

معًا نزرع غابات الغد
TOGETHER WE PLANT
TOMORROW'S FORESTS

جذورلبنان

jouzourloubnan.org

"In all the chaos and confinement we live in and endure, let us get our frustration and stress out and find refuge in nature to search for calmness and moments of bliss "



فتحوا قلبكم
للطبيعة
أرضنا، أملنا

adoptacedar.org

WORD OF THE PRESIDENT



On s'apprêtait à célébrer en 2020 le centenaire du Grand Liban. Le Grand Liban tant rêvé par nos arrières grands parents qui ont enduré le joug des ottomans, la famine et l'injustice. Le grand Liban vert, chaleureux et accueillant qui allait devenir quelques dizaines d'années plus tard la gemme de l'Orient.

Mais voilà que 2020 s'est révélée être l'année de toutes les crises pour le Liban. La prometteuse révolution du 17 octobre a été déchiquetée, suivie d'une crise économique impitoyable et d'une crise sanitaire sans précédent qui frappe tous les continents. Le coup de grâce fut apporté par la double explosion du port de Beyrouth qui a emporté nos biens aimés et a fait partir en morceaux nos espoirs d'un Liban libre, équitable où il fait bon vivre.

Des centaines de jeunes et de moins jeunes émigrent. Un abominable exode des compétences. Excédés, désespérés, ils vivent cela comme un exil plutôt qu'une décision réfléchie pour un nouveau départ. Mais comme le dit si bien Edgard Quinet « Le véritable exil n'est pas d'être arraché de son pays, c'est d'y vivre et de n'y plus rien trouver de ce qui le faisait aimer ». Avec chaque arbre qu'on arrache, avec chaque mètre carré de terre qu'on transforme, nous changeons le visage de notre Liban. Nous avons empoisonné nos sources, nous avons amoché la fierté des sommets de nos montagnes, nous avons noyé dans la honte de nos déchets nos vertes vallées. À tous ceux qui sont partis et à ceux qui ont choisi de rester ou qui ont été obligés de rester faute de pouvoir quitter, faisons de sorte que notre Liban reste fidèle à lui-même.

" J'aime mon Liban, je ne veux pas cesser de l'aimer. Je le reconstruis ou plutôt je le restaure ! Je suis confiante dans notre capacité à traverser cette épreuve, et résolue à renforcer encore plus les activités de Jouzour Loubnan en ces temps difficiles."

Cette résolution est d'autant plus forte qu'elle s'appuie sur un socle de valeurs immuables, partagées avec l'ensemble de notre communauté résidente ou expatriée et même avec les nombreux amis du Liban qui n'ont jamais cessé de croire en ce Liban mission. Le respect de notre terre en est une ! Le Liban ne pourra pas se relever civiquement et économiquement en étant fondamentalement dénigré dans sa structure physique. La restauration requiert outre la bonne volonté, du temps et de la patience à l'instar de la restauration de notre confiance dans les dirigeants de nos pays qu'on choisira soigneusement la prochaine fois.

Attelons-nous à ces tâches.

Pr. Magda Bou Dagher Kharrat
Présidente de Jouzour Loubnan

faces of **exchange**

2020 Award



Congratulations to our President for being awarded the U.S. Department of State's Special Faces of Exchange Award.

For the last 80 years, the International Visitor Leadership Program (IVLP) has brought thousands of professionals to the United States to cultivate relationships with their American counterparts and address a wide variety of foreign policy issues. Since the first exchange participants arrived in 1940, the network has grown to include over 225,000 alumni and continues to build vital linkages between U.S. citizens and emerging international leaders.

As part of the campaign "Faces of Exchange," which celebrates the IVLP's 80th anniversary throughout 2020, 80 accomplished alumni were selected for their lives and leadership, and the impact of their exchange on the global community. From the more than 500 current and former heads of state to leaders in boardrooms, classrooms, community organizations, the arts, and NGOs – these alumni are utilizing skills and information gained during their IVLP experiences to build a safer, more secure, and more prosperous world.

Pr Magda Bou Dagher Kharrat, a professor of plant genetics at the faculty of sciences Saint-Joseph University and President of Jouzour Loubnan is recognized as a leader in environmental issues and conservation in Lebanon. She was selected as one of the 80 international faces of exchange.

The Bureau of Educational and Cultural Affairs' (ECA) – United States Department of State

Content created by Virtual Intern Meghan Crowley

Content edited by Sallie Bestul, Regina Navarro-Gomez, and Jenna Williams



IVLP @StateIVLP · Apr 21
In preparation of #EarthDay , we celebrate @magdaboudagher, a @StateIVLP alumna who focuses on reforestation and launched an online database of native Lebanese flora. 🌱 #FacesOfExchange
@usembassybeirut

Learn more eca.state.gov/ivpprofiles/m...



U.S. Embassy Beirut and Magda BOU DAGHER

10 47

ABOUT

Jouzour Loubnan is an NGO established since 2008 (registration number 491) whose mission is to participate in the restoration of Lebanese woodland and promote sustainable reforestation.

Jouzour Loubnan also focuses on engaging the Lebanese in reforestation by raising awareness on the importance of forests and biodiversity, involving the local communities in the protection and management of our planted forests and encouraging Lebanese residents and the diaspora to support reforestation.

Jouzour Loubnan is one of the most active associations in the reforestation of Lebanon. To date (2020), Jouzour Loubnan has planted, nurtured, and protected 350,000 native trees across Lebanon.

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VISIT OUR SITE

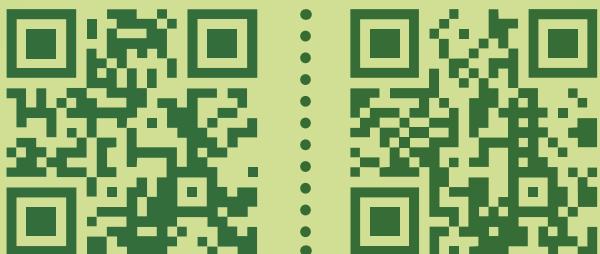
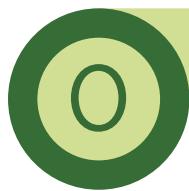


TABLE OF CONTENTS



INTRODUCTION

Word of the President	.2
Faces of Exchange - 2020 Award	.3
About	.4
Table of Contents	.5
Covid - 19 : Agent naturel de régulation de l'activité humaine ?	.6
Les 100 ans du Liban	.10
A Tribute to the Fallen Firefighters	.13
#Ana Ou3len	.15
Meet our Team	.18
Our Mission and Our Goals	.20
Our Green Programmes	.21



INCREASE THE WOODLAND AREA

Our Achievements	.25
Explore our Plantation Sites	.26
Corporate Social Responsibility	.27
Plantation Days	.30
Aarsal: Premier projet en agroforesterie de Jouzour Loubnan	.32
Jezzine: A Hub for biodiversity and future home to our fauna	.36
Jaj: The Revival of a nature reserve	.37



PLANT WITH A SCIENTIFIC BACKGROUND

Enter our Laboratory	.39
DNA Reference Library: Species identification through DNA barcodes	.41
La Vallée de Bisri : havre biologique ou site banal à démolir sans regret ?	.42
Iris westii in Jezzine: A Jewel in Southern Lebanon	.44
Life Plan: A Planetary Inventory of Life	.46
CEPF at Jaj: Conserving and Valorizing the unique botanical heritage of Lebanon	.48
Oak Trees of Lebanon	.50



PROMOTE ENVIRONMENTAL AWARENESS

Awareness Outreach	.53
Forest Fires by Dr. George Mitri	.55
Our Fans Response and Support	.57
International Day of Forests 2020: Forests and Biodiversity	.58
10 Days in the Mediterranean	.60
In the Media	.62
On Social Media	.64
From our Friends and Fans	.66



EMPOWER OUR COMMUNITIES

Ardi Ardag	.69
Buzuruna Juzuruna	.70

Harvest Box Farm	.71
Zera3it Watani	.72
Ads	.73



Le Covid-19, agent naturel de régulation de l'activité humaine ?

Alors que la polémique sur l'origine naturelle ou anthropique de la Covid-19* bat son plein, la communauté scientifique penche vers une origine naturelle du virus, qui aurait été transmis à l'Homme par un animal. La « zoonose » est le terme utilisé pour désigner les maladies infectieuses, d'origine bactérienne, virale ou parasitaire, transmissibles de l'animal à l'homme. Dans le monde anglophone on donne à cette transmission animal-homme le nom de « **spillover** ». Le problème possède donc une dimension écologique qu'il convient d'examiner. Elle nous permettra de mettre en place toutes les pièces du puzzle pour une vision holistique du problème : de la cause à l'effet.

Auprès de l'Organisation mondiale de la santé (OMS), d'autres institutions Onusiennes et d'ONG internationales ne cessent de marteler depuis le début de cette crise que **la pandémie de la Covid-19 n'est qu'un symptôme d'une biodiversité maltraitée par l'activité humaine**. Comment ? Quand est-ce que ça a commencé ?

Revenons un peu dans le temps, à une époque plutôt récente de la préhistoire, entre 10 000 et 5 000 ans avant notre ère : Au Néolithique. A partir de cette époque, l'humanité a connu d'énormes bouleversements démographiques, économiques et culturels. Cette période correspond à l'adoption d'un mode de vie sédentaire et le basculement progressif d'un mode de subsistance basé sur la chasse et la cueillette vers la domestication des plantes et des animaux sauvages. C'est le début de l'agriculture et l'élevage. La domestication des animaux impliquait des contacts fréquents entre l'homme et les animaux, ainsi qu'avec leurs dépourvus.

Ces contacts furent autant d'occasions pour les populations anciennes de contracter les maladies. La « néolithisation » est considérée dans l'histoire de notre espèce vieille d'à peine 300 000 ans comme un temps fort de l'expansion humaine avant l'industrialisation et la mondialisation.

Pendant toute la période pré-antibiotiques où les précautions sanitaires n'étaient pas de mise, ces maladies émergeant de la promiscuité entre hommes et animaux mettaient le système immunitaire des humains à l'épreuve et sélectionnaient (il s'agit bien de la sélection Darwinienne) les individus les plus résistants à ces maladies.

Donc les zoonoses ne sont pas nouvelles pour les humains. Plus de 150 maladies zoototiques sont recensées à l'heure actuelle. Les progrès en matière d'hygiène et de santé ont permis, au cours du XXe siècle, de faire reculer de nombreuses maladies infectieuses et même d'éradiquer quelques-unes. Pourtant, malgré ces progrès, de nouvelles maladies apparaissent encore, ou bien des maladies anciennes ressurgissent. En citant ces maladies on se rendra compte que les intervalles d'éruptions sont de plus en plus rapprochés et de plus en plus meurtriers : La rage, Ebola, SIDA, H1N1, Grippe aviaire, SARS, MERS, Zika, ...

Avant de passer à l'Homme, ces virus infectent, la plupart du temps, une ou plusieurs espèces animales, qui constituent le réservoir naturel de ce virus. La chauve-souris, à titre d'exemple, est considérée comme réservoir naturel pour plusieurs de ces maladies. L'animal pouvant être porteur asymptomatique. Lorsqu'une maladie émergente apparaît, c'est qu'un agent pathogène est d'une part, entré en contact avec le nouvel hôte et d'autre part qu'il a réussi à franchir ce que l'on appelle la barrière d'espèce (spillover); Souvent son génome subit des modifications qui le rendent capable de se multiplier chez son nouvel hôte et de se propager au sein de cette nouvelle population. Dans le cas du Coronavirus responsable du syndrome respiratoire du Moyen-Orient (MERS-CoV) qui a sévit en 2012 dans la Péninsule Arabique, le dromadaire a joué le rôle d'hôte intermédiaire avant que ce virus ne soit transmis à l'homme. Dans le cas du syndrome respiratoire aigu sévère (SARS) en 2003 ce fut la civette.

Dans leur espèce réservoir, un certain équilibre s'installe entre les virus et son hôte, où en stratégie de survie, les virus se maintiennent au ralenti jusqu'à ce qu'une opportunité de trouver un nouvel hôte se présente. Si ce nouvel hôte est un humain, imaginez-vous quelle belle opportunité cela représente pour le virus ? L'Homme avec son mode de vie social, ses villes denses et ultra connectées ! En quelques semaines ce virus aurait conquis la planète ! C'est la meilleure des opportunités. Et c'est ce qui est arrivé avec la Covid-19.

Chaque espèce vivante sur Terre possède son propre cortège de virus. Leur impact sur la reproduction, la croissance ou la survie de leurs hôtes en font potentiellement des agents importants de régulation au sein des communautés et des écosystèmes. A chaque fois qu'une espèce se met à se multiplier sans retenue et devient dangereuse pour l'équilibre de l'écosystème, la police parasitaire est actionnée. Les virus, par exemple, saisissent donc l'opportunité de se transmettre facilement quand les individus hôtes sont très nombreux et viennent à bout de plus de 90% de ces hôtes. L'équilibre est ainsi rétabli. Chaque espèce occupe une niche écologique bien déterminée, tout déséquilibre flagrant requiert un ajustement du système. Ce système de surveillance et d'autorégulation est un processus naturel récurrent vieux de millions d'années.

Serait-il en train aujourd'hui de réguler la population humaine avec la Covid-19 ? Serons-nous une espèce comme une autre dans ce système écologique obéissant aux lois de la biologie évolutive ?

La population mondiale estimée à près de 2,6 milliards en 1950 a atteint le palier de 7 milliards en 2011 et atteindra 9,7 milliards en 2050 ! Depuis plusieurs dizaines d'années, l'activité exagérée de l'homme et sa cupidité allant jusqu'à changer la face de notre planète. Depuis la Révolution industrielle de 1850, l'Homme a acquis une telle influence sur la biosphère qu'il en est devenu l'acteur central. C'est l'Anthropocène, étymologiquement « L'Âge de l'Homme ». Ce dernier ne cesse de déborder sur les territoires de la vie sauvage qu'il exclut sans scrupules. Avec la destruction et la perturbation du fonctionnement des écosystèmes, nous sommes en train d'accroître les risques de zoonoses. Les forêts sont défrichées, les sols retournés et minés, les espèces braconnées, ... autant d'opportunités pour les virus de franchir la barrière et d'actionner leur capacité intrinsèque d'évolution et de devenir des épidémies ou des pandémies.

