

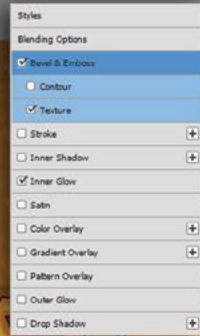
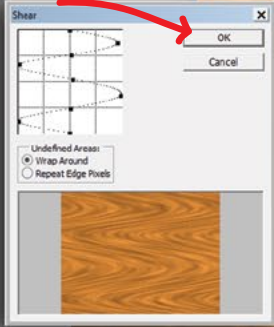
**RICE DMC**  
**SHORT COURSE**



**Creating a Digital Illustration in Photoshop**  
*(Advanced)*

1.Filter>Render>Clouds

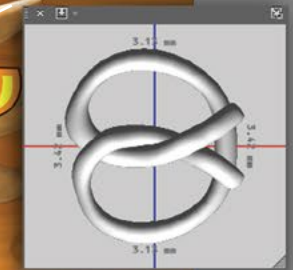
2.Filter>Distort>Shear



Image> Adjustments>Hue and Saturation



3D>New 3D Layer from File



fx . Add Layer Style

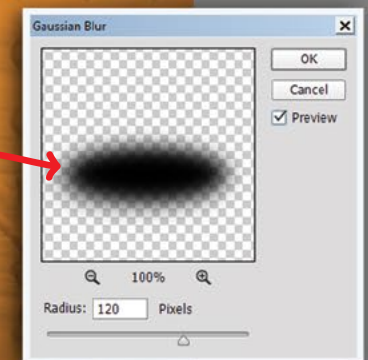


fx . Add Layer Style

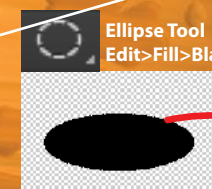
Burn Tool



Filter>Blur>Gaussian Blur



Ellipse Tool  
Edit>Fill>Black



### Shortcuts

Move	V
Erase	E
Transform	Ctrl+T
Repeat Last Filter	Ctrl+F
Eyedropper	I

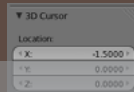


# How to use this guide

## Photoshop Screenshot



1. After getting familiar with the UI, left click near (-1.5,0,0)
2. If your 3D cursor is not quite at (-1.5,0,0) use Shift + S, "Cursor to Grid"
3. If left clicking and snapping are unreliable, press "N" to toggle the properties window within 3D view. Find the 3D cursor options and manually input coordinates.



### Shortcuts Used:

Shift + S ..... snap  
N ..... properties panel

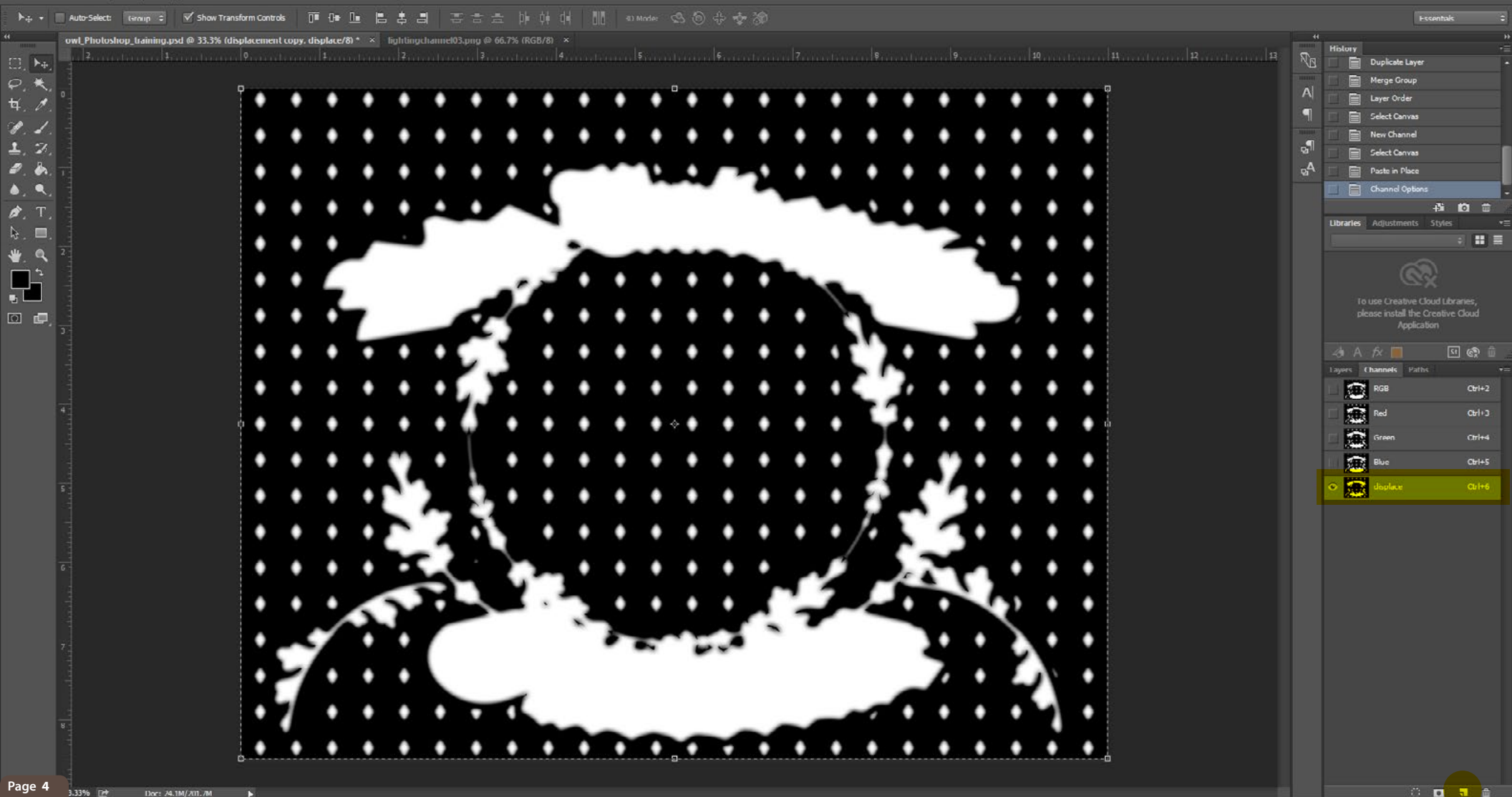
### Why:


Primitives are created at the 3D cursor. Other operations also depend upon the 3D cursor's location. You may left click anywhere to move the 3D cursor or give explicit coordinates in the properties panel "N" (not to be confused with the properties editor)

Explanation to contextualize the steps taken

Steps. The orange text is an alternative step.

Keyboard Shortcuts




1. Open Owl\_Background\_Displacement.jpg. This file will serve as the displacement and lighting map. Hit Ctrl + A to select all of the pixels and then Ctrl + "C" to copy the image to clipboard
2. Open Owl\_Photoshop\_training\_TEMPLATE\_EDIT.psd. In the channels tab select  "create new channel". Hit Ctrl + "V" to paste the displacement map into the new channel.

