

3ds Max Hair and Fur Modifier

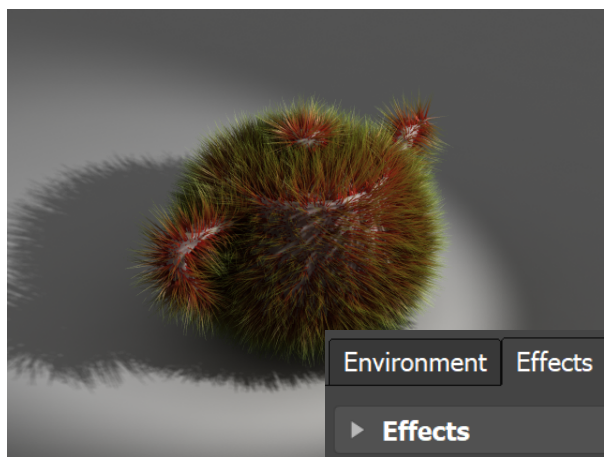
This page gives information on using the Max Hair and Fur Modifier and rendering the results within V-Ray.

Overview

As of 3ds Max 2010, V-Ray supports native rendering of the 3ds Max **Hair and Fur** world-space modifier.

If you use 3ds Max Design, the program might terminate unexpectedly when attempting to render the results of the **Hair and Fur** modifier with V-Ray. To resolve the issue, go to Customize menu > Custom Defaults Switcher and select a non-DesignVIZ preset (such as **MAX.vray**). Restart 3ds Max for the new settings to take effect. After restarting 3ds Max, you should be able to render the Hair and Fur modifier with V-Ray.

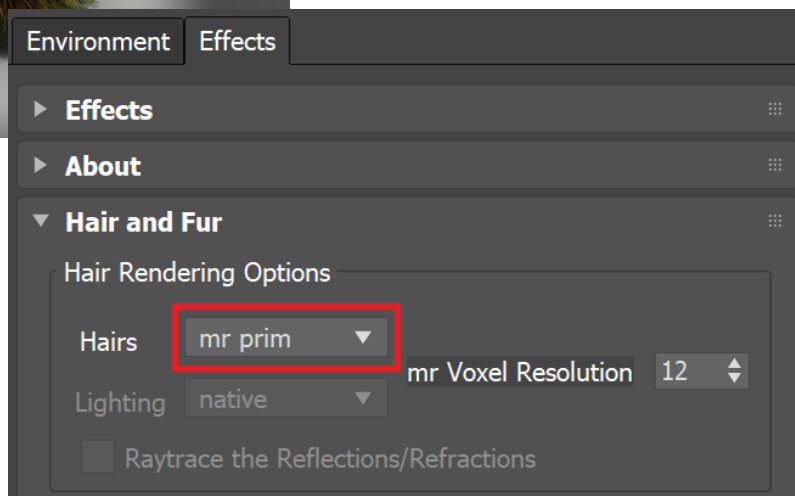
It is strongly recommended to use hair materials for hair-based objects used for simulating hairs.



Tips and Tricks

Here are some suggestions on how to make the implementation work best.

To enable native rendering of the Hair and Fur modifier, in the **Environment and Effects** dialog under the **Effects** tab, select the **mr prim** option for the **Hairs** parameter in the **Hair and Fur** rollout:



In order to render the hair geometry with three-dimensional motion blur, set the motion blur mode for the hair source to **Object** in the **Object Properties** window:

Object Properties
?
X

General
Adv. Lighting
User Defined

Object Information

Name:
Dimensions: X: 939.298 Y: 860.971 Z: 148.725
Material Name: None
Layer: 0 (default)
Vertices: 8
Faces: 12
Parent: Scene Root
Num. Children: 0
In Group/Assembly: None

Interactivity

☐ Hide
☐ Freeze

Display Properties

☐ See-Through
☐ Display as Box
☐ Backface Cull
☒ Edges Only
☐ Vertex Ticks
☐ Motion Path
☐ Ignore Extents
☒ Show Frozen in Gray
☐ Never Degrade
☐ Vertex Channel Display
Vertex Color
Shaded
Map Channel: 1

Rendering Control

Visibility: 1.0
By Object
☒ Renderable
☒ Inherit Visibility
☒ Visible to Camera
☒ Visible to Reflection/Refraction
☒ Receive Shadows
☒ Cast Shadows
☒ Apply Atmospheric
☐ Render Occluded Objects

