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MAKING THE EU WORK FOR PEOPLE & FORESTS

How community restoration and management of forests can help meet climate goals

EU Forests of Hope

June 2019

Contents

Acknowledgments

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From 'Forests in danger' to 'Forests of hope'!

Headlines like "UK and Ireland declare a Climate Emergency," and "Spurred by youth protests, EU parties adopt climate change as rallying cry" make it clear – Europe is looking for ways to fundamentally rethink our over-polluting and over-consuming societies.

And forests are never far from the agenda.

Governments have crucial choices to make about forests' role in tackling climate change whilst benefitting wildlife and European citizens.

Until now the EU has treated forests as feedstock for an intensive industry or as untouchable reserves. The recent European Commission communication "A Clean Planet for all"[1] – also known at the EU Long-Term Climate Strategy – lays out several pathways to transform the economy and reduce emissions, but also emphasises increasing bioenergy production as forests' central activity.[2]

This is a worryingly incomplete picture as forests play a much wider role in society and in the climate. Better management of existing forests, enforcement of forest protection laws, restoration of resilient native species – all these activities would do more to help forests play their full role as a Natural Climate Solution (see box on page 4).

To decide what activities governments should prioritise to deal with climate change, economists and research institutes model different scenarios that would get carbon-dioxide in the atmosphere to a manageable level. Some of these scenarios reveal that it is possible to reach net-zero emissions without burning forests for power.

1 https://ec.europa.eu/clima/sites/clima/files/docs/pages/com_2018_733_en.pdf
2 https://www.fern.org/fileadmin/uploads/fern/Documents/briefingnote_forestEU2019.pdf

One such scenario[3] shows that forests could remove 600 million tonnes of carbon dioxide per year by 2050. Instead of investing in dubious bioenergy with carbon capture and storage (BECCS) schemes, it foresees the EU legislating for and investing in energy efficiency measures in buildings, reducing materials used across industry by 2.5 - 5 per cent, increasing efforts to reduce emissions from shipping and aviation, and crucially, putting the health of forests first.

That is a totally different vision of EU forests than the one the EU is currently preparing for. This report shows that across Europe it can be achieved. There are communities in Estonia, Latvia, Spain and France who know that to deal with the climate crisis, we don't need to intensify management so that more forests are in danger, we need to allow them to regenerate and use them in a way that strengthens local economies and helps us meet global biodiversity goals.

People have always lived within and beside forests and know how to use them sustainably. A recent Eurobarometer[4] poll showed that two-thirds of Europeans "totally agree" that looking after nature is an essential part of tackling climate change and that "biodiversity is indispensable for the production of goods such as food, fuel and medicines".

We hope you enjoy reading these case studies of communities showing how we can work for forests and how forests can work for us. They give a face to the actions that the EU needs to support if we are to deal with the dual climate and biodiversity crises, while managing forests in an economically and socially viable way.

Natural Climate Solutions: why 'planting trees' isn't enough

Europe's total tree-cover has increased slightly over the past 15 years, largely due to afforestation (tree planting in areas without forest). Nevertheless, of the forest habitats that provide water and stabilise wildlife populations, 75 per cent are in a bad conservation state. The major trend, according to a United Nations report assessing the global state of biodiversity and ecosystem services is increasing intensity of conventional agriculture and forestry which reduces both biodiversity and forests' ability to remove carbon.

Recent academic studies suggest that natural forests are better for both the climate and biodiversity. This means that afforestation offers significantly less benefit than leaving forests to naturally regenerate. According to Nature*, land put aside for natural forests to return can store 40 times more carbon than plantations and six times more than agroforestry. Applying this to Europe, where there is hardly a tree left untouched by man, initiatives to help restore and regenerate degraded areas can have enormous benefits and should be a cornerstone of climate action.