**Shortcuts Used:**  
Ctrl + C..... copy  
Ctrl + V..... paste

**Why:**  
This map information will be used later for the Displace and Lighting effects. "Displace" will use the separate file and "Lighting Effects" will use the new channel which was just created.



1. Notice the different layers of the owl. Toggle the eye button on each layer to switch the visibility on and off. 

### Shortcuts Used:

### Why:

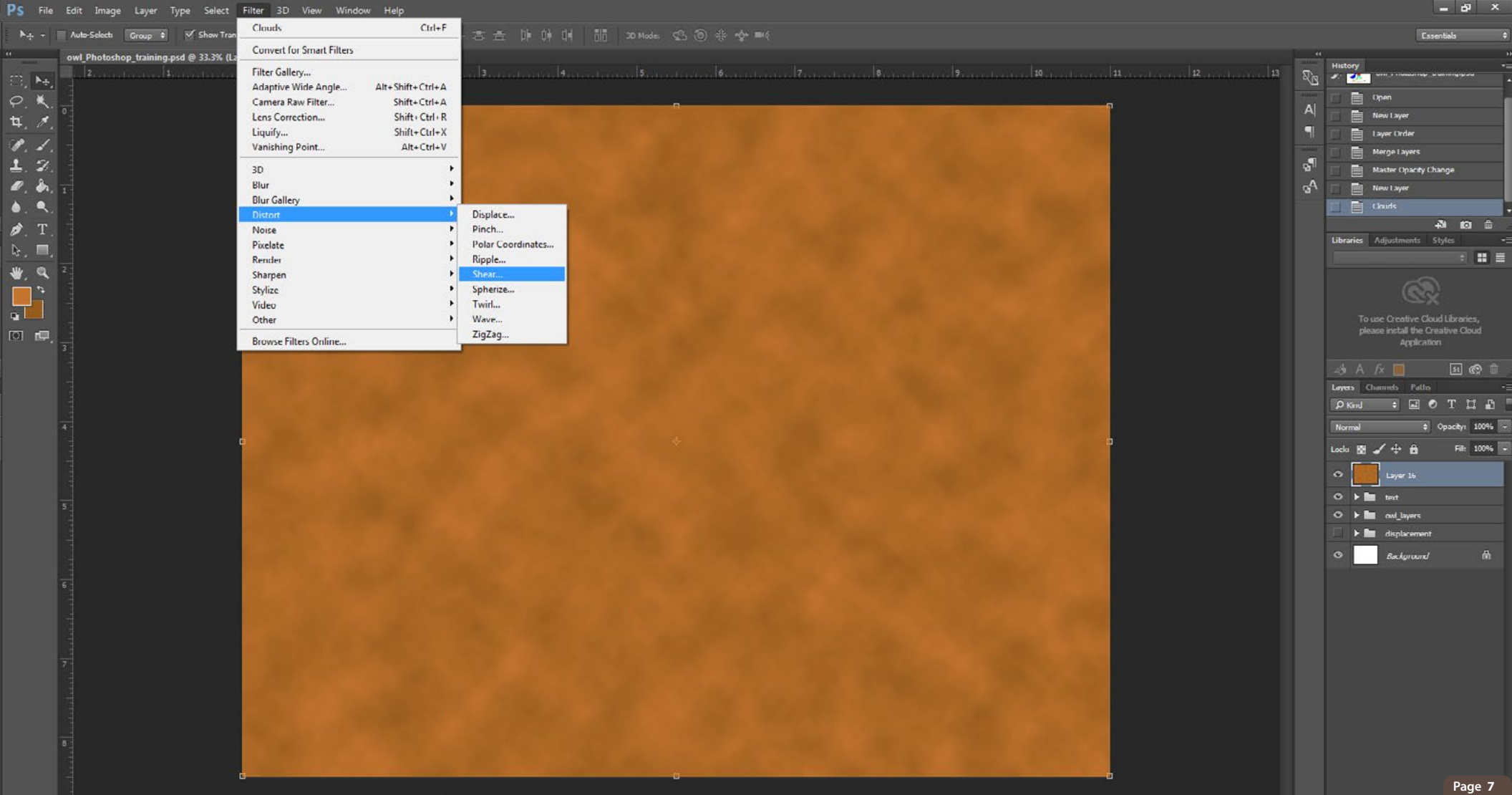
Most problems in Photoshop arise from not having the correct layer selected. It is helpful to toggle the visibility to see what is on each layer.



1. Select two different shades of brown by double clicking the foreground and background swatches and setting the color
2. Select Filter>Render>Clouds

