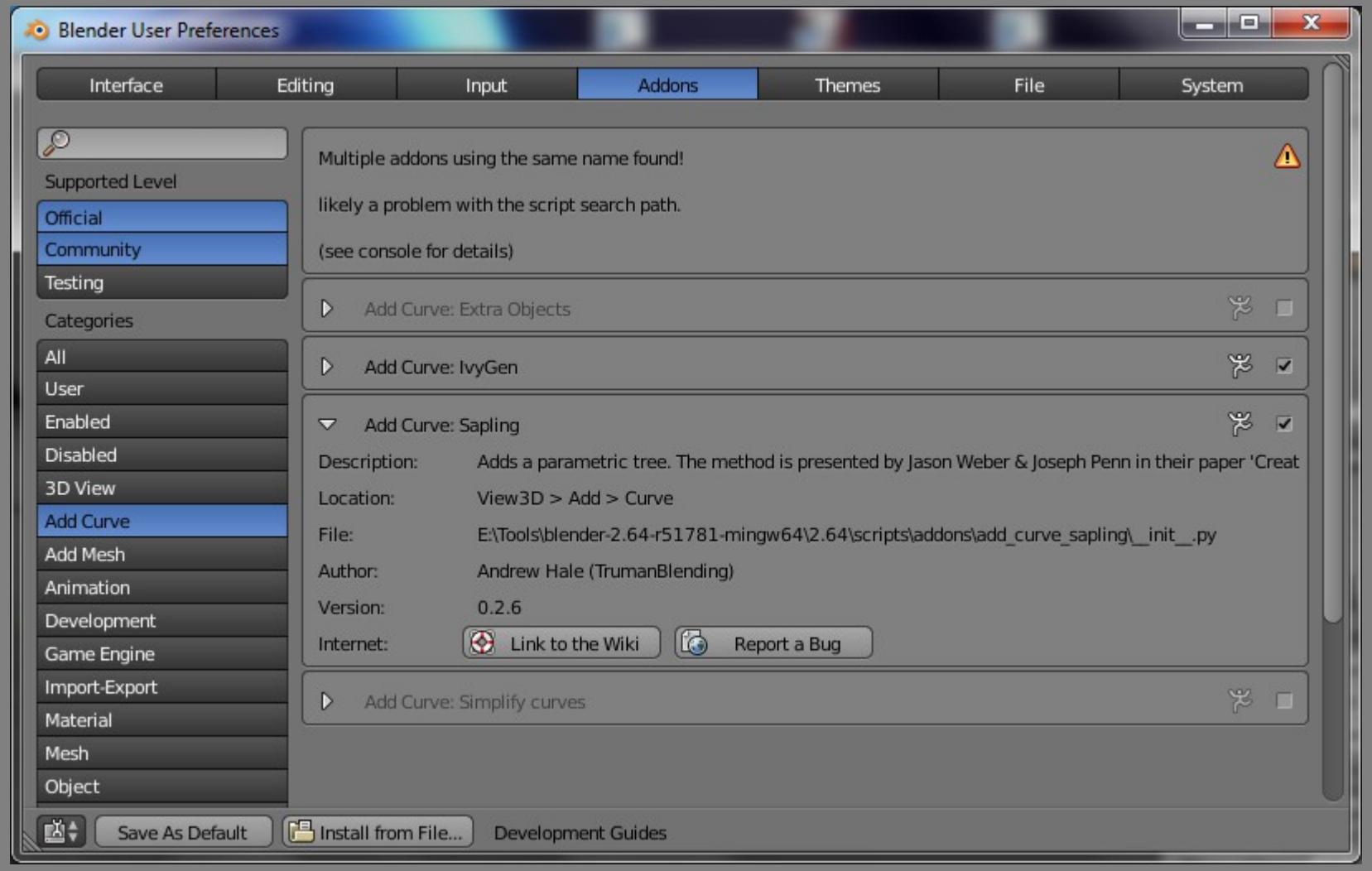
[Quick Tip]
Combining the sapling tree generator add on with the tree from curves script

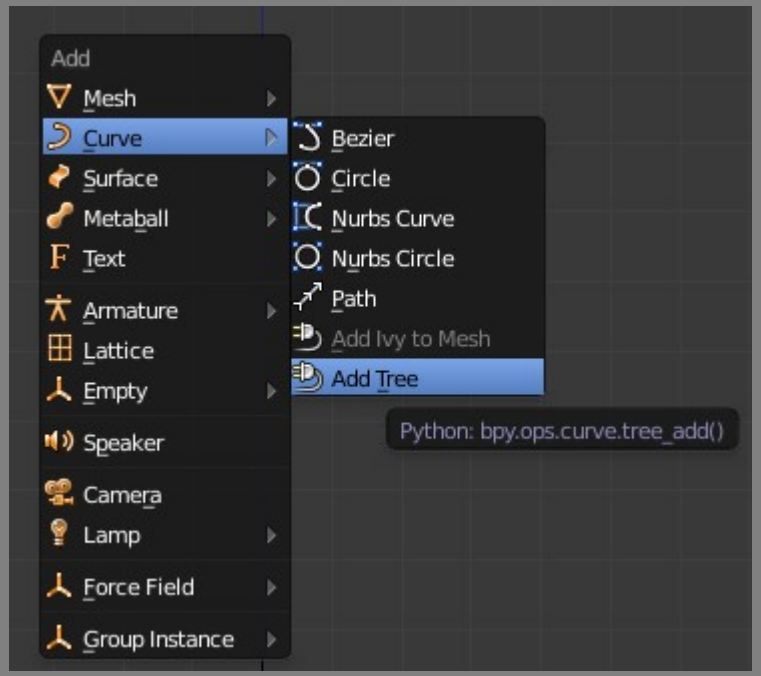
Hi, my name is Johannes Haller and in this quick tip i will show you how to combine the „sapling“ tree generator add on in blender 2.64 with the „tree from curves“ script in blender 2.49b for easy to texture trees.

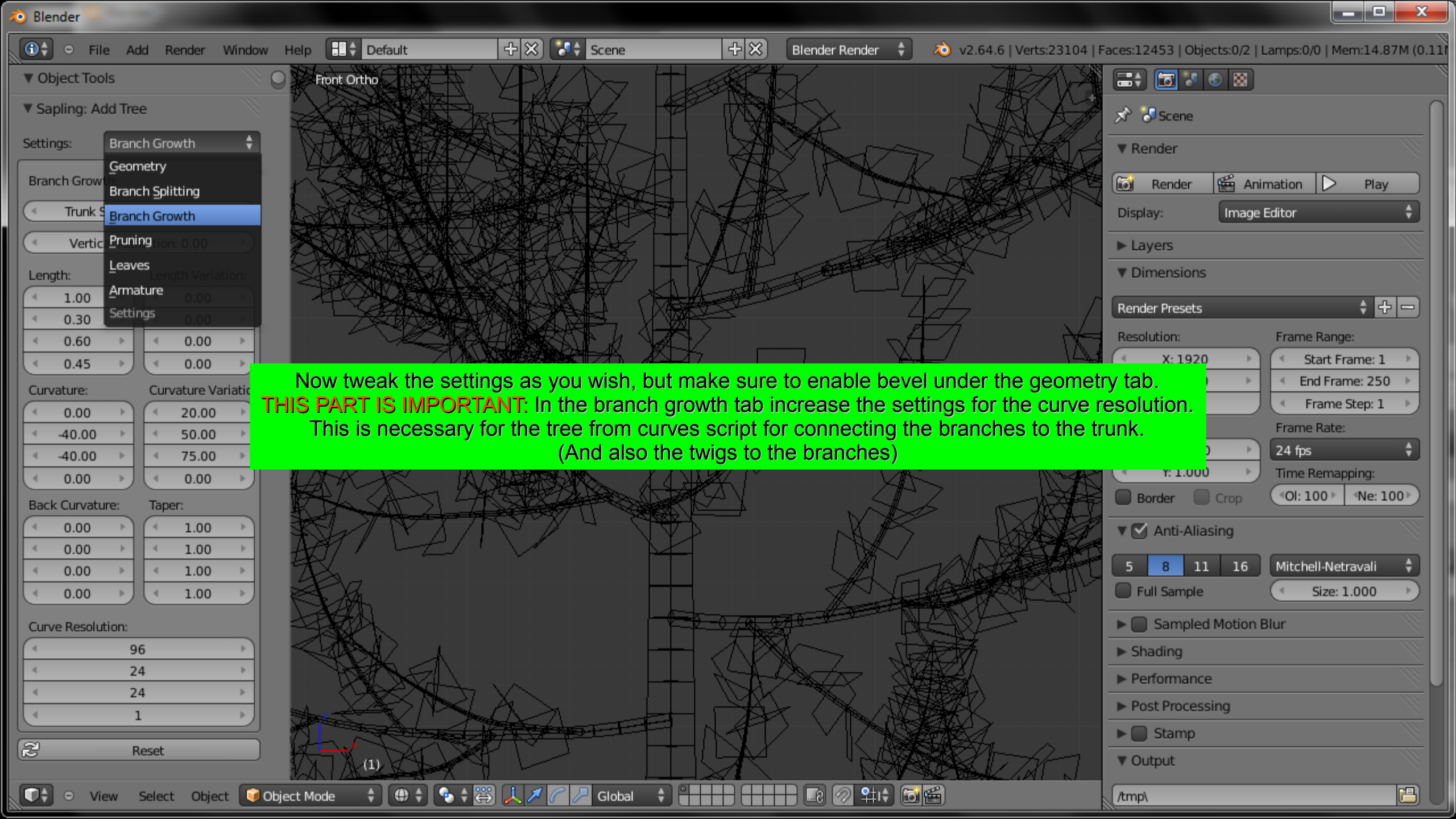
Wath you need: blender 2.49b (**http://download.blender.org/release/Blender2.49b/**)
and blender 2.64 (i recommend the newest build from **http://builder.blender.org/download/**)

