PVC Yard Birds



Ability to Sell or Distribute

You have the right to sell any and all the Patterns that came as a part of this package. However.....EACH must be sold INDIVIDUALLY and not part of or included in another package. You do not have the Right to resell any other part of this package or to distribute it's contents to another person or company. You must not make more than 1 additional copy of this material for backup purposes other than the patterns themselves.

Due to nature of this being information that can be easily copied, there is a no return / refund policy for any reason.

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Welcome and Thank you for your purchase

I have been making these birds for about 2 years now. It is something I find very rewarding. Most of what I know has come from trial and error. It does take time and patience to craft these birds. More than likely you will become frustrated at one point or another. But do continue on.....it will become easier as you progress. I have to admit, some of my ideas have come from birds that others have made. I use a similar idea and change it to my liking. Almost every person that hand crafts these birds does things differently. I'm sure you will adapt your own methods as you progress. If my methods don't work for you, then try ideas that you may have. I was fortunate in the beginning because I had all the tools necessary to begin with. That's not to say I haven't bought new tools to make some things easier. These can be made with just a bare minimum of tools. It might take a little longer but the result can still be the same. Please read through all the material provided and enjoy making your birds,

A few points of Caution:

- 1) Fumes from heating pvc pipe may be harmful.....Please wear a respirator or heat your bird before bending in a well ventilated area. Avoid breathing the fumes.
- 2) Paint fumes are also harmful and very flammable...paint outdoors if possible and in a well ventilated area.
- 3) Follow all safety guidelines from each of the manufacturers of the products / tools that you use.
- 4) Heat guns get extremely hot.....wear appropriate gloves when using them and watch for items that may be able to catch fire easily around where you set it down.
- 5) And PLEASE wear ear plugs, safety glasses, dust masks, protective gloves and respirators as the situation calls for.

Please Read Through all the material.....

There are 76 pages in total. Read everything BEFORE Printing. Otherwise it will use up a lot of paper & ink. If possible....print the patterns on cardstock, it will make tracing the patterns much easier.



Work Bench:

I just use a table I already had. You can also use something like a Black & Decker " Work Mate " that can clamp the pipe to keep it steady. I use a jig on top of this table. It is all I need.....you will need to decide what works best for you.



Pipe Jig:

This is just a jig I made out of scraps of plywood and pieces of left over wood that I cut to the sizes I needed. This jig is for 3" pipe. The area where the pipe sits in must be just wide enough for the pipe so it sits firmly in place, but the pipe can be turned by hand without much pressure.

Example: 3 inch pvc pipe is 3 1/2 inch in diameter, so you need a height for the sides to be 1 3/4 inch high. The entire width would be 3 1/2 inch + using the side material being 1 1/2 inch for each side = a minimum of 6 1/2 inches. You can make the length as short or long as you need. Just keep in mind that your birds may be of various lengths.



Jig Saw:

I use a DeWalt variable speed jig saw....I'm sure any will do as long as it is variable speed.....you do need to slowly cut through the pipe. Also....short, fine tooth metal cutting blades are needed as the finer the tooth.....the smoother the cut will be. You will still have rough edges.....but they will be easier to file & sand smooth.



Heat Gun:

I have a heat gun I bought at Harbor Freight.....it is 1800 watts. If possible......get one that is at least 1600 watts. A lower watt will take longer to heat the pipe before bending. I have heard that some people heat the pipe before bending in very hot water. I'm sure that is a real hassle & you risk injury from spilling the water. Even a hair drier of the above wattage might be a choice until you bought a heat gun.....not sure how safe that may be, so be warned. Safety is always 1st .



Drill:

I use a cordless drill.....any type of drill will work. You will also need various size drill bits depending on the hole sizes you will be drilling for the screw holes and/or for the eyes if you use manufactured eyes. It is also ok to just paint your eyes on your birds.



Sander:

I have palm sander and the Black & Decker Cyclone pictured above. It requires that I need sand paper for each and I also sand by hand & file the edges of the birds which have been cut out. So you will at the least need files of your choosing and sand paper to smooth the cut edges.



Gloves, tape measure and painter's tape:

I use leather palm gloves and rubberized palm gloves when handling, heating, cutting and cooling the pipe. The pipe edges will be very sharp after cutting. Any type of measuring tape can be used. I use the painter's tape to mask off areas while painting and also to hold templstes in place on pipe while tracing the pattern out.



Spray paint & handle:

You will need various colors of spray paint. Be sure to use GLOSS only. Make sure it is for indoor/outdoor use. There is special spray paint fpr pvc pipe.....but I have very good results with Valspar brand paint. When I am not able to get Valspar, I use Krylon brand. Krylon tends to run very easily. Most important for paint adhesion is that you sand and clean all of the cut out bird entirely.



Misc:

You will need either a marking pen or pencil to mark your pattern outline on the pipe before cutting the pattern out. I only use the Sharpie brand fine tip permanent markers. If you choose to use manufactured eyes for your birds, you will also need a brand of super-glue. I use the brand Loctite. Super glue bonds very quickly. If you get it on your fingers, it can glue them together. Follow the manufacturers directions for removal if this happens. Manufactured eyes can be purchased at local craft stores or ordered online at http://www.craftking.com



Water Container:

Almost any type pictured above can be used if it is deep and long enough for you to Immerse the pipe in to it to cool the pipe after bending it.



Safety Equipment:

I wear ear plugs and safety glasses when using the Power tools to cut and sand the pipe. I use the dust Mask when painting the pipe also..



Sandpaper:

I use wet/dry sandpaper & regular type as well. I first clean the pipe edges with a file and then i sand the entire cut out bird with 220 grit sandpaper. This takes off the gloss coating from the pipe and allows the paint to adhere better. Once I think the pipe is clean enough, I then redo the entire pipe with 600 grit wet/dry sandpaper moistened with water. Lastly I clean the pipe with acetone just before painting it.

Additional Tools & Supplies:

You may eventually want to purchase more tools and materials to make working on your birds easier.

- 1) Rotary Tool I use just a basic Craftsman model to sand the edges of the pipe. This does a very good job and makes a smooth edge.
- 2) Dremel Rotary Tool sanding drums model # 407 (1/2" sanding drum) with model # 432 sanding bands (120 grit)
- 3) Dremel Rotary Tool sanding drums model # 430 (1/4" sanding drum) with model # 438 sanding bands (120 grit)
- 4) Wire for hanging birds up to dry after painting
- 5) Shop apron to keep sanding particles, paint and chips from cut pipe off of clothing
- 6) Various mini shaping tools for rotary tools
- 7) Small precision files to get into small cut areas of cut bird
- 8) A pvc pipe saw to cut your pipe to length I have a compound saw that I Use, so I didn't need to purchase any other saw
- 9) Wood to make your own pipe holding jigs
- * 10) 2", 3" and 4" schedule 40 pvc pipe.....usual lengths are 10' but you can buy shorter lengths but the price difference is more expensive for pre-cut short lengths......This Is A Must For Which Ever Size You Make.....
 - 11) Some type of cutting plier to shorten the stems on the eyes if you use them
 - 12) A rolling pin, different sizes of metal pipe to form the bends on the birds or anything round that you think would do such as a can

Everything thing you need to make the birds can be purchased at a local hardware store or from larger Big Box stores like Lowes or Home Depot

Prices for Materials

All items listed here will be from Lowes

Your local lumberyard, hardware store, and various other retailers will sell similar items.

There are 2 types of pvc pipe:

Solid core - heavier – harder to heat for bending

Foam core – not as heavy, easier to heat for bending

- 1) Lengths of pvc pipe
 - A) 10 foot long schedule 40
 - a) 4 inch pipe \$16.19
 - b) 3 inch pipe \$11.75
 - c) 2 inch pipe \$5.63
 - B) 5 foot long schedule 40
 - a) 4 inch pipe \$12.14
 - b) 3 inch pipe \$8.82
 - c) 2 inch pipe \$4.21
 - C) 2 foot long schedule 40
 - a) 4 inch pipe \$6.31
 - b) 3 inch pipe \$5 90
 - c) 2 inch pipe \$3.89
- 2) Skil brand clamping work table \$35.00 & up
- 3) Jig saw variable speed orbital Black & Decker \$39.97
- 4) Heat Gun \$25.00 & up
- 5) Drill \$29.97 & up
- 6) Plastic tote for water \$4.74 & up
- 7) Super glue for eyes \$3.73
- 8) Rubber gloves \$5.20
- 9) Leather/rubber palm gloves \$1.98 & up
- 10) Cutting Pliers for eyes \$7.46 & up
- 11) Drill bits \$1.68 & up for each size
- 12) Jig saw blades metal cutting- \$4.97 ea. 24 teeth per inch
- 13) Spray paint handle \$2.70
- 14) Spray paint respirator \$29.97
- 15) Dust masks \$4.47
- 16) Sandpaper / wet-dry sanpaper \$2.97 & up
- 17) Painters Tape \$5.97 & up

How to make a pipe holding jig

You will find that a pipe holding jig will make working on your birds much easier. The length of the jig is determined by you.....everyone has their own limits. Mine is made from scrap wood material that I already had.

Sizes of pvc pipe:

4 inch pipe has a diameter of 4 ½ inches

3 inch pipe has a diameter of 3 ½ inches

2 inch pipe has a diameter of 2 3/8 inches

What ever size pipe we are using will determine each jig height Basically the height is ½ the size of the diameter of the pipe.

