor and observe amphibian and reptile species in mountainous areas of Sharr Mountains in Dragash Municipality. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 13 July	Monitor and observe amphibian and reptile species in mountainous areas of Bajgorë area in Mitrovicë and Podujevë Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 14 July	Monitor and observe amphibian and reptile species in mountainous areas of Bajgorë area in Mitrovicë and Podujevë Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 15 July	Monitor and observe amphibian and reptile species in mountainous areas of Oshtrokoplje Mountains in Mitrovicë and Podujevë Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 16 December	Monitor and observe amphibian and reptile species in mountainous areas of Oshtrokoplje Mountains in Mitrovicë and Podujevë Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 17 December	Monitor and observe amphibian and reptile species in mountainous areas of Nerodime and Jezerc Mountains in Ferizaj and Kaçanik Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 18 December	Monitor and observe amphibian and reptile species in mountainous areas of Nerodime and Jezerc Mountains in Ferizaj and Kaçanik Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 19 December	Monitor and observe amphibian and reptile species in mountainous areas of Karadak Mountains in Viti, Ferizaj and Kaçanik Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.

Baseline Report

Period of time	Area of investigation and scope of duties
Day 20 December	Monitor and observe amphibian and reptile species in mountainous areas of Karadak Mountains in Viti, Ferizaj and Kaçanik Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 21 December	Monitor and observe amphibian and reptile species in mountainous areas of Gollak Region in Prishtinë and Kamenicë Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 22 December	Monitor and observe amphibian and reptile species in mountainous areas of Gollak Region in Prishtinë and Kamenicë Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 23 December	Monitor and observe amphibian and reptile species in mountainous areas of Koritnik Mountains in Prizren and Dragash Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 24 December	Monitor and observe amphibian and reptile species in mountainous areas of Koritnik Mountains in Prizren and Dragash Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 25 January	Monitor and observe amphibian and reptile species in mountainous areas of Koritnik Mountains in Prizren and Dragash Municipalities. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 26 January	Monitor and observe amphibian and reptile species in mountainous areas of Pashtrik mountains and adjacent areas in Gjakova Municipality. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 27 January	Monitor and observe amphibian and reptile species in mountainous areas of Pashtrik mountains and adjacent areas in Gjakova Municipality. At least seven transects in this area are thoroughly inventoried. Assessment of habitat requirements, habitat deterioration and threats.
Day 28 February	Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level.
Day 29 February	Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level.
Day 30 February	Data analysis on country level as per the Methodology of Red Book. Preparation of final list of species to be included in Red book with associated data on country level. Presentation of results.

A.2 IUCN CATEGORIES

(According to the IUCN Red List Categories and Criteria: Version 3.1 (IUCN 2012).

EXTINCT (EX)

A taxon is Extinct when there is no reasonable doubt that the last individual has died. A taxon is presumed Extinct when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.

EXTINCT IN THE WILD (EW)

A taxon is Extinct in the Wild when it is known only to survive in cultivation, in captivity or as a naturalized population (or populations) well outside the past range. A taxon is presumed Extinct in the Wild when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.

REGIONALLY EXTINCT (RE)

Category for a taxon when there is no reasonable doubt that the last individual potentially capable of reproduction within the region has died or has disappeared from the wild in the region, or when, if it is a former visiting taxon, the last individual has died or disappeared in the wild from the region. The setting of any time limit for listing under RE is left to the discretion of the regional Red List authority, but should not normally pre-date 1500 AD

CRITICALLY ENDANGERED (CR)

A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered (see Section V), and it is therefore considered to be facing an extremely high risk of extinction in the wild.

ENDANGERED (EN)

A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E for Endangered (see Section V), and it is therefore considered to be facing a very high risk of extinction in the wild.

VULNERABLE (VU)

A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable (see Section V), and it is therefore considered to be facing a high risk of extinction in the wild.

NEAR THREATENED (NT)

A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.

LEAST CONCERN (LC)

A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened. Widespread and abundant taxa are included in this category.

