

## ARISTOTLE UNIVERSITY OF THESSALONIKI



# FACULTY OF FORESTRY AND NATURAL ENVIRONMENT

F.A. (Phil) Aravanopoulos, Ph.D., Assoc. Professor & Dr. A. Christodoulou, Assoc. Professor Forestry at A.U.Th. – Historical Account
1917: FACULTY OF FORESTRY (NATIONAL TECHNICAL UNIVERSITY OF ATHENS)
1926: A.U.Th. FOUNDATION: FACULTY OF PHILOSOPHY
1927: FACULTY OF SCIENCES (FORESTRY TRANSFERRED FROM NTUA AS ITS 1<sup>st</sup> SCHOOL)
1937: FACULTY OF AGRICULTURE & FORESTRY

SCHOOL OF AGRICULTURE

SCHOOL OF FORESTRY

1981: FACULTY OF FORESTRY AND NATURAL ENVIRONMENT

■ 1983: FACUTLY OF GEOTECHNICAL SCIENCES

SCHOOL OF AGRICULTURE

SCHOOL OF FORESTRY AND NATURAL ENVIRONMENT

SCHOOL OF VETERINARY MEDICINE

# Forestry at A.U.Th. – Historical Account

 Since 2005: independent FACULTY OF FORESTRY AND NATURAL ENVIRONMENT

# Aristotle University of Thessaloniki

- 10 Faculties
- 49 Schools
- 42000 full-time students
- 2300 academic staff, 2000 technical support and administrative staff
- 10882 research projects completed in the past 15 years
- 1031 research projects in progress (429 funded by the EU)
- 1700 research partners (Universities, Research Institutes, Private Companies) have collaborated with 1340 A.U.Th. staff and 12000 external collaborator personnel, in 3500 research projects completed in the past three years with a total budget of 150 M €

#### FACULTY OF FORESTRY & NATURAL ENVIRONMENTS DEPARTMENTS

2005: FACULTY OF FORESTRY AND NATURAL ENVIRONMENT

FOREST PRODUCTION – FOREST PROTECTION -NATURAL ENVIRONMENT

FOREST AND WATER ENGINEERING

PLANNING & DEVELOPMENT OF NATURAL RESOURSES

> RANGE-WILDLIFE & FRESHWATER FISHERIES

HARVESTING & TECHNOLOGY OF FORESTRY PRODUCTS

# FACULTY OF FORESTRY

Mission statement

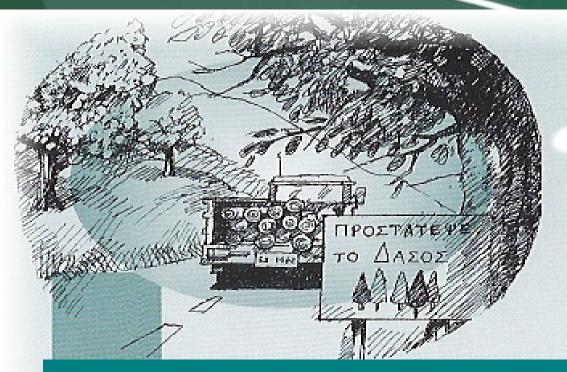
 To study, teach and research on <u>sustainable</u> <u>multipurpose forestry and terrestrial</u> <u>environmental science</u>

# Faculty of Forestry – Personnel (2008 census data)

- 63 Members of the Academic Staff
  - 17 Full Professors
  - 19 Associate Professors
  - 14 Assistant Professors
  - 13 Lecturers
- 42 Technical Support Staff & University Forests' staff
- 920 undergraduate, 105 graduate (M.Sc.) students and 80 doctoral candidates

