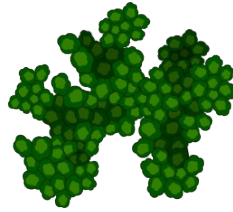


# Loogie's CSR Stamp Method (Copy, Scale, Rotate)

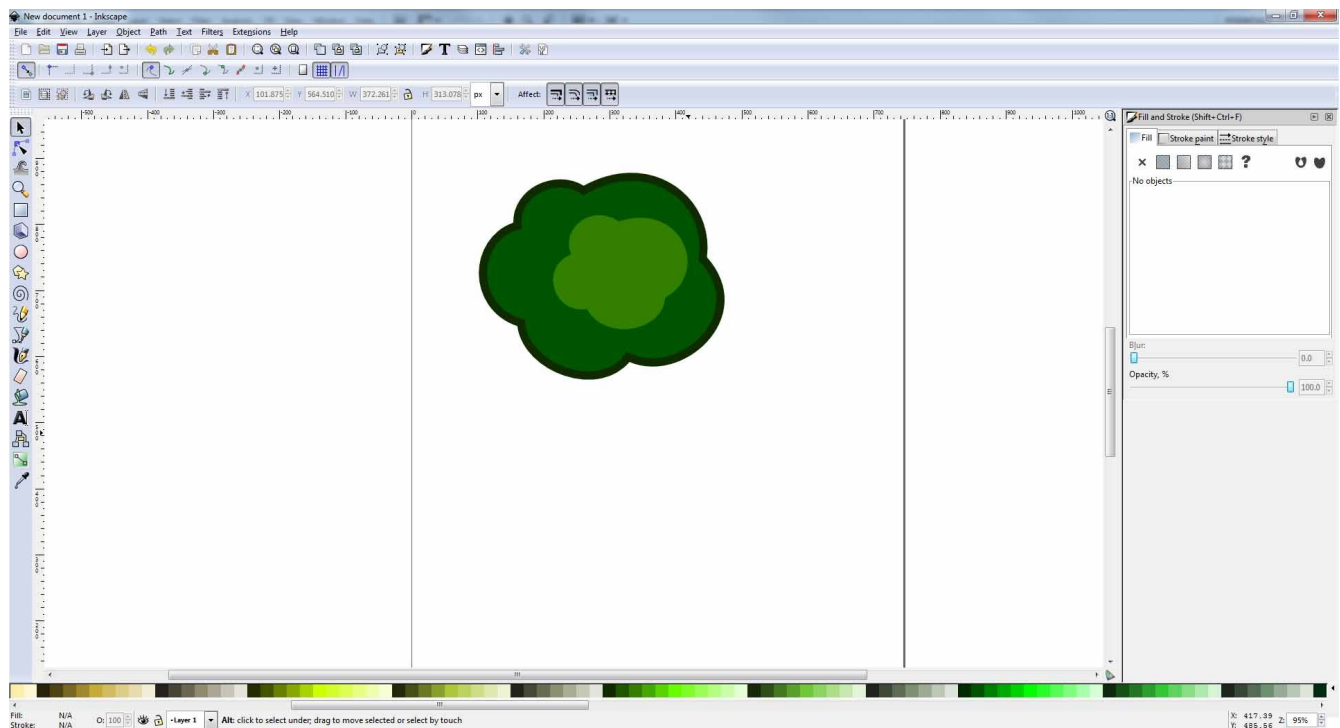


Here is an example of what we're going to create, its a method of using stamps to create a realistically random looking feature (in this case, using single tree stamps to create a forest)... It should be noted that this was done fairly quickly, and to show how much variety you can get even with a single image, I only used one single tree stamp to create this... The variations you see here are a mix of rotation, scale, and some shading. This method is great when using stamps of a top-down nature, although it can easily be modified to do something like a mountain range or even possibly a city block.

