1st Mediterranean Plant Conservation Week

"Building a regional network to conserve plants and cultural diversity"

Ulcinj (Montenegro) - 24-29 October 2016

Skadar lake IPA (Montenegro). Photo by: Green Home.

1re Semaine de la conservation des plantes méditerranéennes

"Construction d'un réseau régional pour la conservation de la diversité culturelle et végétale"

Ulcinj (Montenegro) - 24-29 Octobre 2016

This event aims at becoming a gathering point for botanists; civil society institutions working in the plant conservation field; community members; and for those interested in including plant conservation programmes into their conservation or sustainable development projects.

Cet évènement a pour vocation de constituer un lieu de rencontre pour les spécialistes des plantes, les institutions de la société civile travaillant dans la conservation des plantes, les membres des communautés locales ainsi que pour toute personne intéressée par l'inclusion de programmes de conservation des plantes au sein de leurs projets de conservation ou de développement durable.

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LOCALISATION DE L'ÉVÈNEMENT

THE EVENT WILL TAKE PLACE AT THE
L'ÉVÈNEMENT AURA LIEU À

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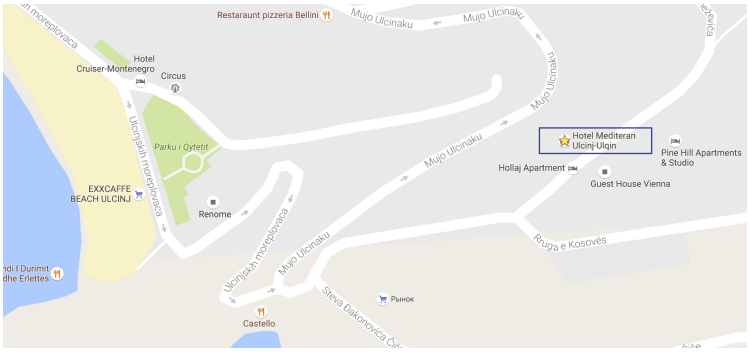

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GLOSARY:

CEM : Commission on Ecosystem Management IUCN
CEPF: Critical Ecosystem Partnership Fund
CPC: Cultural Practices of Conservation
GSPC: Global Strategy for Plant Conservation
HNV : High Nature Value farming systems
ICCA: Indigenous Peoples' and Community Conserved Territories and Areas
IPA: Important Plant Area
KBA: Key Biodiversity Areas
SSC : Species Survival Commission IUCN
WCPA : World Commission on Protected Areas IUCN

GLOSSAIRE:

APAC: Aires et territoires du patrimoine autochtone et communautaire
HVN: Système agricole à haute valeur naturelle
PCC: Pratiques culturelles de conservation
SIBE: Site d'Intérêt Biologique et Ecologique
SMCP: Stratégie mondiale pour la conservation des plantes
ZCB: Zone clé de la biodiversité
ZIP: Zone importante pour les plantes

WELCOME WORDS

ANTONIO TROYA
DIRECTOR IUCN CENTRE FOR MEDITERRANEAN COOPERATION

Welcome message,

In the Centre for Mediterranean Cooperation (IUCN-Med), we are well aware that the Mediterranean region is a global diversity hotspot mainly because of its important plant diversity. It contains ten per cent of all known plants on Earth and over half of them are found nowhere else in the world. We are also conscious of the valuable role plant resources play supporting biodiversity and the livelihoods of many people, by providing them with essential ecosystem services (i.e. water sources, flood control, carbon capture, prevention of desertification and a reservoir of genetic diversity) and the role local population could play in maintaining these green treasures.

Nevertheless, the Mediterranean region flora is threatened and the region is recognized as one of the four most significantly altered biodiversity hotspots on the planet. Additionally, plant diversity is often overlooked in the conservation agenda and the dialogue between plant scientists, site managers, local populations and civil society organizations is often fragmented.

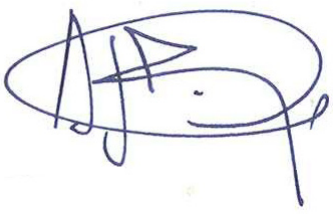
For all the above reasons, we are working to conserve wild plants and habitats for people across the Mediterranean region, through the IPAMed project, an ambitious initiative, which promotes plant conservation actions in the South and East Mediterranean. This project represents our contribution to the achievement of target 5 of the Global Strategy for Plant Conservation.
Important Plant Areas (IPA) are internationally important sites for wild plants and fungi, identified at national level using standard criteria. This designation ultimate aim is to ensure that the sites identified as IPA are adequately protected and managed to allow the perennity of their plants and habitats. Moreover, IPA are recognised as regional Key Biodiversity Areas (KBAs) following the Global Standard approved in the last IUCN World Conservation Congress.

The IPAMed project "Conserving wild plants and habitats for people in the South and East Mediterranean Region", is a partnership between the IUCN-Centre for Mediterranean Cooperation, Plantlife International, the IUCN Commissions (SSC, CEM and WCPA) and several National partners from countries where this project is currently being implemented. The countries and territories where IPAMed activities are carried out include: Algeria, Egypt, Lebanon, Macedonia, Montenegro, Morocco, Palestine, Tunisia and Turkey.

IUCN Med, Global Diversity Foundation, Plantlife, Green Home and the Mediterranean Consortium Nature and Culture have joined forces to organise the 1st Mediterranean Plant Conservation Week with the aim of becoming a gathering point for plant scientists; civil society institutions working in the plant conservation field; community members; and those interested in including plant conservation programmes into their conservation or sustainable development projects.

We thank the MAVA Foundation, our main donor for this event, for supporting the 1st Mediterranean Plant Conservation Week and for connecting and promoting the dialogue between several initiatives for plant conservation in the Mediterranean region it supports. Several projects financed by MAVA Foundation will meet at Ulcinj to exchange knowledge and experiences and will strengthen a Mediterranean plant conservation network. Among these projects we would like to highlight the project Integrated Approach to Plant Conservation in the Moroccan High Atlas, CAREMEDIFLORA project, Supporting cultural practices that benefit nature in the Mediterranean project and IPAMed project. We also want to thank GREEN HOME for their dedication to organise the 1st Mediterranean Plant Conservation Week in Montenegro and to become our host during this week.
We hope that this event will become a periodic meeting point for dialogue, for sharing successful examples of plant conservation with local communities, for capacity building and for the reinforcement and promotion of plant conservation actions all around the Mediterranean.

On behalf of IUCN-Med and the organizing committee, I welcome all the participants to the 1st Mediterranean Plant Conservation Week and I wish you all a fruitful, inspiring, productive and pleasant week.



Antonio Troya
Director IUCN Centre for Mediterranean Cooperation

MESSAGE
DE BIENVENUE

ANTONIO TROYA
DIRECTEUR DU CENTRE DE COOPÉRATION POUR LA MÉDITERRANÉE DE L'UICN

Message de bienvenue,

Au Centre de Coopération pour la Méditerranée (UICN-Med), nous sommes pleinement conscients que la région méditerranéenne est une zone critique de biodiversité (« biodiversity hotspot ») en raison de sa grande richesse végétale. En effet, cette région abrite dix pour cent de toutes les espèces végétales connues sur Terre et plus de la moitié d'entre elles ne se rencontrent nulle part ailleurs. Ces plantes constituent en outre, un moyen de subsistance pour de nombreuses populations en leur fournissant des services écosystémiques essentiels à leur survie. Elles concourent, par exemple, à la préservation des ressources en eau, à la lutte contre les inondations, au captage du carbone, à la prévention de la désertification et constituent un réservoir de diversité génétique inestimable. Aussi, il est important de souligner le rôle que la population locale peut jouer dans le maintien et la préservation de ces trésors verts.

Par ailleurs, la flore méditerranéenne est menacée. La région est en effet reconnue comme l'une des quatre zones critiques de biodiversité les plus significativement perturbées de la planète. En outre, la diversité des plantes est souvent négligée dans les programmes de conservation et le dialogue entre botanistes, gestionnaires de sites, populations locales et organisations de la société civile gagnerait à être renforcé.

Pour toutes ces raisons, nous travaillons à la conservation de la flore et des habitats naturels de la région par le biais du projet IPAMed, une initiative ambitieuse qui encourage des actions de conservation des plantes dans le Sud et l'Est du bassin méditerranéen. Ce projet représente également notre contribution à la réalisation de l'objectif 5 de la Stratégie mondiale pour la conservation des plantes.

Les Zones Importantes pour les Plantes (ZIP) sont des sites d'importance internationale pour les plantes et les champignons sauvages, identifiés au niveau national en utilisant des critères normalisés. L'objectif final de cette désignation est d'assurer une protection et une gestion adéquates des sites ainsi identifiés afin de préserver durablement leurs plantes et de leurs habitats. De plus, les ZIP sont reconnus comme des Zones Clés de la Biodiversité (ZCB) régionales conformément au Standard Mondial approuvé lors du dernier Congrès Mondial de l'UICN.

Le projet "Conservation de la flore et des habitats naturels pour les populations du sud et de l'est de la région méditerranéenne" s'appuie sur un partenariat entre le Centre de Coopération pour la Méditerranée de l'UICN, Plantlife International, les Commissions de l'UICN (SSC, CEM et CMAP) et plusieurs partenaires nationaux au sein des pays où ce projet est actuellement mis en œuvre. Les pays où les activités IPAMed ont été déployées sont : l'Algérie, l'Egypte, le Liban, la Macédoine, le Maroc, le Monténégro, la Palestine, la Tunisie et la Turquie.

L'UICN Med, la Global Diversity Foundation, Plantlife, Green Home et le Mediterranean Consortium for Nature and Culture se sont regroupés pour organiser la 1ère Semaine de Conservation des Plantes Méditerranéennes qui vise à rallier les scientifiques, les membres de la société civile travaillant dans le domaine de la conservation des plantes, les membres des communautés locales ainsi que tous ceux qui souhaiteraient inclure des programmes de conservation des plantes dans leurs projets.

Nous remercions la Fondation MAVA, pour son soutien financier et pour les échanges qu'elle a permis d'instaurer entre les diverses initiatives de conservation des plantes qu'elle finance dans la région méditerranéenne. Cette semaine à Ulcinj constituera un lieu de rencontre pour plusieurs projets financés par la Fondation MAVA. Ce sera l'occasion de partager les connaissances et les expériences et d'étendre le réseau de conservation des plantes méditerranéennes. Parmi ces projets, nous souhaiterions évoquer en particulier, le projet d'Approche intégrée de conservation des plantes dans le Haut Atlas Marocain (« Integrated Approach to Plant Conservation in the Moroccan High Atlas »), le projet CAREMEDIFLORA, le projet d'Appui aux pratiques culturelles favorables à la nature en Méditerranée (« Supporting cultural practices that benefit nature in the Mediterranean project ») et le projet IPAMed. Nous souhaitons aussi remercier GREEN HOME pour son accueil et pour son implication dans l'organisation de cette première Semaine de la conservation des plantes méditerranéennes.

Nous espérons que cet évènement deviendra un rendez-vous régulier de dialogue, de partage d'exemples réussis de collaboration entre gestionnaires et communautés locales, de renforcement des capacités et de promotion des actions de conservation des plantes en Méditerranée.

De la part de l'UICN-Med et du comité d'organisation, je souhaite la bienvenue à tous les participants de la 1ère Semaine de Conservation des Plantes Méditerranéennes et je vous souhaite, à tous, une semaine fructueuse, stimulante, prolifique et agréable.

Antonio Troya
Directeur du Centre de Coopération pour la Méditerranée de l'UICN

1st Mediterranean Plant Conservation Week agenda
Agenda de la 1ère Semaine de la conservation des plantes méditerranéennes

24 October 2016		25 October 2016		26 October 2016	
Capacity building session 1: Plant Species conservation planning		**Consultation session CEPF Mediterranean Ecosystem Profile**		**Workshop session 1: Integrating wild plants information for site management and conservation**	
09:00 - 09:30	Participants welcoming and 1st Mediterranean Plant Conservation Week opening	08:30 - 09:00	Arrival	08:30- 08:45	Workshop opening Introduction and objectives of the session
09:30 -11:10	Theme I – Element of Planning	09:00 - 10:30	Introduction	08:45-09:15	Opening Session
				09:15-11:00	Short Presentations - Pecha kucha session (6 min presentation)
11:10 -11:30	Coffee Break	10:30 -11:00	Coffee Break	11:00-11:30	Coffee Break
11:30 -13:30	Theme 2 – Planning to Implementation	Important Plant Areas (1)		11:30-12:00	Main presentation
		11:00 - 13:00	Break out groups to review draft Key Biodiversity Areas with focus on IPA Revision of Trigger species at site level Revision of boundaries isssues	12:00-13:30	Short Presentations - Pecha kucha session (6 min presentation)
13.30	Lunch	13:00 - 14:00	Lunch	13:30- 15:00	Lunch
Capacity building session 2: Pastoral management and plant conservation	**Capacity building session 3: From *ex situ* to *in situ* conservation**	Important Plant Areas (2)		**Workshop session 2: Cultural practices for conservation in the Mediterranean region**	
15:00 - 15:05 Welcome: Aims and rules of the workshop	15:00 - 15:15 Capacity building session presentation	14:00 - 15:00	Solving problems and restitution Clarification in way forward for IPA identification and validation Breakout groups to also prioritize threats as basis for final session	15:00- 15:20	Worskhop opening Introduction and objectives of the session
15:05 - 17:00 Main presentations	15:15 - 17:50 Main presentations	15:00 - 16:00	Threats to biodiversity and solutions Solutions to threats and contribution to solutions by civil society	15:20-16:00	Opening session
17:00 - 17:30 Final debate		16:00 - 16:30	Final remarks and next steps	16:00-16:20	Coffee Break
	17:50 - 18:00 Experiences and Discussion (All)	16:30 - 17:00	Examples on how to improve plant data in the Mediterranean region Open session to all participants	16.20-18:00	Short Presentations - Pecha kucha session (6 min presentation)
				18:00-19:00	Participatory activity 1

27 October 2016		28 October 2016		29 October 2016	
Field trip		**Workshop session 3: Community-conserved areas in the future management of biodiversity, land and water in the Mediterranean**		**IPAMed mid-term review session Closed coordination meeting for IPAMed partners**	
08:00 - 18:00		9:00- 9:15	Workshop opening	08:00 - 10:30	IPAMed mid-term review session Close coordination meeting for IPAMed partners
		9:15-10:15	Opening session		
		10:15-11:00	Participatory activity 2		
		10:30-10:50	Coffee Break	10:30-11:00	Coffee Break
		10.50-12:40	Participatory session	11:00 - 12:30	IPAMed mid-term review session Close coordination meeting for IPAMed partners
		12:40-13:00	Wrap-up session		
		13:00- 15:00	Lunch		
		Workshop session 4: Networking, building synergies, involving volunteers and citizen science			
		15:00 - 15:10	Workshop opening Introduction & objectives of session		
		15:10 -16:00	Main presentations Questions to the speakers		
		16:00 -16:20	Coffee Break		
		16:20 -18:00	Main presentations Short Presentations - Pecha kucha session Plenary: Extraction of lessons learned; vote of thanks Questions to the speakers		
		18:00	Closure of the 1st Mediterranean Plant Conservation Week		
21:00	**Social dinner**				

* Registration desk available from 23rd October in the Mediteran Hotel reception.

* Bureau d'inscription disponible à partir du 23 Octobre à la réception de l'hôtel Mediteran.

AIMS AND OBJECTIVES OF THE EVENT

OBJECTIFS DE L'ÉVÈNEMENT

The "1st Mediterranean Plant Conservation Week" will include a combination of presentations, workshops, discussion panels and poster presentations. This event also represents a fantastic networking and learning opportunity for all the participants.

La "1re Semaine de conservation des plantes" se propose d'offrir un ensemble de présentations orales, d'ateliers de travail, de forums de discussion ainsi qu'une présentation de posters. Cet évènement constitue également une formidable opportunité de partager les connaissances et de consolider la mise en réseau des acteurs.

Pic des singes Gouraya IPA (Algérie). Photo by: Khellaf Rebbas.

A. Capacity building sessions

Capacity building sessions around key issues on plant conservation will take place the 24th of October.

There will be three capacity sessions focused on:
- Plant species conservation planning
- Pastoral management and plant conservation
- From *ex situ* to *in situ* conservation

B. CEPF consultation process

CEPF consultation process to update of Mediterranean Ecosystem Profile (incorporating the suggestions from participants) will take place the 25th of October.

C. Workshop sessions

Two days sessions will be focused in strengthening the networking in Mediterranean plant conservation, in exchanging experiences and in learning from other experiences in the Mediterranean Basin.

The content will be structured in following topics:

- Session 1: Integrating wild plants information for site management and conservation
- Session 2: Cultural practices for conservation in the Mediterranean region
- Session 3: Community-conserved areas in the future management of biodiversity, land and water in the Mediterranean
- Session 4: Networking, building synergies and involving volunteers and citizen science

D. Networking and motivation

This intense and diverse week will allow everybody to meet people working in plant conservation around the Mediterranean region being an opportunity to exchange experiences, to learn from others, to discuss about the challenges plant conservation is facing and to feed our passion and motivation to work together for ensuring the conservation of wild plants and habitats for people in the Mediterranean.

During this week different initiatives developed by IUCN, Global Diversity Foundation, Mediterranean Consortium for Nature and Culture, Plantlife and CAREMEDIFLORA will have the opportunity to exchange and interact.

E. IPAMed Project mid-term review session

A IPAMed mid-term review session will take place the last day of the week, the 29th October. This is a close event for IPAMed partners. An agenda of this session will be sent to all the partners of the project in due time.

F. Poster communications

Poster will be displayed during all the event.

A. Sessions de renforcement des capacités

Trois sessions de renforcement des capacités centrées sur des questions clés liées à la conservation des plantes sont programmées le 24 octobre.

Elles seront consacrées aux thématiques suivantes:
- Planification de la conservation des espèces végétales
- Gestion pastorale et conservation des plantes
- Passage de la conservation *ex situ* à la conservation *in situ*

B. Processus de consultation

Un processus de consultation se tiendra le 25 octobre. Il sera animé par le CEPF et sera destiné à actualiser le profil d'écosystème méditerranéen en incorporant les suggestions et contributions des participants.

C. Ateliers sur la conservation des plantes méditerranéennes

Ces deux jours d'ateliers seront consacrés au renforcement du réseau d'acteurs de la conservation des plantes méditerranéennes et au partage d'expériences menées en région méditerranéenne.

Les contenus seront structurés autour des thématiques suivantes :
- Session 1: Intégration des informations relatives aux plantes sauvages pour la gestion et la conservation des sites
- Session 2: Pratiques culturelles de conservation en région méditerranéenne
- Session 3: La conservation communautaire des espaces dans la gestion future de la biodiversité, du sol et de l'eau dans la région méditerranéenne
- Session 4: Réseau, mise en place de synergies, implication de volontaires et sciences citoyennes

D. Mise en réseau et motivation des acteurs

Cette semaine de travail et d'échanges permettra aux différents acteurs de la conservation des plantes en région méditerranéenne de se rencontrer. Il s'agit là de l'opportunité d'échanger et d'apprendre autour des expériences de chacun, de débattre sur les défis posés par la conservation des plantes et également, d'alimenter notre passion et notre motivation à travailler ensemble afin de garantir la conservation des plantes sauvages et des habitats pour les populations méditerranéennes.

Au cours de cette semaine, diverses initiatives développées par l'UICN, la Global Diversity Foundation, le Consortium Méditerranéen pour la Nature et la Culture ("Mediterranean Consortium for Nature and Culture"), Plantlife and CAREMEDIFLORA vont avoir l'opportunité d'échanger et d'interagir.

E. Session d'examen à mi-parcours du projet IPAMed

Une session d'examen à mi-parcours du projet IPA-Med se tiendra le dernier jour de la semaine, le 29 octobre. Il s'agira d'une activité réservée aux partenaires du projet IPA-Med.

F. Présentation de posters

Des posters seront exposés pendant toute la durée de l'évènement.

Gymnospermium sciperatum, Vrsuta IPA (Montenegro).
Photo by: GreenHome.

Vella mairei Bou-Naceur IPA (Morocco).
Photo by: Mohammed Shir Taleb.

CAPACITY BUILDING SESSIONS
SESSIONS DE RENFORCEMENT DES CAPACITÉS

Capacity building session 1: Plant conservation planning

The abundant wealth of plant diversity, an estimated 391,000 vascular species (plus about 20,000 lower plants) (RBG Kew, 2016), provides the primary production for all life on earth. Yet these critical resources for continued human survival are threatened by human mismanagement of the environment; plant diversity at the habitat, species, and genetic levels is threatened to a degree never seen previously in our planet's history. Brummitt *et al.* (2015) estimate 20% of plant species are threatened with extinction and another 10% are near threatened using IUCN Red List criteria.

Plants are particularly vulnerable to climate change as: migration is slow; local adaption may not be able to keep pace with the changing environment; many have long generation times; and there is limited knowledge of each species auto- and synecology.

The aim of plant conservation is to maintain the ecosystem, taxonomic and genetic diversity of plants and the interrelationships between plants, other organisms and their environment. The development of conservation programmes aims to enhance or maintain diversity and halt habitat, species and genetic extinction or erosion. To achieve this goal, involves a clear understanding of the diversity and processes that occur and planning and implementation of practical techniques to achieve taxonomic and genetic stability.

Sessions de renforcement des capacités 1: Planification de la conservation des plantes

Cet atelier sera consacré à la planification afin de maximiser l'efficacité des efforts de conservation. L'abondante diversité végétale, environ 391.000 espèces vasculaires et plus de 20.000 plantes inférieures (RBG Kew, 2016), fournit la production primaire nécessaire à la vie sur Terre. Ces ressources, pourtant essentielles pour la survie de l'humanité, sont menacées par notre mauvaise gestion de l'environnement. La biodiversité végétale - ses habitats, ses espèces et sa diversité génétique - est grandement menacée et cela, à un niveau jamais atteint auparavant. En effet, une étude publiée par Brummitt *et al.,* en 2015 et utilisant des critères de la Liste rouge de l'UICN, estime que 20% des espèces végétales mondiales sont menacées d'extinction et 10% d'entre elles sont quasi-menacées.

Les plantes sont particulièrement vulnérables au changement climatique: leurs capacités de migration sont limitées, leur potentiel d'adaptation locale peut ne pas être en mesure de suivre la progression des changements en cours, beaucoup d'espèces ont de longs temps de génération et nous avons des connaissances limitées sur l'autoécologie et la synécologie des espèces.

La conservation des plantes vise le maintien de l'écosystème, de la diversité taxonomique et génétique des plantes et de leurs relations avec les autres organismes et l'environnement. Le développement des programmes de conservation cherche à améliorer ou à maintenir la diversité, à stopper les extinctions d'espèces et les pertes d'habitats et de diversité génétique. L'atteinte de cet objectif implique une compréhension claire de la diversité et des processus biologiques, ainsi que la planification et la mise en œuvre de techniques opérationnelles pour parvenir à la stabilité taxonomique et génétique.

