

# Nuts and Bolts

## Declaring Label Independence:

### Live Free or Pay

by Kitty Connolly

**Kitty Connolly** is Botanical Education Manager at the The Huntington Library, Art Collections, and Botanical Gardens in San Marino, California. She may be contacted at [kconnolly@huntington.org](mailto:kconnolly@huntington.org).

The label is up on the gallery wall and it looks great, but it includes a mistake.... Do you change it? *Can* you change it?

The label is up on the gallery wall and it looks great, but it includes a mistake: the photo it describes was taken in the Indian Ocean, not the Pacific. Do you change it? *Can* you change it? Too often, you don't have the money or time to send it out for reprinting. You have to live with the mistake, but if you're lucky, it's a temporary exhibition. If you produced your labels in-house, the story could end differently. In-house production means mistakes are easily corrected, updates incorporated, turn around quick, and costs relatively low. The question is, is it worth the work and expense to make your own labels? We'll examine a case of in-house label production at The Huntington Library, Art Collections, and Botanical Gardens and weigh the costs (Reynolds, 2009).

#### **Making Durable Labels for a Conservatory**

***Plants Are up to Something*** is a permanent exhibition in a steel and glass conservatory at The Huntington in southern California. More than 50 interactive exhibits are nestled among 16,000 square feet of living plants. Labels range from vinyl gallery titles to vinyl-wrapped flip books, from poly banner exhibit labels to small "tidbits" that highlight the collections. All together, the exhibition has more than 400 labels of one type or another, almost all written and made at The Huntington.

One of the first decisions we made about this project was that label production would be in-house. Exhibit labels in a working greenhouse need to endure high levels of humidity, light, heat, visitor traffic, and the occasional spray from a stray hose. We knew we would have to reprint fairly often. Also, the collections themselves change over time (growing, blooming, fruiting, dying, being

replaced with new specimens), so it's very helpful to use materials that you can cheaply and easily change. And finally, since this was an experimental exhibition, we knew we would be revising the interpretation over time. Below is a list of equipment and materials used in different contexts, with notes on how they are working.

#### **Poly banner**

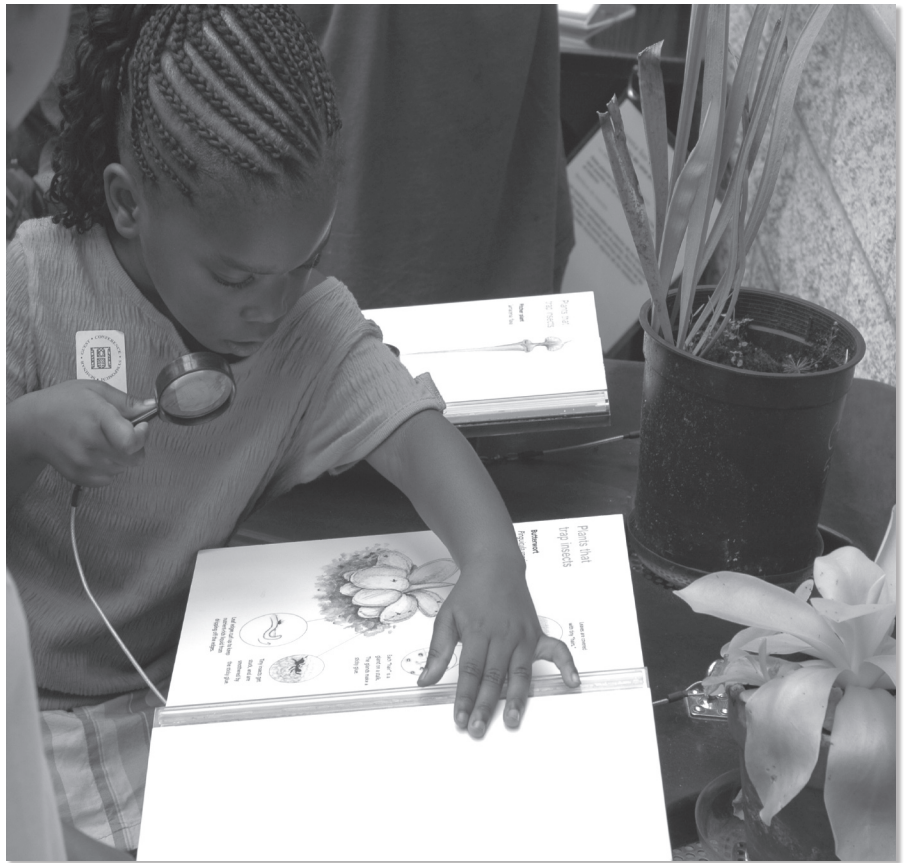
Translucent poly banner is our staple label material. This waterproof and tear-resistant medium comes in 3 ft x 100 ft, 9-mil thick rolls enabling us to print signs of almost any size. Poly banner can run from \$90 to \$260 a roll, depending on its source. Many of our poly banner labels are hung, clipped at top and bottom between lengths of folded Plexiglas, or on table-top clipboards. This makes them easy to swap out when they get dirty or we change our labels. We also print photo-murals on this matte-finished material; backlit by the sun on exterior windows, they create a fantastic stained-glass effect.

