



Reusable Tote Pattern

Thank you to our wonderful zoo volunteer, Dawn Smith, for sewing hundreds of reusable totes, for providing the pictures and creating the instructions for this pattern.



Using this simple sewing pattern, Brevard Zoo animal feed bags are sewn by community volunteers into reusable totes. The feed bags, which are not recyclable, are diverted from the landfill and the reusable totes replace disposable plastic bags that are harmful to wildlife. Totes are available at Brevard Zoo's gift shop and the proceeds support conservation and sustainability initiatives!

How to make a reusable tote:

- **Collect woven poly (non-paper) HERBIVORE feed bags.**
 - Herbivore bags are easiest to clean. Carnivore bags tend to have a greasy coating on the inside, making them harder to prep, but they can be used with some extra work.
- **Prep Feed Bags.**
 - Thoroughly clean all old food or stains from the inside of feed bags.
 - Dusty bags can be wiped clean with a damp cloth.
 - Heavily soiled bags can be scrubbed with diluted bleach and a brush.
 - Let bags COMPLETELY DRY. If not fully dry, mildew can form; use a towel to remove excess moisture.
- **Sew feed bags into reusable totes using the following instructions.**

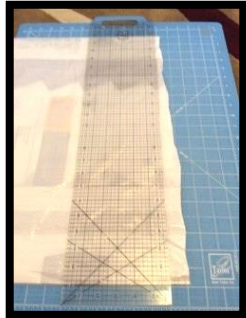
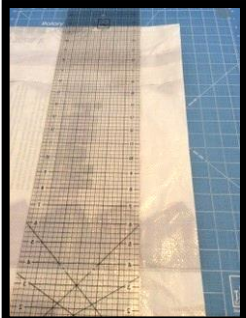

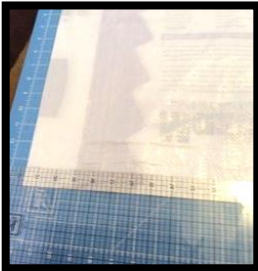
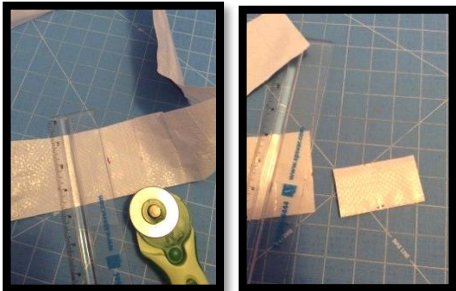
Materials:

- Feed bag (must be woven poly kind)
- Polyester thread
- Quilt ruler or T-square cutting ruler or yard stick
- Cutting mat (optional)
- Rotary cutter or scissors
- Plastic scrapper
- Permanent marker
- Clothes pins or binder clips
- Sewing machine
- Large sewing needle (size 14 or 16)



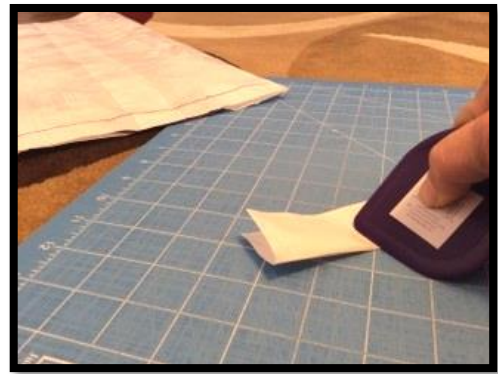
Cutting the Bag

Helpful Tip: Be aware of placement of pictures on outside of the bag; try to center the image so it is visible when the reusable tote is complete.

<ul style="list-style-type: none">• Cut off ends of bag using a ruler to make sure ends are even.• Helpful Tip: Use a cutting mat, quilter's ruler, and rotary cutter.	
<ul style="list-style-type: none">• At the bottom of the bag, measure 3 inches from the edge and cut off. This will make a 3-inch-wide strip which will become the handles for the bag.	
<ul style="list-style-type: none">• At the new cut at the bottom, measure 2.5 inches and draw a line across the bottom of the bag with the marker.	
<ul style="list-style-type: none">• At the top of the bag, measure 1 inch down and draw a line with the marker.	
<ul style="list-style-type: none">• Take the 3 inch strip (it will all be connected like a circle). Find the location on the strip which is overlapping and cut the overlapping section off. This strip will become the handles for the bag.	

Folding and Creasing Straps

- Fold the entire 3-inch-wide strip in half lengthwise with the wrong sides (inside of the bag) together.
- Helpful Tip: A scrapper tool is handy to help make a solid crease.



- Open and fold one side into the middle crease that you just made. Crease as you go.




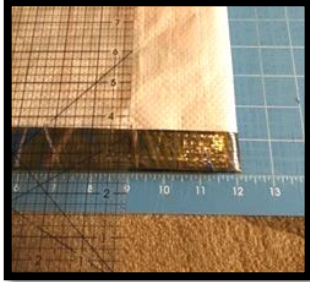
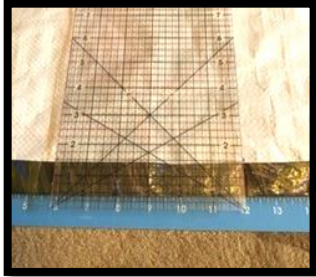
- Open and fold the other side into the middle crease of the strap.