DATA DEFICIENT (DD)

A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. Data Deficient is therefore not a category of threat. Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future research will show that threatened classification is appropriate. It is important to make positive use of whatever data are available. In many cases, great care should be exercised in choosing between DD and a threatened status. If the range of a taxon is suspected to be relatively circumscribed, and a considerable period of time has elapsed since the last record of the taxon, threatened status may well be justified.

NOT EVALUATED (NE)

A taxon is Not Evaluated when it has not yet been evaluated against the criteria.

NOT APPLICABLE (NA)

Category for a taxon deemed to be ineligible for assessment at a regional level. A taxon may be NA because it is not a wild population or not within its natural range in the region, or because it is a vagrant to the region. It may also be NA because it occurs at very low numbers in the region (i.e. when the regional Red List authority has decided to use a "filter" to exclude taxa before the assessment procedure) or the taxon may be classified at a lower taxonomic level (e.g. below the level of species or subspecies) than considered eligible by the regional Red List authority. In contrast to other Red List Categories, it is not mandatory to use NA for all taxa to which it applies; but is recommended for taxa where its use is informative.

A.3 HABITATS CLASSIFICATION SCHEME (VERSION 3.1)

1 Forest

- 1.1 Boreal Forest
- 1.2 Subarctic Forest
- 1.3 Subantarctic Forest
- 1.4 Temperate Forest
- 1.5 Subtropical/Tropical Dry Forest
- 1.6 Subtropical/Tropical Moist Lowland Forest
- 1.7 Subtropical/Tropical Mangrove Forest Vegetation Above High Tide Level
- 1.8 Subtropical/Tropical Swamp Forest
- 1.9 Subtropical/Tropical Moist Montane Forest

2 Savanna

- 2.1 Dry Savanna
- 2.2 Moist Savana

3 Shrubland

- 3.1 Subarctic Shrubland
- 3.2 Subantarctic Shrubland
- 3.3 Boreal Shrubland
- 3.4 Temperate Shrubland
- 3.5 Subtropical/Tropical Dry Shrubland
- 3.6 Subtropical/Tropical Moist Shrubland
- 3.7 Subtropical/Tropical High Altitude Shrubland
- 3.8 Mediterranean-type Shrubby Vegetation

4 Grassland

- 4.1 Tundra
- 4.2 Subarctic Grassland
- 4.3 Subantarctic Grassland
- 4.4 Temperate Grassland
- 4.5 Subtropical/Tropical Dry Lowland Grassland
- 4.6 Subtropical/Tropical Seasonally Wet/Flooded Lowland Grassland
- 4.7 Subtropical/Tropical High Altitude Grassland

5 Wetlands (inland)

- 5.1 Permanent Rivers, Streams, Creeks [includes waterfalls]
- 5.2 Seasonal/Intermittent/Irregular Rivers, Streams, Creeks
- 5.3 Shrub Dominated Wetlands
- 5.4 Bogs, Marshes, Swamps, Fens, Peatlands [generally over 8 ha]
- 5.5 Permanent Freshwater Lakes [over 8 ha]
- 5.6 Seasonal/Intermittent Freshwater Lakes [over 8 ha]
- 5.7 Permanent Freshwater Marshes/Pools [under 8 ha]
- 5.8 Seasonal/Intermittent Freshwater Marshes/Pools [under 8 ha]
- 5.9 Freshwater Springs and Oases
- 5.10 Tundra Wetlands [includes pools and temporary waters from snowmelt]
- 5.11 Alpine Wetlands [includes temporary waters from snowmelt]
- 5.12 Geothermal Wetlands
- 5.13 Permanent Inland Deltas
- 5.14 Permanent Saline, Brackish or Alkaline Lakes

Baseline Report

- 5.15 Seasonal/Intermittent Saline, Brackish or Alkaline Lakes and Flats
- 5.16 Permanent Saline, Brackish or Alkaline Marshes/Pools
- 5.17 Seasonal/Intermittent Saline, Brackish or Alkaline Marshes/Pools
- 5.18 Karst and Other Subterranean Inland Aquatic Systems