## Steps:

### 1 Get your Stamp(s)

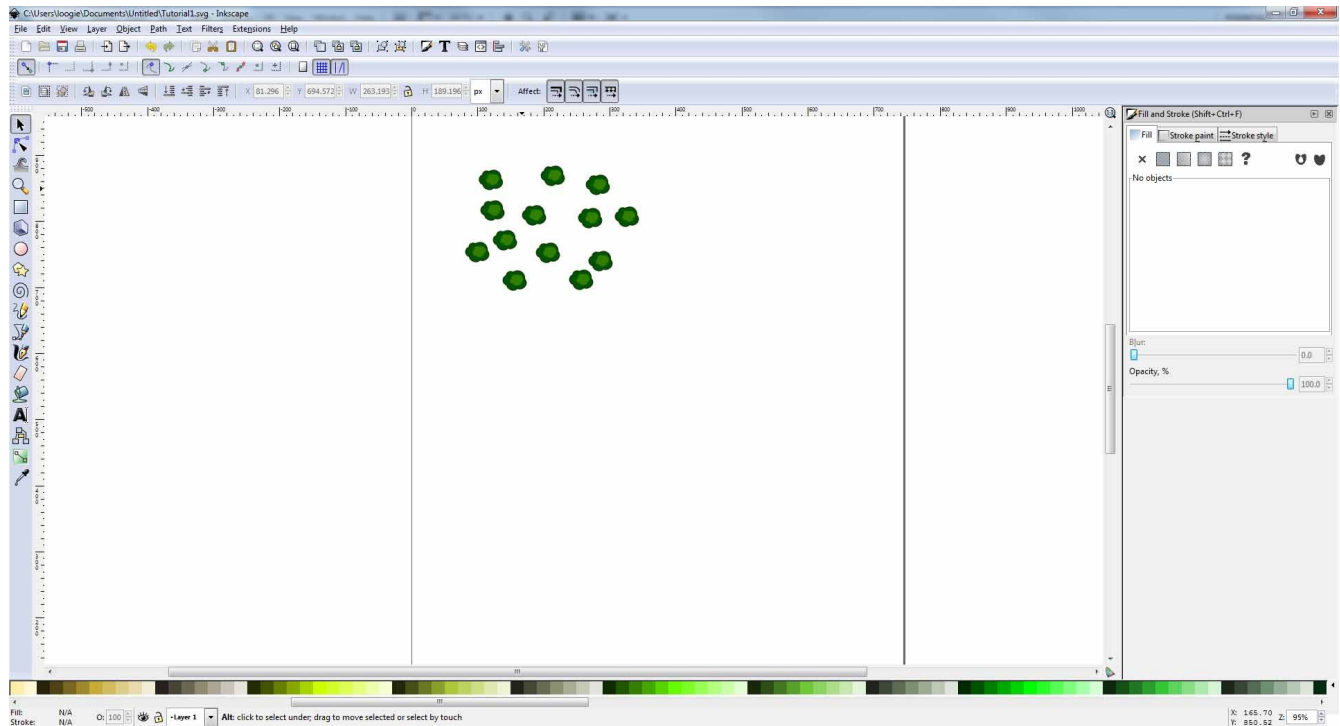
Start with your "Stamp", in this case, I have created a simple vector tree icon in inkscape.



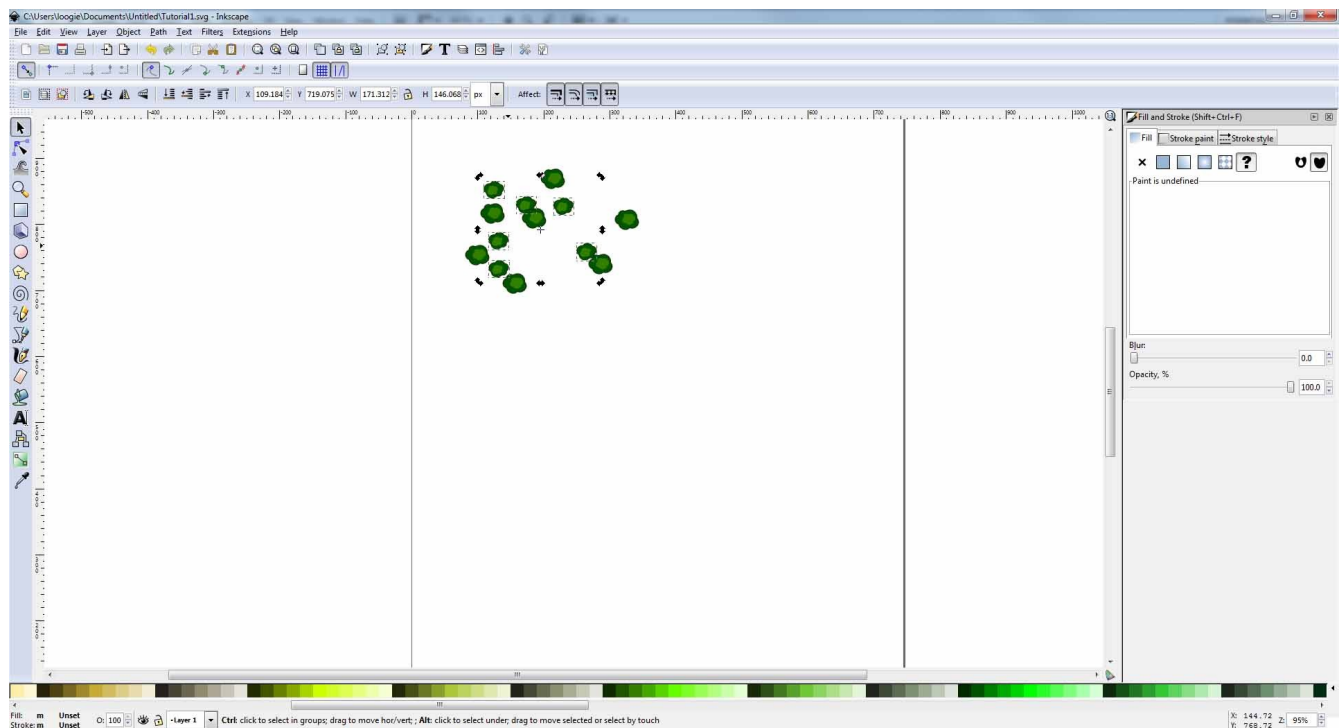
## 2 Duplicate your Stamp(s)

Time to Copy and Paste! Remember, to create a lot of variety, make a few "Stamps" and create multiple groups out of them! For my tutorials, I will continue to use just one single stamp, to show you know much one single image can really look random. The process is simple, and you can repeat it with stamps, and again with groups... the more you do it, the more random your result should be.

