



The Semaphore

On Saturday, August 25th the club meeting will be held at 10:00 am, at Boney's Marketplace, 1820 Oceanside Blvd., Oceanside, CA. Members, guests and visitors are invited.

North County Model Railroad Society (NCMRS)

Volume 3, 7

Special points of interest:

President's Message by Dick Miller

I was recently dispatched to our neighborhood grocery store to find a better cleaner for our bathroom shower. There were twenty or more different cleaners displayed along the cleaning aisle of the market all with no abrasives or bleach. I remember, years ago, when Tide would take the paint off the wall and a hand soap called Lava would take the first layer of skin off your hands if you were not careful. Now, those were cleaners. I read a few labels as I walked along the aisle, most of which said that no scrubbing was required. Just "mist it on and walk away". Then I read it, the ultimate cleaner. The label actually said, "start with a clean shower". I am not making this up.

there were 16 E-mail responses with 8 more the following day. Everyone had a different track cleaning method. Some used 600 grit sandpaper, and car wax. Others used something called "rail zip" and Flitz metal polish. One fellow even applied Wahl hair clipper oil to the track after cleaning. There was certainly no agreement on a best track cleaning technique. Most respondents did suggest that "Bright Boy" was pretty abrasive and should be used with care.

My theory is that it's much easier, like the shower cleaner, to keep the track clean than it is to clean it. I was able to greatly increase track-cleaning intervals on my railroad by attacking the source of dirt, dust and oils that were being tracked around my layout. The first question should be "how do we keep track clean" not how do we best clean it.

I determined early on in the construction of my railroad that one of the main dirty track culprits was plastic wheels. Those wheels can pick up dust, oils, and anything else on your track and efficiently spread it over every inch of your layout. Changing out all the plastic wheels on my rolling stock greatly

All this made me think of track cleaning. All the different ways we rub, scrub, drag, wipe, roll, polish, and burnish, our track in an effort to get it clean. Everyone has their own idea of how best to clean their crud-laden track.

I belong to the Model Railroads of Southern California Yahoo Group where model railroaders exchange information. A week ago a model railroader asked about track cleaning. The next morning

Work Schedule

Every Thursday and Saturday are work days at the clubhouse. There are plenty of tasks to be performed.

Visitor Schedule

Every Thursday 3-8:30 PM, Saturday 9:30 AM - 4 PM are the visitor hours at the NCMRS Clubhouse.

Operation Schedule

2nd Tuesday of the month
Setup time 5:30 pm
Run Time 6:00 pm—8:30 pm

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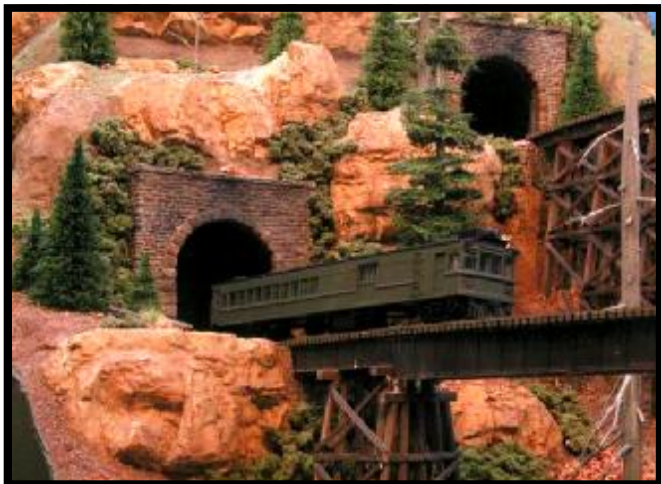
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reduced the amount of time I spent cleaning track. The next culprit was those sintered metal drive wheels on my Athearn diesels. Their porous wheels were acting like little sponges, picking up oils and carefully spreading them around my railroad. I changed out the wheels on a couple of those engines with NWSL turned wheels, sold a couple more on E-bay, and gave the rest of them away. Once again less track cleaning and better operation. The last step for me was to close and seal the heating and air conditioning vent in my train room and to apply weather stripping to the door. Since then there seems to be less dust on structures and rolling stock so I expect there is less dust settling on the track.