**Shortcuts Used:**

**Why:**  
Render Clouds is a quick way of creating a basic texture to stack more filters on or manipulate.  
  
These clouds will eventually become a wood grain background

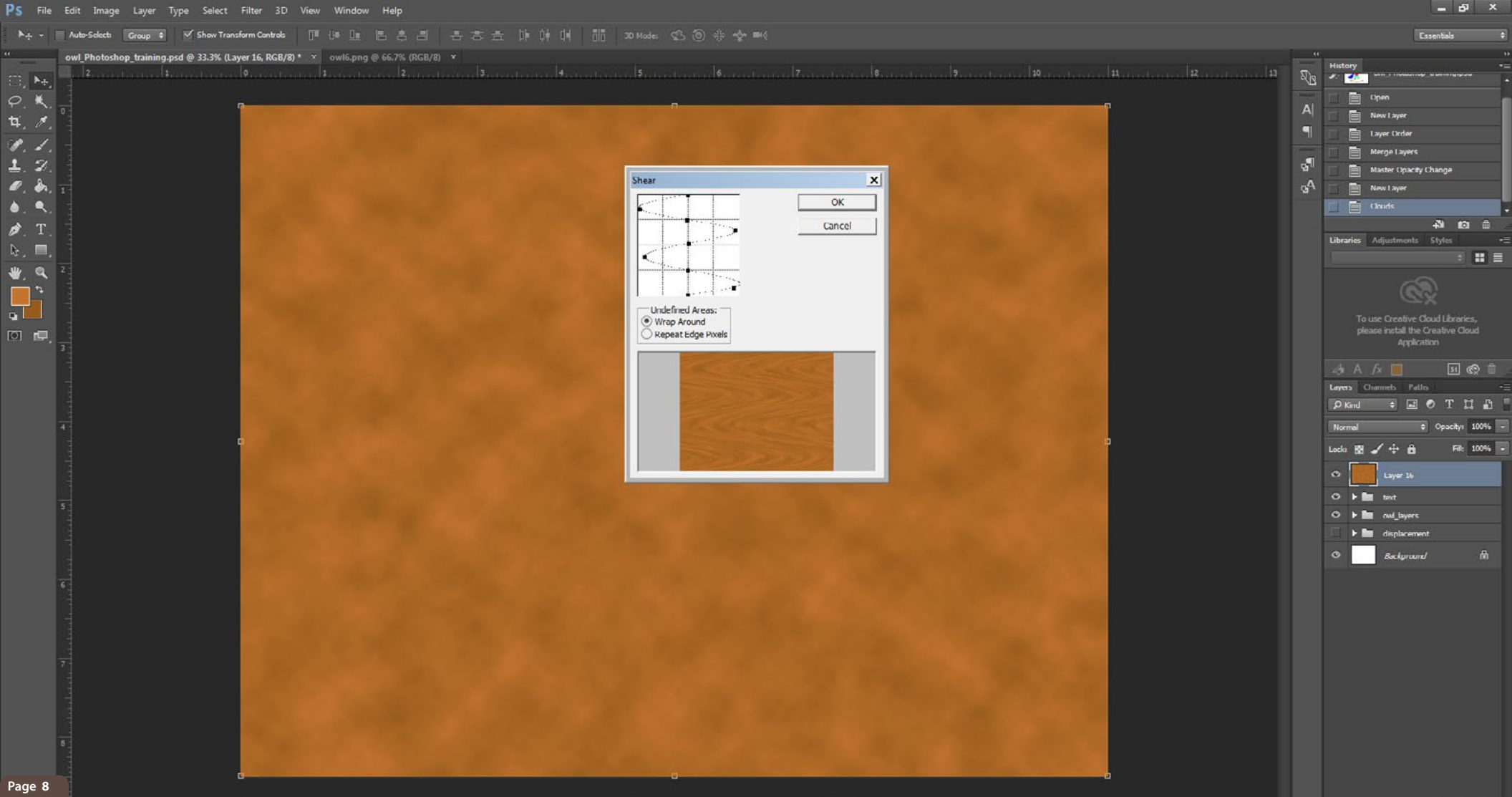


1. Notice the different brown clouds. Now select Filter>Distort>Shear. This will stretch the pixels to resemble a wood grain. Go to next page for shear settings.

### Shortcuts Used:

### Why:

Most problems in Photoshop arise from not having the correct layer selected. It is helpful to toggle the visibility to see what is on each layer.



1. Select different points on the graph and move them as shown above.  
Click OK.
2. Hit Ctrl + "F" to redo the last filter. This will exaggerate the shear. You may hit Ctrl + "F" any number of times

**Shortcuts Used:**

Ctrl + F ..... redo last filter

**Why:**

Render Clouds is a quick way of creating a basic texture to stack more filters on or manipulate.

These clouds will eventually become a wood grain background





1. With the wood grain layer selected, click and drag it below the bird and text layers. Alternatively, hit Ctrl + "{" any number of times to move the layer closer to the bottom.

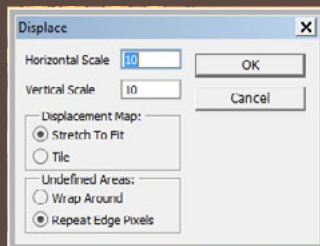
**Shortcuts Used:**

Ctrl + { ..... move layer down  
Ctrl + } .....move layer up

**Why:**



1. Select Filter>Distort>Displace, navigate to the Owl\_Background\_Displacement.jpg file and use the below settings.



**Shortcuts Used:**

**Why:**  
Displace will add a relief to the wood grain to give it a carved look. The following lighting effects filter will give the relief a more pronounced look.



1. Select Filter>Render>Lighting effects

**Shortcuts Used:**

**Why:**

We will use the same map for this effect as displace. The only difference is the settings call for a channel and not a file



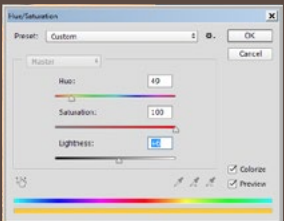
1. Use the above-right settings. Notice the channel from step 1 is selected.

**Shortcuts Used:**

**Why:**



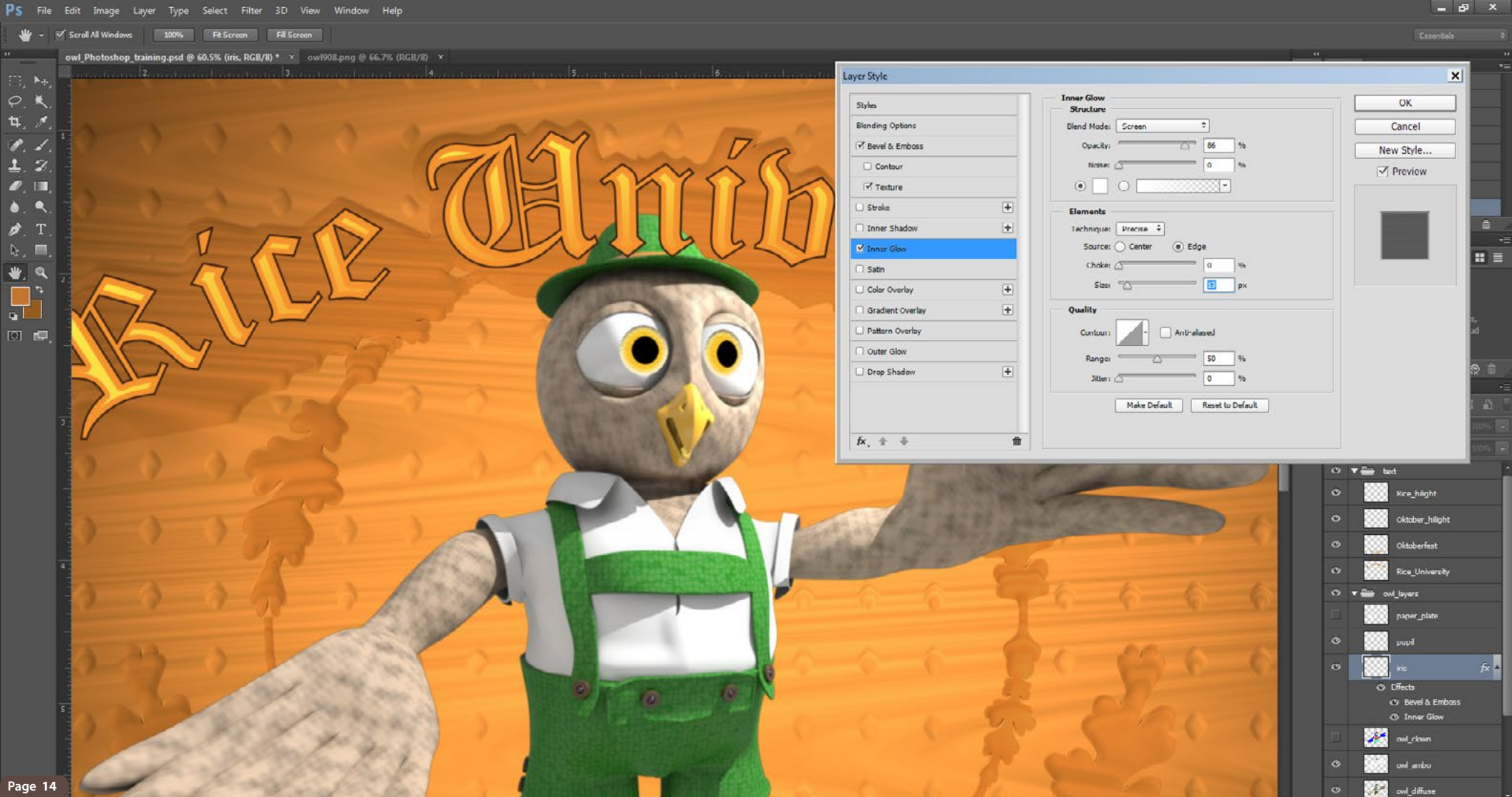
1. Select the iris layer (wherever that is in your document). Hit Image>Adjustments>Hue/Saturation. Click the checkbox for "colorize" and change the hue of the eyes to a yellow.



