

The Forestry Source

News for forest resource professionals published by the Society of American Foresters

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IN THIS ISSUE

2011 SAF Leadership Guide

The SAF Leadership Guide appears annually in *The Forestry Source* so that the Society's members can more readily contact SAF leaders and representatives. Contained herein are the members of the SAF Council, and the chairs of SAF task forces and committees, state societies, and working groups. **Page 8.**

First annual NESAF-NY student conclave a success

On the weekend of October 15–17, 2010, forestry students from Paul Smith's College, the University of Maine, and the University of Connecticut gathered in Petersham, Massachusetts, at the 2010 New England SAF (NESAF)–New York Student Conclave to meet and discuss the state of their SAF student chapters. **Page 10.**

New insecticide approved for pest control in conifers and hardwoods

In December, the Environmental Protection Agency approved the use of emamectin benzoate for the "control of mature and immature arthropod pests of deciduous, coniferous, and palm trees." **Page 12.**

Field Tech: Safety gear can save your life—if you use it

According to the Centers for Disease Control and Prevention, every year about 36,000 people are treated in hospital emergency rooms for injuries from using chainsaws. In 1999, the US Consumer Product Safety Commission put the number at more than 28,500. **Page 13.**

Here's how to identify southern pine, pine engraver, and Ips beetles

When prolonged drought occurs in the east Texas piney woods, an increase in Ips, or pine engraver, beetle activity is likely to occur. **Page 14.**

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Timberland Ownership: A Sound Future Investment

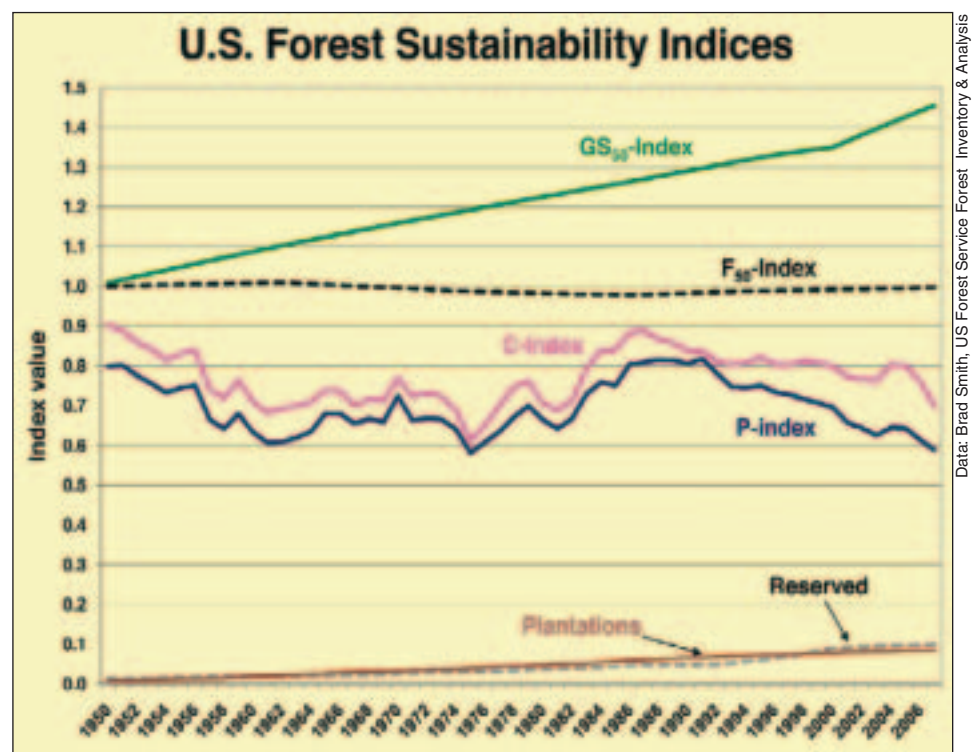
A Conversation with J. Brian Fiocco, Author of The Timberland Blog

By Steve Wilent

For US timberland owners, it is fair to say that the last decade has been tumultuous. Integrated forest products companies such as International Paper, Georgia Pacific, and Champion International sold most or all of their holdings to timberland investment management organizations (TIMOs), real estate investment trusts (REITs), and other investors. Transactions peaked in 2007, when more than seven million acres changed hands. See "Merrill Lynch: Investors Bullish on Timberland," November 2007; and "Timberland: A Safe Haven in a Global Financial Crisis?" November 2008.

