# GUIDE TO HAND POSE LIBRARY

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.
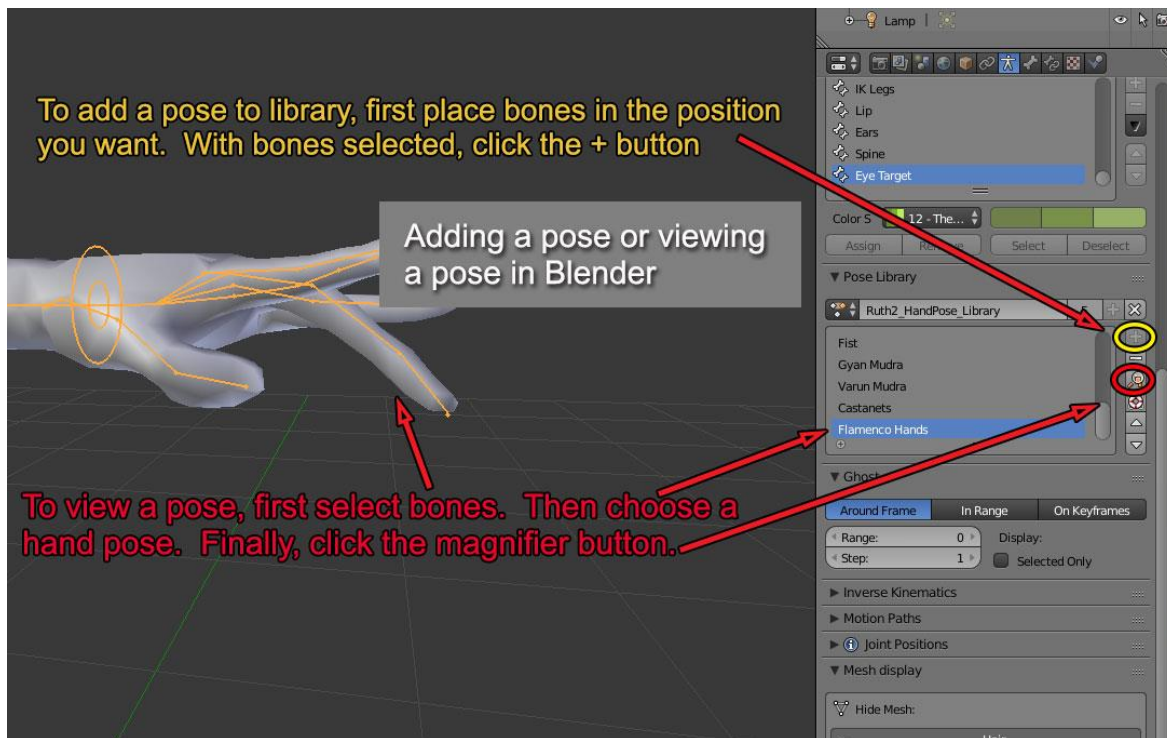
You'll need to download one Blender file (Ruth2HandPoses.blend) from the Ruth Github repository. (It's currently found under the following folder: Mesh / Sundance / Hand Pose.) To download it, click on the file name in GitHub. On the upper right you'll see a download button that will allow you to download. 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 Ruth2HandPoses.blend. Open the "Action" folder. Select "Ruth2_HandPose_Library," and click the button: "Append from Library"