### Shortcuts Used:

### Why:

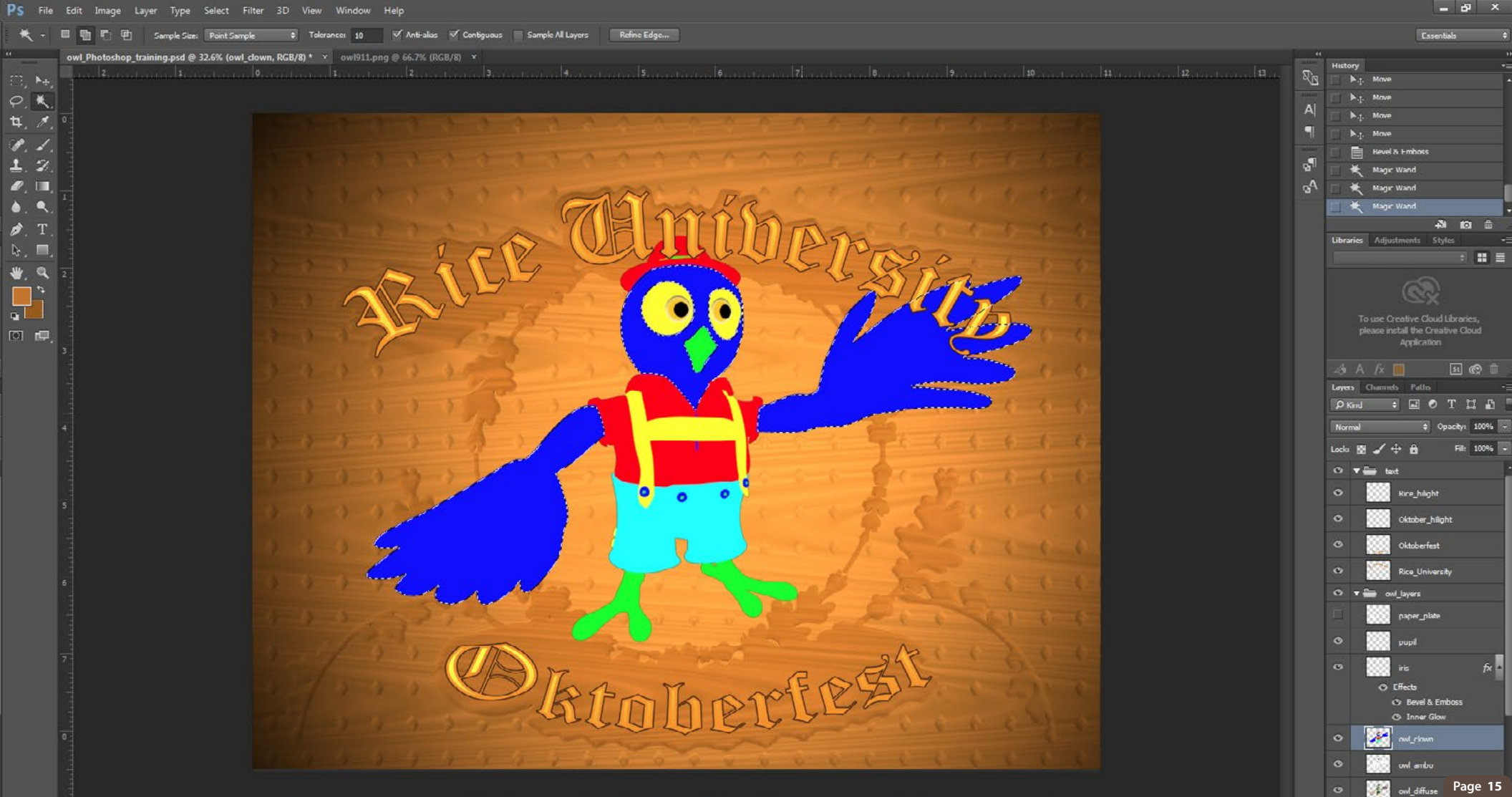
"Colorize" is a good way to bring color into a grey or black and white layer




1. With the iris layer selected, hit the layer style button at the bottom of the layers panel. *fx*
2. Select the checkbox for bevel and emboss, texture and inner glow. Use the above settings. For texture, choose a texture and scale that resembles the stringy pattern of an iris.

**Shortcuts Used:**

**Why:**



1. Make visible the multi-colored bird layer. Then use the magic wand tool  with a very low tolerance to select the birds body which is blue. Use shift to select multiple regions. This will allow us to make changes to only the birds body without effecting other areas.

### Shortcuts Used:

### Why:

Saving selections in Photoshop will save time. Selections can be saved as paths, channels or a layer with solid colors as shown above.



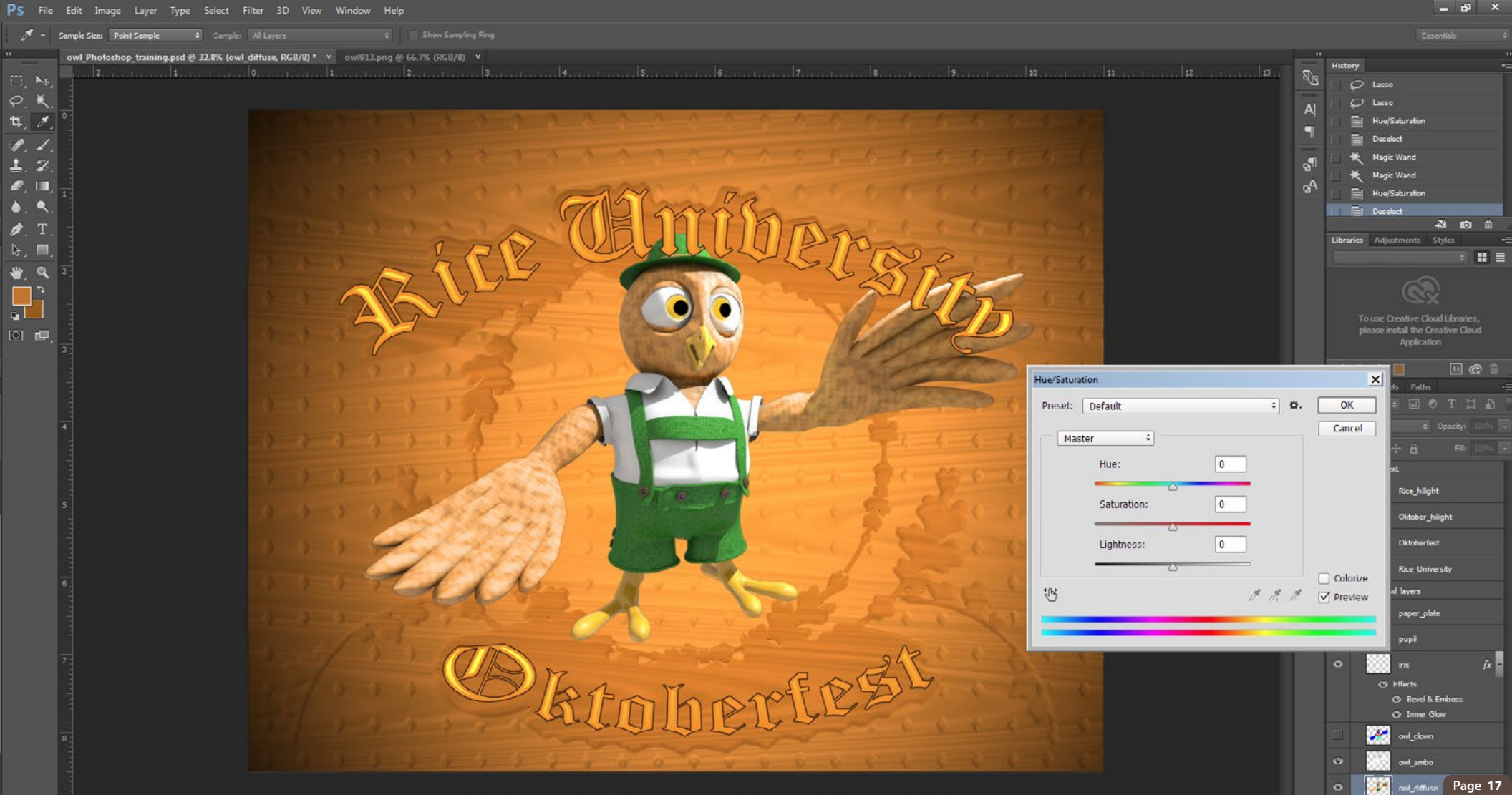
1. Make the multi-colored "clown" layer invisible and select the owl\_diffuse layer to make it the active layer. Notice the bird's body is still selected.

