



## **Appalachian Puppet Pageant's Giant Puppet Making 101 Building Manual**

### **Planning**

One of the reasons we love giant puppets so much is that they are an innately collaborative form of art, requiring multiple hands to both build and operate. We recommend assembling a team of at least 3-5 folks to make your giant puppet for the parade (although more or less is fine too). This will be your parade crew. In the pages that follow, we have included templates for building puppets that require 1, 2, 3, 4, or even more people to operate. Most of these templates can be adapted for any creature you might want to make, as well as the number of participants you have. Try focusing on the technique of construction, rather than the particular creature that is pictured.

### **Designing**

The Appalachian Puppet Pageant is intended to be a community-inspired parade. We are asking folks to design giant puppets, masks, costumes, and other parade art that *tell their story*. This could look like creating your own individual piece of parade art or creating something collectively with a group. It could be an opportunity to make art about a cause you are passionate about. It could be a chance to just make something joyful or silly. Each parade year we offer up a theme to inspire your art making.

This year's parade theme is: ***Arise from the Fire***

*Fire is power, creativity, destruction, transformation, rebirth. For this year's Appalachian Puppet Pageant, we want to see your fire. Our world needs our creativity, our vision, and our unique gifts now more than ever. What do we want to create and transform in our communities? What do we want to breathe life into together? How can we tend each other's fire?*

Once you generate a list of potential ideas, we recommend that you next consider the following:

- # of people you want operating your puppet
- Where will you store it both during the making process and leading up to the parade?
- How will you transport it?
- What materials do you have easy access to or want to use?
- Size?
- Safety considerations- How easy will this puppet be to operate? Visibility?

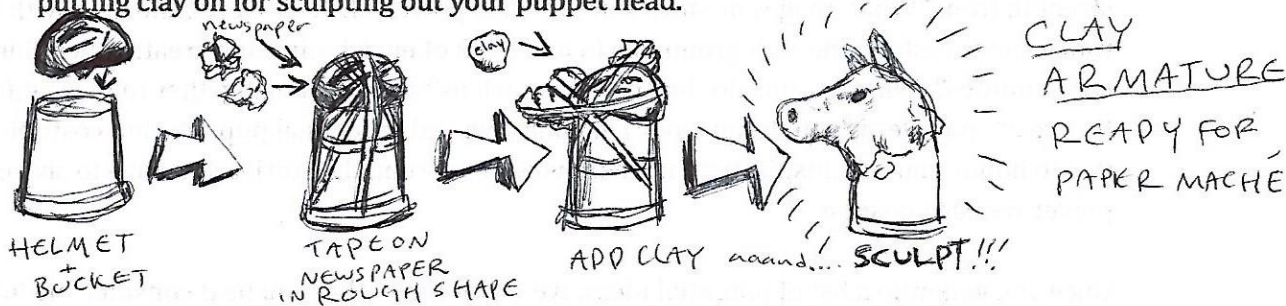
We also have the following Parade Guidelines to consider:

- Everyone must be in costume, including parents and staff accompanying children.
- Children under 15 must be accompanied by someone older.
- All entries must be handmade and people powered. Motorized vehicles (other than wheelchairs) and live animals (other than working animals) are not permitted.
- We believe that all human and non-human beings deserve dignity and respect. We ask that all of your entries respect and reflect this belief. If you have questions about your entry in regards to this guideline, please feel free to contact us directly and ask. Cattywampus reserves the right to prohibit parade participation if any of your creations violate this guideline.
- As this is a family event, nudity is prohibited.
- No distribution of leaflets or flyers during the parade or along the parade route.
- All parade participants participate at their own risk. Written waivers are required.
- All parade entries must emphasize SAFETY. Please make sure your creation has good visibility, is easy to operate and control, and is safe for other parade participants to move around. Remember, we will be parading in the outdoors, so consider wind when you are building.

### Building Methods: Papier Mache

Papier mache is one of our favorite ways to make durable, lightweight puppets. You can use it to make masks, small and large heads, hands, etc. Once you decide what you want to make out of papier mache, the first step is to create an *Armature*.

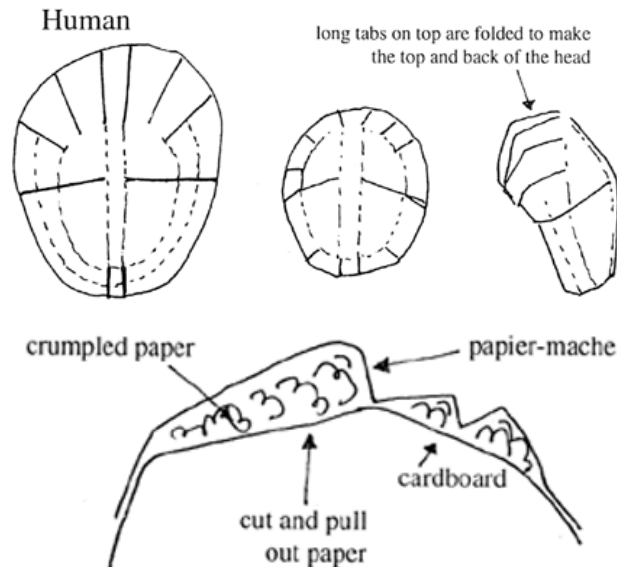
1. An *Armature* is the "support system" for your papier mache and can be made in many different ways.
  - *Bucket Armature*: When we are making a 360° head and sculpting with clay, we usually like to start with a 5 gallon bucket, which we then tape a bicycle helmet on top of. Depending on the size of the head, we tape additional wadded up newspaper on top of the helmet to build it out further. This armature is then ready to start putting clay on for sculpting out your puppet head.