#### **Vinyl-Wrapped Sintra**

We use vinyl primarily on our hinged labels, such as the plant diagrams in the Structures of Carnivorous Plants. It has a very clean look, and the color of the graphics is vivid with no fading problems. Our plotter handles 3 ft x 100 ft rolls of \$240 vinyl just fine. The thick vinyl gets slightly scratched and gouged over time, however. In an extremely humid conservatory environment, such as our cloud forest gallery, nicks in the surface lead to almost immediate algae growth not just in the breach itself but spreading laterally just underneath the vinyl layer resulting in dark stains that are impossible to wash off. We still use this material in humid areas, but we are very careful to keep it from getting scratched—by installing rubber bumpers



Poly banner murals are easy to install and adjust. Courtesy of The Huntington Library.



Flip books weather the water and heat of the conservatory. Courtesy of The Huntington Library.

at the edges of the lift-up panels, for example. We print our own replacement labels, peel off the old ones, and rewrap the Sintra. The ease of scratching means vinyl is not a good choice for vandalism-prone exhibition areas.

### Plotter

We use a HP DesignJet 5500PS Plotter with waterproof, UV-resistant inks. The plotter handles rolls of paper up to 42 in. wide and prints at 1200 x 600 dpi resolution. Our model, now discontinued, cost \$12,000 in 2006. A comparable HP plotter today is about \$13,000, plus the recommended maintenance contract. It is a fairly large investment, and it also takes up considerable space. Make sure you have a place for it before you buy.

Generally the plotter is easy to use for non-experts and can be shared by several users, although getting it to work smoothly with graphics software is an ongoing challenge. We use Adobe products: Illustrator, Photoshop, InDesign, and Acrobat. A few hard-learned lessons meant wasted paper and inks. We have

decided that converting all files to PDF before sending them to the plotter reduces errors.

The UV inks we use have proven to be quite stable in high light conditions, lasting on average one year before significant fading, and they never run in the rain and humidity. The inks are expensive with a complete set of six cartridges running more than \$2,000. They last almost two years for us, although we print mostly text and few graphics. For event-related signs, we sometimes use a color laser printer and regular copy paper. Even laminated, these signs last only around six weeks before fading, just long enough for temporary events.

### Cutting and Sticking

Preparing all these materials to mount requires having a variety of cutting tools on hand. We use Olfa blades (<\$10), self-healing cutting mats (\$20-\$135), Artool cutting rails (\$17-\$25), a Rotatrim M24 rotary cutter (about \$300), and a regular paper trimmer (\$120). We even use scissors and a hole punch for some applications.

Is it worth the work and expense to make your own labels?



Using a range of cutting tools is a routine part of exhibition care. Courtesy of The Huntington Library.

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Overall, taking labels production in-house was a good decision for us.

Labels on horizontal surfaces are held in place with tape: for strong adhesion, 3M VBH 0.02 in. thick foam tape with adhesive on both sides (\$96 for 72 yards); and for lighter duty, 3M 4416 1/16in. thick, 1/2in. wide double sided vinyl foam tape (\$41 for 36 yards). Both work at high temperatures, are water and UV resistant, and are easy to move. We use the thicker foam tape to hang the photo murals because it is easy to reposition on glass.

#### **Lamination: The Low-Tech Solution**

Although nothing says cheesy quite like peeling lamination, for high-traffic applications such as table-top instructions, we laminate. Thick lamination lasts, looks professional, and protects labels from scratching and water damage. We use a Jackson-Hirsh Premium Pouch Laminator, Card/Guard model 7200 (\$300). The type and thickness of the lamination pouches vary with the application. If the item gets heavy handling by the public, we use a 30-mil-thick pouch (\$36 for 25 pouches). If the item is for reading but doesn't get manipulated, we use the non-glare style of 20-mil lamination (\$77 for 50). For a visitor-voices exhibit, we use small pouches that can be written on with pencils but are easily erased. Spring for the \$69 corner rounder: it gives labels a finished look. We spend about \$150 each year on lamination supplies.

#### **P-Touch Label Tape**

For small supplemental labels that point out focus knobs, identify the contents of bottles, or give on-the-spot directions, P-touch tape is a lovely, low-cost solution. The machines start at around \$50 with 1/2 in. 26 ft tape at \$14.