Capacity building session 1: Plant conservation planning (cont.)

Conservationists, when undertaking a particular conservation planning exercise, use their knowledge of genetics, ecology, geography, taxonomy and many other disciplines to understand and manage the biodiversity they wish to conserve. To conserve the maximum range of diversity found in a species, populations of the species are likely to require protection in diverse locations and in each of these the habitat management set in place that maintains or enhances diversity within and between the target populations.

Plant conservation planning is distinct from other biodiversity conservation planning in the sheer breadth of the taxonomic diversity and the largely unknown range of genetic diversity being targeted.

On the positive side, good taxonomic checklists and distributional data is available, for at least developed country's flora, and at a global level centres of diversity have been identified so Species Distribution and Climate Resilience modelling can be used to facilitate conservation planning.

Even though little is understood of patterns of genetic diversity within taxa, techniques such as ecogeographic land characterization (Parra-Quijano *et al.*, 2012) and gap analysis are employing ecogeographic distribution as a proxy for genetic diversity and are increasingly used to plan the genetic conservation of plants. Due to the breadth of diversity included planning often involves the conservation of multiple taxa in multiple locations employing a range of *in situ* (formal protected area / extra PA *in situ* / on-farm / home gardens) and *ex situ* (seed storage / in vitro storage / DNA storage / field gene bank / botanic garden) techniques. For many plant species, particularly those with known socioeconomic value, there is an intimate link between plant genetic diversity, conservation and utilisation.

The model includes a series of steps starting with the full range of genetic diversity for the plant species or group of species to be conserved, through the planning of conservation action, the implementation of the conservation action and leading finally through to characterisation and evaluation as a precursor to utilisation.

The application of this model is at the core of food security, poverty alleviation and the well-being for humankind. As the primary production for all life on earth, plants have a high ecosystem services and economic value, yet their loss or decline in diversity is likely to have severe economic, social and ethical consequences for humankind, so it is critical we prioritize their efficient and effective conservation planning, only then can we implement those plans and ensure continued and sustainable utilisation.

Specifically, the Plant Conservation Planning Workshop will address: an overview of plant conservation planning; how Important Plant Areas may act as a tool for plant conservation; taxonomic and geographic prioritization for conservation action; ecogeographic surveys and gap analysis techniques; species distribution modelling, climate change and conservation planning; an introduction to an on-line plant conservation planning toolkit; working with stakeholder communities; the content of conservation strategies and action plans, as well as local, national, regional and global level conservation planning.

Sessions de renforcement des capacités 1: Planification de la conservation des plantes (cont.)

Les spécialistes de la conservation, lors de l'élaboration de projets, utilisent leurs connaissances en génétique, écologie, géographie, taxonomie, et dans de nombreuses autres disciplines, pour comprendre et gérer la biodiversité qu'ils souhaitent conserver. Pour conserver la plus grande diversité possible au sein d'une espèce, ses populations requièrent des mesures de protection sur divers sites au sein de son aire de répartition, et dans chacun d'entre eux, la mise en place d'une gestion qui maintient ou augmente la diversité au sein des populations cibles et entre elles.

La planification de la conservation des plantes se distingue des autres plans de conservation de la biodiversité par l'ampleur de la diversité taxonomique et de la gamme, largement inconnue, de la diversité génétique ciblées.

Pour palier à cette difficulté, des listes taxonomiques actualisées et des données de distribution des plantes sont disponibles pour la flore de certains pays. De plus, à un niveau plus global, les centres de diversité ont été identifiés permettant ainsi, l'utilisation de modèles de distribution d'espèces et de résilience climatique pour faciliter la planification des efforts de conservation.

Même si l'organisation de la diversité génétique au sein des taxons est mal connue, des techniques telles que la caractérisation de zones éco-géographiques ("ecogeographic land characterization") (Parra-Quijano *et al.* 2012) et l'analyse des lacunes ("gap analysis") utilisent des distributions éco-géographiques comme alternatives aux données de diversité génétique et sont de plus en plus utilisées pour planifier la conservation génétique des plantes.

En raison de l'importance de la diversité concernée, la planification implique souvent la conservation de multiples taxons dans diverses localisations géographiques en utilisant une gamme de méthodes *in situ* (zones protégées officielles / autres types de zones protégées *in situ* / fermes/ jardins familiaux) et *ex situ* (stockage in vitro/ stockage de semences/ Stockage d'ADN/ banque de gènes/ jardins botaniques). Pour de nombreuses espèces végétales, en particulier pour celles possédant une valeur socio-économique, il existe un lien étroit entre diversité génétique, conservation et utilisation.

Ce processus comprend une série d'étapes débutant par la planification de la conservation de l'étendue complète de la diversité génétique pour les espèces ou le groupe d'espèces végétales à conserver, la mise en œuvre des mesures de conservation et conduisant finalement à la caractérisation et à l'évaluation en tant que préalable à l'utilisation.

Cette approche est au cœur de la sécurité alimentaire, de la lutte contre la pauvreté et du bien-être de l'humanité. En tant que production primaire pour la vie sur la terre, les plantes fournissent des services écosystémiques inestimables et ont une grande valeur économique. Leur perte ou leur déclin en diversité est ainsi susceptible d'avoir de graves conséquences économiques, sociales et éthiques pour l'humanité. Il est donc essentiel de hiérarchiser les mesures de conservation en fonction de leur efficacité et de leur pertinence. Alors seulement, nous pourrons les mettre en œuvre et assurer ainsi, une utilisation continue et durable des ressources végétales.

Plus précisément, l'atelier de planification de la conservation des plantes abordera les sujets suivants: approche générale de la planification de la conservation des plantes; rôle des zones importantes pour les plantes en tant qu'outil de conservation; hiérarchisation taxonomique et géographique pour les mesures de conservation; approche écogéographique et techniques de "gap analysis"; modèles de distribution d'espèces; changement climatique et planification des mesures de conservation; présentation d'un outil de planification de la conservation des plantes en ligne; travailler avec les parties prenantes; contenu des stratégies de conservation et des plans d'action et planification de la conservation au niveau local, national, régional et mondial.

Agenda

Capacity building session 1: Plant species conservation planning

Sessions de renforcement des capacités 1: Planification de la conservation des espèces végétales

Convenors: *Nigel Maxted and Joana Magos Brehm, University of Birmingham*
Facilitator: *Teresa Gil, IUCN-Med*

Theme I – Element of Planning	
9:30 – 9:45	IPA: a tool for plant conservation. *Bertrand De Montmollin, IUCN / SSC Mediterranean Plant Specialist Group.*
9:45 – 10:10	Conservation planning as a tool for conservation implementation. *Nigel Maxted, University of Birmingham*
10:10 –10:20	Taxonomic and geographic prioritization. *Joana Magos Brehm, University of Birmingham.*
10:20 –10:30	Experiences and Discussion (All)
10:30 –10:40	Ecogeographic surveys and gap analysis. *Nigel Maxted, University of Birmingham.*
10:40 –10:50	Experiences and Discussion (All)
10:50 –11:00	Species distribution modelling, climate change and conservation planning. *Joana Magos Brehm, University of Birmingham.*
11:00 –11:10	Experiences and Discussion (All)
11:10 –11:30	Coffee Break
Theme 2 – Planning to Implementation	
11:30 –11:45	On-line plant conservation planning toolkit. *Joana Magos Brehm, University of Birmingham.*
11:45 –11:55	Working with stakeholder communities. *Nigel Maxted, University of Birmingham.*
11:55 –12:05	Experiences and Discussion (All)
12:05 –12:15	Conservation strategies and action plans content. *Joana Magos Brehm, University of Birmingham.*
12:15 –12:25	Experiences and Discussion (All)
12:25 –12:40	CS.1.1. Implementation of plant conservation planning at sub-national and local levels. *Emilio Laguna, Generalitat Valenciana.*
12:40 –12:55	CS.1.2. Inventorying and delimitation of Algerian IPA, ongoing research. *Nassima Yahi, Université des sciences et de la technologie Houari Boumediene.*
12:55 –13:10	CS.1.3. Setting conservation priorities is a priority: case of Lebanese flora *Magda Bou Dagher, Université Saint Joseph.*
13:10 –13:20	Global and Regional conservation planning. *Nigel Maxted, University of Birmingham.*
13:20 –13:30	Closing Questions and Answers session
13.30	Lunch

Convenors

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Capacity building session 2: Pastoral management and plant conservation

This farming activity is frequently considered to be a threat for conservation, particularly in areas where poor livestock management and overgrazing prevail, whereas, in other places, conservation efforts are made to preserve livestock grazing, particularly when the abandonment of pasture use is putting valuable habitats and species at risk. This contrast is particularly visible when we compare situations found in the northern and southern rims of the Mediterranean.

In Europe, this type of farming is frequently welcome -and even requested by conservation managers- in areas where targeted grazing can play a valuable role (e.g., wildfire prevention or control of invasive species) and more generally, where they are considered to be "High Nature Value farming systems" (HNV), which help preserve threatened species, valuable farmland habitats and essential ecological processes.

The first block of the workshop will be devoted to presenting the HNV farming concept and share experiences from areas where grazing management is being encouraged.

In Northern Africa and part of the East of the Mediterranean, the challenge is completely different. Poverty in rural areas, linked with a much higher dependence on local natural resources for subsistence, maintains a very high "farming pressure" in much of the region. Indeed, the combination of collecting fuelwood, ploughing and grazing intensively produce important impacts on many Important Plant Areas. Addressing these issues calls for tools like the Ecosystem-based approach that IUCN supports, which will be presented and discussed in the second block of this workshop.

In this integrative approach, local people and their use of natural areas are carefully taken into account when developing conservation plans. In the workshop, we will discuss some experiences where alliances for conservation with local populations are being established.

Participants are expected to contribute actively to the workshop with their own experience, successes and difficulties, so as to have lively exchanges on the subject. Inspiring success stories of collaboration between livestock farmers and conservation managers in Mediterranean designated areas are particularly welcome. The overall focus should be set on how challenges have been or are currently dealt with, so that the final debate of the workshop leads to identifying some of the key tools and strategies we all need to address pastoral farming issues and better achieve conservation goals.

Convenor

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Sessions de renforcement des capacités 2: Gestion pastorale et conservation des plantes

Le pâturage est souvent considéré comme une menace pour la conservation, en particulier dans les zones où la gestion du bétail est inexistante et où le surpâturage domine. Dans d'autres régions, des efforts de conservation sont faits pour maintenir le pâturage, en particulier lorsque l'abandon de cette pratique peut mettre les habitats et les espèces en péril. Ce contraste est particulièrement visible lorsque l'on compare la rive nord à la rive sud de la Méditerranée.

En Europe, cette pratique agricole est souvent considérée comme la bienvenue. Elle est même préconisée par les gestionnaires dans les zones où le pâturage ciblé peut jouer un rôle précieux en termes de gestion par exemple, pour prévenir ou contrôler l'expansion d'espèces invasives. Plus généralement, le pâturage est considéré comme un "système agricole à haute valeur naturelle "(HVN), qui contribue à préserver des espèces menacées, les habitats agricoles et les processus écologiques.

Le premier bloc de l'atelier sera consacré à la présentation du concept d'agriculture HVN et au partage d'expériences issues de zones où la gestion des pâturages est encouragée.

En Afrique du Nord et dans certaines parties de l'Est de la Méditerranée, le problème est tout autre. La pauvreté dans les zones rurales associée à une dépendance aux ressources naturelles beaucoup plus marquée pour la subsistance des populations, maintient une "pression agricole" très élevée dans une grande partie de la région. En effet, la combinaison de la collecte du bois de feu, de la pratique du labour et du pâturage intensif a des impacts conséquents sur de nombreuses zones importantes pour les plantes (ZIP). La prise en compte de ces problématiques nécessite l'usage d'outils tels que l'Ecosystem-based approach soutenu par l'UICN et présenté et discuté lors du deuxième bloc de cet atelier.

Dans cette approche intégrée, les populations locales et leurs usages des espaces naturels sont soigneusement pris en compte lors de l'élaboration des plans de conservation. Lors de l'atelier, nous allons évoquer des expériences de conservation en cours, menées en collaboration avec les populations locales. Les participants seront invités à contribuer activement à l'atelier en faisant part de leurs expériences et des réussites et des difficultés qu'ils ont pu rencontrer afin d'entretenir les échanges sur le sujet. Des récits stimulants de réussites en matière de collaboration entre éleveurs et gestionnaires dans les zones concernées seront particulièrement bienvenus. L'objectif global sera de mettre l'accent sur la façon dont ces défis ont été relevés, afin d'identifier des outils et des stratégies clés pouvant être utilisés pour aborder les problèmes liés aux questions pastorales et d'atteindre les objectifs en matière de conservation.

Agenda

Capacity building session 2: Pastoral management and plant conservation
Sessions de renforcement des capacités 2: Gestion pastorale et conservation des plantes

Convenor: *Jabier Ruiz, European Forum on Nature Conservation and Pastoralism*
Facilitator: *Marcos Valderrábano, IUCN-Med*

15:00 – 15:05	Welcome: Aims and rules of the workshop.
15:05 – 15:30	CS.2.1. Round of one minute presentations: Name, Organisation, Place of Origin, Your main concerns regarding pastoral management and plant conservation.
15:00 – 16:15	CS.2.2. Fostering grazing when land abandonment is the issue: High Nature Value farming in Europe. *Jabier Ruiz, European Forum on Nature Conservation and Pastoralism.*
	Experiences and Discussion (All)
16:15 - 17:00	CS.2.3. Alleviating grazing when resources are being overexploited: the Ecosystem-based Approach. *Jabier Ruiz, European Forum on Nature Conservation and Pastoralism.*
	Experiences and Discussion (All)
17:00 –17:30	Final debate: what are our key tools and strategies to deal with these challenges?

Capacity building session 3: From *ex situ* to *in situ* conservation

The preservation of biodiversity represents a well-established priority in global environmental policies and is a key component of the main international strategic plans (i.e. the Global Strategy for Plant Conservation, the Aichi Biodiversity Targets, and, at European level, the "Habitats Directive"). However the loss of biodiversity is constantly increasing mainly by the continuous and growing human-related impact (i.e. pollution, global change, industrialization, urbanization and consequent "waste of land").

The Mediterranean Basin hosts a flora of around 25,000–30,000 flowering plants and ferns, c. 50% of them are endemic plants; in particular the aisled geographically or ecologically territories, such as islands, islets, and mountains, constitute the main centres of plant diversity. However, this plant richness is severely threatened and it deserves particular attention in a conservation point of view.

Ex situ strategies (i.e. conservation of species outside their natural habitats), to date, represents one of the most effective ways to conserve plant diversity. Germplasm preservation include seed banks, pollen and tissue storage, vegetative cloning and maintaining whole plants , which allows preserving large amounts of genetic material in a small space. Optimistically, *ex situ* conservation could reach significant levels in the coming years (at least in some territories worldwide) and with accessions representative of natural variability. However, the main question is how to use these accessions for future conservation activities (if necessary).

In situ strategies (i.e. conservation of species in their natural habitats) is considered the most appropriate way of conserving biodiversity and the preservation of the areas where populations of species naturally exist is an underlying condition for their conservation. The importance of *in situ* conservation of endangered plant species has been highlighted by the Target 7 of the GSPC for 2020 which scheduled that at least 75% of known threatened plant species should be conserved *in situ*.

Conversely, despite the importance of the *in situ* measures, their full application remain far from being widely achieved. To prevent the extinction risk of threatened species and to improve their conservation status, translocations have become increasingly important in management worldwide and they represent the ideal scenario although it is not often practicable. Translocations (including population reinforcement, reintroduction and introduction) aim to enhance population viability, for instance by increasing population size and/or genetic diversity. The potentiality of translocations to contribute to the recovery of threatened species is particularly significant when is a part of integrated *ex situ* and *in situ* conservation activities. In particular when seeds stored *ex situ* are the starting point for producing transplants to be reintroduced in the natural environment; the strong integration between *in situ* and *ex situ* conservation strategies is the emerging tools in the conservation of plant diversity .

However, many limits remain in the implementation of these conservation actions, such as the high both economic and time costs, the availability of the optimal site, the difficulties on the implementation of these actions on private areas and the high uncertainty of success principally connected to natural stochastic events. Thus, considering these several limitations, it is often necessary to identify other active management measures, such as the fences erection (to prevent grazing and to protect the most critical life-cycle stage for population survival) or to remove alien invasive plants, or to plan a low-cost translocation project.
Although the active *in situ* conservation actions are the best way to conserve natural plant populations, very few experiences has been done in the Mediterranean territories compared to what is necessary to prevent the extinction risk of many plant species. Thus, taking into account the limited available economical funds and human resources, the implementation of the active conservation measures will be the first purposes.

Sessions de renforcement des capacités 3: Passer des mesures de conservation *ex situ* à *in situ*

La préservation de la biodiversité représente une priorité bien établie dans les politiques environnementales mondiales et est un élément clé des principaux plans stratégiques internationaux (à savoir, la Stratégie mondiale pour la conservation des plantes, les objectifs d'Aichi, et au niveau européen, la « directive habitats »). Toutefois, la perte de la biodiversité est en constante augmentation et cela, à cause des activités humaines, à savoir la pollution, le changement climatique, l'industrialisation et l'urbanisation.

Le bassin méditerranéen abrite une flore d'environ 25.000-30.000 plantes à fleur et fougères. 50% d'entre elles sont endémiques, en particulier, au sein des zones géographiquement ou écologiquement isolées, comme les îles, les îlots et les montagnes, qui constituent les principaux centres de diversité végétale. Toutefois, cette richesse végétale est gravement menacée et elle mérite une attention particulière.

Les stratégies *ex situ* (à savoir la conservation des espèces en dehors de leurs habitats naturels) représentent à ce jour, l'un des moyens les plus efficaces pour préserver la diversité végétale. La conservation du matériel génétique comprend les banques de semences, le pollen, le stockage des tissus, le clonage végétal et le maintien des plantes entières, ce qui permet de préserver de grandes quantités de matériel génétique dans un espace restreint. De façon optimale, la conservation *ex situ* pourrait atteindre des niveaux significatifs dans les années à venir (au moins sur certains territoires) et inclure des accessions représentatives de la variabilité naturelle. Cependant, la principale question est de savoir comment utiliser ces variantes dans les activités de conservation futures (si nécessaire).

Les stratégies *in situ* (à savoir la conservation des espèces dans leur habitat naturel) sont considérées comme les mesures les plus appropriées pour la conservation de la biodiversité et la préservation des zones où les populations d'espèces existent naturellement dans des conditions permettant leur conservation. L'importance de la conservation *in situ* des espèces végétales menacées a été mise en évidence par l'objectif 7 du SMCP pour 2020, qui décrète qu'il faudrait conserver *in situ* au moins 75% des espèces végétales menacées connues sur Terre.

En revanche, malgré l'importance de mettre en œuvre des mesures *in situ*, elles sont loin d'être appliquées en toute situation. Pour éviter le risque d'extinction des espèces menacées et améliorer leur état de conservation, la translocation est devenue de plus en plus courante dans la gestion des plantes de manière globale. Celle-ci représente la méthode idéale mais elle est rarement applicable. La translocation (y compris le renforcement de la population, la réintroduction et l'introduction) vise à améliorer la viabilité de la population. Par exemple, en augmentant la taille de la population et/ou la diversité génétique. La translocation a le potentiel de contribuer au rétablissement des espèces menacées et est particulièrement importante quand elle intègre les méthodes *ex situ* et *in situ* dans les activités de conservation. En particulier lorsque les graines stockées *ex situ* sont le point de départ pour la production de transplants à des fins de réintroduction dans leurs milieux naturels. L'intégration des stratégies *in situ* et *ex situ* dans les stratégies de conservation est un outil novateur et émergent pour la conservation de la diversité végétale.

Cependant, la mise en œuvre de ces actions de conservation reste très limitée. En effet, les coûts économiques élevés, le manque de temps, la disponibilité du site optimal, les difficultés de mise en œuvre de ces actions sur des terrains privés et la forte incertitude quant au succès de ces mesures (principalement liée aux événements stochastiques naturels) rendent la tâche ardue. Compte tenu de ces diverses limites, il est souvent nécessaire d'identifier des mesures de gestion alternatives, comme l'édification de clôtures (pour empêcher le pâturage et pour permettre le bon déroulement des étapes du cycle de vie des plantes les plus critiques pour leur survie), l'éradication des plantes exotiques envahissantes et la planification de projets de translocation à faible coût.

Bien que les mesures de conservation *in situ* représentent la meilleure façon de conserver les populations de plantes naturelles, très peu d'expériences ont été menées dans les territoires méditerranéens comparativement à ce qu'il devrait être fait pour prévenir l'extinction de nombreuses espèces végétales. Ainsi, en tenant compte des fonds disponibles et des ressources humaines (toutes deux limitées), la mise en œuvre des mesures de conservation alternatives seront mises en avant.

Agenda

Capacity building session 3: From *ex situ* to *in situ* conservation capacity building session
Sessions de renforcement des capacités 3: Passer des mesures de conservation *ex situ* à *in situ*

Convenors: *Gianluigi Bacchetta, University of Cagliari, Yiota Gotsiou, MAICh, and Giuseppe Fenu, University Sapienza*
Facilitator: *Bertrand de Montmollin, IUCN / SSC Mediterranean Plant Specialist Group*

15:00 – 15:15	Capacity building session presentation. *Bertrand de Montmollin, IUCN/SSC Mediterranean Plant Specialist Group*.
15:15 – 15:50	How to develop an *ex situ* conservation plan of plant species? Challenges for the Mediterranean region. *Elinor Breman, Millennium Seed Bank, Royal Botanic Gardens, Kew.*
15:50 – 16:00	Experiences and Discussion (All)
16:00 – 16:20	Innovative perspectives of the Sardinian Germplasm Bank (BG-SAR) for the preservation of the Mediterranean plant diversity. *Gianluigi Bacchetta, Centre for Conservation of Biodiversity, University of Cagliari.*
16:20 – 16:30	Experiences and Discussion (All)
16:30 – 16:50	Results and lessons learned from the international cooperation among Mediterranean plant conservation centres. *Panagiota Gotsiou, Mediterranean Agronomic Institute of Chania – MAICh.*
16:50 – 17:00	Experiences and Discussion (All)
17:00 – 17:20	*Ex situ* and *in situ* conservation activities on threatened plants in Sardinia. *Giuseppe Fenu, University Sapienza Rome.*
17:20 – 17:30	Experiences and Discussion (All)
17:30 – 17:50	CS.3.1. From *ex situ* to *in situ*: the risk of stowaways from the nursery growing session. *Emilio Laguna Lumbreras, Generalitat Valenciana.*
17:50 – 18:00	Experiences and Discussion (All)

Convenors

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ABSTRACTS

CS.1.1. IMPLEMENTATION OF PLANT CONSERVATION PLANNING AT SUB-NATIONAL AND LOCAL LEVELS

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Planning and implementation of plant conservation are increasingly made at low territorial level. On one hand, when the responsibility is focused on a national authority, participation of low-territorial level – regions, provinces, counties, departments, municipalities – through local people or entities used to be a crucial issue to ensure the success of a conservation plan, and often favours considerable savings in the plan budgets. On the other hand, there are countries where the regions or other sub-national authorities are empowered by law to develop plant conservation activities (i.e. in Spain, where the main authority for nature conservation are the Autonomous Communities, formerly named Regions).
The sub-national and local implementation depends on the legal frame for nature conservation in each country, as well as their tradition involving of local people in conservation tasks. For instance, Italian NGOs are often involved in the management and even coordination of Natural Protected Areas (NPA), and entities such as WWF-Italy have implemented measures for conservation of some endangered species (e.g., for *Calendula maritima* in Sicily); in other Italian regions, universities and research centers play an essential role to implement conservation plans (e.g., CCB-Università degli Studi di Cagliari in Sardinia). However, most national and regional laws around the Mediterranean traditionally have reduced the role of conservation NGOs to a mere collaboration – even being often the main actors in plant conservation.
The keystone to develop a conservation plan often lays on the land property, and landowners used to be reluctant to collaborate with supra-local governments; however, they often accept other ways to collaborate through land custodianship performed by local NGOs or local public entities. This way is increasingly developed in Spain and Portugal, where the LIFE-Nature program has supported concrete actions for endangered species (e.g., for *Asphodelus bento-rainhae* in Serra da Gardunha, Portugal; or all the species protected by the EU Habitats Directive in Minorca, Spain).
As a relevant initiative born in the Valencian Community (Spain) the plant micro-reserves (PMRs) are being developed in different ways and legal frameworks since the 90's. In most cases, the initiative to create new protected microsites is launched in a bottom-up approach from local NGOs, municipalities or research centres, both in regions, provinces or 'county' levels (e.g., Valencian Community, Castilla-La Mancha, Basque Country provinces, Minorca, etc. in Spain; Chania province in Crete, Greece; St. Katherine's Protectorate in Sinai peninsula, Egypt), or even at mid to small-sized country levels (i.e. Lebanon, Cyprus).

