

**Songbird
ReMix**

Jacanas



Lily Trotters of the World

Avian Models for 3D Applications

Characters and Procedural Maps by Ken Gilliland

Songbird ReMix Jacanas

Lily Trotters from across the Globe

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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

The set is located within the **Animals : Songbird ReMix** folder. Here is where you will find a number of folders, such as **Bird Library**, **Manuals** and **Resources** . Let's look at what is contained in these folders:

- **Bird Library:** This folder holds the actual species and poses for the "premade" birds. Birds are placed into a "type" folder (such as "Birds of Prey (Order Falconiformes)" which for example would hold falcons, hawks and eagles). The birds for this set can be found in the following folder(s):
 - **Gulls and Waders (Order Charadriiformes)**
- **Manuals:** Contains a link to the online manual for the set.
- **Props:** Contains any props that might be included in the set
- **Resources:** Items in this folder are for creating and customizing your birds
 - **Bird Base Models:** This folder has the blank, untextured model(s) used in this set. These models are primarily for users who wish to experiment with poses or customize their own species of bird. When using physical renderers such as Iray and Superfly, SubD should be turned to at least “3”.

Poser Use

Select **Figures** in the **Runtime** Folder and go to the **Animals : Songbird ReMix** folder. Select the bird from the renderer *Firefly* or *Superfly* folder you want and simply click it to load. Some birds in the Songbird ReMix series may load with attached parts (*Conformers*) such as tail or crest extensions. Some of these parts have specific morphs. You will need to click on the attached part to access those controls. Associated poses can be found in the same folder- **Bird Library : (Type) : Poses**.

DAZ Studio Use

Go to the **Animals : Songbird ReMix** folder. Select the bird from the renderer (*3Delight* or *Iray*) folder you want and simply click it to load. Some birds in the Songbird ReMix series may load with attached parts (*Conformers*) such as tail or crest extensions. Some of these parts have specific morphs. You will need to click on the attached part to access those controls. Associated poses can be found in the same folder- **Bird Library : (Type) : Poses**. **Note:** Using the "Apply this Character to the currently selected Figure(s)" option **will not** properly apply the correct scaling to the bird selected. It is better to delete the existing character first and load the one you want to use.

Physical-based Rendering

Iray and **Superfly** requires more CPU and memory horsepower than the legacy renderers because of ray-trace bounces and higher resolution meshes needed for displacement. Poser's **Superfly** renderer will require that the "Min Transparent Bounces" be set to **at least 16** and that the "Max Transparent Bounces" be set to **at least 32** in render settings. Superfly renders may show artifacts in the head area. This is a known Poser issue and may be addressed in the future. Increasing the SubD may minimize this issue.

Posing & Shaping Considerations

This volume has various species, so when using generic poses not every pose will work perfectly with every bird. You may find that some minor alteration on the stock poses may be warranted.

Here are some of the most common alterations you may need to make:

- Birds will not be flat on the zero plane due to leg size and overall scale.
- Because of the numerous beak shapes, closing the beak may range from 0.5 to 1+. Usually 0.8-1.0 is about right.
- **Coverlets.** The wings often do not depict the true markings of the bird when folded; the Coverlet body parts fixes this. They were designed as slipcovers for the folded wings. By default, the Coverlets will be deployed when the wings are folded. The Hide Coverlet morph (which is hidden) has two modes; On or off. "Unhide" parameters if you want to their use to be optional. The basic rule is that they should always be hidden if the Wings are in any position other than completely Folded. There are additional Coverlets morphs in the Creation Controls (Wings and Tail) section.
- **"Fluff" lines.** With some lighting, seams where the "Fluff" transparency planes correct to the model may show badly. In these cases, there are 3 "work-arounds" ... **1)** reposition the lighting so the seam(s) doesn't show; **2)** smooth/paint it out in postwork; or **3)** use the "Hide Fluff" morphs found in Correction Controls on the offending area.

IK Concerns

Some poses may go askew when IK is turned on. By default, Poser's IK feature is turned off when loading a bird. To turn it on, select the "Figure" category from the main tool bar and "Use Inverse Kinematics" from the submenu.

By default, DAZ Studio's IK feature is turned on when loading a bird. This will cause the thigh and shin rotations change when the character is moved. The **CTRL K** keypress will turn IK on and off in DAZ Studio. IK doesn't work that well in Studio, so I suggest selecting the character in the **Scene tab** and simply deleting the two IK body parts to remove IK.

