



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

Songbird ReMix Parrots

VOLUME 5: AMAZONS of the WORLD 1

Manual

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Songbird ReMix Parrots

VOLUME 5: AMAZONS of the WORLD 1

Introduction

Amazon parrots are medium-sized, short-tailed parrots native to the Americas, with their range extending from South America to Mexico and the Caribbean. “*Amazona*” is one of the 92 types that make up the Parrot family and contains about thirty species. Most Amazon Parrots are predominantly green, with accenting colors that depend on the species, and can be very vivid. They feed primarily on seeds, nuts, and fruits, supplemented by leafy matter.

Many Amazons have the ability to mimic human speech and other sounds. Partly because of this, they have become popular pets, and a marketplace has developed in breeding Amazons in captivity for this market. This popularity has led to many parrots being taken from the wild to the extent that many species have now become endangered. Most countries have made the capture of wild parrots for the pet trade illegal in an attempt to help protect wild populations. Feral populations of Amazons can be found in different parts of the world, including in South Africa, Europe, and major cities in the Americas.

This set (and its companion “*Volume 6: Amazons of the World 2*”) include all remaining Amazon Parrots not already in Songbird ReMix format ([see list](#)). There are two versions of this set for native support in Poser and DAZ Studio. Materials have been tuned to support Iray, 3Delight, Superfly and Firefly renderers.

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):
 - **Parrots and Cockatoos (Order Psittaciformes)**
- **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”. For DAZ Studios 3Delight renders, the SubD must be turned from the “High Resolution” setting to the “Base” setting (otherwise some areas will render incorrectly transparent).

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.

Where to find your birds

| Type Folder | Bird Species |
|--|--------------|
| Parrots and Cockatoos (Order Psittaciformes) | All Parrots |

Where to find your poses

| Type Folder | For what species? |
|--|-------------------|
| Parrots and Cockatoos (Order Psittaciformes) | All Parrots |

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.

Specific Bird Controls

There are several controls with the **Action Controls** section of the model that are specific to certain species of bird.

- Under **Fluff Controls** (*in Creation Controls*):
 - These controls move the feathers on each side of the cheek towards the bill.
- **Raise Upper Beak** (*in Action Controls*):
 - This morph is a “one size fits all” control. Because of the variety of beak shapes. It may not work with all birds.

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.

Songbird ReMix Parrots
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Field Guide

Festive Parrot
Vinaceous-breasted Parrot
Tucumán Parrot
Red-spectacled Parrot
Red-crowned Parrot
Lilac-crowned Parrot
Red-lored Parrot
Blue-cheeked Parrot
Red-browed Parrot
Red-necked Parrot
St. Lucia Parrot
Yellow-naped Parrot
Yellow-headed Parrot
Yellow-crowned Parrot
Yellow-shouldered Parrot

Common Name: Festive Parrot
Scientific Name: *Amazona festiva*

Size: 13.4-13.8 inches (34–35 cm)

Habitat: South America; found in found in eastern Colombia, eastward through the Orinoco Basin of Venezuela and sporadically into northwestern Guyana, and southward through the Brazilian Amazon, eastern Ecuador, and eastern Peru.

It is closely associated with humid lowland vegetation, from sea level 500 m, but rarely above 100 m in Venezuela. It is often found along major watercourses such as seasonally flooded várzea and permanently flooded igapó forest, river islands, riparian growth, gallery forest, and seasonally wet savannas. It avoids dry-land forests, but has been seen in cacao plantations in Brazil



Status: Near Threatened. **Global Population:** Unknown mature adults with a decreasing population trend. This Amazon parrot may be considered fairly common, but locally, it has a restricted range. In Venezuela, it was abundant in late 19th century along the middle Rio Orinoco River, especially between Caicara and Altagracia, where “great flocks” were regularly hunted for food. Now, it is very local and only regularly recorded northeast of Tucupita in Delta Amacuro, with small numbers at Hato Los Indios in Apure and Caurama Lodge in Bolívar. The status in Guyana is unclear, but at least formerly, it was considered a rare sighting. It is suffering from combination of habitat loss and

trapping for trade (including between Venezuela and Guyana) . In the more southern portions of its range, it is abundant in the upper Amazon Basin, especially in western Brazil, and is the commonest Amazona parrot in some parts of southeastern Colombia and northeastern Ecuador, at localities along and north of Rio Napo, in Sucumbíos. It is considered rare in trade, at least internationally, but is one of the many parrot species harvested in northeastern Peru; within the Pacaya-Samiria National Reserve, Loreto, where local people regularly take young parrots from their nests in aguajales (*Mauritia flexuosa* palm swamps). Sixty-seven young parrots were counted in captivity by researchers during a four-year study period in the late 1990s, making it the third most frequently taken species in the region (behind *Amazona amazonica* and *Ara ararauna*, both of which were much more heavily harvested). Current population estimates are urgently needed, together with a reassessment of the impact of illegal trade.

Diet: Mostly fruits such as mangos and peach palm.

This parrot is gregarious and feeds often in small flocks. It may forage alongside the Orange-winged Parrot (*A. amazonica*). It makes a variety of barks and screeche, most are low-pitched. Its flight call is a distinctive nasal laughing “wah-wah” or more rolling “rrah-rrah.”

Breeding: Overall, the plumage is green. The lores and frontal band are dark red, with pale blue shading above and behind the eye, and on chin. There is a slight effect of “scaling” on nape. The lower back and rump are red. The carpal edges are yellowish and the primaries range from greenish-blue to dark blue. The tail is tipped with yellowish edges. The bill is horn brownish-black and the irises are deep yellow to orange. The tarsi and toes are black-gray.

Sexes are alike. Immatures have less blue on the head, and green on lower back and rump (no red).

It nests in Amazonas, Brazil, in March, said to be breeding in extreme northeastern Ecuador in December to April and apparently has young in nest during February to April in northeastern Peru. It nests in *Mauritia flexuosa* and *Astrocaryum jauari* palms, with entrances typically > 5 m above ground. It lays 2 to 3 white eggs and the female incubates them for 26 to 27 days.

Cool Facts: It is separated from other sympatric *Amazona* species by red rump and lower back, and the lack of bare skin around eye. It also is missing the usual red or orange wing patch on the secondary wing feathers.

Subspecies and distribution:

- *A. f. bodini*. The Northern Festive Parrot is found in Eastern Colombia east through Orinoco basin of Venezuela, sporadically into northwestern Guyana. Compared to the nominate, this subspecies is more yellowish below, has lores that are gray-black, its forecrown is red, and its face has a bluish-green tinge. The bill is usually darker as well.
- *A. f. festiva*. The Southern Festive Parrot is found in Southeastern Colombia (Vaupés and Amazonas), eastern Ecuador (Sucumbíos and Orellana), and eastern Peru east through Amazon Basin to eastern Amapá and northern Pará, in north-central Brazil.

Common Name: Vinaceous-breasted Parrot
Scientific Name: *Amazona vinacea*

Size: 13.8-14.2 inches (35-36 cm)

Habitat: South America; it is endemic to the Atlantic forest. Small populations are found at a cluster of sites in the departments of Alto Paraná, Canindeyú, and Caaguazú (northeastern Paraguay); in central Misiones (Argentina); and at scattered sites in Paraná, Santa Catarina, Rio Grande do Sul, São Paulo, Rio de Janeiro, Minas Gerais and Espírito Santo. Although the largest populations are found 600-2000 m. It formerly occurred from Bahia (Brazil) south to Rio Grande do Sul and inland to southeastern Paraguay, southern Misiones (Argentina), and probably northern Corrientes (Argentina). However, it has disappeared from much of its range (especially the southern, western, and northern edges of its range) and remains only in fragmented populations.

Its extends through the Atlantic forest and ecotones with grasslands ("campos") and cerrado, but the species is now most common in parana pine (*Araucaria angustifolia*) mixed forest. Parana pine seeds appear to be an important food item in winter, and may dictate small-scale movements; nevertheless, they also have seen (and have occurred historically), year-round, well outside the range of parana pine forests.

Status: Endangered

Global Population:

Less than 2,500 mature adults with a decreasing population trend. The global population has been greatly reduced in number and distribution, and is currently estimated at fewer than 2,500 individuals. They appear to be most abundant in the Curitiba Metropolitan Region

(Paraná, Brazil), with 899 and 906 individuals counted in 2002 and 2003. The most important site in Argentina is the town of San Pedro and farming area to Tobuna and Santa Rosa, with a population of about 250 individuals that appears stable since 2005. The populations in Paraguay were estimated at a minimum of 220 individuals based on



field data up to 2002, including records of 150+ individuals roosting at RNP Itabó (Canindeyú) in 2001 and 2002.

Human activities appear to have had a major impact on Vinaceous Parrots, resulting in widespread declines. The species was once killed as a crop pest in Argentina but this does not appear to be a major threat currently. All, or nearly all, remaining populations of the Vinaceous Parrot are affected by capture for the pet trade, habitat loss, and habitat degradation. Humans deplete two key resources required by Vinaceous Parrots, diminishing the quality of remaining habitat. Selective logging, and lack of tree regeneration on farms, reduce the availability of potential nest sites. Illegal logging and lack of regeneration of parana pine, as well as harvesting of seeds, may substantially reduce winter food supply.

