CUT-TO-LENGTH VS. WHOLE TREE LOGGING

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CAPABILITIES, LIMITATIONS, AND SPECIFICATIONS
CUT-TO-LENGTH VS. WHOLE TREE

HARVESTER

FELLER-BUNCHER
CTL VS. WTL

- **Wheeled Harvester**
  - Boom Reach: ~28’-36’ with a versatile cutting head which includes processing
  - Rubber Tire Width: ~36”
  - Machine Width: 9’-10’
  - Total Weight: ~40-50k lbs.
  - PSI 26” tire without tracks: 8.5 and 6.5 with tracks
  - Tailswing: None
  - Leveling Cab: 30-40%
  - Lift capability: Limited overall
  - Visibility: High

- **Feller-Buncher**
  - Boom Reach: ~20-22’ with a limited mobility cutting head
  - Track Width: 24”-36”
  - Machine Width: 10.5’-11.5’
  - Total Weight: 50k-85k lbs.
  - PSI: 6.5-7.5 36” track: 5.5
  - Tailswing: ~12”-5.5’
  - Leveling Cab: Up to 50%
  - Lift capability: Full extension 1/3 to ½ of lifting ability
  - Visibility: Limited
CAPABILITIES, LIMITATIONS, AND SPECIFICATIONS
CUT-TO-LENGTH VS. WHOLE TREE FORWARDER

SKIDDER
CTL VS. WTL

**FORWARDER**
- Total Weight: ~25k-35k lbs.
- Machine Width: ~9’
- Tires: ~26”-36”
- PSI: Front Tire Empty ~7.5 and Front Tire Loaded ~8
  Rear Tires Empty ~5 and Rear Tires Loaded ~14.5
  Rear Tires with Tracks Loaded ~8.5

**SKIDDER**
- Total Weight: ~25k-35k lbs.
- Machine Width: ~10’
- Tires: ~26”-32”
- PSI: 6-8 unloaded and 8-14 loaded
Environmental Considerations

**CTL**
- Forwarder Trail Spacing: ~65’ with a 9’ wide trail
- Little to No Displacement, with full suspension of logs
- Compaction: only 66% of trail impacted
- Little to No Side Intervals needed
- No Landings needed EXCEPT if you are removing slash
- Longer forwarding distances if needed ~2000’
- Slash mats vs. Slash Removal
  - Fuels Considerations

**WTL**
- Skid Trail Spacing: ~100’ with a 11-12’ trail
- 11-12’ wide typically 100% of organics are displaced from trees
- Compaction: generally 75-100% of trail impacted
- 30’ side intervals off skid trails
- ~100’x100’ Landing size every 10-20 acres
- Skid trails 500’ avg. length with max skid to 1000’
- Low residual slash

**Fuels Considerations**
APPLICATIONS/EFFICIENCIES

WHOLE TREE LOGGING

- Best for Lower Residual Basal Area’s (less than 80)
  - Less Nimble, but quicker
  - Some Tailswing
  - Need straight skid trails
- Slope’s under 40%
- Limited Visibility
  - ITM/LTM
  - DxD
APPLICATIONS/EFFICIENCIES

CUT-TO-LENGTH

- Best for Higher Residual Basal Area (80 or over)
  - More Nimble
  - No Tailswing
  - Ability to Reach farther
  - Versatile Cutting Head
APPLICATIONS/EFFICIENCIES

CUT-TO-LENGTH

- Riparian Areas
  - Less Displacement
  - Less Compaction
  - Slash mats
  - Utilize Roads where possible
  - Landings far away from riparian area
APPLICATIONS/EFFICIENCIES

CUT-TO-LENGTH

- Steep Slopes
  - Good Crawlers
  - 8 wheel options with bogies
  - Tethered Assist
- Higher TPA
  - No multiple 30’ intervals
- Good for DxP
  - High Visibility for Tree Evaluation
APPLICATIONS/EFFICIENCIES

VIEW FROM HARVESTER CAB

VIEW FROM FELLER-BUNCHER CAB
WHICH IS BEST?!?

CUT-TO-LENGTH VS. WHOLE TREE LOGGING

- 2 Machines (Harvest/Forwarder) for 4 Jobs
  - Lower Diesel Consumption and Cost
  - Lower Labor Costs
  - PRODUCTION
    - 3-5 Acres/Day per Side
  - MORE VERSATILE

- 4 Machines (Feller-Buncher, Skidder, Processor, Loader) for 4 jobs
  - Higher Diesel Consumption and Cost
  - Higher Labor Costs
  - PRODUCTION
    - 6-12 Acres/Day per Side
  - MORE PRODUCTIVE