Where to find your Birds and Poses

Type Folder	Bird Species
Gulls and Waders (Order Charadriiformes)	Northern Jacana Wattled Jacana African Jacana Lesser Jacana Madagascar Jacana Bronze-winged Jacana Pheasant-tailed Jacana Comb-crested Jacana

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

Australiasia

Comb-crested Jacana

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

Size: 8.5-9.5 inches (21.5-24 cm)

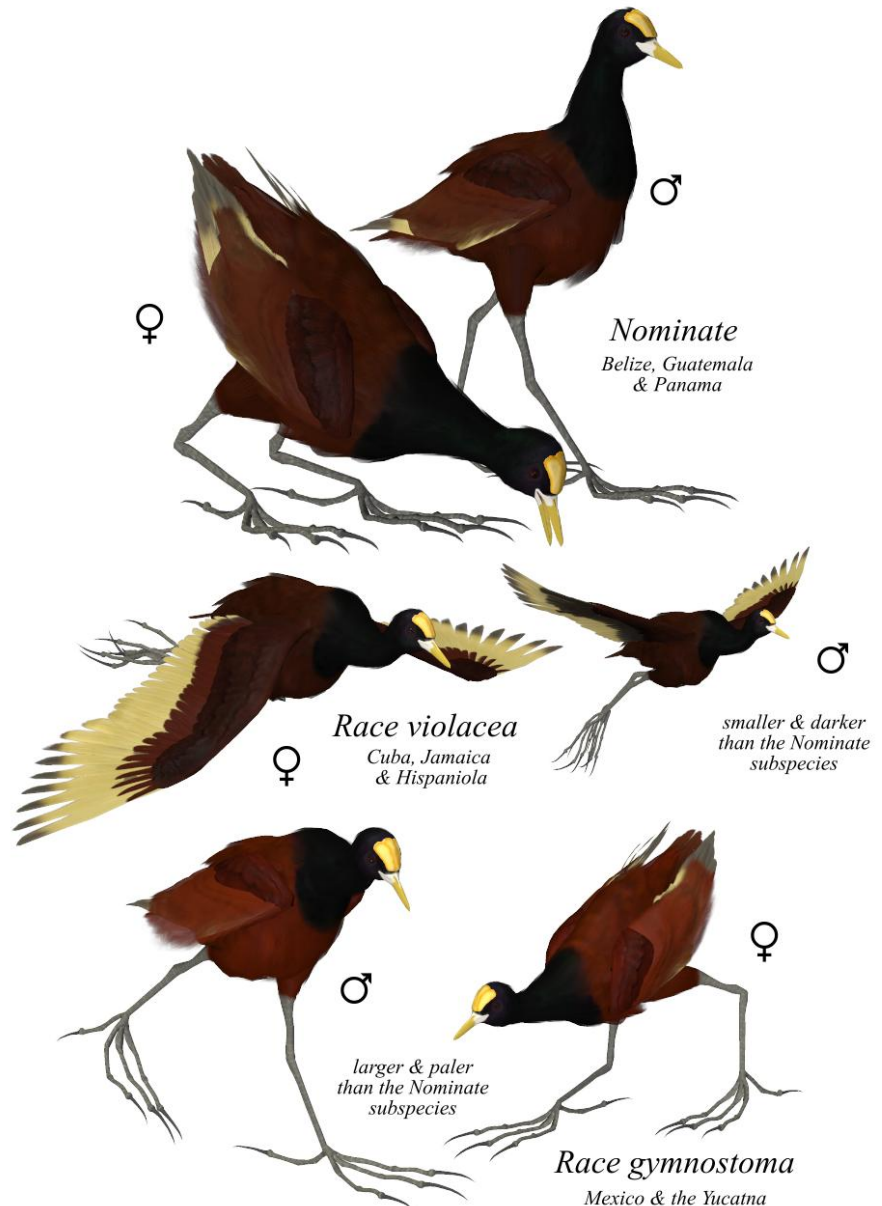
Habitat: Central America; coastal Mexico to western Panama, and on Cuba, Jamaica and Hispaniola. It sometimes breeds in Texas, USA, and has also been recorded on several occasions as a vagrant in Arizona. Preferred habitat is shallow lakes, rivers or streams covered with floating or floating-emergent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

Status: Least Concern.

Global population: 500,000-4,999,999 mature individuals with a stable population trend. The 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.

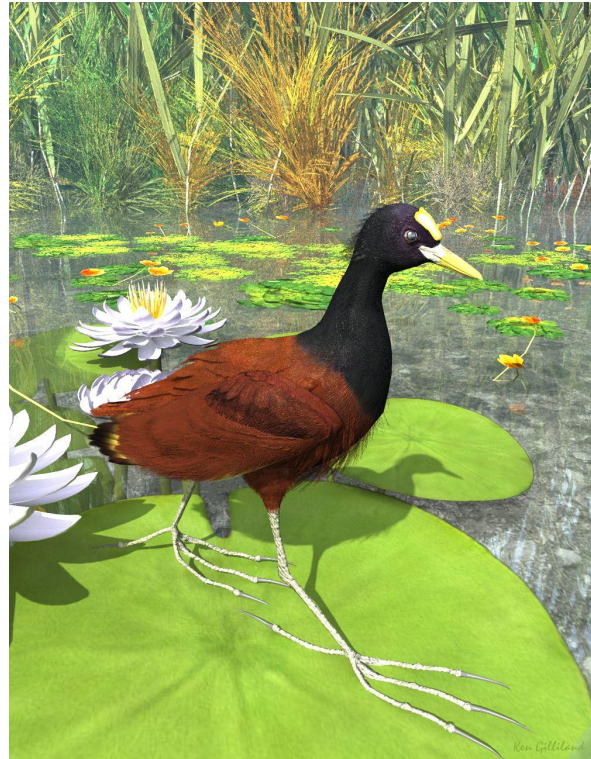
Diet: Insects, other invertebrates and seeds picked from the floating vegetation or the water's surface. Their huge feet and claws which enable them to walk on floating vegetation while foraging.