- *Paper Armature*: For making a 180° head or mask and sculpting with clay, you will not need as much support. We recommend using wadded up newspaper on a flat table or board surface, and then laying clay on top of this to sculpt.

- *Cardboard Armature:* If you aren't using clay to sculpt with, a cardboard armature can be used to build the entire shape of your puppet. You can also incorporate wadded up newspaper to "build" up certain areas. The easiest way to put a cardboard armature together is to use staple pliers. Once you have this structure complete, you can then papier-mâché directly on top of it. If you are using clay, you can still use a cardboard armature but will want to make sure that you build it so that it can withstand the weight of the clay.

\*Heavy lines mean to cut and overlap, stapling. Dotted lines mean to score lightly and bend.



- *Clay:* If you want to make a more detailed, more fluid face or creature, sculpting on top of your armature with clay can be a great method. Starting with slab pieces and then adding more details is recommended. Once you are finished, you will want to use a plastic grocery or trash bag as a release layer between the clay and papier-mâché. Cut your bag open so that it lays as one piece. Cover your clay sculpture with the bag, making sure to get it into all of the nooks and crannies, so that you will retain as much detail as possible when you papier-mâché.

## 2. Cornstarch Papier-Mâché: Making GOOP!

- Heat 1 gallon of water in an old pan on the stove and bring to a boil.
- While the water is heating, in a separate small bowl, stir in 2 cups of cornstarch with a some extra water, until it is completely dissolved.
- Once water is boiling, reduce heat and stir in cornstarch mixture.
- Once it has thickened, remove from stove and allow to cool before using. A slightly warm mixture is pleasant to work with!
- For a smaller project, use 1/8 c cornstarch to 1 cup of water.

### 3. Paper

- Brown paper bags are our favorite for papier-mâché because they are stronger and heavier than newspaper.
- Tear the paper into 1-2 inch strips. For more or less detailed areas, you can increase or decrease the size of your strips.
- One at a time, dip each strip into the goop so it will become saturated. Strip the excess goop off with your fingers and lay the strip onto your creation, trying to get it to lay as flat and smoothly as possible.
- To build strength, we recommend applying 4-6 layers on a clay armature. On a cardboard armature, 2-4 should be plenty. To help keep track of the layers, we recommend alternating them, print side up and print side down. After a few layers, allow your piece to dry before applying remaining layers.
- After you have finished your last layer, allow your piece to completely dry. You can set up a fan on your piece to accelerate this process.

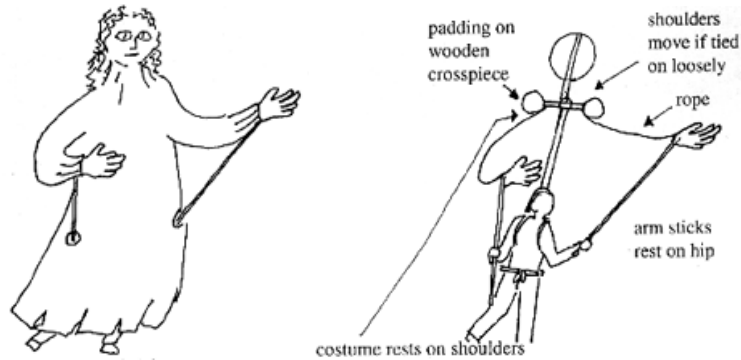
### 4. Painting/Finishing

- First be sure your creation is completely dry. It is now time to remove your papier-mâché from your armature if you used clay during the process. If you made a 360° creation, you will need to cut off the papier-mâché using a utility knife. Once it is removed, you can re-seam it back together using tape and then more papier-mâché. For 180° creations sculpted flat on a board or table, you should be able to gently lift the papier-mâché off of the plastic layer.
- Papier-mâché can be painted with acrylic paints or latex house paint. We like to use house paint because we can often get used house paint for free.
- You can also use tissue paper instead of paint, using a white glue mix (1 part water: 1 part white glue). You can use the papier-mâché method described above or lay the tissue paper on your creation and paint the glue mix on using a cheap foam brush.
- Other Ideas:
  - Apply faux fur
  - Fabric
  - Hot glue sparkles, papier-mâché/cardboard glasses, fake hair, etc.
- If you are making a head to wear, you can use foam to line the inside of it, attaching it with hot glue!

### **Rigging Methods/Design Templates**

The following excerpts are sketches and photos from “68 Ways to Make Really Big Puppets”. These designs were put together by **The Puppeteers’ Cooperative**, who have inspired so many. Visit their site <http://puppetco-op.org/> for additional ideas!