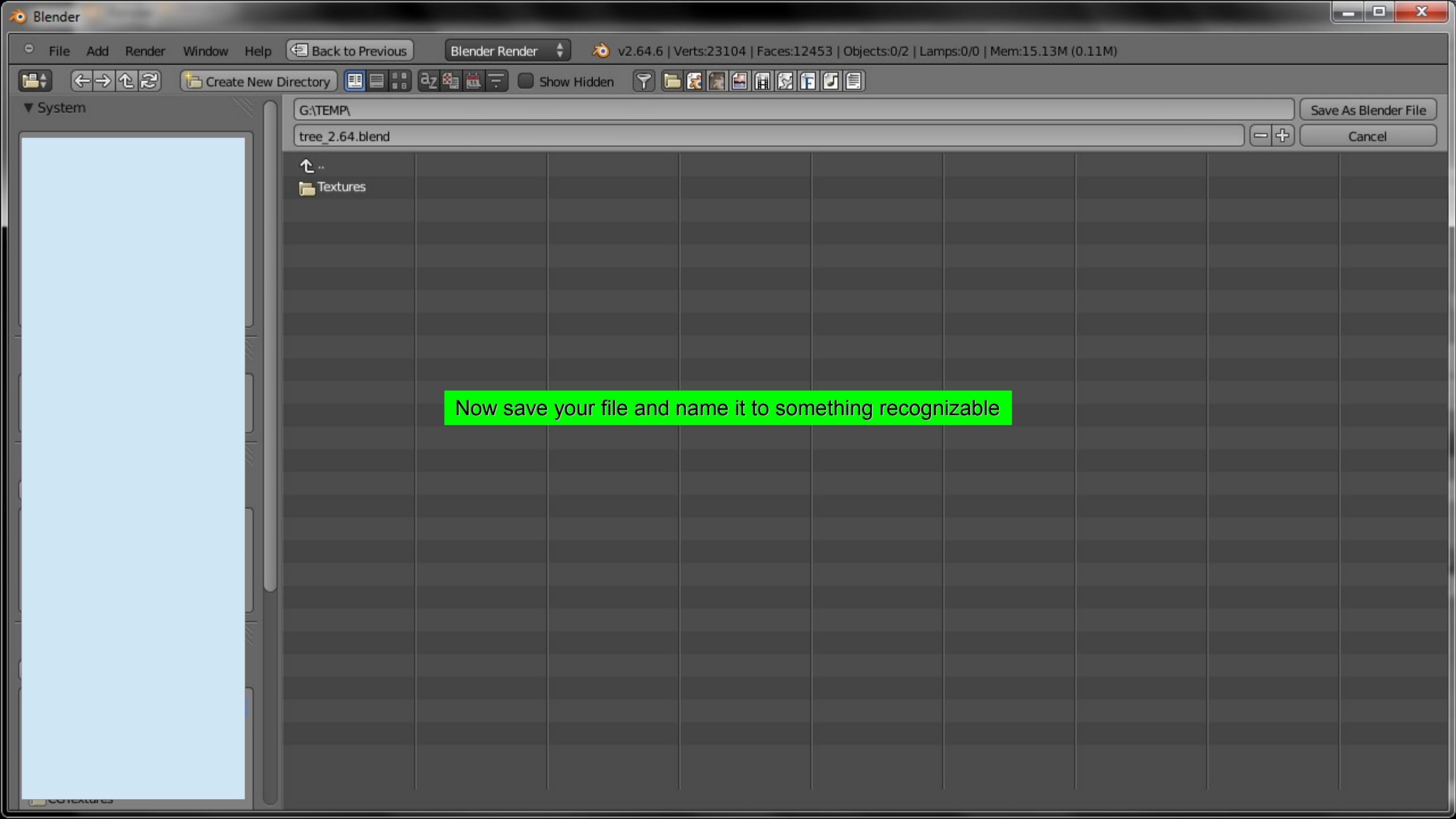
Difficulty: Intermediate (since this is nit a in-depth tutorial i assume you have worked with these two add on's before)
If not look for tutorials about sapling and tree from curves)

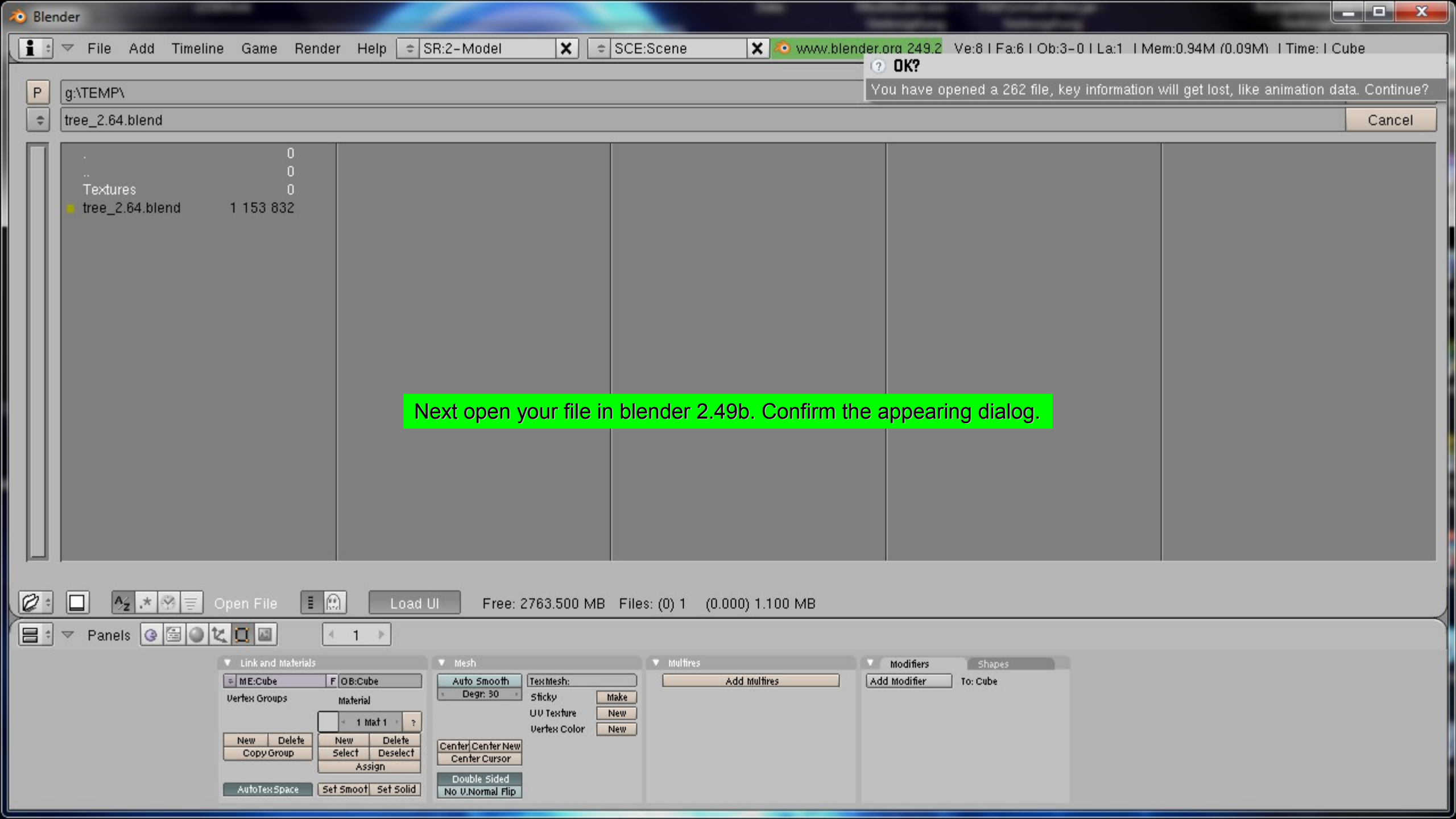
First make sure you enabled the sapling add on under user preferences (ctrl+alt+u)
Then in 3D view schift+a → curve → add tree.

