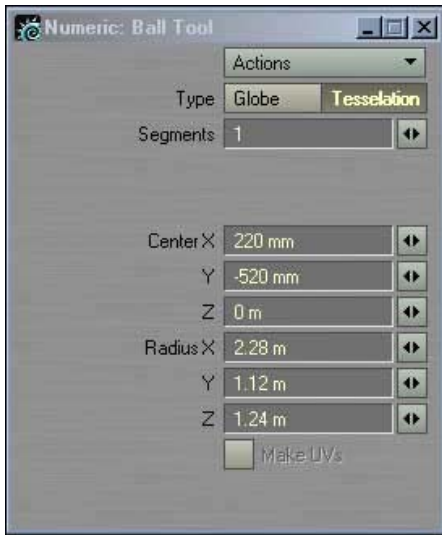


Quick, medium (or low) poly rocks

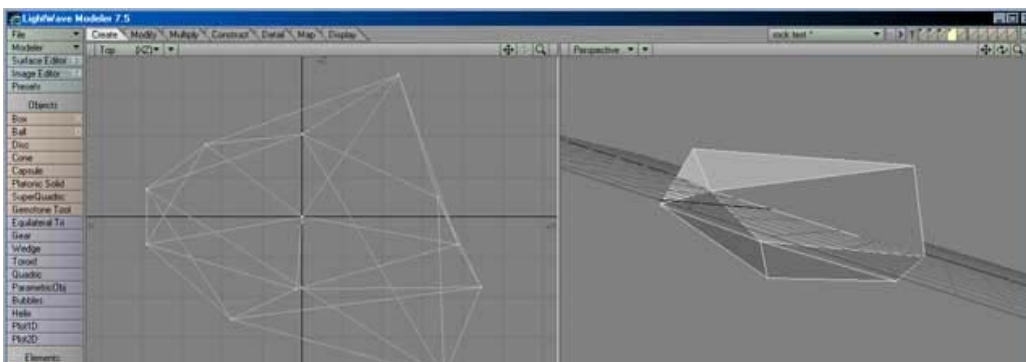
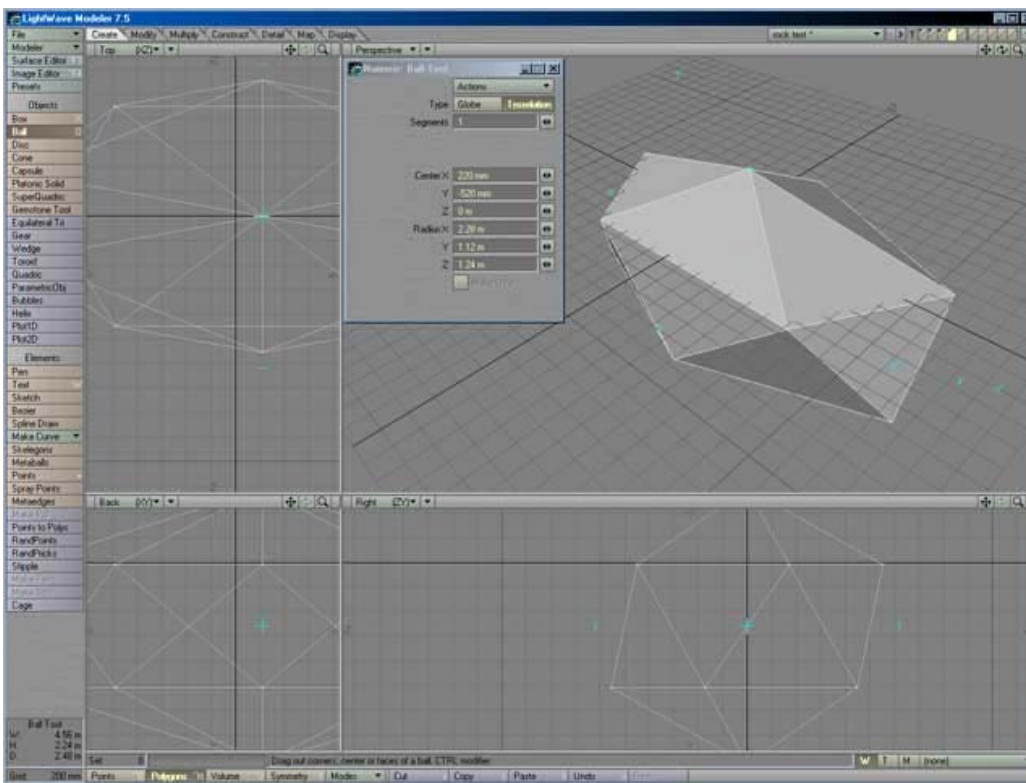
- There are probably a thousand ways to make rocks in various applications or through the use of plugins. Here is yet another quick way to construct the types of rocks you can put around a river bed or flying in space. Our application of choice for this tutorial is Lightwave, since it's just so darn cool and fun to work with.



