



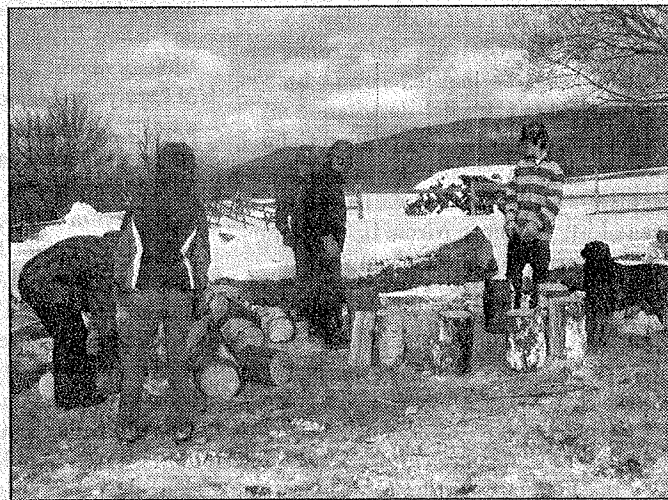
The Wood Life Cycle

Picture in your mind the cutting board you use every evening to chop dinner's ingredients, the birdfeeder you add seeds to in the chilly winter months, the benches that you rest on while searching for the perfect book to read next in the library, and the warmth that comes from your woodstove. Wood allows us to enjoy these simple needs and conveniences of everyday life. We took a week to explore and understand what the wood life cycle entails – ecologically, economically, and personally. Let us lead you on a tour of the wood life cycle through the lenses of a forester, a saw mill, an electric generating station, a landfill, and a reused building materials store.

Day One: Driving to the working site of a stand of trees, we struggle to emerge from the warmth of the vehicles with hardhats tightly secured and multiple layers of warm clothing to aid in bearing January's chilling air. Graham Leitner of Mad River Forestry met us with Biltmore stick in hand at the log landing of a current parcel he is logging. This is a bit of a different site from last week, when Bruce Hennessey of Maple Wind Farm did a horse logging demonstration with us in exchange for time spent splitting and stacking wood. "Forestry is a real traditional type of industry here in Vermont," Leitner proudly shared. A lot of people are involved in the harvesting process: land owner, forester, logger, and machine operator. Walking through the stand, Graham explained how "loggers help smaller trees grow healthy by allowing for the natural process of photosynthesizing to occur" through thinning larger, profitable trees. This keeps a forest strong ecologically, economically, and biodiversity-wise. Crunching our boots through the snow, we worked our way back to the landing, watched the skidder in action, and retreated to the heat of the vehicles.

Day Two: The snow was steadily falling as we pulled into Lamell Lumber Corporation

of Essex Junction. Kicking off the tour of this value-added products mill, we see several large, impressive machines in the saw mill process. The first preparatory step is to clean the log of all dirt and snow and then de-bark it. Next, a machine cuts the log into pre-determined



measurements of board length to add value to this natural resource. From the cutting process, the shavings and scraps are collected for the boiler on site, to sell as horse bedding, and to be sent off as a fuel source for the McNeil electric generation station (see day four). All parts of a log are useful to the right person.

Days Three and Four: From felling to milling, let's explore three possible end points for the wood life cycle: disposal, reuse, and recycled energy. To understand the linear option of disposal, we drive over the compacted, human-made hills of refuse garbage at the Moretown Landfill. With Camel's Hump on the horizon, garbage trucks were pulling in, and we watched a lot of wood product misfits create a new layer on the garbage mound. The Moretown Landfill is unique in that it not only takes the garbage of its neighboring communities, but

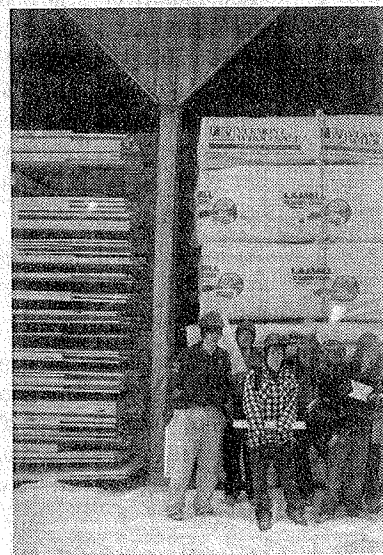
also harvests methane from the decomposing trash and transfers its energy to power the town of Waterbury.