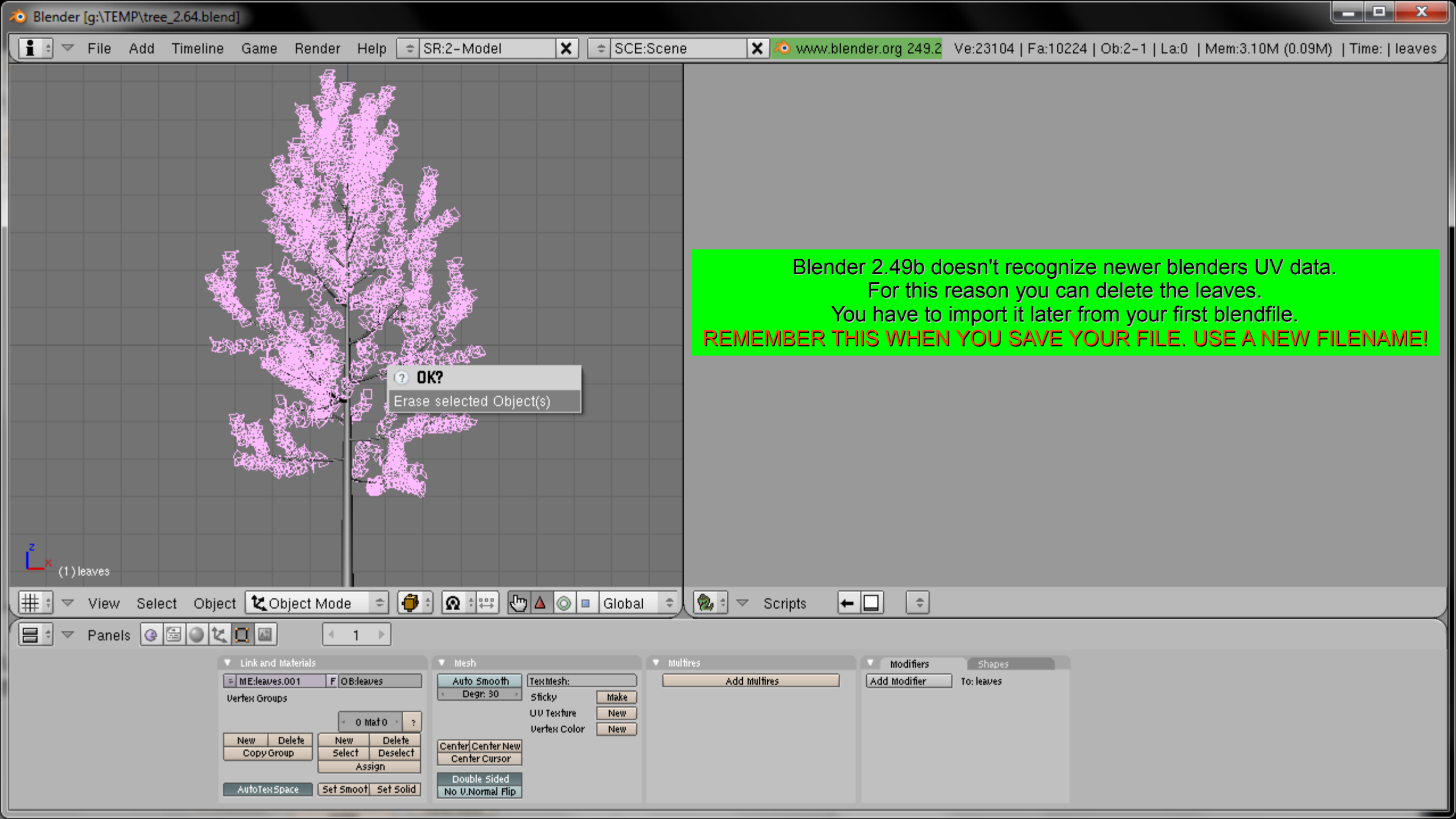


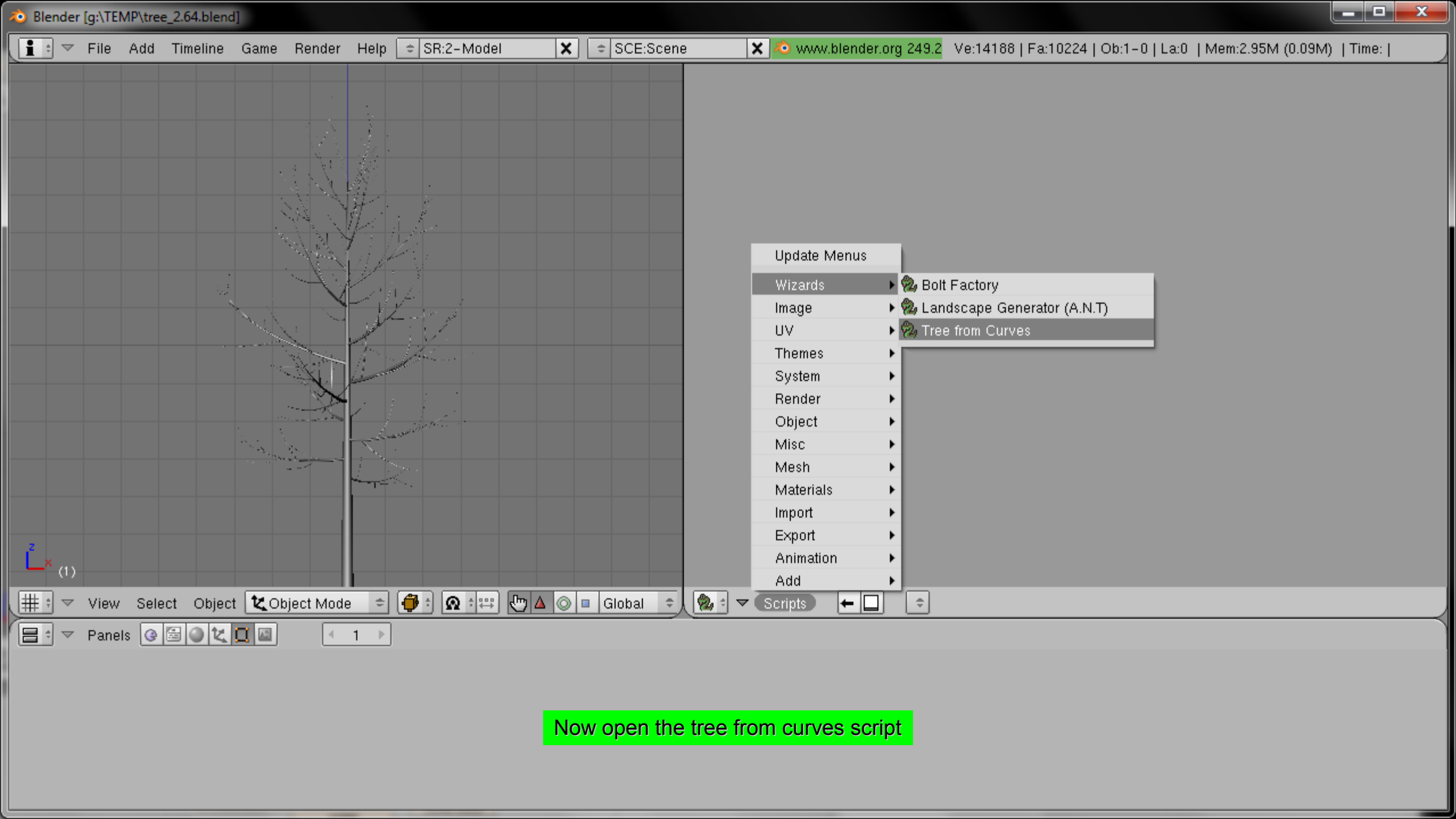


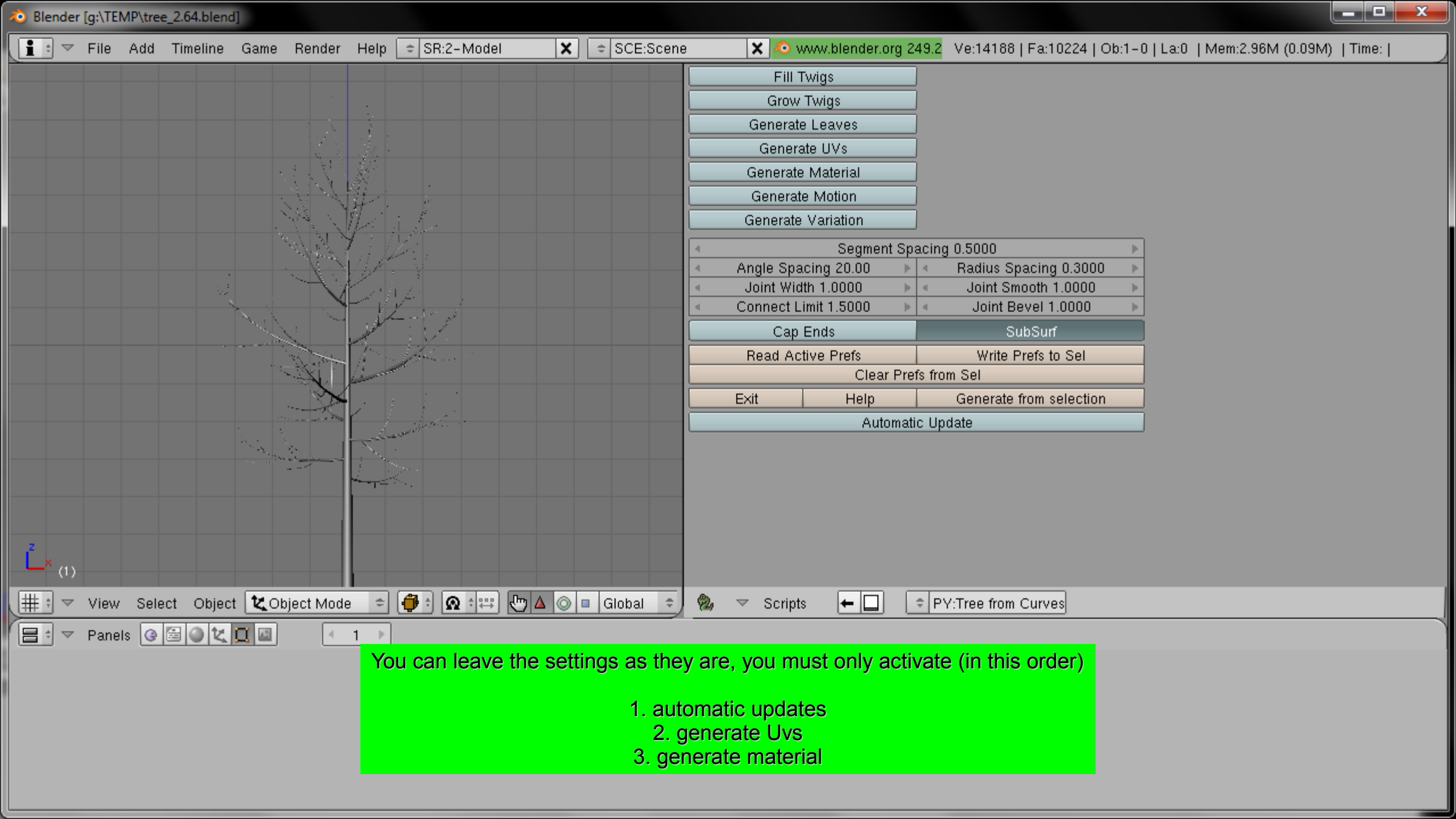

Blender
File Add Render Window Help
Default
Scene
Blender Render
v2.64.6 | Verts:23104 | Faces:12453 | Objects:0/2 | Lamps:0/0 | Mem:14.87M (0.11
Object Tools
Sapling: Add Tree
Settings:
Branch Growth
Geometry
Branch Splitting
Branch Growth
Pruning
Leaves
Armature
Settings
Length:
Curvature:
Curvature Variatio
Back Curvature:
Taper:
Curve Resolution:
Reset
Front Ortho
(1)
Now tweak the settings as you wish, but make sure to enable bevel under the geometry tab.
THIS PART IS IMPORTANT: In the branch growth tab increase the settings for the curve resolution.
This is necessary for the tree from curves script for connecting the branches to the trunk.
(And also the twigs to the branches)
Scene
Render
Render
Animation
Play
Display:
Image Editor
Layers
Dimensions
Render Presets
Resolution:
Frame Range:
Start Frame: 1
End Frame: 250
Frame Step: 1
Frame Rate:
24 fps
Time Remapping:
Border
Crop
Anti-Aliasing
Mitchell-Netravali
Full Sample
Size: 1.000
Sampled Motion Blur
Shading
Performance
Post Processing
Stamp
Output
/tmp\
View Select Object
Object Mode
Global

