

# Between Tradition and Innovation

*IUFRO's work in forest classification  
and terminology with a view to a  
forest ontology*

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# INTRODUCTION

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**Curious about**

forest classification  
forest terminology ?



## PAST ACHIEVEMENTS

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### **TERMINOLOGY WORK HAS TRADITION in IUFRO**

These projects include:

- 1933 Flury International Bibliography System
- 1953 Joint IUFRO-FAO Bibliography Committee
- 1954 Oxford Decimal Classification (ODC)  
for forestry (CABI)
- 1971 Terminology of Forest Science, Technology,  
Practice and Products (F.C. Ford-Robertson)
- 1981 ODC revision started
- 1990 Vocabulary of Forest Management
- 1990 FDC trilingual short version
- 1992 FDC full version in German and English

cont.

## PAST ACHIEVEMENTS

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### **TERMINOLOGY WORK HAS TRADITION in IUFRO**

- 2000 Forest Terminology (proceedings)
- 2000 Terminology of Forest Management
- 2003 Multilingual glossary of Forest Genetic Resources (with FAO)
- 2006 Global Forest Decimal Classification (with an online database)
- 2014 GFDC book published online
- 2017 GFDC multilingual online service (development version with additions to the Swedish and Spanish versions)

## WHAT ARE WE TALKING ABOUT?

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### *Classification*

*“... systematic arrangement in groups or categories according to established criteria” (Merriam-Webster)*

*“... system of coding, assorting and organizing (library materials) according to their subject”*

## WHAT ARE WE TALKING ABOUT?

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### *Terminology*

*“... structured set of concepts and terms used to represent them in a specific subject field” (Wright & Budin, 1997)*

*“... make aware of difficulties in technical communication”*

# WHY ARE WE DOING IT?

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variety of definitions

concepts change with time

English lingua franca ?

new terms - neologisms

*... good terminologies reveal differences*

## MORE RECENT ACHIEVEMENTS

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# Global Forest Decimal Classification (GFDC)\*

Main features:

- Custom designed by foresters
- Hierarchical subject divisions
- Developed over 100 years
- Classification provides language independent numeric subject hierarchy with 2752 categories and an alphabetical subject index
- GFDC is an official part of UDC
- Online GFDC (FPInnovations, Canada)

\* *coordinated by J. Saarikko*

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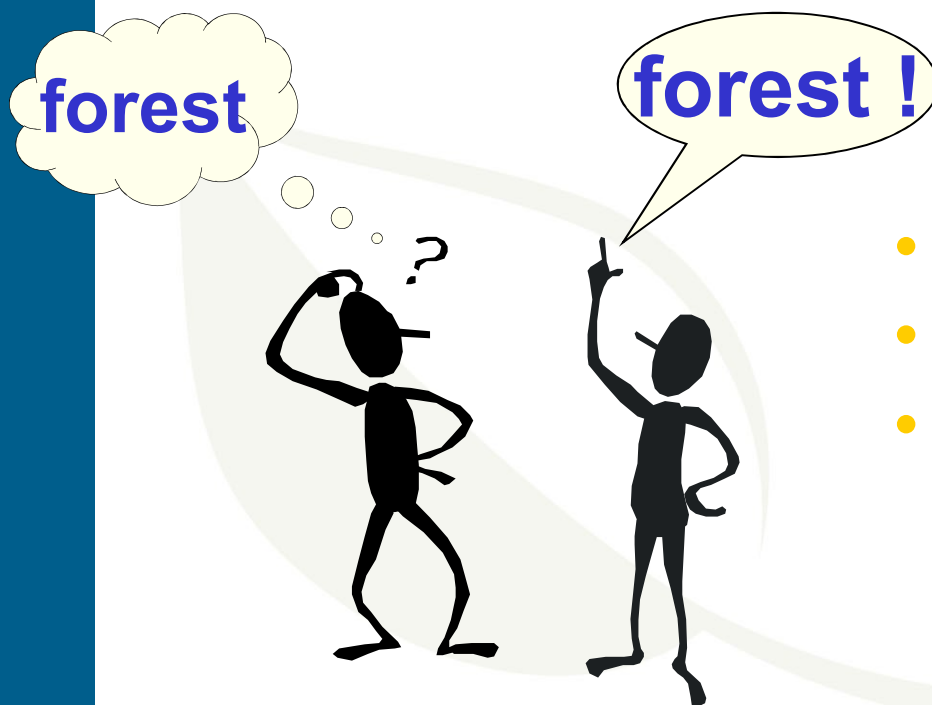
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# SILVATERM: FACTS and FIGURES

