

Crossties

NOVEMBER/DECEMBER 2005

The Magazine For Producers And Users Of Treated Wood Crossties And Related Products.

2005 CONVENTION
PROFILED IN PICTURES
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MONTREAL

convention

A RESOUNDING SUCCESS



PLUS:

A Q&A With
RTA President
Tony Helms

SPECIAL REPORTS

**RTA Donates
Thousands To Aid
Katrina Victims**

**Association Well
Represented
At AREMA
Conference**

**Annual Convention
Shown In Pictures**

**Helms Takes On
Role As Association
President**

**2005: A Tipping
Point For Short
Line Railroads**

**Railroad Operates
On 5 Principles**

**Maine's Forestry,
Rail Industries
Profiled**

what they said AT THE CONVENTION

Presenters Discuss Demand, Challenges & More

Packed with information and activities, RTA's 2005 Convention has been highly regarded as a success. Part of what makes the event so successful is the presentations. This year, topics addressed everything from the latest engineering research efforts to purchasing plans for the coming year and more. While space would not allow for complete presentations to be published, what follows are excerpted comments from RTA convention presenters.

RESEARCH & PRODUCT DEVELOPMENT FORUM



Dr. Allan Zaremski, ZETA-TECH Associates: Comparative Analysis of 6x8 vs. 7x8 Timber Crossties

The crossover point in low density and branch lines, the point where it starts making sense, seems to lie in the 400- to 500-ties range. Generally, it seems that in the 500- to 700-ties range the economics work, so if you're putting in anything more than 500 to 700 ties per mile into the track for these lighter density lines, then 6x8 ties seem to make economic sense. If you are putting in fewer than 400 ties, the 6x8 ties do not make economic sense. The smaller-scale installations do not always provide an economic benefit; and as track densities increase, the economics move away from the 6x8 ties, even for the large-scale applications.



Winfried Boesterling, VOSSLOH: VOSSLOH—A New Look At Fastening Systems for America

In Europe, very often we discuss the elasticity of the track—the bending in the track. In Europe, it is more and more common to increase the elasticity in the fastening system to achieve more load distribution to the track to reduce ballast maintenance. For that, we developed a special tension clamp with a high fatigue limit, which

allows us to use a very soft pad directly under the rail. This new tension clamp allows us also to use standard technology.

Here are some pictures of its application in the track from Petersburg to Moscow. With the four-spindle device, one worker can assemble four screws at the same time. Robal developed an eight-spindle screwing device where we can install 600 meters per hour.



Terry Amburgey, TASKpro: Commercializing The Manufacturing Process For Borate Pre/Dual Treatments

The people in Louisiana, before their minds were on Hurricane Katrina, were very seriously considering not placing wooden crossties in track in Southern Louisiana. And, if it can happen in Louisiana, it can happen in Mississippi, Texas, Alabama, Georgia and Florida. So, we have to do something to address the reasons for poor performance.

I think we've got the solution—it's a matter of your clients knowing about it. We can treat non-seasoned ties with borate, but it will require a bit of tweaking. It requires treatment, a period of diffusion storage, paying attention to how you air-dry things, and over-treating the borates with an oil preservative such as creosote.



Bob Coats, Pandrol USA: VICTOR System Installations and Technical Update

Based on the results so far in test, we are starting to see a little bit of separation between the rolled steel base plate and the VICTOR base plate. The VICTOR system is performing better. We think that the improvements that we have achieved are starting to show up, and we expect that will be the case as the test progresses.

SHORT LINE & REGIONAL RAILROAD FORUM



Steve Sullivan, American Short Line and Regional Railroad Association

Fuel prices have had a slight dampening effect.

But, interestingly enough, it hasn't been that dramatic. Rail capacity—we can continue to grow rail business but only to the extent that we have capacity. And that can be defined in several different ways. And, basically, the Class 1s tell us that they are out of capacity. They are trying to add capacity now, but that's a long-term solution. Short lines don't have a problem with capacity. Short line business has been growing, and it's been growing well.



Paul Boisvenue, St. Lawrence and Atlantic Railroad Company

Regional short lines are faced with making some changes to their business

model, so we have done some rate increasing. We have put some fuel surcharges in certain areas, and adjusted car ordering and leasing agreements. All of these issues are being handled to get the cars moving, which has worked out well. We have some other projects that will come down the pipeline early next year or late this year. So, we'll get more traffic, and that is the name of the game



Carl Vercollone, 42 North Structured Finance Company

Let me give you one example of how this works. Let's say some of you out there were thinking about putting a new roof on your house. You went out and got contractors' bids, and the bids came in at \$20,000. And, the next day, after you got all of the bids, one of the suppliers of the roofing shingles called you up and said, "If you use my roofing shingles, it will

only cost you 10,000.” That’s effectively what the opportunity is for RTA members with a railroad that is not in position to use this tax credit, but the supplier is.



