Tutorial:

Tree Maker: 117 ZBrush Brushes, 50 Alphas and 8 Tree Basemeshes

by Artistic Squad

CONTENTS OF THIS PRODUCT

This product contains several useful tools to build trees from scratch:

- 117 ZBrush brushes for shaping and texturing trees: rough bark, smooth bark, cracks, knots, and cut branches.
- 50 PSD Alphas that you can use in Zbrush and other 3D modelers that use alphas.
- 8 Basemeshes of trees, of different shape: tall and thin, wide, gnarly...
- A Branch brush to add additional branches to the trees.
- A IMM Trees brush that can add the basemeshes of the trees in your scene in a fast way, to quickly compose a small forest or shape them as you drag.

The ZBrush brushes include different kind of brushes:
- DragRect brushes that you can click and drag to set the position and size of the detail.
- DragDot brushes, in which you decide the size of the detail, and then drag to position it with precision (for example, for a knot or a cut branch).
- Special Draw brushes that have settings to allow you to paint the details in an artistic way, so you can shape the trees like drawing. This way they have direction and uniqueness, and look natural like in real trees.

HOW TO INSTALL

To install this product follow these steps:

- Once you have downloaded the product, unzip it, and close Zbrush.

- Go to the folder where your brushes are stored, usually in Windows it's

Program Files\Pixologic\ZBrush XXX\ZBrushes

(XXX being your version of Zbrush)

Copy the folder with the .ZBP files there

- Now do the same for the Alphas:

- Go to the folder where your alphas are stored, usually in Windows it's

Program Files\Pixologic\ZBrush XXX\ZAlphas

(XXX being your version of Zbrush)

Now open Zbrush, open Lightbox, and then click on Alphas or Brushes. You will find them in their folder.

HOW TO USE THIS PRODUCT

First you need to load a basemesh of a tree, or use your own mesh if you want to. In our product we include 8 tree basemeshes, in OBJ and as a IMM brush.

For using the OBJs, you just have to import them in Zbrush. Use the button in the menu Tool / Import
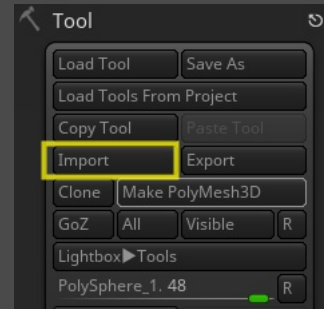
The IMM brush contains the same trees. They are in the "Tree" folder inside our product brushes. Open the folder in LightBox and you will locate them here:
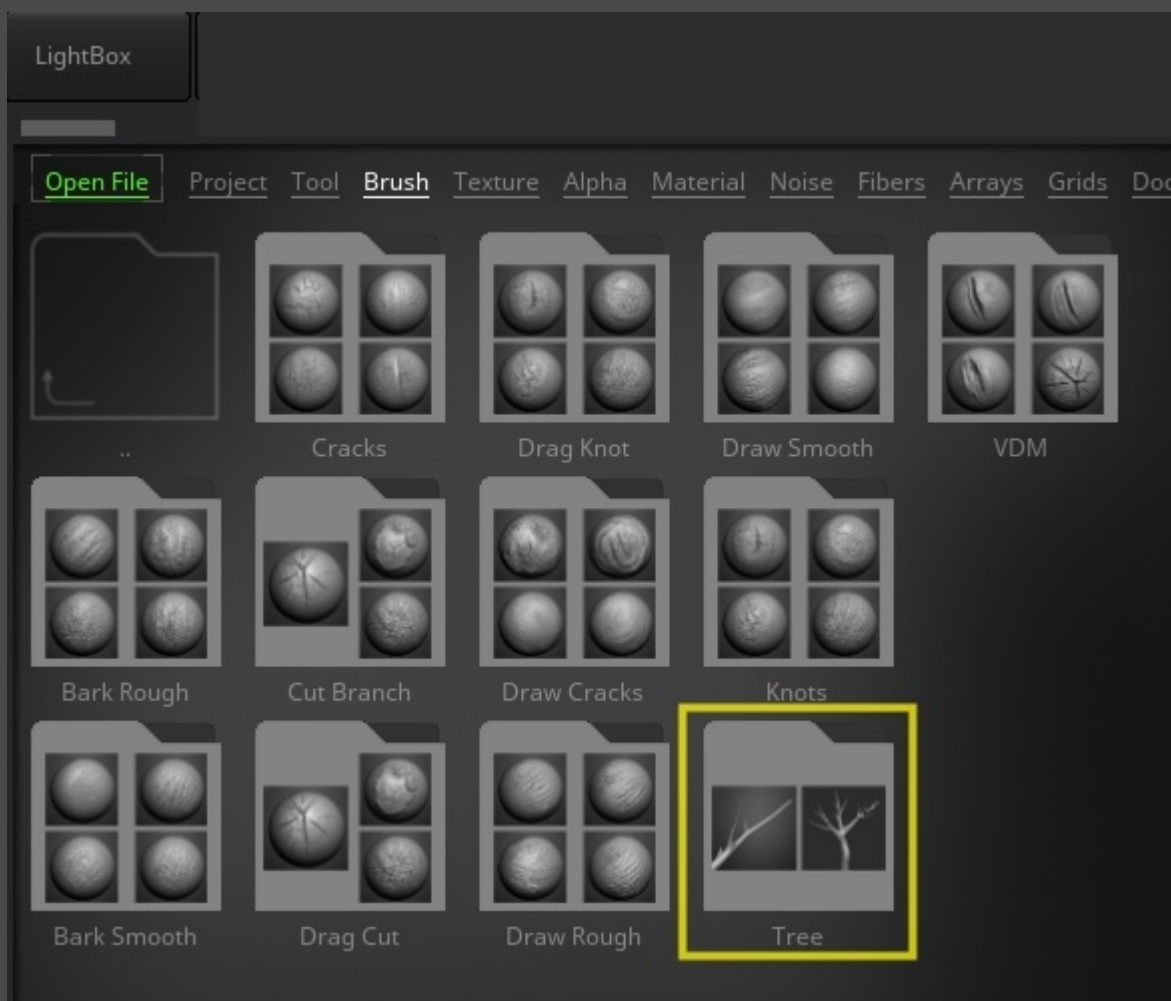
Load the brush, and then press "M" in your keyboard to select one of them. Then, click and drag over your terrain to create a tree.

