

Songbird  
ReMix

# Jacanas



Lily Trotters from across the Globe

**Avian Models for 3D Applications**  
Characters and Procedural Maps by Ken Gilliland

# Songbird ReMix *Jacanas*

Lily Trotters from across the Globe

## Contents

### Manual

Introduction	3
Overview and Use	3
Conforming Crest Quick Reference	4
Creating a Songbird ReMix Bird	5
Using Conforming Crests with Poser	6
Using Conforming Crests with DAZ Studio	8
Birds in Flight & Pose Tips	9

### Field Guide

<b>List of Species</b>	10
Northern Jacana	11
Wattled Jacana	13
African Jacana	15
Lesser Jacana	17
Madagascar Jacana	18
Bronze-winged Jacana	19
Pheasant-tailed Jacana	20
Comb-crested Jacana	22
Resources, Credits and Thanks	24
Rendering Tips for Poser and Vue	25

Copyrighted 2010-11 by Ken Gilliland [SongbirdReMix.com](http://SongbirdReMix.com)

*Opinions expressed on this booklet are solely that of the author, Ken Gilliland, and may or may not reflect the opinions of the publisher, DAZ 3D.*

# Songbird ReMix *Jacanas*

## Lily Trotters from across the Globe

### Introduction

Jacanas are a unique species of shorebird which are commonly found with river and lake edges. Because of their exceptionally large feet they are traverse across open bodies of water by clinging plant and floating material. This gives them the appearance of walking on water and acquiring nicknames such as “Lily Trotter” or “Jesus Bird”. In the “Songbird ReMix Jacanas” set, all eight species of Jacana found throughout the world are represented.

### Overview and Use

Select **Figures** in Runtime Folder and go to the **Songbird ReMix** folder. Here you'll find an assortment of files that are easily broken into 2 groups: **Conforming Parts** and **Bird Base models**. Let's look at what they are and how you use them:

- **Bird Base Models**
  - **<WF8> Waterfowl 8/Jacana Base Model** - This model is used with semi-palmate (partially webbed) footed birds with a “Shorebird” rear toe in this package. See the “**WF8**” icon in the lower right corner? This corresponds with characters in the Pose folders. All MAT/MOR files with the “**WF8**” icon use this model. Load this model first and then the appropriate *Conforming Parts* if needed.
- **Conforming Parts** - No conforming parts are needed for this Shorebirds volume. It is possible that with future add-on volumes and/or future free download Birds that they *may* be needed. (All Conforming Crests have alphanumeric icons in the lower right corners such as “**C09**”, “**C22**” or “**T03**”. This corresponds with characters in the Pose folders. All MAT/MOR files with the same icon use that particular Conforming Part. ***Be sure to read this:*** Most conforming parts are Crests, which cover the head part. When posing the Base Model, the Conforming Part will follow any Bend, Twist or Rotate Commands. It will not obey any **SCALE** or **MORPH** commands you give the Base Model. You must manually scale the Conforming Part and, with morphs such as “OpenBeak” or “Stretch”, you must also set its counterpart in the head part of the Conforming Crest.

# Conforming Crest Quick Reference

Load Model(s)	To Create... (apply MAT/MOR files)
 <p>Jacana Base</p> <p>WF8 Songbird ReMi.3</p>	<ul style="list-style-type: none"><li>All Jacanas in this package</li></ul>