4. In the Properties Editor, select "Object Data (Armature)" (it's the button with the little stick figure). 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. (See illustration).
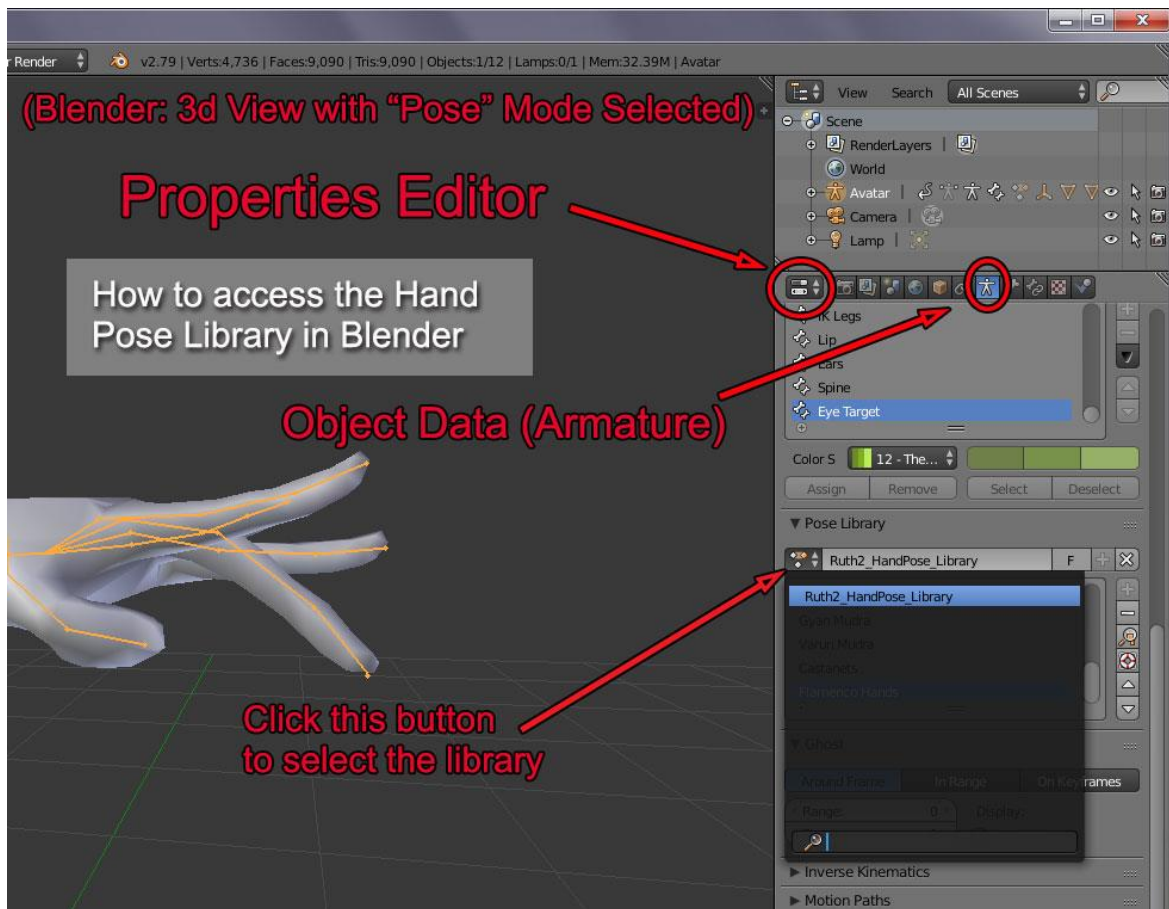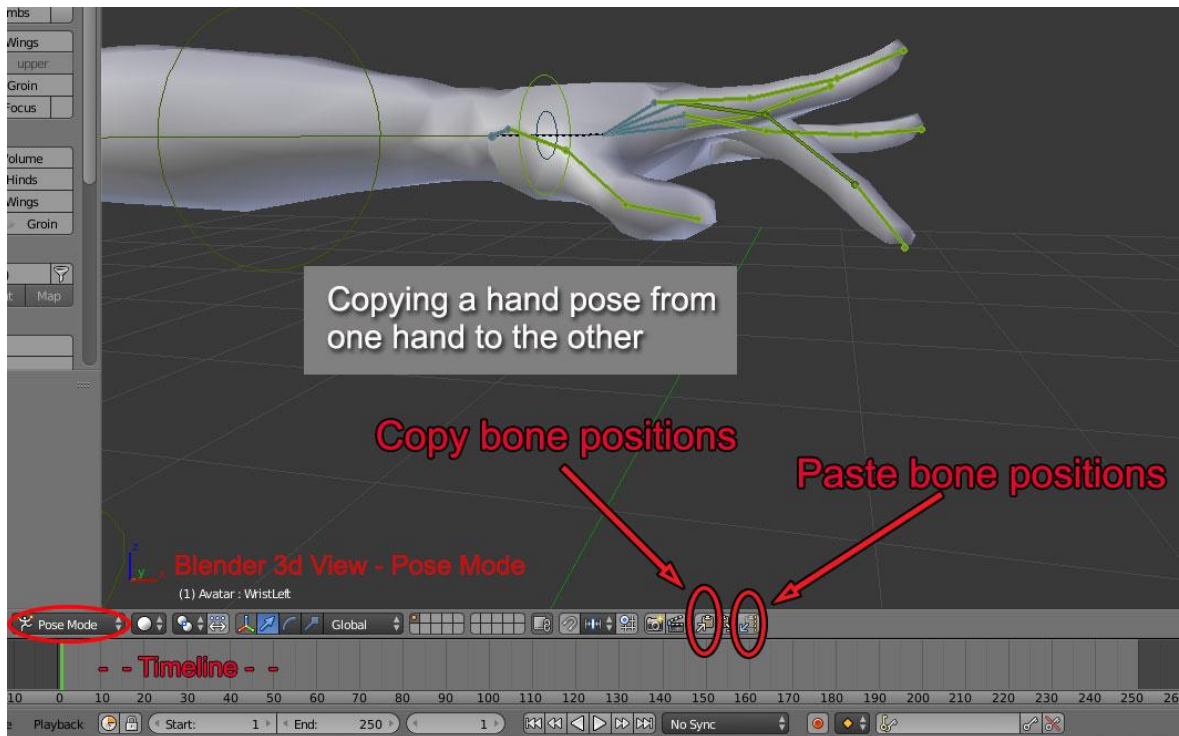
5. To see each of the hand poses on the avatar in the 3D (Pose Mode) window, you need to first select the hand bones. (It's also possible to select all the bones by typing an "a"). Then choose a hand pose from the library list and click the magnifier button (if you hover over it, the name is called "apply specified pose library to rig.") After clicking it, you'll see the pose appear in the 3d view. (See illustration)

