Detailing Wood Structures – In 2 parts – PowerPoint presentation and Hands on Demo.

> Frank Markovich June 2012

Goals for Clinic

- See prototype examples of wood old and relatively new. Both interior and exterior in a variety of rolling stock and structures.
- See model examples of the above.
- Understand some of the techniques to achieve realistic results not just weathering.
- Logical treatments beyond just overall effect.
- Methods to speed things up and keep costs down!
- How to simply add:
 - Grain detail (Appropriate)
 - Peeling paint
 - Weathering the silver gray look.
 - Interior wood –
 - Effects of elements where you would see it sun, water, dirt, wind etc. to your models.
 - Rotting wood yes it does.
 - Bleached wood from sun etc.
 - Weathering of stained wood. different than painted wood.
 - Things that attack or attach to wood. Don't forget mold, plants, etc.
 - Where dirt, rust etc. attach to rolling stock and structures just barely talk about that.
 - Dented wood broken wood burned wood.
 - Wood under water.
 - Doing all of this safely.

Overview

- Let me start by saying that 95% or more of what I am going to cover, I learned from others.
- Real wood doesn't just weather over time, there are dents, discoloration from water, wind etc., cracks, splits, rotting, attacks from plant life and fungus, paint chipping off, accidents breaking the wood etc.
- Special thanks to Mic Greenberg, the late Colin Emmerson (both close friends that showed me more than I could ever learn on my own), and the many weathering books and videos that I have taken information from.
- In all cases there are at least 2 references that I used for my techniques.
- Most of this is done before assembly of the model.
- I found what works for me but you may find what works best for you.
- Most importantly have fun!!!!!

Samples

- During the clinic I will be passing around some samples.
- Please return them.
- I don't have samples of everything but a representative group.
- Will also demo some of the techniques.

Study the prototype!

- Go to the location.
 - Take pictures
 - Make notes
 - Colors
 - Weathering
 - Take measurements etc.
- If not possible then use references:
 - Books
 - Photographs
 - Videos use them more and more now.
 - Internet User groups really have helped me. Most of the prototype photos are from this source.
 - Museums
- Even eye witnesses if you can find them.
- This part can be a hobby itself or a hobby within a hobby.

Some examples

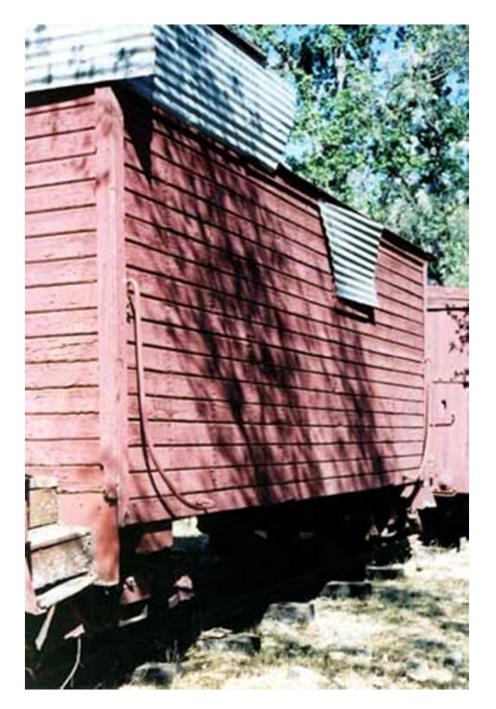
- These are from Westside lumber co.
- Notice the weathering over time.
- Would most likely not do as heavy but for some structures I might.
- First picture is the dispatchers office. Notice the peeling paint and how the weathering is more towards the bottom of the building.
- Will go through the next 12 slides quickly to just talk about what I look for.
- I don't model WSLC but a private line (fictional) in the same geographic area.



Notice more weather effects towards bottom of building. Peeling paint.



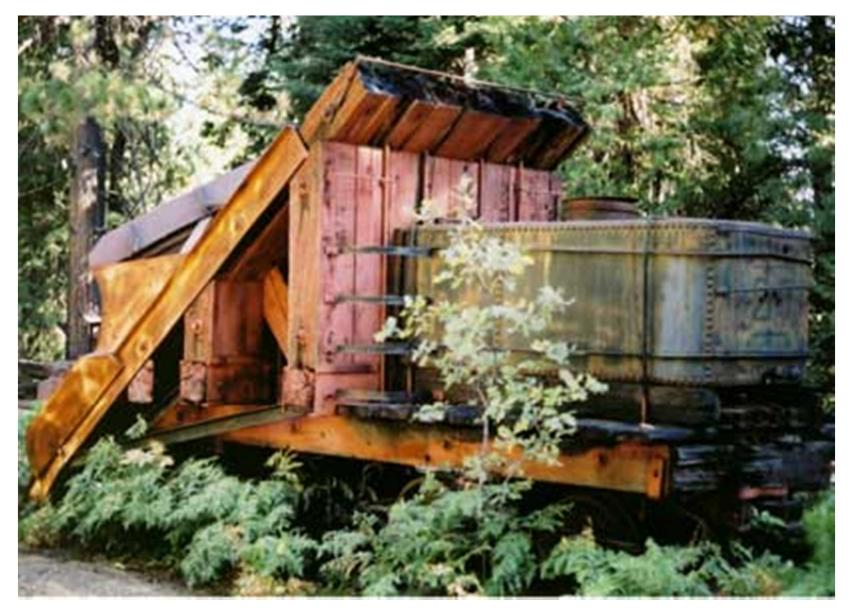
Notice grain on end beams. Weathered grey for fence and how rough cut the fence is.



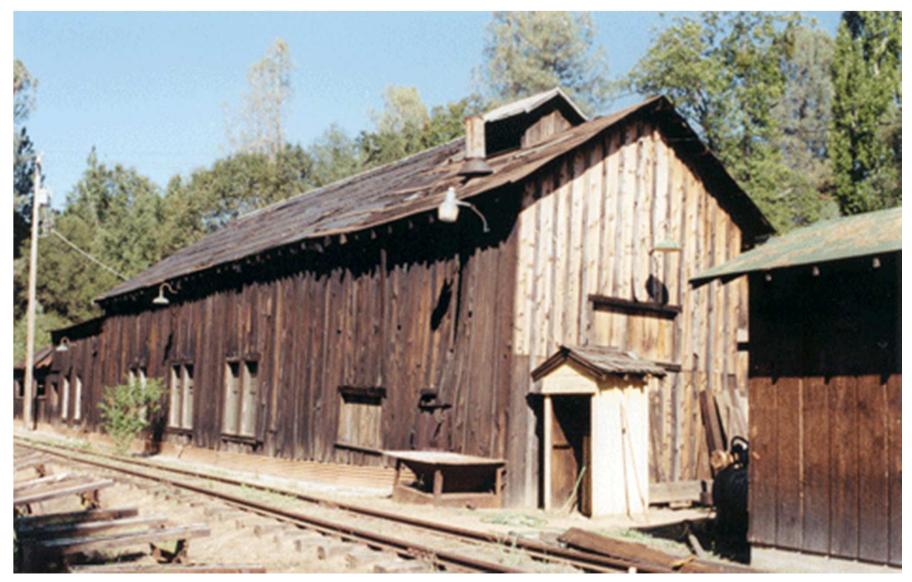
Rotting wood on stair – rough wood on the end. Shades on the wood – paint missing in spots.



Look at the grain on the end board. Also notice missing paint on the sides and end.



Look at the end of beams on the plow – black color with grain. Paint missing on the rest of the wood. Stains everywhere.



Look at the knots on the ends of this building. Also the foreground building the weathering towards the bottom.



Run down. Most likely too much for a model. But good study in effects of weather and sun.