**Shortcuts Used:**

**Why:**

A defining strength of Photoshop is the ability to have a selection active while moving around to different active layers. In other words, pixel selection and layer selection are independent.







1. As before, select Image>Adjustments>Hue/Saturation. Increase the saturation of the bird and select the "colorize" checkbox to make the brown color more pronounced.

### Shortcuts Used:

### Why:

Adding saturation will tend to give the image more vibrancy.



1. Create a new layer  behind the owl\_diffuse layer. Using the elliptical marquee tool , click and drag an ellipse shape to define the bird's shadow.

### Shortcuts Used:

While creating ellipse:  
hold Alt .....create from center

### Why:



1. With an elliptical area defined select Edit>Fill. Make sure contents is set to black and opacity is at 100%
2. Hit Ctrl + D to deselect the ellipse. The next step will not work correctly unless nothing is selected.

### Shortcuts Used:

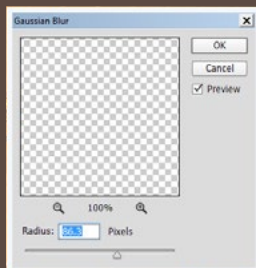
Ctrl + D ..... deselect

### Why:

If there is a selection active, all edits and filters will effect only inside the boundaries of your selection. Therefore deselect to have filters and edits effect the entire image.



1. Select Filter>Blur>Gaussian Blur. This will give the shadow more realism.  
Set the radius to around 100.



**Shortcuts Used:**

**Why:**



1. With shadow layer selected set the blending mode to multiply, set the opacity to around 40% and use Ctrl+T to resize the shadow.

### Shortcuts Used:

Ctrl + T .....free transform

### Why:

Free Transform (Ctrl+T) is a useful tool that combines scale, rotate and move into one set of handles. The same shortcuts apply: holding Alt will scale in reference to the center and holding Shift will constrain proportions. Note: move cursor outside the box to rotate.



1. Holding Alt, click and drag the shadow layer one step above itself, this will duplicate the layer, your shadow should appear twice as dark now because there are two copies.
2. Use Ctrl + T to scale the second shadow so that it fits between the bird's feet as seen above.

**Shortcuts Used:**  
Ctrl + T..... free transform

**Why:**  
An alternative to using Alt + click and drag is to right click and select "duplicate layer".



1. Under the 3D tab directly next to the "layers" tab, select source and change it to "file". Navigate to the pretzel.obj file.

**Shortcuts Used:**

**Why:**



1. Notice that the pretzel is placed in the center, there is a top-down view in the upper left corner and more options under the 3D tab.

**Shortcuts Used:**

**Why:**





1. Use the "coordinates" sub menu inside of the properties tab to manually insert coordinates or use the move, scale and rotate handles on the pretzel to move it into the bird's left hand.