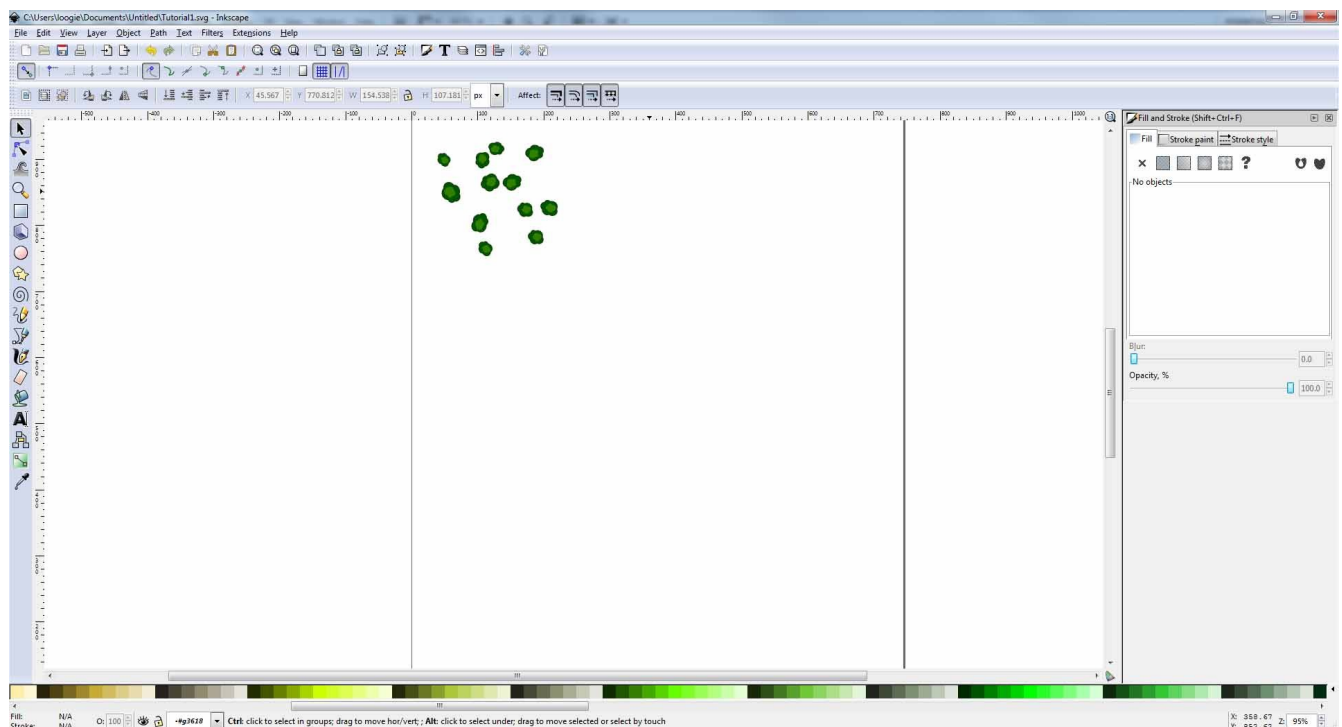
**\*\*NOTE:** I noticed that starting with the stamp a bit bigger than you'd like it to generally be at its biggest is a good idea, for usually you end up with a slightly smaller result (i find i generally do a rotate, and scale down more than a scale up)\*\*



