

**Logging and Forest
Management in Montana:
The Old, the “Tough Go”, the New,
and the Astounding.**

Western States Land
Commissioners Association

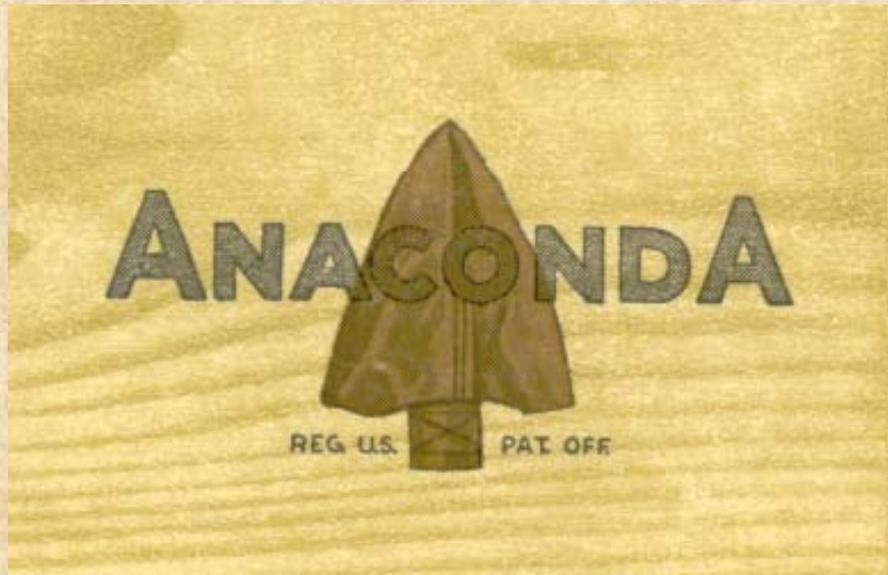
By Scott Kuehn

THE OLD

The first known sawmill in Montana was in Stevensville, about 20 miles south of Missoula at the St. Mary's Mission in 1845.

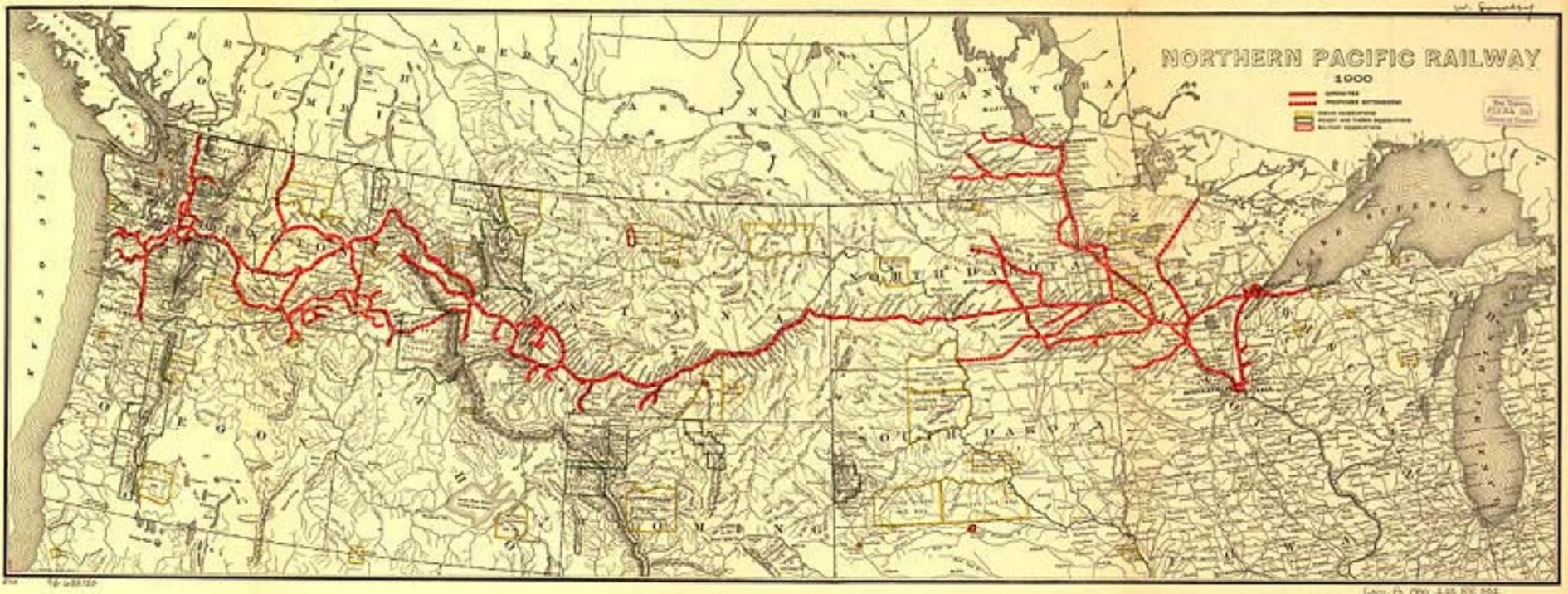
That's just 38 years after Lewis and Clark passed through the same area and 31 years before the battle of the Little Big Horn.

You can't talk about Montana's timber heritage without talking about two major players:



There were other small regional forest products companies: Western Lumber, J. Neils, F.H. Stoltze,

In 1864, Northern Pacific Railroad was granted twenty alternate sections per mile through Montana totaling 14,000,000. That's equivalent to the size of Massachusetts, New Jersey and Connecticut combined, just in Montana



In 1883, “The Montana Improvement Company” was formed to provide railroad ties, bridge beams and supplies for the Northern Pacific Railroad.

In 1886, the “Improvement Company” completed its first sawmill at the convergence of the Big Blackfoot and Clark River.



Through mergers, buyouts and to avoid prosecution for timber trespass on federal land, the Improvement Company becomes Blackfoot Milling and Manufacturing, and later the Anaconda Company owned by Copper King Marcus Daly.

In 1899 Marcus Daly acquires
3,000,000 acres of timberland
from Northern Pacific Railroad.



In 1910, the Western Lumber Company moves its mill from Lothrop Montana to Milltown, just across the river from the Anaconda Mill.



To this day, these two competing lumber mills separate town sites remain separate, each having a separate zip code and post office ½ mile away.

On February 22, 1889, the Enabling Act grants Montana sections 16 & 36 in every township, totaling 5,188,000.

