

Avian Models for 3D Applications

Model and Morphs by BL Render and Ken Gilliland
Procedural Maps by Ken Gilliland

Songbird ReMix Condors

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Songbird ReMix Condors

Manual & Field Guide

Introduction






Condors is an add-on package for "Vultures" from the popular Songbird ReMix Series. The Condor is the largest living bird on the planet with a wingspan over 9 feet long. Both species, the California and the Andean Condors, have been recreated down to the last hair on their mostly bare heads. Each species has three variants.

Overview and Use

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

- **Bird Base Models**
 - **<C> SBRM Condor Base Model** - This model is specifically for use with Vultures. See the "C" icon in the lower right corner? This corresponds with characters in the Pose folders. All MAT/MOR files with the "C" icon use this model. Load this model first and then the appropriate *Conforming Parts* if needed.
- **Conforming Parts**
 - **<C23> Crest23 for the Male Andean Condor**. This part should be conformed to the Condor Base **<C>** to create the male species of the Andean Condor. There are some Morphs in the HEAD section. **Be sure to read this:** When posing the Base Model, the Conforming Part will follow any Bend, Twist or Rotate Commands. It will not obey any **SCALE** or **MORPH** commands you give the Base Model. You must manually scale the Conforming Part.
 - **<Radio Tags> Radio Tracking Tracks for the California Condor**. These tags are used to track the endangered California condor in the wild. Several MAT (in Poses) have been provided to alter the default number on the tags to 15, 22, 23 or 32. Several morphs to adjust the tags on the wings have been provided in the lShoulder and rShoulder parts. **Be sure to read this:** These Tags will not work with the Fold morph—the folding feathers make it impossible to properly place the tags on the wings.

Conforming Crest Quick Reference

Load Model(s)	To Create... (apply MAT/MOR files)
	<ul style="list-style-type: none"> Andean Condor (Female) California Condor (Juvenile & Adults)
 	<ul style="list-style-type: none"> Andean Condor (Male)
 	<ul style="list-style-type: none"> Tracked California Condor (Juvenile & Adults). Radio Tags should only be used with Birds in flight. They don't work with folded wings.

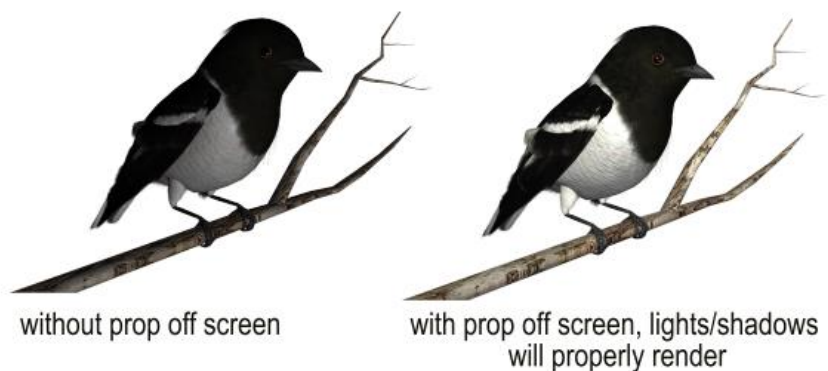


Creating a Songbird ReMix Bird

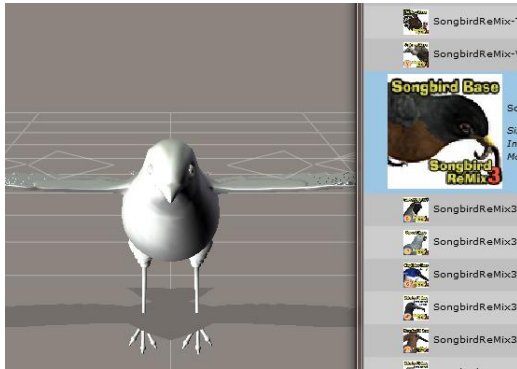
1. Choose what you want to load. For this example, we'll create a Condor species.
2. Load Poser or DAZ Studio and select **FIGURES** and the Songbird ReMix folder. DAZ Studio users will select the "Poser Formats" → "My Library" → "FIGURES" → "Songbird ReMix".
3. Because all of the Condor use the "Condor"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