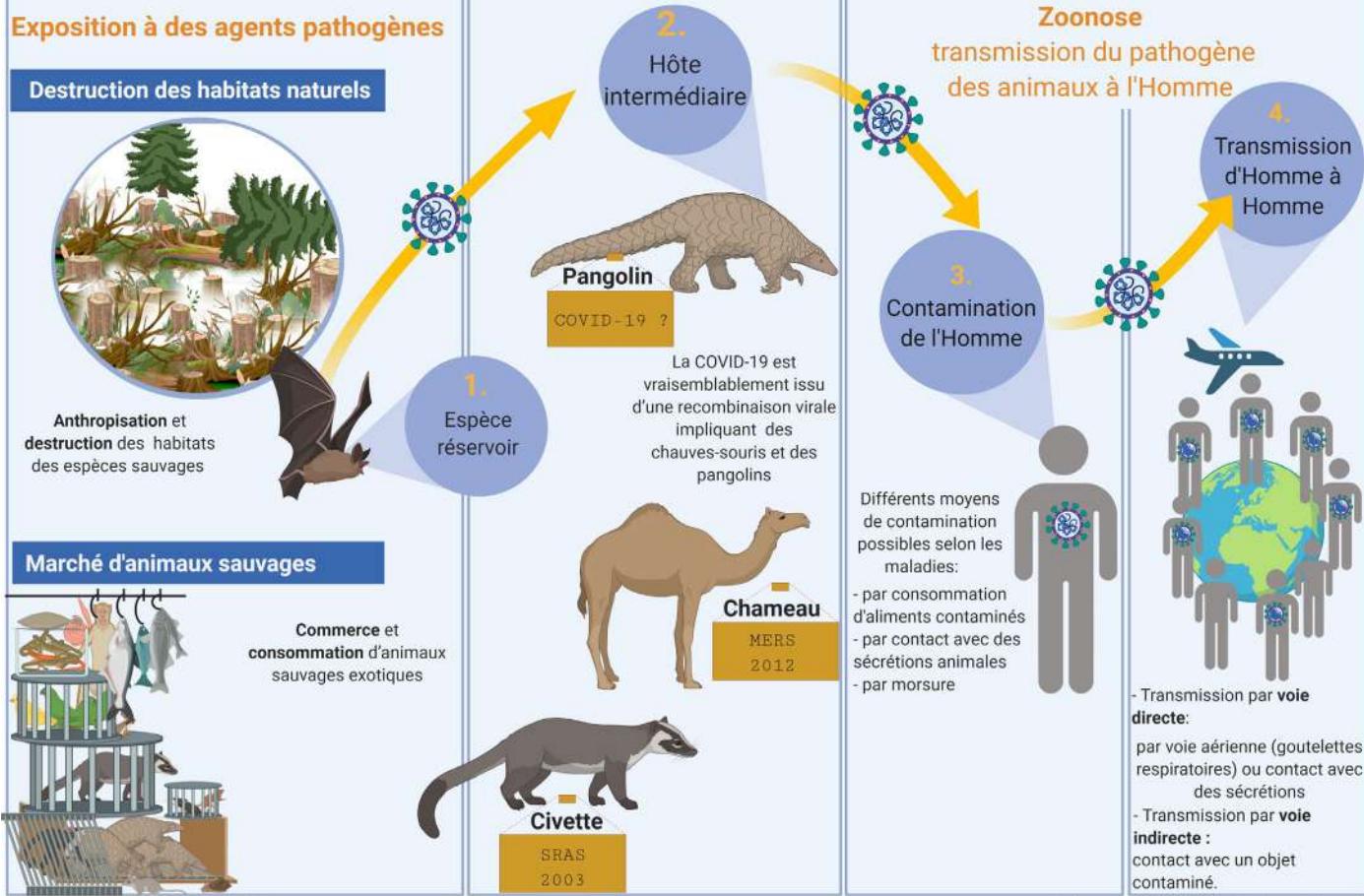
Quelques mois de confinement ont été suffisants pour que notre planète respire, pour que les animaux fassent tomber leur peur et appréhensions et reviennent réclamer leurs anciens territoires. Quelques mois de confinement ont été suffisants pour beaucoup d'entre pour réapprendre à écouter les oiseaux, à observer depuis leurs fenêtres l'élosion des boutons floraux et le déplacement furtif des animaux.

Faisons que cette leçon nous serve à quelque chose pour qu'on puisse dire qu'il y a un avant et un après la Covid-19. Pensons notre responsabilité, reconsiderons notre consommation, nos voyages, nos loisirs. Réduisons notre empreinte écologique, soyons solidaires entre nous et avec les espèces que nous côtoyons.



Pr. Magda Bou Dagher Kharrat
Présidente de Jouzour Loubnan

Destruction des écosystèmes et émergence de pandémies



*Texte original de l'article publié dans L'Orient-Le-Jour le 25 avril 2020 sous le titre « Le Covid-19, agent naturel de régulation de l'activité humaine ? ». Depuis le 7 mai 2020, l'Académie française a opté pour un usage au féminin pour ce mot puisqu'il s'agit de l'acronyme de Coronavirus Disease 2019, traduit donc "Maladie à coronavirus 2019".



Le Président Emmanuel Macron plante un cèdre à l'occasion du centenaire du Grand Liban.

1er septembre 1920, le Général Gouraud entouré des dignitaires religieux et des illustres figures politiques de l'époque pour annexer Beyrouth au Mont - Liban. Le Grand Liban est né. Cent ans après, jour pour jour, alors qu'une crise sans précédent secoue le Liban, ébranle ses fondations et met à l'épreuve la population, c'est encore la France qui se démène à la rescousse du pays des cèdres.

Le président Emmanuel Macron fait son 2ème déplacement au Liban en tant que président pour célébrer malgré tout cette date pivot dans l'histoire du Liban soulignant l'engagement indéfectible de la France pour le Liban.

Qu'y a t il de plus symbolique que la plantation d'un cèdre à cette occasion ?

Cet acte représente l'attachement de la France au Liban et l'attachement des libanais à leur terre. Sans arbres, le sol - mémoire de l'histoire et de toute la vie qui s'est perpétuée par dessus- s'érode et s'en va et met à nu la roche mère... sans son peuple le Liban se démantèle et son identité se dissipe.

Jouzour Loubnan fut sollicitée pour l'organisation de cet événement solennel. Le choix de la réserve naturelle des cèdres de Jaj pour enracer ce cèdre n'est pas fortuit!

Ces 170 vieux cèdres reliques qui règnent majestueusement sur ce dramatique panorama rocheux, ne sont ils pas le symbole même de l'attachement des libanais à leur terre? Ne sont ils pas l'expression de notre résilience à vouloir survivre quelque soit l'hostilité de notre environnement?

Ces vieux cèdres sont la relique d'une forêt qui a connu une déforestation historique massive. Ils se dressent majestueusement parmi les roches blanches sculptées par l'érosion naturelle.

Courant la cérémonie de plantation du cèdre, les hymnes nationaux français et libanais ont été chantés par les élèves de l'école de Saint-Cœur Mechref. La ceremonie s'est terminée par un defilé des Alpha Jet de la Patrouille de France arborant les couleurs du drapeau du Liban, un hommage rare.

Vive l'amitié libano-française, Vive le Liban, le Grand Liban !

Pr. Magda Bou Dagher Kharraf
Présidente de Jouzour Loubnan



1/9/2020
Bon Jour Jagda
Bon Dagher Khanat
Merri infiniut
a bientôt

Gouverneur Paon



A TRIBUTE TO THE FALLEN FIREFIGHTERS



Fumée, feu, sirènes, déflagration, effroi, Silence absence

Ce souffle mortel a fracassé beaucoup plus que le verre dans le large périmètre autour du port de Beyrouth.

Des centaines de cœurs brisés, des familles endeuillées... à jamais.

Parmi les 204 victimes, 10 pompiers qui sans se poser de questions ont accouru pour accomplir leur devoir :



Charbel Karam



Sahar Fares



Joe Bou Saab



Mithal Hawa



Charbel Hetti



Rami Kaaki



Ralph Mallahi



Joe Noun



Najib Hetti



Elie Khouzami







أنا_أعلن
تمسّكي بجذور لبنان
بجذورلبنان

ADVERTISING AA ASSOCIATION

**ANA_OU3LEN** is a one-of-a-kind initiative by the AA Advertising Association in Lebanon aiming at reviving the advertising and media landscape and pumping positive blood in the veins of our collective interest.

The advertising field is significantly affected, with lifeless billboards lining the streets, and empty advertising airtime on TV and radio.

This campaign is an invitation for every media, advertising agency, institution, or brand, to participate in this bigger-than-life national campaign and fill the ambient void with ideas, colors, and creativity.

How about joining our voices to make ourselves heard again?

أنا_أعلن
تمسّكي بجذور لبنان ! **#**

أنا_أعلن هي مبادرة فريدة من نوعها من قبل جمعية للإعلان في لبنان تهدف إلى إحياء المشهد الإعلاني والإعلامي وضخ الإيجابية في مجتمع

مؤخرًا، تأثر مجال الإعلان سلبيًا، إذ اصطفت اللوحات الإعلانية المهملة في الشوارع، وفرغ وقت البث الإعلاني على التلفزيون والراديو

هذه الحملة هي دعوة لكل وسيلة إعلامية أو وكالة إعلانية أو مؤسسة أو علامة تجارية للمشاركة في هذه الحملة الوطنية ملء الفراغ ونشر الأفكار الإيجابية والألوان والإبداع

فلنضمّ أصواتنا لجعلها مسموعة من جديد !



#أنا_أعلن

تمسّكي بجذور لبنان



ADVERTISING  ASSOCIATION

MEET OUR TEAM

MAGDA BOU DAGHER

President



PROFESSION: Director of Biodiversity and Functional Genomics Laboratory, Faculty of Sciences, Saint Joseph University
EDUCATION: PhD in plant molecular biology, University Pierre et Marie Curie, HDR, Université Paris-Sud

RAOUL NEHME

Vice President

PROFESSION: Minister of Economy and Trade - Lebanon

EDUCATION: Ecole Polytechnique de Paris & Ecole des Mines de Paris

FADI NASSIF

General Secretary

PROFESSION: Lawyer and Owner of Nassif Law Office

RAMI KOZHAYA

Treasurer



PROFESSION: Head of Clearing & Cash Centre, special projects, Bank Audi.
EDUCATION: MBAIP, USJ, Sorbonne, Dauphine.

CHRISTINA EL HABR

Assistant Lab



PROFESSION: Assistant Lab, Jozour Loubnan
EDUCATION: Masters in Biodiversity: Management and Conservation of Natural Resources, Lebanese University

HANI HOYEK

Project Manager



PROFESSION: Chief Operating Officer, Kleos
EDUCATION: Grande Ecole de Commerce EM Lyon

RIDA BOUTROS

Project Coordinator



PROFESSION: Project Coordinator, Jozour Loubnan
EDUCATION: Masters in Biodiversity: Management and Conservation of Natural Resources, Lebanese University

HIBA ABOULHOSN

Communication & Media



PROFESSION: Communications Consultant & Partner, KeepItSimple communications
EDUCATION: Masters in Communication, Edinburgh University

MYRNA ISKANDAR

Administrative manager



PROFESSION: Administrative manager - BestMedGrape project - Saint Joseph University
EDUCATION: : Public Relations - Lebanese University

SAYED MARCOS

Site Supervisor Ehden



MAROUN GEBRAYEL

Site Supervisor Jezzine



ROGER AKIKI

Site Supervisor Kfardebiané



NASSIM FARHAT

Site Supervisor Ebl El Saki



ELISABETH NEHME

Communications Manager

PROFESSION: Communication Manager, Jouzour Loubnan

EDUCATION: Associate Diploma in Non-profit Management - Lebanese American University

ZAHER SAADEH

Site Controller

PROFESSION: Site Controller, Jouzour Loubnan

FARID MAALOUF

Member

PROFESSION: OTV, Executive Director

EDUCATION: Civil Engineer, ESIB

CHARLES EL HAGE

Member

PROFESSION: Retired as Senior Vice-president with Booz & Company

EDUCATION: Masters of Science in Industrial Engineering and Bachelor Industrial Management, Purdue University, Indiana, USA

JOELLE SAAB

Member

PROFESSION: Head of Recycling Unit, Dulisco, UAE

EDUCATION: Masters in Environmental Sciences and Management, USJ

RIAD MOUAWAD

Member

PROFESSION: Creative Director & Partner, BlackLink - visual communication

EDUCATION: Graphic Design, Notre Dame University

FREDERIC KHALIL

Member

PROFESSION: Partner, BEAR

EDUCATION: MBA, USJ - Paris Dauphine

OUR MISSION



Our mission is to participate in the restoration of Lebanese woodland and promote sustainable reforestation.



OUR GOALS

1

PLANT TOWARDS
SUSTAINABLE
FORESTS



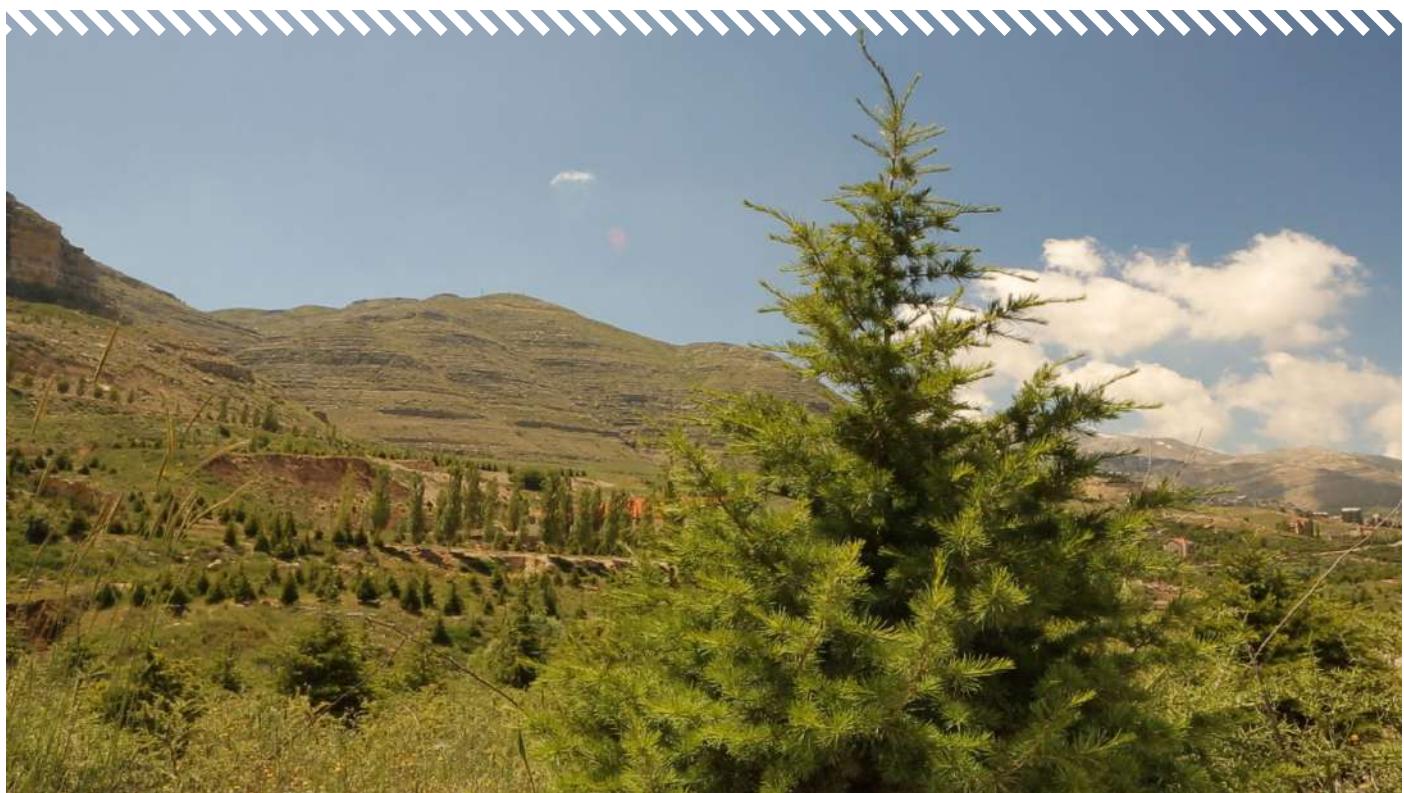
2

ENGAGE THE
LEBANESE IN
REFORESTATION



1. **Restore** degraded forest ecosystems.
2. **Contribute** to the development of the Green Corridor.
3. **Foster** urban forests and agroforestry.
4. **Create and share** new and good forestry practices through research & development.

1. **Raise** awareness on the importance of forests and biodiversity.
2. **Involve** local communities in the protection and management of our planted forests.
3. **Encourage** Lebanese residents and diaspora to support reforestation.



OUR GREEN PROGRAMMES



We cannot forget that the fight for reforestation is a worldwide fight, and we are all concerned about the fast reduction of native woodland areas in Lebanon.

We all have a role to play! Each of us can contribute to the reforestation effort as individuals.

Discover our CSR and green programmes to help us save Lebanon's forests and green spaces. These programmes are flexible and can be adapted to cater to your marketing and communication needs.



ARE YOU A PRIVATE COMPANY AND WANT TO REDUCE YOUR ENVIRONMENTAL FOOTPRINT?



ARE YOU A CAR DEALER / CAR RE-SELLER?

Our generous supporting partners have exceptionally well-received these corporate events to date.

They are exciting team-building activities that raise awareness about the importance of protecting and increasing our woodland heritage.

Below the activities that the Jouzour Loubnan team can offer separately or jointly under this programme:

- **Donate** a portion, a percentage, or all of the proceeds of your product, service, or event;
- **Sponsor** a plantation site or a number of trees to be planted in the name of the company;
- **Gather** employees and/or client with their families in a fun outdoors team-building event during the plantation season in the Autumn to plant the number of trees they donated;
- **Organize** awareness sessions with the employees promoting the benefits of reforestation;

Certificates are prepared in the name of the company, employee, or client with the GPS coordinates of the adopted planted tree or the sponsored plantation site.