4 inch pipe jig will be 2 1/4 inches high

3 inch pipe jig will be 1 ¾ inches high

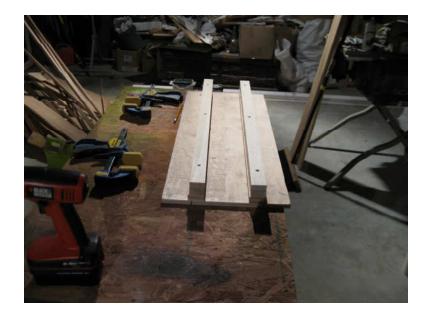
2 inch pipe jig will be 1 3/16 inches high



This is the material for a 4 inch pipe jig.

- 1) 1 piece of $\frac{1}{2}$ plywood cut to 13 inches wide by 32 $\frac{1}{2}$ inches long
- 2) 6 pieces of 1 ¾ inch wide by 32 ½ inch long popular by ¾ inch thick Any type of wood will do as long as it is the correct size
- 3) 12-2 inch long wood screws.
- 4) Start by drawing a line through the center of the plywood length wise.
- 5) Next draw a line 2 1/4 inches to each side of the center line
- 6) The space in the center should now be 4 ½ inches wide...a tiny bit larger is ok...





Now take 3 pieces of the $\frac{3}{4}$ x 1 $\frac{3}{4}$ pieces and stack on top of each other. Next drive 3 screws into those pieces from the top spaced 1 in center & 2 near the ends. Repeat this for the other set of 3 pieces.

I have placed the 1st set on one of the outer lines and clamped it in place. Now turn the entire piece over and put 3 more screws through the back of the plywood into the stack of 3 as was done previously. Then repeat this for the opposite side. Flip everything back over. It should now look like the picture on the right.

The 3 pieces of ¾ inch thick material gave us a height of 2 ¼ inches....exactly what we needed. So now we can put 2 reference lines on each pipe before we trace our patterns onto the pipe, each half way around the pipe.



Now our pipe sits in the jig and we can work much easier with the pipe.

Now that you know the basics, I'm sure you can make the other 2 sizes. Just remember the heights mentioned above for them.

Making one of the birds

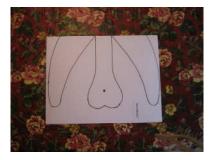
Duck:

Ok...now it's time to learn to craft one of the birds. I have chosen the "duck" for the learning process. It is the bird I think is easiest to make.

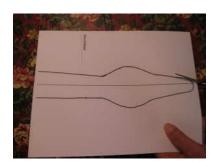
We'll start by printing the duck patterns – there are 3 of them as pictured below.







Next we will cut out all three of the patterns and then tape them together on both sides.





Next we will prepare to tape the pattern to a 24" length of 4" pvc pipe.

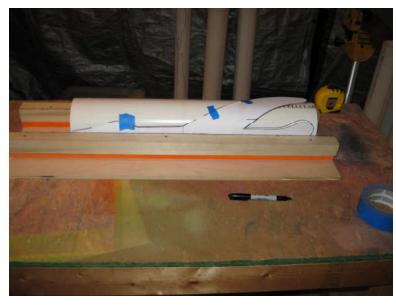


If you have made a 4" jig already, then place a 24" length of 4" pvc pipe in it. Now....take a felt tip marker or pencil and draw a line on each side of the pipe by using the wood as a guide. This will allow you to know where ½ of the pipe height is and you can use this mark as a reference point. If you haven't made a jig yet....then don't worry you can mark the pattern without it.....but the pipe will be quite hard to hold in place when you actually cut the pattern out. You will have to find some way to hold it fairly securely while you cut it. I do recommend using a holding jig or a "Work Mate" table.





Place the pattern on one of the lines and tape the pattern to the pipe in a few different places. You can also use rubber bands to do this step. I find that tape is much easier. Now trace completely around the pattern with the marker or pencil.



This is what yours should be similar to.



Now here is mine after marking and removing pattern.

Now turn the pipe over to the opposite side and where the head of the first pattern was but on the new reference line tape your pattern on the pipe again and trace another duck. Be sure to avoid overlapping the drawings. It is ok if they are close...just don't have them touching. Now you should have 2 ducks traced and each facing opposite directions as the pictures below show.



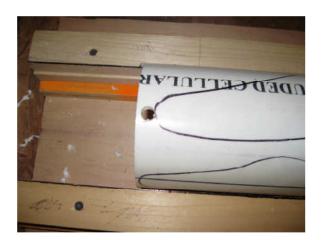


Now it's time to cut out our patterns.....



I have placed my pipe in the jig, I have on safety glasses, I am wearing gloves to protect my hands and ear plugs to protect my hearing. Safety should always be your 1st priority.

As you can see, I'm getting ready to drill some holes in the pipe. I do so because I like for the very ends of the pipe to stay connected after cutting an entire pattern out. It seems to stabilize the pipe more and gives me more control over my cutting out of the pattern. You decide for yourself if you want to do this or not. I place the drilled holes where I think that I can make a cut easier.....you will realize this as you cut the pattern out.





So now I have 3 holes drilled on each pattern. 1 at each wing tip and 1 at bottom of the foot. So there are 6 holes drilled in all. The holes are just large enough for my jig saw blade to fit into. The hole size will be determined by the size of your jig saw blades.

Again...be sure to have your safety equipment on...it's time to cut out our patterns.

I begin at the foot for the duck pattern. I cut around each side all the way to where the legs meet the wing.





Next....let's cut out the wings....beginning at the hole, cut up to where the wing side meets the neck. Then from the hole to where the wings meets at the top of the legs. Do this for both wings.





Now it's time to do everything we've done on this pattern to the pattern on the opposite side. If we continue to cut this pattern out completely.....it will leave the other pattern much harder to hold and to cut out. So cut the other pattern just like you did on this one and then we will continue.



Ok....now we have cut both patterns out all the way around to the beginning of the neck. Time to finish Cutting the patterns out.

Let's start back at where the wing meets the neck. Continue cutting the neck all the way to the center of duck's bill on one side only. Now we need to do the same on the pattern on the opposite side. Once that has been cut.....do the rest of the neck and head of that pattern. It should be cut out completely now. Just leave it in place and go back to the other pattern and finish cutting it out. Congratulations.....you Have cut out your first bird pattern. Now let's remove them from the cut pipe.



Success



A little rough around the edges.....but they sure look good. Maybe now is a good time to take a short break, get something to eat or drink and relax for a couple of minutes. Oh yes....and admire your work.....great job.





Ok....be sure to put your safety equipment back on. Now let's clean this duck up. I am using a Scotch Brite brand pad here. You can also use sand paper. I am just removing the chips from the edges here. You may find other things that work better for you. I will clean up the edges better with a rotary tool with a sanding drum attachment. These can be quite dangerous as they are high speed tools and even though they are small...can do some damage if you are not careful enough. You may use files and sandpaper to clean the edges completely and it should be almost ready for painting.



The rotary tool does a very nice job. Ok...we have our edges sanded....now it's time to remove the markings For the pencil, marker, and ink markings from the pipe manufacturer. I will use a palm sander, but again just sandpaper will work just fine....just takes more muscle and time/



Alright....our duck patterns are really looking good now.....next step will be to learn how to make bends to pose the birds.

Bending the bird into shape

Now we are ready to begin to shape our duck. I have clamped the duck to my work table. You should notice that it is placed with the top of the legs just barely over the edge of the table. Now it's time to get on our safety gear because the pipe does get very hot when heating it up. As I begin to heat the pipe, I try to hold the tip of the heat gun just far enough away from the pipe to keep from scorching it. Sometimes that doesn't work out so well and it gets scorched anyway. Not to worry....it can be re-sanded later to remove the brown/tan areas. As the pipe heats up, the body that is overhanging the table will begin to slope downwards towards the floor. You can even grab the duck and bend it more or less to the position you want it to be in. Once you have the bend where you want it, remove the clamp and put the heat part into a pan of water of under a faucet to instantly cool it and it will hold that shape.











Your duck should look similar to this

Next we will mark the foot of the duck, and drill the hole to mount it on what ever type of display you choose.

.



Next we will bend the foot of the duck, also by clamping it to the work table. Then we will again heat it with the heat gun in the same way as before until it sitting flat. Take notice of the line I marked showing where to heat and bend the foot.

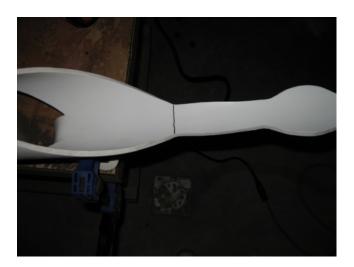


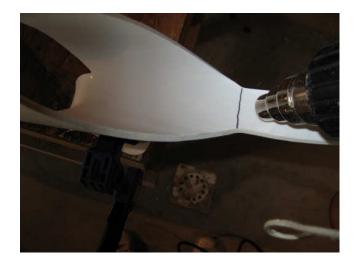
Here I am bending the foot by hand to the position I want....then I cool it off again in water. Notice I had the heat gun too close and scorched the pipe.





Your duck should now look similar to this..... I have also marked the duck where the 1st neck bend will be, and have started to heat the pipe.





Once the pipe is pliable enough....I begin to bend that section to the position I want. Then back in the water to cool it off.





Again I have marked another area to be bent.....It is not necessary for you to put these marks on the pipe, I have just done so to show you about where to make the bends. And again heat up that area to bend it to the position you desire. Your duck should now look similar to mine. Then back in the water to cool it off.











Well, this will be the last bend on the duck....... I have marked an area on the head. You will need to heat that entire area to bend the sides of the head up just a bit. Once it has heated enough, you can grab the head in one hand and squeeze the sides together just a little. You must then hurry and cool the head in water to hold that shape. Remember to wear gloves for this step.....that pipe is hot! Almost done for the shaping....just a few steps left if you want to add manufactured eyes to your project.