I clean track every few weeks with two Walthers track-cleaning cars. These cars have a soft mildly abrasive cleaning pad under the car between the trucks. I clean the pads with Isopropyl Alcohol after each use. I also have a Centerline track-cleaning car, which I use every few months if I can remember to do it. 20% of my main line track and three turnouts are hidden and inaccessible. Those areas have not been hand cleaned in 8 years; still trains run smoothly over those portions of my railroad. Track cleaning for me is not an issue.

If we, as a club, focus more on what gets track dirty in the first place and solve those problems, we will spend a lot less time cleaning track and more time enjoying smooth running trains.

All Aboard Dick Miller



The First Transcontinental Railroad

By Dan Conway

On January 28, 1855, a train completed the first trip across the American Continent, more than 14 years before the driving of the Golden Spike at Promontory Summit, Utah on May 10, 1869.

The first Atlantic to Pacific railroad was not in the US, but in Panama. Built from 1850 to 1855, the Panama Railway was an engineering marvel. It was the most costly railroad per mile built to that time, with 300 bridges or culverts in 48 miles of mainline which crossed some swamps that had to be filled to a depth of 100 feet to create a solid base for the roadbed. Until the opening of the Panama Canal in 1914, the Panama Railway carried the heaviest volume of freight per mile of any railroad in the world.

The railroad was built by US businessmen who were very lucky in their timing: just as they were organizing the company to build the line, gold was discovered in California, greatly increasing the demand for a quick and safe route from the Atlantic to the Pacific for freight and passengers. With only 8 miles of track laid, the railroad starting hauling passengers from the Atlantic port which is now Colon to the end of the line, charging \$25 for the ride. The railroad charged another \$10 for the privilege of walking the final 40 miles along their right-of-way to the Pacific port of Balboa, near Panama City. It took 4 to 5 days to cover that distance by foot. Demand was so great that by the time the line was finished to the Pacific, one-third of all construction costs had been covered by fares.

The line was sold in 1881 to the French Co. that made the first attempt to build the Panama Canal.

The existence of the railroad was a major factor in the decision to build the Canal. In 1904, the US government bought the railroad, and in 1979 it was sold to the Government of Panama. The line went into decline due to lack of maintenance, and in 1998 a majority interest was purchased by the Kansas City Southern railroad. KCS rebuilt the railroad in 2000-01, using the original right-of-way but installing heavy rail and concrete ties to resist the hot, humid and rainy Panamanian weather.

The re-birth of the railroad, now called the Panama Canal Railroad, is due to the construction of huge container ships, vessels too big to fit through the locks on the Panama Canal, which lift or lower ships 85 feet to make the continental crossing. The super container ships are forced to unload their cargos at one end of the canal, and the Panama Canal Railroad hauls the containers to the other end, where they are loaded on other vessels to complete their journey. Future plans to enlarge the canal may spell the doom of the railroad, but that is probably a decade or two in the future.

The Panama Canal Railroad is an efficient line, but a bit boring for a rail fan. Along its modern right-of-way, metal towers over the rails carry wires for communications and signaling equipment. When I first saw the towers over the track every 50 yards, I thought it was an electrified railroad. In fact, the railroad operates with ten ex-Amtrak F40PHs and one GP10. I say the line is boring because with one exception, every train looks the same: 2 locos, and 7 articulated 5 or fewer well double-stack bulkhead-type container cars, 35 container units per train, except one exciting occasion (I took photos of the event) when there were 3 locos pulling the 35 container units for some reason.

Trains run about every 45 minutes one way or the

other on the single-track line. The only variety is a passenger train which leaves Panama City at 7:15 AM each morning to Colon, returning at 6:15 PM each evening. The passenger train is painted in attractive colors, with one locomotive on each end, 5 coaches and an ex-Southern Pacific dome car dating from 1938. The passenger train operates only on Mondays through Fridays, with occasional special runs on weekends organized by cruise ship operators for their clients. Since I was working every day I was in Panama, I couldn't make the trip over the line, a disappointment, but a good reason for another trip to Panama.

