GUIDE TO HAND POSE LIBRARY

Text by Sundance Haiku

Illustrations, Hand Pose Animations & Textures by Chimera Firecaster

Note: this information is a guide to the hand pose library and some brief instructions on how to make your own hand poses and how to export them. In addition to this document, we've also put together information on how to assemble the Hand Pose HUD. That information is found in AssembleHandPoseHUD.pdf.

To access the hand pose library in Blender, you'll want to have the Avastar Add-on installed. Without Avastar you'll need to create your own character with all of the Second Life bones, including the extended bones. Additionally, you would need to make some tweaks in the animation export routine. Of course that's all possible, but for the sake of these instructions, we'll assume that you are using Avastar.

You'll need to download one Blender file (Ruth2HandPoses.blend) from the Ruth Github repository. (It's currently found under the following folder: *Mesh / Sundance / Hand Pose Library & HUD*, but this may change as the project progresses,) To download it, click on the file name in GitHub. On the upper right you'll see a download button that will allow you to download. Save it to some location on your computer. You'll use it shortly . . .

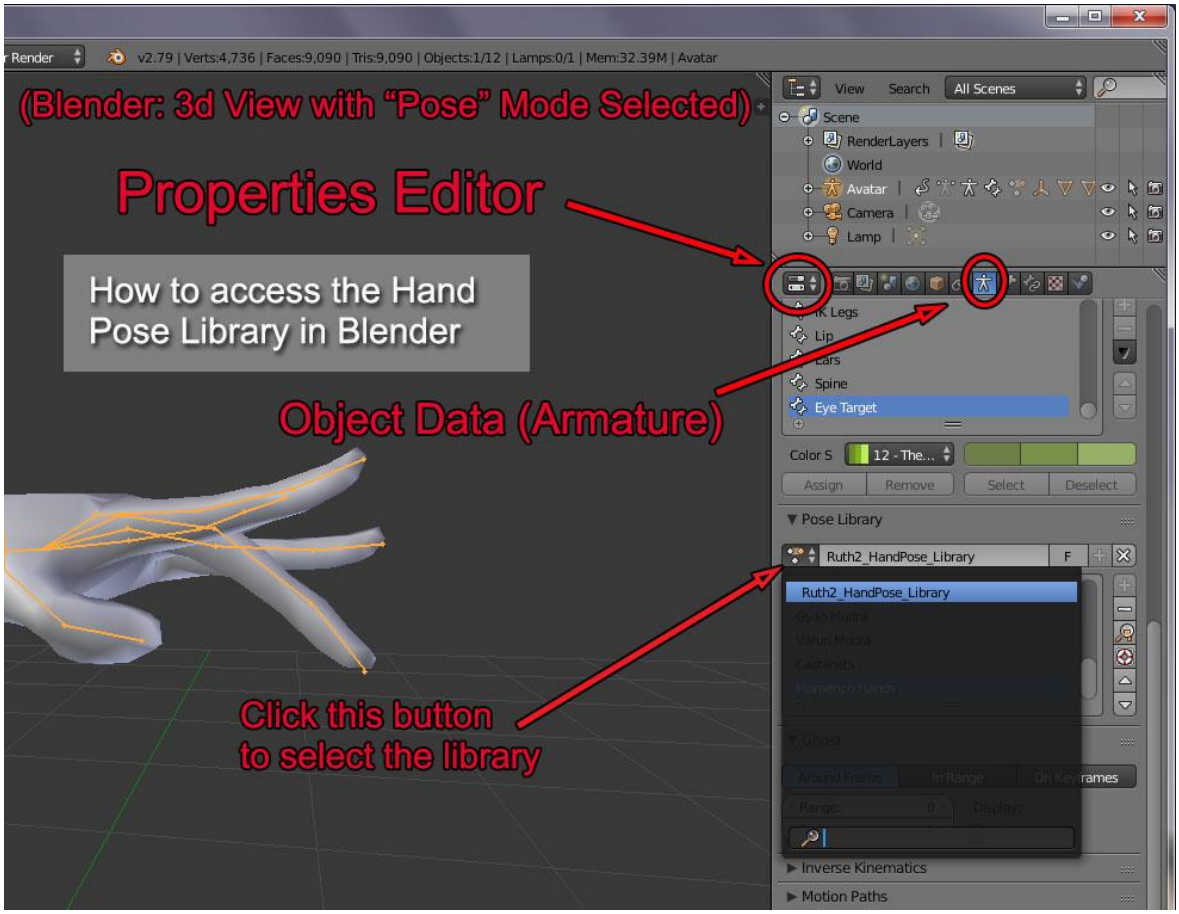
Loading the Library Into a Blender File

1. Assuming that you have Avastar, open Blender. Delete the default cube. Then, in the 3D window, select from the menu ADD >> AVASTAR >> EXTENDED.

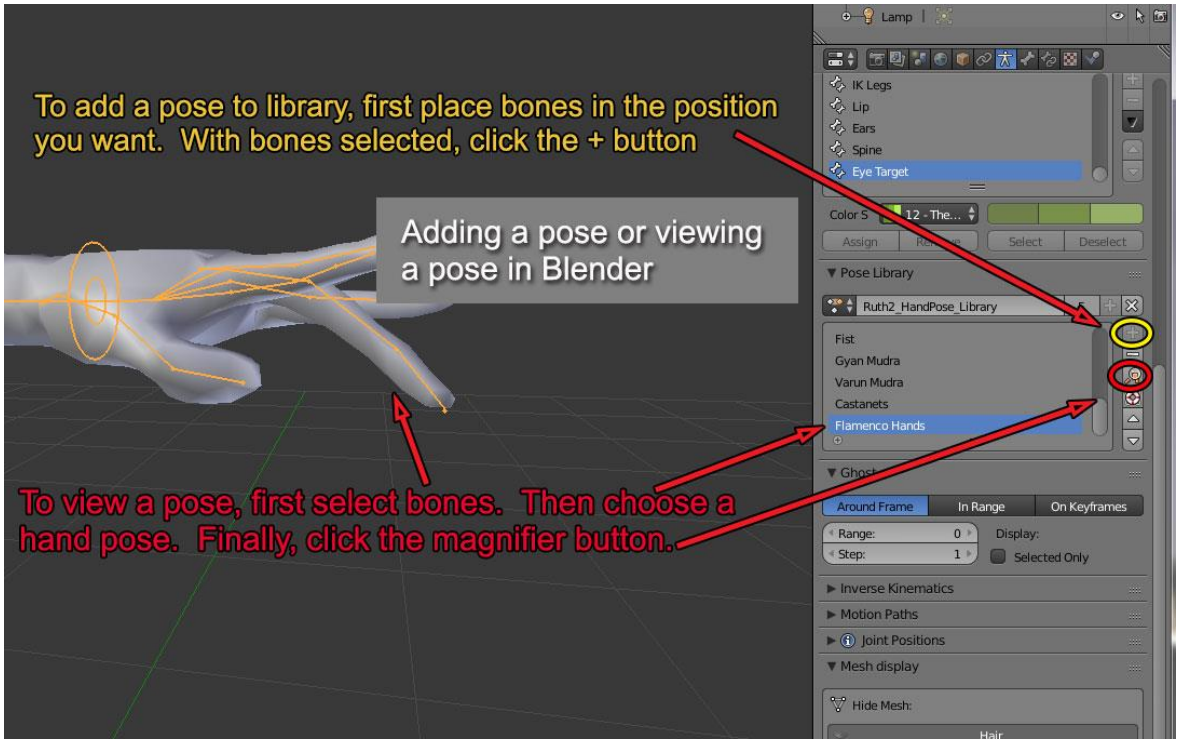
2. This will create the Second Life default character with extended bones. Make sure you are in "Pose" mode. If not, select the armature and then change to the Pose mode.