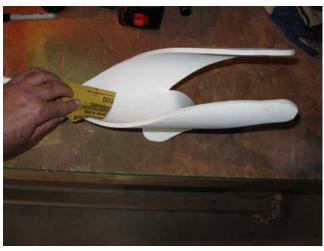
Your duck should be somewhat like this now

Almost time to paint your duck.....but 1stit must be cleaned to remove as many marks/ink off of it as you can so they don't show through the paint. I now sand the entire duck with 600 grit wet/dry sandpaper which has been moistened with water. This ensures that all the shiny areas of the pipe are just a little bit dull so the paint will adhere better.





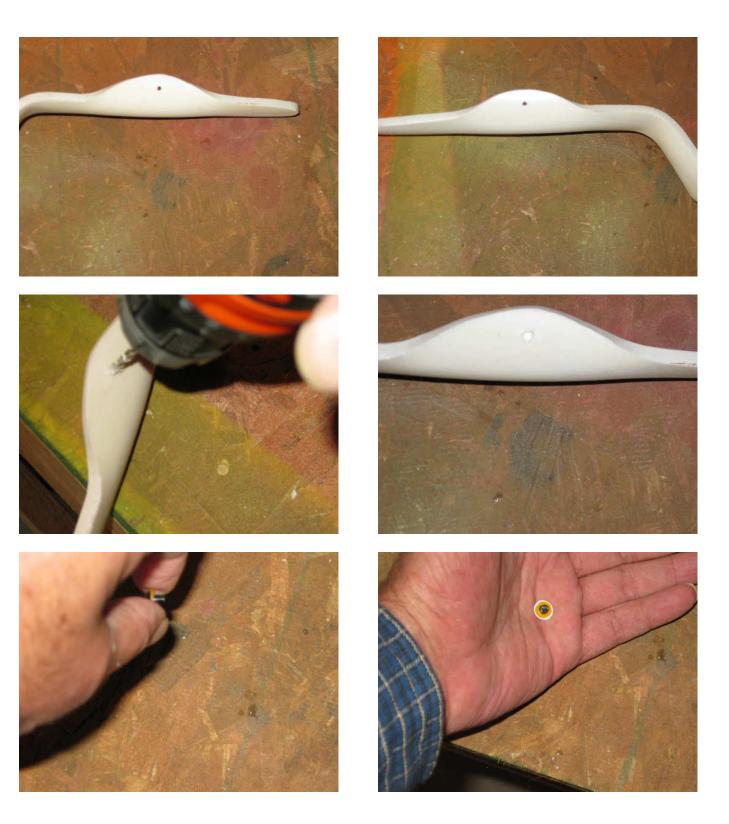




If you want to glue manufactured eyes on your duck....the following will show you how.

1st I mark each side of the head where I will place the eyes.

Then I use a drill bit which is the same diameter as the stud of the purchased eye I use and drill a hole almost.....but just shy from going all the way through the pipe. You really need to be careful and drill slowly. I'm sure it will take some practice to get the hang of it. You will have lots of scrape pipe to practice different things with. Better using the scrap rather than wasting a cu tout bird. It is quite common to paint the eyes on as well or even not use any type of eyes





I only use eyes from http://www.craftking.com

The one pictured is a yellow 6mm size eye.

In all I use 3 sizes...depending on the bird size.

6 mm, 9 mm, 12 mm

3 colors I use: black, yellow and amber

Looks like we are ready to paint the duck

Just minutes before I am ready to paint the birds, I clean the entire bird with a clean rag and Acetone. I believe this also helps the paint to adhere much better.



Painting

Alright....now it's time to put some color on our duck.

Everything in this painting section can be applied to all the other birds that you create. You will need to wrap them differently and paint the different colors in a rotation that you find appropriate. Please do your painting outdoors when the wind is calm. Be sure to have some way to prevent the over spray from getting on items you don't want painted. Such as your neighbor's car or house..... This section shows me painting indoors, but I assure you it was done outside. The weather here is not very suitable right now for doing all the steps outside so I would do a step inside and then go outside and paint. I usually let each color dry for 2 days before wrapping the bird again to spray another color. I live in the mountains of Western Maryland and have a lot of moisture close by. You may not need to wait as long...the tell tale sign will be if your block off a painted area with painter's tape and paint another color....then go to remove the tape and the paint comes off with it. Ok do have your safety equipment ready?....please use it and protect your health.





Here's our bird all ready to paint.....I have just cleaned the entire duck with Acetone and it is ready to go. The second picture shows it being suspended by a piece of wire.



This set shows the different areas I am masking off before starting to paint. As you can see, I have used plastic bags to cover the larger areas where possible. Use what ever you need....except....newspapers or magazines, the ink from them will bleed onto your painted bird. I adhere the plastic bag right over the masking tape I began with.





I have painted the largest portion 1st....be sure to hold your spray can about 8 – 12 inches away from what you are painting. Also be sure to just spray a light coat the first spraying. It will be able to sprayed again in about 10 minutes. Continue spraying additional coats of paint until you like the paint coverage. Remember light coats will also prevent the spray from running. Next I have uncovered the head and will paint it today also...using the same techniques I supplied above. I didn't cover the body part I had just painted.....I just held the new area to be painted in a way that would prevent the new color from getting on it. Now I will let this dry for 2 days before I paint another area.





2 days have gone by and now I'm ready for the next colors. As you see, I have masked off the main body And will paint the foot & leg. I have also masked off the head and will also paint the duck's bill today. Once again I will wait 2 more days before finishing the last color. Remember...you may be able to paint The next day or even the same day....it just depends on how your mask the areas off and the moisture In the air where you live.



Whoohoo...finally....I can now paint the last small section.....You may decide to just paint this last section the same color as the head....choice is yours. I just like the little bit of difference the white on the neck makes. Well....Congratulations....your 1st hand crafted bird is a success. Well done.

I had already put the eyes on after the white section had dried. Just refer back to the section where I explained about installing the eyes. If you don't care to place eyes on them that is fine. And don't forget that you can also paint your own eyes on them.

Now take some time and check out your other patterns to see how you do.

I hope you have enjoyed learning how to craft your own PVC Yard Birds.....And I wish you continued success in making even more. If you have family or friends that may be interested in doing this and you believe I have provided you with a good product....please have them to visit my website.

If you have any questions or concerns, please email me at:

pvcyardbirds@gmail.com

I will reply as soon as I can

My many Thanks,

G...the pvc birdman of Accident,MD

P.S. I will also have new patterns for sale on the website soon Check them out if you are looking for more

http://www.pvcyardbirds.com

Patterns

All of the patterns are for 3 " & 4" pipe. With some patterns you will be able to get 2 full birds out of 1 length of pipe. But you may be able to get more by using lengths which are longer. Always try to get the most cuts when possible. So always try both sizes of pipe and use the patterns as a guide to see how it works out first. The actual sizes of your birds can always be increased or shortened by changing the lengths of the necks and legs. The appearance can be quite different just by doing this.

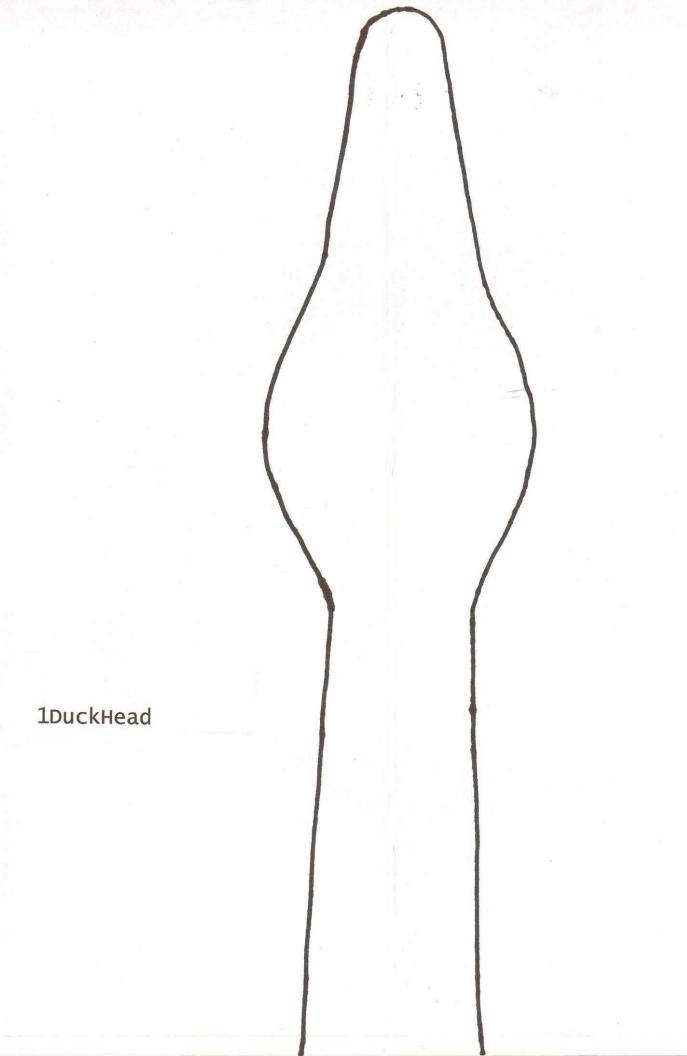
- 1) Duck is 23 ½ inches over all length so a piece of pipe cut 24" long will do. So you can get 5 lengths cut from a 10' pipe...and could make as many as 5-10 birds.
- 2) Small Pelican 23" long and pipe can be cut the same 24"
- 3) Great Heron $-37 \frac{1}{2}$ " long...cut pipe for 38 "...could get 3-6 birds from 10'
- 4) Egret 39" longcut pipe 40" long.....same as Great Heron
- 5) Large Pelican 48" long...only able to get 2 4 birds out of 10' pipe
- 6) Whacky Bird 31 ¹/₄" long...cut pipe 32".....only 3-6 birds out of 10' pipe