* https://www.nature.com/articles/d41586-019-01026-8

3 Scenario produced with modifications based off of the "demand-focus" scenario in the ECF/ClimAct net-zero model
4 http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/survey/getsurveydetail/instruments/special/surveyky/2194

Estonia

Vormsi church forest: a century ago and today

Algor Streng, forester on the Vormsi island

Vormsi church manor sits on an Island 140 kilometres from Estonia's capital, Tallinn. In 1901, it included 163 hectares of forest, mostly pine, with a small amount of spruce. At the time it was intensively managed. Clearcutting, selective cutting and windfalls made the forest thinner although some pine trees were allowed to grow 150–200 year old so they could be used for ship-building. In those days, people didn't know much about nature conservation: they impoverished the soil by clearing the forest floor of logging slashings and fallen trees, stopped reforestation by allowing cattle to graze, and land reforms reduced the forest area to 33 hectares.

The first time I went to church forest was over 10 years ago, and I still do some work there in winter. I mainly pick out old pines and spruces to provide the lower forest with adequate light and get better quality wood. The pine trees can be turned into logs suitable for boat building or building restoration. The remainder are used for beams and planks.

A healthy spruce makes good building material. It has more, but smaller, branches than pine, so it works well for the framework. It is also good to remove some spruce as an adult casts a shadow several times bigger than the pine, removing them assists the growth of the lower forest, normally filled with dry moss and bilberry plants.

Local forest owners ensure continuous-cover forestry in Vormsi, but companies now offer a competing model where they come and clear-cut the forest for you. For those owners who don't live on the island or who don't have any use for their timber, it may seem that the most convenient way to manage their forest is by ordering a timber company from the mainland.

Heartwood ordered by a restorer.

The effect on the island can be devastating.

It is now common that people buying land or settling on the island find that the forest surrounding their property is clear-cut. As a result, land prices are plummeting and tourism on the island has decreased.

Such forest management also decreases the value of the wood as trees planted in the open have more branches, wider growth rings and limited use. Such wood doesn't last long, and boat-builders, restorers, window and door makers, and carpenters all want the best quality. Forest managers should think like the builder who is responsible for making good quality products that last a century or more.

It is best to cut wood in the winter. That way it lasts longer and has less soluble nutrients to offer to pests and fungi that would feed on the tree. It also means there is no need to soak wood with chemicals, which is problematic as when the wood rots the chemicals enter the groundwater.

In the lower areas, church forest is populated with bilberry plants and moss, so young forest doesn't grow easily.

In more demanding structures, such as village wells, stairs, boardwalks and bridges, it is important to use heartwood (the dense inner part of a tree trunk) which lasts longer.