Nesting: Females are larger than the males. It is a small to medium-sized wader, with long legs and greatly elongated toes and nails. The adult is a reddish brown, with a green-glossed black head, neck, and breast. The bill is bright yellow, with a white or pale bluish base. There is a



yellow-fleshy shield on base of the forehead. The remiges are a green-yellow, edged with dark brown and contrasting with the rest of the plumage when the wings are extended. The wing also has a sharp yellow spur at its bend. Upon alighting and during certain displays, Northern Jacanas extend their wings vertically above the body, exposing yellow carpal spurs and remiges. 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 co-evolved is unknown. Males build the nest, incubate, and raise the 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 one male's territory.



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

There are three subspecies:

- *J. s. gymnostoma*. This subspecies is found in Mexico from south-central Sinaloa and central Tamaulipas southward to Chiapas, the Yucatán and Cozumel Island. It can be rarely seen in southeastern Texas (United States). This race tends to be smaller than the nominate subspecies.
- *J. s. spinosa*. The nominate race is found in Belize and Guatemala southward to western Panama.
- *J. s. violacea*. This race is endemic to Cuba, the Isle of Pines (where it is possibly extinct), Jamaica and Hispaniola. This race is also smaller than the nominate race.

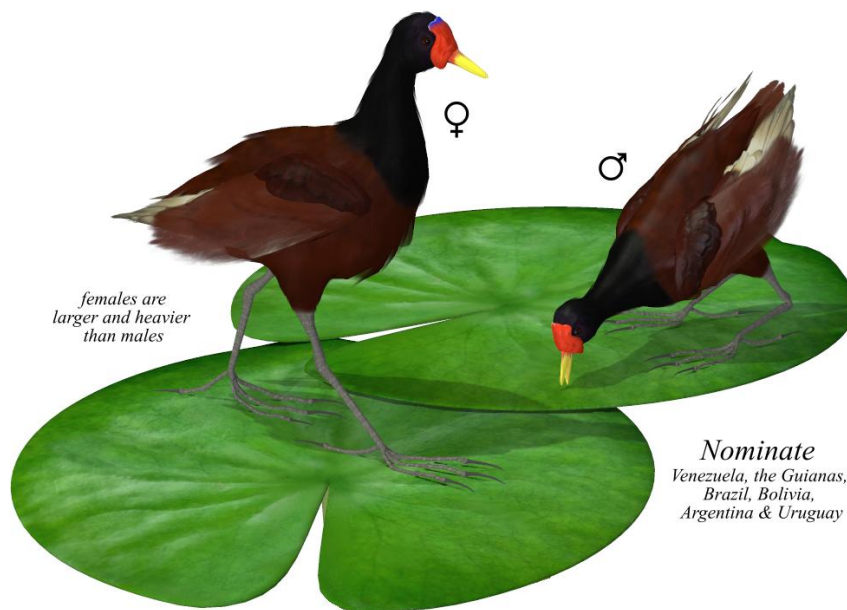
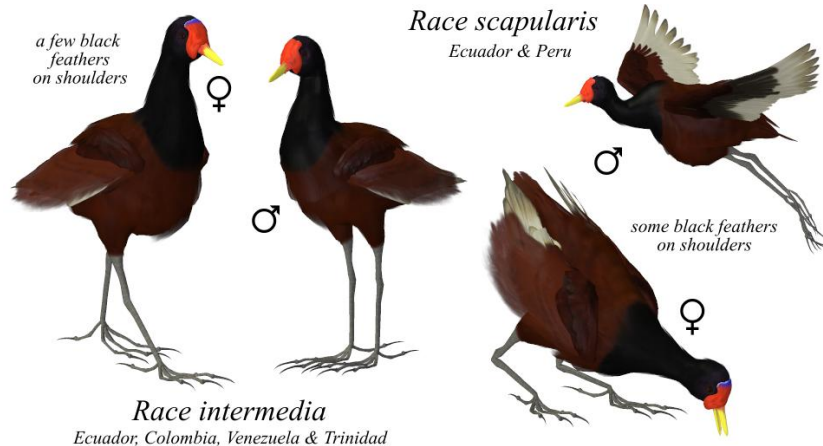
Common Name: Wattled Jacana
Scientific Name: *Jacana jacana*

Size: 8.3-9.8 inches (21-25 cm)

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

It is found in permanent and seasonally flooded freshwater wetlands with floating

and floating-emergent vegetation. It also forages in shallow water, and in adjacent croplands and grasslands. In Guyana, it nests in ditches, canals and small ponds, and regularly feeds on adjacent rice fields.



Status: Least Concern.