Over time the edge of the tape starts peeling up a little, making it a target for visitors who like to pick at things, but it's fast and easy to replace and leaves no sticky residue to clean up. Label tape also allows you to be responsive to visitors' needs: if people seem to need additional direction, it's easy to supply.

#### **Vinyl Lettering**

We create our own press-on vinyl lettering on the front door and the glass doors between galleries to help identify the spaces. We use a Graphtec CuttingPro FC5100-75. Creating the lettering and applying it takes specialized skills, so before you sink money (more than \$5,000) into the machine, software, and materials, dedicate staff to learning and using the equipment. Vinyl letters on glass look very elegant for small amounts of text in a large font. It's only a matter of time before visitors start picking at the letters, so we have backups for every sign so we can fill in the missing pieces.

#### **Outside Help**

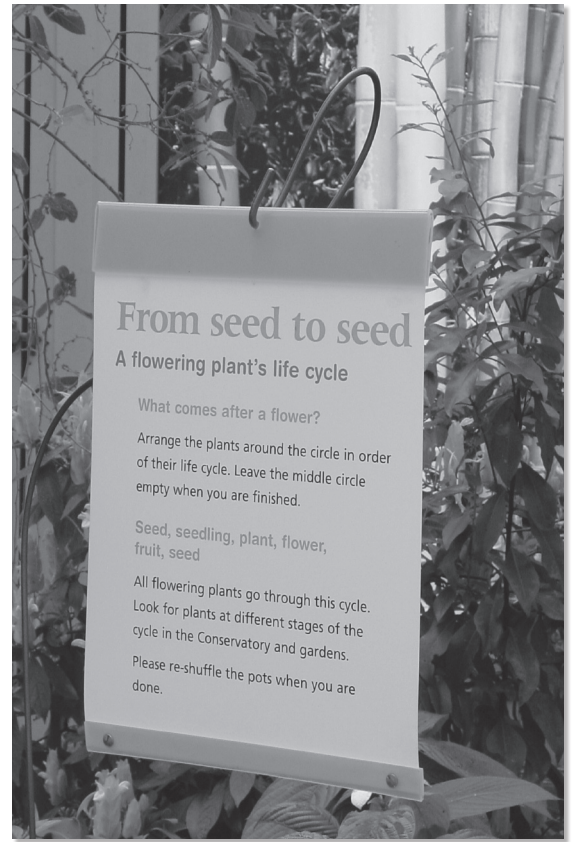
Only a few really large institutions can produce everything they need in-house. When we run into projects we can't complete, we turn to local vendors to supply those services. FedEx Office (formerly Kinko's) will print a 3ft x 5ft full-color, 3-mil banner from your graphics file for around \$180. Spiral binding runs less than \$7 a booklet. A local graphics printing company laminates signs that are larger than we can accommodate. They do 10-mil lamination for \$7.50 per square foot.

#### **Inevitable Trade-Offs**

Control of in-house production comes with burdens. We must have staff with the technical skills and patience to print labels and the



Lamination protects signs that are within visitors' reach. Courtesy of The Huntington Library.



Poly banner is easily scratched. Hanging the signs protects them from damage, and their translucent quality is shown to best advantage. Courtesy of The Huntington Library.

organizational skills to keep track of this ongoing task. For the conservatory project, this responsibility takes about 5% of one person's time. It also means that there is little patience among our colleagues with shared curatorial responsibilities if labels are slow in coming. They know we can print labels at will; they just don't always remember that we have other duties, too.

We must also maintain the means of production, which means a long-term care agreement for the plotter, replacement of worn and abused items, and even policing the materials and supplies so that they don't get used up for other department's special projects. But, the do-it-yourself ethic has become something of a central principle on the project. With exhibit elements that are out of our control, we get frustrated and scheme to bring production in-house if at all possible.

### Sharing Capacity

Once it gets known within your institution that you have the capability to make quality

labels, you are never alone for long. Different departments—advancement, communications, events—call you up to ask for favors. We are happy to help keep expenses down for the museum, but have had to insist that regular users purchase their own paper, and load it onto the plotter themselves, before we send the files to print. It also reduces confusion a great deal if each department purchases its own spindle for its paper. Working out the use of inks is trickier, and so far the conservatory project has just absorbed that expense.

Overall, taking labels production in-house was a good decision for us. The labels are cheaper to produce, but ultimately the principle advantage is control. With our own means of production, we can respond quickly to changes in the collections or their interpretation, to correct mistakes, and to replace damaged labels as needed. If these changes required outside vendors, we would save up changes for twice yearly batches, think twice about the cost, and probably not make all the refinements that we have. ✨

### Reference:

Reynolds, K. (2009). *Conservatory cookbook: Exhibit recipes from the Plants Are Up to Something exhibition at the Rose Hills Foundation Conservatory for Botanical Science*. San Marino: The Huntington Library.