To add a pose to library, first place bones in the position you want. With bones selected, click the + button

Adding a pose or viewing a pose in Blender

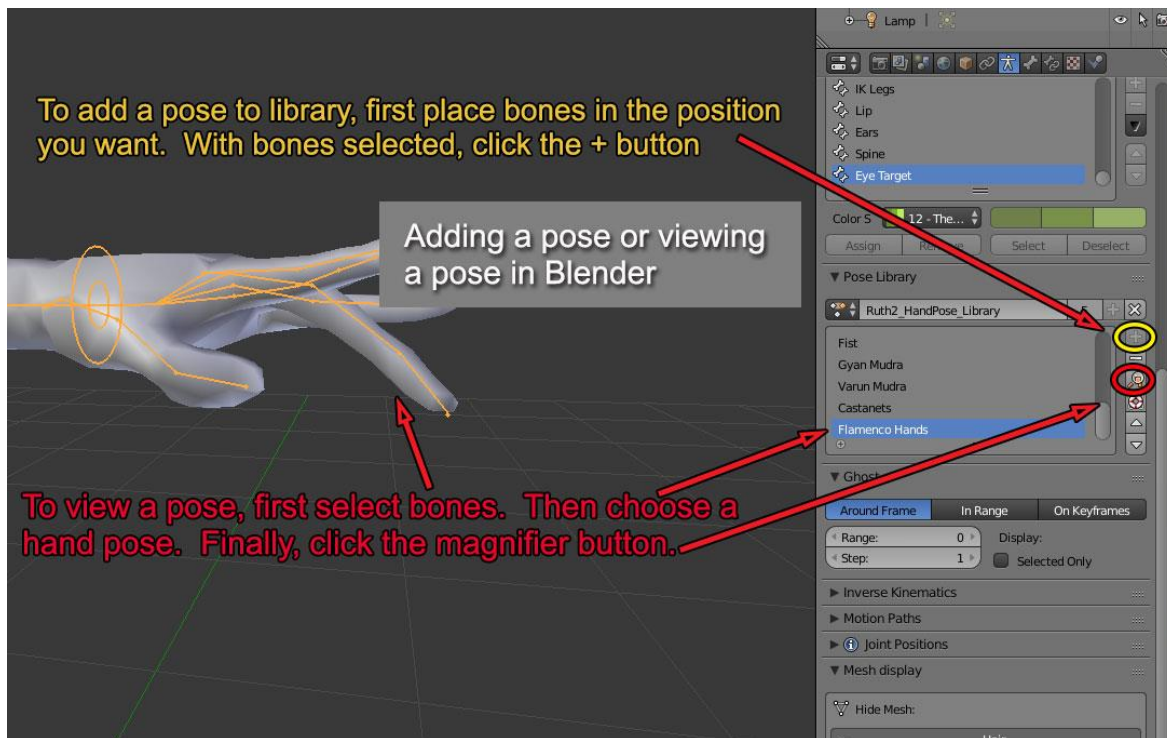To view a pose, first select bones. Then choose a hand pose. Finally, click the magnifier button.

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 and move them into position. Start with one hand first. Either hand works, but let's just say you start with the right hand.

