

PolyDraw Tutorial III

Making an Asian Bowl

Everyone understands circles, ovals, squares and rectangles but there is a world of shapes in between. **PolyDraw** will help you explore and exploit these shapes for your bowl patterns.

The goal of this tutorial is to make a four layer 7" Asian bowl basket starting with the 7" circular bowl pattern you designed in the first tutorial (**Tutorial I Making a Circular Bowl**). This tutorial assumes you have read the first one. A powerful feature of PolyDraw is that you can save your designs and recall them later. You can modify one pattern to produce a new one.

Open PolyDraw and click on the **Load** button. Recall the pattern you developed in the first tutorial. Click the **Draw** button and you should get the following.

PolyDraw
Design Tool for Bowls and Baskets

Load Save

Draw

Scale 1.000

of Polys 7

X Radius	Y Radius	Poly Order	# of Waves	+/-Wave Amplitude	X Offset	Y Offset
3.5000	3.5000	2.000	0	0.0000	0.0000	0.0000
3.2500	3.2500	2.000	0	0.0000	0.0000	0.0000
3.0000	3.0000	2.000	0	0.0000	0.0000	0.0000
2.7500	2.7500	2.000	0	0.0000	0.0000	0.0000
0.0500	0.0500	2.000	0	0.0000	0.0000	3.2500
0.0500	0.0500	2.000	0	0.0000	0.0000	-2.7500
0.0500	0.0500	2.000	0	0.0000	3.0000	0.0000

of Comments 1

X Offset	Y Offset	Comment
1.0000	-4.0000	My First PolyDraw Bowl

of Lines 2

From X	From Y	To X	To Y
-3.5000	0.0000	3.5000	0.0000
0.0000	-3.5000	0.0000	3.5000

My First PolyDraw Bowl

This bowl is 7" across in all directions (the definition of a circle). The Asian design will be 7" wide, 7" long, and 7½" on the diagonal. The shape of each poly is determined by its **Poly Order** value. A value of 2 is used to make circle or oval. The bigger the Poly Order value the greater the diagonal gets. (The puffier it becomes). **PolyAnalyze** is a tool provided by **Scrollmania.com** to calculate the Poly Order given length, width, and diagonal values. Knowing that the diagonal need to be 7½" for the first poly and the width of each ring is ¼", the calculated values are entered into Poly Order fields of the first 4 polys. These values can be seen below. For the moment it is not necessary to understand how the values were calculated. There is time for understanding that later. Also change the Poly Order values for

the 3 drill mark polys to **100**. Change the comment to **My First Asian Bowl**. Enter all these values as shown below and click the **Draw** button to draw your pattern.