# Faculty of Forestry - Infrastructure

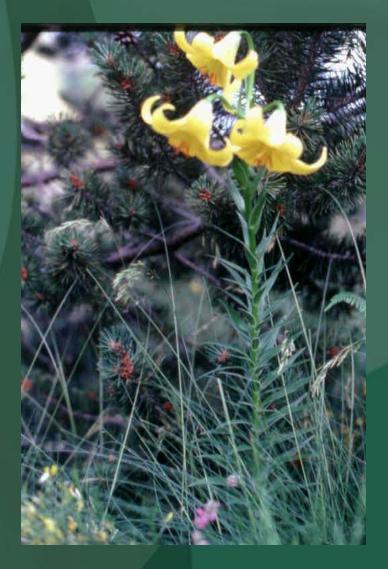
- 2 University Forests (9200 Ha), 2 University Forest District Offices & University Forests Administration Fund Central Office
- 1 Building in the main Aristotle University Campus
- 1 Forestry Campus in Phoenix (east Thessaloniki) 5 buildings – 15000 m<sup>2</sup> of labs, lecture rooms and offices
- 1 Botanical Garden
- 1 Museum of Natural History
- Nurseries and Greenhouses in the A.U.Th. Agricultural Farm
- Experimental Plantations in Vassilika Thessaloniki



### FOREST PRODUCTION – FOREST PROTECTION - NATURAL ENVIRONMENT

General & Forest Ecology, Forest Soil Science, Forest Genetics & Forest Tree Improvement, Forest Protection, Forest Botany and Geobotany, Nature Conservation & Landscape Architecture

#### **Laboratory of Forest Botany - Geobotany**





Lilium rhodopaeum Delip

Plant socio-enosis of *Alnetum incanae* Aich. et siegr 30

## Laboratory of Forest Genetics & Forest Tree Improvement

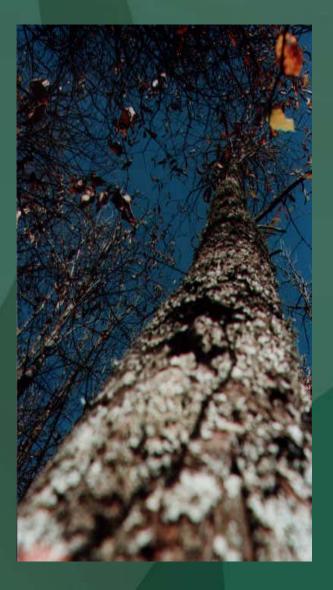


#### **Experimental Center for Fast Growing Hardwoods; A.U.Th. Agricultural Farm**



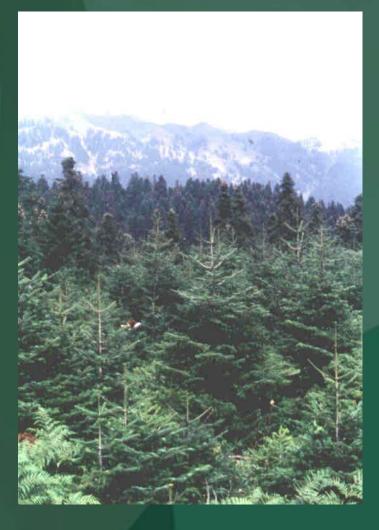
*Pinus nigra* Seed Orchard, Taxiarchis University Forest, Chalkidiki

