

Dear readers,

Over the years, interest in trees has continued unabated. The number of scientific articles on the subject continues to grow, as you can see from the selection below. Admittedly, trees are still often seen as a practical means of storing carbon or a source of timber, and it is temptingly easy to continue with traditional forestry practices and the mistakes of the past. Nevertheless, there is a growing interest in species diversification and natural regeneration. Moreover, biodiversity seems to have taken a more prominent role in recent international meetings devoted to forests, such as the One Forest Summit held in Gabon earlier this year, or the recent meeting of Amazonian countries which, although not very concrete, led to the creation of an alliance to combat deforestation.

There's still a long way to go, and we continue tirelessly to stress the importance of preserving every species, "useful" or not, majestic or "insignificant"; our support grows every year, and we've just passed the symbolic mark of 1,000 threatened species protected by the projects we support. Thank you to all our beneficiaries who do the hardest part of the work, facing the reality on the ground, which is very different from the declarations of intent renewed at international meetings.

We have begun to strengthen tree conservation activities in certain regions. In several countries, coordination efforts are underway. In Ghana, for example, we supported the development of a national tree conservation strategy, and then launched a call for projects specifically for its implementation. This approach is now being replicated in other countries. We hope it will improve collaboration between grassroots organizations and increase their influence so that forestry practices evolve favourably.

Enjoy your reading,

Jean-Christophe Vié  
Directeur Général

## ACTIVITIES OF THE FOUNDATION

**New projects:** A total of 15 new projects have been finalized since the beginning of the year. Some organizations have already benefited from the Foundation's support; they are now entering a second phase of funding to consolidate their actions or extend their activities to a wider range of threatened tree species and new sites. The new projects are listed [here](#). A detailed description of the new projects along with the updated interactive map showing their location will be available on our [website](#) soon.

**Calls for proposals:** Earlier this year, Fondation Franklinia opened a call for proposals, specifically targeting **Ghana**, just after the publication of a national strategy for the conservation of threatened trees, available [here](#). This publication was drawn up at a workshop organized by BGCI and the Conservation Planning Specialist Group (CPSG) of the IUCN Species Survival Commission (SSC), with our support. We hope this new approach for our Foundation will enable to better coordinate the activities of the various partners in the country. Seven projects have been accepted and funded. They target all 38 country's priority threatened tree species and include a national coordination mechanism as well as a project dedicated to capacity building.

A second call for proposals targeting **Southeast Asia** was published on July 21<sup>st</sup> and will remain open until September 10<sup>th</sup>, 2023. Detailed instructions are available [here](#).

**Impact :** For the past 4 years, we have been documenting our Foundation's impact as accurately as possible, and we ask all our beneficiaries to provide precise, quantified data for this exercise. It's not always an easy task, but thanks to this collective effort we can see that our impact is growing year on year. Today, we support 372 different organizations targeting over 1'000 threatened species, including around 10% of all Critically Endangered trees.

Here are a few figures detailing our collective impact in 2022, and how it compares with the previous year:

***Direct actions at species and habitat level :***

- 1,011 threatened tree species conserved *in situ* in 59 countries **(+27%)**
- 439 threatened tree species conserved *ex situ* in 41 countries **(-18%)**
- 352,995 seedlings of 432 threatened tree species planted and/or protected *in situ* in 35 countries **(+29%)**
- 104,747 mature individuals of 643 threatened tree species protected *in situ* in 41 countries **(+43%)**
- 936,454 hectares of production landscape under enhanced management in 33 countries **(+4%)**
- 1,566,955 hectares of protected areas under enhanced management in 44 countries **(-3%)**
- 5,825 hectares newly protected in 15 countries **(-47%)**

***Threats reduction :***

- 8,808 people benefited from alternative livelihoods activities **(+96%)**
- 73,593 people were targeted by concrete awareness raising actions **(+52%)**
- 589,135 hectares are better protected against illegal logging in 18 countries **(-16%)**

***Enabling conditions :***

- 372 organisations have improved organisational capacity **(+46%)**
- 37,283 people directly benefited from education and training activities **(+137%)**
- 3,538 tree species assessments were published on the IUCN Red List **(-53%)**
- 528 species descriptions were published in various floras **(-50%)**
- 29 action plans for the conservation of threatened trees were developed **(-57%)**
- 78 scientific papers were published **(-4%)**

**Building the team:** Thomas Gelsi has just joined the Foundation to manage part of the growing project portfolio. Thomas has extensive experience in the conservation of threatened species, as well as in grant management. His field experience includes chimpanzee conservation in West Africa, and grant-making at IUCN, where he contributed to the implementation and development of the Integrated tiger habitat conservation programme in Asia.