SCALE RAIL MAGAZINE ARTICLE

By Tom Bernhardt

The writing talent of the NCMRS has pooled its skills and put together a 3000 word article about our Club's past, present and future. The Club's President, Dick Miller feels strongly that "Scale Rails" will except our bid to get published.

The article starts off describing the Club's effort in including the youth in our Club via the "Show-N-Go" and our membership. The majority of the members in the Club is rather advanced in years but that does not shake off the reality that the future of model railroading is in the hands and spirits of the youth. The simple fact is that if we don't have the youngsters moving up the ranks the hobby will disappear and we will have strong competition for the youth of America. With the computer, computer games, the internet and who knows what, coming up in the future, all tempting the interest of the youth.

The railroads are a big part of this country's history and heritage and it falls on all model railroaders to pass on this wonderful tradition. The article goes on to describe the transition.... (continued)

from Modular to Club Scale format and the change in mental attitude in being a community service organization in lieu of being a closed private club.

This article is just the first step in a larger plan to expand the awareness of the NCMRS into the local community and the national model railroad scene.

LOCAL NCMRS AWARENESS

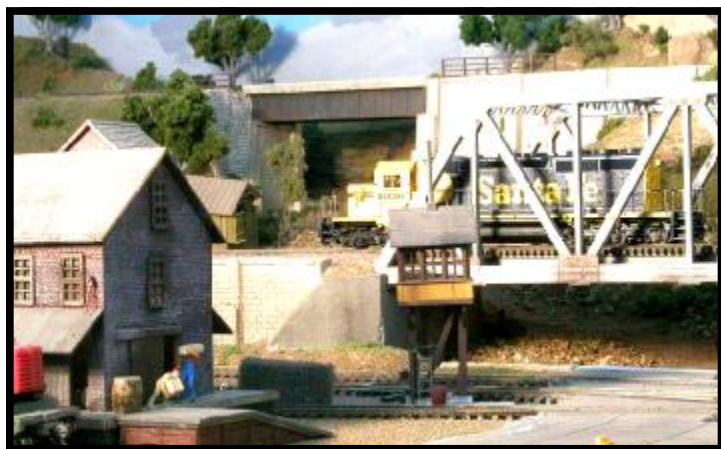
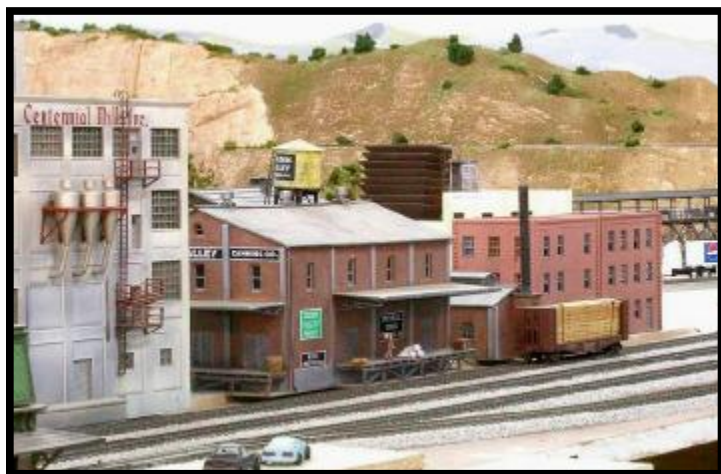
In the last two months we have had no less than the Mayor of Oceanside, his Honor Jim Wood , visit our Club site. We displayed our “Show-N-Go” in Boney’s Marketplace as well as conducted two group tours at our Club site.. One of these tours got the attention of two local news organizations. The coverage should be terrific since both press representatives took lots of pictures. The Club’s involvement in “Operation Lifesaver” was up front and received much attention from the press.

