• Review of Steep Ground Harvesting was carried out on the Forestry Commission estate in 2008
• Annual production should be 266k m³
• Total production in 2010/11 was 3,196k m³
• Steep ground makes up 8% of the annual Production Forecast
• Review identified a shortfall in harvesting
• Need for better forest planning
• Some resourcing issues
• The volume is predominantly on West Coast
• Higher percentage of steep ground across the Central Ops area
• Likely that similar distribution exists within private sector
• Steep ground was defined as ground that can’t be harvested by conventional means
• Usually delivered via the use of steep ground tracked harvesters or by a skyline winch
Steep Ground Harvester

- Recent introduction
- Can work on moderately steep slopes
- Timber extracted by a forwarder or skidder
- Outputs from 15K – 30K m³ a year
- Higher output/lower costs
- No capable of operating on very steep terrain
- Has a safe working limit but extends mechanised harvesting option
Skyline Winch

• Used since 1960’s
• Used on very steep slopes
• Manual felling
• Extraction via cables, winches & pulleys
• Mechanised handling at roadside
• Outputs from 2K – 11Km3 obs a year
• Lower output/higher costs
• High Risk skilled work
Machinery and Labour

Age distribution of plant

- Under 5
- 6-10
- 11-15
- 16-20
- 21+

Number

- Not in Use Winches: 13
- Working Winches: 9
- Excavator Base Winches: 11
- Hillclimber: 15
Machinery and Labour

Age distribution of personnel

- Skyline Operators
- Excavator Base Winch Operators
- Hillclimber Operators

Age categories:
- 20-30
- 31-40
- 41-50
- 51-60

Counts for each age category:
- Skyline Operators:
  - 20-30: 4
  - 31-40: 6
  - 41-50: 5
  - 51-60: 10
- Excavator Base Winch Operators:
  - 20-30: 3
  - 31-40: 5
  - 41-50: 8
  - 51-60: 2
- Hillclimber Operators:
  - 20-30: 2
  - 31-40: 4
  - 41-50: 7
  - 51-60: 1
• Practicable and workable plans are required
• Additional training required
• Skyline resource is dated
• Concern over age of operators
What are we doing about it?

- Developing management courses for our staff
- Improving Forest Planning for steep ground to ensure robust and workable plans
- Our training branch is revamping technical training on steep ground
- Contributing to the development of guidance on working methods through our technical development branch
- Looking at solutions for “extreme” coupes through our Steep Ground Harvesting project
- Developing our marketing strategy
Many Thanks
I’ll see some of you tomorrow!