## NEWS FROM THE PROJECTS

### Global Tree Assessment: from knowledge to action



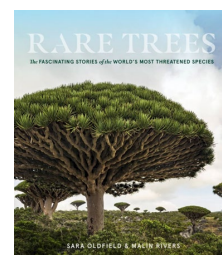
A special volume of Plant People Planet is dedicated to the assessment of the world's tree species. It features a collection of articles presenting the work of a large number of organizations and individuals around the world who are working together to document the conservation status of the world's 60,000 tree species. These articles are freely available [here](#). This is the largest assessment project for a given taxonomic group in the history of the IUCN Red List. Approximately 70% complete, it will fill an important knowledge gap and better guide and document nature conservation and restoration efforts worldwide.



### Rare Trees: the fascinating stories of the world's most threatened species



This book written by Sara Oldfield and Malin Rivers with the help of many members of the IUCN Global Tree Specialist Group (GTSG) was published a few months ago. It brings together a collection of examples of exceptional efforts to save trees from extinction. It is dedicated to the members of the GTSG and to all those who have participated in the Global Trees campaign over the last 20 years. It should help to draw attention to the plight of trees around the world and the actions being taken to save them. To find out more, including how to obtain it, click [here](#).



### Restoration of the Usumacinta river basin in Mexico



Run and managed by women, the "Lluvia de Oro" nursery is playing a pioneering role in the conservation of threatened tree species and the restoration of their habitats in this biodiversity hotspot in Mexico. Over 30 native and threatened tree species are propagated and used to restore the banks of a river threatened by human development. This work is carried out in close collaboration with local community members. This [video](#) illustrates their efforts, the area's unique biodiversity and the threats it faces.



### Conservation of threatened oak and pine tree species of the Zapalinamé reserve



Since 1997, Profauna has been managing the Sierra de Zapalinamé nature reserve which provides essential ecosystem services to three towns in Mexico's Saltillo Valley. Their project aims to reduce threats and strengthen populations of at least four threatened oak and pine tree species in this nature reserve. To find out more about this work, you can visit their Facebook page by clicking [here](#).



### Hope for *Autranella congolensis* (EN) in Cameroon



BETA-Resilience is a young Cameroonian NGO with great expertise in the field of natural regeneration and revitalization of forest stands. Their Facebook page reports that *Autranella congolensis*, a highly threatened tree species in Central Africa which produces seeds randomly, has produced an exceptional quantity of seeds this year. Once they have reached the seedling stage, the plants will be reintroduced into their natural habitat to reinforce existing populations. To follow their efforts to conserve threatened trees, click [here](#).





The Missouri Botanical Garden team is engaged in the documentation and conservation of threatened trees in Central Africa, particularly in Gabon, where they document their risk of extinction, identify key areas for biodiversity and attempt to influence policies that will enable the conservation of large tracts of still well-preserved forest. To learn more about their efforts and those of their partners in this region, more information is available in their [newsletter](#).



## The Red List of Dipterocarpaceae



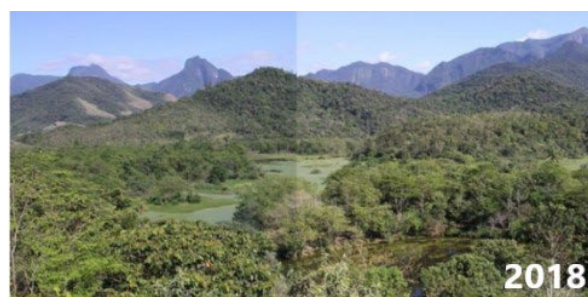
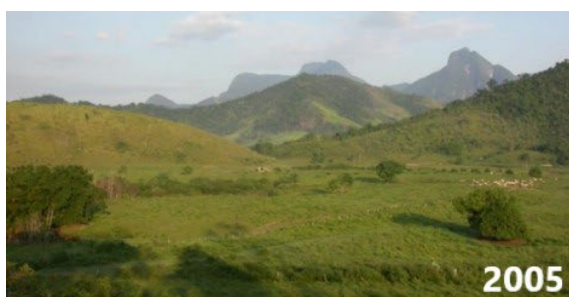
The Red List of Dipterocarpaceae was recently published by Botanic Garden Conservation International (BGCI). It is the result of extensive work by over 50 experts from more than 15 organizations, who have gathered valuable information on the distribution, ecology, population status and threats for the 535 species of the Dipterocarpaceae family described to date. More than two-thirds of them (357 species) are threatened in their natural habitats. To explore the results and conclusions of this study in more detail and download the publication, click [here](#).



