## SORTIN' IT OUT

# A GUIDE TO UNDERSTANDING FOREST PRODUCTS PART 1: PINE

#### BY BILLY RYE

Do you want to get the best price for your standing timber? Understanding the different forest products present on your property and their relative value is a must! Prices paid for standing timber vary greatly and some products may be worth 500% the value of others. To maximize timber sale revenue, it is vital that each log be sold for its "highest and best use." This process is known as "merchandizing" in the timber industry. It is unlikely that you will find this word in a dictionary so I will define it as "optimizing the total value of harvested timber by felling, cutting, sorting and transporting logs for their highest value."

Landowners may be confused by the terminology used in describing the types of forest products on their property as they aren't involved in the day-to-day aspects of the timber industry. This is further complicated by the fact that mill specifications and availability of new markets seem to always be in a state of change. In this two-part article, I will review some of the most common forest product markets in Alabama that are currently available. The first article will focus on pine products, while the second article will expose readers to the forest products which come from hardwood trees.



### **COMMON PINE PRODUCTS**

**Pine Sawtimber.** Trees that are in this product category are larger than 10 inches DBH (diameter at 4.5' above the ground) and are free of major defects such as branches, forks or diseased stem and can yield dimensional lumber.<sup>1</sup> Dimensional lumber refers to lumber that will be used as supports for building structures, such as 2x4s and 2x6s.<sup>2</sup> The length and minimum diameter will vary by mill and product sought. Some products will be cut and hauled tree length while some will be cut to a predetermined size at the harvesting site. Within this product category there are a couple of notable subcategories.

**Grade pine sawtimber.** High quality flooring, furniture, siding and some dimensional lumber require high quality wood. Mills producing these products demand logs which have tight and even grain, relatively free of defect including knots, and are long enough to make the desired product. Many of these mills do not purchase wood grown in a pine plantation as these trees often have lower quality wood than pine grown in natural stands.

Chip-n-saw. The Alabama Cooperative Extension Service defines this product class as mid-sized trees (larger than pulpwood, but smaller than sawtimber) that produce both dimensional lumber and chips.1 In general, dimensional lumber is sawn out of the center of the log and the wood from the outside slab and the treetop is chipped and sold to pine pulpwood mills. The quality of chip-n-saw may be less than that of grade pine sawtimber as it is primarily sold as treated lumber. Southern yellow pine accounts for 85% of all pressure-treated lumber manufactured in the US and dominates the international market for decking material.3 Many chip-n-saw mills are decreasing the maximum size wood which they accept, and landowners will have to shorten their traditional pine plantation rotations to avoid having wood that is too large to sell.

**Pulpwood.** A smaller class size of trees that are usually chipped and made into brown paper, cardboard, or oriented strand board (OSB). OSB is a panel product made of chips rather than the solid veneer used in plywood. Larger-diameter trees of lower quality may also be purchased as pulpwood by mills. Due to its lower value, this product is usually relegated to trees that are removed during pine thinning operations and treetops.

## PINE PRODUCTS AVAILABLE IN SOME MARKETS IN ALABAMA

Ply logs. Sometimes referred to as "peeler logs," this product is soaked, peeled, dried, glued and pressed to make plywood when it reaches the mill.<sup>2</sup> Plywood is used in construction, furniture, as pouring forms for concrete, and in the making of boats due to its superior strength. Only high-quality pines are used to make the veneer used in plywood. Trees must be tall, straight, have very little taper, have very few knots and large enough in diameter to meet mill specifications to be used for plywood. The value of the finished product and the scarcity of quality trees result in some of the highest stumpage prices paid for pine products.

**Poles.** Those trees that are tall, solid, straight, have very little taper, have very few knots and are large enough to be sold for poles. Pole timber may be used for utility poles, barn poles, piling for foundations and for square house piles.<sup>2</sup> The dimensions accepted for each product will vary by mill but in general, larger poles have the highest value. Unfortunately, very few trees within a stand of pines will meet the strict product specifications for most poles. The good news is that most landowners are happy with the price they receive for this product.