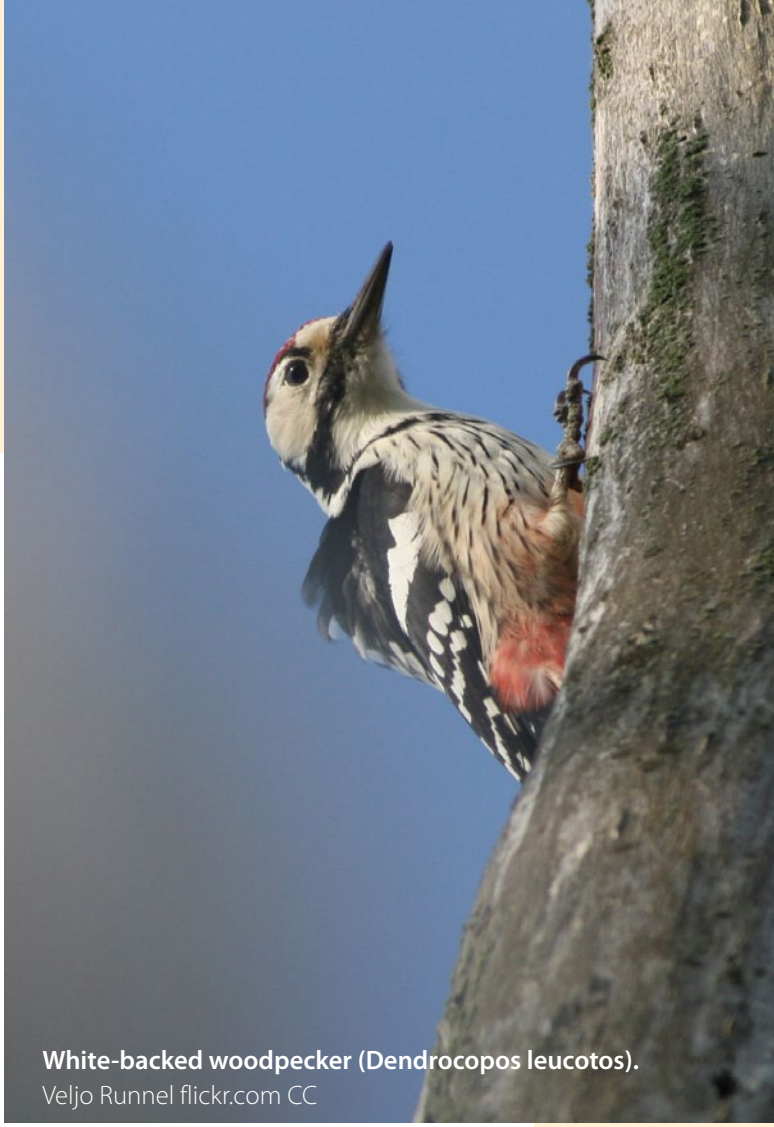
Another reason for cutting the forest in the winter or cold weather is that soil and nature can be better preserved. Cutting forests in warmer months disturbs animals and birds, especially during the breeding season (see page 7 'Estonian spring and summer logging break respects life, law and tradition').

Some suggest that the only way to preserve forest diversity is to conserve forests, but many endangered species are able to cope under continuous-cover forest management. Such management works if people only take what they need and leave waste from cutting (leaves, warts, hollow wood, etc.) as that is where wildlife thrives. If everyone follows these rules, such an approach is sustainable..

The southern and windy edges of church forest have a 'protective forest' that slows down the wind and quietens life in the deeper forest. The trees there are quite crippled, a lot of branches break, and a lot of trees fall. Growth rings are uneven meaning they are not good lumber, but it is exciting to go there, walking in the company of whispering giants.

If the forest is to survive and even improve for the next 100 years, cooperation with forest owners, timber exporters, harvesters and builders must continue to improve. Ensuring continuous cover management and an end to clear-cuts will make church forest better for the people, the climate, wildlife, and the carpenters and builders that use the wood. It's time to harvest wood with the future and the lives of the islanders in mind.

Forest managers should think like the builder who is responsible for making good quality products that last a century or more.



White-backed woodpecker (Dendrocopos leucotos).
Veljo Runnel flickr.com CC

Estonian spring and summer logging break respects life, law and tradition

Estonians have a close relationship with their forests going back many generations; many Estonian traditions encourage care for the forests and the wildlife that depends on them. So logging in spring and summer (when birds are nesting, hatching and fledging) is generally seen as taboo. Indeed, laws such as the Nature Conservation Act and the Animal Protection Act both prohibit the killing of wildlife and disturbing them during breeding time. There are exceptions, but "economic activity" is not one of them.

Although a wide array of factors influence the bird population, spring-summer logging has a particularly direct and negative effect. Avoiding it on the other hand would protect the lives of nesting birds and beasts, help stop the spread of root rot, improve wood quality and alleviate the risk of wildfires.

The seasonal logging ban was first proposed in 1999 by the Estonian Ornithological Society, supported by four other environmental and scientific organisations. In 2003, a two-month ban was introduced in Estonian state forests, which comprise 51 per cent of the total forest area. This is a positive step, even though the optimal duration would be from the start of April until the end of July. A four-month ban would increase the number of bird species that are protected from about 50 to 82. Some political parties are already saying they would introduce a three-month ban.

