

Avian Models for 3D Applications

Characters by Ken Gilliland

Songbird ReMix BIRDS of LEGEND

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Songbird ReMix BIRDS of LEGEND

Introduction

Portions from "The Mythology Encyclopedia" (http://www.mythencyclopedia.com)

Rising above us and soaring into the clouds, birds have been the symbols of power, freedom, foreboding peril, peace and war throughout the history in myth and legend. In Songbird Remix, "Birds of Legend", many of the most storied and beloved birds are included. Birds such as the Bluebird of Happiness, the Snipe, the Peace Dove, the Thunderbird and the Phoenix are all included.

While many of the birds in this set would appear to be fantasy-based, most do actually exist. Where possible this set uses the real-life counterparts from whom cryptozoologists believe the legends originated. Yes, that "Snipe" you were hunting does actually exist and is so hard to find that people who hunt it are called "Snipers". The Thunderbird that Native Americans believed brought the storms it suspected to have been a condor that soared through all of North America in the late Pleistocene. The Egyptian god, Bennu was actually the giant prehistoric heron which towered over men.

In many myths and legends, birds link the human world to the divine or supernatural realms. They play a central part in some creation myths and frequently appear as messengers of the deities. Birds are often associated with the journey of the human soul after death. Sparrows are thought to carry the souls of the dead and it is believed to bring bad luck if you kill one. Ravens, vultures and other species that feed on carrion are common symbols of death, war and bad luck. Eagles, doves and owls are often represented as symbols of strength, love, and wisdom. Some birds appear as tricksters and oracles.

Birds and Creation

Myths from around the globe associate birds with the creation of the world. In ancient Egypt said that when land rose out of the primeval waters of chaos, the first deity to appear was a bird perching on that land. The Egyptians called the god, Bennu, and portrayed it as a long-legged, wading heron in the sun temple at Heliopolis. Bennu created the universe and then made gods and goddesses and men to live in that universe.

A number of creation myths from Southeast Asia feature birds. On the great island of Borneo dwell the Iban people, who tell of Ara and Irik, two bird spirits

floating above an expanse of water at the beginning of time. Seizing two eggs from the water, Ara made the sky from one egg, while Irik made the earth from the other. As Irik squeezed the earth into its proper size, mountains and rivers appeared on its surface. Then the two creator spirits shaped bits of earth into the first people and woke them to life with bird cries.

Other creation stories begin with the laying of a cosmic egg from which the universe emerges. Indonesia, Polynesia, and the northern European countries of Finland and Estonia have stories of deities flying down to the primeval ocean to lay eggs that hatch into the world.

Birds appear in some myths as earth divers. An earth diver is an animal that plunged to the bottom of the primeval sea and brought up mud from which the earth was formed. Legends of the Buriat and Samoyed people of Siberia feature birds as earth divers. Water birds such as ducks or swans play this role in the creation myths of many Native American peoples, including the Mandan of North Dakota. A Navajo myth about a great flood tells that the people fled to an upper world, leaving everything behind. A turkey then dived into the lower world to rescue seeds so that the people could grow food crops.

Sometimes mythological birds create more than the physical world. Cultures in northern Europe and Asia credited birds with establishing their social orders, especially kingships. A golden-winged eagle was said to have put the first Mongol emperor on his throne. The Japanese believed that sacred birds guided their second emperor in conquering his enemies before the founding of his dynasty. The Magyar people claimed that a giant eagle, falcon, or hawk had led their first king into Hungary, where he founded their nation. The Magyars looked upon this bird as their mythical ancestor.

Life, Death, and the Soul

Many myths have linked birds to the arrival of life or death. With their power of flight, these winged creatures were seen as carriers or symbols of the human soul, or as the soul itself, flying heavenward after a person died. A bird may represent both the soul of the dead and a deity at the same time. The albatross was believed to carry the souls of dead sailors. The sparrow is a land-based version of the albatross.

Bringers of Life and Death

Some cultures have associated birds with birth, claiming that a person's soul arrived on earth in bird form. A remnant of this ancient belief has survived into modern times: one traditional answer to a child's question "Where do babies come from?" is "The stork brings them." The legend that the European White Stork brings babies is believed to have originated in northern Germany, perhaps because they arrived back in Europe on fairly predictable dates and almost exactly 9 months after the previous mid-summer. Northern Europeans of Teutonic ancestry encouraged storks to nest on their homes hoping they would bring fertility and prosperity. This tradition of welcome and protection did not exist in the portions of France where the White Stork disappeared first.

Birds have also been linked with death. Carrion-eating birds such as vultures, crows, and ravens, for example, were connected with disaster and war. Celtic and Irish war goddesses often appeared in the form of crows and ravens—perhaps because crows and ravens were known to gather over battlefields and to feast on the flesh of fallen warriors. It was said that if one of these goddesses appeared before an army going into battle, the army would be defeated.

The mythological bird called the phoenix combined images of birth and death to become a powerful symbol of eternal rebirth. According to Egyptian legend, the phoenix burned up every 500 years but was then miraculously reborn out of its own ashes, so it was truly immortal. In myths from China and Japan, the phoenix does not emerge from a fire but instead causes itself to be reborn during times of good fortune.

The Flight of the Soul

Numerous myths have linked birds to the journeys undertaken by human souls after death. Sometimes a bird acts as a guide in the afterlife. In Syria, figures of eagles on tombs represent the guides that lead souls to heaven. The soul guide in Jewish tradition is a dove.

In some cultures, it was thought that the soul, once freed from the body, took the form of a bird. The ancient Egyptians believed that the soul, the ba, could leave the dead body in the form of a bird, often a hawk. They built their graves and tombs with narrow shafts leading to the open air so that these birds could fly in and out, keeping watch on the body. The feather cloaks that Central American and Mexican priests and kings wore may have been connected to the idea of a soul journey.

Because of their great size and strength, eagles have been associated with royal or imperial souls. Some ancient peoples, including the Romans, would release an eagle at a ruler's funeral. As it rose into the sky the mighty bird was seen as the ruler's spirit taking its place in the heavens.

The Greeks and Celts thought that the dead could reappear as birds. The Sumerians of the ancient Near East believed that the dead existed as birds in the underworld. According to Islamic tradition, all dead souls remain in the form of birds until Judgment Day, while in Christian tradition, the gentle dove became a symbol of the immortal soul ascending to heaven. Birds also appear in Hindu mythology as symbols of the soul or as forms taken by the soul between earthly lives. The connection between birds and souls is sometimes reflected in language. A Turkish saying describes somebody's death as "His soul bird has flown away."

Becoming a Bird

Under certain conditions, the living could be transformed into birds. In some cultures, it was believed that shamans, priests, and prophets could change themselves into birds during trances or other mystical states. Such ideas were found in Siberia and Indonesia. In Celtic mythology, both deities and the sly supernatural beings called fairies or fays were said to have the power to transform themselves into birds.

Some legends involve birds that change into or inhabit the bodies of humans. The Central American god Quetzalcoatl, a combination of a bird and a serpent, appears as a culture hero or a god in human form in Toltec, Maya, and Aztec myths. Among certain peoples in northern Europe and Asia, the spirits of birds such as eagles, owls, and crows are said to enter the bodies of shamans to inspire them.

In some myths, humans and other beings acquire the ability to fly like birds. Such supernatural flight, like many mythological powers, can be either good or evil. Norse tales told that the goddess Freya's feather cloak enabled the wearer to fly. European tradition portrayed angels with wings like those of birds, but devils often had bat wings. Japanese mythology includes a group of winged deities known as tengu. Part bird and part human, they live in forests and occasionally use their powers to play tricks on people.

Winged Wisdom

Birds in mythology sometimes have the ability to speak. These talking birds, often sources of wisdom, may be deities in bird form or simply messengers of the deities. Either way, their advice is generally sound, and humans ignore it at their peril. Birds warn of dangers ahead, reveal secrets, and guide heroes and travelers on their way.

Birds do not always speak in human languages; many stories tell of people who gain the power to understand the language of birds. In Greek mythology, a snake licked the ears of the prophet Cassandra, who could then understand what the birds were saying. After tasting the magical blood of a slain dragon, the German hero Siegfried knew what the forest birds were saying.

Some birds are believed to have special powers of telling the future or revealing the will of the gods. Magpies, ravens, and doves appear in myth as oracles. In Iranian mythology, birds communicate

In Hindu mythology, Garuda was a creature with a human body and an eagle's head, wings, and talons. This Indian miniature painting portrays Garuda with the god Vishnu and his wife on his back.

The Hottentot people of Southern Africa believe that the Hamerkop, a wading bird, can see reflections of the future in pools of water. When the bird learns that someone is about to die, it flies to the person's home and gives three cries of warning.

Common Birds in Mythology

Certain birds appear over and over again in the world's myths and legends, although not always in the same roles. The crow and its close relative the raven, for example, have a number of different meanings. In some cultures, they are oracles and symbols of death. In Norse mythology, Odin* was always accompanied by two wise ravens that told him everything that happened on earth. According to Greek mythology, the feathers of crows and ravens were originally white, but the god Apollo punished the birds—either for telling secrets or for failing in their duty as guardians—by turning them black.

For some Native Americans, such as the Tsimshian people of the Pacific Northwest, Raven is both a trickster and a culture hero. Sometimes his antics shake up the gods and the established order of the universe, and sometimes they backfire and get him into trouble. Often, though, Raven's deeds benefit humankind, as in the legend of how Raven brought light into the world. After finding the hiding place where the Creator kept the moon, the stars, and daylight, Raven released them so that they could shine on the world.