## Backpack Frame *1 person puppet*

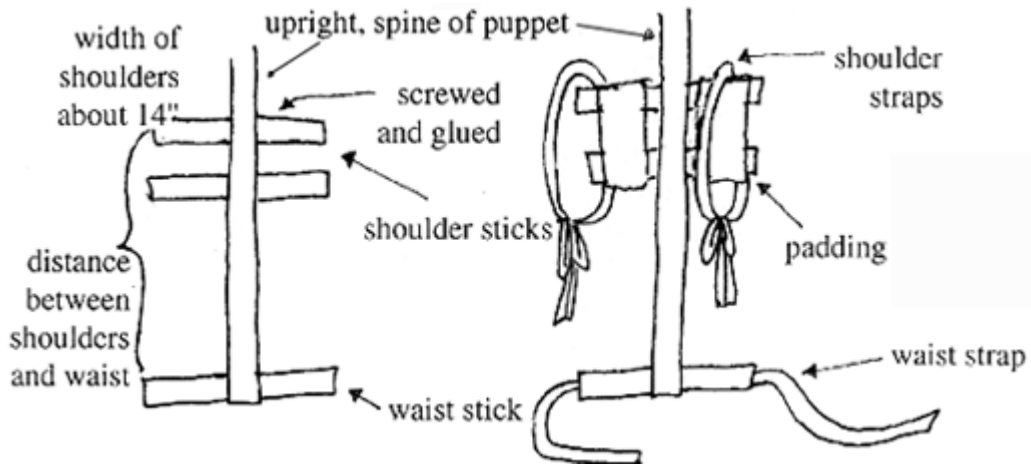


**Note:** A backpack puppet with an eight-foot upright takes about twelve yards of cloth for the costume and hair.

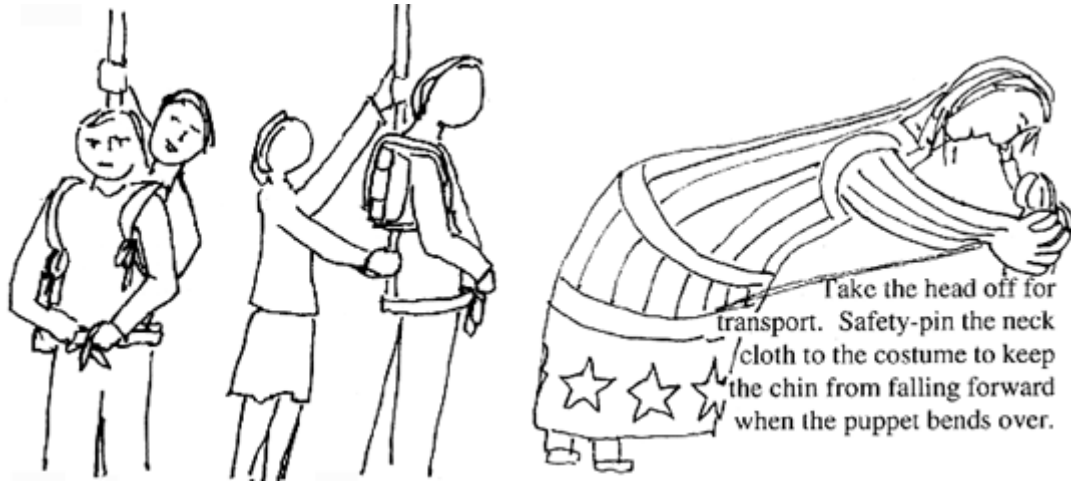
Backpack puppets are built on a pole which is attached to a backpack and worn like a regular backpack. The advantage is that the movement is very natural; the puppet simply does everything you do. The disadvantage is that it takes help to put it on.

**Note:** The easiest way to make a backpack is to buy an external frame backpack from the thrift store and to screw or duct tape it to the upright pole.