Scaling and Square Shadows in Poser

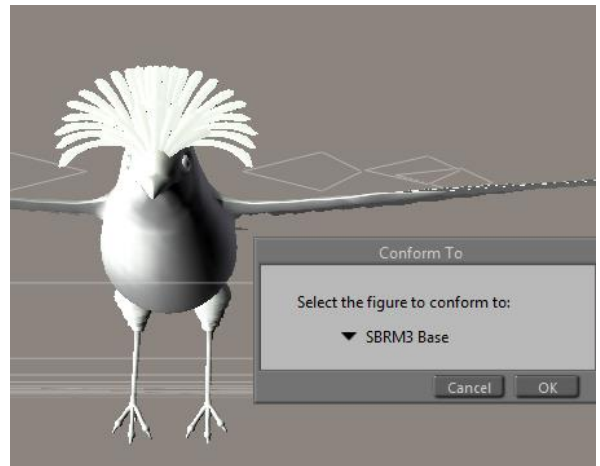
All the birds in this package have to scaled proportionally to DAZ 3D's Victoria and Michael models. The smallest of the included birds **MAY** render with a Square shadow or improper lighting. This is a bug in Poser. Poser can't figure out how to render a shadow for something really small, so it creates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



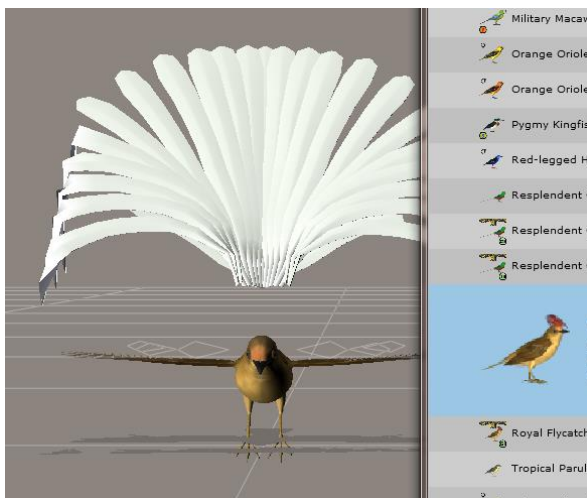
How to build a Songbird ReMix Character with a Conforming Crest in Poser



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



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



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

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



Updates and Freebies

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

Songbirdremix.com always has the latest updates and additions to existing Songbird ReMix products, plus the latest digital and real bird news, tutorials, videos, all the Field Guides, free bird characters, props and much more...

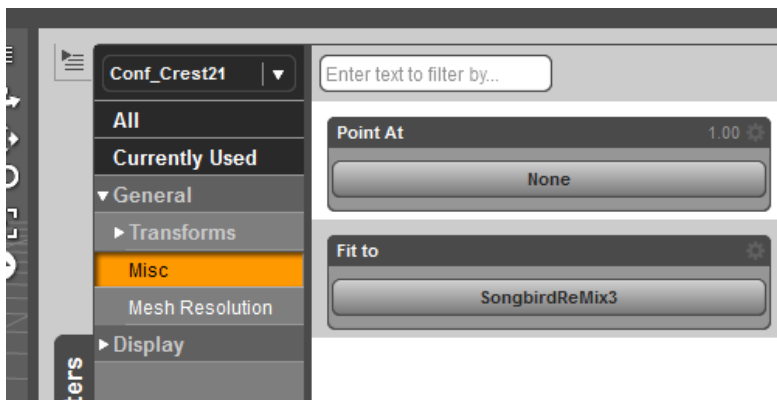
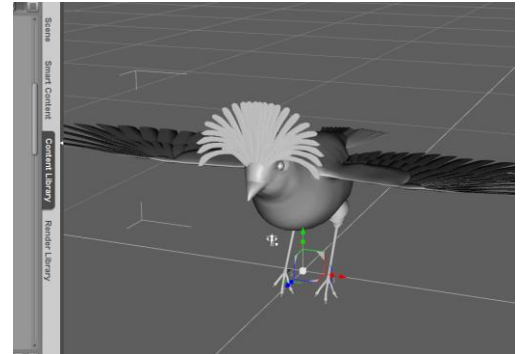