**Shortcuts Used:**

**Why:**

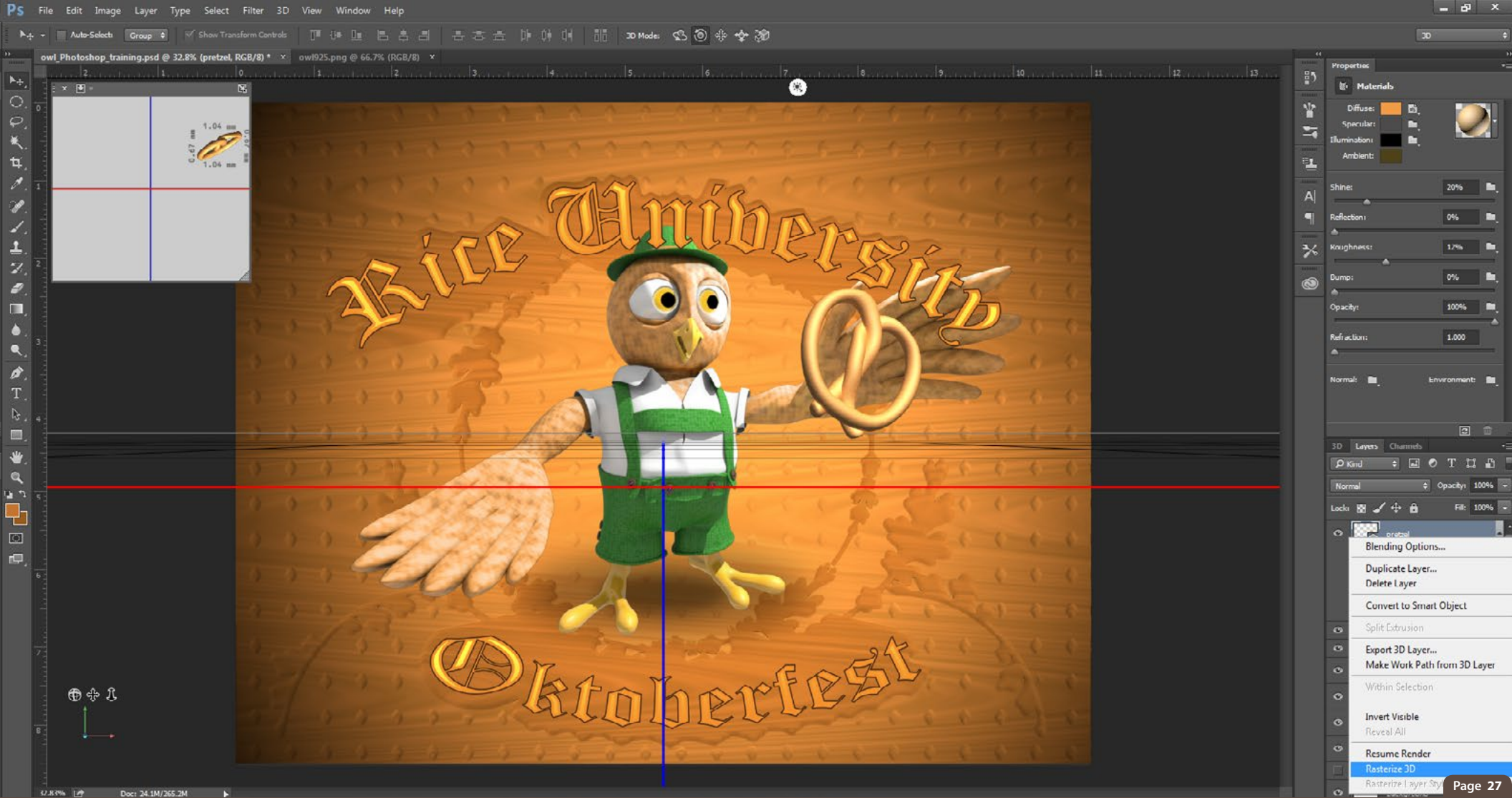


1. Make final changes so that the ring of the pretzel is on top of the bird's thumb as shown above.
2. Select the "materials" icon under the "properties tab" to play with the shading. Give the pretzel a brown color.

### Shortcuts Used:

Ctrl + T..... free transform

### Why:

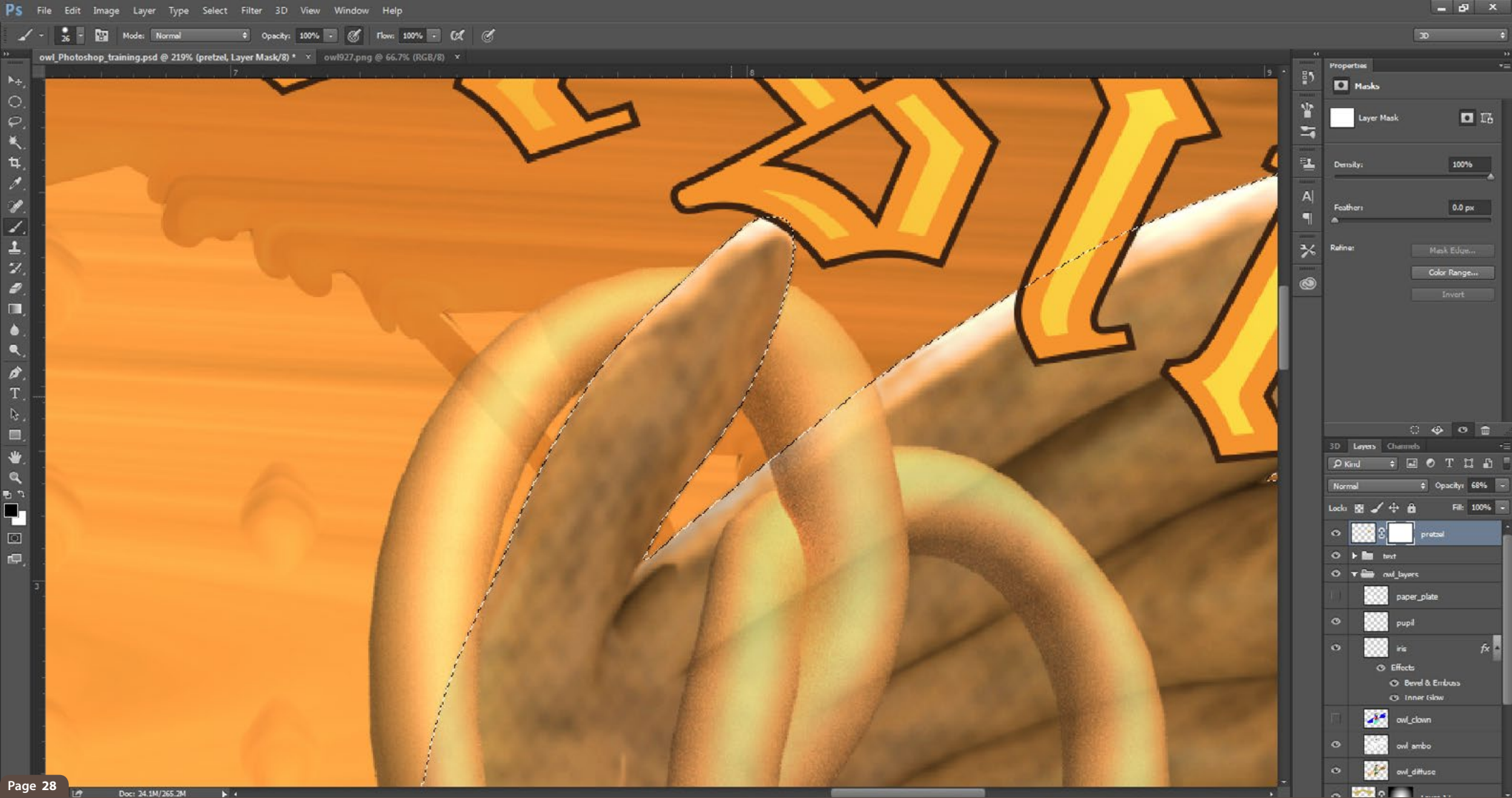



1. Go back into the layers tab and select the 3D layer, then right click and select "rasterize 3D". Notice that after doing so, all of the 3D options will be unavailable and the pretzel will be a typical photoshop layer.

### Shortcuts Used:

### Why:

Rasterize 3D will turn the pretzel into pixels exactly as it seen in preview. "Render" will go through a rendering process which will take longer but will produce better results.



1. Ctrl + select the thumbnail of the bird layer, this will select all of the pixels on that layer, alternatively, select the layer, right click and select "select pixels"
2. Zoom in to the bird's left hand. Hold down Alt and use the middle mouse wheel to scroll in.
3. Select the pretzel layer. Then select make layer mask . Lastly, paint 100% black into the portion of the thumb that overlaps the pretzel.


### Shortcuts Used:

Alt + MMW .....scroll to zoom

### Why:

We could have jumped into the make layer mask option but by first selecting the bird pixels the masking process becomes much easier.

