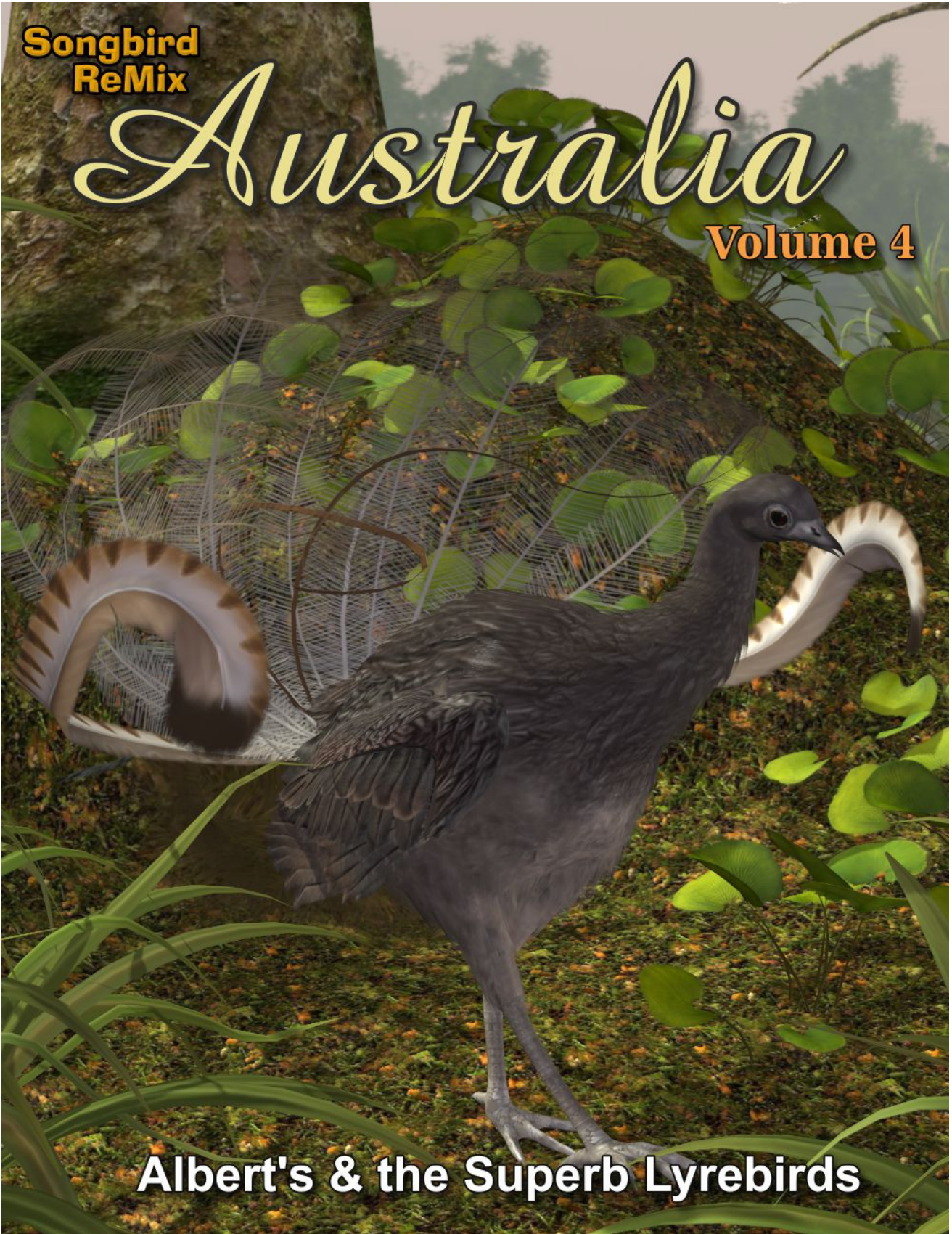


**Songbird
ReMix**

Australia

Volume 4



Albert's & the Superb Lyrebirds

Avian Models for 3D Applications

Characters and Procedural Maps by Ken Gilliland

Songbird ReMix Australia Volume 4

Lyrebirds of the World

Manual

Introduction	3
Overview and Use	3
One Folder to Rule Them All	4
Physical-based Rendering	4
Rendering & Pose Tips	5
Taming the Lyrebird's Tail	5
Where to Find your Birds and Poses	6