These green partnerships can all be promoted externally with the general public through mediatised tools and events.

Jouzour Loubnan started this green initiative with one car dealer to ensure that soon enough, every newly purchased car in Lebanon would create traffic of trees in our deserted mountains.

"One tree planted for each new car sold" is our motto. The car dealers' reforestation program is simple:

- **Receive** a plantation certificate in the name of the new car owner with the GPS coordinates of the planted tree;
- **(or) Receive** a yearly plantation certificate in the car dealer's company name with the GPS coordinates of the plantation site in which all of the trees are planted;
- **Receive** a customized designed sticker that can be placed on the car saying "I just planted a tree";
- **Promote** this green partnership externally with the general public through mediatised tools and events.



ARE YOU A REAL ESTATE DEVELOPER?



ARE YOU SEARCHING FOR A GIFT TO YOUR FAMILY, FRIENDS, OR LEBANON?



It has been such a reward to partner to date with more than four real-estate developers in this programme: "1sqm of newly created forests for 1sqm built."

Below the activities that the Jouzour Loubnan team can offer separately or jointly under this programme:

- **Sponsor** a surface of newly created forest equal to the surface of sold/ built sqm monthly or quarterly;

The developer will receive a certificate of the plantation (monthly or yearly) in the company's name with the GPS location of the newly planted site.

- **(or) Encourage** the buyer to contribute to the creation of newly created forests for the surface of his/her newly purchased home;

The house owner will receive a certificate of plantation in his/her name with the GPS location of the newly planted site.

This programme allows you to promote an environmental awareness image and can be used in all of your marketing and sales strategies and promotional materials.



The 'adoptacedar.org' initiative was initiated based on many individuals who wished to support Jouzour Loubnan's mission but could not physically be present.

This initiative evolved rapidly and started taking many shapes and forms, such as a wedding or birthday wish list, a newborn's 'Cadeau de Retour,' a memorial, or even a wedding proposal.

Anyone... Anywhere... can today adopt a Cedar in Lebanon with just a click!

- **Adopt** a small or big Cedrus libani for you, your family, or friends;

- Receive an instant certificate with the GPS coordinates of the adopted tree;

- **Request** an event wish-list on the 'adoptacedar.org' site for friends and family;

- **Personalize** the certificate design to fit the event's theme;

- **(Optional) Engrave** the name on a metallic tag to be placed on the adopted tree;

- **(Optional) Request** a picture of the tag and tree.



ARE YOU A MOTIVATED SPIRIT?



ARE YOU A TEACHER OR A STUDENT?



You can participate in our public plantation campaigns during the Autumn season. We announce them regularly on our website www.jouzourloubnan.org and our Jouzour Loubnan page on Facebook.



Jouzour Loubnan encourages students to participate and volunteer in its activities. A letter certifying participation is offered to each student accordingly. Well rooted partnerships are forming generations while providing significant support to Jouzour Loubnan.



ARE YOU A MEDIA, PR OR ADVERTISING COMPANY?



ARE YOU SOCIALLY OR POLITICALLY ACTIVE OR A KEY OPINION LEADER?



Journalists and media outlets are vital and essential to reach out to the general public and communicate Jouzour Loubnan's mission.

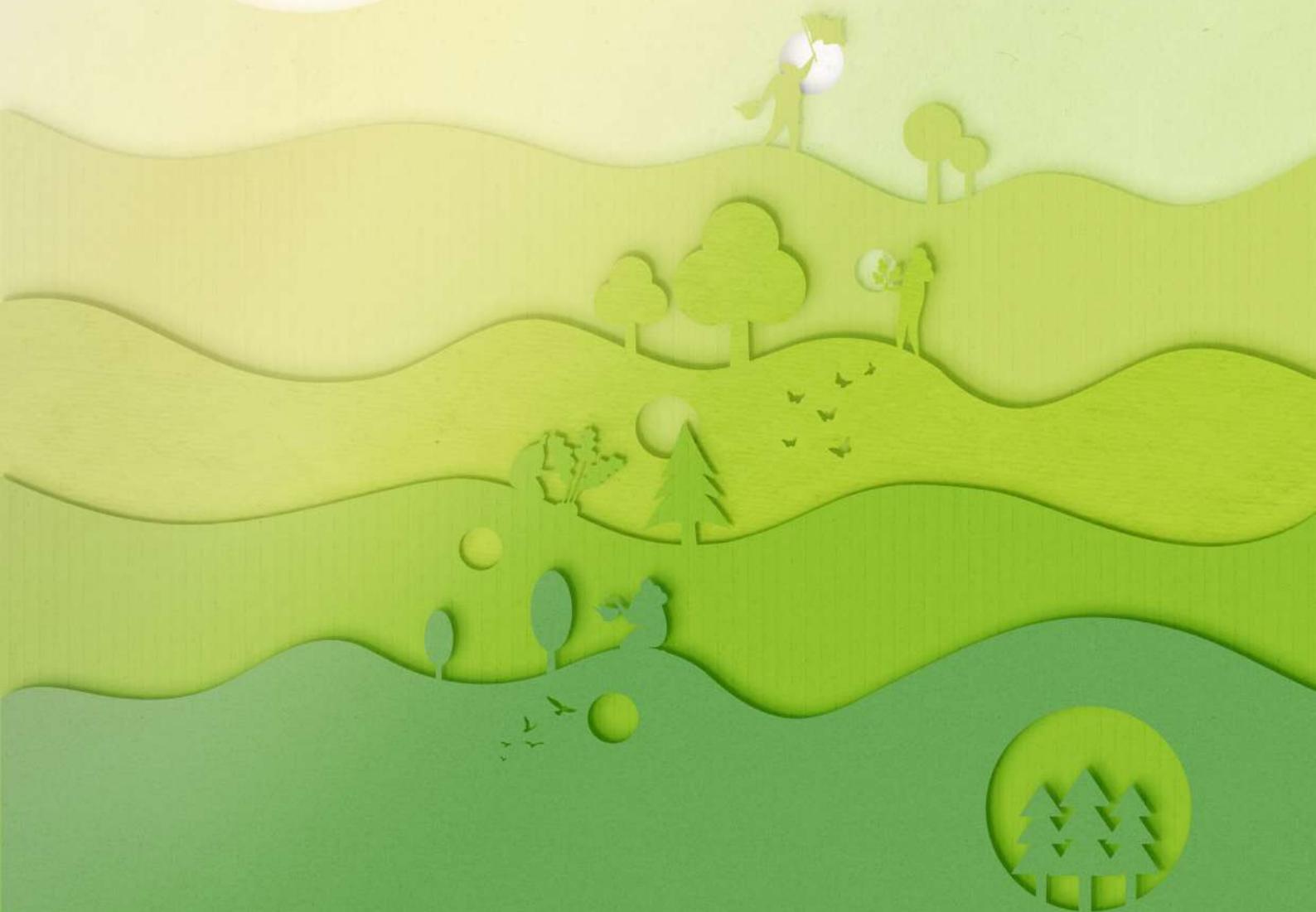


You can support our cause by offering us free ad spaces for our annual awareness campaigns or covering our activities and spreading the news to the public via different media portals.

You may assist in the political awakening of the Lebanese Government and its commitment to implement a serious plan in the regulatory field in applying the law to protect and develop our woodland heritage.



INCREASE THE
WOODLAND
AREA



OUR ACHIEVEMENTS

Since 2008, we have...



Planted 356,395 TREES

on more than **6.42** million sqm, i.e. **642** hectares, in more than **20** areas across Lebanon



Created a Seed Bank Lab

which includes: over **400** seed capsules, over **300** taxa, over **2 000 000** seeds present



Initiated Green Programmes for

Online Cedar Adoption; Real Estate Developers; Car Dealers; Company CSR; Green Schools; Diaspora



Designed and Launched

8 consecutive national awareness campaigns; **9** annual magazines; **8** successful fundraising events;



Organized awareness sessions and workshops



Participated in and contributed to

fairs, exhibitions, local and int'l workshops, seminars, local TV talk shows and radio programmes.

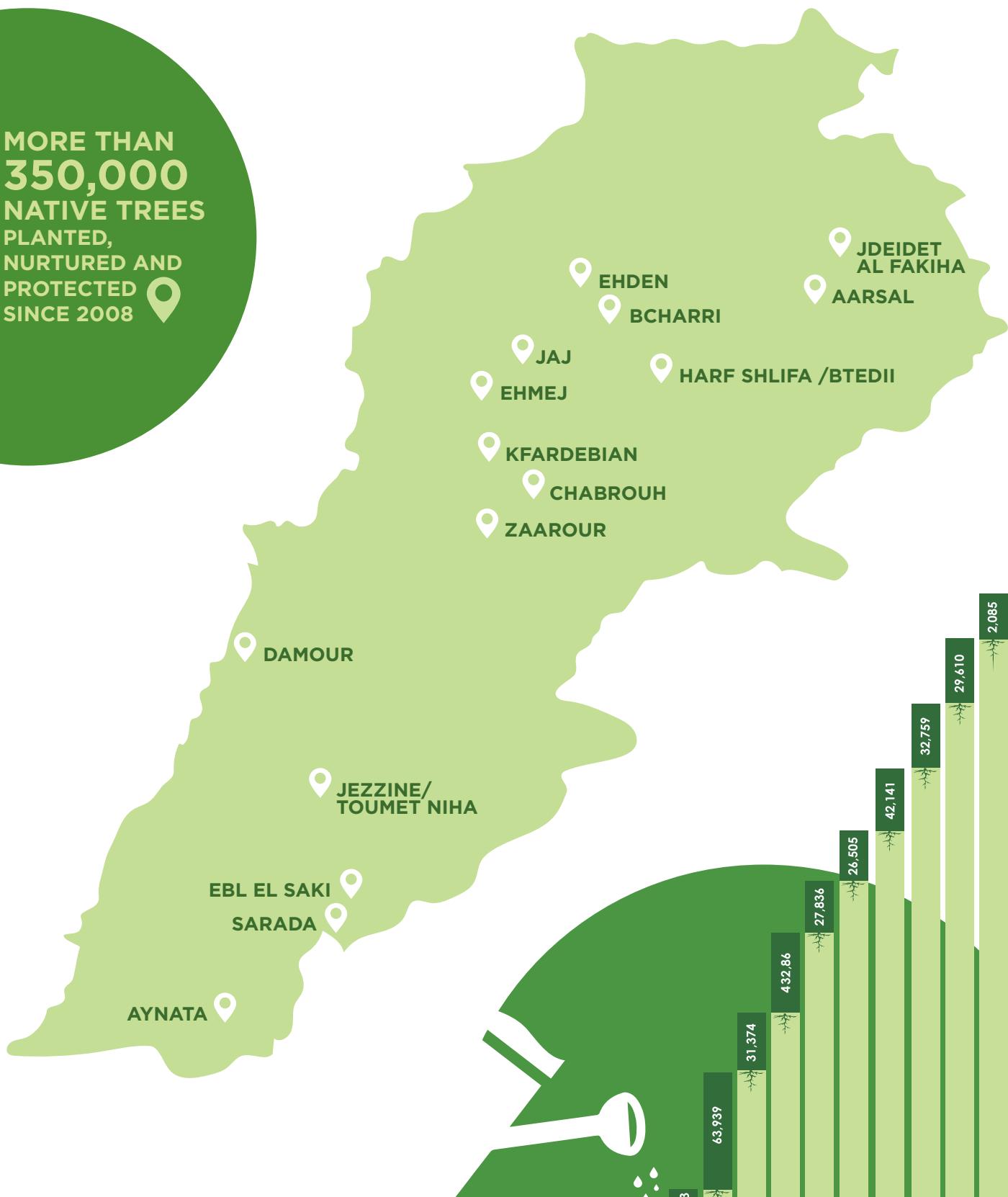
SITE	SEEDLINGS COMPLETE	AREA PLANTED (ha)	PERIOD OF PLANTATION
Kfardebiane	185,888	303	2008 - Ongoing
Chabrouh/Faraya	7,884	10	2008 - Ongoing
Ebl El Saki	27,375	42	2012 - Ongoing
Ehden - Zgharta	8,110	16	2012 - Ongoing
Sarada	250	0.5	2017 - Ongoing
Jaj	13,712	44	2017 - Ongoing
Bcharri	5,205	10	2017 - Ongoing
Mseilha	360	0.72	2019 - Ongoing
Ehmej	10,300	15	2009 - 2016
Aynata	10,099	22.2	2010 - 2012
Harf Shlifa/Btedii	26,950	46.35	2011 - 2014
Zaarour	2,800	15	2013 - 2016
Balaa	100	0.5	2014
Damour	2,500	5.7	2014 and 2017
Jezzine	39,442	80	2015 - 2019
Aychieh	76	0.15	2020
Other sites across Lebanon	15,644	31	2008 - 2019
TOTAL	356,695	642.12	12 YEARS

NATIVE TREES PLANTED ACROSS LEBANON

LATIN	ENGLISH	ARABIC
<i>Abies cilicica</i>	Cilician fir	شوح الكيليكى
<i>Acer syriacum</i>	Syrian maple	قيقب
<i>Castanea sativa</i>	Chestnut	كستناء
<i>Cedrus libani</i>	Cedar of Lebanon	أرز لبنان
<i>Ceratonia siliqua</i>	Carob	خروب
<i>Cercis siliquastrum</i>	Judas tree	زمزريك
<i>Crataegus azarolus</i>	Mediterranean medlar	زعور أصفر
<i>Crataegus monogyna</i>	Hawthorn	زعور أحمر
<i>Cupressus sempervirens</i>	Evergreen cypress	شربين
<i>Fraxinus ornus</i>	Flowering ash	شجرة البق
<i>Juniperus excelsa</i>	Grecian juniper	لزاب
<i>Laurus nobilis</i>	Laurel	غار
<i>Malus trilobata</i>	Three-lobed apple	تفاح برّي
<i>Pinus brutia</i>	Calabrian pine	صنوبر بري
<i>Pinus pinea</i>	Umbrella pine	صنوبر جوي
<i>Pistacia palaestina</i>	Palestine pistachio	برزق
<i>Pirus syriaca</i>	Syrian pear	اجاص بري
<i>Platanus orientalis</i>	Oriental plane	دلب المشرقى
<i>Prunus ursina</i>	Bear plum	خوخ الدب
<i>Ostrya carpinifolia</i>	Hop-hornbeam	بندق بري
<i>Quercus calliprinos</i>	Kermes oak	سنديان
<i>Quercus infectoria</i>	Aleppo oak	ملول
<i>Sorbus torminalis</i>	Wild service tree	غبيراء المخصوص
<i>Styrax officinalis</i>	Storax	جوز

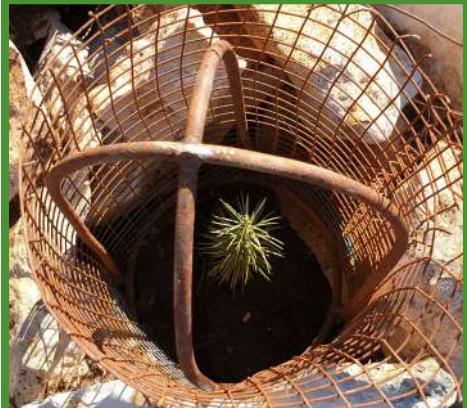
EXPLORE OUR PLANTATION SITES

MORE THAN
350,000
NATIVE TREES
PLANTED,
NURTURED AND
PROTECTED
SINCE 2008



NUMBER OF SEEDLINGS PLANTED AND PROTECTED PER YEAR

CORPORATE SOCIAL RESPONSIBILITY



ABC - Kfardebane - 445 trees planted



International Committee of the Red Cross (ICRC) - Kfardebane, Ehden, Ebl El Saqi - 350 trees planted



CARE INTERNATIONAL - Kfardebane - October 5, 2019 - 45 trees planted



FATTAL GROUP - Kfardebiane - 100 trees planted



LE CEDRE VERT - Kfardebiane - December 9, 2020 - 11 trees planted



TECHNICA INTERNATIONAL - Kfardebiane - October 6, 2019 - 91 trees planted



THE MALT GALLERY - Kfardebiane - December 5, 2020 - 167 trees planted



L'OCCITANE EN PROVENCE - Ebl El Saqi - January 23, 2020 - 85 trees planted



THE HANGING EYE -
Kfardebiane - December 9,
2020 - 46 trees planted

VL RECORDS - Kfardebiane -
December 9, 2020 - 14 trees
planted

THE THREE SHIRT
INITIATIVE - Kfardebiane -
60 trees planted

PLANTATION DAYS



40 NGOs for Tree Day - Kfardebian - December 6, 2020 - 50 trees planted



Antonine University with Green Community- Ehden - December 3, 2019 - 30 trees planted



Directorate General of Antiquities - Mseilha - December 5, 2020 - 300 trees planted



Public Plantation - Kfardebbiane - November 22, 2019 - 170 trees planted



Premier projet en agroforesterie de Jouzour Loubnan

Dans les années soixante et soixante-dix, 85% des habitants de Aarsal étaient propriétaires terriens, les habitants avec les membres de la coopérative ont planté environ deux millions de cerisiers, d'abricotiers et de pommiers ainsi que des vignes pendant quarante ans.

