



Erasmus Mundus MSc
in Mediterranean Forestry
and Natural Resources Management



Addressing risks in Mediterranean forest management planning-the case of fire

Dr. José Antonio Bonet (Coord. of MEDFOR at UdL)

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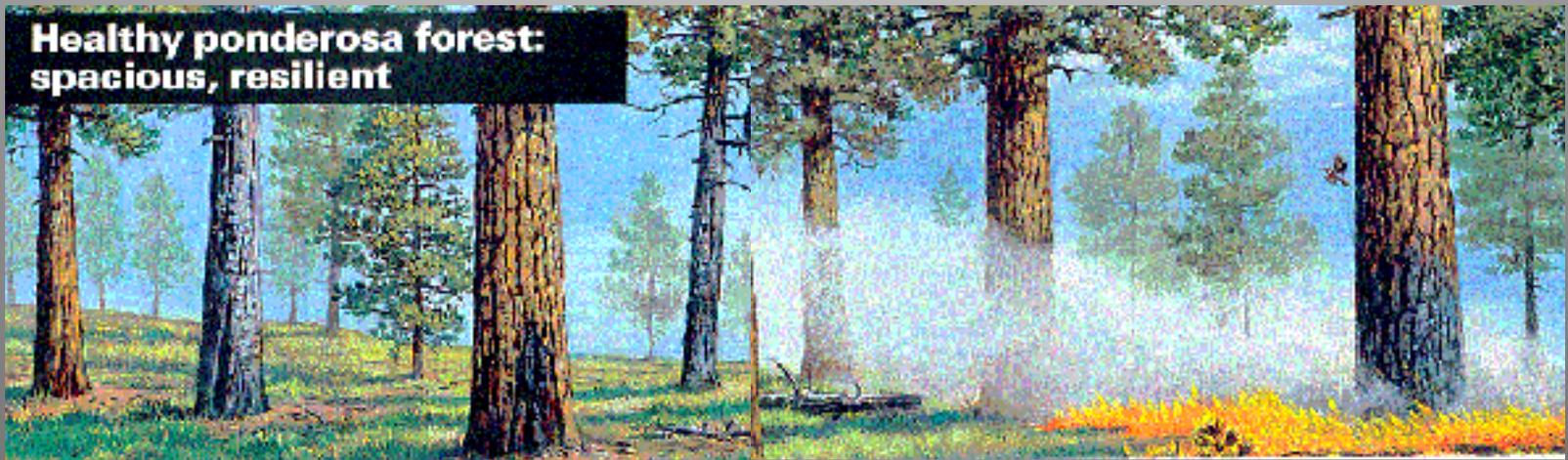


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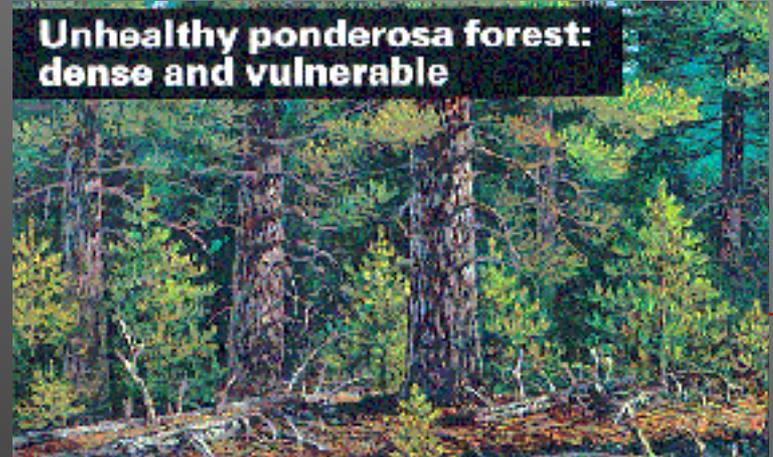


Forest Hazards

Simultaneous fires in Greece (summer 2007)



With Fire Exclusion:





Lost or burned: which is more important?



Nearly 7 million ha of
natural forest lost
per year from 2010-2015.

compared to

An average of over 50
million ha of forest land
burned every year.