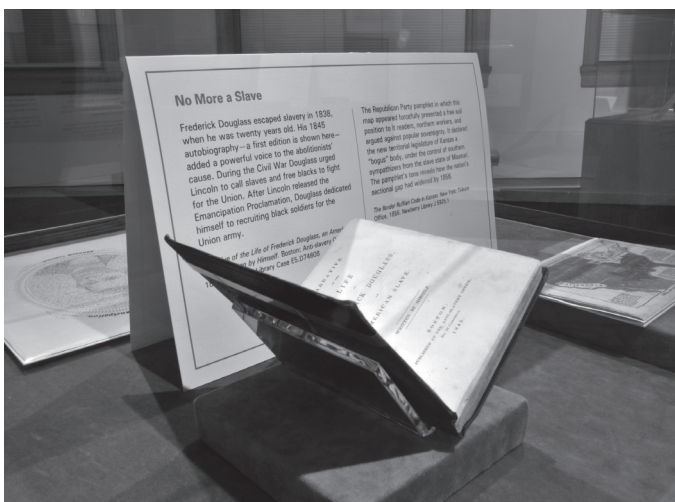
## Stand-up Labels by Frank Madsen

**Frank Madsen** is President of Teller Madsen, Inc. In Chicago. He may be reached at [fmadsen@tmexhibits.com](mailto:fmadsen@tmexhibits.com).

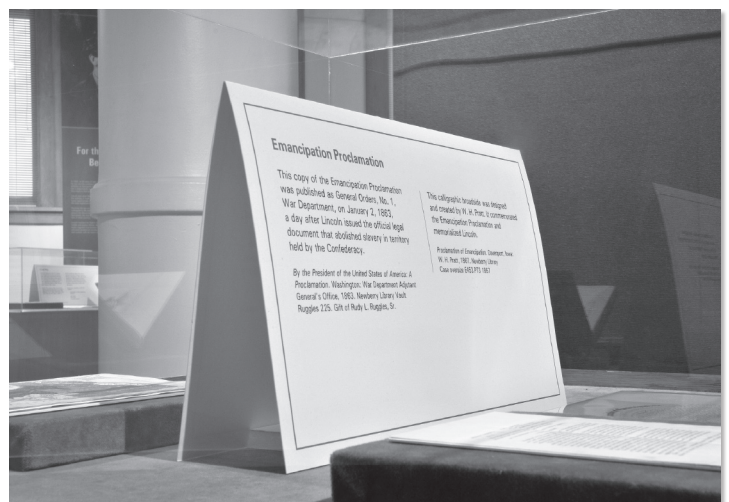
Newberry Library's recent exhibition on Abraham Lincoln had many flat documents and books displayed in cases, as is typical for their collection. Viewers circulated around the freestanding cases. Flat documents with labels side-by-side can create difficulties in visual transition for the viewer, especially with several documents clustered together. Such a layout can also result in a very crowded case.

To improve the object/label relationship and provide more space in the cases, we created labels positioned at a nearly 80% angle immediately behind the item being described. We call them stand-up labels, although they are often known as tent labels. In this way, the viewer could glance down at the document and up slightly to read the label, much as one might view a two-page spread in a book that is oriented from bottom to top on facing pages. Label groups are centered back-to-back in the case like a spine. When the viewer looks up, the label itself screens the items and text on the opposite side of the case. It also adds a modest visual barrier to eliminate the distraction of those facing the viewer on the opposite side.

The text is 22 point Univers for easy reading, and the labels are positioned high enough with space below (about 9in. top to bottom) so that if the object in question is a book on a cradle, it does not obscure the text. The back-to-back labels were printed on heavy stock, scored by the graphic shop. We then bent the labels along the fold and attached a tapered strip of ½in. 'Gator Foam' with banner tape to make a 4in. base. This keeps the printed stock from bending over time and maintains a uniform shape for all the labels which range in width from 12in. to 42in. Using our stand-up design, the conventional footprint for such labels is reduced by about 75%. For one case with very large documents, and sheet music, the labels sit to one side of the case and are blank on the back. Our intern Claire Paolini gets credit for type layout as well as design for all graphic elements of the exhibition. *The exhibition closed in February 2010. The Editor.* ✨



The viewer can glance down at the document and up slightly to read the label. Photo by Alan Teller, Teller Madsen, Inc.



When the viewer looks up, the label itself screens the items and text on the opposite side of the case. Photo by Alan Teller, Teller Madsen, Inc.