Step 1:

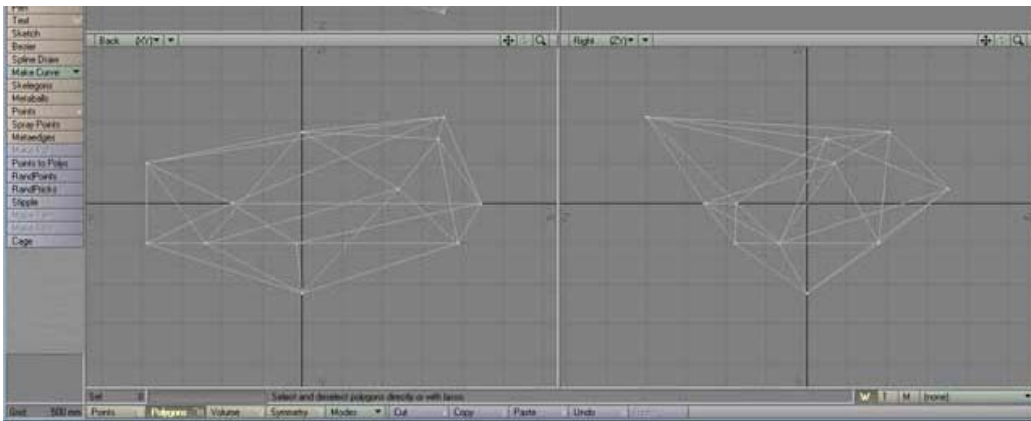
Create a tessellated oval shape using the ball tool. Set the segments to 1.

It should look like something in the image bellow, or whatever proportion you want your rock to have.



Step 2:

Grab on some points and distort the shape to get some more irregularities into your rock (your future rock anyway).



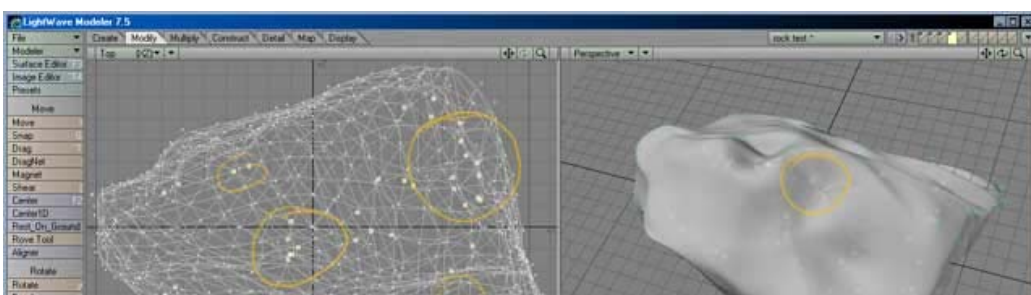
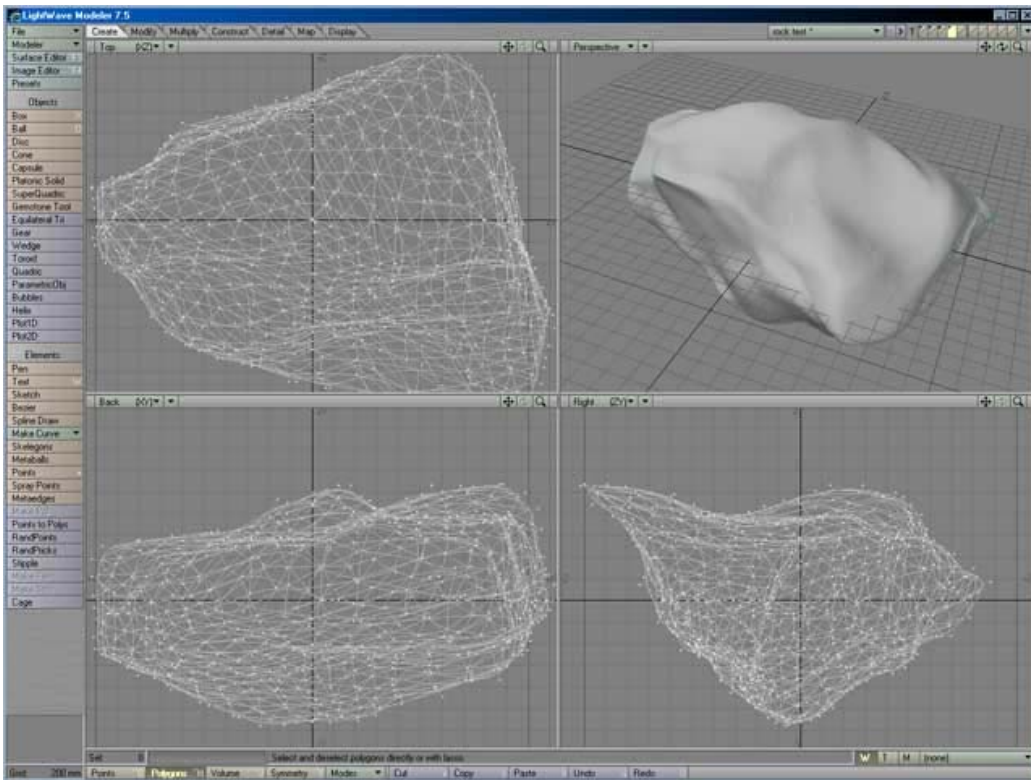
Step 3:

Subdivide the polygons 2 or 3 times. Use faceted as the first pass and then smooth or metaform for the other passes. Set the fractal slider all the way to 100 to get good irregularities.



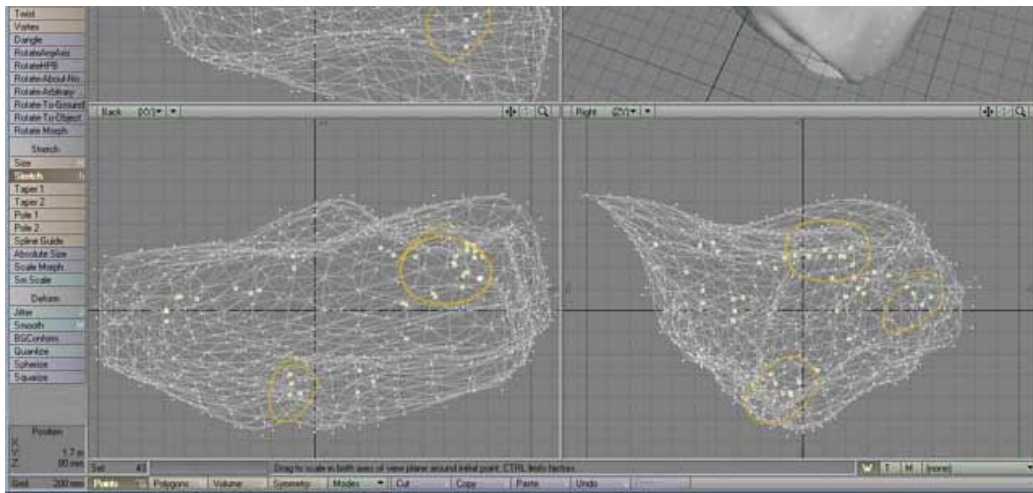
Also convert the shape to subpatches by pushing the tab key. This will temporarily slow things down, but keep going since we will remedy that in a minute.

You should have something like the screen shot below .



Step 4:

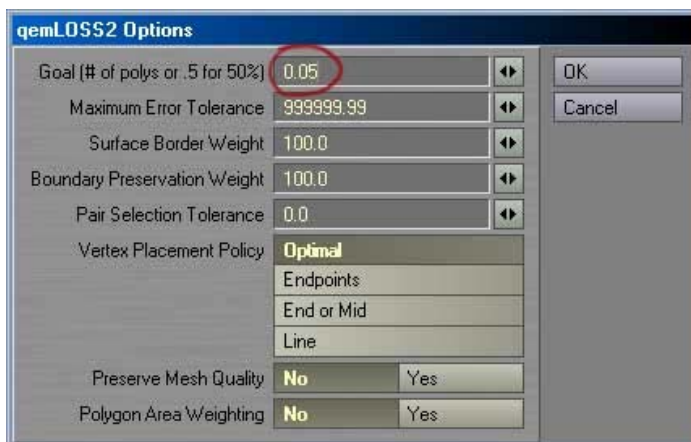
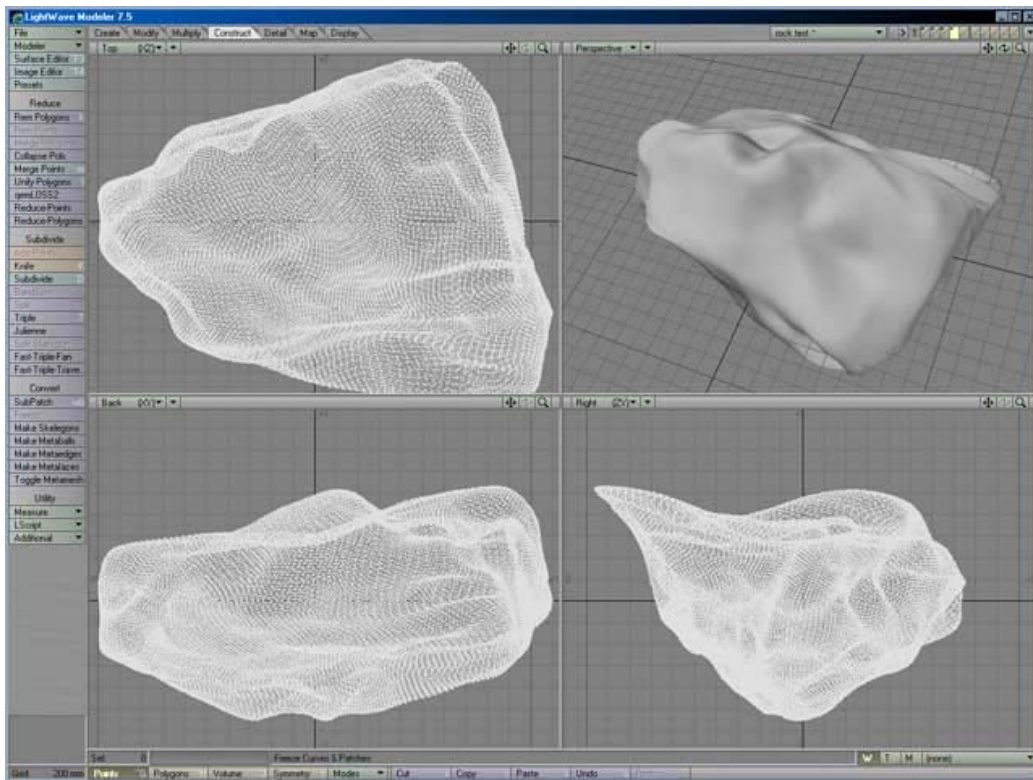
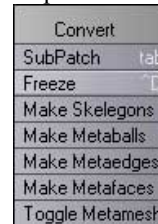
In addition you can randomly select some points on the surface and create some extra dents and finer irregularities.



Step 5:

Now freeze the subpatch object to get a dense polygon mesh.

This is where you temporarily get some intense polygon action happening, but the next step will fix this for us.



Step 6:

Activate qmLOSS2 from the Reduce menu.

Set the Goal field to a very small number. We used 0.05 in this case. Make sure you use a value that will not turn your rock into 3 polygons, and also try to reduce as many of the polygons that are not necessary.