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Large fire (30,000 ha) in central Catalonia in summer 1994



Mediterranean ecosystem



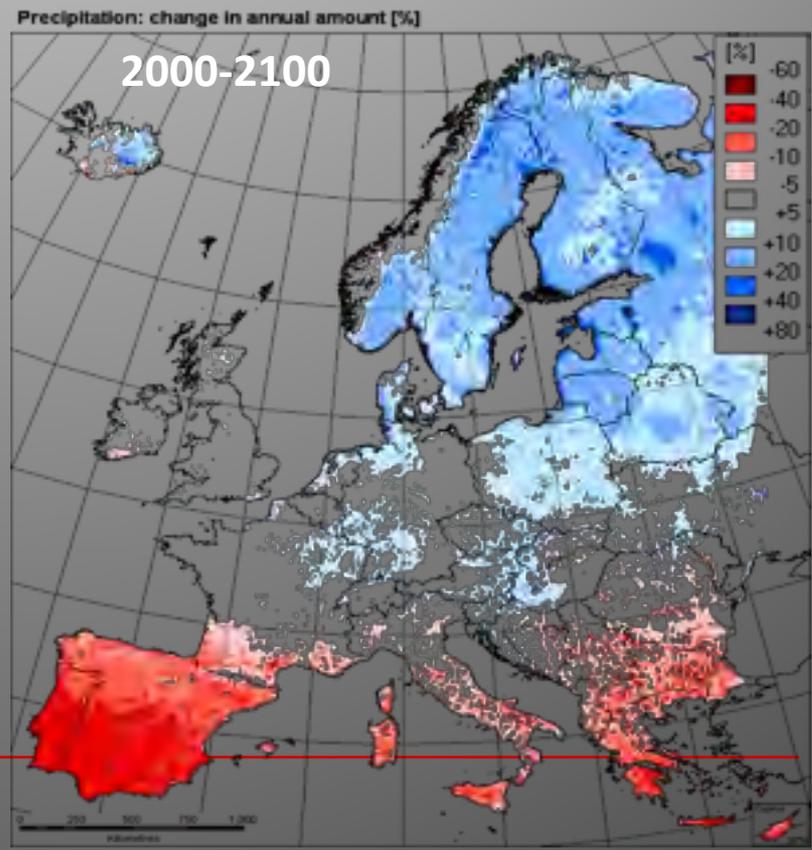
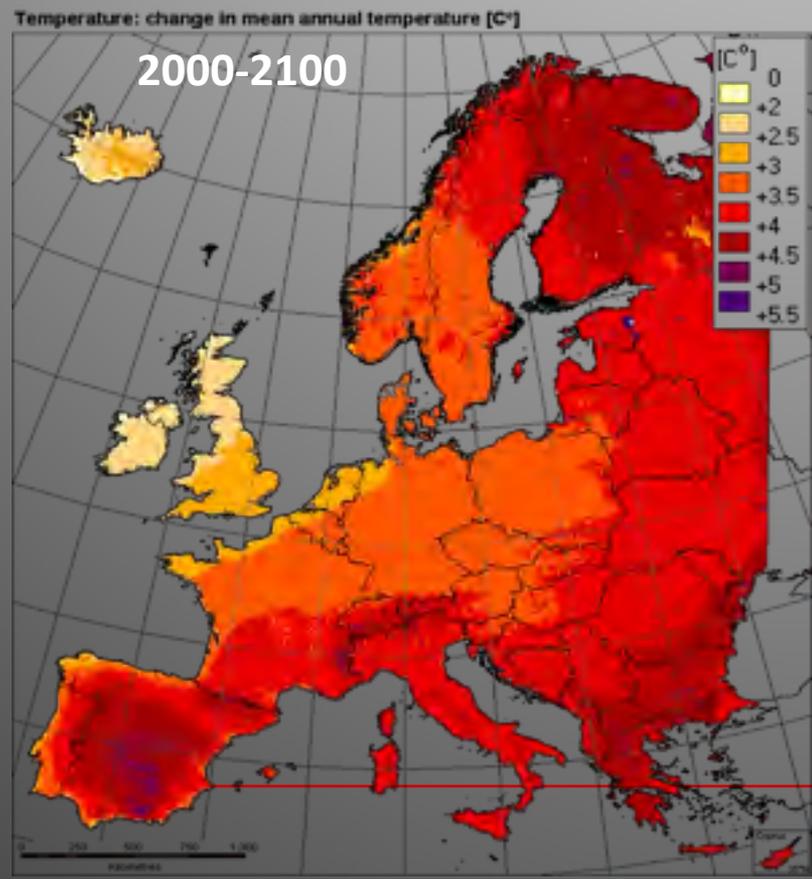
After three fires in 12 years