Diet: Seeds of parana pine may constitute an important food item in winter in much of the species' range. They also feed on more than 30 native and exotic plant species, taking mostly seeds or fruits but also young shoots, buds, and flowers. Seeds of the parana pine are the basic food from February to July, whereas fruits or seeds of palms (*Syagrus romanzoffianum*) and myrtles (*Psidium longipetiolatum*, *Eugenia uniflora*, *Eugenia involucrata*, *Campomanesia xanthocarpa*), and flowers of Fabaceae (*Erythrina falcata* and *Mimosa scabrella*) and Theaceae (*Laplacea fruticosa*) are consumed in the breeding season in spring. This parrot also have been observed eating soil (perhaps clay for stomach toxins coating or insects).

They forage leisurely in tree-tops, often in pairs or groups, mostly in silence, sometimes with one or two birds acting as sentinels. When eating parana pine seeds, they select the largest, most mature seeds. They chew away a large section from the side of the cone, exposing two or three seeds, then eat the seeds while still fixed to the cone or pull the seed from the cone using the bill, hold the seed in the foot, and rip open the seed casing with the bill, pulling out the white endosperm and letting the brown casing fall to the ground. While eating the seeds, the parrot may stand on the cone itself, on a thick branch, or on a leafy frond. It can take 6-7 minutes for the parrot to eat one seed.

Breeding: A medium-sized, predominantly green parrot with a red forehead, turquoise nape, and lilac breast. There are a few red feathers below the bill. The feathers on the nape are green at the base, followed by a light blue band, and ending in a thin blue-black margin (nape appears scaly and turquoise in the field). A very thin blue-black margin is also present on the feathers of the head, sides of the neck, and back (gives a scaly appearance in the field). The feathers on the cheeks and around the ears are ashy-lilac with a green margin that is gradually reduced on the throat until the feathers are entirely lilac with a black band along the margin, although some feathers have a greenish tint (face appears mostly green in the field; throat may appear green or lilac). The breast feathers are lilac at the base with a wide submarginal green band and black margin; on the abdomen the green band becomes wider and more intense, and the black margin disappears (breast appears lilac, fading to green on abdomen). The eight external retrices (tail feathers) are scarlet from the base to half their length, and yellow-green at the tip (visible as a red patch in field). These red tail patches measure 30 mm in length. There is considerable individual variation in the extent of the red on the lores and lilac on the breast, which some authors have attributed to differences in age, sex, or region

They are assumed to be socially monogamous, as most parrots are. The main breeding season is from August to December. They nest in cavities in a wide variety of tree species including grapia, parana pine, cancharana, anchico, cedar, persiguero, marmelero, myrtle and laurels. They do not create the cavities. The cavities are created naturally by a limb breaking off of the tree or commandeering an old woodpecker nesting hole. Most woodpeckers do not reuse their previous nests.

Prospecting pairs or individuals cling to the cavity and sometimes walk around it, bite the edges of the entrance, look inside, and enter for short periods. A parrot may cling to the wall of the cavity with its head out, or stand beside the cavity for several minutes when prospecting. Nest-holes are used for multiple years by Vinaceous Parrots.

The female lays two to four white, unmarked eggs. During incubation, the female remains in the nest nearly constantly, and the male roosts at night in a nearby tree. During this time, the incubating female leaves the nest only for short periods (approximately 30 minutes) during which she is fed by the male, sometimes followed by copulation. Incubation was approximately 1 month. Nestlings are fed by both parents and the nestling period lasts for about 50-70 days.

Cool Facts: Vinaceous Parrots are highly gregarious, flocking together to feed on a variety of seeds, fruits, young shoots and flowers, perhaps especially seeds of the parana pine.

Common Name: Tucumán Parrot
Scientific Name: *Amazona tucumana*

Size: 12.2 inches (31 cm)

Habitat: South America; it has a tiny range which spans the Bolivian/Argentinan border on the eastern slope of the Andes (southern Bolivia (Tarija, Chuquisaca and Santa Cruz) and northwestern Argentina (Jujuy, Salta, Tucumán and Catamarca)).

This *Amazona* parrot is restricted to a small strip of humid Yungas forest dominated by Andean alder (*Alnus acuminata*) and Pino del cerro (*Podocarpus parlatorei*) which spans the Bolivia/ Argentina border on the eastern slope of the Andes.

Status: Vulnerable. **Global Population:** 7,650 mature adults with a decreasing population trend (2007). It was formerly listed as “Near Threatened”. It is present in winter in several protected areas such as in Argentina (El Rey National Park).



By 2015, 26% of non-breeding habitat but only 15% of breeding habitat was protected. It causes some damage to fruit crops during winter, and is vulnerable to trapping at that season, when entire local populations concentrate at roosts. 18,641 birds were trapped and exported in Argentina from 1985–1989, after which no trade was permitted under CITES. Also, nearly 5,400 were exported in Bolivia in the early 1980s. This parrot came fully protected (including prohibition of export) in Bolivia since 1984.

Its habitat remains threatened from farming and development and local pet trade exploitation continues at a reduced scale.

Diet: Over 80% of its diet is from Pino del cerro (*Podocarpus parlatorei*). Fruits and seeds of *Podocarpus*, *Blepharocalyx*, *Myrcianthes* and *Cinnamomum* are taken in summer, while the staple food in winter, are seeds of leguminous trees as *Acacia*. During the spring the flowers of *Juglans australis* are often taken.

Breeding: Sexes are alike. The body is green throughout, with feathers strongly edged black to give scaled effect. Its forehead, and sometimes lores, are bright red. The bare orbital skin is white. The lower thighs are orange-yellow and the under tail-coverts are yellower. The primary-coverts are red and the primaries tipped a dark blue. The tail is tipped yellowish. It has a smallish bill compared to most Amazons. The immature has all-green thighs.

Breeding season occurs November through January. They nest in cavities in wide old tree trunks, which are often originally excavated by Cream-backed Woodpecker (*Campephilus leucopogon*). Three to six eggs are laid which the incubation period lasting 26 to 30 days. The nestling period lasts 50–58 days. Hatching success is about 75% with fledging success rated at 83%. Two to three young fledged Amazons per egg-laying female per year is normal.

Cool Facts: It is sometimes considered conspecific with the Red-spectacled Parrot (*Amazona pretrei*), but the two are better regarded as forming a species-pair. The genetic data suggests that the Vinaceous-breasted Parrot (*Amazona vinacea*) is sister to these two.

Common Name: Red-spectacled Parrot
Scientific Name: *Amazona pretrei*

Size: 12.6 inches (32 cm)

Habitat: South America; it is endemic to Brazil's southernmost state, Rio Grande do Sul, where it is an inhabitant of Araucaria forest in the north, as well as being more widely in the lowland broadleaf woodlands that punctuate the savannas across the south of the state. The species is partially migratory, moving north in winter, at which season it also, at least periodically, reaches the adjacent state of Santa Catarina.

It prefers the *Araucaria angustifolia* forest in the northern part of its range, as well as the lowland riverine broadleaf forest in south, with extensive seasonal use of *Podocarpus lambertii* groves. The major breeding area appears to be in the savanna region in the southeastern part of its range, in open woodland dominated by Podocarpus, Lythraea, Scutia, Celtis, Allophylus, Eugenia, Schinus and Sebastiania species.



Status: Vulnerable. **Global Population:** 7,500–8,500 mature adults with a decreasing population trend (c 1990). It was previously listed as Endangered because it is a “restricted-range” species. It was formerly abundant, but a major decline occurred over the 20th century in response to the destruction and fragmentation of its habitat, compounded by the pet trade at national level. Collectors usually remove all nestlings, cutting trees and often destroying nests in process; this is now probably the major threat

to this species. Despite the presence of many protected areas within the species's range, none is adequate either in staffing levels or in size.

Diet: A variety of fruit in spring and summer (October through February), notably Cupania, Eugenia, Phytolacca, Allophylus, Nectandra, Ocotea, Campomanesia, Cytharexylum, Myrcianthes, Blepharocalyx, Ficus and Symplocos, with some populations heavily exploiting Podocarpus in January and February. In late autumn and winter (May through August) birds concentrate on seeds of Araucaria (a type of evergreen conifer).

Breeding: It is similar to the Tucuman Amazon (*A. tucumana*), but the red on the head extends to the mid-crown and around bare orbital skin, often with some flecks on ear-coverts and neck. The rest of the head lacks dark feather-edging. There is a red patch in the folded wing that extends from the shoulders to the primary-coverts. Its lower thighs are mixed with some red feathers. The immature has reduced red on its head and wings.

Breeding season begins in September and lasts through December. They nest in a cavity in trees, generally fairly low (about 6 m from the ground). Nectandra, Ocotea, Cupania and Sebastiania are commonest nest-tree species. The female lays two to four eggs and incubates them for 25–27 days. Chicks fledge from as early as 50 days.