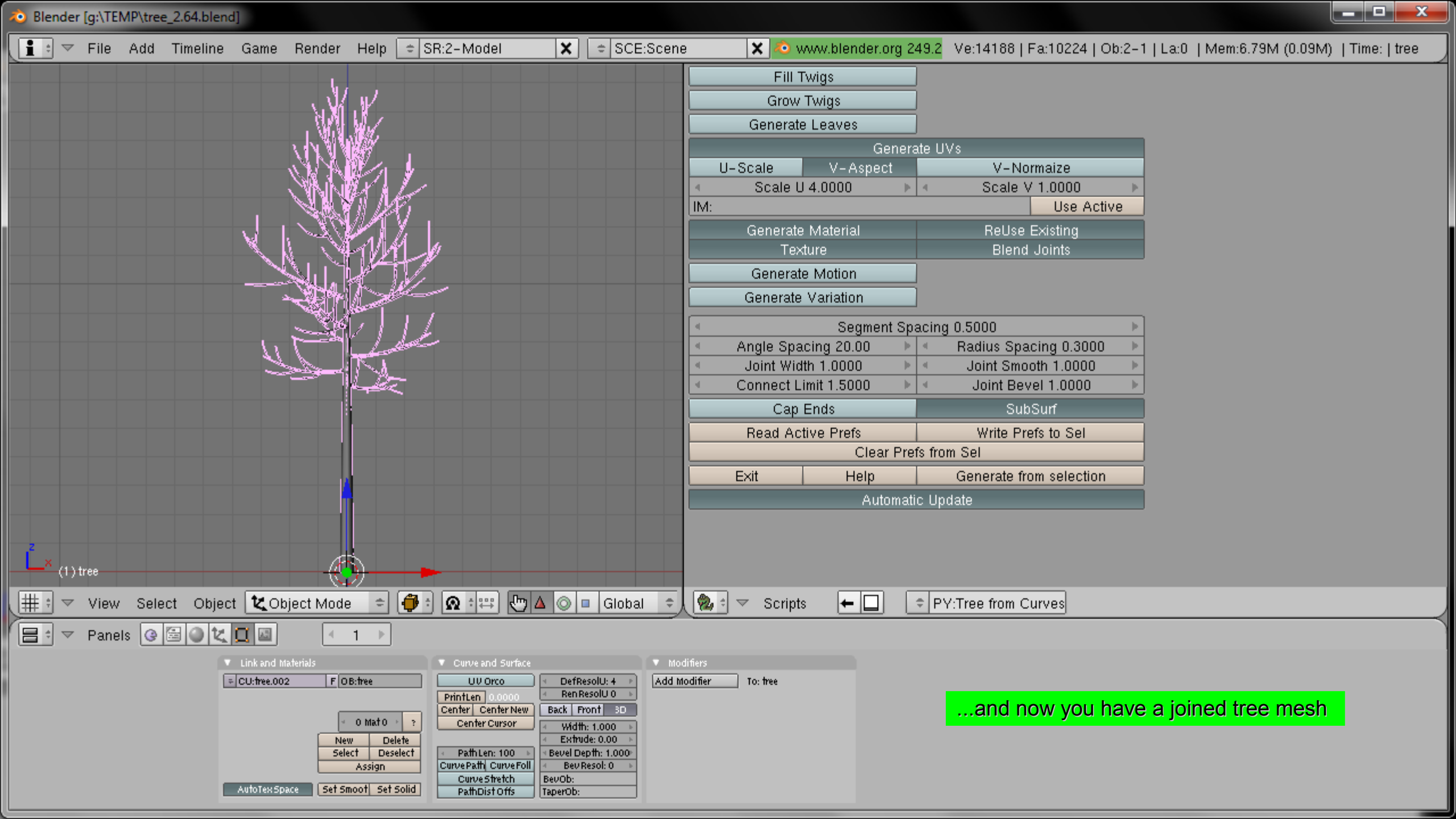

Blender
File
Add
Render
Window
Help
Back to Previous
Blender Render
v2.64.6 | Verts:23104 | Faces:12453 | Objects:0/2 | Lamps:0/0 | Mem:15.13M (0.11M)
Create New Directory
Show Hidden
System
G:\TEMP\
tree_2.64.blend
Save As Blender File
Cancel
..
Textures
Now save your file and name it to something recognizable

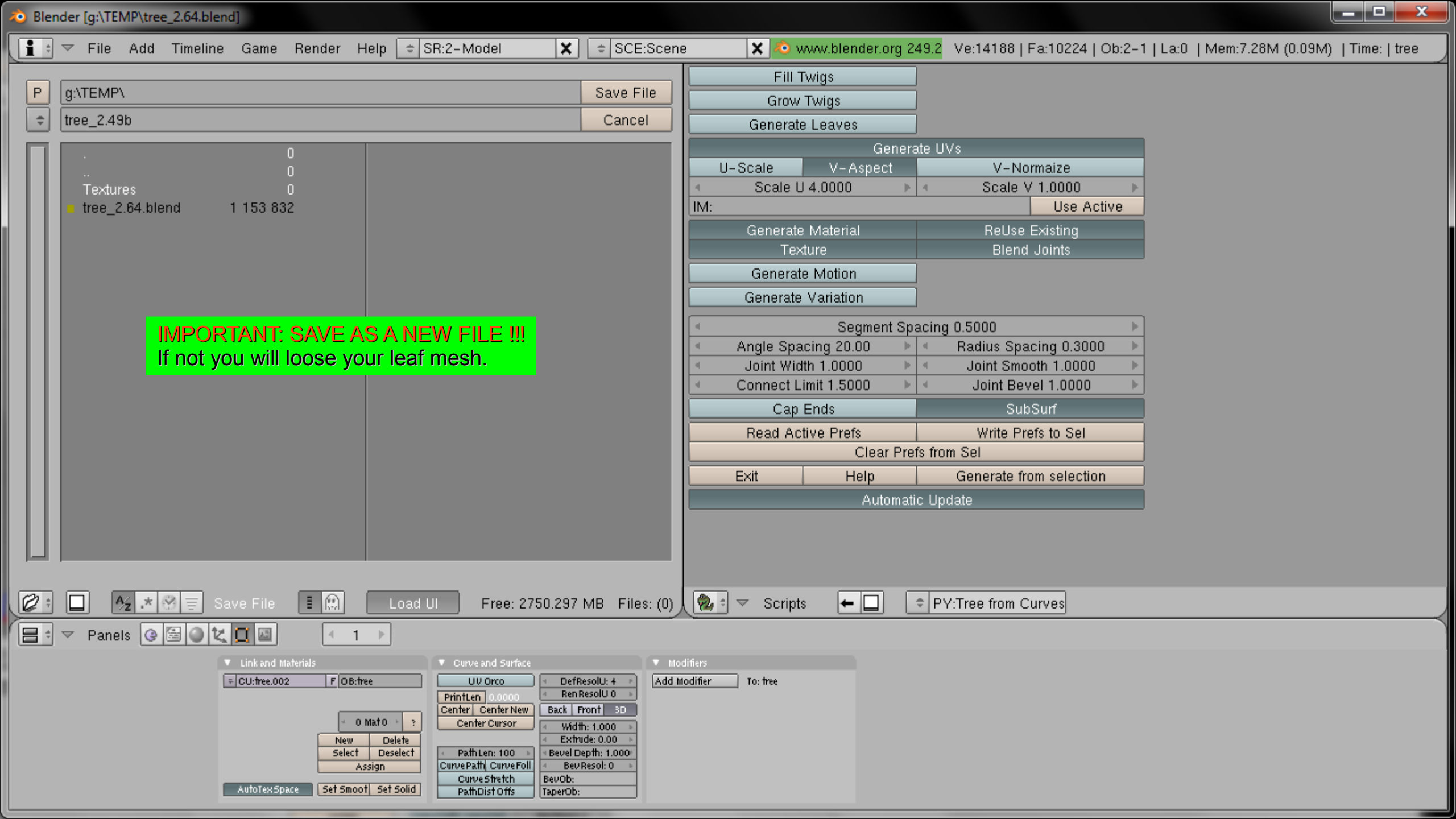

Blender
File Add Timeline Game Render Help SR:2-Model SCE:Scene www.blender.org 249.2 Ve:8 I Fa:6 I Ob:3-0 I La:1 I Mem:0.94M (0.09M) I Time: I Cube
OK?
You have opened a 262 file, key information will get lost, like animation data. Continue?
P g:\TEMP\
tree_2.64.blend
Cancel
. 0
.. 0
Textures 0
tree_2.64.blend 1 153 832
Next open your file in blender 2.49b. Confirm the appearing dialog.
Open File
Load UI
Free: 2763.500 MB Files: (0) 1 (0.000) 1.100 MB
Panels
1
Link and Materials
ME:Cube
OB:Cube
Vertex Groups
Material
1 Mat 1
New
Delete
Copy Group
Select
Deselect
Assign
AutoTexSpace
Set Smoot
Set Solid
Mesh
Auto Smooth
Degr: 30
TexMesh:
Sticky
Make
UV Texture
New
Vertex Color
New
Center
Center New
Center Cursor
Double Sided
No V.Normal Flip
Multires
Add Multires
Modifiers
Shapes
Add Modifier
To: Cube

