

PolyDraw Tutorial IV

Making a Rippled Bowl

There are many terms for ripples; lobes, flutes, groves, channels, ridges.... All are basically mean the same thing, to make an edge wavy. The key word is wave. **PolyDraw** makes it easy to add waves to your patterns. It gives you control over the number of waves and their height.

The goal of this tutorial is to make a four layer 7" circular bowl with 7 waves, 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

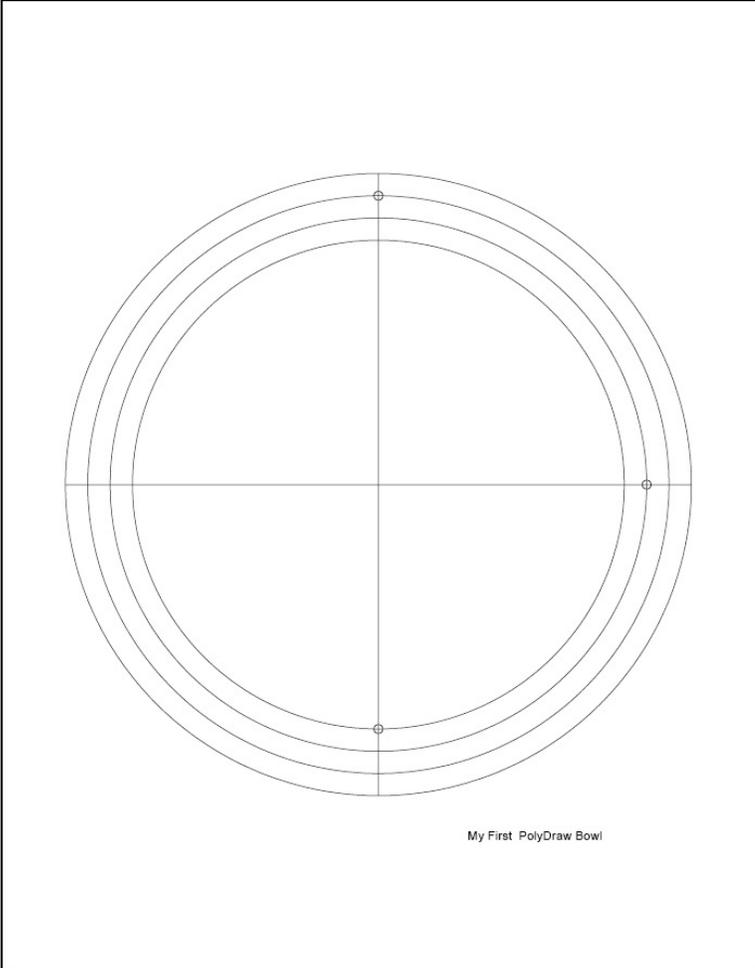
X Radius	Y Radius	Poly Order	# of Waves	+/-Wave Amplitude	X Offset	Y Offset
3.5000	3.5000	2,000	0	0.0000	0.0000	0.0000
3.2500	3.2500	2,000	0	0.0000	0.0000	0.0000
3.0000	3.0000	2,000	0	0.0000	0.0000	0.0000
2.7500	2.7500	2,000	0	0.0000	0.0000	0.0000
0.0500	0.0500	2,000	0	0.0000	0.0000	3.2500
0.0500	0.0500	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

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



This pattern must be very familiar to by now. This new pattern is to have 7 waves and a peak and trough of $\pm 3/16$ ". For the top 4 polys, the **# of Waves** should be set to **7** and the **+/-Wave Amplitude** should be set to **3/16**. The drill marks with have to be relocatedthe the comment should be changed to **7 Wave Bowl**. Enter all these values as shown below and click the **Draw** button to draw your pattern.