Since the ban's introduction, the state forest company has suffered no major economic loss, and the Estonian forest sector, the Estonian job market and the economy are in a much better state than back in the early 2000s.

Estonian forests, on the other hand, are not. In April 2019 it was revealed that the country had logged more forest than ever before – reaching 12.5 million cubic meters, while the sustainable rate as calculated by the Estonian Environmental Agency would be a third less.

Martin Luiga, International communications coordinator, Estonian Forest Aid

France

A fair trade from the tree to the beam

Département Ardèche, France. collectifbois07@gmail.com

In the South-East of France lies the region of South Ardèche, an area known for its forests and walking trails. It is there that groups have got together to form Wood Collective 7 (Collectif Bois 07) with the aim of creating a wood supply chain covering everything from logging and harvesting to sawing, planing and sales. It connects foresters, sawmillers and craftsmen – groups that sometimes struggle to find shared interests - and stands as a rare example of a system that combines fair remuneration to workers with respect for the forest ecosystem from tree to beam.

The forest manager drafts the timber sales contracts for the Collective which then subcontracts the harvesting to loggers who are known for the attention they pay to trees.

Environmentalists are happy because the Collective's wood comes from selective logging – never from clear-cuts. Customers are happy because they only use skilled carpenters and sawmillers who can optimise how the wood is used. Wood Collective 7 is not seen as an intermediary, but as a guarantee of quality and respect for the forest, for raw materials and the people who work in the industry.

The process begins with the definition of the sensitive and ethical approach that will be taken in the forest. This approach is validated by a Pro Silva forest manager, and then a technical and economic discussion follows. The forest manager drafts the timber sales contracts for the Collective which then subcontracts the harvesting to loggers who are known for the attention they pay to

trees. The Collective even organises site visits for its members and customers who want to see how the trees that will be used for the construction of their house are harvested.

Post-harvest, the Collective transports logs to one of the sawmills and then on to a storage area or even directly to the end customers such as carpenters and builders.

Throughout the supply chain, the Collective and its partners define fair remuneration and although there is no long-term contractual commitment, the process helps build lasting partnerships and trust. Having such a transparent pricing system means that customers are willing to pay higher prices as they understand the additional costs of delivering ethical products.

As the process is so local, customers also get to see what a difference ethical consumption can make. The forests they buy from often use continuous cover forestry (or close-to-nature forestry) principles in a region where clear-cuts are prevalent.

Sadly, it is not all good news. After having enjoyed a boom, the project ceased coordinating logging and timber sales in 2019 due to a lack of funding. A new project will soon emerge in the form of a log and firewood project in which customers pay in advance for their wood, meaning that loggers can invest and don't need to rely on loans from banks.

To find out more, visit: http://alternativesforestieres.org/collectifbois07

Latvia

Family run forestry shows a diverse range of benefits in Latvia

Jānis Rozītis, Pasaules Dabas Fonds

Working in forest management can be full of contradictory but related elements: knowledge and emotion; ecosystem support and commercial activity; material and non-material benefits to society.

Pasaules Dabas Fonds try to combine all of these elements in our work to establish forest management demonstration areas in Latvia. Each property and manager is different, but they all view forests as having a diverse range of benefits, which need to be preserved for the future.

In "Kalna Gavieši" in Skujene Parish (about 2 hours from Riga), the Vilciņš family manages approximately 1,000 hectares of forest, felling 4,000 – 5,000 cubic metres a year. They steer clear of clear-cutting, choosing instead to conduct selective felling operations. This type of continuous cover forestry leads to a landscape with sparser and denser groups of trees and trees of various ages and heights, but without the stark boundaries caused by clear-cuts. Such selective felling has a minimal impact on the forest, but also works from a commercial perspective as it provides optimal growth conditions for the trees of the future.

The Vilcinš family pays a lot of attention to preserving structures required for biological diversity, taking care of older trees, hollow trees, dead wood, leaving some scrub bushes and trees, demonstrating particular care in small wetland areas and at the edge of the forest. The owners also preserve high-value forest biotopes and micro-reserves for the black stork and the three-toed woodpecker.