**Fred Simpson,
Montana Rail Link**

I am very concerned with what the capacity problems are doing to our industry and how we respond to those problems. I’m very concerned with the impact it is going to have on carload traffic.

I think Paul Boisvenue mentioned de-marketing carload traffic. And you just heard Mike Smith’s comments and Steve Sullivan mentioned that the Class 1s are refocusing on quality of revenue, which is kind of a code word for yield management, which means you manage the yield so you can get rid of the carload traffic. Our issue for this year going forward is how we deal with carload traffic.



**Mike Smith,
Finger Lakes
Railway Corporation**

You can see that in 1929 we had almost 75 percent of the total ton-miles that moved in this country. Today, we seem to have stabilized in the 41 to 43 percent area. That’s still pretty good, and it does give us a good argument with government and with our customers in terms of how important we are to the overall transportation market. But, still in all, 42 to 43 percent of the total market may not be good enough.

By the way, you may ask why I have 1929 in there. Well, 1929 was basically our last good year when you think about it. When we started the 20th century, we were the biggest industry in the United States. By the 1920s, the auto industry had edged us out. Right now, we are duking it out with the dog food industry in terms of total revenue.



**Jalene Forbis,
California Short Line
Railroad Association**

Our association is working hard. We are actually gaining momentum with legislatures. When I first started back in the

short line industry, we would have a meeting with the legislatures and would have to spend the entire meeting discussing what a short line railroad is. That’s changed now.

Business for the most part in California is doing well. We are seeing an increase particularly in the port area. It’s just amazing and mind boggling how well business is doing in that area, and we are going to continue. I appreciate the partnerships that we have, particularly, Gary Ambrose, who is in this room. Koppers has been a very strong supporter of ours, and we welcome more. It helps when we go into our legislative meetings not to have just railroads but also to have our associate members who have employees that could be impacted by legislation as well. That’s critical, and I welcome more to join us.

LUNCHEON



**Bruce Vincent,
The Alliance for America
Foundation, With Vision
There Is Hope**

Railroads are the green choice, and we have to talk to the public about that and learn to talk to the public. We have to lead this discussion and not just fight it. We have done a pretty good job at fighting. But then we learned that fighting makes us the three-ring circus or the third ring of a three-ring circus with somebody else taking gate receipts. We have to lead the discussion on our nation’s environmental future and weave ourselves into it. And, to do that we have to remember three truths:

Truth number one is that democracy works, but it has been a spectator sport for far too long. We have let the democratic process work and griped about its outcome without being fully engaged in it. Truth number two is that when people lead, our leaders will follow. We need to be talking to our leaders about how we can have clean water and creosote; you better tell them about how you can have both because if they have to pick between clean water and the preservation of your tie, the preservation of your ties is out of here. Their clean water is what’s important, so you’d better talk to them about how you can have both. The final truth is that those who show up run the world. There are meetings held everyday that discuss your industry’s future, and there are folks show-

ing up. They are going to continue to show up. You need to be showing up as well, and all of that showing up can’t be placed just on Jim Gauntt and the Railway Tie Association.

If Jim is trying to represent you without you being there with him, he has an impossible task ahead of him. Leaders don’t listen to groups, and they don’t listen to industry associations. They listen to the individuals within those associations. Jim can give you the tools, but you have to show up.

HARDWOOD RESOURCE FORUM



**Judd Johnson,
Hardwood Market Report**

I see a fundamental change in the marketplace. And if it is true that we have a fundamental change, it is probably going to take some time before the timber industry understands and reflects that. Meanwhile, as anybody in the sawmill business understands and agrees, the current prices and the market opportunities for number one common red oak are at unsustainable low levels. And that is the key. So far, sawmills have tried to avoid red oak and/or limit it as much as they possibly can—cut other species. But, I think that what we have seen is that red oak is the biggest production item that is available to them in growing stocks, and you’re simply not going to be able to avoid it forever. If you’re an Eastern U.S. sawmill, you’re going to cut red oak at some time. This strongly suggests that further reduction in sawmill production is going to occur. We haven’t quite seen a circumstance where the industry has hit the wall, where it is all financial, and banks are pulling loans and that sort of thing. It has been more of a voluntarily scale back because of market conditions. But that puts Eastern U.S. hardwood production slightly below 10 billion board feet for 2005 if this holds true.



