SoCal ROC
Career Technical Education

A cool effect for a swamp or enchanted forest level is to use an animated fog layer.

NOTE: For animated fog to work best, you must turn "ON" Global Illumination in World Properties.

1. Create your fog texture in PhotoShop. Be sure to set it in RGB mode and save as a Targa file.

2. In UDK create a new material using your targa texture (as you learned to do in Video Game Design I)

3. Set Blend Mode to Additive.

4. Open a simple static mesh "Plane" from the asset browser.

Be sure to turn off the all the collision factors on the mesh.

5. Apply the new material to the plane.

Unreal Material Editor: Fog-animated.Materials.New-Fog-Material

Base pass shader with light map: 35 instruction:
Point light shader: 41 instruction:
Vertex shader: 121 instruction:
Texture sampler: 1/12

PreviewMaterial_5

Diffuse
DiffusePower
Emissive
Specular
SpecularPower
Opacity
OpacityMask
Distortion
TransmissionMask
TransmissionColor
Normal
CustomLighting
CustomLightingDiffuse
AnisotropicDirection
WorldPositionOffset
WorldDisplacement
TessellationMultiplier
SubsurfaceInscatteringColor
SubsurfaceAbsorptionColor
SubsurfaceScatteringRadius

Assigns "color" and "density" to the fog
50,50,50

Multiply

Texture Sample

Links the two copies of the textures to the Opacity channel

Texture Sample

Using two copies of the texture adds complexity to the fog effect.

Animates the texture move across the plane. Play with the numbers to find the right speed.

Panner
Coordinate
Time

Material Expressions: Fog-animated.Materials.New-Fog-Material

WorldPosOffset
CameraWorldPosition
ConstantClamp
FoliageImpulseDirection
FoliageNormalizedRotationAxisAndAngle
LandscapeLayerBlend
MeshEmitterDynamicParameter
MeshEmitterVertexColor
ObjectOrientation
ObjectRadius
ObjectWorldPosition
Panner
Rotator

Material Function Library

WorldCoordinate3Way
VectorOps
Fresnel
World Position Offset
CameraOffset
ObjectPivotPoint
ObjectScale
PivotAxis
RotateAboutWorldAxis_cheap
SimpleGrassWind
SplineThicken
Wind

Properties: Fog-animated.Materials.New-Fog-Material

▶ Physical Material
▼ Material
Opacity Mask Clip Value   0.333300
Blend Mode   BLEND_Additive
Lighting Model   MLM_Phong
Two Sided
▶ Misc
▶ D3D11
▼ Translucency