### Making a homemade backpack

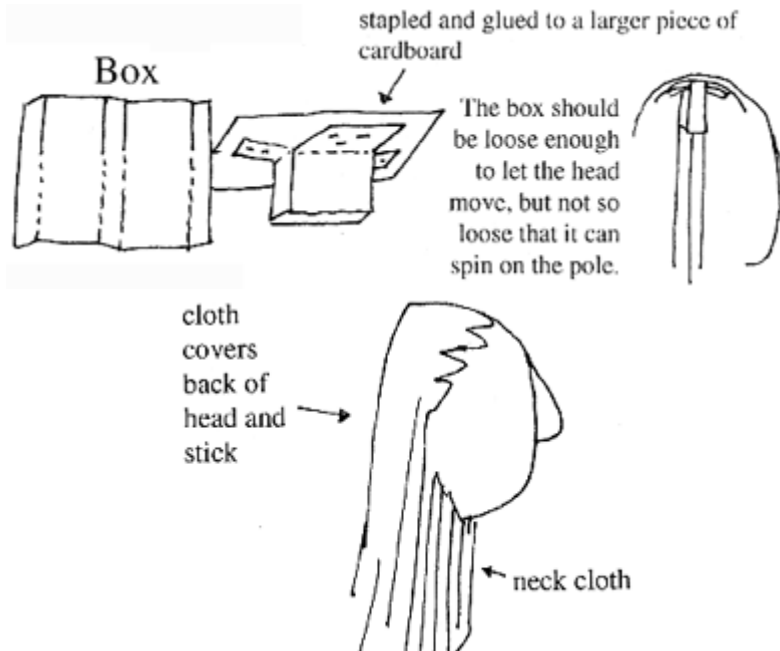


## Putting it on



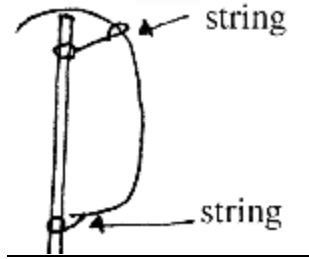
## Attaching Heads

### Box

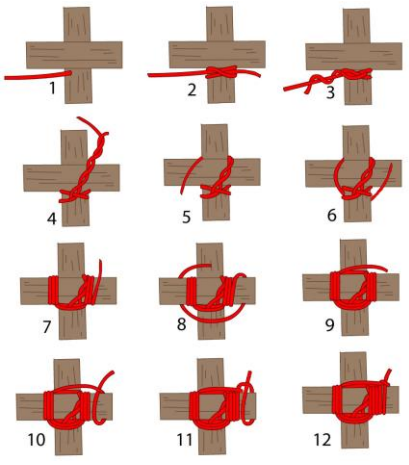
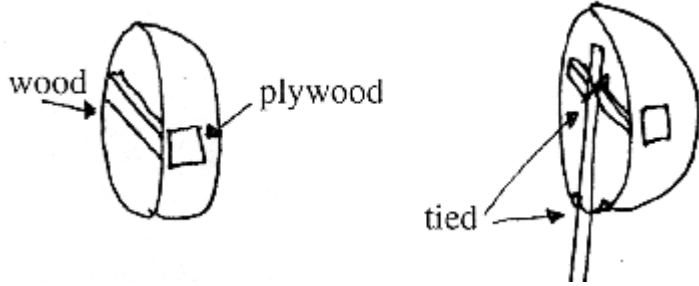


**Note:** The box is most suitable for backpack and other puppets where the head is not attached to the costume, and you want to remove it for transport. The box should be loose enough to let the head move, but not so loose that it can spin on the pole.

**String**



**Wood**

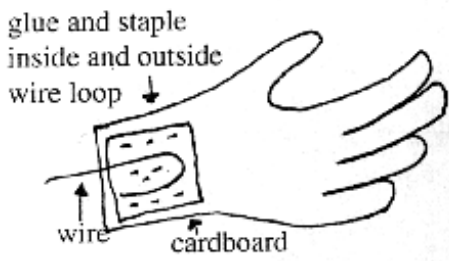


*Lashing* with paracord works well for attaching your bamboo pole to your puppet head. We use square lashing. There are plenty of YouTube videos out there to get you started. To the left, we included an illustration of a square lashing to get you started.

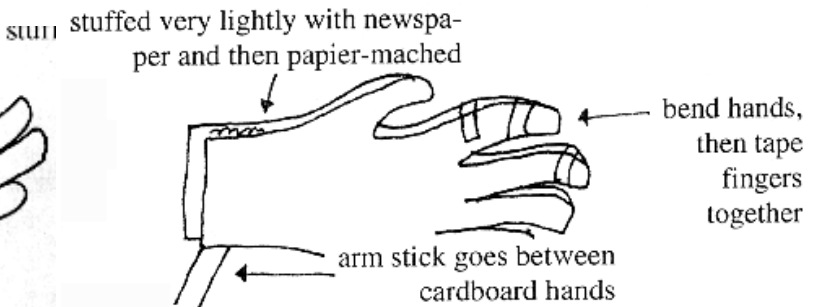
**Hands**

If you have clay, you can make hands out of clay, cover it with thin plastic, and do 3-5 layers of papier-mâché with heavy paper. You can also use a cardboard & newspaper armature to make hands that you then papier-mâché or try the cardboard template below.