## Laboratory of Forest Genetics & Forest Tree Improvement

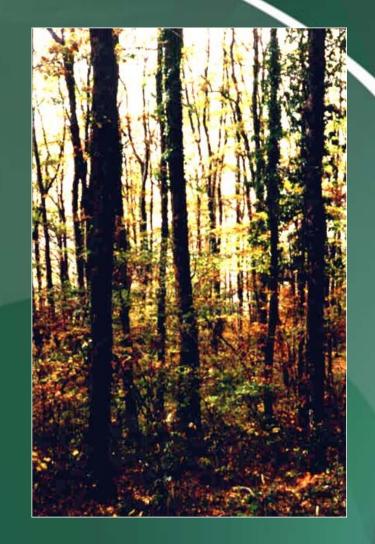




#### Laboratory of Silviculture

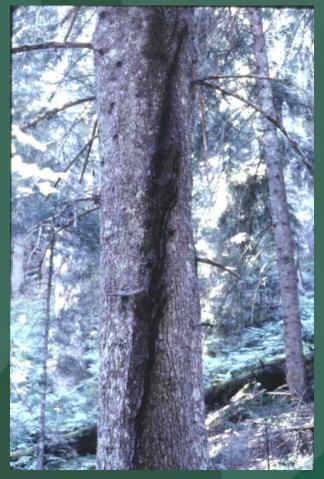


Fir natural regeneration at the University Forest of Pertouli



Coppice oak forest under conversion at Chalkidiki area

#### **Laboratory of Forest Protection**



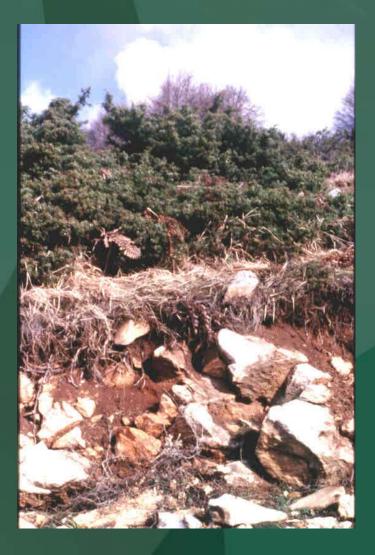
Ice-crevice seen in a fir trunk found at the University Forest of Pertouli **Forest fires** 





A pine-tree larva eating pine-needles

#### **Laboratory of Forest Soil Science**





Complete soil erosion and land degradation due to long-term land use

#### **Degraded forest soils in a hard limestone**



RANGE SCIENCE – WILDLIFE AND FRESH WATER FISHERIES Rangeland Ecology, Wildlife Biology and Freshwater Fish Culture

#### Laboratory of Rangeland Ecology



#### **Forest rangeland-Agroforestry Systems**



**Biodiversity in rangelands** 

#### **Laboratory of Rangeland Management**



Sheep grazing in a pseudoalpine meadow in Crete



Sheep grazing in a turf meadow

#### Laboratory of Wildlife Biology and Fresh Water Fisheries



#### Carpeolus carpeolus (Roe)



Salmo trutta m. fario



#### PLANNING AND DEVELOPMENT OF NATURAL RESOURCES

Forest Biometry, Forest Management, Forest Policy, Forest Economics, Forest Remote Sensing & GIS, Forest Recreation, Environmental Education, Sociology