Suite à la guerre en Syrie et au déplacement massif des réfugiés syriens vers Aarsal depuis 2012, le secteur agricole s'est sensiblement affaibli. Les agriculteurs n'avaient pas accès à leurs champs pour l'élagage, le labour et d'autres activités agricoles, et de nombreux champs ont été détruits et de nombreux arbres ont été coupés ou morts. Depuis Novembre 2019, Jouzour Loubnan s'est mobilisée pour aider les habitants de Aarsal en mettant en œuvre son premier Projet en Agroforesterie en utilisant des ressources génétiques indigènes.

Ce projet est financé par l'Ambassade de France au Liban dans le cadre des « Projets Innovants des Sociétés Civiles et des Coalitions d'Acteurs » (PISCCA) en partenariat avec la Coopérative des Agriculteurs de Aarsal. BankMed a contribué



au financement d'une partie de ce projet dans le cadre de son programme de responsabilité sociale des entreprises.

Le projet vise à aider les communautés locales vulnérables en améliorant les revenus des populations touchées par la crise syrienne et à renforcer les capacités des municipalités, coopératives et organisations locales.

Pour la prévention de l'érosion sur les terres escarpées des steppes naturelles comme dans la région d'Aarsal, la priorité devrait être donnée à l'utilisation d'arbres, d'arbustes et de buissons naturels en combinaison avec des arbres fruitiers.

Le projet a été inauguré après l'installation de la pépinière le jeudi 16 Juillet 2020 en présence de son Excellence l'Ambassadeur de France au Liban, des Ministres de l'Agriculture et de l'Economie, des élus et des dignitaires de la région et des représentants de la communauté locale.



Une pépinière ultramoderne a été conçue et installée et est prête à produire les 40 000 plants d'arbres fruitiers et de genévrier par an qui seront plantés par les agriculteurs. Un réservoir d'eau de 70 000 m³ cofinancé par la Coopérative a été installé. Afin de fonctionner de manière durable et non polluante, un système photovoltaïque constitué de 80 panneaux solaires fournissant suffisamment d'énergie pour faire fonctionner les pompes à eau, le système d'irrigation et les besoins basiques du fonctionnement du site a été installé.



Ce projet comprend un volet formation dans le cadre duquel plusieurs ateliers visant à former les agriculteurs et les jeunes apprentis sur les techniques de base auront lieu. Cette tâche a été confiée à l'ESIAM – École Supérieure d'Ingénieurs d'Agronomie Méditerranéenne et à la Faculté des Sciences de l'Université Saint Joseph. Le premier atelier de greffage a eu lieu à l'ESIAM à Taanayel le vendredi 23 Octobre 2020. Quinze apprentis ont été formés à la technique de greffage des cerisiers sauvages et devront s'exercer à greffer les centaines d'arbres qui seront produits par leur pépinière. D'autres ateliers de formation sur la collecte et la germination des graines, sur la gestion de la pépinière et sur la production de plants complèteront la série des ateliers

Les travaux sont encore en cours. Bientôt un local technique et une desserte viendront compléter le projet.

Auprès des cerisiers, la pépinière produira des plants de genévrier. *Juniperus excelsa*, un conifère adapté aux conditions environnementales difficiles, et aujourd'hui largement utilisé en reboisement au Liban, est toujours présent dans les montagnes de l'Aarsal. Un protocole de germination a été défini pour cette espèce et sera appliqué dans la pépinière nouvellement implantée.

Les pratiques d'agroforesterie et de reboisement constituent un défi majeur pour le Liban. La mission de Jouzour Loubnan est de reconstruire des écosystèmes durables et résilients au Liban tout en soutenant les communautés locales. Ce projet pilote d'agroforesterie pourrait être répliqué dans toutes les zones similaires de la région pour lutter contre la désertification et cultiver les effets positifs de l'agroforesterie tout en favorisant la production locale de fruits et de plants forestiers.





JEZZINE

Jezzine, a hub for biodiversity and the future home to our fauna!

Jouzour Loubnan planted 39,442 trees from 19 species native to Lebanon and the region, covering 80 hectares of municipal land from August 2014 until March 2019. Ensuring the sustainability of this project and conserving the trees planted is the most important mission.

Thus, these newly planted trees were nurtured, irrigated, and maintained during the dry summers and harsh winters throughout those years.

This year, and only after the first rain, Jouzour Loubnan's site supervisor and a team of local workers changed the small individual cage of the most recently planted in 2019 (10,000 trees) to a larger fence protection.

Watching these new forests slowly yet strongly grow gave a clearer image of how Toumet Niha will become. The local community had a sense of belonging, and preserving their efforts is the key to success.



Consequently, the Jezzine municipality has endorsed and owned the project and will protect and maintain it beyond its financing. With Jouzour Loubnan's assistance, they will manage to declare Toumet Niha - Jezzine as an official Lebanese nature reserve, especially after discovering *Iris westii*, one of the Royal Iris, an endangered species endemic to Lebanon.

The plantation project was initially co-funded by the European Union in Lebanon and Jouzour Loubnan.

With a survival rate of 93%, Jouzour Loubnan's five-year-old trees in Jezzine have already become homes to our fauna and a hub for biodiversity.



Jaj, the revival of a nature reserve

Jaj, a mountainous village with an altitude of 1,500 m, is situated 68 km north of Beirut and 28 km up toward the east of Byblos city.

Known for its oldest cedar trees back in the Phoenician times, the remaining 172 ancient Cedars, rooted in rocky masses, were not protected until recently when the Lebanese parliament issued a new law in April 2014.

Jouzour Loubnan already planted 13,000 of 16,500 *Cedrus libani* to cover 43.7 hectares within the Food and Agriculture Organization (FAO) project "Smart Adaptation of Forest Landscapes in Mountain Areas (SALMA)," funded by the Global Environment Facility (GEF), in collaboration with the Ministry of Agriculture, and in partnership with Jaj Cedars Forest Natural Reserve and Jaj Municipality.

The remaining seedlings will be planted this upcoming spring season.

Meanwhile, due to this year's dry summer season, these newly planted trees needed a proper irrigation system to ensure a good survival rate. This challenge wasn't easy because of the rocky surroundings.



But thanks to the Lebanese Armed Forces for civil society, the air team forces equipped with their helicopters helped us set two water tanks in the nature reserve.

The plantation site was also chosen to conserve landscapes, plant and animal species, particularly threatened, rare or unique species, their habitats and biological balances in partnership with Saint Joseph University within The Critical Ecosystem Partnership Fund (CEPF) initiative.

Jai's biodiversity will allow us to learn more about the region's ecosystem to avoid degradation, pollution, and risk of extinction and ensure healthier and sustainable forests.

To that end, the next initiative should be to complement these newly planted trees with other native trees and shrubs that go along the Cedars of Lebanon to restore and create a diversified forest.



**PLANT WITH A
SCIENTIFIC
BACKGROUND**



ENTER OUR LABORATORY

Despite the hard circumstances happening in Lebanon, the Biodiversity Conservation Initiative (BCI) carried on with its dedication on saving Lebanon's biodiversity by restoring degraded ecosystems and conserving its threatened species.

From the office, from the field or from home, our work never stopped!

In order to keep **Lebanon flora** beauty at your fingertips, database of some species is collected every year and is available on our website <http://www.lebanon-flora.org/>

This year, we mainly worked on collecting data describing more than 15 endemic species such as taxonomic identity, synonyms, common name, location of specimens within herbariums, illustrations, detailed botanical description, seed characteristics, florescence period, natural habitat, altitudinal range, genome size and chromosome number as well as their distribution map all over the Lebanese territory especially in protected areas and some recent pictures in different seasons.

The Jouzour
Loubnan
SEED Bank
contains:



Over
400 seed
capsules

We also worked on the definition of germination protocols for strictly endemic species such as *Astragalus cedreti*, *Astragalus ehdenensis*, *Erica sicula libanotica*, *Cyclamen libanoticum*... Some of these species are listed as threatened under the IUCN red list and others will have their conservation status assessed soon by our team.

Moreover, with 2 trainees, we worked in **Jouzour Loubnan laboratory** on germinating over 1000 seedlings: seeds collection, decortication and cleaning, post maturation, dehydration, seeds characterization (size, weight, scan...), germination and/or storage and conservation in **Jouzour Loubnan SEED Bank**: a laboratory for Seed Germination and Conservation (LSGC) available also on our Lebanon Flora website.

Christina El Habr

Assistant Laboratory - Jouzour Loubnan
Biodiversity Conservation Initiative - Lebanon



Over
300
taxa



Over
2 000 000
seeds present



Finally, regarding all the difficulties our country is facing, we will never lose hope in our Nature! We will always keep working, searching, enhancing and conserving!





Species identification through DNA barcodes

How many species are there in Lebanon? This simple question is often asked yet hard to be answered. Different existing methods are used to try to answer this question and to evaluate species richness of a geographical region such as species inventories and monitoring. The number of species which have been described in Lebanon until now using morphological description by taxonomic specialists is around 9,116 species in total, including 4,486 fauna species and 4,630 flora species. Due to difficulties in morphological identification and taxonomic uncertainty especially in complex biodiversity area, the integration of additional tools like species genetic identification by DNA barcoding analysis is now needed into any project to improve the accuracy of species inventory. By comparing a small DNA sequence of a specimen to a publicly available DNA sequence reference library like BOLD database and Genbank database, this technique allows us to determine the identity of the organism.

Knowing that biodiversity assessments in the eastern Mediterranean region (EMR) are relatively scarce, the construction of a reference library of DNA sequences for this region's biodiversity is essential. In the context of a project led by Saint-Joseph University of Beirut, in collaboration with Jouzour Loubnan members and the Smithsonian institute in Washington DC, we created the first reference library of standard DNA markers for mammals and plants in the EMR using plant leaves collected from different Lebanese nature reserves and roads kills samples, and also by using historical DNA extracted from taxidermized mammal specimens collected from the Museum of Birds, Mammals and Butterflies of Qobayat and the private collections of Mr Fadi Nejmeh in Keserwan.

A reliable and rich DNA sequence reference library is crucial for DNA-based monitoring and inventories of species, and particularly, to find out many more unknown species living with us.



Boukhdoud L, Saliba C, Parker LD, Rotzel McInerney N, Ishak Mouawad G, Kharrat M, Kahale R, Chahine T, Maldonado JE, Bou Dagher-Kharrat M. First DNA sequence reference library for mammals and plants of the Eastern Mediterranean Region. *Genome*. 2021 Jan; 64(1):39-49. DOI: 10.1139/gen-2019-0194

Liliane Boukhdoud Ph.D. student

Biodiversity Conservation Initiative – Lebanon



Publication: <https://cdnscepub.com/doi/abs/10.1139/gen-2019-0194>

Websites : <http://lebanon-flora.org/>
<http://lebanon-fauna.org/>



La vallée de Bisri : havre biologique ou site banal à démolir sans regret ?

La réponse dans le premier Bioblitz de la vallée

La vallée de Bisri creusée par le cours d'eau "El Awali" est l'une des fertiles vallées du Liban Sud. Caractérisée par une riche biodiversité, le site jouit également de vestiges archéologiques datant de l'époque phénicienne, romaine, mamlouk et ottomane de valeur culturelle et spirituelle.

Entre 400 et 500 m d'altitude, la vallée de Bisri appartient à l'étage eu-méditerranéen où se développe une forêt riveraine (ripisylve) luxuriante en mosaïque avec des terrains agricoles profitant des alluvions fertiles. Ce site voué à la destruction par un projet de barrage nécessite un inventaire biologique urgent !

Qu'est ce qu'un Bioblitz ?

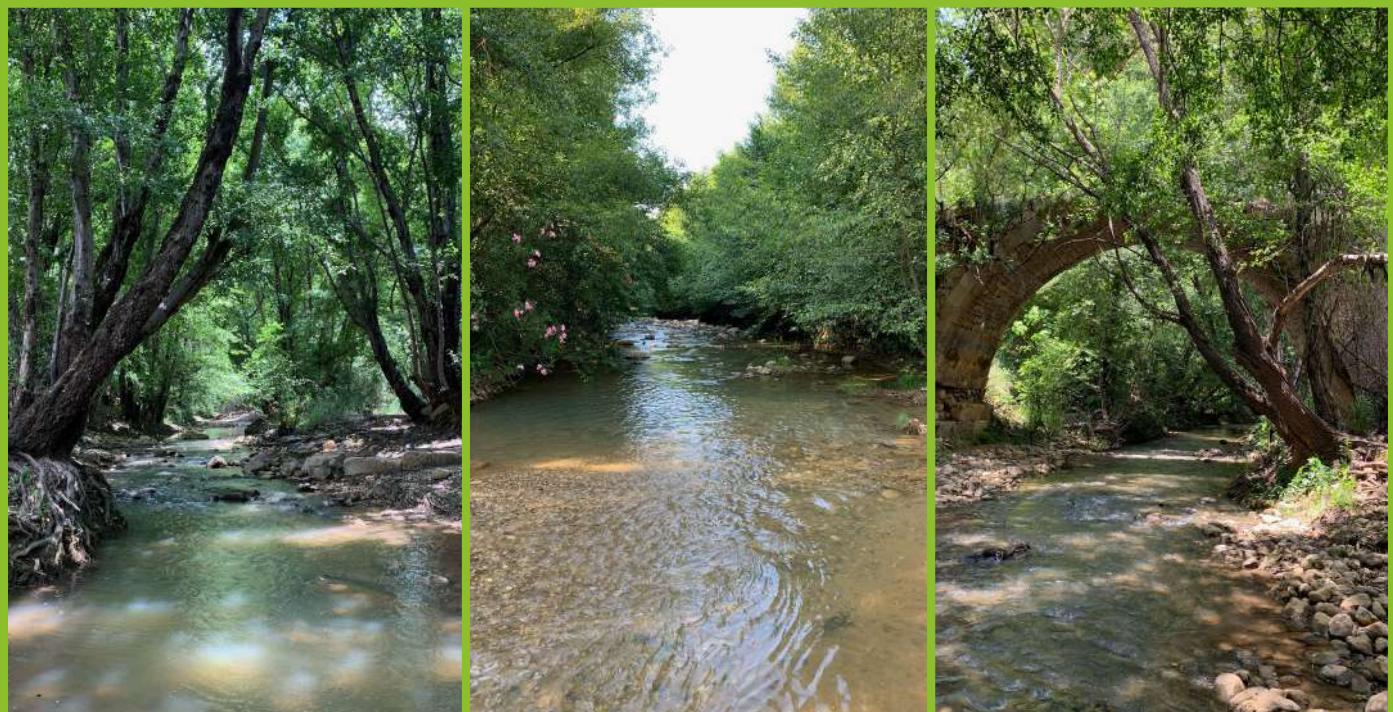
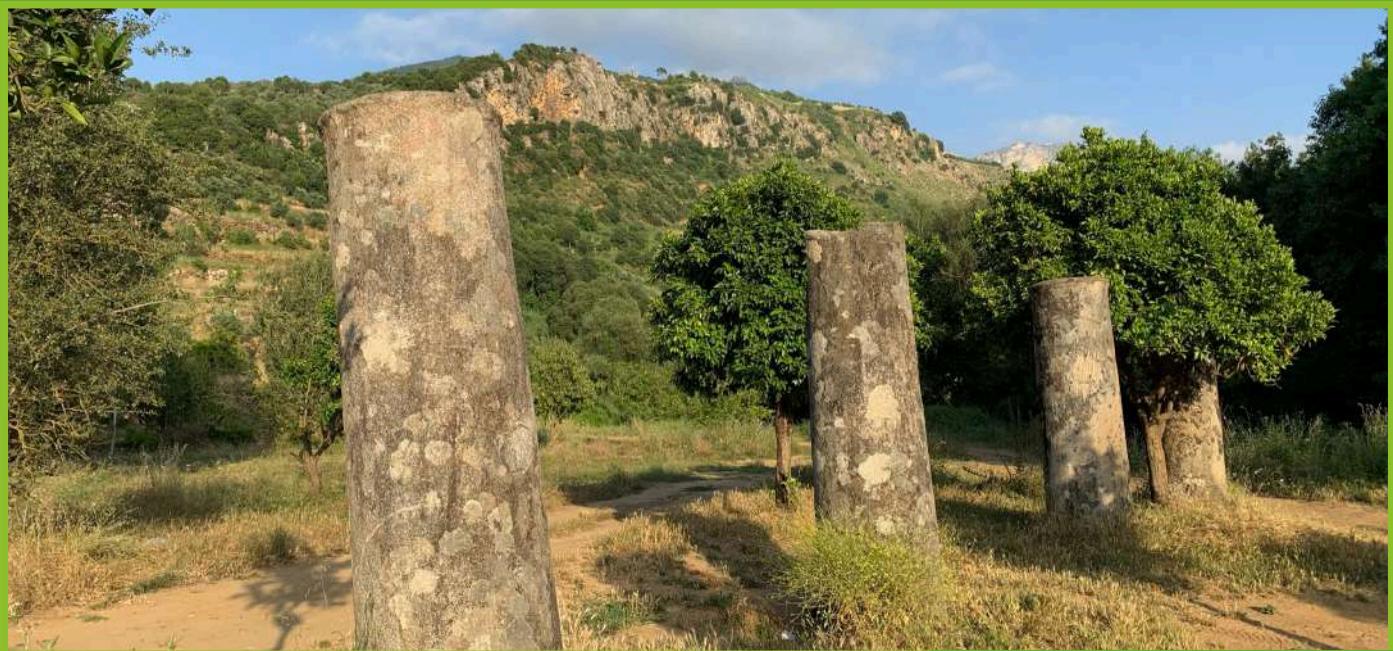
Un Bioblitz, est un inventaire « flash » de la biodiversité d'un site spécifique, il ne dure que 24 heures et vise à documenter autant d'espèces que possible par la communauté scientifique (chercheurs, étudiants) mais également par les citoyens (volontaires, activistes, randonneurs, adeptes de la nature). L'engagement communautaire dans un BioBlitz, en fait une enquête biologique unique qui nourrit la relation entre la communauté et son environnement. Les citoyens en travaillant aux côtés des scientifiques, lors de la réalisation du Bioblitz, acquièrent des connaissances et des compétences sur la diversité biologique, tout en nouant leur rapport avec les espaces naturels de leur localité, ce qui les engagera ardemment dans la préservation de ces sites et de leur biodiversité.