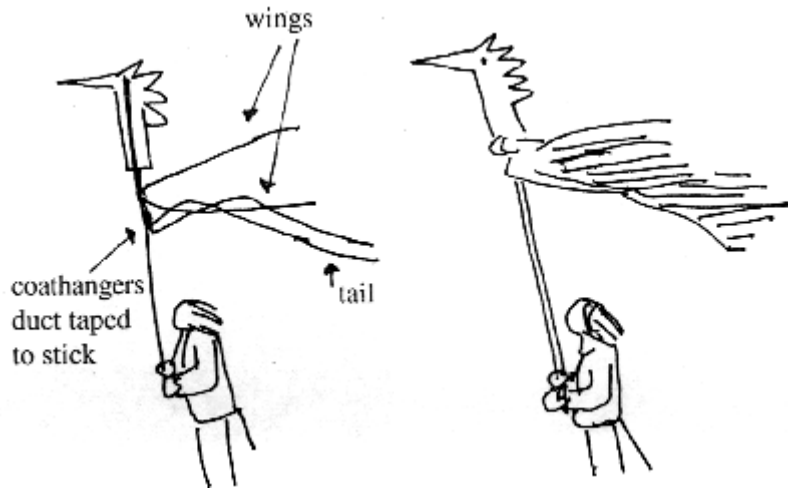
**Cardboard Single Hand**



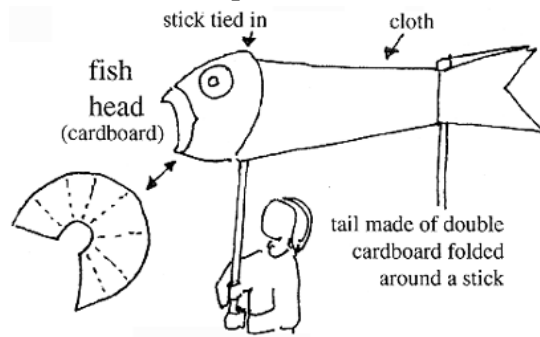
**Cardboard Double Hand**



### Wire Bird



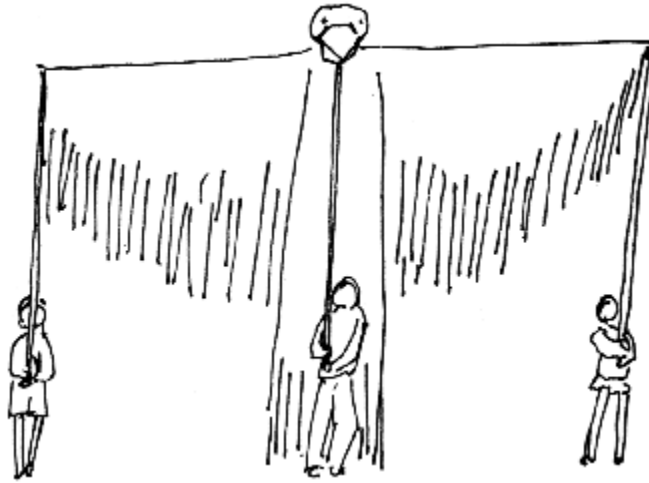
### Two-person Fish



### Hat Cat

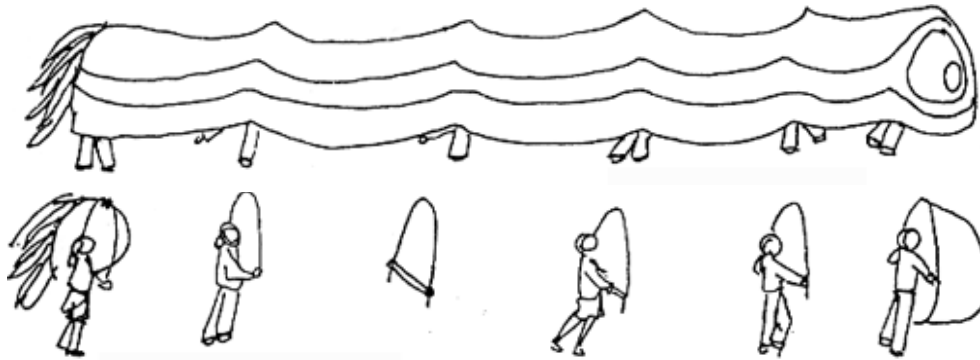


### 3 Person Bird



Note: Bird takes about nine yards of light cloth. Fringe looks good on this bird.

### Half-hoop Caterpillar



Note: A thirty-foot dragon takes four widths of cloth, or forty yards. Run seams across the width for the ribs.