The majestic eagle, sometimes called the king of birds, usually has divine or royal associations in myth. Images from the ancient Near East and Iran show the sun with an eagle's wings, a sign that the bird was linked to the sun god. The eagle was also a symbol of Jupiter, the supreme Roman deity, and a sign of strength and courage. By adopting the eagle as their symbol, kings from ancient to recent times have tried to suggest that they, too, had some divine or heroic qualities.

Stories of eagles fighting snakes or dragons represent the tension between light and darkness, heavenly and underworld forces. In the myths of various Native American peoples, the eagle is a culture hero, a hunter or a tornado transformed into a bird, and the spirit of war and hunting. The eagle was also the great culture hero of Siberian mythology

In the ancient Near East and in Greece, the dove was a symbol of love and fertility, often associated with goddesses of love such as the Greek Aphrodite. In China doves represent tranquility and faithfulness in marriage, while in India they symbolize the soul.

When owls appear in mythology, their meaning is often uncertain and complex, neither all good nor all bad. Owls are symbols of wisdom, patience, and learning, yet because they hunt at night, they are associated with secrecy and darkness. In China they are seen as signs of coming misfortune. According to the Hottentot people of Africa, the hooting of an owl at night is an omen of death.

Early cultures in Mexico regarded owls as sacred to the rain god, but later the Aztecs of the same region viewed them as evil night demons. Some Native American legends portray owls as destructive and malicious; others show them as helpful beings who warn people of dangers. The stories may include a person who is transformed into an owl. In the Navajo creation myth, an owl resolves a bitter quarrel between men and women, allowing the creation of the human race.

Bats also symbolize both good and evil in mythology. Chinese legends link the bat with good fortune. A group of five bats represents five causes of happiness: wealth, health, long life, virtue, and a natural death. In various other cultures, however, bats are often connected with witches or evil spirits, and demons are pictured with bat wings.

Jewish mythology includes the story of the hoyl—a bird that, like the phoenix, is devoured by divine fire only to rise from its own ashes. Legend says that after Adam and Eve ate the forbidden fruit in the Garden of Eden, Adam offered the fruit to all of the animals. The hoyl bird was the only one that refused to eat the fruit that God had said must never be eaten. As a reward, the hoyl received a kind of immortality. It never dies but only goes to sleep, after which fire destroys it. An egg remains, however, and from that egg a full-grown hoyl hatches anew.

Other birds have special meanings in myths. Swans, with their white feathers and graceful appearance, often serve as symbols of purity and feminine beauty. Both Celtic and Norse mythology included tales of women who turned into swans. Male peacocks, endowed with splendid tail feathers, can suggest either foolish vanity or divine glory. In legends from India, they often appear being ridden by one of the gods.

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):
 - Albatrosses and Petrels (Order Procellariiformes)
 - Birds of Prey2 (Order Accipitriformes)
 - Gulls and Waders (Order Charadriiformes)
 - Herons, Ibises and Pelicans (Order Pelecaniformes)
 - Mythological and Fantasy
 - Perching Birds (Order Passeriformes)
 - Pigeons and Doves (Order Columbiformes)
 - Waterfowl (Order Anseriformes)
- o **Manuals:** Contains a link to the online manual for the set.
- o **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.
- Tongue poke-through (especially when the beak is open). This can be easily solved by using the Throat-Fuller1 & 2 morphs (found in Creation Control/Head Shapes).

IK Concerns

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

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

Where to find your birds & poses

Usually birds are placed into their specific families within the Bird Library system, however with this set, many of the birds are doubled up. Ones that have real-life counterparts are placed normally where you expect them to be in the Bird Library system without their mythological references. This may also have extra subspecies and female counterparts. They are **also** placed, along with the purely mythological birds within the "Mythological and Fantasy" section of the Bird Library for easier use, with the extra subspecies and female counterparts.

Type Folder	Bird Species
Albatrosses and Petrels (Order Procellariiformes)	Wandering Albatross (The Albatross)
Birds of Prey2 (Order Accipitriformes)	California Condor (The Thunderbird)
Gulls and Waders (Order Charadriiformes)	Common Snipe (The Snipe)
Herons, Ibises and Pelicans (Order Pelecaniformes)	Giant Heron (The Bennu Bird) Hammerkop (The Lightning Bird)
Mythological and Fantasy	Riro Riro Riro The Albatross The Bennu Bird The Bluebird of Happiness (all variations) The Goose The Nightingale The Thunderbird The Lightning Bird The Peace Dove The Phoenix The Snipe (Common Snipe) The Stymphalian Bird
Perching Birds (Order Passeriformes) Chickadees, Tits & their Allies	Common Nightingale (The Nightingale)
Perching Birds (Order Passeriformes) Fairywrens, Scrubwrens & their Allies	Gray Gerygone (Riro Riro Riro)
Perching Birds (Order Passeriformes) Thrushes, Oxpeckers & their Allies	Blue Rock-thrush (Bluebird of Happiness) Mountain Bluebird (Bluebird of Happiness)
Pigeons and Doves (Order Columbiformes)	Rock Dove (The Peace Dove)
Waterfowl (Order Anseriformes)	Taiga Bean Goose (The Goose)

Songbird ReMix BIRDS of LEGEND Field Guide

Mythological birds from real-life counterparts

The Snipe
The Bluebird of Happiness
The Peace Dove
The Albatross (around your neck)
The Goose (that laid the Golden Egg)
The Nightingale
The Thunderbird (from Native American Folklore)
The Lightning Bird (from African Tribal Folklore)
The Riro! Riro! Riro! (from Maori Tribal Folklore)
The Bennu Bird (from the Ancient Egyptian religion)

Mythological Birds

The Phoenix (from Greek Legend)
Stymphalian Birds (from Greek Legend)

The SNIPE

Common Name: Common Snipe Scientific Name: Gallinago gallinago

Size: 9 – 11 inches (23-28 cm)

Habitat: Eurasia & North America: Breeds extensively across northern Europe and Asia, then winters in parts of Europe, North Africa, and across southern Asia.

It is almost always found in marshes, wetlands, flooded fields, and moist grasslands. Regularly appears on Aleutian Islands of Alaska.



Status: Least Concern. **Global Population:** 6,300,000 to 8,100,000. Due to maintained and increasing populations, the Common Snipe's conservation rating is "Least Concern".

Diet: Insects, primarily earthworms by foraging in the mud for food.

Nesting: It is a small-tomedium size snipe with a long bill and whitish belly. Sexes are alike, differing only in measurements of body and feathers, especially total length of outer tail feather. There are no significant seasonal variations. It is highly variable in plumage but the normally the neck, breast and flanks more heavily marked than

most snipes. It has a prominent white trailing edge to wing, and supercilium is narrower than eye stripe at base of bill. The juvenile is very similar to adult, but the wing-coverts are more neatly marked and narrowly fringed pale buff (versus

the more prominent oval spots, separated by a dark shaft-streak in adults). The rectrices lack the dark shaft-streak distally, and the secondaries and tertials have narrower white tips, the edges to the outer edge of scapulars also white (yellowish and broader in adults).

Nests of the Snipe are hidden on the ground under low vegetation. Their clutch size is almost always four eggs. When the first two chicks hatch, the male takes them from the nest and cares for them. The last two chicks to hatch are cared for by the female. The two groups do not interact after they part.

Cool Facts: The Common Snipe may also be called the "Fantail Snipe", and is a stocky shorebird.

There are two races:

- G. g. faeroeensis. This race is found in Iceland, Faeroes, Orkney and Shetland. It winters in the British Isles. It is darker and more rufous above, with narrower, less contrasting, back stripes than the nominate.
- G. g. gallinago. The nominate race is found in the British Isles, Scandinavia and Western Europe through North-central Eurasia to Kamchatka and western Aleutians, and southward from northeastern Afghanistan to northern India. It winters from western Europe, Mediterranean and equatorial Africa through Middle East, Arabia and Indian Subcontinent to eastern China, southern Korea, southern Japan, Philippines and Borneo.

The male Common Snipe performs "winnowing" displays during courtship, circling high then diving, producing a distinctive sound as the air flows over specially modified tail feathers. This behavior has given rise to the Finnish name, "Taivaanvuohi", or "sky goat", because the sound is similar to the sound a goat makes.

Myths, Stories & Legend: Ever been on a "Snipe" hunt? A snipe hunt, a form of wild goose chase that is also known as a fool's errand, is a type of practical joke that involves experienced people making fun of newcomers by giving them an impossible or imaginary task. The origin of the term is a practical joke where inexperienced campers are told about a bird or animal called the snipe as well as a usually ridiculous method of catching it, such as running around the woods carrying a bag or making strange noises.

In the most popular version of the snipe hunt, especially in the American South, a newcomer is taken deep into the woods late at night and told to make a clucking noise while holding a large sack. The others, who are in on the joke, say that they will sneak away and then walk back towards the newcomer, thereby driving snipes towards the bag holder. The frightened snipes, they say, will be attracted to the clucking noise and easily caught in the bag. The newcomer is then simply

left in the dark forest, eventually to realize his gullibility and find his way home or back to camp.

The "real" snipe (a family of shorebirds) is difficult to catch for experienced hunters, so much so that the word "sniper" is derived from it to refer to anyone skilled enough to shoot one.

The BLUEBIRD of HAPPINESS

Common Name: Mountain Bluebird Scientific Name: Sialia currucoides

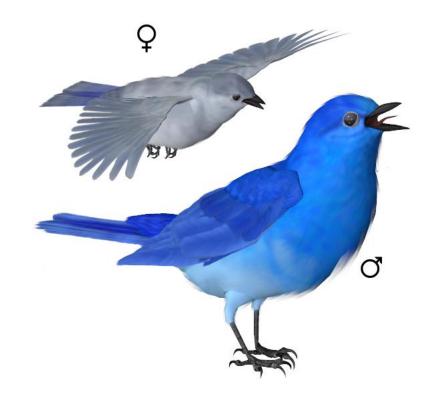
Size: 6 ½ - 8 inches (16-20 cm)

Habitat: North America; found mostly west of the Rockies from Alaska to Mexico. Their range varies from Mexico in the winter to as far north as Alaska, throughout the western U.S. and Canada. Northern birds migrate to the southern parts of the range; southern birds are often permanent residents. Some birds may move to lower elevations in winter. They inhabit open rangelands, meadows, generally at elevations above 5,000 feet.