Once you put your tree on the terrain, you will notice that all except the new tree is masked. If you press the "Move" button, you can use the ZBrush Gizmo to place your tree with precision where you want it, and also dig the tree trunk as much as you like.
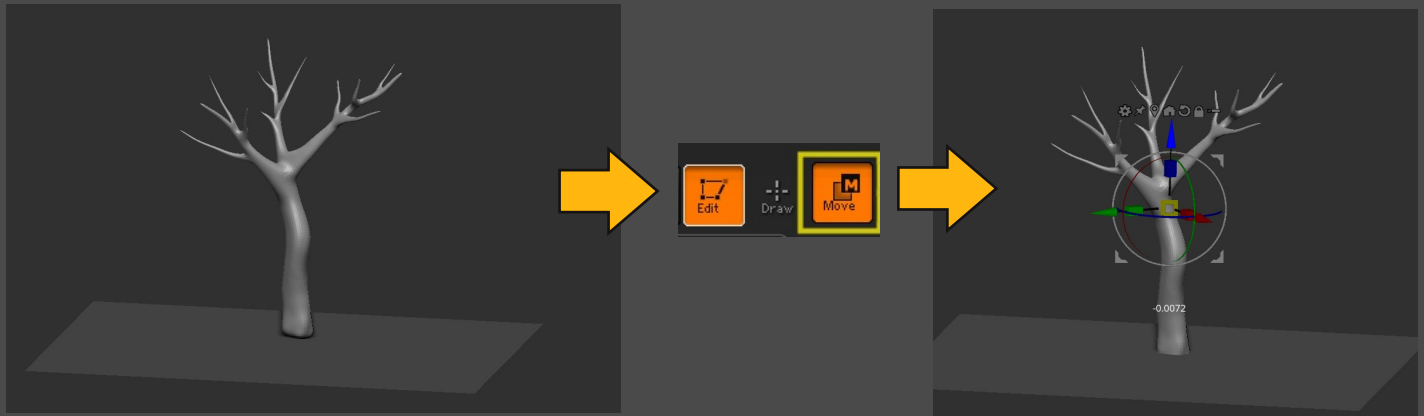
Once you've done this, you can click the "Draw" button. It will be convenient to separate the tree in another subtool. For this, look into the Tool / Subtool menu, and the section called "Split" inside Subtool. You need to click the button called "Split Masked Points".
This will separate your terrain from the tree, so you have two subtools.
Now select the tree to work with it.

In the same folder as the Tree brush, you will find the Branch brush. If you like the tree as it is, you don't have to add extra branches.

But if you like to add more branches, use this brush. It must be used in Sculptris mode. To activate the Sculptris mode, click the icon that is highlighted in the image below.

This brush allows you to click and drag over the tree and draw a branch. If you drag fast, the branch will be thinner, and if you drag a bit slower, the branch will be thicker.

Also, choose a brush size that is right for the branch. The branch will be always need to be smaller than the part of the tree where it begings (like in real trees).
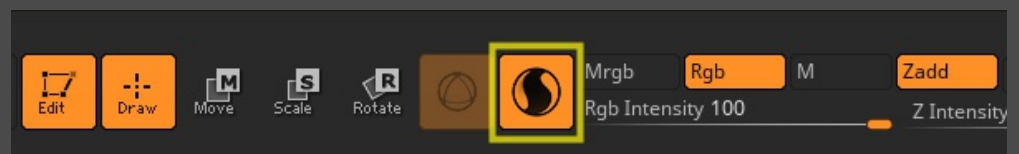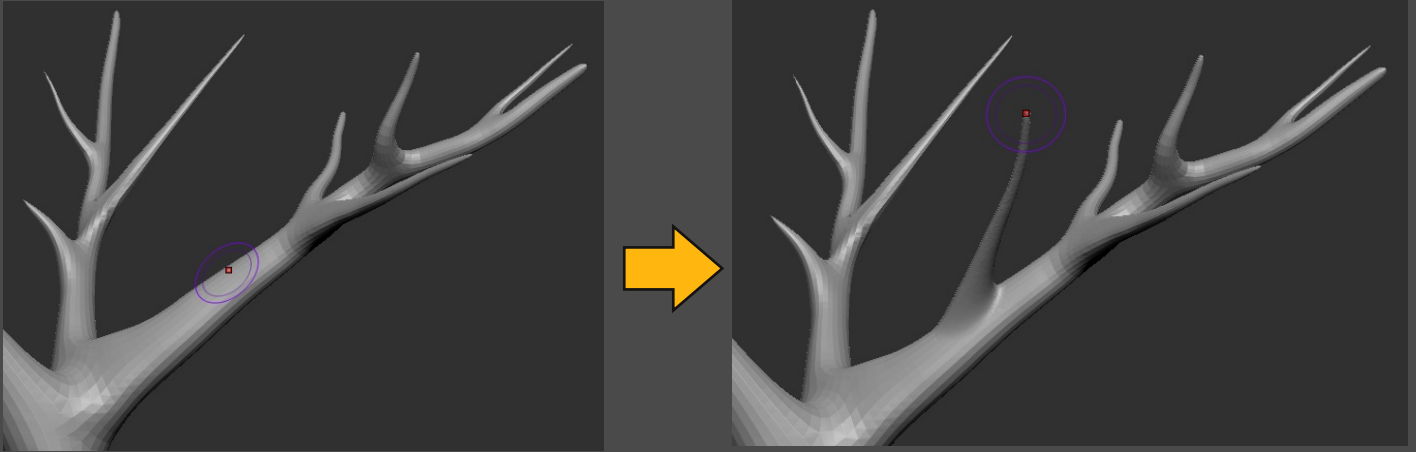
If you set the Polyframe view, you will see that the branch has more polygons than the rest of the tree. This is not good for the next steps, but it's good for creating new branches.