6 Rocky Areas [e.g. inland cliffs, mountain peaks]

7 Caves and Subterranean Habitats (non-aquatic)

- 7.1 Caves
- 7.2 Other Subterranean Habitats

8 Desert

- 8.1 Hot
- 8.2 Temperate
- 8.3 Cold

9 Marine Neritic (Submergent Nearshore Continental Shelf or Oceanic Island)

- 9.1 Pelagic
- 9.2 Subtidal Rock and Rocky Reefs
- 9.3 Subtidal Loose Rock/Pebble/Gravel
- 9.4 Subtidal Sandy
- 9.5 Subtidal Sandy-Mud
- 9.6 Subtidal Muddy
- 9.7 Macroalgal/Kelp
- 9.8 Coral Reef
 - 9.8.1 Outer Reef Channel
 - 9.8.2 Back Slope
 - 9.8.3 Foreslope (Outer Reef Slope)
 - 9.8.4 Lagoon
 - 9.8.5 Inter-Reef Soft Substrate
 - 9.8.6 Inter-Reef Rubble Substrate
- 9.9 Seagrass (Submerged)
- 9.10 Estuaries

10 Marine Oceanic

- 10.1 Epipelagic (0–200 m)
- 10.2 Mesopelagic (200–1,000 m)
- 10.3 Bathypelagic (1,000–4,000 m)
- 10.4 Abyssopelagic (4,000–6,000 m)

11 Marine Deep Ocean Floor (Benthic and Demersal)

- 11.1 Continental Slope/Bathyal Zone (200–4,000 m)
 - 11.1.1 Hard Substrate
 - 11.1.2 Soft Substrate
- 11.2 Abyssal Plain (4,000–6,000 m)
- 11.3 Abyssal Mountain/Hills (4,000–6,000 m)
- 11.4 Hadal/Deep Sea Trench (>6,000 m)
- 11.5 Seamount
- 11.6 Deep Sea Vents (Rifts/Seeps)

12 Marine Intertidal

- 12.1 Rocky Shoreline
- 12.2 Sandy Shoreline and/or Beaches, Sand Bars, Spits, etc.
- 12.3 Shingle and/or Pebble Shoreline and/or Beaches

Baseline Report

12.4 Mud Shoreline and Intertidal Mud Flats

12.5 Salt Marshes (Emergent Grasses)

12.6 Tidepools

12.7 Mangrove Submerged Roots

13 Marine Coastal/Supratidal

13.1 Sea Cliffs and Rocky Offshore Islands

13.2 Coastal Caves/Karst

13.3 Coastal Sand Dunes

13.4 Coastal Brackish/Saline Lagoons/Marine Lakes

13.5 Coastal Freshwater Lakes

14 Artificial - Terrestrial

14.1 Arable Land

14.2 Pastureland

14.3 Plantations

14.4 Rural Gardens

14.5 Urban Areas

14.6 Subtropical/Tropical Heavily Degraded Former Forest

15 Artificial - Aquatic

15.1 Water Storage Areas [over 8 ha]

15.2 Ponds [below 8 ha]

15.3 Aquaculture Ponds

15.4 Salt Exploitation Sites

15.5 Excavations (open)

15.6 Wastewater Treatment Areas

15.7 Irrigated Land [includes irrigation channels]

15.8 Seasonally Flooded Agricultural Land

15.9 Canals and Drainage Channels, Ditches

15.10 Karst and Other Subterranean Hydrological Systems [human-made]

15.11 Marine Anthropogenic Structures

15.12 Mariculture Cages

15.13 Mari/Brackish-culture Ponds

16 Introduced Vegetation

17 Other

18 Unknown

A.4 THREATS CLASSIFICATION SCHEME (VERSION 3.2)

