



Preliminary results, September 2016

Lars Helge Frivold (NMBU-INA)

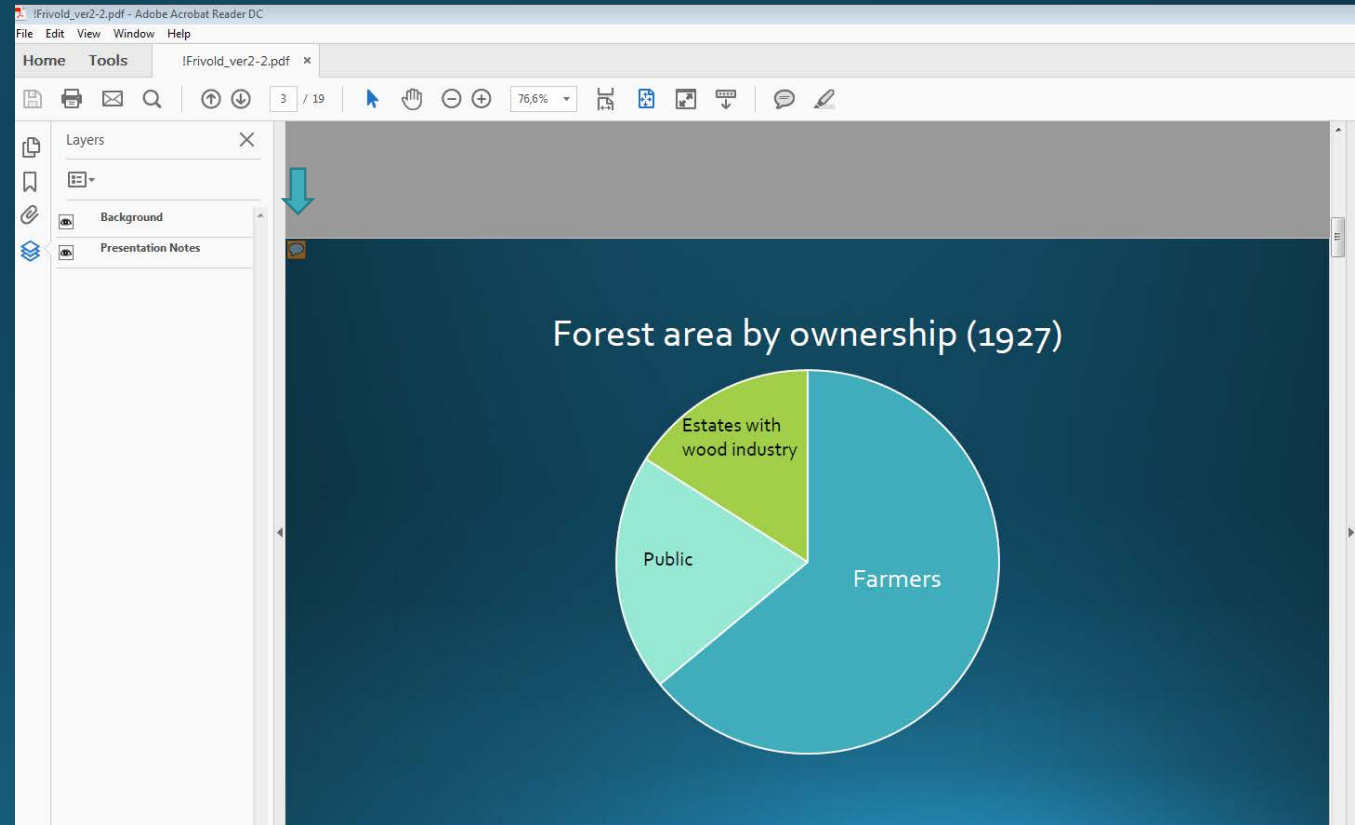
The Breakthrough of Even-Aged Logging in Norway
Part II (1930–1965)