Field Guide

Introduction to Lyrebirds	7
Albert's Lyrebird	8
Superb Lyrebird	10
Resources, Credits and Thanks	14

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Songbird ReMix Australia Volume 4

Lyrebirds of the World

Introduction

Lyrebirds are among the world's largest passerines, looking and acting much more like brown pheasants than like their songbird relatives. This illusion is shattered when male lyrebirds open their mouths to sing. Lyrebirds are among the best mimics in the world, sometimes incorporating human-made sounds (the sounds of chainsaws, a can of spray paint being shaken, camera clicks and cellphone rings) into their exceptionally long song phrases. When not singing, lyrebirds walk quietly through the wet forests of eastern Australia, stopping often to scratch in the forest duff with their long, strong legs in search of grubs. Their name derives from the shape of the spectacular tail plumes of the displaying male.

Lyrebirds of the World comes with both species of this amazing bird, the Albert's and Superb Lyrebird, as well as all Superb Lyrebird subspecies in both male and female forms. As with all Songbird ReMix sets, there is a wide variety of controls and morphs to mimic most of the types of behavior you would expect a bird to do, as well as numerous shaping features. The set comes in native DAZ Studio and Poser versions and supports Iray, 3Delight, Firefly and Superfly render engines.

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):
 - **Perching Birds (Order Passerines) - Lyrebirds, Bowerbirds & their Allies**
- **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.

One Folder to Rule Them All

When I reworked the entire Songbird ReMix library starting in 2018, I decided to abandon the way the birds were sorted (by product name) and choose an Ornithological approach. All birds are found in the Bird Library folder and are arranged by type of bird. This approach is hopefully easier for most to find what bird they are looking for. Admittedly, it will take some getting use to for some longtime users, but I’ve always approached the Songbird ReMix series as a learning tool as well as a graphics tool, so hopefully some knowledge will rub off by seeing how birds are grouped.

Probably the most deceiving subfolder in the **Bird Library** is “**Perching Birds (Order Passeriformes)**”. This is folder you probably will end up “favoriting” because this one folder (Passeriformes) **holds more than 50% of all birds**. Perching birds range from cardinals and jays to chickadees, crow and swallows.



Finding the bird you want within the “**Perching Birds (Order Passeriformes)**” folder can be daunting, even for an experienced birder (such as myself), so I’ve included an online reference tool within this folder that helps to make your search easier. Click the “**Perching Birds Finder**” icon and when loaded, look at the first column and search for the type of bird you want. For example, I want a “manakin” (a bird common to Central and South America). Scroll down the first column alphabetically and stop on “manakin”. Looking across to the second column, you will now know that manakins can be found in the “Tyrant Flycatchers & their Allies” subfolder.

Physical-based Rendering

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

Posing & Shaping Considerations

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

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

- Birds will not be flat on the zero plane due to leg size and overall scale.
- Because of the numerous beak shapes, closing the beak may range from 0.5 to 1. Usually 0.8 is about right.
- **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.

Taming the Lyrebird Tail

I won't pretend that posing the Lyrebird's tail with its 184 parts is going to be easy. There's a huge amount of ERC controls that are found in the BODY section—maybe too many. In the "**Tail Feather Controls**" you'll be able to control each feather individually; Twisting, Curling Side-to-Side and Bending. The Lyrate and Points feathers even have additional controls to allow move elaborate shaping. All feathers have controls also in the **Creation Controls** section to alter their length and width.

The best place to start is by using one of the pre-built full or partial poses that I've created for the tail. I devised three bend master controls; one for bending the two outer Lyre-shaped feathers, one for bending the two spike-shaped feathers and a final one to control the filament feathers. There's also a master control for folding the tail.