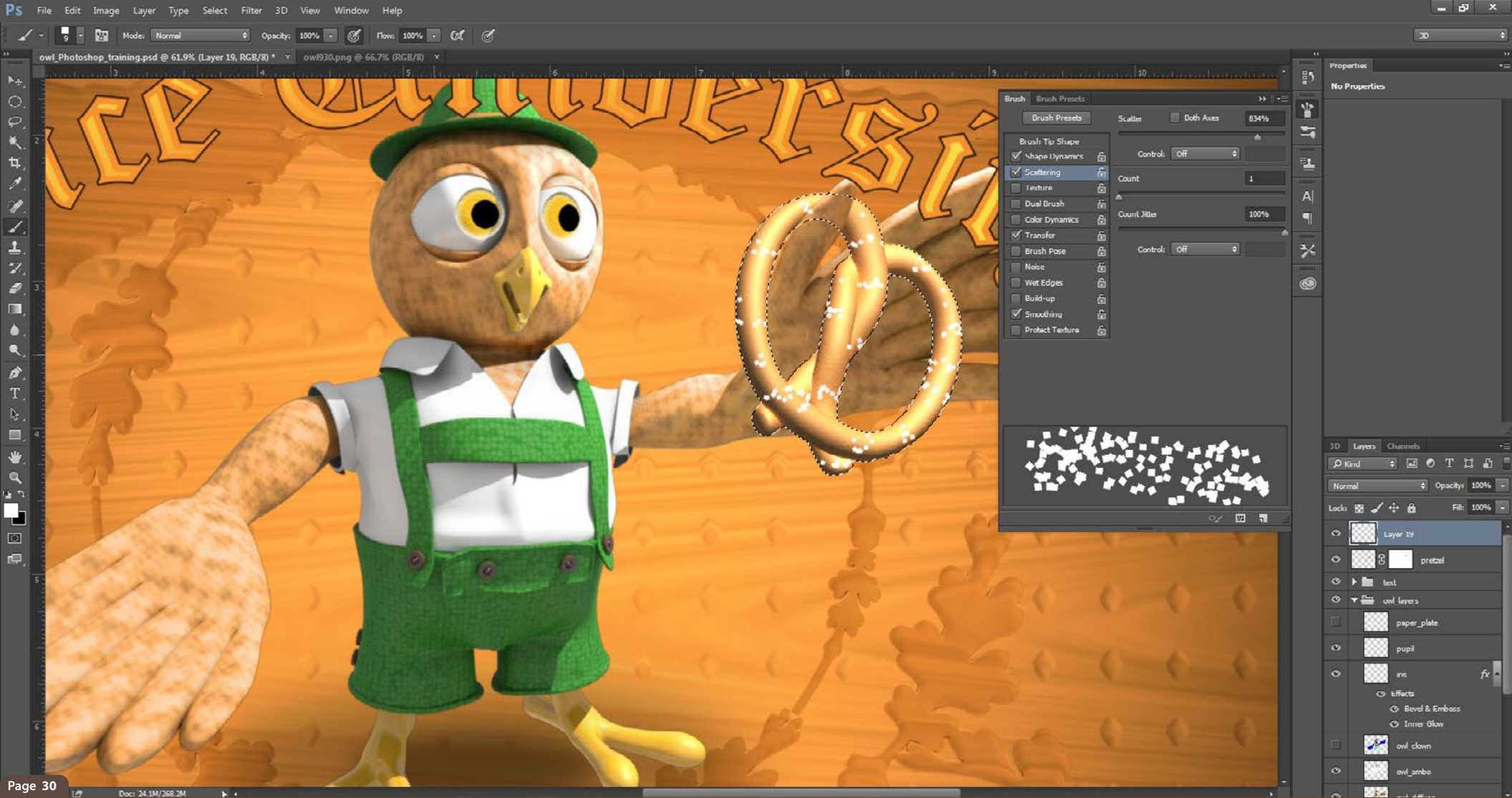



1. First Ctrl + click the thumbnail on the pretzel layer to select all of the pretzel pixels.
2. Select Select>Modify>Expand and enter 8 pixels.
3. Select the brush tool and hit then select the gear icon  from that menu. Lastly, select "square brushes" from the bottom of the list and select "append" from the warning dialog box.

### Shortcuts Used:

### Why:

A square brush is selected to paint salt grains onto the pretzel.



1. With the brush tool selected, hit the folder with brushes icon  to open the brush panel.
2. Activate shape dynamics and turn up "angle jitter". Activate scattering and turn up "scatter"
3. Create a new layer.
4. Paint salt onto the pretzel. Notice that the grain are only painted inside of the selection. Clean up with the eraser tool.

### Shortcuts Used:

E ..... eraser

### Why:

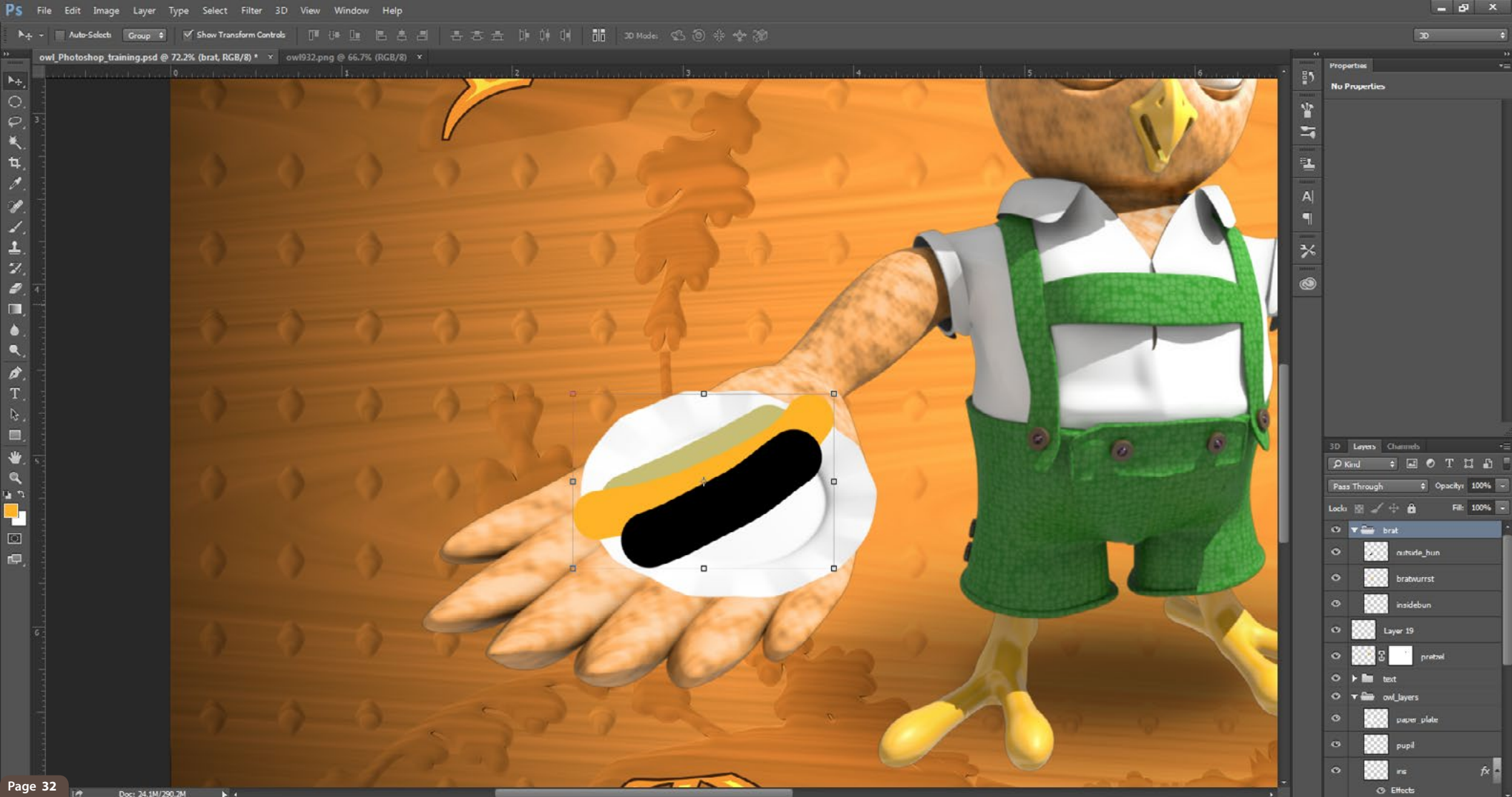
expanding the selection by 8 pixels allows for the salt grains to protrude out from the pretzel which gives the illusion of depth.