Songbird ReMix.com

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

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

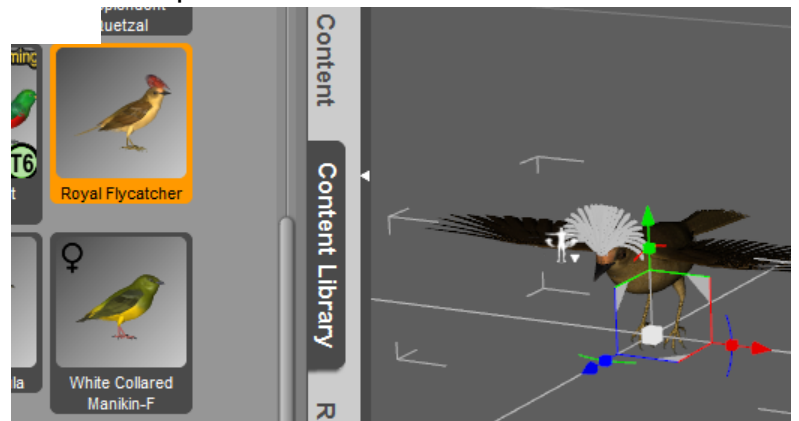
Now, using the “FIT TO” command in the Parameters Tab, Select the Songbird ReMix Model. Go back to the **Scene** Tab and select the Songbird ReMix Model.



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

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

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



Tips and Tricks

How do I open the Mouth?... Unlike the Songbird Remix model, the Opening and Closing of the Vulture beak is controlled by the **BEAK** body part.

Being Hip in Poser... you may want to turn off IK for the feet. While IK can affect preset poses and does affect leg movement, IK can be very helpful in **HIP** XYZ rotations and translation.

Displacement... “Vultures” does use displacement maps. You must turn on displacement in the Poser render settings; DAZ| Studio does this automatically.

Being Fluffy... the collar and fluff morphs in **NECK1-3** can be helpful in awkward looking neck/hip bends. Try using neck morphs “Cllr-BottomBendExpand”, “Cllr-TaperBottom”, and various “Fluffs”. You’ll find “FluffUp” morphs very helpful, too.

Varying individuals... Since most vultures feed together you’ll probably want to include more than one Vulture in a scene. You can vary appearance slightly with the arsenal of head and neck morphs included. In **HEAD**, try slight adjustments to beak and facial hair.

Jaw Gaps and Tongue Poke-throughs... Because of the generic nature of the Vulture some species may exhibit jaw gaps and lower beak poke through. Several morphs in the **HEAD’s** Beak section will correct this. “BkB-Fix 1” and “2” control the lower beak width. “Bk-CornerBack” or “Bk-CornerDown”, as well as the Beak joint controller will help on Jaw gaps. Tongue poke-through can be corrected by using the “Throat” sections’ “Jaw-CloseLumpFix” Morph

Throat Issues... Sometimes, the Throat hair bunches together to form a straight line in extreme bend-down angles with the head. The **HEAD** morph (in Hair Morphs Section) called “ChinFuzzGone” will take care of it. Chin hairs showing up in the throat can be corrected by “ChinFuzz-Fix”

Songbird ReMix Condors

Field Guide

New World Vultures:

California Condor, *Gymnogyps californianus*
Andean Condor, *Vultur gryphus*



Common Name: California Condor
Scientific Name: *Gymnogyps californianus*

Size: 46-53 inches (117–135 cm); Wingspan 108-110 inches (277-280 cm)

Habitat: North America; Currently found in southern California, in Baja California, and at the Grand Canyon in Arizona. Five hundred years ago, the California Condor roamed across the American Southwest and West Coast. The condors live in rocky scrubland, coniferous forests, and oak savannas. They are often found near cliffs or large trees.



