

VIRTUAL FORESTS:

IO6. Citizen involvement in forestry:

MOOC

Palencia, July 5th



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Erasmus+ Programme
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Call 2020 Round 1 KA2 - Cooperation for innovation and the exchange of good practices

KA226 - Partnerships for Digital Education Readiness



AgroParisTech



[cese**for**.]

AgroParisTech: National Institute of Technology for Life, Food and Environmental Sciences

- Delivering degrees from master level to PhD
- Under the authority of the French Ministries of Agriculture and Higher Education & Research.
- Academic partnerships: 85 foreign univ. / 27 countries
- Some figures
 - ~ 2 200 students (16% international)
 - 450 PhD students,
 - ~ 350 PhD students (34% international)
 - 230 academic staff
 - 24 joint research units + 1 R&D unit (17/ 24 with INRAE)
 - Top international ranking in agriculture & forestry field



IO6. All they want to know about forestry but were afraid to ask

- Citizens
 - Growing interest of citizens for forest + a decreasing connection with Forestry
 - Critical towards forest management, they are keen to understand and argue
 - In search for a more meaningful job, some of them want to prepare a professional retraining
- Students
 - Increasing diversity in students population
 - eg: PHD students with no background in forest management
- Other populations:
 - Forest managers facing information demanding citizens
 - Local representatives, mayors of forest owning community
 - People working in wood sector



2020: MOOC development



- Two professors:
 - Meriem Fournier, INRAE, senior researcher (from wood sciences to collaboration with social sciences)
 - Myriam Legay, AgroParisTech, forest engineer with background in forest management and planning, and research-development
- Regional founding and collaborations
- Inputs from ONF (French forest service) and from National center for Private forestry
- Implementation on FunMOOC platform: Gouvernemental MOOC platform. Open access MOOCS



<https://www.fun-mooc.fr/fr/cours/comprendre-la-gestion-forestiere/>



2021, 2022, 2023 sessions

2021, 1st session: 7303 attendees from 101 countries (71 % from France)

2022, 2nd session: 4549 attendees from 70 countries (71 % from France)

2023, 3rd session: 3372 attendees from 78 countries (73% from France)

- English transcriptions provided
- Webinar on forest health with presentation of Silvalert platform and challenge by IEFC
- Podcast of the webinar provided on the platform: 92 views



DEPARTEMENT DE LA SANTE DES FORETS



MOOC program in 5 weeks



5 weeks course:

- S1: What is a forest?
- S2: What does it mean to « sustainably manage » a forest?
- S3: What is silviculture?
- S4: Using wood sustainably
- S5: Innovations and forest management



Each week week is composed of :

- 5 to 7 lessons: a lesson = 1 video + training quizz + supplementary materials (internet links to videos, websites, documents...)
- A weekly evaluation quiz
- Forum

Final evaluation : badge obtained if mean quizz results $\geq 50\%$



S1: What is a forest?



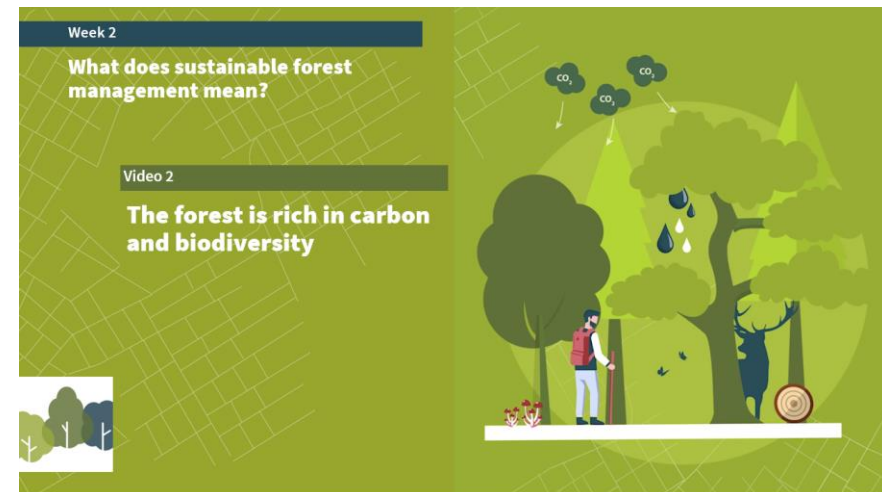
- S1V1: What is a forest?
- S1V2: Where are the forests and where do they come from?
- S1V3: Open and dense forests, basal area
- S1V4: The different types of forest
- S1V5: A forest in the reflection of its environment



S2: What does it mean to « sustainably manage » a forest?