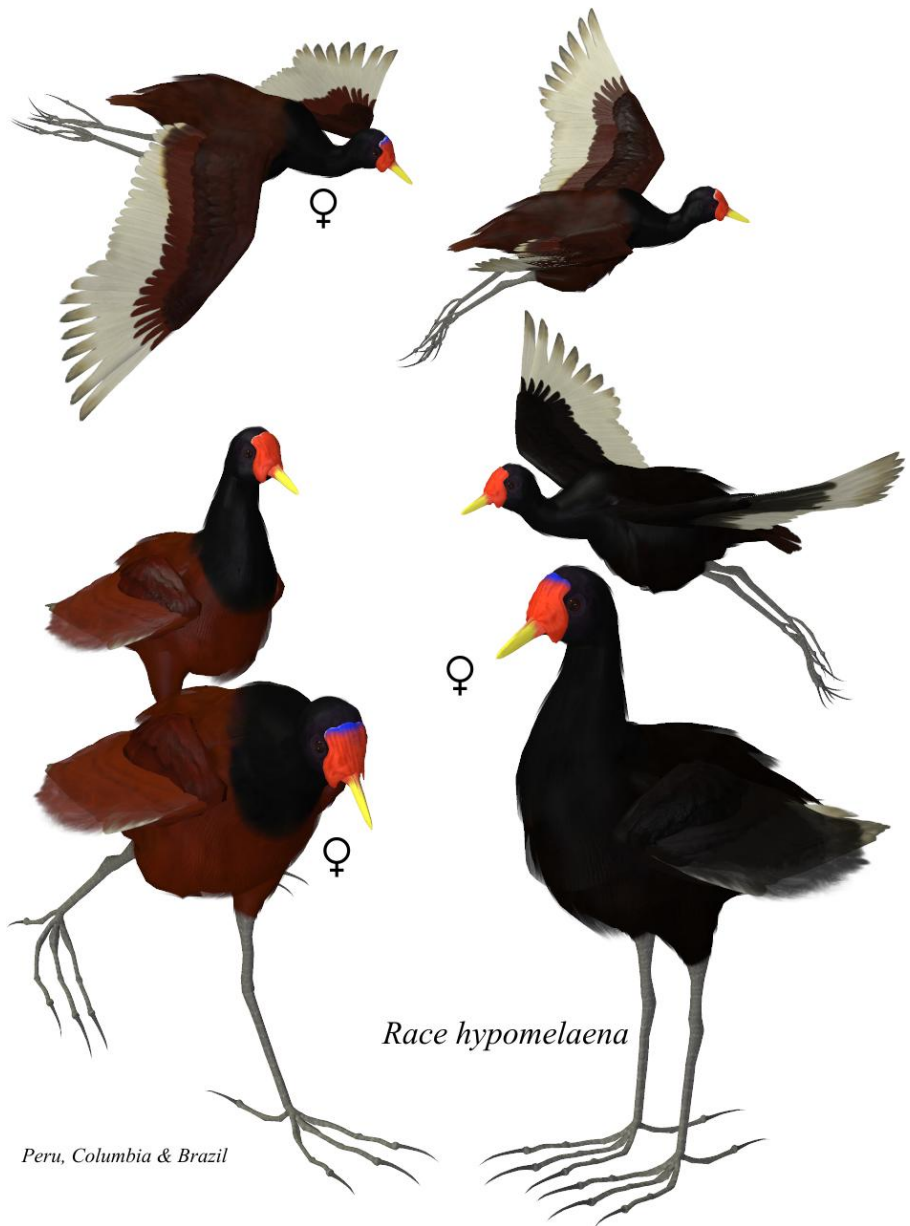
Global population: 500,000-4,999,999 mature individuals with a stable population trend. The drainage of wetlands is an ongoing threat, also harvesting of mangrove swamps for lumber. Water pollution from pesticide use is ongoing.

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

Nesting: Females are significantly larger and heavier than males, but otherwise similar in appearance. The notable feature on this jacana is its red bi-lobed frontal comb and the conspicuous rictal lappets which contrast with its yellow bill and black head. It is blackish to reddish chestnut-brown above and has yellow to pale greenish-yellow flight feathers with dark brown to black tips. They are broader distally, and the outermost edges of the outermost primaries, the primary-coverts, the alula and carpal area; bright yellow carpal spur. Often, the

female may have a bluish caste to upper edge of comb. The juvenile is very similar to that of the Northern Jacana, but has a smaller frontal shield which is bi-lobed, rather than tri-lobed and it lacks the lacks rictal wattles.

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, mainly differing in the amount of black in their plumage.

Black-backed Group:

- *J. j. hypomelaena*. Referred to as the “Black-backed” Wattled Jacana, it is found from west-central Panama to northern Colombia. All the chestnut plumage is replaced by black.

Chestnut-backed Group:

- *J. j. melanopygia*. This race is found from western Colombia (Cauca Valley) to western Venezuela (Lake Maracaibo).