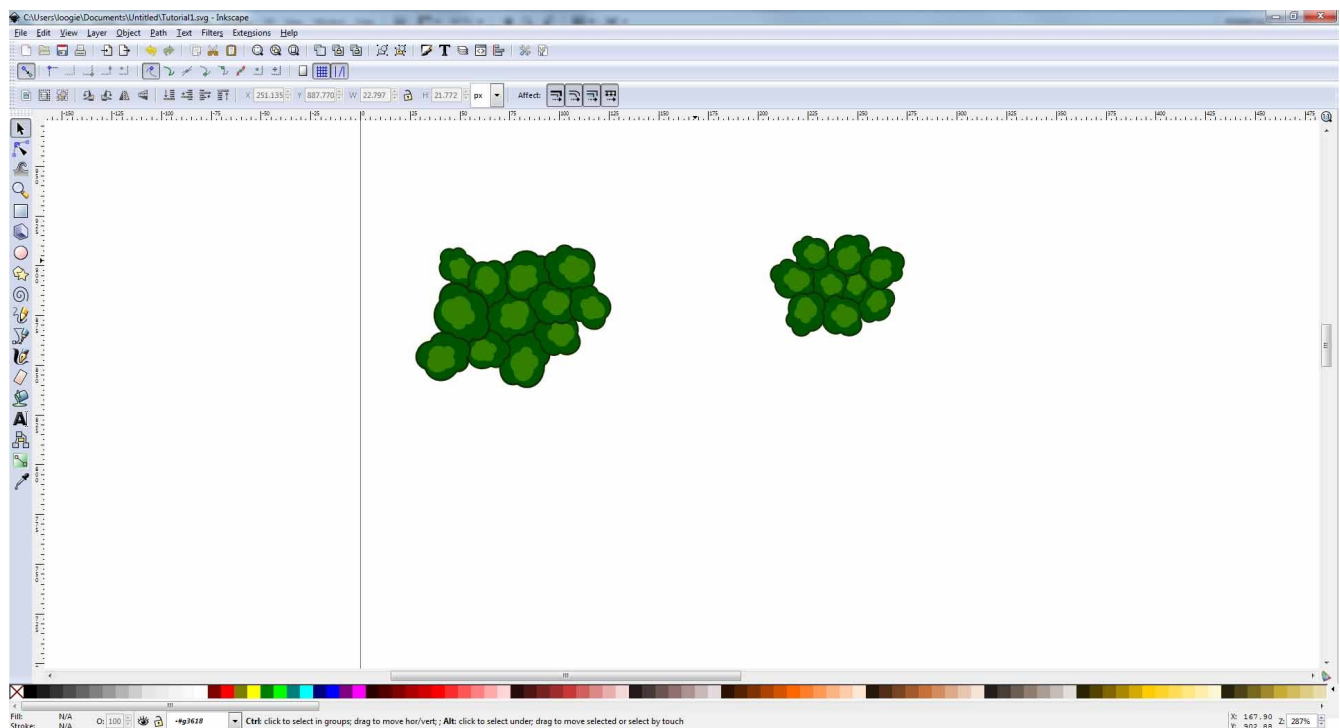
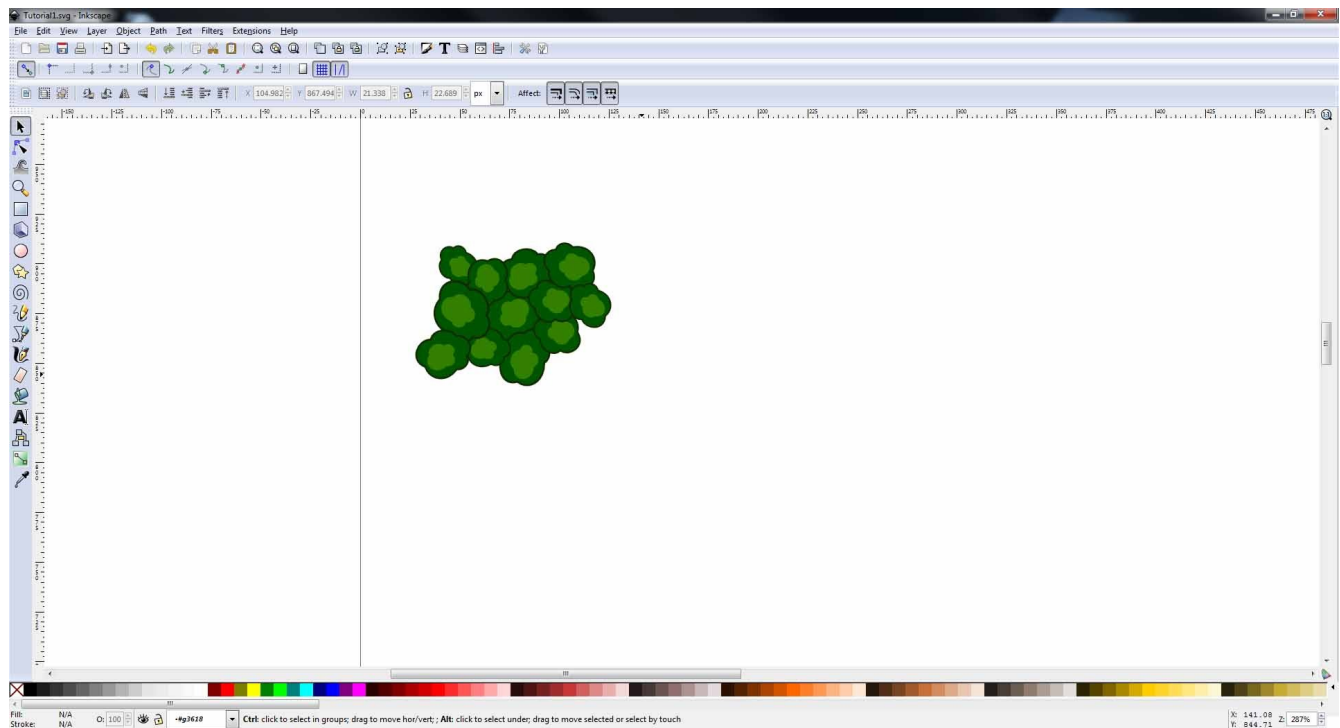
The steps are simple, basically, select a number of your copied stamps randomly. use the arrows to scale them a bit smaller (or bigger), and then use the rotate arrows to rotate them a random ammount (You don't have to worry about keeping the scale ratio, since we're looking for a slightly different result... just try to keep it fairly even). Deselect your stamps, then select another random selection of those stamps (which can include the ones you just scaled/rotated). Repeat the scaling and rotating randomly... Repeat this a number of time, with random selections each time. The result should be a fairly random group of stamps of all different sizes and shapes and rotations.



Move your stamps around into a group... In inkscape, even the depth are fairly random so there is no need to "move to the front" etc in most cases. You can make the group into any shape possible, and you can also make several different groups (perform the above step multiple times).. For this tutorial I will use 2 separate groups. Group the individual stamps into a solid group (to move them easily)... For more significant space saving... you can also save the groups as an image, and continue from there (but you lose the ability to pull the groups apart at a later date).