Forest terms and definitions



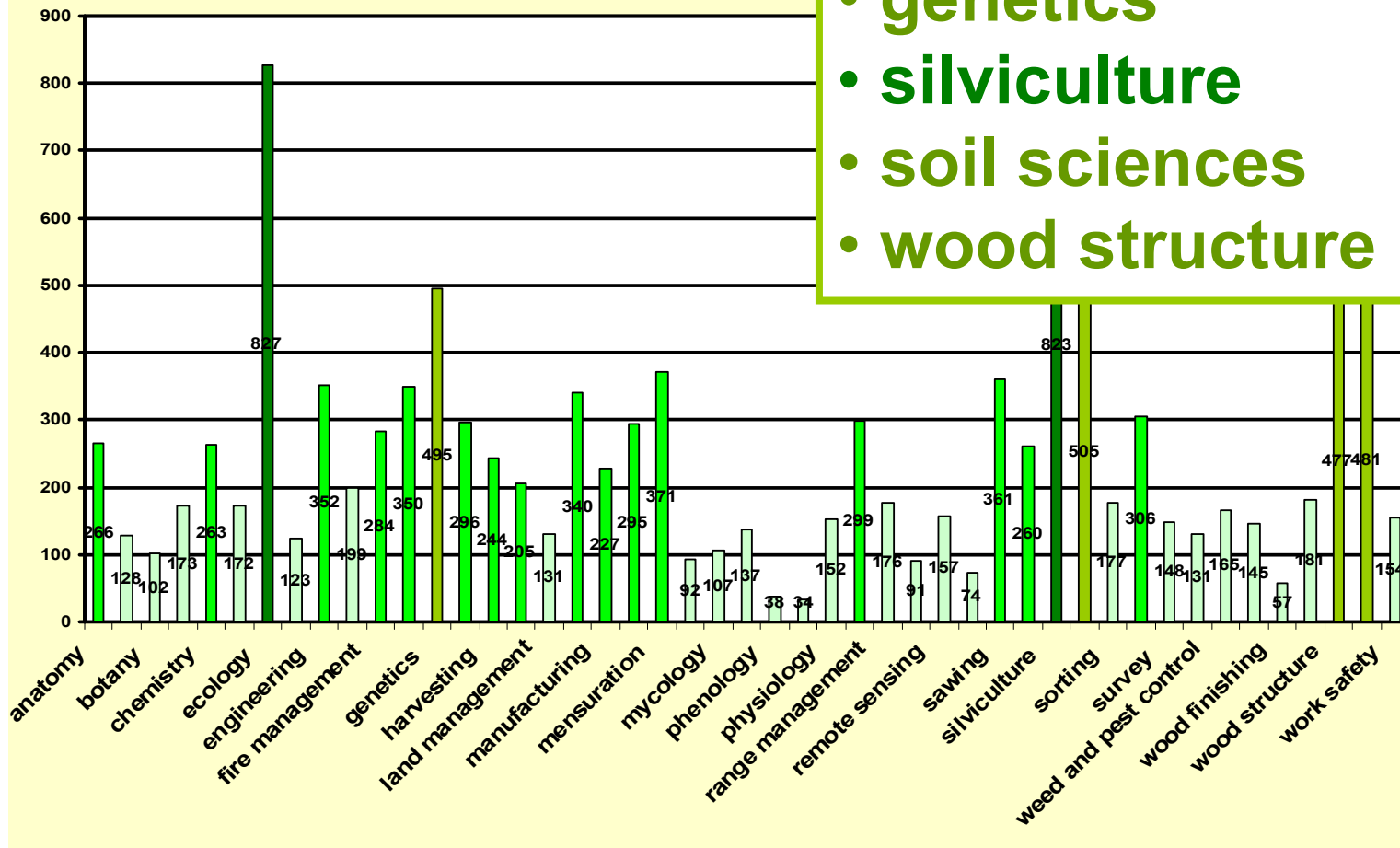
- **Designed in 1998**
- **online since 1999**
- **only database to specialize in forest**

for efficient communication

# 1 SILVATERM: FACTS and FIGURES

12,000 entries

- ecology
- genetics
- silviculture
- soil sciences
- wood structure



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# SILVATERM: FACTS and FIGURES

## > 8 Languages

French	95%
Spanish	90%
German Japanese	30%
Italian Portuguese Hungarian	20%
Swahili	10%

**Other languages: Chinese;  
Polish, Romanian, Swedish, Russian**



<b>English Term:</b>	afforestation
<b>Short Form:</b>	
<b>Synonym(s):</b>	
<b>Definition:</b>	The establishment of a forest, stand or tree crop on an area not previously forested, or on land from which forest cover has very long been absent.
<b>Cross Reference:</b>	
<b>Note:</b>	If on land from which trees have recently been removed it is termed reforestation.
<b>Source:</b>	*FR
<b>Hyperlink:</b>	<a href="http://f9010.ffpri-109.affrc.go.jp/forterm/http://home.att.net/~gklun/DEFpaper.html">http://f9010.ffpri-109.affrc.go.jp/forterm/http://home.att.net/~gklun/DEFpaper.html</a>
<b>IUFRO Unit:</b>	4.04.07 SilvaPlan
<b>Subject Field:</b>	silviculture

## Equivalent terms in other languages:

de:	<a href="#">Aufforstung</a>
hu:	<a href="#">erdősítés</a>
sp:	<a href="#">forestación</a>
fr:	<a href="#">reboisement</a>
pt:	<a href="#">reflorestamento</a>
It:	<a href="#">rimboschimento</a>
sh:	<a href="#">upandajimiti</a>
...	...

## WHO IS USING IT?



- Forest Scientists
- International Processes
- Decision-makers, politicians
- Students in forestry
- Translators, Interpreters
- Information managers

# TOWARDS THE FUTURE

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- Library classifications are **not dead**. They have a new life in ordering and searching content online.

*The Universal Decimal Classification was created for information retrieval and management.*

- Linking GFDC terms and categories with existing terminologies would help in developing a **forest ontology**.

## WHAT ARE WE TALKING ABOUT?

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### *Ontology*

*“... a machine-readable set of definitions that create [a taxonomy of] classes and subclasses and relationships between them” (WebOntology Working Group)*

# TOWARDS THE FUTURE

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- ❖ To reorganize all the concepts included in both the SilvaTerm database and GFDC classification into a multilingual ontology with hierarchical and other relationships
- ❖ **Terminology brings the semantics and the content, the classification/thesaurus brings the structure and relationships and all mixed together with some more ingredients in a machine readable format builds up an ontology.**



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Thank you for the attention



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