Étant donné sa situation géographique et sa beauté exceptionnelle, nombreux sont les randonneurs, les photographes et les scientifiques qui ont visité le site et l'ont immortalisé avec leurs photos.

Dans ce contexte, Biodiversity Conservation Initiative - Lebanon a lancé le 16 Juin 2020 le premier BioBlitz pour documenter la flore de la problématique Vallée de Bisri sur la plateforme web "iNaturalist" de National Geographic et California academy of science et en partenariat avec Jouzour Loubnan.

Qu'en dit ce premier Bioblitz de la biodiversité de Bisri ?

Ce city challenge a permis de rassembler des observations et d'établir un inventaire du site en un temps record ! 226 observations ont été documentées par 6 observateurs qui ont pris la relève informatique du devoir pour les participants au Bioblitz, révélant ainsi 154 espèces de plantes. Un bilan confirmant la riche diversité végétale de la vallée, en harmonie avec la diversité de son paysage et de ses habitats. Verdict ? une vallée à préserver sans doute vu son unicité au Sud du Liban plutôt aride, sa richesse floristique prometteuse, certainement à inventorier davantage parallèlement à ses animaux, champignons etc., sans négliger son patrimoine historique, culturel et géologique.



Bisri Valley

Dr. Rana El Zein
Biodiversity Conservation Initiative – Lebanon



A Jewel in Southern Lebanon

"What in your life is calling you? When all the noise is silenced, the meetings adjourned, the lists laid aside, and the wild Iris blooms by itself in the dark forest, what still pulls on your soul?" (Rumi)

In the highest mountains of Jezzine, one of the Royal Irises reigns over the rocks. *Iris westii* has chosen to leave all the beautiful places on earth, to only bloom in "Tawmat Jezzine," and in my master's end of the study project.

After the southern Lebanon liberation from the Israeli Occupation, the Lebanese Mine Action Center gradually removed the site's landmines. Meanwhile, the biodiversity began to conquer the area, assessed during Jouzour Loubnan's reforestation project and the Biodiversity Conservation Initiative team efforts.

Now, the site is home to more than 150 plant species, counting 77 endemic species, and more than 20 observed fauna species living there, even though the forest hasn't yet finished growing.



Iris westii was on the brink of extinction.

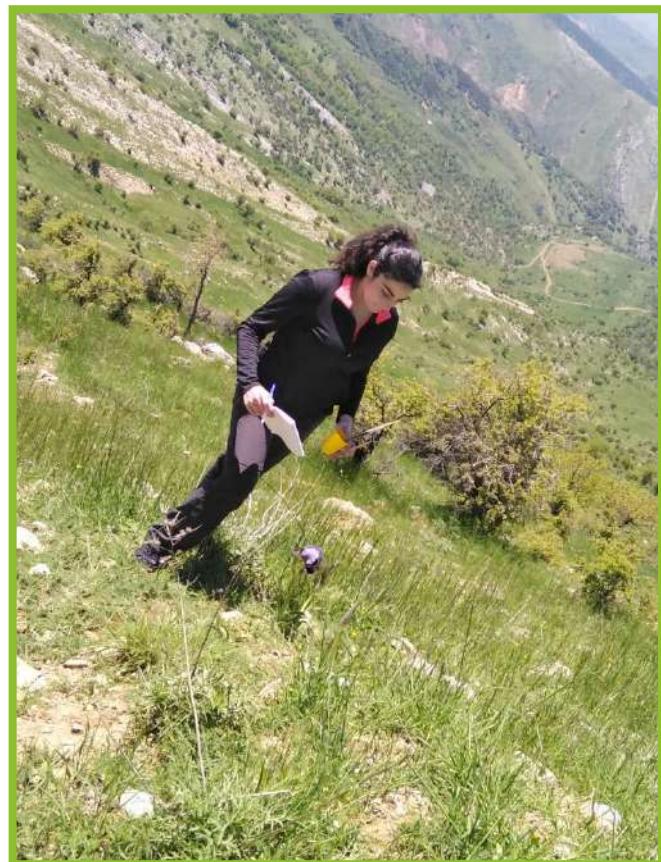
The protection of the Jezzine population is detrimental to conserve it. This is the main reason to classify "Tawmat Jezzine" as a "Nature Reserve," due to the site's important biodiversity and high level of endemism.

The local municipality will also preserve the site from overgrazing the 53,000 planted trees.

Not only "Tawmat Jezzine" is rich in biodiversity, but the natural and cultural heritage is also distributed to most surrounding villages: Bkassine pine forest, Sfaray crusader fortress, Jezzine waterfall, Bisri valley, roman sarcophagi... All of this richness deserves to be preserved and sustainably employed.



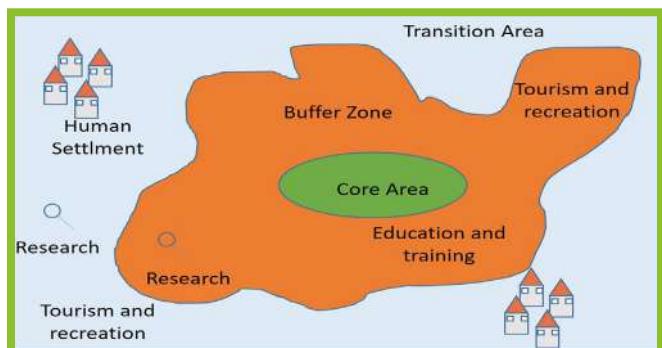
This calls for a more effective protection form covering all the regions: "The UNESCO Biosphere Reserve."



It contains three zones:

the core zone(s) -legally protected area-, the buffer zone(s) -research and sustainable practices area-, and the external transition zone -home for settlements, researches, and sustainable practices.

Since Lebanese law doesn't cover the Biosphere Reserve, but a very similar protection form: the "Natural Park," the union of Jezzine municipalities agreed to begin implementing it, helped by two current Ph.D. theses, to develop and valorize this jewel in southern Lebanon.



Marie-Claire Andraos, Ph.D.
Biodiversity Conservation Initiative – Lebanon

LIFE PLAN

A Planetary Inventory of Life

While humanity is planning for conquering other planets, little is known about how life is structured across our own. Our unawareness relates to not only the richness in species but also how these species are structured into communities and how they interact with each other.

At present, an estimated 80% of all species on Earth still await discovery. At the same time, we are losing biodiversity at an alarming rate.

The lack of relevant data for the vast majority of species and the complexity of processes underlying biodiversity dynamics are the two main reasons for our poor understanding of biodiversity and its drivers.

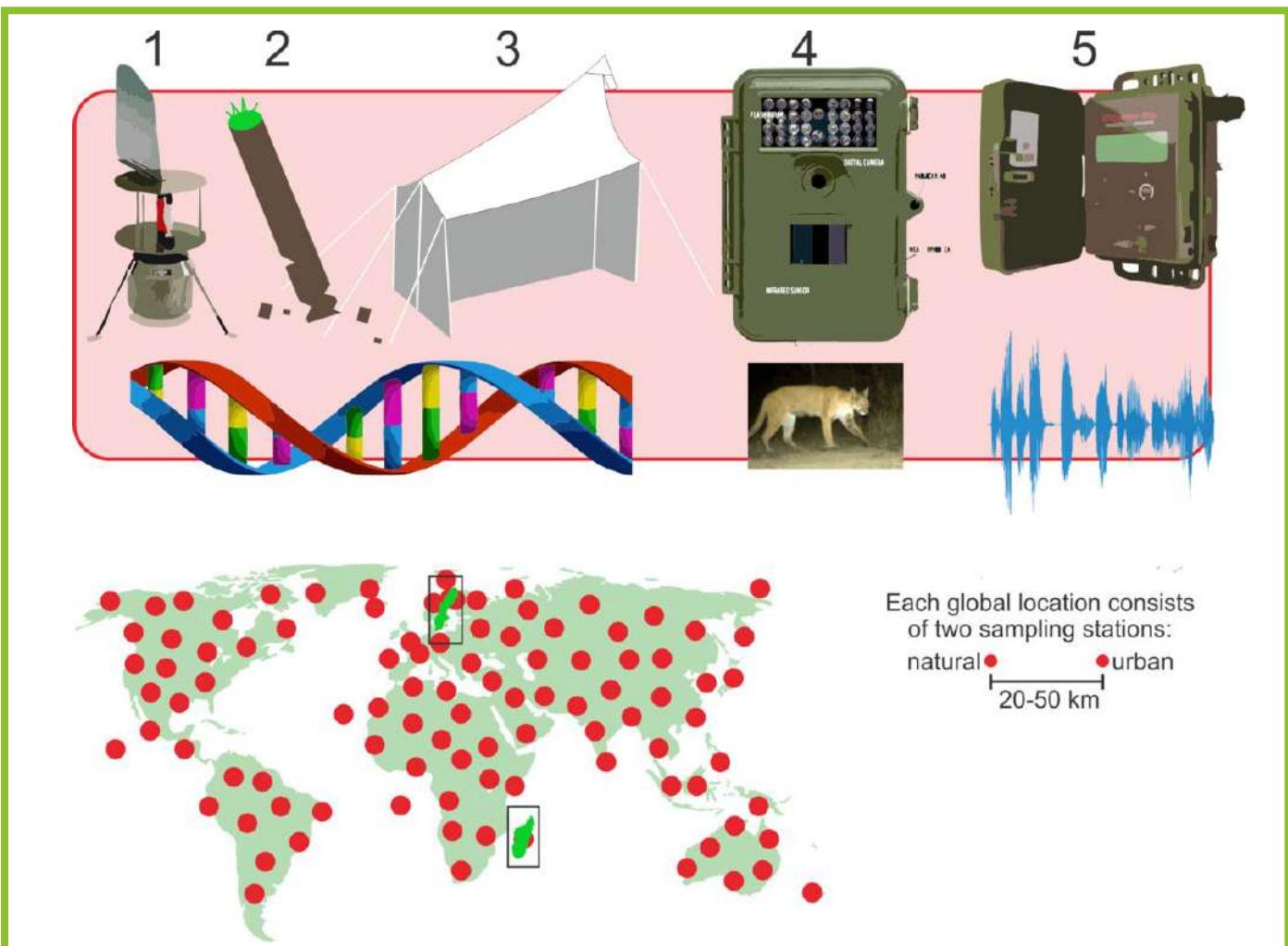
LIFEPLAN will overcome both obstacles. LIFEPLAN aims to establish the current state of biodiversity across the globe, to characterize biological diversity through a worldwide and well-standardized sampling program that do not require taxonomical expertise and to develop the bioinformatics and statistical approaches needed to make the most out of these data.

LIFEPLAN is a six-year (2020-2025), 12.6 million EUR project led by the University of Helsinki, funded by the European Research Council (ERC) through a major ERC Synergy Grant. LIFEPLAN has joined BIOSCAN, a research program overseen by the International Barcode of Life (iBOL). As its guiding principle, LIFEPLAN is committed to Access and Benefit-sharing, and offers workshops on both data analysis and sampling methods.



To achieve these goals, research teams in 53 countries around the globe including LEBANON represented by Pr. Magda BOU DAGHER KHARRAT laboratory have teamed up to generate fully standardized data across 200 globally distributed sites.

At each site, two 1-ha (100m x 100m) localities some 20-50 km from each other will be included, out of which one will be more natural (N), and the other one more urban (U). We choose Jaj Reserve as the natural site where Jouzour Loubnan and Saint Joseph University are working already and Zaarour as the urban site. We will be moving between these sites that will be sampled in a six-year sequence of N-U-N-U-N-U. The basic unit of sampling is a 1-ha plot within which five types of sampling will be deployed: a cyclone sampler (1), i.e. a device for extracting small particles from the air, yielding physical samples of spores and pollen; soil and root samples (2) taken manually, yielding physical samples of fungi and other microbes; a Malaise trap (3) for catching flying organisms, to sample insects; camera traps (4) and audio recorders (5), yielding digital samples of primarily vertebrates (Mammals, Birds and other vocal organisms).



Sampling techniques and equipment used in LIFEPLAN

Then, the resulting samples will be sent to the coordinating team of LIFEPLAN for sample processing (DNA extraction, sequencing, image and sound analysis and taxonomic placement of the data).

LIFEPLAN will give us the opportunity to reveal unprecedented data on the biodiversity found from our study sites which will help us illuminate Lebanon's biodiversity.

Carole Saliba

Ms Genomique et Proteomique Fonctionnelle
Biodiversity Conservation Initiative – Lebanon

Conserving and Valorizing the Unique Botanical Heritage of Lebanon

Our seed bank is closely involved in the implementation of the project entitled “Conserver et Valoriser le patrimoine unique du Liban” funded by the Critical Ecosystem Partnership Fund (CEPF) and implemented by the Saint Joseph University. The project's main targets focus on:

1 In-situ conservation of endemic species present in protected areas. The conservation approach revolves around drafting a section about endemic plant conservation in the reserve's management plan of Horsh Ehden Nature Reserve and Jabal Moussa Biosphere Reserve.