3. To bring in the Hand Pose Library, select from the upper menu FILE >> APPEND. Browse to the file you downloaded (Ruth2HandPoses.blend). Open the "Action" folder. Select "Ruth2_HandPose_Library," and click the button: "Append from Library"

4. For this next step, see the illustration below. In the Properties Editor, select "Object Data (Armature)" (it's the button with the little stick figure as shown in the illustration). Scroll down to "Pose Library" click the little button shown on the illustration below. (If you hover your cursor over the button, Blender calls it: "Browse action to be linked.") After clicking the button, you'll see "Ruth2_HandPose_Library" listed. Select it, and the library of hand poses will appear.



5. To see each of the hand poses on the avatar in the 3D (Pose Mode) window, you need to first select the hand bones. (It's also possible to select all the bones by typing an "a"). Then choose a hand pose from the library list and click the magnifier button (if you hover over the magnifier, Blender calls it: "apply specified pose library to rig.") After clicking it, you'll see the pose appear in the 3d view. (See the illustration below)

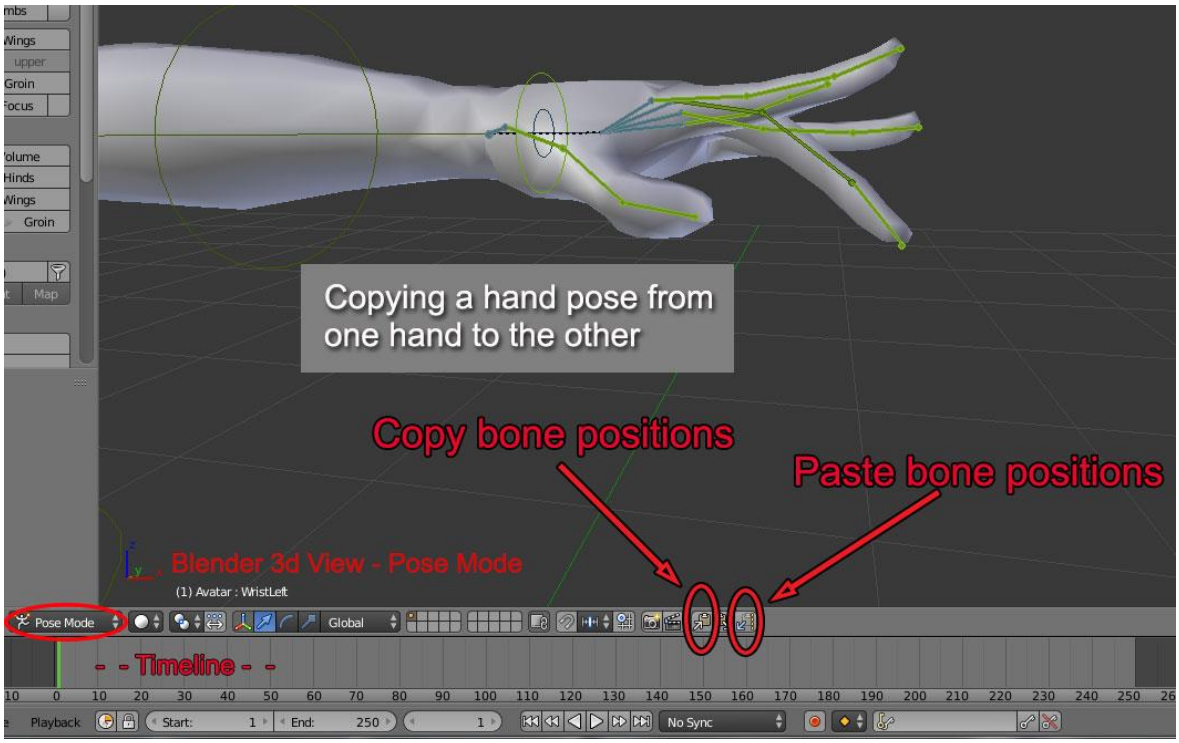


Creating Your Own Hand Poses

1. If you'd like to create your own hand poses, start by selecting the hand bones in the 3D (Pose Mode) window. Arrange the bones into the desired position. Start with one hand first. Get everything looking just right with the one hand. Either hand works, but let's just say you are starting with the right hand.