As the nation and the world recover, slowly, from the financial crisis, many investors continue to view timberland as a safe and sound investment. Nonetheless, many questions remain about the strength and endurance of future economic growth, energy resources, global trade, and other factors. I recently discussed these issues with J. Brian Fiocco, author of *The Timberland Blog* (<http://thetimberlandblog.blogspot.com>) and owner of Timberland Strategies LLC (www.timberlandstrategies.com), a consultancy focusing on timberland valuation, sales, and resource analysis, including the impact of the use of woody biomass for energy production

(See "Timberland" page 3)



The GS₅₀-Index is the cumulative accrual factor for growing stock volume since base year 1950. The F₅₀-Index is the change in total forest area since base year 1950. The P-Index is the proportion of annual net growth needed to provide for domestic timber production in a given year. The C-Index is the proportion of annual net growth that would be needed to provide for domestic wood-products consumption in a given year. The gap between the C-Index and P-Index represents imports. Reserved is the reserved forest area as a proportion of total forest area for a given year since 1950. Plantations is the plantation area in the United States as a proportion of total forest area for a given year since 1950.

Forest Service Marks Weeks Act Centennial

One hundred years ago, on March 1, 1911, Congress passed the Weeks Act, sometimes called the Weeks Law, which authorized the secretary of agriculture, and, by extension, the US Forest Service, to "purchase such forested, cut-over, or denuded lands within the watersheds of navigable streams, as in his judgment may be necessary to the regulation of

the flow of navigable streams or for the production of timber." Over the next five decades, the agency did so, primarily in the eastern United States, thus establishing 52 national forests encompassing more than 25 million acres in 26 eastern states. Much of the land had been so degraded that it was

(See "Centennial" page 4)



The Weeks Act authorized the US Forest Service to purchase degraded lands, such as this logged and burned-over area in the Allegheny National Forest in Pennsylvania, shown as it was in 1926.

Big Changes in Federal Income and Estate Tax Laws

By William L. Hoover

The focus on long-term forest and timber management makes it hard to tolerate constant changes in tax rules, but you'd better get used to it. Forestry professionals can expect even more frequent changes in tax law as Congress and the Obama administration decide what to do about provisions ending in 2012 and more broadly adjust tax policy through what may turn out to be the largest fundamental change in the economy since the post-World War II era. How we participate in this process is debatable. For the last several rounds of changes, we've at least retained our forestry-specific provisions. My position is that it's not the right time to ask for more. Those working closely with Congress are best positioned to determine how vocal we should be in defending our provisions. But the talk about lowering corporate and business tax rates by eliminating selected deductions is unsettling.

Many of the changes discussed in this article are tied to new health care provisions, kicking down the road decisions on income tax rates, and the definition of "wealthy" when assets are transferred to

(See "Tax Law" page 5)

Forest History Society, Durham, NC

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Society of American Foresters

The mission of the Society of American Foresters is to advance the science, education, technology, and practice of forestry; to enhance the competency of its members; to establish standards of professional excellence; and to use the knowledge, skills, and conservation ethic of the profession to ensure the continued health and use of forest ecosystems and the present and future availability of forest resources to benefit society.

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Editor's Notebook

Why You Should Attend the National Workshop on Climate & Forests

By Steve Wilent

If you need any further scientific proof that Earth's climate is dynamic, you'll find some in research published in *Geophysical Research Letters*, the journal of the American Geophysical Union. A group of researchers led by David Stahle, a paleoclimatologist at the University of Arkansas at Fayetteville, looked at 1,238 years of Mexico's climate history by studying tree rings. Among the findings: evidence of four ancient megadroughts, including the so-called Terminal Classic drought, which some anthropologists suggest may have contributed to the collapse of the Mayan civilization, and another that may have been a key factor in the decline of the Toltec culture.