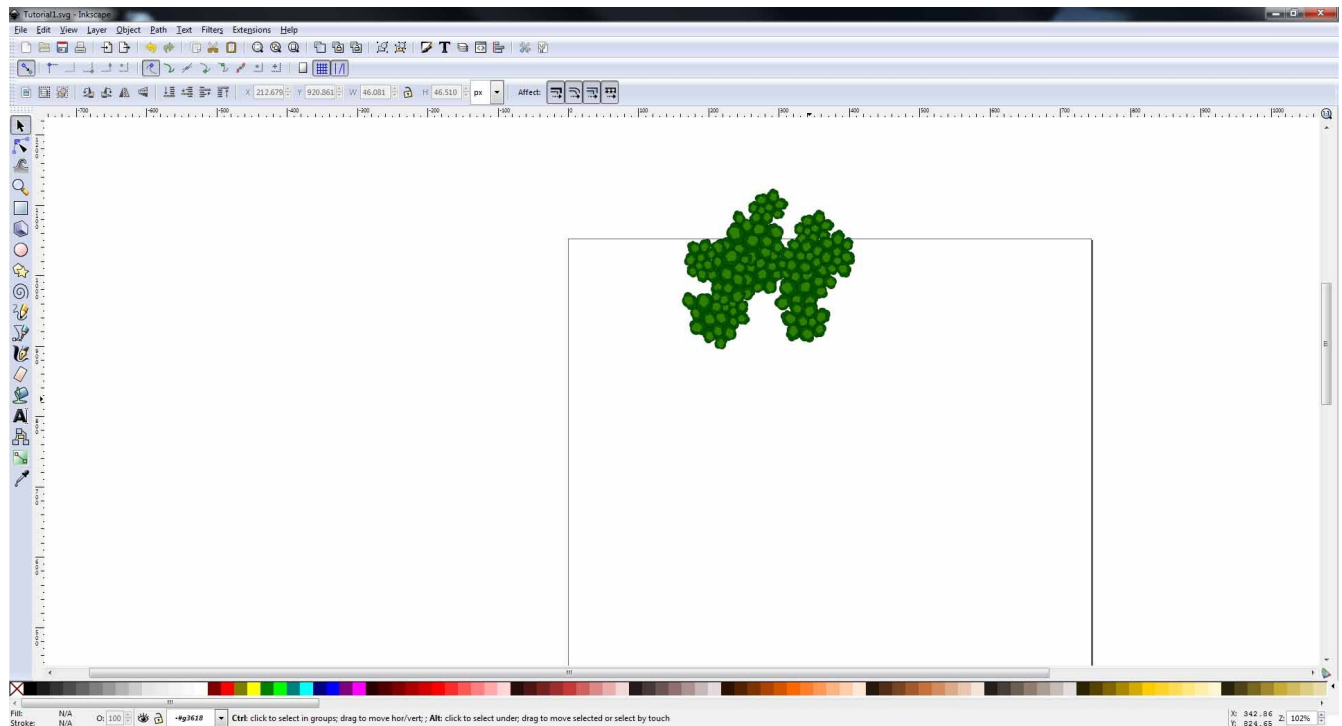
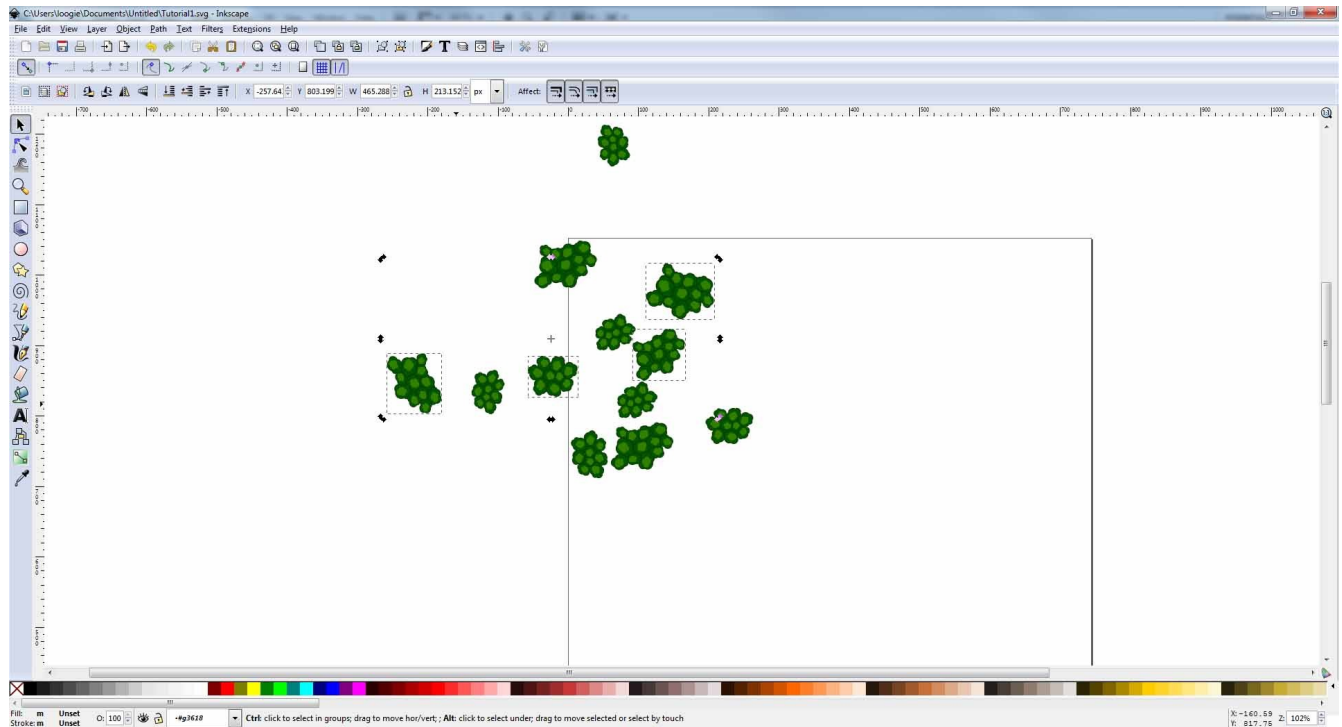