Where to find your birds

Type Folder	Bird Species
Perching Birds (Order Passeriformes) Lyrebirds, Bowerbirds & their Allies	Albert's Lyrebird Superb Lyrebird

Where to find your poses

Type Folder	For what species?
Perching Birds (Order Passeriformes) Lyrebirds, Bowerbirds & their Allies	All Lyrebirds



Songbird ReMix Australia Volume 4

Lyrebirds of the World

FIELD GUIDE

All About Lyrebirds

The lyrebirds are among the world's largest passerines, looking and acting much more like brown pheasants than like their songbird relatives. This illusion is shattered when male lyrebirds open their mouths to sing. Lyrebirds are among the best mimics in the world, sometimes incorporating human-made sounds (the sounds of chainsaws, a can of spray paint being shaken, camera clicks and cellphone rings) into their exceptionally long song phrases. When not singing, lyrebirds walk quietly through the wet forests of eastern Australia, stopping often to scratch in the forest duff with their long, strong legs in search of grubs. Their name derives from the shape of the spectacular tail plumes of the displaying male.

Lyrebirds are polygynous, with a single male's territory potentially incorporating several female territories. Males have one of the most diverse vocal repertoires of any bird. When a female approaches a male lyrebird's display site, a dirt mound on the forest floor, he performs an elaborate courtship dance involving his highly modified tail feathers, which, if successful, results in copulation.

Key Identifiers of a Lyrebird

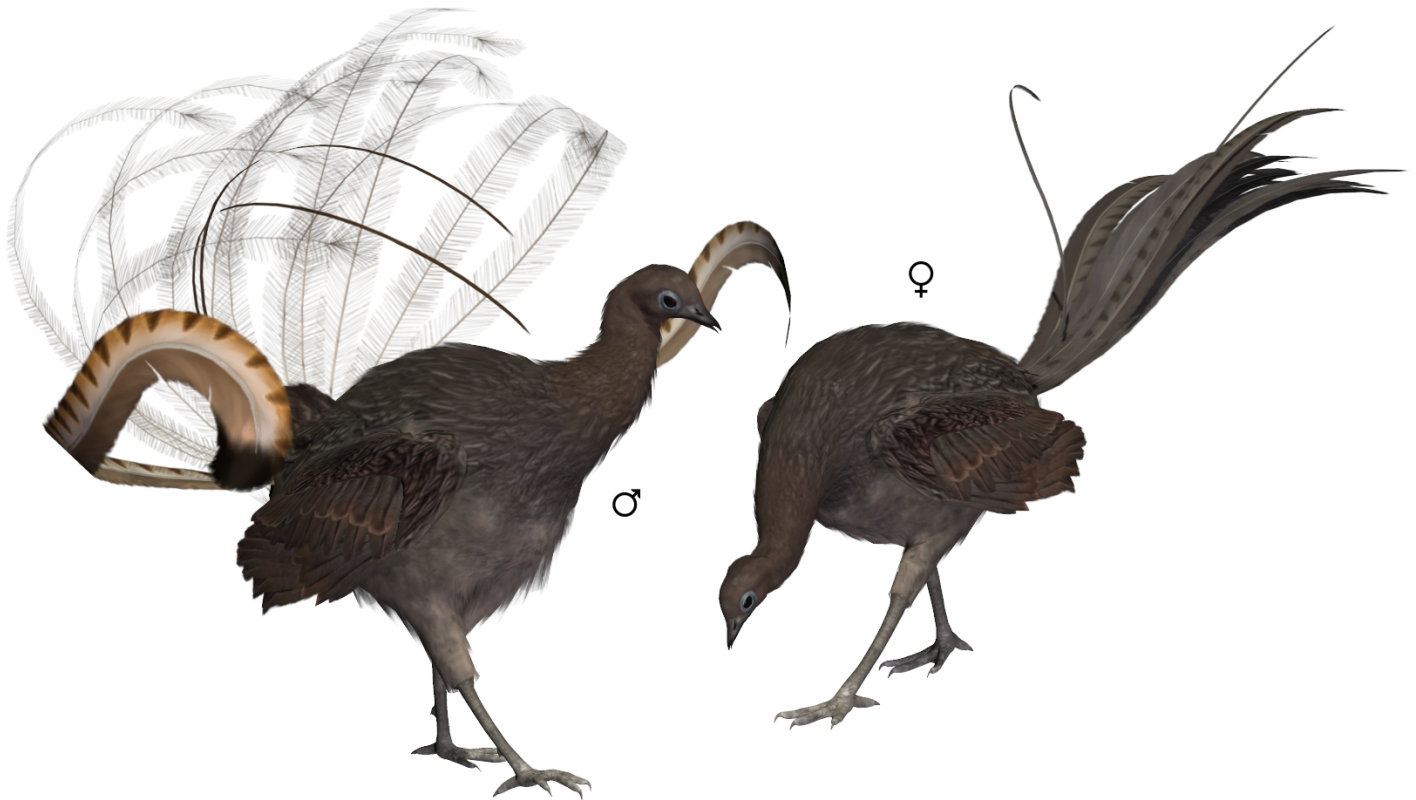
- Plumage generally dull gray-brown
- Wings short, rounded; tail long
- Body large, ovoid, with horizontal posture
- Bill medium length, conical, and sharp
- Head small, with bare bluish orbital skin; neck medium-long
- Legs long; toes long and stout with long near-straight claws
- Sexually dimorphic; males with highly modified rectrices