You can go to the Brush / Sculptris Pro subpalette and move the dial called "SubDivide Size" up and down to change the density of these polygons as you prefer in case that the default setting doesn't work for you.
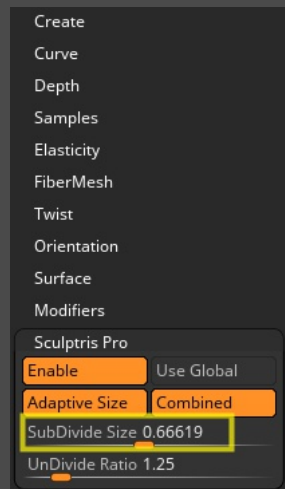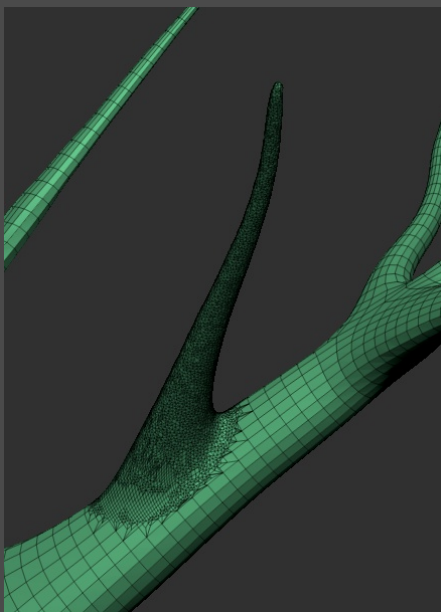
The higher density and different topology of the new branches is not good. It needs to be the same of the rest of the tree to get the best of the next steps.

Because of this, after you have created the extra branches, or maybe after creating a number of them, it is good to use Zremesher for optimizing the mesh.
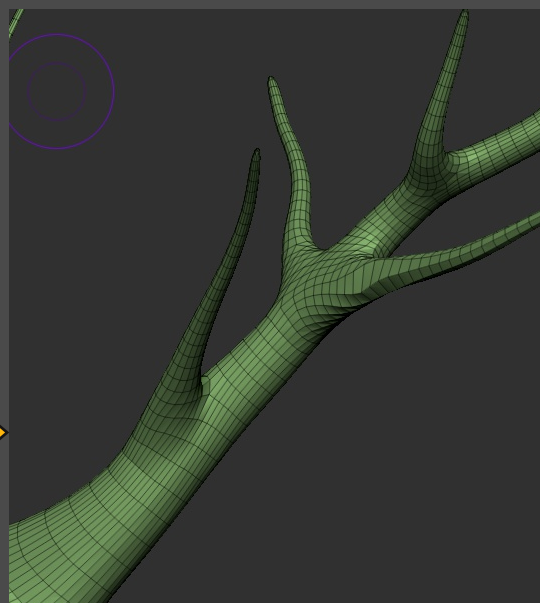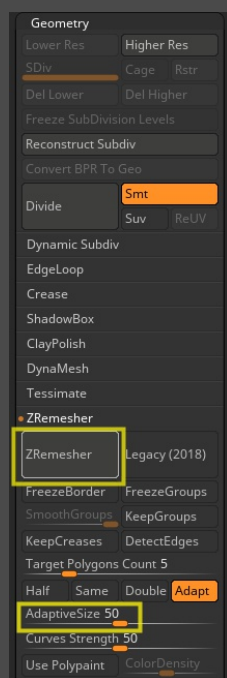
In the Tool / Geometry subpalette you will find Zremesher. Click its button and after some time, the mesh will be re-created and all will have a similar density, which is perfect for the rest of the tree creation.

If you feel the density is too low or too high, you can change the value in "AdaptiveSize" (in this example, it was set to 90 for best result.