## Turning pastures into wildlife havens



The Guapiaçu Ecological Reserve (REGUA), located in Brazil's Atlantic Forest, has planted over 530,000 trees of 180 native species on 330 hectares of degraded pastureland since 2005. Our Foundation supported their efforts to further increase the diversity of threatened tree species propagated in their nurseries. The priority is to strengthen the protection of areas still covered by primary forest, while restoring areas that have been degraded. This [article](#) will tell you more about the results of the colossal efforts made over the last 18 years.



## Securing viability of threatened wild pear species populations in Armenia



Armenia is a critical country for wild pear genetic diversity. A project is being implemented in the Vayots Dzor region to ensure the long-term survival of endemic pear tree populations and secure their genetic diversity. This is a crucial issue for the Society of Armenian Biologists. This [video](#) illustrates their work and highlights the various players involved in these conservation efforts.



## Joining forces to conserve threatened Magnolias



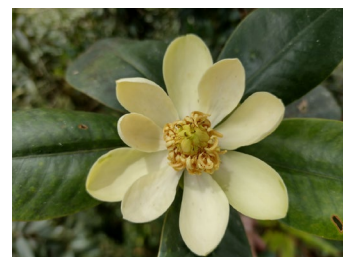
Several [Global Conservation Consortia](#) have been created by Botanic Gardens Conservation International to enhance the conservation of emblematic tree species groups. Their aim is to strengthen collaboration between institutions and experts working on these species groups by developing and implementing collaborative strategies. Such is the case of the Magnolia Conservation Consortium. You can learn more about *in situ* and *ex situ* conservation efforts for magnolias in their annual [report](#).



## A Global Magnolia Species Checklist (EN)



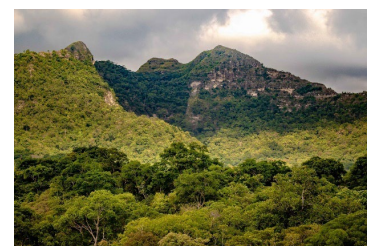
The Global Conservation Consortium for Magnolia (GCCM) has produced a checklist of the 357 world's Magnolia species. It is a working document to keep up to date with new species descriptions, changes in taxonomy and species assessment categories. The GCCM looks forward to this being a collaboratively used resource throughout the GCCM and beyond. Comments or questions are welcome if experts spot errors or would like additions or changes made. The list and contact can be found [here](#).



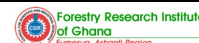
## Conservation of threatened trees in the Claro river valley, Colombia



With almost 6,000 tree species, 20% of which are endemic and over 12% threatened, Colombia is a key country for the conservation of tree species. It is in this country that the Foundation supports the largest number of projects. This [article](#) describes the efforts of one of our beneficiaries, the Humboldt Institute, to conserve eight endemic threatened tree species, five of which are found only in the Claro river basin.



## Contrasting situations in three African countries



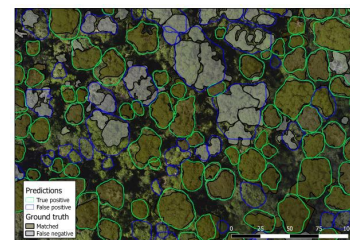
This [article](#) presents the situation facing forests in three African countries. While the situation is very worrying in Angola, where 300,000 hectares have disappeared since 2000, there is greater hope in Kenya and Ghana. The article describes the efforts of Ghanaian scientists who, with the support from our Foundation, are actively seeking out two Critically Endangered species (*Talbotiella gentii* and *Aubregrinia taiensis*) and multiplying them to increase population size.



## Remote sensing for ecology and conservation



New technologies hold great promise for facilitating the work of field conservationists. Two articles recently published by researchers at the University of Cambridge, with the support of our Foundation, detail the [approach](#) used and [applications](#) for monitoring restoration efforts. They have also developed a software [program](#), available free of charge, as well as a [tutorial](#) explaining how to prepare the data and use the program.