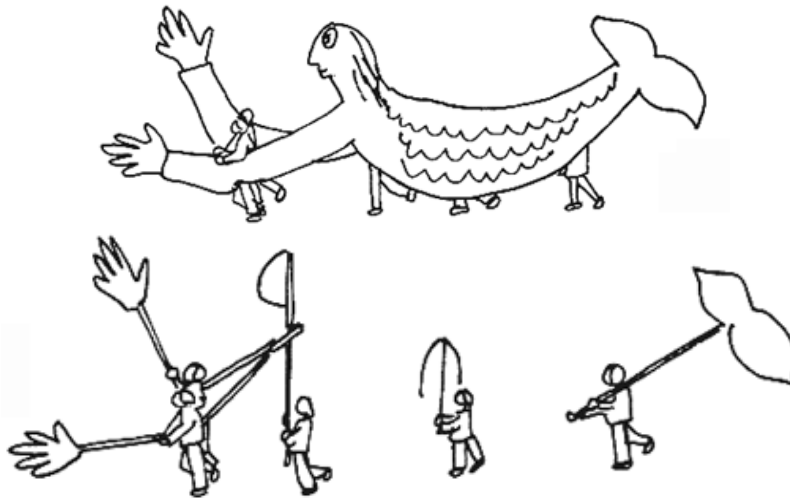
### Kid-King



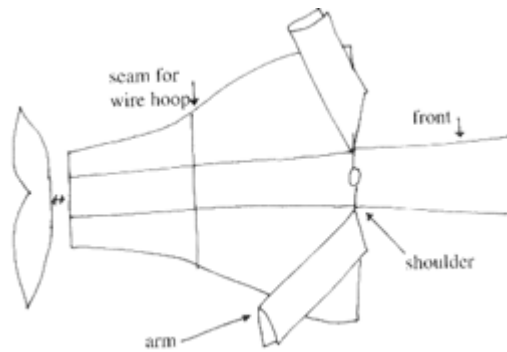


**Note:** This puppet can be made with kids as young as first grade. It is simple but large and impressive.

### Poseidon



### **Poseidon Costume**



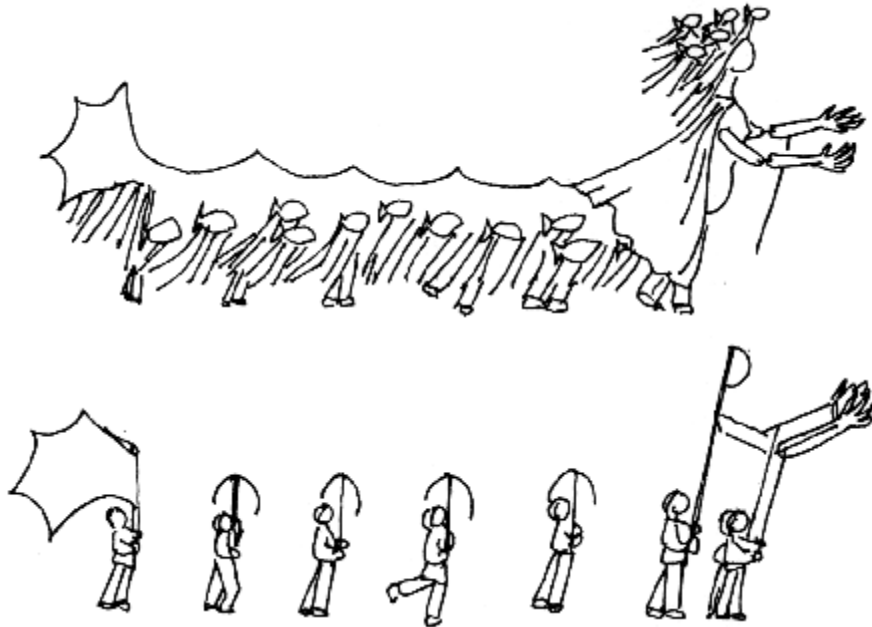
**Note:** This puppet takes about 15 yards of cloth for the costume, hair, and decoration.

## Praying Mantis



**Note:** Because the balance point of the Preying Mantis is so high up, it can rather easily be as tall as 18-20 feet. The long sticks need to be good wood.

## Mermaid



**Note:** A thirty-foot dragon or mermaid takes three widths of cloth, or thirty yards, plus half as much again for fringe or decoration. Run seams across the width of the cloth for the ribs.

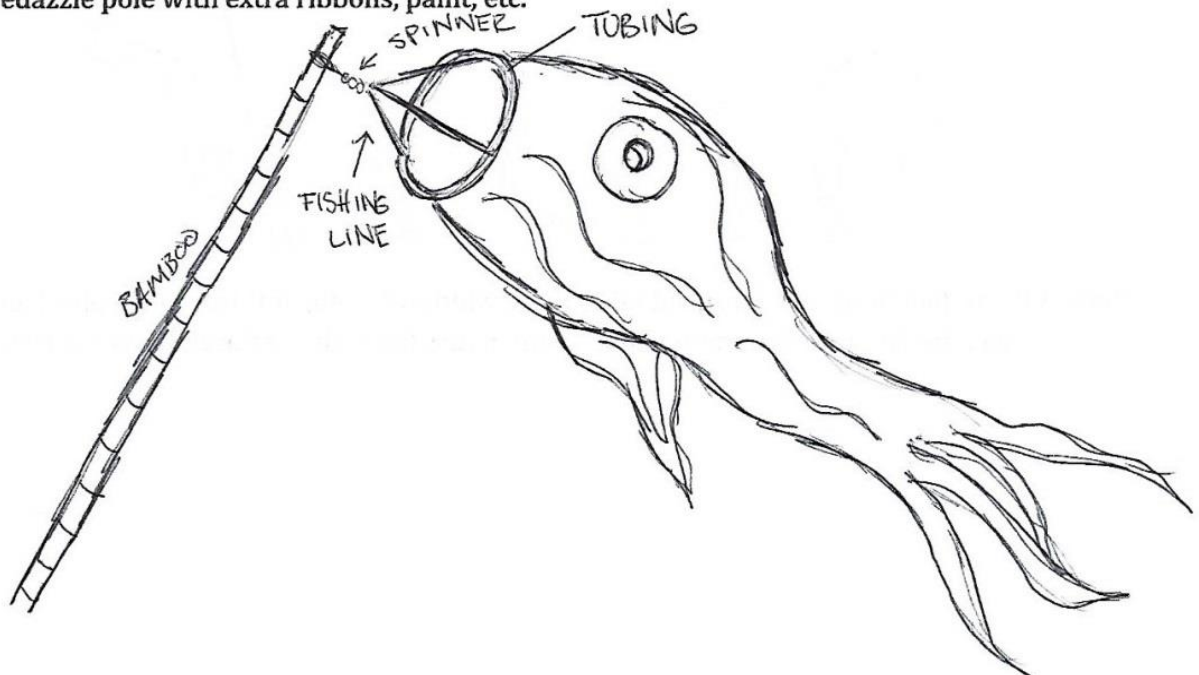
## Other Ideas for Parade Items:

**Windssocks:** Windssocks are an awesome addition to a parade, bringing lots of color and movement. They are also really simple to make!

### Materials Needed:

- *Light cloth (muslin, cotton bedsheet, or synthetic)*
- *Hoop or length of tubing*
- *Hot glue*
- *Fishing line*
- *Fishing spinner*
- *Bamboo pole*
- *Ribbons*

- 1) Take fabric and sew 3-4 panels together, depending on size you want to end up with. You can choose to sew anywhere from the top 1/4th of the sock together to further down, leaving the ends streaming open. Fold the top edge of fabric over and sew, forming a tube.
- 2) Thread the tube onto a 1/2" thick piece of flexible tubing. The exact length of tubing is tricky. It should allow a couple inches of "give". You can also use a small hula hoop, cutting it open to thread through and then reconnecting.
- 3) Thread the hoop through the top of the windssock and then attach the tubing ends to one another using hot glue or a staple plier to close the hoop.
- 4) Attach at least 3 lengths of heaving fishing line to the hoop in between each panel. Tie all of the ends of the line together into one knot with an extra length left over.
- 5) Tie a fishing spinner to this extra length.
- 6) Drill a hole one inch away from end of sturdy bamboo pole.
- 7) Thread a long zip tie through the hole.
- 8) Attach windssock to pole by snapping spinner to zip tie.
- 9) Bedazzle pole with extra ribbons, paint, etc.