Common Name: Albert's Lyrebird
Scientific Name: *Menura alberti*

Size: Male 36.6 inches (93 cm), tail length 47–57 cm; Female 33.9 inches (86 cm), tail length 36–42 cm.

Habitat: Australia; It is endemic to extreme southeastern Queensland and extreme northeastern New South Wales, in Eastern Australia.

Status: Near Threatened. **Global population:** 3,500 mature individuals with a declining population trend. This species is currently considered “Near Threatened”, and previously, “Vulnerable” because it is a restricted-range species, only found in Eastern Australia. The population density in optimal habitat is about 5 “pairs” per km². In 19th century much of the habitat was cleared for agriculture, forestry and settlement, resulting in a significant contraction of its range and decrease in population. Many sub-



populations are now found in national parks and other reserves, where they are fairly secure, but some possibly susceptible to adverse effects that afflict small populations (e.g. genetic inbreeding). The biggest current threat is intense forestry management. Forest managers have been replacing optimal habitats with eucalyptus and pine plantations. These only support only low densities of lyrebirds.

Diet: Mainly adult and larval insects and other soil invertebrates.

It forages mostly alone, on the ground in open areas that lack dense shrub cover. It scratches through the litter with its feet, digging into soil to depths of 5 cm. It has occasionally been observed to forage above ground, at up to 10 m, in debris trapped in subcanopy epiphytes (e.g. bird's-nest fern (*Asplenium australasicum*)).

Nesting: A large bird with long legs, big strongly clawed feet, and a train-like tail. The male has a dark gray head and neck, a mainly dark red-brown to rufous-brown upper body and wings with a long train-like tail that is 47–57 cm long. It comprises a ribbon-like central pair of feathers, 12 lacy filamentaries, and a broad outermost pair (*lyrates*), dark brown above and dark gray below. The chin, throat and foreneck is a rufous-brown while the breast is a dark gray. There is a paler gray on the abdomen and the rear flanks and under tail-coverts are a bright rufous-brown. The bill is black and the iris is dark brown to black with a gray orbital ring. The legs and feet are a brownish-gray. Female is like male, but tail shorter (36–42 cm) and simpler interior tail feathers (lacking the lacy filamentaries). The juvenile resembles the adult female, but the rufous coloration is brighter, the upper parts are paler, and the rectrices are mostly narrower, tapered and pointed. Immatures are similar to the adult females, and acquire the adult tail gradually over several years.