From here, repeat the duplication, rotation, and scale randomization to create unique groupings of the specific stamp. You can do this as many times as you need, until you end up with the size of "stamp" you require.



I completed the forest i wanted my moving the groups into an arrangement I liked. If something didn't quite fit, I was able to ungroup it, and delete or move any stragglers that i didn't need (The benefit of using grouping instead of images). The randomization of the groups also helps in creating realistically

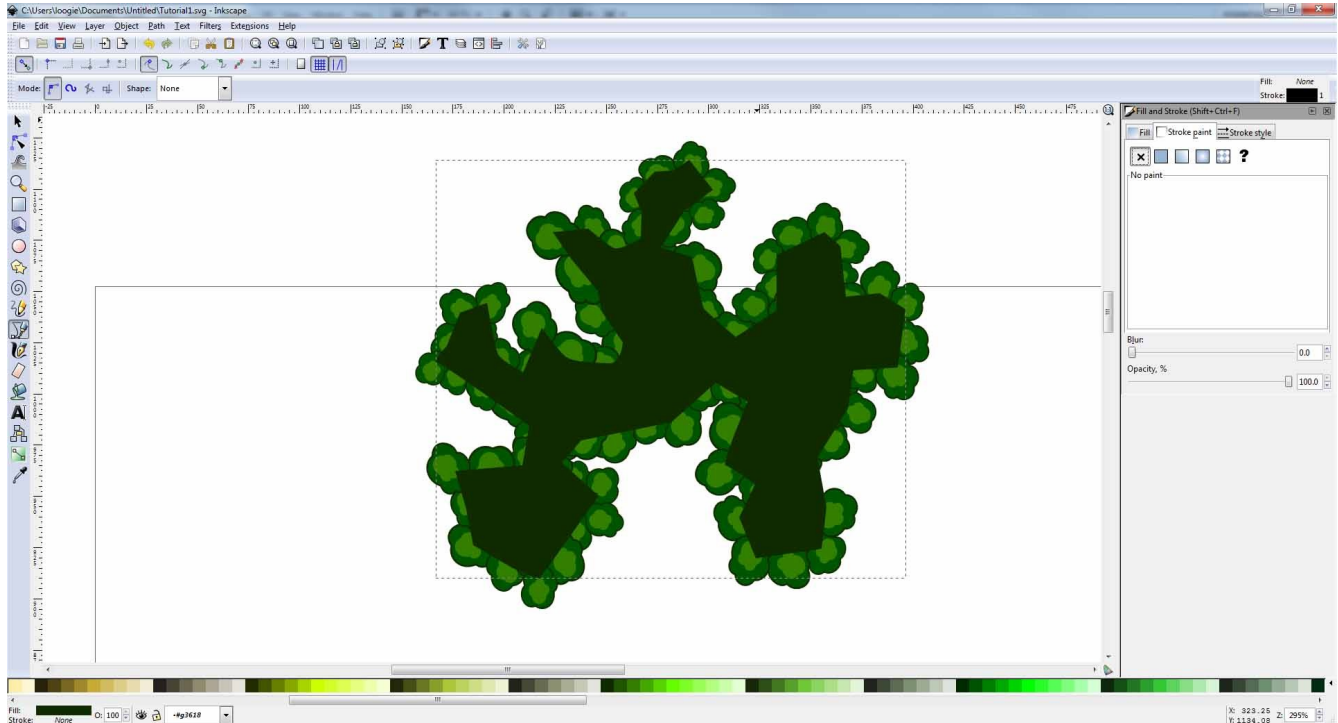
"random" borders, for you are fitting random shapes to fill in the area the best you can, instead of filling I in exactly to the lines.



