Sasquatch Lite Grass

- Renders grass onto an object
- You can put more than one instance of Saslite on an object
- Variety of settings
- You can use the different surfaces of an object to create zones for different grass effects
- You have to do a render every time you want to see changes
Simple scene

1 object with 2 surfaces. Shadow-casting lights must be spotlights.
No grass yet…
Adding the plug-in to pixel filter

Click Scene Tab, Effects, and Image Processing.
Select Saslite from drop-down list

From the Add Pixel Filter drop-down menu, select Saslite.
Saslite pixel-filter plug-in interface

This interface places settings that hold for all instances of Saslite in this scene.

**Antialiasing** is similar to that in Layout. It has only settings of 1 and 2.

**Render Backside Fibers** can be turned on if it looks like there are fibers missing.

**Receive Lightwave Shadows** will enable Saslite to respond to shadows cast from objects.

**Self-shadowing** is crucial for creating a realistic effect.

**Cast Shadows From** is set to LW Shadow Spots so that all shadow-casting spotlights will have an effect on the fibers.
We need to apply the Saslite pixel filter to our lawn object.

With the lawn object selected, click the “Item Properties” tab.

This opens the object properties dialog box.
Click the “Add Displacement” box...

...from the drop-down menu, select Saslite
You will see that the Saslite plugin now appears in the displacement queue. This is one “instance” of Saslite being applied to the object.
The Sasquatch Lite Interface

- Applies to the entire object
- Surface name: not in use--all surfaces on object recieve these fibers.
- Bright & Hue Vary: randomly changes each hair color & brightness for a more natural look
- Diffuse, Specular and Glossiness: similar to Lightwave surface editor controls. Specular values are particularly sensitive.
- Coarseness: controls the thickness of strands
- Frizz: Changes the way a strand “wiggles”. A zero setting would make the strand perfectly straight.
- Clump Size: Regulates the size of clumps of strands. Amount of clumping is set separately.
**Fur Density**: Non-linear controls for number of fibers on the object. Doubling this value gives much more than double the amount of strands.

**Length**: Controls length of fibers as a percentage of the size of the object. This setting is partly randomized and is also non-linear.

**Drooping**: Dictates how much fibers bend downward with gravity.

**Clumping**: Sets the number of fibers that occur in a group. *Clumping size* controls how wide the clumps are.

**Comb X, Y, Z**: Adds a bias direction which the fibers lean.

**Save Settings**

**Load Saved Settings**
Rendering of first instance of Saslite.

Looks OKAY…but it’s a little BORING!
Adding another instance of Saslite to the object properties

You can add as many instances of Saslite to an object as you want. You can “layer” the instances to create a variety of grass types with a single object. Here we are adding some subtle variations to our lawn.
Small window view
Second Instance of Saslite

- Color changed
- Fur density much less
- Longer strands
- Less specular
- Less Frizz
- Much coarser
- Larger clump size
- More clumping
- Everything else is pretty much the same
Okay, it's looking better.
Now our field has some pale strands sticking out—maybe some of last year’s dead grass.

But wait…there’s more…

There’s STILL something missing…I think we need some really tall grass somewhere…BUT WHERE??
To do this nifty trick, we get to apply a third instance of Saslite to the object, yet apply it to a specific surface, this time. To do so, we must:
We need to yet again add another instance of Saslite to the object properties of the “lawn” object...
...and then open the new Saslite window...
Instance #3

To make this work properly, we have to apply the “Apply fur only to named surface” operation to every instance of Saslite on the object. We have to re-open those instances of Saslite, select the correct box, and name the surface being acted upon. In the other two instances, you have to type in “lawn” in the surface name box, because that’s what the name of the non-long grass area is named.

Here, we select “named surface” to indicate where this new instance is going to be applied. Below, we have to type (correctly) the surface name we want. We’re going to apply this Saslite to the “patches” surface. Then we can make our changes. Note that the color is different, Density is set to 30% and Length to 58%. Coarseness is also set to a thick 35%.
All 3 instances of SasLite need to be set for “Apply only to names surfaces”, and the Surface Name field must be filled in with the surface being acted upon.
That’s more like it!