More Birds

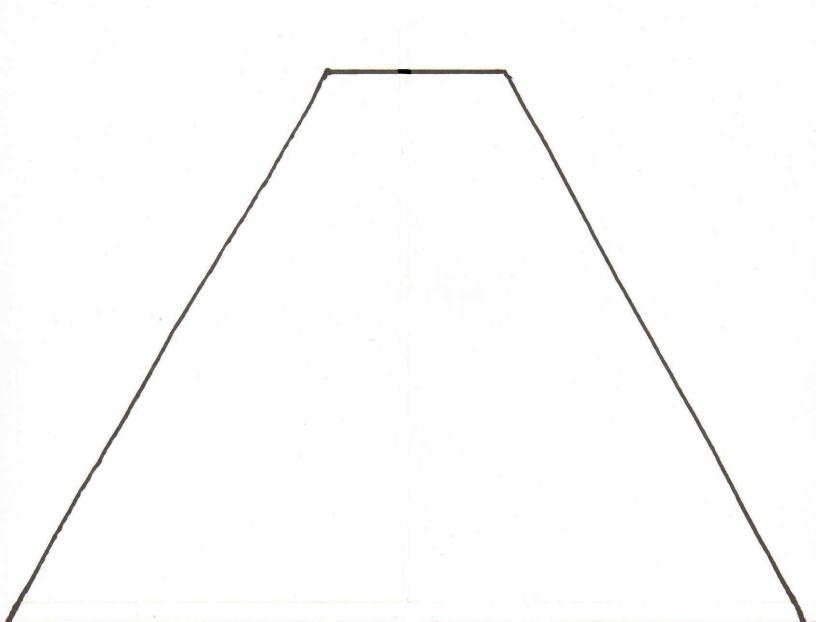
These patterns have some extra parts with them....all the heads, bodies, legs and necks can be interchanged to make many more birds.

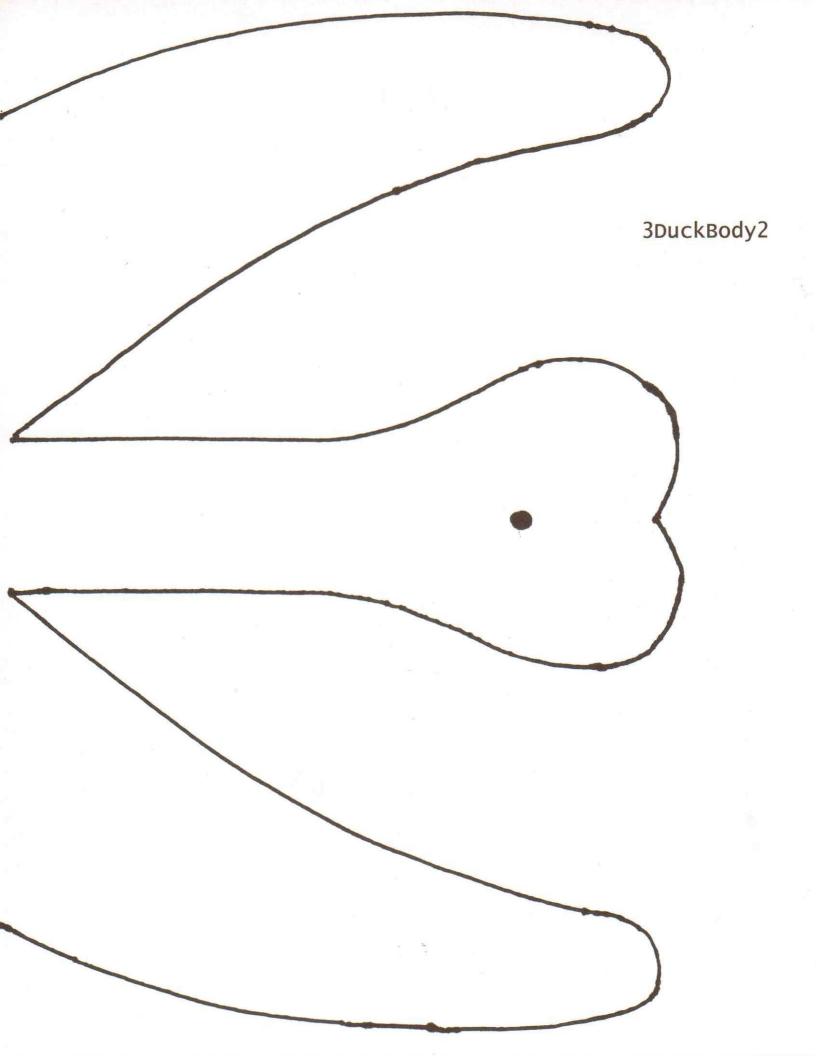
- 1) Body 1
- 2) Body 2
- 3) Body 3
- 4) Neck
- 5) Head 1
- 6) Head 2
- 7) Head 3
- 8) Legs
- 9) Legs 2

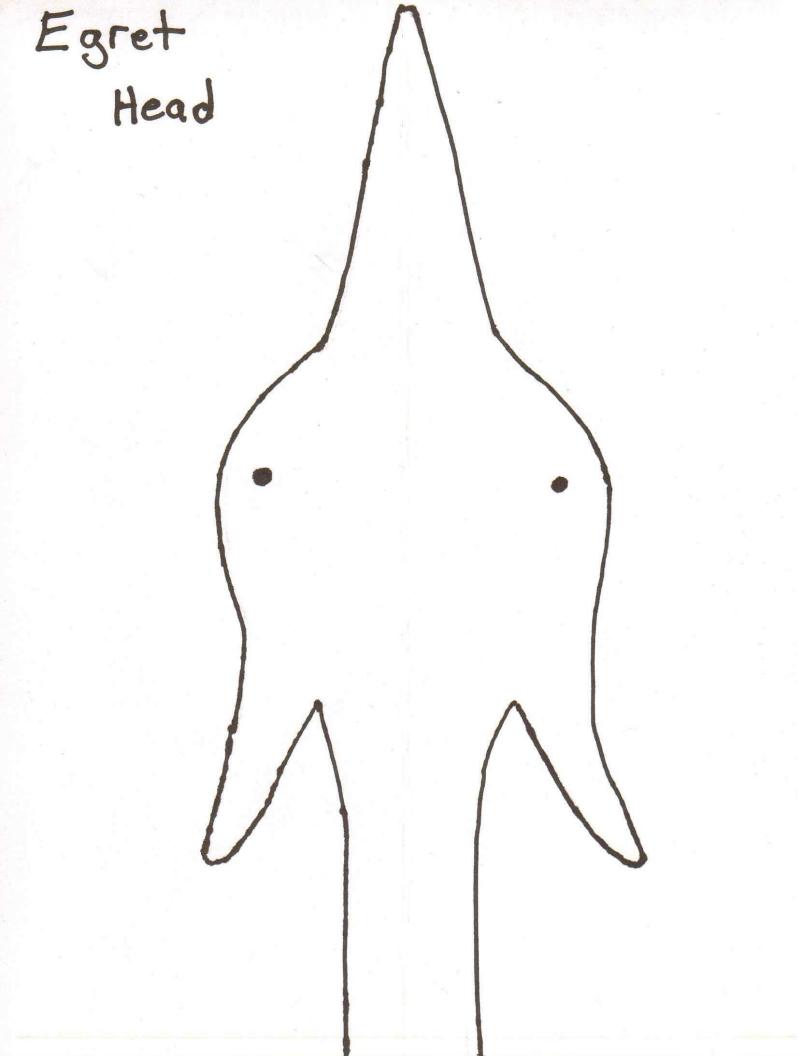
Plus an extra bill that is larger for Small Pelican