## Creating a Songbird ReMix Bird

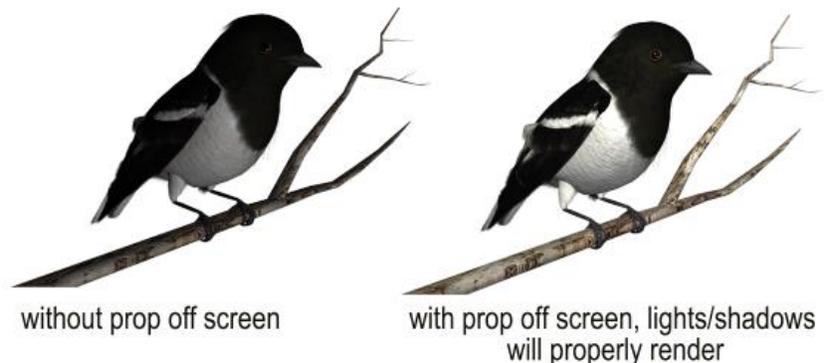
1. Choose what you want to load. For this example, we'll create a Jacana species.
2. Load Poser or DAZ Studio and select **FIGURES** and the Songbird ReMix folder. DAZ Studio users will select the "Poser Formats" → "My Library" → "FIGURES" → "Songbird ReMix".
3. Because all of the Jacanas use the "Jacana" base model we'll load that.
4. Go to the **POSES** folder and **Songbird ReMix** Master folder, then select the appropriate Songbird Remix library. This again, for DAZ Studio users will be found in the "Poser Formats" file section.
5. Select one of the Jacana Species and load/apply it by clicking the mouse on to our loaded Songbird ReMix base model. This species pose contains morph and texture settings to turn the generic model into the selected Jacana. It will automatically apply the correct DAZ Studio material settings if you are using DAZ Studio.

## Displacement in Poser 5+

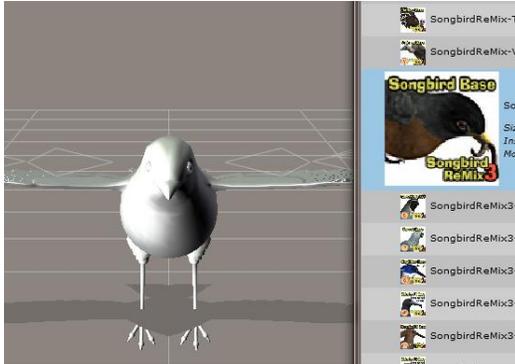
In Poser, several settings will help to bring out the best in this bird set. Under "Render Settings" (CTRL+Y) make sure you check "**Use Displacement Maps**" and (in some rare cases) the "**Remove Backfacing Polys**" boxes. In some poses, the wing morphs will expose backfacing polygons which tend to render black. Clicking the "Remove Backfacing Polys" fixes this.

## Scaling and Square Shadows in Poser

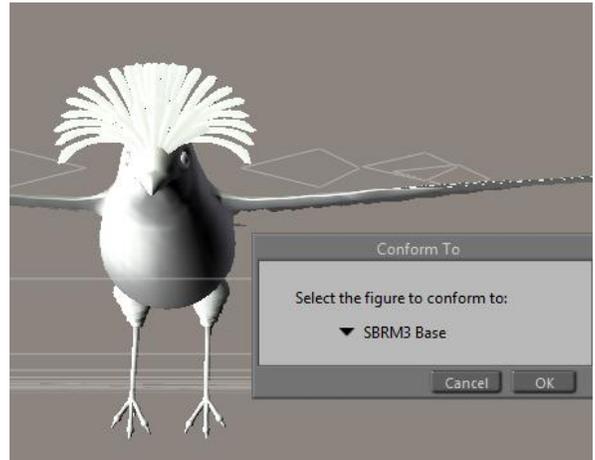
All the birds in this package have to scaled proportionally to DAZ 3D's Victoria and Michael models. The smallest of the included birds **MAY** render with a Square shadow or improper lighting. This is a bug in Poser. Poser can't figure out how to render a shadow for something really small, so it creates a square shadow. The solution is to put a larger item that casts a normal Poser shadow in the scene (even if it is off camera) and the square shadows will be fixed or **BODY** scale the bird to a larger size.



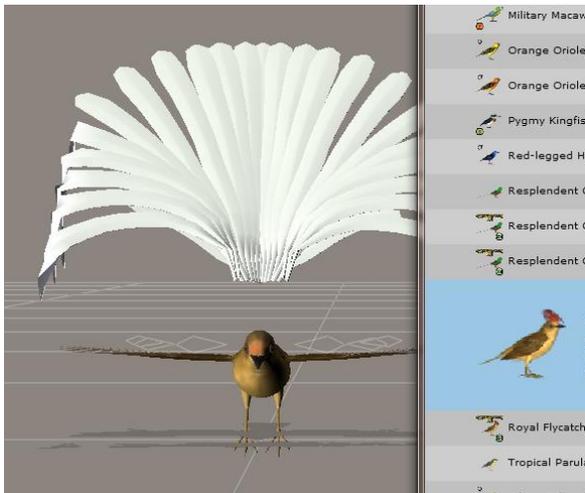
# How to build a Songbird ReMix Character with a Conforming Crest in Poser



1. In the Figures section, load a Bird base Model. Then load the appropriate conforming part for the bird you're trying to create.
2. **Conform it** to the bird base model.



3. Select the Base Model and go to **POSES**. Select and apply the appropriate Character/Material pose setting for the bird you're creating.



4. The Conforming part will look wrong. That's okay—we're going to fix that now. Select the conforming part and apply appropriate Character/Material pose for the part.

5. Voila! Your bird is done. Just remember to select the bird base when posing and often there are additional morphs in the conforming part you can use.



## Updates and Freebies

The Songbird ReMix series is constantly growing and improving. New morphs and additions to upcoming and future products often end up benefiting existing sets with new geometry, morphs and textures.

Songbirdremix.com always has the latest updates and additions to existing Songbird ReMix products (often months before they are updated at DAZ), plus the latest digital and real bird news, tutorials, videos, all the Field Guides, free bird characters, props and much more...

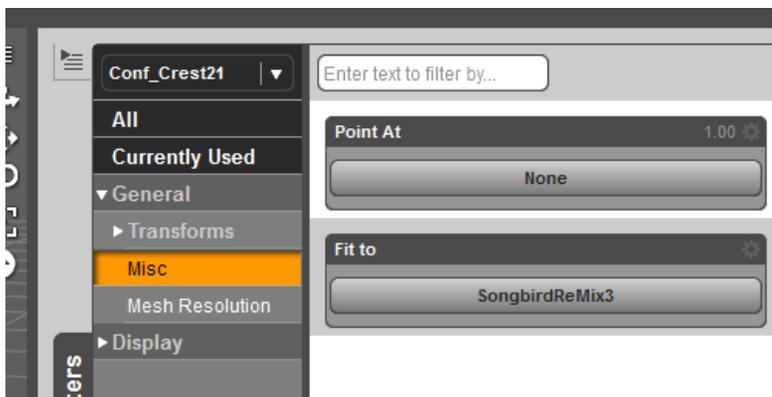
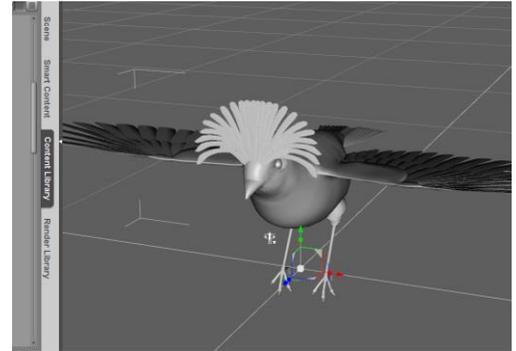
**[Songbird ReMix.com](http://SongbirdReMix.com)**



## How to build a Songbird ReMix Character with a Conforming Crest in DAZ Studio

In the **Runtime** folder, select **Figures** and load the Songbird ReMix Model and the appropriate Conforming Crest in Studio. Select the Conforming Crest by selecting on the screen or in the **Scene** Tab.

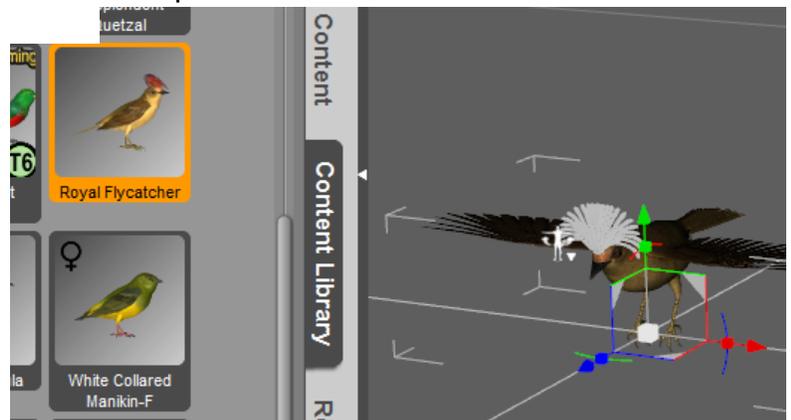
Now, using the “FIT TO” command in the Parameters Tab, Select the Songbird ReMix Model. Go back to the **Scene** Tab and select the Songbird ReMix Model.



Select the Studio **Content** Folder and go to the **Animals : SBRM : !CreateYour Own : Characters** folder and select the appropriate Songbird Remix library. Apply the Character setting to the bird base. It will probably reduce the size significantly and change the shape of the bird.

Now that the bird is sized, select the conforming part and apply the conforming part character settings.

Voila! Your bird is done. Just remember to select the bird base when posing and often there are additional morphs in the conforming part you can use.



# Birds in Flight

## Thigh Smoothing for Flight

When the thighs are pulled back for flight, often they can appear 'lumpy'. To correct this, each Thigh section has a '**SmoothThigh4Flight**' morph. This pulls back the Fluff Feather Material into the thigh and smoothes the thigh geometry slightly. This morph is used in the flight poses that are provided.

## Coverlets, Folded and Outstretched Wings

The wings often do not depict the true markings of the bird when folded; the **Coverlet** body parts will fix this. The **HideCoverlet** morph in each Coverlet body part has two modes; On or off. **The Coverlets should always be hidden if the Wings are in any position other than completely Folded.** They were designed as slipcovers for the folded wings. There is main controller for both Coverlets in the BODY section and separate controllers in both the left and right Coverlet parts.

## Wattle I do?

### When using the Upper Beak Morph...

When using the Raiser Upper Beak morph on specific species of Jacana you will notice wattle poke-through. There are 3 fix morphs to correct this in the Wattle body part. These fixes correspond to the wattle shape morph used in this section. For example if the **BeakBlend** morph is used, you'll need to dial the **BendBlendFix** morph.

# Songbird ReMix *Jacanas*

## Lily Trotters from across the Globe Field Guide

### **Americas**

Northern Jacana  
Wattled Jacana

### **Africa**

African Jacana  
Lesser Jacana  
Madagascar Jacana

### **Asia**

Bronze-winged Jacana  
Pheasant-tailed Jacana

### **Australasia**

Comb-crested Jacana

**Common Name:** Northern Jacana  
**Scientific Name:** *Jacana spinosa*

**Size:** 6 ¾ - 9 inches (17-23 cm)

**Habitat:** Central America; coastal Mexico to western Panama, and on Cuba, Jamaica and Hispaniola. It sometimes breeds in Texas, USA, and has also been recorded on several occasions as a vagrant in Arizona. Preferred habitat is shallow lakes, rivers or streams covered with floating or floating-emergent vegetation in tropical areas.

**Status:** Least Concern. **Global population:** 500,000-5,000,000. Drainage of wetlands is an ongoing threat, also harvesting of mangrove swamps for lumber. Water pollution from pesticide use is ongoing. Protected under the Migratory Bird Treaty Act of 1918 in the US.



**Diet:** Insects, other invertebrates and seeds picked from the floating vegetation or the water's surface. Their huge feet and claws which enable them to walk on floating vegetation while foraging.

**Nesting:** Females are larger than the males. Juveniles initially have entirely white under parts, and can always be identified by the presence of white in their plumage. The Northern Jacana lays four black-marked brown eggs

in a floating nest. In this species the roles of the sexes are reversed, for unknown reasons. Whether role reversal evolved before polyandry or they coevolved is unknown. Males build the nest, incubate, and raise the small, precocial young. Females rarely brood chicks. The much larger, more aggressive females may be bonded simultaneously with up to 4 males, which defend their adjacent territories

against one another. Females defend their territories against other females and assist each of their males in defending their territories against both neighboring jacanas and other intruders. This remarkable simultaneous polyandry occurs where habitat is rich, male territories are relatively small, and the configuration of male territories allows the females to defend more than one male's territory. In less rich habitats where male territories are larger, or along narrow waterways where male territories are long, females may be unable to defend more than 1 male's territory.

**Cool Facts:** In Jamaica this bird is also known as the 'Jesus bird', as it appears to walk on water.



**Common Name:** Wattled Jacana  
**Scientific Name:** *Jacana jacana*

**Size:** 6 ¾ - 9 inches (17-23 cm)

**Habitat:** Central and South America; from western Panama and Trinidad south through most of South America east of the Andes.

**Status:** Least Concern. **Global population:** unknown. Drainage of wetlands is an ongoing threat, also harvesting of mangrove swamps for lumber. Water pollution from pesticide use is ongoing.

**Diet:** Insects, other invertebrates and seeds picked from the floating vegetation or the water's surface.



**Nesting:** Females are larger than males. Young birds initially have entirely white under parts, and can always be identified by the presence of white in their plumage. Females lay four black-marked brown eggs in a floating nest. The male takes responsibility for incubation, with two eggs held between each wing and the breast. The females are polyandrous, and will help to defend the nests of up to four mates. If the female disappears and is replaced by another, the chicks

are in danger of being killed by the new female so that her own eggs will have a better chance of survival.

**Cool Facts:** There are six races of Wattled Jacana; with the nominate *Jacana ssp. jacana* race *jacana* being the most widespread. Several of the other subspecies are similar, but *J. j. hypomelaena* of western Panama and northern Colombia has all the chestnut plumage replaced by black, and *J. j. scapularis* of western Ecuador has some black feathers on its chestnut shoulders, and white outer primary feathers.

Jacana is one Linnæus' pseudo-Latin misspelling for the Brazilian Portuguese Jaçanã (from a Tupi name of the same bird) whose pronunciation is approximately [ʒa.sa.náN].

**Common Name:** African Jacana  
**Scientific Name:** *Actophilornis africana*

**Size:** 11– 12¼ inches (28-31cm)

**Habitat:** Africa; throughout sub-Saharan Africa. This species is nomadic in relation to changing water levels with some individuals travelling as far as several kilometers between suitable habitats. The species may breed in any month of the year in permanent wetlands but only during the wet season in seasonally flooded areas.

**Status:** Least Concern. **Global population:** 1,000,000. The species is locally threatened by wetland degradation and loss through flooding (as a result of hydroelectric projects), drainage and overgrazing.

**Diet:** Insects (e.g. dragonfly nymphs, bees) and worms, as well as spiders, crustaceans, mollusks and occasionally seeds are picked from the floating vegetation or the water's surface. The species forages singly, in pairs or in dispersed family groups and may occasionally gather in small, loose flocks.

**Nesting:** Females are twice as large as males and can be very picky about who they choose as a mate. The female African Jacanas does not generally choose the same male partner for every clutch of eggs that she lays. The



African Jacana breeds throughout sub-Saharan Africa. It is sedentary apart from seasonal dispersion. It lays four black-marked brown eggs in a floating nest. It has a polyandrous mating system, with males holding nesting, breeding, foraging and chick-rearing territories while females mate with several adjacent males.

**Cool Facts:** African jacana molt all of their wing feathers at the same time and are unable to fly until their new feathers grow in.