Secondly, we learned about ReSOURCE's program ReBUILD, the Building Materials retail store, the deconstruction service, and the Waste-Not products that offer salvaged materials and creative reuse products for sale. Along with keeping useful household items from the landfill and reselling them at an affordable price, ReBUILD's Deconstruction Service is able to

recover between 60 to 80 percent of building waste from disposal in landfills. It is estimated that in just a year "ReBUILD helps prevent 56,000 lineal feet of lumber, 90 cabinets, 5,000 bricks, and 156 doors from ending their one-use life early."

Third and finally, we toured the Joseph C. McNeil Generating Station for the Burlington Electric Department to explore the option of wood fuel as energy. In watching train cars deliver wood chips from local suppliers such as Lamell Lumber Corporation, we were taught that using wood fuel helps provide a cost-effective fuel source that helps Vermont ecologically and economically. John Irving, McNeil Plant Manager, proudly shared that "seventy percent of the wood chips that fuel the McNeil Station are called whole-tree chips and come from low quality trees and harvest residues." The trees are cut, chipped, and transported to McNeil, "significantly reducing the volume of about 54,000 tons of wood waste going into the regional landfill," Irving stated. At full load, the plant can generate 50 megawatts of electricity – nearly enough for all of Burlington! Even with safety glasses on, the impact of this fact was visibly understood with great appreciation.

It is evident: we use natural resources, such as wood, in our day-to-day life. In this adventure of understanding, we took the steps in clarifying that the "forester cre-



Photos, clockwise from top left: skidder pulling logs out of the wood Plant in Burlington, VYCC team with finished lumber at Lamell splitting wood.

