Rendering Blood in Lightwave

By: Larry Fodge
Blood Shape: Clip map

- Blood is a very irregular shape, and rendering it with normal polygons would be very difficult. As such, we have to use a clip map. To make the clip map, use aura or photoshop to create the shape of the puddle in pure white on a black background.
Also, you will want to create a texture map as well for applying transparency and reflection textures later. To do that, erase around the edges of the clip map.
Applying the Clip Map

- To create the general shape, create a square, 0 thickness polygon and subpatch it, then load it into lightwave. Click on the polygon, hit properties, and then head to render and clip map. Assign our clip map as a planar projection along the Y axis, or whatever axis you are using.
Blood is relatively viscous, so we should apply a displacement map to help make it seem a little less flat. To do that, go to the item properties, deform, displacement map and apply a procedural texture, underwater displacement map. Change the texture value to about .08.
Texture Settings

In order for the blood to look correct, several of the values have to be set. These values are specularity and glossiness. Furthermore, textures have to be applied to the reflection and transparency fields.
Apply the texture map to the transparency and reflection fields.
**Set up**

- Place the puddle somewhere in a well lit scene, and turn on ray tracing, then render it. It should come out something like this.
Information from: Realistic Puddles, by Erik Nichols, Tutorial.