According to a press release issued by the university, the scientists drew their data from 74 core samples taken from 30 ancient Montezuma bald cypress trees (*Taxodium mucronatum*) growing about 56 miles from Tenochtitlan, capital of the Aztec empire, and 37 miles northeast of Tula, the Toltec state's main city.

"This is the national tree of Mexico, and it tells such an interesting story of the decline of the Mexican empires," said Stahle, adding that previous tree chronologies for Mexico were only three to four centuries long. "This is the first one that goes back into pre-Hispanic times."

Evidence of such natural climatic changes abound. I recall visiting Glacier Bay, Alaska, a couple of years ago and listening to the tour guide explain as we entered the bay that Glacier Bay did not exist when Captain George Vancouver sailed along the Alaska coast in 1794, because it was entirely encumbered by ice thousands of feet thick. Little more than 200 years later, our ship sailed up the bay more than 65 miles before we halted before the fractured remains of that great glacier. The vast majority of the ice had melted by 1900.

Fact: Since about 1750, our planet has been warming. Earth's climate is not static. Aside from any influence by humanity, it has and will change over decades, centuries, and millennia.

Fact: human activity has and is contributing to the rate of warming. How much?

"Most of the observed increase in glob-

ally averaged temperatures since the mid-20th century," wrote the Intergovernmental Panel on Climate Change (IPCC) in 2007, "is very likely due to the observed increase in anthropogenic GHG concentrations."

At this point, some of you—maybe most of you—are itching to debate these facts. Some of you would claim that humanity's influence on climate is insignificant or that anthropogenic global warming is a scam. Others might express dismay that anyone could deny that human-induced warming is a clear and present danger to our civilization.

Defending these positions may be exhilarating, but that doesn't get us foresters very far.

Perhaps we can agree on this: our climate has changed and, will continue changing,

and, therefore, foresters must account for the dynamic nature of climate in forest management. There, that's not terribly radical, is it? We already acknowledge the dynamism in nature, such as with succession and disturbance agents such as fire, as well as in economics and even politics. So, we must acknowledge that our climate has, is, and will change, and then get down to the business of managing forests.

SAF is cosponsoring a conference that may provide some help. The National Workshop on Climate & Forests: Planning Tools and Perspectives on Adaptation and Mitigation Options will be held May 16–18 at Northern Arizona University in Flagstaff, Arizona. Its purposes are:

- ▶ To extend greater understanding of the current adaptation and mitigation options (the "Five Rs") for forest management;

- ▶ To make state-of-the-art climatic and ecological planning tools accessible and useful for decision makers, forest resource managers, and extension educators at all levels;

- ▶ To explore how to make these options and tools better utilized by the various forest resource managers and extension educators across the country; and

- ▶ To foster understanding of where sci-

entific research and practitioners' expectations intersect to generate the best management decisions.

Conference speakers include some of the top experts in forest management and research, including Thomas Swetnam, director of the University

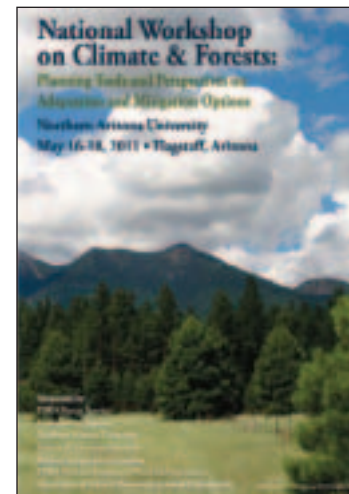
of Arizona's Laboratory of Tree-Ring Research, and Connie Millar, a research paleoecologist with the US Forest Service Pacific Southwest Research Station, whose presentation is titled, "Managing in the Face of Uncertainty: Adaptation Strategies and Actions." If you haven't seen one of Millar's presentations on the Five Rs—resistance, resilience, response, realignment, and reduction—here's

your chance. The featured guest speaker will be George Hopper, dean of the College of Forest Resources and director of the Forest and Wildlife Research Center at Mississippi State University.