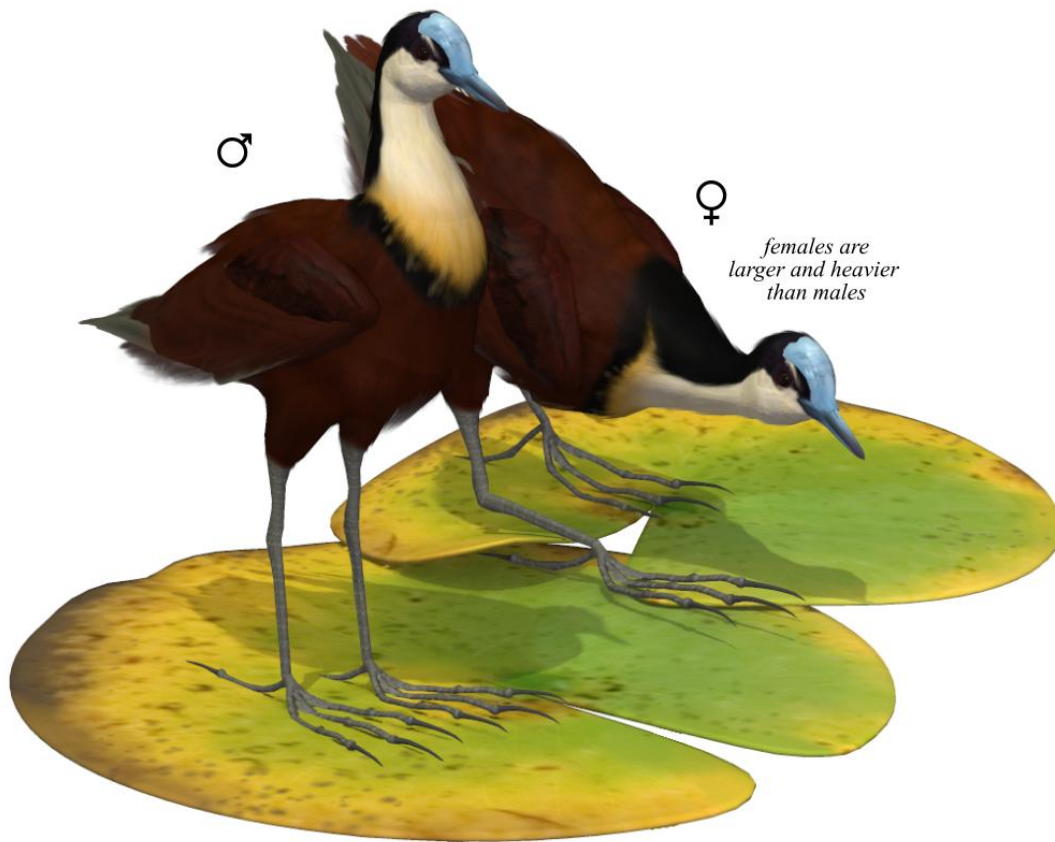
- *J. j. jacana*. The nominate race is found in southern Venezuela and the Guianas, southward through most of Brazil to eastern Bolivia, northern Argentina and Uruguay.
- *J. j. intermedia*. This race is found in northeastern Ecuador, eastern Colombia, north and central Venezuela and Trinidad. This race is similar to race *scapularis* but has less black feathers on the shoulders.
- *J. j. scapularis*. It is endemic to the lowlands of western Ecuador and northwestern Peru (Tumbes). This race has some black feathers on its chestnut shoulders, and white outer primary feathers.
- *J. j. peruviana*. This race is found in northeastern Peru (lower Ucayali River) and adjacent northwestern Brazil (upper Amazon River) and extreme southeastern Colombia (Leticia).

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

Size: 9–12.3 inches (23-31cm)

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:** 24,400,000 mature individuals with a stable population trend. 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.

The bill is continuous with large frontal pale blue to gray-blue shield, both. The crown and hind-neck are black. The sides of the face, chin and throat are white changing to a golden-yellow on the upper breast. Most of the upper parts are chestnut to rufous-cinnamon, but the rump, secondaries and under-body are a darker maroon-chestnut. The primaries are black, but are seen only during flight or display. The immature has its crown and hind-neck black with some brown feathers. The supercilium is white while the upper parts are pale brown with glossy green. The rump, secondaries and greater coverts are chestnut while the under parts are white with weak yellowish breast band and chestnut on the sides of thighs.



Females 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*

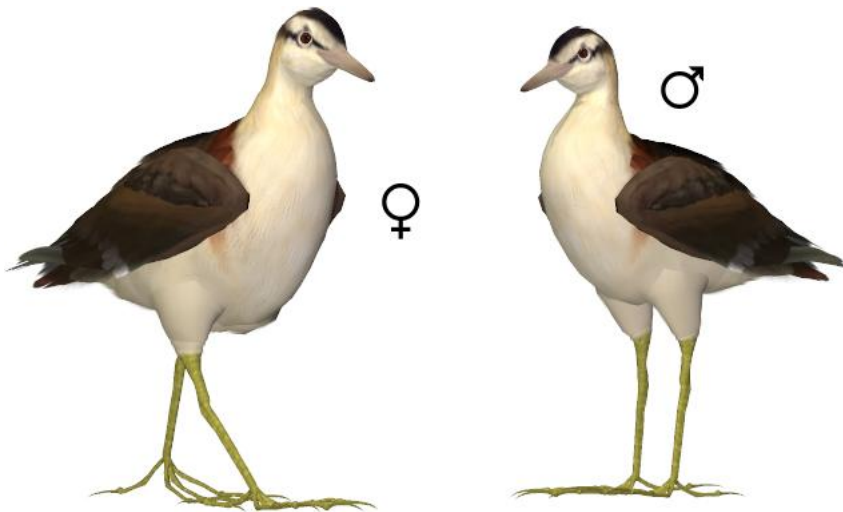
Size: 6–6.5 inches (15-16.5 cm)