Cool Facts: It is sometimes considered conspecific with *A. tucumana*, but the two are better regarded as forming a species-pair. The genetic data suggest that *A. vinacea* is a sister to these two.

Common Name: Red-crowned Parrot
Scientific Name: *Amazona viridigenalis*

Size: 13 inches (33 cm)

Habitat: Central America; it is endemic to northeastern Mexico. The native range currently comprises approximately 50,000 km², mainly in eastern Nuevo León, southern Tamaulipas, eastern San Luis Potosí, and northeastern Veracruz, Mexico.

The typical habitat in northeastern Mexico is diverse sub-deciduous tropical forest characteristic of northern limit of Veracruzian Biotic Province. It is a relatively open first canopy layer of frost-sensitive tropical tree species at about 15-20 m. The dominant canopy vegetation includes strangler fig (*Ficus cotinifolia*), coma (*Bumelia laetevirens*), ebony (*Pithecellobium ebano*), gumbo-limbo (*Bursera simaruba*), "cerón" (*Phyllostylon brasiliensis*), ojite (*Brosimum alicastrum*), and barreta (*Helietta parvifolia*).

In urban settings, the feral populations of this parrot prefers areas with large trees, such as the Los Angeles Arboretum.



Status: **Endangered.** **Global Population:** 2,000-4,300 mature adults with a decreasing population trend. The species has undergone a large, significant decline between 1970 and 2017. Historic densities recorded for the species were 25.2 individuals/km² in the 1970s, falling to 5.7 individuals/km² in one area in 1992-1994, indicating a decline of up

to 78% over this period. Declines are thought to continue due to the impacts of trapping pressure and habitat loss, but current rates are unknown. As of 1995, the southern California population estimated at 750-1,000 individuals.

Diet: Seeds and fruit. Foraging appears to be opportunistic. Fruits of dominant tree species, particularly ebony, strangler fig, coma, and anacua (*Ehretia anacua*) seemed to provide majority of diet. In the Los Angeles area, they seem to be drawn to Acacia seeds.

Breeding: It is a medium-sized green Amazona parrot, with short tail. Sexes are generally alike in plumages. It has a bright red crown bordered by violet blue from rear supercilium and sides of rear crown, sometimes extending to sides of neck and even nape. The rear crown and hind neck are boldly scaled with black-tipped feathers. The cheeks bright green and lack the black-tipped feathers. There is a red patch on the outer secondaries, otherwise, the remiges are a bluish-black. The shoulder and base of the tail are green. The tail is tipped with a yellowish green. The bill is a dull cream yellow, while the orbital ring and feet are a pale gray. The sub-adult has the red limited to forehead, and sometimes, a few scattered red feathers on its crown. The blue on the sides of the crown tends to form a broad band over and behind the eye.

Odd-colored individuals is not uncommon in the wild. These variations include yellow feathers on several parts of the body, especially on the neck and head. The bend of wing is sometimes red.

Its fast flight with rapid shallow wing beats, almost invariably flying in pairs or in clearly distinguishable pairs within flocks. Calls of this species could have functions equivalent to language. The calls seem less complex than those of Yellow-headed Amazon, and less overt dueting is apparent in Red-crowned than in Yellow-headed. Several calls have been identified as apparently associated with special contexts. These calls include the Takeoff Squawk, Begging Calls, Individual Flight Call, Nest Arrival Call, Nest Exit Prompt, Copulation Meow, Nest-Finding Rap, Chick Calls, Whisper, Aerial-Acrobatics Call, and Socializing-Chase Call.

Here are examples of the context and/or presumed function of the first five:

- Takeoff Squawk. It is given in preparation to or immediately at takeoff. This call is relatively uniform across individuals and similar to that reported for Puerto Rican Amazon.
- Begging Call. A rackety “gaa-gaah-gaah” given by brooding females and young chicks to demand food.
- Individual Flight Call. This call is given during flight with considerable inter-individual variation. It may be an identification call.
- Nest Arrival Call. This call is usually used by males as they approach nest, at or before landing. It is usually followed by the “Nest Exit Prompt” call. It may be a shortened version of “Individual Flight” call.
- Nest Exit Prompt. This call is given by male in close proximity to the nest. It can be repeated many times, depending on female willingness to exit nest. For example, if female has recently been fed, more stimuli are required to motivate her to exit. The volume of the call is apparently also used to express degree of urgency (more volume = more urgency).

On basis of field observations, pairs may form among first-year birds during non-breeding season while birds are in large flocks. Flocks start to break up in early February, and respective pairs return to their old nest sites or search for new ones. As with all Amazon Parrots, they do not build nests; rather, they occupy existing cavities in trees. Two to five eggs are laid and incubated by the female for about 27 days. Females brood the young for average of 17 days after hatching and they fledge after about 53 days.

Cool Facts: This species is sometimes referred to as the “Green-cheeked” Parrot.

Although well established in the pet trade, and as feral populations in several urban areas both inside and outside of Mexico, the Red-crowned Parrot is native to only a small region of northeastern Mexico and endangered because of extensive habitat loss and depredation of nests to supply birds for the lucrative pet trade. Ironically, escaped pets and “released” birds in illegal transit are the driving force behind the establishment of feral populations in the United States. These population can be found in southern California, Texas, Puerto Rico, Hawaii, and Florida, where this species numbers in the hundreds, if not thousands of birds. Only the Monk Parakeet (*Myiopsitta monachus*) seems to compare in success as a feral parrot in North America.

The Red-crowned Parrot's success as an urban colonizer may have resulted in part from considerable public empathy. It has even been named the city mascot in Brownsville, Texas, where it apparently has bred regularly since the early 1980s. Yet in Hawaii and California, there is concern about the possible impacts of such feral populations on fruit crops and native avifauna. On a side note, these Amazons fly-by daily and sometimes visit the author's (Ken Gilliland's) garden.



Red-crowned Amazons perched outside Ken Gilliland's office

Common Name: Lilac-crowned Parrot
Scientific Name: *Amazona finschi*

Size: 12-13.6 inches (30.5-34.5 cm)

Habitat: South America; endemic to the Pacific slope of Mexico. The species occurs in wooded foothills below 1,500 m, from southern Sonora to Oaxaca.

It occurs in deciduous and semi-deciduous forests along the Pacific coast, as well as pine-oak forests. However, nest studies demonstrate that Lilac-crowned Parrots require semi-deciduous forest as optimal breeding habitat, and local people also report that the species breeds preferentially in low-lying areas of semi-deciduous forest. In addition, semi-deciduous forest provides key food resources for Lilac-crowned Parrots during the dry season. However, semi-deciduous forest now covers only 5,106 km² in its distribution range, hence its population decline.



Status: **Endangered.** **Global Population:** 7,000-10,000 mature adults with a decreasing population trend. This parrot was listed as “Threatened” in 2007 however has recently been elevated in concern. The main justifications for increasing the risk status of the Lilac-crowned Parrot are the reduction in geographic range due to extirpation or habitat loss, decline in populations throughout its distribution, the intrinsic biological vulnerability of the species, and the impact of human activities on wild populations. The capture for

domestic and international trade is the major threat to wild populations. The species is highly valued in trade and was the most captured Amazon parrot species in the early 1980s. In 2008, the Mexican government introduced a ban on the trade of all native parrot species in the country. A decline in seizures of illegally caught Lilac-spectacled Amazons has been reported after the 2008 ban.

Diet: Seeds and fruits. 82% of its diet is from seeds of *Caesalpinia pulcherrima*, *Eisenbeckia nesiotica*, and *Jatropha* spp. and 9% from the fruits of *Sciadodendron excelsum*.

They forage in the canopy, and are often seen in large feeding flocks in fruiting trees. In tropical dry forest of coastal Jalisco, most foraging activity of parrots is conducted during the first 3 hours of the morning and last 2-3 hours of the afternoon. The peak movement of individuals occurs in the early morning from 6:30 to 9:30 am, and late afternoon from 6:30 to 7:30 pm, when parrots fly to and from communal roost-sites and foraging areas. These Amazons are generally inactive and do not move location for 5–6 hr from 11:00 to 16:00 hrs (Salinas-Melgoza and Renton 2005). During this period, parrots take refuge from the heat of midday beneath the shade of foliage, or take advantage of warm breezes at the top of exposed ridges.

Breeding: A medium-sized Amazon parrot with predominantly green plumage. The species is characterized by a red fore-head, green cheeks, and mauve or lilac hind-crown and neck. Primary and secondary wing feathers are tipped violet blue, with a red speculum at the base of the first five secondary wing-feathers. This displays a red and blue band on the upper wing when the parrots are in flight.

They commence egg-laying and incubation in early February to June. The female lays two to six eggs. The incubation period lasts 28-29 days, during which the female remains in the nest throughout the day, leaving the nest only twice a day in the morning and late afternoon to be fed by the male. Conversely, the male rarely enters the nest, apart from at the time of initial egg-laying. Food transfer from the male to the female usually takes place away from the nest cavity, and is the only time during the incubation phase when both adults are away from the nest area for an average 11-12 minutes each food transfer session.