#### Laboratory of Forest Biometry

Use of biometric instruments



#### Laboratory of Forest Management & Remote Sensing

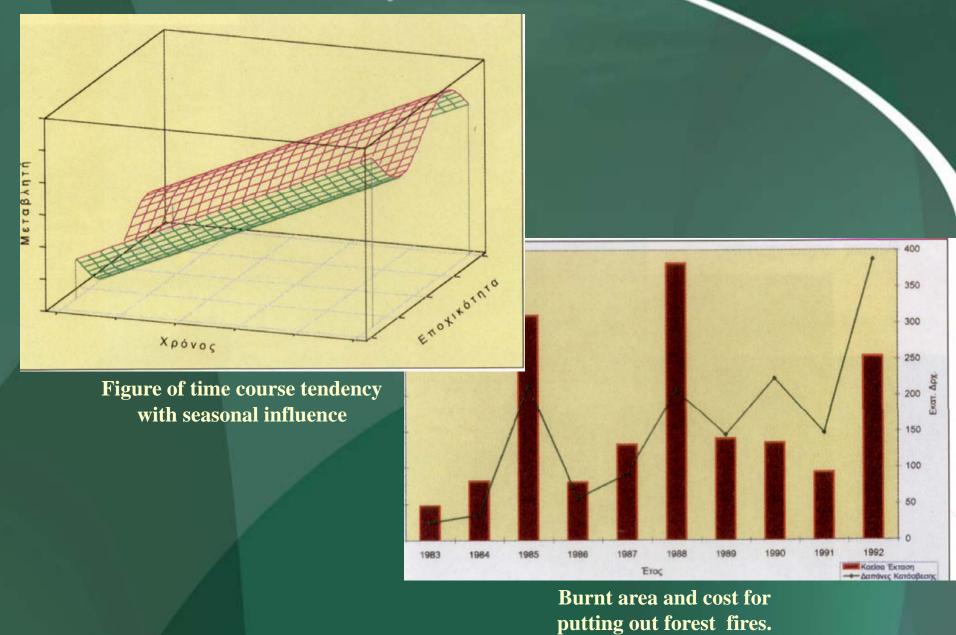




Digital forestry map and threedimensional depiction from two observation points



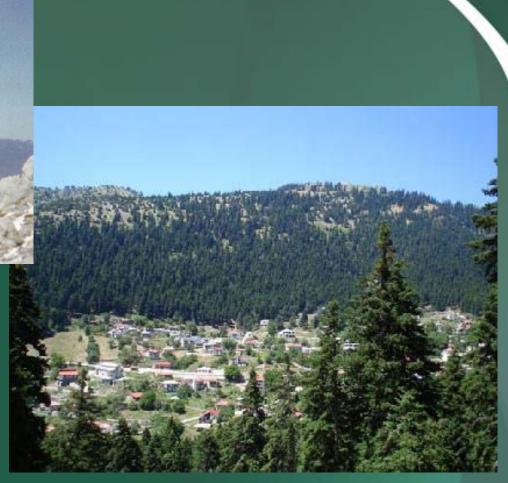
#### **Laboratory of Forest Economics**



Greece 2002-2003

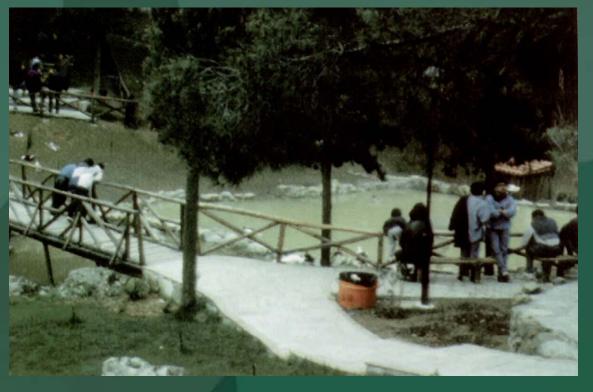
#### **Laboratory of Forest Policy**



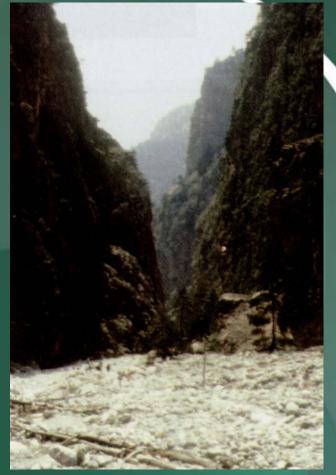


The University Forest of Pertouli – Rural Community Policies

#### Study of Forest Recreation, Environmental Education and Sociology



**Recreation** center in the urban forest of Kedrinos Hill, Thessaloniki



Recreation center in the National Park of the Samaria Gorge (Crete)



### FOREST AND WHITE WATER ENGINEERING

Management of Mountainous Water, Hydrologic Management of Basins, Forest Constructions, Forest Road Construction and Forest Products Transfer, Topography

#### Laboratory of White- Water Management and Torrent Control



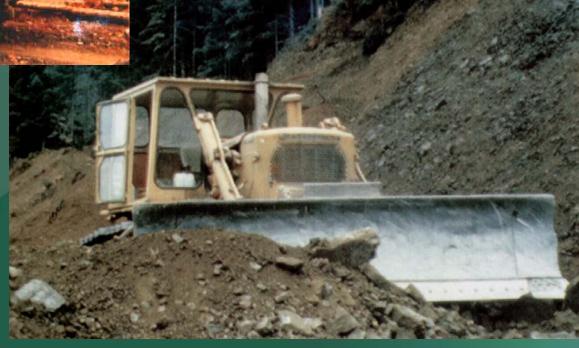
Dam for consolidation of the river bed in a Mt. Pindos torrent