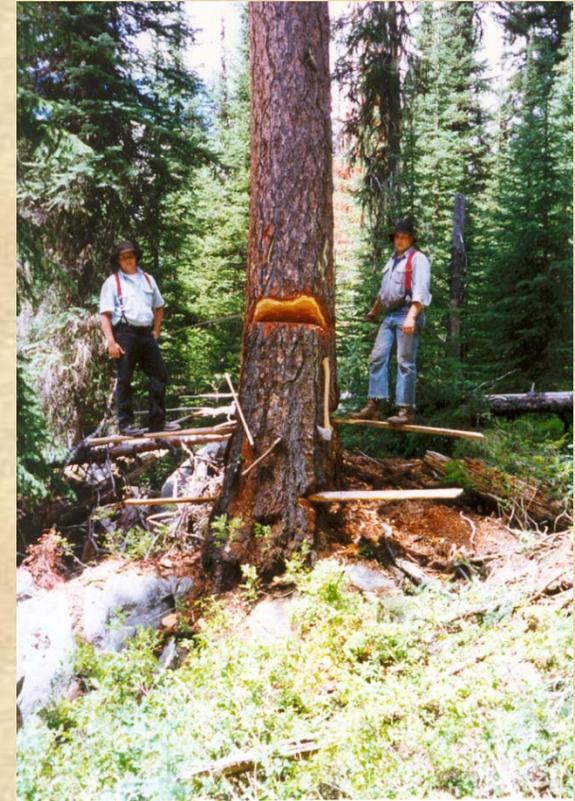
Today, Montana still manages 5.2 million acres of school trust lands

In 1913, the University of Montana School of Forestry is founded.

In 1927, Andreas Still, from Germany develops a portable gasoline powered chain saw



It will be another 25 years before the chain saw becomes practicable



**Rubber-man
falling partner**

In 1928, Anaconda Company purchases
Western Lumber (Across the river).
Anaconda ran the mill until 1932.



In 1946, Plum Creek Lumber, then owned by DC Dunham saws it's first log at it's new mill in Columbia Falls.

(Plum Creek Lumber was named after a small creek by Bemidji Minnesota where Dunham operated his first sawmill. This is the same stream that Laura Ingalls Wilder wrote about in her book: "On the banks of the Plum Creek")



1968: Northern Pacific Railroad buys Plum Creek Lumber Company



Anaconda Train re-load, Clearwater Junction,
just 2 miles West of DNRC's Sperry Grade Office

1970: Northern Pacific, Great Northern,
Pacific Coast Great Northern Pacific
and Burlington Lines merge to form
Burlington Northern Railroad.



1983: BN Timberlands merge with Plum Creek and is known as Plum Creek Timber.

1993: Plum Creek timber purchases 850,000 acres of timberland from Champion International and Stimson Lumber buys the Bonner mill complex

On June 6th, 2008, the last load of logs was delivered to the Bonner mill after 122 years in existence.



Amy Helena, now a
Montana DNRC forester

The Old meets the New

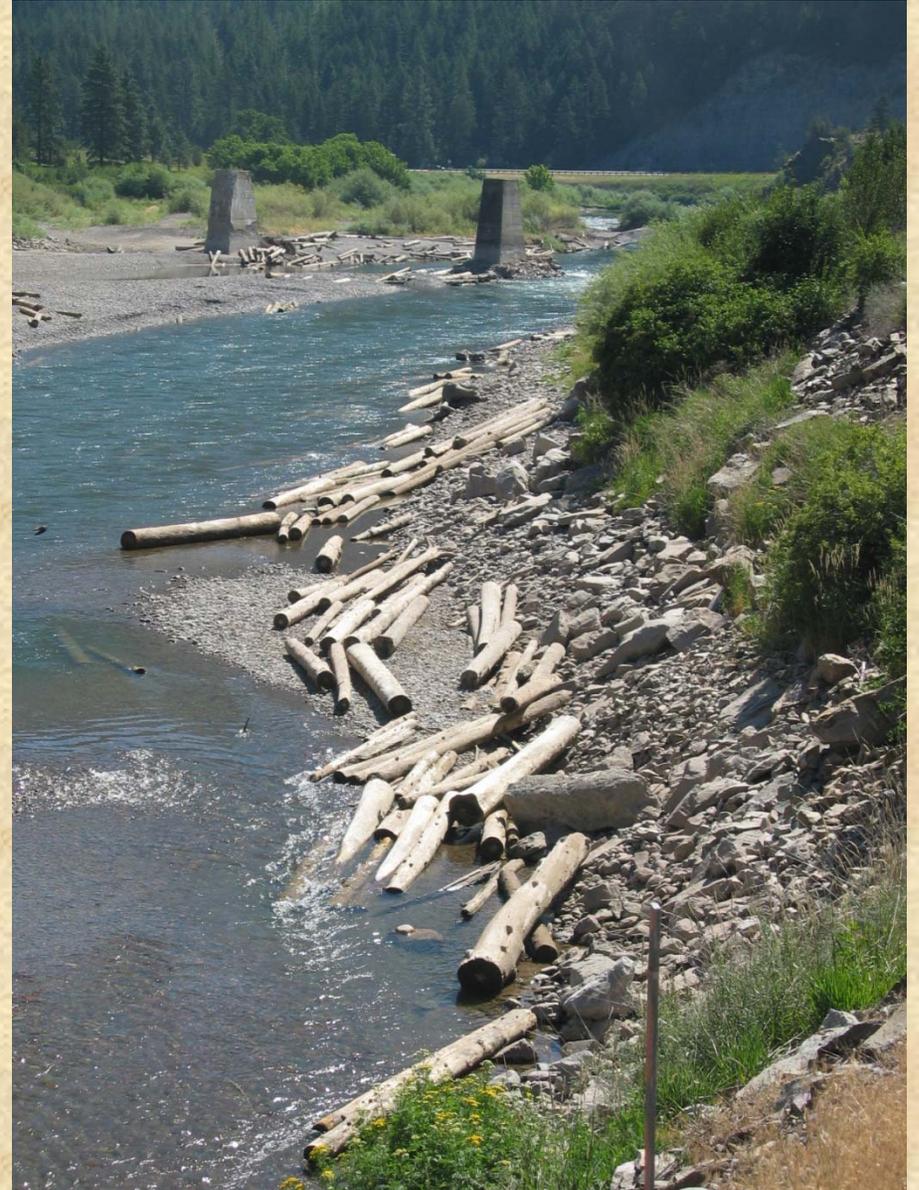


Blackfoot River, just upstream of the Bonner Mill

Blackfoot River Logs



The last log drive down the Blackfoot was in 1926. Though the river was used to store logs brought down by rail.





