From:

Sent: mercredi 19 mai 2021 13:26
To: CAB SIMSON ARCHIVES

Cc:

Subject: FW: Causes of declining forest biodiversity

# For registration please ©

From: CHAPUIS Laure (CAB-SIMSON) < Laure.CHAPUIS@ec.europa.eu>

Sent: Wednesday, May 19, 2021 1:24 PM

To:

Subject: RE: Causes of declining forest biodiversity



I am checking internally with colleagues to have several cabinet members and get back to you tomorrow.

Best, Laure



Laure Chapuis

European Commission | Commissioner for Energy Kadri Simson

Tel: 0032-2-29-69.057 | Mob: 0032-460-769.057

From:

Sent: Wednesday, May 19, 2021 8:28 AM

To: CHAPUIS Laure (CAB-SIMSON) < Laure.CHAPUIS@ec.europa.eu>

Subject: FW: Causes of declining forest biodiversity

Importance: High

Dear Laure Chapuis,

Referring to the below, I wonder if any of the suggested dates/times would be suitable for you and other members of your cabinet to have a meeting with Marc Palahí and Lauri Hetemäki?

Thank you in advance for your response!

With kind regards,

From:

Sent: Monday, 10 May 2021 11.18

**To:** CHAPUIS Laure < <u>Laure.xxxxxxx@xx.xxropa.eu</u> > **Subject:** RE: Causes of declining forest biodiversity

Dear Laure Chapuis,

Referring to the email exchange below, I would cordially like to inquire whether any of the times below would be suitable for you and other members of your cabinet to have a meeting with EFI Director Marc Palahí and Assistant Director Lauri Hetemäki:

Monday 24 May at 12.30-13.30 Central European Summer Time (CEST) Friday 28 May at 13.00-14.00 CEST Monday 31 May between 13.00-15.00 CEST Thursday 3 June between 13.00-15.00 CEST

We use mainly Microsoft Teams for virtual meetings and I'm happy to send a Teams invitation once we have identified the meeting time. Please, could I ask you to inform me the email addresses of other meeting participants, if you wish me to include them to the invitation.

Thank you in advance for your reply.

With kind regards,

**From:** Marc Palahi < <u>marc.pxxxxx@xxx.xx</u>

**Sent:** Friday, 7 May 2021 14.50

**To:** CHAPUIS Laure < <u>Laure.xxxxxxx@xx.xxropa.eu</u> >

Cc:

Subject: RE: Causes of declining forest biodiversity

#### Thank you Laure!

Here my presentation. I also add a very visual ppt from our Assistant Director Lauri on current use of wood resources, with some interesting data. My comment was that EU Forests represent 4% of the World Forests but the EU Forest based sector is responsible for 40% of the global forest products export value. Lauri calculated that Figure. Any reference Lauri? Yes, lets have a meeting in end of May or June. Lauri should also participate. Best regards,

Marc

Marc Palahí

Director, European Forest Institute (EFI)
Coordinator, SMI Circular Bioeconomy Alliance (CBA)

From: CHAPUIS Laure < Laure.CHAPUIS@ec.europa.eu>

Sent: Friday, 7 May 2021 13.56

To: Marc Palahi < marc.palahi@efi.int >

Subject: RE: Causes of declining forest biodiversity

#### Dear Marc,

Thank you for the follow up and for forwarding me your email. I will certainly circulate it in the Cabinet. Together with a few colleagues in the Cabinets we would be very interested by some of the numbers you have mentioned yesterday and in particular on the share between the EU Forest usage in Europe and the economic outcome (4/40% ratio). Do you think you could also share your presentation made yesterday?

I will also like to check possible dates when we could organize a meeting, possibly in the next 2 weeks. I am pretty sure that at least my Head of Cabinet would like to have a meeting.

Let me know if this would suit.

Best, Laure

From: Marc Palahi < marc.palahi@efi.int > Sent: Friday, May 7, 2021 11:36 AM

To: CHAPUIS Laure (CAB-SIMSON) < Laure. CHAPUIS@ec.europa.eu >

Subject: FW: Causes of declining forest biodiversity

#### Dear Laure,

It was nice to meet you! I just want to forward you the message I sent today to your colleague Suvi (in International Partnerships) as it might be relevant for you too. See my reference below to Biodiversity and Bioenergy synergies...

Happy to follow up.

Regards Marc

Marc Palahí

Director, European Forest Institute (EFI)
Coordinator, SMI Circular Bioeconomy Alliance (CBA)

From: Marc Palahi

**Sent:** Friday, 7 May 2021 9.04

To:

Subject: RE: Causes of declining forest biodiversity

Kiitos! It was very interesting for me to participate!.

Let me reply to your question and I am also sending you references. The tropical context is very different and we could discuss it separately, because there the issue is connected to deforestation of intact forests (very valuable in terms of biodiversity).

## Why is biodiversity in European Forests declining?

There is <u>not a single reason</u> but a range of factors that affect different types of forest dwelling species in different ways.

**Eutrophication** is certainly an important reason. The continuing high deposition of nitrogen into our forests leads to a loss of species, in particular of lichens and understorey plants, which are weak competitors compared to those plants that benefit in their growth from the increased nitrogen supply. With the loss of these species, other species such as insect that specifically depend on these plants also lose their habitat. See following publication on the topic: Eichenberg, D., Bowler, D. E., Bonn, A., Bruelheide, H., Grescho, V., Harter, D., ... & Jansen, F. (2021). Widespread decline in Central European plant diversity across six decades. *Global Change Biology*, *27*(5), 1097-1110.