- 1 Residential & commercial development
 - 1.1 Housing & urban areas
 - 1.2 Commercial & industrial areas
 - 1.3 Tourism & recreation areas
- 2 Agriculture & aquaculture
 - 2.1 Annual & perennial non-timber crops
 - 2.1.1 Shifting agriculture
 - 2.1.2 Small-holder farming
 - 2.1.3 Agro-industry farming
 - 2.1.4 Scale Unknown/Unrecorded
 - 2.2 Wood & pulp plantations
 - 2.2.1 Small-holder plantations
 - 2.2.2 Agro-industry plantations
 - 2.2.3 Scale Unknown/Unrecorded
 - 2.3 Livestock farming & ranching
 - 2.3.1 Nomadic grazing
 - 2.3.2 Small-holder grazing, ranching or farming
 - 2.3.3 Agro-industry grazing, ranching or farming
 - 2.3.4 Scale Unknown/Unrecorded
 - 2.4 Marine & freshwater aquaculture
 - 2.4.1 Subsistence/artisinal aquaculture
 - 2.4.2 Industrial aquaculture
 - 2.4.3 Scale Unknown/Unrecorded
- 3 Energy production & mining
 - 3.1 Oil & gas drilling
 - 3.2 Mining & quarrying
 - 3.3 Renewable energy
- 4 Transportation & service corridors
 - 4.1 Roads & railroads
 - 4.2 Utility & service lines
 - 4.3 Shipping lanes
 - 4.4 Flight paths
- 5 Biological resource use
 - 5.1 Hunting & collecting terrestrial animals
 - 5.1.1 Intentional use (species being assessed is the target)
 - 5.1.2 Unintentional effects (species being assessed is not the target)
 - 5.1.3 Persecution/control
 - 5.1.4 Motivation Unknown/Unrecorded
 - 5.2 Gathering terrestrial plants
 - 5.2.1 Intentional use (species being assessed is the target)
 - 5.2.2 Unintentional effects (species being assessed is not the target)
 - 5.2.3 Persecution/control
 - 5.2.4 Motivation Unknown/Unrecorded
 - 5.3 Logging & wood harvesting
 - 5.3.1 Intentional use: subsistence/small scale (species being assessed is the target) [harvest]
 - 5.3.2 Intentional use: large scale (species being assessed is the target) [harvest]
 - 5.3.3 Unintentional effects: subsistence/small scale (species being assessed is not the target) [harvest]
 - 5.3.4 Unintentional effects: large scale (species being assessed is not the target) [harvest]
 - 5.3.5 Motivation Unknown/Unrecorded

Baseline Report

5.4 Fishing & harvesting aquatic resources

- 5.4.1 Intentional use: subsistence/small scale (species being assessed is the target) [harvest]
- 5.4.2 Intentional use: large scale (species being assessed is the target) [harvest]
- 5.4.3 Unintentional effects: subsistence/small scale (species being assessed is not the target) [harvest]
- 5.4.4 Unintentional effects: large scale (species being assessed is not the target) [harvest]
- 5.4.5 Persecution/control
- 5.4.6 Motivation Unknown/Unrecorded

6 Human intrusions & disturbance

- 6.1 Recreational activities
- 6.2 War, civil unrest & military exercises
- 6.3 Work & other activities

7 Natural system modifications

- 7.1 Fire & fire suppression
 - 7.1.1 Increase in fire frequency/intensity
 - 7.1.2 Suppression in fire frequency/intensity
 - 7.1.3 Trend Unknown/Unrecorded
- 7.2 Dams & water management/use
 - 7.2.1 Abstraction of surface water (domestic use)
 - 7.2.2 Abstraction of surface water (commercial use)
 - 7.2.3 Abstraction of surface water (agricultural use)
 - 7.2.4 Abstraction of surface water (unknown use)
 - 7.2.5 Abstraction of ground water (domestic use)
 - 7.2.6 Abstraction of ground water (commercial use)
 - 7.2.7 Abstraction of ground water (agricultural use)
 - 7.2.8 Abstraction of ground water (unknown use)
 - 7.2.9 Small dams
 - 7.2.10 Large dams
 - 7.2.11 Dams (size unknown)
- 7.3 Other ecosystem modifications

8 Invasive & other problematic species, genes & diseases

- 8.1 Invasive non-native/alien species/diseases
 - 8.1.1 Unspecified species
 - 8.1.2 Named species
- 8.2 Problematic native species/diseases
 - 8.2.1 Unspecified species
 - 8.2.2 Named species
- 8.3 Introduced genetic material
- 8.4 Problematic species/diseases of unknown origin
 - 8.4.1 Unspecified species
 - 8.4.2 Named species
- 8.5 Viral/prion-induced diseases
 - 8.5.1 Unspecified "species" (disease)
 - 8.5.2 Named "species" (disease)
- 8.6 Diseases of unknown cause