New addition to the MT DNRC Office using salvaged river logs



Underwater Salvage Logging



Sawfish, Triton Logging





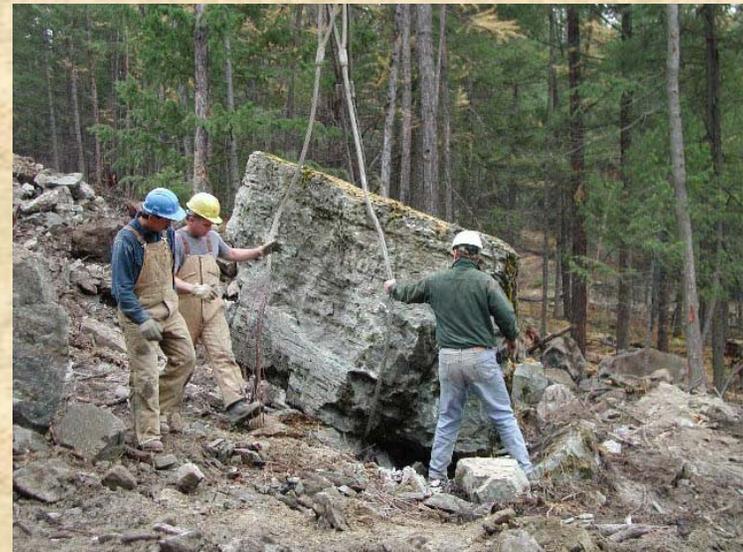




**These logs are considered
“Green” and called
“Re-discovered wood”**



Beauty Rock from the woods





The “Tough Go”







Reliance Co. Camp - 1916

Relief



**A lot of the wood cut
by Drag Saws was used
to fuel steam boilers**



4-man saw?



Electric Chain Saw





**Original “Scratcher” style tooth
resembled a crosscut saw**



**In 1947, 3d grade educated Joseph Buford Cox invented the modern
chain saw teeth by watching a wood borer.
The next year he started the Oregon Chain Company.**



• BUCKING (SAWING TO PROPER LENGTH) ON LANDING ANACONDA FOREST PRODUCTS 1965



YZ 40 Motocross engine
made into a Chain saw,
burning Alcohol and nitro.
Two cuts in a 20" Larch:
3.45 seconds



507 pound Chevy V8



A good team and a sharp cross-cut saw will out cut a (regular) chain saw. Winning time at Forestry Days in Missoula in a 20” Larch was 7.4 seconds





Skidding Logs (Horse/Oxen Power)

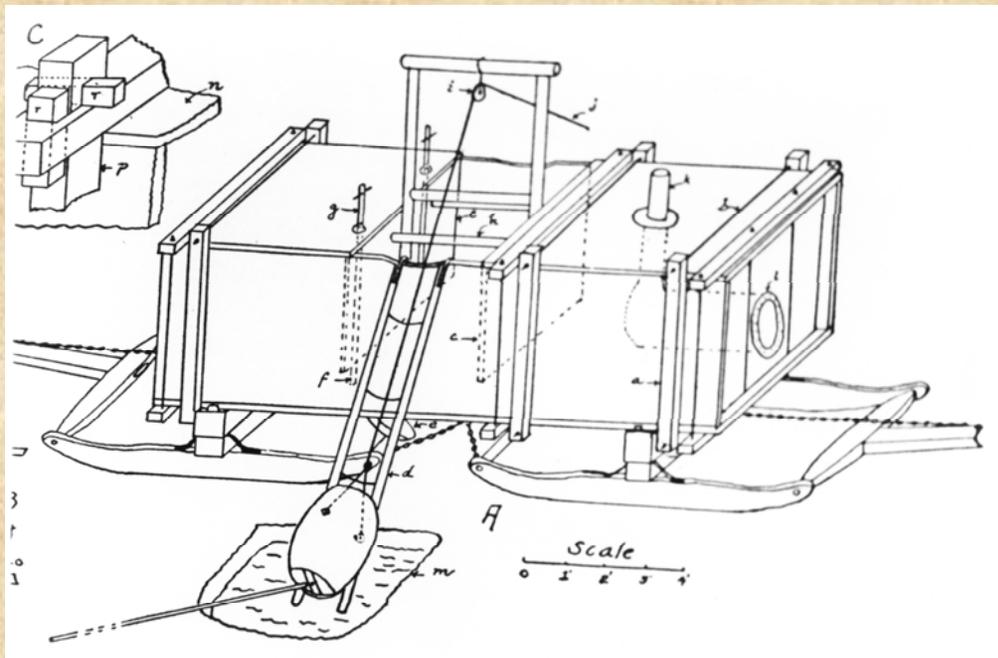
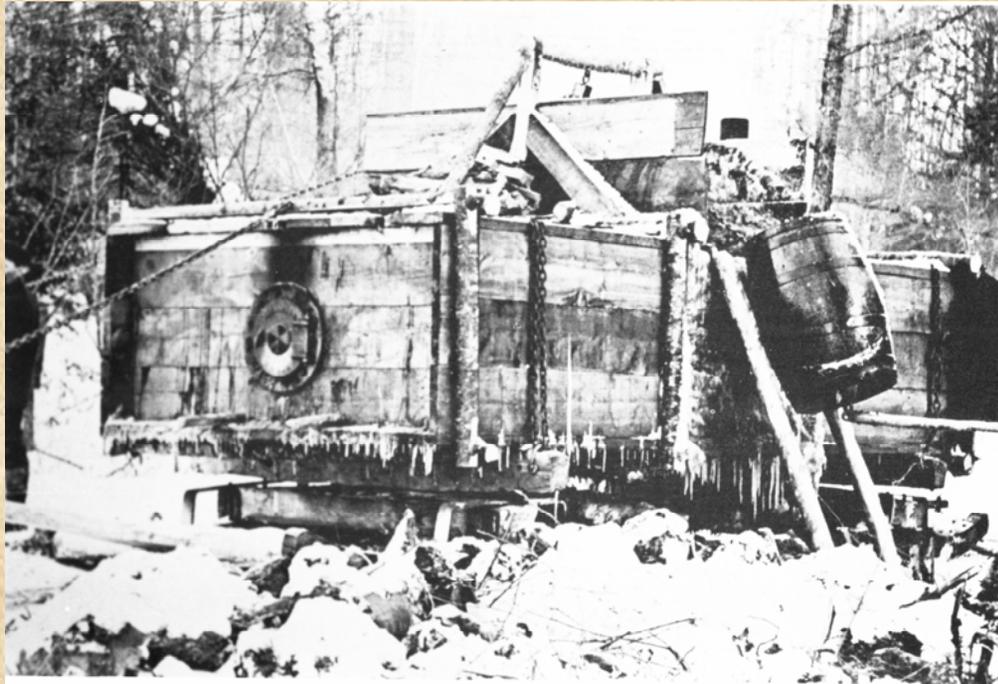