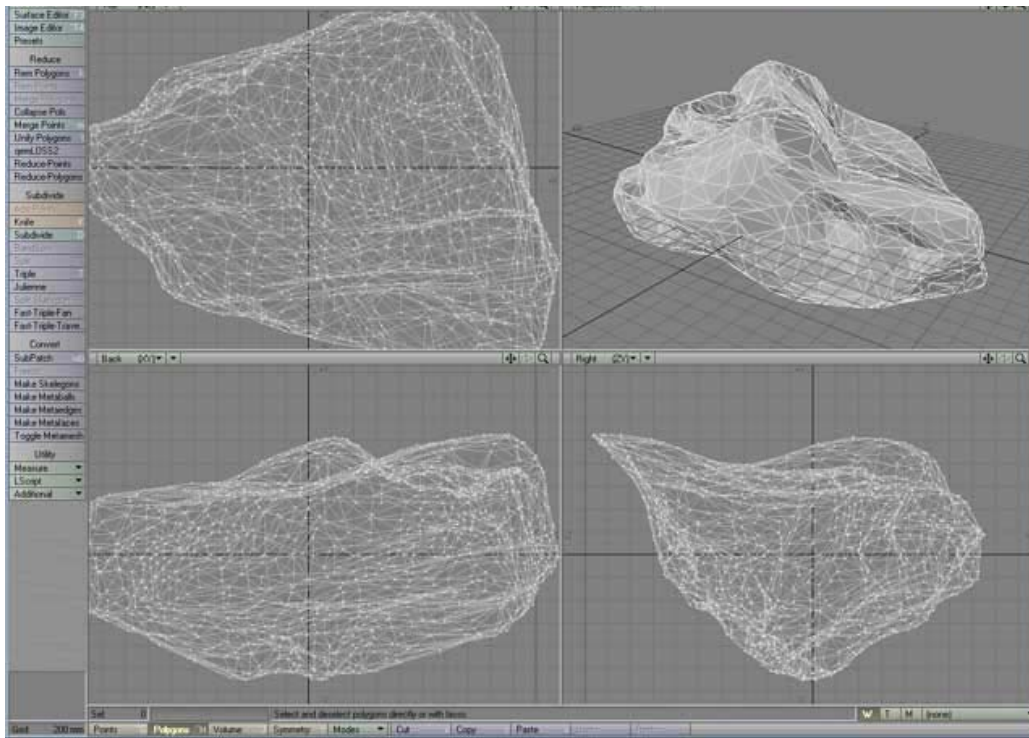
Obviously if your rock has to fly close to your camera you will need more geometry.

You can also run a few passes of qmLOSS2 if you don't want to reduce in such an extreme way within one step.

You should have something like this screen shot



LIKE THIS SCREEN SHOT.



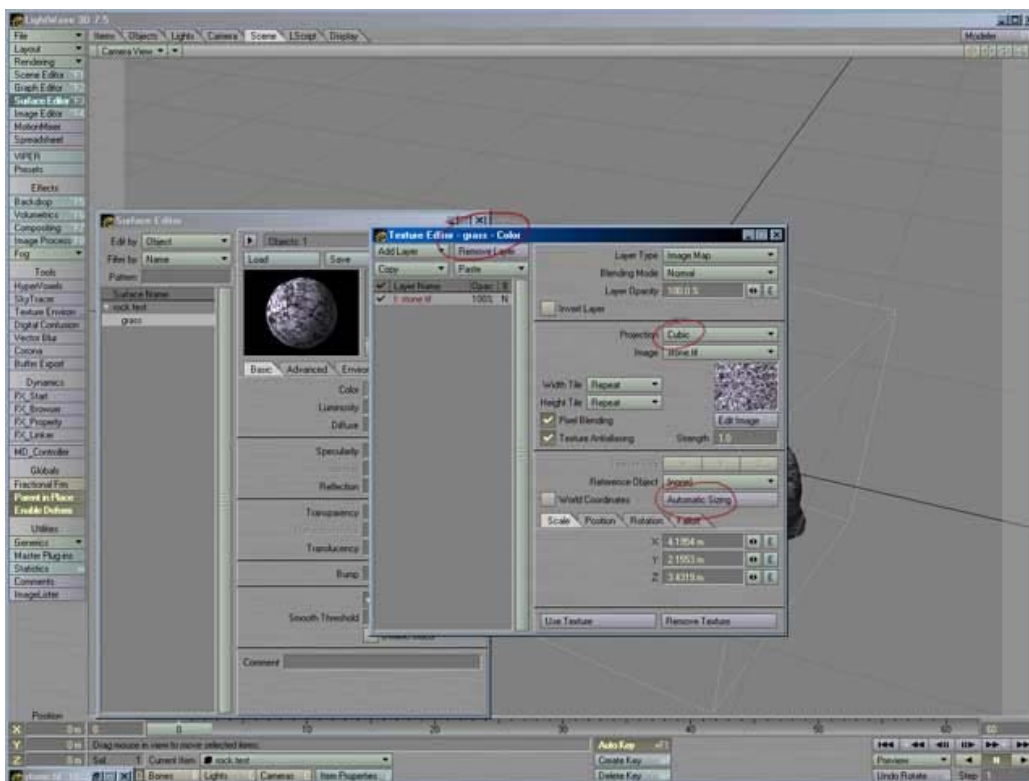
Step 7:

Now bring the geometry into layout for texture mapping.