**Posts.** Southern yellow pine trees make excellent posts as they may be pressure treated to increase their longevity. This creates added value to landown-



"Merchandizing" is the term used in the timber industry for sorting forest products for their highest and best use. This process is critical to helping landowners get the most for their timber. In this picture, Bobby Collins Logqing, LLC has four different pine products sorted for transport to the mills.



Pictured is a load of pine that will be sold for posts. Notice that the ends of the logs are slightly larger than those of pulpwood. The benefit to the landowner is that the stumpage prices paid for this product are typically higher than those paid for the same size pulpwood.

ers with this market as the prices for posts are slightly higher than those received for pulpwood. Depending on the size specification of the mill, posts may displace from 1/4 to 1/3 of what would otherwise be sold as lower value pulpwood. However, landowners should be vigilant to make sure that trees which

make the specifications for higher value products such as chip-n-saw are properly merchandized.

**Pallets.** As the price for hardwood sawtimber has risen, many pallet manufacturers have turned to lower-cost pine logs as a replacement. While the prices paid for pallet grade pine are lower than chip-n-saw, they are generally higher than the prices paid for pulpwood. Like the market for posts, landowners will need to ensure that their higher-value products aren't being sold as pallet wood.

**Pellets.** Wood pellets are a fuel commonly used as an alternative to traditional fossil fuels. They are made from sawdust, wood chips, and wood scraps from furniture manufacturing.<sup>4</sup> Wood pellets are viewed as a sustainable and renewable energy source, crucial in reducing the demand for fossil fuels and reducing waste from other wood-using facilities. The wood chips used to make pellets may provide landowners with additional revenue as otherwise non-commercial wood can be used to make this product.

Recognizing the various forest products present on their property can help landowners better understand the relative value of their standing timber. However, most landowners will only sell timber a few times in their lifetime and are likely unfamiliar with the other aspects of the most important phase of

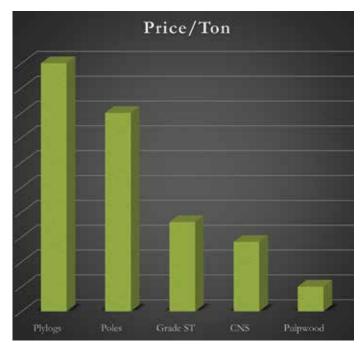


In this image, a logger gets the highest value for a landowner's timber by removing the cut-to-length logs from the base of trees this size. The tops are sold as pulpwood. Other trees that meet mill specifications are cut, transported, and sold as tree-length logs. (Photo courtesy: Tim Sharp Logging, LLC.)



Pictured is a load of tree-length pine pulpwood which is headed to the mill to become cardboard. The logger does an excellent job of loading all trees that meet the mill's specifications with very little waste. (Photo courtesy: ECB Logging, Inc.)

timber management. This is why I recommend that landowners use a consultant forester to represent them during the selling and harvesting of their timber. A consultant forester will serve as the agent for the landowner and will have certain fiduciary (legal)



Pine prices vary greatly by product, mill specifications and area. This graph demonstrates the wide variations of stumpage (standing timber) prices paid for the pine products on a timber sale that we coordinated.

responsibilities. Consultant foresters will help level the playing field by using their education, experience and expertise to help the landowner get the most for their timber and ensure their interests are protected during the process. When interviewing a consulting forester, be sure to ask for their Registered Forester License Number, some local references and a map of a few sales that the consultant has coordinated. By understanding the forest products present, making sure they are being sold for their highest and best value and by utilizing the services of a consultant forester, landowners are much more likely to get the best price for their standing timber and enjoy a successful timber sale.

#### References

- 1 https://www.aces.edu/blog/topics/forestry/ common-forestry-terms-for-the-forest-landowner/
- 2 https://timberupdate.com/timber-products/
- 3 https://www.lumber.com/blog/southern-yellow-pine-facts-grades-uses-industry-insights
- 4 https://woodpelletreview.org/how-are-wood-pellets-made/