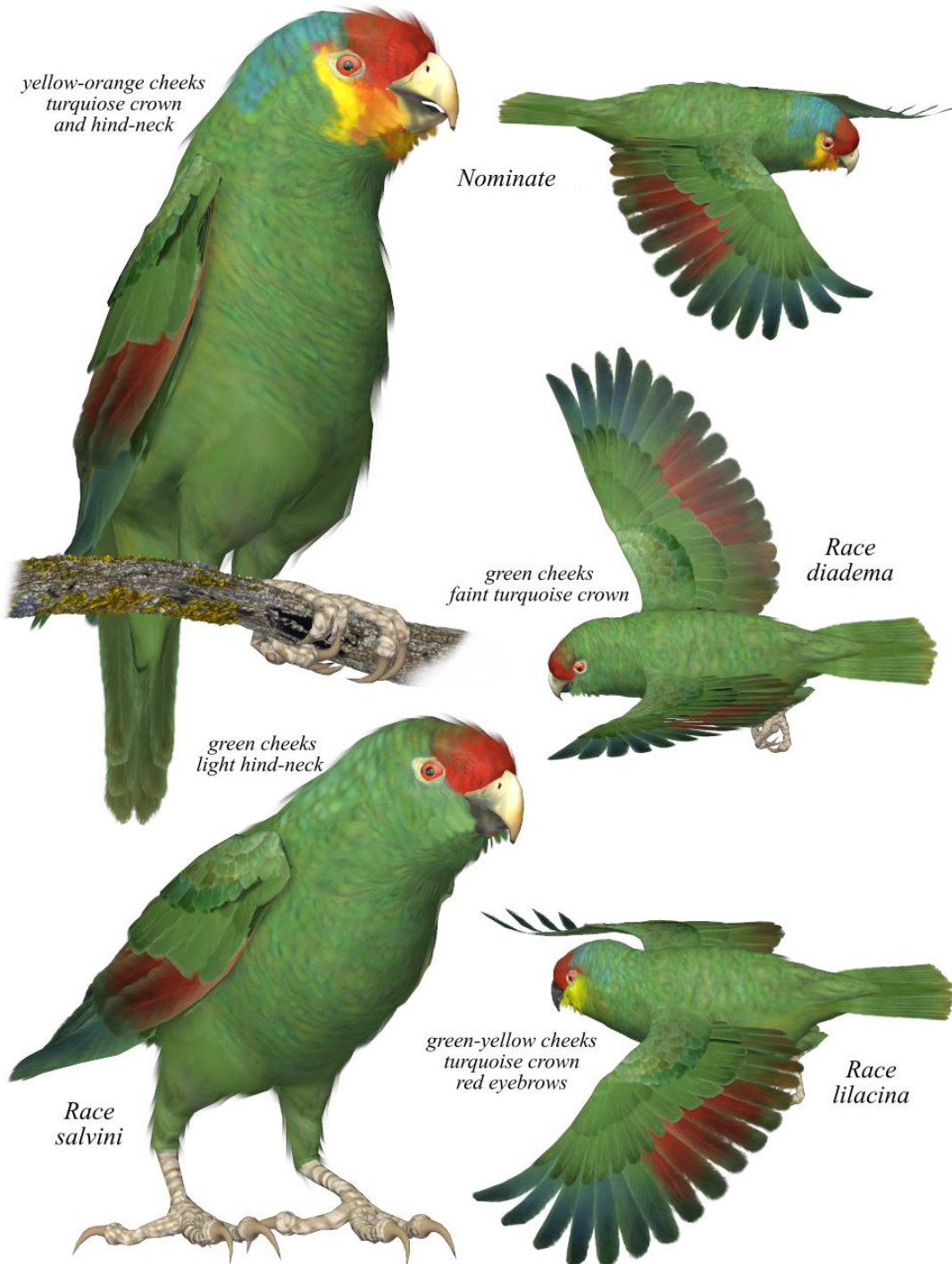
Following hatching of the eggs, females continue to brood nestlings throughout the day during the first three weeks. During this early nestling phase, the male feeds the female twice a day, and may occasionally enter the nest. Later in the nesting cycle when the chicks are larger the female leaves the nest during the day to forage with the male. At this time, both parents enter the nest to feed the young twice a day, and are extremely secretive and cautious when approaching the nest.

Cool Facts: Lilac-crowned Parrots are important pre-dispersal seed predators, causing a total 56% loss of seed resources of *Astronium graveolens* through direct predation and waste of immature fruits.

Common Name: Red-lored Parrot
Scientific Name: *Amazona autumnalis*

Size: 12.2-13.8 inches (31-35 cm)

Habitat: Central America; it has a wide range, which extends over the Caribbean slope of Middle America, from eastern Mexico south to Panama, and in northern South America from northwest Venezuela somewhat discontinuously south to western Ecuador,



with a highly disjunct population in the Amazon basin of northwest Brazil.

It is found along the edges of humid evergreen to semi-deciduous or dry lowlands and foothill forests, gallery woodlands, and semi-open areas with scattered trees, plantations and groves. It is less common in continuous blocks of forest. In some areas, this species is also found in dry tropical forests and mangroves. Across much of its range, the Red-lored Amazon is recorded mainly below 700 m, and only occasionally to 1300 m.

Status: Not Threatened to Endangered. **Global Population:** mature adults with a decreasing population trend. The nominate and *salvini* races are not considered globally threatened. They are relatively common everywhere, except northeastern Mexico and northwestern Venezuela. In many parts of Central America, they are commonest Amazon parrot and sometimes one of the most numerous parrots seen. Declines in northeastern Mexico (perhaps throughout the country) and western Venezuela appear to be owing to high rates of trapping and extensive habitat loss, although in the latter country the species has also recently been discovered in Andes of Mérida.

Race *lilacina* is, on its own, considered “Endangered”. It occurs widely but very sparsely on the Pacific slope of Ecuador, where fieldwork in Nov 2012 and Feb 2014 led to an estimate of at least 304 individuals along more than 40% of the coastline, with result that the total population is estimated at < 2500 birds. In late 1990s, population had been estimated at just 400–600 birds. The species’ preferred habitats of mangrove and dry tropical forest have become rare since mid-20th century owing to urbanization, agricultural expansion, timber and fuel wood harvesting, and aquaculture development, and on coasts the species appears to exist in small and isolated subpopulations (none of which numbers > 250 individuals), with an apparent reduction of 18–35% in numbers at Puerto Hondo mangrove between 2006 and 2014, while ongoing habitat loss and small-scale trapping pressure (the species is rare in aviculture) imply that the population is in decline. Clearance and unsustainable use of mangroves may have slowed because of protection measures, but loud bird-scaring devices used at existing shrimp farms are likely to cause disturbance to the species.

Race *diadema* is also treated as “Endangered”. There is no indication of its population size, but suspected to be declining. It is projected to lose 49–55% of suitable habitat within its distribution over three generations (37 years) from 2002, based on a model of Amazonian deforestation, and given its susceptibility to trapping (probably mainly for domestic trade) the species is suspected to decline by 50–79% over this period). However, species is apparently rare in aviculture. Primary threat is accelerating deforestation as land is cleared for cattle ranching and soy production, facilitated by expansion of the road network. Proposed changes to the Brazilian Forest Code reduce percentage of land a private landowner is legally required to maintain as forest (including, critically, a reduction in the width of forest buffers alongside perennial streams) and include an amnesty for landowners who deforested before July 2008 (who would subsequently be absolved of the need to reforest illegally cleared land). Nevertheless, Race *diadema* is now known to be rather more widespread than previously thought, with its discovery in Faro State Forest, northwestern Pará, in January 2008. However, records from south of the Amazon, along upper Rio Urucu river, now withdrawn. It also occurs within the Jaú National Park where it is considered rare to infrequent.

Diet: Fruits of palms, figs, ripening legume seeds, leaf buds and some cultivated fruit including mangoes, citrus and even coffee beans. It will also eat seed and occasionally, insects.

It is quite gregarious when feeding, sometimes joining Macaws, usually in canopy of trees.

Breeding: A large, stocky, square-tailed Amazon parrot. The plumage is green overall, with an obvious red wing patch in flight. The forehead and lores are red, and cheeks are bright yellow and/or lime green (depending on the subspecies). Sexes are generally alike, but female perhaps shows heavier scaling on breast (at least in Race *salvini*), while older adults (of either sex) may show some red feathers on chin.

Breeding season begins in February and goes through May in Middle America. They nest in holes in tall, usually dead trees, often palm stubs. Three to four eggs are laid and the incubation period lasts 25-26 days.