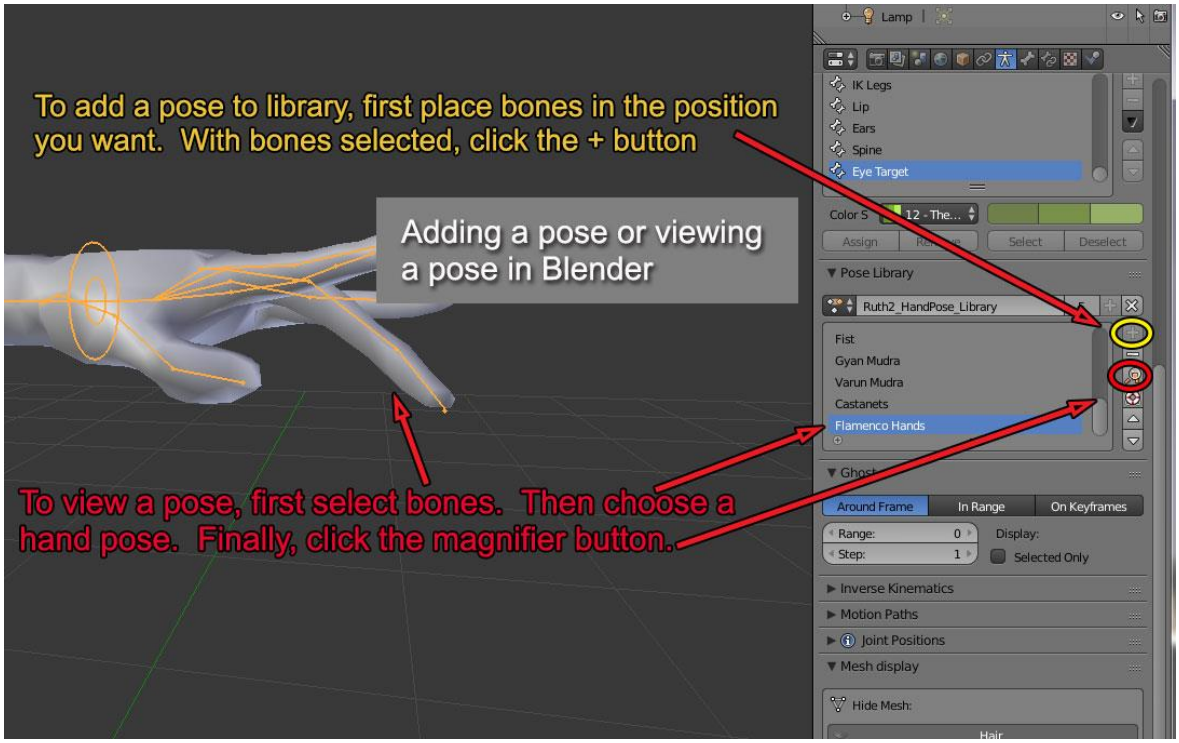
2. When the bones of the right hand are positioned to your liking, you'll be able to copy the bone positions over to the left hand. To do that, first make sure all of the right hand bones are selected. Select only the hand bones. Make sure you don't select any of the other bones on the arm. Remember: just the hand bones.

3. Then click on the first clipboard button at the bottom of the screen (as shown on the illustration below). That will copy the bone positions.



4. To paste the positions to the other hand, click on the third clipboard button as shown in the illustration.

5. To add a pose to the library, select all hand bones of the right and left hands, then click the "+" beside the library. (There are two plus signs (+). Be sure the click the lower one. (See illustration.) The positions of the hand bones will be saved, and you can give it an appropriate name.