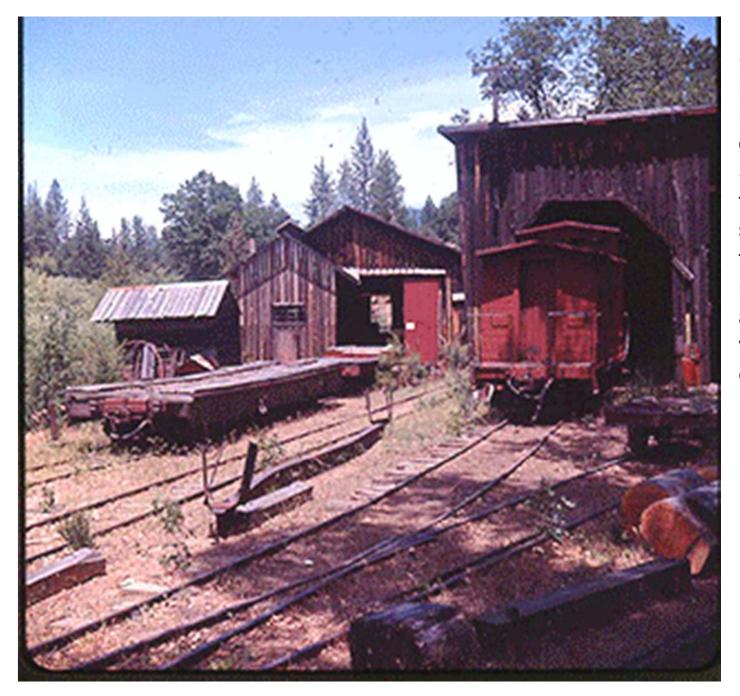
From the inside out – ages of mis-use. See the framing and how large the framework is. Can see detail even on this wood.



Look at the color change from the top of the building to the bottom.



Water tank discoloration. You can get that with a white wash or even use bleach and a strong light source.



So much here that it would take too much time to go over everything. See the shades in the wood structure. The flatcar sags in the middle. Clutter and scraps of wood and debris everywhere.

Make notes

- I suggest you write down everything.
- Now onto adding this detail in your modeling.

Real wood

- While I have seen some very beautiful models made of other materials, for a wood structure, real wood to me still looks the best.
- Some effects cannot be accomplished easily with other materials. Such as exposed wood, broken wood, lifted boards etc.
- To me more fun to work with real wood.
- Lots of choices now: Strip wood, scribed siding, coffee stirrers, sheet woods. Some choices in wood also from basswood, redwood to even balsa in some structures (good to simulate foundations or piers).
- Real wood takes stains well. I know others are able to simulate with various plastics but it just isn't the same look.
- For castings such as windows and doors I always paint them first with a raw wood color. Then continue from there. Floquil CN Grey is a good choice for the base coat.

Why detail wood?

- I like to see some depth in a wood building or rolling stock.
- If it looks too smooth it loses the real look and the feel.
- Even on freshly painted structures and rolling stock, variations can be seen. Nothing stays fresh looking in nature very long!
- It is fun and adds much to a model as long as it isn't overdone! That to me can be a huge mistake. And believe me I have made it more than once.

Some examples

- Both from the YSL (I am a member) and from my own home layout.
- On the next slide look closely at the wood detail – grain detail – variation in the paint etc.
- Board ends are fairly even but not perfect.
- Wood is worn in many places.
- It brings the flatcar to life!

Flatcar



Shacks

- Notice different colors and textures.
- Shingles are individual.
- Nail hole detail.
- Grain detail.
- Loose board modeled.
- Framework.
- Roof not complete.
- Windows open.
- Peeling Paint
- Knot Holes now I do knots themselves use a wood burning set for this or even an old soldering iron. For holes use a wood carving set and gouge out the wood – distress then use black and dark browns around it.
- Broken windows.

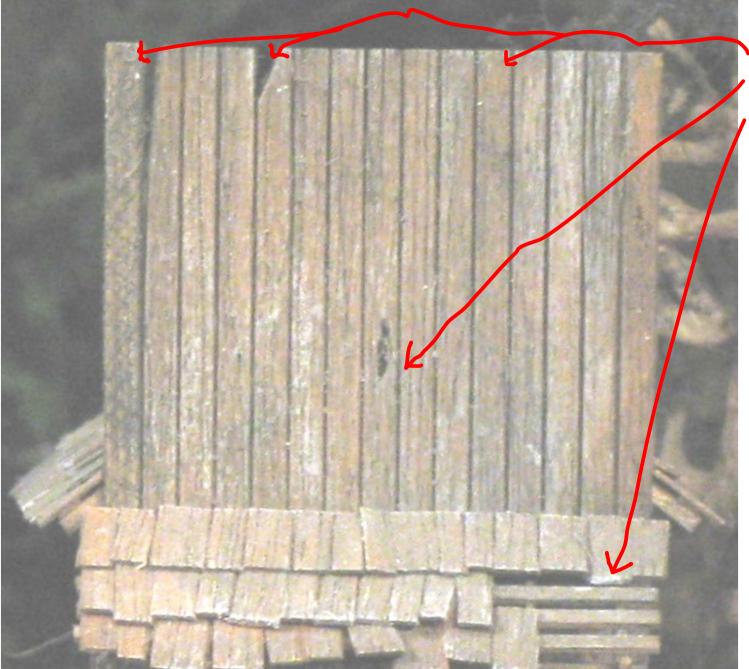


Open window and doors – peeling paint – These windows and doors work and are built of individual pieces.



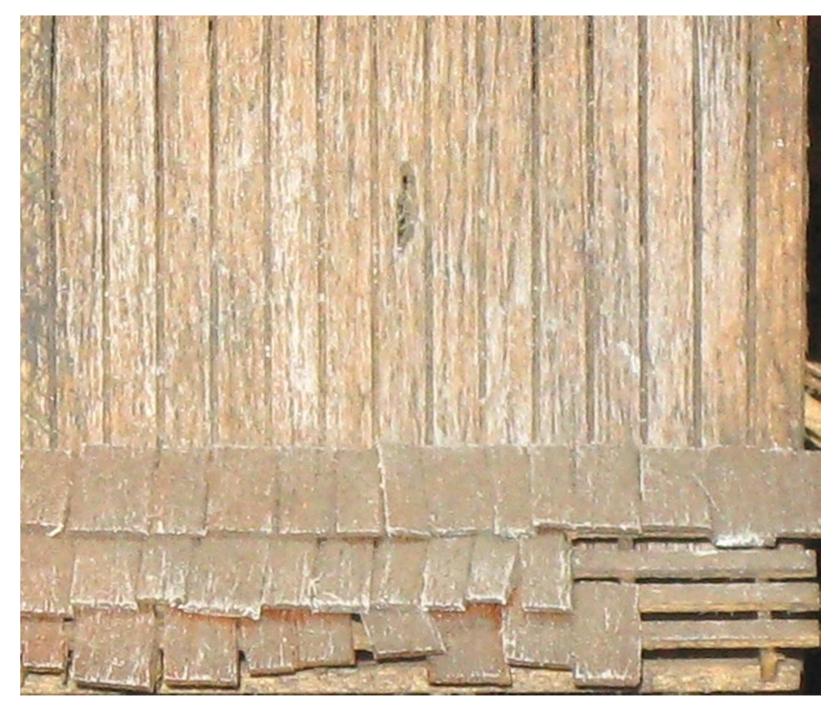


Overall effect of rundown cabin. Broken glass. Interior framing Broken boards.