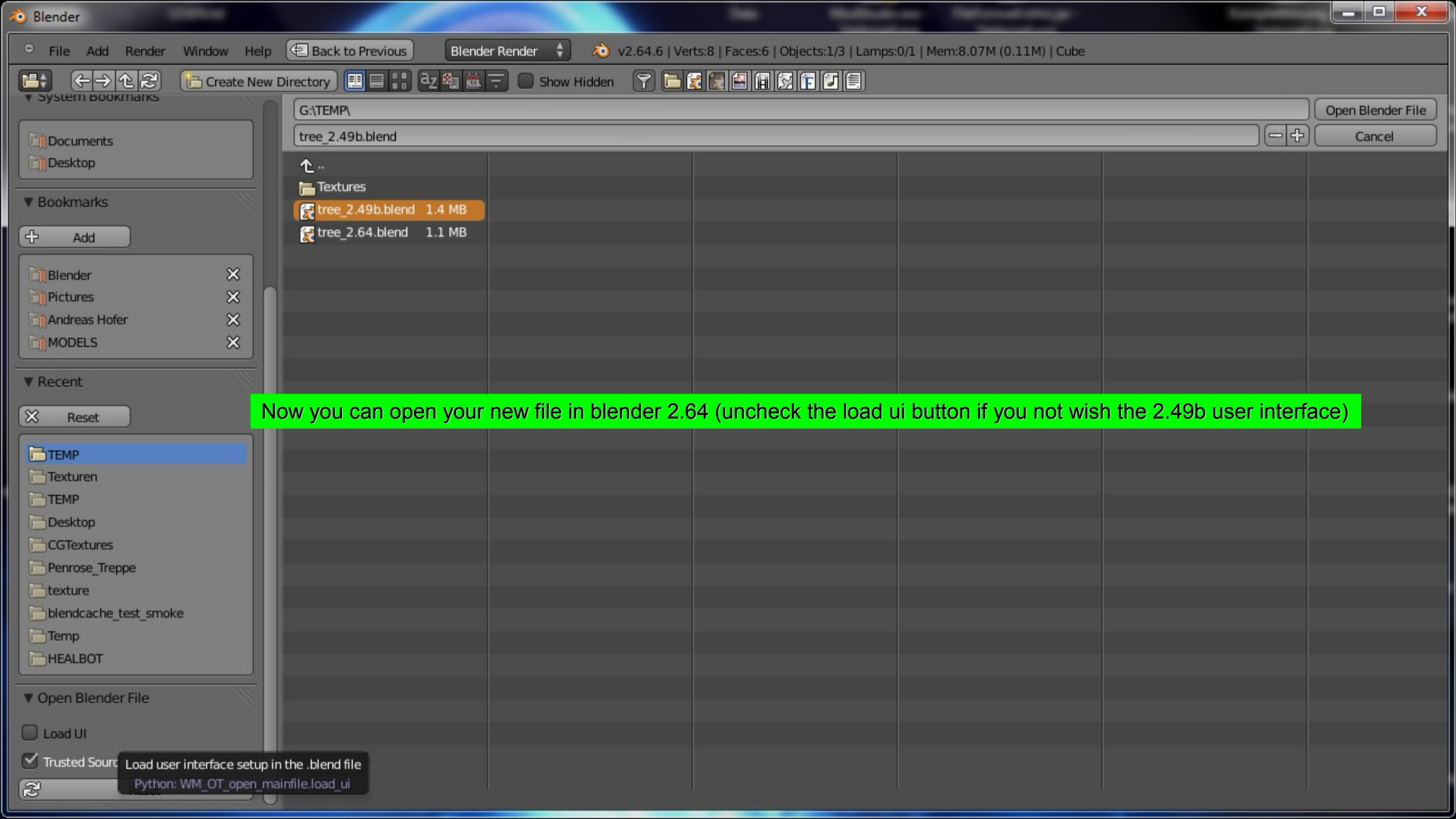

Blender [g:\TEMP\tree_2.64.blend]
File Add Timeline Game Render Help
SR:2-Model
SCE:Scene
www.blender.org 249.2
Ve:23104 | Fa:10224 | Ob:2-1 | La:0 | Mem:3.10M (0.09M) | Time: | leaves
OK?
Erase selected Object(s)
(1) leaves
Blender 2.49b doesn't recognize newer blenders UV data.
For this reason you can delete the leaves.
You have to import it later from your first blendfile.
REMEMBER THIS WHEN YOU SAVE YOUR FILE. USE A NEW FILENAME!
View Select Object Object Mode Global
Scripts
Panels
Link and Materials
ME:leaves.001
OB:leaves
Vertex Groups
0 Mat 0
New Delete
Copy Group
New Delete
Select Deselect
Assign
AutoTexSpace
Set Smoot Set Solid
Mesh
Auto Smooth
Degr: 30
TexMesh:
Sticky Make
UV Texture New
Vertex Color New
Center Center New
Center Cursor
Double Sided
No V.Normal Flip
Multires
Add Multires
Modifiers
Shapes
Add Modifier
To: leaves

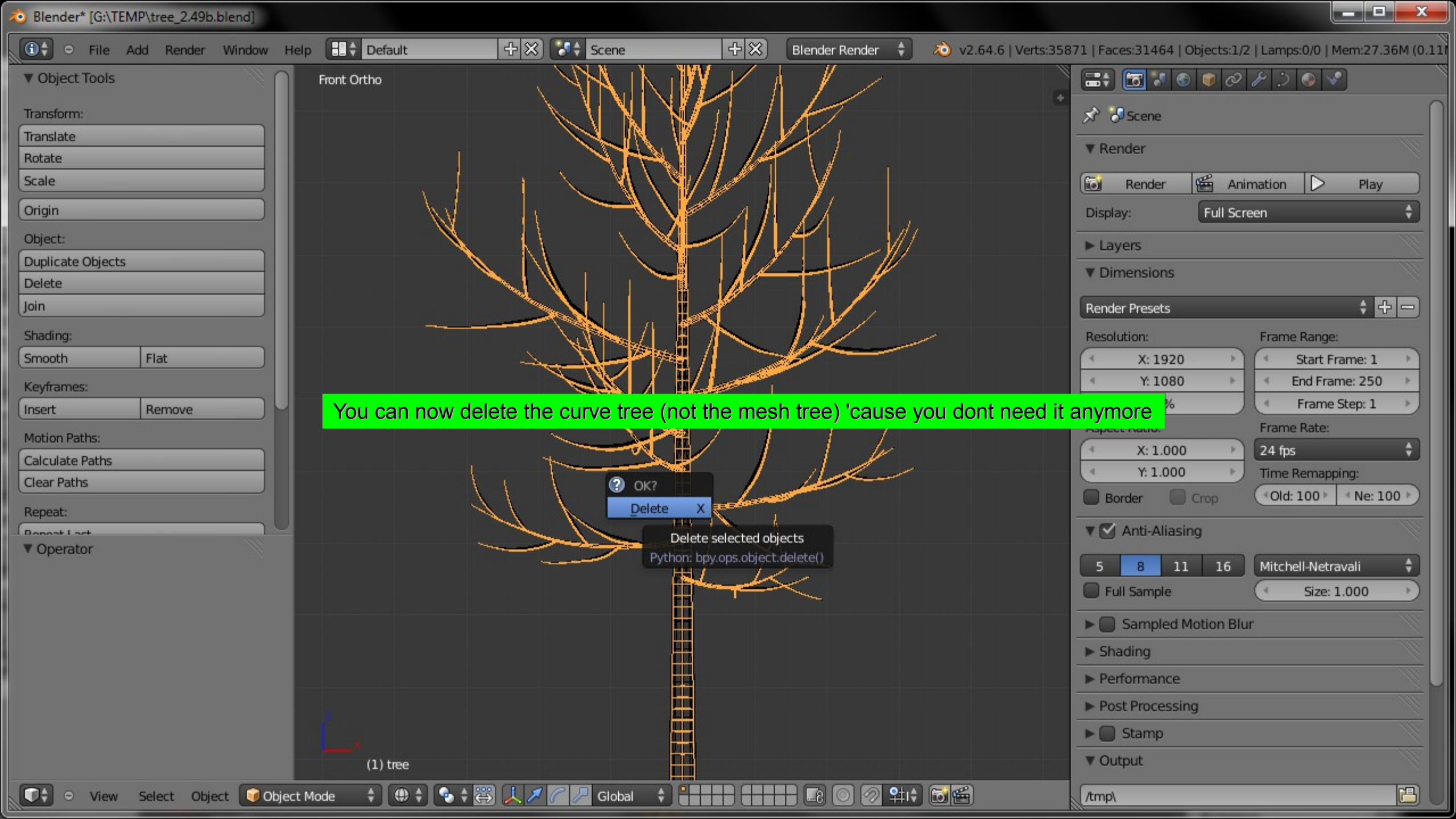

Blender [g:\TEMP\tree_2.64.blend]
File Add Timeline Game Render Help
SR:2-Model
SCE:Scene
www.blender.org 249.2
Ve:14188 | Fa:10224 | Ob:1-0 | La:0 | Mem:2.95M (0.09M) | Time: |
Update Menus
Wizards
Image
UV
Themes
System
Render
Object
Misc
Mesh
Materials
Import
Export
Animation
Add
Bolt Factory
Landscape Generator (A.N.T)
Tree from Curves
View Select Object
Object Mode
Global
Scripts
Panels
1
Now open the tree from curves script