Biocultural approaches to restoration, which recognize the unique ways of understanding of socioecological challenges by Indigenous and local communities, have gained traction in recent decades. Yet, less attention has focused on biocultural opportunities where there is no Indigenous population or traditional knowledge to draw upon. This [study](#) focuses on the restoration of *Scalesia cordata*, a highly threatened plant species, endemic to Isabela, where human presence is linked to recent migration. Findings indicate that *Scalesia* remains a valued cultural keystone species providing tangible and intangible benefits to local residents.



## Franklinia grantees in Costa Rica get together



Members from all the Franklinia-funded projects in Costa Rica got together in August to participate in the workshop for the creation of a Conservation Action Plan for the Endangered oak *Quercus insignis*. In addition to the workshop activities, the awardee group discussed common successes and challenges among their projects, future ways of collaborating and, of course, their favorite tree species.

The group included representatives from Osa Conservation (OC), The Morton Arboretum (MA), Instituto Monteverde (IMV), and Costa Rica Wildlife Foundation (CRWF). From left to right: Rodrigo De Sousa (OC), Silvia Alvarez-Clare (MA), Marco Molina (scientific illustrator), Leonardo Alvarez (OC), María José Mata (OC), Daniela Quesada (IMV), Hazel Muñoz (CRWF), and Karina Orozco (MA).



## RECENT PUBLICATIONS AND ARTICLES

### • Tree ring scars and fires

Every week we receive alarming news about the increasing frequency of forest fires. The role of climate change is often put forward, but the main cause remains destruction by fire for agricultural purposes. The results of [this study](#), based on tree rings from a region in central Vietnam, confirm this. It shows that the frequency of forest fires has increased considerably in the region over the last 100 years, but that climate change is not the main culprit.

### • How to define an old tree

Large old trees are among the most emblematic organisms on the planet and are an integral part of many terrestrial ecosystems. In this [publication](#), the authors shed new light on their ecology, role, evolution and management. In particular, they explain that the diameter, height and longevity of these trees vary considerably from one species to another, posing serious problems for their definition. A definition of large old trees is necessary for each ecosystem and species, and will rarely be easily transferable to other species or ecosystems.

### • Giants of the Amazon

Large emergent trees perform important ecological functions, yet little attention has been paid to the factors influencing their diversity. This [article](#) explains how environmental variations determine the diversity of large trees. It reveals that the forests of the Guyana Shield and Roraima show a high diversity of large trees, while places such as Imeri province and the northern part of Madeira province stand out for their high species diversity in general.

### • Benefits of trees

This [article](#) reveals that trees exhibit a disproportionate number of specific features stimulating well-being responses compared to other forest organisms (e.g. insects and birds). This is probably due to the year-round visibility of trees, the diversity of effects being reinforced by seasonal changes and their longevity. Moreover, trees are often the dominant biomass in these ecosystems, confirming the mass ratio hypothesis in these perceptions. Nevertheless, no single species or group of species can deliver all the ecosystem services provided by a habitat at a given location on the planet.

- **Culture and trees**

In many parts of the world, culture is closely associated with trees. The fascinating example described in this [article](#) is a case in point. In the forests of South America, *Genipa americana* has been used for generations by the Emberá people who harvest the fruit to produce a dye used to paint their skin for certain ritual celebrations. After 20 years of study, scientists and entrepreneurs are on the verge of producing a marketable colorant naturally derived from this tree.

- **Tallest tree of the Amazon**

This [article](#), packed with illustrations and videos, reports on an expedition to locate and identify the tallest tree in the Amazon rainforest. The record holder is an 88.5-meter tree, almost as tall as the Statue of Liberty in New York (93 m) or Big Ben in London (96 m). It belongs to the genus *Dinizia* and is located in a protected area with other large trees. It also contains 60-70% of the carbon stored in the surrounding hectare. Although it may be the tallest tree in South America, it is still considerably shorter than the world record holder, a 116 m-high *Sequoia sempervirens* in California's Redwood National Park.