Scale

of Polys

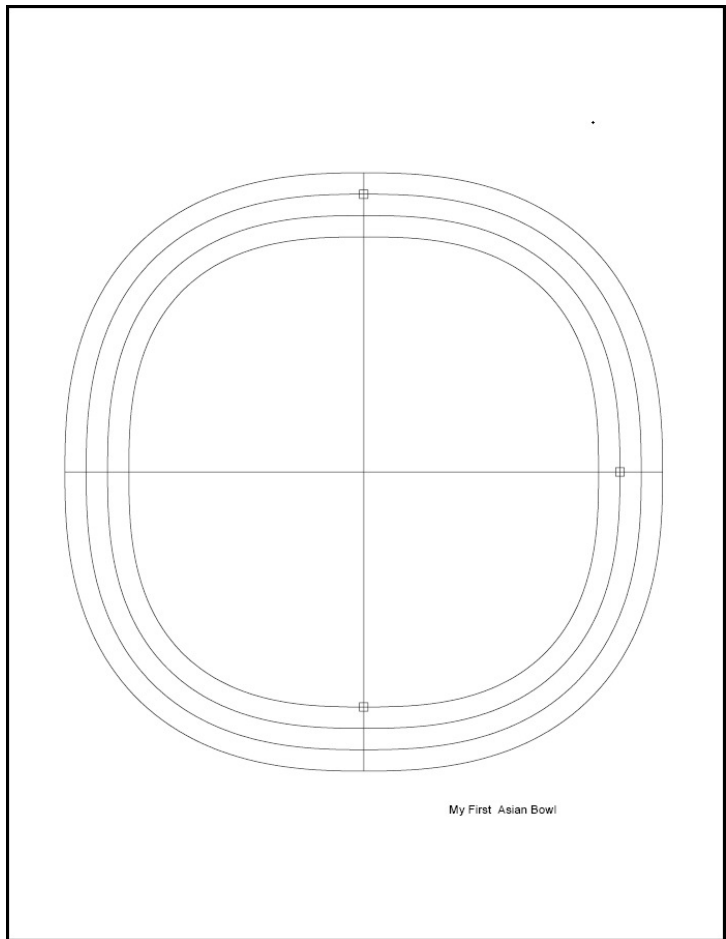
X Radius	Y Radius	Poly Order	# of Waves	+/-Wave Amplitude	X Offset	Y Offset
<input type="text" value="3.5000"/>	<input type="text" value="3.5000"/>	<input type="text" value="2.497"/>	<input type="text" value="0"/>	<input type="text" value="0.0000"/>	<input type="text" value="0.0000"/>	<input type="text" value="0.0000"/>
<input type="text" value="3.2500"/>	<input type="text" value="3.2500"/>	<input type="text" value="2.544"/>	<input type="text" value="0"/>	<input type="text" value="0.0000"/>	<input type="text" value="0.0000"/>	<input type="text" value="0.0000"/>
<input type="text" value="3.0000"/>	<input type="text" value="3.0000"/>	<input type="text" value="2.601"/>	<input type="text" value="0"/>	<input type="text" value="0.0000"/>	<input type="text" value="0.0000"/>	<input type="text" value="0.0000"/>
<input type="text" value="2.7500"/>	<input type="text" value="2.7500"/>	<input type="text" value="2.670"/>	<input type="text" value="0"/>	<input type="text" value="0.0000"/>	<input type="text" value="0.0000"/>	<input type="text" value="0.0000"/>
<input type="text" value="0.0500"/>	<input type="text" value="0.0500"/>	<input type="text" value="2.000"/>	<input type="text" value="0"/>	<input type="text" value="0.0000"/>	<input type="text" value="0.0000"/>	<input type="text" value="3.2500"/>
<input type="text" value="0.0500"/>	<input type="text" value="0.0500"/>	<input type="text" value="2.000"/>	<input type="text" value="0"/>	<input type="text" value="0.0000"/>	<input type="text" value="0.0000"/>	<input type="text" value="-2.7500"/>
<input type="text" value="0.0500"/>	<input type="text" value="0.0500"/>	<input type="text" value="2.000"/>	<input type="text" value="0"/>	<input type="text" value="0.0000"/>	<input type="text" value="3.0000"/>	<input type="text" value="0.0000"/>

of Comments

X Offset	Y Offset	Comment
<input type="text" value="1.0000"/>	<input type="text" value="-4.0000"/>	<input type="text" value="My First Asian Bowl"/>

of Lines

X	Y	X	Y
From: <input type="text" value="-3.5000"/>	<input type="text" value="0.0000"/>	To: <input type="text" value="3.5000"/>	<input type="text" value="0.0000"/>
From: <input type="text" value="0.0000"/>	<input type="text" value="-3.5000"/>	To: <input type="text" value="0.0000"/>	<input type="text" value="3.5000"/>



You now have a bowl pattern with some Asian influence. Also note that the drill marks are now squares. That is because they have such large Poly Order values. Save to pattern as **7InchAsianBowl.txt**.