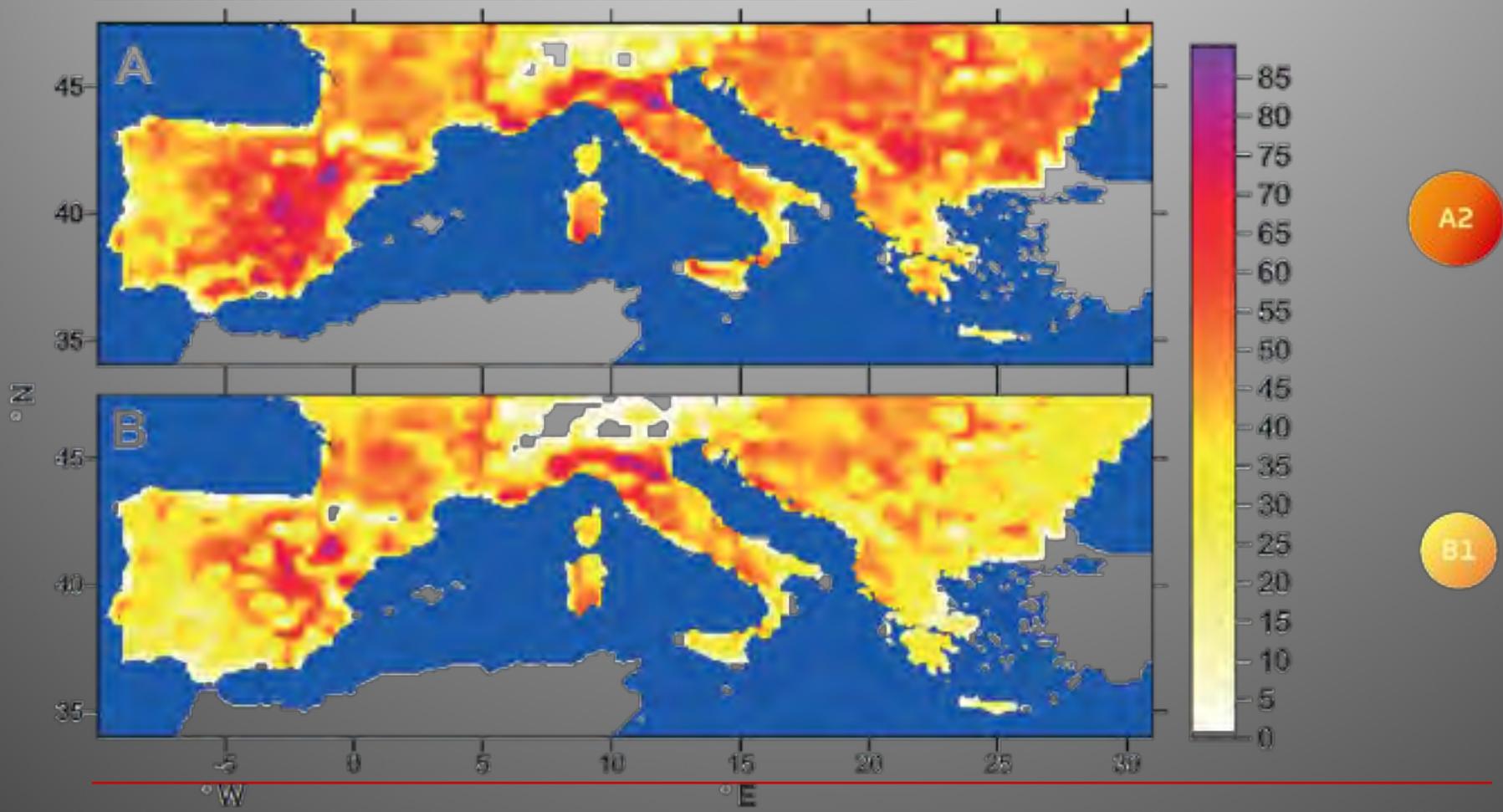


The Mediterranean Basin is particularly sensitive to Climate change

Changes in annual temperature° C)