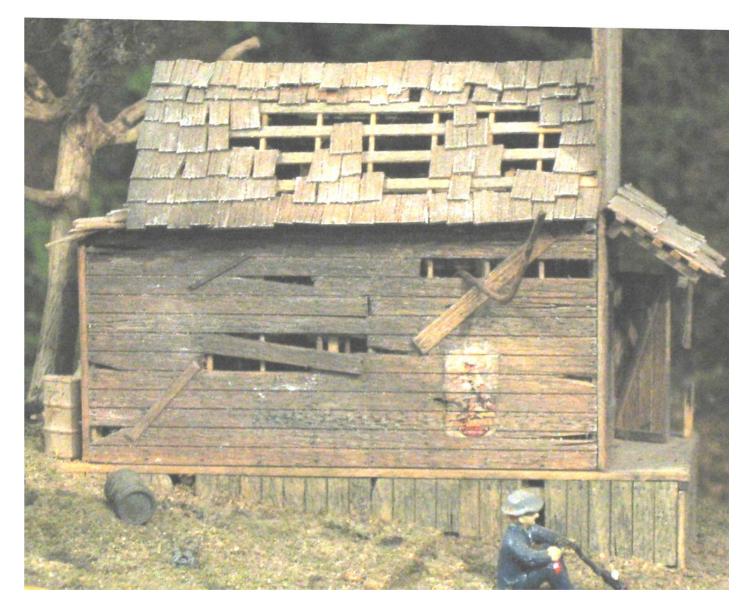


See splits. Knot hole Missing shingles Lots of detail in the wood and texture. This is an HO model.

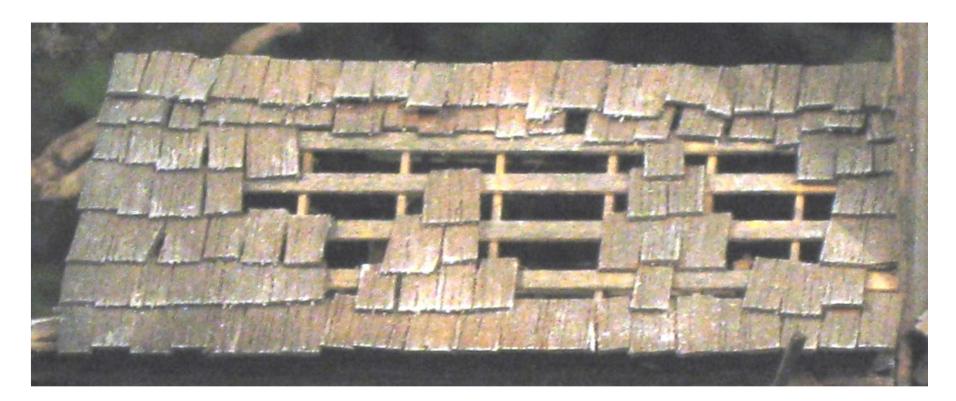




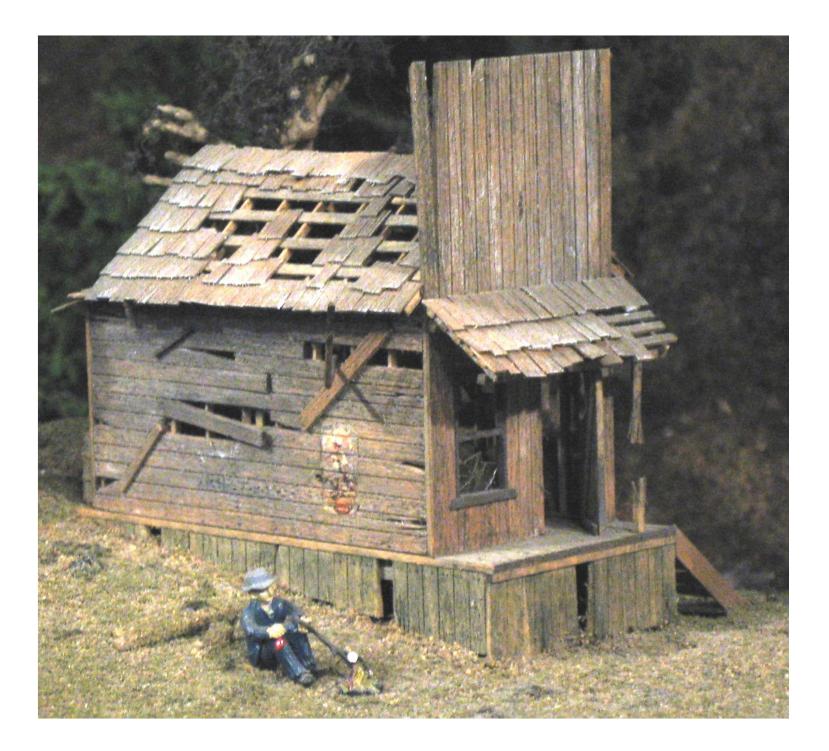
Dry brush white as a final step. Did add in some chalks to highlight.

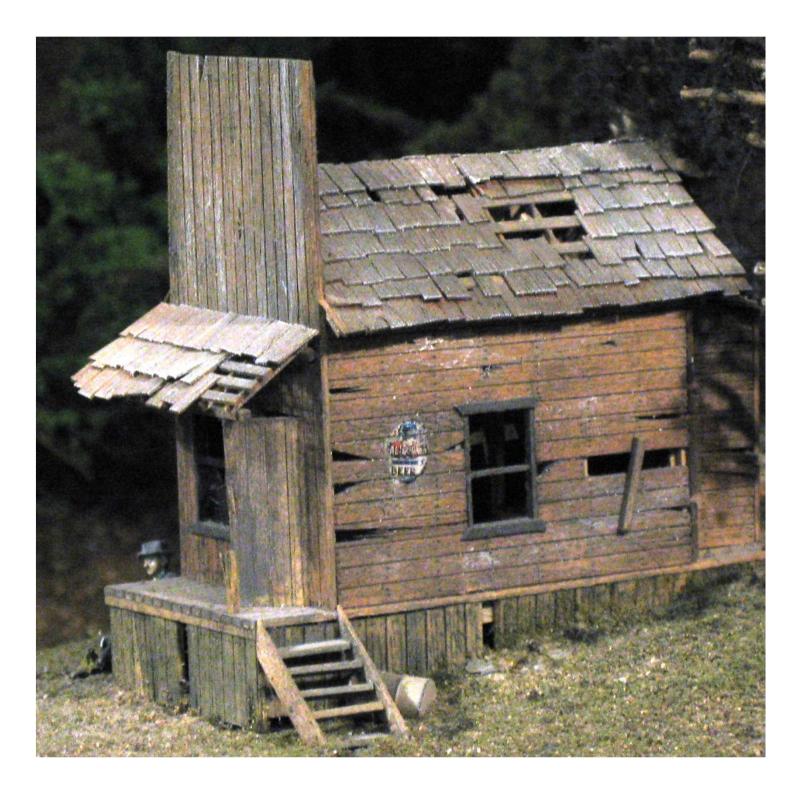


Picture rubbed into the side. Sanded on the back and worked in with knife and dental tool. Also missing boards and shingles show the interior framing. Offset boards to simulate too much use. Nail holes.



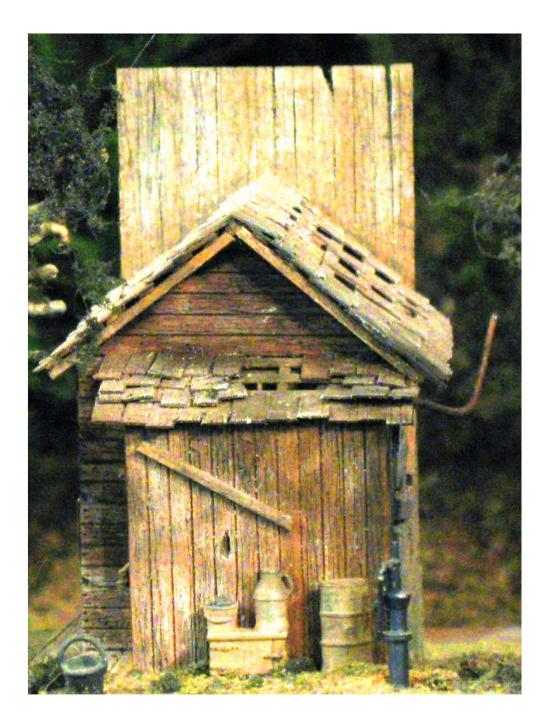
Shingles are wood veneer – real wood again. Treated similarly but then dry brushed with white.