Open the color texture channel and add a texture map.

We used the limestone image [DSC_1002](#) from our database, but anything that's similar can be used.

Since this is a pretty chaotic texture, we will cubically map it onto our rock to avoid any stretching. Also, use automatic sizing if the texture is to dense on the object.

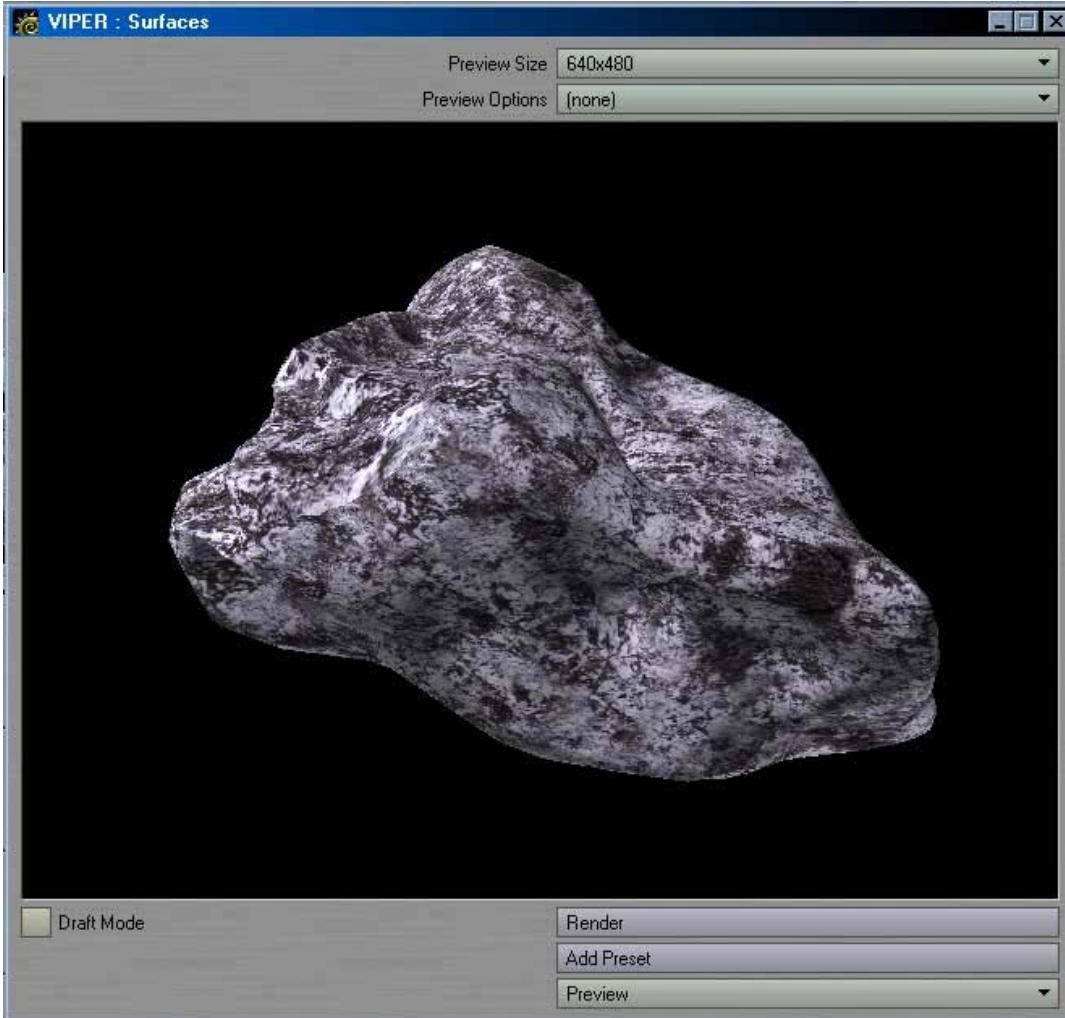


Step 8:

Activate VIPER in the render options to help you adjust your textures. Do a test render to get some VIPER data and switch back to your texture window.

Make sure your VIPER preview window is open so you can see all the adjustments you are making to your texture.