Cool Facts: Four subspecies recognized:

- *A. a. autumnalis*. The nominate race is found on the Caribbean seaboard and slope from eastern Mexico (southern Tamaulipas) to northeastern Nicaragua. The nominate race has yellow on its cheeks.
- *A. a. salvini*. It is found in Eastern Nicaragua south to southwestern Colombia and northwestern Venezuela (Sierra de Perijá; recorded also in western Andes of Mérida). This race has lime green on its cheeks.
- *A. a. lilacina*. This race is found in Western Ecuador (north of Gulf of Guayaquil). It differs from other subspecies in its all-black upper mandible, in having the red of forecrown continuing over eye, the lilac of crown not extending onto nape, a paler, clearer green cheek, narrow, sharp yellow edges of wing-coverts and flight-feathers. Behaviorally, it's retiring, non-aggressive demeanor appears to also distinguish it, at least from the nominate.
- *A. a. diadema*. This race is found along the Lower Río Negro and adjacent northern bank of Amazon, in northwestern Brazil. It was recently also discovered in northwestern Pará. It differs from Race *lilacina* in certain characters outlined under that subspecies, and from that and other subspecies in having its nares being covered in red feathers, with rest of red patch on face sharply delineated to form a distinct rectangle, quite different from shape of red patches on other taxa in complex, and allowing blue on crown to extend forward to border the frons. Additionally, it has a powdery dorsum, resembling more that of the Mealy Amazon (*A. farinosa*), a black bill with a pale patch below nares.

Common Name: Blue-cheeked Parrot
Scientific Name: *Amazona dufresniana*

Size: 13.4 inches (34 cm)

Habitat: South America; It occurs from extreme eastern Venezuela in Bolívar east through Guyana and Suriname to French Guiana.

In Venezuela, it occupies humid lowland forest and forests in the foothills of the tepuis. In Suriname, however, this parrot seasonally occurs in coastal sand ridge forests.

Status: Near Threatened. **Global Population:** 6,000-61,000 mature adults with a decreasing population trend. Blue-cheeked Parrot is vulnerable to habitat loss, such as deforestation, or disturbance. A greater threat to this species may be capture for the pet trade; currently there is relatively little international trade in this species, however, although there may still be a continuing local trade, at least in the eastern portion of its range.

Diet: A variety of seeds, as well as fruits and blossoms.

It is gregarious, but usually is reported only in small single species flocks.

Breeding: Sexes are alike. It is a large parrot with relatively short, blunt-tipped tail. It has an area of dull blue on the sides of the head and neck. The lores and a narrow



frontal band are ochre, and the crown is dull yellow. The primaries are edged with blue and the outer secondaries are yellowish-orange. The tail is green with an indistinct yellow tip. The immature parrot is similar to the adult in pattern, but is duller.

Breeding occurs in March in Guyana. The clutch is three to five eggs, and the incubation period is 23-26 days.

Cool Facts: This species takes its English name from an area of dull blue on the sides of the head and neck.

Common Name: Red-browed Parrot
Scientific Name: *Amazona rhodocorytha*

Size: 15.8 inches (35 cm)

Habitat: South America; it is endemic to eastern Brazil, where it is confined to remnants of Atlantic Forest below 1000 m from Alagoas discontinuously south to São Paulo, in which state it was only very recently discovered.

It prefers humid lowland forests, though it also ranges into interior highlands up to 900 m.

Status: Vulnerable. **Global Population:** 2,500–9,999 mature adults with a decreasing population trend. Less than 1% of this species original habitat is now estimated to remain. Small populations highly fragmented by chronic deforestation within its range, and gene exchange between many or all of them may no longer be possible. Meanwhile, these birds are still trapped for local trade, and this now seems to be the principal threat.



Species is present but not secure in Monte Pascoal National Park (Bahia), Rio Doce and Ibitipoca State Parks (Minas Gerais), Córrego Grande, Córrego do Vead, Sooretama and Augusto Ruschi Biological Reserves (Espírito Santo), near Desengano State Park (Rio de Janeiro) and Serra da Bocaina National Park (São Paulo). It was considered “Endangered” in Brazil until 2014, it is now considered within the country as “Vulnerable”.

Diet: It prefers seeds and fruit and has a particular like for the fruit of “Cajueira” (Cashew nut)

Breeding: Sexes are alike. It has orange-red lores and crown shading to brownish purple on hind-crown, with rest of area round bill being a yellowish-pink. The cheeks are a blue to violet-blue which turn greener on the ear-coverts. The nape, mantle and sides of neck are green edged dark with the remaining body and wings green on top and a paler, yellower green below. There is a small red speculum patch and it has black primaries, with the secondaries tipped dark blue. The outer tail feathers have a red subterminal patch fringed in yellow. The immature bird has much reduced red on head, wings and tail.

Breeding seasons appears to be from September to November. Three to five eggs are laid and incubated for about 24 days. The nestling period lasts about 34 days.

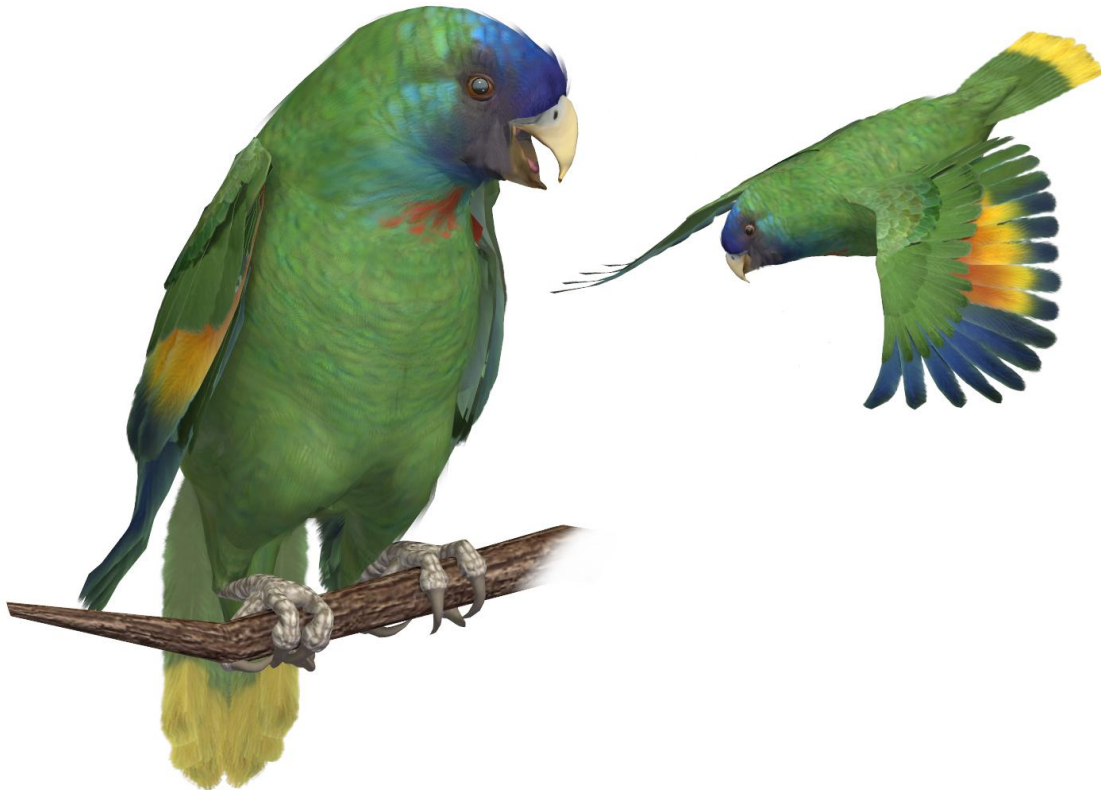
Cool Facts: Its distinctive ‘laughing’ calls are often the first indication of the Red-browed Parrot’s presence.

Common Name: Red-necked Parrot
Scientific Name: *Amazona arausiaca*

Size: 13-16 inches (33-40 cm)

Habitat: North America; it is endemic to the tiny island of Dominica in the Lesser Antilles.

It is found in moist forests chiefly at 300–800 m, sometimes ranging into more open cultivated areas.



Status: Vulnerable. **Global Population:** 500-999 mature adults with a decreasing population trend. There are conflicting reports of its former abundance; by early 1970s probably less than 400 remained, owing to habitat loss, hunting (for food) and trade. With two severe hurricanes in 1979 and 1980, the population may have been possibly halved. Natural recovery, along with considerable conservation efforts since that time, has resulted in a population rebound.

Diet: A wide range of fruits and seeds, including Dacryodes, Licania, Richeria, Amanoa, Simarouba, Symphonia, Cordia, Pithecellobium, Byrsonima, Anacardium, Pouteria, Dussia, Ormosia and palms. It sometimes will also forage on wild guavas and cultivated citrus.

Breeding: It is similar to the St. Lucia Amazon (*A. versicolor*) but has no dark edges to feathers giving scaled effect, and the red on the upper breast is reduced to the throat spot. The speculum is red and yellow and the primaries are tipped blue-black.

Breeding season goes from February to June. Nesting occurs in cavities found in trees (usually *Dacryodes excelsa* or *Sloanea berteriana*). Two to three eggs are laid with incubation lasting 26-28 days and the fledging period about 81 days.

Cool Facts: It is closely related to the St. Lucia Amazon (*A. versicolor*) with the two forming a Lesser Antillean clade.