They are found in agricultural areas and prairie-forest edge with groves of trees, short grass, and few shrubs. It prefers more open habitats than the other bluebirds and can be found in colder habitats in winter.

Status: Least concern.
Global Population:
5,200,000. The mountain bluebird has adapted to human activities and populations stable or increasing. The popularity of bluebird nest boxes have been a boon to the population.

Diet: Inserts and berries. These birds hover over the ground and fly down to catch insects, also flying from a perch to catch them They may forage in flocks in winter, when they mainly eat grasshoppers. Mountain bluebirds will come to a platform feeder with live meal worms, berries, or peanuts.



Nesting: The adult male has rich cerulean to methyl to cobalt blue upper parts, although the wing tips are dusky. The throat and upper chest are a distinct cerulean blue fading to an increasingly pale cerulean blue moving down the

breast to the belly, while the lower part of the belly is mostly white. The adult female is grayish brown to ashy gray on the head and upper back, sometimes flecked with or tinged a light cerulean blue. The rump stands out as a patch of light cerulean to light methyl blue, bright/glossy in some females and darker/flat in others. The color of the throat, chest and upper belly can be a pale grayish brown, an ashy gray, or a faint rufous to tawny to orange-buff. The chin area can be distinctly lighter than the throat and breast. The lower belly and under tail coverts are white. The scapular, primary, and tail feathers are mostly a light cerulean blue, often bright. The wing coverts are largely grayish brown with distinct white edges. Females also have a modest white eye-ring and sometimes a faint malar streak. Recently fledged individuals are like the adult female but darker and duller. The grayish brown breast and upper flanks are spotted white.

Mountain bluebirds are a monogamous breed. The male can be seen singing from bare branches. The singing takes place right at dawn, just when the sun rises. Nest in cavities in trees and snags, and frequently in nest boxes. Nest woven of grasses, lined with fine grass, soft bark, hair, or feathers. Only the female builds the nest. The male sometimes acts as if he is helping, but he either brings no nest material or he drops it on the way. 4-8 unmarked pale blue eggs are laid. Incubation normally last 14 days and the young will take about 21 days before they leave the nest. Both males and females fiercely protect the nest.

Cool Facts: It is the state bird of Idaho and Nevada.

Mountain and Western bluebirds compete for nest boxes, and may exclude each other from their territories. In the small area where they overlap, the Mountain Bluebird dominates the Eastern Bluebird. This relationship may limit the westward expansion of the Eastern Bluebird.

Myths, Stories & Legend: The mythology of the bluebird of happiness has deep roots that go back thousands of years. Indigenous cultures across the globe hold similar myths and beliefs about the bluebird. It is a widely accepted symbol of cheerfulness, happiness, prosperity, hearth and home, good health, new births, the renewal of springtime, etc. Virtually any positive sentiments may be attached to the bluebird.

In magical symbolism, bluebirds are used to represent confidence in the positive aspect and egotism in the negative. A dead bluebird is a symbol of disillusionment, of the loss of innocence, and of transformation from the younger and naive to the older and wiser.

In American symbolism, "bluebird" refers to true thrushes (Turdidae) of the genus Sialia, in particular the Mountain Bluebird (*S. currucoides*) which is almost completely bright blue.

Many Native American tribes considered the bluebird sacred.

According to the Cochiti tribe, the firstborn son of the Sun was named Bluebird. In the tale "The Sun's Children" from Tales of the Cochiti Indians (1932) by Ruth Benedict:

"She nursed him until the Sun father came back. Sun returned to the girl, and the girl offered the child to him, saying, 'Here is your baby. It is a little boy.' They named him Bluebird (Culutiwa)."

The Navajo hold the Mountain Bluebird to be a great spirit in animal form and associate it with the rising sun. The Bluebird Song is sung to remind tribe members to wake at dawn and rise to greet the sun:

Bluebird said to me, "Get up, my grandchild. It is dawn," it said to me.

The Bluebird Song is still used in social settings and is also performed in the nine-day Ye'iibicheii winter Nightway ceremony. It is the most revered song, as well as the closing act, performed just before sunrise on the final day.

A popular song titled "Bluebird of Happiness" was written by Sandor Harmati and Edward Heyman in 1934. It was recorded twice by Jan Peerce, becoming his "signature tune". It was also recorded by Art Mooney and His Orchestra, and others. Also the bluebird is mentioned in The Wizard of Oz's "Over the Rainbow" by Arlen and Yarburg.

The bluebird of happiness is also mentioned in the film "K-Pax," as all the patients in the ward await the arrival of the bluebird (which in that case turns out to be a Bluejay.

In the film "Follow that Bird", the Sleaze Brothers kidnap Big Bird and put them in their fun fair, paint him blue and call him the Bluebird of Happiness.

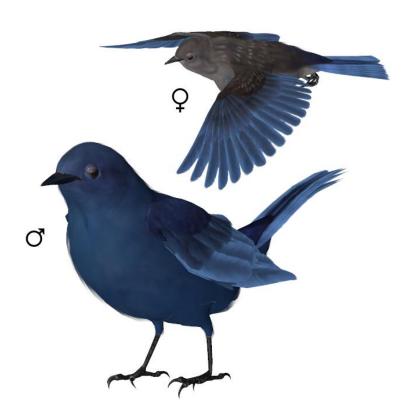
The blue bird is mentioned towards the end of the Beatles movie, "The Yellow Submarine", with the Bluemeanie leader saying, "You know I've never admitted it before, but my cousin is the bluebird of happiness."

The BLUEBIRD of HAPPINESS

Common Name: Blue Rock-thrush Scientific Name: Monticola solitarius

Size: 8 ½ - 9 inches (21-23 cm)

Habitat: Eurasia and Africa; breeds in southern Europe and northwest Africa, and from central Asia to northern China and Malaysia. The European, North African and southeast Asian birds are mainly resident, apart from altitudinal movements. Other Asian



populations are more migratory, wintering in sub-Saharan Africa, India and Southeast Asia. This bird is a very uncommon visitor to northern and western Europe.

It is found usually in open mountainous areas,

Status: Least Concern. Global Population: 500,000 - 3,000,000.

Diet: Inserts and berries.

Nesting: The male of the nominate race is a deep blue, darker and browner on wings and tail. The female can be variable, but is usually much duller above, sometimes blue-gray to brownish. It is a streaked buff and brown from lower face to mid-breast, shifting to a buff-and-brown barring from lower breast to the under tail. The juvenile is a dark brown with

no blue tone, and more strongly spotted and scaled than the female.

Cool Facts: The Blue Rock Thrush is Malta's national bird and is shown on the Lm 1 coins that was part of the previous currency of the country.

There are 5 subspecies:

- M. s. solitarius. The nominate race is found in northwestern Africa, southern Europe (east to Italy and the north Balkans), nprthern Turkey, Caucasus and Transcaucasia. Non-breeding birds are also seen in Africa and Arabia.
- M. s. longirostris. This race is found in Greece, western and southern Turkey and Levant eastward to Tien Shan, Afghanistan and the northwestern Himalayas (in northern Pakistan and Kashmir). Non-breeding individuals can also be found in Arabia, northeastern Africa east to northwestern India. It is on average smaller,

- duller, paler and grayer and often with very narrow vague buff barring. The female is paler and less crisply marked.
- M. s. pandoo. It is found in the central Himalayas, southern, central and eastern China (including Hainan) and northern Vietnam. Non-breeding travel southward and into southeastern Asia south to the Greater Sundas. It is very similar to race longirostris, but on average is smaller and darker. The male bluer and the female has a more distinct under part pattern.
- M. s. philippensis. It is found in eastern Mongolia, northeastern China, Korea, Sakhalin, southern Kuril Islands, Japan, Ryukyu Islands, coastal Taiwan and the northern Philippines (Batanes Islands). Non-breeding birds can be found in southeastern China (including Hainan and Taiwan), southeastern Asia and the Philippines south to the Sundas, Moluccas and Palau. The male is a stronger blue above, with a dull chestnut mid-breast to its undertail, often with indistinct narrow buff-and-black barring over body. The female is the darkest.
- M. s. madoci. It is found in extreme southern Thailand, Peninsular Malaysia and northern Sumatra. It is the smallest of the races and the female is more richly suffused blue than the other races.

Myths, Stories & Legend: The European "bluebird" is probably a reference to the Blue Rock-Thrush (*Monticola solitarius*), a chat (thrush-like Old World flycatcher) which occurs from the Mediterranean region eastwards. Its adult male is the only European passerine bird with all-blue plumage. In general, there are very few small birds in the western Palaearctic that have any conspicuous amount of blue in their plumage. The widespread Bluethroat (*Luscinia svecica*) and the Azure Tit (*Cyanistes cyanus*) from Russia and adjacent regions are notable exceptions.

Bluebird mythology in Europe is noted in a fairy tale called L'Oiseau Bleu (The Blue Bird) by Madame d'Aulnoy (1650–1705). This seems to be the root source of most modern accounts of bluebird symbolism and myth. In this tale, King Charming is transformed into a bluebird, who is the love interest of the younger princess Fiordelisa and aids her through her trials.