Outline

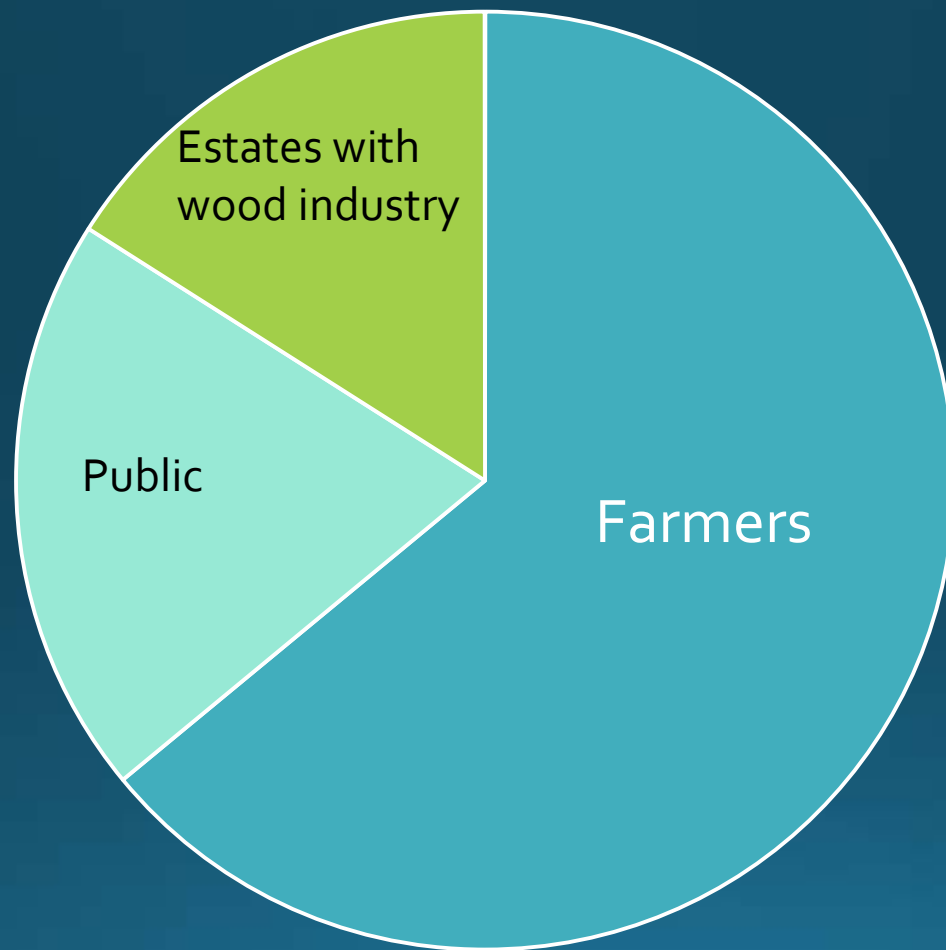
- Forest owners
- Legal framework
- Driving forces and obstacles
- Statistics
- Conclusions

Instruction

To read the notes to each of the following slides, click on the stack of papers symbol (far left) and then move the pointer to the speech balloon symbol at the upper left corner of the slide.



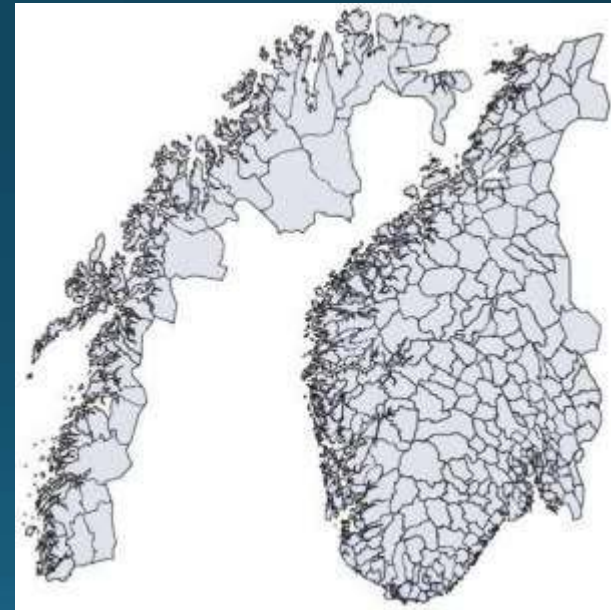
Forest area by ownership (1927)