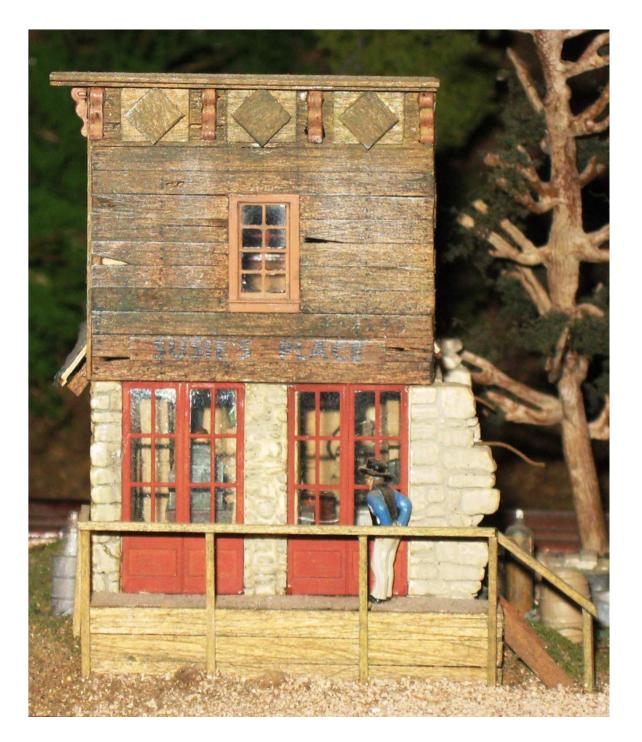




Paint is there but more of a wash. Distressed quite a bit, nail holes, washes of thinned grimy black then dry brushing. All the detail adds to the effect even if viewers don't see it at first.

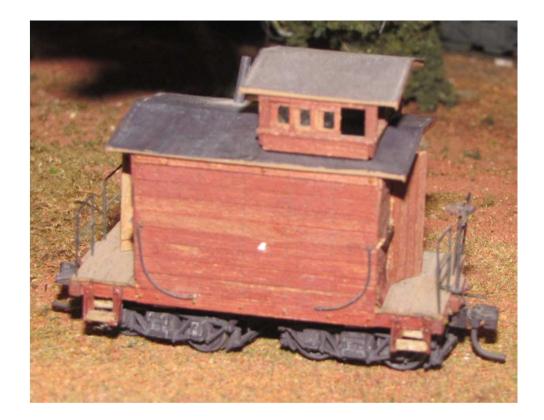


Don't forget the back of the structure. If placed properly on the layout it can be viewed also.



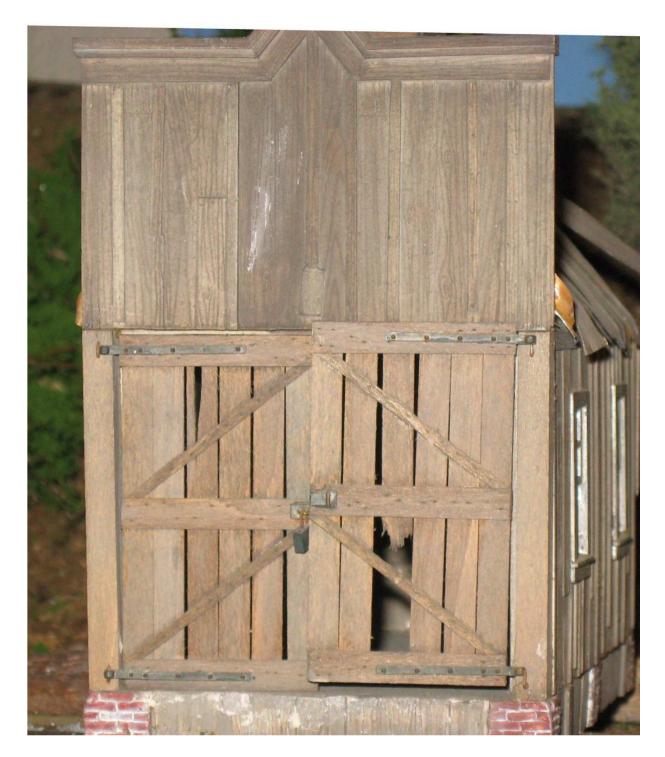
Old Yorke kit. Similar approach.



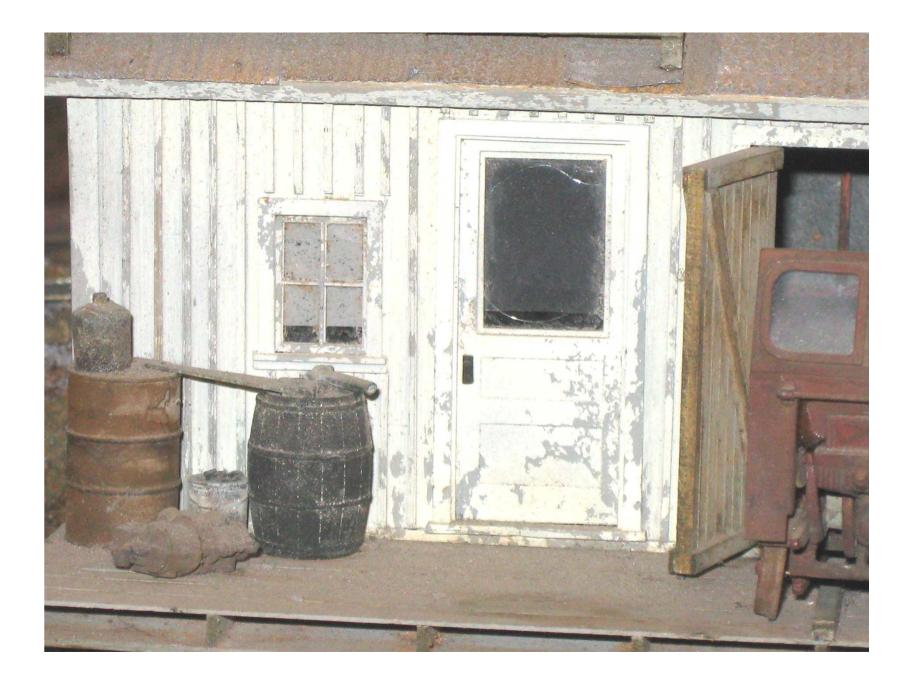


Next 4 slides

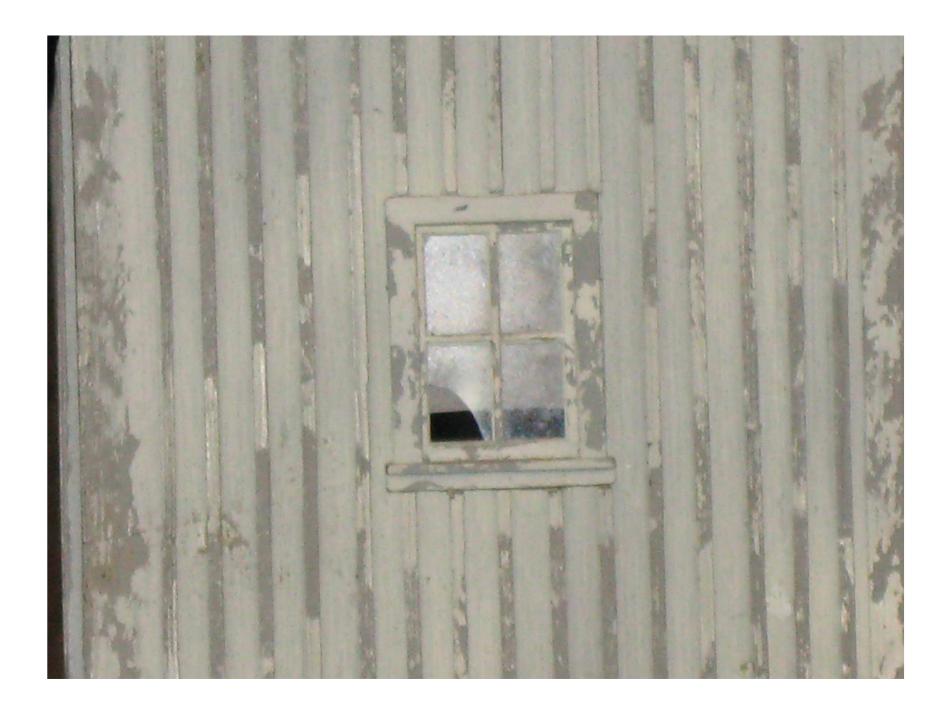
- Not my models but others and good examples.
- Notice peeling paint.
- White works well. Mic Greenberg used it quite a bit. One reason is that it shows up well.