2. When the right hand is positioned to your liking, you'll want 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 hands.

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

Copying a hand pose from one hand to the other

Copy bone positions

Paste bone positions

Blender 3d View - Pose Mode

(1) Avatar : WristLeft

Pose Mode   Global

- - Timeline - -

Playback   Start: 1   End: 250   1   No Sync

4. To paste the positions to the other hand, click on the third clipboard button as shown in the illustration above.
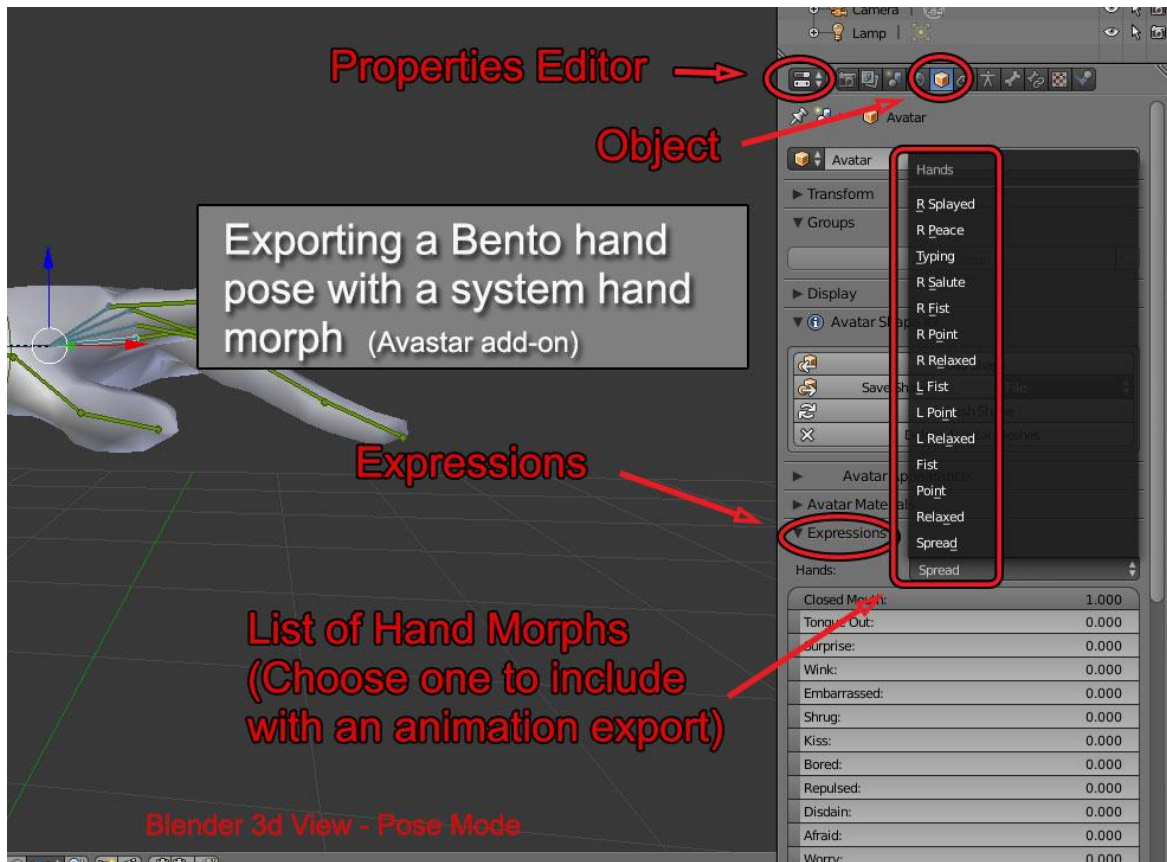
5. To add a pose to the library, select all hand bones of the right and left hands, then click the "+" beside the library. (There are two plus signs (+). Be sure the click the lower one. See illustration.) The positions of the hand bones will be saved. You can name it something that helps you remember the pose.

To add a pose to library, first place bones in the position you want. With bones selected, click the + button

Adding a pose or viewing a pose in Blender

To view a pose, first select bones. Then choose a hand pose. Finally, click the magnifier button.