Besides all this public attention the an article about the Club appeared in the summer issue of the “Oceanside Quarterly Magazine.” During June and July the Club has had over 150 visitors.

Please remember to ask visitors to sign in.

NMRA CALENDAR 2008

The Club shutter bugs have been active taking photographs in the hope of getting an entry in the NMRA annual calendar. Several photos were submitted after much effort by Nick Ruddick, Dick Miller and Tom Bernhardt. These pictures are not shown to avoid any conflict if they are used for the calendar.



More pictures showing the excellent progress.

So Balsa is a Hardwood?

By Roger Curtis

As model engineers most of us know the differences in the properties, appearance and uses of copper, brass, stainless steel, bronze, mild steel and cast iron and some of the more knowledgeable among us can even differentiate between the different grades of these materials. But when it comes to timber it tends to be a different story.

Most of us know that there are hardwoods and softwoods and many of us assume that this means that if we press a thumbnail into a piece of softwood we will get a bigger dent than if we press it into a piece of hardwood. This is often true but it by no means always the case. Balsa, which we all know is about as soft as any timber, is in fact a hardwood and yew, which is very hard on the thumbnail test, is a softwood. So what is the difference?

Well, the two types of timber have completely different structures, particularly in respect of the way in which they transport their sap up the tree from the roots to the leaves. In a hardwood this is done via small diameter tubes known as 'vessels'. This means that if we use a magnifying glass to look at a clean cut cross section of the timber we will see lots of little circles that are the cross sections of these vessels. Softwoods, on the other hand, do not have vessels but have what might be called slots instead, though they are often very difficult to see even with a magnifying glass.

Botanically, hardwoods are dicotyledons which means that when their seeds germinate they send up a pair of first leaves (the cotyledons) whereas softwoods are monocotyledons which means that their seeds only send up a single first leaf. Generally speaking conifers are softwoods but not all

softwoods are conifers. Yew, for example, has berries instead of cones. It is tempting to think that deciduous trees are hardwoods and evergreens are softwoods but this is certainly not the case. Larch is deciduous but it is a softwood whereas holly, which we all know is evergreen, is a hardwood. Indeed, most tropical hardwoods are evergreen.

The only sure way of identifying the species of a particular sample of timber is to use a 10X magnifying glass to look at a clean cut cross section of the sample. When I first tried this I had some difficulty in ignoring my engineering training that told me to look for measurables like the numbers of growth rings per inch or the diameters of the vessels. What we are looking for are patterns. There are over six hundred species of timber in common use, the majority of which is hardwoods. This is a lot of patterns to choose from but there is a very clever punched card system for narrowing it down. These cards have holes along the top edge some of which are cut away to the edge of the card when a particular feature is present. This means that by putting a knitting needle through a particular hole in a stack of cards and picking up the stack with the needle all those cards with this particular feature will drop out. By the time you have done this with half a dozen or so features there will be surprisingly few remaining.

Clearly this is not the place to go into too much detail but the sort of things that matter in timber identification are the sizes, numbers and distribution of the vessels, the spacing of the rings (though this varies from year to year and depending on where the timber grew), the distribution of medullary rays (which gives quarter cut oak its distinctive figure), the location of the parenchyma (a tree's version of fat), whether it shows ring porosity and its density (how heavy it is).

Ring porosity is a feature of most of the common deciduous hardwoods like oak, ash, and chestnut. These trees lie more or less dormant throughout the winter and when spring comes they start to grow rapidly, producing large vessels at the start of the growth ring but as the year progresses the vessels become smaller and smaller giving a gradation across the growth ring. It may seem surprising but even tropical hardwoods that grow all year round do replace many of their leaves at one particular time of the year and consequently also exhibit growth rings though not normally ring porosity.

The hardness of a timber using the thumbnail test is largely, but not wholly, dependent on the density of the timber. Some timbers like balsa, obeche and western red cedar are very light indeed whilst at the other end of the scale timbers like greenheart, lignum-vitae and some boxwoods are so dense that they will not float in water.