- S2V1: What is the purpose of our forest
- S2V2: Forests are rich in carbon and biodiversity
- S2V3: Threats to the forest: clearing and degradation
- S2V4: Renewal, a key step
- S2V5: Forest planning, at the heart of sustainable management
- S2V6: Sustainable Forest Management: the stakeholders



S3: What is silviculture?



- S3V1: The growth of trees in a stand
- S3V2: The diversity of tree species and their temperaments
- S3V3: The forestry cycle in regular (even-aged) high forests
- S3V5: Silvicultural management of stands in (uneven-aged) irregular high forests
- S3V6: Mixed stand silviculture



Week 3

What is silviculture?

Video 1

The growth of trees in a stand

The screenshot shows a video player interface with a green background. On the right side, there is a stylized illustration of a forest with several trees of varying heights and colors (green, blue, pink). The text 'Week 3' is at the top left, 'What is silviculture?' is below it, and 'Video 1' and 'The growth of trees in a stand' are in a dark box on the left. A small speaker icon is at the bottom right.



S4: Using wood sustainably



- S4V1: What is wood used for?
- S4V2: What happens between timber in the forest and the wood in your home?
- S4V3: Are there forests dedicated to the supply in specific wood uses?
- S4V4: Harvesting trees for the wood industry
- S4V5: Is timber harvesting good for the climate?
- S4V6: How much carbon is stored and substituted by the forest?
- S4V7: Is my wood boiler sustainable?



Week 4

Using wood sustainably

Video 2

What happens between the wood in the forest and the wood in my house?



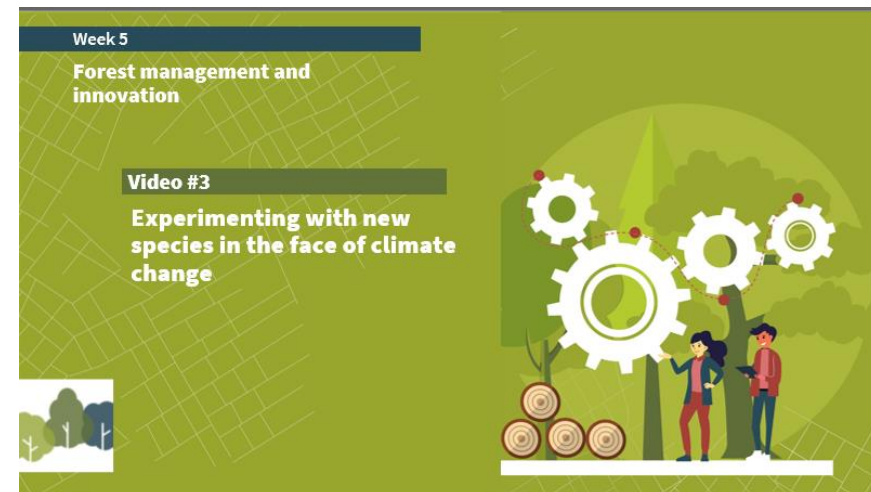




S5: Innovations and forest management



- S5V1: Improving monitoring and information available on forests
- S5V2: Improving harvesting, an interview with Didier Pischedda
- S5V3: Experimenting with new species in response to climate change
- S5V4: From the seed to the tree, kickstarting growth in French forests
- S5V5: Joint innovations with wood engineers: visit of the ENSTIB
- S5V6: New forms of governance



Immediate interest and further perspectives

Lessons in English provide the main content of the MOOC for any English speaker

Lessons in English + videos in French are useful for students interested to study forestry in France

Basis for a further collaboration:

- Development of Spanish, German...variants of any lesson that is more or less dependant of the country: silviculture, stakeholders presentation...