### 3 Shadowing and Depth

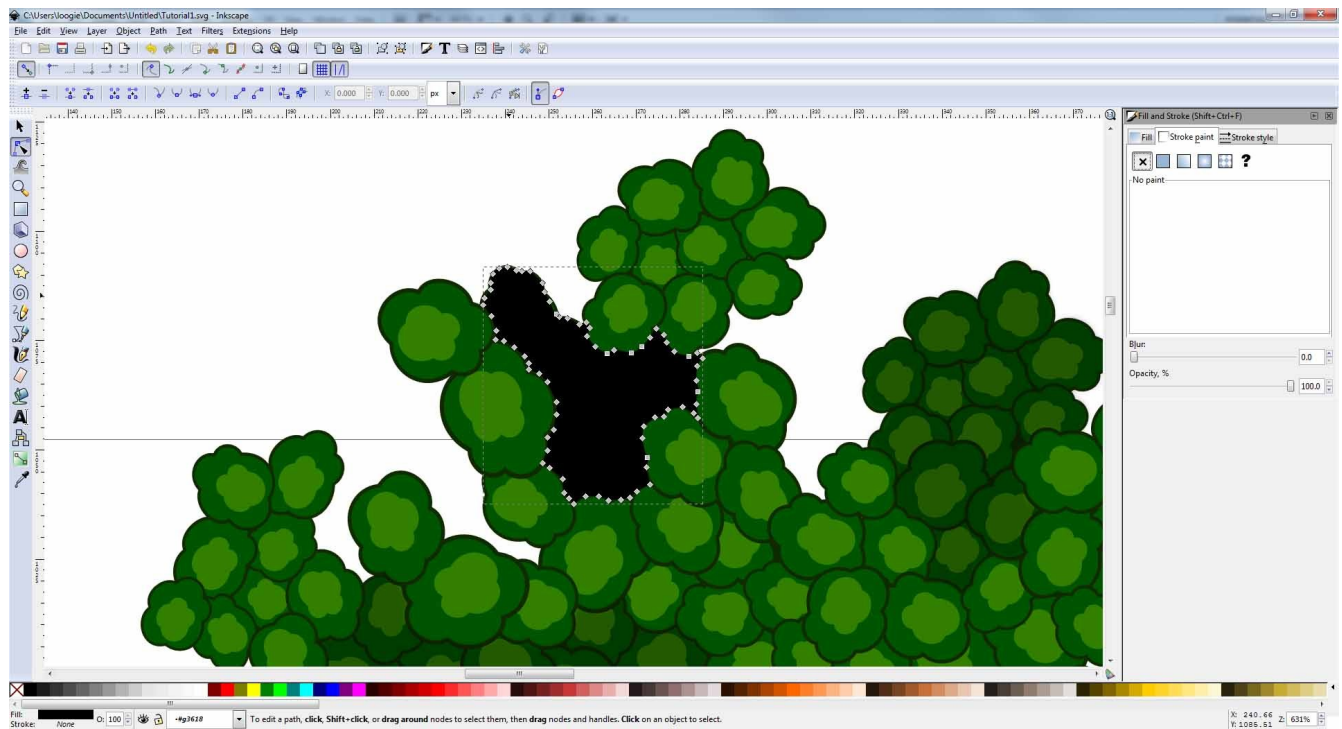
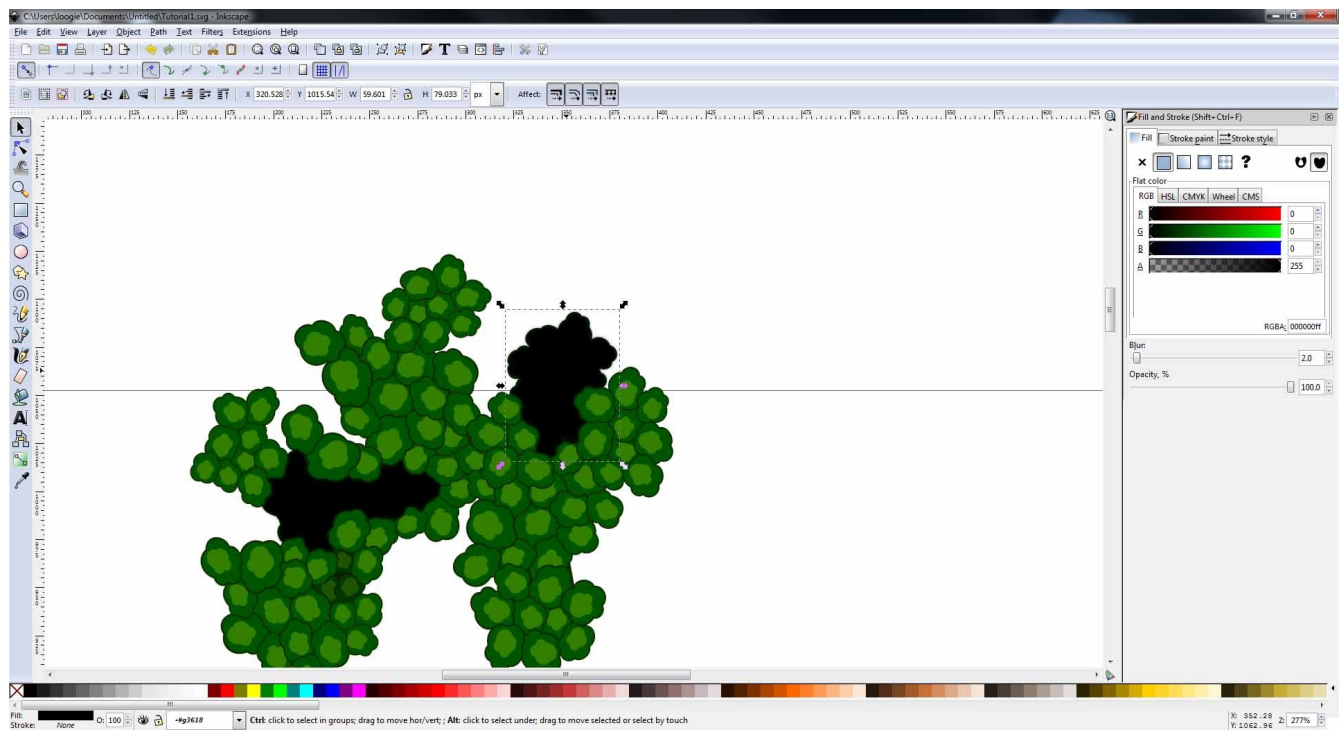
Your general forest outline is complete, and that would be fine for most, but you are the picky sort... so lets make it look at bit more random, and a bit more tasteful. Now, regardless of how much I try, I

