

#### ALBERT-LUDWIGS-UNIVERSITÄT FREIBURG

# Güten Abend und Willkommen

Presentation of Applied Period Activities (Albert-Ludwigs-University Freiburg, Germany)

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### Mission

#### To explore ownself in European environment (both social and ecological)

To have Theoretical and practical exercise and experience on desired field of study.









### Objectives

- □ To work as part of host institution
- To assess the working and management system of institution
- Work and learn on desired field of study
- To observe and study locality and social behavior
- To evaluate ownself and test own adaptive capability









#### **Methods of learning**

- □ Literature review.
- Web search
- Lecture attend
- Participate in workshops, seminar
- Field visit

Personal contact and interviews. Etc.



### Introduction to University of Freiburg

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- The University of Freiburg was founded by Archduke Albrecht IV of Austria in 1457
- The name honors Austrain Archduke Albrecht and Grand Duke Ludwig of Baden
- There are 11 faculties in the University. Faculty of Forestry and Environmental Sciences is one of them

There are 14 Institutes under Faculty of Forestry and Environmental Sciences. Institute of Forest Growth (IWW) is one of them

There are 2 Departments in IWW namely, Department of Forest Growth and Department of Forest Biometry









- The Institute for Forest Growth studies the growth of trees in their environment
- Develops decision tools for controlling forest growth and provides basic methods for the exploration of tree growth
- Research and Studies are closely linked on a national and international level
- Scientific findings are enhanced and distributed through events, publications, and study programmes









### Services of IWW

1. Consulting

2.

The Institute for Forest growth offers consulting and expertises on the following topics:

- Growth and climate
- Effects of environment on forest growth
- Forest growth in Europe
- Improvement of forest stability and value
- Management of valuable broadleaved trees

Professional Training on forest growth, management and related field of study









# AP Supervisor(s) at IWW

<u>Chief Supervisor</u> Prof. Dr. Heinrich Spiecker Director of IWW University of Freiburg, Germany

Assistant Supervisor Joachim Langshausen









## **AP Topic**

### Different Aspects of Transformation of Secondary Conifer Forests

(With special reference of Norway Spruce Conversion: Options and Consequences by Heinrich Spiecker et. al.)



### **Background**

- Deforestation
- Population growth
- Increased mining activities

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- Industrial revolution
- Rapid infrastructure development
- Slow motion of natural succession and growth of natural forest
- High demand of soft wood.
- Distrust to nature



## The Question of Conversion

#### **Result**

- Trial for fast growing species
- Search for non-native-indigenous and exotic species
- Cutting down of natural forest
- Massive plantation of fast growing species
- Loss of natural forest areas
- Empire of monoculture

#### Consequences of Monoculture of Pines

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Positive	Abundance of wood	Biodiversity	Negative
Support to industry	Forest as agro crop	Climate	Aesthetic value
	Soil	Vulnerability	Multiple use
Employment	amelioration	Forest quality	Sustainability
Greenery	Sustainable future	Soil	

NB: This diagram is my own view, not necessarily be accepted by all



### The Question of Conversion

#### What to do?

#### Convert pure plantation to mixed forest



### The Question of Conversion

### How to do?

1. Follow the pace of natural succession

2. Mixed plantation

3. Multilayer management

4. Promote natural regeneration



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- Ecology
- Silviculture
- Inventory
- Management plan
- Economy (financial analysis)
- Society







#### **Achievements of AP**

#### Collection of 12 ECTS

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- Opportunity to have experiences of European culture and behavior
- Knowledge of southern Germany Physiography and beautiful places
- Introduction with IWW personnel
- Development of research scheme







### Feedback

AP is significantly important for non-European students to grow up in European environment

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- AP is more exploration than learning and training
- Hypothesis of AP appears reasonably good but it should be fostered by planned conduction of AP
- Students want to listen welcome sentence from host institution "We want to see you doing this work."instead of "What do you want to do?"









#### For your patience and attention.