The schedule also includes presentations on climate and forests from a variety of perspectives: nonindustrial private forest owners, large-tract forest owners, state foresters, nonprofit organizations, forest carbon project opportunities. There's too much to list here—it will be a very full three days. Or four days, if you opt to attend the National In-Service on Climate and Forests Extension Programming: Program Planning and Scholarly Activity Development on May 19 at Snow Bowl Ski Lodge, north of Flagstaff. (I admit that seeing "Sunset viewing over Grand Canyon" on the schedule was one factor that led me to plan on attending, even though I'm not an extension forester.)

I'm planning on attending the conference, so look for me if you want to talk about the Five Rs. If you want to debate the causes—or the existence—of climate change, I'm game.

For more information, visit www.safnet.org/natworkshop11.



LETTERS

An Example of Agroforestry

The article by Joseph M. Smith in the February issue of *The Forestry Source* ("Maximizing Land Value Through Agroforestry: An Interview with Shibu Jose") reminded me of an experience I had in Guatemala in the 1980s. A group of young men with forestry degrees, whose fathers owned a large cement company, decided that wood could be used for fuel to burn the lime for cement. They convinced their fathers to allot land for plantations, established a nursery, and experimented with several species of fast-growing trees. When they determined which species were desirable, they set out on a plan of agroforestry.

The plan was simple. They contracted with local peasants to plant the trees, but went a step further: they gave the people vegetable seeds and fertilizer and had

them interplant the trees with vegetable crops. This gave the planters abundant food while they cultivated and fertilized the tree crop as well.

I was first shown these plantations when the trees were about a year old. Three years later I returned and saw a forest of trees ranging from about 20 feet in height to more than 50 feet. The local people were also given trees to provide for their own wood needs. These were planted near their villages. As the work progressed, the people had extra food and wood to sell, which helped them provide for their own needs.

I have not been able to follow up on what has happened to the project, but certainly the beginnings were impressive. This could be used elsewhere, especially in the Third World and tropical lands.

Robert Maeglin
Wonewoc, Wisconsin

Tipping Point

I was glad to hear from an old friend in

the recent commentary by Jim Shaw and Harry Wiant ("Two Foresters, Two Visions of Forestry," February). Even though my professional career thus far has been short lived, I have come to see the fall of the timber industry and all it supports in my home state of Pennsylvania. What were once thriving rural communities scattered across the landscape are now desolate towns. The forestry profession—and, for that matter, all science-based natural resources management—has taken the leap to ecosystem management. I will refrain from formulating a definition of ecosystem management here because I agree with Harry Wiant's "unauthorized translation" of the subject in his paper titled "Ecosystem Management: Retreat From Reality." However, the very subject has become so complex that even its proponents do not know what it means.

Foresters and natural resource managers

("Letters" continues on page 3)

Timberland

(continued from page 1)

on wood demand. Fiacco's timber-industry career has spanned nearly four decades, including positions with MeadWestvaco, the Forest Technology Group, and MeadWestvaco's real estate development subsidiary. He owns and manages tree farms in South Carolina and New York State. The following is an edited transcript of our conversation.

What's been going on since the flurry of transactions four or five years ago, when many of the integrated forest products companies sold off their timberlands?

Well, the market is off. The big peak of sales of industry lands to TIMOs and the conversion of some companies to REITs is nearly complete. There are still some good size blocks of industry land out there, but the conversion of Weyerhaeuser to a REIT pretty much ends it. MeadWestvaco still has a fair amount of land, but you can expect to see that go too. Most of what we're going to see going forward is land moving between the TIMOs' clients and maybe back and forth between the REITs and the TIMOs.