- **Forest management and CO<sub>2</sub> emissions**

It has become clear that nature, and forests in particular, will not be able to offset the CO<sub>2</sub> emissions resulting from human activities on their own. This [publication](#) attempts to quantify the additional amount of carbon that could be stored by forests worldwide if they were freed from human intervention. According to this rather unrealistic scenario, the amount of carbon stored by forests would only increase by 15%, a low mitigation potential which underlines the fact that the main strategy remains to sharply reduce greenhouse gas emissions, and that forests should be preserved to offset residual carbon emissions rather than to compensate for current emission levels.

- **Reforestation challenges in Madagascar**

Reforestation is a real challenge in the field and remains far from an easy solution to galloping deforestation and the exacerbating effects of climate change, such as forest fires. This can be a source of discouragement for local NGOs. Two recent articles illustrate the challenges posed by fires, legal and illegal logging, livestock issues and the supply and spread of quality seeds from indigenous tree species in Madagascar. You can read more in this [article](#) and this [one](#).

- **Increased risks for trees in arid zones**

This [article](#) warns that tree biodiversity in arid zones will decline faster than elsewhere in a drier world. These areas represent 19% of the world's land surface and are home to around 1,100 tree species. Despite their ecological and societal importance in this type of environment, few similar studies have been carried out to date.

- **Old growth forests, a question of points of view**

A decree aimed at officially defining what constitutes a "mature" and "old-growth" forest has been issued in the United States, recognizing that simple criteria such as canopy height and structure, or capacity to store more carbon, are not enough. The question, discussed in this [article](#), is an important one, as this definition will be applied to millions of hectares of forests and the classification will influence the management and exploitation of these forests.

- **Two new *Magnolia* species**

Two new species of *Magnolia* have recently been described. *Magnolia buenaventurensis* was discovered in the Buenaventura reserve, managed by Jocotoco, one of our grantees, in the province of El Oro, south-western Ecuador. Full details of its characteristics, as well as photos and a map of its distribution are available in this [article](#). The other species, *Magnolia pajarito*, was discovered on the eastern slopes of the Andes in Colombia. It is described in detail in this [publication](#).

- **Science helps to conserve the magnolias on Hispaniola**

Five endemic species of *Magnolia* occur on the island of Hispaniola, all threatened with extinction. Little is known about their distribution and genetic diversity, which hinders the implementation of targeted conservation actions in the field. This [article](#) illustrates how a scientific approach combining distribution modelling and genetic studies can help make decisions to conserve these species more effectively in the field.

- **The sound of plants**

We know that plants can perceive and respond to sound, but this [article](#) reveals that they can also emit ultrasonic sound signals in the event of stress, such as water stress or injury. These signals can also vary according to the species, type and level of stress.

- **Environmental DNA as an emerging tool in botanical research**

Only recently has the potential of eDNA been realized in the botanical world. This [article](#) synthesizes the state of eDNA applications in botanical systems focusing on both single-species approaches and multispecies community metabarcoding. It also describes how abiotic and biotic factors, taxonomic resolution, primer choice, spatiotemporal scales, and relative abundance influence the utilization and interpretation of airborne eDNA results. Lastly, it explores several areas and opportunities for further development of eDNA tools for plants.

- **How Nepal regenerated its forests**

This [article](#) shows that forest cover almost doubled in Nepal between 1992 and 2016, growing from 26 to 45%. The research group found that community forest management was associated with the regrowth of forests; once communities started actively managing the forests, they grew back, mainly as a result of natural regeneration. Today, community forests occupy nearly 2.3 million hectares—about a third of Nepal's forest cover—and are managed by over 22,000 community forest groups comprising 3 million households.

- **Managing species on the brink**

Several recent articles focused on Extinct in the Wild (EW) species. *Franklinia alatamaha* is one of them. Our foundation was named after this species with the aim of avoiding the entry of other tree species into this Category. As explained in [this article](#), EW needn't be a dead end; it can be a platform for long-term restoration but this will probably require intense work, time and funding. Encouragingly, two-thirds of EW animals but just under a quarter of EW plants have already been released back to natural habitats.

This [second article](#) provides an overview of the fates of the 95 species that, since 1950, are known to have persisted in *ex situ* care despite extirpation in the wild and characterize the present statuses of the 84 species currently assessed as EW. And this [third paper](#) presents five scenarios that encapsulate the circumstances facing EW species and suggest potential conservation action for each of these situations.