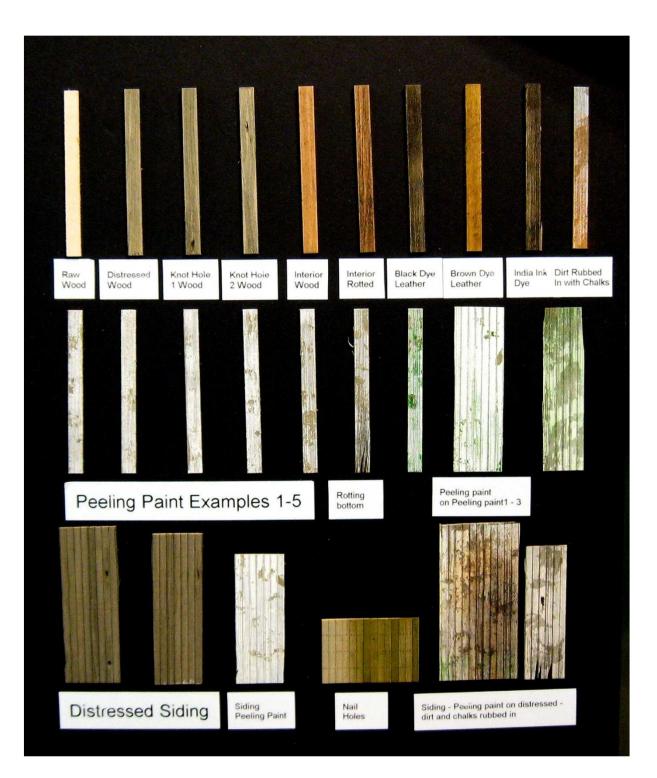


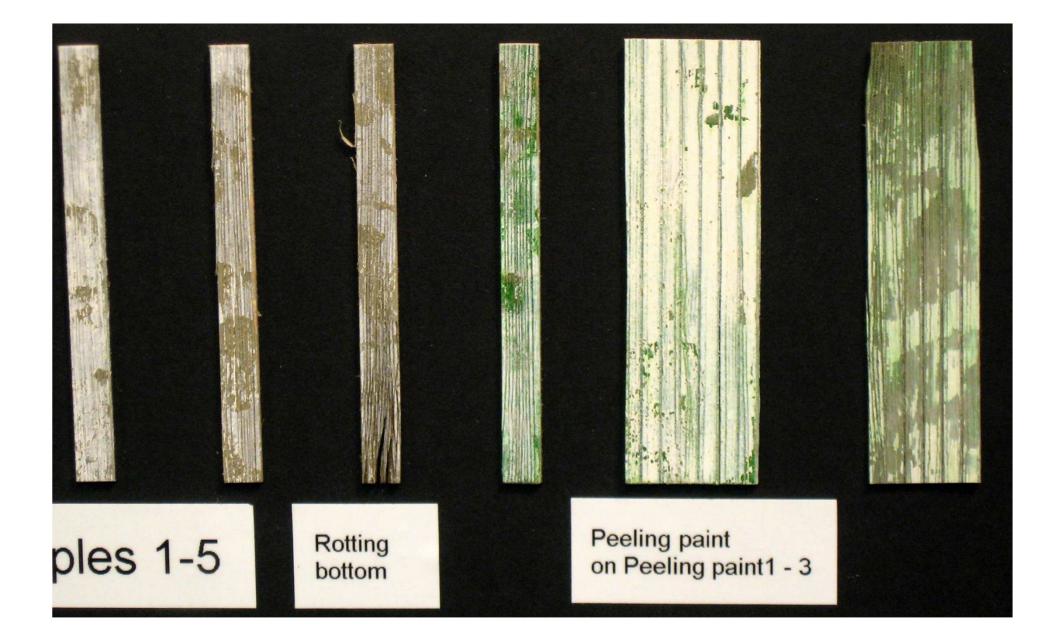
Look at the broken boards. Your eyes go to that immediately. While this can be overdone on a door it looks right. Also lots of variation of the boards and grain detail.











Questions before starting

- Even with a kit there are a number of questions that need to be answered before starting your model.
 - New
 - Old -
 - Is it in disrepair?
 - How long has it been in use or service.
 - Has it been taken care of?
 - Era
 - Location (where prototype is located)
 - Climate (where prototype is located)
 - What is the purpose it was used for rolling stock is obvious usually but buildings may not be. Make sure if you are building a structure that it fits your goals.
 - Will there be an interior plan it right out. Much easier than later.
 - Framing 16 inch or 24 inch centers for buildings.

Before starting

- Examine the wood.
- If necessary sand it smooth unless a rough cut is desired.
- Quality of wood is important Kappler or Mt. Albert are two of the best brands.
- Could also use scraps of wood.
- Or even coffee stirrers.
- I even like siding can work great board by board can be better looking if done right but scribed siding can be just as good with some work. In some cases it looks more realistic.

Scale

- Plays a big role in this smaller scales require much less detail.
 - Wood grain in Z would never be seen.
 - Wood grain in G scale would not only be seen but would look unrealistic if it were not there.
 - O scale, S scale would require a little more than HO scale.
 - But even N scale can use some to add character.

Must look real

- In order to do this, you must study to some extent rolling stock, structures etc. to get the correct effects that you want.
- While characterization might be ok for some it is not for me. That being said John Allen's work was superb.
- Just like in the movies or theater though you might want to exaggerate a little in order to bring out effects.
- Must fit into layout. For structures work in real dirt and plants.

Planning

- Most important part.
- Answer the previous questions.
- Write out as much as you can for reference and to set a direction.
- Do not skip this step even if building a kit.

Here is my latest project

- Just first couple of pages.
- Plans following done with Visio

Example of Planning

Tool shed goals

- 1. Must fit in a space no bigger than 4" by 6" front long side. Includes any part of footprint. This includes deck etc.
- 2. Age old 20 years or more. Very weather worn. Paint is beginning to wear out. Wood underneath split and showing lots of grain detail etc.
- 3. Board by board with a full frame interior and floor. Floor will be scribbed. Much easier and will look fine. Also unpainted but fully weathered – more weathered by the door.
- 4. Inside no paint will stain with walnut. Wipe stain.
- 5. Roof will be shingles individual shingles. No gutters!
- 6. Windows and doors will be scratch-built. Large enough to see in.
- 7. Double wide doors open swing open not slide. Make them work.
- 8. Windows are double hung. Not working.
- 9. Outside color will be similar to Westside yellow with white trim. All peeling paint. More towards bottom of walls.
- 10. Peak on side.
- 11. Nails will show. 24 inch centers for studs.
- 12. Prototype built out of pine of fir. So knots are present.
- 13. Make roof removeable.
- 14. Interior with work benches etc. To be added after building is complete.
- 15. Framing 2 by 4's.
- 16. Siding 1 by 12's. Siding is horizontal.
- 17. Plans drawn in Visio.

Comments: inside wood and exterior different. Wipe them to get the effect.

Following slides are my directions for the project.

- I write these out.
- Not afraid to modify them as needed.
- Many times I get ideas as I go along.
- But this gives me a direction.
- Without a direction, how will I know how to get there and what I intend.

Cutting - staining – painting – assembling etc.

Start with plan on building. If scratch-building do as if you wrote kit instructions.