Egg laying occurs from May through August. The mating system for this species is poorly studied but is believed to be similar to that of the superb Lyrebird; there is arena behavior, the male sings and displays, raising fanned tail over its body and head and dances alone on a terrestrial platform of sticks and vines. Copulation probably occurs on the platform with the nest-building and all subsequent nesting duties performed by female alone. The bulky nest domed, with side entrance, made from sticks, fronds, leaves and rootlets, lined with moss, fine plant material and feathers. It is placed on rock face or on the ground (often at tree base or sometimes in a tree fork). The male's territory is 5–15 ha (the female is probably territorial as well). The clutch is a single egg with an unknown incubation period. The nestling period is about 39 days.

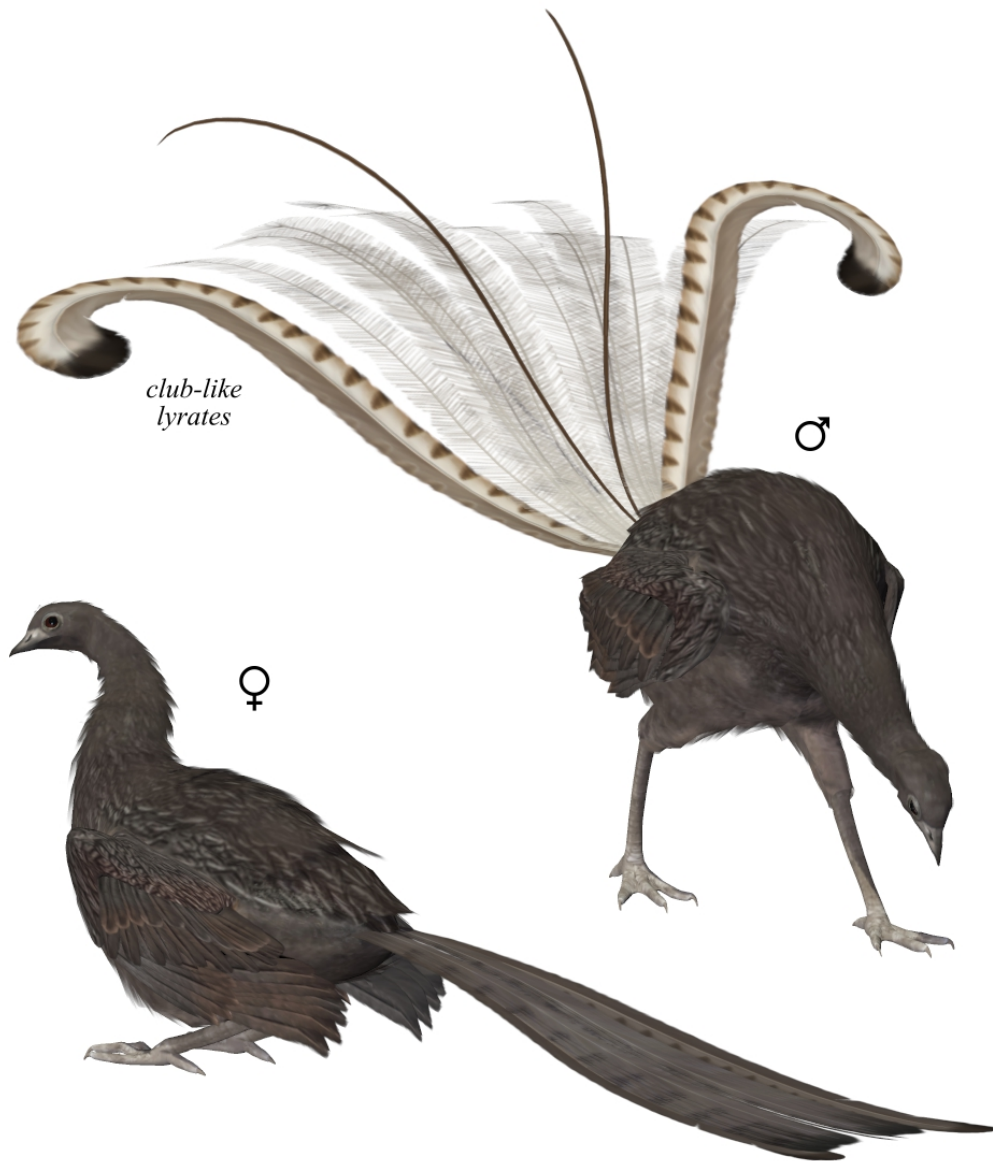
Cool Facts: Albert's Lyrebird differs from its more well-known cousin, the Superb Lyrebird, by being significantly smaller in size, with more rufous plumage and simpler *lyrates* (outer tail feathers).