2DuckBody1

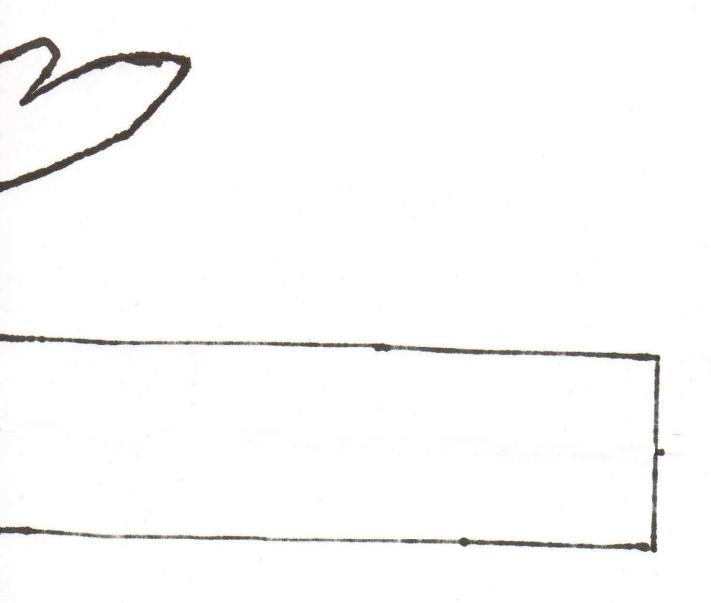






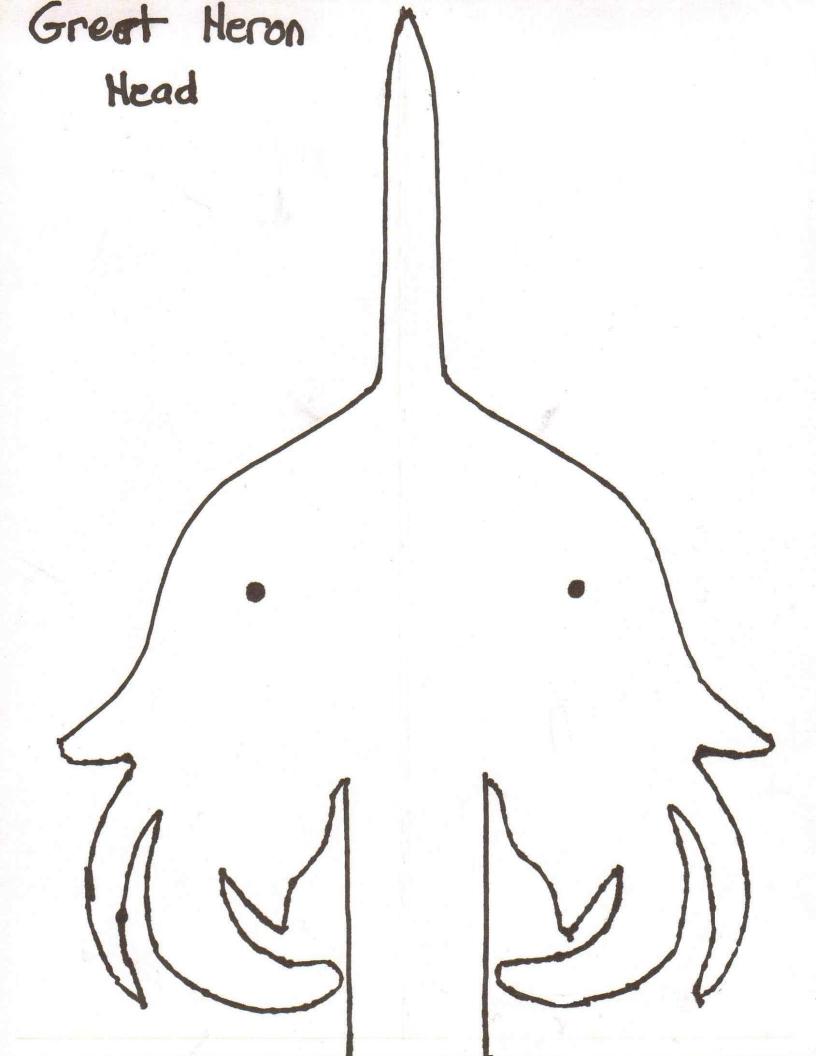
Egret Neck to Body Start



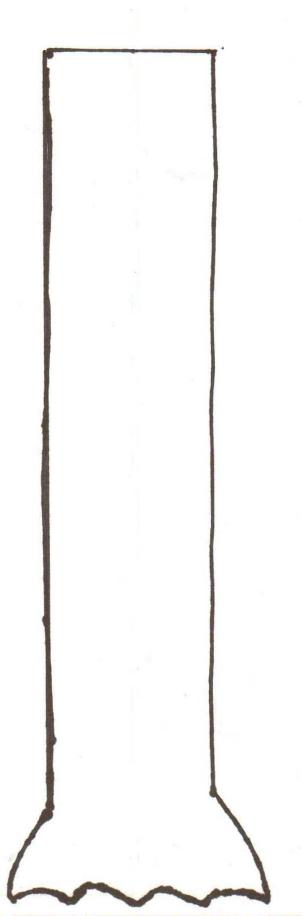


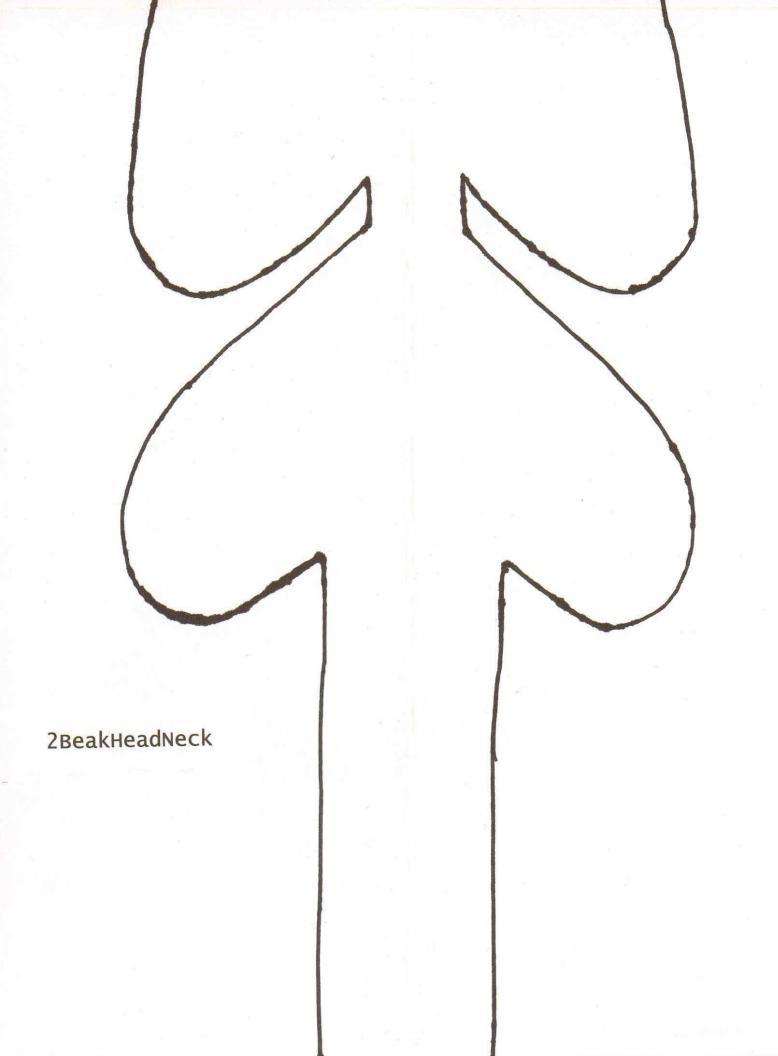
13

Egret

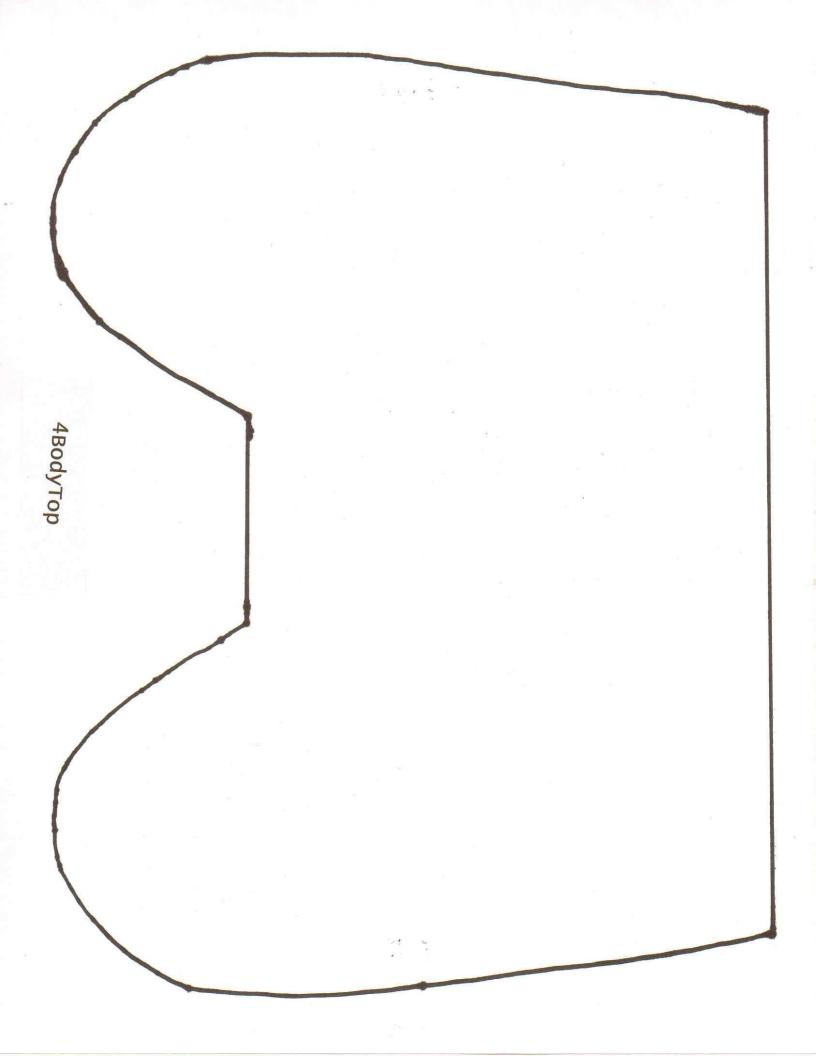


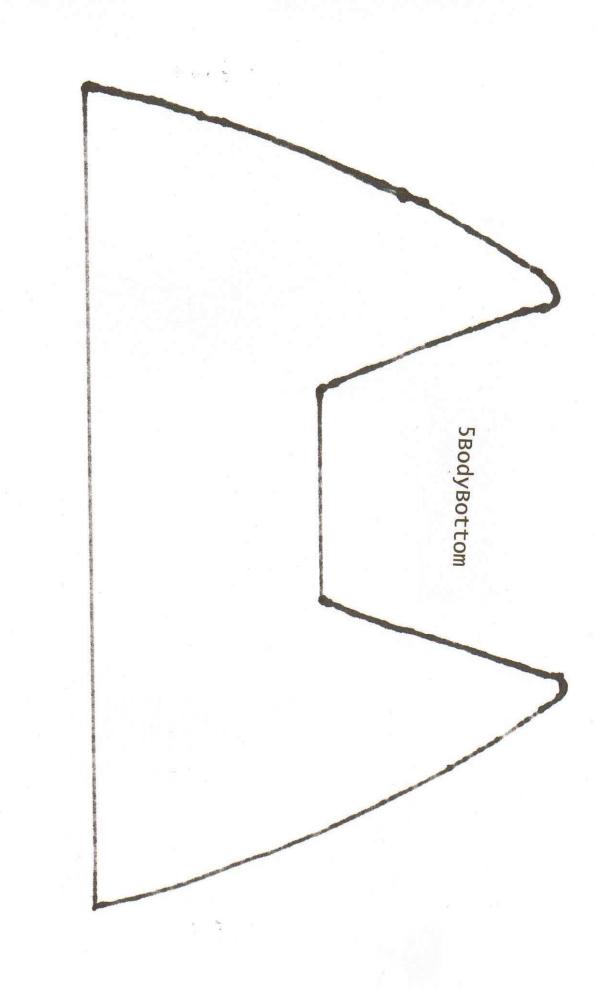
Great Heron Neck Bottom Great Heron Body