The Blue Bird was made into a 1908 stage play by Maurice Maeterlinck and into several films throughout the 20th century, including the 1940 original starring Shirley Temple, Gale Sondergaard, Spring Byington and Nigel Bruce. The story begins with two child heroes, Tyltyl and Mytyl, whom are sent out by the fairy Bérylune (Jessie Ralph) into various lands to search for the Bluebird of Happiness. Returning home empty-handed, the children see that the bird has been in a cage in their home the whole time. When Tyltyl gives the bird as a present to a sick neighbor, the bird flies away. But the moral is that the search for happiness is ongoing, and it is to be found within oneself.

In Russian fairy tales, the bluebird is a traditional symbol of hope. In more recent times, Anton Denikin characterized the Ice March of the defeated Volunteer Army in the Russian Civil War as follows:

"We went from the dark night of spiritual slavery to unknown wandering-in search of the bluebird."

The PEACE DOVE

Common Name: Domestic Pigeon

Scientific Name: Columba livia domestica

Size: $12 - 14 \frac{1}{2}$ inches (32-37 cm)

Habitat: Worldwide: The pigeon's original range was western and southern Europe, North Africa and into southwest Asia. Its habitat is natural cliffs, usually on coasts. In its domesticated form, the feral pigeon has been widely introduced elsewhere and is common, especially in cities, over much of the world. In Britain, Ireland, and much of its former range, the Rock Pigeon probably only occurs pure in the most remote areas. The pigeon has adapted to human activity and is now widespread throughout the world.

Status: Least Concern. **Global Population:** unknown. Rock
Doves have adapted to
humans and are not imperiled.

Diet: Seeds and man-made food products.

Nesting: In the wild, the nest is usually on a ledge in a cave; it is a slight structure of grass, heather, or seaweed. Like most pigeons it lays two white eggs. The eggs are incubated by both parents for about 18 days. The nestling has pale yellow down and a flesh colored bill with a dark band. It is tended and fed on "milk" like other doves. The fledging period is 30 days.



Cool Facts: A Rock Pigeon's

life span is anywhere from 3-5 years in the wild to 15 years in captivity, though longer-lived specimens have been reported. Rock Doves come in five basic variations; Natural (shown above), Checkered, Brown, Dark and Pied. Many domestic birds have escaped or been released over the years, and have given rise to the feral pigeon. These show a variety of plumages,

although some look very like the pure Rock Pigeons. The scarcity of the pure wild species is due to interbreeding with feral birds.

The pigeon was introduced to North America in 1604 by explorers and settlers.

Pigeons are one of the few birds that can swallow water without having to lift its head back, allowing the bird to drink much more water.

Rock Pigeons have been domesticated for several thousand years, giving rise to the domestic pigeon (*Columba livia domestica*). As well as pets, domesticated pigeons are utilized as homing pigeons and carrier pigeons, and so-called war pigeons have served and played important roles during wartimes, with many pigeons having received bravery awards and medals for their services in saving hundreds of human lives: including, notably, the French pigeon Cher Ami who received the Croix de Guerre for his heroic actions during World War I, and the Irish Paddy and the American G.I. Joe, who both received the Dickin Medal, amongst 32 pigeons to receive this medallion, for their gallant and brave actions during World War II. There are numerous breeds of fancy pigeons of all sizes, colors and types.

Myths, Stories & Legend: The use of the olive branch as a symbol of peace dates at least to the first century BCE. The Roman poet Virgil (70-10 BCE) used it as such in his Aeneid:

"High on the stern Aeneas his stand,
And held a branch of olive in his hand,
While thus he spoke: "The Phrygians' arms you see,
Expelled from Troy, provoked in Italy
By Latian foes, with war unjustly made;
At first affianced, and at last betrayed.
This message bear: The Trojans and their chief
Bring holy peace, and beg the king's relief."

Defeated Roman armies displayed olive branches to indicate surrender.

In the Hebrew Torah, doves or young pigeons are acceptable burnt offerings for those who can't afford a more expensive animal.

In the Christian Bible (Genesis 8:6-12), Noah used a dove to determine if there was any dry land. When the flood waters receded, the dove came back with an olive leaf:

6 And it came to pass at the end of forty days, that Noah opened the window of the ark which he had made:

7 And he sent forth a raven, which went forth to and fro, until the waters were dried up from off the earth.

8 Also he sent forth a dove from him, to see if the waters were abated from off the face of the ground;

9 But the dove found no rest for the sole of her foot, and she returned unto him into the ark, for the waters were on the face of the whole earth: then he put forth his hand, and took her, and pulled her in unto him into the ark.

10 And he stayed yet other seven days; and again he sent forth the dove out of the ark:

11 And the dove came in to him in the evening; and, lo, in her mouth was an olive leaf pluckt off: so Noah knew that the waters were abated from off the earth.

12 And he stayed yet other seven days; and sent forth the dove; which returned not again unto him anymore.

Dove is also a term of endearment in the 'Song of Songs' and elsewhere.

In the New Testament, Jesus's parents sacrifice doves on his behalf after his circumcision. Later the Holy Spirit descended upon Jesus at his baptism like a dove, and subsequently the dove became a common Christian symbol of the Holy Spirit.

In Islam, doves and the pigeon clan in general are respected and favored because they are believed to have assisted the final prophet of Islam, Muhammad, in distracting his enemies outside the cave of Thaw'r in the great Hijra.

An olive branch held by a dove was used as a peace symbol in 18th century Britain and America. A £2 note of North Carolina (1771) depicted the dove and olive with a motto meaning: "Peace restored". Georgia's \$40 note of 1778 portrayed the dove and olive and a hand holding a dagger, with a motto meaning "Either war or peace, prepared for both." The olive branch appeared as a peace symbol in other 18th century prints.

In January 1775, the frontispiece of the London Magazine published an engraving: "Peace descends on a cloud from the Temple of Commerce," in which the Goddess of Peace brings an olive branch to America and Britannia. A petition adopted by the American Continental Congress in July 1775 in the hope of avoiding a full-blown war with Great Britain was called the Olive Branch Petition.

Picasso's lithograph, La Colombe (The Dove), a traditional, realistic picture of a pigeon, was chosen as the emblem for the World Peace Congress in Paris in April 1949. The dove became a symbol for the peace movement and the ideals of the Communist Party. At the 1950 World Peace Congress in Sheffield, Picasso said that his father had taught him to paint doves, concluding, "I stand for life against death; I stand for peace against war." At the 1952 World Peace Congress in Berlin, Picasso's Dove was depicted in a banner above the stage.

The ALBATROSS

Common Name: Wandering Albatross **Scientific Name:** *Diomedea exulans*

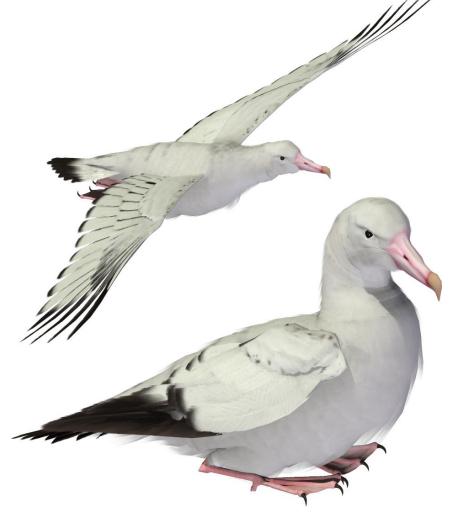
Size: 42 – 53 inches (107–135 cm)

Habitat: Circumpolar range in the Southern Ocean. Wandering Albatross typically forages in oceanic waters; however considerable time is spent over shelf areas during certain stages of the breeding season. The breeding populations of the Tristan subspecies are essentially restricted to Gough Island, Tristan da Cunha, St Helena (UK),

having become extinct on Tristan (although birds were seen prospecting in 1999), and 2-3 pairs breed annually on Inaccessible Island.

It nests at 400-700 m (rarely to 300 m), primarily in wet heath where it is open enough for take-off and landings.

Status: Endangered to Critically Endangered. **Global Population:** 26,000 and decreasing. The observed decline of this species is believed to be driven largely by incidental catch in fisheries, which has reduced adult survival and juvenile recruitment. The vast foraging range means that birds encounter many different longline fleets. Fisheries were responsible for a 54% decrease in



numbers on the Crozet Islands between 1970 and 1986. In 2007 a survey of Wandering Albatross chicks on Bird Island revealed that half had ingested fishing hooks. The Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) has introduced measures which have reduced by-catch of albatrosses around South Georgia by over 99%. Recently, other Regional Fisheries Management Organizations, including the tuna commissions, have taken initial steps to reduce seabird by-catch rates. The Prince Edward Islands are a special nature reserve and Macquarie is a World Heritage

Site. Large parts of the breeding colonies on the Crozet and Kerguelen Islands are now part of a Nature Reserve.

Race *dabbenena* is critically endangered. A 2007 population estimate numbered between 3,400-4,800 mature adults with a declining population. Interactions with longline fisheries represents a major threat, with a high proportion of bycatch in southern Brazilian water being of this species. It has been estimated that about 500 individuals of this species are killed every year by longliners. Satellite tracking of breeding birds indicates considerable overlap between bird distribution and areas of longline fishing. A study of great albatross bycatch from Uruguayan and Japanese longline fisheries in the south-west Atlantic off Uruguay found most Tristan Albatross bycatch occurred between September and November in pelagic waters where many other fleets operate.