It is similar to the Superb Lyrebird in that it is an excellent mimic; creating a wide variety of different sounds, ranging from mechanical-sounding buzzes, clicks and cackles to loud piercing whistles and shrieks. It very accurately mimics vocalizations of other bird species.

The longest-lived individual is more than 20 years old.

Common Name: Superb Lyrebird
Scientific Name: *Menura novaehollandiae*

Size: Male 39+ inches (100+ cm), tail length 54–71 cm; Female 33.9 inches (86 cm), tail length 36-42 cm.



Habitat: Australia; found in the forests of southeastern Australia, from southern Victoria to southeastern Queensland.

It prefers the moist forest, particularly cool temperate and subtropical rainforest and wet sclerophyll forest, from sea-level to subalpine zone. It inhabits gullies, valleys, mid-

slopes and ridges; needs bare ground for feeding. In subtropical rainforest, usually associated with dense under-story of ferns, shrubs, vines and epiphytes; in cool temperate rainforest, in areas with more open under-story. Widespread in wet sclerophyll forest with various eucalyptus species forming canopy, also in alpine snow gum woodland and coastal eucalypt forest where banksias prominent. In Tasmania, introduced population (Race *victoriae*) now established in temperate beech (*Nothofagus*) forest and wet sclerophyll forest. Northern populations (Race *edwardi*) confined to dry sclerophyll forest with sparse understory of hard-leaved shrubs interrupted by numerous granite boulders.

Status: Least Concern. **Global population:** 487,000 mature individuals with a decreasing population trend. It was formerly hunted, and now, fully protected. Many mainland populations probably declined in 20th century. It is still common in suitable habitat with 1 to 5 birds per ha. Its habitat has been reduced and degraded by forestry, agriculture and settlements. It has been able to survive in forest remnants near farmland, also in logged forests, if regrowth has been more than 5 years old and the ground cover is limited. It was introduced in 1930s and 1940s in Tasmania, where it has expanded its range by about 1 km annually (and the expansion is continuing).

The main threat is further habitat loss, as some populations are not in protected reserves. In addition, predation on adults and nestlings by introduced mammals has had a significant adverse impact on numbers.

Diet: Mainly adult and immature invertebrates, obtained from soil and under bark. It occasionally takes small vertebrates and seeds. Common prey include earthworms, woodlice, millipedes, centipedes, scorpions, spiders, cockroaches, beetles, earwigs, diplurans, fly larvae, bees, ants and moths. Less frequent items include amphipods and decapods, Hemiptera, stick-insects, snails, small frogs, and skinks.

It forages mostly alone on the ground with foraging routes being straight or winding. It digs in soil to depths of 15 cm, uses powerful feet to rip bark from rotting logs, taking any suitably sized prey encountered. On average, excavation sites used during steady foraging up to 2 m apart, each yielding 25–30 prey items. Prey disturbed by its activity are often exploited by other passerines. Foraging is thought to play key role in nutrient-cycling and vegetation regeneration.