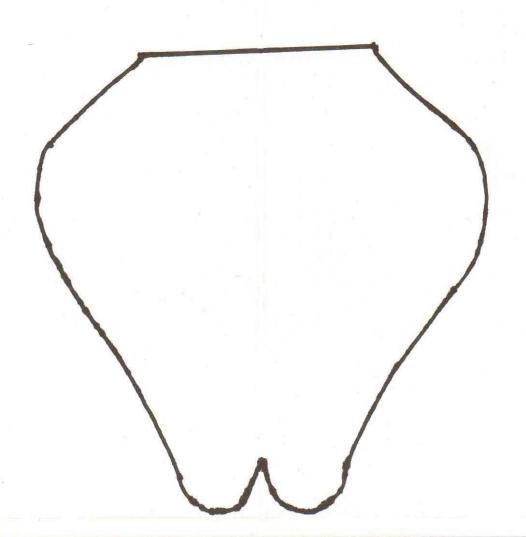


3NeckExtension

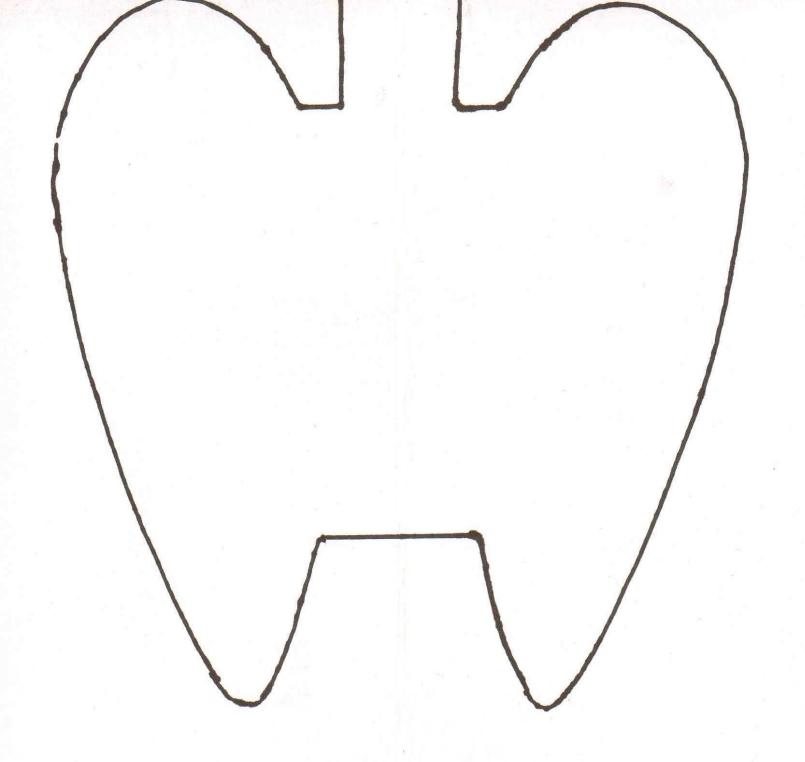




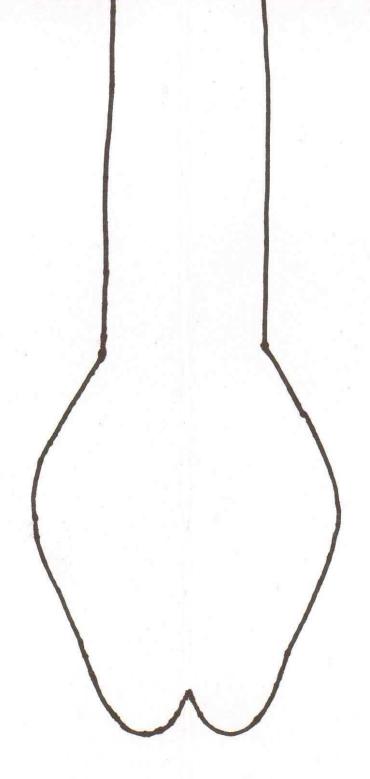
6Legs



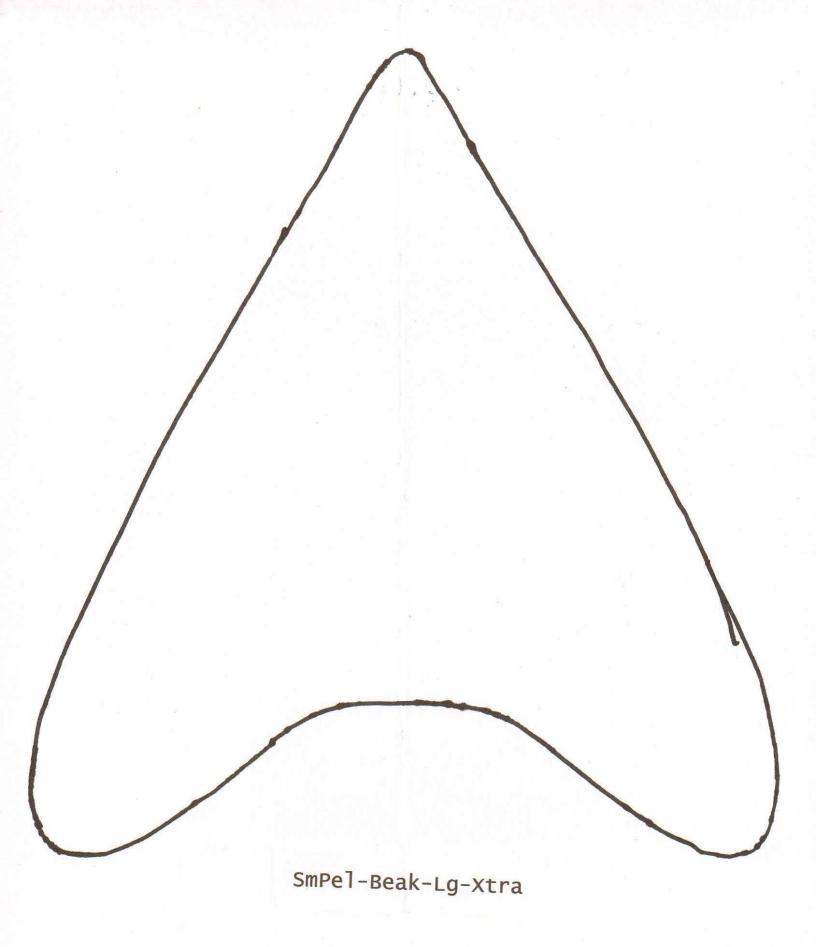
SmPelHead-Beak



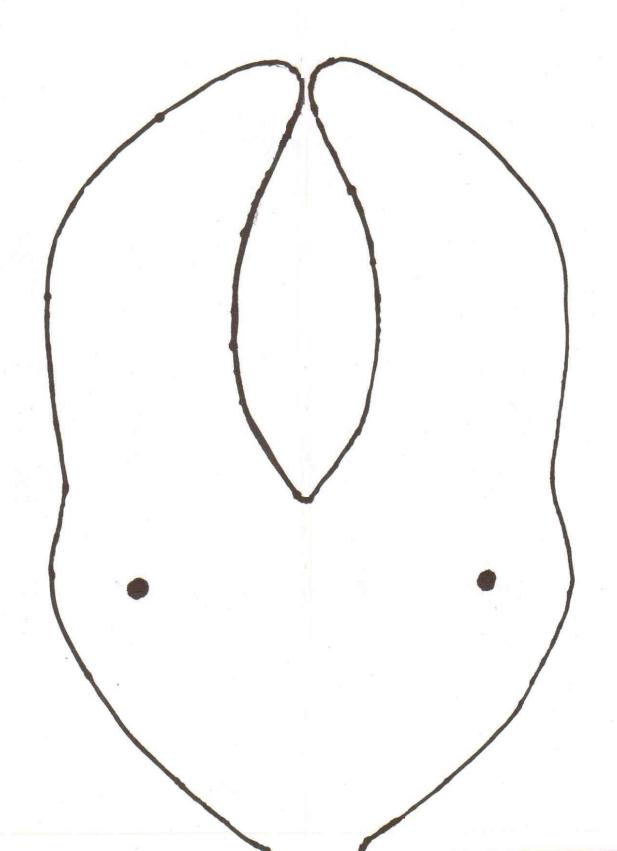
SmPelBody-Neck



SmPelFoot-Leg

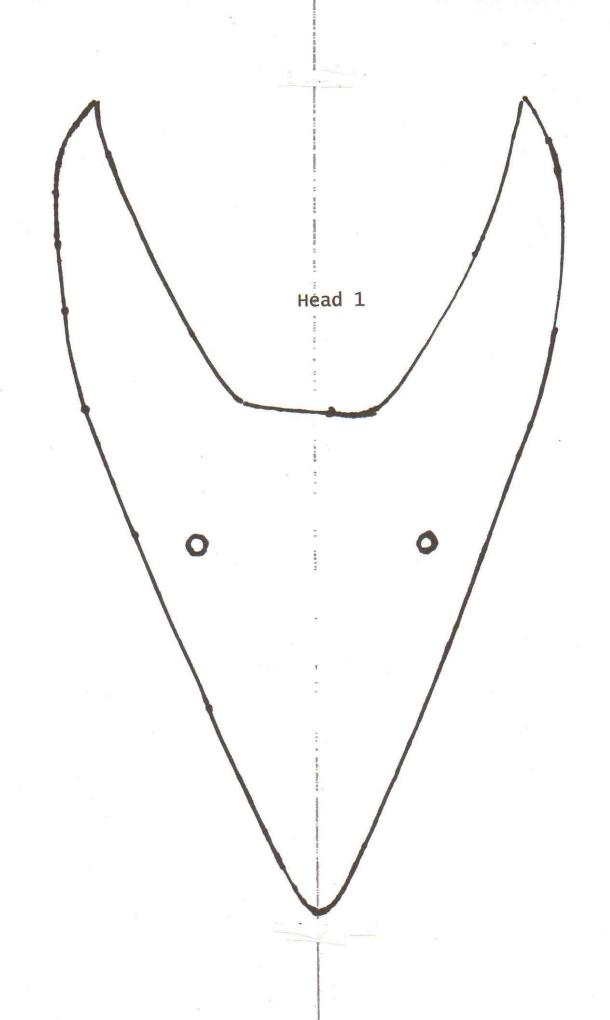


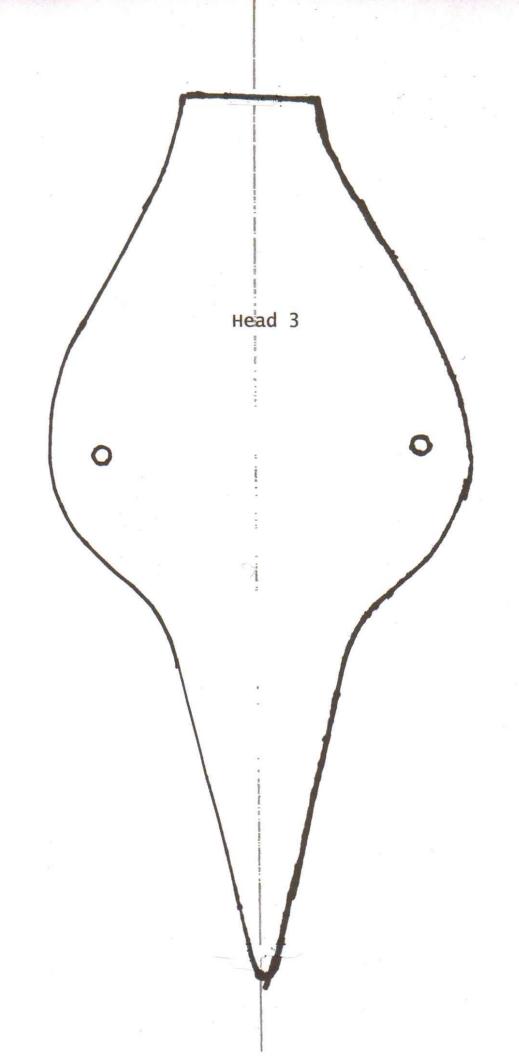
Wacky Bird Head

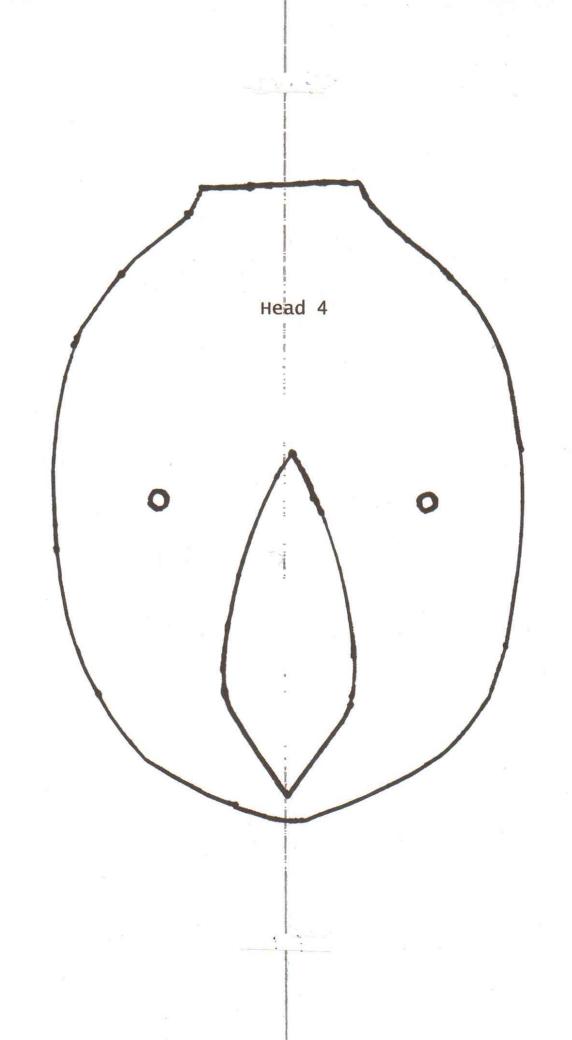


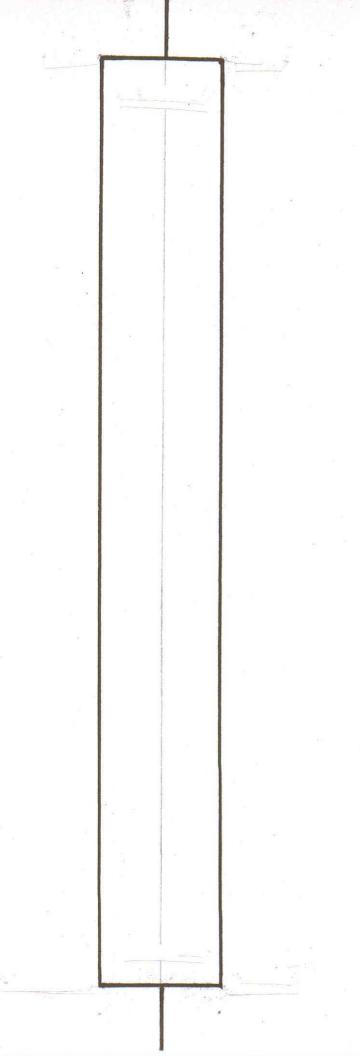
Wacky Bird Neck Wacky Bind Body Top

Wacky Bird
Body Borrom

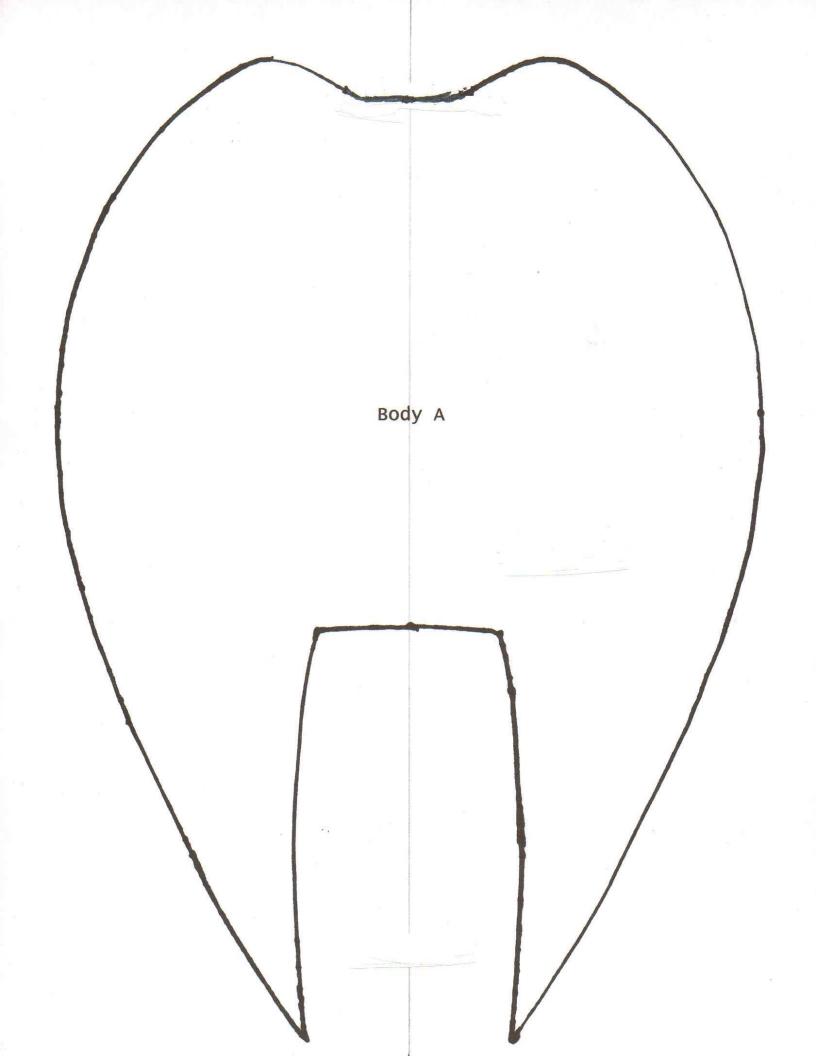


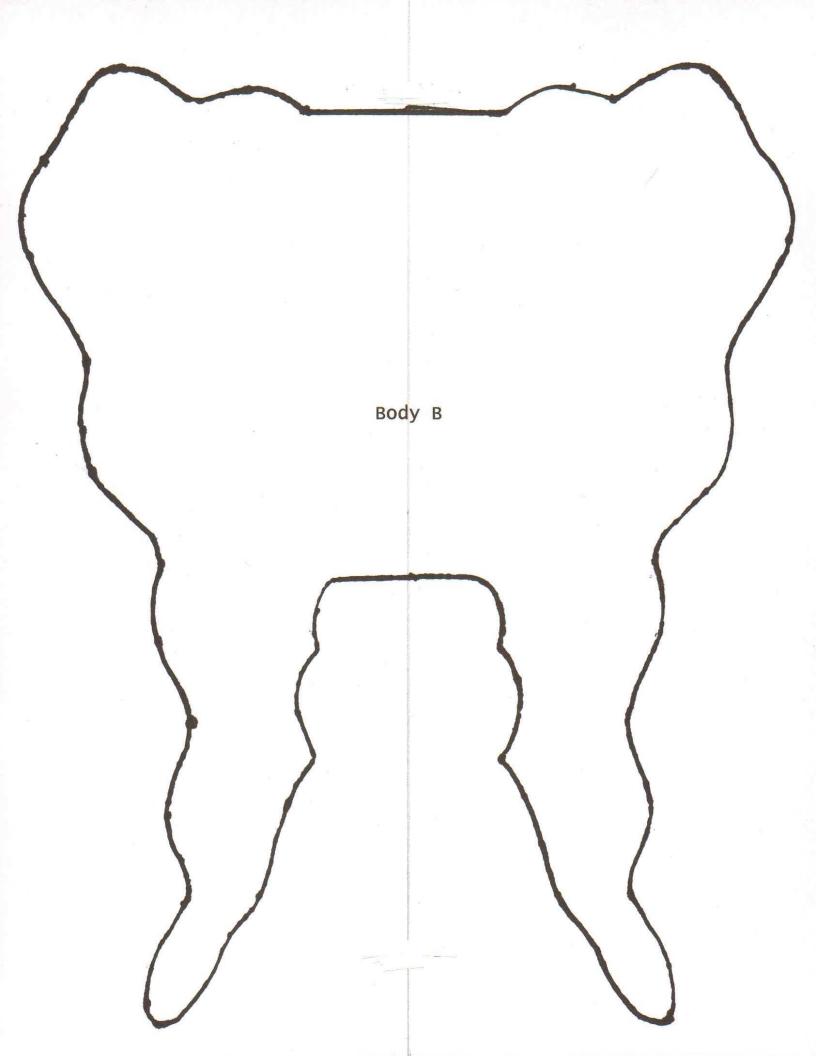


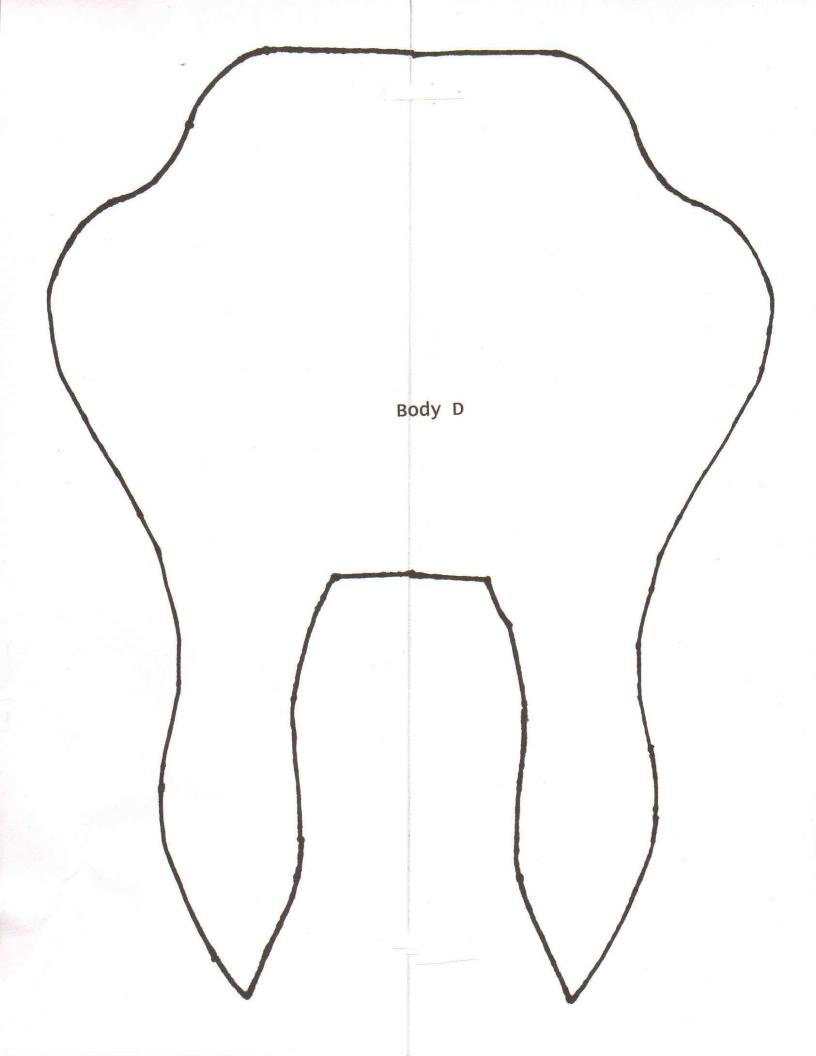




Neck

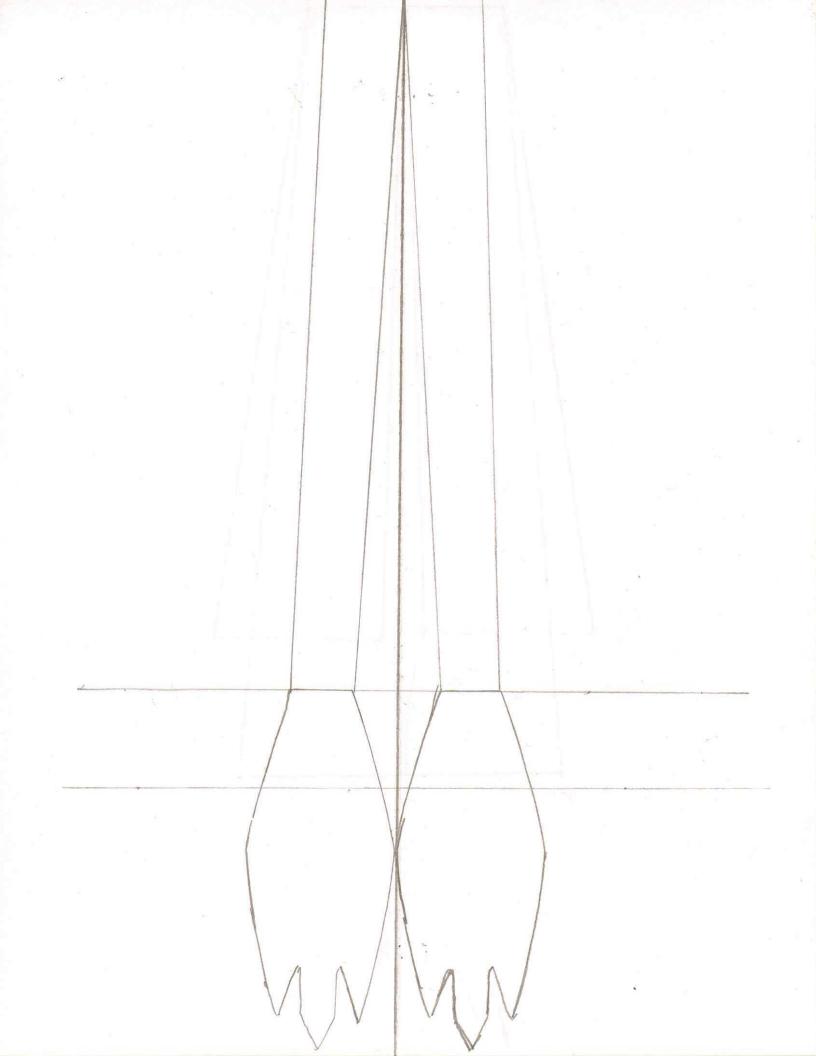






Legs

Cut Area Out Between Legs



Ways to Mount or Display the Birds