By making the diagonal 9", the bowl becomes more square-like. I used PolyAnalyze to determine new Poly Order values for such a bowl and entered them as shown below. Enter all these values and click the **Draw** button to draw your pattern.

Load Save

Draw

Scale 1.000

of Polys 7

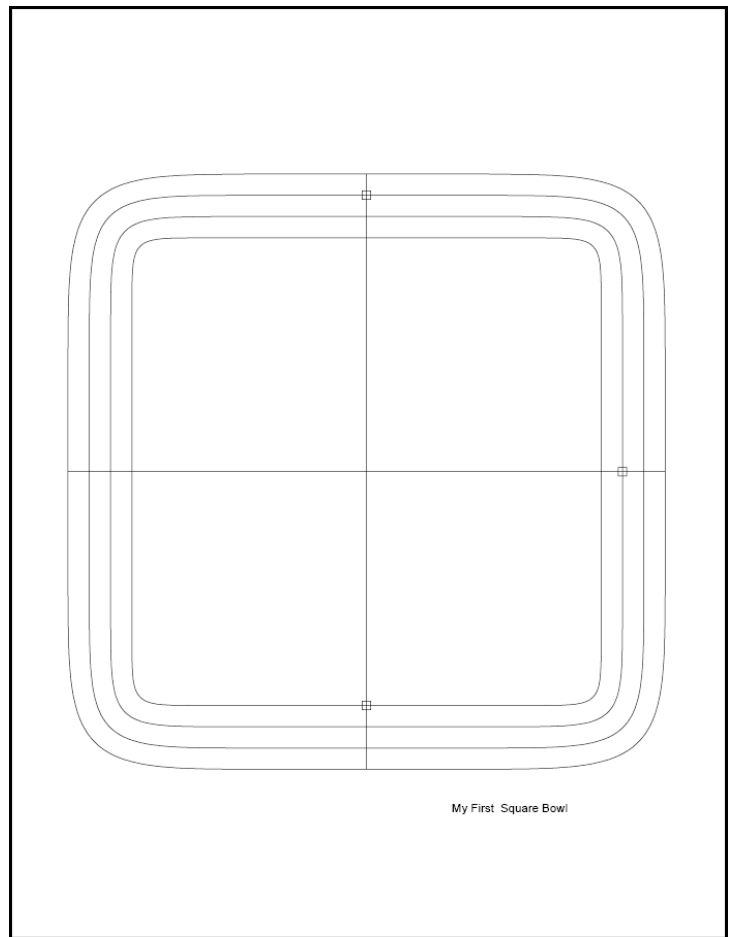
X Radius	Y Radius	Poly Order	# of Waves	+/-Wave Amplitude	X Offset	Y Offset
3.5000	3.5000	7.276	0	0.0000	0.0000	0.0000
3.2500	3.2500	8.851	0	0.0000	0.0000	0.0000
3.0000	3.0000	11.770	0	0.0000	0.0000	0.0000
2.7500	2.7500	19.033	0	0.0000	0.0000	0.0000
0.0500	0.0500	100.000	0	0.0000	0.0000	3.2500
0.0500	0.0500	100.000	0	0.0000	0.0000	-2.7500
0.0500	0.0500	100.000	0	0.0000	3.0000	0.0000

of Comments 1

X Offset	Y Offset	Comment
1.0000	-4.0000	My First Square Bowl

of Lines 2

From: X	From: Y	To: X	To: Y
-3.5000	0.0000	3.5000	0.0000
0.0000	-3.5000	0.0000	3.5000



You now have a bowl pattern that is pretty much a square. The same technique can be used to make rectangles. Save the pattern as. **7InchSquareBowl.txt**.

The Poly Order value will help you to get just the right shape for you bowl pattern. PolyAnalyze is a tool that can help determine the right values. However if you would rather, just play with the poly order values till it looks right.

This ends this tutorial and you are now a Master of Poly Shapes. You are ready to move on to **Tutorial IV, Making a Rippled Bowl**.