CS.1.2. INVENTORYING AND DELIMITATION OF ALGERIAN IPA, ONGOING RESEARCH

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In 2010, under the project "Important Plant Areas (Key Biodiversity Areas for Plants) in the south and east Mediterranean region" supervised by IUCN-Plantlife, 22 Important Plant Areas (IPA) have been identified in northern Algeria covering an area of approximately 11000 km2. The identified IPA have been recognized considering a shaving the highest number of "IPA selection species" that is threatened species as defined by the 1997 IUCN global red list of plants, locally endemic species and nationally threatened species. By combining the criteria of endemism and rarity, 152 trigger species have been identified, mainly Algerian national endemics and also several Algerian-Moroccan and Algerian-Tunisian endemics depicted respectively in western and eastern IPA.
Currently, *in situ* research is launched to identify and recognize new priority sites for plants. It aims at completing the first preliminary list of Algerian Important Plant Areas proposed by Yahi *et al.* in 2012. A revision of the list of trigger species is also undertaken as well as using other criteria such as criterion B (diversity) and criterion C (habitats).
The new IPA, a total of 21, can be related to six mains habitat categories: coastal sites, saltmarshes, wetlands, dunes, forests and mountains. They all harbour species with high ecological and patrimonial values and are identified mainly in the west and center of the country and deserve to be analysed in details.

CS.1.3. SETTING CONSERVATION PRIORITIES IS A PRIORITY: CASE OF LEBANESE FLORA

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After more than 30 years of war, Lebanon is witnessing a creeping urbanization of cities to the surrounding countryside and mountains, colonizing river borders, mountain peaks and the last shreds of beaches. Relatively pristine habitats are being lost at unprecedented rates as an expanding human population converts them to urban centres, roads, industrial zones. As these habitats are altered, untold numbers of species are disappearing before they have been recognized by our generation and much less studied by our scientists.
Mindful about the necessity to conserve the degrading ecosystem and depleting biodiversity of Lebanon and given constrained resources, we had to take decisions by concentrating on particular species and on particular places. But our efforts were trivial. Thanks to a Critical Ecosystem Partnership Fund endowed grant awarded to Saint-Joseph University, we are setting national conservation priorities in terms of space, by defining the Important Plant Areas and in terms of species, by setting the first national red list of endangered taxa.
Moreover we worked, in the framework of this project, on three different land ownership models to set protected areas: Public lands, private lands and Lands belonging to religious community. On the ground, different protection scenarios are tested to fit these different land ownership types and to deal with the environmental stewardship.
On the other hand, molecular and cytogenetic studies are conducted in our laboratory targeting different species considered as threatened and in need of *in situ* and *ex situ* conservation.
Practical actions as population translocation, *ex situ* conservation and management plans will be also presented as preliminary results of this project.

CS.3.1. FROM *EX SITU* TO *IN SITU*: THE RISK OF STOWAWAYS FROM THE NURSERY GROWING MEDIA

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Major production of plants of endangered species in the Valencian Community (Spain) is made in two nurseries of the regional government (Generalitat Valenciana). Aquatic plants are grown in the CCEADCV [Valencian Community's Conservation Centre for Freshwater Species] and terrestrial ones are produced by the CIEF [Centre for Forestry Research and Experimentation]. In addition the OTDA (Technical Office for Devesa-Albufera site), a unit of the municipality of Valencia, produces relevant amounts of coastal species to recover the sand dunes of the Albufera Natural Park, near Valencia city.
More than 10 years ago, massive germination of several new invasive species were detected both in ODTA and CIEF nurseries, and the monitoring of culture practices shown that the coconut fibre – used as sponging substrate in growing media –, carried the seeds of several stowaway taxa. Some of them are considered as worldwide nursery weeds – i.e. *Cardamine flexuosa, Epilobium ciliatum, Marchantia polymorpha* var. *ruderalis, Oxalis stricta,* etc. –, but the current list of stowaways found in the Valencian Community nurseries enclose more than 40 species, including several novelties for the European flora such as *Bulbostylis thouarsii (Cyperaceae), Cleome viscosa (Cleomaceae), Hedyotis angustifolia (Rubiaceae), Murdannia spirata (Commelinaceae), Muntingia calabura (Muntingiaceae), Rynchosia aurea (Leguminosae)* or *Sparmacoce latifolia (Rubiaceae)*. The lack of invasive species in the nursery of CCEADCV is due to their different grown media, mainly compound by mineral black peat, without coconut fibre.
The use of coconut fibre is often recommended for quality standards of forest plant production, being extensively used in Spain, and often imported from south-eastern Asia. Searching for the travel made by the stowaways, interviewing substrata importers, the origin has been located in Sry Lanka, were the main coconut fibre shipments are produced in vast fields. The simultaneous detections of the same stowaway species in other public and private nurseries in the Valencian Community showed that the imported coconut fibre is not properly sanitized.
Most stowaway plants often germinate after 3-4 months of regular watering, but other species can emerge afterwards for 1-2 years, a time water has enough removed the allelopathic content of coconut fibre. A large proportion of these species are tropical and subtropical, posing no risk for plantations in dry Mediterranean shrublands or high-mountain vegetation. However the substrata of grown endangered plants, containing hidden stowaway seeds of new invasive species, can become a serious problem if planted on more sensible habitats such as dunes, lowland wetlands, lauroid forests, etc.

Consultation process session: Mediterranean Basin Hotspot Ecosystem Profile Update (CEPF)

The Critical Ecosystem Partnership Fund (CEPF) is updating the Ecosystem Profile for the Mediterranean Basin Hotspot. This document describes the conservation status of the region and will be used to create a new investment strategy for CEPF. All stakeholders are invited to input into this process.

Ecosystem Profile is built around the concept of conservation outcomes and Key Biodiversity Areas (KBAs). Conservation outcomes are the entire set of conservation targets that need to be achieved in order to prevent species extinctions and biodiversity loss.

The existing Ecosystem Profile identifies 1.110 KBAs, and the update aims at including newly identified KBAs including the Important Plant Areas (IPA).

During the 1st Mediterranean Plant Conservation Week a consultation session will take place with the aim at refining, validating data, solving boundary conflicts to ensure that Important Plant Areas; and plant information can be considered in the ecosystem profile. This session will also allow plant experts to provide input on main threats to plant diversity, and propose criteria for identification of priorities for conservation.

Specifically, we would like plant experts to review the IPA boundaries and to contribute more information on the sites or on trigger species occurring at the sites. This might include information which helps to define IPA boundaries especially where sites are overlapping (with protected areas or with other KBAs), as well as data on species which help to confirm that an IPA is meeting the new IUCN KBA standard (https://portals.iucn.org/library/sites/library/files/documents/Rep-2016-005.pdf).

An on-line consultation (http://arcg.is/2bD1NqR) is being launched in parallel with a series of national consultation meetings which are being held across the hotspot. For those attending the consultation session at the 1st Mediterranean Plant Conservation Week, this microsite provides an opportunity to view information on-line in advance of the meeting.

The CEPF Consultation process session is open to all the participants of the 1st Mediterranean Plant Conservation Week. Your participation is highly important to ensure consistency of plant information across Mediterranean, clear indication of threats to plant diversity, and identification of key sites for plant diversity in the next ecosystem profile.

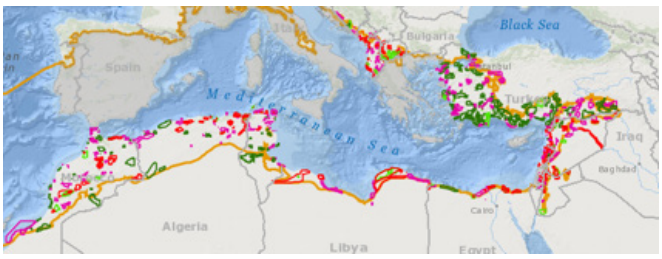

Figure 1: Draft KBA Inventory (including IPA) for consultation in the update of CEPF Ecosystem Profile

Chair: Marcos Valderrábano, IUCN-Med.

Objectives

(1) To review and consider revisions to the draft inventory of Key Biodiversity Areas specialty revision of Important Plant Areas with focus in solving data deficiencies, and boundaries issues
(2) To review plant diversity data and analysis in the Ecosystem Profile
(3) To identify the threats to plant biodiversity in the region, recommend solutions, and agree on the contributions that can be made by civil society to addressing these threats

Agenda Chair: *Marcos Valderrábano, IUCN-Med*	
08:30 - 09:00	**Arrival**
	Introduction
09:00 - 09:20	Introduction to CEPF and the Mediterranean Hotspot. Overview of progress and plans for CEPF investment in the Mediterranean
09:20 - 09:40	Context for biodiversity conservation (conservation importance, threats, socio-economic and policy context, civil society assessment, and current conservation funding)
09:40 - 10:00	Important Plant Areas. Presentation of existing data and website. Presentation Current IPA criteria and new KBA standards criteria and thresholds Missing data and gaps
10:00 - 10:30	Questions and answers Clarifying the starting point
10:30 - 11:00	Coffee break
	Important Plant Areas (1)
11:00 - 13:00	Break out groups to review draft Key Biodiversity Areas with focus on IPA Revision of Trigger species at site level Revision of boundaries isssues
13:00 – 14:00	Lunch
	Important Plant Areas (2)
14:00 – 15:00	Solving problems and restitution. Clarification in way forward for IPA identification and validation Breakout groups to also prioritize threats as basis for final session
	Threats to biodiversity and solutions
15:00 – 16:00	Solutions to threats and contribution to solutions by civil society
16:00 – 16:30	**Final remarks and next steps**

Processus de Consultation: Mise à jour du profil d'écosystème du hotspot du bassin méditerranéen (CEPF)

Le Critical Ecosystem Partnership Fund (CEPF) a initié une mise à jour du profil d'écosystème du hotspot du bassin méditerranéen. Une fois complété, ce document permettra d'évaluer l'état de conservation de la nature de la zone sensible et de définir une stratégie pour la nouvelle phase de l'octroi du CEPF dans la région méditerranéenne. Toutes les parti-prenantes sont invitées à participer activement à ce processus.

Le profil d'écosystème se base sur les résultats de conservation et sur le concept des Zones clés pour la biodiversité (ZCB). Les résultats de conservation sont l'ensemble des objectifs de conservation qui doivent être réalisés afin de prévenir l'extinction des espèces et la perte de la biodiversité.

Le profil de l'écosystème existant identifie 1.110 ZCB, et la mise à jour vise à inclure les ZCB nouvellement identifiées, y compris les Zones importantes pour les plantes (ZIP).

Au cours de la 1ère Semaine de la conservation des plantes méditerranéennes, une séance de consultation aura lieu dans le but d'affiner et de valider les données recueillies. De plus, cette consultation permettra de résoudre les problèmes liés au chevauchement de différents zonages à enjeux pour veiller à ce que les zones importantes pour les plantes et les informations concernant les plantes puissent être considérées dans le profil d'écosystème. Cette session permettra également aux spécialistes des plantes d'apporter leur contribution à propos des principales menaces à la diversité des plantes, et de proposer des critères pour l'identification des priorités en matière de conservation.

Plus précisément, nous aimerions que les botanistes examinent les limites des ZIP et qu'ils contribuent à l'apport d'informations sur ses sites ou sur les espèces critiques se trouvant au sein de ces sites. Cela pourrait apporter des informations qui aideront à définir les limites des ZIP, en particulier lorsque des zonages se chevauchent (chevauchement avec des aires protégées ou avec d'autres ZCB), ainsi que des données sur les espèces qui aideraient à confirmer que la ZIP répond à la nouvelle norme UICN pour les ZCB.

Une consultation en ligne (http://arcg.is/2bD1NqR) a été lancée en parallèle avec une série de consultations nationales qui se sont produites au sein du hotspot. Pour ceux et celles qui vont participer à la séance de consultation lors de la 1ère Semaine pour la conservation des plantes Méditerranéenne, ce microsite offre la possibilité de visualiser les informations en ligne et cela avant la réunion.

La session de consultation du processus CEPF est ouverte à tous les participants de la 1ère Semaine de la conservation des plantes Med. Votre participation est cruciale pour assurer la cohérence de l'information sur les plantes à travers la Méditerranée, pour connaitre les menaces pour la diversité végétale, et pour identifier les sites clés pour la diversité végétale dans le prochain profil d'écosystème.

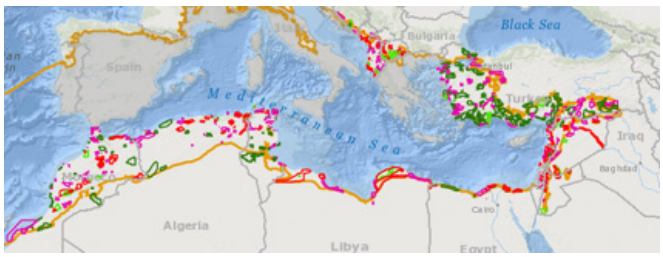

Figure 1: Projet inventaire des ZCB (ZIP comprises) pour consultation lors de la mise à jour du profil d'écosystème CEPF

Président : Marcos Valderrábano

Objectifs
(1) Passer en revue et examiner les révisions de l'inventaire des Zones clés pour la biodiversité en s'attardant plus particulièrement sur les révisions des Zones importantes pour les plantes et cela en se concentrant sur la résolution des lacunes dans les données et les questions de délimitation
(2) Examiner les données et l'analyse de la diversité végétale dans le profil d'écosystème
(3) Identifier les menaces qui pèsent sur la biodiversité végétale dans la région, recommander des solutions, et se mettre d'accord sur les contributions qui peuvent être faites par la société civile pour faire face à ces menaces

Programme Chair: *Marcos Valderrábano, IUCN-Med*	
08:30 - 09:00	**Arrivée des participants**
	Introduction
09:00 - 09:20	Introduction au CEPF et au hotspot Méditerranéen. Aperçu des progrès et des plans d'investissement du CEPF dans la Méditerranée
09:20 - 09:40	Contexte de la conservation de la biodiversité (importance de la conservation, quelles sont les menaces, le contexte socio-économique et politique, l'évaluation de la société civile, et le financement actuel)
09:40 - 10:00	Zones importantes pour les plantes : Présentation des données et du site web existants. Présentation des critères actuels, des nouveaux critères et des seuils de désignation pour les ZCB. Données manquantes et lacunes
10:00 - 10:30	Questions et réponses Clarifier les points initiaux
10:30 - 11:00	Pause café
	Zones Importantes pour les Plantes (1)
11:00 - 13:00	Désignation des groupes pour l'examen des zones clés pour la biodiversité en mettant l'accent sur les ZIP Révision des espèces critiques au niveau des sites Révision des questions de délimitation
13:00 – 14:00	Déjeuner
	Zones Importantes pour les Plantes (2)
14:00 – 15:00	Résolution des problèmes et restitution. Clarification de la voie à suivre pour l'identification et la validation des ZIP Groupes de discussion afin de discuter des menaces comme base pour la session finale
	Les menaces à la biodiversité et solutions
15:00 – 16:00	Solutions aux menaces et contribution aux solutions proposées par la société civile
16:00 – 16:30	**Remarques finales et prochaines étapes**

MEDITERRANEAN PLANT CONSERVATION WORKSHOP
ATELIERS SUR LA CONSERVATION DES PLANTES MÉDITERRANÉENNES

This two-day workshop focuses on strengthening networking surrounding, exchanging experiences and mutual learning on the topic of plant conservation in the Mediterranean Basin.

Individual sessions will be focused on the following topics:
- Session 1: Integrating wild plants information for site management and conservation
- Session 2: Cultural practices for conservation in the Mediterranean region
- Session 3: Community-conserved areas in the future management of biodiversity, land and water in the Mediterranean
- Session 4: Networking, building synergies and involving volunteers and citizen science

Ces deux jours de sessions seront consacrés à la consolidation du réseau d'acteurs de la conservation des plantes méditerranéennes et au partage d'expériences issues du bassin méditerranéen.

Les contenus seront structurés autour des thématiques suivantes :
- Session 1: Intégration des informations relatives aux plantes sauvages pour la gestion et la conservation des sites
- Session 2: Pratiques culturelles de conservation dans la région méditerranéenne
- Session 3: La conservation communautaire des espaces dans la gestion future de la biodiversité, du sol et de l'eau dans la région méditerranéenne
- Session 4: Réseau, mise en place de synergies, implication de volontaires et sciences citoyennes

Allium carmeli (Palestine). Photo by: Banan AlSheikh.

Session 1: Integrating wild plants information for site management and conservation

This session will explore how to translate plant information (species, populations, habitats, threats…) into concrete plant conservation actions, or even plant conservation planning.

Plant information at site level is often dispersed, unavailable, or out-of-date. In addition, translating existing wild plant information into decision-making is not a straightforward process. This session gathers examples from around the Mediterranean where the results of field survey studies or other plant data may successfully translate into site-based conservation actions.

The session will also provide space for the elaboration of collaborative proposals, either from scientists, managers, local populations or civil society groups who wish to test innovative collaboration models.

It will explore possible avenues for collaboration between scientists and decision-makers at site level with a view to developing conservation policies and site based actions involving local populations.

In the context of this session, a "site" is defined according to its management scale: it includes not only IPA but also Protected Areas, community managed areas, or other management units.

Stories and cases of coordination between managers, scientists, and communities or local users will be presented.

Session 1: Intégration des informations relatives aux plantes sauvages pour la gestion et la conservation des sites

Cette session s'attachera à explorer de quelle manière les informations disponibles sur les plantes (espèces, populations, habitats, menaces, etc.) peuvent être traduites en actions concrètes de conservation des plantes, voire en une planification générale de la conservation des plantes.

Les informations sur les plantes à l'échelle des sites sont fréquemment insuffisantes, obsolètes ou mêmes inexistantes. Quoi qu'il en soit, traduire les informations disponibles sur les plantes en prises de décisions ne constitue pas une tâche facile. La session permettra de passer en revue des exemples, issus du bassin méditerranéen, dans lesquels les résultats des études de terrain ou d'autres données relatives aux plantes ont pu être traduits avec succès, en actions de conservation propres aux sites.

Un espace sera réservé au sein de cette session à des propositions de collaboration, qu'elles émanent de scientifiques, gestionnaires, populations locales ou groupes de la société civile désireux de suggérer des modèles de collaboration innovants pouvant être mis à l'épreuve.

Y seront également explorées des voies de collaboration à l'échelle des sites entre scientifiques et décideurs, afin de développer des politiques de conservation et des actions propres au site impliquant les populations locales.

Dans le contexte de cette session, le « site » est défini conformément à l'échelle de gestion, et peut donc ne pas se référer uniquement à des ZIP*, mais également à des aires protégées, des aires à gestion communautaire ou autres unités de gestion.

*Les Zones importantes pour les plantes sont des sites reconnus internationalement pour leur diversité en plantes sauvages et en champignons ; elles sont identifiées sur la base de critères normalisés.

Enfin, cette session incorporera des récits et des exemples de coordination entre gestionnaires, scientifiques, populations et utilisateurs locaux.