You have to divide the tree several times, in order to get the maximum detail. If you plan to texture and UV map your model, do it first, so you can later save your normals and displacement maps.
Usually 5 divisions will be enough.
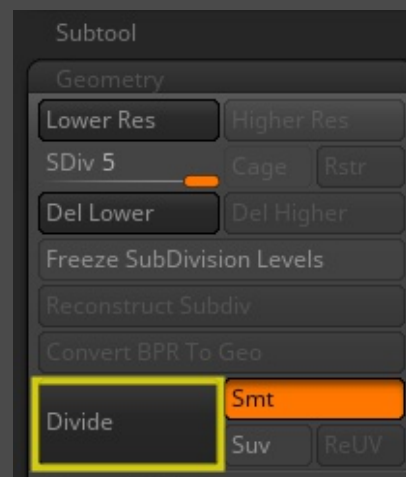
There are several kind of brushes. The "Bark Rough" and "Bark Smooth" folders contain brushes for drawing the details of the bark of the trees.

They are very easy to use: you just have to click and drag over your tree to draw the brak. The size of the bark detail will be bigger or smaller as you drag.

Try to make it smaller as the branches become smaller, as happens in real trees. You can use one single brush or mix several ones, as you feel it's better.
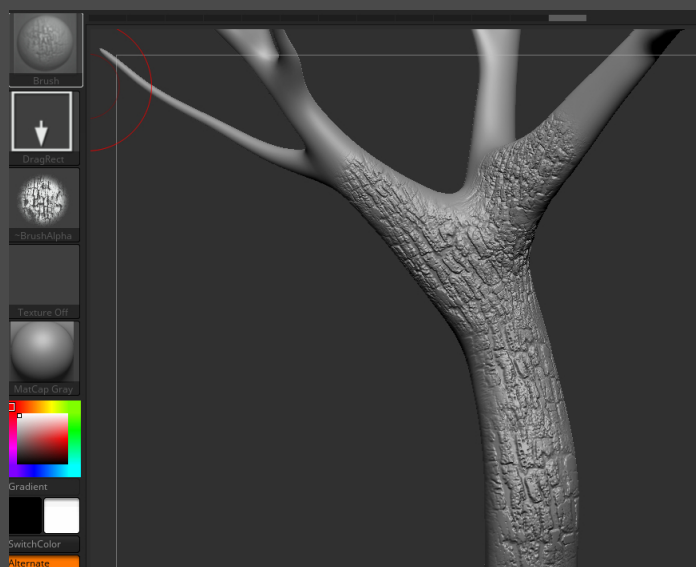
The Brushes inside the folders named "Bark Rough", "Bark Smooth", "Cracks", "Cut Branch", and "Knot" work the same way: click and drag. The brush will be applied where you click, and will be smaller or bigger as you drag, and once you like it, you release the mouse button to apply it.

With these brushes you can create different features:
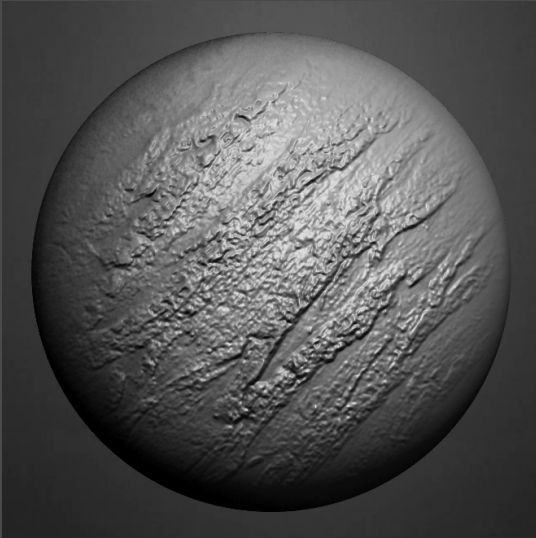
There are 20 "Bark Rough" brushes. They are used for making bark of trees which have specially rough texture like pine trees or other trees with thick bark.

They can also be great for detailing furniture made from pieces of trees like benches or seats made with trunks, or for fences and buildings made with trunks.
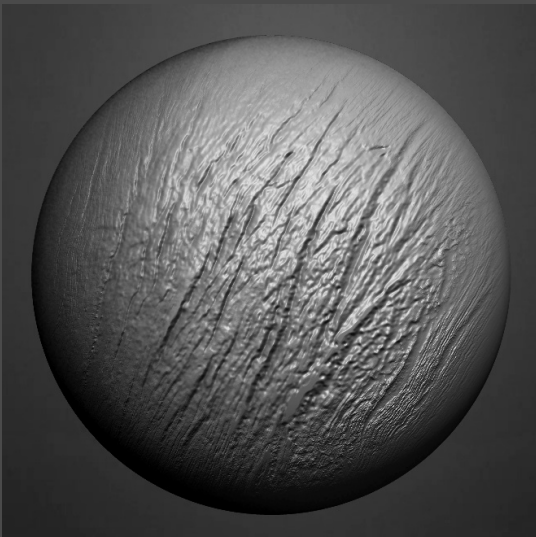
The "Bark Smooth" brushes are 14 brushes for trees with a less thick bark or with more delicate details.

They can also be useful for parts of the trees that may have lost the bark, or for furniture made of wood that needs to look smooth but still have the lines and features of wood.

Inside the "Cracks" folder you find brushes for creating damage to the wood. There are four brushes called "Cracked" and three called "Scratch". The cracked brushes are for making cracks and simulate parts that lost the bark.