Exporting a Pose

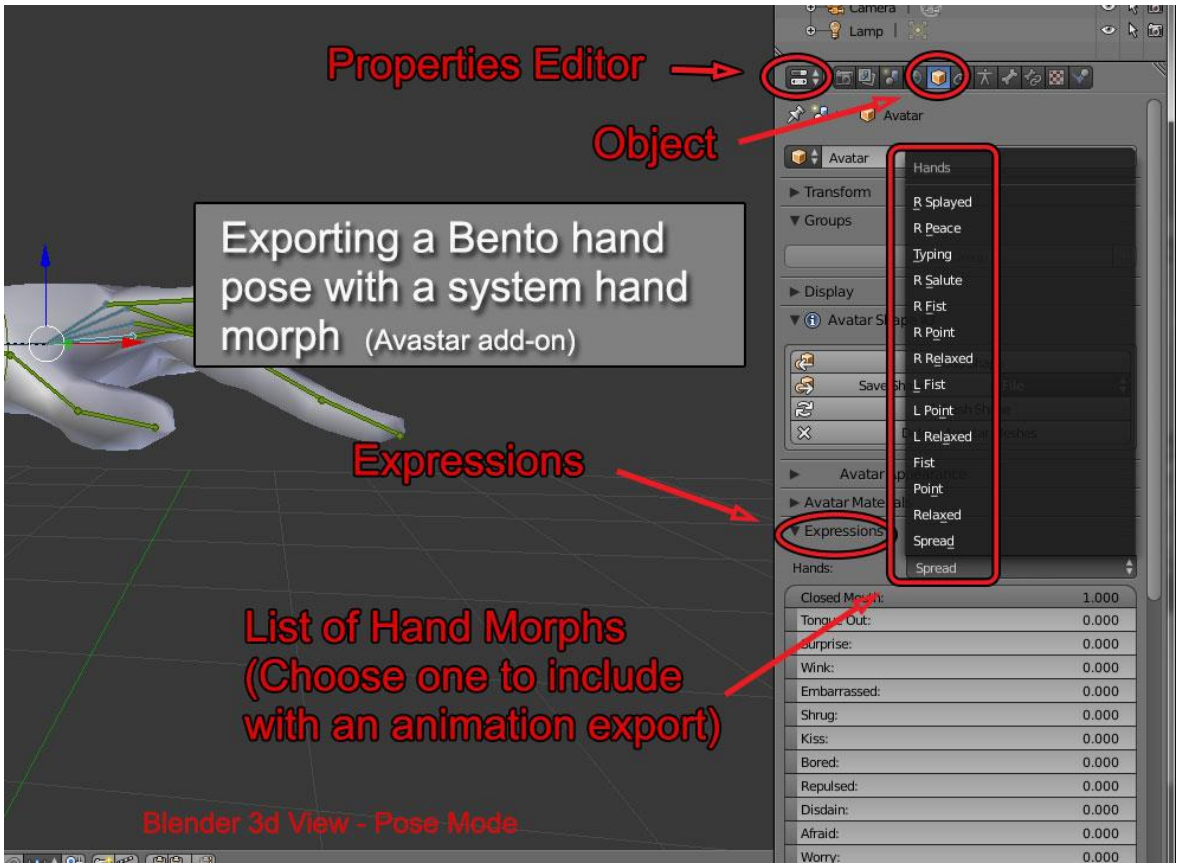
AvaStar is also a godsend when it comes to exporting your pose.

1. To do an export, start in the Pose Mode of the 3D view and select all the hand bones (but not any of the arm or wrist).

2. With your cursor in the 3D window, type in an "i" and select "LocRoc." (Or if you're like me and you forget the Blender quick keys, you can also select from the menu: POSE >>ANIMATION >> INSERT KEYFRAME >> LOCROC.