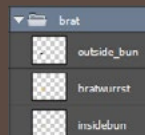
1. Make the paper plate layer visible. The next steps will cover how to make a bratwurst.

**Shortcuts Used:**

**Why:**



1. Create a folder named brat under layers and create 2 new layers within. Make a brush stroke for the brat on one layer and another stroke on a different layer for the bun. Name them accordingly.
2. Alt + click and drag the bun to make a copy for the other side of the bun. Reorder the layers in a logical way.



### Shortcuts Used:

### Why:

When painting by freehand it is important to keep track of layers and name them because the number of layers build up quickly.

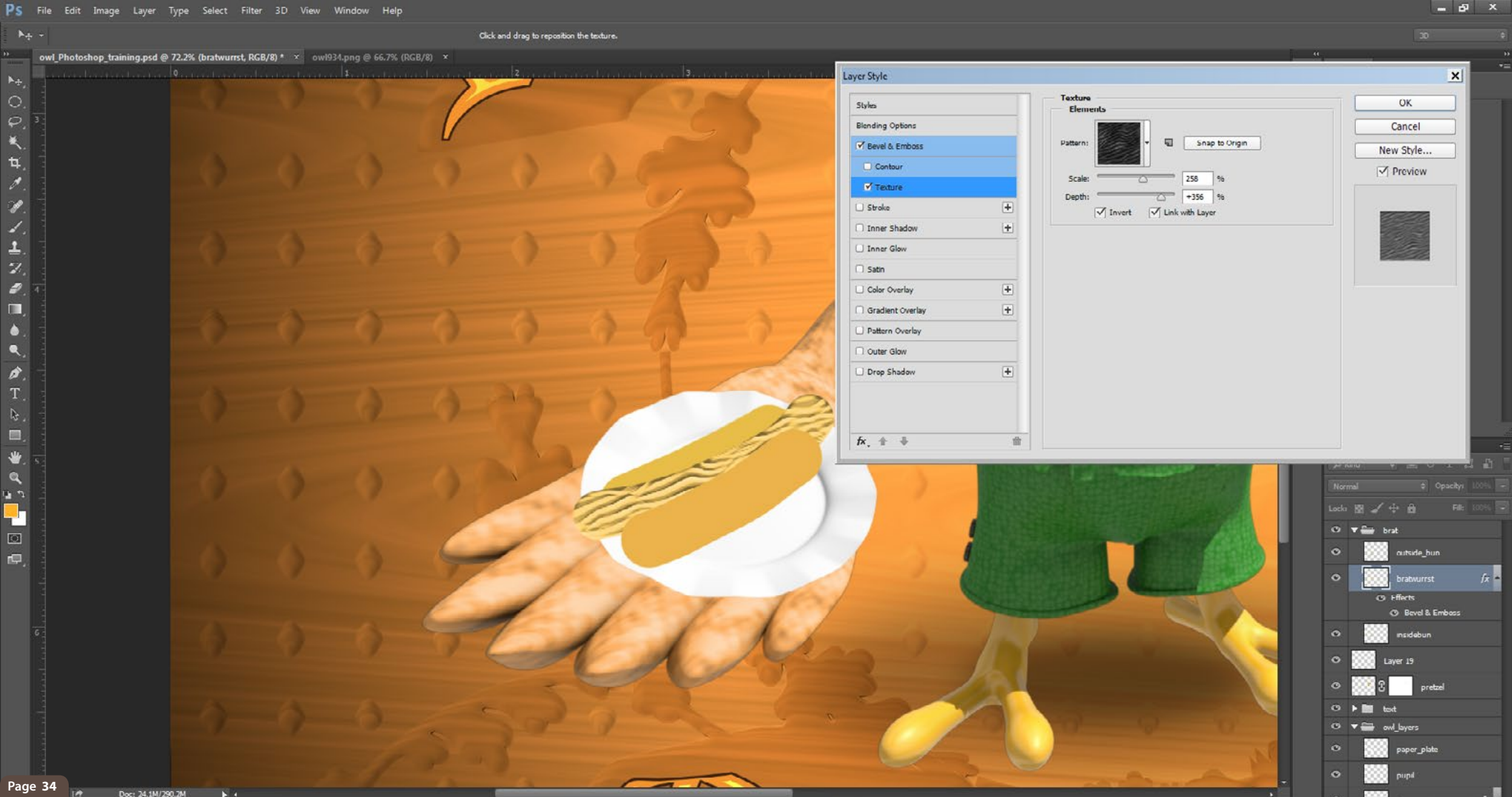




1. Use Image>Adjustments>Hue/Saturation and click "colorize" to give the buns and bratwurst realistic colors

**Shortcuts Used:**

**Why:**



1. Select the bratwurst layer and hit the layer style icon. `fx`
2. Activate bevel and emboss and texture. Select the zebra stripes to give the brat sear marks as shown above.

### Shortcuts Used:

Ctrl + T..... free transform

### Why:




1. Right click the bratwurst layer and select "Rasterize Layer Style". This will permanently change the layer style into pixels which can be altered directly similar to an image.
2. Ctrl + click the thumbnail on the bratwurst layer. This will select the pixels. While in the bratwurst layer, use a soft yellow brush to knock back the sear marks.

### Shortcuts Used:

### Why:

Rasterize is a destructive process. Once the layer style has been baked to pixels, it can no longer be changed or tweaked and the "bevel and emboss" style information is gone.



1. Select the bun in the foreground and then hit the layer style icon. 
2. Activate inner glow with the above settings. The blend mode will be set to multiply to give the bun a shadow around the edge to impart depth and a baked look.
3. Select the background bun, hit layer style, activate bevel and emboss and texture. Apply the "ant farm" texture to make the bread appear porous. Also apply a similar inner glow as shown above.

**Shortcuts Used:**

**Why:**



1. Create a new layer on top of the bratwurst layer. Use a circular brush with 100% hardness and draw out a stream of mustard.
2. Hit the layer style icon and apply bevel and emboss. Use the above settings.

### Shortcuts Used:

### Why:

untick "Use Global Light" to give the bevel and emboss a unique light angle. Otherwise any changes made will effect every instance of bevel and emboss in the document.



Finished

Shortcuts Used:

Why:

