Jeane Spline Version 1.0.5 Guide

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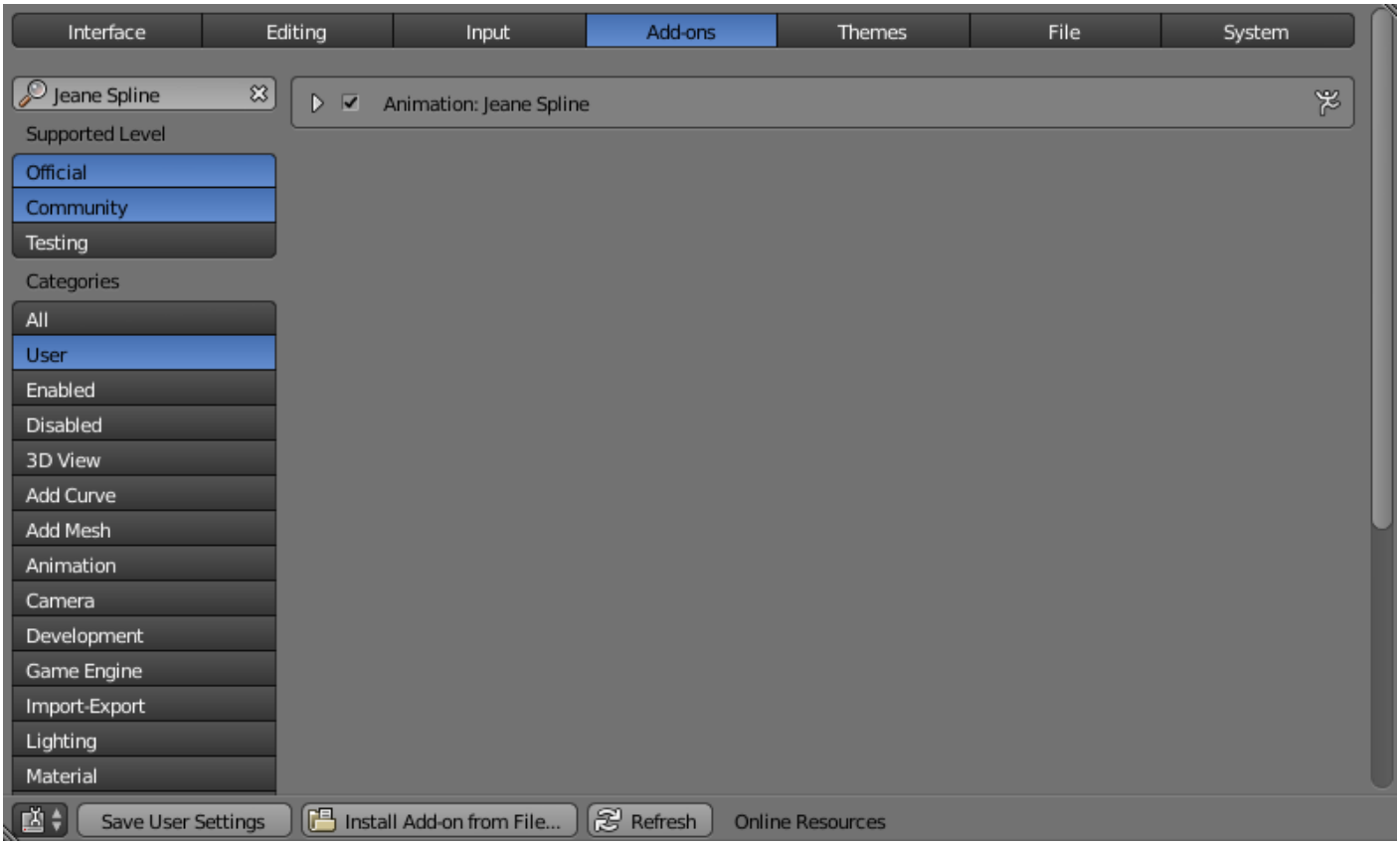
Installation

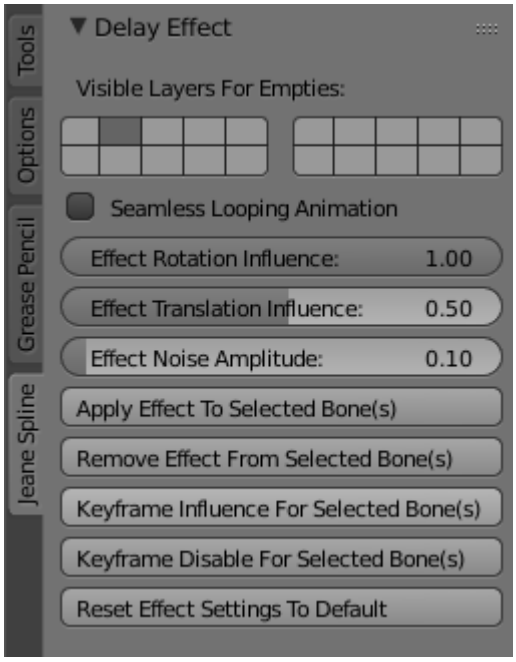
To start using Jeane Spline version 1.0.5, install it from within Blender using the provided zip file.



To install Jeane Spline 1.0.5 from the provided zip file in Blender, open the Blender software, navigate to File>User Preferences...>Add-ons, click on 'Install Add-on From File' and select the provided zip file from the file browser. Click on the check mark to the left of Animation:Jeane Spline to enable the add-on and click on 'Save User Settings' to keep the add-on enabled next time you start Blender.

Accessing Jeane Spline

The Jeane Spline menu tab is available in the left viewport toolbar in Pose Mode.



To view the Jeane Spline menu, select the armature you wish to use Jeane Spline on and switch Blender to Pose Mode. If the left viewport toolbar is not visible, click on the expand menu button near the top left of the viewport to expand it. In the left viewport toolbar, click on the Jeane Spline tab to access the Jeane Spline tools.

Jeane Spline Menu Overview

The Jeane Spline menu in version 1.0.5 allows you to:

- Specify visibility layers for empties which will be used when applying the Jeane Spline delay effect
- Enable frame wrap-around for creating looping animations with the Jeane Spline delay effect
- Change the influence of the rotation and location delay on selected bones
- Change the amount of movement noise that is applied to each bone along with the Jeane Spline delay effect
- Apply and remove the Jeane Spline effect on selected bones
- Keyframe a specific influence or no influence for the selected bones at the current frame
- Reset the rotation and location delay influence values to the suggested defaults

Visible Layers for Empties

Jeane Spline creates a large number of empties when applied to chains of bones. You can select one or more visibility layers in the Jeane Spline menu to specify which visibility layers the empties will be created on.

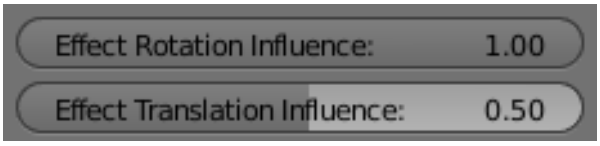
Separating empties into visibility layers keeps your scene and dope sheet clean. You may also wish to change the motion paths or make use of the empties generated by Jeane Spline, however it is unlikely that you will need to do this in Jeane Spline version 1.0.5.

Looping Animation Option

When the Seamless Looping Animation option is enabled, Jeane Spline will duplicate the armature animation multiple times, apply the Jeane Spline delay effect to the result and move a looping segment into the active timeline region.

Please note that using Seamless Looping Animation will significantly change the original armature animation. Please save your progress before applying the Jeane Spline effect with Seamless Looping Animation enabled. Jeane Spline will not apply any movement noise when Seamless Looping Animation is enabled.

Effect Rotation and Translation Influence



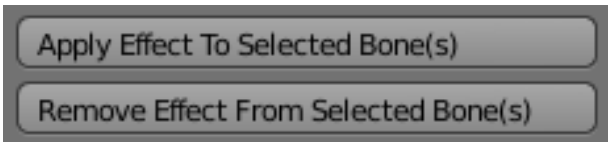
Jeane Spline applies constraints to bones to offset their location and rotation. The Effect Rotation Influence and Effect Translation Influence sliders determine the influence of the Jeane Spline effect when it is applied to one or more bones.

The Effect Rotation Influence and Effect Translation Influence are set to 1.00 and 0.50 as a recommended default intensity for most animations.

Effect Noise Amplitude

In Jeane Spline version 1.0.5, you can apply motion noise modifiers to multiple selected bones when you apply the Jeane Spline delay effect. The Effect Noise Amplitude determines how much noise will be applied to each bone. The suggested default Effect Noise Amplitude value for most animations is 0.10. Noise can be left out by setting the Effect Noise Amplitude to 0.00.

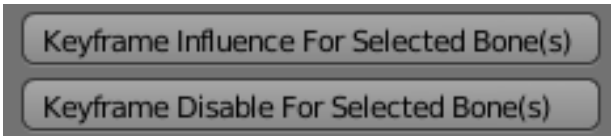
Apply and Remove Effect



When one or more bones are selected in pose mode, the Apply or Remove Effect buttons will apply the Jeane Spline effect to the selected bones with the current settings or remove the effect from the selected bones. The Remove Effect operator is run at the beginning of the Apply Effect operator, so you can update the Jeane Spline effect on the selected bones by clicking Apply Effect multiple times. Pressing the Apply Effect button will not interfere with existing delay effect influence keyframes.

Please note that applying the Jeane Spline effect can take a long time if multiple bones are selected and the active timeline region is long.

Keyframe Influence and Keyframe No Influence



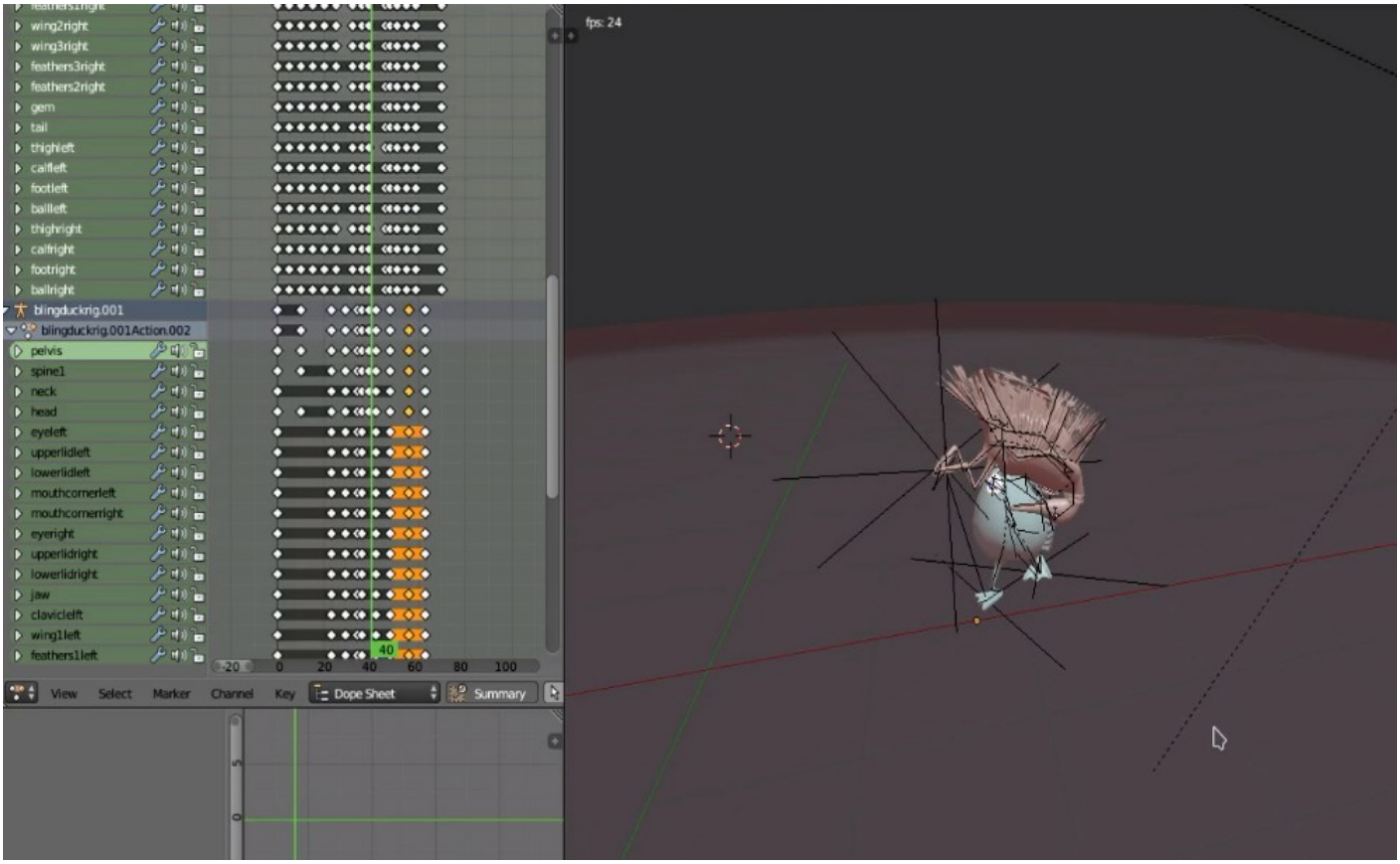
Keyframe Influence will create a keyframe at the current frame with the specified Effect Rotation and Translation influence for the selected bones. Keyframe disable will create a keyframe at the current frame with the effect turned off for the selected bones. By using the Jeane Spline keyframe buttons, you can quickly define regions in your animation where the Jeane Spline effect is reduced or turned off. This may be useful where an armature is moving quickly and the Jeane Spline effect creates undesired stretching.

Reset Effect Settings To Default

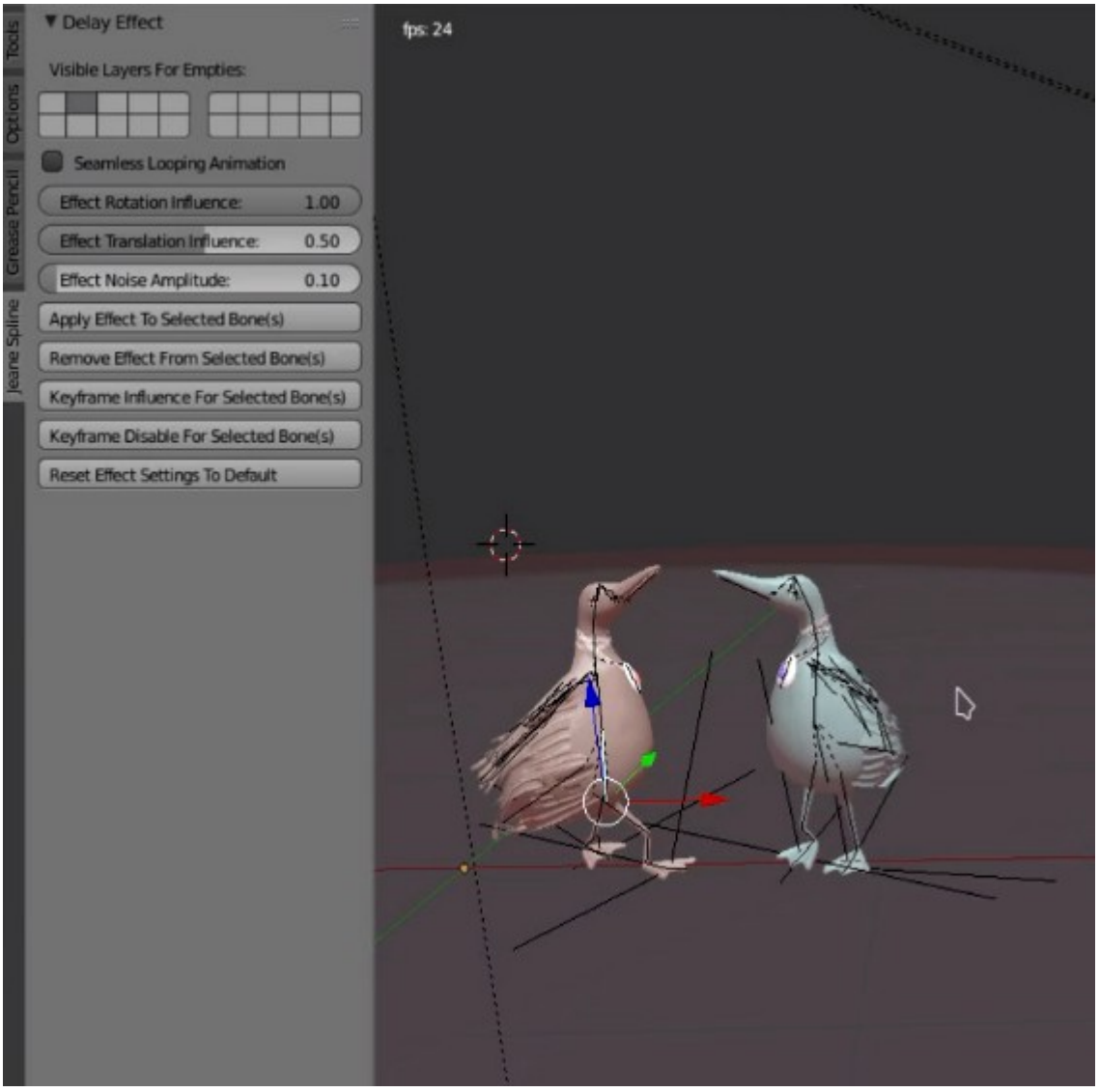
In Jeane Spline version 1.0.5, you can use the Reset Effect Settings To Default button to reset the Effect Rotation Influence, Effect Translation Influence and Effect Noise Amplitude to their default suggested values of 1.00, 0.50 and 0.10.

Applying Jeane Spline to a Non-Looping Animation

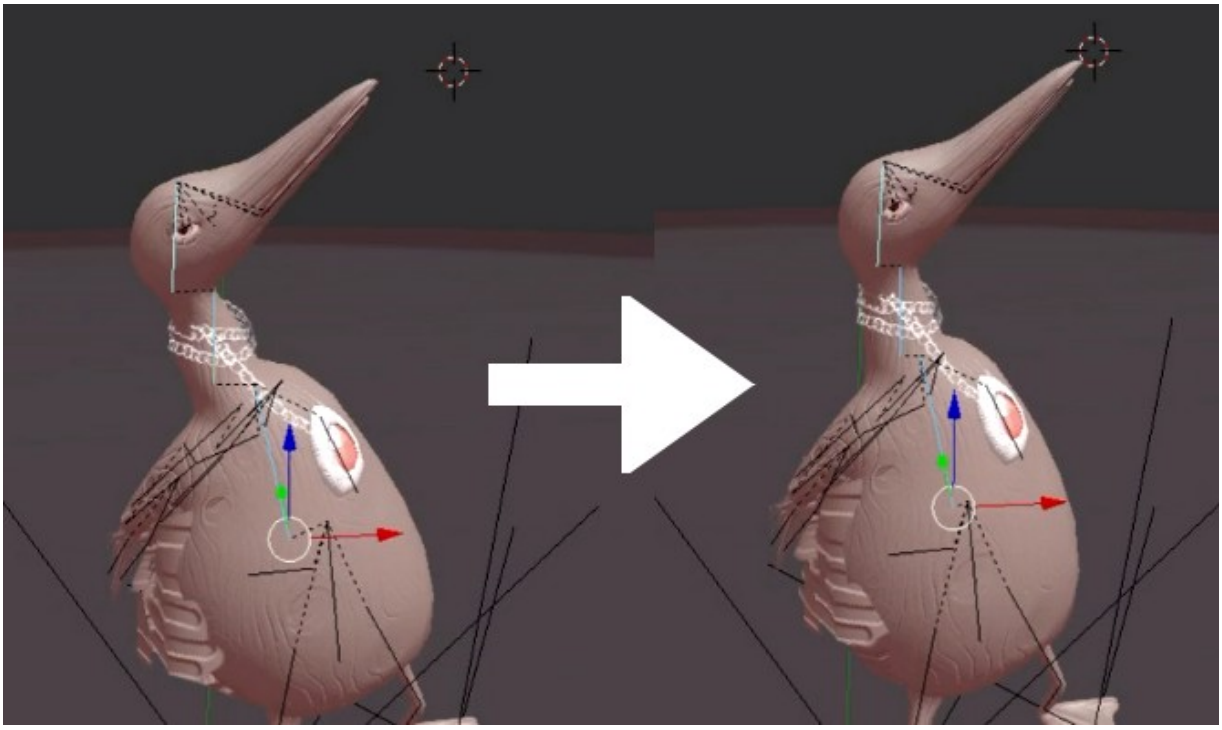
For non-looping animations, Jeane Spline version 1.0.5 can be applied to most armature motions consisting of mostly FK bones. Once you have created your initial armature motion, you can use Jeane Spline to loosen it up and smooth it out.



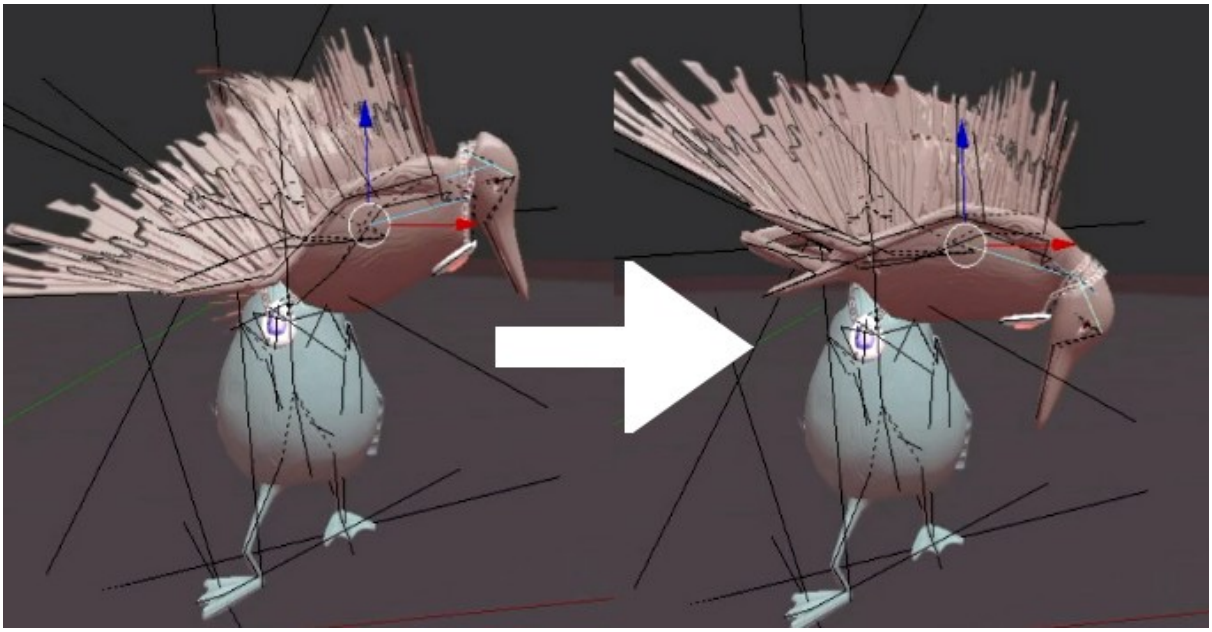
In this example, one character is animated to perform a front flip over another character. Both characters are animated pose to pose with a mix of fast and slow movements.



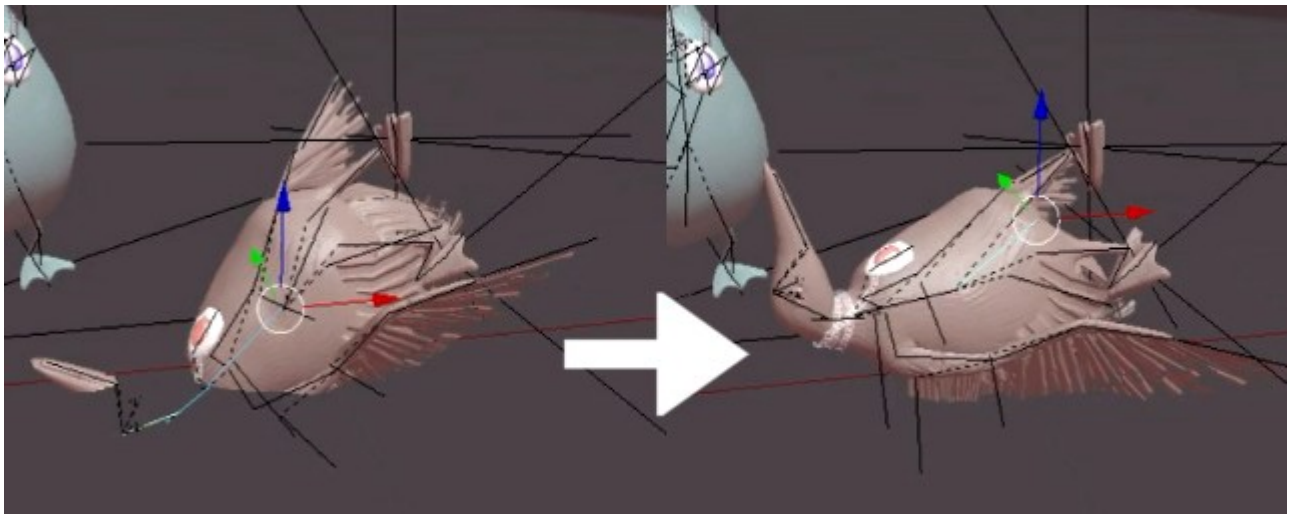
Once the initial armature motion is complete, the Jeane Spline delay effect can be applied to the animation. The Jeane Spline delay effect is first applied to the root bone in this animation. The result is as desired, so the spine, neck and head bones are selected and the Jeane Spline delay effect is applied to all three bones at once.



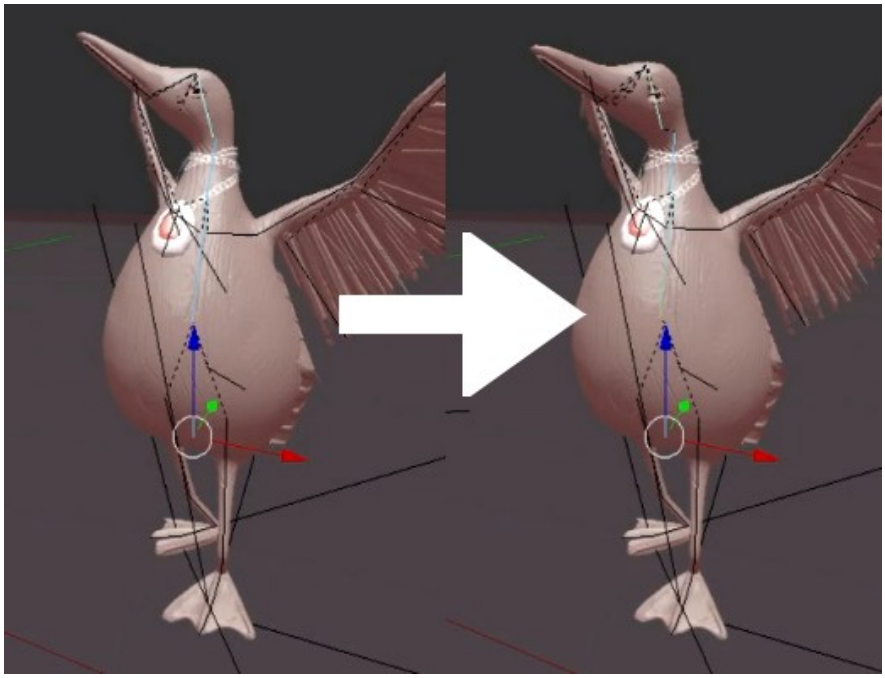
When the Jeane Spline delay effect is applied to the spine, neck and head bones, there is some undesired stretching. The Keyframe Influence For Selected Bone(s) button is used to define a region in the animation where the translation delay is reduced for the spine, neck and head bones.



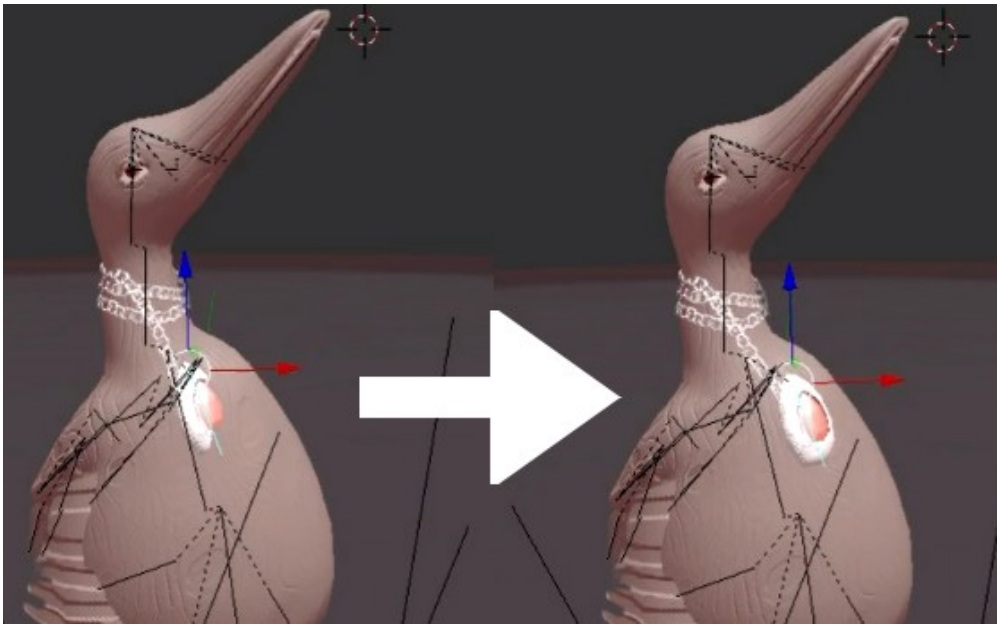
The translation and rotation delay effects are too strong when the character is moving forwards into the front flip, meaning that the head and neck are squashed too far and the character starts the roll too late. The translation and rotation influence for the spine, neck and head are reduced as a keyframe to achieve the desired results.



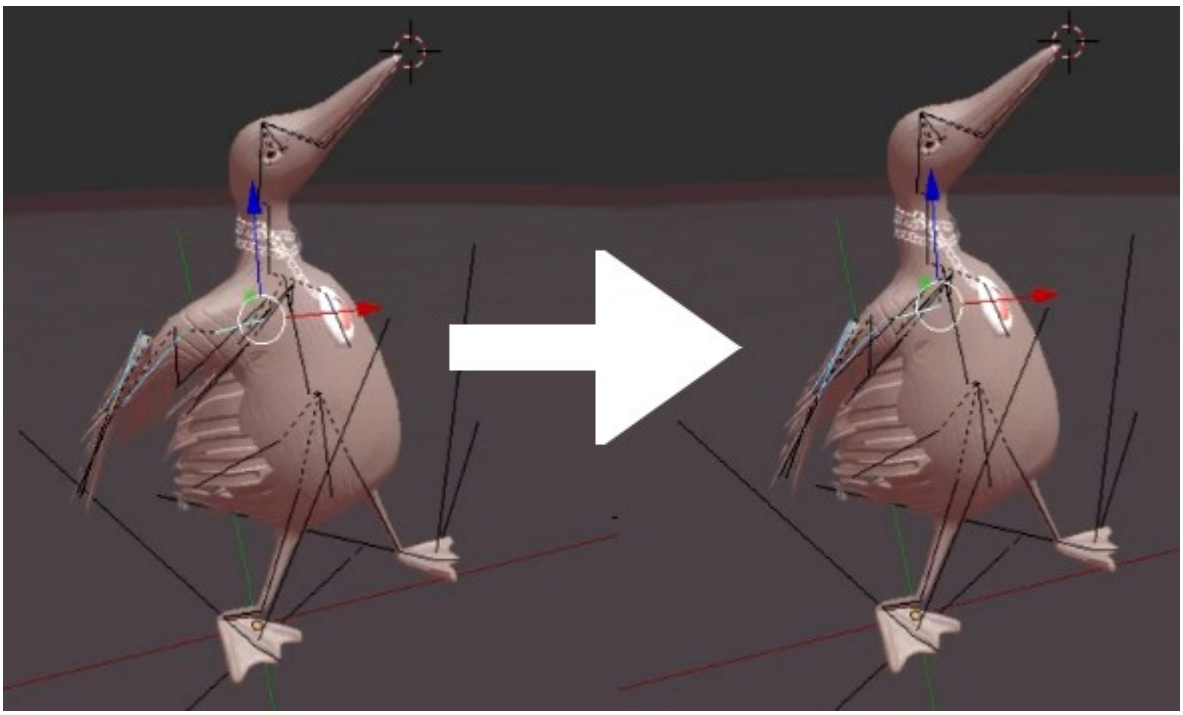
The rotation delay effect causes the head and neck to pass through the ground during the roll. The rotation delay influence is reduced as a keyframe to bring the head and neck back above the ground during the roll.



