

village view

by Andrea Leonard

Part I

Have you ever wondered what happens to the van-loads of newspapers we keep accumulating at the Town Disposal area? Have you secretly suspected the effort is just one more boondoggle and not worth the effort?

Let's see what the paper industry is doing with the newspapers and magazines we save and recycle. First, we sell it by the town. Recent prices for newspapers and magazines range from \$8 to \$35 delivered to the packer's door here in New England. The price depends on the kind of paper and what's been printed on it.

At a paper company's recycling plant the waste paper is washed to remove ink and other impurities. What's left is pulp. From it is made paper stock to provide the news media with the necessary material to deliver your daily paper to your door. Some used pulp is combined with virgin pulp for other paper products.

Cleaning each ton of recycled paper requires 14,000 gallons of hot water, a large expenditure of two precious resources: water and energy.

Recently a new \$3,000,000 de-inking system was put to work at the Kalamazoo, Michigan, plant of Georgia-Pacific Corp. The system is a first in the nation and transforms once unusable waste paper into high-quality printing papers with substantial savings in energy and water; furthermore, it can and does reduce environmental problems.

Using multiple-clarifier flotation techniques, and with a capacity of 33,000 tons annually, recycled fibers are blended with various amounts of virgin fiber to meet paper specifications for printing everything from books to stamps.

In addition to putting a dent in the amount of solid waste landing in the dumps and reducing the need for new wood fiber from trees to make paper, the system uses only 3,000 gallons of water per ton of cleaned fiber; it uses water 60 degrees cooler than the standard systems in common use.

Instead of throwing away heated water for each new batch to be washed, the system recycles its own hot water, cutting both energy costs and pollution. When additional water is needed, it draws already heated water from the paper machine, thus conserving even more energy, the company reports.

The de-inking process removes impurities ranging from ink, varnish and lacquer to staples, binding tape, glue, thread and even plastics. Some impurities immune to standard washing processes are removed by the new multiple-clarifier system; this results in more high-quality used fiber which is used for manufacturing white and colored fine papers.

Why is this important to us? Paper company executives report consumption of newsprint alone will grow between 4% and 5% in 1977. If the consumption rate remains steady, twenty years from now the country will use newsprint at double the rate of today.

What is most paper made from? Trees. What good are trees? Let's see. What do we use more and more of in our homes and daily lives instead of substitute resources we have less and less of?

What products are durable, yet disposable; plentiful, yet recyclable? And what products are self-renewable?

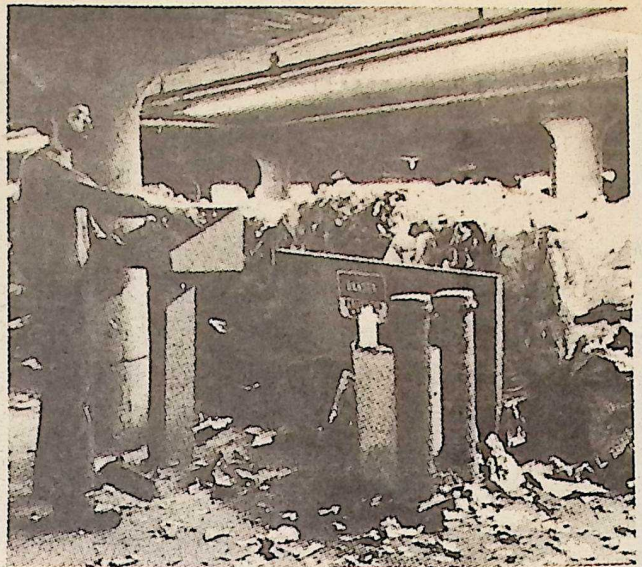
Forest products. Trees.

Consider the impact lumber, paper, and other forest products have on the quality of your life. Although nearly everything else has changed dramatically since our founding fathers settled in log cabins, our homes are still basically a product of trees.

The typical single-family home uses nearly 11,000 board feet of lumber. Pine (and not the top-grade of pine either) is selling for over a dollar a board-foot. Finer woods are even more expensive. During construction the typical single-family home uses nearly 5,000 square feet of plywood.

Wood is preferred by homebuilders and buyers because it is strong, versatile, has natural insulating characteristics, is easily worked, and has the capacity to cushion stress and strain.

And wood is beautiful.



The conveyor belt is filled with used paper. Before it arrived at the plant, it was solid waste. Here it will be recycled and become bright white printing paper. It is raw material for a recycling system being used by Georgia Pacific Corp. at its Kalamazoo, Michigan, plant to put another 33,000-ton annual dent in solid waste, save energy and cut pollution.

Wood is used, more and more, for siding, attached decks and patios, as well as for massive, sawn-textured exposed ceiling beams to help harmonize the interior of a home with the trees, shrubs and other plant life outdoors.

More important than any other feature, however, wood is a renewable resource. In this population-exploding, shortage-prone, energy-starved era, wood's importance to each of us will become clearer in coming years.

Trees can be planted, grown and harvested; then they can be planted, grown and harvested again. And again, in an endless cycle of renewability. Coal, iron, bauxite, gas and oil resources, once used, are gone forever.

Metal and fossil fuel resources are limited; we're fast depleting those meager supplies that are left. Wood, however, is not only renewable but expandable as well. In a well-managed forest more wood can be grown, and grown faster, than nature can grow on its own. Today more trees are growing in this nation than are being harvested.

Trees use only the energy of the sun to grow. Forests hold topsoil and water where plants and animals, including man, can get it when they need it. The first step to a desert is the loss of trees.

It takes far less energy to produce wood building products than metal or other materials; furthermore, wood is the best insulator of all structural building materials; therefore, less energy is needed to heat and cool a wooden building.

Of all major raw material resources, only wood is biodegradable. Since it breaks down into basic components naturally, wood eliminates the energy drain required for disposal of inorganic materials. Concrete, bricks, glass, aluminum and plastics may be buried for hundreds of years. When dug up they are the same material they were when they went into the ground.

Wood rots quickly when buried; it becomes humus first, then earth.

The energy shortage is already affecting each of us. Whether your concern is last winter's home heating bill or the rising costs of transportation, at the root of both is the energy shortage.

People everywhere are recognizing the seriousness of the situation; they are driving less, doubling up more; they are combining errands and making one trip instead of four; at least one building contractor in town has installed two-way radios in his trucks to save trips; the equipment pays for itself in lower gasoline bills.

Next week we'll look more closely at the forest products industry, and other ways we save money using wood instead of the alternate building materials.