Chair persons/Modérateurs

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Agenda **Session 1: Integrating wild plant information for site management and conservation** **Session 1: Intégration des informations relatives aux plantes sauvages pour la gestion et la conservation des sites**	
08:30- 08:45	Workshop opening Introduction and objectives of the session *Marcos Valderrábano, IUCN-Med/Bertrand de Montmollin, IUCN-SSC MPSG.*
08:45-09:15	Opening Session 30 min (20 min presentation + 10 interaction) S.1.1. Valencian plant micro-reserves: 25 years of a pioneer experience to conserve Important Plant Areas. *Emilio Laguna, Generalitat Valenciana.*
09:15-11:00	Short Presentations - Pecha kucha session (6 min presentation) S.1.2. Towards the conservation and management of Mediterranean coastal sandy ecosystems and their endemic flora: The Lebanese coast as a case study. *Mohammad Souheil Al-Zein, American University of Beirut.* S.1.3. Conserving range- and site-restricted endemics in an urban setting: Beirut and coastal Lebanese endemics as a case study. *Moustapha Itani, American University of Beirut.* S.1.4 La gestion participative pour la conservation de la diversité de la flore et des habitats : Cas de la ZIP de Jbel Bou-Nacer. *Toufik Ouagga, Haut Commissariat aux Eaux et Forêt et à la Lutte Contre la Désertification.* S.1.5.Moroccan Biodiversity and Livelihoods Association - Integrated approach to plant conservation and cultural practices in the Moroccan High Atlas. *Hassan Rankou, Global Diversity Foundation.* S.1.6.Biodiversity situation in Palestine- West Bank. *Banan AlSheikh, NARC.* S.1.7. Enjeux de conservation d'une zone humide d'eau douce méditerranéenne exceptionnelle : la Garâa Sejenane (Tunisie septentrionale). *Amina Daoud-Bouattour, Faculté de Sciences de Tunis.* S.1.8. Exploitation de la cartographie et la dynamique de la végétation des marais de l'écosystème Ichkeul- Tunisie pour l'identification d'un outil d'aide à sa gestion et conservation. *Zeineb Ghrabi, INAT.* S.1.9. La Zone importante pour les plantes Chélia (Aurès), Algérie : importance et bilan de connaissance. *Yassine Beghami, Université de Batna.* Questions to the speakers
11:00-11:30	Coffee Break
11:30-12:00	Main presentation. 30 min (20 min presentation + 10 interaction) S.1.10. The project CAREMEDIFLORA: conservation actions for rare and endangered island mediterranean flora. *Gianni Bachetta, Università degli Studi di Cagliari.*
12:00-13:30	Short Presentations - Pecha kucha session (6 min presentation) S.1.11. Réflexion sur l'approche participative à adopter pour la conservation d'espèces endémiques dans le Mont Chélia (Khenchela et Batna-Algérie). *Loucif Ilham, DGF Algerie.* S.1.12. Inventaire et conservation de la flore des ZIP de Gouraya (Béjaia, Algérie). *Khellaf Rebbas, Université Mohamed Boudiaf de M'sila.* S.1.13. Etat des connaissances et mesures de conservation de la flore endémique dans l'Atlas Tellien Occidental d'Algérie. *Mohamed Djamel Miara, Université d'Oran.* S.1.14. Etude de la dynamique végétale et de la diversité floristique des marais de la Macta (Algérie). Application à la conservation et à la préservation de la biodiversité. *Zahira Souidi, Université de Mascara.* S.1.15. Conservation status assessment of *Primula boveana* in South Sinai, Egypt. *Karim Omar, Consultant.* S.1.16.Threatened habitats on Crete – Conflicts and Perspectives. *Florian Goedecke Georg-August, University of Goettingen.* S.1.17. Integrating mapping data for conservation strategies of plant diversity in traditional Mediterranean agro-ecosystems: the case of Greek. *Stefan Meyer, Georg-August-University of Goettinge.* S.1.18. Lessons learned and goals yet to reach: Mediterranean islands plant conservation ten years after the first edition of the Top 50. *Salvatore Pasta, Consultant.* Questions to the speakers

Agenda **Session 1: Integrating wild plant information for site management and conservation** **Session 1: Intégration des informations relatives aux plantes sauvages pour la gestion et la conservation des sites**	
Posters	S.1.19. Important Plant Areas in Morocco: Importance, diversity, threats and conservation strategies. *Mohammed Taleb, Intitute Scientifique*. S.1.20. Recovery plans for valencian endangered species. *Emilio Laguna, Generalitat Valenciana.* S.1.21. Invasion and management of camphorweed, *Heterotheca subaxillaris*, in Tyre Coast Nature Reserve, Lebanon. *Magda Bou Dagher Kharrat. Université Saint-Joseph.* S.1.22. Is the High Atlas hotspot slipping away? *Jah-Wild Skipper, University of Reading.* S.1.23. Écologie et distribution de deux Aracées à répartition très localisée en Méditerranée *Biarum dispar* Schott. et *Ambrosina bassii* L. *Safa Ben, Faculté des lettres, des arts et des Humanités de la Mannouba, Tunisie.* S.1.24. Valorisation et conservation de la biodiversité d'une ZIP de Tunisie : Garâa Sejenane-Mogods. *Imtinen Jilani, Ben Haj Jilania, Faculté des lettres, des arts et des humanités de la Manouba. Faculté des Sciences de Tunis.* S.1.25. Conservation status assessment of populations of two priority *Centaurea* species in protected areas of the Western Greece. *Maria Panitsa, Department of Environmental and Natural Resources, University of Patras, Greece; Department of Biology, University of Patras, Greece.* S.1.26. Une réédition augmentée et actualisée du livre: Arbres et arbustes du Nord de l'Afrique. *Jesús Charco, Centre de Recherches Environnementales de la Méditerranée (CIAMED)*. S.1.27. Mediterranean temporary pond plant conservation on Mt. Oiti and Mt. Kallidromo in the region of Sterea Ellada, Greece. *Pinelopi Delipetrou et al., University of Athens*. S.1.28. Jabal Moussa Biosphere Reserve: Ecosystem significance and conservation challenges. *Myrna Semaan, Association for the Protection of Jabal Moussa*.

Session 2: Cultural practices for conservation in the Mediterranean region

This session will explore the diversity of Cultural Practices of Conservation (CPCs) that benefit plant conservation in the Mediterranean region. Participants will share experiences in documenting, promoting and protecting CPCs in their areas of work.

Local and indigenous communities around the Mediterranean have shaped the landscapes for thousands of years. Many cultural practices and lifestyles that have a positive effect on nature and biodiversity still exist today, but they are by and large threatened. Practices such as mobile pastoralism, traditional agriculture and bioclimatic architecture protect and enhance biodiversity, maintain long-term productivity and sustain livelihoods. Mediterranean ecosystems have co-evolved with people: cultural practices in part are responsible for ecological heterogeneity and biodiversity patterns in this area. However, CPCs are rarely taken into account in conservation actions and planning.

This session will showcase examples of CPCs, as well as experiences of documenting and supporting CPCs, from around the Mediterranean region. In tandem with the subsequent session on Friday 28th October, discussions in this session will form the basis for the development of an initial roadmap for CPCs protection and inclusion in conservation action and planning at the regional level.

This session will explore the potential of CPCs for enhancing plant conservation in the Mediterranean and help create synergies between participants who will interact and share experiences. A combination of presentations by participants and hands-on exercises will allow the group to explore in depth the diversity of experiences and possibilities for supporting and strengthening CPCs in the region.

This session will be chaired by Liza Zogib, member of the Mediterranean Consortium for Nature and Culture and Irene Teixidor Toneu from University of Reading.

Session 2: Pratiques culturelles de conservation dans la région méditerranéenne

Cette session sera consacrée à la diversité des pratiques culturelles de conservation (PCC) qui contribuent à la conservation des plantes dans le bassin méditerranéen. Les participants mettront en commun des expériences liées au recensement et à la description, la promotion et la protection des PCC dans leurs zones de travail.

Les populations locales et autochtones méditerranéennes ont modelé les paysages depuis des milliers d'années. De nombreuses pratiques et modes de vie qui produisent des effets positifs sur la nature ou la biodiversité existent encore aujourd'hui, mais elles sont globalement menacées. Des pratiques telles que le pastoralisme nomade, l'agriculture traditionnelle et l'architecture bioclimatique tendent à protéger et à renforcer la biodiversité, à maintenir la productivité à long terme et à entretenir des moyens d'existence. Les écosystèmes méditerranéens ont co-évolué avec les populations : les pratiques culturelles sont en partie responsables de l'hétérogénéité écologique et des profils de biodiversité dans cette région. Cependant, les PCC ne sont que rarement prises en compte dans les actions et programmes de conservation.

Cette session sera l'occasion de présenter des exemples de PCC, ainsi que des expériences destinées à documenter et à soutenir les PCC dans la région méditerranéenne. En tandem avec la session suivante du vendredi 28 octobre, les débats menés au cours de cette session constitueront la base du développement d'une première feuille de route pour la protection des PCC et leur intégration aux actions et programmes de conservation à l'échelle régionale.

Cette session servira à étudier le potentiel des PCC à améliorer la conservation des plantes dans le bassin méditerranéen et à contribuer à la création de synergies entre les participants au travers d'échanges et de mises en commun d'expériences. Une combinaison de présentations assurées par les participants et d'exercices pratiques permettra au groupe d'examiner en profondeur la diversité des expériences et des opportunités d'appui et de valorisation des PCC dans la région.

Cette session sera coordonnée par Liza Zogib, membre du Mediterranean Consortium for Nature and Culture.

Chair persons/Modérateurs

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Agenda **Session 2: Cultural practices for conservation in the Mediterranean region** **Session 2: Pratiques culturelles de conservation dans la région méditerranéenne**	
15:00- 15:20	Worskhop opening Introduction and objectives of the session Documenting and Promoting Cultural Practices for Conservation in the Mediterranean. *Liza Zogib, DiversEarth and Mediterranean Consortium for Nature & Culture*
15:20-16:00	Opening session. 40 min (30 min presentation + 10 interaction) S.2.1. Case study of documentation and promotion of CPCs for plant conservation from the Moroccan High Atlas. *Gary Martin, Irene Teixidor, and Ugo D'Ambrosio, Global Diversity Foundation.*
16:00-16:20	Coffee Break
16.20-18:00	Short Presentations - Pecha kucha session (6 min presentation) Case Studies of CPCs and experiences of documentation, promotion and protection of CPCs in the Mediterranean region: S.2.2. Mobile pastoralism and biodiversity in the Mediterranean: Preliminary results of a mapping exercise across the Basin overlaying migration routes with protected areas, Key Biodiversity Areas, IBAs and IPA. *Engin Yilmaz, Yolda Initiative, Turkey.* S.2.3. Transhumance, nature conservation, and hima community-based management in Lebanon. *Shalimar Sinno and Assad Serhal, Society for the Protection of Nature, Lebanon.* S.2.4. Local Knowledge: Traditional practices and wild food plants maintenance in southern Extremadura (Spain). *Rufino Acosta-Naranjo, Universidad de Sevilla, Spain.* S.2.5. Urban biocultural networks in Barcelona: linking human diversity and plant conservation. *Ugo D'Ambrosio Palau, Universitat de Barcelona and Institut Botànic de Barcelona.* S.2.6. Dehesa and transhumance: cultural and environmental treasures threaned by policy neglect. *Concha Salguero, Trashumancia y Naturaleza and Mediterranean Consortium for Nature and Culture.* S.2.7. L'effet de la pratique de l'anastomose des tiges du Frêne dimorphe: *Fraxinus dimorpha* sur la production foliaire. *Soufiane M'sou, Université Cadi Ayyad and Moroccan Biodiversity and Livelihoods Association, Morocco.* S.2.8. L'importance des Agdals pour la conservation de la diversité floristique dans le Haut-Atlas Marocain. *Rachid Ait Babahmad, Université Cadi Ayyad and Moroccan Biodiversity and Livelihoods Association, Morocco.* S.2.9. Mount Athos: community management of a sacred site. *George Dimitropoulos, Mediterranean Institute for Nature and Anthropos (MedINA).* S.2.10. Marabout sacred sites in North Africa. *Sana Mzoughi and Faouzi Maamouri, WWF North Africa, Tunisia.* Presentations followed by 35 minutes of interaction.
18:00-19:00	Participatory activity 1 This session will allow participants to gain deeper knowledge of each others' perspectives and experiences in the field of CPCs, and to explore possible future avenues for enhancing the role of CPCs in conservation action and planning. Group break-up (20 min), plenary time for discussion (25 min), wrap-up and introduction to the subsequent session on 28th October (15 min)
Posters	S.2.11. Les pépinières communautaires comme outil pour la conservation *ex situ* et *in situ* dans le Haut-Atlas Marocain. *Mohamed El Haouzi et Hassan Rankou, Moroccan Biodiversity and Livelihoods Association et Global Diversity Foundation.* S.2.12. Medicinal plants of Lebanon: diversity, distribution and recommendations for future bioprospecting and conservation. *Nisrine Karam et al., Faculty of Agriculture and Veterinary Medicine, Lebanese University, Beirut, Lebanon.* S.2.13. Richesse floristique et Inventaire Ethnobotanique de la région de Tataouine-Sud de la Tunisie. *Olfa Karous, Khaled Abaza, Ali Hanafi, Imtinen Ben Haj Jilani, Amor Mokhtar Gammar et Zeineb Ghrabi. Institut National Agronomique de Tunisie, Université de Carthage.*

Session 3: Community-conserved areas in the future management of biodiversity, land and water in the Mediterranean

Indigenous Peoples' and Community Conserved Territories and Areas (ICCAs) are key landscape level practices for conservation. ICCAs ensure traditional livelihoods of rural populations whilst conserving biocultural diversity. Examples of ICCAs in the Mediterranean include agdals, which are socially-, spiritually- and culturally-embedded traditional management systems for conserving pasture and other resources that are prevalent in rural areas throughout the Maghreb. However, ICCAs in the Mediterranean region are poorly understood and scientific research on their structure, role, potential and current challenges has only just begun.

Moreover, while CPCs have been discussed and proposed as useful tools for conservation in the conservation and social science literature for almost 3 decades, to date there has been little effective integration of these practices in everyday conservation planning and action, including their formal recognition and acceptance by government agencies. This session will explore the challenges and opportunities for this integration.

In this session we will discuss the role of ICCAs as cultural practices for landscape-level conservation. We will also debate how CPCs should be recognized and integrated in conservation actions and planning whilst respecting communities' rights to decide upon their knowledge and practices. We will explore the challenges involved in this integration through a hands-on exercise. The workshop will conclude with a collective brainstorming session with a view to developing initial ideas for a Roadmap for integrating CPCs in conservation action and planning at the regional level in the Mediterranean.

This session will be chaired by the Global Diversity Foundation.

Session 3: La conservation communautaire des espaces dans la gestion future de la biodiversité, du sol et de l'eau dans la région méditerranéenne

Les Aires et territoires du Patrimoine Autochtone et Communautaire (APAC) constituent des pratiques clés de conservation à l'échelle du paysage.

Les APAC garantissent les moyens d'existence des populations rurales tout en conservant la diversité bio-culturelle. Un des exemples d'APAC dans le bassin méditerranéen correspond aux agdals, des systèmes de gestion traditionnels intégrant des facteurs sociaux, spirituels et culturels, et destinés à la conservation des pâturages et autres ressources courantes dans les zones rurales de l'ensemble du Maghreb. Cependant, les APAC de la région méditerranéenne sont mal comprises, et les recherches scientifiques sur leurs structures, rôles, potentiels et défis actuels n'en sont qu'à leurs débuts.

En outre, alors que les PCC ont été débattues et proposées comme des instruments utiles pour la conservation dans la littérature consacrée à la conservation et aux sciences sociales depuis près de trente ans, elles n'ont jusqu'à présent que très peu été intégrées dans les programmes et actions de conservation, pas plus que reconnues et acceptées formellement par les agences gouvernementales. Cette session permettra d'examiner les défis et opportunités posés par cette intégration.

Au cours de la session, le rôle des APAC en tant que pratiques culturelles pour la conservation à l'échelle du paysage sera débattu. Les débats porteront également sur la façon dont les PCC devraient être reconnues et intégrées dans les actions et programmes de conservation tout en respectant le droit des communautés locales à décider sur la base de leurs savoirs et pratiques. Les défis posés par cette intégration seront également traités par l'intermédiaire d'un exercice pratique. L'atelier s'achèvera par une session de brainstorming collectif afin de développer une ébauche de feuille de route pour l'intégration des PCC aux actions et programmes de conservation à l'échelle locale dans le bassin méditerranéen.

Cette session sera coordonnée par Global Diversity Foundation.

Chair persons/Modérateurs

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Agenda **Session 3: Community-conserved areas in the future management of biodiversity, land and water in the Mediterranean** **Session 3: La conservation communautaire des espaces dans la gestion future de la biodiversité, du sol et de l'eau dans la région méditerranéenne**	
9:00- 9:15	Workshop opening ICCAs as landscape level CPCs for plant conservation. *Gary Martin, Global Diversity Foundation*
9:15-10:15	Opening session (30 min presentation) S.3.1. ICCAs in conservation action and policy in Europe and the Mediterranean. *Concha Salguero, Iniciativa Comunales, ICCA Consortium, and Mediterranean Consortium on Nature and Culture*
10:15-11:00	Participatory activity 2 Problem-solving exercise to explore the challenges of integrating CPCs in conservation planning. In small groups, participants discuss and resolve real problems related to CPCs and plant conservation and their integration in conservation action and planning. Outcomes will be shared and discussed in a brief concluding plenary.
10:30-10:50	Coffee Break
10.50-12:40	Participatory session CPCs and plant conservation in the Mediterranean: what next? This is a participatory brainstorming exercise, carried out through thematic breakout group discussions (45 min), followed by a plenary at which results are presented (30 min) and concluding with the discussion of an initial outline of a regional roadmap (30 min)
12:40-13:00	Wrap-up session Brief wrap-up on morning sessions and on challenges and opportunities for CPCs in conservation action and planning

Session 4: Networking, building synergies involving volunteers and citizen science

On-the-ground conservation entails involving local stakeholders and local communities in conservation actions and advocacy. Such a bottom-up approach presents its own challenges and solutions. This session will explore what these challenges are, how they differ within a local context, and what has worked in different areas.

The aim of this session is to share experiences in creating synergies with and engaging local communities in conservation advocacy and conservation actions. This session will explore how civil society groups such as NGOs create collaborations to promote conservation in a local context.

The approach will be to provide a space for sharing of experiences from groups that have engaged in such work for a long time e.g. Plantlife, IPAMed partners. Local stakeholders such as student groups, art groups will also be invited to share their experiences in such collaborations.

Session 4: Réseau, construction de synergies, implication de volontaires et sciences citoyennes

Le travail de conservation mené sur le terrain exige l'implication des parties prenantes et communautés locales dans les actions et la défense de la conservation. Une approche ascendante de la sorte présente ses propres défis et solutions. Cette session donnera l'occasion de visualiser quels sont ces défis, d'examiner de quelle manière ils diffèrent suivant les contextes locaux, et d'étudier les points qui ont fonctionné sur différents sites.

L'objectif de cette session est de mettre en commun des expériences de création de synergies avec les communautés locales, en les impliquant dans la défense de la conservation et les actions de conservation. Cette session servira à examiner de quelle manière les groupes de la société civile tels que les ONG mettent en place des collaborations afin de promouvoir la conservation à l'échelle locale.

L'approche consistera à mettre à disposition un espace d'échange d'expériences transmises par des organisations engagées de longue date dans de telles activités, comme par exemple Plantlife ou les partenaires du projet IPAMed. Des parties prenantes locales, telles que des associations étudiantes ou artistiques, seront également invitées à partager leurs expériences de ce type de collaborations.

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Agenda

Session 4: Networking, building synergies, involving volunteers and citizen science
Session 4: Réseau, construction de synergies, implication de volontaires et sciences citoyennes

15:00- 15:10	Workshop opening Introduction & objectives of session. *Ben Mc Carthy and Ivis Chan, Plantlife International*
15:10-15:35	Main presentations (20 min, with 15 min presentation + 5 min interaction) S.4.1. Public engagement and citizen science—what are they and how do we achieve them? *Felicity Harris, Plantlife International.*
15:35-15:55	S.4.2. Experience on creating synergies, volunteerism and citizen science from the IPAMed project partners. *Ksenija Medenica, Green Home.*
15:55-16:00	Questions to the speakers
16:00-16:20	Coffee Break
16:20-16:40	S.4.3. Important Plant Areas conservation in Macedonia in the hands of local communities *Robertina Brajanoska, Macedonian Ecological Society.*
16:40-17:00	S.4.4. Successes and challenges in plant conservation: insights from Turkey *Canan Orhun, Rubicon Foundation.*
17:00-17:20	S.4.5. A vision for meadow restoration in abandoned lands in Croatia *Tomislav Hudina, Association BIOM.*
17:20-17:25	Questions to the speakers.
17:25-17:30	Short Presentations - Pecha kucha session (6 min presentation) S.4.6. People and wild plants – naturally connected *Irena Andreevska, Macedonian Ecological Society.*
17:30-17:35	S.4.7. Inspiring the young generation to value their local plant treasures. *Jadranka Trsic, Green Home.*
17:35-17:40	Questions to the speakers
17:40-18:00	Plenary : All participants Extraction of lessons learned; vote of thanks.
Poster	S.4.8. Local plant species win the hearts of local artisans *Tolga Ok, Kahramanmaras Sutcu Imam Universitesi.*

ABSTRACTS

Session 1: Integrating wild plants information for site management and conservation
Session 1: Intégration des informations relatives aux plantes sauvages pour la gestion et la conservation des sites

S.1.1. VALENCIAN PLANT MICRO-RESERVES: 25 YEARS OF A PIONEER EXPERIENCE TO CONSERVE IMPORTANT PLANT AREAS

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The Valencian Community (VC), placed in estern Spain, is one of the main plant hotspots for vascular plants in Western Europe, holding up to 399 Spanish endemic species – 70 of them being exclusive endemics to this region. Initial studies about the VC's plant richness demonstrated that the more relevant rare, threatened and endemic (RTE) species use to live together in small sites, tipically forming micro-habitats (i.e. in Mediterranean temporary ponds, rock cliffs, gypsum outcrops, dunes, etc.). As a result of that, a proposal to set up a Plant Micro-reserves (PMR) network was published for the first time in 1991. This initiative is considered a pioneer idea worldwide to protect plant species through small protected sites.
The works to set up the Valencian PMR network started in 1992, thanks to the support of EU's LIFE-Nature grants. In 1994, the autonomous government of the Valencian Community passed a Decree to establish and regulate the legal designation of PMRs. Valencian PMRs can size up to 20 ha, and they must hold a good representation of RTE species. They can be established on public soils managed by the regional government (Generalitat Valenciana, GV), or proposed by landowners or municipalities engaged with plant conservation practices for their own sites.
The first PMRs were legally declared in 1998. Currently (2016), there are 300 PMRs occupying 2,288.0 ha – this means less than 0.1% of the regional surface –. Equivalent mean surface is 7.63 ha/PMR . 234 PMRs (1,643.2 ha) are managed by GV, and 66 belong to the private-municipal model, being managed by village councils (37 PMRs, 473.9 ha) or private landowners and NGOs (29 PMRs, 155.9 ha). Landowners and municipalities have received two kinds of grants: 1) a first aid to join the network, dealing with a 'symbolic' grant, much lower than the true market value of the land; 2) a bigger grant –up to 70-100% of real cost, depending on public budget availability- to pay all the conservation activities proposed and carried out by the owners, scientifically assessed by botanical institutions, NGOs, etc.
The Valencian PMR network holds not less than 24,088 populations of 1,817 species of vascular plants – 56.83% of the Valencian checklist. 65.9% of the more endangered species and 77.9% of the Spanish endemic taxa are now represented in the PMR network. Concerning the more relevant endemics, 66 exclusive endemics (94.3%) and 85 close-to-fully endemic plants (91.4%) are present into the PMR network.

S.1.2. TOWARDS THE CONSERVATION AND MANAGEMENT OF MEDITERRANEAN COASTAL SANDY ECOSYSTEMS AND THEIR ENDEMIC FLORA: THE LEBANESE COAST AS A CASE STUDY

Mohammad S. Al-Zein[1], Moustapha A. Itani[2], Mariana Yazbek[3], Jostelle Beyrouthy[4], Ramzi Malti[5], Nisrine Karam[6] and Salma N. Talhouk[7]
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Lebanese coastal sands, like many coastal Mediterranean ecosystems, are highly threatened by human activities, with urbanization being the major threat. In this study, we utilized the literature, aerial photographs and Geographic Information System (GIS), coupled with a comprehensive survey of the coast, to map all remaining coastal sandy ecosystems along the Lebanese coast. Within these identified remnants, particularly ones falling inside or overlapping with delineated coastal Important Plant Areas (IPA), we surveyed four regional endemic plant species, *Artemisia monosperma, Pancratium maritimum, Thymelaea hirsuta* and *Retama raetam* (previously reported as nationally extinct), and compared their current distribution with historic records from herbaria, floras, published reports and scientific studies. For each target species, we also estimated its abundance, identified associated species, and identified existing and potential threats to the species and its habitat. For *Pancratium maritimum*, which has been extensively studied more than fifteen years ago, we assessed population performance, with the ultimate aim of identifying trends in key population parameters such as reproductive success. In the light of data collected, we evaluated the current borders of coastal IPA, identified potential sites for *in situ* conservation of the target species within and outside the IPA, and proposed management plans for the target species.