When planning any felling, Vilciņš also tries to imagine what the forest will look like afterwards. The bigger the volume of felling, the more the forest environment will change, so it is important to consider the spatial positioning of trees, the mutual relationships between tree species and the need for trees of various thicknesses. There will also be changes to the ground vegetation – some areas can quickly become covered with grass, and the risks posed by wind will also increase.

Clear-cutting reduces the value of my property, but the methods we employ ensure a positive cash flow. It preserves the forest and all benefits we get from it.

Another consideration is when to cut. Vilciņš usually plans to fell in the driest part of the year, and if at all possible – in freezing conditions. This offers a higher likelihood of avoiding damage from diseases and pests, disruption to nesting birds, and makes it possible to reduce or prevent damage to undergrowth and roots when removing felled trees from the forest.

For 15 years, Pasaules Dabas Fonds and the Vilciņš family have also been organising seminars for forest owners, forestry workers, industry and governmental representatives and students to learn how to preserve biological diversity, how to move from clear-cutting, and other forest related issues. They have hosted thousands of people from Lithuania, Estonia, Bulgaria, Romania, Sweden, France, Finland, Denmark and beyond.

Ziedonis Vilciņš explains why he works this way: “Clear-cutting reduces the value of my property, but the methods we employ ensure a positive cash flow. It preserves the forest and all benefits we get from it. We are responsible for the diversity of nature and for the surroundings. I want to ensure that I leave a valuable property with a diverse range of material and non-material assets for future generations. We’re not managing our property for one day alone.”

For more information visit the Demonstrējumu teritorijas page.

Portugal

From forest to desert and back again!

João Paulo Fidalgo Carvalho and Pedro Januário, Luzlinar's Projecto Bosques

In Feital, Portugal near the Serra da Estrela Natural Park, trees are mainly appreciated for the fruit they provide.

But the reality is that they could change the very land people stand on.

Feital was once a forested area but it is increasingly becoming a desert. Because trees offer shade, however, planting them can turn a black and burned area into a green one. This is what the Feital community and Luzlinar Association's Projecto Bosques is trying to do.

Project Bosques is working with local communities to promote and restore native forests and local biodiversity. In 2019 alone, 8,000 trees have been planted by local people who get together to climb the hill and plant trees. Sometimes it is just 30 people, but on planting days, more than 250 people can participate including children, students, artists, firemen, teachers and technicians. Participants range from four to eighty years old.

Luzlinar Association oversees 60 hectares of land, six hectares of which, 'Jardim Das Pedras', were given to them in exchange for a sculpture by Luzlinar's founder and renowned artist, Maria Lino. For the past 25 years, Maria has been inviting artists to explore the surroundings and the restored areas, or simply to use her guest house as a gateway and source of inspiration. The house is presently occupied by an author writing a book about trees. Such work is a vital part of communicating the importance of nature conservation.

João measuring the soil moisture. In the degraded area, the volume of soil moisture was between two and three per cent while in the oak forest it is between 12 and 15 per cent.

The Association's other activities include the development of ecotourism through looking after 200 dry-stone shelters and the creation of hiking routes across the land. This has brought in new visitors to experience the link between art and conservation first-hand.

Projecto Bosques is a recent but promising addition which will hopefully lead to three new native wood shelters and a nursery offering native trees to residents.

University researcher and Pro Silva representative in Portugal, João Paulo Fidalgo Carvalho, is working with members of the Association to focus on high-quality oak timber at a time when cheap but lower quality timber from tree plantations is dominant. He has shown

Pedro learned to use what nature has to offer and now promotes high-value oak timber to architects and clients.

that forests can be economically viable whilst still being sustainable and delivering ecological and social benefits.

Field trials were installed in different parts of the area which are now part of a research project called Scapefire which aims to value natural forest ecosystems and landscape planning according to their ability to prevent fire. Native oaks and broadleaves are promoted because of their resistance and resilience to forest fires.