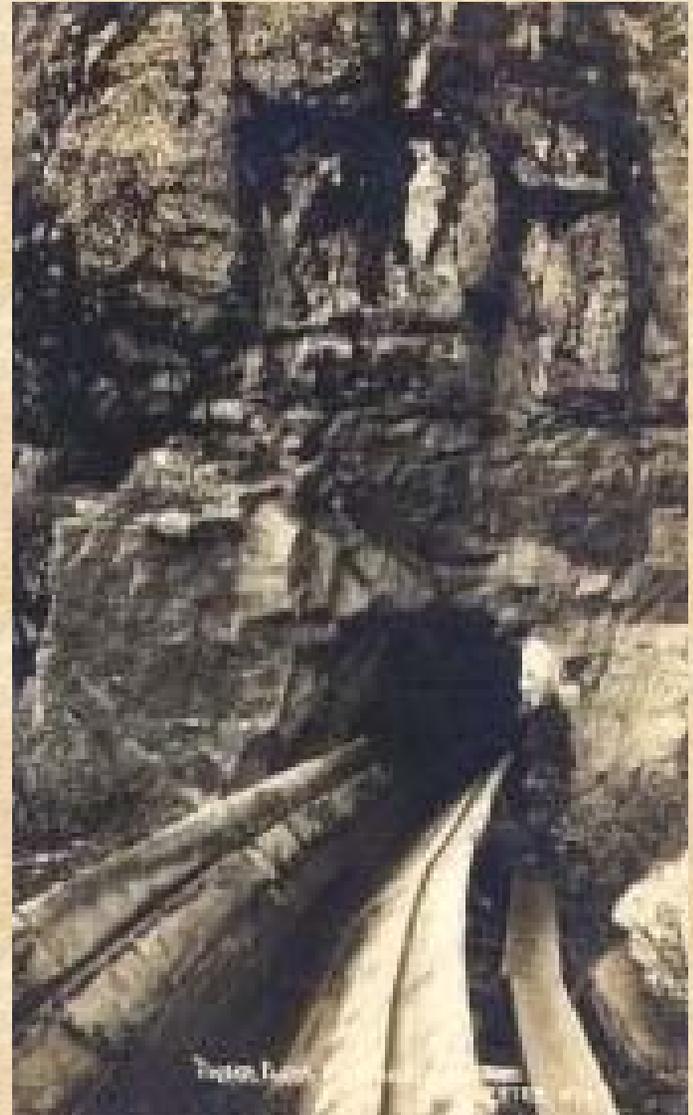
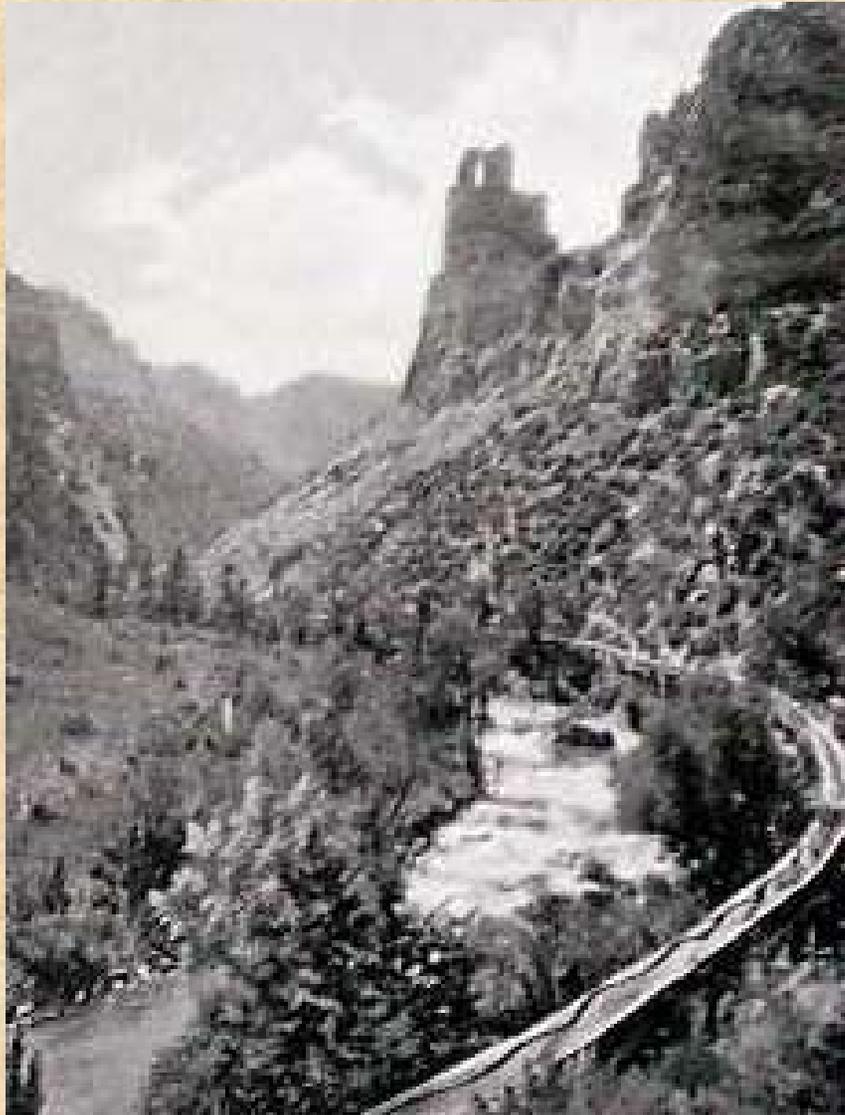