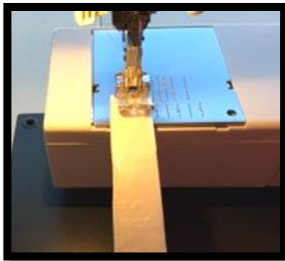
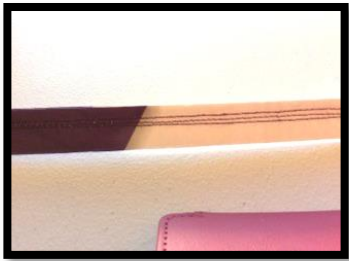
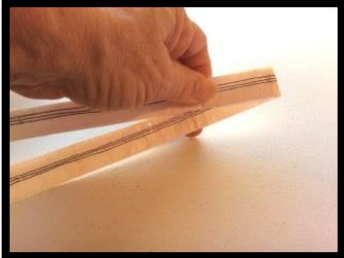
- Make sure both sides are folded into the center, fold lengthwise again ensuring the crease is firm.
- The strap will be about $\frac{3}{4}$ inches wide and 4 layers thick.



Folding and Pressing the Top of Bag

<ul style="list-style-type: none">Using the drawn 1 inch line across the top of the bag, create a crease with the wrong sides (inside of the bag) together.	
<ul style="list-style-type: none">Using the new 1 inch fold, fold once more around the top of the bag and press with the scraper. This makes a total of 2 inches of bag used.	
<ul style="list-style-type: none">Now fold the bag in half to find the center. Mark the bag at 3 inches from the center on both sides. This mark will indicate where the straps will be sewn.	

Sewing the Straps

<ul style="list-style-type: none">Stitch $\frac{1}{4}$ inch seam along both sides of the strap.Helpful Tip: Stitching 3 times makes the strap extra sturdy.	 
<ul style="list-style-type: none">Once stitched, fold in half lengthwise and cut. You should have 2 equal lengths of strap.	

Sewing the Top of the Bag and Attaching the Handles

- Find the strap placement markings.



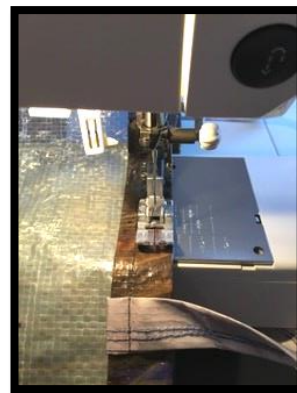
- Insert 1 side of strap into the fold by the marking and fold strap over.
- Do the same to other side of the strap. The strap should now look like a handle.
- Helpful Tip: Use clothes pins to hold straps in place while sewing.



- To sew the handles onto the bag, start on the back side of the bag on what will be the bottom hem of the top fold.
- Single stitch all the way around at the ¼ inch seam.



- Sew top hem at ¼ inch seam all the way around the bag.



Sewing the Bottom of the Bag

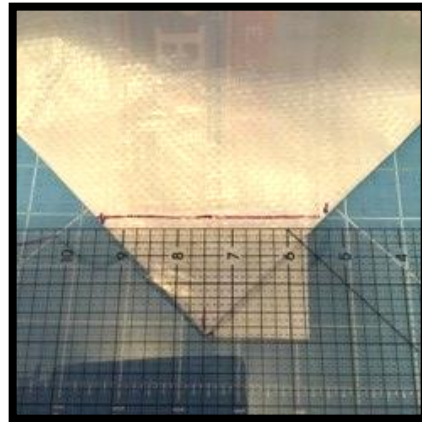
- Sew along the bottom of the bag on previously drawn line.
- Helpful Tip: You should double stitch this to reinforce.



- Open the bag so that the center side crease is flush with the stitching you just completed. Make sure the creases and stitching are aligned on both sides of the bag.



- Draw a line across the corners of the bag, using the exterior creases for the sides of the bag.
- Trim excess bag off.



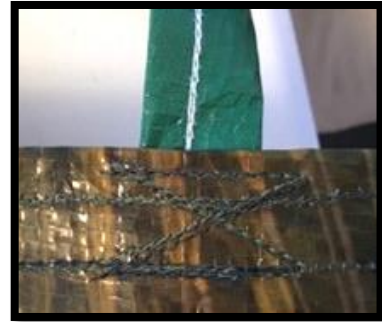
- Sew along lines drawn on both sides of the bag. Double stitch.



**Turn the bag right side out.
This will take some work, but if you start with the corners it's a little easier.
Make sure to get the corners.**

Reinforcing the Handles

- Stich an “X” where the handle is attached to the bag. This “X” will reinforce the handles.
- Repeat “X” reinforcement on all strap placements.



Folding and Creasing the Bag

- Crease bag at the bottom, making sure you get the corners pressed.



- Fold the side creases together on each side so the bag lays flat.



- You will need to make a new crease at the bottom so the bag can fold.



Ta-da! You are Finished!

Congratulations on keeping plastic feed bags out of the landfill and saving wildlife with this new upcycled and reusable tote!