The Forest Protection Acts of 1893 and 1908

- Decentralized
- Municipal by-laws to be approved by Ministry
- Diameter-limit cuttings





Ministry of Agriculture

Forest research

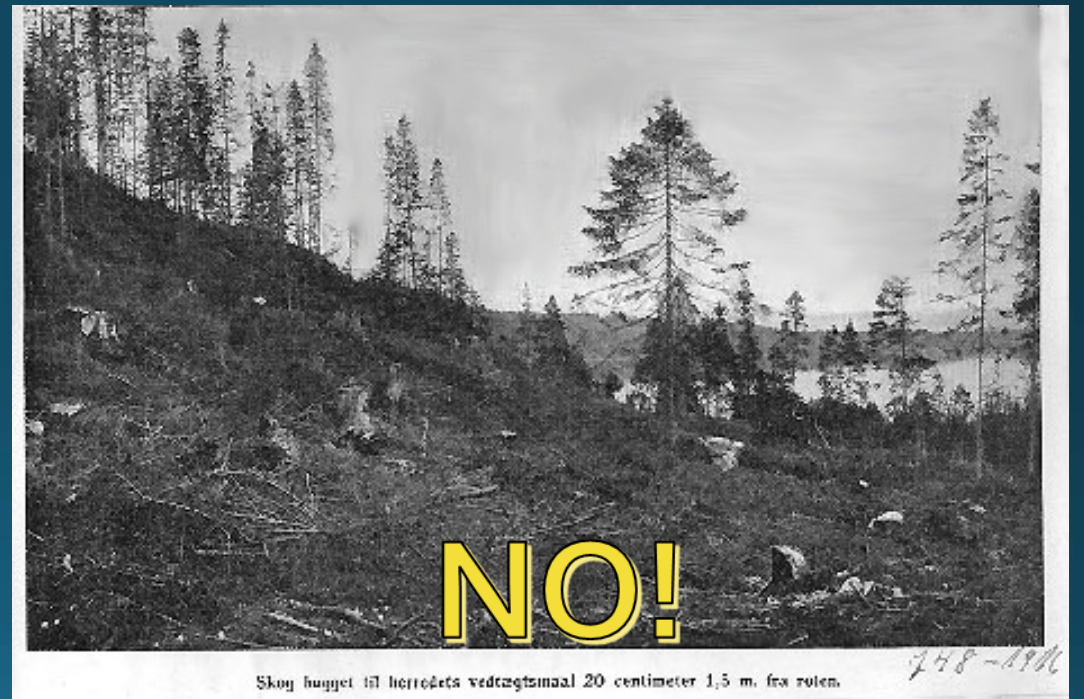
Forest situation



The Forest Protection Act of 1932

- Valid for all private forests
- Broke away from old harvesting systems
- Immature forests → thinnings
- Mature forests → proper regeneration
- Forest supervisors
- Freedom under responsibility!

«Good silviculture» = ?