Jacanas have many enemies including snakes, otters, water mongooses and other birds are predators of the African Jacana's eggs. Since African Jacana's eggs and young chicks are often preyed upon, the survival of this species is largely dependent on the mother's ability to lay several clutches of eggs in one season.



**Common Name:** Lesser Jacana

**Scientific Name:** *Microparra capensis*

**Size:** 6 – 6 ½ inches (15-16.5 cm)

**Habitat:** Africa; This species shows a preference for shallow water around the edges of permanent and seasonally flooded wetlands, with areas of sparse, aquatic grasses and stands of floating vegetation such as water-lilies. It inhabits lake and dam backwaters, river flood-plains (e.g. Okavango Delta), swampy river edges, pans, coastal lagoons (Natal, South Africa), grassy swamps and sometimes small ponds, although it generally avoids shorelines with firm substrates.

**Status:** Least Concern. **Global population:** 25,000 to 100,000. The species is locally threatened by wetland degradation and loss through flooding (as a result of hydroelectric projects), drainage and overgrazing.



**Diet:** Insects, other invertebrates and seeds picked from the floating vegetation or the water's surface.

**Nesting:** The species breeds in territorial solitary pairs, the timing of breeding varying geographically in response to wet seasons and the availability of suitable habitat.

**Cool Facts:** Outside of the breeding season the species can be observed singly or in loose groups of up to 20 individuals.

**Common Name:** Madagascar Jacana  
**Scientific Name:** *Actophilornis albinucha*

**Size:** 11 – 12¼ inches (28-31cm)

**Habitat:** Africa; It is endemic to Madagascar. The migratory movements and breeding habits of this species are little known although it appears to make minor local movements in response to water conditions and may breed throughout the year. The species shows a preference for floating vegetation on shallow lake margins, in freshwater marshes, on ponds and on slow-flowing rivers

**Status:** Least Concern. **Global population:** 1,000 to 10,000. The species is threatened by habitat degradation (the population on Lake Aloatra has declined as a result of siltation, agricultural development, drainage, over-fishing and illegal hunting)



**Diet:** Adult and larval insects and other invertebrates, as well as the seeds of aquatic plants. The species is usually found alone or in pairs, rarely in groups.

**Nesting:** Females are larger than males and can be up to twice the size. The nest is a floating heap of aquatic vegetation. Males incubate the eggs.

**Cool Facts:** The Madagascar jacana has the same colors as the African jacana, but with the neck and head colors exactly reversed.

**Common Name:** Bronze-winged Jacana  
**Scientific Name:** *Metopidius indicus*

**Size:** 11 - 12 inches (27-30cm)

**Habitat:** Asia; breeds in India and Southeast Asia. It is sedentary apart from seasonal dispersion. Floating vegetation in the shallow lakes that are their preferred habitat.

**Status:** Least Concern. **Global population:** 50,000 to 100,000. The species is locally threatened by wetland degradation and loss through flooding, drainage and overgrazing.

**Diet:** Insects, other invertebrates and seeds picked from the floating vegetation or the water's surface.

**Nesting:** Females are larger than males but look alike. Young birds have brown upperparts. Their underparts are white, with a buff foreneck. Females lays four

black-marked brown eggs in a floating nest and males incubate the eggs.

**Cool Facts:**

The call is a wheezy piping 'seek-seeek-seeek' given mostly in alarm. When forced they sometimes choose to hide by submerging themselves. The male may carry chicks between the wings and body.



**Common Name:** Pheasant-tailed Jacana  
**Scientific Name:** *Hydrophasianus chirurgus*

**Size:** 11 ½ - 12 ½ inches (29-31.5 cm)

**Habitat:** Asia; breeds in India, Southeast Asia, and Indonesia. It is sedentary in much of its range, but northern breeders from south China and the Himalayas migrate into peninsular India and Southeast Asia. It is also resident in Taiwan, where it is considered endangered.

**Status:** Least Concern. **Global population:** 100,000. **Endangered in Taiwan** (1997). The Guantian Jacana Reserve in Tainan County was designated to protect the species in 2000 however receives scant funding. Several government projects and Typhoon Morakot (2009) have dealt severe blows to Taiwan population.



**Diet:** Insects, other invertebrates and seeds picked from the floating vegetation or the water's surface.

**Nesting:** During the breeding season, the long tail adds another 3 - 9  $\frac{3}{4}$  inches (8-25 cm). Breeding adults are mainly black other than white wings, head, and fore neck. The hind neck is golden. Non-breeding adults lack the long tail. The under parts are white except for a brown breast band and neck stripe. The side of the neck is golden.

Females tend to be larger and more colorful than males. Young birds have brown upperparts. The under parts are white, with a weak brown breast band.

These jacanas breed on floating vegetation from March to July. In southern India, it breeds in the monsoon season, June-September. They are polyandrous and a female may lay up to 10 clutches. Four black-marked brown eggs are laid in the floating nests.

**Cool Facts:** This is the only jacana to have a different breeding plumage and is easily identified by the striking white plumage from head to breast and by the long sickle shaped tail during the breeding season.

The Pheasant-tailed Jacana is capable of swimming, although it usually walks on the vegetation.

**Common Name:** Comb-crested Jacana  
**Scientific Name:** *Irediparra gallinacea*

**Size:** 7 ¾ - 9 inches (20-23 cm)

**Habitat:** Australiasia; distributed in coastal and sub-coastal regions from the Kimberleys, Western Australia, through northern Australia to about Grafton, New South Wales. They are more common in the north of their range. The species also occurs in New Guinea, Indonesia and the Philippines. Found in tropical and subtropical freshwater wetlands, including lagoons, billabongs, swamps, lakes, rivers, sewage ponds and dams, providing there is adequate floating vegetation.

**Status:** Least Concern. **Global population:** 25,000 to 1,000,000. The species is locally threatened by wetland degradation and loss through flooding, drainage and overgrazing.

**Diet:** Aquatic insects, which it seizes from floating vegetation or the surface of the water. It also feeds on seeds and aquatic plants. Birds rarely come to shore. When searching for food, the Comb-crested Jacana bobs its head and flicks its tailed continuously.

**Nesting:** Both sexes are similar in appearance, but the female is larger than the male, and slightly brighter in color. In flight, the long legs and toes trail behind the



body. Young Jacanas resemble the adult birds, but are rufous to black on the head and nape, and have a rufous-black breast band. The red fleshy comb is much smaller and darker.

The female Comb-crested Jacana may mate with several males, while the male alone builds the nest, incubates the eggs and

cares for the young. If danger threatens the young birds, the male has the curious habit of picking the chicks up under his wings and carrying them off to safety.

**Cool Facts:** In Australia, the Comb-crested Jacana, also known as the “Lotusbird”. Comb-crested Jacanas will move to new locations, particularly in response to changes in their current habitat, such as droughts or excessive flooding.

Special Thanks to...

....my beta testers (Bea, Jan, Kelvin, Nancy, Rhonda, Sandra and Walter)

## Species Accuracy and Reference Materials

Many birds of the same species do vary considerably in color. This package tries to emulate the colors and markings in the most commonly found variants.

The author-artist has tried to make these species as accurate to their real life counterparts as possible. With the use of one generic model to create dozens of unique bird species, some give and take is bound to occur. The texture maps were created in Painter with as much accuracy as possible. Photographic references from photographs from various Internet searches and several field guides were used.