S.1.3. CONSERVING RANGE- AND SITE-RESTRICTED ENDEMICS IN AN URBAN SETTING: BEIRUT AND COASTAL LEBANESE ENDEMICS AS A CASE STUDY

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Of Lebanon's 21 designated Important Plant Areas (IPA), six are coastal or extend to the coast. The conservation of endemic plants in these IPA and in the coast in general is very challenging, as this part of the country is highly urbanized. Of all the plant species endemic to Lebanon, three (*Matthiola crassifolia, Limonium postii* and *Limonium mouterdei*) are coastal, and happen to coexist in Beirut, Lebanon's most urbanized city, where semi-natural open urban spaces are continuously being destroyed or landscaped. No systematic monitoring of these species has been conducted, rendering any effort to conserve them challenging. In order to assess the status of these three endemics and better guide their conservation, extensive surveying of all semi-natural sites in the city was conducted and the population size, habitats and threats to these species were recorded. Additional information needed to assess the status of these species globally was collected outside the city. The three species were then red-listed according to standard Red-listing procedures. Prospects for conserving and managing these species were proposed. We recognized that successful site based conservation involves both *in situ* and *circum situm* conservation. Sites in which the plants occur were classified based on the threats posed to them. Two sites in the city were recognized as *de facto* protected. Most sites were at risk of being lost to urbanization as they are privately owned. Publicly owned lands and privately owned lands that the public is protesting their development were considered as having potential for *in situ* conservation. *Circum situm* conservation could benefit the species through enhancing management procedures of small landscape elements such as street medians, plazas and gardens.

S.1.4. LA GESTION PARTICIPATIVE POUR LA CONSERVATION DE LA DIVERSITÉ DE LA FLORE ET DES HABITATS : CAS DE LA ZIP DE JBEL BOU-NACER

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Jbel Bou-Nacer constitue le site le plus original sur le plan floristique dans le Moyen Atlas. Il est l'une des deux Zones importantes pour les plantes sélectionnées comme cas pilote pour le projet IPAMed au Maroc. De plus, ce site est caractérisé par une diversité floristique endémique remarquable (près de 60 espèces, 19 sous espèces et 13 variétés endémiques marocaines sur un total de 556 espèces, 68 familles et 283 genres pour le pays), d'où son classement comme Site d'Intérêt Biologique et Ecologique (SIBE) depuis 1994. Cette diversité peut être expliquée par sa haute altitude et sa proximité avec des zones arides (le sommet de la montagne de Bou-Nacer atteint les 3340 m, il est la plus haute montagne du Moyen Atlas). Le tissu associatif est aussi très développé dans cette zone (une multitude d'associations et des coopératives de protection de l'environnement et de production du miel issu des plantes locales), et est très conscient de l'importance des richesses floristiques qui existent dans le site. Des actions de gestion sont également menées dans ce site par le HCEFLCD dans le cadre de ses programmes de conservation et de protection de la biodiversité.
Néanmoins, la présence d'écosystèmes forestiers très dégradés et en dysfonctionnement, notamment la cédraie qui n'est représentée dans certains cas que par des pieds morts et l'existence d'une grande interaction entre la population locale et le milieu naturel dans ce site, nécessite la participation de tous les acteurs locaux pour la conservation de ces Zones importantes pour les plantes.
Ma présentation sera focalisée sur les actions de conservation de la flore et des habitats naturels qui peuvent être menées avec la population locale dans la ZIP de Jbel Bou-nacer dans un cadre partenarial.

S.1.5. MOROCCAN BIODIVERSITY AND LIVELIHOODS ASSOCIATION - INTEGRATED APPROACH TO PLANT CONSERVATION AND CULTURAL PRACTICES IN THE MOROCCAN HIGH ATLAS

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This paper presents current conservation and development challenges in one of the Mediterranean biodiversity hotspots, the Moroccan High Atlas. Starting in 2013 with Darwin Initiative funding, and with co-funding from Critical Ecosystem Partnership Fund and MAVA Foundation, Global Diversity Foundation and Moroccan Biodiversity and Livelihoods Association are leading a programme that seeks to enhance local livelihoods and contribute to plant conservation. The programme catalyses positive change in the Moroccan High Atlas where biodiversity and landscapes are under growing pressure from the interrelated drivers of climate change, water mismanagement, plant overharvesting, overgrazing, market integration and migration, amongst others. It does so through an integrated biodiversity-conservation approach that tackles these interconnected problems.
Integrated *in situ* and *ex situ* conservation actions, participatory ecological and floristic assessments, IUCN conservation assessments along with livelihoods-enhancing activities, come together to generate solutions for local conservation threats, building on existing local conservation practises and enhancing ecosystem integrity of Important Plant Areas. New knowledge about key plant species' conservation status, the impacts of climate change on plant populations and potential climate change refugia inform conservation actions and policy decisions. Our integrated approach not only provides information and analyses of the Important Plant Areas to catalyze actions for biodiversity conservation, but also establishes a baseline from which to monitor the changes at the level of species, habitat and ecosystem. It also helps to establish conservation priorities at regional level and generates a representative selection of species as biodiversity indicators that cover all the major ecosystems of the High Atlas.
The *ex situ* conservation and agroecology activities revolve around the management of community nurseries for the production of wild and domestic plants for distribution to households, provide income and resources to Amazigh families while contributing to *in situ* conservation actions through enrichment planting. Enhanced water resource management and more efficient irrigation practices contribute to local livelihoods as well as greater water flows to ecologically sensitive areas.

This integrated approach, which also involves continuous training and sustaining of community researchers, strengthens community-based systems of environmental research and management. It also helps Morocco fulfil national and international policy commitments related to biodiversity.

S.1.6. BIODIVERSITY SITUATION IN PALESTINE- WEST BANK

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Palestine is situated in South West Asia, east of the Mediterranean basin, the third richest hotspot in the world in plant diversity. Palestine is home of 2600 vascular plant species, while West Bank has 1595 ones. It has four phytogeographical regions: Mediterranean, Irano-Turanian, Saharo-Arabian and Sudanian.
The biodiversity richness in Palestine is due to its location between Asia and Africa, rich environments, and long periods of human influence.
The Occupied Palestinian Territories (West Bank) has a unique dramatically climatic gradient in the Mediterranean Basin. In a distance of 25 km, elevation drops from 914 m in east Jerusalem to - 420m in the Dead Sea. West Bank has 615 rare species constituting 38.6% of all species, endemics; *Iris haynei*, near endemics, globally threatened; *Iris lortetii* (IUCN,1997) and some face slow extinction process.
Heavy anthropogenic effects, long period of continuous implementation of destructive measures by the Israeli occupation like confiscation of land for settlements (establishment of seven settlements in Wadi Qana nature reserve), bypass roads, over abstraction of ground water, separation wall, urbanization, infrastructure, intensive agriculture, chemicals, heavy grazing, reduced habitat quality, overharvesting of medicinal plants, and land reclamation.

As a result of IUCN project: Important Plant Areas (IPA) in South and East Mediterranean Basin. West Bank has six IPA: Faquo`a, Wad Elbalat-Beit illo, Wad Qana- Wad Esha`ir, Yaseed-Ibzeik-Tamoun, Dead Sea Area and Dead Sea –Hebron gradient.

Yaseed-Ibzeik-Tamoun: It extends from Mediterranean to Irano-Turanian. It includes chaparral, degraded chaparral, remnants of Carob woodland and historical *Pistacia atlantica* trees. The area has 39 endemic, near endemic and rare species.

Conservation Measures: public awareness, sustainable harvesting, *ex situ* conservation of rare species, *in situ* conservation, implementation of the environmental laws and manage grazing.

S.1.7. ENJEUX DE CONSERVATION D'UNE ZONE HUMIDE D'EAU DOUCE MÉDITERRANÉENNE EXCEPTIONNELLE : LA GARÂA SEJENANE (TUNISIE SEPTENTRIONALE)

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La Garâa Sejenane est la plus grande zone humide naturelle d'eau douce de Tunisie. Les enjeux de conservation de la végétation hydrophytique sont évalués grâce à 55 relevés phytosociologiques. Ils révèlent une richesse floristique exceptionnelle, avec 74 hydrophytes dont 26 sont à forte valeur patrimoniale. Des analyses multivariées distinguent trois types d'habitats : des cultures inondables, des marais temporaires, et des pelouses humides/mares temporaires. Un Indice de Rareté des Espèces très élevé, et des espèces à fort enjeu conservatoire (1 endémique stricte à la Garâa Sejenane, 5 espèces dont elle constitue l'unique localité tunisienne, et 2 espèces dont elle abrite les plus grandes populations nord-africaines) révèlent l'intérêt écologique et conservatoire majeur du site, et ceci malgré de fortes pressions anthropiques que subit le site depuis les années 60. Dans le contexte actuel d'augmentation de la pression de perturbation, la conservation à long terme de cette biodiversité exceptionnelle nécessite la mise en place de mesures de gestion appropriées intégrant les populations locales.

S.1.8. EXPLOITATION DE LA CARTOGRAPHIE ET LA DYNAMIQUE DE LA VÉGÉTATION DES MARAIS DE L'ÉCOSYSTÈME ICHKEUL- TUNISIE POUR L'IDENTIFICATION D'UN OUTIL D'AIDE À SA GESTION ET CONSERVATION

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Le Parc National de l'Ichkeul est un écosystème très fragile et unique dans son mode de fonctionnement. La végétation de ses marais constitue un site de repos et d'alimentation pour une importante communauté d'oiseaux d'eau migrateurs. L'actualisation de ses inventaires (oiseaux migrateurs, flore des marais...), le suivi régulier du niveau et de la salinité du lac ainsi que la gestion des ressources hydrauliques du Parc sont des actions lourdes entreprises depuis une quinzaine d'années par les conservateurs du parc. Ces actions rentrent dans le cadre d'un programme national qui vise la sauvegarde de cet écosystème. L'objectif de ce travail est d'identifier à travers la cartographie (2005-2008-2011) et la dynamique (1925 – 2011) de la végétation des marais de Joumine et par extension, de l'ensemble du système lac-marais de l'Ichkeul, un indicateur significatif de l'évolution de sa végétation. Cet indicateur pourrait être un outil performant pour la prise
de décision et l'aide à la gestion et la conservation de la biodiversité de l'écosystème.

S.1.9. LA ZONE IMPORTANTE POUR LES PLANTES CHÉLIA (AURÈS), ALGÉRIE : IMPORTANCE ET BILAN DE CONNAISSANCE

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Par sa position biogéographique, le massif de l'Aurès (Algérie), constitue un biotope refuge pour les plantes. En effet, à moins 50 kilomètres en direction du sud se trouvent les premières oasis qui annoncent le plus grand désert du monde. Au cœur de ce massif, s'installe le massif du Chélia (ZIP) qui s'élève à 2328 m d'altitude; c'est le plus haut sommet de l'Algérie du nord. Il abrite un certain nombre d'espèces endémiques et rares. Sur la base des travaux bibliographiques et de terrain (Quézel, 1957; Quézel et Santa 1962-1963; Abdessamed, 1981 et Beghami, 2013) nous avons choisi 5 espèces SRE et 6 espèces SCE. A travers cette communication nous essayerons de dresser un bilan de connaissances sur les dites espèces. Quelques-unes ont été retrouvées et cartographiées. D'autres, signalées par la Bibliographie, mais n'ont pas encore revues.

S.1.10. THE PROJECT CAREMEDIFLORA: CONSERVATION ACTIONS FOR RARE AND ENDANGERED ISLAND MEDITERRANEAN FLORA

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The Care-Mediflora project is an initiative led by eight institutions [Mediterranean Plant Specialist Group (IUCN/SSC), Office de l'Environnement de la Corse (OEC) - Corsica/France, Hortus Botanicus Karalitanus (HBK), University of Cagliari - Sardinia/Italy, Department of Biological, Geological and Environmental Sciences, University of Catania - Sicily/Italy, CIHEAM Mediterranean Agronomic Institute of Chania (MAICh) - Crete/Greece, Jardí Botànic de Sóller Foundation (JBS) – Baléares/Spain, Department of Forest (DF) and Agricultural Research Institute (ARI) – Cyprus] that have long experience in conservation activities. Recently, they have collaborated in the framework of the project 'Ensuring the survival of endangered plants in the Mediterranean islands' (co-funded by MAVA Foundation) and they have collected seeds for *ex situ* conservation from ~900 taxa of the Mediterranean islands, creating optimum germination protocols for many of these. During the current project, they will jointly make a step forward by using some of this genetic material and the knowledge gained so far to experiment with *in situ* applied active management actions and measures for some of these taxa within the limited period of three years of the project.

S.1.11. RÉFLEXION SUR L'APPROCHE PARTICIPATIVE À ADOPTER POUR LA CONSERVATION D'ESPÈCES ENDÉMIQUES DANS LE MONT CHÉLIA (KHENCHELA ET BATNA-ALGÉRIE)

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Dans le cadre de la collaboration DGF/UICN dans le domaine de la Conservation de la Flore dans les Zones Importantes pour les Plantes, un projet portant sur « La conservation de la flore et des habitats naturels avec des populations locales dans le sud et l'est du bassin méditerranéen » a été initié sur deux sites pilotes à savoir : Le Parc National de Gouraya (wilaya de Bejaia) et le Mont Chélia (wilayas de Khenchela et Batna) avec des botanistes, l'institut national de recherche forestière, les conservations des forêts de ses wilayas et des associations locales.
La communication portera sur la problématique du Mont Chélia qui est situé dans une région du point de vue sociologique particulière. Une population très attachée à ses coutumes et traditions. Une menace sérieuse à prendre en considération dans ces ZIP: le piétinement de la flore par les bovins.
La méthode de gestion proposée a pour objectif de convaincre la communauté autochtone de changer ses habitudes en matière de parcours et lui faire accepter de nouvelles pratiques durables afin de préserver les espèces endémiques dans les ZIP de ce site remarquable.

S.1.12. INVENTAIRE ET CONSERVATION DE LA FLORE DU ZIP DE GOURAYA (BÉJAIA, ALGÉRIE)

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Les ZIP de Gouraya abritent 470 espèces, appartenant à 298 genres et 87 familles botaniques (Rebbas, 2014) dont 25 taxons endémiques (s.l.) (6 endémiques du K2, 6 endémiques de l'Algérie, 10 endémiques de l'Afrique du Nord, 2 endémiques algéro-tunisiennes et une autre endémique algéro-marocaine et 47 espèces rares (s.l.) (16 espèces assez rares, 19 espèces rares et 12 espèces très rares).
Le parc national de Gouraya renferme 7 espèces SRE: *Bupleurum plantagineum* Desf., *Erysimum cheiri* (L.) Crantz subsp. *inexpectans* Véla, Ouarmim & Dubset, *Genista ferox* (Poir.) Dum var. *salditana*, *Hypochaeris saldensis* Batt., *Sanguisorba ancistroides* Desf. var. *battandieri*, *Silene sessionis* Batt., *Pancratium foetidum* Pomel var. *saldense* et 5 espèces SCE: *Erodium battandieranum* Rouy, *Genista vepres* Pomel, *Sedum multiceps* Coss. & Durieu, *Allium trichocnemis* J. Gay, *Satureja pomelii* Pomel.
A l'état naturel la plupart des espèces des ZIP de Gouraya sont bien protégées car elles se développent sur des rochers ou des falaises, non accessibles à l'homme.
Sauf pour deux sites, celui d'*Erodium* qui est très proche du sentier et celui de *Genista* à l'ouest de Gouraya qui se trouve proche de carrières, de la décharge publique et de terrains privés: piétinements intenses (surfréquentation), défrichement et incendies.
Trois actions sont importantes à développer pour la conservation et la préservation des différentes ZIP de Gouraya:
- Réaliser un guide écotouristique dans le but de sensibiliser la population local et régionale sur l'importance de la conservation des habitats et de la flore rare et endémique de Gouraya en collaboration avec les associations écologiques de la région comme par exemple l'Association Assirem Gouraya.
- Organiser des conférences sur l'importance de la taxonomie végétale et l'identification des endémiques de Gouraya.
- Conservation *ex situ*. Collecte et culture d'espèces rares et endémiques (Les conservatoires botaniques nationaux, les jardins botaniques) dans le but de renforcer les stations naturelles affaiblies, voire la réintroduction en nature si l'espèce a disparu.

S.1.13. ETAT DES CONNAISSANCES ET MESURES DE CONSERVATION DE LA FLORE ENDÉMIQUE DANS L'ATLAS TELLIEN OCCIDENTAL D'ALGÉRIE. (Exemple de la région de Tiaret comme une nouvelle Zone importante pour les plantes)

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Cette étude consiste à rechercher les plantes endémiques et rares au niveau l'Atlas tellien occidental de Tiaret. Cette portion méditerranéenne de l'Algérie occidentale renferme une biodiversité végétale remarquable dont 421 taxons rares et 94 endémiques. Toutefois, les changements taxonomiques, nomenclaturaux et chorologiques récents ont significativement modifié ces données anciennes. Aussi, l'état actuel de conservation ou même de l'existence de ces taxons, notamment les endémiques stricts du pays demeure méconnu et les recherches de terrain de ces plantes sont de plus en plus rares.
Dans cette étude, nous commencerons par dresser un bilan global qui concernera d'abord les statuts taxonomiques et chorologiques de ces taxons au niveau régional en se basant sur les données les plus récentes. Par la suite nous analyserons ces données ainsi que la situation actuelle des taxons endémiques-rares, ceux menacés d'extinction ou bien qui n'ont pas été retrouvés.
Nos recherches de terrain au niveau du secteur atlasique de Tiaret nous ont permis de retrouver 34 espèces endémiques qui ont été photographiées et dont l'existence est ainsi confirmée. Néanmoins, parmi ces taxons dont certains figurent dans la liste rouge de l'UICN, nous signalons des espèces qui n'ont pas été retrouvées et d'autres que nous jugeons disparus définitivement. Enfin, nous proposons des mesures de conservation qui concerneront surtout les habitats naturels de ces plantes notamment les Zones importantes pour les plantes (ZIP) dont certaines demeurent encore méconnues et non protégées à l'image du massif de Guezoul dans la région de Tiaret.

S.1.14. ETUDE DE LA DYNAMIQUE VÉGÉTALE ET DE LA DIVERSITÉ FLORISTIQUE DES MARAIS DE LA MACTA (ALGÉRIE). APPLICATION À LA CONSERVATION ET À LA PRÉSERVATION DE LA BIODIVERSITÉ

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Les marais de la Macta (35,67° N et 0,093°W ; -2 à 50 m d'altitude) se situent dans une dépression triangulaire parallèle au littoral méditerranéen (ouest de l'Algérie). Elle couvre une superficie de 44 500 Ha. C'est une zone hétérogène dont la richesse floristique est le caractère le plus dominant, avec notamment la présence des espèces caractéristiques de la flore maritimes (i.e *Anchusa azurea, Messembryanthemum cristallinum*), des lieux immergés (i.e *Phragmites australis, Typha domingensis*), des collines argileuses (i.e *Sarcocornia fruticosa, Arthrocnemum macrostchyum*), ou encore de la steppe succulente (*Suaeda fruticosa*) et enfin des bosquets à base de *Tamarix africana* et *Tamarix gallica*.

Cette diversité floristique offre des opportunités multiples pour l'avifaune, notamment les oiseaux dépendant d'habitats aquatiques (i.e *Podiceps cristatus, Phoenicopterus ruber*). Cette avifaune est représentée par 33 espèces réparties sur 9 familles. Les marais de la Macta sont classés comme site Ramsar et comme Zone importante pour la conservation des oiseaux (ZICO). Les zones d'appellation ZICO sont des sites favorables pour la conservation des oiseaux selon les critères d'inventaire de l'organisation Birdlife International.

Cependant ces marais sont exposés à des menaces d'origine endogène (salinisation, érosion hydrique et érosion éolienne) ou encore à des perturbations exogènes (pompage, surpâturage et pollution).

Pour pouvoir sauvegarder ce site, il a été proposé comme site terrestre pour être classé en réserve naturelle, mais jusqu'à l'heure actuelle aucune étude détaillée n'a été encore effectuée, ni aucune stratégie de gestion et de protection n'a été proposée.

C'est dans ce cadre que s'inscrit notre projet avec le CEPF, dont l'objectif principal est de faire l'inventaire des espèces sauvages ayant un intérêt pour la population et identifier toutes les menaces. Ce travail permettra d'attirer l'attention des gestionnaires de terrain et des décideurs sur l'intérêt des marais de la Macta pour entreprendre une réelle conservation et préservation de ce hotspot de la biodiversité.

S.1.15. CONSERVATION STATUS ASSESSMENT OF PRIMULA BOVEANA IN SOUTH SINAI, EGYPT

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In order to develop an efficient and effective conservation strategy using complementary *in situ* and *ex situ* techniques, we must have a clear understanding of each target species' geographical distribution, its habitat preferences, population characteristics, and requirements.

The Sinai primrose, *Primula boveana* has been reported as one of the rarest and most endangered plant species worldwide (Richards, 2003). It is endemic to the St Katherine Protectorate (SKP) in southern Sinai, Egypt, and has high medical importance because of substances extracted from its roots. This species is severely threatened by both natural (aridity of the area) and human factors (scientific research and over-grazing). All these factors are pushing *P. boveana* to the brink of extinction The study is aimed to assess the current conservation status of this species according to IUCN criteria in order to produce a series of recommendations for conservation action. In addition, we will try to enhance the understanding about the IUCN Red List Category & Criteria by using this species as a case study.

In order to achieve that and to fit to the IUCN Red List assessment requirements; we studied and discussed the geographic range, population characteristics, habitat and ecology, threats, uses and trade, and conservation actions for the target species.

S.1.16. THREATENED HABITATS ON CRETE – CONFLICTS AND PERSPECTIVES

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In fulfilment of art. 11 (Habitats Directive) our team conducted Natura 2000 habitat survey and monitoring in Crete. We present and discuss concepts targeting major conservation problems mainly on societal level.

The Natura 2000 monitoring of 2014/15 revealed severe impacts and a bad conservation status for many habitats of European importance. Especially coastal wetlands and dunes are affected. Lack of environmental awareness is evident. Positive conservation efforts have been made locally (e.g. Almyros beach and Elafonisi). Nevertheless, local conservation groups seem to be little connected, uninfluential, or missing altogether.