- **Deforestation in the Congo Basin**

The Congo Basin region, home to the second largest tropical forest and carbon sink in the world and a major biodiversity hotspot, experienced an alarming 5% increase in deforestation in 2021 compared to previous years. The integrity of forests has declined in all six Congo Basin countries, with the greatest reductions seen in Cameroon, the DRC, and Equatorial Guinea. Between 2015 and 2020, 11% of regional deforestation (approximately 650,000 ha) occurred in forests that were first fragmented before undergoing permanent conversion. To learn more click [here](#).

- **200 years of tree planting in India**

[This article](#) describes the damages of tree planting in India during the last 200 years. Similar analyses could probably lead to similar results in many countries. Unfortunately, monospecific plantations are still promoted and accounted as "forests". It is fine to plant trees for wood production but these plantations should be considered as agricultural land (trees will be cut like any other crop) not classified as "forests" and should not be taken into account by restoration initiatives such as the Bonn Challenge.

- **Carbon credits and nature certificates**

[This report](#) presents the state-of-play, diagnostics, and recommendations for unlocking new financial resources for the conservation, sustainable use, and restoration of biodiversity in a socially inclusive manner, with a focus on two emerging instruments: biodiversity-positive carbon credits and nature certificates. The authors state that, with clear policy frameworks and signals, good governance, improved institutional capacities, and inclusive and transparent rules of engagement, these mechanisms have the potential to markedly complement other financial mechanisms. They should not stop the fight against harmful subsidies which remain extremely important and continue to fuel the destruction of nature.

- **The story of breadfruit**

Breadfruit (*Artocarpus altilis*) is an increasingly valued staple crop in tropical agroforestry systems, in particular in the Caribbean region. Most breadfruit there came from a single 1793 introduction aimed at providing a cheap food source for slaves forced to work on British plantations with St. Vincent being the first significant point of Caribbean introduction. Hundreds of cultivars are documented in breadfruit's native Oceania; [this study](#) identified eight major global breadfruit lineages 5 of which are found in the Caribbean and likely represent the original introduction.



- **Self-burying seed carriers**

Plants have evolved all sorts of tricks to help their seeds spread and thrive. For some plants this means seeds that bury themselves in the soil to avoid getting eaten or dried out in the sun. Now a team of researchers are taking nature's designs and engineering a new solution for planting crops, fertilizing soil or re-planting forests. You can watch the video and access the article [here](#).

- **Is the role of mycorrhizal networks overstated?**

There is a widespread belief that plants share food using mycorrhizal networks but this [article](#) explains that the evidence remains inconclusive. There is some supporting evidence for the communication and sharing of resources between plants via mycorrhizal fungi. Fungi have also been shown to act as conduits for communicating defensive signals, at least between some types of plants. Although, what these signals are and how they are transmitted remains unknown.

- **Planting trees to reduce heat-related deaths**

Several strategies exist to protect urban residents from the impacts of heat. These include covering roofs and facades in vegetation (green roofs), decorating them in lighter colours, replacing paved surfaces with areas of vegetation and of course planting trees. This [study](#) revealed that one-third (2,644) of deaths caused by urban heat island effect in Europe could be prevented by increasing tree canopy cover to 30% in every urban neighbourhood, a target adopted by several cities worldwide.

- **Forest loss and supply chains**

While farming continues to drive deforestation around the world, 60% of the destruction of Earth's large, intact forests is caused by other forces, in particular, the production of commodities for export, particularly timber, minerals, oil and gas. Increasing global demand for these commodities, which are often exported through globe-spanning supply chains, explains much of the ongoing removal, degradation and fragmentation of intact forests in a handful of countries including Brazil, Canada, the Democratic Republic of Congo and Russia. Since 2000, the global extent of Intact Forest Landscapes has shrunk by 7.2%, a loss of 1.5 million km<sup>2</sup>. Learn more in this [article](#).

- **Risks of China's increased forest areas**

Between 2010 and 2020 China increased its "forest" area by 193,680 km<sup>2</sup> and billions more trees should be planted before 2030. However, as questioned in this [letter](#), given the loose definition of forests allowing all types of plantations to be counted as forests, should this be considered as a conservation success and will this offset losses of ecosystem services?