Dam for erosion control in the Aridaia area, NW Greece

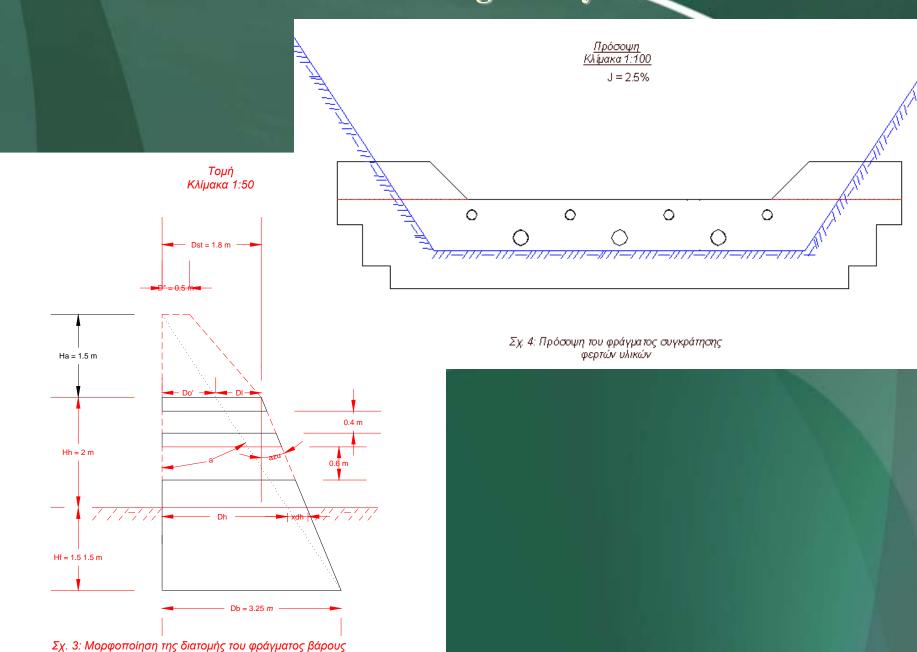
#### Laboratory of Forest Engineering and Topography

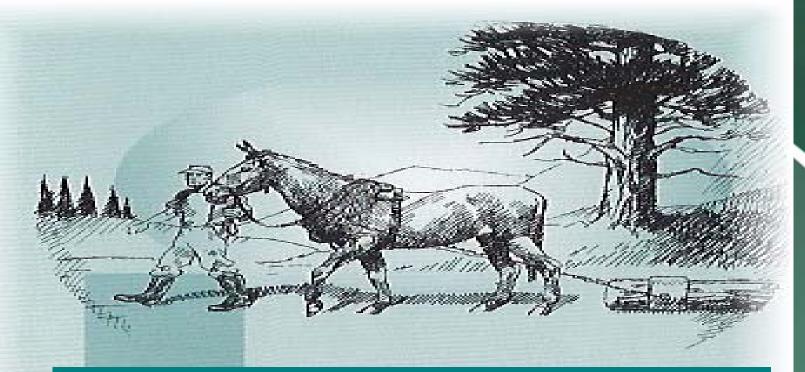
Transportation of timber



**Forest road construction** 

#### **Technical Design Study**

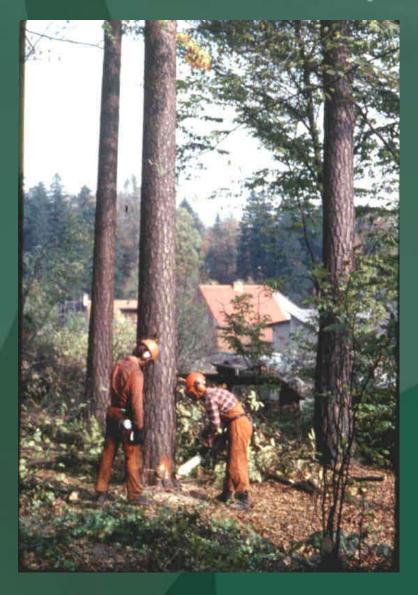




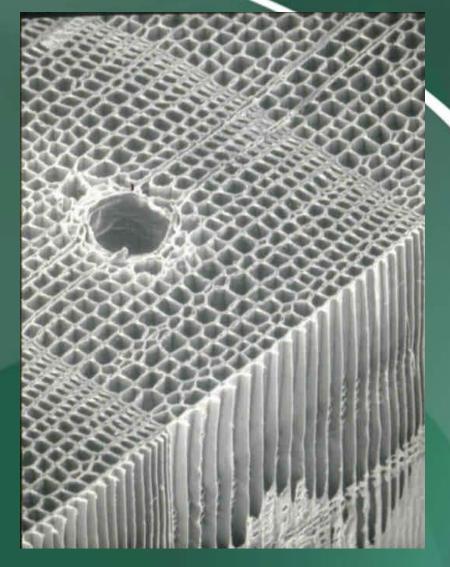
# HARVEST AND TECHNOLOGY OF FOREST PRODUCTS

Harvesting of Forest Products, Structure and Properties of Wood, Chemical and Mechanical Processing of Wood and its Products, Wood Industries