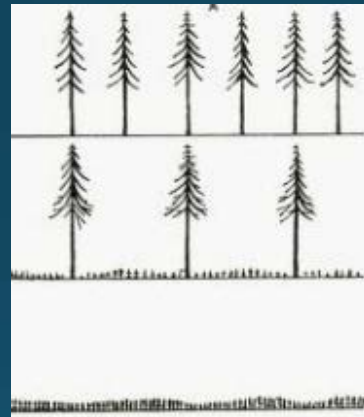
Photos: Agnar Barth

The Forest Improvement Plan, 1938

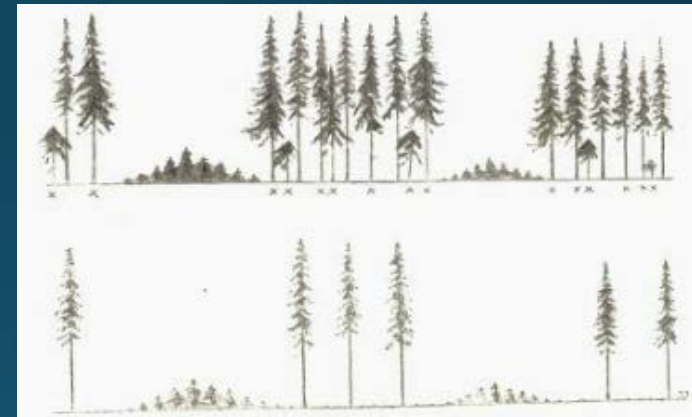
- Even-aged logging methods!



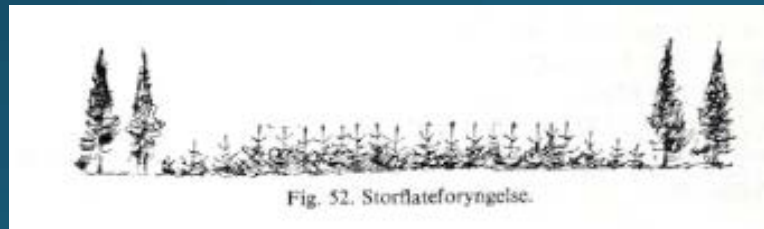
Seed trees (pine)



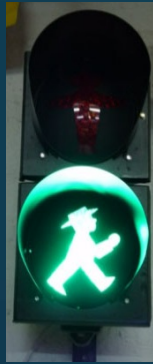
Uniform shelterwood



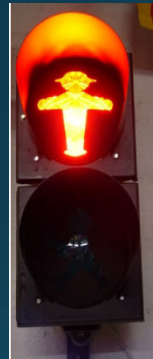
Quickly expanding groups



Clearcutting



Driving forces



Obstacles



	1920s		1930s		1940s		1950s		1960s	
National Forest Inventory										
Research & Experience										
Forest policy										
Extension services										

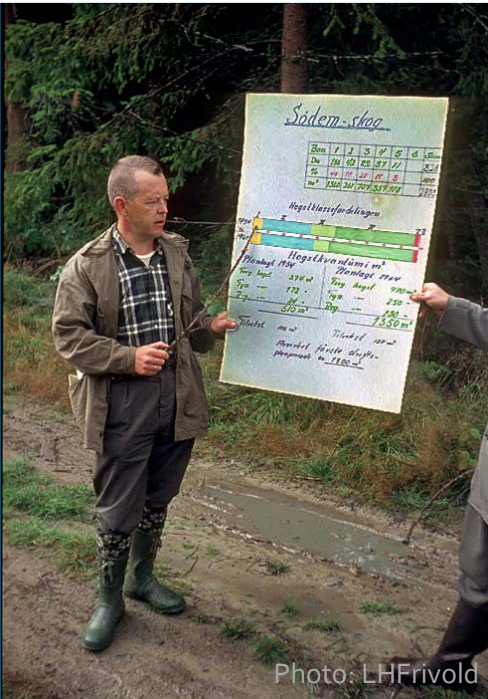


Photo: LHFrivold


Roundwood prices of pulpwood, in NOK of 2015





	1920s		1930s		1940s		1950s		1960s	
National Forest Inventory										
Research & Experience										
Forest policy										
Extension services										
Prices of small logs										



	1920s		1930s		1940s		1950s		1960s	
National Forest Inventory		👤	👤	👤	👤	👤	👤	👤	👤	👤
Research & Experience	👤	👤	👤	👤	👤	👤	👤	👤	👤	👤
Forest policy	👤	👤	👤	👤	👤	👤	👤	👤	👤	👤
Extension services	👤	👤	👤	👤	👤	👤	👤	👤	👤	👤
Prices of small logs	👤	👤	👤	👤	👤	👤	👤	👤	👤	👤
Mechanisation of logging							👤	👤	👤	👤
Forest road construction					👤	👤	👤	👤	👤	👤