9 Pollution

- 9.1 Domestic & urban waste water
 - 9.1.1 Sewage
 - 9.1.2 Run-off
 - 9.1.3 Type Unknown/Unrecorded
- 9.2 Industrial & military effluents
 - 9.2.1 Oil spills

Baseline Report

- 9.2.2 Seepage from mining
- 9.2.3 Type Unknown/Unrecorded
- 9.3 Agricultural & forestry effluents
 - 9.3.1 Nutrient loads
 - 9.3.2 Soil erosion, sedimentation
 - 9.3.3 Herbicides and pesticides
 - 9.3.4 Type Unknown/Unrecorded
- 9.4 Garbage & solid waste
- 9.5 Air-borne pollutants
 - 9.5.1 Acid rain
 - 9.5.2 Smog
 - 9.5.3 Ozone
 - 9.5.4 Type Unknown/Unrecorded
- 9.6 Excess energy
 - 9.6.1 Light pollution
 - 9.6.2 Thermal pollution
 - 9.6.3 Noise pollution
 - 9.6.4 Type Unknown/Unrecorded
- 10 Geological events
 - 10.1 Volcanoes
 - 10.2 Earthquakes/tsunamis
 - 10.3 Avalanches/landslides
- 11 Climate change & severe weather
 - 11.1 Habitat shifting & alteration
 - 11.2 Droughts
 - 11.3 Temperature extremes
 - 11.4 Storms & flooding
 - 11.5 Other impacts
- 12 Other options
 - 12.1 Other threat

A.5 CONSERVATION ACTIONS CLASSIFICATION SCHEME (VERSION 2.0)

- 1 Land/water protection
 - 1.1 Site/area protection
 - 1.2 Resource & habitat protection
- 2 Land/water management
 - 2.1 Site/area management
 - 2.2 Invasive/problematic species control
 - 2.3 Habitat & natural process restoration
- 3 Species management
 - 3.1 Species management
 - 3.1.1 Harvest management
 - 3.1.2 Trade management
 - 3.1.3 Limiting population growth
 - 3.2 Species recovery
 - 3.3 Species re-introduction
 - 3.3.1 Reintroduction
 - 3.3.2 Benign introduction
 - 3.4 Ex-situ conservation
 - 3.4.1 Captive breeding/artificial propagation
 - 3.4.2 Genome resource bank
- 4 Education & awareness
 - 4.1 Formal education
 - 4.2 Training
 - 4.3 Awareness & communications
- 5 Law & policy
 - 5.1 Legislation
 - 5.1.1 International level
 - 5.1.2 National level
 - 5.1.3 Sub-national level
 - 5.1.4 Scale unspecified
 - 5.2 Policies and regulations
 - 5.3 Private sector standards & codes
 - 5.4 Compliance and enforcement
 - 5.4.1 International level
 - 5.4.2 National level
 - 5.4.3 Sub-national level
 - 5.4.4 Scale unspecified
- 6 Livelihood, economic & other incentives
 - 6.1 Linked enterprises & livelihood alternatives
 - 6.2 Substitution
 - 6.3 Market forces
 - 6.4 Conservation payments
 - 6.5 Non-monetary values

A.6 RESEARCH NEEDED CLASSIFICATION SCHEME (VERSION 2.0)

1 Research

- 1.1 Taxonomy
- 1.2 Population size, distribution & trends
- 1.3 Life history & ecology
- 1.4 Harvest, use & livelihoods
- 1.5 Threats
- 1.6 Actions

2 Conservation Planning

- 2.1 Species Action/Recovery Plan
- 2.2 Area-based Management Plan
- 2.3 Harvest & Trade Management Plan

3 Monitoring

- 3.1 Population trends
- 3.2 Harvest level trends
- 3.3 Trade trends
- 3.4 Habitat trends

4 Other

A.6 THE TEMPLATE FOR SPECIES AFTER EVALUATION WITH THE SET OF DATA

Drusus dardanicus Ibrahimi, Kucinic & Vitecek, 2015

Emri shkencor: *Drusus dardanicus*

Emri në shqip: Flutura e Dardanisë

Rendi: Trichoptera **Familja:** Limnephilidae

Të dhëna rreth llojit: Në fazën larvare jeton në ujë përgjatë një viti. Ushqehet me detritus. Faza adulte prej Majit deri në Gusht. Si fazë e rritur nuk ushqehet dhe është aktive ditën dhe natën. Aftësia e mobilitetit e vogël.