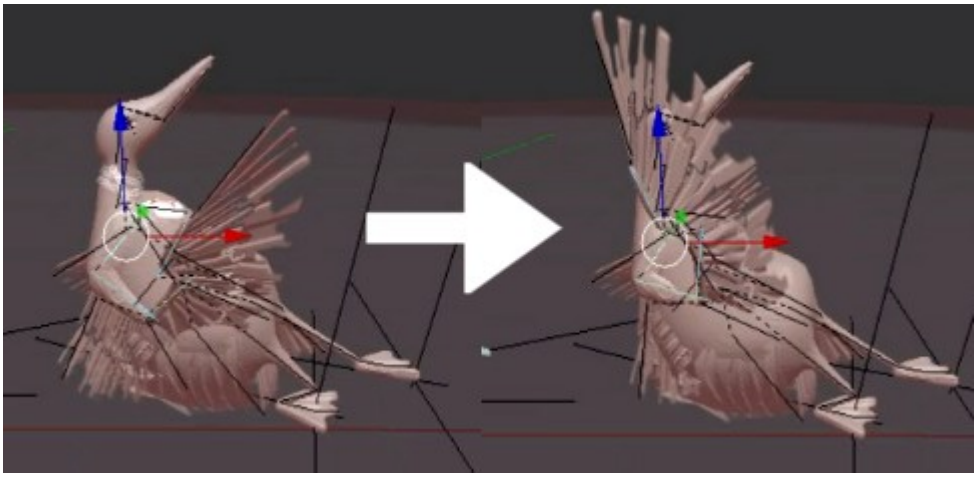
The Reset Effect Settings To Default button is pressed to restore the rotation and translation influence to their default setting. The default influence setting is then applied as a keyframe to add follow through to the spine, neck and head bones as the character comes to rest.



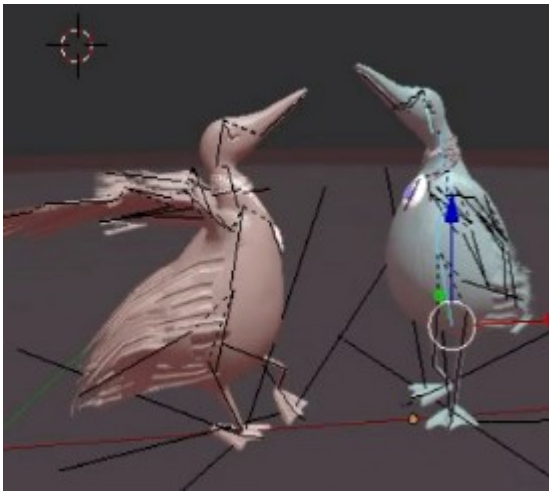
The Jeane Spline delay effect is applied to the amulet. Because the amulet is not alive and should only move as an attachment to the character, the Effect Noise Amplitude is set to 0 when the effect is applied. The translation influence of the Jeane Spline delay effect on the amulet is keyframed to prevent clipping during the front flip and to return to full strength as the character comes to rest.



The Jeane Spline delay effect is applied to the right wing with default settings. Similarly to the spine, neck and head, the translation and rotation delay effect influence is reduced with keyframes during the front flip so that the wing does not stretch.

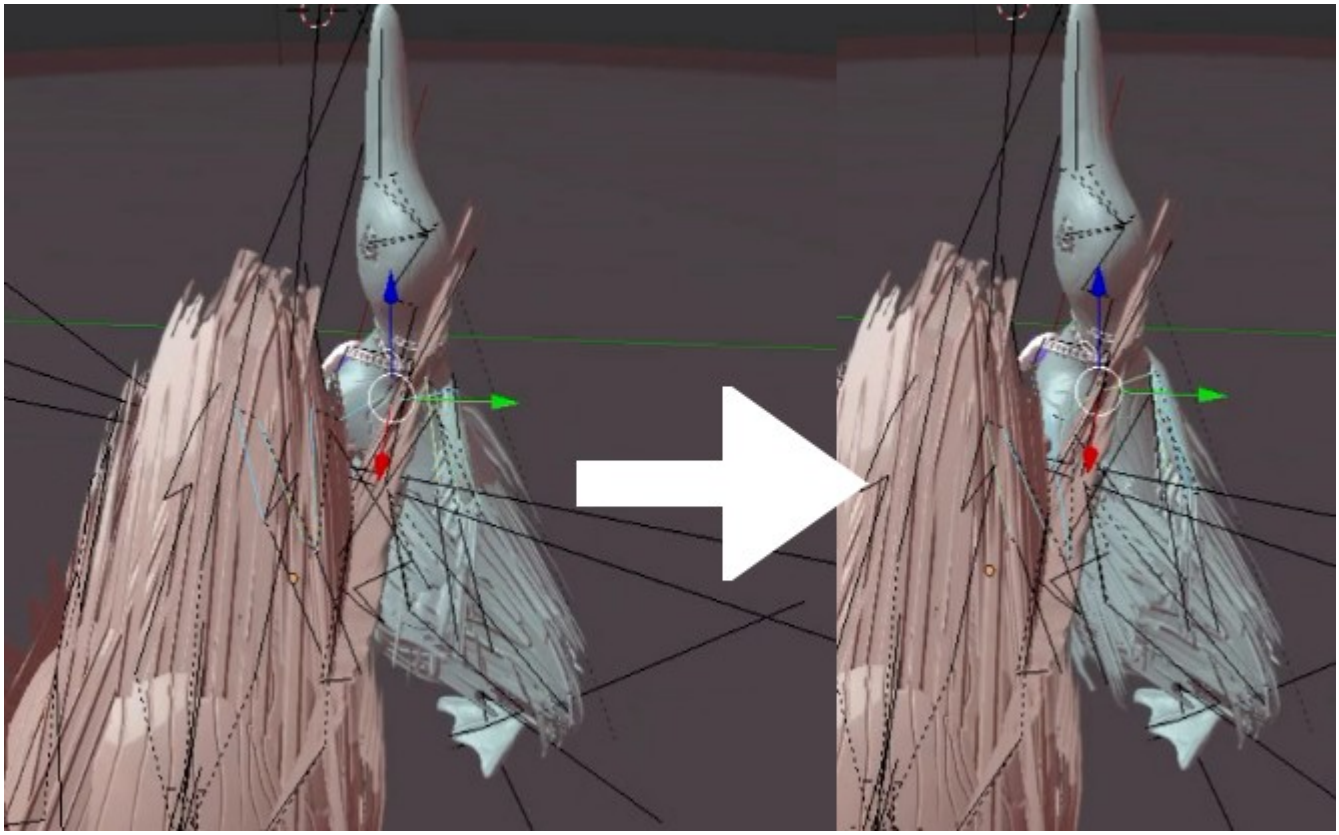


At the point where the character begins to recover from the front flip, the delay influence on the wing is keyframed to the default value to increase follow through. The same process of applying and tweaking the Jeane Spline delay effect is then performed on the left wing.