Changes in annual rainfall (%)





Increment of the risk of fires in the future

Moriondo et al, 2006,
Climate Research 31



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COURSE	TEACHER/S	Nº ECTS
1. Forest fires in Spain	Dr. J.A. Bonet & D. Molina	5
2. Pastoral uses of Mediterranean forests: A control fire tool	Dr. R. Fanlo / Dr. P. Casals	3
3. Special topics in effects of fire on soils	Dr. J.R. Olarieta	3
4. Prescribed fire laboratory	Dr. D. Molina	6
5. Remote sensing of Forest Fires	Dr. C. Vega	3
6. Principles of Wildland Fire Science and Management	Dr. Victor Resco de Dios	5
7. Writing and publishing a scientific paper	DR. G. Slafer	5
	TOTAL	30









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Special topics in effects of fire on soils











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Pastoral uses of Mediterranean forests: A control fire tool





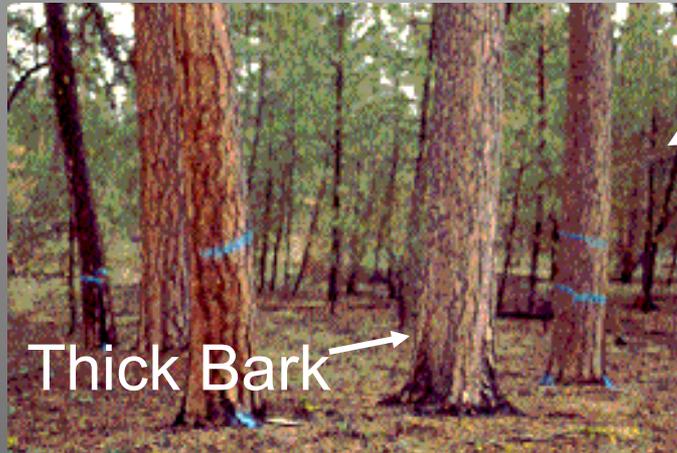








Principles of Wildland Fire Science and Management



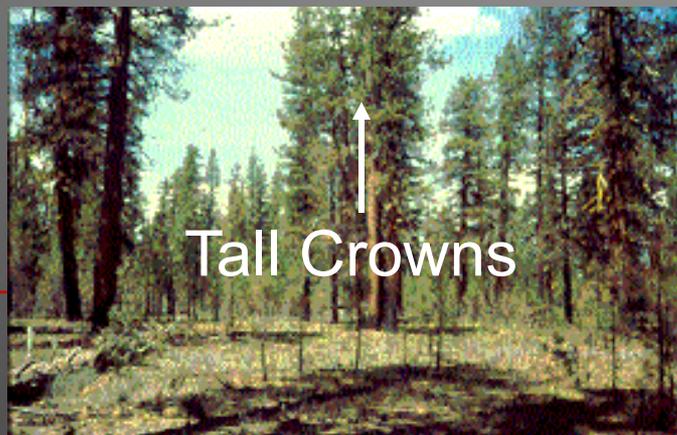
Thick Bark →

Small trees are a result of fire exclusion

??????????