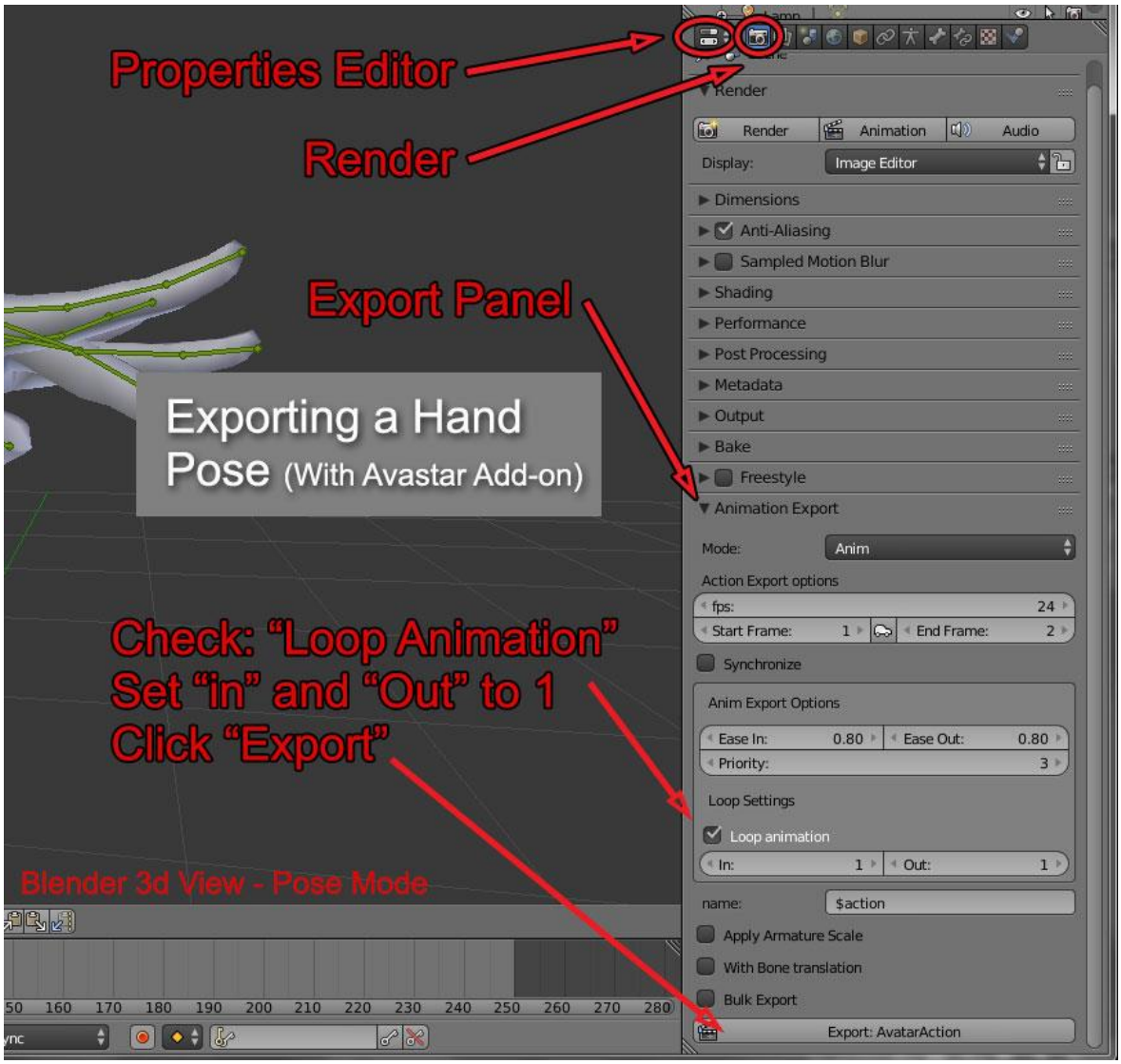
3. Selecting "LocRoc" saves the bone positions as a keyframe. If you have the time line showing, you'll see a keyframe has been entered.

4. If you'd like to create poses to be used with system hands as well as Bento hands, select the "Object" button (it looks like a cube) from the Properties Editor. Scroll down to "Expressions." Pick a hand expression that approximates (and it will be very approximate) your pose. See illustration. *(Note: we are getting odd results from this. We're not sure if it's our procedure – or there's a bug in Avastar.)*



5. The next step is to select the ‘Render” button on the properties panel. Scroll down to the bottom and place checkmark in “Loop Animation” and “1” in “In” and “1” in “Out” as shown on the illustration.

6. Click the “Export” button. Give the pose a name, and an *.anim file will be created.



7. The last step is upload the animation in-world. To do that select from the menu BUILD >> UPLOAD ANIMATION.