

DOVETAIL COMMENTARY

Sustainable Forests: Are we there yet?

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Over the past 15 years significant strides have been made at both ends of the wood products channel: in the forest with certified forestry improving forest management practices, and in the marketplace with a growing number of well-defined green purchasing guidelines and certification programs. There is no question these developments have made a difference in both the forests and in the stores. So, a relevant question is, are we there yet? Have we achieved sufficient progress to make the concept of sustainability, sustainable? One approach to answering this question is to look at what is going on in the US today that impacts the future of forests and forestry within our borders.

The total area of US forests has been roughly stable for over 60 years, with forestland ownership roughly shared by three parties: the public, private individuals, and the industrial sector. In light of the significant amount of real estate development over the past few decades many people are quite surprised by this stability in the number of total acres. Key to understanding this situation is recognition that losses of forestland to highways, power lines and real estate development in some regions of the country are being offset by recovery of unused agricultural lands into forests in others, and particularly in the eastern U.S. Also key to understanding this situation is recognition that the term “recovery” here is quite important, as it recognizes that much of our current agricultural land was once covered in timber.

In reality, from the time of early settlement right up until the early part of the twentieth century the area of forestland in the U.S. decreased at a pretty consistent rate of 2.1 acres converted per individual added the population. In general this forestland was converted to agricultural uses. Then in the early 1900s, after almost three hundred years of steady losses, forest acreage leveled off at or near its current levels despite continuing population growth. This abrupt change has been attributed to a number of factors; key among them were the advent of the tractor (that replaced large numbers of draft animals requiring vast areas for grazing) and commercial use of fertilizers – both were innovations that reduced direct pressures on forests but both also required significant inputs of petroleum products. Today, demand for energy again threatens to have a dramatic affect on forests – but this time it threatens to increase conversion and forest losses.

There is tremendous interest today in using bio-based materials as a supplement or replacement for current energy supplies. The percentage of the U.S. corn crop that is devoted to production of ethanol is steadily rising, raising the possibility of a reversal of a decades-long trend of reversion of agricultural land back to forest. Now there are discussions about increasing the use of wood for energy production, including liquid fuels. Like many current and emerging wood products, such as paper and engineered

wood products, the production of energy products does not require large trees as raw material. Thus discussions are also increasingly focused on tree plantations of fast-growing species and short rotation management practices. These plantations have a greater similarity to cornfields in terms of economic inputs and management programs than they do to diversified forests.

The point of all this is to simply recognize that there are no silver bullets when it comes to attempts to address complex environmental problems, as represented by the case in point of energy use. Converting from oil to any other extracted product, even one that is renewable, will have significant implications. In this case, switching from oil to corn or even wood will still have significant impacts, and not all those impacts are obvious up front. The potential conversion of forests to farmland, or of forests to highly managed plantations is only one example.

In this month's article about oil usage we talk about the need to truly consider our consumption of oil regardless of whether or not global warming is an issue. The impacts of this usage go well beyond any single impact or issue, even one as dramatic as global warming. It really could truly be said that we, as a nation, need to take a look at consumption in general for these same reasons. Every solution has its problems! In the 1970s and 1980s many utility companies realized it was easier and cheaper to fund conservation behaviors than it was to build new electrical generation capacity. This is no less true today.

As a nation, and globally as the human species, we have consistently demonstrated that we can make a major difference in the world when we put our minds to it. Waterless urinals, cars that get 50 or even 100 miles per gallon, motion-activated lights, low-voltage lighting, are all examples of that ingenuity, and the list is getting longer every day. For example, Italian scientists have recently introduced cement building materials that can be used the same as standard materials but that have the unique ability to chemically convert the most potent air pollutants to less harmful substances.

In our view, we are at a point in history in which serious consideration needs to be given to fundamental, rather than incremental, change in many of our behaviors that impact the environment. With this in mind, it is increasingly evident that relying exclusively on the activities of individuals is not the best or most timely solution. There is an argument to be made that the only way a major behavioral change can be made (and the way it is being implemented in most countries) is through leadership within the national government through the use of regulation, incentives, or penalties that serve to set a standard as well as a level playing field for everyone involved.

We need the will to change and the resolve to stop thinking about incremental improvements if we are to ever resolve complex environmental problems. What is needed is a clear national vision and commitment to behave differently.

So the answer to the original question is no, we are not yet on a path to sustainable forestry. We have great knowledge and plans on how to manage forests sustainably.

But without a national vision we are still only talking about incremental and fragile improvements. Our plans are valuable only as long as forests remainforests.

Dr. Jeff Howe

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