Nesting: A large, with long legs, big strongly clawed feet, and long, train-like tail. The male of the nominate race has dark gray to brownish-gray upper parts, a dull red-brown wash on greater coverts and wings. The tail is 54–71 cm long, comprises wire-like central pair of feathers, 12 lacy filamentaries, and broad outermost pair (*lyrates*) with toothcomb pattern and black club-shaped tip. It is dark brown above and mostly silvery white below. The under parts are dark to light brownish-gray and the under tail-coverts are browner. The bill is black as well as the iris. The eye has a gray orbital ring. The legs and feet are dark gray. The female is like the male, but the tail shorter (25–41 cm) and simpler (lacking the lacy filamentaries). The juvenile is like the adult female, but the forehead, chin and fore-neck are rufous to red-brown, plus the *lyrates* are shorter,

narrower and pointed at the tip. Juveniles gradually loses the rufous coloration and develops the adult tail over several years.

Egg laying in June through August. The male is the bearer of the most elegant of all tails. It takes seven years is required for the tail to fully develop. Superb lyrebirds have a promiscuous mating system. Adult males start singing half an hour before sunrise from roosts high above the forest floor. Superb lyrebirds sing less often at other times of year but a stroll through their habitat on a rainy or misty day will sometimes find them active.

During the breeding season adult females and males defend separate territories and only females care for young. A female may visit several males before she mates but it is not known if she mates more than once. The male exhibits arena behavior, performs courtship with much vocal mimicry on earth mound, tail thrust forward horizontally over head and back and vibrated rapidly, with side-to-side stepping and vertical jumps.

Copulation occurs on the mound and nest-building and all parental care is solely by the female. The nest is a bulky, domed, with a side entrance, made from sticks, rootlets, twigs, bark, fern fronds, plant fibers, leaves and moss, lined with fine plant materials and body feathers. It is placed on or within 2 m of ground, at the base of tree, or an earthen bank, boulders, rock face, and fissure or crotch of living or dead tree.

The female lays a single egg and incubates it for about 50 days. The nesting period last about 47 days. The chick spends about nine months with the female before becoming independent. Clutch 1 egg ; incubation 50 days; nestling period 47 days; independence at 8–9 months after fledging. Females begin breeding at 5–6 years and males at 6–8 years. The oldest identifiable individual lived 25–26 years.

Cool Facts: The superb lyrebird has an extraordinary ability to accurately mimic a huge variety of sounds from phone rings to chainsaws to songs heard over the radio and the content of the calls are unique to each individual Lyrebird.

The Superb Lyrebird is featured on the reverse side of the Australian 10 cent coin and is called weringerong, woorail, and bulln-bulln in Aboriginal languages. A group of Lyrebirds is called a musket.

Lyrebirds are ancient Australian animals. The Australian Museum has fossils of lyrebirds dating back to about 15 million years ago. The prehistoric *Menura tyawanoides* has been described from early Miocene fossils found at the famous Riversleigh site.

There are 3 subspecies:

- *M. n. novaehollandiae*. First reported by Latham in 1801. The nominate species is found in southeastern New South Wales from the Hunter river southward (on and east of the Great Dividing Range) to the Victoria border (east of the Monaro Tablelands).

- *M. n. edwardi*. It is found in extreme SE Queensland (Stanthorpe–Killarney region) and northeastern New South Wales (south, on and east of the Great Dividing Range, to the Hunter river). It is generally lighter and grayer than the nominate race and the lyrates slightly less curved.



- *M. n. victoriae*. It is endemic to the Australian Capital Territory (Brindabella Range) and extreme southeastern New South Wales west of the Monaro Tablelands south to eastern Victoria (southward to the Dandenong–Strathbogie Ranges and to the northeastern coast). Its head, neck and mantle are darker. The wings are slightly darker and the yellowish eye-ring is more pronounced.



Special Thanks to...

...my beta team

Alisa, FlintHawk and Tparo

Species Accuracy and Reference Materials

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

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

Field Guide Sources:

Wikipedia

Birds in the Backyard <http://birdsinbackyards.net>

OZ Animals <http://www.ozanimals.com>

Jigger Juice: Plants of the Murray Mallee <http://www.jiggerjuice.net/plants/index.html>

FloraBase: Western Australian Flora <http://florabase.calm.wa.gov.au/>

WWF <http://www.worldwildlife.org>

Birds of the World <https://birdsoftheworld.org/bow/home>

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