**Banners & Flags:** Banners and flags are really simple to make and can be decorated with beautiful images and words.

Materials Needed:

- Fabric cut to desired shape and size (Bedsheets work great!)
- Decorations
- Paint
- Wooden dowel or bamboo pole



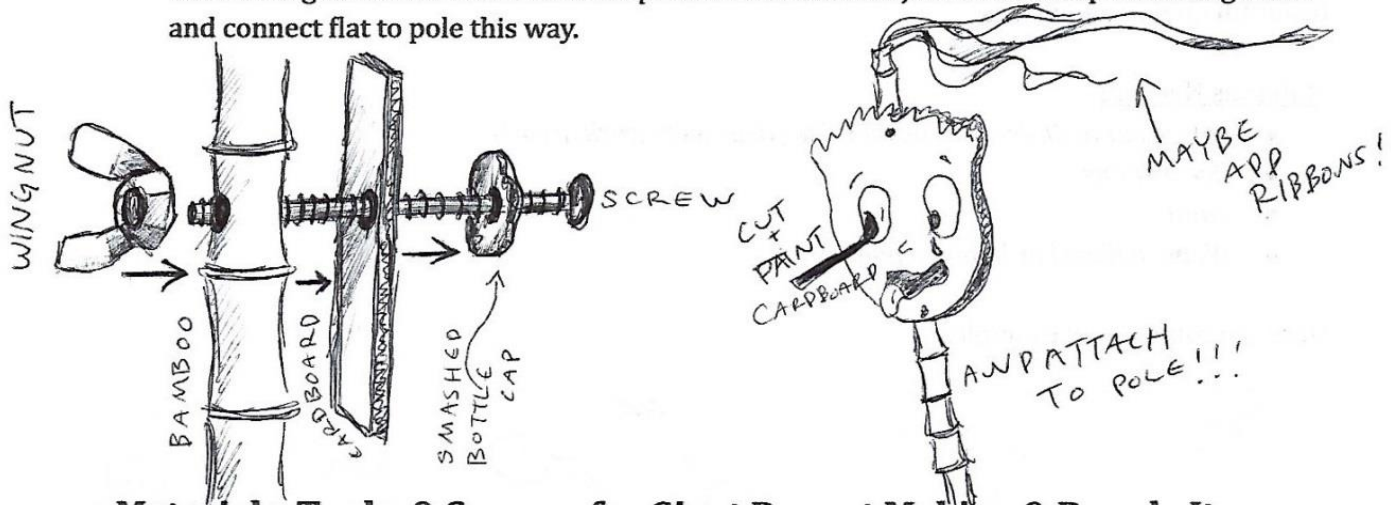
**Cardboard Flats:** Cardboard flats on sticks make awesome parade art that can be carried by folks of any age.

Materials Needed:

- Large pieces of cardboard
- Bamboo sticks or dowels
- Screws & Wingnuts OR Zip ties
- Box knife
- Drill
- Paint & brushes
- Glitter, ribbons, feathers, etc.

1. Create a template of the image for your flat (animal, flower, face, etc.). Draw image on cardboard. You can make flat two-sided (i.e sandwich pole in between two flats) or just one-sided.
2. Cut out the design carefully using a box knife.
3. Paint and decorate image. When dry, feel free to punch holes and attach ribbons, noisemakers, etc.
4. Attach flat(s) to bamboo pole or dowel by drilling at least one hole (if not a couple for connection points) through cardboard and bamboo. We like to use a smashed beer bottle

cap as a washer and then thread screw through washer, cardboard, and bamboo, tightening with a wingnut on the other side. See picture. You can also just thread a zip tie through hole and connect flat to pole this way.



## Materials, Tools, & Sources for Giant Puppet Making & Parade Items

This is a fairly comprehensive list of tools and materials for creating giant puppets, masks, and costumes for the parade. We also tried to include a list of sources both locally and on the internet for acquiring them.

