

Steep Slope Harvesting with ground-based equipment

[LEE MILLER](#) (President, Miller Timber Services)

The advancement of steep slope harvesting equipment open up new possibility's in fuel treatments on steeper terrain.

Key Points:

- We can do 60-85% slopes (6-wheelers); used to do up to 35% slope
- Varies by soil and ground condition
- Advanced to Ponsse:
 - Thinning and large diameter trees: slope: downhill 55%, uphill 40%
- 8-wheel Ponsse harvester
 - opened new doors: slopes 70% to flat
 - uphill 45% slope, downhill 70% slope
 - used for juniper
 - Balanced Bogie: keeps balanced on all wheels, so on slopes all 8 wheels are on the ground
- Innovation in tracks: lower compaction by tilling 55% uphill, 75% downhill
- A lot of stability
- New Ponsse: up to 29-30" (2.5-3 tons/tree)
- 22-ton forwarder with Ponsse tethering
 - 65-75% rock slope in Lakeview and it worked
 - Uphill 80% and downhill 65%
- Environmentally it keeps the ground disturbance the same
- Soil disturbance - slash on ground allows for multiple trips