### Field Guide Sources:

- **“The Sibley Guide to Birds”** by [David Allen Sibley](http://www.sibleyguides.com/) (<http://www.sibleyguides.com/> )
- **Birds of Southeast Asia** by Craig Robson. Princeton University Press
- **Birds of Australia** by Ken Simpson and Nicolas Day. Princeton University Press
- **Birds of Southern Africa** by Ian Sinclair, Phil Hockey, and Warwick Tarboton. Princeton University Press
- **Birds of East Asia** by Mark Brazil. Princeton University Press
- **Birds of Peru** by Thomas S. Schullenberg, Douglas F. Stotz, Daniel F. Lane, John P. O’Neil and Theodore A. Parker III. Princeton University Press
- **All About Birds/Cornell** (<http://www.birds.cornell.edu/AllAboutBirds/> )
- **Wikipedia** (<http://www.wikipedia.com>)
- **Birdlife International** (<http://www.birdlife.org> )

### Other Resources:

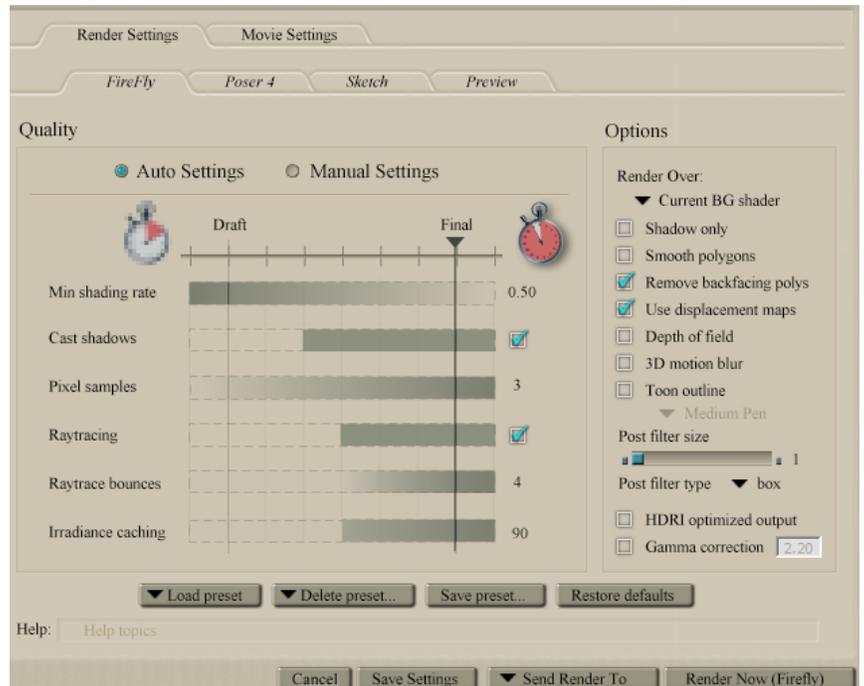
- **Songbird ReMix Central** (<http://www.songbirdremix.com> )
- **Songbird ReMix “Bird Brains” User Group and Forum** (<http://artzone.daz3d.com/groups/songbirdremix> )

# Rendering Tips

## In POSER 5+...

In Poser, several settings will help to bring out the best in this bird set.

Under “Render Settings” (CTRL+Y) make sure you check “**Use Displacement Maps**” and (in some rare cases) the “**Remove Backfacing Polys**” boxes. In some poses, the wing morphs will expose backfacing polygons which tend to render black. Clicking the “Remove Backfacing Polys” fixes this.



## In VUE...

Vue has trouble with back-facing polygons which tend to show-up in certain wing and “Fluff” poses. The easiest and fast solution is to limit the amount of bending in the Forearm, Hand and Feather controllers and the hide or limit the ‘Fluff’ used

**Bake it!** The better (but much slower solution) is to in “Polygon Mesh Options”, **bake the model**. You might also click “Force double-sided baking” as well as playing with the Max smoothing angle and checking Dynamic Subdivison. Put Quality boost into the + area. Then bake it—“baking” will take hours on most computers.

The “Eye” material uses a Poser reflection map; since Vue has a built-in environment, it’s better to use the Vue one and cut down the reflection to 20-50% depending on light in the scene.

I also often find in better to also cut down the “Highlight Global Intensity” to 40% and “Highlight Global Size” to 50% on Plumage, Wings and Beak materials in the “Highlights” section.

**Shirts, jerseys, sweatshirts,  
prints, cards, posters, pillows,  
coffee cups, calendars & more**