Load Save

Draw

Scale 1.000

of Polys 7

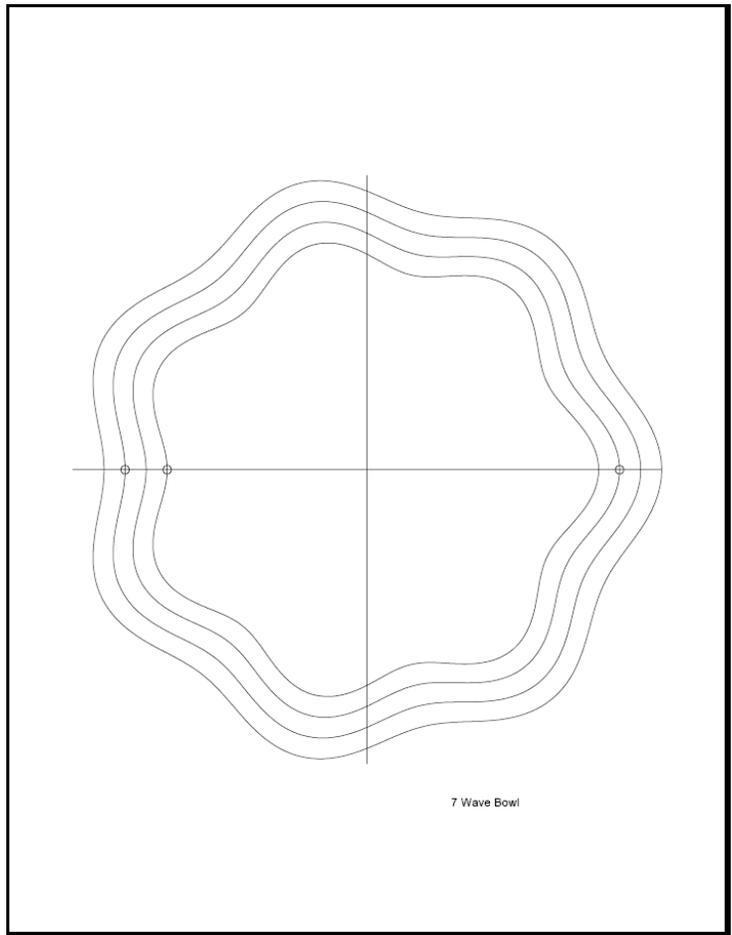
X Radius	Y Radius	Poly Order	# of Waves	+/-Wave Amplitude	X Offset	Y Offset
3.5000	3.5000	2.000	7	0.1875	0.0000	0.0000
3.2500	3.2500	2.000	7	0.1875	0.0000	0.0000
3.0000	3.0000	2.000	7	0.1875	0.0000	0.0000
2.7500	2.7500	2.000	7	0.1875	0.0000	0.0000
0.0500	0.0500	2.000	0	0.0000	-2.8750	0.0000
0.0500	0.0500	2.000	0	0.0000	-2.3750	0.0000
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	7 Wave Bowl

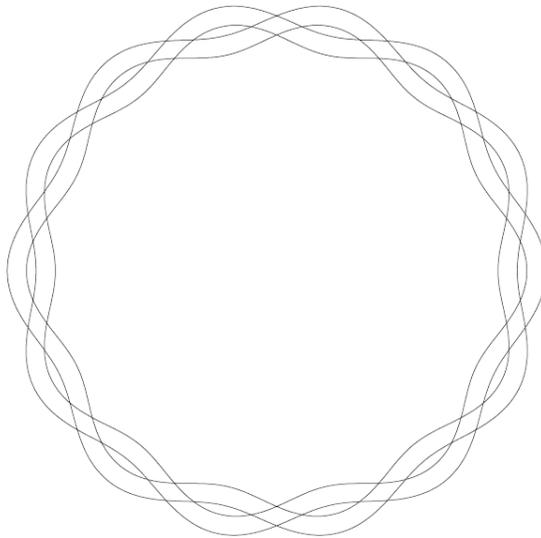
of Lines 2

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



You now have a bowl pattern with 7 waves. Save the pattern as **7WaveBowl.txt**.