Habitati: Burimet malore dhe rrjedhat e epërme të përroskave malore

Përhapja e përgjithshme: Bjeshkët e Kopaonikut

Përhapja në Kosovë: Fshati Bollosicë, Bjeshkët e Kopaonikut

Popullatat: Popullata të vogla në shpatijet e Bjeshkëve të Kopaonikut midis lartësive mbidetare 1300 dhe 1700 m.

Kategoria e kërcënueshmërisë sipas IUCN në Kosovë: EN - B1ab(i,ii,iii,iv) + 2ab(i,ii,iii,iv) - I Rrezikuar

Arsyetimi i vlerësimit: Vlerësimi është bazuar në Sipërfaqen e Përhapjes (EOO), në Zonën e Zënë (AOD) dhe në numrin e lokaliteteve. Sipërfaqja e Përhapjes (EOO) është <100 km², Zona e Zënë (AOD) është <100 km² dhe numri i lokaliteteve është 2.

Viti i vlerësimit: 2017

Vlerësuesi: Halil Ibrahimi

Statusi ndërkombëtar: NA

Shkaqet e rrezikimit: 1. Humbja dhe degradim i habitatit i nxitur prej njeriut (1.3.3.2. Prerja selektive e drunjtëve, 1.3.3.3. Prerja për pastrim), 9. Faktorët e brendshëm (9.1. Shpërndarja e kufizuar, 9.5. Dendësia e ulët, 9.9. Shtrirja e kufizuar), 10.5. Ndotja e ujërave.

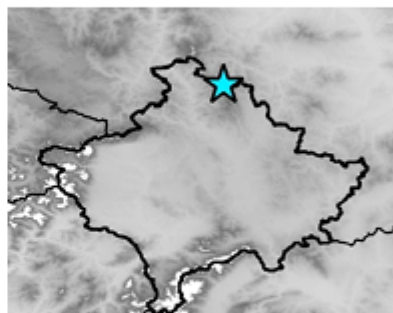


Drusus dardanicus. Foto: Halil Ibrahimi

Ndërmarrja e masave mbrojtëse: Në bazë të udhëzimit administrativ Nr. 18/2012 për shpalljen e llojeve të egra të mbrojtura dhe strikt të mbrojtura (MMPH) të Republikës së Kosovës ky takson nuk është nën mbrojtje.

Masat e nevojshme mbrojtëse: Mbrojtja adekuatë ligjore, monitorimi i vazhdueshëm.

Referencat: H Ibrahimi, M Kučinić, S Vitecek, J Waringer, W Graf, A Previšić, M Bálint 2015 New records for the Kosovo caddisfly fauna with the description of a new species, *Drusus dardanicus* sp. nov. (Trichoptera: Limnephilidae) Zootaxa 4032 (5), 551





REPUBLIC OF KOSOVO

Ministry of Environment and Spatial Planning
Inter Ministerial Water Council



The Sida Framework Environmental Programme For Kosovo

C2
A2.01
D2.01.01



Technical Assistance provided by
**FCG Sweden (Lead Company) in Consortium with
EPTISA Servicios de Ingenieria (Partner)**

Address:
Dalagatan 7 – 11123 Stockholm (Sweden)
Tel.: +46-(0)8-4067627 /
Fax: +46-(0)8-210269



Sweden
Sverige

The project is funded by the
Swedish International Development Agency and
managed by the **Swedish Embassy in Kosovo**
Address:

Str. Perandori Justinian, No. 111, Pejton – 10000 Pristina
Tel.: +381-(0)38-245795
Fax: +381-(0)38-245791