

Harvesting Forest Products

Harvest: It doesn't make any difference what the use of the wood will be; the process of moving the forest to the mill or to a location where it is needed is constantly changing. When settlers first came to Colorado in the 1800s, they had to provide for their own wood needs and lived close to the supply. This meant a lot of time spent doing hard physical labor with few tools. Gradually, the need for lumber for mine timbers, railroad ties, and building supplies developed into the timber industry involved in the logging, transportation and milling of wood. New equipment was invented for harvesting, advanced methods for transportation were used, and new products were created to meet the needs of a growing nation.

At one time, cutting timber required time, man-power and limited hand tools. Harvest was slow but inexpensive and had little impact on the environment. Today there are many costs to consider, starting with the cost of the trees. Timber is no longer "free" and companies must buy it from someone or own the land that grows the forest. Logging equipment that needs fewer people and less time has been invented, but this equipment is expensive to buy and operate and depends on fossil fuels.

Transporting timber has always been difficult. Logs are heavy, odd shapes. Most trees grow far from transportation routes. To solve this problem, machines have been designed to fell, skid, forward, stack, load, unload and carry the logs to their destination – for a cost.

Because of the costs associated with forest harvest, updated methods to use as much of the tree as possible are being discovered. Where solid wood products were once necessary, new laminated and "manufactured" wood products are filling the need. The use of biomass and increased recycling are creating new, profitable markets for what once was forest waste.

The Forest Products Laboratory¹ has been researching wood and wood uses for over a century. The "best use" of different types of wood were based on strength, flexibility, resistance to decay, tendency to splinter etc., and these standards are in use in today's wood industries. Many of the wood products we take for granted were developed and refined at this laboratory. Research continues to design new "wood products" that take advantage of every part of the tree.

Vocabulary

- Felling – removing or cutting the tree from stump
- Processing: Delimiting – removing branches
 - Topping – removing the skinny treetop down to minimum log diameter
 - Bucking – cutting the tree stem into log lengths
- Extraction (also skidding or forwarding) - removing the log from the woods to a landing or area where trucks can be loaded
- Loading – sorting and placing logs into a transport system like a truck, train, or ship
- Milling – cutting logs into boards and shaping wood
- Biomass – organic material (from a formerly living source), usually vegetative, in a given area

¹ <http://www.fpl.fs.fed.us/>