



**AST EXHIBITS**  
NO STORY LEFT UNTOLD

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*"If history  
were taught  
in the form  
of stories,  
it would never  
be forgotten."*

- Rudyard Kipling

# SFSM Exhibit Construction Progress Report 04/17/2013

**"Quality is not an act, it is a habit."  
--Aristotle,  
Greek philosopher**

We are nearing the end of the production process for the South Florida Science Museum and the exhibits are coming together nicely. Historically, during the last few weeks of production there is an increasing pressure to complete all aspects of the project by the installation date. By maintaining our high standards, especially during this time, we ensure quality workmanship.

At AST Exhibits, quality is not only important to our clients, but to us as well, as it is at the core of our guiding principles. Every aspect of production must be held to this principle from the selection of materials, hiring only the most qualified individuals, to insisting that everything be the best that it can possibly be before it ever leaves our shop.

So, as you read through this report, know that we are working tirelessly to deliver the best possible product.

*"The leadership to establish extremely high standards and the ability to insist that they be adhered to throughout the entire production process are the most important skills that I have developed over the years. They guide my work daily."*

--Scott Metelko  
Founder and President of AST Exhibits



## Everglades: Test Kitchen

Even though we just recently completed a project where we built terrain that simulated coastal terrain in Southwest Florida, simulating the terrain of the Everglades is a different process.

We started with the same basic requirements which are that the terrain needs to be durable, walkable, easy to maintain and look like a sandy surface but not have any loose particles that will fall off over time and create more work for the housecleaning staff.

One difference is that the Everglades terrain will need to appear much darker and since there is a “water” feature in the terrain, it will need to vary from relatively dry to fully wet at the water’s edge. To make the water as realistic as possible and yet meet the same maintainability standards, we needed to develop a multi layer paint and clear coat process.

In order to accomplish these goals, we opened up what we affectionately call our test kitchen. It looks something like this:





We also tested various techniques for both dry and wet footprints for the different animals that will be wandering around the exhibit.



## Everglades: Build

Of course, while we were in the kitchen, we were also building the rest of the Everglades exhibit.



Pictured above are the platforms. The holes are so that we can bolt them together once they are installed. To the right, are the platforms with the first wall sections being applied.





Once the platforms were built and the walls were in place, it was time to tackle the reader rails. We built plywood mockups of the aluminum supports and began fitting the reader rail panels.



The Compound angles were a challenge, but the joints turned out extremely well. After these pictures were taken, the railing was disassembled for paint, re-fitted with the actual aluminum supports, and then disassembled until we receive the graphics. At that time, the graphics will be applied and they will be given one last test fit on the finished platforms. Then it will be time to drill the holes for the interactive buttons.

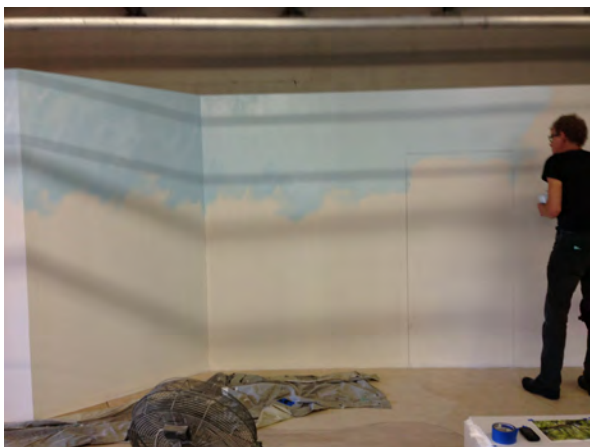


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We also took the time to place the taxidermy on the platform to get a better idea of their scale in relation to the available space. Piper made sure to keep a watchful eye out for the alligator.



Next we moved everything next door to our finish shop for paint, terrain and texture. The images below show our muralist Cliff beginning to paint the background.





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## Everglades: Background

Here are pictures of the background as the painting progressed.



Meet Our muralist Cliff. Some say this is his best side.



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Here are pictures of the background as the painting progressed.



And Finally, the layering of the background is complete. We will, of course, bring Cliff with us for the install. He will match the paint on the adjacent facility walls and add any necessary details once the exhibit is complete and in place.



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## Water

Simulating water is always a challenge. Like the sandy terrain, it needs to be a durable surface that can handle occasional foot traffic. It also needs to look like murky everglades water that has some depth. We accomplish that by using several layers of paint and texture on the plywood substrate which gives us the appearance of depth, and by tinting and slightly texturing the polycarbonate surface. The result is a very convincing water effect that is durable and easily maintained.



Left is a typical painted substrate. For the Everglades exhibit, we started with this treatment and then added layers that darkened it and gave it some depth.



Above and left are samples of water with the polycarbonate surface. Note that the surface has a texture applied at this point but does not yet have the tint applied to the underside which adds another layer of depth.





## Terrain

The next step was to apply the foam which will give the terrain its contour. The foam is a very dense 2 part mixture that sets up quickly. Once the two parts are mixed together, there is only about a 45 second window with which to pour and spread the foam. After that, it not only gets too tough to work with, but the volume also greatly increases as it sets. Because of that short working time, the application of the foam can be pretty chaotic. Luckily, the pros here at AST Exhibits have plenty of experience and artistic ability. They make it look easy.



Billy and Mike setting up the mixing station.



Right: Equal parts of the two part mixture are combined and mixed.



Left: The foam has been poured and is rising to its initial shape. Next steps are to cut the pieces apart so they can be transported, carve the foam and then apply the sand textured surface. Once on site, plants will be added to complete the effect.



## Electronics

The electronics for the Everglades exhibit have arrived and their installation has begun. Since the graphics for the reader/push button rail are still not in, we will install the buttons in a temporary railing so that we can get things in and tested.

Right: Taxidermy and temporary graphics ready for electronics installation.



Left: Wiring a power supply for the effects rack. Below is the back of the effects rack.



The electronics crew Mike and Cliff are getting all of the wiring ready to install.



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## More Cabinets

We are just beginning construction on the cabinets for the conservation lab. There is not really much to show except a pile of lumber that is cut and ready for assembly.



We have completed the table for the conservation lab.





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We are also just beginning work on the Science Showcase. It is in the very beginning stages of assembly.



Luckily, we have our best man on it. Meet Chuck.





## Railings and Brackets

Finally for this progress report are the railings and brackets for the aquarium reader rails. These are finally finished, powder coated, and ready to install. The only thing left to do for the reader rails is to attach the graphics to the plywood substrate once the finished graphics arrive.



That will do it for this update. We remain on budget, on schedule, and ready to install everything early next month.