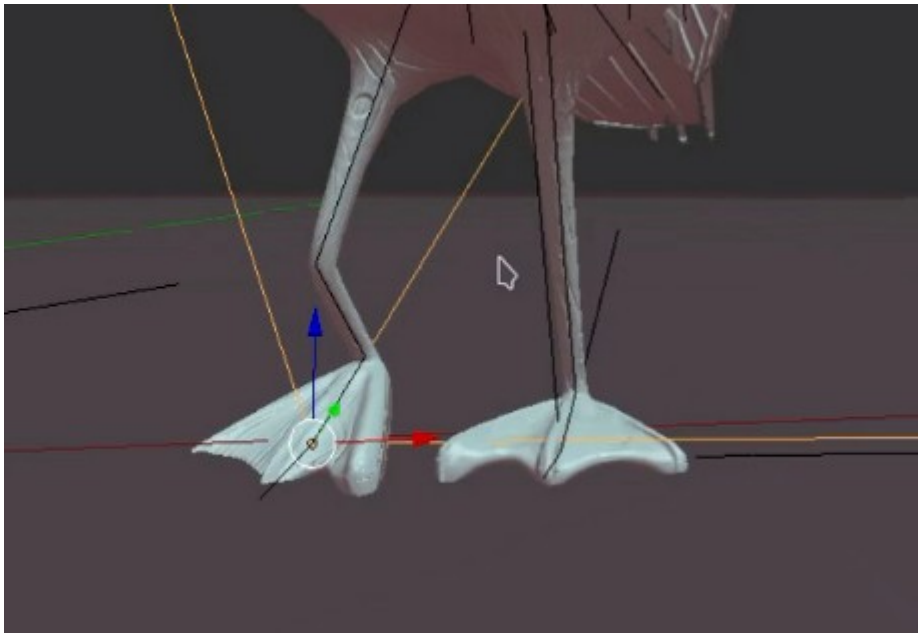


The Jeane Spline delay effect is applied to the root bone, spine, neck and head of the character who is observing the front flip. The results of applying the effect are as desired.

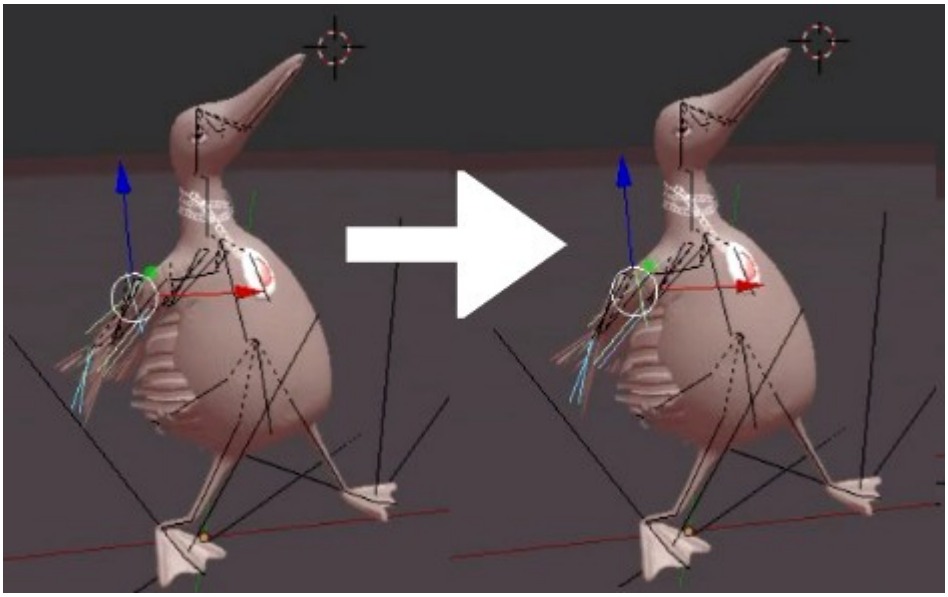
The Jeane Spline delay effect is also applied to the tail of the observing character with the desired results.



The Jeane Spline delay effect is applied to the wings of the observing character with default settings. The wings clip with the body when the character moves quickly, so a keyframe is set to reduce the effect translation influence on the wings.



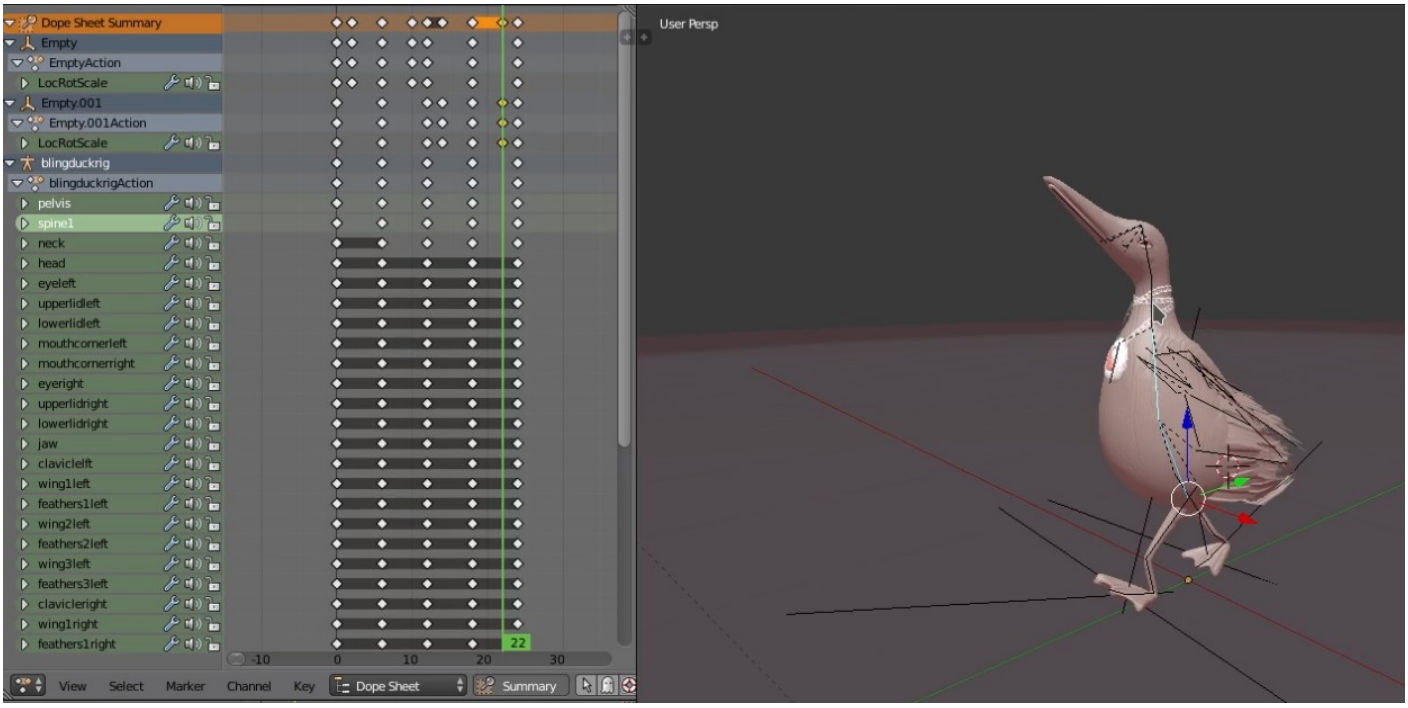
Adjustments are made to the animation of the IK handles for the legs to emphasize locomotion.