#### **Laboratory of Forest Utilization**



#### Wood harvesting



Three dimensional coniferous wood (pine) in stereoscopic electronic microscope

#### Laboratory of Forest Technology





Wood logs for industrial exploitation



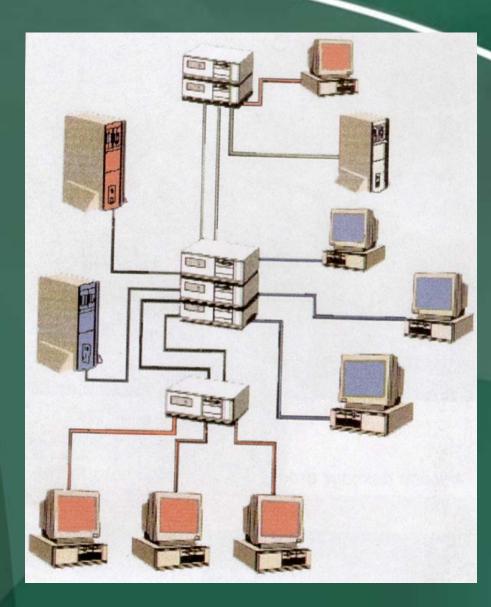
Wood products and usage

#### Laboratory of Forest Informatics (Faculty wide)



#### **Computer rooms**





#### **Computer Network Facility and Workstations**

#### **University Forests**



View of the Central Administration Building of the University Forest of Pertouli, Trikala, central Pindos mountain range

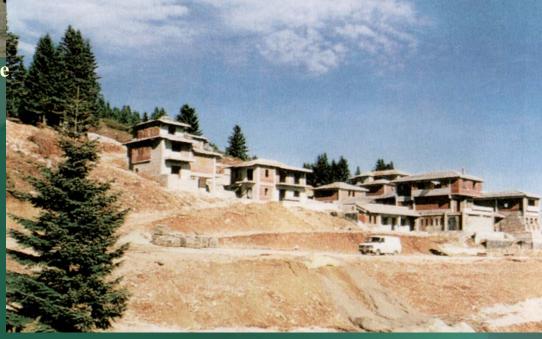


View of the Central Administration Building at the University Forest of Taxiarhis, Chalkidiki

#### **University Forests Infrastructure**



View of the student dormitories and labs at the University Forest of Taxiarhis, Chalkidiki



Novel infrastructure under construction at the University Forest in Pertouli, Trikala

## **University Forests – Field Practice**





#### **University Forests – Field Practice**





#### **Participation in National and International Exhibitions**





## **Undergraduate** Program

- 5 years (10 semesters)
- 60 half-year compulsory courses
- 12 half-year courses chosen from 92 elective courses
- Minimum of 265 credits
- 4 months of additional practical training (3 months at University Forests each after the end of the 4<sup>th</sup>, 6<sup>th</sup> and 8<sup>th</sup> semester respectively; one month practicum at the National Forest Service)
- Diploma Thesis

# Graduate Programs

- Two levels:
  - Post-graduate Specialization Diploma PSD (M.Sc. Equivalent)
  - Doctorate (PSD or equivalent needed to enter a Doctorate program)
- Duration
  - PSD: min. 3 semesters, max. 6 semesters
  - Doctorate: min. 6 semesters, max. 12 semesters

## • PSD - 6 specializations:

- Forest Production & Management
- Wood Science
- Range Science & Game Management
- Forest & Hydronomic Engineering
- Planning & Development of Natural Resources
- Forest & Environmental Conservation

## Graduate Programs

- PSD Requirements:
  - 1 compulsory course (Research Methodology)
  - 6 elective courses out of 96 offered in the graduate program (typical courses + directed studies courses)
  - extra courses can be taken either from the Faculty or the University at large, but do not count in the calculation of GPA
  - Graduate Thesis (involving a minimum of 12 month work)
- Doctorate Requirements:
  - Doctorate Thesis (based on hypothesis-driven research)
  - Graduate courses may be taken from the Faculty or the University at large (optional)