always end up with tiny spaces in my forests, places where a group didn't quite fit together, or where I just wasn't careful enough at placing things... The solution is fairly easy, and doesn't require you to move your groupings again. Simply take the polygon tool, and draw a rough polygon inside the area of the stamps... it doesn't have to be right to the edges, but it should cover the whole area. Color it a color darker than your stamps, and move it to the back. Now any spaces that may have shone through with a telltale white, (if you background is white) are showing a nice, shadowed forest floor.

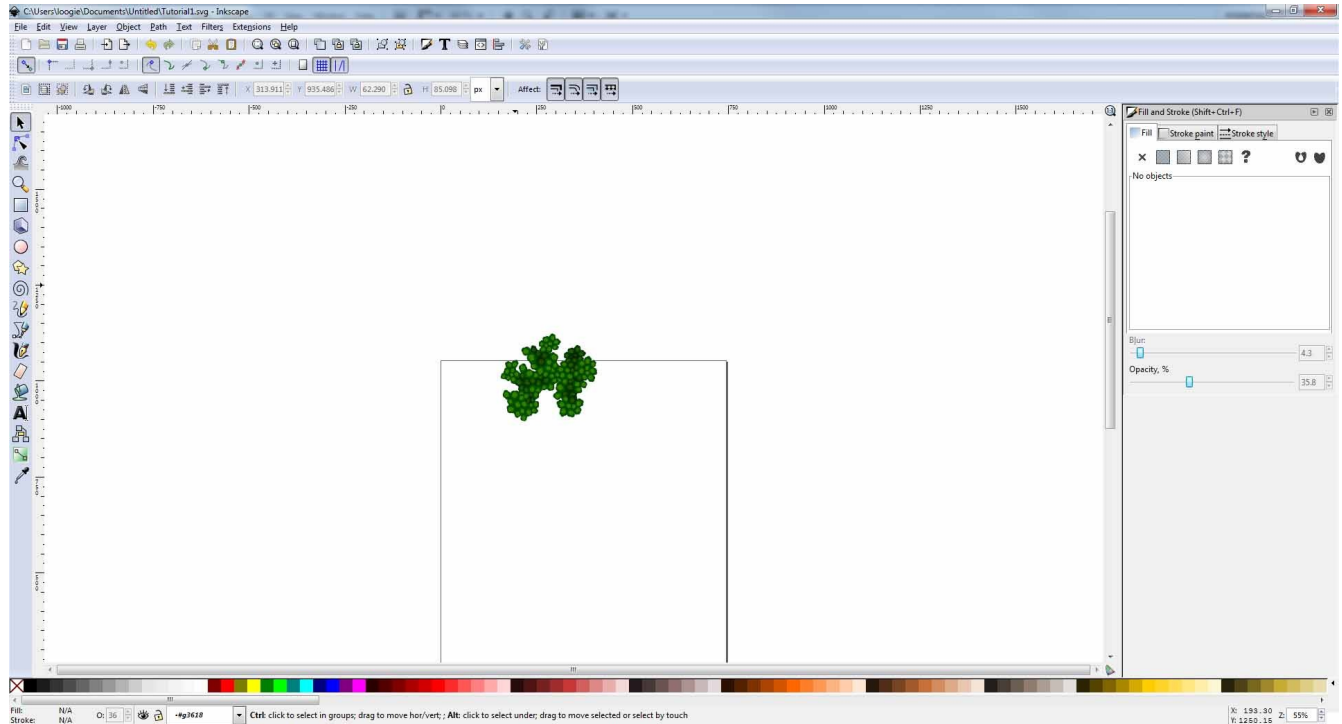


Next we can add some depth to the forest. This is the most tedious part of the tutorial, so its really up to you if you wish to do it or not, or even how detailed you can get with it. We will be filling in some shadow in the trees, using the polygon tool with a black fill, made transparent so that it covers some trees, making them look darker. I try to draw the polygons over trees that show up as "below" the other trees. Its really random as far as how you want to do it, but basically draw around the part of the tree that is showing, and skip those you don't want to be included. Fill the polygon in black, and change its transparency (I find around 25% is good). Repeat this step a few time (you can even overlap) and you have some shadows... if you want to cover your tracks a bit (in case you can see your bad, blocky straight edges of the polygon) you can also blur the edges of the polygon to haze that line.





## 4 FINISHED!



It's time to step back, and marvel at your work. Simple, quick, and as detailed as you want it to be... a great way to create almost any top-down stamp.

This idea can be modified to use for mountains (less rotation, more scaling) as well as buildings, or pretty much any other type of stamp based mapping.

In my tutorial I used inkscape, but since this is using very basic drawing tools, it can be done fairly easily in photoshop, gimp, and many other graphics programs.

*I hope you guys enjoyed my first tutorial! I hope it can be of use to some of you, and I hope I get the chance to do more in the future!*

Loogie