If you evenly align the layers you get a rippled bowl. If you twist the layers half a wave you get a basket as shown below.



Lets take this pattern and change it to have 21 waves. For the top 4 polys set the **# of Waves** field to **21** and the **+/-Wave Amplitude** field to **1/16**. Also change the comment to **21 Wave**

Bowl and relocate those pesty drill markers. Enter all these values and click the **Draw** button to draw your pattern.

Scale

of Polys

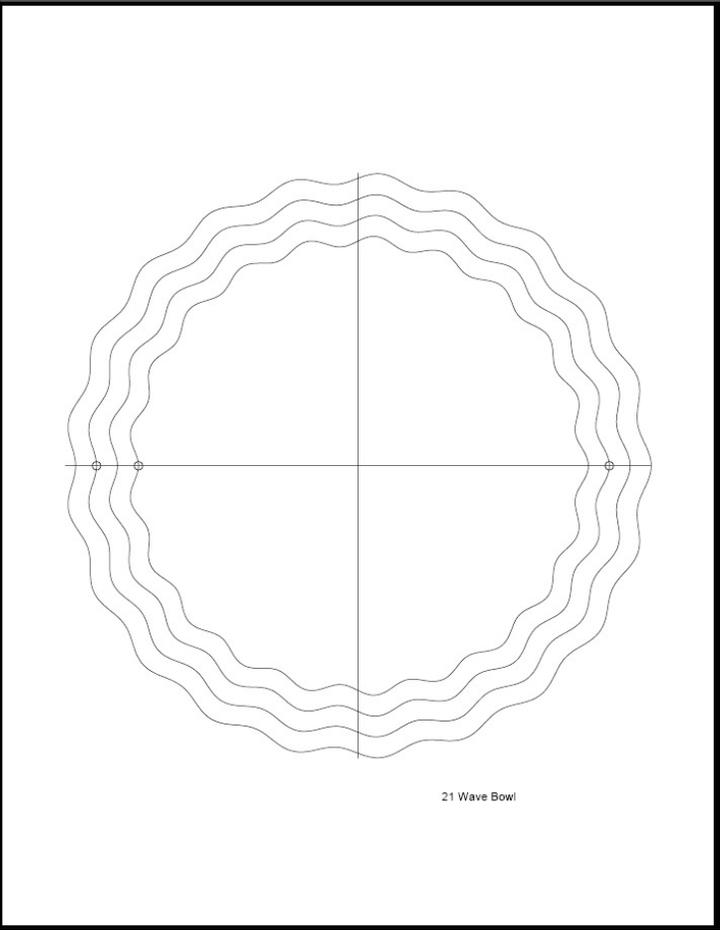
X Radius	Y Radius	Poly Order	# of Waves	+/-Wave Amplitude	X Offset	Y Offset
<input type="text" value="3.5000"/>	<input type="text" value="3.5000"/>	<input type="text" value="2.000"/>	<input type="text" value="21"/>	<input type="text" value="0.0625"/>	<input type="text" value="0.0000"/>	<input type="text" value="0.0000"/>
<input type="text" value="3.2500"/>	<input type="text" value="3.2500"/>	<input type="text" value="2.000"/>	<input type="text" value="21"/>	<input type="text" value="0.0625"/>	<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="2.000"/>	<input type="text" value="21"/>	<input type="text" value="0.0625"/>	<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="2.000"/>	<input type="text" value="21"/>	<input type="text" value="0.0625"/>	<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="-3.1250"/>	<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="3.0000"/>	<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="-2.6250"/>	<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="21 Wave 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 21 waves. Save this pattern as. **21WaveBowl.txt**.

Now waves are not just reserved for circles or ovals. The pattern below is a squarish bowl with 10 waves.