Status: Critically endangered. **Global Population:** <350 mature individuals. Condor numbers dramatically declined in the 19th century due to poaching, lead poisoning, and habitat destruction. Eventually, a conservation plan was put in place by the United States government that led to the capture of all the remaining wild condors in 1987. These 22 birds were bred at the San Diego Wild Animal Park and the Los Angeles Zoo. Numbers rose through captive breeding and, beginning in 1991, condors have been reintroduced into the wild. The project is the most expensive species conservation project ever

undertaken in the United States. The California Condor is one of the world's rarest bird species. In August 2008, there were 332 condors known to be living, including 156 in the wild.

Diet: Large, terrestrial mammalian carcasses such as deer, goats, sheep, donkeys, horses, pigs, mountain lions, bears, or cattle. Alternatively, they may feed on the bodies of smaller mammals, such as rabbits or coyotes, aquatic

mammals such as whales and sea lions, or salmon. Bird and reptile carcasses are rarely eaten. Wild condors inhabit large territories, often traveling 250 kilometers (150 mi) a day in search of carrion. It is thought that in the early days of its existence as a species, the California Condor lived off of the carcasses of the "megafauna", which are now extinct in North America.

Nesting: Sexes look alike; juvenile is mostly a mottled dark brown or gray with blackish coloration on the head. Condors begin to look for a mate when they reach sexual maturity at the age of six. To attract a prospective mate, the male condor performs a display. In the display, the male turns his head red and puffs out his neck feathers. He then spreads his wings and slowly approaches the female. If the female lowers her head to accept the male, the condors become mates for life. The pair makes a simple nest in caves or on cliff clefts, especially ones with nearby roosting trees and open spaces for landing. A mated female lays one bluish-white egg every other February or March. The egg weighs about 280 grams (10 oz) and measures from 90–120 millimeters (3½–4¾ in) in length and about 67 millimeters (2⅝ in) in width. If the chick or egg is lost or removed, the parents "double clutch", or lay another egg to take the lost one's place. Researchers and breeders take advantage of this behavior to double the reproductive rate by taking the first egg away for hand-rearing; this induces the parents to lay a second egg, which the condors are sometimes allowed to raise.



The eggs hatch after 53 to 60 days of incubation by both parents. Chicks are born with their eyes open and sometimes can take up to a week to hatch from their egg. The young are covered with a grayish down until they are almost as large as their parents. They are able to fly after five to six months, but continue to roost and hunt with their parents until they turn two, at which point they are displaced by a new clutch.

Cool Facts: California Condors have the largest wingspan of any North American bird. Its featherless head reduces bacterial growth from eating carrion.

The Condor, remnants of the prehistoric... At the time of human settlement of the Americas, the California Condor was widespread across North America. However, climate changes associated with the end of the last ice age and the extinction of the Pleistocene megafauna led to a subsequent reduction in range and population. Prehistorically, California Condors are known from Arizona, Nevada, New Mexico, and Texas.

In modern times, a wide variety of causes have contributed to the condor's decline. Its exacting mating habits and resulting low birth rate, combined with a late age of sexual maturity, make the bird vulnerable to loss of population. Significant damage to the condor population is also attributed to poaching, especially for museum specimens, lead poisoning (from eating animals containing lead shot), DDT poisoning, electric power lines, egg collecting, and habitat destruction.

In addition to this, cattle ranchers who observed condors feeding on the dead young of their cattle assumed that the birds killed the cattle. This fallacy led to the condor's extinction in some parts of the western United States. This belief was so deeply ingrained that the reintroduction of condors to the Grand Canyon was challenged by some cattle ranchers, who mistakenly believed that the bird hunted calves and lambs. During the California Gold Rush, some condors were even kept as pets.