Sierra Pacific Industries has about 1.9 million acres in California and Oregon. J.D. Irving still owns a good bit of land up in Maine—about 1.5 million acres—but I'd be surprised to see them sell it. And there are some others—Simpson, Roseburg, Green Diamond, Longview Timberlands, Soterra, and others. The St. Joe Company in Florida still owns around 580,000 acres, although they do not have a mill, and they have a major real estate operation going. Most of St. Joe's land is timberland, and I would expect to see a large chunk of that, something over 400,000 acres, go at some point.

Weyerhaeuser recently announced the sale of 82,000 acres to Hancock Timber Resource Group. That's a small chunk of its more than six million acres in the United States. Will the company hold on to the bulk of those acres?

I think so, yes. They've always said they were the timberland company, and now they really are. They've still got some mills, but they've disposed of most of them. They've got housing, a cellulose fibers segment, and real estate development operations that they can operate outside of the REIT. I wouldn't expect to see Weyerhaeuser sell off a lot of land. I think they will be managing it as timberland. But you never know. Look at Plum Creek Timber, which is very much what you can think of as a capital management business. When land prices are high and stock prices are low, they'll sell land and buy back their own stock or reduce debt. If they have the opportunity to make a favorably priced timberland purchase, they are a buyer. They seem to be pretty efficient at managing capital. But I wouldn't expect Weyerhaeuser to go that route quite so aggressively.

About a year ago, in a blog entry titled, "The Forest Industry of the Future: What Will It Look Like?" you wrote that there were three key trends in progress: changing timberland ownership, biomass for energy, and the global industrial revolution. Are those still important to watch?

Yes, those remain the three key changes. As we've already discussed,

most of the integrated forest products company land has already been sold, but we'll still see exchanges between the new owners of that land—the REITs and TIMOs' clients (institutional investors such as endowments and pension funds).

As for biomass, I see it being a bumpy ride. The second-generation biofuels will have a lot going for them, when production gets off the ground. In the interim, the use of biomass for energy is building. Of



"Sustainability is not a real issue from a fiber standpoint, it's a political issue," said J. Brian Fiacco, owner of Timberland Strategies LLC, and author of *The Timberland Blog*.

course, the forest products industry has run on biomass for a long time. When you look at the available biomass coming from forest product manufacturers, there isn't enough to go around. A lot of biomass companies—pellet manufacturers, utilities—think they're just going to buy up all this waste biomass, but the pulp and paper mills are using almost all of it already. It's not available, regardless of all the hype about it. With respect to logging residues, it is expensive wood. And it is of poor (non-uniform) quality for making pellets of consistent quality. The pulp and paper engineers have known this from the beginning. That is why that logging residue is out there!

We will see ups and downs, but the direction will be toward renewables, and the most important will be the second-generation biofuels that replace oil. We have coal and we have natural gas and we have nuclear for producing electricity. The real need is for liquid fuels to replace oil. In energy, the issues are renewability and security. The politics of global warming are still there, but do seem to have diminished in recent months.

The price of crude oil recently reached \$100 per barrel and, by all accounts, the price will continue to rise. It seems likely that this will lead to an increase in demand for renewable biofuels. What will be the effect on demand for and the price of biomass?

With increased competition for biomass, prices will go up. There's no question about that. But at the same time, if cooler heads prevail, we will continue the use of coal and natural gas for the production of electricity, because right now those fuels are relatively inexpensive. Biomass on its own simply can't fill such a big hole. FirstEnergy Corp. proposes to convert its Shadyside, Ohio, plant from coal

to a 312-megawatt biomass fueled operation. That would consume about three million green tons of biomass annually—roughly the consumption of three major pulp mills. Well, we've watched pulp mills go out of business because they were hauling wood too far. As the price of oil goes up, the power companies that rely on reaching out that far for biomass are going to get killed by transportation costs. It's just not going to work.

So it's a matter of logistics, not a lack of biomass?

There's no shortage of biomass. Sustainability is not a real issue from a fiber standpoint, it's a political issue. We continue to increase our growing stock, year after year after year. We continue to use less wood than we grow. Sustainability-wise, we can support a good biomass energy industry.