Habitat: Africa; it is found in Mali and Ivory Coast patchily eastward to South Sudan and Ethiopia, then south through Uganda and Kenya to Zambia, Zimbabwe, Mozambique and eastern South Africa, extending west to eastern Angola and eastern Namibia.

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: It is much smaller than other jacanas and its frontal shield very small (rare) to (commonly) lacking. The wings are dark with conspicuous white trailing edges to the inner primaries and secondaries. Its forehead is golden-rufous, its crown

cinnamon, the hind-neck and mantle darker, and the rest of the back a rufous to cinnamon. The under parts are white. The sexes are nearly identical, but the female is slightly larger. There is a higher proportion of males that are darker on the back and have black lateral margins to their crowns, but it is not a reliable difference between the sexes. There is a subtle difference between mated birds making it possible to distinguish them; most males and some females have violaceous-black feathers on their hindneck and mantle. Juveniles are similar to

adults except for the mantle, scapulars, back, rump and upper tail-coverts which are fringed buff.

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: 11–12.3 inches (28-31 cm)

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: **Endangered.** **Global population:** 780-1,643 mature individuals which a declining population trend. 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). There are no targeted conservation actions for this species, although it occurs in a number of protected areas, and will benefit from actions carried out for other aquatic bird species.

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. It is similar in size to the African Jacana (*A. africanus*), to which it is identical except for the crown, hind-neck and the sides of the neck which are white with golden-yellow next to the mantle. The face and lower neck are black. There is a band of white sometimes from thighs across the upper tail-coverts. The tips of the middle tail feathers are black. Immatures are similar to the immature African Jacana, but its crown, hind-neck and eye stripe are blacker.

The nest is a floating heap of aquatic vegetation. Males incubate the eggs and take care of the young. The female protects the nest.

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 (27-30 cm)

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. The wings are a bronze-brown with a green sheen and have a reduced tubercular carpal spur. The head, neck and breast are black and contrast with the broad white supercilium that runs

from over the eye to the back of the neck. The lower back and tail coverts are chestnut. The tail is stubby and reddish brown with black terminal band. The greenish yellow bill has a red-base to the upper mandible. A lappet or frontal shield extends up over the forehead and is reddish purple. The legs are greenish. The toes are long and the straight and the elongated nail on the hind toe is longer than the toe. Young birds have brown upper parts. Their under parts are white, with a buff foreneck.

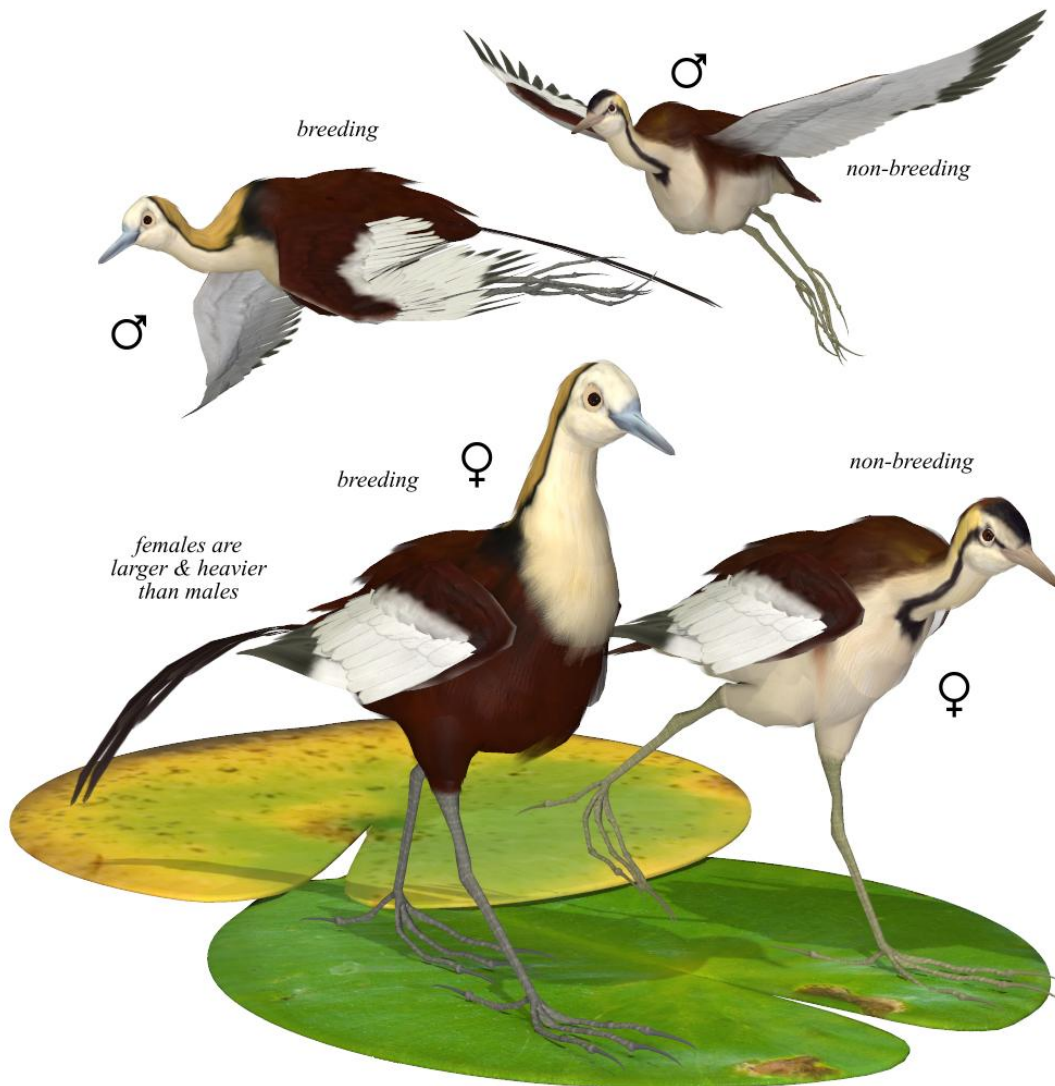
Females lays four black-marked brown eggs in a floating nest and males incubate the eggs.