Scale

of Polys

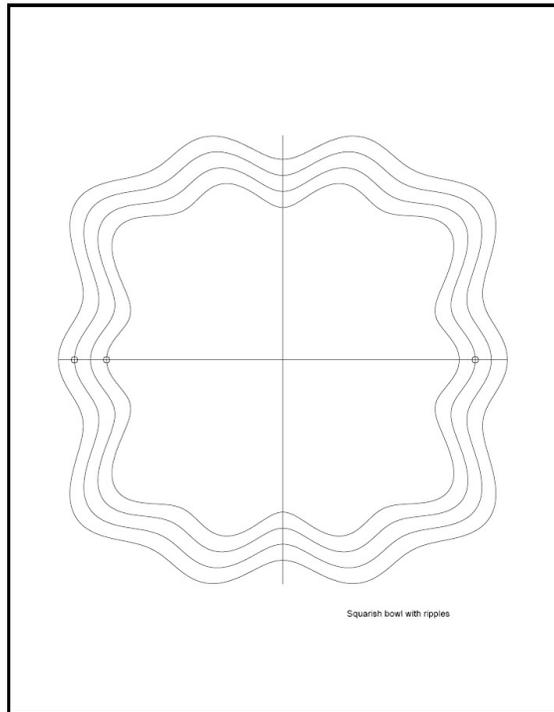
X Radius	Y Radius	Poly Order	# of Waves	+/-Wave Amplitude	X Offset	Y Offset
<input type="text" value="3.5000"/>	<input type="text" value="3.5000"/>	<input type="text" value="3.803"/>	<input type="text" value="10"/>	<input type="text" value="0.1875"/>	<input type="text" value="0.0000"/>	<input type="text" value="0.0000"/>
<input type="text" value="3.2500"/>	<input type="text" value="3.2500"/>	<input type="text" value="4.061"/>	<input type="text" value="10"/>	<input type="text" value="0.1875"/>	<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="4.406"/>	<input type="text" value="10"/>	<input type="text" value="0.1875"/>	<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="4.889"/>	<input type="text" value="10"/>	<input type="text" value="0.1875"/>	<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="-3.2500"/>	<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="3.0000"/>	<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="-2.7500"/>	<input type="text" value="0.0000"/>

of Comments

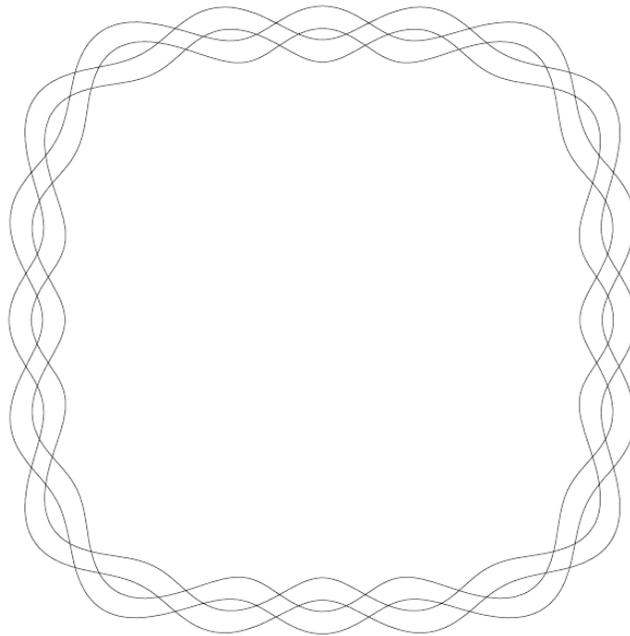
X Offset	Y Offset	Comment
<input type="text" value="1.0000"/>	<input type="text" value="-4.0000"/>	<input type="text" value="Squarish bowl with ripples"/>

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"/>



If you evenly align the layers you get a rippled squarish bowl. If you twist each layer a quarter turn you the square basket shown below.



This ends this tutorial and you are now a Master of Waves. You are ready to move on to **Tutorial V, Making a Morphed Bowl.**