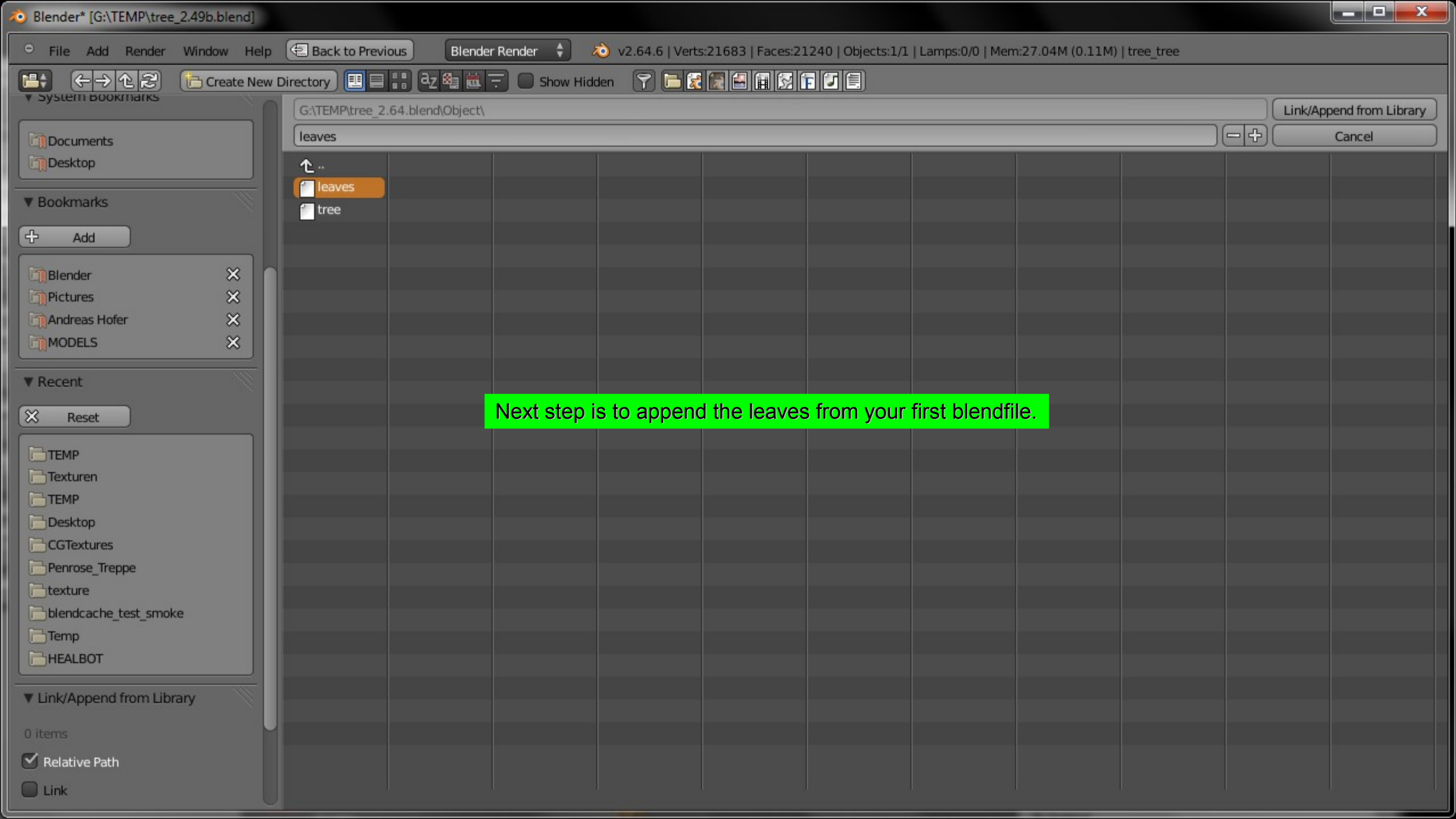

Blender [g:\TEMP\tree_2.64.blend]
File Add Timeline Game Render Help
SR:2-Model
SCE:Scene
www.blender.org 249.2
Ve:14188 | Fa:10224 | Ob:1-0 | La:0 | Mem:2.96M (0.09M) | Time: |
Fill Twigs
Grow Twigs
Generate Leaves
Generate UVs
Generate Material
Generate Motion
Generate Variation
Segment Spacing 0.5000
Angle Spacing 20.00
Radius Spacing 0.3000
Joint Width 1.0000
Joint Smooth 1.0000
Connect Limit 1.5000
Joint Bevel 1.0000
Cap Ends
SubSurf
Read Active Prefs
Write Prefs to Sel
Clear Prefs from Sel
Exit
Help
Generate from selection
Automatic Update
(1)
View Select Object
Object Mode
Global
Scripts
PY:Tree from Curves
Panels
1
You can leave the settings as they are, you must only activate (in this order)
1. automatic updates
2. generate Uvs
3. generate material

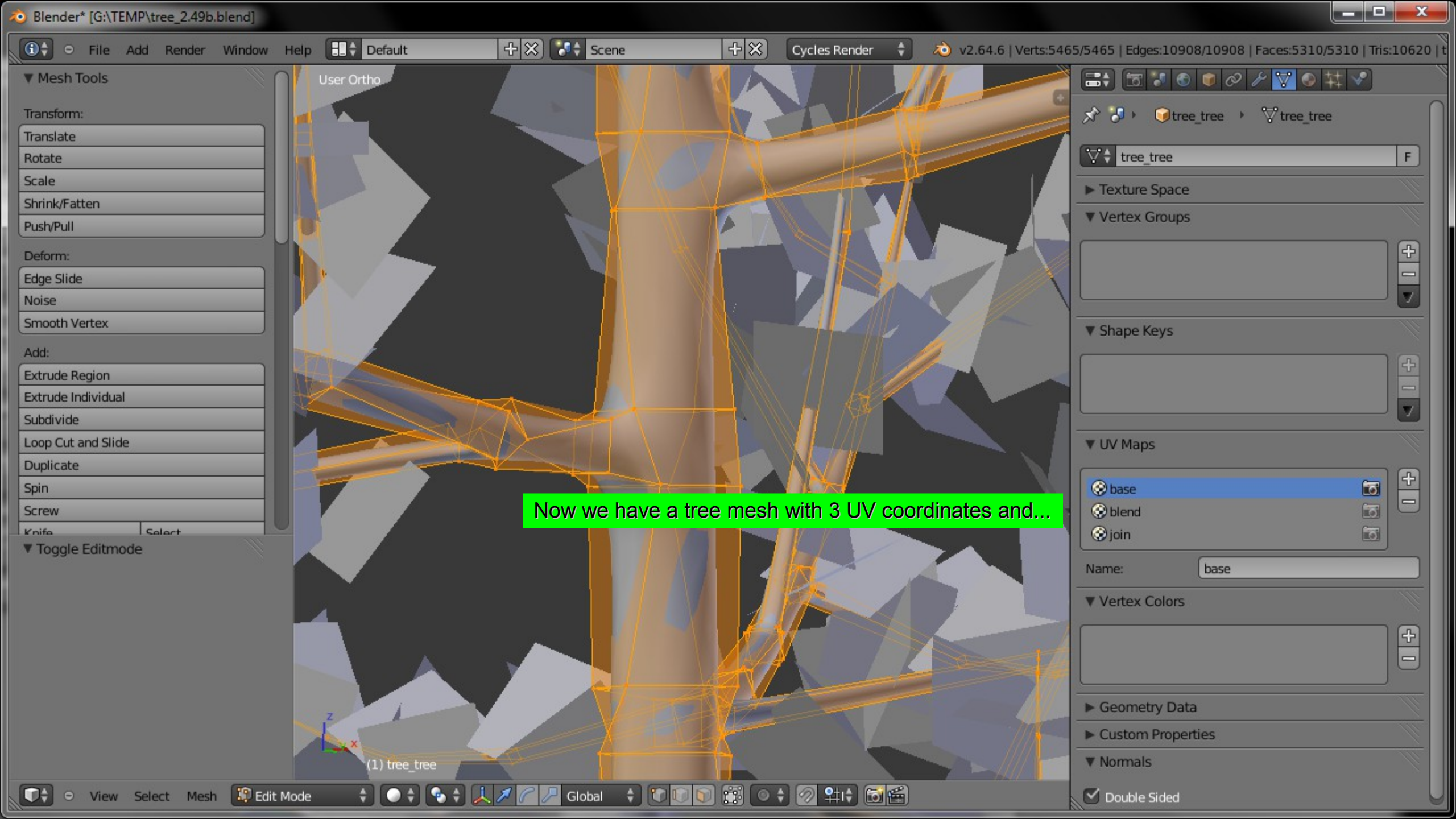

Blender [g:\TEMP\tree_2.64.blend]
File Add Timeline Game Render Help
SR:2-Model
SCE:Scene
www.blender.org 249.2
Ve:14188 | Fa:10224 | Ob:2-1 | La:0 | Mem:6.79M (0.09M) | Time: | tree
Fill Twigs
Grow Twigs
Generate Leaves
Generate UVs
U-Scale
V-Aspect
V-Normaize
Scale U 4.0000
Scale V 1.0000
IM:
Use Active
Generate Material
ReUse Existing
Texture
Blend Joints
Generate Motion
Generate Variation
Segment Spacing 0.5000
Angle Spacing 20.00
Radius Spacing 0.3000
Joint Width 1.0000
Joint Smooth 1.0000
Connect Limit 1.5000
Joint Bevel 1.0000
Cap Ends
SubSurf
Read Active Prefs
Write Prefs to Sel
Clear Prefs from Sel
Exit
Help
Generate from selection
Automatic Update
(1) tree
View Select Object
Object Mode
Global
Scripts
PY:Tree from Curves
Panels
Link and Materials
Curve and Surface
Modifiers
Add Modifier
To: tree
...and now you have a joined tree mesh