Common Name: St. Lucia Parrot
Scientific Name: *Amazona versicolor*

Size: 16.5-18.5 inches (42-47 cm)

Habitat: North America; it is endemic to the island of St. Lucia in the Lesser Antilles.

It favors montane, moist primary forest in the center and south of the island, mainly at 500–900 m, but the species also is reported to forage in secondary growth.



Status: Vulnerable. **Global Population:** 1,150-1,500 mature adults with a increasing population trend. Formerly a common bird, but only 1000 birds estimated around 1950 and a steady decline thereafter as combination of habitat loss, hunting (for food), trade and hurricanes continued to reduce numbers. Major conservation endeavors from late 1970s, when possibly only 150 birds remained, resulted in strong national and popular support for species, whose numbers by 1990 were 300–350. Conservation actions may have saved this species from extinction. Numbers are now increasing and there is some evidence of a small range expansion. Continuing threats: The human population of St Lucia is growing at a considerable rate, increasing pressure on the forest and resulting in habitat loss. Selective logging of mature trees may significantly reduce breeding sites, and hurricanes, hunting and trade pose further threats.

Diet: Fruits and seeds of Clusia, Talauma, Pouteria, Miconia, Manilkara, Byrsonima, Sloanea, Pithecellobium, Dacryodes, Cassipourea, Protium, Torrubiya, Pterocarpus, Sterculia and several palms.

It is gregarious and makes noisy and raucous screeching. It also gives purring, cackling, shrieking and honking noises.

Breeding: A large Amazon parrot. It has a royal blue forehead and lores, shading paler on mid-crown and face, becoming scaled green on hind crown, nape, sides of the neck and mantle. There is a red patch on upper breast with green and maroon mottling on lower breast, and maroon on belly. Its vent is greenish yellow. The wings are green with a red speculum and dark blue primaries. Its tail green tipped yellowish.

Breeding occurs from February to March or later. They nest in holes within trees. Two to three eggs are laid and incubation lasts 28 days. The nestling period is about 81 days.

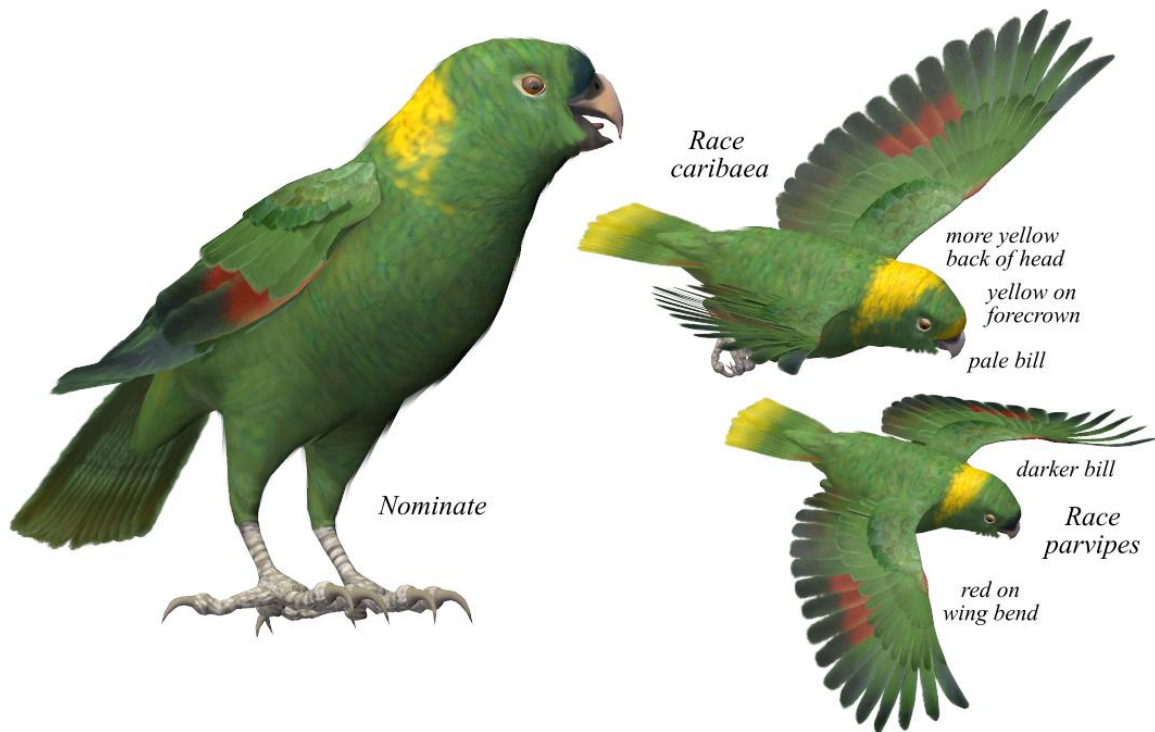
Cool Facts: It is the only parrot found on St. Lucia.

Common Name: Yellow-naped Parrot
Scientific Name: *Amazona auropalliata*

Size: 13.8-14.1 inches (35-36 cm)

Habitat: North and Central America; occur over the Pacific slope of Middle America from southern Mexico south to northwestern Costa Rica, and is almost entirely green, with a large patch of yellow on the nape. Similar populations are also found on the Atlantic coast, in eastern Honduras and northern Nicaragua (*A. a. parvipes*). A third subspecies, *A. a. caribaea*, is restricted to the Bay Islands off the northern coast of Honduras.

This Amazon parrot occurs in tropical deciduous forest, gallery forest, savannas with scattered trees, and, on the Atlantic slope, in pine woods. Over most of its range, the Yellow-naped Parrot remains uncommon to fairly common, but the insular subspecies, *Race caribaea*, appears to be rather rare.



Status: **Critically Endangered.** **Global Population:** < 10,000 birds mature adults with a decreasing population trend. It is thought to be in rapid decline, probably throughout most of its range, owing to loss and degradation of habitats and unsustainable exploitation for trade, with an overall population decline of about 50% between 1980 to 2000. Preliminary surveys and observations suggest that population in S Guatemala has plummeted since the 1990s and interviews with local elders in southwestern El Salvador provided anecdotal evidence of a significant decline since the 1950s and 1960s. In the early 1990s, population in Gracias a Dios, Honduras, was about 123,000 birds, however, by this time it had been nearly extirpated from Choluteca and El Valle, and there was also evidence for a decline on the Bay Islands. Surveys in Nicaragua also indicate a

steep decline in abundance between 1994-95 and 2000, and locals report that the species has disappeared from the vicinity of some human settlements, while the population in Costa Rica (considered one of the most secure) also appears to have been declining since the 1970s and 1980s. Bird counts at 6 sites in Costa Rica detected a decline of 48.9% between 2005 and 2016. That number shows a decline of 89% over 3 generations (or 37 years).

It is threatened by habitat loss and degradation, driven primarily by expansion of agriculture, and capture for local and international trade. Deforestation is prevalent in all range states; for example, mangrove forests in Gulf of Fonseca region are being cleared for development of aquaculture, firewood and timber.

It is considered one of the most sought-after Amazons in Central American pet trade, owing to the species's vocal capabilities. During 1990s, almost 100% of the known nests in southern Guatemala were poached, and significant areas of habitat were lost to expansion of sugarcane cultivation. In southwestern SW El Salvador, it also suffers from heavy nest-poaching, as well as its nesting locations being overtaken by Africanized honey bees. Numbers recorded in export from Nicaragua appear to be decreasing, however, nest poaching is still high and is thought to affect over 50% of nests in the Rivas area. In Costa Rica, roughly 30% of nests were raided in one study, accounting for about 85% of the all nest failures observed. It is thought that twice as many are taken from the wild than recorded in export, based on a mortality rate of 54% during capture and transit, although a survival rate of one in three or four has also been reported. Threats directly and indirectly caused by humans are thought to exacerbate the effects of poor rates of recruitment to the breeding population.

It was not considered of conservation concern until as recently as 2012 until recent information on levels of exploitation and habitat loss, and local population trends suggest that the species is undergoing a very rapid population decline and it was therefore uplisted to "Endangered" in 2017 and "Critically Endangered" soon after that.

Diet: Seeds of *Cochlospermum*, *Curatella*, figs and ripening *Terminalia* fruits, while race *caribaea* is reported to show a high seasonal dependence on cones of *Pinus caribaea*.

It is generally observed in pairs to large flocks.

Breeding: Sexes are alike. A large, mostly green parrot with bright golden-yellow nape and red speculum on its wing. Some birds can show yellow on the usually bluish-green forehead, hind crown can also be pale bluish green. The lores, cheeks and neck-sides are green, while the upper parts are green with some faint black fringes to feathers of the mantle and back. The rump and upper tail-coverts are slightly brighter green. The wing-coverts more emerald-green than rest of the bird. Some birds can have yellow feathers on leading edge to the wing. The outer webs to four outermost secondaries have red bases, while remiges otherwise have violet-blue on outer webs and towards their tips. The under wing is green. The under parts are pale green with bluish tinge on the throat. The tail is green with yellowish-green terminal band, with red bases and bluish edges to outer webs of the outer rectrices. The bill is horn, becoming black at tip. The eyes are orange with a greyish orbital skin. The legs and feet grayish horn to horn. The immature has a green nape, lacking the golden-yellow band, and has brown eyes. The yellow starts to appear on the neck at the end of the first year.