In a first step of our project initiative we attempt to figure out threatened sites of high conservation value and main conflicts. We also aim to identify relevant stakeholders (NGOs, communities, local tourism networks), their ideas and their positions towards conservation issues. In a second step we want to display values of nature and ecosystems for society and tourism using the ecosystem services approach (giving nature a value) and invite stakeholders to networking events, elaborating solutions for common problems. We aim to engage local groups to identify and evaluate problems in the field.

One of our targets is to establish a well-working exchange platform for local nature conservation and ecological tourism. The second aim is capacity building in environmental education. In this context we want to install training courses for nature guides in a workshop based education program, leading to a spread of ecological knowledge, while offering a potential source of income in the ecological tourism sector.

S.1.17. INTEGRATING MAPPING DATA FOR CONSERVATION STRATEGIES OF PLANT DIVERSITY IN TRADITIONAL MEDITERRANEAN AGRO-ECOSYSTEMS: THE CASE OF GREEK

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The spread of agriculture is closely linked with the human development and the history of our cultural landscape. Nowhere in Europe were such landscapes, as the product of the interaction of the natural environment and the practices of its farmers, established earlier than in Greece. Here, the Neolithic arable farming developed more than 8000 years ago and formed as a byproduct a unique agrobiodiversity. Nowadays, by European standards, the plant species richness (incl. crop wild relatives) and crop diversity of agroecosystems in Greece is still unrivalled, and many species which are rare or nearly extinct elsewhere can still be found in the Eastern Mediterranean archipelago with many subpopulations.

Yet, on closer inspection there is a dramatic and ongoing decline of traditional arable farming and its ecosystems, caused on the one hand by increasing intensification in areas favourable for cultivation, on the other hand by abandonment of marginal or remote arable lands. In this contrast, especially on popular tourist Greek islands the millennia-old tradition of arable farming is nearly vanished in the past decades. This trend is accompanied by profound changes in the population and agriculture structure in remote rural areas which leads to an ongoing loss of knowledge of traditional arable farming techniques.

Unfortunately, plant occurrence data are very limited due to the fact that arable land plays often only a minor role in vegetation mapping and conservation tasks. In this context, a current survey concludes that the arable plants in the existing Red Data Book of Greece have been neglected, and that a considerable proportion of the plants of traditional agriculture occurring in Greece are threatened by IUCN Red List standards. In contrast to Central Europe, where the protection of the arable flora has received some attention by the nature conservation policy in recent years, there appears to be little such effort in the Mediterranean. Therefore, conservation measures for the unique arable flora of Greece are urgently needed.

This presentation wants to raise awareness for the cultural and natural heritage of the arable flora in the Mediterranean in the broader public. It is a matter of urgency to provide solutions for adequate compensation and a long-term perspective for local farmers to manage along the principles of traditional agriculture to stop the decline of biodiversity in agroecosystems. A such called multifunctional agriculture, which is propagated by the European Union, is considered as a tool for integrated and sustainable rural development.

S.1.18. LESSONS LEARNED AND GOALS YET TO REACH: MEDITERRANEAN ISLANDS PLANT CONSERVATION TEN YEARS AFTER THE FIRST EDITION OF THE TOP 50

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The Top 50 IUCN booklet was first edited in 2006. Although the selection of the target species was not very rigorous, this booklet still represents a useful 'random' sample which mirrors the reality of the main Mediterranean insular systems. In this perspective, the second edition of the Top 50 has been considered a precious opportunity to assess: how many *in situ* or *ex situ* conservation actions focused on the Top 50 species have been carried out after 2006? How many national and regional red lists have been published or updated after the Top 50? How many national and regional laws concerning Top 50 species have been promulgated or modified during the last 10 years? Have conservation projects or laws been effective to reduce the threat level of the Top 50 species? How many scientific investigations on the Top 50 target species have been carried out after 2006? What has been the issue of those researches in terms of species conservation? Trying to answer to these questions allowed us to evaluate the relationship between conservation-research efforts and their effect (high, average, little, none). As a matter of fact, the threat level of ca. 20% of the target species has decreased, mostly because field investigations allowed to discover more populations or to downscale potential threats, sometimes as an outcome of *in situ* conservation actions (e.g. population re-enforcement, alien invasive plant eradication, etc.). Ad hoc funding allowed considerable improvements of the knowledge about the physiology, reproduction biology, demography, ecology and distribution, threat factors, taxonomic identity and genetics for most target species (especially in the western islands, but also in Cyprus). On the other hand, very low (and slow) progress has been recorded in terms of dedicated laws and *ex situ* conservation is still far from optimal for most of the considered species. Greece represents a paradigm for future conservation challenges: despite its valuable botanic heritage (10 out of the 50 target species grow on Crete and Greek islands!), very little financial resources hindered improvements both in knowledge and conservation policies, so that special support is urgently needed to see an improvement of the local situation. In our opinion, the IUCN and the whole international scientific community should promote a better coordination of species conservation and research efforts, giving special attention to the less well known islands and islets of the Mediterranean area, such as those of NW Africa, Croatia, Greece and Turkey, following the example of the PIM (= Petites Iles de la Méditerranée) Initiative promoted by the French Conservatoire National du Littoral.

S.1.19. IMPORTANT PLANT AREAS IN MOROCCO: IMPORTANCE, DIVERSITY, THREAT AND CONSERVATION STRATEGIES

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Located in the extreme northwest of Africa, between 21° and 36° north latitude and 1° and 17° west longitude, Morocco covers an area of 710 850 km2. Its privileged location with a double coastline and its diverse mountain with four major mountain ranges: the Rif, Middle Atlas, High Atlas and Anti Atlas with altitudes exceeding 2000 m in the Rif, 3000 m in the Middle Atlas and 4000 m in the High Atlas gives an exceptional range of climates from Saharan climate to high mountain climate passing through arid, semi arid, humid and subhumid climates. This climate and orographic diversity offers very varied ecological conditions which allowed installation of diverse ecosystem and various Important Plant Areas (hotspots) rich in rare and endemic species.
However, these Important Plant Areas are subjected to many natural pressures (climate change, parasitic attacks...) and human actions (clearing, overgrazing,...).
This presentation will be focused on the Moroccan Important Plant Areas and biodiversity conservation strategies and the assessment of the climate change impacts on the degradation and the dysfunction of ecosystems as well as the rarefaction and the disappearance of species.

S.1.20. RECOVERY PLANS FOR VALENCIAN ENDANGERED SPECIES

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The Valencian Catalogue of Threatened Plant Species, passed by a regional Decree in 2009 and reviewed in 2013 in the Valencian Community (VC, Spain), holds the list of strictely protected plants, currently compound by 85 taxa. This Catalogue holds two legal categories established by law at national level: 1) Threatened of Extinction, which encloses in VC species matching conditions of IUCN's CR (Critically Endangered) and 2) Vulnerable [whose name is not related with IUCN's VU], covering most of the IUCN's EN (Endangered) taxa.
In 2008, the Valencian Government passed a first Recovery Plan for *Silene hifacensis* Rouy ex Willk. In 2015, it was reviewed and 2 more plans were approved for *Limonium perplexum* Sáez & Rosselló and *Cistus heterophyllus* subsp*. carthaginensis* (Pau) Crespo & Mateo. The goal for the 3 plans is passing from IUCN's CR to VU category. This means to obtain for each species 6 or more permanent populations and/or stable representation within 6 or more UTM 1x1 km squares, holding not less than 250 individuals, maintained after 5 or more years in annual censuses.
For *L. perplexum* – only one native population living in less than 40 m2 in a low sea-cliff platform affected by progressive collapse –, the target is close to be reached, after creating 9 new populations since 2005; its reproductive model – a triploid apomictic plant, without natural genetic diversity – and its high germination rate, favor the success of conservation actions.
C. heterophyllus subsp. *carthaginensis* only has one pure specimen worldwide, being self-incompatible, but exceptionnally producing some few seeds; although successful in vitro propagation was obtained 25 years ago, the culture produces a chromosomic change in ribosomal DNA whose effects are unknown. After a rare event of seed production recorded in 2013 on the unique native mother plant – 50 mature seeds were gathered –, a first generation of seed-coming 25 new plants was set up in 2014, and close to 20.000 seeds have been obtained *ex situ* after artificial crossing, ensuring the production of future plant to start reintroduction projects.
S. hifacensis, is a ibero-balearic endemic holding only 4 populations in the coastal cliffs of the Iberian peninsula – all of them in the Valencian Community –. 4 pools of *ex situ* mother plants are maintained in 4 separated nurseries, and 1-1.5 million seeds are produced each year. However *in situ* germination and development in tall sea-cliffs after sowing and planting still yield very poor results.

S.1.21. INVASION AND MANAGEMENT OF CAMPHORWEED, HETEROTHECA SUBAXILLARIS, IN TYRE COAST NATURE RESERVE, LEBANON.

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After more than 30 years of war, Lebanon is witnessing a creeping urbanization of cities to the surrounding countryside and mountains, colonizing river borders, mountain peaks and the last shreds of beaches. Relatively pristine habitats are being lost at unprecedented rates as an expanding human population converts them to urban centres, roads, industrial zones. As these habitats are altered, untold numbers of species are disappearing before they have been recognized by our generation and much less studied by our scientists.
Mindful about the necessity to conserve the degrading ecosystem and depleting biodiversity of Lebanon and given constrained resources, we had to take decisions by concentrating on particular species and on particular places. But our efforts were trivial. Thanks to a Critical Ecosystem Partnership Fund endowed grant awarded to Saint-Joseph University, we are setting national conservation priorities in terms of space, by defining the Important Plant Areas and in terms of species, by setting the first national red list of endangered taxa.
Moreover we worked, in the framework of this project, on three different land ownership models to set protected areas: Public lands, private lands and Lands belonging to religious community. On the ground, different protection scenarios are tested to fit these different land ownership types and to deal with the environmental stewardship.
On the other hand, molecular and cytogenetic studies are conducted in our laboratory targeting different species considered as threatened and in need of *in situ* and *ex situ* conservation.
Practical actions as population translocation, *ex situ* conservation and management plans will be also presented as preliminary results of this project.

S.1.22. IS THE HIGH ATLAS HOTSPOT SLIPPING AWAY?

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The Moroccan High Atlas is an important centre for plant diversity in the Mediterranean (Medail & Quezel, 1997) harboring the highest diversity of plant endemics and species at a national scale. However, without an up to date Red List, the extent of threats affecting the flora must still be evaluated to establish efficient conservation plans at both a local and global scale. Addressing this gap in knowledge, we followed the Red List criteria and categories (Version 3.1) set out by the International Union for Conservation of Nature (IUCN) to assess the totality of the strict endemic vascular flora from the High Atlas mountain range (90 species). This study will represent a significant contribution towards the edification of a National Red list by categorizing 15 % of the endemic flora. Establishing the threat levels impacting the High Atlas Hotspot will give decision makers and conservationists a valuable tool to ensure that this remarkable diversity does not slip away. This is a presentation on the methods and their scientific rationale and impact, and as they become available, preliminary results will be shared.

S.1.23. ÉCOLOGIE ET DISTRIBUTION DE DEUX ARACÉES À RÉPARTITION TRÈS LOCALISÉE EN MÉDITERRANÉE BIARUM DISPAR SCHOTT. ET AMBROSINA BASSII L.

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Ce travail concerne l'adaptation écologique et la distribution de deux espèces de la Famille d'Aracées en Tunisie. Le genre *Ambrosina* est monospécifique, représenté par *Ambrosina bassii* L., une endémique du centre-ouest du Bassin méditerranéen dont la répartition est limitée. Elle est signalée dans des zones isolées en Italie (Sardaigne et Sicile), dans le sud de la Corse, en Algérie et en Tunisie. Le genre *Biarum* comprend 21 espèces inféodées aux zones semi-arides et réparties au sud de l'Europe, en Afrique du Nord, aux Proche et Moyen-Orient. Ce dernier est considéré comme le centre de diversité, où 75 % des espèces sont endémiques. En Tunisie le genre *Biarum* est représenté seulement par *B. dispar* Schott., dont la répartition est limitée à l'Est du Bassin méditerranéen. L'objectif de ce travail est d'établir la distribution de ces espèces, de déterminer leurs habitats, leur écologie à partir de collectes récentes sur l'ensemble de son aire de répartition en Tunisie (Kroumirie, Mogods, Nord Est, Vallée de la Medjerda, CapBon et la Dorsale). Les conditions pédoclimatiques favorables à leur développement (bioclimat, pluviométrie, altitude, pH, texture, conductivité électrique, teneur en calcaire total et actif du sol) ont été quantifiées.

L'analyse des données écologiques des sites de collecte des populations tunisiennes de l'endémique du Centre-ouest de la Méditerranée *Ambrosina bassii* a permis de quantifier les conditions pédoclimatiques favorables à son développement et qui se traduisent par une pluviométrie de 722 mm (enregistrée de septembre à février 2012), une altitude moyenne de 203m, un sol à pH faiblement basique (7,6) et une teneur moyenne en calcaire totale de 15,23%. Les résultats ont permis d'identifier les milieux écologiques auxquels est adapté *Biarum dispar* qui se caractérisent par une pluviométrie de 507 mm, des altitudes élevées de 424 m et des sols riches en calcaire avec une teneur moyenne en calcaire totale de 34,3%.

S.1.24. VALORISATION ET CONSERVATION DE LA BIODIVERSITÉ D'UNE ZIP DE TUNISIE : GARÂA SEJENANE-MOGODS

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La Garâa Sejenane, sélectionnée par l'UICN comme une Zone Importante pour les Plantes (ZIP), appartient à la chaîne montagneuse des Mogods. Bien qu'elle soit formée par des milieux humides résiduels très morcelés, la Garâa abrite une biodiversité élevée.

Toutefois, cette richesse biologique exceptionnelle accuse une importante dégradation constituant une menace de plus en plus contraignante. En effet, la Garâa constitue un habitat où la disponibilité de terre s'avère un problème crucial vu l'inadéquation entre la dynamique démographique, les besoins croissants d'une population rurale pauvre et démunie et les ressources disponibles limitées.

Ainsi, une enquête socio-économique associée à une enquête ethnobotanique ont été conduites auprès des agriculteurs, des éleveurs et de la population locale de la zone. L'objectif est de déceler à la fois les différents usages de la Garâa, et les menaces qui pèsent sur sa biodiversité afin de proposer un programme pour sa gestion intégrée et sa conservation durable.

Les résultats ont permis d'identifier les cultures et les systèmes de culture existants ainsi que le savoir local qui s'y rapporte (pratiques agro pastorales, patrimoine variétal cultivé, critères de choix des cultivars à savoir: performances agronomiques, adaptation au terroir, utilité alimentaire, finalité sociale, etc.).

D'autre part, différents usages locaux et traditionnels d'une trentaine de plantes caractéristiques des zones humides ont été inventoriés. En particulier, *Rumex tunetanus* (CR) est pâturée et très appréciée par le bétail. Cette espèce sténoendémique qui ne se trouve que dans la Garâa, est menacée par le drainage, le surpâturage et le développement d'infrastructures.

Ce constat justifie donc la nécessité et l'urgence d'une conservation efficace de cette biodiversité tout autant que les cultures des populations témoins des savoirs et savoir-faire s'y rattachant. De surcroît, la sensibilisation des populations locales à la gestion rationnelle de ces potentialités, en l'occurrence, par la création d'activités génératrices de revenus et une valorisation concomitante de certains produits de terroir issus de la biodiversité, s'avère essentielle pour faire évoluer leurs mentalités.

S.1.25. CONSERVATION STATUS ASSESSMENT OF POPULATIONS OF TWO PRIORITY CENTAUREA SPECIES IN PROTECTED AREAS OF THE WESTERN GREECE.

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Seven taxa of the genus *Centaurea* are included as in Annexes II & IV of the Directive 92/43/EU, all under priority for protection. Three of them are considered as Vulnerable, one as Endangered according to the IUCN Red List and one is Critically Endangered. In the framework of our study, concerning habitat type '8210: Calcareous rocky slopes with chasmophytic vegetation' of Annex I of the Directive 92/43/EU, and the chasmophytic plant diversity of limestone slopes and cliffs, we present here the conservation status of the restricted populations of two of the *Centaurea* species of Annex II, *Centaurea heldreichii* (Critically Endangered B1ab(iii)+2ab(iii)) and *Centaurea niederi* (Vulnerable D2). *Centaurea heldreichii* is a stenoendemic that is restricted to one location in Western Greece and *Centaurea niederi* is known from three localities on crevices of vertical limestone cliffs and rocks. Pressures and threats for the future prospects and trends of these species populations are explained and discussed.

S.1.26. UNE RÉÉDITION AUGMENTÉE ET ACTUALISÉE DU LIVRE: ARBRES ET ARBUSTES DU NORD DE L'AFRIQUE

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Dans les années 90, s'est déroulée la première phase du projet Biodiversité et lutte contre la désertification au nord de l'Afrique. L'un des résultats a été la publication de 2 livres par l'Agence Espagnole de Coopération Internationale pour le Développement (AECID):
- Charco, J. 1999. Le bois méditerranéen au nord de l'Afrique. Madrid. 370 pp.
- Charco, J. 2001. Arbres et arbustes du nord de l'Afrique. Madrid. 671 pp.

Ces livres ont répondu à un besoin important d'accès à la connaissance dans le domaine des sciences de la vie et de la terre pour le nord de l'Afrique en particulier, et pour les pays du bassin de la Méditerranée, en général. Richement illustrés et soigneusement mis en page, ils ont été inclus dans les programmes d'étude de différentes universités espagnoles et sont apparus dans les bibliothèques et les librairies de différents pays européens, ainsi qu'en Afrique, en Amérique ou en Australie. L'intérêt que les livres ont suscité au niveau national et international s'est traduit par un épuisement rapide des stocks disponibles (en un an seulement). 15 ans après leur parution, ils continuent d'être très sollicités. Une réédition révisée et augmentée sera donc faite, disponible sous forme de livre mais aussi sur Internet en accès libre pour les étudiants, les professeurs, les techniciens et les scientifiques. Les textes seront rédigés en espagnol, en français et en anglais.
Il est pour le moment prévu de rééditer uniquement le livre *Arbres et arbustes du nord de l'Afrique* qui, dans sa version augmentée, dépassera probablement 700 pages.
Cette réédition sera financée, développée et publiée par le Centre de Coopération pour la Méditerranée de l'Union Internationale pour la Conservation de la Nature (UICN).
La première édition (décennie des années 90) a bénéficié de l'appui ponctuel de nombreuses personnes, le plus souvent à titre personnel. Cette seconde édition, fera appel à des experts européens et nord-africains, aussi bien à titre personnel qu'en tant que représentants des universités ou des centres de recherche auxquels ils appartiennent.
La première édition portait sur le nord de l'Afrique : de la Méditerranée au Sahel et de l'océan Atlantique au désert égyptien. L'Égypte était donc exclue du projet. Cette seconde édition tentera d'inclure l'Égypte et le nord du Soudan. Ainsi tout le nord de l'Afrique sera inclus jusqu'à la mer Rouge.

S.1.27 MEDITERRANEAN TEMPORARY POND PLANT CONSERVATION ON MT. OITI AND MT. KALLIDROMO IN THE REGION OF STEREA ELLADA, GREECE

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The conservation of high altitude mediterranean temporary ponds is one of the objectives of the LIFE11 NAT/GR/1014 project FOROPENFORESTS. Conservation actions were specified after a two-year study of the plant communities and of the geoenvironment, hydrology and geochemistry of the ponds: Livadies, Greveno, Alykaina, and Louka on Mt. Oiti; and Nevropoli, Mourouzos and Mouriza on Mt. Kallidromo. Plant species monitoring was continued for two more years. The size, geology, and flooding period of the ponds vary but they are all rain fed and greatly influenced by meteorological conditions, so they present large interannual fluctuations in the timing and duration of the wet and dry ecophase and also in the abundance and spatial distribution of plants. The main typical species on Mt. Oiti are *Lythrum thymifolia, Limosella aquatica, Ranunculus lateriflorus, Myosurus minimus,* and *Veronica oetaea*. All the species are rare in Greece but inconspicuous and possibly overlooked. Veronica oetaea is a dwarf annual temporary pond specialist endemic to Mt. Oiti and restricted to three ponds (total area 900 m2). Population counts and soil seed bank assessment took place for four years. *Veronica oetaea* is Endangered (B1ac + B2ac) due to its small area of occupancy and high (> 100-fold) population size fluctuations. The main typical species on Mt. Kallidromo are *Verbena supina, Heliotropium supinum, Mentha pulegium, Cyperus fuscus*, and *Myosurus minimus*. The main threats for all the ponds are grazing and trampling but their impact is significant only at the ponds Louka, Nevropoli, Mourouzos, and Mouriza where plant communities are degraded and require restoration. Scrub encroachment is evident at the surrounding grasslands but does not pose a threat to the ponds. The ponds of Kallidromo are also subject to weed and alien plant invasion. Restoration specifications include: a) fencing with poles preventing the entrance of vehicles at all the ponds; b) fencing with poles and planks preventing the entrance of animals at part of the ponds Louka, Nevropoli, Mourouzos, and Mouriza, in order to assess the effect of grazing and animal trampling; c) removal of weeds and aliens at the ponds Nevropoli, Mourouzos, and Mouriza; d) planting of typical temporary pond species at the ponds requiring plant community restoration; d) in situ conservation of Veronica oetaea by pilot introduction at the pond of Louka which is the only one without the species but with suitable abiotic conditions; and e) seed bank for the ex situ conservation of *Veronica oetaea.*

S.1.28. JABAL MOUSSA BIOSPHERE RESERVE: ECOSYSTEM SIGNIFICANCE AND CONSERVATION CHALLENGES

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Jabal Moussa Biosphere Reserve (JMBR) is nested in the heart of one of the most important valleys on the Mediterranean, the Adonis Valley. The geographic, geologic and topographic particularities of this valley on the East Mediterranean has promoted the development of a distinctive ecological system; the latter is still mostly intact preserving its ecological functions and characteristics in support of a significantly rich biodiversity. Established in 2009, JMBR preserves a substantial sample of the valley ecosystem; it exhibits an extensive diversity in habitats (aquatic and terrestrial) and microhabitats due to its altitudinal span and highly varied topographic features realizing all orientations. It is also marked with a high floral species density. One of the icons of the reserve is *Cyclamen libanoticum* Hildebr., which is strictly a local endemic attesting to the capacity of the ecological cauldron at promoting unique evolutionary processes. Most of the populations of *C. libanoticum* fall within the reserve. Another iconic endemic that finds its sole refuge in the reserve is *Salvia peyronii* Boiss. ex Post; its populations beyond the reserve have long been declared extinct. Both species testify to the crucial conservation of this Important Plant Area. JMBR is also attested an Important Bird Area along the Europe-Africa bird migration routes.
Anthropogenic pressures encroached on the outskirts of the protected area in the past few decades. Deforestation for firewood and charcoal production attacked expanses of deciduous and evergreen oak, denuding some regions, and reducing others to low seral stages. More recently, the quest for a fast and high economic profit allowed the proliferation of sand quarrying on adjacent mountain slopes. Amidst the two poles of high ecological value and rapidly growing threats, the not-to-profit Association for the Protection of Jabal Moussa (APJM) adopted the conservation strategy of total protection of the core area of the biosphere reserve, and the effective reduction of threats and their impact in the buffer and transition zones. This is attained through promoting the reconciliation of the local community with their natural heritage by means of awareness spreading and development of sustainable alternatives for income generation, where ecotourism and women empowerment play integral roles. Robust conservation management has allowed for a multitude of success stories at the level of natural and human resources.