On-land threats include predation by introduced species. On Inaccessible Island, population decline was probably due to predation by rats, feral pigs (now absent) and humans. The failure to recover is unclear, but may be because young birds become entangled in thick vegetation, or there is a high mortality in long-line fisheries. On Tristan, its extirpation was probably the result of human exploitation, although predation by rats (and possibly mice) may have been a factor. At present, the greatest risk is posed by house mice, which causes very low breeding success on Gough and alone is sufficient to drive a population decline of over 50% over three generations. Mouse attacks on chicks peaked in May-June at the start of the austral winter and all predation took place at night, normally 1-2 mice were recorded attacking the chick, with death occurring 2-4 days after the first attack. An additional threat on Gough is peat slips caused by storms burying and killing nestlings and adults, although this is probably a very rare event.

Diet: Cephalopods, small fish, and crustaceans.

It is highly pelagic, spending the majority of the year wandering the southern oceans, and coming to land only once every two years to breed. Albatross feed mostly at night. They also follow sailing vessels, waiting for animal refuse thrown, and eating to such excess at times that they are unable to fly and rest helplessly on the water. They are prone to following ships for refuse. They can also make shallow dives.

Nesting: The adult male has a white head, usually with apricot or pinkish patch on uppermost neck-side during breeding, the eye ring is whitish to pale sky-blue or pale pink. The upper parts are white often patterned with fine dark gray vermiculation, becoming entirely white in old birds. The wing is blackish on upper wing-coverts, with variable amount of white on wing base and central wing, in older birds most upper wing-coverts are white, retaining most blackish feathers on distal wing and on greater and outer median coverts. The under wing white except flight-feathers, the dark secondaries showing as narrow trailing edge. The tail is white, often with some blackish on sides and tips, becoming whiter with age. The under parts are white in old birds; with some brown and gray vermiculations on the neck, breast and flanks in youth. The iris is dark brown and the bill is usually a pale pinkish, with yellowish-horn tinge at tip, The ramicorn is often paler and bluer near tip. The legs are light pinkish to pale bluish.

Sexes are similar, but the male is slightly larger than female (by 4% in wing length and up to 20% heavier). Some females have weak gray breast band and females do not normally achieve the 'snowy stage', generally having less white on the upper wing, some black at the edges of the tail, and often some black, gray or brown on the head (especially on the crown).

Juveniles are dark brown with a white face. Their plumage progressively whitens on the upper wing from the center outwards.

This albatross is a biennial breeding species, although about 30% of successful and 35% of failed breeders (on average) defer breeding beyond the expected year. Adults return to the colonies in November, and eggs are laid over a period of 5 weeks during December and January. The breeding colonies are at Crozet and Kerguelen Islands. Most eggs hatch in March, and the chicks fledge in December. Birds usually return to colonies when 5-7 years old (but can return when as young as 3 years old). Birds can start breeding as young as 7 or 8 years old. Wandering Albatross nests are placed on slopes with sparse grass tussocks and with an exposed site for easy takeoff.

Cool Facts: The Wandering Albatross has the largest wingspan of any living bird, with the wingspan between 2.51–3.50 m (8.2–11.5 ft) The longest-winged examples verified have been about 3.7 m (12 ft), but probably apocryphal reports of as much as 5.3 m (17 ft) are known. As a result of its wingspan, it is capable of remaining in the air without beating its wings for several hours at a time (travelling 22 m for every meter of drop).

They also have a salt gland that is situated above the nasal passage and helps desalinate their bodies, due to the high amount of ocean water that they imbibe. It excretes a high saline solution from their nose.

Sailors used to capture the birds for their long wing bones, which they manufactured into tobacco-pipe stems. The early explorers of the great Southern Sea cheered themselves with the companionship of the albatross in their dreary solitudes; and the evil fate of him who shot with his cross-bow the "bird of good omen" is familiar to readers of Coleridge's The Rime of the Ancient Mariner. The metaphor of "an albatross around his neck" also comes from the poem and indicates an unwanted burden causing anxiety or hindrance. In the days of sail the bird often accompanied ships for days, not merely following it, but wheeling in wide circles around it without ever being observed to land on the water. It continued its flight, apparently untired, in tempestuous as well as moderate weather.

There are five subspecies. Many of the subspecies were considered at one time full species, but now have recently been moved into subspecies of the Wandering Albatross.

- *D. e. exulans.* First reported by Carl Linnaeus in 1758. The nominate subspecies is called the "Snowy" Wandering Albatross.
- D. e. dabbenena. First reported by Mathews in 1929. This subspecies is called the "Tristan" Wandering Albatross and is found in the southern ocean, breeding from South Georgia eastward to Kerguelen, Heard and MacDonald Islands and Macquarie Island. Until recently was treated as conspecific with D. exulans, but differs in its smaller size with considerably shorter bill. There are no plumage characters, however, constantly and definitively separate it, although adults generally do not reach the whiteness shown by those of Race exulans, and there appears to be a higher number of stages before full adult plumage attained.
- *D. e. antipodensis.* First reported by Robertson & Warham in 1992. This subspecies is called the "New Zealand" Wandering Albatross and is found in the southern Atlantic Ocean, breeding on Gough Island and occasionally Inaccessible Island, and formerly also on Tristan da Cunha.
- D. e. gibsoni. First reported by Robertson & Warham in 1992. The nominate subspecies is called the "Gibson's" Wandering Albatross and breeds in Auckland Islands (Disappointment Island, Auckland Island and Adams Island), south of New Zealand. It may forage mostly west of New Zealand over Tasman Sea and south of Australia. It was initially described as a race of D. exulans (as it is now) and later elevated to species level on basis of ecological differences. This appears to refer only to timing of breeding, and morphological diagnosability, consisting of the adult females dark brown, pattern resembling immature plumage of other taxa, and the adult male smaller with a shorter bill. However, "there are no simple plumage features to distinguish from other 'wanderers'" so it was moved back into a subspecies category.
- D. e. amsterdamensis. First reported by Roux JP, Jouventin, Mougin, Stahl and Weimerskirch in 1983. This subspecies is called the "Amsterdam" Wandering Albatross and found the southern Indian Ocean, breeding on Amsterdam Island. It, too, was originally given a species status, owing to the chocolate-brownish breeding plumage with white face and throat, broad brown breast band, pink bill, and dark tip and the cutting edges of upper mandible, but it never was entirely free of uncertainty owing to view that dark plumage of adults simply an extreme form of neoteny.

Myths, Stories & Legend: Albatrosses have been described as "the most legendary of all birds". An albatross is a central emblem in "The Rime of the Ancient Mariner" by Samuel Taylor Coleridge; a captive albatross is also a metaphor for the poète maudit in a poem of Charles Baudelaire. It is from the Coleridge poem that the usage of albatross as a metaphor is derived; someone with a burden or obstacle is said to have 'an albatross around their neck', the punishment given in the poem to the mariner who killed the albatross. In part due to the poem, there is a widespread myth that sailors believe it disastrous to shoot or harm an albatross; in truth, however, sailors regularly killed and ate them, but they were often regarded as the souls of lost sailors.

In the "Rime of the Ancient Mariner", the story begins with his ship departing on its journey. Despite initial good fortune, the ship is driven south off course by a storm and eventually reaches Antarctica. An albatross appears and leads the ship out of the Antarctic, but even as the albatross is praised by the crew, the Mariner shoots the bird.

God save thee, ancient Mariner
From the fiends, that plague thee thus
Why look'st thou so? - With my cross-bow
I shot the Albatross.

The crew is angry with the Mariner, believing the albatross brought the South Wind that led them out of the Antarctic. However, the sailors change their minds when the weather becomes warmer and the mist disappears.

The crime arouses the wrath of spirits who then pursue the ship "from the land of mist and snow"; the south wind which had initially led them from the land of ice now sends the ship into uncharted waters, where it is becalmed.

Here, however, the sailors change their minds again and blame the Mariner for the torment of their thirst. In anger, the crew forces the Mariner to wear the dead albatross about his neck, perhaps to illustrate the burden he must suffer from killing it, or perhaps as a sign of regret.

Ah. well a-day. what evil looks Had I from old and young Instead of the cross, the Albatross About my neck was hung.

Eventually, in an eerie passage, the ship encounters a ghostly vessel.

On board are Death (a skeleton) and the "Night-mare Life-in-Death" (a deathly-pale woman), who are playing dice for the souls of the crew.

With a roll of the dice, Death wins the lives of the crew members and Life-in-Death the life of the Mariner, a prize she considers more valuable.

Her name is a clue as to the Mariner's fate; he will endure a fate worse than death as punishment for his killing of the albatross.

The GOOSE

Common Name: Taiga Bean Goose

Scientific Name: Anser fabalis

Size: 27 - 36 inches (68-90 cm); Wingspan: 55 -69 inches (140-174 cm)

Habitat: Eurasia; found from Scandinavia east to the Urals. **Breeding habitat**: The species breeds near lakes, pools, rivers and streams in high Arctic tundra or the taiga forest zone. Taiga nesting populations show a preference for scrubby birch forest and dense spruce forest with bogs or mires, whereas tundra-based populations nest on damp tundra of moss, grass, sedge or scrub near river flood-



plains (but above flood levels) on Arctic islands and in Arctic coastal regions. Non-breeding habitat: During the winter and on passage the species inhabits marshes, agricultural land (pastures, arable fields, rice-paddies), damp steppe grassland. flood-lands, rivers and coastal shallows6 in open country. It also roosts on lakes, rivers and flood-lands in Europe during this season

Status: Least Concern.
Global Population:
830,000 - 850,000. The species declined in the past due to hunting (resulting in mortality, injury and disturbance) and habitat loss. Habitat

degradation due to oil pollution, drainage, peat extraction, changing management practices (decreased grazing and mowing in meadows leading to scrub overgrowth) and forest clearance is a threat to breeding areas in Russia, Norway and Sweden. The species also suffers from human persecution and is susceptible to poisoning by pesticides used on agricultural land.