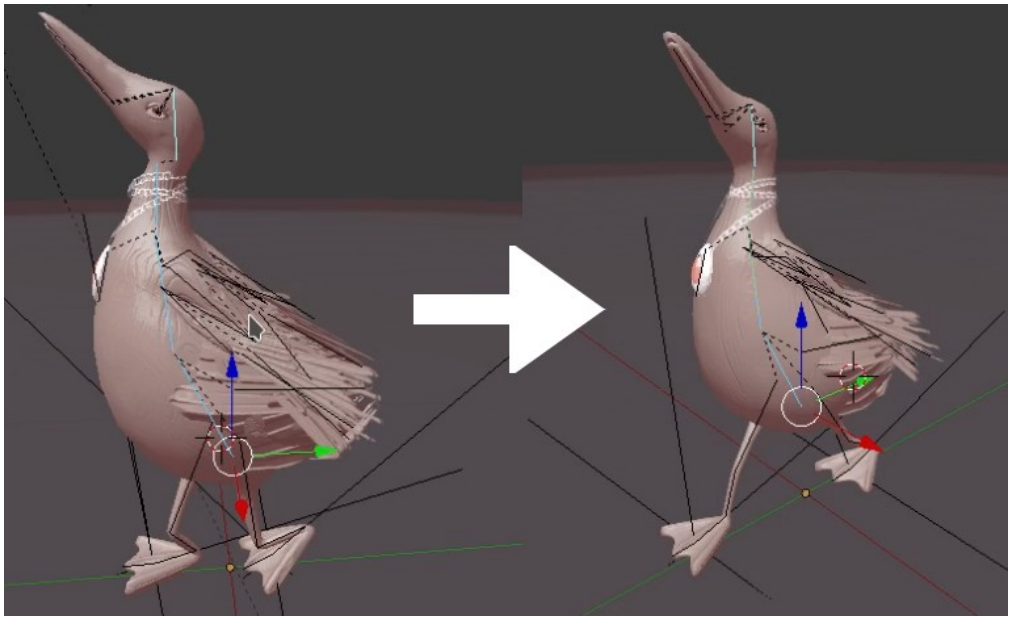
Finally, the Jeane Spline delay effect is applied to the feather bones on both wings of the character performing the front flip. The translation influence of the feather bones is reduced using a keyframe during the front flip so that they do not stretch.

Applying Jeane Spline to a Looping Animation

For looping animations, Jeane Spline version 1.0.5 can be applied to most armature motions consisting of mostly FK bones with the duration of the loop defined by the active timeline region. The start and end frames for your looping animation should match and the active timeline region should end one frame before the final frame of your looping animation. Once you have created your initial looping armature motion, you can use Jeane Spline to loosen it up and smooth it out.

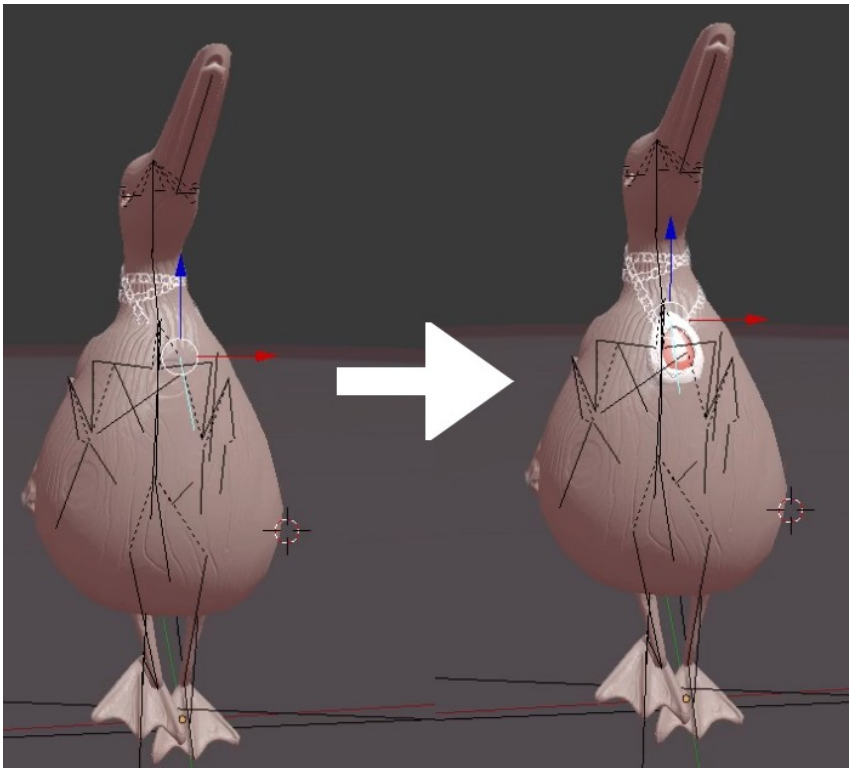


In this example, a character is animated with a simple walk cycle. The character is animated pose to pose and the active timeline region ends one frame before the final animation frame.

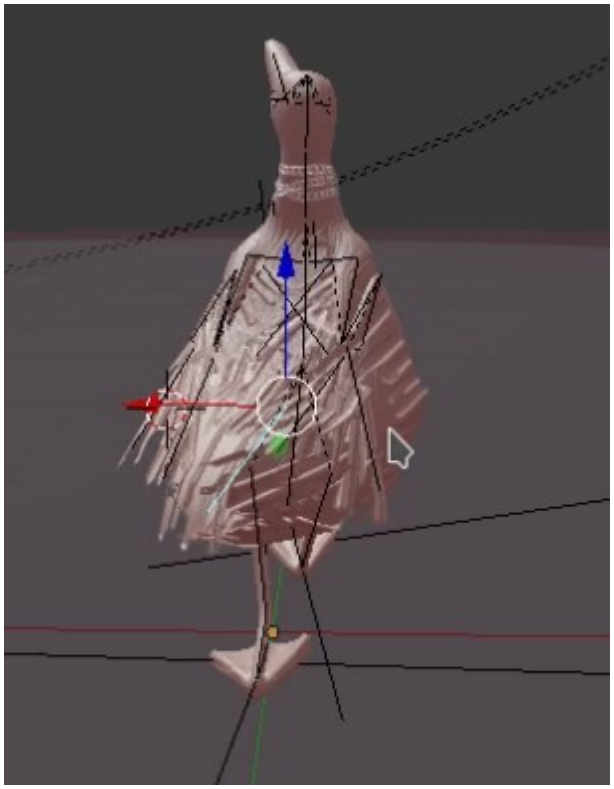


The Jeane Spline effect is first applied to the pelvis, spine, neck and head bones in one selection. Because there are a lot of steps involved in creating looping animation, it takes 2 minutes for Blender to apply the effect to the selected bones.

The result has too much translation delay in the neck and head, so the Jeane Spline effect is re-applied to the pelvis, spine, neck and head with a lower Effect Translation Influence value.



The Jeane Spline delay effect is applied to the amulet and Keyframe Influence for Selected Bone(s) is used to keyframe a region of reduced effect influence to prevent clipping.



Finally, the Jeane Spline delay effect is applied to the tail using default settings with the desired results.