### Tools

- Large paper and markers for drawing designs
- First aid kit
- Hot glue guns
- Hot glue sticks
- Staple pliers: Salco with 3/8inch staples
- Utility knives w/ locking blades
- Permanent markers
- Heavy duty and regular scissors
- Cordless drill with bits
- Hammer
- Old cook pot (for goop making)
- Hot plate or propane cooker for heating goop (if stove isn't available)
- Paint brushes-various sizes
- Artist brushes-various sizes
- Tape measure
- Pliers
- Wire cutters

### Materials

*Whenever possible, try to use recycled materials. Most of what we list below can be found at thrift stores, the dump, or even in your own trashcan or garage!*

Wire-various gauges  
Fabric: all sorts of colors (lightweight synthetics are preferable)  
Old bed sheets: white and colored  
Ribbon  
Plastic zip ties  
Foam (thick pieces)  
Corrugated cardboard single wall, large flat pieces: great for sculpting (Lots!)  
Corrugated cardboard double wall  
Kraft paper (nice for final papier-mâché layer)  
Brown paper bags  
Newspaper  
Duct tape  
Nylon twine  
PVC plumbing pipe, various sizes  $\frac{3}{4}$  inch to 3inch diameter  
Heavy cardboard tubes  
Velcro  
Acrylic paint  
Glitter, sequins, miscellaneous fun trimmings  
Faux fur  
White glue  
Cornstarch  
External frame backpacks (just the frame and harness)  
Bicycle helmets (good for armatures, as well as starting point for masks/head-mounted structures)  
Clear packing tape  
Masking tape  
Used bottle caps for cardboard washers (flatten with hammer and punch nail hole in center)  
Wood (pine, fir, or spruce): 1" x 1" x 8', 1" x 2" x 8',  $\frac{1}{2}$ " x 2" x 8'  
Wooden dowels  
Screws & nails  
Bamboo poles (can be harvested locally)- large diameter for main support poles,  $\frac{3}{8}$ " diameter for smaller structure pieces.  
Rit Dye (for dyeing fabrics)

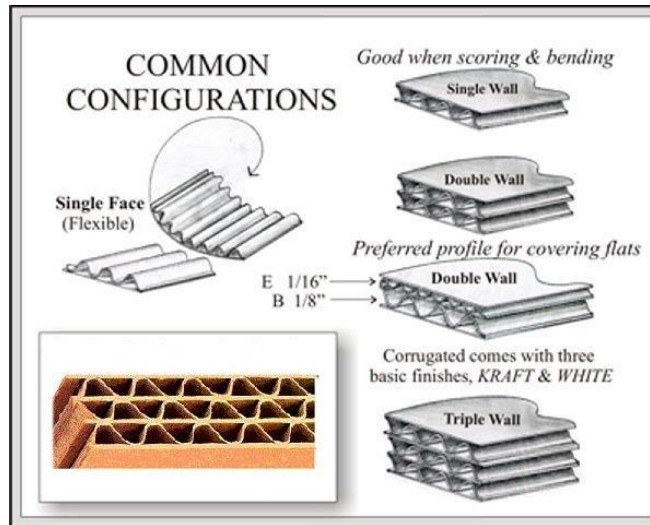
### **Material & Tool Sources**

**Bamboo:** Ask around. Most people who have it growing in their yard would love to get rid of some of it.

**Cloth & Fabric:** Cloth can generally be the most expensive element of any giant puppet construction. Nylon, polyester, and man-made blends tend to be better than cotton as cotton is heavier, retains moisture, and is subject to sagging. The exception to this is if you are planning to dye the cloth. When dyeing cloth, untreated muslin is the best option. We also have dyed cotton bed

sheets before. We like using Rit Dye for this. Check Jo-Ann's for sales and take advantage of their online coupons.

**Corrugated Cardboard:** Pretty easy to get for FREE! Check with Walmart, Home Depot, Lowe's, Best Buy, Furniture and mattress stores, etc. Small cardboard boxes are really easy to get but larger pieces can require a bit more hunting. Mattress stores are generally good sources for bigger sheets. Below is a diagram showing the different cardboard configurations that you will come across. We recommend Single Wall cardboard as it is the easiest to sculpt with. Double Wall is better for covering flats, making signs, etc.



**Craft and Art Supplies (Tissue, Glue, Paint, Kraft paper, Feathers, Fabric, etc.):** Jo Ann's, Michaels, A.C. Moore, Jerry's Artarama

**Foam:** We like to support the Foam Rubber & Factory Outlet (1323 N Central). You can buy foam of any size there and sometimes they have scraps they will let you have for free as well.

**Paint:** Ask paint stores for mis-tints. Acrylic-latex only. Bold primary colors are nice, as well as black and white so you can mix any color you want. You can also try the Habitat Re-Store and Craigslist. You can also use regular student-grade acrylic paint.

**Staplers:** The best staplers for puppetry construction are called *Staple Pliers*. They have a pointed tip that enables you to staple cloth or cardboard away from the edge by penetrating the cardboard with the point and then stapling. The most affordable "sword point" stapler we've found is the *Salco P694 Sword Point*. Bostitch also makes a staple plier but it is light duty and not recommended.

Salco staple pliers can be purchased directly from Salco: [www.stapleheadquarters.com](http://www.stapleheadquarters.com)

*Salco P694 S/P* 1= \$36.65, 3+=\$33.75

\*Remember to purchase staples as well. Recommended size for puppetry construction is  $\frac{3}{8}$  inch, galvanized.



**Wood:** 1" x 2" stock works well for re-inforcing many constructions. Check local building sites as scraps are commonly thrown out and can be recycled.

**Thrift Stores:** Local thrift stores can be a gold mine for fabrics and other random puppet making supplies. Check out Am Vets, Goodwill, KARM, Ladies of Charity, etc. Who knows what you'll find?

*\*This document was compiled by Cattywampus Puppet Council, 2017 © We need your creativity and ideas, so feel free to email any updates or additional sources to:*

*[cattywampuspuppetcouncil@gmail.com](mailto:cattywampuspuppetcouncil@gmail.com).*

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