River Drives, aka River Pigs





The Bateau had a flat bottom and flared sides for stability



Flumes

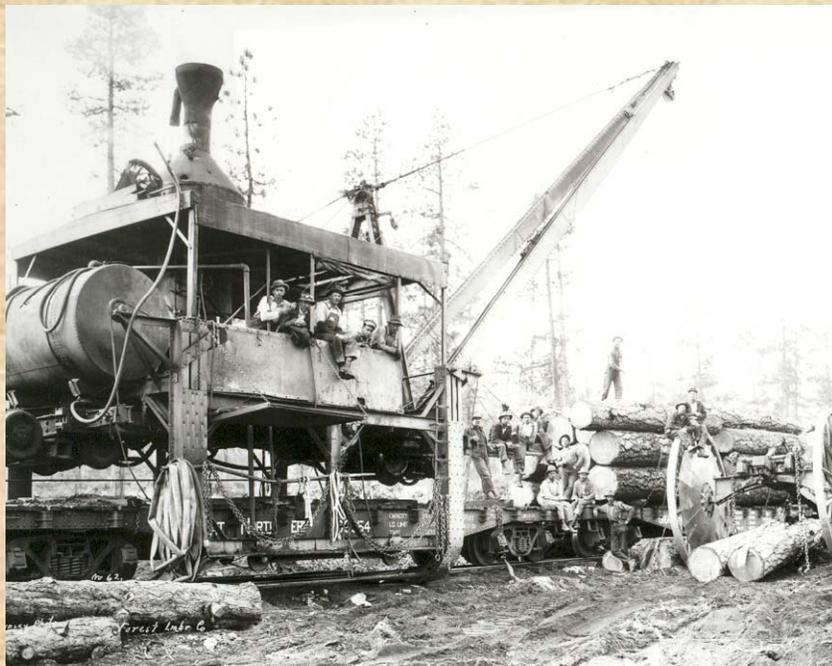
Steam age of logging





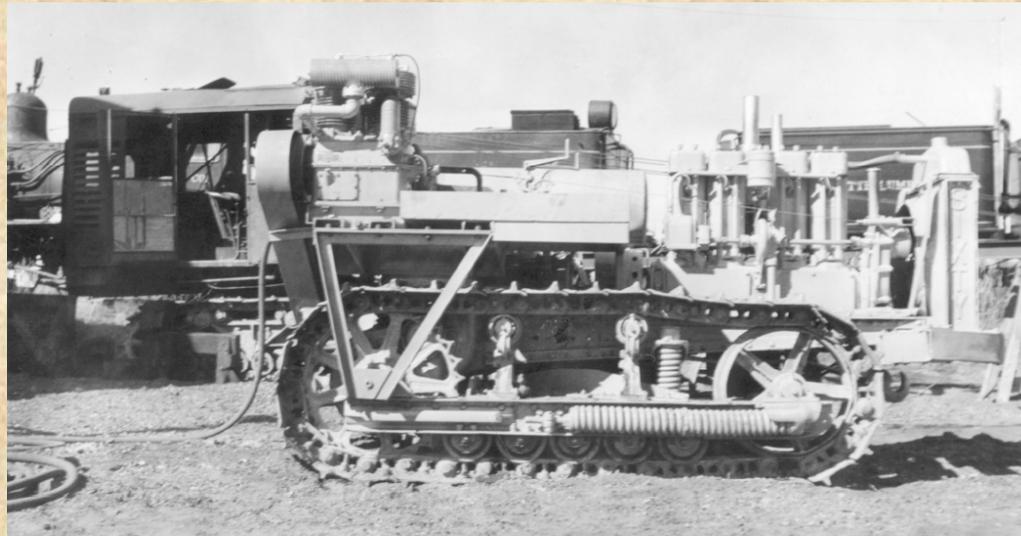


Lombard Engine

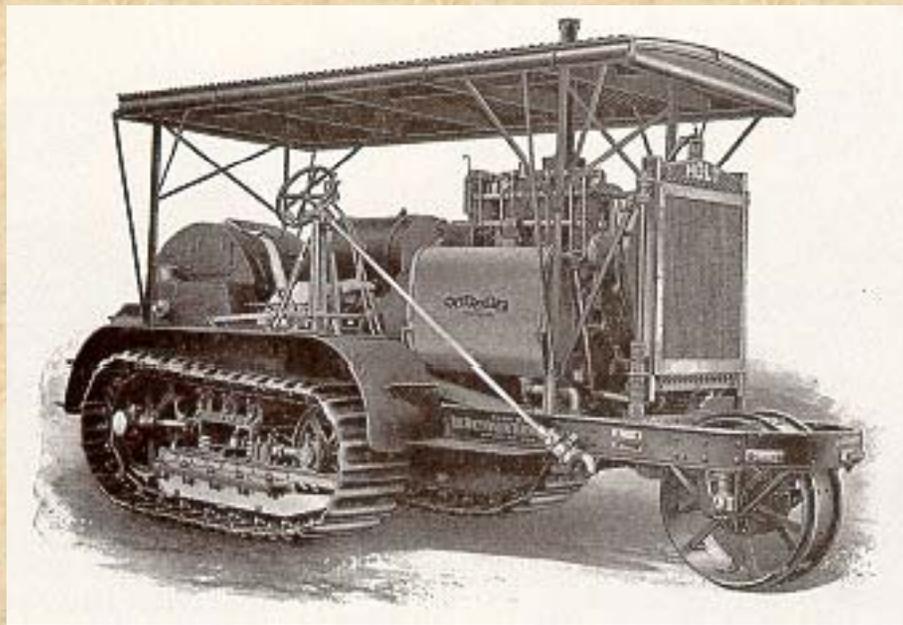


The McGiffert pulled empty rail cars from underneath, loaded the cars, then lowered it's own wheels and moved down the track

Internal Combustion Age of Logging



Circa 1916







**Arches
reduced the
power needed
to skid logs by
80%**

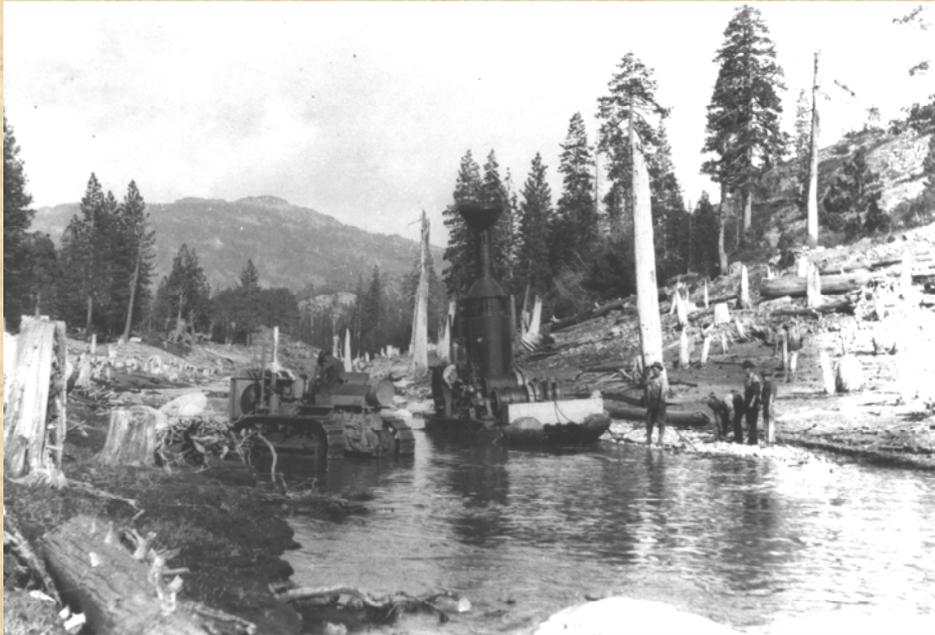




Crawler Tractors didn't have front blades until 1925, the same year Holt and Best merged to form Caterpillar.