Cool Facts: The call is a wheezy piping '*seek-seek-seek*' 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: 15.4-22.8 inches (39-58 cm, including 25–35 cm tail)

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 (**Endangered in Taiwan** (1997)). **Global population:** 20,000,000 mature adults with a declining population trend. 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: 8.3 - 9.5 inches (21-24 cm)

Habitat: Australasia; 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.

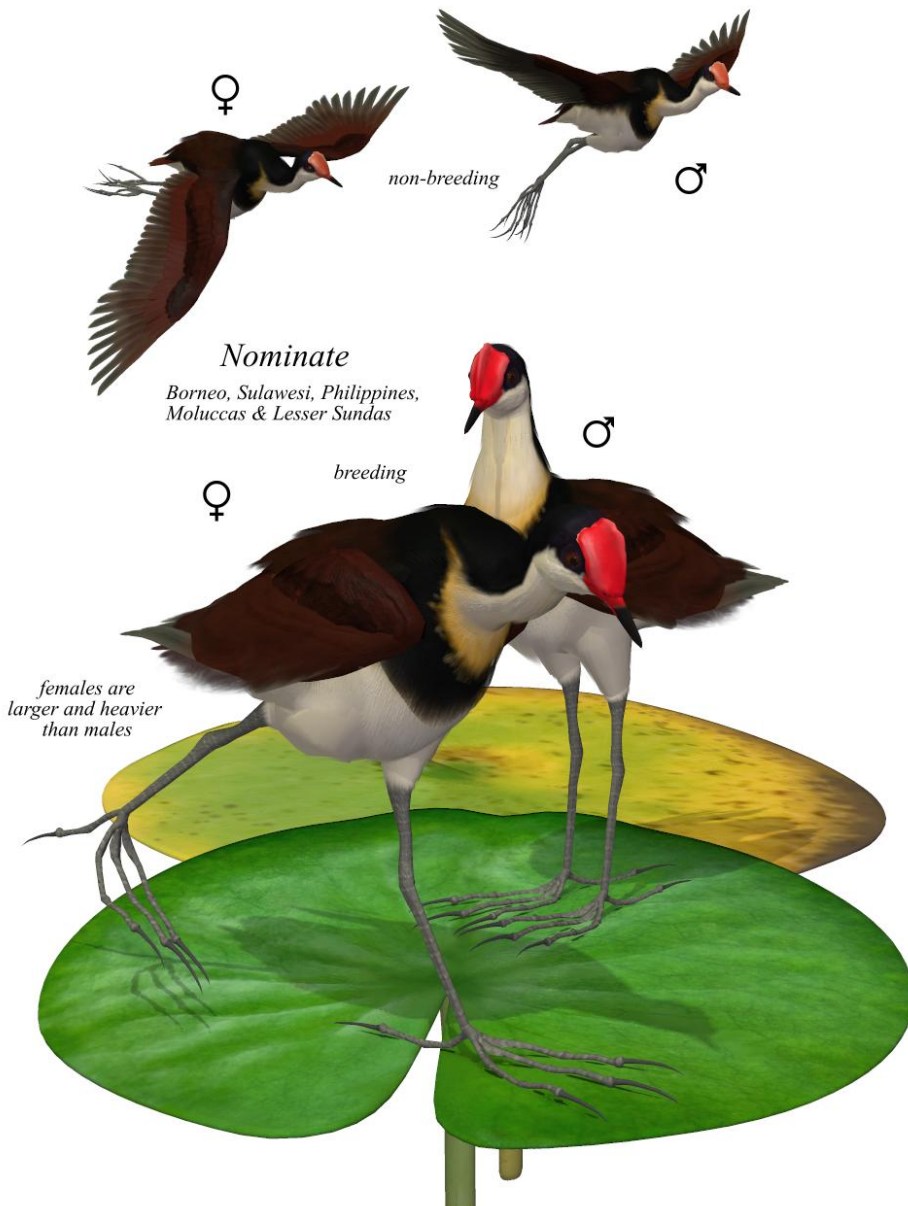
It is found in tropical and subtropical freshwater wetlands, including lagoons, billabongs, swamps, lakes, rivers, sewage ponds and dams, providing there is adequate floating vegetation.