Session 2: Cultural practices for conservation in the Mediterranean region
Session 2: Pratiques culturelles de conservation dans la région méditerranéenne

S.2.1. CULTURAL PRACTICES FOR CONSERVATION – A MOROCCAN CASE STUDY

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Local ecological knowledge is a source of valuable information for biodiversity conservation and sustainable use of natural resources. However, it remains marginal to conservation policy due to vast cultural differences between indigenous people and decision-makers and lack of communication with natural and social scientists. Documenting local ecological knowledge is the first step towards its integration into conservation practices, especially by local members of the community. As part of a project funded by the MAVA Foundation in Morocco, we are developing a community-based, participatory methodology to document traditional practices and community-based resource and landscape management. Knowledge recorded so far includes agricultural practices as well as wild plant population and water management, but some of the recorded agroecological activities are not practiced anymore, principally as a result of socioeconomic changes and generational shifts. Conservation impacts and current status of cultural practices are evaluated, as well as the explanatory models underlying change. In a later stage of the project, recommendations for strengthening cultural practices of conservation will be sought with the community and their incorporation into conservation plans and other means encouraged.

S.2.2. MOBILE PASTORALISM AND BIODIVERSITY - PRELIMINARY RESULTS OF A MAPPING EXERCISE ACROSS THE BASIN OVERLAYING MIGRATION ROUTES WITH PROTECTED AREAS, KEY BIODIVERSITY AREAS, IBAS, IPA

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Understanding and supporting the traditional cultural practices that benefit nature is absolutely critical at a time when biodiversity and cultural diversity have never been more threatened. Thus a consortium of NGOs (Associacion Trashumancia y Naturaleza, DiversEarth, Mediterranean Institute for Nature and Anthropos, Society for Protection of Nature, Yolda Initiative and WWF North Africa), have joined forces to research and conserve 'cultural practices' which benefits biodiversity in the Mediterranean Basin.

Among these practices mobile pastoralism occurs across the entire region in one form or another, representing an outstanding wealth of traditional ecological knowledge which has until now gone relatively unacknowledged by the conservation community - yet which surely holds a key to a more sustainable future in the Mediterranean.

Within the scope of Consortium's work regarding this practice, one of the components is using GIS mapping to identify the routes of mobile pastoralism (pastoral nomads, transhumance etc.) in the Mediterranean Basin and correlating them with the Protected Areas, Key Biodiversity Areas, Important Bird Areas, Important Plant Areas, habitat types etc. This presentation shares the findings of this particular study.

S.2.3. TRANSHUMANCE, NATURE CONSERVATION, AND HIMA COMMUNITY-BASED MANAGEMENT IN LEBANON

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Hima are traditionally protected areas in the Arabic world. These areas have a significantly high number of endemic plants in a region of rangelands threatened by overgrazing. The region of El Fekha was declared a hima in 2013, making it the 8th acknowledged hima in Lebanon. El Fekha is a biologically diverse site, harboring more than 50 bird species of which 10 are considered biome-restricted. It is also an extension of the Ras Baalbek Important Bird Area (IBA), according to BirdLife International. This hima will provide the basis for organizing the grazing system in El Fekha, whereby methods for sustainable grazing will be promoted by SPNL in coordination with the local herders.

Nearly 1,650 species of plants across 104 families and over 580 genera have been documented in the hima of El Fekha. Although grazing itself may not directly affect plant biodiversity, it may nevertheless affect species composition and vegetation cover. Controlled or traditional levels of grazing in himas generate higher biodiversity than in unprotected areas. Sustainable and traditional grazing practiced for hundreds of years has been a way to conserve the landscape and biodiversity. Transhumance grazing has increased the number of habitats that are suitable for plants, reptiles, and insects.

In particular, we have carried out research on butterflies in himas. Butterflies are the most fragile indicators of ecosystem health; they occupy a very important position as pollinators. Plant diversity serves as nectar sources to adult butterflies and many of them are also host plants, thus butterflies contribute to the maintenance of numerous plant species. Over 40 butterfly species from Lebanon are listed as threatened by the IUCN. Almost 165 butterfly species were observed in the region of El Fekha feeding on a wide variety of plants. Many of these species are still poorly known and in need of protection. SPNL produced a compact guide on the butterflies in the Arab World, from Morocco to Mesopotamia and the Arabian Peninsula elucidating their amazing diversity.

S.2.4. LOCAL KNOWLEDGE: TRADITIONAL PRACTICES AND WILD FOOD PLANTS MAINTENANCE IN SOUTHERN EXTREMADURA (SPAIN)

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The research group Ecology, Culture and Development, of the Universidad de Sevilla, studies the ethnobiology of the Sierra Morena area in Spain (Acosta 2002 y 2008; Acosta, Díaz y Amaya 2002). We documented the population decline of several wild plants, such as criadilla de tierra (Terfezia arenaria) and colleja (Silene vulgaris). We also recorded a serious extinction risk for other species referred to by our informants, including ahijón and macuca, for which we were unable to find samples for identification. This issue is related to acroecological changes in the area, in particular the loss or strong decrease of traditional farming practices in the dehesa and the olive grove, as well as to specialization and livestock intensification on farms. Related to this threat to biodiversity is the loss of local knowledge surrounding wild edible plants, the gathering and consumption of which are in a continuous decline, as Reyes-García (2015) has shown. These cases confirm previous studies carried out in the dehesa (Pulido et al 2015), that demonstrate that traditional knowledge as well as traditional agricultural and livestock management practices contribute to enhanced biodiversity.

S.2.5. URBAN BIOCULTURAL NETWORKS IN BARCELONA: LINKING HUMAN DIVERSITY AND PLANT CONSERVATION

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Cities are spaces in which plants are used in myriad ways, as a result of the different groups inhabiting them: these ecosystems will thus of be of great influence for the future of biodiversity conservation. Urban areas also often define the pathways of production, consumption and exchange of plants for both rural and urban areas. Nonetheless, little is discussed in academic terms about the potentialities that cities offer for the development of ethnobotany and biocultural conservation. Recently, big conurbations, such as the metropolitan area of Barcelona, have experienced a rise of organic food cooperatives, slow food chains, food fairs, urban gardens and the reintroduction of wild food plants and underutilized crops in stores, restaurants and kitchens. Concurrently, an increase of immigrants from all continents are providing new botanical and cultural elements to the city's inhabitants. These phenomena of reformulation, innovation and transculturation regarding the use of plants are of particular interest for ethnobotanical research, particularly regarding how they relate to biocultural conservation.

The present communication is based on various emergent activities carried out by our research group, and others, in the metropolitan region of Barcelona and neighboring areas. Using diverse research and outreach methodologies, our group has sought to promote ethnobotanical awareness, cultural practices of conservation and the establishment of local networks with the participation of academic and administrative institutions as well as local farmers, food stores, professional cooks and the general public. In a reflexive exercise, local stakeholders are linked here to an emerging urban network that is producing, exchanging and consuming a great variety of local and exotic plants in the urban milieu. This new and dynamic structure that includes the complex exchange of knowledge, practices and beliefs around plants, involves spaces so disparate such as markets, restaurants, fairs, schools, libraries and research institutions. Underutilized crops, wild plants, ethnic foods and many other subjects are sprouting in the city, reformulating biocultural landscapes and the underlying cultural conservation practices. Future research and outreach to characterize and support these networks should consider a larger area and number of stakeholders, to better understand urban ethnobotanical phenomena and strengthen collaboration amongst actors.

S.2.6. DEHESA AND TRANSHUMANCE: CULTURAL AND ENVIRONMENTAL TREASURES, THREATENED BY POLICY NEGLECT

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Dehesas and trashumance are two paradigmatic cultural systems intrinsically linked with high plant biodiversity in Spain and the Mediterranean. They have not only been a key element in economic development, but also in the creation and protection of the region's rich natural and cultural heritage, contributing greatly to its status as a hotspot of planetary biodiversity.

The 'dehesa' is the result of human intervention over millennia, transforming the original Mediterranean forests into a multipurpose agrosilvopastoral system in response to community needs. Sustainability and the provision of ecosystem services have been central to the dehesas' role, as their underlying objective was to optimize the use of resources which guaranteed community survival over time.

Following the same resource use efficiency and sustainability rationale, mobile pastoralism has traditionally characterized grazing in the Mediterranean Basin, where Spain stands out as the most striking example of transhumance. It is also one of the few western nations whose history, landscape and culture have been deeply influenced by this pastoral heritage, almost to the present day. As a result, Spain is one of the richest countries in Europe in terms of biodiversity.

The routes followed by the herds, the so-called 'Drovers' Roads', were first given legal recognition in the 13th Century, and their status was confirmed as recently in 1995 with the creation of the National Network of Drovers' Roads. Unique in the world, in total it comprises more than 12,000 km and over 400,000 ha of land, forming true ecological corridors and biodiversity 'warehouses'. Transhumance also creates habitats without which other species could not survive, increases botanical diversity and it is a first-class tool for wildfire prevention and in addressing climate change. Both dehesas and transhumance are also reservoirs of traditional knowledge and governance types, such as those traditionally managed under common tenure systems.

However, the viability of both systems is seriously threatened by intensification and abandonment, provoked by market rules and public policy. The legal protection of some dehesa types under EU biodivesity legislation has had hardly any effect in counteracting the damaging consequences of the current Common Agriculture Policy (CAP) on these farming systems. If this precious and unique heritage is to be protected, EU policy should support agriculture that produces healthy food and healthy ecosystems essential for a healthy society. For that, a radically different CAP is needed.

S.2.7. L'EFFET DE LA PRATIQUE DE L'ANASTOMOSE DES TIGES DU FRÊNE DIMORPHE : FRAXINUS DIMORPHA SUR LA PRODUCTION FOLIAIRE

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Le Haut Atlas Marocain est le lieu de vie de populations Amazighes rurales qui vivent dans des conditions de rigueur climatique où il est difficile de se développer économiquement. Ces populations agropastorales sédentarisées ont développé des pratiques et des techniques originales d'exploitation des arbres dans une vision holiste du fonctionnement de systèmes de production très dépendants des ressources naturelles. Il s'en est suivi un façonnage original du paysage agroforestier, et une valorisation du fourrage foliaire aérien dans le cycle fourrager du cheptel, surtout pendant la période hivernale. Le frêne dimorphe constitue l'une des ressources clés dans la sédentarisation de la population.

Dans la tribu des Ait M'hamed (Haut Atlas central marocain) la population locale, exploite des parcs agroforestiers à frêne dimorphe pour les besoins en fourrage du cheptel. C'est dans ce cadre que les jeunes arbres sont façonnés pour améliorer la production en fourrage foliaire. Dès leur jeune âge les tiges rapprochées, issues de germinations ou d'anciennes touffes sont relevées et liées ensemble. Cette pratique provoque l'anastomose de ces tiges en un seul tronc.

Dans le cadre de ce travail, nous avons réalisé une étude comparative de la production foliaire entre des arbres de frêne non anastomosés (un seul tronc) et des arbres façonnés et anastomosés. L'analyse statistique des résultats obtenus sur un total de 32 individus (sur chaque individu on a choisis 10 brins sur lesquels on a mesuré le diamètre, la longueur et le poids de feuilles par brin) a montré qu'il y a des différences très hautement significatives entres les individus anastomosés et les non anastomosés. Nous pouvons donc conclure que l'anastomose des arbres du frêne a un effet significatif sur la production foliaire.

On a pu ainsi déterminer que cette pratique traditionnelle repose sur un savoir biologique et écologique chez les populations des Ait M'Hamed, et qui leur permet de mettre en valeur cette ressource fourragère appréciable.

S.2.8. L'IMPORTANCE DES AGDALS POUR LA CONSERVATION DE LA DIVERSITÉ FLORISTIQUE DANS LE HAUT-ATLAS MAROCAIN

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Le Maroc est parmi les cinq premiers pays floristiquement plus riches à l'échelle méditerranéenne avec 3800 espèces. Le Haut Atlas est l'une des zones qui présentent une diversité floristique la plus riche et aussi le principal foyer de l'endémisme (423 espèces). La conservation de cette diversité dans le Haut Atlas est primordiale.

Les agdals sont des systèmes de conservation utilisés par la population dans cette zone. Le principe de l'agdal consiste en la mise en défens temporaire d'un espace ressource par des institutions coutumières intervenant à différentes échelles territoriales (village, fraction tribale). Dans le Haut Atlas, la pratique de l'agdal permet la protection des ressources naturelles (agricoles, pastorales ou forestières) ou construites par l'Homme (aménagements collectifs, lieux sacrés...). Notre recherche explore l'importance de l'agdal pour la biodiversité floristique dans la Haut Atlas.
Des mesures de végétation ont été effectuées dans trois stations comparables établies dans l'agdal de la commune d'Ait M'hamed (province d'Azilal), qui couvre une superficie d'environ 10,000 ha. Dans chaque station, des mesures de recouvrement végétal et de contribution des espèces à la couverture végétale ont été réalisées sur quatre lignes de 20 mètres de longueur par station, à l'aide de la méthode des points quadrats. Sur chaque ligne, 100 points équidistants de 20 cm sont lus pour déterminer la présence ou l'absence des espèces végétales. Des calculs du recouvrement total de la végétation ont ainsi pu être effectués, de même que les contributions spécifiques des plantes au recouvrement végétal. Les mesures ont été réalisées à deux dates: fin juin avant la fin de la mise en défens de l'agdal, et après l'utilisation intensive de l'agdal par les troupeaux. Les comparaisons en termes de proximité floristique vont être utilisées pour calculer les indices de végétation.

Des collectes complémentaires d'espèces végétales ont été réalisées pour compléter la liste floristique des faciès de végétation en présence. D'après les premiers résultats, le recouvrement végétal est très important en juin, ce qui reflète le fort développement de la végétation résultant de la mise en défens. Après passage des troupeaux, les différences sont plus réduites mais encore significatives par rapport aux régions ou surfaces non protégées. Ces résultats sont confirmés par les indices de végétation. Bien que les analyses des résultats sont à leur début, celles-ci pointent l'importance de l'agdal comme pratique pour la conservation de la diversité des plantes dans le Haut-Atlas Marocain.

S.2.9. MT ATHOS: COMMUNITY MANAGEMENT OF A SACRED SITE

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The Athonite peninsula in Halkidiki, Northern Greece, also named the 'Garden of the Virgin Mary', is known around the world as the Holy Mountain. From the start of the second millennium to the present day it has been a shining beacon of Christian monasticism and a cradle of Orthodoxy.
Mt Athos is internationally known for the spiritual radiance of its monasteries and the wealth of its cultural artefacts, which include buildings, works of religious art, manuscripts and books, objects of ethnological interest or from day-to-day life, as well as living traditions and mores resulting from many centuries of a monastic community life, work, and prayer.
However, beyond its spiritual and cultural significance, Mt Athos is an area of unique landscapes and rich biodiversity – as evidenced by its 1453 recorded species of *Pteridophyta* and *Spermadophyta*, 173 species of avifauna, many rare and endangered mammals, as well as including a plethora of habitat types of Community Interest. The Peninsula is characterized by a high degree of endemism and some of its forest ecosystems –such as that of the Quercus ilex– are considered to be at the optimum state of preservation in Greece.
UNESCO declared Mt Athos as a World Heritage Site (WHS) in respect to both its natural and cultural values –only one of two mixed WHS in Greece. The Peninsula has also been incorporated in the EU Natura2000 network of protected areas.
Mt Athos has always enjoyed a particular status of self-administration, which has been respected in all historic periods. Today, as acknowledged by the Greek constitution, the territory of Athos belongs exclusively to its 20 monasteries and may not be expropriated, whereas responsibility for integrated management of the Peninsula is assumed by the Holy Community, which includes representatives from all monasteries, in partnership with the Greek State where needed.
To effectively safeguard Mt Athos' natural and cultural heritage, it has been proposed that management should be actively undertaken by the monastic community, yet in accordance with international standards and in close cooperation with international organizations; a proposal which has been viewed by the Holy Community in a positive light. The experience gained on Mt Athos so far –as enriched with advice from the competent public services, eminent scientists and UNESCO experts– may prove useful for other similar WHS.

S.2.10. MARABOUT SACRED SITES IN NORTH AFRICA

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A Marabout is a Muslim religious leader, scholar and teacher of the Qur'an in West Africa, and historically in the Maghreb. Some may be wandering holy men who survive on alms, others are Sufi Guides, or leaders of religious communities. Other Marabouts keep syncretic pre-Islamic traditions alive, making amulets for good luck, presiding over ceremonies, predicting the future, and in some cases actively guiding the lives of followers.
In Tunisia, the marabout sometimes gives the name to a locality, a village or a city. He provides protection and blessing in the place of worship - zaouïa - that welcomes thousands of devotees every year. Generally speaking, where there is a marabout in natural places, the territory and plant resources surrounding the site are protected.
In marabout sites we find the oldest olive trees in the country, some dating back to the punic period 814 av. J.-C. (for example; Sidi Chrif Marabout, Hawaria, Tunisia). The cork oak forest of the northern areas of Tunisia also benefit from the protection of the Marabout: there is a respect of the area surrounding the trees' Marabout and there is no exploitation of their cork (Cap Negro, Tunisia).
However, things are changing in North Africa with the increase and expansion of radical Islamism and along with it the vision that maraboutism is anti-Islam. Marabout sacred sites are currently endangered: in 2013 a number of marabout sites were destroyed by extremists. It is now critical to strengthen resilience and protection of these sacred sites, while there is still time to put in place appropriate safeguards. WWF North Africa is working to document how cultural practices enhance conservation in these sacred sites in order to garner support for their protection.

S.2.11. LES PÉPINIÈRES COMMUNAUTAIRES COMME OUTIL POUR LA CONSERVATION EX SITU ET IN SITU DANS LE HAUT-ATLAS MAROCAIN

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Depuis 2013, Moroccan Biodiversity Livelihoods Association et Global Diversity Foundation soutiennent la création et la gestion de pèpinières communautaires dans deux communes du Haut Atlas Marocain : Imegdale et Ait M'hamed, et dans un internat pour filles dans la vallée de l'Ourika, Dar Taliba.
Ces pépinières s'inscrivent dans une perspective de sensibilisation, d'éducation et d'actions pour un environnement durable, et ce pour répondre aux défis écologiques (les menaces sur la biodiversité), économiques, sociaux et culturels. En effet, nous sommes convaincus que la participation des populations dans la gouvernance de la biodiversité favorise énormément les nouvelles dynamiques de développement local.
Ces pépinières contribuent si bien à la conservation des plantes qu'à l'économie locale à travers de la cultivation d'espèces menacées ainsi que d'espèces économiquement importantes. Les plantes initialement cultivées dans les pépinières sont ensuite distribuées aux membres des communautés qui les plantent dans leurs parcelles et dans le territoire communautaire plus ample. Ici, elles contribuent à la restauration écologique en augmentant les populations sauvages de plantes menacées, et donc soulageant la pression sur les populations existantes, tout en permettant aux membres des communautés d'entreprendre une collecte et vente durable de ces espèces.
Un objectif important de notre travail est rendre les pépinières les plus productives et durables possibles. Pour cela nous avons entamé un processus de re-conception des pépinières selon les principes de permaculture, qui envisage une production de plantes de manière entièrement écologique. Nous soutenons aussi une intervention importante au niveau de la gestion des ressources en eau qui vise à l'efficacité des systèmes d'irrigation des pépinières tout en apportant une provision en eau potable aux communautés.
Les pépinières sont aussi un lieu de capacitation et formation pour les communautés, qui ont l'opportunité de développer de nouvelles compétences et de trouver de l'emploi au sein du projet. Elles sont aussi un espace pour l'expérimentation pour la cultivation d'espèces sauvages, une approche qui promets pour la restauration écologique du paysage du Haut Atlas. Enfin, ce sont des lieux de rencontre, d'échange et d'apprentissage mutuel entre différents acteurs, institutions et communautés qui cherchent à conserver l'écologie unique du Haut Atlas Marocain.

S.2.12. MEDICINAL PLANTS OF LEBANON: DIVERSITY, DISTRIBUTION AND RECOMMENDATIONS FOR FUTURE BIOPROSPECTING AND CONSERVATION

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The flora of Lebanon is comprised of about 3000 species of vascular plants, 15-20% of which are reported to be of medicinal value. Despite growing interest in documenting native medicinal plants and verifying their therapeutic potential, data on the nomenclature, distribution and conservation status of these plants remains scattered and sometimes lacking or contradictory. Moreover, the search for new medicinal plants is not generally guided by taxonomic relationships with plants of known effects. In this study, we generated a comprehensive, updated list of medicinal vascular plants used in Lebanon. The list was then analyzed with the purpose of identifying taxonomic groups of high medicinal potential, with the ultimate aim of guiding future bioprospecting. Species conserved ex situ (in seed banks and in cultivation) and in situ (protected areas) were identified. Distribution maps of the different medicinal plants were also generated with the aim of identifying important medicinal plant areas (IMPAs), geographic regions with high diversity of medicinal plants. A comparison of these areas with delineated important plant areas and designated natural reserves in Lebanon was undertaken using DIVA-GIS to identify potential sites for in situ conservation. A preliminary assessment of threats to medicinal plant diversity was undertaken. This study will serve as the baseline for guiding future conservation of medicinal plants and bioprospecting efforts in Lebanon and the region.

S.2.13. RICHESSE FLORISTIQUE ET INVENTAIRE ETHNOBOTANIQUE DE LA RÉGION DE TATAOUINE-SUD DE LA TUNISIE

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Une étude ethnobotanique menée dans la région de Tataouine au sud tunisien nous a permis de mettre en évidence la biodiversité et la richesse de la flore spontanée de cette région et en plantes à usage médicinal exploitées par la population locale.

Une série d'enquêtes ethnobotaniques a été réalisée sur le terrain pendant les campagnes 2012/2013 - 2013/2014 auprès des utilisateurs des plantes, des herboristes et tradipracticiens. Ces recherches, complétées par l'identification des échantillons sur le terrain et au laboratoire, nous ont permis d'inventorier 123 espèces spontanées répertoriées en 104 genres et 37 familles. Par ailleurs nous avons recensé au niveau de ce secteur d'étude 9 espèces endémiques à savoir Rhanterium suaveolens: Endémique Nord-AficaineTripoltaine ; *Artemisia saharae*: Endémique de l'Algérie et Tunisie ; *Limoniastrum guyonianum* : Endémique du Sahara Nord-Africaine ; *Linaria scariosa* : Endémique de la Tunisie jusqu ' à Biskra ; *Daucus syrticus* : Endémique lybico-tunisienne ; *Arnebia decombens* : Endémique tunisienne, et 4 taxons considérés comme espèces rares à savoir *Salvia aegyptiaca, Kicknia aegyptiaca, Linaria laxiflora* et *Lavandula coronopifolia*.