01   02   03   04
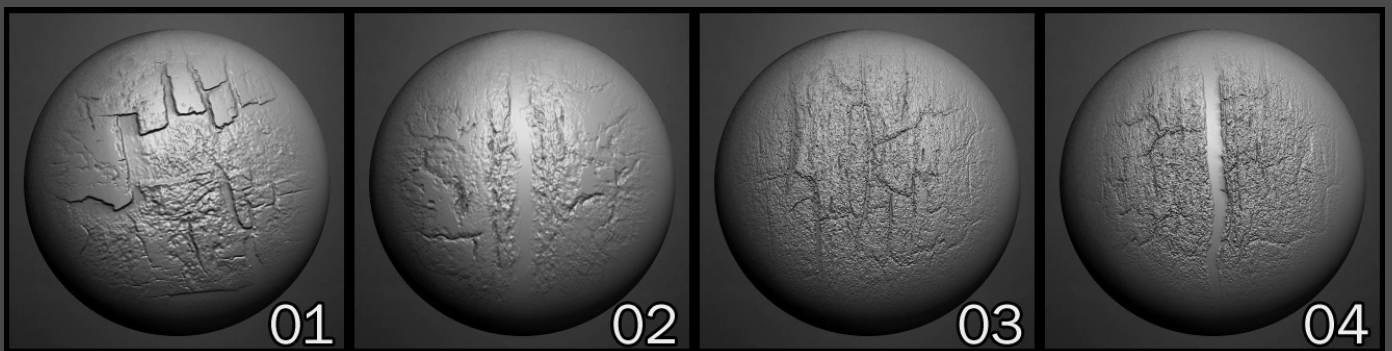
The "Scratch" brushes can be used to simulate big or small scratches in the wood caused by animals, the weather or whatever.
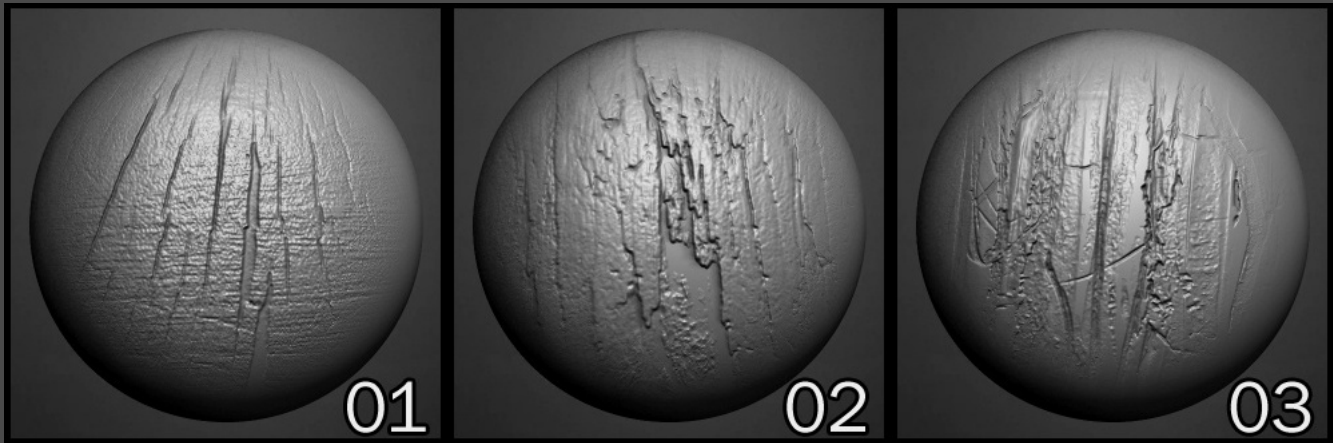

Inside the "Knot" folder, you will find brushes to create natural knots of the wood.

