

## Section 13 March 2, 2006



### ***Context***

With the completion of the north room, we move into the area that has suffered the most deterioration due to long periods of exposure with much of the glass lost. We will plan the work completely for a double section approach to complete 13 and 14 by the end of the month.

### ***Initial observations***

Vent operator shafts are replaced in this area due to corrosion that has reduced the wall thickness of the pipe to less than 50% in areas adjacent to the cast iron arms. An attempt to understand the unusual corrosion results in speculation that there may have been high acidity in this central part of the greenhouse due to the long term presence of fruiting vines or the early exposure to acid precipitated from the wood/coal boilers.

### ***Proposed practice***

Removal of glass and wood will be completed before the shelter is moved. We prefer to do the metal prep and repairs under wet conditions and do cleanup immediately before painting takes place.



### ***Results from thirteenth section***

Our completion includes the work of the interior wall. With the glass removed and tagged for replacement location, wood prep is completed in place. Repairs and prime coat are done before the glass is re-installed. Most of the glass is intact. Small repair pieces are added. One piece of original glass is replaced due to curvature that has developed over time.

### ***Recommended practice***

The wood glazing bars or muntins of the roof and wall require replacement due to their extremely bad condition. Replacement with new yellow cedar muntins increases to 25%. I anticipate similar proportions for the balance of the project.

### ***Conservation practice***

Work continues on the repair and repainting of the doors. Patches to jambs and doors are done with yellow cedar. Glazing stops for the exterior doors and bolection molding is being manufactured to match the original needed for replacement of damaged or missing parts. Most hardware has been replaced with modern material. Where replacement is required, we will use hardware similar to period style.

### ***Project priorities***

Thorough cleaning and lubrication maintain proper operation of the vent sashes.

### ***Future caretaking***

Check for worn parts in the vent mechanism. Pivots, arm set screws and shaft couplers may require adjustment or repair. Oil level in the gear bath should just come to the bottom of the gear.