G-Buffer

Object ID: 0

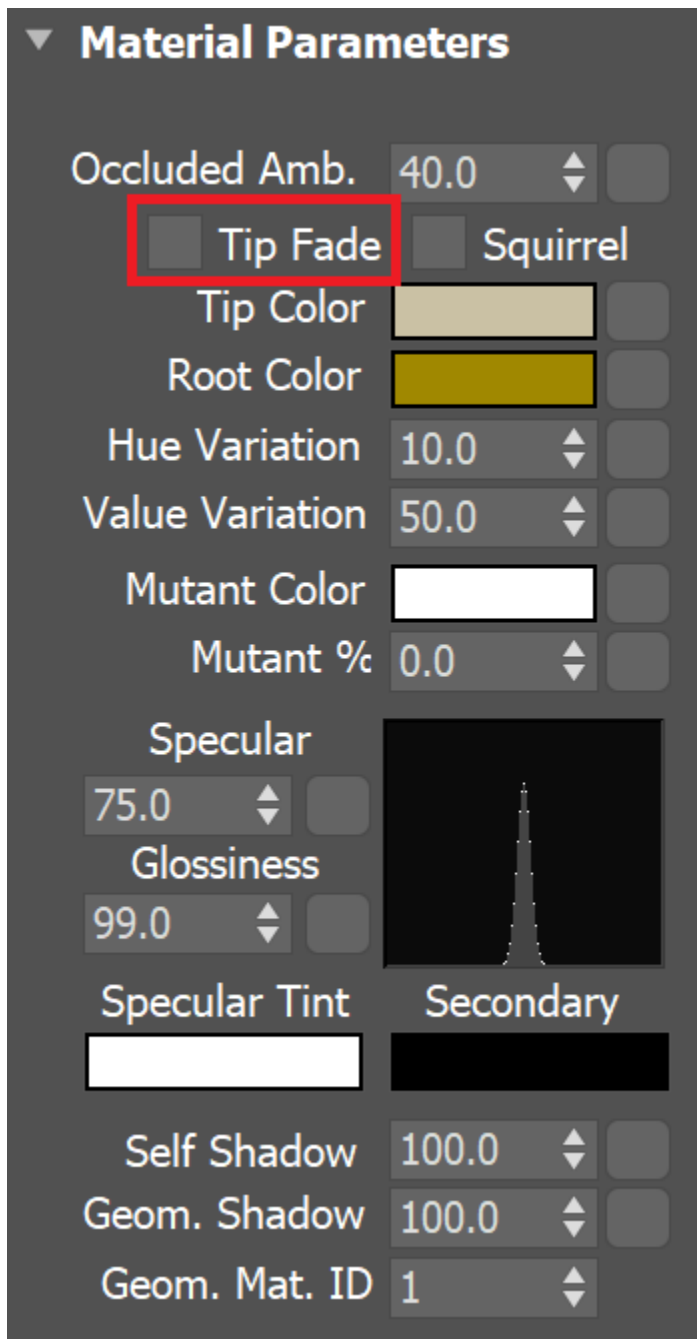
Motion Blur

Multiplier: 1.0
By Object
☒ Enabled
☐ None
☒ Object
☐ Image

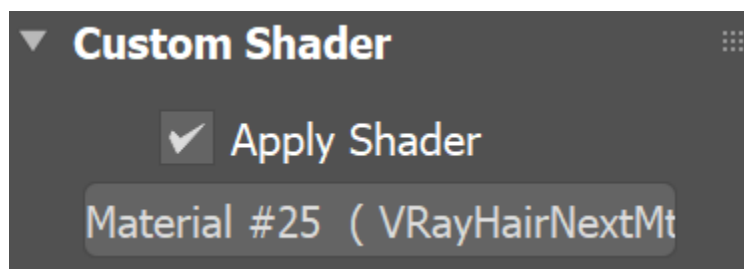
OK
Cancel

Note: The duration and position of the motion blur interval for the Hair and Fur effect are controlled from the Hair and Fur render effect, rather than from the respective V-Ray settings.

To speed up the rendering of the hair, you can turn off the **Tip Fade** parameter in the **Material Parameters** rollout of the Hair and Fur modifier. V-Ray works fine with this option on, but render times might be increased substantially because of the semi-transparent tips of the hairs:



To apply a custom V-Ray material to the hair, enable the **Apply mr Shader** option in the **mr Parameters** rollout and choose the material:



Notes

- For 3ds Max 2015 and newer: In order to have the correct mapping of bitmaps used for shading hair and fur, the Hairs mode in the Effects panel should be set to geometry instead of mr prim. In this case, the shading material must also be applied to the base geometry. This allows the hair material to properly receive the mapping.