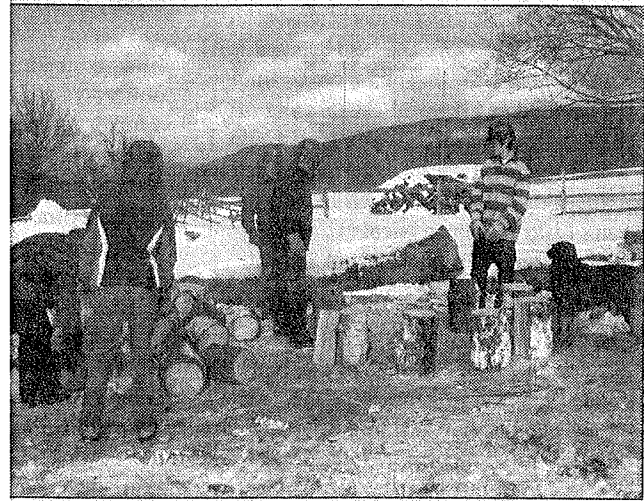
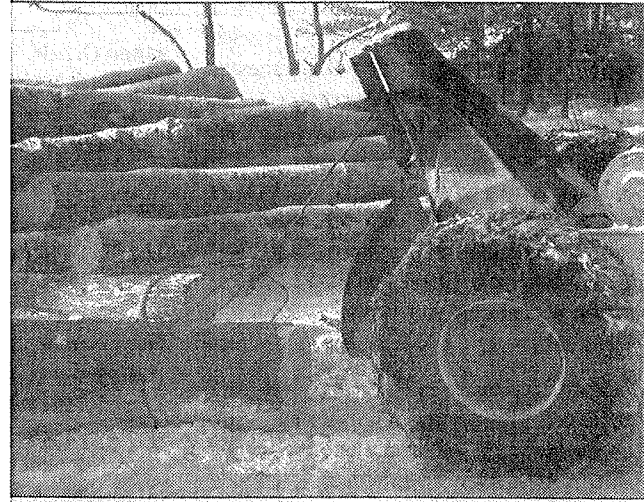
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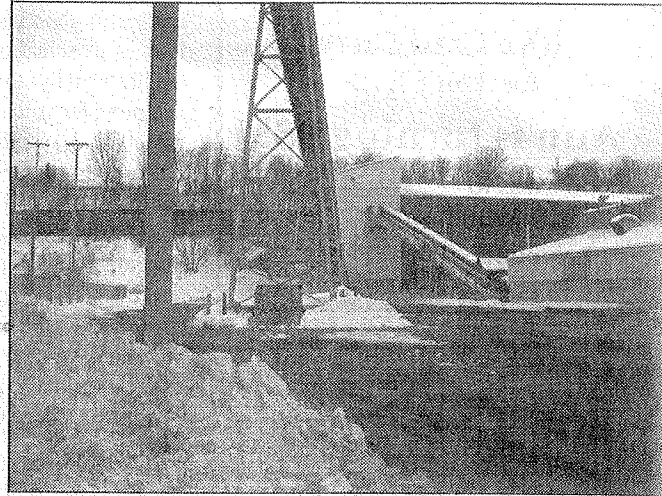
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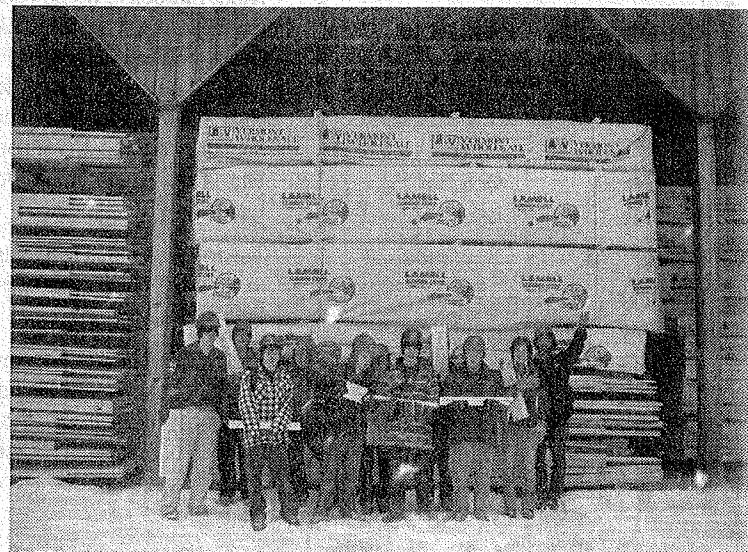
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ates a management prescription, and the logger carries out the management prescription," a Leitner explained. We exposed the linear and cyclical cycles. Now we are left with what to do with all of this information. Do you choose to recycle your newspapers, salvage a piece of wooden furniture from trash pick-up, and look into reusable containers instead of throwaway take-home boxes from your dinner? Remember to take time to look beyond the surface value of that wooden cutting board that sits on your counter.



The Mount Mansfield Union (MMU) School Crew is a unique work-based learning opportunity offered by the Vermont Youth Conservation Corps (VYCC). Students earn academic credit while completing local environmental conservation projects. Through a partnership with The Times Ink! the VYCC School Crews are responsible for writing an article each month for the newspaper. VYCC School Instructors guide the students as they learn and practice their research, communication, and writing skills. The MMU crew is one of four VYCC School Crew based throughout the state.



Photos, clockwise from top left: skidder pulling logs out of the woods, the chip station at the McNeil Generating Plant in Burlington, VYCC team with finished lumber at Lamell Lumber in Essex Junction, and cutting and splitting wood.