The third trend to watch is the global industrial revolution. China in particular is a good example of this.

China is buying huge amounts of resources all over the world. Its per-capita consumption of a wide range of products is rising very fast. I was in China last April and, frankly, I was quite surprised at how everything is changing there. You hear about the very wealthy upper class and the huge numbers of poor people in rural areas, but you don't hear much about the middle class in China. But there sure is an emerging middle class—it's phenomenal. It's very similar in India.

We had an industrial revolution in this country, and you know how quickly it evolved. Now, countries like China, India, and Brazil are moving forward very, very fast, and it's changing the dynamics of the global economy. Today, wood costs in Brazil are more than they are in the southern United States. Our pulp mills have the lowest-cost fiber supply in the world. Ten years ago that would've been hard to imagine, but our pulp and paper companies are definitely more competitive than they were in, say, 2000.

So the paper industry in the United States isn't dead?

No, it's not. It's reaching a new level of competitiveness. There are a couple of factors involved, one of which is the devaluation of the dollar. I won't say whether that's good or bad, but it certainly helps our manufacturers. Brazil's currency has strengthened and China's will.

Much has been written about China's appetite for paper....

China has a huge fiber supply gap, which has been filled by importing paper for recycling from the United States and other nations, plus logs, primarily from Russia. But the gap is actually increasing, and this year they've looked to New Zealand, Canada, and the west coast of the United States to fill that gap. And as oil prices increase, and as the Chinese currency strengthens relative to the dollar, transportation costs will push more processed goods to China.

We're going to see the Chinese buying timberland in the United States. That has not happened yet, that I know of, but three US paper mills have been acquired in the last two years by Chinese companies: one in Canada, one in Oregon, and one in northern New York. It's just a matter of time until the Chinese start buying land here, too. Everything we've seen with the Chinese and their commodity plays show that they try to be vertically integrated; they want to control the commodities that

they need for manufacturing. So, since they have acquired mills in the United States and Canada, in time I think we will see them try to control the commodities feeding them.

Would Chinese owners have a different approach to managing land?

They know how to manage timberland, and I think they would manage sustainably. Otherwise, they would just buy the timber. I know some TIMO folks in China, and I think it is pretty clear that China is making the commitment to secure its commodities.

What does this mean for the value of timberland in the United States—increased demand, and, therefore, increased prices?

If the Chinese do start acquiring US timberland, then I'm sure prices will go up.

What about demand from other investors?

There's not much money flowing into timberland right now, but there's definitely money going into agricultural land. Heartland farm prices have reached an all-time high. Will that eventually translate into higher prices for timberland? I think it will, but we don't know when. In any case, I think it will happen quite abruptly. It seems like players in the investment community like to follow the other guy—there's a little bit of a herd mentality. The one worrisome issue would be a large increase in discount rates, which could push prices down.

What's the bottom line on timberland? Is it and will it be a sound investment?

I am in the process of buying another tract of timberland myself right now. That pretty well explains where I think the market is going. Prices are down, perhaps 10 to 15 percent from the peak, but I see no evidence that they are falling more. From an investment standpoint, the upside appears to be better than the equity market—which has just surpassed a two-and-a-half-year high—and the downside risk is a heck of a lot better. Plus, I can walk on it and work on it, and that makes me feel good.

(“Letters” continued from page 2)

have a long tradition of being stewards of the land. That stewardship, albeit mostly from the “stand-level,” has inherently improved conservation and the utilization of resources at the landscape level. Has that success all of a sudden been tarnished by a movement that has no real clear definition? Our society has complex problems, many of which relate to environmental concerns and resource utilization. Should we resolve these problems with a vague, uninterrupted philosophy or with years of documented science-based success? I lean toward the latter.

Although I have great respect for my friend, I do disagree with his comment that the sun has set on the forestry profession. I believe that there are still a few true foresters out there and that there may even be a few up-and-coming resource managers who will practice science-based management, and that may be enough to tip us back to our roots.

Phillip Manning
Harrisburg, Pennsylvania

(“Letters” continues on page 4)