When you use the knot, scratches, and cracks and other features, it's better that you first plan your project and first place these where you like them, and then do the rest of the bark around those features. This way, even if you use a very rough bark, they will be clearly visible.
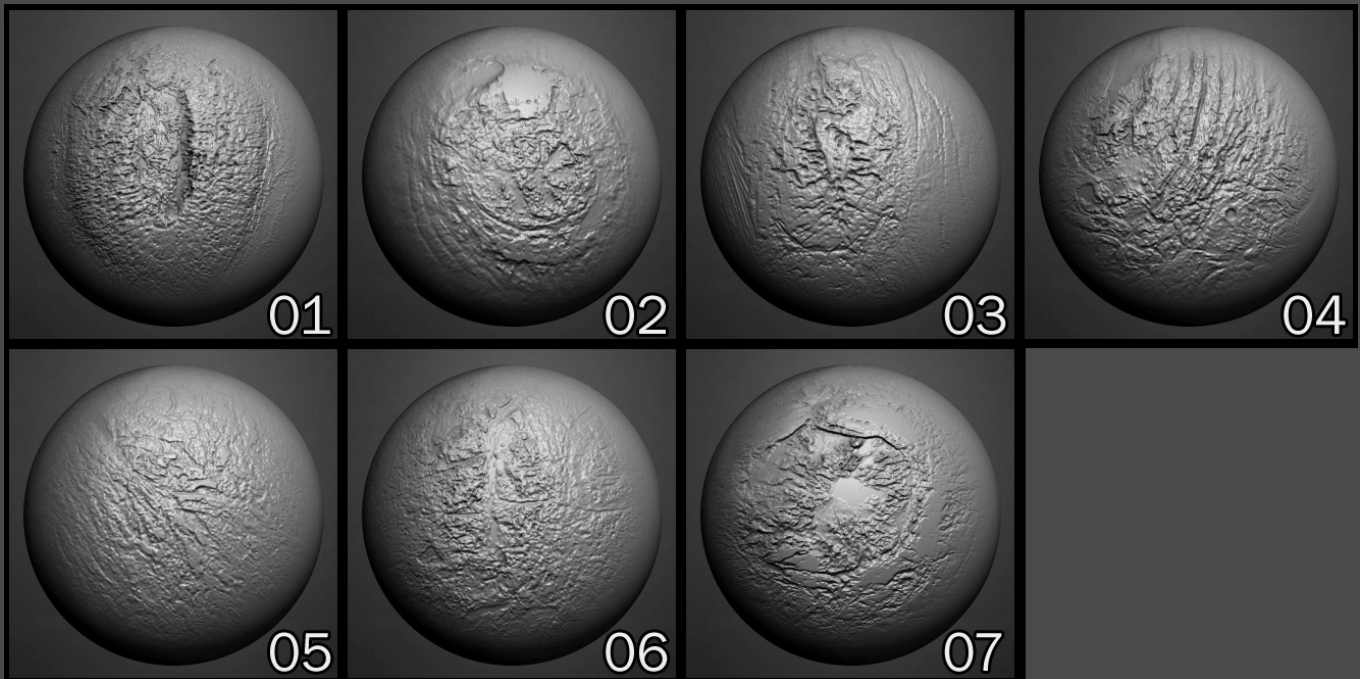
The "Cut Branch" folder contains three brushes that can be used to simulate a branch that has been cut off. There are three of them: a recent dry cut, an older cut that has partially healed, and an old cut.
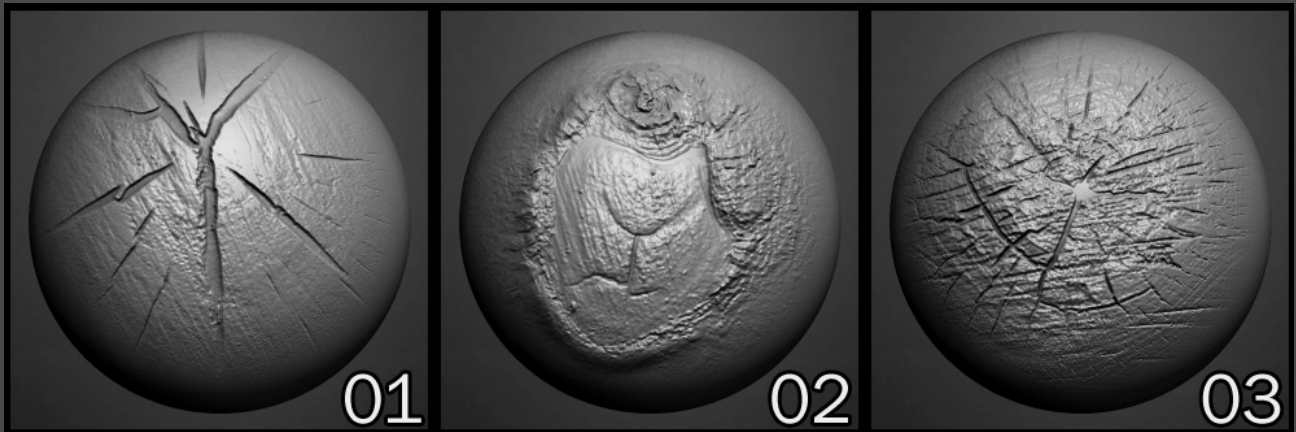

You can cut a branch of the tree by using the TrimCurve brush or another Trim brush (as the Trim Lasso). The ideal moment to cut the branch is before subdividing the tree.

But if you didn't, you can still do it, by using the "Freeze Subdivision Levels" in Tool / Geometry: click that button, use the Trim brush, and then click the button again and wait. The tree branch will be cut and your details will remain.

Now you have a branch cut like the following one. You can select a Cut Branch brush and drag on the center of the cut, until it is drawn over all the cut.
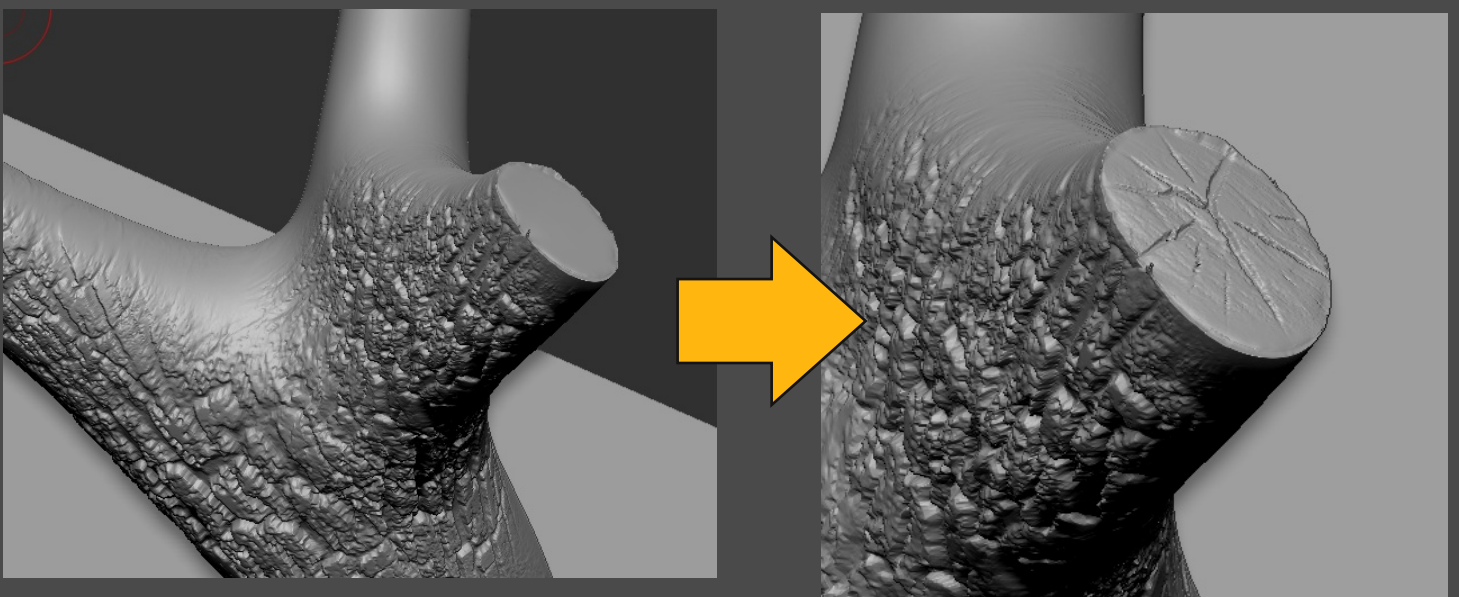
As we said before, if you prefer, you can use the brushes in the "Drag Cut", and "Drag Knot" to draw these details in a different way. They work by setting a brush size: the cut or knot will be drawn in that particular size. What you do dragging is placing the brush where you want it.

