Personal History
- Started with company in 2015.
- Buy poles for yards in Sheridan and St Helens.
- Going to be talking about the Doug-fir pole business

Company Background
- 6 pole yards in Oregon and Washington
- 5 treatment plants on West coast
Overview

- Approximately 120 million power poles in North America
- Replacement of 1% per year (1.2 million poles)
- Utility poles have a 40-70 year life span, depending on species, treatment, and location
Western U.S.
Douglas Fir Pole Yard Locations
-Each yard receives and peels an average of 7 loads of poles per day.

-The company does not own timber land.

-Poles are purchased from private lands, ODF, BLM and Forest Service timber Sales.
We Buy Poles From 30’-140’

30’ Distribution Pole

140’ Transmission Pole
Pole Timber Characteristics
- 45 years and older
- Straight
- Well spaced limbs
- Free of defects
- No spike knots, scars or rot
- 12”-30” butt dia.
- Uniform taper
- Call if you need an evaluation

An average stand of timber might have 5-10% poles
An outstanding stand will have 30-40% poles
Pole Defects

Sucker Limb

Spike Knot-Included Bark
Tree Growth Defects

Sweep

Thin Sap-Need At Least 1” Of Sapwood
In current markets poles are worth approximately $200-$400 more than logs, depending on size, quality, and distance to mills.
Pole logging costs are generally higher than logs due to extra care required in handling.
45’-55’ poles are always in high demand.

Most log trucks can haul poles 55’ and shorter without the additional cost of a specialized pole truck.
- Long poles have the highest value
- Higher logging and hauling cost.
- Capturing the value requires

1) Getting them to the yard in one piece, without damage
2) A road built for long loads
Machine Falling Poles

-Most poles on the market are cut with a machine.

-Fast

-No man on ground. Safe

-Don’t get a good look at defects

-More handling with machines with potential damage to pole
Hand Falling And Bucking

Advantages
- Cutter can walk strip looking for stumps and broken ground to avoid.
- Cutter can see pole and defects as he works tree.
- Full manufacture of pole in brush
- Less handling
- Less damage

Disadvantages
- Good pole cutters are hard to find.
- Slower than machine
- Companies moving away from hand cutters on ground.
  dangerous job
Falling Damage

Visible Breakage

Internal breaks & driven knots can be hard to see in bark
Most poles produced on shovel, or cat sides with a processor making the pole
Machine Damage

- Grapples on shovels, cats and skidders
- Heeling rack on shovels
- Processor-wheels and knives
Landings need to be large enough to process, deck and load poles. Poles also produced on yarder and helicopter jobs. Can be tough to save poles on steep ground.
-Crane logging poles 120 feet and up in British Columbia.
  high value $

-Trees limbed and topped prior to removal
-Most poles on the market come off clearcut units.

-Every tree is harvested and has potential to be a pole.

-Clearcut ground is full of stumps with high potential for breakage.

-Trees are fell into open ground with nothing to slow them down.
Thinning-Pre-Pole

- Logging poles first before clearcutting a stand

- Main advantage is to fall poles into other trees to slow down the speed of tree and save the pole.
- Opportunity to design sales for high value poles

- This ODF sale removed 8 trees per acre in 85 year old timber

- Removed 65’-135’ poles

- Post harvest stand had 85 trees per acre

- Plan to manage residual stand for birds and wildlife

- Sold by ODF for $978.04/MBF in 2018
Pole Sale Post Harvest
- The straighter the road the better for hauling long poles
- If a low boy or long logger can make it, a specialized pole truck can get at least 90’ poles out.
- Tail sweep will be the limiting factor on the longest pole.
-Design crossings with
1) Long enough culvert
2) Wide enough road
3) Excavated banks for tail sweep
4) Remove trees for tail sweep & belly sweep

-Greater the turn radius the better

-100’ radius good rule of thumb
- 120’ poles
- Requires steer trailer
- Removal of trees on inside and outside of corner
- Excavate banks where necessary

Belly sweep and tail sweep in a corner
Planning and communication between roads and timber.

Short pipe (40’) limits road width through crossing.
-Switchback with elevation change
  120’ Poles

-Sharp Dips or humps can tear brake and air lines in half

-Avoid steep elevation changes in crossings and switch backs
Switchbacks And Corners

- Excavated nose of ridge and filled outside edges of road to increase turn radius
Trailer On It’s Side.

Road Was Too Narrow.

9’ Road width
- Excavated the nose of ridge and widened road surface for tail sweep.
- Slight slope of road to outside edge of curve helps trailer track better.
Poles are decked along the edge of road, parallel to the road.

Flat ground and wide roads make best landing locations.

Straight stretch and flatter the grade the better for loading.
Intersections-Tail Sweep

Avoid narrow 90 degree corners when building new roads

Build junctions of new spurs with as wide of a curve as possible
Highway Hazards - Tail Sweep

-Signs, poles and roundabouts
Highway Hazards

- Traffic
- Distracted Drivers
- Pilot Cars
For evaluation of poles and roads in Oregon

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone Number</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ben Johnson</td>
<td>541-729-2099</td>
<td>Oregon Resource Manager</td>
</tr>
<tr>
<td>Buck Williams</td>
<td>541-510-8789</td>
<td>Wilbur, Oregon</td>
</tr>
<tr>
<td>Will Pollock</td>
<td>503-857-3515</td>
<td>Brownsville, Oregon</td>
</tr>
<tr>
<td>Greg Roberson</td>
<td>541-255-5865</td>
<td>Sheridan and St Helens, Oregon</td>
</tr>
<tr>
<td>Nels Jensen</td>
<td>503-857-3609</td>
<td>Sheridan and Brownsville, Oregon</td>
</tr>
<tr>
<td>Kelly Evers</td>
<td>503-816-0633</td>
<td>Sheridan and St Helens, Oregon</td>
</tr>
<tr>
<td>Melynn Vandehey</td>
<td>971-813-9712</td>
<td>St Helens, Oregon and Curtis, WA</td>
</tr>
</tbody>
</table>
For evaluation of poles and roads in Washington

Larry Putnam 425-239-4157  Washington Resource Manager
Steve Knight 253-381-1907  Curtis and Rochester, WA
Matt Roth 253-886-2392  Curtis and Rochester, WA
MeLynn Vandehey 971-813-9712  Curtis, WA and St Helens, Oregon