Diet: Herbs, grasses, sedges and mosses, complemented during the breeding season by berries.

Nesting: A medium sized gray goose with a dark brown head and neck, becoming sooty brown on former. There is sometimes white at base of bill (but never markedly so). The upper body and mantle are a medium brown, with pale fringes to feathers. The wing-coverts are gray and the flight feathers are blackish brown. The under tail-coverts and tail margins are white. The under wing is a dark grayish black. It has orange legs and feet and its iris is dark brown. Juveniles are similar to the adult though duller and have conspicuous pale fringes to mantle feathers, as well as the head and neck being paler and less contrasting with the body. There is no white at base of the bill and the wing-coverts appear marbled rather than streaked. Its orange bill and legs are duller and grayer than the adult.

The species breeds near lakes, pools, rivers and streams in high Arctic tundra or the taiga forest zone.

Cool Facts: There are five subspecies, with complex variation in body size and bill size and pattern; generally, size increases from north to south and from west to east. Some ornithologists split them into two species based on breeding habitat, whether in forest bogs in the subarctic taiga, or on the arctic tundra.

Myths, Stories & Legend: "Killing The Goose That Laid the Golden Eggs" is among the best known of Aesop's Fables and use of the phrase has become idiomatic of an unprofitable action motivated by greed.

Avianus and Caxton tell different stories of a goose that lays a golden egg, where other versions have a hen, as in Townsend: "A cottager and his wife had a Hen that laid a golden egg every day. They supposed that the Hen must contain a great lump of gold in its inside, and in order to get the gold they killed it. Having done so, they found to their surprise that the Hen differed in no respect from their other hens. The foolish pair, thus hoping to become rich all at once, deprived themselves of the gain of which they were assured day by day."

In early tellings, there is sometimes a commentary warning against greed rather than a pithy moral. This is so in Jean de La Fontaine's fable of La Poule aux oeufs d'or (Fables V.13), which begins with the sentiment that 'Greed loses all by striving all to gain' and comments at the end that the story can be applied to those who become poor by trying to outreach themselves. It is only later that the morals most often quoted today began to appear. These are 'Greed oft o'er reaches itself' (Joseph Jacobs, 1894) and 'Much wants more and loses all' (Samuel Croxall, 1722). It is notable also that these are stories told of a goose rather than a hen.

The English idiom, sometimes shortened to "Killing the golden goose", derives from this fable. It is generally used of a short-sighted action that destroys the profitability of an asset. Caxton's version of the story has the goose's owner demand that it lay two eggs a day; when it replied that it could not, the owner killed it. The same lesson is taught by Ignacy Krasicki's fable of "The Farmer":

A farmer, bent on doubling the profits from his land, Proceeded to set his soil a two-harvest demand. Too intent thus on profit, harm himself he must needs: Instead of corn, he now reaps corn-cockle and weeds.

There is another variant on the story, recorded by Syntipas and appearing in Roger L'Estrange's 1692 telling as "A Woman and a Fat Hen" (Fable 87):

A good Woman had a Hen that laid her every day an Egg. Now she fansy'd to her self, that upon a larger Allowance of Corn, this Hen might be brought in time to lay twice a day. She try'd the Experiment; but the Hen grew fat upon't, and gave quite over laying.

His comment on this is that 'we should set Bounds to our Desires, and content our selves when we are well, for fear of losing what we had.' Another of Aesop's fables with the moral of wanting more and losing everything is The Dog and the Bone.

An Eastern analogue is found in the Suvannahamsa Jataka, which appears in the fourth section of the Buddhist book of monastic discipline (Vinaya). In this the father of a poor family is reborn as a swan with golden feathers and invites them to pluck and sell a single feather from his wings to support themselves, returning occasionally to allow them another. The greedy mother of the family eventually plucks all the feathers at once, but they then turn to ordinary feathers; when the swan recovers its feathers they too are no longer gold. The moral drawn there is:

Contented be, nor itch for further store. They seized the swan - but had its gold no more

North of India, in the formerly Persian territory of Sogdiana, it was the Greek version of the story that was known. Among the 8th century murals in Panjakent, in the western Sugdh province of Tajikistan, there is a panel representing a series of scenes moving from right to left where it is possible to recognize the same person first in the act of checking a golden egg and later killing the animal in order to get more eggs, only to understand the stupidity of his idea at the very end of the sequence. A local version of the story still persists in the area but ends differently with the main character eventually becoming a king.

The NIGHTINGALE

Common Name: Common Nightingale **Scientific Name:** *Luscinia megarhynchos*

Size: $6 - 6 \frac{1}{2}$ inches (15-16.5 cm)

Habitat: Eurasia; migratory species breeding in the forests in Europe and Asia. It winters in southern Africa as far as Uganda and summers as far as Southern England.

In Europe, there are two main habitat types: lowland open woodland with thickets and dense patches of vegetation of coppice stands, nettles and brambles, bordering water bodies and edges and glades of broadleaf woodland, undergrowth-rich pinewoods and dry maquis, garrigue and shrubbery on sand and chalk (i.e. with no surface water). Also in various intergradations of the two



types, such as cultivated land with mature hedgerows and untended bush-rich suburban gardens and parks with leaf litter.

Status: Not Threatened. **Global Population:** 15,000,000 - 70,000,000

Diet: Mainly invertebrates (especially beetles and ants) all year. It also consumes berries and seeds in late summer and autumn.

It forages within dense cover, mainly on the ground in leaf litter, but also will glean insects on low branches and leaves. It occasionally drops from its perch onto prey, or pursues them in an aerial sally.

Nesting: Sexes are similar in appearance. The nominate adult is plain warm brown above, shading to rusty-brown tail and rump. It is whitish below, with a slightly sandy-buff breast and flank. Its dark iris is set in narrow pale eye ring with poorly defined grayish supercilium. Its bill is dark with yellowish edging. Its legs

are flesh-brown. The juvenile is brown with buff spotting above. Its rump and tail are rusty-brown, buff with relatively weak dark scaling below.

Nests on the ground within or next to dense bushes.

Cool Facts: Nightingales are named so because they frequently sing at night as well as during the day. The name has been used for well over 1,000 years, being highly recognizable even in its Anglo-Saxon form - 'nihtingale'. It means 'night songstress'. Early writers assumed the female sang when it is in fact the male. The song is loud, with an impressive range of whistles, trills and gurgles. Its song is particularly noticeable at night because few other birds are singing. This is why its name includes "night" in several languages. Only unpaired males sing regularly at night, and nocturnal song is likely to serve attracting a mate. Singing at dawn, during the hour before sunrise, is assumed to be important in defending the bird's territory. Nightingales sing even more loudly in urban or near-urban environments, in order to overcome the background noise. The most characteristic feature of the song is a loud whistling crescendo, absent from the song of Thrush Nightingale. It has a frog-like alarm call.

There are three subspecies:

- L. m. megarhynchos. The nominate race is found in northwestern Africa, western and central Europe eastward to central Turkey and Levant (Lebanon, Syria, Iraq, Palestine, and Jordan). Non-breeders migrate to Africa.
- L. m. africana. This race is found in the Caucasus area and eastern Turkey eastward to northern and southwestern Iran. In non-breeding season they migrate to northeastern and eastern Africa. This race is duller and less rufous above, and paler below than the nominate. It also has a gray-brown breast.
- L. m. golzii. This race is endemic to eastern Iran east into Kazakhstan, southwestern Mongolia, northwestern China (northern Xinjiang) and Afghanistan. During non-breeding season, they migrate to eastern Africa. This race is grayer above, with whitish lores and a vague supercilium. It is whiter below with a sandy-colored breast.

Myths, Stories & Legend: The nightingale is an important symbol for poets from a variety of ages, and has taken on a number of symbolic connotations.

In Greek mythology, Aedon, daughter of Pandareus, was the wife of Zethus. The pair had one daughter, Itylus. Aedon accidentally killed her and was stricken with grief and guilt. In pity, the gods turned her into a nightingale, which cries with sadness every night. Alternatively, she was the queen of Thebes, who attempted to kill the son of her rival, Niobe, also her sister-in-law, and accidentally killed her own daughter instead and so the gods again changed her into a nightingale.

What else can I that am old and lame do but sing to God?
Were I a nightingale, I should do after the manner of a nightingale.
Were I a swan, I should do after the manner of a swan.
But now, since I am a reasonable being, I must sing to God: that is my work: I do it, nor will I desert this my post, as long as it is granted me to hold it; and upon you too I call to join in this self-same hymn.

-The Golden Savings of Epictetus

Homer evokes the Nightingale in the Odyssey, suggesting the myth of Philomela and Procne (one of whom, depending on the myth's version, is turned into a nightingale.). This myth is the focus of Sophocles' tragedy, Tereus, of which only fragments remain.

Just as Pandareus' daughter, the nightingale of the green woods, sings out her lovely song when early spring arrives, perched up in thick foliage of the forest, and pours forth her richly modulating voice in wailing for her child, beloved Itylus, lord Zethus' son, whom with a sword one day she'd killed unwittingly—that's how my heart moves back and forth in its uncertainty.

Ovid in his "Metamorphoses", includes the most popular version of this myth, imitated and altered by later poets, including Chrétien de Troyes, Geoffrey Chaucer, John Gower, and George Gascoigne. T.S. Eliot's The Waste Land also evokes the Nightingale's song (and the myth of Philomela and Procne). Because of the violence associated with the myth, the nightingale's song was long interpreted as a lament.

The Nightingale has also been used as a symbol of the poet. Poets chose the nightingale as a symbol because of its creative and seemingly spontaneous song. Aristophanes' Birds and Callimachus both evoke the bird's song as a form of poetry. Virgil compares a mourning Orpheus to the "lament of the nightingale".