EXPORTING A POSE

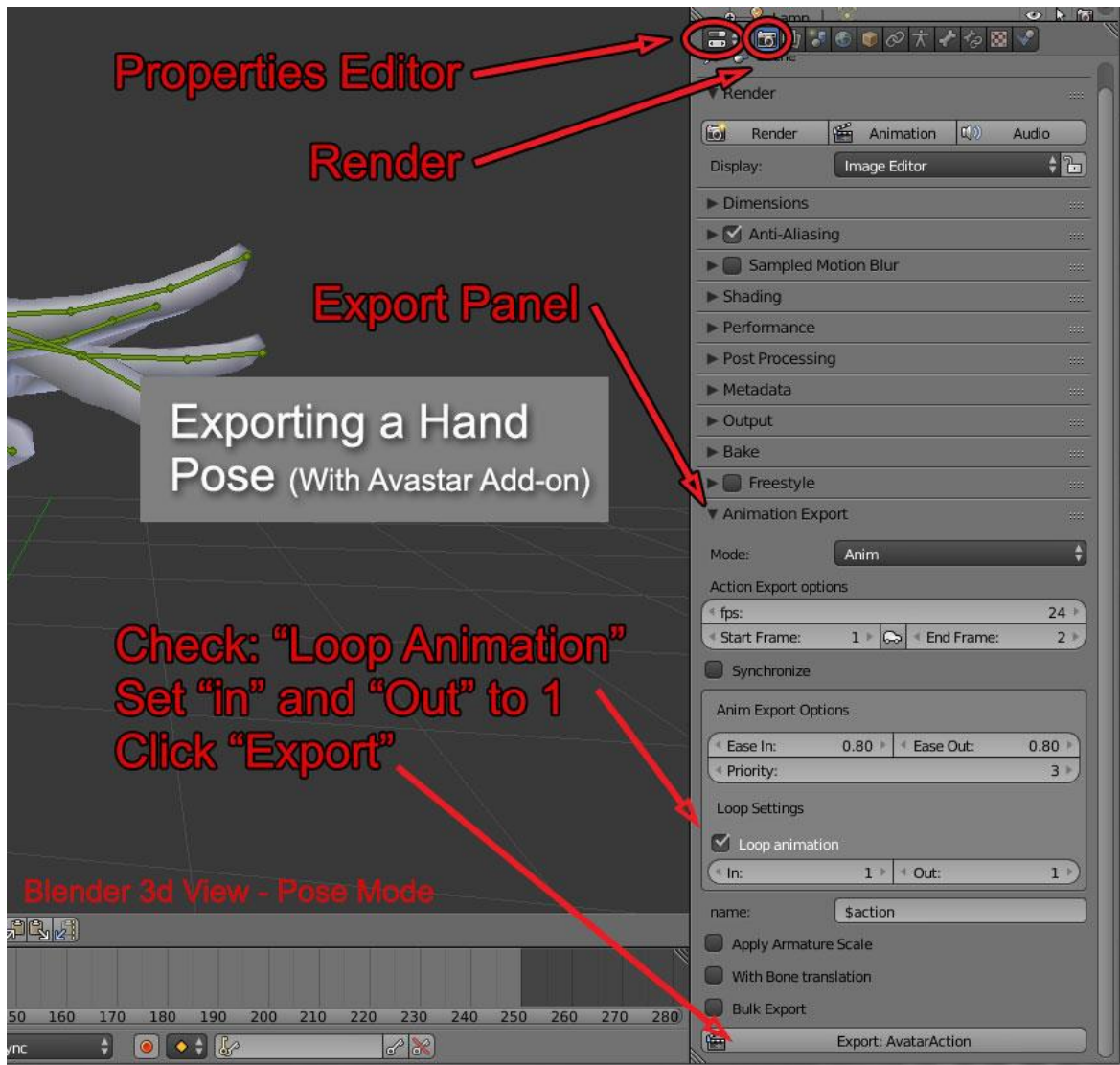AvaStar is also a godsend when it comes to exporting your pose. It has the necessary process built in.

1. To do an export, starting in the Pose Mode of the 3D view, 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 make your poses so they can be used with system 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.

Exporting a Bento hand pose with a system hand morph (Avastar add-on)

Properties Editor

Object

Expressions

List of Hand Morphs (Choose one to include with an animation export)

Blender 3d View – Pose Mode

5. 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.

Exporting a Hand Pose (With Avastar Add-on)

Blender 3d View - Pose Mode

Properties Editor
Render
Export Panel
Check: "Loop Animation"
Set "in" and "Out" to 1
Click "Export"

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

(For information on how to put together a HUD for using the poses, see the Ruth 2 Hand Pose HUD Assembly Instructions.