In addition to the case of endemic species present in Cedars of JAJ, a newly declared nature reserve

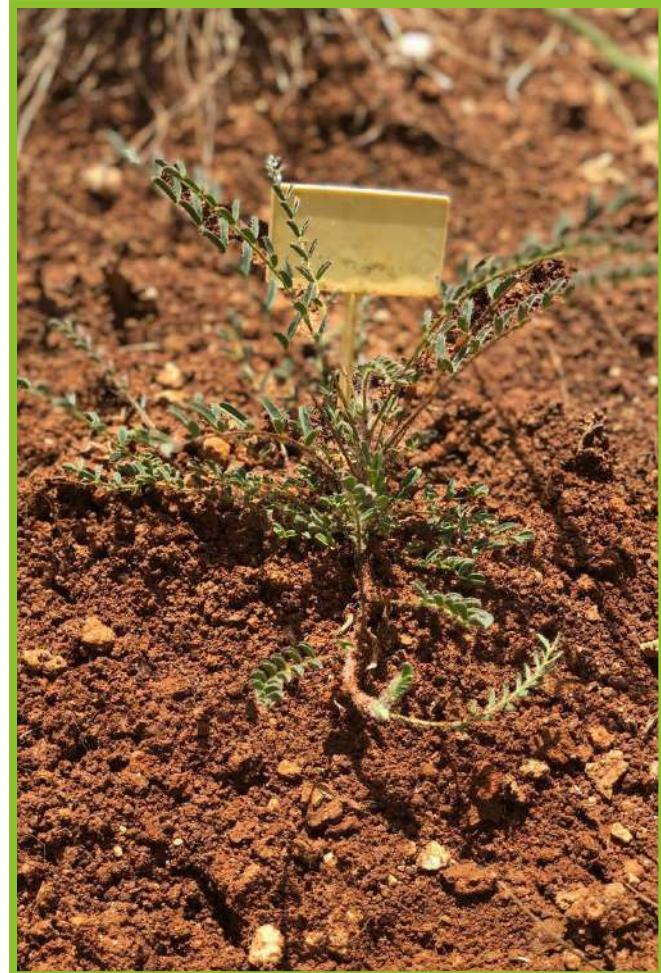
that does not have a management plan yet. Subsequently, we are working in collaboration with the committee of the reserve to prepare a management plan focused on endemic plants and build trails inside of the reserve therefore enriching the visitors' path by highlighting important points on each trail.



2

Co-conservation of our Natural and cultural Heritage:

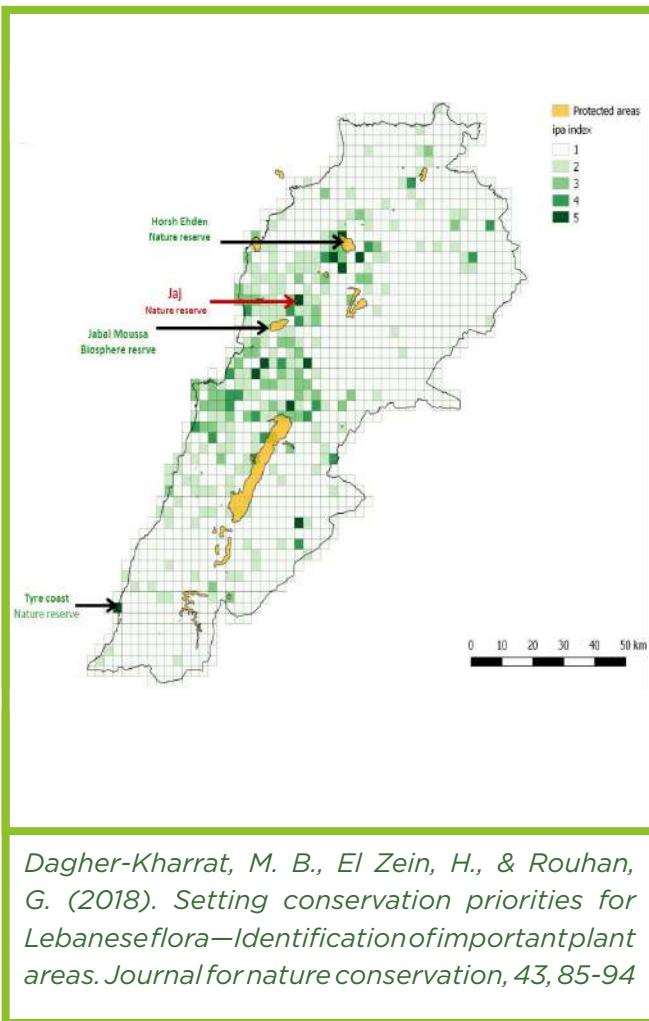
We are proud to be considered pioneers in introducing this new conservation approach that focuses on conserving endemic species in already protected areas such as archeological sites. The idea behind this approach is to germinate in our laboratory, endemic species that are compatible with the bioclimatic zones of the recipient site (Anjar and Tyr archeological site). Once the seedlings are developed, we translocate them into these archeological sites after discussion with the site managers. These introductions have double objective: the conservation of plant species on protected sites which would not require a maintenance since they would develop under the same abiotic conditions as their place of origin and therefore allowing large public awareness about endemic plant species which are an integral part of our cultural heritage. Two archaeological sites are serving as pilot sites: the ruins of Tyre for the protection of *Astragalus berytheus* and the archaeological site of Anjar for the protection of *Iris antilbanotica*.



3

Creation of microreserve

Creation of microreserve and population reinforcement: Moreover, the work on plant micro-reserves that was initially introduced as part of the first CEPF project that ended in 2016 is still ongoing. Indeed, we are still working on population reinforcement in Sarada microreserve for the *Iris bismarckiana* species and on the involvement of the local community in the region. We are also aiming at creating a new microreserve in Becharre for the protection of the endemic species *Iris cedreti*.



Dagher-Kharrat, M. B., El Zein, H., & Rouhan, G. (2018). Setting conservation priorities for Lebanese flora—Identification of important plant areas. *Journal for nature conservation*, 43, 85-94.

Rhea Kahale

Masters in Environmental Sciences and Management
Biodiversity Conservation Initiative – Lebanon

OAK TREES

Oak trees of Lebanon

Oak trees in Lebanon are very old companions of the rural Lebanese communities as important source of charcoal. Oaks are typical of the Mediterranean Basin forests. Seven oak species thrive in Lebanon, from the coast up to around 1800 m above sea level, reflecting the high biodiversity of our country.

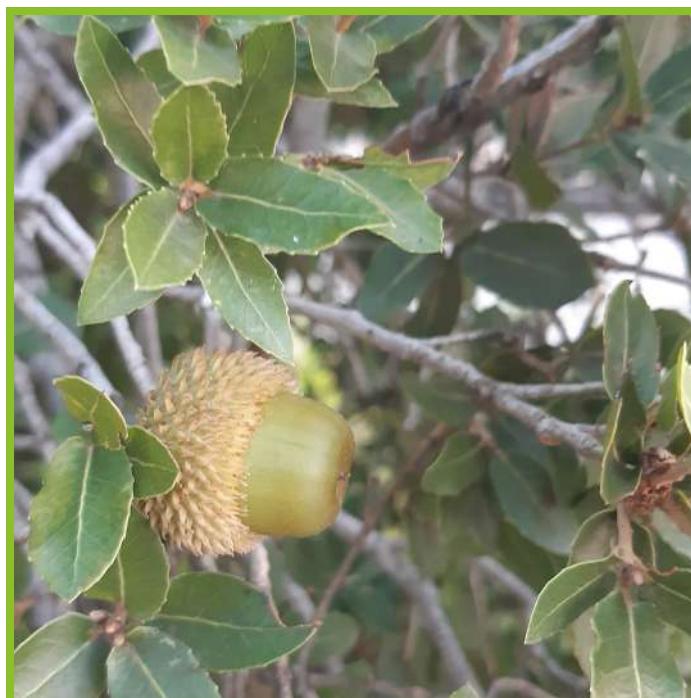
In addition, many hybrids are found making species identification very challenging. DNA markers help us getting a clearer picture of the interbreeding and the genetic diversity found in this genus. Our recent study showed that Lebanon is a center of oak diversification in the region and holds some unique genotypes.

To identify the oak species one should look at its nut fruit and leaf shape. The most widespread oak is the kermes oak "السنديان" (*Quercus calliprinos* Webb.). It is the only evergreen oak easily identified by its small, waxy spiny leaves and its short fruit nut covered by a spiny capsule.

Its close companion and second most common is the *Quercus infectoria* G. Olivier "ملول أو عفص". It is characterized by wide symmetrical leaves with smooth lobes as well by its long nut fruit slightly covered by a smooth capsule. The biggest oak tree in Lebanon growing up to 30 meters is the *Q. cerris* L. (عزز) forming unique oak forests on deep well developed soils. Associated with ferns and Peonies they offer a wonderful forest scenery. The leaves are wide easily recognized by their asymmetrical deeply lobed limbo. The fruit nut is short and almost entirely covered by a capsule covered by very long hairs.

The four other species are not very common in Lebanon. They require special attention for their protection, especially *Quercus kotschyana* O. Schwarz an endemic species to Lebanon, and *Q. look Look* endemic to Lebanon and Syria. *Q. cedrorum* Kotchy occurs also in Turkey and Iran while *Q. ithaburensis* Decne. is spread across the Levantine countries.

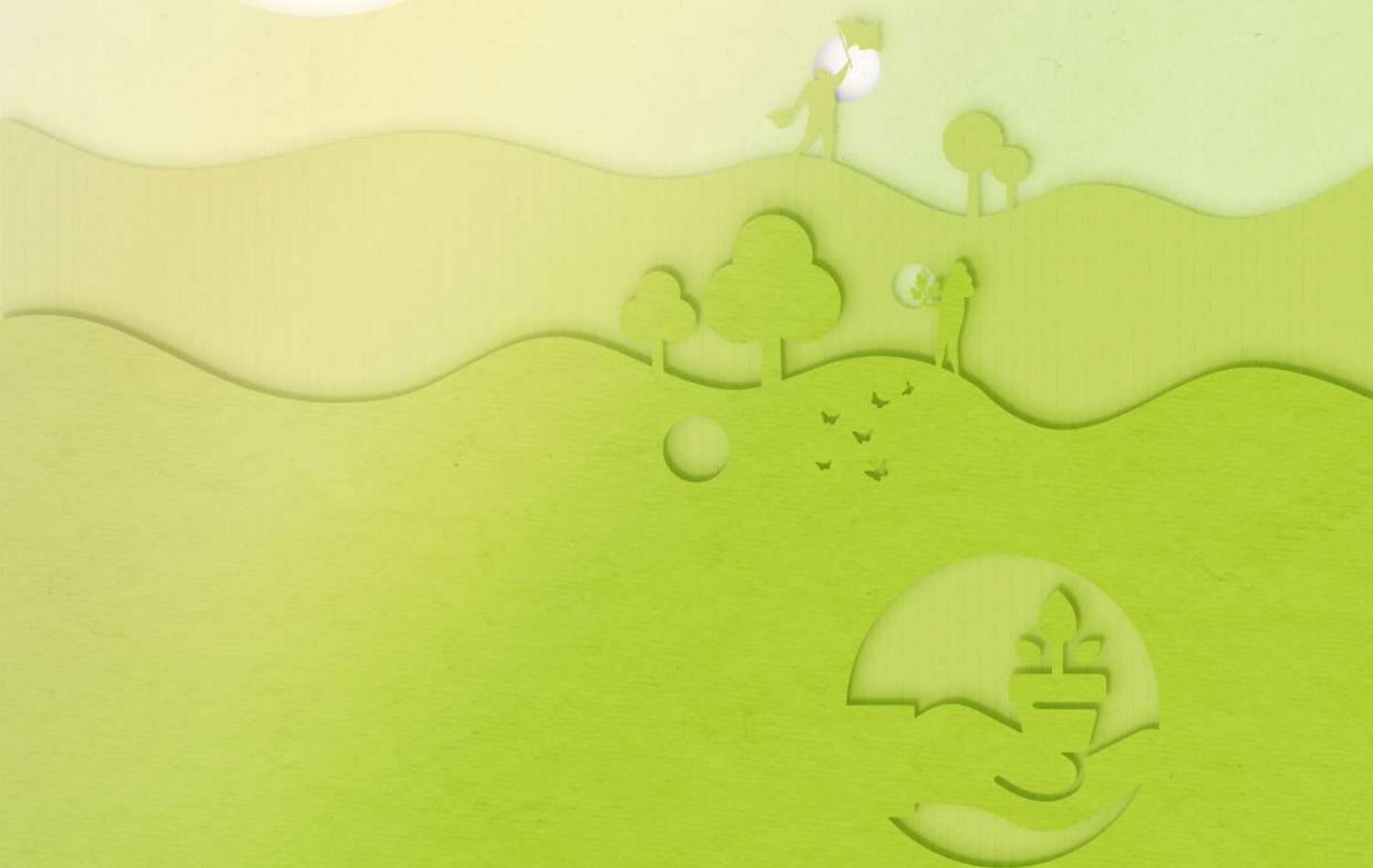
Bouchra Douaihy, Carole Saliba, Jean Stephan, Magda Bou Dagher Kharrat, Marco Cosimo Simeone, Perla Farhat & Simone Cardoni (2020) Tracking diversity and evolutionary pathways of Lebanese oak taxa through plastome analyses, *Botany Letters*, 167:3, 315-330, DOI: 10.1080/23818107.2020.1765197





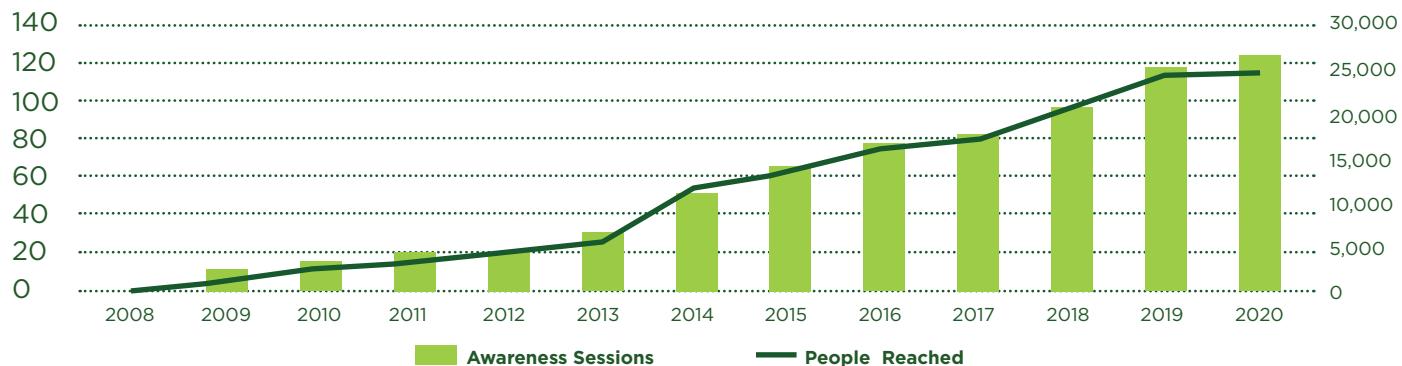
Dr. Bouchra Douaihy - PhD, Ecology
Associate Professor
Faculty of Sciences
Lebanese University

PROMOTE
ENVIRONMENTAL
AWARENESS



AWARENESS OUTREACH

Before the pandemic, Jouzour Loubnan reached thousands of students, scouts, and Lebanese citizens through awareness sessions, highlighting our forests' importance and preservation and restoration methods.



At the beginning of the year, Jouzour Loubnan was able to do several awareness sessions at Collège Protestant Français to 8 classes, including 33 sections with a reach of almost 1,000 students.

With this initiative, the students and their teachers created a yearly calendar 2020 under the theme: Man and Nature (l'Homme et la nature).