This will give you some ideas on how to show off your completed birds. There are many ways to do this.....also you may consider mounting on a tree branch, epoxying to a rock or large boulder, mounting on a fence or railing, suspending in the air with wire. The ways are just endless....



Picture 1 shows 3 pcs of 4 inch round pressure treated post cut to 4", 6" and 9" long. They are then just screwed together from the back to hold their shape. Pic 2 is the same except it uses 4x4 square pressure treated posts. Pic 3 is a piece of cherry.....5/4x8x12 inches....it will be sanded smooth and will be used indoors.





Pic 4 is of 2x12 pressure treated wood 12" long....to be used outdoors. You can make it fancier by cutting an champher completely around the top of it. Pic 5 is showing a spike...basically a large nail. Spikes can be made of steel or aluminum and vary in length and diameter. They are good for mounting The larger footed birds to the ground.....just hammer them into position using a spike.



All 3 of these pics are of tee posts. The 1st is made from 2x4 pressure treated wood....36" long & 12"length for the top. The 2nd is 2x2 pressure treated square spindle posts used for decks......cut 48" long and 8" length for the top. Both of These are held together with a screw from the top down. And the last pic is made from 34" pvc pipe with a 34" tee fitting. The length is 36" and the 2 smaller pieces in the tee are 4" each.....these can be assembled with pvc pipe glue. All of these sizes can be made to whatever length you want. The posts will have to put in the ground so you need to dig an appropriate size hole for them. Be as fancy as you wish....it shows off the birds much more and if you are planning on selling your birds.....will warrant a higher price.