Le dépouillement des résultats obtenus à partir des fiches questionnaires et à l'aide d'un traitement informatique nous a permis de mettre en évidence la capacité de la population à maîtriser et à valoriser la quasi totalité de la flore de sa région. En effet, nous avons recensé 89 plantes spontanées qui ont présenté plusieurs usages à savoirs les usages médicinaux (48,7%) alimentaires (24,39 %) ainsi que rituels (4,88%). De plus (7.32%) des taxons inventoriés sont cités comme étant toxiques, répulsives ou à activités pesticides.

Session 3: Community-conserved areas in the future management of biodiversity, land and water in the Mediterranean
Session 3: La conservation communautaire des espaces dans la gestion future de la biodiversité, du sol et de l'eau dans la région méditerranéenne

S.3.1. ICCAS IN CONSERVATION ACTION AND POLICY IN EUROPE AND THE MEDITERRANEAN

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The concept of 'ICCAs' (areas collectively conserved by communities) is largely unknown in Europe and the Mediterranean, but some of their essential elements exist, associated with systems of collective tenure, whether their ownership is public (in most cases) or private.

Historically widespread in Europe and the Mediterranean, these common systems were pushed to the brink of extinction by the growth of capitalism, Despise the adverse trends we are today witnessing the revival of some traditional "ICCAs" in Europe and the emergence of new ones. These systems might play a crucial role as a 'firebreak' to stop natural resources degradation, and sustain conservation management. For example, the implementation of Natura 2000 in the EU offers a good potential.

Session 4: Networking, building synergies, involving volunteers and citizen science
Session 4: Réseautage, construction de synergies, implication de volontaires et sciences citoyennes

S.4.1. PUBLIC ENGAGEMENT AND CITIZEN SCIENCE—WHAT ARE THEY AND HOW DO WE ACHIEVE THEM?

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Plantlife International has a history of partnership with international partners to effect local conservation actions. We recognise that plant conservation begins with people and we work with partners to conserve plants on the ground in community based projects and to raise awareness of civil society rights. We have developed medicinal plant conservation projects with partners and local communities in Africa and the Himalaya. We work to ensure that rural development plans include plant conservation projects, for the benefit of plants and people.

We work with partner organisations in many countries around the world that are identifying or conserving their Important Plant Areas (IPA). We coordinated efforts to publish European and Global identification criteria for IPA, and works to promote the work of IPA projects in over 66 countries around the world. We have also been a major contributor to the CBD Global Strategy for Plant Conservation (GSPC) and together with the Planta Europa Network and the Council of Europe developed a regional European Strategy for Plant Conservation. This talk highlights our knowledge and experience gained in garnering public involvement in plant conservation, engaging volunteers, and implementing citizen science efforts.

S.4.2. EXPERIENCE ON CREATING SYNERGIES, VOLUNTEERISM AND CITIZEN SCIENCE FROM THE IPAMED PROJECT PARTNERS

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Twenty seven IPA have been identified in Montenegro and three of them were selected for implementation of activities in the framework of the project "Conserving wild plants and habitats for people in the South and East Mediterranean": Long Beach, Vrsuta and Skadar Lake. Project activities were focused at local level with the aim to increase local people awareness and understanding of botanical values, but also to include them to participate in the implementation of conservation measures.

So far, many activities were realized at these IPA, that brought together more than 200 volunteers, representatives of all relevant institutions and more than 10 local NGOs. Substantial assistance in the organization of the event was provided by local partner organization. Our volunteers contribute to the cleaning action, removing invasive plant species, but also they had opportunity to learn about the significant plant species and habitats through educational workshops and field visits. After the acquired knowledge, volunteers assist in the collection of information about species and habitats, through regular monitoring.

We have used a variety of methods to engage our volunteers and local residents. For example, we used simple spread sheet with plant images for purposes of monitoring, or mapping populations of invasive species on printed Google maps like the way to introduce people with the rich flora in their area but also treats and difficulties for protection. Also we have organized many meeting and workshops with representatives of local communities, with aim to reach better understanding of the value of nature protection in their nearby area, where short benefits of using resources (for example wood cutting, sand and gravel exploitation, but also urbanization caused by unsustainable tourism development), are seen as way to improve livelihood.

S.4.3. IMPORTANT PLANT AREAS CONSERVATION IN MACEDONIA IN THE HANDS OF LOCAL COMMUNITIES

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Ever since the 42 IPA were identified in Macedonia in 2007, nothing has been done in terms of their conservation enforced by the national legislation for nature protection. They were only approved as such and mentioned in the national law for nature protection. Fortunately, mainly thanks to the initiatives raised by organizations like Plantlife, four projects have been applied in Macedonia in the period 2007-2016. The national coordinator of these projects is NGO Macedonian Ecological Society.
Especially important is the project known as "A Natural Network for People and Places", conducted in three phases which covered seven IPA from Macedonia. These IPA were selected and networked with a dual objective in mind: to contribute to the protection of plants and raise awareness among the people about the value and importance of nature in general. The most remarkable achievement during this project is the network formed of local NGOs, stakeholders, informal groups and volunteers that actively took part. In each IPA, the activities were conducted by local coordinators, responsible for organizing around 30 events, on the topic of the importance of plants and the need for their protection. The events included educational camps, marking hiking trails with information panels, photographing wild plants and development of herbaria, establishing mountain and botanical trails, monitoring. Some 1700 people, were part of the Natural Networks project. Mountaineers, teachers, students, youth groups, representatives of the municipalities - all voluntarily participated in the events. Some were botanists, herbalists, but most were just lovers of nature and its beauty. All volunteers were open to learn more about their IPA - why it was so special, what plants could be found there and not elsewhere, how could they protect them, why were they important at the European level etc.
The transfer of experience and knowledge enhancement on the international laws for nature protection is especially important and beneficial to the local communities that potentially can become so called local conservation groups (LCG). Many of them are pioneers in the protection of nature and the environment in Macedonia. As a candidate for accession to the European Union, Macedonia is committed to introduce all laws mandated by the European Commission. These local conservation groups are precisely those target groups that should be familiar with the laws relating to nature protection. Thus, they become directly aware of the importance of the area/s they act in and at the same time they acquire the capacity to conserve and protect natural resources.

S.4.4. SUCCESSES AND CHALLENGES IN PLANT CONSERVATION: INSIGHTS FROM TURKEY

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Our presentation will be centered on the activities of the IPAMed project what are the challenges, successes, what are the future priorities for plant conservation/IPA work in Turkey. We'll be sharing our experiences on the species monitoring activities of this project within the context of Citizen Science and how this activity has been implemented in Turkey with the help of volunteers; how the challenges are being met, what has worked/ what has not. We discuss our work on community visions and what the different communities have envisioned for their IPA, how this vision might be implemented, what would need to happen, what help they might need and from who.

S.4.5. A VISION FOR MEADOW RESTORATION IN ABANDONED LANDS IN CROATIA

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In 2009, Croatia identified 97 Important Plant Areas (IPA) as part of the project "Conserving Important Plant Areas: Investing in the Green gold of south east Europe". The greatest threat facing IPA here is land abandonment leading to succession changing the natural ecosystem. BIOM has recently been working toward habitat restoration of overgrown meadows within a Nature Park in Croatia. The work is implemented in collaboration with local and international volunteers. Here, I outline a vision for restoring meadows within the Učka Nature Park, an IPA site, and share our experience with working with volunteers.

S.4.6. PEOPLE AND WILD PLANTS – NATURALLY CONNECTED

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The area around Demir Hisar town which belongs to Ilinska and Plakenska Mountain IPA is special because of the connection between nature and people that has been developed centuries ago. Some of the most beautiful villages in Macedonia are spread here camouflaged into the hills and meadows in the surrounding area. People here learned to live with, and out of the benefits and goods that nature brings. Wild plants are among the most popular goods that nature can produce. Special traditional bond among wild plants and people has been established. But, as industrial and economic development took part, many of this traditional practices were abandoned. Nowadays, the elderly villagers of this region are trying to pass their knowledge and wisdom to the younger population here. This knowledge is mainly related to how they used the wild plants from the area during the years behind.
Since 2013, when Ilinska and Plakenska IPA was first included in the Natural Networks for Places and People project this connection among wild plants and people was re-bourn. With help to one very enthusiastic locally based NGO known as Art Point Gumno, many people started to re-connect with wild plants again. Thanks to the activities performed in the last two years, wild plants in this IPA has become popular as they were several decades ago. Lectures to local schools, working with preschool children, collecting wild plants related stories by elder villagers, involving children in self research related to some medicinal and aromatic plants, production of informative materials and plenty other activities arose the idea, at least among part of the population of this area, that wild plants were once, and still are the most important part of people's livelihood.

S.4.7. INSPIRING THE YOUNG GENERATION TO VALUE THEIR LOCAL PLANT TREASURES

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During 2015. and 2016, the students of the high school "Niko Rolović" from Bar participated in the volunteer activities of the project "Conserving wild plants and habitats for people in the South and East Mediterranean," which in Montenegro NGO Green Home is implementing. In our school, we have organized the ecological sections for about 20 students who had the opportunity to attend 5 educational workshops about botanical values of Vrsuta Mountain that Green Home representative prepared for them. Also, for students were organized two educational field visits to Vrsuta, which is one of the 27 IPA in the country and located near our city.
Although Vrsuta always has been a favourite picnic area for residents of Bar, there wasn't so many people introduced about its botanical values. Through the project, students from the high school learned a lot about it from botanists and biologists. They met the flora of this area but also they had the opportunity to participate in the monitoring of species and habitats. Inspired by the activities that we have worked together with Green Home and scouts society "24.November" (local project partner), students of environmental section write a school project about endangered and rare species *Gymnospermium scipetarum*. The project includes a plan how to preserved, protect and valorised last habitat of this species in Montenegro. In addition, students presented the project on the school level, then many people in town and country heard about this. At the end, project was part of competition for students from all parts of Europe and it was held in Istanbul this year. For this occasion, students individually created many posters, presentations, leaflets and similar promotional materials.
Students and their teachers are hoping that, in the coming years, they will contribute to the protection of important species and habitats in a similar way. But also, share the message about the importance of preserving the natural values in the next generations of students in their school.

S.4.8. LOCAL PLANT SPECIES WIN THE HEARTS OF LOCAL ARTISANS

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As part of our awareness raising activities, inspired by the Plantlife International's Patchwork Meadow Project, we planned an activity to involve rural women of Kahramanmaras to our Project. The objective of our activity was to bring our target plants to the attention of rural women and thus raise their awareness on the issue. We chose Göksun Continuing Education Center (Center) as our partner because they are famous for the quality training and education they provide in fine arts and also because one of our target plants *Psephellus goeksunensis* takes its epithet name from the Göksun municipality of Kahramanmaras Province. The enthusiasm of our Project Coordinator coupled with the dedication and enthusiasm of the Center's Director the activity reached and surpassed the initial expections of the Project team.
This activity demonstrated , once again, the importance of people relations in a Project. The timely and enthusiastic communications, proper information sharing including providing the Center illustrations for the target species in our Project, and species specific information provided in simple language provided by our Coordinator won the hearts and commitment of the Director and students of the Center. As a results the Center's Director dedicated this school year (2016) and next (2017) to plants of Kahramanmras. At the end of the school year they held a successful exhibition with all the handcrafts, using local wild flora themes, produced during the year. There will be 2 subsequent exhibits this year.
We share this in poster form as a good example of how a simple awareness raising activity may produce ripple effects if treated with enthusiasm.

Field visit to Long beach and Skadar Lake Important Plant Areas

In the framework of the 1st Mediterranean Plant Conservation Week, Green Home will organize a one-day field visit to Long beach and Skadar Lake Important Plant Areas (IPA).

On this occasion, the participants will be introduced to plant species and habitats diversity of these two selected IPA. These presentations will be given by two botanists and guides Prof.Dr. Danka Petrovic and Prof. Dr. Danijela Stešević from the Faculty of Natural Sciences and Mathematics (University of Montenegro). The participants will also have the opportunity to learn about threats to biodiversity and how Green Home fights them.

Long Beach (Velika Plaža)

Long Beach in Ulcinj is located at the south-eastern end of the Adriatic coast and is considered its longest beach (approximately 12 km long). It is famous for its well preserved habitat of psammophytic vegetation in Montenegrin coastal area and in the eastern Adriatic coast as well.

Long beach is characterized by its important biodiversity and is included in the list of IPA habitats in Montenegro. Furthermore, 10 Natura 2000 habitats are reported on this beach.

23 species are protected under national legislation in Long beach. However, this number may be underestimated. Some of the most important species protected include: *Calystegia soldanella, Pancratium maritime* and *Cakile maritima*.

Rapid tourism development and unplanned urbanization are serious threats to its wildlife. In the last 10 years, Long Beach and its hinterland have been exposed to intensive anthropogenic pressure, mainly due to tourism development and urbanization. In order to improve tourist facilities, the construction of buildings, roads, parking places and beach furniture has intensified. This has resulted in an increase of illegal waste disposal and in the spread of invasive exotic species.

Skadar Lake (Skadarsko jezero)

Skadar Lake is located in the Montenegrin-Albanian border and is the largest lake of the Balkan Peninsula. Its area varies seasonally, ranging from 354 to 505.8 km2, while its water level fluctuates from 4.7 to 10 m.

Skadar Lake is one of the most important biodiversity centers of the Western Balkans. The Lake and its surroundings are home to 725 species of vascular plants, which represent one fifth of the total number of registered plant species in Montenegro. At the national level, its biodiversity is extremely important. Indeed, the lake inhabits 164 aquatic plant species. This number significantly exceeds the diversity of other freshwater basins in Montenegro. Some of these species include: *Nymphaea alba, Nuphar lutea*, *Trapa natans*, and *Scirpus* sp.

Habitat destruction is one of the most significant pressures on biodiversity in Skadar Lake. This is mainly due to the development of tourism, agricultural activities, exploitation of natural resources, etc.

Important threats to biodiversity also include non-native invasive plants that are rapidly multiplying and damaging to the natural floristic composition of plant communities, endangering native plants. Some of these exotic invasive plant species include: *Amorpha fruticosa, Ailanthus altissima* and *Robinia pseudoacacia*.

Agenda

Guides: Danka Petrovic (for Skadar Lake) and Danijela Stesevic (for Long beach in Ulcinj)

First group **Premier groupe**		**Second group** **Second groupe**	
08:00 - 09:30	Traveling to Skadar Lake Trajet vers le Lac de Skadar	08:00 - 08:30	Traveling to the Long beach Trajet vers le site de Long beach
09:30 - 10:15	Presentation of National Park Skadar Lake (Vranjina Visitor centre) Présentation du Parc National du Lac de Skadar (Centre des visiteurs de Vranjina)	08:30 - 09:00	Presentation of the representative from Public institution “Morsko dobro” (coastal management) Présentation du site par le représentant de l’institution publique “Morsko dobro” (gestion côtière)
10:15 - 12:30	Boat ride and Visit of the Besac fortress in Virpazar Sortie en bateau et visite de la forteresse de Besac à Virpazar	09:00 - 11:00	Visiting the area of Long beach Visite du site de Long beach
12:30 - 14:00	Lunch at the local restaurant in Virpazar Repas dans un restaurant de Virpazar	11:00 - 12:30	Traveling to the Skadar Lake Trajet vers le Lac de Skadar
14:00 - 15:30	Traveling to the Long beach Trajet vers le site de Long beach	12:30 - 14:00	Lunch at the local restaurant in Virpazar Repas dans un restaurant de Virpazar
15:30 - 16:00	Presentation of the representative from Public institution “Morsko dobro” (coastal management) Présentation du site par le représentant de l’institution publique “Morsko dobro” (gestion côtière)	14:00 - 14:45	Presentation of National Park Skadar Lake (Vranjina Visitor centre) Présentation du Parc National du Lac de Skadar (Centre des visiteurs de Vranjina)
16:00 - 17:30	Visiting the area of Long beach Visite du site de Long beach	14:45 - 17:00	Boat ride and Visit of the Besac fortress in Virpazar Sortie en bateau et visite de la forteresse de Besac à Virpazar
17:30 - 18:00	Traveling back to the hotel Retour à l’hôtel	17:00 - 17:30	Traveling back to the Hotel Retour à l’hôtel

Visite sur le terrain des Zones importantes pour les plantes de Long Beach et du lac de Skadar

Dans le cadre de la 1 ère Semaine de la Conservation des Plantes Méditerranéennes, Green Home organisera une visite de terrain d'une journée sur les Zones Importantes pour les Plantes (ZIP) de Long Beach et du lac de Skadar.

À de cette occasion, les participants seront initiés à la diversité des espèces et des habitats de ces deux ZIP. Ces présentations seront données par deux botanistes et guides Prof. Dr. Danka Petrovic et Prof. Dr. Danijela Stešević de la Faculté de Sciences naturelles et de mathématiques (Université du Monténégro). De plus, les participants auront aussi l'occasion de découvrir les menaces qui pèsent sur la biodiversité et la façon dont Green Home les combat.

Long Beach (Velika Plaža)

La ZIP de Long Beach à Ulcinj se situe à l'extrémité sud-est de la côte Adriatique et est considérée comme la plus longue plage de la côte (environ 12 km). Elle est célèbre pour son habitat très bien préservé qui abrite une végétation psammophytique au sein de la zone côtière monténégrine ainsi que sur toute la côte orientale de l'Adriatique.

La ZIP de Long Beach se caractérise par sa grande diversité biologique, qui a permis de l'inclure dans la liste des ZIP du Monténégro. De plus, un total de 10 sites NATURA 2000 sont identifiés sur cette plage.

23 espèces protégées par la législation nationale ont été enregistrées dans la ZIP de Long Beach, mais on suppose que ce nombre est sous-estimé. Certaines de ces espèces protégées sont: *Calystegia soldanella, Pancratium maritime* et *Cakile maritima*.

Le développement rapide du tourisme et de l'urbanisation non planifiée représentent des menaces sérieuses pour la faune de Long Beach. Au cours des 10 dernières années, la ZIP de Long Beach et son arrière-pays ont été exposés à une importante pression anthropique, principalement due au développement de l'urbanisation et aux activités touristiques. En effet, afin d'améliorer les installations touristiques, la construction de bâtiments, de routes, de places de parking et d'installations sur la plage s'est intensifiée. Cela a entraîné le développement de dépôts illégaux de déchets et la propagation d'espèces exotiques envahissantes.

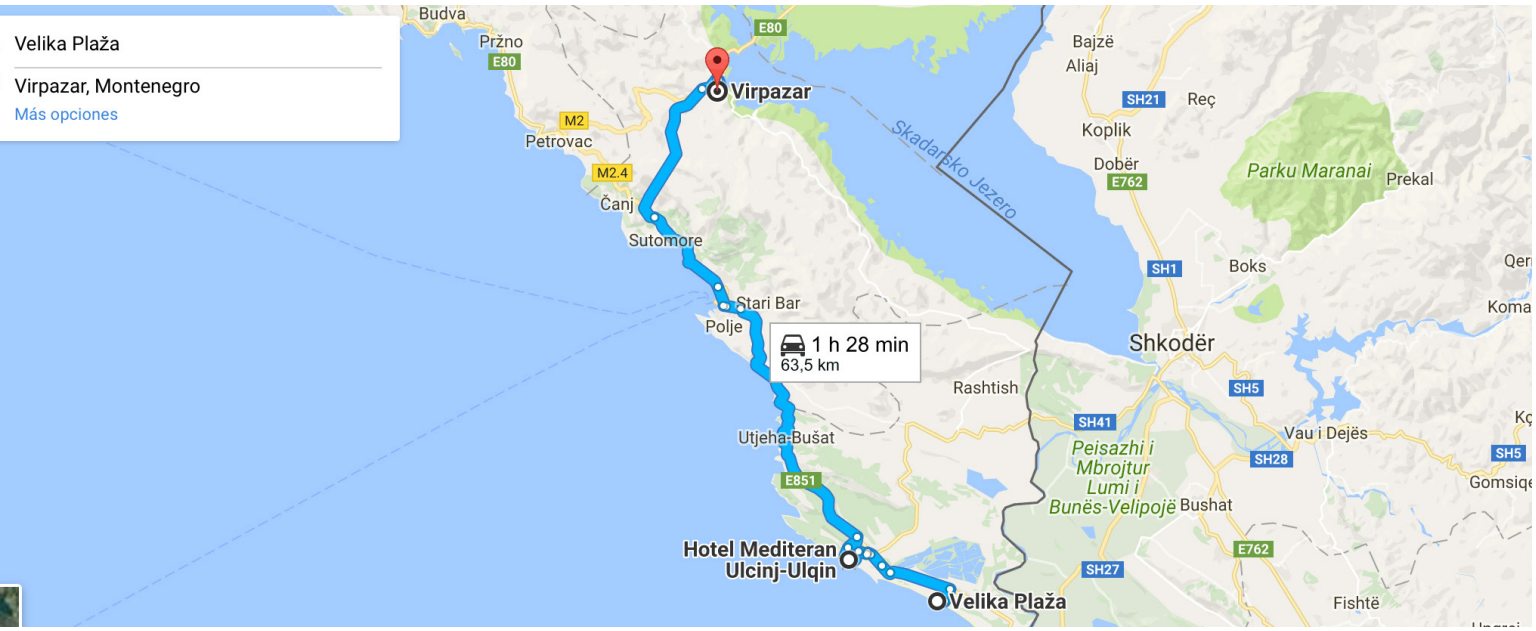
Lac de Skadar (Skadarsko jezero)

La ZIP du lac de Skadar est située sur la frontière monténégrino-albanaise et est le plus grand lac de la péninsule balkanique. Sa superficie varie selon la saison, entre 354 et 505,8 km2, alors que le niveau de l'eau varie entre 4,7 et 10 m.

La ZIP du lac de Skadar est l'un des centres de biodiversité les plus importants des Balkans. Le lac et ses environs abritent 725 espèces de plantes vasculaires, ce qui représente un cinquième du nombre total d'espèces végétales du Monténégro. Au niveau national, sa biodiversité est extrêmement importante. En effet, le lac abrite près de 164 espèces de plantes aquatiques, ce qui est énorme comparativement à d'autres bassins d'eau douce du Monténégro. Certaines des espèces qui caractérisent le lac de Skadar sont: *Nymphaea alba, Nuphar lutea, Trapa natans* et *Scirpus* sp.

La destruction de l'habitat est l'une des pressions les plus importantes sur la biodiversité au sein du lac de Skadar et cela est principalement dû au développement du tourisme, des activités agricoles, de l'exploitation des ressources naturelles, etc.

De plus, d'autres menaces importantes pour la biodiversité du lac sont les plantes exotiques envahissantes qui se multiplient rapidement et endommagent la composition floristique naturelle des communautés végétales, mettant en danger les plantes indigènes. Certaines de ses espèces exotiques envahissantes incluent: *Amorpha fruticosa, Ailanthus altissima* et *Robinia pseudoacacia*.



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