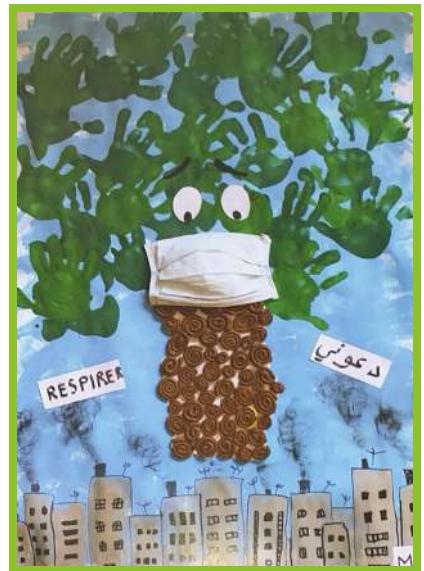
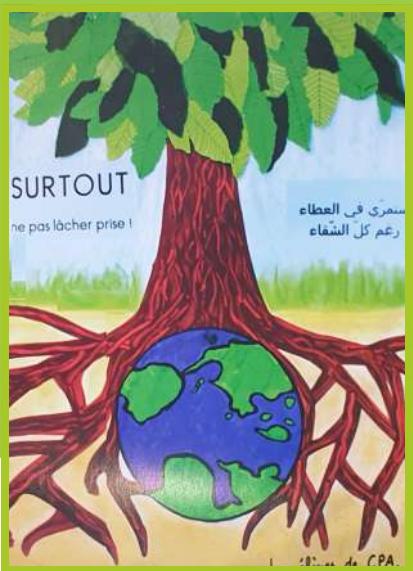
The artworks beautifully illustrated the months of this year and added hope for future generations. All of the proceeds from this sale were donated for reforestation.



We want to thank the esteemed school, Mr. Olivier Gautier, Mr. David Boulay, Mrs. Nada Kamel, Mrs. Rindala Berro, and Mrs. Samar Koujou, again.



CALENDRIER 2020
COLLÈGE PROTESTANT FRANÇAIS





Our cedar trees burned this year as Lebanon experienced its worst fire season on record

Lebanon has just suffered its worst fire season on record based on an assessment conducted by the Land and Natural Resources Program at the Institute of the Environment at the University of Balamand. Increasing drought conditions and weather extremes facilitated the spread of fires over large areas while pushing the flames to ignite at a record altitude above 2,000 m (i.e., approximately 441 ha of burned high mountain lands).

The unprecedented fires burned over a total land area of 7,132 ha, while the yearly average has been around 1,000 ha during the past decade. From the 2,997 ha which burned in forests, a total of 54 ha burned exceptionally this year in cedar, juniper, and fir tree covers.

In addition, the wildfires burned a total of 1,036 ha of Key Biodiversity Areas (KBAs) across the country, therefore resulting in severe ecological damages.

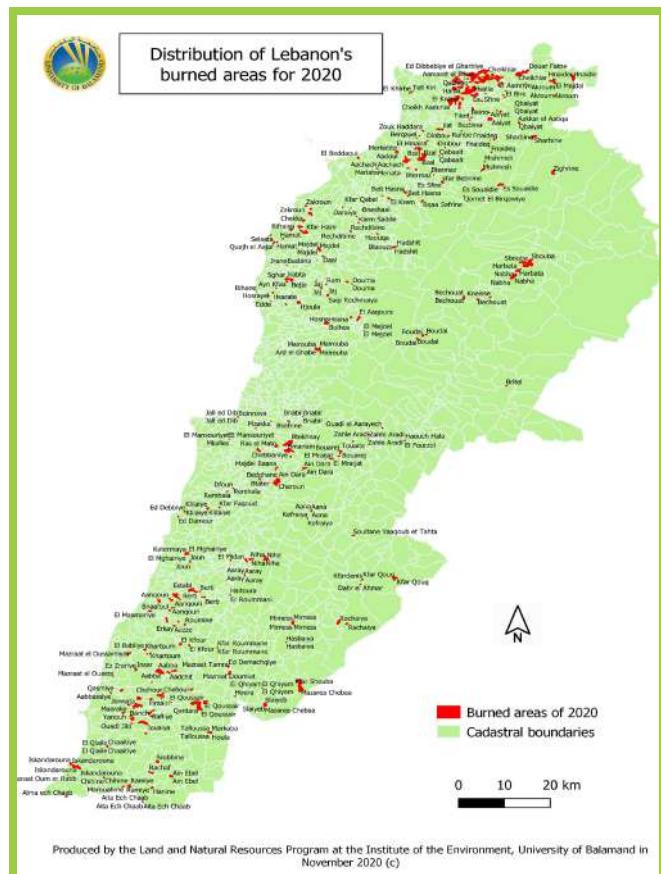
Also, relatively large agricultural land and grassland areas were burned with total areas of 1,241 ha and 2,893 ha, respectively. In addition to the high ecological damages, the recent fires have had large socio-economic damages, especially that privately-owned large forest and agricultural areas were severely burned, and crops were lost in the time of a national financial and monetary crisis.

There is no doubt that drought and recurrent weather extremes contributed to the spread of fires over large areas and, in some cases, along with high mountainous lands. A study previously published by Mitri et al. (2015)[1] projected a significant increase in drought conditions in high mountainous areas, especially in the Akkar region. The landscape is so dry and combustible from multiple years of gradual change, leading to an increase in fires' frequency and intensity.



At the same time, Lebanon showed severe unpreparedness to deal with an increasing fire risk. Unfortunately, more than 1,400 fire alerts were recorded between April 1 and October 30, 2020. Around 150 fires burned simultaneously in less than 48 hours across different parts of the country. Sadly, the fires resulted in the loss of 1 human life. Although Firelab, our fire danger forecast system (<http://firelab.balamand.edu.lb/FireLabWeb/FireDanger>), generated a total of 1,800 fire danger forecast maps throughout the fire season, the national fire preparedness and response were at their weakest levels. In this context, more than one-third of Civil of Defense's fire trucks were out of service during the fire events, mostly due to a lack of enough financial resources for car maintenance.

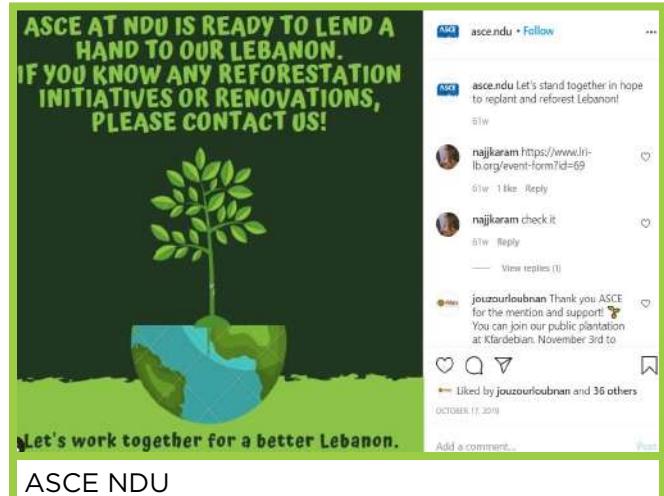
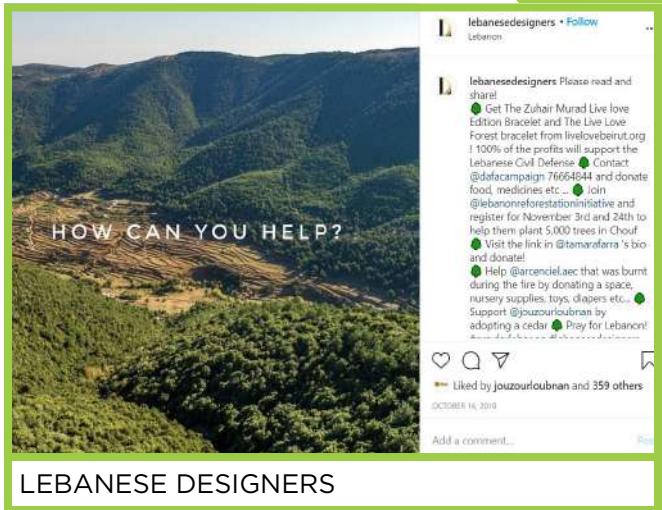
As wildfires will continue to sweep across the country, threatening more lives, destroying private and public properties and infrastructure, our research and studies (i.e., involving socio-economic, environmental, and climatic data) have shown a dire message: this could be Lebanon's new normal especially with the lack of a national commitment to manage the increasing fire risk. We definitely need to design a better future and manage our forests in a smarter and innovative way and not just accept what is coming.



Dr. George Mitri, Associate Professor

Director of Land and Natural Resources Program,
Institute of the Environment, University of Balamand
Email: george.mitri@balamand.edu.lb

FANS SUPPORT



INTERNATIONAL DAY OF FORESTS 2020



Forest biodiversity is under threat from “HIPPO”:

Habitat
Destruction

Invasive
Species

Pollution

Human
Population
Raise

Over-
exploit-
ation



Even though Lebanon has a rich and unique biodiversity of fauna and flora with 12% of endemic plant species, it is not too late to take action now to save it!

The theme for the 2020 International Day of Forests on March 21 was Forests and Biodiversity. Access the Lebanon e-flora website www.lebanon-flora.org for more detailed information on Lebanese plant species to spot and preserve.



Berberis libanotica

بربريس لبناني



Juniperus excelsa

لزاب



Astragalus berytheus

كثيراء بيروت



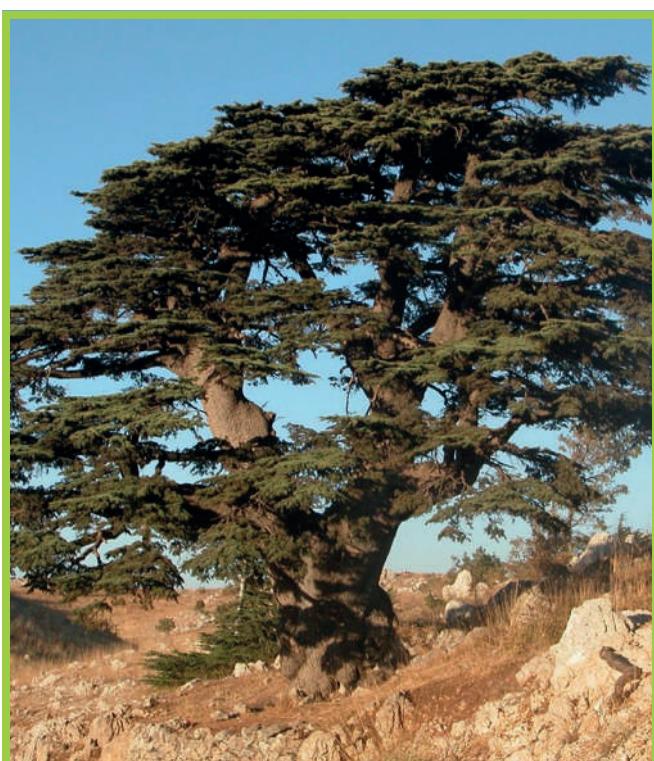
Hyaena hyaena

ضبع مخطط



Vormela peregusna

فأر الخيل الرخامي



Cedrus libani

أرز لبناني

10 DAYS IN THE MEDITERRANEAN



Thirty young civil society leaders carried out the “10 Days for the Mediterranean” campaign, comprising of thirty initiatives taking place conjointly between 1-30 June 2020 in the Southern Mediterranean to raise awareness on ecological issues. This action was developed and supported by the EU-funded “Med Dialogue” for Rights and Equality Programme, in 10 South Mediterranean countries: Algeria, Egypt, Jordan, Lebanon, Libya, Mauritania, Morocco, Palestine, Tunisia, and Syria.

These young leaders took part in first Med Dialogue Fellows Bootcamp on the topic of “Addressing the ecological challenges in the Mediterranean” in January 2020. They carried out local awareness raising campaigns, trainings and advocacy actions to help promote sustainable practices and environmental protection measures around four main themes: Climate change, Agroecology and forests, plastic waste, and marine pollution.

Link to view the campaign –

https://www.youtube.com/watch?v=uk5or8exK_Q&feature=youtu.be

قام ثلاثون شاباً وشابة من قادة المجتمع المدني بتنفيذ حملة "10 أيام من أجل المتوسط" والتي تالت من ثلاثة مبادرة جرت بين 1 و 30 يونيو 2020 في جنوب المتوسط لزيادة الوعي بالقضايا البيئية. وقد تم تطوير هذه العمل المشترك ودعمه من قبل برنامج حوار المتوسط من أجل الحقوق والمساواة الممول من الاتحاد الأوروبي لينفذ في 10 دول في جنوب المتوسط هي: الأردن والجزائر وتونس وسوريا وفلسطين ولبنان وليبيا والمغرب ومصر وموريتانيا

وكان قد شارك هؤلاء القادة الشباب في المخيم التدريبي حول "التصدي للتحديات البيئية في منطقة المتوسط" في كانون الأول يناير 2020. نفذ شباب حوار المتوسط حملات توعية محلية وبرامج تدريبية وحملات للمناصرة وذلك للمساعدة في تعزيز الممارسات المستدامة وتدابير حماية البيئة حول أربعة مواضيع رئيسية: تغير المناخ والإيكولوجيا الزراعية والغابات والنفايات البلاستيكية وتلوث البحار.

ساعدونا لنزرع أشجار
محليّة أكثر حتى نستعيد
التنوع البيولوجي ونحمي
نظامنا البيئي في لبنان!

Help us plant more native trees to restore our biodiversity and protect our ecosystem!



**بتساهمم جذور لبنان من خلال إشراك
الناس بمشاريعها وتطوير برامج بيئية
مع الشركات!**



Jouzour Loubnan contributes to a social-economic level

**تعوا ننشر الوعي بين صناع القرار عنا
والأجيال القادمة!**



**هدفنا زرعة غابات مستدامة و نخلي
اللبنانيين يشاركون بعمليات إعادة
التشجير!**



Our goals are to plant towards sustainable forests and
engage the Lebanese in reforestation!

IN THE MEDIA



MTV - Happening - 22 June 2020



MTV - Alive - 4 December 2019



CHARITY TV - Aa hawa al mahabeh - 26 November 2019



TéLé Liban - Ahla sabah - 7 October 2019



TéLé Liban - Ahla sabah - 20 November 2019

To view all interviews, visit our website: <https://www.jouzourloubnan.org/video-gallery>

FRANCE 24

EN DIRECT

03/09/2020 18:43

FRANCE | ARABE | REPORTAGES | EMISSIONS | STOP DISPOX

Information Coronavirus • Français à l'étranger : consultez les informations officielles et les recommandations émises par le Gouvernement

LEBANON

Emmanuel Macron a planté un cèdre lors de sa deuxième visite à Beyrouth

Published le : 01/09/2020 - 18:43 Modified le : 01/09/2020 - 18:46

FRANCE 24

GREEN PLANET MONITOR

SOCIAL & ENVIRONMENTAL | SOCIETY & CULTURE | PLACES | GLOBAL DEV | SCI-TECH | SPECIAL SERIES PAST FORWARD

Lebanon Roots

GREEN PLANET MONITOR on January 14, 2020 at 10:00 am (UTC+0)

Restoring Lebanon's Cedar Forests

By David Kattenburg

Other Special Series

Brain Waves | Positive Crustaceans | Warm Wet Planet | You and Your Geas

GREEN PLANET MONITOR

Le grand reportage

Cèdre du Liban. A l'ombre d'un fragile géant

Dans un contexte de crise économique et politique, le cèdre du Liban apparaît comme une valeur refuge pour la population. Il protège des arbres centenaires mais il démontre aussi que le pays du mont Liban demande lui aussi à être protégé alors que son environnement naturel est devenu hostile.

LE GRAND REPORTAGE

LE SOIR .be

Fil info | Belgique | Monde | Économie | Sports | Culture | Opinions | L'actu en vidéo | Immo | +

Accueil > Opinions > Cartes blanches

Carte blanche: «Planter des cèdres au Liban pour manifester l'attachement à la terre»

Les ONG et associations s'unissent et viennent en aide aux Libanais, dont la situation s'aggrave depuis un an. Les explosions au port de Beyrouth n'ont fait que faire plonger les plus précaires dans l'extrême pauvreté.

Dans cet article • Embourré dans les crises, l'Etat libanais joue les absents

Mis en ligne le 13/12/2020 à 15:00 par Alexandre Meeus, juriste et politologue basé au Liban

LE SOIR

L'Orient-Le Jour

GENTENAIRE DU GRAND LIBAN

La plantation d'un cèdre à Jaj, un événement à forte connotation symbolique

Pour l'association Jouzour Loubnan, cette réserve naturelle incarne la résilience des Libanais et leur attachement à leur terre.

OJL / Par Ornella ANTAR, le 11 septembre 2020 à 00h00

L'ORIENT LE JOUR

L'Orient-Le Jour

POINT DE VUE

Le Covid-19, agent naturel de régulation de l'activité humaine ?