- **Oak species found**

Botanists have been searching for years for a living specimen of a rare oak species, the Chisos Mountains Oak (*Quercus tardifolia*). Listed as Data Deficient on the IUCN Red List due to the high level of taxonomic uncertainty and lack of field exploration, the species has been presumed extinct since 2011, when the last known living individual died before it could be studied by biologists or cultivated for conservation. A succession of botanical expeditions in Far West Texas repeatedly failed to locate any more remaining survivors but, at last, a team of botanists announced that *Quercus tardifolia* officially still exists. However only one lone tree was found in a 356,000-hectare national park. Critically, this remnant stand is not producing any acorn, complicating efforts to grow more individuals of the species. To learn more about this species, its rediscovery and the plans to propagate it, read [here](#).

- **Deforestation in the Amazon**

With approximately 2.5 million km<sup>2</sup> currently degraded by fire, edge effects, timber extraction, and/or extreme drought (38% of all remaining forests in the region), the Amazon rainforest is a biodiversity hotspot under threat. Two analytical reviews, published in Science, synthesize data on forest loss and degradation in the Amazon basin, providing a clearer picture of its current status and future prospects. One [article](#) reviewed the drivers of change and show that anthropogenic changes are occurring much faster than naturally occurring environmental changes of the past. Although deforestation has been widely documented in the Amazon, degradation is also having major impacts on biodiversity and carbon storage. The [second article](#) synthesized the drivers and outcomes of Amazon forest degradation from timber extraction and habitat fragmentation, fires, and drought.

- **EU deforestation law overlooks emerging crops**

This new law aims to limit imported commodities responsible for deforestation such as cocoa, coffee, oil palm and soya. This is a great step forward. However, as explained in this [letter](#), production and consumption patterns can shift quickly and the

legislation should include emerging crops responsible for deforestation, such as cashew whose cultivation has grown sevenfold in recent decades.

- **Phantom carbon credits**

Doubts have been raised repeatedly over carbon credits bought by a number of internationally renowned companies claiming that their products are “carbon neutral”, or telling their consumers they can fly, buy new clothes or eat certain foods without making the climate crisis worse. Journalists undertook a 9-month investigation into one of the world’s leading certifier of carbon credits. This [article](#) claims that their carbon offsets are “largely worthless and could make global heating worse”.

- **Does CITES have teeth?**

Many tree species are threatened by international trade and, therefore, our Foundation decided to support the last analyses of the proposals for listing species under CITES. However, while many claim that CITES is one of the few international conventions that “have teeth”, others are more skeptical. To learn more about CITES and its compliance measures, read this [article](#).

- **Deforestation and peace in Colombia**

As explained in this [article](#), when the Colombian government signed a peace accord with the Revolutionary Armed Forces of Colombia in 2016, it created a new and unexpected victim: the country’s forests. At the time, environment was seen as a possible beneficiary of the peace agreement but not as a key part of the agreement itself. Colombia could finally be turning the tide; official figures show deforestation fell 26% in Colombian Amazon last year and 29% nationwide, the highest reduction in deforestation and forest fires in two decades.

- **Spatial repulsion among adult tropical trees**

Tropical forests host an unusually high diversity of tree species. Strong interactions between individuals are hypothesized to create these patterns. A tree is more likely to survive when surrounded by different tree species with different resource needs, diseases, and herbivores. In this [study](#), the authors explain that the adults of dozens of tropical forest tree species show strong spatial repulsion, some to surprising distances of approximately 100 meters. This study shows that distances between conspecifics are maintained in adult trees, helping to explain the high diversity of tropical forests.

## TRAINING AND RESOURCES

- **Conservation training**

When we ask our beneficiaries to report on their impact, we ask them to report on the identification or protection of Key Biodiversity Areas (KBAs). There is often confusion about their meaning. To learn more about *the identification and delineation of KBAs*, [here](#) you will find information about an online Training Course.

Today KBAs have rarely been defined using tree species because appropriate data was lacking but with the rapid progress of the Red Listing of the world’s tree species, trees should be increasingly used in the identification of KBAs.

There are more training modules aimed at building relevant knowledge and skills among conservation practitioners (including how to conduct Red List assessments) on the [Conservation Training website](#).

- **IUCN/SSC Conservation Planning Specialist Group**

For a long time, most of the Group’s activities have been focusing on wild animals but, in recent years, plants, and trees in particular, have become a much more prominent component of their work. The Specialist Group offers a range of online training courses including subjects such as *Facilitating Species Conservation Planning Workshops*, *Wildlife Disease Risk Analysis* or a new one on *Ex situ Conservation*. To learn more, visit their [website](#).