**Darrell Beasley,
Beasley Forest Products**

We’ve got several problems as sawmillers, but one of the biggest is log inventory and log costs. I think that the railroads and the treaters probably have enough problems of their own, but

this is a problem that they need to take seriously. You will never treat a tie that doesn't run through a sawmill first, and you'll never treat a tie that isn't cut by a logger at some point. So, I am going to try to identify five things that affect log inventory and then I will try to break those things down to help you understand how you can try to improve our log inventories.

The first one isn't a big surprise—weather conditions. In the South, that is primarily rain. We have gotten more of our share of it. In the North, it may be snow or other things, but weather conditions are the first one. The second one is logging capabilities. These problems build on one another. We start out with almost an inadequate logging force in good weather and you multiply bad weather with an inadequate logging force, and you put on top of that competition, stiff competition, for those products. Then, there is storage capacity. Most tie mills that I am aware of have very limited storage capacity when compared to grade mills. There are some things that we can do as an industry to update our storage industry. And the last one is standing timber inventory. These are the five key things that affect our logging inventory, and we need to all be working to figure out how to improve the situation.



**Dave Larson,
Webster Hardwoods**

Since 2001, when I started with the company, as log prices for northern hardwood logs continued to increase, we began to operate our facility to maximize the production of grade lumber rather than ties. The reason is that it was economically essential for us in order to recover the value from the log. It has been this way over that period of time and really for probably more than 25 years. So, we have taken what was a tie mill and turned it into a lumber mill—done a 180 degree turn. That's an important evolution. It has been a challenge to balance log procurement and sawmill production with the fact that our commitment with both the log and the tie operations is that we have also operated with a creosote treating plant on the premises and also have a full complement of dry kills, planers, planer operation and a concentration yard. So, our

focus was on both of those operations and not just one. We have had to produce at the sawmill and bring each of those products, lumber and ties, one step further to additional refinement.

Producing ties can only be profitable if there is an adequate quality and quantity of tie logs at an appropriate price. That is if you have a tie mill and you cut tie logs you need to buy tie logs and operate that sawmill in such a way that you can make money-making ties. All ties that result from sawing lumber logs simply develop. That is that they are not sawed intentionally. They simply occur when it becomes economically prudent to add more sawing costs for the value of the lumber received. In almost all cases, the selling price of ties produced from northern hardwood lumber logs does not equal the cost per board foot of the price per thousand board feet paid for the log. In our area, it remains a delicate balancing act.



**Greg Callahan, Pioneer
Machinery/Caterpillar**

The dispersment of the timberland is one of the issues that we are going to have to deal with. In the United States now, there are 9.9 million individual and family-owned timberlands. That number will probably increase by 10 to 15 percent in the next couple of years because some of the larger tracts of timber are being sold off to both companies and individuals. National and state conservatories are buying these lands. So, we are going to see a growth again in the potential of individual- and family-owned forestland. In the state of Georgia alone, better than 60 percent of the wood alone is owned by individuals. Timber companies are selling off their land base at levels that we did not anticipate. They do this for several reasons. One reason is to put the cash back in the till. Let's just visualize that they bought this track of timber 30 years ago when they paid \$150 an acre straight across the board for that land and 30 years ago probably harvested two growths of lumber or timber off that land and now see the capability of selling some of the parcels for around \$1,400 an acre. So, quite obviously, they can put a lot of money in the till. They can reward

their stockholders and make them calm and make them pleased with the company. So there are a lot of different reasons they are doing that. One of the byproducts of that is that we have seen a return to dealerships. In the middle 70s, the dealer was a very strong part of the wood industry because the dealer had the loan money to buy the chainsaw. The dealer was the banker. We saw that in the 80s and in the 90s the dealerships went away. We saw independent contractors begin to merge. Now, we see the opposite side of that cycle, which is basically dealerships that have contract loggers working for them.



**John LeBlanc, Canadian
National Railway**

We know that we have probably been under-investing in tie replacement programs when we look at the statistics from various railroads. There is also the effect of us adding in the Wisconsin Central territory, the BC Rail territory and the GLT properties. Our concrete ties are basically replacements for derailments, cracked ties and so forth, and they are coming out of CXT and are an improved design over the old one, which had a lot of tie plate abrasion problems and caused us to have to patch them a lot. The embedded plate is supposed to really help that problem. One of the things that I hear a lot from the Southern United States is that our engineering guys do not like the service length of wood ties that they are seeing. I guess they are being attacked by pests.

Boultonizing isn't their favorite word either. There are many ties that are succeeding out there, but we only hear a few of the horror stories. Our approach to extending tie life is to focus on maintaining gage. For us, safety is of the utmost importance, and this breeds a low-cost operation because we have more than \$100 million of costs in derailments every year, and my boss is very cost conscious. And, because he is a fighter, he has fought within the corporation to increase the capital budget for track. We have gotten rails, and he has gotten ties, and he seems to have the ear of the CFO and the CEO.

additional service improvements if we choose materials wisely. These are some of the things that Norfolk Southern is involved in to combat the stressed state of our physical plant.