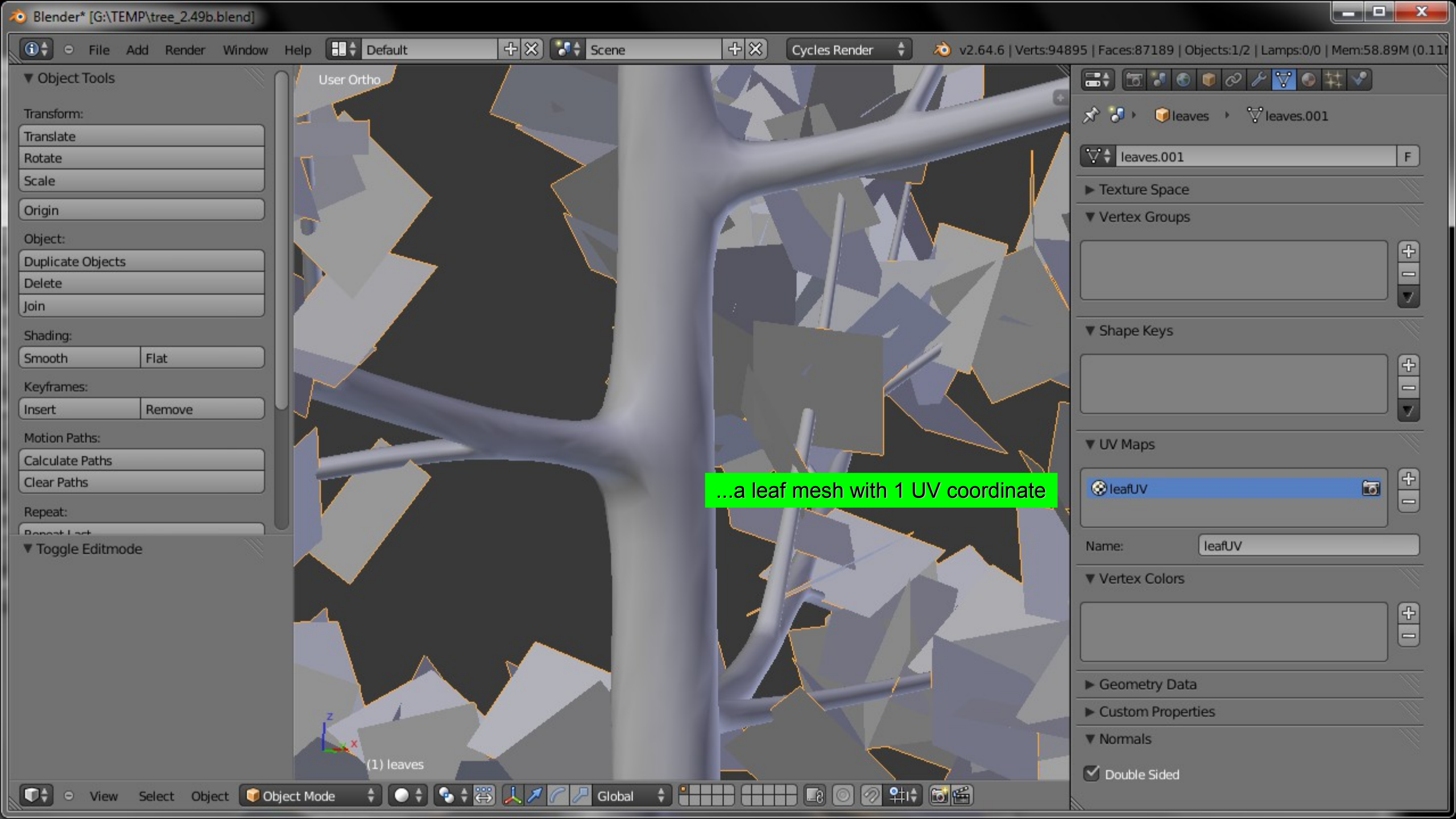

Blender [g:\TEMP\tree_2.64.blend]
File Add Timeline Game Render Help SR:2-Model SCE:Scene www.blender.org 249.2 Ve:14188 | Fa:10224 | Ob:2-1 | La:0 | Mem:7.28M (0.09M) | Time: | tree
P
g:\TEMP\
Save File
tree_2.49b
Cancel
. 0
.. 0
Textures 0
tree_2.64.blend 1 153 832
IMPORTANT: SAVE AS A NEW FILE !!!
If not you will loose your leaf mesh.
Fill Twigs
Grow Twigs
Generate Leaves
Generate UVs
U-Scale V-Aspect V-Normaize
Scale U 4.0000 Scale V 1.0000
IM: Use Active
Generate Material ReUse Existing
Texture Blend Joints
Generate Motion
Generate Variation
Segment Spacing 0.5000
Angle Spacing 20.00 Radius Spacing 0.3000
Joint Width 1.0000 Joint Smooth 1.0000
Connect Limit 1.5000 Joint Bevel 1.0000
Cap Ends SubSurf
Read Active Prefs Write Prefs to Sel
Clear Prefs from Sel
Exit Help Generate from selection
Automatic Update
Save File Load UI Free: 2750.297 MB Files: (0)
Scripts PY:Tree from Curves
Panels 1
Link and Materials
CU:tree.002 F OB:tree
0 Mat 0
New Delete
Select Deselect
Assign
AutoTexSpace Set Smoot Set Solid
Curve and Surface
UV Orco DefResolU: 4
PrintLen 0.0000 RenResolU 0
Center Center New Back Front 3D
Center Cursor
Width: 1.000
Extrude: 0.00
PathLen: 100 Bevel Depth: 1.000
CurvePath CurveFoll Bev Resol: 0
CurveStretch BevOb:
PathDistOffs TaperOb:
Modifiers
Add Modifier To: tree

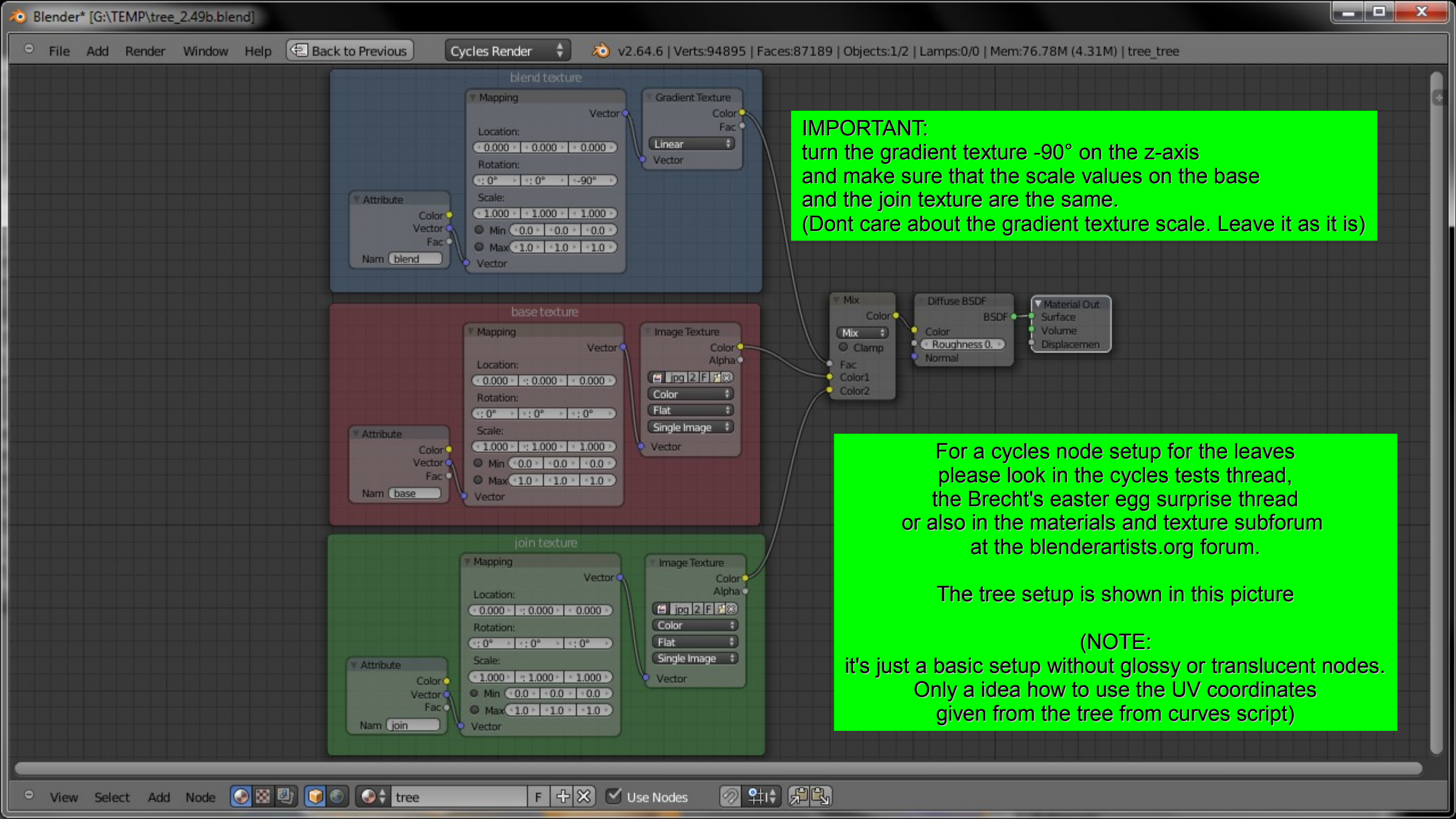

Blender
File Add Render Window Help
Back to Previous
Blender Render
v2.64.6 | Verts:8 | Faces:6 | Objects:1/3 | Lamps:0/1 | Mem:8.07M (0.11M) | Cube
Create New Directory
Show Hidden
G:\TEMP\
tree_2.49b.blend
Open Blender File
Cancel
Documents
Desktop
Bookmarks
Add
Blender
Pictures
Andreas Hofer
MODELS
Recent
Reset
TEMP
Texturen
TEMP
Desktop
CGTextures
Penrose_Treppe
texture
blendcache_test_smoke
Temp
HEALBOT
..
Textures
tree_2.49b.blend 1.4 MB
tree_2.64.blend 1.1 MB
Now you can open your new file in blender 2.64 (uncheck the load ui button if you not wish the 2.49b user interface)
Open Blender File
Load UI
Trusted Sourc
Load user interface setup in the .blend file
Python: WM_OT_open_mainfile.load_ui