External influences such as long distance drift of pesticides from agriculture. A much cited recent study showed that there is an alarming recent arthropod decline in forests similar in magnitude to that observed in agriculture. This study showed that arthropod decline in forests was not related to management intensity but was influenced by the management in the surrounding landscape. It is not entirely clear, what is causing this decline, but one possible explanation could be the wide-spread use of agrochemicals. In the forests that were investigated in this study, no pesticides are being used. See the following publication: Seibold S, Gossner MM, Simons NK, Blüthgen N, Müller J, Ambarli D, Ammer C, Bauhus J, Fischer M, Habel JC, Linsenmair KE, Nauss T, Penone C, Prati D, Schall P, Schulze ED, Vogt J, Wöllauer S, Weisser WW (2019) Arthropod decline in grasslands and forests is associated with drivers at landscape level. *Nature* 574, 671-674, doi: 10.1038/s41586-019-1684-3.

Loss of old forests which harbour certain unique structures with their associated species. This is a process that is unfortunately ongoing in some eastern European countries and some parts of Fennoscandia. However, in the majority of Europe, forests are actually getting older and thus offer opportunities to (actively) restore old-growth habitats. See also: Sabatini FM, Keeton WS, Lindner M, Svoboda M, Verkerk PJ, Bauhus J, Bruelheide H, Burrascano S, Debaive N, Duarte I, Garbarino M, Grigoriadis N, Lombardi F, Mikoláš M, Meyer P, Motta R, Mozgeris G, Nunes L, Ódor P, Panayotov M, Ruete A, Simovski B, Stillhard J, Svensson J, Szwagrzyk J, Vandekerkhove K, Volosyanchuk R, Vrska T, Zlatanov T, Kuemmerle T (2020) Protection gaps and restoration opportunities for primary forests in Europe. Diversity and Distributions 26,1646–1662, DOI: Error! Hyperlink reference not valid.

Loss of historical forest use systems such as coppice (<a href="https://here.com/here-there-are-synergies-with-bloom.com/here-there-are-synergies-with-bloom.com/here-there-are-synergies-with-bloom.com/here-there-are-synergies-between-bioenergy and biodiversity), coppice with standard and silvo-pastoral systems. Many forest dwelling species that are today rare and threatened actually depend on more open and heterogeneous forest conditions, which were historically maintained through management systems at the interface between agriculture and forestry. The Montado in Portugal and Dehesa in Spain (agro-silvo-pastoral systems) are thehaving the highest biodiversity value in Europe and they are man-made systems. These transitional systems have been large abandoned and replaced, either by more intensive and homogenous agricultural production systems or by closed forests. Therefore, more open forests are today often the focus of nature protection. See Bengtsson et al. 2000.

We also see that the **increasing growing stocks** in European forests do not lead to an increase in biodiversity. While some species benefit from older forests with more biomass, oter species that require more open and light conditions are clearly disadvantaged. **This shows that strict protection of forests is not helpful as a universal solution**. See Sabatini et al. 2018.

Replacement of native forests through secondary (conifer) forests has certainly led in the past to much habitat loss. However, this in most parts no longer occurring and we actually see an opposite trend in most parts of Europe, where restoration and conversion of secondary conifer forests leads to more natural habitats.

Other threats to biodiversity are of course climate change and invasive species, again to drivers that can only be tackled through restoration, adaptation and active management.

### I hope this helps!

I also hope we can meet soon your Commissioner and discuss collaboration towards Africa. I am personally coordinating an initiative of the Prince of Wales, the Circular Bioeconomy Alliance: <a href="https://efi.int/cba">https://efi.int/cba</a> with a central focus in Africa: we provide advice to several Ministers and we are launching forest restoration projects with holistic value chain approach...

# Best regards Marc

Marc Palahí

Director, European Forest Institute (EFI)
Coordinator, SMI Circular Bioeconomy Alliance (CBA)

Yliopistokatu 6 B | 80100 Joensuu | Finland Tel. +358 10 773 4342 | <u>www.efi.int</u> | Twitter: <u>@Marcpalahi</u>

From:

**Sent:** Thursday, 6 May 2021 15.42 **To:** Marc Palahi <marc.palaxx@xxx.xxx

**Subject:** Causes of declining forest biodiversity

Dear Mr Palahi,

Many thanks for your interesting and enlightening comments and replies at the meeting that just ended. I wanted to make one more question but it was not possible due to the lack of time, and that is why I decided to send my question to you by email.

Forest biodiversity in Europe is declining. For the policy makers, also in view of the upcoming forest strategy, it is important to understand why this is happening. It seems that a lot of blame has been put on forestry and forest sector, while you said (and please correct me if I am mistaken) that we should address problems with fossil based industries. I have read that nitrogen deposition (from fossil industry and agriculture) could be one of the reasons for declining forest biodiversity. Could you elaborate on that? Also, a very simple question: what is causing biodiversity loss in European forests? To what extent the biodiversity loss is caused by clear cuts? It would be most welcome if you could elaborate the drivers of biodiversity loss also in the context of tropical forests.

I too see that the public debate on forests is getting somewhat ideological and heated and that is why I want to stress that the above are very genuine and sincere questions from my end (I am not a scientist) so that I can advise my Commissioner to the best of my ability.

Many thanks in advance.

Best regards,



# European Commission Cabinet of Commissioner Jutta Urpilainen International Partnerships