Mike Hazen,
Canadian Pacific Railway

We looked at the economic factors of different tie systems using the following parameters: per mile of four-degree curve, 75 MGT per year and life-cycle costs over 35 years. Hardwood ties and track spikes costs were \$1.33 million U.S., while with hardwood ties with screw spikes we are looking at \$1.26 million U.S., and with concrete ties and the additional ballast required it was \$1.32 million U.S. What we found was that the economic crossover point for using concrete ties was at 90 MGT.

For our expansion projects, we will be using pre-plated ties. We tried that in 2005, and it was very successful. We have performed lab testing on Lewis Evergrip spikes, and we will be field testing them this fall in Western Canada. We see this spike as a possible improvement over our present screw spike.



Craig Domski,
Union Pacific Railroad

The TRT909 was built by Harsco Track Technologies in their Columbia, S.C., plant at a cost of \$11 million. The 909 is contracted to install 14 ties a minute on a minimum six-hour day, so we expect to be putting in 5,000 ties a day with the new machine versus a production rate of 2,500 ties a day with the prior P811.

The thing that really forced us into developing this new machine was that the P811 had to stop working when we were working on narrow track centers—13-foot track centers. With the development of the new machine, we can continue installing ties and laying rail while trains pass us on 13-foot track centers, which is the majority of our East-West corridor.

One of the really exciting technologies that was developed as part of this machine is the use of electric conduction heating of the rail versus the old propane or gas flame method, which caused everybody problems—a lot of questions about the

accuracy of the measurements. But the electric conduction heating has proven to be very successful.

CLASS I PURCHASING FORUM



Mike Aarstad,
Burlington Northern Santa Fe

As I said before, this is the first full year without Kerr-McGee. In 2004, we still had some inventory that we could utilize, which helped us try to get through the year. But this year we didn't have that luxury. It's been a struggle, but we've been able to make it through. Several of you know about the Springfield seasoning yard that we put in; it's helped us quite a bit. Without that seasoning yard, we wouldn't be able to make it. We've got about a million ties drying there right now; I think we send about 80,000 ties a month out of the Springfield facility to whichever treating plant we need.



Gary Hunter,
Union Pacific Railroad

Our wood tie numbers are right at 4 million. The kicker there is that whatever we don't provide on the composite side will have to be provided in wood, and our production of composite ties has been disappointing at best; it's quite an effort on a lot of people's part to have enough ties for 19 tie gangs going on at one time. I mentioned earlier that the second quarter was probably the toughest quarter that I remember as far as feeding tie gangs and being able to come up with the ties. We had a lot of conference calls with treating plants and also with our engineering department.

After one tense conference call late in May, things were starting to go a little bit better and one of the engineering folks at the end of that meeting said, "Well, I feel much less worse now." Everybody realized that we had gotten through on that particular project. With 2006, 4 million wood ties, that's where the number's going to be. We appreciate the hard work of all of our suppliers in making that happen, and what I'm hearing is that the Union Pacific is going to have a 4 million tie program for the foreseeable future.



Walt King,
Norfolk Southern Corp.

The key to ensuring that the wood tie maintains its dominance as a tie of choice in North America is that it remains cost competitive. This means that everyone in the supply chain should diligently do their part to find ways to minimize cost by improving their understanding of the business and exploring new methods of production and treatment. It is the industry's responsibility as a whole to ensure that artificial or inflationary costs are not created within the market costs that eventually become the burden of the railroad customers. This often calls for a collaboration between industry partners. Remember that costs must be managed to avoid passing along excessively high prices to customers. High prices provide incentive for customers to both lower demand and seek alternative materials—both of which the rail customers are seeking and both of which could be detrimental to the long-term survival of the wood crosstie industry.



John LeBlanc,
Canadian National Railway

We're around the 1.4 million mark. We've ramped up from somewhere around 600,000 in 2002, and we're at about the 1.4 million mark for the foreseeable future. We know that we've underdone the track tie replacement—that's been recognized. And, now with the 286,000-pound traffic more and more, there's a lot more emphasis on the basic track structure. We're putting a lot of money into rail, and we're putting a lot of money into crossties.



Rob Churma,
Canadian Pacific Railway

Canadian Pacific is very consistent in the overall demand year after year—just at a million plus ties. As our tonnages go up, we're starting to switch over from softwood to hardwood, so the hardwood is making the difference in terms of handling that extra tonnage—that really helps us. Secondary suppliers will continue to support primary suppliers. And, next year, there's going to be additional expansion capacity and more pre-plated ties required and additional switch ties. §