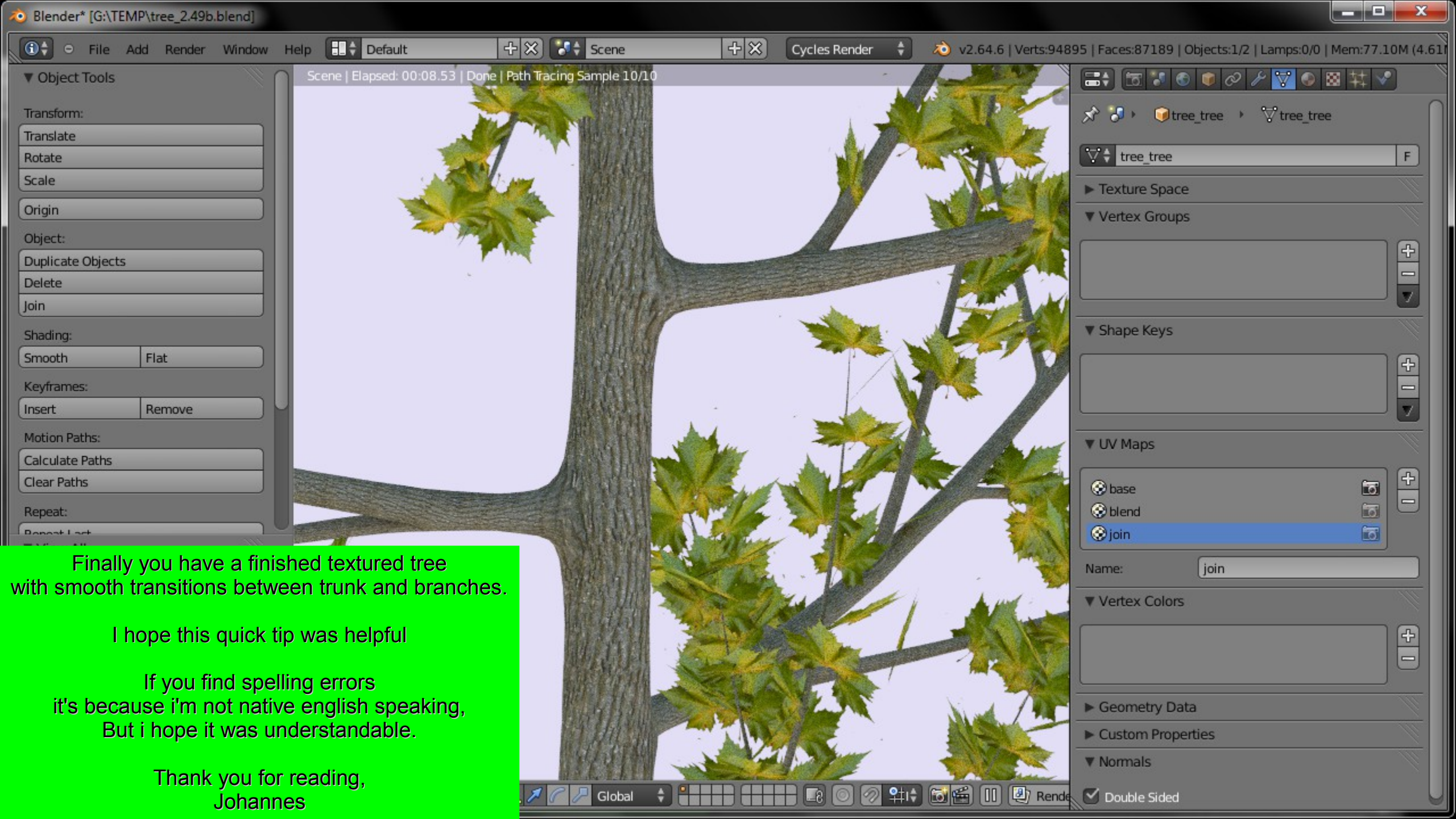

Blender* [G:\TEMP\tree_2.49b.blend]
File Add Render Window Help
Default
Scene
Blender Render
v2.64.6 | Verts:35871 | Faces:31464 | Objects:1/2 | Lamps:0/0 | Mem:27.36M (0.11
Object Tools
Transform:
Translate
Rotate
Scale
Origin
Object:
Duplicate Objects
Delete
Join
Shading:
Smooth
Flat
Keyframes:
Insert
Remove
Motion Paths:
Calculate Paths
Clear Paths
Repeat:
Operator
Front Ortho
You can now delete the curve tree (not the mesh tree) 'cause you dont need it anymore
OK?
Delete X
Delete selected objects
Python: bpy.ops.object.delete()
(1) tree
Scene
Render
Render
Animation
Play
Display:
Full Screen
Layers
Dimensions
Render Presets
Resolution:
X: 1920
Y: 1080
Frame Range:
Start Frame: 1
End Frame: 250
Frame Step: 1
Frame Rate:
24 fps
Time Remapping:
Old: 100
Ne: 100
X: 1.000
Y: 1.000
Border
Crop
Anti-Aliasing
5
8
11
16
Mitchell-Netravali
Full Sample
Size: 1.000
Sampled Motion Blur
Shading
Performance
Post Processing
Stamp
Output
/tmp\
View Select Object
Object Mode
Global


Blender* [G:\TEMP\tree_2.49b.blend]
File Add Render Window Help
Back to Previous
Blender Render
v2.64.6 | Verts:21683 | Faces:21240 | Objects:1/1 | Lamps:0/0 | Mem:27.04M (0.11M) | tree_tree
Create New Directory
Show Hidden
Documents
Desktop
Bookmarks
Add
Blender
Pictures
Andreas Hofer
MODELS
Recent
Reset
TEMP
Texturen
TEMP
Desktop
CGTextures
Penrose_Treppe
texture
blendcache_test_smoke
Temp
HEALBOT
Link/Append from Library
0 items
Relative Path
Link
G:\TEMP\tree_2.64.blend\Object\
leaves
Link/Append from Library
Cancel
..
leaves
tree
Next step is to append the leaves from your first blendfile.


Blender* [G:\TEMP\tree_2.49b.blend]
File Add Render Window Help
Default
Scene
Cycles Render
v2.64.6 | Verts:5465/5465 | Edges:10908/10908 | Faces:5310/5310 | Tris:10620 | t
Mesh Tools
Transform:
Translate
Rotate
Scale
Shrink/Fatten
Push/Pull
Deform:
Edge Slide
Noise
Smooth Vertex
Add:
Extrude Region
Extrude Individual
Subdivide
Loop Cut and Slide
Duplicate
Spin
Screw
Toggle Editmode
User Ortho
Now we have a tree mesh with 3 UV coordinates and…
(1) tree_tree
tree_tree
tree_tree
tree_tree
F
Texture Space
Vertex Groups
Shape Keys
UV Maps
base
blend
join
Name:
base
Vertex Colors
Geometry Data
Custom Properties
Normals
Double Sided
View Select Mesh
Edit Mode
Global


Blender* [G:\TEMP\tree_2.49b.blend]
File Add Render Window Help
Default
Scene
Cycles Render
v2.64.6 | Verts:94895 | Faces:87189 | Objects:1/2 | Lamps:0/0 | Mem:58.89M
Object Tools
Transform:
Translate
Rotate
Scale
Origin
Object:
Duplicate Objects
Delete
Join
Shading:
Smooth
Flat
Keyframes:
Insert
Remove
Motion Paths:
Calculate Paths
Clear Paths
Repeat:
Toggle Editmode
User Ortho
...a leaf mesh with 1 UV coordinate
(1) leaves
leaves
leaves.001
leaves.001
F
Texture Space
Vertex Groups
Shape Keys
UV Maps
leafUV
Name:
leafUV
Vertex Colors
Geometry Data
Custom Properties
Normals
Double Sided
View Select Object
Object Mode
Global


Blender* [G:\TEMP\tree_2.49b.blend]
File Add Render Window Help Back to Previous Cycles Render v2.64.6 | Verts:94895 | Faces:87189 | Objects:1/2 | Lamps:0/0 | Mem:76.78M (4.31M) | tree_tree
blend texture
Mapping
Vector
Location:
0.000 0.000 0.000
Rotation:
0° 0° -90°
Scale:
1.000 1.000 1.000
Min 0.0 0.0 0.0
Max 1.0 1.0 1.0
Vector
Gradient Texture
Color
Fac
Linear
Vector
Attribute
Color
Vector
Fac
Nam blend
base texture
Mapping
Image Texture
Color
Alpha
jpg 2 F
Color
Flat
Single Image
Nam base
join texture
Nam join
Mix
Color
Mix
Clamp
Fac
Color1
Color2
Diffuse BSDF
BSDF
Color
Roughness 0.
Normal
Material Out
Surface
Volume
Displacemen
IMPORTANT:
turn the gradient texture -90° on the z-axis
and make sure that the scale values on the base
and the join texture are the same.
(Dont care about the gradient texture scale. Leave it as it is)
For a cycles node setup for the leaves
please look in the cycles tests thread,
the Brecht's easter egg surprise thread
or also in the materials and texture subforum
at the blenderartists.org forum.
The tree setup is shown in this picture
(NOTE:
it's just a basic setup without glossy or translucent nodes.
Only a idea how to use the UV coordinates
given from the tree from curves script)
View Select Add Node tree F Use Nodes


Blender* [G:\TEMP\tree_2.49b.blend]
File Add Render Window Help
Default
Scene
Cycles Render
v2.64.6 | Verts:94895 | Faces:87189 | Objects:1/2 | Lamps:0/0 | Mem:77.10M (4.61
Object Tools
Transform:
Translate
Rotate
Scale
Origin
Object:
Duplicate Objects
Delete
Join
Shading:
Smooth
Flat
Keyframes:
Insert
Remove
Motion Paths:
Calculate Paths
Clear Paths
Repeat:
Scene | Elapsed: 00:08.53 | Done | Path Tracing Sample 10/10
tree_tree
tree_tree
tree_tree
F
Texture Space
Vertex Groups
Shape Keys
UV Maps
base
blend
join
Name:
join
Vertex Colors
Geometry Data
Custom Properties
Normals
Double Sided
Global
Finally you have a finished textured tree
with smooth transitions between trunk and branches.
I hope this quick tip was helpful
If you find spelling errors
it's because i'm not native english speaking,
But i hope it was understandable.
Thank you for reading,
Johannes