As the condor's population continued to decline, discussion began about starting a captive breeding program for the birds. Opponents to this plan argued that the condors had the right to freedom, that capturing all of the condors would change the species' habits forever, and that the cost was too great. However, the project received the approval of the United States Government, and the capture of the remaining wild condors was completed on Easter Sunday 1987, when AC-9, the last wild condor, was captured. There were only 22 condors in existence, all in captivity. The captive breeding program, led by the San Diego Wild Animal Park and Los Angeles Zoo, got off to a slow start due to the condor's mating habits. However, utilizing the bird's ability to double clutch, biologists began removing the first egg from the nest and raising it with puppets, allowing the parents to lay another egg.

As the number of condors grew, attention began to focus on releasing some back into the wild. In 1988, the US Fish and Wildlife Service began a reintroduction experiment involving the release of captive Andean Condors into the wild in California. Only females were released, to eliminate the possibility of accidentally introducing a South American species into the United States. The experiment was a success, and all the Andean Condors were recaptured and re-released in South America. California Condors were released in 1991 and 1992 in California, and again in 1996 in Arizona near the Grand Canyon. Though the birth rate remains low in the wild, their numbers are increasing steadily through regular releases of captive-reared adolescents.

Unanticipated deaths among these populations occurred due to contact with Golden Eagles, power lines, and other factors such as lead poisoning. Since 1994, captive-bred California Condors have been trained to avoid power lines and people. Since the implementation of this aversion conditioning program, the number of condor deaths due to power lines has greatly decreased. Lead poisoning due to fragmented lead bullets in large game waste is a particularly big problem for condors due to their extremely strong digestive juices; this lead waste is not as much of a problem for other avian scavengers such as the Turkey



Vulture and Common Raven. This problem has been addressed in California by the Ridley-Tree Condor Preservation Act, a bill that went into effect July 1, 2008 that requires that hunters use non-lead bullets when hunting in the condor's range.

The California Condor conservation project is also the most expensive species conservation project in United States history, costing over \$35 million, including \$20 million in federal and state funding, since World War II. However, nesting milestones have been recently reached by the reintroduced condors. In 2003, the first nestling fledged in the wild since 1981. In March 2006, a pair of California Condors attempted to nest in a hollow tree near Big Sur, California. This was the first time in more than 100 years in which a pair of California Condors had been

seen nesting in Northern California. In early 2007, a California condor laid an egg in Mexico for the first time since at least the 1930s. The population of the condors has risen due to these wild and also captive nestings. As of August 2008 there are 332 individuals living, including 156 in the wild and the rest in the San Diego Wild Animal Park, the Los Angeles Zoo, the Oregon Zoo, or the World Center for Birds of Prey in Boise, Idaho.

Throughout its historic range, the California Condor has been a popular subject of mythology and an important symbol to Native Americans. Unusually, this bird takes on different roles in the storytelling of the different tribes.

The Wiyot tribe of California says that the condor recreated mankind after Above Old Man wiped humanity out with a flood. However, other tribes, like California's Mono, viewed the condor as a destroyer, not a creator. They say that Condor seized humans, cut off their heads, and drained their blood so that it would flood Ground Squirrel's home. Condor then seized Ground Squirrel after he fled, but Ground Squirrel managed to cut off Condor's head when Condor paused to take a drink of the blood. According to the Yokut tribe, the condor sometimes ate the moon, causing the lunar cycle, and his wings caused eclipses. The Chumash tribe of Southern California believed that the condor was once a white bird, but it turned black when it flew too close to a fire.

Condor bones have been found in Native American graves, as have condor feather headdresses. Cave paintings of condors have also been discovered. Some tribes ritually killed condors to make ceremonial clothing out of their feathers. Shamans then danced while wearing these to reach the upper and lower spiritual worlds. Whenever a shaman died, his clothes were said to be cursed, so new clothing had to be made for his successor. Some scientists, such as Noel Snyder, believe that this process of making ceremonial clothing helped contribute to the condor's decline. If so, this would be the only known species that was endangered by the California natives.