1933



	1920s		1930s		1940s		1950s		1960s	
National Forest Inventory										
Research & Experience										
Forest policy										
Extension services										
Prices of small logs										
Mechanisation of logging										
Forest road construction										
Lack of nursery stock										
Livestock grazing										





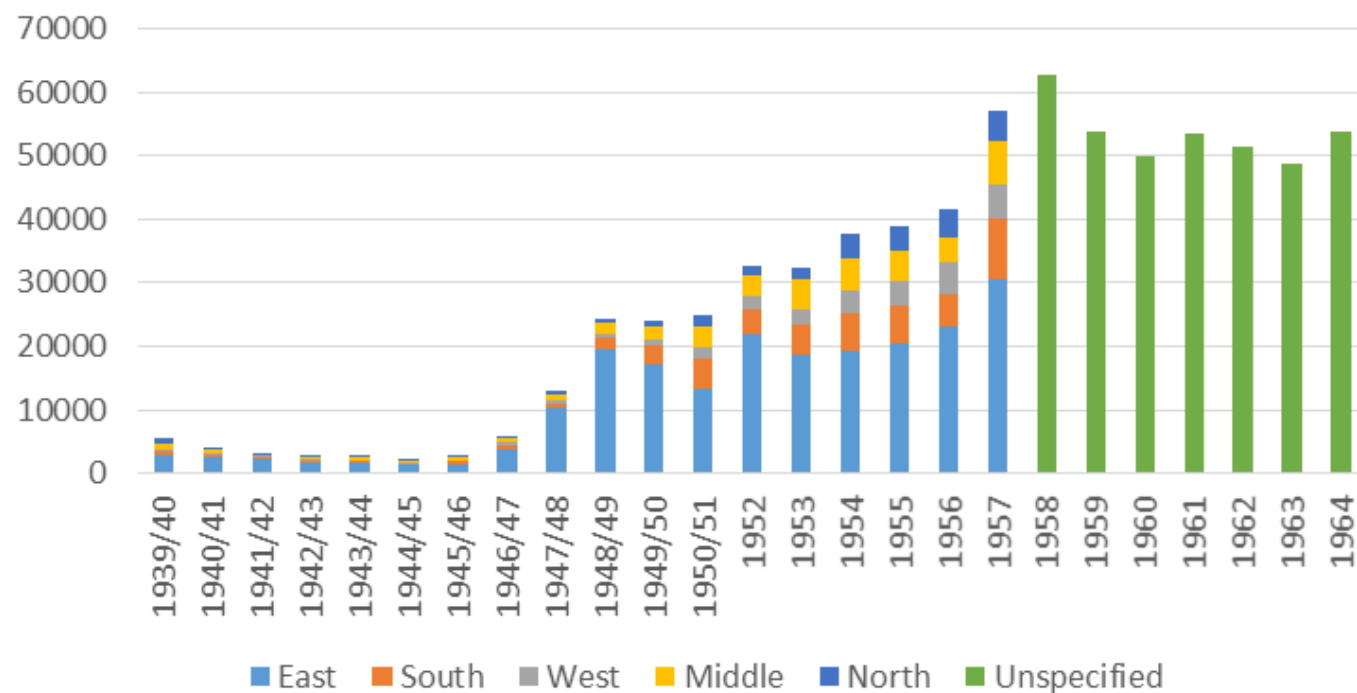
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Forest road construction										
Lack of nursery stock										
Livestock grazing										
Minds of farm forest owners										





Statistics

Annual regeneration area (ha)



Data collected by the Ministry of Agriculture



Modified map from www.d-maps.com



Conclusions



Photo:
LHFrivold

Brandbu
2006