Cool Facts: There are three subspecies:

- *A. a. auropalliata*. The nominate race is found in southern Mexico (Southeastern Oaxaca) southward to northwestern Costa Rica.
- *A. a. caribaea*. This race is found on the Bay Islands (Roatán, Barbareta and Guanaja), off northern Honduras. This race is similar to race *parvipes*, but is more olive below, with a paler horn bill (especially the mandible), while there is usually a triangular-shaped patch of yellow feathers on its forecrown.
- *A. a. parvipes*. This race is found in northeastern Honduras and northeastern Nicaragua. It differs from the nominate in being overall smaller, with some red (not yellow) feathers on its wing-bend.

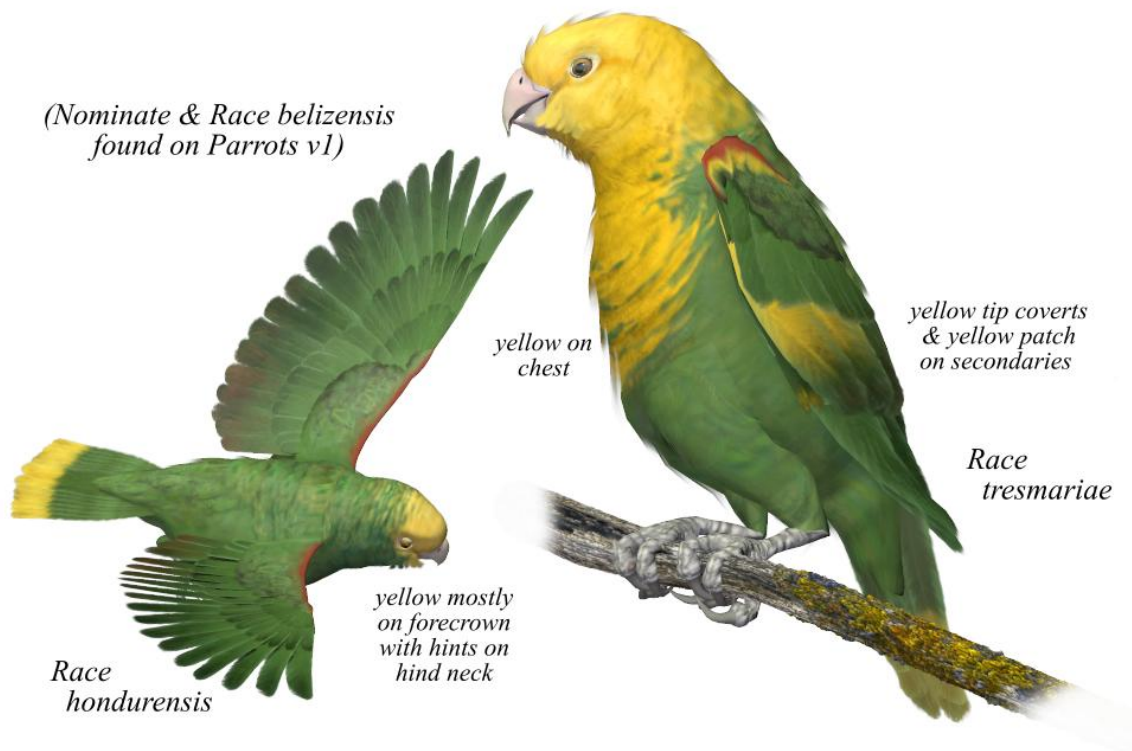
Common Name: Yellow-headed Amazon
Scientific Name: *Amazona oratrix*

Size: 14.9-16.9 inches (38-43 cm)

Habitat: Central America; found on the coastal slopes of Mexico from the Tres Mariás Islands and Jalisco to Oaxaca and from Nuevo León to northern Chiapas and southwestern Tabasco, as well as a disjunct area including most of Belize, and another comprising a small part of northeastern Guatemala and northwestern Honduras.

It prefers riparian forest and areas with scattered trees, as well as evergreen forest in Belize and mangroves in Guatemala.

Status: **Endangered**. **Global Population:** 7,000. Their numbers in the wild have been reduced by 90% from 70,000 to 7,000 (mid 1970s to 1994) and to 4,000 by 2004 because of capture for the blackmarket pet trade and habitat destruction. Poachers usually hack at the nest site with a machete to steal parrots, which is especially destructive because habitat is lost at the same time that the wild parrot population is reduced. An estimated 90% of poached Amazons die before they are sold.



Diet: Fruits, seeds, nuts, berries, blossoms, and leaf buds.

Breeding: The shape is typical of amazons, with a robust build, rounded wings, and a square tail. The body is bright green, with yellow on the head, dark scallops on the neck, red at the bend of the wing, and yellow thighs. The flight feathers are blackish to bluish

violet with a red patch on the outer secondaries. The base of the tail also has a red patch, which is usually hidden. The outer tail feathers have yellowish tips.

The bill is horn-colored, darker in immatures of the Belizean subspecies. The eye ring is whitish in Mexican birds and grayish in others. The most conspicuous geographical difference is the amount of yellow. In adults, the head and upper chest are yellow in the subspecies of the Tres Mariás Islands (*A. o. tresmariae*); just the head in the widespread subspecies of Mexico (*A. o. oratrix*); just the crown in Belize (*A. o. belizensis*); and the crown and nape in the Sula Valley of Honduras (*A. o. hondurensis*), which thus resembles the yellow-naped parrot. Immatures have less yellow than adult. They attain adult plumage in 2 to 4 years.

The variety "*Magna*" (or "Magnum") is bred for more yellow and commands a premium price as a pet. Some "extreme" Magnas have as much yellow as Tres Mariás birds, but are distinguished from them by heavier barring on the chest and a less bluish tint to the green plumage.

Yellow-headed Parrots nest in holes in tree trunks or fallen branches. They form communal roosts and nest in an unlined hollow in either a living or dead tree. They lay 2 - 4 oval, glossy eggs. Incubation lasts for approximately 29 days and fledging occurs approximately 2 months later.

Cool Facts: It is also known as the yellow-headed parrot and double yellow-headed amazon. Amazons are widely available and their personalities make them highly desirable pets. Their vocal abilities are generally considered to be bested only by the African Grey.

Subspecies and Distribution:

- *A. o. tresmariae*. First reported by Nelson in 1900. The "Tres Marias" Amazon is found in Tres Mariás Island, off the west-central coast of Mexico. Race *tresmariae* has longer wings than the nominate (in male), more bluish-green underparts, more extensive yellow on neck and, especially, throat, paler green upper parts, more frequent yellow tips to wing-coverts, inner secondaries and tail, and can show odd red feathers on head
- *A. o. oratrix*. First reported by Ridgway in 1887. The nominate species, "Yellow-headed Amazon" is found in the lowlands of Mexico, on Pacific (Jalisco to Michoacán, formerly to Oaxaca) and Atlantic (Tamaulipas and San Luis Potosí to Tabasco, Campeche and Chiapas) slopes.
- *A. o. belizensis*. First reported by Monroe & T. R. Howell in 1966. It is found in Belize and northeastern Guatemala (Petén). Race *belizensis* shows less yellow on the head than nominate (has all-green cheeks) and none on the throat. It is, on average, probably smaller and has grayish-white orbital ring, while birds from Guatemala to northwestern Honduras can show yellow on fore crown and around eyes (variety "*guatemalensis*"). The bill is darker in immatures on the nominate species.
- *A. o. hondurensis*. First reported by Lousada & S. N. G. Howell in 1997. It is found in extreme eastern Guatemala (Punta Manabique) and northwestern Honduras (lower Sula Valley). Race *hondurensis* has yellow on head which is limited to the forecrown and sometimes the nape. It has a paler bill than the nominate species.

Common Name: Yellow-crowned Parrot
Scientific Name: *Amazona ochrocephala*

Size: 13.8-15 inches (35-38 cm)

Habitat: North and South America; it is widely distributed over the northern two-thirds of South America, south as far as northern Bolivia, and over much of Panama.

It is found in tropical deciduous woodlands, tall thorn scrub, humid gallery forests, seasonally flooded várzea forests and secondary riverine growths. It can also be found in mangroves, pine savanna, Mauritia palm stands in wetter open areas, llanos,



cultivated land with remnant groves and woodlots, and even some suburban areas. These are always in lowlands, typically below 300 m, locally to 500 m in Venezuela and Colombia

Status: Not Threatened.