Trivia: What was the color of Caterpillar tractors until 1931?



What SMZ?



**What weight
limit?**



Oops!



**Ovando
1975**



10 below and 13' of Snow, Spruce Creek, Lochsa, winter 95/96





The New

Small Log Harvesting









Snow Logging





“Excaline”



Trail







**New composite Rotors,
increased efficiency from
45% to 96%, with less
horsepower and lower
fuel costs**



5 Carbon Fiber Rotors at \$250,000 each. This is one they just dropped from 15' while changing blades.

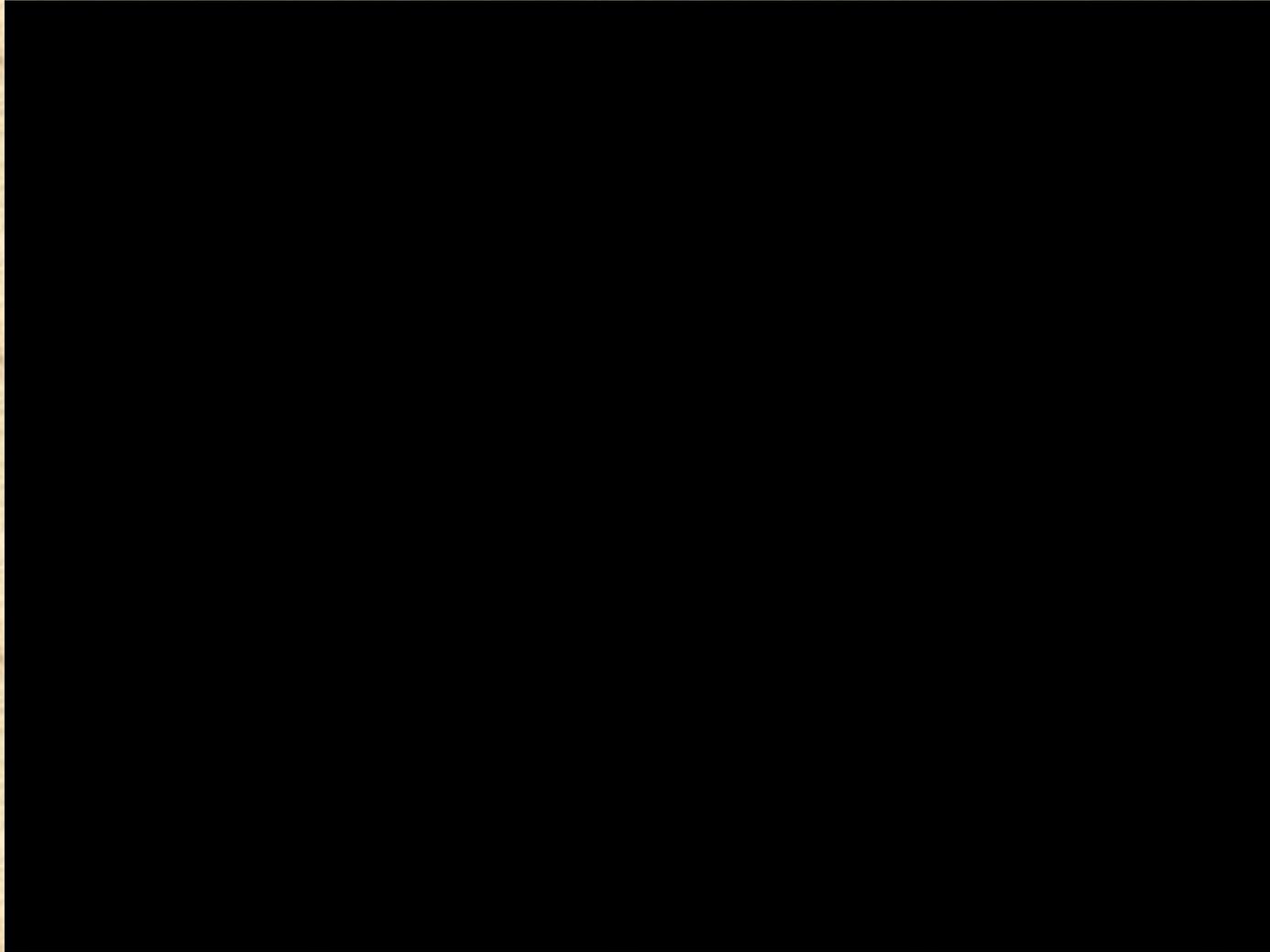