During the Dark Ages fewer references were made to the nightingale. John Milton and others of the 17th century renewed the symbol. In "L'Allegro" Milton characterizes Shakespeare as a nightingale warbling "his native woodnotes wilde" (line 136), and Andrew Marvell in his "On Paradise Lost" subsequently described Milton's Paradise Lost in similar terms:

"Thou sing'st with so much gravity and ease, And above human flight dost soar aloft, With plume so strong, so equal, and so soft: The bird named from that paradise you sing So never flags, but always keeps on wing" (line 40)

During the Romantic era the bird's symbolism changed once more: poets viewed the nightingale not only as a poet in his own right, but as "master of a superior art that could inspire the human poet".

For some romantic poets, the nightingale even began to take on qualities of the muse. Coleridge and Wordsworth saw the nightingale more as an instance of natural poetic creation: the nightingale became a voice of nature. John Keats' Ode to a Nightingale pictures the nightingale as an idealized poet who has achieved the poetry that Keats longs to write. Invoking a similar conception of the nightingale, Shelley wrote in his "A Defense of Poetry":

"A poet is a nightingale who sits in darkness and sings to cheer its own solitude with sweet sounds; his auditors are as men entranced by the melody of an unseen musician, who feel that they are moved and softened, yet know not whence or why."

The beauty of the nightingale's song is a theme in Hans Christian Andersen's story "The Nightingale" from 1843. The Emperor of China learns that one of the most beautiful things in his empire is the song of the nightingale. When he orders a nightingale brought to him, a kitchen maid leads the court to a nearby forest where the bird is found. The nightingale agrees to appear at court. The Emperor is so delighted with the bird's song that he keeps the nightingale in captivity. When the Emperor is given a bejeweled mechanical bird he loses interest in the real nightingale, who returns to the forest. The mechanical bird breaks down due to overuse. The Emperor is taken deathly ill shortly thereafter. The real nightingale learns of the Emperor's condition and returns to the palace. Death is so moved by the nightingale's song that he departs and the emperor recovers. The nightingale agrees to sing to the emperor of all the happenings in the empire, that he will be known as the wisest emperor ever to live.

The THUNDERBIRD

Common Name: Late Pleistocene Condor

Scientific Name: Gymnogyps californianus amplus

Size: 43-56 inches (109-140 cm); Wingspan 102-118 inches (249-300 cm)

Habitat: North America. Range is believed to have extended from California to Florida .

Status: Extinct. Global Population: None. This subspecies of Condor existed in the late Pleistocene. As the climate changed during the last ice age, the entire population became smaller until it had evolved into the California Condor we're familiar with (*G. c. californianus*).



Diet: It is thought that this condor lived off of the carcasses of the "megafauna", which are now extinct in North America.

Nesting: 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 ($3\frac{1}{2}$ – $4\frac{3}{4}$ in) in length and about 67 millimeters ($2\frac{5}{8}$ 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: *G. c. amplus* was much larger than the California Condor, having about the same weight as the Andean Condor and had a wider bill. It is believed to have evolved into the California Condor we know today.

The Wiyot tribe of California say 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.

Myths, Stories & Legend: The Thunderbird is a legendary creature in certain North American indigenous peoples' history and culture. It's considered a "supernatural" bird of power and strength. It is especially important, and richly depicted, in the art, songs and oral histories of many Pacific Northwest Coast cultures, and is found in various forms among the peoples of the American Southwest and Great Plains. Thunderbirds were major components of the Southeastern Ceremonial Complex of American prehistory.

The Thunderbird's name comes from the common belief that the beating of its enormous wings causes thunder and stirs the wind. Clouds are pulled together by its wingbeats, the sound of thunder made by its wings clapping, sheet lightning the light flashing from its eyes when it blinks, and individual lightning

bolts made by the glowing snakes that it carries around with it. In masks, it is depicted as many-colored, with two curling horns, and, often, teeth within its beak. The Native Americans believed that the giant Thunderbird could shoot lightning from its eyes. The Lakota name for the Thunderbird is Wakį́yą, from wakhą, meaning "sacred", and kįyą, meaning "winged". The Kwakwaka'wakw have many names for the Thunderbird and the Nuu-chah-nulth (Nootka) called him Kw-Uhnx-Wa. The Ojibwa word for a thunderbird that is closely associated with thunder is animikii, while large thunderous birds are known as binesi.

Most thunderbird reports that are taken seriously by scientists working in the field of cryptozoology describe a bird that generally resembles a really huge condor. Other experts have suggested that the Thunderbird's roots in the Pacific Northwest lead to the bald eagle and on the Great Plains, the Raven or Turkey Vulture. The Raven is known in most Native American tribal lore as the "Trickster".



Many Plains Indian tribes claim there are in fact four colors (varieties) of Thunderbirds (the blue ones are said, strangely, to have no ears or eyes), sometimes associated with the four cardinal directions, but also sometimes only with the west and the western wind. (According to the medicine man Lame Deer, there were four, one at each compass point, but the western one was the Greatest and most senior.) (Fire and Erdoes 1972) The fact that they are sometimes known as "grandfathers" suggest they are held in considerable reverence and awe. It is supposed to be very dangerous to approach a Thunderbird nest, and many are supposed to have died in the attempt, swept

away by ferocious storms. The symbol of Thunderbird is the red zig-zag, lightning-bolt design, which some people mistakenly think represents a stairway. Most tribes feel he and the other Thunder beings were the first to appear in the Creation, and that they have an especially close connection to *wakan tanka*, the Great Mysterious.

Depending on the people telling the story, the Thunderbird is either a singular entity or a species. In both cases, it is intelligent, powerful, and wrathful. All agree one should go out of one's way to keep from getting thunderbirds angry.

The singular Thunderbird (as the Nuu-chah-nulth thought of him) was said to reside on the top of a mountain, and was the servant of the Great Spirit. The Thunderbird only flew about to carry messages from one spirit to another. It was also told that the thunderbird controlled rainfall.

The plural thunderbirds (as the Kwakwaka'wakw and Cowichan tribes believed) could shapeshift into human form by tilting back their beaks like a mask, and by removing their feathers as if it were a feather-covered blanket. There are stories of thunderbirds in human form marrying into human families; some families may trace their lineage to such an event. Families of thunderbirds who kept to themselves but wore human form were said to have lived along the northern tip of Vancouver Island. The story goes that other tribes soon forgot the nature of one of these thunderbird families, and when one tribe tried to take them as slaves the thunderbirds put on their feather blankets and transformed to take vengeance upon their foolish captors.

The Sioux believed that in "old times" the Thunderbirds destroyed dangerous reptilian monsters called the Unktehila.

The Anishinaabe, who speak Ojibwa, one of the Three Fires Society, have many stories about thunderbirds. During the sundance ceremony a thunderbird nest is put near the top of the tree of life. The dancers often face the nest while dancing, and their hands and arms reach up towards the nest at times. A thunderbird pipe is used during the ceremony as well, and thunderbird medicine is prepared as well. The area of Thunder Bay, Ontario, is related in some ways to the Anishinaabe stories of thunderbirds.

A famous story of the Thunderbird is "Thunderbird and Whale". The Thunderbird mythology parallels tales of the Roc from around the Indian Ocean; as the roc, it is generally assumed to be based on real (though mythically exaggerated) species of birds, specifically the Bald Eagle, which is very common on the Northwest Coast.

The LIGHTNING BIRD

Common Name: Hamerkopf

Scientific Name: Scopus umbretta

Size: 20-22 inches (50-56 cm)

Habitat: Africa; south of the Sahara, Madagascar and coastal southwest Arabia in all wetland habitats, including irrigated land such as rice paddies, as well as in savannas and forests. Most remain sedentary in their territories, which are held by pairs, but some move into suitable habitat during the wet season only. Whenever people create new bodies of water with dams or canals, Hamerkopfs move in quickly.



Status: Least Concern.
Global Population: 170,000
to 1,100,000 individuals with a
slightly declining population
trend. This species is
potentially threatened by a
deterioration in wetland water
quality caused by the
excessive use of pesticides
and is hunted and traded at
traditional medicine markets
in Nigeria.

Diet: Amphibians; also fish, shrimp, insects and rodents. Hamerkopfs feed during the day, often taking a break at noon to roost. They normally feed alone or in pairs. They walk in shallow water looking for prey, possibly raking their feet on the bottom or suddenly opening their wings to flush prey out of hiding.

Nesting: A squat, brown, ibis-

like bird with a bushy-crested hammer-like head. There can be an iridescent purplish gloss on back. The juvenile is similar to adult.

The strangest aspect of Hamerkopf behavior is the huge nest, sometimes more than 1.5 m across, comprising perhaps 10,000 sticks and strong enough to

support a man's weight. The birds decorate the outside with any bright-colored objects they can find. When possible, they build the nest in the fork of a tree, often over water, but if necessary they build on a bank, a cliff, a human-built wall or dam, or on the ground. A pair starts by making a platform of sticks held together with mud, then builds walls and a domed roof. A mud-plastered entrance 13 to 18 cm wide in the bottom leads through a tunnel up to 60 cm long to a nesting chamber big enough for the parents and young.

These birds are compulsive nest builders, constructing 3 to 5 nests per year whether they are breeding or not. Barn Owls and eagle owls may force them out and take over the nests, but when the owls leave, the Hamerkopfs may reuse the nests.

At the finished nest, a pair gives displays similar to those of the group ceremonies and mates, often on top of the nest. The clutch consists of 3 to 7 eggs that start white but soon become stained. Both sexes incubate for 28 to 30 days. Both feed the young, often leaving them alone for long times; this unusual habit for wading birds may be made possible by the thick nest walls. The young hatch covered with gray down. By 17 days after hatching, their head and crest plumage is developed, and in a month, their body plumage. They leave the nest at 44 to 50 days but roost in it at night until about two months after hatching.