Global Population:

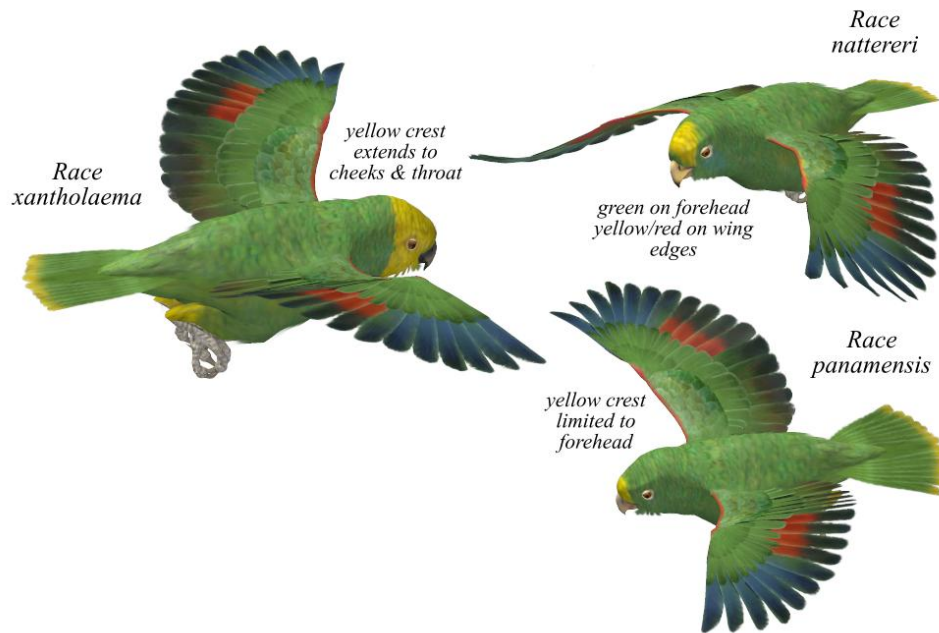
Unknown amount of mature adults with a suspected decreasing population trend. This species is suspected to lose 19-to-32% of suitable habitat within its distribution over three generations (37 years) based on a model of Amazonian deforestation. However, given the species's tolerance of fragmentation and degradation/edge-effects and/or the extent of overall losses, it is suspected to decline by <25% over three generations.

Diet: Fruit, seeds and flowers of trees. These

tree include Pithecellobium, Spathodea, Acacia, *Curatella americana*, Macuna, *Pereskia guamacho*, Tabebuia, Erythrina, Ficus, Terminalia, Euterpe and other palms. Flocks also take cultivated crops such as maize, green bananas, mangos, lemons, avocados, guavas, papayas and alfalfa.

This gregarious Amazon is typically recorded in pairs or small flocks of up to 30 birds. They can be seen in flocks of up to 300 individuals.

Breeding: Sexes are alike. A large green parrot that is more yellowish below. Its forehead and mid-crown are yellow, often with some yellow around the eye. Its cheeks and ear-coverts are bright green while its hind crown to mantle are a medium green very lightly edged with black. The bend of the wing is red and the carpal edge is yellowish. The speculum is red with the flight-feathers tipped dark blue. Its tail is tipped yellow and



basally marked red on the outer feathers. The immature is duller, with less yellow and red on the head and wing.

Breeding season occurs from February to May in northeastern Venezuela; December to January in western Panama and Colombia; and January in

Surinam. The nest is in a hollow of a tree. The cavity can be lined with leaves and wood chips. Two to four eggs are laid and incubated for 22–28 days, by female alone. The fledging period last from 59–86 days.

Cool Facts: Subspecies show small but usually distinctive variations in distribution of yellow on head.

- *A. o. ochrocephala*. The nominate race is found in eastern Colombia eastward through Venezuela, Trinidad and the Guianas to north-central Brazil (Pará).
- *A. o. xantholaema*. It is endemic to Marajó Island, in the Amazon Delta of northern Brazil. This race has more extensive yellow that extends to hind crown, around eyes and onto cheeks, often with a narrow green frontal band and a bluish tinge to breast.
- *A. o. nattereri*. It is found in southeastern Colombia southward through eastern Ecuador and eastern Peru to northern Bolivia and western Brazil (to Mato Grosso). It has less yellow on head than nominate (with which perhaps intergrades with the nominate in southeastern Colombia) with green frontal band, bluish tinge to cheeks, superciliary region and lores, red of wing-bend is often admixed yellow
- *A. o. panamensis*. This race is found in western Panama to northwestern and central Colombia. It has yellow restricted to V-shaped patch on forehead and a pinkish-horn bill, while size perhaps averages slightly smaller than the nominate.

Common Name: Yellow-shouldered Parrot
Scientific Name: *Amazona barbadensis*

Size: 13 inches (33 cm)

Habitat: South America; it has isolated populations in coastal Venezuela (Falcón to Sucre) and islands of Margarita and La Blanquilla. It can also be found on the western Leeward Antilles on Curaçao (probably feral) and Bonaire. It is now extinct on Aruba.

It is found in xerophytic vegetation such as dry cactus scrubland and thornbush in lowland areas where annual rainfall is less than 1000 mm, but tracts of denser woodland may be important.



Status: Near Threatened. **Global Population:** 2,000 mature adults with a decreasing population trend. It is heavily exploited everywhere for largely internal pet trade, compounded by tourist developments on the islands and other forms of habitat destruction, such as mining; other problems include some persecution as a crop pest and occasional island droughts. Population on mainland unknown, but a roost of 700 recorded in 1989. Margarita held 650–800 in late 1980s, rising under management to 914 in 1992, and to 1600 in 2009. Blanquilla held under 80 in 1992. Over 400 were counted on Bonaire, 1987, this population gaining some protection within Washington-Slagbaai National Park.

Diet: Fruits, seeds and/or flowers of *Platymiscum*, *Pithecellobium*, *Piptadenia*, *Piscidia*, *Bulnesia*, *Tabebuia*, *Capparis*, *Malpighia*, *Bourreria*, *Casearia*, *Guaiacum*, *Terminalia*, *Spondias*, *Moringa*, *Ziziphus*, *Caesalpinia*, *Crotalaria*, *Acacia*, *Prosopis*, *Leucaena*, *Bursera*, *Crescentia* and various cacti.

Breeding: A mostly green Amazon with narrow dark edges to feathers giving light scaled effect, bluish tinge on underparts; forehead white shading to yellow on mid-crown and around eye , with light blue suffusion on lower cheeks and chin; shoulder and thighs are yellow; speculum red , flight-feathers tipped dark blue. Immature lacks bluish tinge below.

Eye laying begins late March to early April. This parrot nests in a hole/cavity within a tree or cactus, and sometimes a cliff side. The egg clutch is one to six eggs and the incubation period last 24–30 days. The nestling period lasts 50–66 days. 20% of eggs are lost because of hatching failure (8%), predation (6%), human perturbation (3%) or nest abandonment (3%), and 49% chicks lost due to poaching (29%) or natural causes including predation (10%).

Cool Facts: A variety of screeches and calls, rather high-pitched. In flight, typically a high-pitched screeching “*screeet!*”, often trilled or modulated to “*scree-ee-ee-eet!*”.

Special Thanks to my Beta-Testing Team...

Alisa & FlintHawk

Species Accuracy and Reference Materials

The author 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.

Field Guide Sources:

- "Parrots: A Guide to Parrots of the World" by Tony Juniper and Mike Parr
- Handbook of the Birds of the World Alive <https://www.hbw.com/>
- Wikipedia https://en.wikipedia.org/wiki/Main_Page
- BirdLife International <https://www.birdlife.org/>

Amazon Parrots Found in Other Sets

- **Black-billed Amazon** (*Amazona agilis*). Found in Songbird ReMix Parrots v6.
- **Cuban Amazon** (*Amazona leucocephala*). Found in Songbird ReMix Parrots v6.
- **Hispaniolan Amazon** (*Amazona ventralis*). Found in Songbird ReMix Parrots v6.
- **Imperial Amazon** (*Amazona imperialis*). Found in Songbird ReMix Parrots v6.
- **Kawall's Amazon** (*Amazona kawalli*). Found in Songbird ReMix Parrots v6.
- **Mealy Amazon** (*Amazona farinosa*). Found in Songbird ReMix Parrots v6.
- **Orange-winged Amazon** (*Amazona amazonica*). Found in Songbird ReMix Parrots v6.
- **Puerto Rican Amazon** (*Amazona vittata*). Found in Songbird ReMix Parrots v6.
- **Red-tailed Amazon** (*Amazona brasiliensis*). Found in Songbird ReMix Parrots v6.
- **Scaly-naped Amazon** (*Amazona mercenarius*). Found in Songbird ReMix Parrots v6.
- **St. Vincent Amazon** (*Amazona guildingii*). Found in Songbird ReMix Parrots v6.
- **White-fronted Amazon** (*Amazona albifrons*). Found in Songbird ReMix Parrots v6.
- **Yellow-billed Amazon** (*Amazona collaria*). Found in Songbird ReMix Parrots v6.
- **Yellow-headed Amazon** (*Amazona oratrix*; Races *oratrix* and *belizensis*). Found in [Songbird ReMix Parrots v1](#)).
- **Yellow-lored Amazon** (*Amazona xantholora*). Found in Songbird ReMix Parrots v6.

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