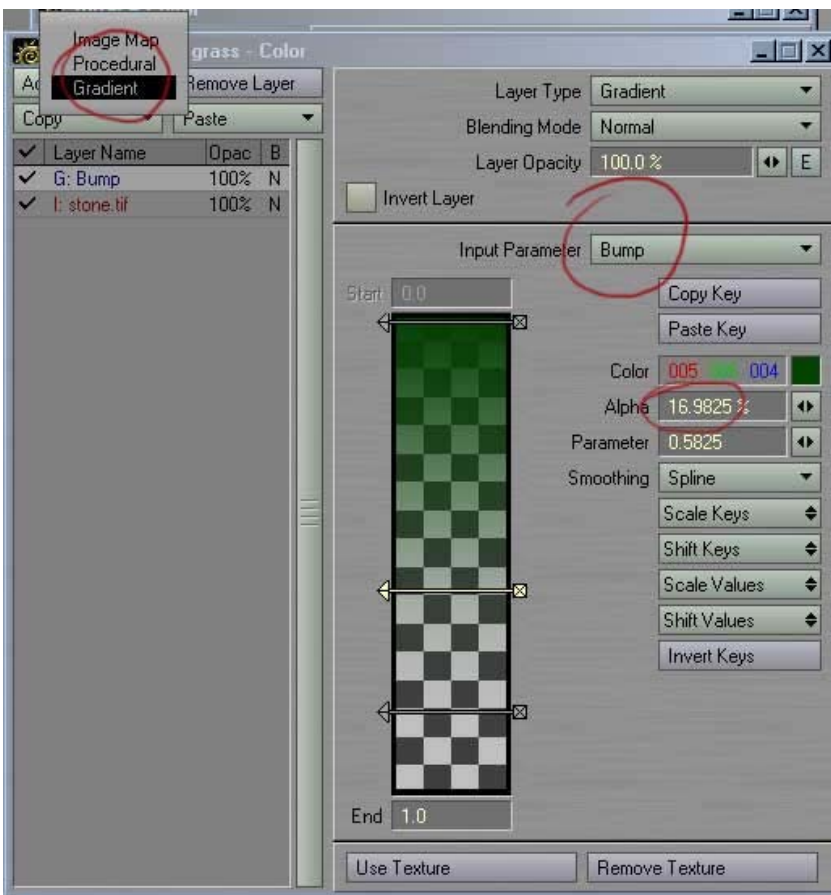
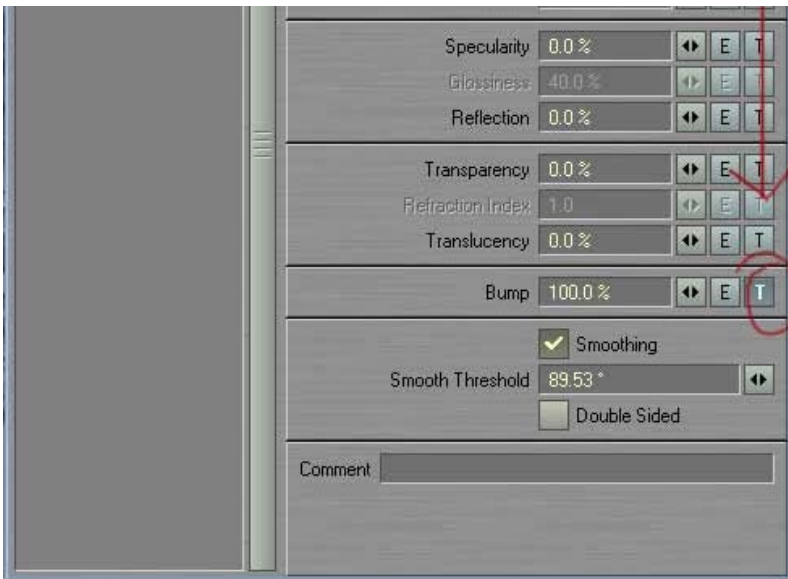




Step 9:

Now what you can do to get a little more interesting variations on the surface, is layer the texture with some procedurals or gradient ramps.

What we did here is copy the color channel into the bump, since the texture has enough bright and dark areas to serve as a bump map to provide a little more surface detail



Step 10:

Back in the color channel we added a gradient that uses the bump map as it's input parameter. The alpha channel slider is used to gradually dissolve the effect. Play with this to get some interesting effects such as mossy coverage on the stone or extra darkening.



Keep on playing:

The gradient ramp adds the defined color where the bump is high (or low if you reverse it) to create a more complex object material than we originally started with. By playing for a few minutes with this you can get something not all that bad looking. And if you play with it a



lot you can most likely get
photo real results.

That's all for now.