Another misconception often heard about hardwoods and softwoods is that hardwoods are more durable than softwoods. Durability is the ability to stand up to the elements without rotting away or being eaten by bugs and may be measured on a scale of one to five, with five being the most durable. Oak is about half way up the table. Beech, which is a hardwood, only scores one; it is a lovely timber to work with a silky smooth finish from the plane. It is quite hard by the thumbnail test and if you bang a nail into it you will have quite a job to get it out but make a fence post out of it and it will probably fall down within a year.

On the other hand both Douglas fir and western red cedar, both of which are softwoods are of the rare group that has a durability of five. Indeed I have just replaced some Douglas fir windows in my house that had been there for over seventy years. They would have lasted longer still but painting the woodwork on my house is not my favourite activity. I wonder how long the plastic replacements will last? Douglas fir is reasonably dense and hard on the thumbnail test but western red cedar can be almost as soft as balsa and is 'orrible stuff to work

(it's a bit like trying to plane cotton balls) yet it is the preferred timber for roofing shingles and when used for these will last many decades. I used it to build my conservatory.

As a matter of interest, many timbers will last centuries if they are completely immersed in water with a low oxygen content which is quite fortunate as many of our historic buildings are built upon elm piles driven below the water table that are still as good as the day they were put in.

So where does this get us? Well in the end when choosing a timber for a particular application it pays to stick with tradition and experience. Ash is a lovely straight grained springy timber that is ideal for making wagons and tool handles and oak is a good strong and reliable structural material with grown crooks that can be very useful for curved elements of the structure. Apple is ideal for the teeth of cogwheels in water and windmills as it meshes well with the iron of the pinions. Beech is excellent for the framing of chairs and horse chestnut is the best timber from which to make milking pails as it is very white and does not taint the milk. I know! Nobody makes them of timber these days they use stainless steel.

Chestnut splits easily so is good for fencing, whereas elm has interlocking grain and is almost impossible to split so is ideal for chopping blocks. Elm is, in my view, also one of the most attractive timbers and its loss from Dutch elm disease is very tragic. And finally, if you want a new handle for your billhook then you can do no better than to use ivy (which is a hardwood) as it will not slip out of your hand even when wet. 😊

Roger Curtis is a member of the Guildford Model Engineering Society. I saw this article in their newsletter and ask permission to reprint it in ours.

Nick Ruddick

WHAT IS AN EDMONDSON?

By Nick Ruddick

In 1830, when railways first started, they were thought of as a feeder to bring heavy goods to the extensive canal system in England and it was to be several years before people started to use railways for the transportation of passengers. At the start railway ticketing was modeled after the way tickets were issued for stage coaches and tickets had to be hand written by the booking agent including the serial number. As the passenger traffic picked up in the 1830-40s this process became much too slow and so Thomas Edmondson devised the small cardboard ticket that was to last well into the 1960s. Thomas not only devised the ticket but he invented the whole system, including the machine to date the ticket and the racks to hold them.

If it is collectable there are people who do so and this small cardboard ticket is called an Edmondson.

A display of the Thomas Edmondson system can be seen at the National Railway Museum in York, England. He is of interest to me because he is a distant relation. ☺



OUR THANKS

Everybody who knows Al Cuevas is aware that he has been very ill with gall stones. Al is a big part of this Club and he is aware of our positive thoughts for his full recovery from this painful experience. I am sure that he felt it when Kevin the collective Engines of the Club into a giant consist with the intent to help our friend over this steep hill to recovery. Get well soon Al. You are missed.

Cleanliness The maid, who most of the NCMRS membership assumes we have, *has quit*. In fact I don't think she ever found the elevator! Some of you do pretty well but, on the whole members exhibit dropsy. Coffee cups can be found anywhere, especially the "Starbucks" style of paper coffee cup. Too bad there isn't a deposit on them. I could buy excellent lunches. Please clean up when using the table saw. Do not leave debris or tools on the layout. Remember you are working on a piece of fine art.

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