Common Name: Andean Condor

Scientific Name: *Vultur gryphus*

Size: 40-50 inches (100-130 cm); Wingspan: 120-144 inches (320-370 cm)

Habitat: South America; The Andes Mountain Range from Venezuela to Sierra del Fuego; descends to lowland desert regions in Peru and Chile/ In the early nineteenth century, the Andean Condor bred from western Venezuela to Tierra del Fuego, along the entire chain of the Andes, but its range has been greatly reduced due to human activity. Its habitat is mainly composed of open grasslands and alpine areas up to 16,000 ft (5,000 m) in elevation. It prefers relatively open, non-forested areas which allow it to spot carrion from the air, such as the páramo or rocky, mountainous areas in general. It occasionally ranges to lowlands in eastern Bolivia and southwestern Brazil, descends to lowland desert areas in Chile and Peru, and is found in southern-beech forests in Patagonia.



Status: Near Threatened.

Global Population: 10,000 mature individuals and decreasing. Threatened by habitat loss and by secondary poisoning from carcasses killed by hunters. Captive breeding programs have been instituted in several countries.

Diet: Primarily carrion, but also eggs from seabird colonies

Nesting: In the male, the head is

crowned with a dark red caruncle or comb, while the skin of his neck lies in folds, forming a wattle. The skin of the head and neck is capable of flushing noticeably in response to emotional state, which serves to communicate between individuals. The irises of the male are brown, while those of the female are deep

red. Juveniles have a grayish-brown general coloration, blackish head and neck skin, and a brown ruff.

The Andean condor nests in shallow caves on cliff ledges and lays one or two bluish-white eggs, weighing about 280 g (10 oz) and ranging from 75 to 100 mm (3 to 4 in) in length, during the months of February and March every second year. The egg hatches after 54 to 58 days of incubation by both parents. If the chick or egg is lost or removed, another egg is laid to take its place. Researchers and breeders take advantage of this behavior to double the reproductive rate by taking the first egg away for hand-rearing, causing the parents to lay a second egg, which they are generally allowed to raise.



Cool Facts: It is the only member of the genus *Vultur*. Although it is on average about five cm shorter from beak to tail than the California Condor, the Andean Condor is larger in wingspan. Contrary to the usual rule among birds of prey, the female is smaller than the male.

The condor helps keep the environment clean from potentially harmful bacteria found on animal carcasses. It prefers large carcasses, such as those of deer or cattle. It can pick an animal's carcass clean in under an hour—sometimes even eating the bones. The head and neck are meticulously kept clean by the bird, and their baldness is an adaptation for hygiene, allowing the skin to be exposed to the sterilizing effects of dehydration and ultraviolet light at high altitudes.

Condors will ride air currents, similar to the eagle. This is an efficient way of flying for a bird of its size.

Condors have weak feet that are used more for walking than clutching food.



Special Thanks to...

....to my betatesters (**Bea, Jan, Kelvin, Nancy, Rhonda and Sandra**)

Species Accuracy and Reference Materials

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 Goggle searches and several field guides were used.

- **"The Sibley Guide to Birds"** by David Allen Sibley.
- **"Raptors of the World"** by James Ferguson-Lees and David A. Christie
- **"Vultures: Animal Scavengers"** by Sandra Markle
- **"Condors and Vultures"** by David Houston

Field Guide Sources:

- **Cornell Lab of Ornithology** (<http://www.birds.cornell.edu>)
- **Wikipedia** (<http://www.wikipedia.com>)
- **BirdGuides.com** (<http://www.birdguides.com>)
- **IUCN Red List of Threatened Species** (<http://www.iucnredlist.org/>)
- **Vultures; Nature's Nobel Caretakers** (<http://vultures.homestead.com/>)

Other Resources:

- Songbird ReMix.com
- Songbird ReMix on Facebook

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