Harvester Video



Harvester Simulator to train employees



Simulator video





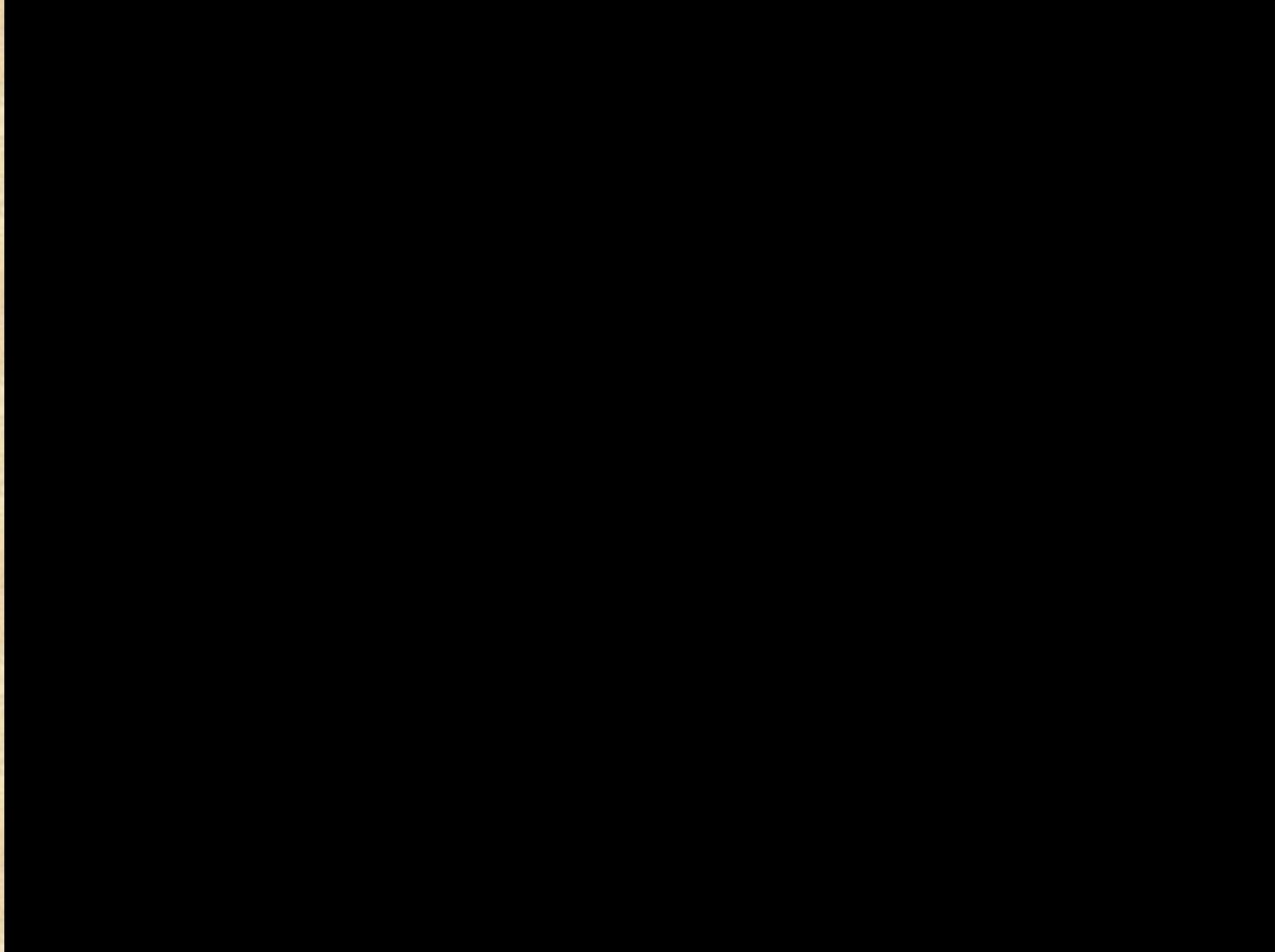


Masticators





Fecon 140 Masticator working on a DNRC Jumpstart Project in St. Regis





Feller Buncher Masticator





Biomass Removal



**Grinder for
Hog Fuel**



**Delimeter/Debarker
for clean chips**





From this



**Before treatment on Tricon's
Little Thompson Thinning Jumpstart 2 project**

Or this



To This, after treatment

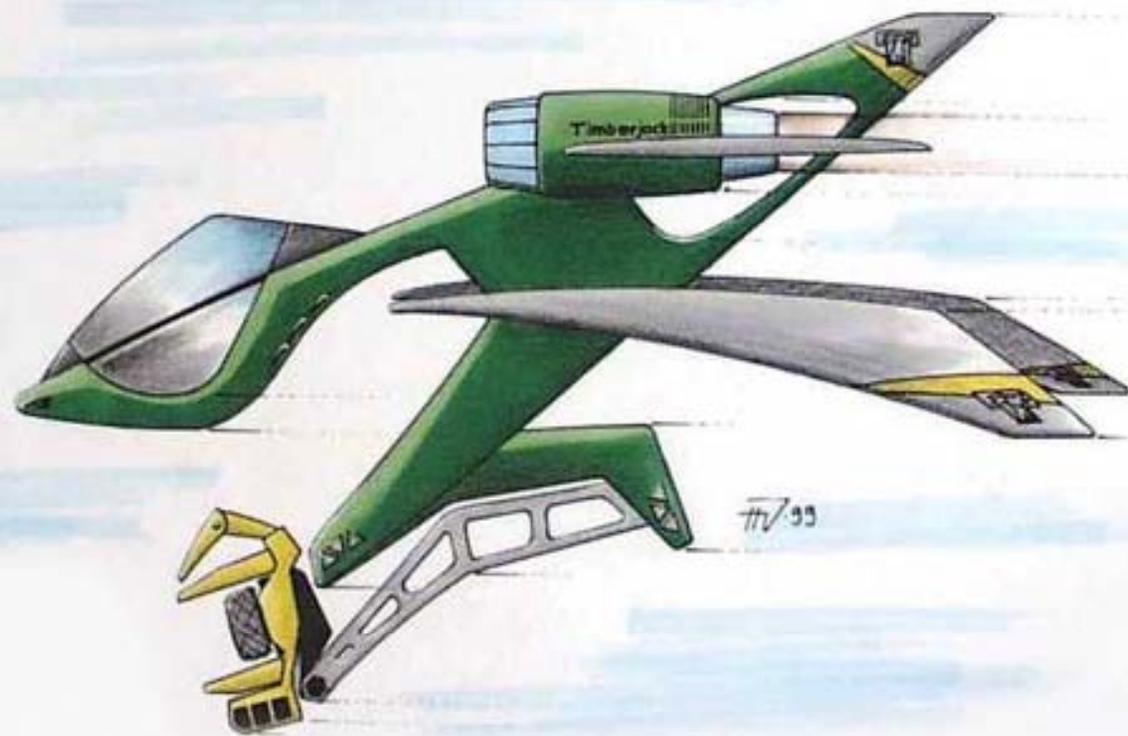


The Astounding Future of Logging?