Depending on what you want to do, you may prefer this different way of using the brushes.

The other folders are the "Draw" brushes, and the VDM brushes. We will explain the VDM brushes later.

The Draw brushes are brushes with a special setting that allow you to draw the bark and details so they follow your strokes, in a natural way as if you were drawing them.

They also separate your strokes, so you won't overlap them unless you want it. That creates a much natural feeling and result in the wood, as it will vary like in the real world.

Here you can see a "Draw Crack" brush on the left and a "Draw Smooth" brush on the right applied over a sphere. The result of these brushes is completely at your will and natural, so you actually sculpt over the surface and all your strokes will be different as you can impress the direction and the strength of the brush.
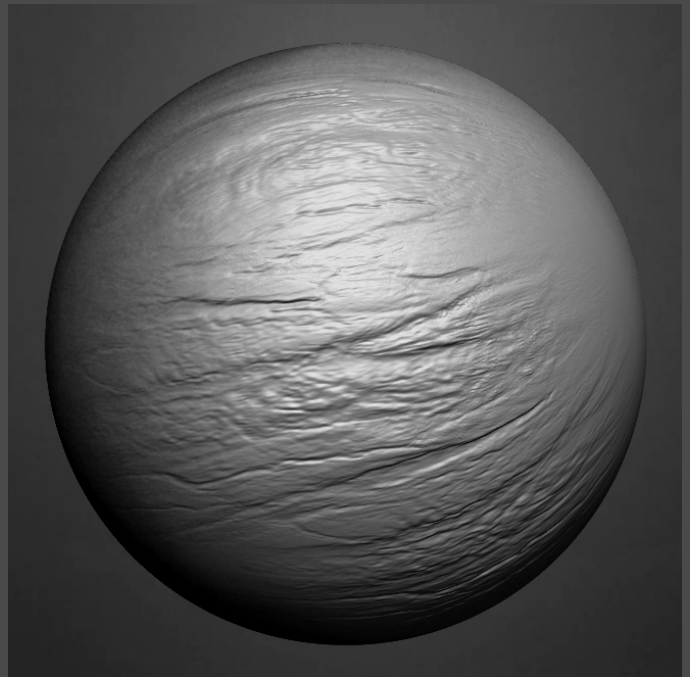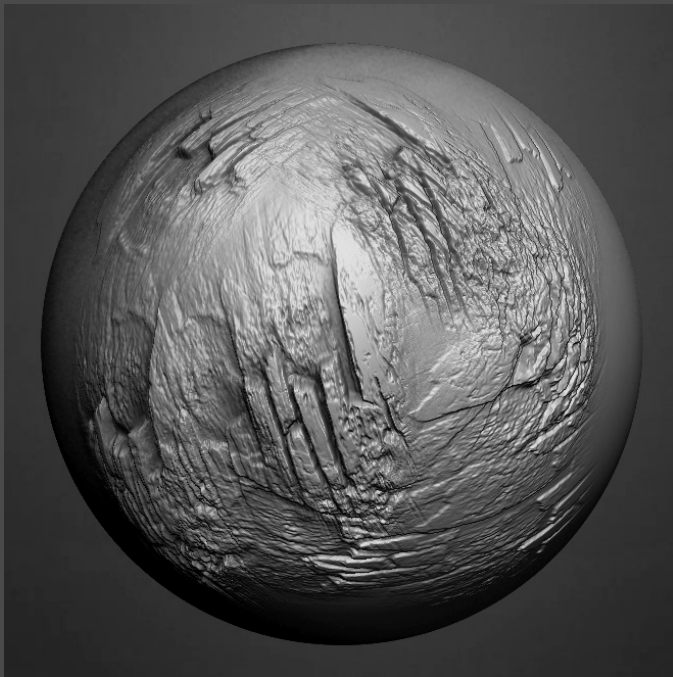
When you use the Draw brushes it is also easier to paint the detail on the branches, including the smaller ones, and simulate the flow of bark growth around the branches like in real trees.


The "VDM" folder contains a special kind of brushes. They apply both detail and volume, sculpting a shape that mixes with your geometry and at the same time adds bark, cuts, holes, and other details in the tree.

