

Where did your house grow?¹

From the SUNY College of Environmental Science and Forestry

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If your house is like most others in the United States, it was constructed in large part out of wood products. According to National Association of Home Builders (NAHB), the average 2,085 ft², single-family home can include 13,127 board feet of framing lumber alone. That is roughly equivalent to a 15,000-foot long two-by-four board. Add the plywood or oriented strand board (OSB) that covers the frame, the exterior siding, trusses, doors, trim, flooring, deck, cabinets and countertops, and it is clear that much of your house is made of wood, even if the builders used a lot of other materials like metal, concrete, and plastic.

Where did all that wood come from? In this age of globalization it is very likely that the lumber and other wood products that make up your house came from all over the world. It is also possible that the harvesting of the wood and manufacturing the products took place in different countries. Generally, the more processed a product is, the more difficult it is to determine exactly where the wood was grown. However, looking at the flow of wood products into and out of the United States provides some clues as to where these finished products were manufactured and where the wood for these products might have been grown.

The Frame

The frame and trusses of a house are most often made of softwood lumber sawn from pine, fir and spruce species. The United States is a huge producer of softwood lumber, milling over 26,200 billion board feet in 2003 and exporting over \$380 million worth each year. However, the U.S. also imports approximately \$4.5 billion worth of softwood lumber from Canada, accounting for 83% of total softwood lumber imports by value. That's over ten times as much as the U.S. exports to other countries. Another 13% of our total imports in this category come from Chile, Brazil, New Zealand, Germany and Sweden, collectively.

Sheathing

Once the frame of the house is complete, builders cover the frame with sheathing, which most often consists of plywood or oriented strand board (OSB). These two products can be made of either softwood or hardwood, depending on the manufacturer. Again, the U.S. manufactures and exports its share of these products. In 2003, the U.S. produced over 4,660 million board feet of OSB, but demand was almost double that. With minimal exports in this category, we import the difference from Canada, Ireland, Germany and other countries, though a significant amount of the European supply is made with wood from forests in Eastern Europe, Russia, and Africa. The U.S. imports softwood plywood primarily from Canada, Brazil and Chile. The raw logs and wood chips used to make these products are also often imported from other countries.

¹ <http://www.esf.edu/pubprog/house/default.htm>

Other Harvest Background for Teachers

Flooring and molding

While much of the wood flooring and molding used in homes is made from softwood grown in the U.S. and Canada, about 94% of flooring imports and 32% of molding imports are made from hardwoods, including maple, birch, beech and a variety of non-coniferous tropical species. Overall the U.S. imports most of its foreign-made hardwood flooring from Canada, China, Sweden, Indonesia and Brazil. Along with Malaysia, all of these countries except Sweden are also major sources of hardwood molding. But this example highlights the complexities of timber flow and international markets. The U.S. exports over \$190 million dollars' worth of hardwood logs to Canada each year. Some of this wood is processed and shipped back to the U.S. in the form of flooring and molding, indicating that although the finished product was imported from Canada, the trees were not necessarily grown there. Likewise, China is the largest supplier of imported softwood flooring, but manufacturers often import raw materials from other parts of Asia. Brazil and Chile provide the bulk of softwood molding imports, but manufacturers often use logs from countries throughout South America.

Other home building products

The U.S. exports about twice as much pressure-treated decking lumber as it imports; however, if you build a deck from imported pressure-treated wood, its origins can likely be traced to Canada, Honduras or Russia. While it is a major importer of U.S. hardwood veneers for furniture and other uses, Canada is the primary supplier of imported softwood siding for home building.

Because it has a large population and the highest wood consumption rates in the world, the United States is both a major producer and a major importer of wood products. Both public and private forests in the U.S. provide much of the wood we need, but for most categories of wood products, our consumption outpaces our production. Imports of wood products from around the world make up the difference. While this often means lower prices for a finished home, or cheaper products at the lumberyard, it also means that the wood you use can have economic and social impacts all over the world.