Status: Least Concern.

Global population: 12,400,000 mature individuals with an unknown population trend. The species is locally threatened by wetland degradation and loss through flooding, drainage and overgrazing.

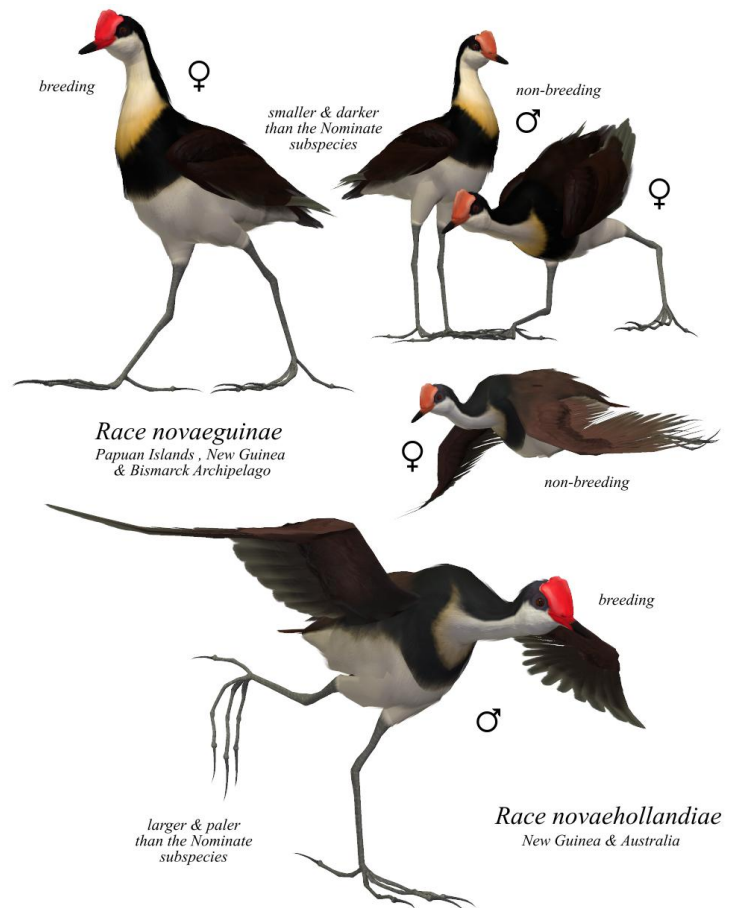
Diet: Aquatic insects, which it seizes from floating vegetation or the surface of the

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. The mantle, back and upper wing-coverts are brown, while the rest of the plumage is black with the exception of its white belly, the under tail-coverts, face and upper neck. The sides of its neck are bright golden-yellow. Its bill is pink to red, with a black tip. The bright pinkish-red flat, fleshy shield has a conspicuous comb rising up 1 cm or more in center. The shield and comb are yellow to orangish in non-excited state becomes bright pinkish red with infusion of blood during breeding and other periods of excitement. 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.

- *I. g. gallinacea*. The nominate race is found in southeastern Borneo, Sulawesi, the southeastern Philippines (Mindanao), the Moluccas and the Lesser Sundas (Sumbawa to Timor).
- *I. g. novaeguinae*. This race is endemic to the western Papuan Islands (Misool), Kai Islands, Aru Islands, lowland New Guinea (except in the south), Bismarck Archipelago (New Britain) and the D’Entrecasteaux Islands (Fergusson Island). This subspecies has the darkest upper parts.
- *I. g. novaehollandiae*. This race is found in southern New Guinea, northern and eastern Australia southward to Sydney. It is the largest subspecies with the palest upper parts.

Special Thanks to...

- **2010 Beta Team:** Bea, Jan, Kelvin, Nancy, Sandra and Walter
- **2022 Re-release Beta Team:** Alisa and FlintHawk

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/) (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
- **Wikipedia** (<http://www.wikipedia.com>)
- **Cornell Labs Birds of the World** (<https://birdsoftheworld.org>)
- **Birdlife International** (<http://www.birdlife.org>)

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