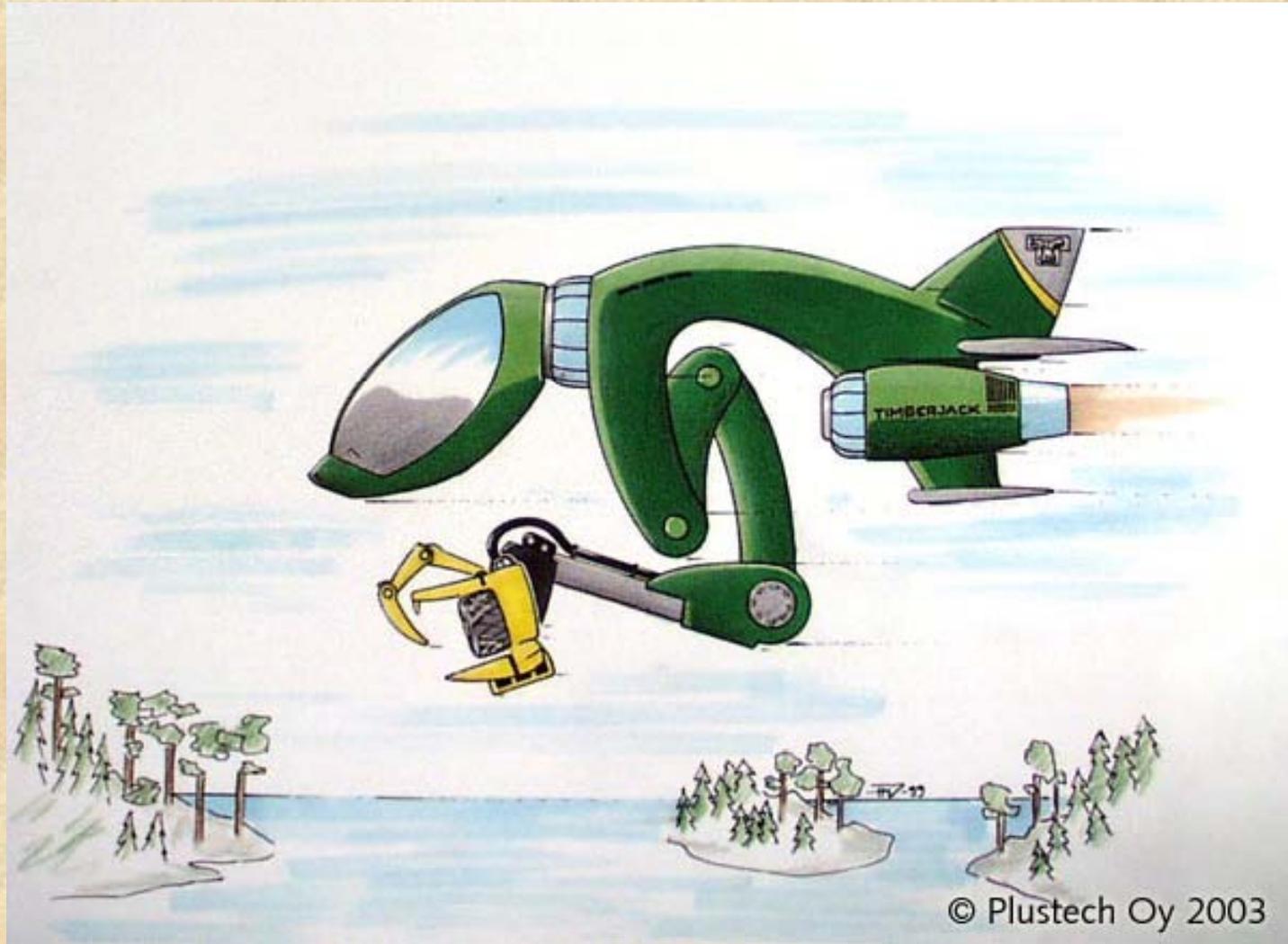




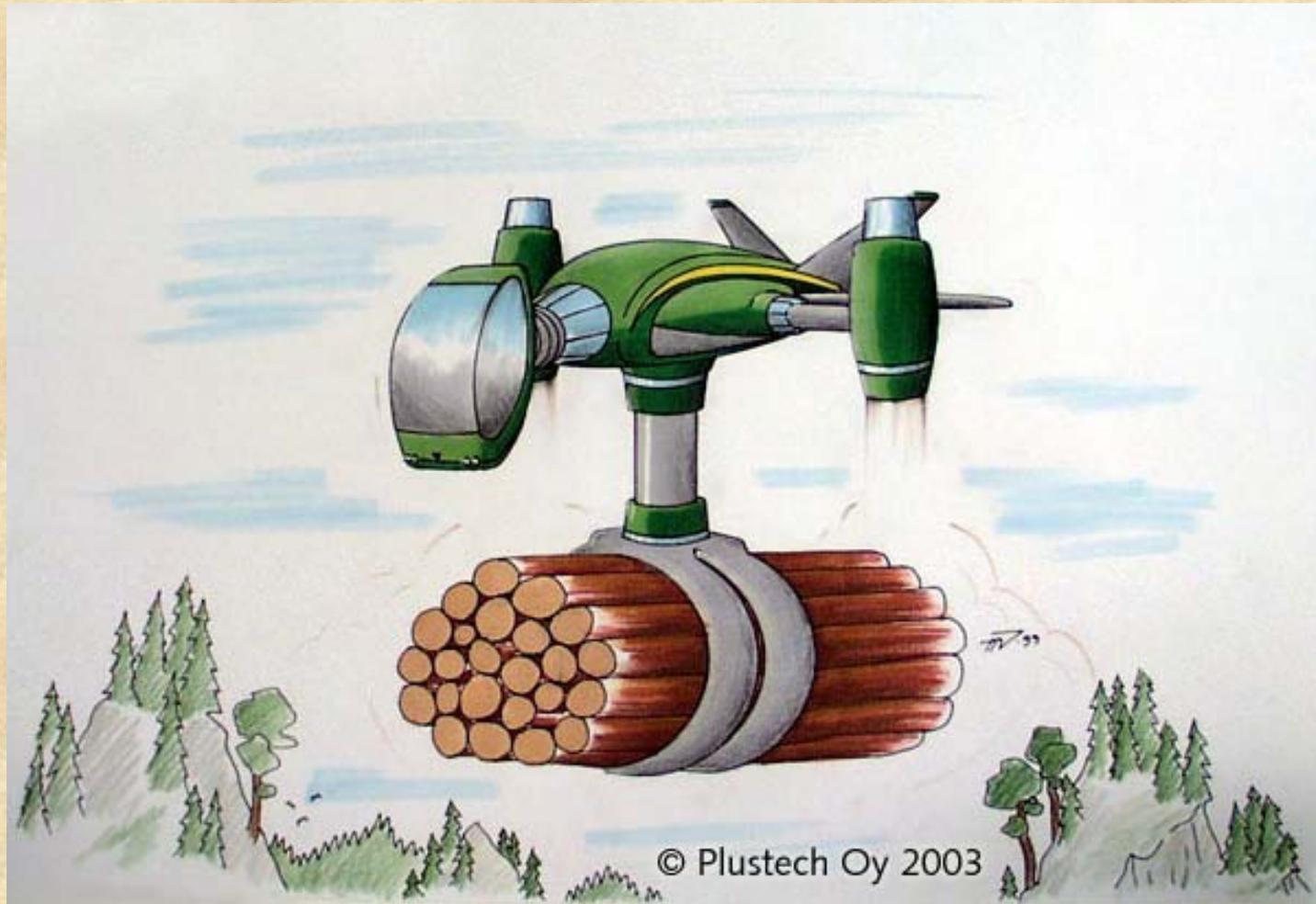
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Timberjack Slash Bundler



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The End



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**Day Job: Procurement Forester, Tricon Timber,
Rest of the time: Society of American Foresters Historical Chair
Visit our web site: www.forestrydays.com**