Order

- 1. Build jig for framework do over framing plan. Build from plastic so wood glue won't stick to the frame.
- 2. Stain the framing. Wipe on Walnut thinned down a bit. 2 days. This to include the roof rafters and the roof stringers Model furring strips for the roof.
- 3. Stain the floor let it dry 2 days.
- 4. Stain rest of wood. Start with the Walnut. Wipe on with rag. Let dry 2 days.
- 5. For exterior of wood start with silver grey stain driftwood or India Ink formula. Let dry 1 week!!!
- 6. Do the framing with the pre-stained wood. Use carpenters Glue with small glue applicator.
- 7. Put knots in with wood burner.
- 8. Use #11 knife to add in detail around knot holes.. Distress the floor rest of the floor.. Use distress tool.
- 9. Do a wash of grimy black on the floor. Make area by door a heavier wash.
- 10. Make cuts in scribed wood to indicate different board lengths.
- 11. Dry brush with Earth, Mud, and some Roof Brown Poly S the boards to very the color. Do to board ends? Do not overdo. Use very little paint.
- 12. Add in Nail holes to the floor with a drafting pencil. Run down a few boards sides to show cracks in flooring.
- 13. Rub in various chalks to indicate wear and dirt on floor. Use earth colors.
- 14. Assemble the siding on the framing for each wall.
- 15. On to exterior walls put knots in with wood burner.
- 16. Use #11 knife to add in detail around knot holes.. Distress the sides rest of the sides.. Use distress tool.
- 17. Do a wash of grimy black on the sides. Make area by bottom a heavier wash.

- 18. Make cuts in siding to indicate different board lengths. Do where there is framing.
- 19. Add in Nail holes to the sides with a drafting pencil. Opposite where the framing is located.
- 20. Dry brush with Earth, Mud, and some Roof Brown Poly S the boards to very the color. Do not overdo. Use very little paint.
- 21. Distress and add wood grain, knots etc. on the exterior walls. This is a first pass. Will do more later on.
- 22. Treat outside walls with thin wash of grimy black to get the distressing to show. Don't worry is some gets on inside as cracks etc. in the structure will show through.
- 23. Cover the framing leave the openings for the doors and windows.
- 24. For each wall Pat rubber cement on the walls. Do more towards the bottom of the walls and less to none towards the top of the walls.

- 25. Spray paint yellow (Westside Color) on walls. Not full coverage!
- 26. When dry to the touch rub rubber cement pickup over the walls to reveal peeling paint. Let it dry 1 week.
- 27. Use a #11 blade to scrape off some of the paint again more towards the bottom of the walls.
- 28. Distress lower parts of wall with #11 blade.
- 29. Lift up 1 or 2 boards in the middle may have to cut through. Put grain on the ends.
- 30. Wash walls with grimy black or India Ink rub off only want in distressed parts.
- 31. Let it dry for a few days minimum.
- 32. Use some chalks to add in weathering. Bragdon chalks rub into the sides.
- 33. Do similar for the doors and windows being built but the paint step should be white rather than yellow. Also for outside corner trim.
- 34. Corner trim Doors and Windows should be built in place. Do pre-stain weather, peeling paint parts before cutting and assembling.
- 35. Next assemble the walls on the scribed base using Carpenters glue. Be sure to use weights and squares to ensure that structure is square.
- 36. Once completely set again I allow at least 1 full day. Start the roof. Use jigs like for the framing. Build them up 1 at a time. Make sure that the roof is removeable.

Plans – reduced for presentation.



Tools

- Most important tool for me is the X-Acto knife with a #11 blade. I get them by the box.
- File cleaner for doing grain on large amounts of wood at one time.
- Wire brush for the same.
- A tool will show you that puts a number of X-Acto blades (5 to 7) in at once. Easy to make. I have a number of these.
- Pounce tool (used in sewing) also called tracing wheel.
- I use a drafting pencil for nail holes.
- Can make nail hole tools will show.
- Various good paint brushes and some inexpensive ones for dry brushing and other techniques that seem to eat brushes.
 - Good inexpensive collections can be had from Michael's Craft stores or Aaron Brothers. Get on both companies Email lists for sales and specials.
 - Even inexpensive foam brushes can be used.
- Hobby Ruler.
- Old T-Shirts one way to apply paint quickly.
- Scales, squares, weights.
- Ruling pen for applying super glue drafting supply stores have this.
- T-pins for holding parts down.
- Glue applicators work well.

Other materials & tools continued.

- Rubber cement
- Rubber cement pickup
- Chalks
- ACC I use this very little but others use it quite a bit.
- For wood I prefer using carpenters glue or even white glue.
- Epoxy, goo, etc. can be used for special needs.
- Palettes for many items. I use tops of cottage cheese and other items. It is a type of recycling.
- Masking tape can be used in place of rubber cement pickup.
- Blue tape for masking don't use much but it does help
- Cutting mat large one makes it easier. Good surface helps.

Paints etc.

- 99% Isopropyl alcohol with ~2 ounces of India Ink. Could also use 70% Isopropyl alcohol – I prefer 99% as less chance of warping the wood. Can vary this and I do.
- For interior wood use the same Isopropyl alcohol with brown India Ink (I found this recently – it works really well). The alcohol – India Ink mixture is really inexpensive - \$7 a pint. Goes a long way.
- If you can find it Floquil Driftwood stain I have 2 pints left. Like gold to me.
- There are formulas for making it. Some better than others. My favorite is CN Gray with 2.5 parts thinner.
- Rubbing alcohol and leather dye. I have also used this prefer India Ink.
- Various stains I like maple, oak, etc. Can buy larger amounts of MinWax stains. Much less expensive than hobby stains – what Floquil used and rebottled.
- Floquil weathered black, cheery, maple, concrete, mud, etc.
- Grimy black Floquil thinned out considerably.

Acrylics

- The usual suspects are needed some listed below:
 - Burnt Sienna
 - Raw Sienna
 - Burnt Umber
 - Raw Umber
 - Various yellows, greens etc.
 - White
 - # You can buy sets of these from Michael's crafts watch for sales and get on their email list.
- Floquil Poly S:
 - Earth
 - Dirt
 - Mud
 - Others as needed.

Safety

- Wear safety glasses whenever working with tools, or with adhesives and paints.
- Work in a well ventilated area! A vented booth when spray painting. A mask at the very least!
- Wear gloves with any paints, solvents, glues etc.
- Keep cutters sharp! Dull blades are more dangerous than sharp ones. Discard worn blades properly.
- Cut away from you not towards you.
- Work in a clean organized space. Use a healing mat to work on.
- Above all use common sense. If something doesn't feel or look right it probably isn't!

Experiment

- I am not the final expert.
- Try the various techniques, stains, paints etc. and find what works for you!
- Watch clinics on this topic. Lots of good DVD's out there on this. They will give you other ideas also. Darryl Huffington's are good as a start but also Paul Scoles etc.

Distressing tools

- I could go on for pages but here is a brief list:
 - Hobby knife with #11 Blades other blades can be used for special effects.
 - Wood Distressor how to build on next slides.
 - Dental Tools dental picks can really work well.
 - Wood burning set with different points great for knots.
 - File Cleaner for files to take out the small filed items in the grooves.
 - Wire brush don't go to cheap here.
 - BBQ brush clean unused one.
 - Fine Toothed modelers saw blade in handle.
 - Course sandpaper or emery board.
 - Other knifes etc. I look for all sorts of unusual items.
 - Wood carving tools I use these to gouge out for knot holes.

Wood Wrecker

- Have built one years ago. All use #11 blades.
- First experiment was to chuck 5 blades in a vice grip. This worked well as long as the grip was tightened up significantly.
- Then did something similar with 5 blades bolted them together epoxy over the none blade end. Modified a handle wood handle drilled out to the size just over the end of the blades. Epoxy on the blades to handle.
- Used this for years did every tie on my home layout with this.
- Handle was great as it allowed me to work very fast.
- Note use safety glasses when doing this technique.
- I finally broke a blade after doing the entire layout when working on an individual module.
- I have also modified an hobby knife tool to do the same. My son did this in school for a class invention project.
- Whatever you do dip the handle in something to provide a grip.
- The Maple Leaf Mafia Narrow Gauge modeling group in the Toronto area came up with a neat tool for scribing and distressing wood for structures and for railway ties. A description with my modifications is on the next slide.