You can use them the same way as other brushes, by click and drag. The feature of the VDM brush will be added in that exact place. The more you dragg, the bigger the feature will be.

We have included VDM brushes for cracks in the wood, knots and cuts. You will notice that these really change the shape of the tree.

To prevent that they affect the opposite part of the trunk, it is better that you activate the "Backface Mask" button. It is located in the "Brush / Automasking" subpalette.
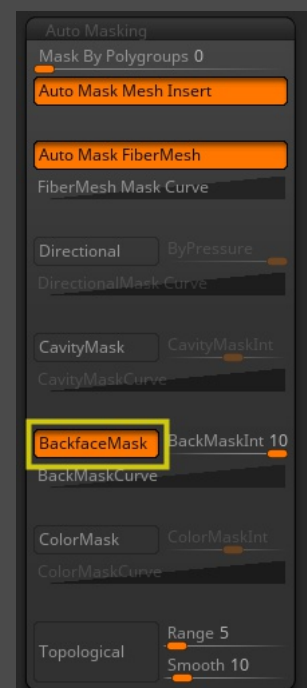
Here you can see the result of applying one of the VDM brushes to the trunk. It is usually better than you first add these details, and then add bark around it.
You can also smooth or delete the bark on that part if you do afterwards, but it's less easy.
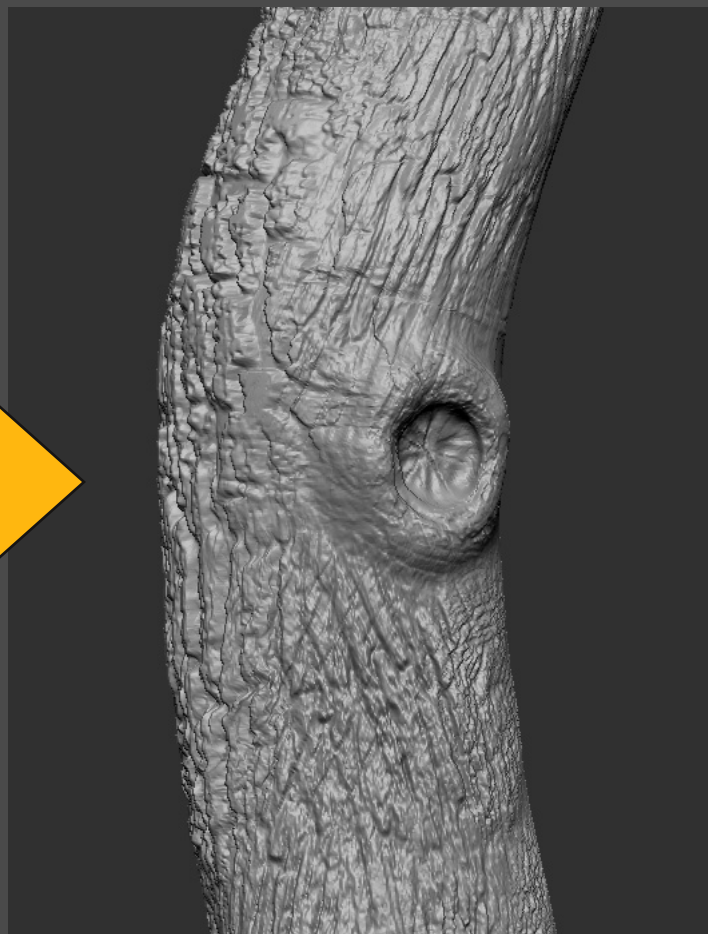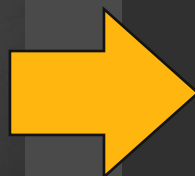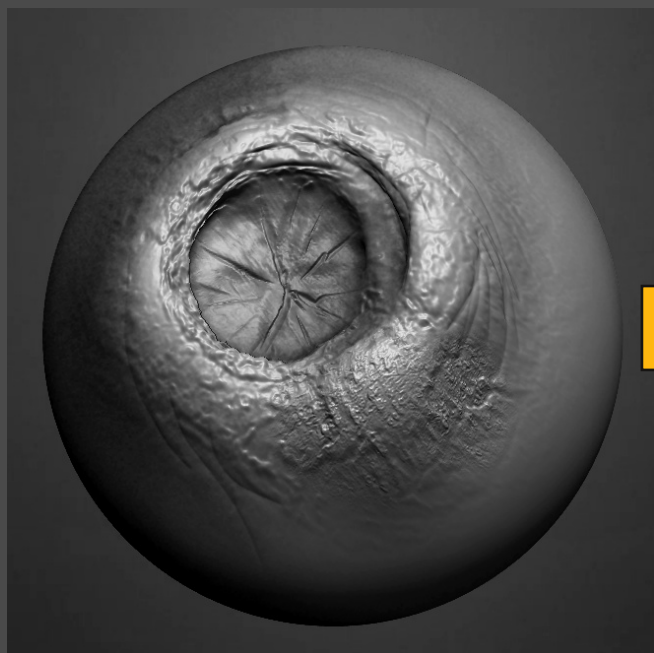
As you can see, you can create awesome trees by using our product! You can add fantastic trees to your scenes and sculptures, with complete freedom and in a fun way.

You can also use these brushes for more than trees: buildings, wood items, rustic furniture, boxes made of wood, hybrid creatures like golems of wood, and much more. It is at limitless as your imagination: they are a tool for the artist.

We hope you enjoy using our product. Thanks for your support!

- Artistic Squad

artistic-squad.artstation.com