Wide Spacing



Tall Crowns ↑













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Our methodological approach:

Regular classes

Conferences by invited speakers

Field trips



Welcome to Lleida



Catalonia

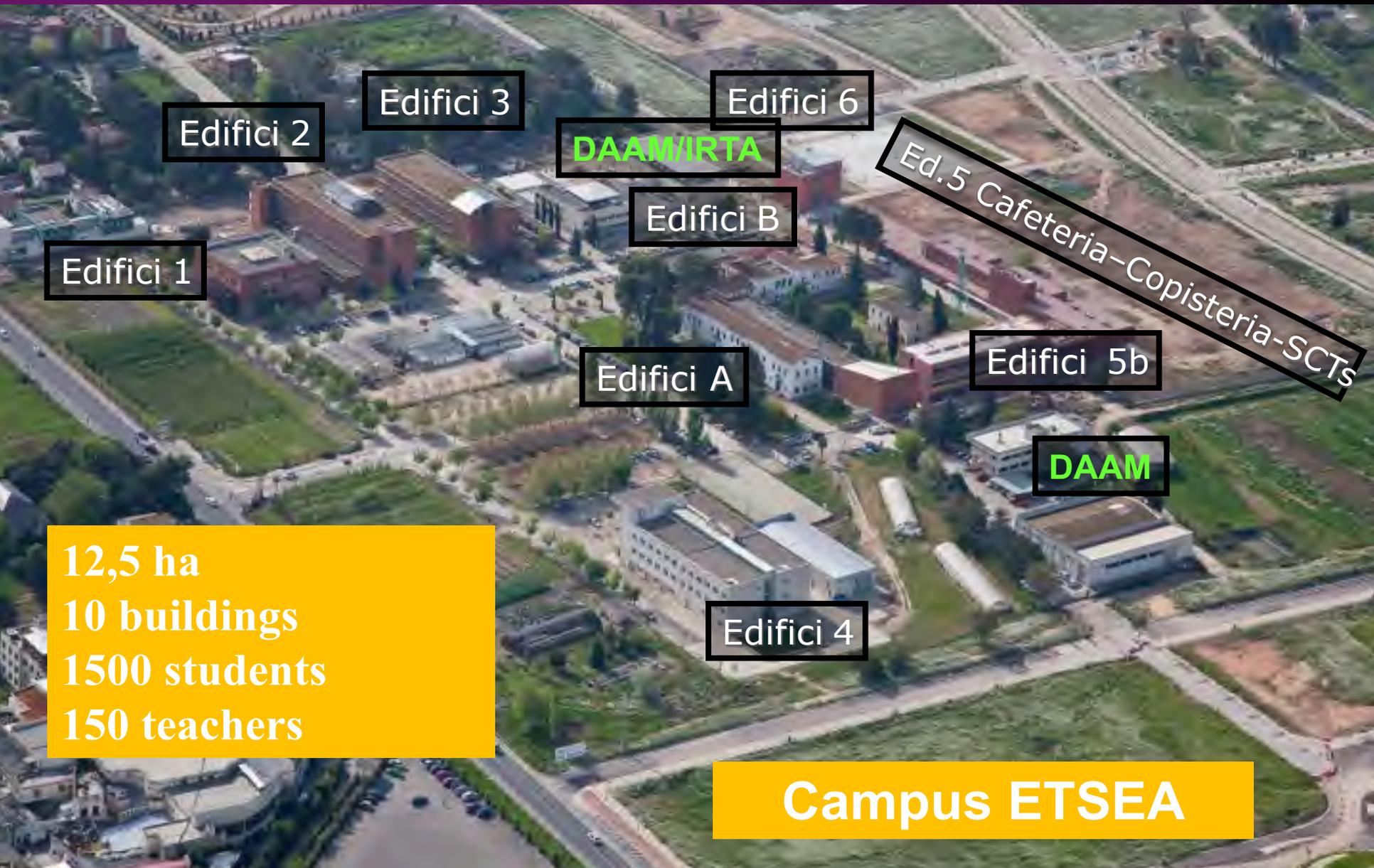
3.209.204 ha

- 63,8% forest land
- 26,8 % agricultural land
- 9,6% other uses





Escola Tècnica Superior d'Enginyeria Agrària



12,5 ha
10 buildings
1500 students
150 teachers

Campus ETSEA



- Fire managers from France, Germany, Italy, Spain & Portugal in this demo site





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**Thank
you!!!**

Thank you for your attention!.
Questions are welcomed!

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