Wood Wrecker pt. 2

BUILD YOUR OWN WOOD WRECKER -

Start with a 6 to 8 inch length of rectangular brass tubing by K&S or Special Shapes Co. It needs to measure 5/32" x 5/16" outside dimensions. Use #11 X-Acto knife blades. Some recommend using old blades – I have found that new blades really work best. You can buy blades in large quantities.

The shafts of exactly 6 blades will be an extremely tight fit inside the opening of the rectangular tubing. Use a block of wood or Masonite to force the blades inside the tubing, until they are firmly seated. I tape the ends together (point side). Be extremely careful - those blades are still sharp!! They can go flying so wear safety glasses when doing this!!!!

If you are nervous about the blades coming out, use a couple drops of ACC or epoxy to freeze them in the shaft. Now wrap the tubing with something to prevent the edges from hurting your hands. I dipped the handle in the rubber goop they sell at Home Depot for tool handles.

To use the tool, simply scribe in the direction of the grain. Because of the six blades, one pass will 'grain' an On3 tie, and the lines are perfectly parallel. Swerve the tool, or make a curved pass to get some variety. Around knot holes make sure that you swerve it appropriately.

Cutting Tools

- NWSL Choppers I have and use all 3.
- Hobby knife #11 blade.
- NWSL True Sander.
- Dremel or similar 3 to 5 inch power disk sander.
- Cut off saw Ron Kolo uses this effectively I use it with the coffee stirrers.
- NWSL Dupli-cutter good for scribed siding.
- Signal edge razor blades give great cuts and very inexpensive!!

Modify windows and doors

- If using castings you can add lots of interest by modifying windows and doors.
- Have them open or cut out mullions.
- Even better scratch build doors and windows. I did this on the shack in the earlier picture. The windows and doors actually open and close. Subject of a NGSL article I did a few years ago

Bottom of walls

- Use the alcohol shoe dye starting at the bottom. Brown black mixture.
- Wet stiff brush start at the bottom and work your way up the structure be very random!
- Dry brush well almost.
- Can then use chalks again starting at the bottom.
- Start with a gray chalk (Bragdon enterprises).
- Then a rust or similar and lastly a black or brown
- I use a fan brush for this.
- Above anywhere that a engine would be running brush with mainly black going up.

Dry Brushing

- Use this quite a bit really a lot on trees will show 1 tree trunk.
- Get just a little paint on the brush. Rub most of it off on any porous surface – I use scrap paper and or a scrap rag.
- With most of the paint off go over the wood lightly getting just the highlights.
- Use mainly a white and then earth colors for this. White brings out detail on edges.

Other sources

- Magazines NGSL Gazette my favorite but Model Railroader, Railroad Model Craftsman, and other outside MR such as Finescale Modeler.
- Books Kalmbach and others.
- DVD's lots here, from Greenfrog, Darryl Huffman, Paul Scoles etc.
- Magazines on railroading and structures I even like to go through National Geographic.
- Use time while waiting in doctors and dentist offices etc. to go through magazines.
- Clinics
- Other modelers my best source.

Before we start

- Be safe
- Wear safety glasses whenever working with tools.
- Work in a well ventilated area.
- Spray booth if spray painting.
- Wear respirator when using paints especially lacquer or mineral based paints!
- Wear gloves when rubbing paints on wood or whenever paint could come in contact with your hands etc.

For interior wood

- Use a thin wash of walnut, cheery or other stain. Also can use a very thin wash of grimy black.
- The brown India Ink in Alcohol works really well. There is an example of that on the handout.
- Will also sometimes do light dry brushing of earth, mud and sometime roof brown. Very light. Make darker by the bottom.
- Anywhere above where loco's go use some grimy black.

Exterior wood

- Start with one of 3 silver effects:
 - Floquil driftwood I still have 2 pints left bought it when they announced they were discontinuing it.
 - There are online formulas for getting close to this.
 - Some using commercial paints some using existing model paints.
 - Or the India ink and rubbing alcohol. Vary the mixes.
 - Or the leather dye (black and brown) and rubbing alcohol
 - These last two I have used but still prefer driftwood.
 - Following 2 pages show other formulas to get driftwood.

Driftwood formulas

- Thinned grime works well experiment with thinner to grime about 4 parts to 1.
- 2.5 parts Diosol, 1 part CN Gray with a little weathered black or grime. For closeness to Driftwood this really does work well. I also use this on castings for an undercoat – thinned just a bit not 2.5 to 1.

From another internet source – Maybe get together with others for this.

• Its supposed to be a dead ringer for Floquil driftwood!!!

Can you imagine 2.5 quarts (yes, i said quarts, not ounces) of Driftwood stain for under 20 bucks??

Start with 1 qt of Sherwin Williams "Pickled White" Interior Wood Oil Stain Wood Classic." Have the following tint added:

W1-20 B1-16 Y3-11 Y1-2

The only requirement is that the Sherwin Williams outlet you get this from must have the computerized mixing setup.

[This information originally appeared on the On30Conspiracy on August 7, 2000.]

In use, the stain needs to be thinned with approximately 1 1/2 quarts of Diosol.

Wipe driftwood stain or other stain method such as India Ink or leather dye on the wood

- Use a rag (Cut up T-Shirt), wear gloves.
- As an alternative use inexpensive paint brushes.
- Will demonstrate.
- Wipe 1 direction.
- Do not try to fully cover.
- Vary quite a bit!
- This must dry a few days!!!!
- I usually let it dry at least one week.

Next distress the wood

- Use distressing tool.
- E-Xato knife with #11 blade
- Wood burning tool for knot's. I do this first.
- Dental tools picks etc.
- Or even the file cleaner, or wire brush.

Wire brush technique

- Run a wire brush down the wood in one direction.
- Vary the angle etc. get variety.
- Could also use a file cleaner or BBQ brush.
- I like the file cleaner but wear gloves. I have cut my fingers or hands more than once doing this.
- Good for lots of wood.

Distress tool

- I prefer this method.
- Again go down in 1 direction and move it around – will demonstrate.
- Can also do ends on flatcars to get grain detail.
- Works great to go around knots.

Add more detail

- I will not do all of the wood with the previous methods but will do some boards totally individually with an #11 blade. Put it knot holes etc.
- For knot holes can use the knife, other blades, dental picks, or wood burning technique – just started doing this and it looks great.

Wash of thinned grimy black

- To bring out grain detail. Very thin.
- May even use my paint thinner for cleaning brushes (this is what I and others use more often than not).
- Brush it on and wipe it off with a rag!!!
- Only want it in the grain.
- An alternative is to use the India Ink or Leather dye thinned with rubbing alcohol.

Then add some color

- Using dry brush techniques.
- Poly S paints of Mud and Earth. Also some Roof Brown for variety.
- Don't overdo just a little must be dry brushing.
- Again let this dry for some time.

Add in wood that is rotted

- Bottom of structure will be where this wood is located.
- Really distress quite a bit. Washes of Grimy black. I do in about 3 passes of distress and Grimy Black.

Old colors

- I actually start with rubber cement tapped on the wood. Let it dry.
- If the structure had another color or more of paint underneath wipe it on very thin. Or spray paint it. Don't fully cover!
- Then use rubber cement pickup, masking tape, your finger – or an eraser to lift the paint and rubber cement.
- I will distress again.
- Let this dry a few days.
- Then a wash of grimy black

Final color

- Do the same last steps.
- Rubber cement more towards bottom of building or lower part of rolling stock.
- Spray or wipe on paint do thin and don't fully cover.
- Pull off paint where rubber cement was using rubber cement pickup.
- Lastly use the back side of a #11 blade to wipe off some of the paint. Be careful during this step.