OJL / Par Magda BOU DAGHER KHARRAT, le 25 avril 2020 à 06h10

L'ORIENT LE JOUR

ON SOCIAL MEDIA



Magda BOU DAGHER @magdaboudagher · Oct 30
When early in the morning you discover germinating seeds of hope 😊😊
#Cyclamen libanicum
#Astragalus cedreti

@JouzourLoubnan @CommunityCEPF @usj_fs @USJLiban

Christina



MAGDA BOU DAGHER



Greenpeace @GreenpeaceAR · Oct 4
العيش يائسجام مع الكائنات الحية يضمن بقاؤنا على هذا الكوكب، وهذا ما تطمح إليه
مجدداً بو داغر خراطة في الفرصة الثانية. شاركينا عبر فيديو روتك لمستقبل أفضل
على #فرصة_نانية @magdaboudagher act.gp/30wzog1
#غرينبيس



GREEN PEACE



Jouzour Loubnan @JouzourLoubnan · Sep 30
Biosphere Reserves, Nature and Social Changes: an Interview with
@magdaboudagher
@usj_fs @USJLiban #EduBioMed



JOUZOUR LOUBNAN



Magda BOU DAGHER @magdaboudagher · Sep 11
La plantation d'un cèdre à Jaj, un événement à forte connotation symbolique
- @LOrientLeJour @usj_fs @USJLiban @JouzourLoubnan @AFD_France
@CommunityCEPF @AmbeFranceLiban @Elysee



MAGDA BOU DAGHER



John Lieber @jungle_capital · Sep 1

Here, @magdaboudagher plants a cedar tree in Beirut's centenary with
French President @EmmanuelMacron

As Magda tells me "in the frame of humanitarian and economic crisis,
environment remains important"

Please check out their fundraiser on adoptacedar.org



JOHN LIEBER



Emmanuel Macron @EmmanuelMacron · Sep 1

...

La liberté, le dialogue, la coexistence. Le Liban est fort de ces valeurs. Fort de l'Histoire centenaire du Grand Liban. Il saura renaître de la crise qu'il traverse. Je le dis au nom des Français : nous serons toujours aux côtés du peuple libanais.



EMMANUEL MACRON



Magda BOU DAGHER @magdaboudagher · Jul 31

...



MAGDA BOU DAGHER



Akkartrail @akkartrail · Jul 24

...

مبروك لعكار ❤️, زهرة جديدة أضافت الى قائمة الازهار البرية في لبنان !

nna-leb.gov.lb/ar/show-news/4...
@MTVLebanonNews @USJLiban
@MoE_Lb_Official @Hassan_B_Diab
@magdaboudagher #Akkartrail #عزّز عكار # @General_Aoun @grandserail



AKKAR TRAIL



La France au Liban @AmbaFranceLiban · Jul 16

...

Inauguration de la pépinière de @JouzourLoubnan, en présence des ministres de l'Economie @RaoulNehme et de l'Agriculture @M_abassmortada, et de sa présidente @magdaboudagher. Grâce au fonds PISCCA, 40000 arbres fruitiers et genevières vont être plantés.



LA FRANCE AU LIBAN



Élysée – Présidence de la République française · Follow

...

Il y a 100 ans, l'Etat du Grand Liban était proclamé. Depuis la réserve des Cèdres de Jaj, le Président Emmanuel Macron témoigne du lien indestructible entre le Liban et la France.



ELYSEE

FROM OUR FRIENDS AND FANS

 **Sociedad Libanesa de Rosario**
14 Oct • 

Campaña ADOPTA UN CEDRO- ADOPT A CEDAR. 

👉 Jouzzour Lubnan junto con Sociedad Libanesa de Rosario.
👉 ... See more

Campaign ADOPT A CEDRO-ADOPT TO CEDAR. 

👉 Jouzzour Lubnan along with Lebanese Society of Rosario. 👉 ... See more

 Rate this translation



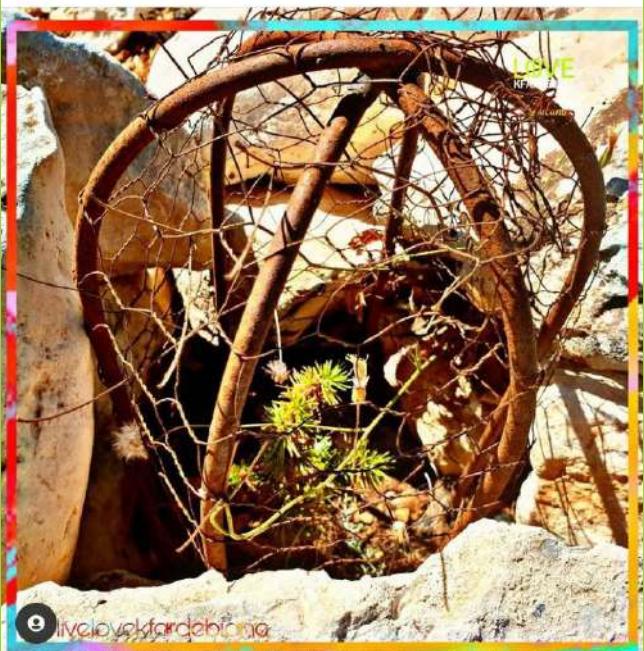
SOCIEDAD LIBANESA DE ROSARIO

 **josiane_sallit** • Follow
Faraya



JOSIANE SALLIT

 **livelovekfardebiane** • Following
Oyoun El Siman Kfardebian



LIVE LOVE KFARDEBIANE

 **husseinghazzi**

Mabrouk! You have adopted 5 Small Cedrus libani in Lebanon.
Your babies are in safe green hands!
Lebanon thanks you for your generosity and your belief in our mission!
It is thanks to you, our supporters, that the Jouzzour Loubnan team is planting and protecting more forests across Lebanon.



Come on people, log on to adoptacedar.org and buy yourself trees to participate in the reforestation of our beloved country Lebanon

HUSSSEIN GHAZI



Jouzour Loubnan

26 Feb •

The individual fence is successfully adopted, recording considerable achievements over the tested sites since 2013.

This fencing technique designed... See more



JOUZOUR LOUBNAN



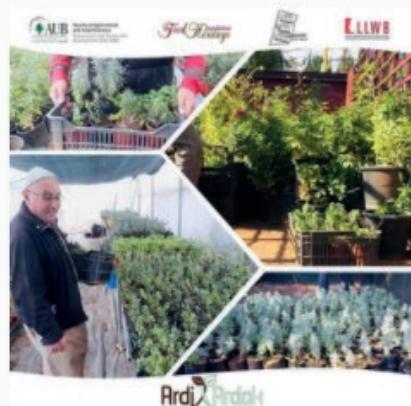
RITA AND JOHNNY



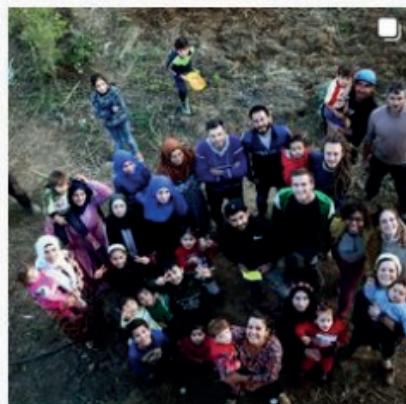
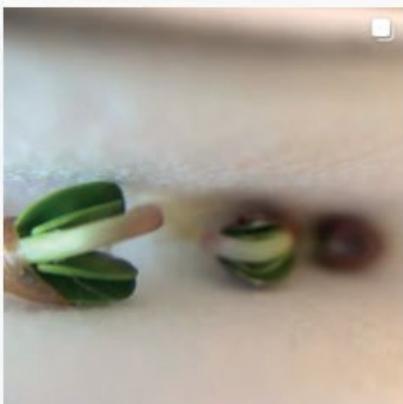


**EMPOWER OUR
COMMUNITIES**

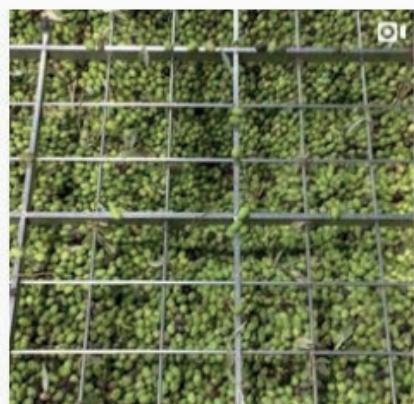


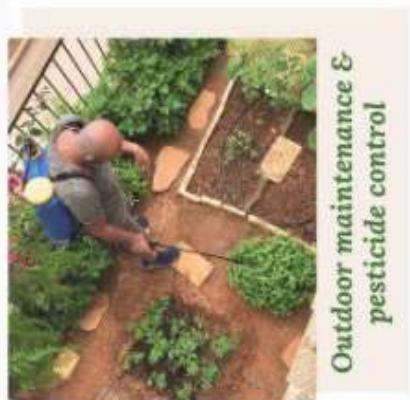
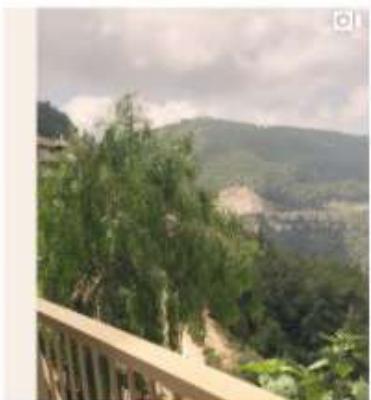


BUZURUNA JUZURUNA



HARVEST BOX FARM





Entrance Beautification



Balcony Beautification

ADS

Acting for people responsible



people, planet, trade

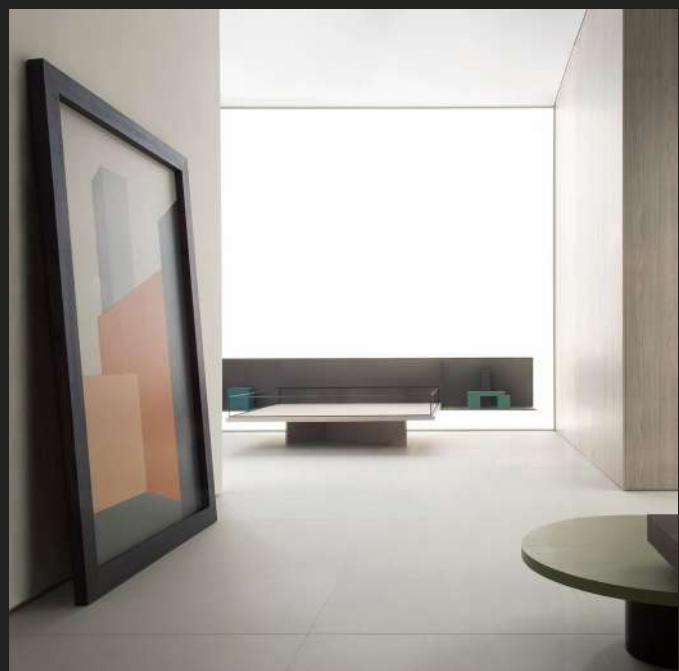
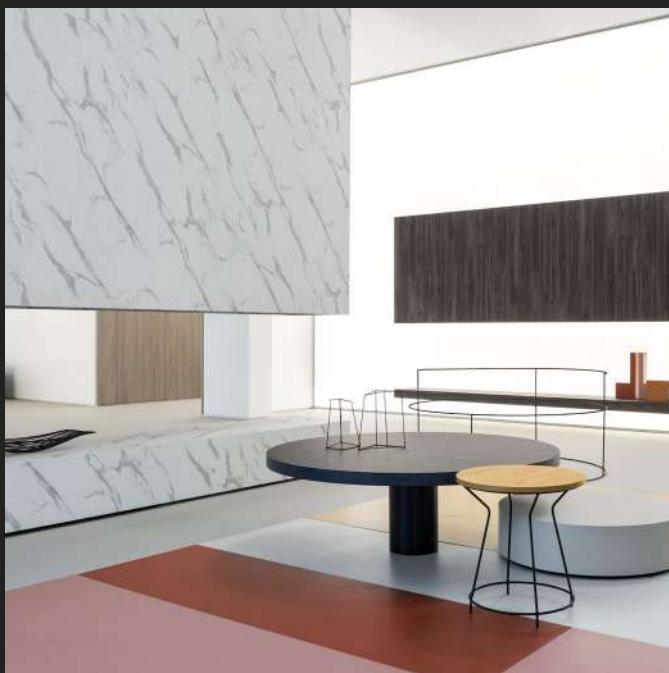


CMA CGM

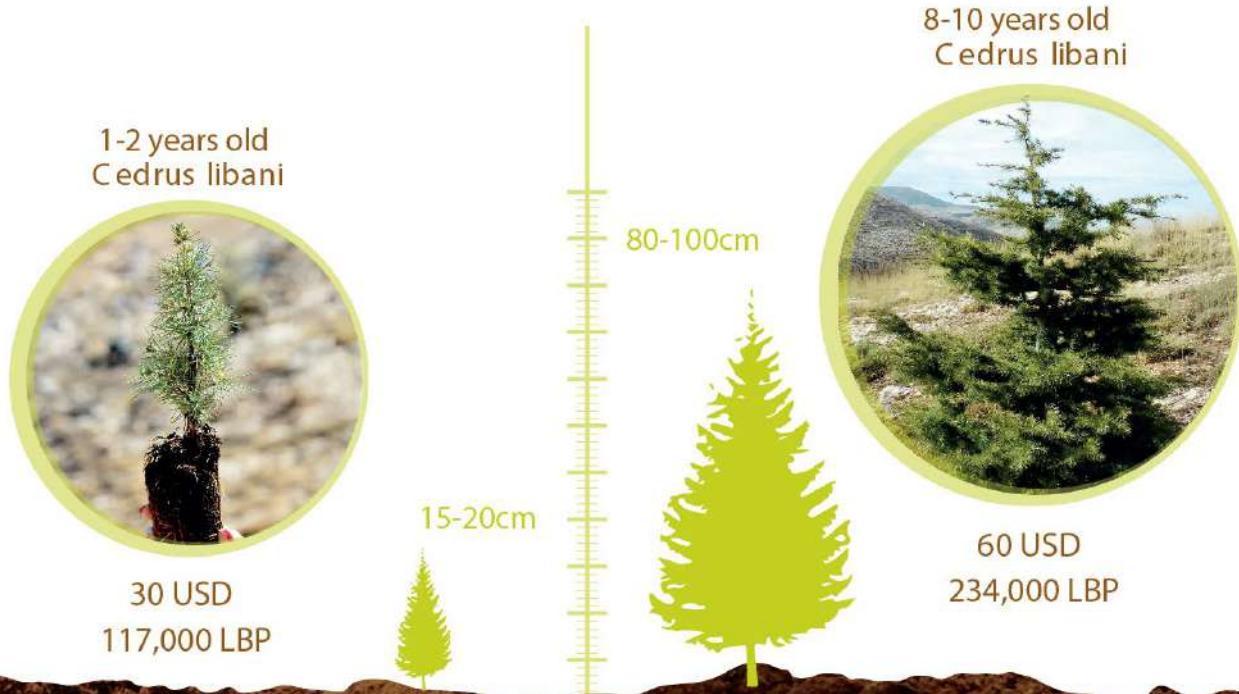
Cleaf's innovative surfaces and solutions for the furniture and interior design industries offer a wide range of faced panels, laminates and edges, ideal for building inspirational spaces. The aesthetic and tactile collection allows the creation of multiple stylistic combinations for different contexts, customizable upon taste.

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adoptacedar.org



The donation fees cover the plantation, nurturing and protection of each planted seedling.
Every tree which does not survive is replaced the following year.

Adopt your cedar tree today!

Get an instant digital certificate with the GPS location of your adopted cedar tree!
*



Engrave your name on a metallic tag placed by your adopted cedar tree!



Request a picture of your metallic tag when installed on your cedar tree!



Surprise your friends and loved ones by adopting a cedar tree in their names as a gift!



*Ask for a customized certificate design for your EVENT
(birthdays, wedding, baby shower, in memory of, thanks to, corporate gifts...)

**TOGETHER
WE PLANT
TOMORROW'S
FORESTS**