If it wasn't for the Association, this region could have become like many others in Portugal where the landscape has been turned into eucalyptus plantations that are responsible for substantial soil degradation and increasing forest fires. Project Bosques demonstrates an alternative way to manage a forest and Pedro Januário, member of the Association and an architect, believes that this kind of project can be expanded and spread to other regions, linking with other, similar projects.

There is hope in the air in Feital, but as long as big paper companies that exploit eucalyptus plantations continue to exert political pressure on municipalities and the government, it will be hard to expand close-to-nature forestry models to other Portuguese regions.

Using continuous cover forestry means the association supports forest biodiversity. Timber is cut in a local sawmill which serves 20 local villages.

Galicia, Spain

Still working toward our Atlantic forest dream

Manuel López Rodriguez (Secretary of Comunidade de Montes de Teis)

In North-West Spain, near the border with Portugal lies Teis Communal Forest (Vigo, Galicia). This ancient type of communal property was established centuries ago with the arrival of Barbarian tribes to the Iberian Peninsula. Despite being banned during Franco's dictatorship, they still exist in Galicia and North Portugal as little by little people are reclaiming their customary rights (about 22 per cent of Galicia is communally manged).

Teis Communal Forest was officially founded in 1998, at a time when a highway was being constructed straight through it, causing massive environmental damage. The forest was already suffering numerous problems, mainly caused by the government. These included high-voltage cables, garbage dumping and the introduction of exotic species. The community decided to respond by restoring the native forest, ridding the land of the geometric plantations of invasive species that were taking hold.

The community decided to respond by restoring the native forest, ridding the land of the geometric plantations of invasive species that were taking hold.

The biggest obstacle to this restorative dream, was the battle against Black Acacia (*Acacia Melanoxylun*). Originally from south Australia, this species was introduced in the forties and fifties in the hope that it could be used as building material. This hope was dashed and the plantations were abandoned leading to fast-spreading forest fires which killed the last remaining pockets of native forest.

Twenty years later and story is quite different. Much of the Black Acacia has gone, replaced with a tremendous variety of native trees and plants, reproducing nature as far as possible. This process of profound healing has been amazing for the community to observe because native animals, plants and mushrooms are returning after more than seventy years, proving that with the right conditions you can have strong native forests near to a city.

The transformation process is still ongoing but locals are already benefiting from increased employment and the return of traditional forest uses. Local schools now undertake guided visits and volunteers of different ages and backgrounds get together to clean, control the bush, and continue the fight against Black Acacia.

The Teis Community planting native tree species such as the chestnut tree with volunteers and 'comuneiros.as' (land and forest owners).

It is not just the community that benefits, however, but also the wildlife that calls the forest its home. Teis Communal Forest believes that transforming degraded forests helps communities to conceive of a new ethic, based on respect for nature. One of the reasons why the forests became degraded in the first place was that those in power lacked an understanding of nature and thus explored planting the Eucalyptus and Pine plantations which have turned out to be such fire hazards. If those in government can walk in a real forest full of colour, smells, sounds and life, they will understand that nature must be respected not replaced.

One of the reasons why the forests became degraded in the first place was that those in power lacked an understanding of nature and thus explored planting the Eucalyptus and Pine plantations which have turned out to be such fire hazards.

But how can those in power go about helping such projects?

The first step would be to create a legal institution to promote native forests, with a real budget, a plan, and the tools to analyse problems and measure progress. The timber industry too must contribute to the preservation of native forest. Given the effects of intensive and extensive forestry, it is scandalous that it has not been regulated before now.

Finally, schools can play an important role in explaining that we are part of nature and that native forests are essential. The planet is heating up and the restoration of native forests is vital if we are to turn down the temperature.

For more information visit other communities that do similar work such as here.

Better management of existing forests, enforcement of forest protection laws, restoration of resilient native species – all these activities would do more to help forests play their full role as a Natural Climate Solution.

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