Final steps

- Again India ink or grimy black wash over the whole structure.
- Then you can use powders for add color.
- I used to dry brush with white. I still do but do much less and try to get it so that the viewer doesn't even see the white. It is for highlighting.
- I lastly like putting moss or other plant type material on structures or mud on the underside of rolling stock

Peeling Paint

- Think about how much and where.
 - More towards bottom of what you are building and less towards the top.
 - Doors get lots of action and use more there.
 - Windows get a bit. Think about where people handle the windows for a start – where windows rub – going up and down or sliding.
 - More on the sun side usually and less on the shade side (moss and growth more there – or rotting if in a damp place).
- From a high level on how to do.
 - Put something on the wood before the final coat of paint.
 - Paint
 - Remove that something
 - Many ways to accomplish this.

Methods for Peeling Paint

- Put rubber cement on where you want the final paint to be missing. Use paint between fingers or use small tool to apply the cement.
- Paint
- When dry !! Use rubber cement pick-up. A rubber type item. Can also use your finger rubbing across or masking tape.
- I have used all 3 and all work well. Finger is not the best but for small areas works fine.
- For other techniques it is similar. You can use salt, dirt, etc. First lightly wet it to put it on the surface. For this use the finger or masking tape. I use this for metal items quite a bit but works equally well for wood. Can be finer than the rubber cement both an advantage and disadvantage.

Peeling Paint Cont.

- Also use the hobby knife with a #11 blade to scrape off some paint – again by the bottom of the model.
- Do not overdo the peeling paint!
- I have actually left some rubber cement under paint to represent bubbling of the paint in some areas – a nice effect.

Final Touches

- More washes of both diluted black and diluted browns.
- Rubbing in real dirt towards bottom. Also underneath rolling stock but away from working parts.
- Weathering chalks Bragdon and ones you get from powered chalks.
- Put signs on the building. Rub them in and use a knife, dental tools etc. to work into the wood surface. Also, do washes over it like the siding. Want to make it all tie together.
- Plant material near the bottom of structures. Can even use to hide problems.
- Water tanks etc. Use bleach spray it on use high power light to get effect – or the sun.

For modeling Dented or Broken Wood

- I will break pieces even scribed siding.
 See earlier photos. Make sure the edges are rough!.
- For siding you can cut the boards and pull it out. For both roughen up the ends!! Using X-Acto knife, dental tools, etc.
- Dents use dental tools works best for me. Must use a bit of pressure for this.

Burnt buildings

- Use real fire. Be very careful. Scorch the edge of the wood.
- I have only done this one time.
- Then you can bleach it afterword for a great effect.

Tools

- Go over the various tools used. Show each tool.
 - Where to get tools.
- Go over paints used.
 - Where to get them.
 - Pricing
- Stains
 - How to make them.
 - Where to get materials.

Demo's

- Show Tools
 - Lay them out and talk about each tool and it's use.
- 3 types of old wood techniques (gray silver look)
 - Driftwood rub on with rag. Dry 2 days.
 - India Ink and Isopropyl Alcohol. Dry 1 day.
 - Shoe dye and Isopropyl Alcohol. Dry 1 day.
- Distressing show each method
 - Knife
 - Distressing tool
 - Carving set
 - Wood burner knot holes
 - Wire brush
 - File Cleaner
 - Side of saw blade
- Show methods of knot holes- step 1.
 - Wood Burning
 - X-Exto knife
 - Wood carving
- Bringing out grain all must dry at least 2 days!!!
 - Dirty paint
 - Grimy black cut by 10
 - India Ink wash
 - Wash of Leather dye
- Peeling Paint
 - Rubber Cement
 - Rubber Cement Pickup
 - Masking Tape as an alternative

Demo's 2

- Nail holes
 - Pounce tool --
 - Drafting Pencil
 - Homemade tool Maybe
- Dry Brushing
 - Various Colors
 - Rag wipe off.
 - On a tree trunk
- Chalks
 - Bragdon rubbing in
 - Using dirt as a chalk
 - Other chalks use fixative to fasten
- Interior
 - Paint -
 - Leather Stain
- Peeling Paint
 - Rubber Cement
 - Rubber Cement Pickup
 - Masking Tape as an alternative
 - Salt
- Trees
 - Carving
 - Painting
 - Drilling
 - Adding in Caspia

Knot Holes

- Show methods step 1.
 - Wood Burning
 - X-Exto knife
 - Wood carving
 - Using a toothpick or other piece of wood.
 - Drill a hole in the wood the size of the toothpick.
 - Stain the toothpick use a dark stain such as walnut.
 - Put the end of the toothpick in the hole. Cut off the back of it. Must be flush with the front.
 - Glue it on the back of the wood.
 - This works best in large scales O scale or larger HO or smaller would be difficult.

Latest Technique

- Using pastels
- Use high quality
- Powder and apply with soft brush.
- Fix with odor-less mineral spirits.
- Can build up.

Start with coloring base

- Rubbing alcohol with India Ink or Shoe Dye. Wear gloves!
- Let dry.
- Distress the wood.
- Add in nail holes like before.
- Then add powder to wood and use the mineral spirits to work it in.

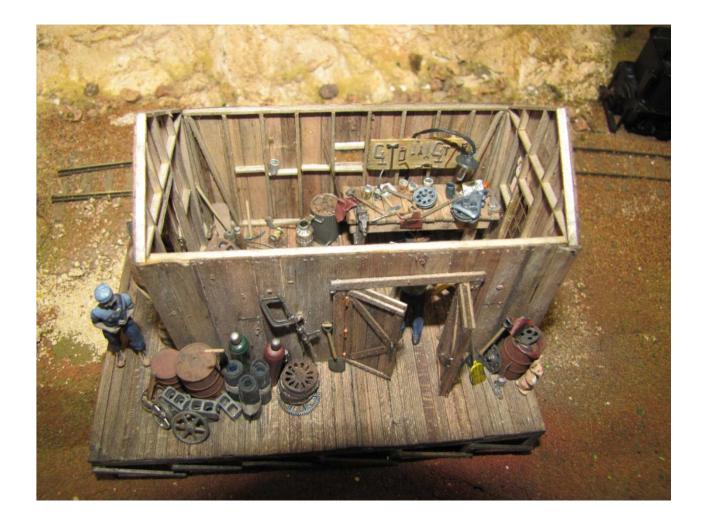
Notice floor Variation



Knot Holes Etc.

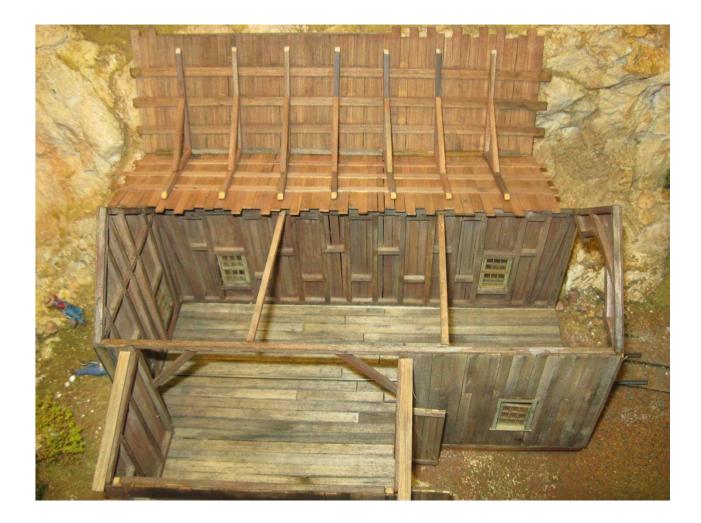


Shading etc.











Contact Information

- Frank Markovich
 - Email: <u>frank@frankmarkovich.com</u> or <u>markovich@smccd.edu</u>
 - Cell 408-505-2727
 - Address: 1904 Chula Vista Dr., Belmont Ca 94002