Cool Facts: The Hamerkopfs behavior is unlike other birds. One unusual feature is that up to ten birds join in "ceremonies" in which they run circles around each other, all calling loudly, raising their crests, fluttering their wings. Another is "false mounting", in which one bird stands on top of another and appears to mount it, but they may not be mates and do not copulate.

In Zulu culture, someone who spends a lot of time in front of the mirror is called *thekwane* (the Zulu name for a Hamerkopf), because he or she is like the bird that seemingly spends hours staring at its reflection at the water's edge.

There are two subspecies:

- S. u. umbretta. The nominate is found in most of tropical Africa, southwestern Arabia and Madagascar.
- *S. u. minor.* This race is found on the coastal belt of western Africa from Sierra Leone to eastern Nigeria. It is darker and smaller than the nominate.

Myths, Stories & Legend: The lightning bird is a real or imaginary bird superstitiously associated with special powers among southern African native peoples. Among many tribes, the Hamerkopf is believed to be the lightning bird. Other tribes believe the bird to manifest itself only through lightning and it only visible as a bird to a women.

If you destroy the Lightning bird's nest, the bird will take revenge by sitting on the roof of your hut and calling down lightning. It is also said that if you hit the bird

without killing it, it is you who will die or at least lose your hair. If the bird hovers over your village, something evil is about to befall you. At the scene of the lightning strike, that is where you'll find the bird or its eggs. The eggs are believed to contain special magic properties. Powers associated with the bird include possessing body parts that are valuable to traditional medicine. Tribal witch doctors are looked to for help in dealing with the bird. Supposedly, they can use an extract that comes from the bird's flesh as a method of catching thieves.

The Hamerkopf can see reflections of the future in pools of water. When the bird learns that someone is about to die, it flies to the person's home and gives three cries of warning.

RIRO! RIRO! RIRO!

Common Name: Gray Gerygone or Gray Warbler

Scientific Name: Gerygone igata

Size: 4 1/4 inches (11 cm)

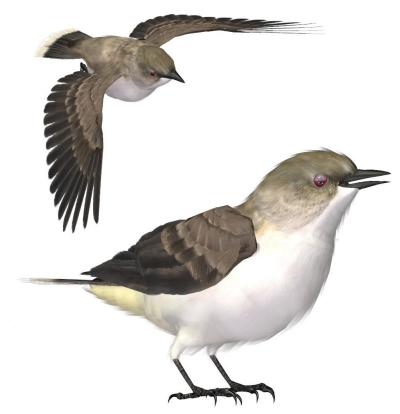
Habitat: New Zealand. Endemic and common throughout New Zealand main islands and many off-shore islands, absent from open country and alpine areas. At home in native and exotic forests it may be found almost anywhere there is some tree or shrub cover.

Status: Least Concern. **Global Population:** 721,000 amount of individuals with a stable population trend.

Diet: Inserts, primarily spiders, insects and their larvae. They are very active, almost never stay still as they move from one perch to perch.

Nesting: Sexes are alike. The plumage is grayisholive above, with blackish lores. The tail has a broad blackish subterminal band, large white spots near tips of all except central rectrices. It has a gray face, chin, throat and breast, with white on the rest of the under parts. Sometimes, there are pale yellow or gray tinge on the flanks. The iris is dark red and the bill and legs are black. The juvenile has a paler face and breast, and a pale eyering.

Gray warblers are unique among New Zealand birds in building a pear-shaped structure with a side



entrance near the top. Although the male collects material, the nest itself is constructed by the female from grass, leaves, rootlets and moss, held together with spider web threads. It is constructed anywhere from 2 to 25 feet above the ground, and is lined with feathers and other soft material. It is attached to a twig

at the top, but is often also secured at the back or sides well. Although not involved in nest building or incubation, the male helps to feed both nestlings and fledglings. The 3 to 6 eggs, each laid 2 days apart, are pinkish-white with fine reddish-brown speckles all over. The eggs, weighing 1.5 grams are about 17 mm long and 12 mm wide. Incubation takes about 19 days and the chicks spend another 15 to 19 days in the nest.

Their breeding season is from August to January and they usually manage two clutches, but the Shining Cuckoo often parasitizes this second clutch leaving a single egg for the warblers to incubate and rear.

Cool Facts: The male's song often starts with a series of three squeaks and builds into a distinctive long plaintive wavering trill that rises and falls. They sing throughout the year but most vigorously, when nesting, during spring. More commonly heard than seen.

Myths, Stories & Legend: In the early mist of a spring morning at the beginning of the bird snaring season, Kurangaituku. a giant mist fairy, 'like a tree in height,' went out to spear pigeon and Kaka, for, like mortal men, she too lived on the birds of the forest. But she had no need to set snares or wield the thirty–foot–long tahere, for she depended upon the length and sharpness of her fingernails.

Now Hatupatu, a chief of rank, was also out spearing birds in the early morning and he saw the bronze—green gleam of a Kereru shining from a tufted totara tree. At the same time the giant mist fairy noticed the pigeon from the other side of the tree and she sent her long fingernails through the trunk to spear her prey upon them. It was then that Hatupatu saw their sharp points coming through the rough totara wood and closing upon the gentle pigeon which was not afraid of man — not half so much afraid as he himself of the great white giantess.

Easily Kurangaituku captured the frightened chief, for she had never in all her bird taking expeditions observed the face of man; and she took him through deep ways of the forest to her secluded home, which was ringing with the calls and cries of many birds she kept as pets to charm away her loneliness. Thus the great chief Hatupatu became the mokai of the mist fairy and was forced to live with the birds, her other pets; but he soon grew weary with longing to escape and return to his own people, and the wild free life of a brave man, unafraid of war. Yet he was afraid of his immortal captor and knew he must get free by strategy.

One day Kurangaituku asked him what kind of food he would like to eat, for she was kind to her pets and fed them well. "Birds," he replied, "but only those that live in the forests of the sixth range of hills." Now the sixth range lay afar off, its edges violet—blue in the deep of noon and sometimes blotted out with rain; even the trees which covered it lay in a haze of mist of smoky smear against the horizon — so far away were its bird—haunted hunting grounds. But he said this

knowing that it would take his captor a long time to go there and back, and he needed hours in which to escape.

Now Kurangaituku would have done anything for her favourite mokai, so she set off at once, striding from range to range with the ease of an immortal, while Hatupatu began filling up holes and crannies in the house with knotted flax so that none of the birds might escape to fly after their owner and tell her of his going. But he had forgotten to block up one little hole; and as Hatupatu crept stealthily out, shutting all the birds in behind him, the tiny Riroriro saw the chink of light coming through the neglected hole, and in a moment squeezed her little body through, for excepting Titipounamu, the rifleman, Riroriro is the smallest among all the children of Tane.

Flying fast over hill and gully on her lilting evening flight, the gray messenger, like the shadow of a leaf, perched herself near the great stalking form of her mistress and sang excitedly: "Kurangai–tuku–e–ka riro a tana hanga! Riro! Riro! Riro!"

Returning at once, she was just in time to see Hatutapu disappearing behind a rock but she followed swiftly after him over the open ground of the pumice lands of Rotorua, and on and on they went, the man every now and then pausing to hide himself in the ground. At last he went into a lair he knew of near the boiling springs of Whakarewarewa, and the towering Kurangaituku stood poised for a moment on the edge until with a crash she fell in and was drowned in the scalding water.

Thus Hatupatu escaped, but still over hill and valley up long aisles of forest, and over the open manuka scrub where swings her cozy nest, the gray warbler is ever telling the mountain mist that her property is escaped and gone, gone, gone — "Riro — Riro — Riro."

The BENNU BIRD

Common Name: Bennu or Giant Heron **Scientific Name:** *Ardea bennuides*

Size: 65 – 82 ½ inches (165-210 cm) Wingspan: 86 ½ - 105 (220-270cm)

Habitat: Africa and Asia; Arabian Peninsula.

It was found in coastal marshlands.

Status: Extinct.
Global
Population:
None. It became
extinct when
humans
colonized what
was apparently its
final stronghold of
the island Umm
al-Nar, around
5000 B.C.

Diet: Fish, frogs, and insects with its long bill.

Nesting: This heron was probably similar to the Gray or Goliath Heron. It was gray on its upper parts and pale to white on its belly (based on hieroglyphs).



It is assumed that the Bennu Heron would have similar Breeding habits to its' modern day counterparts, breeding in mixed colonies of hundreds or thousands

of pairs. It may have also nest solitarily or in small groups of 2-10 nests. The nest was probably a stick platform that is often re-used over successive years, usually positioned high in a tall tree up to 50 m, but also on the ground or on cliff edges, in reed beds or in bushes. In reed-beds nests may be built of reeds, and ground nests may be reduced to a slight scrape, ringed with small stones and debris.

Cool Facts: A large species of heron, nowadays extinct, occurred on the Arabian Peninsula in comparatively recent times; it may have been the ultimate inspiration for the Bennu. The species is called the Bennu Heron (*Ardea bennuides*).

Enormous, conical nests measuring about 15 feet in diameter were discovered along the Gulf of Suez by James Burton in 1822. Locals told him they were built by large stork-like bird taller than a man that had vanished from the area.

Myths, Stories & Legend: The Bennu bird serves as the Egyptian answer to the phoenix, and is said to be the soul of the Sun-God Ra. Some of the titles of the Bennu bird were "He Who Came Into Being by Himself," "Ascending One," and "Lord of Jubilees." While Bennu is the common name given to the bird in English, the original vowels of the name spelled as bnn by Egyptian scribes are uncertain, although it may have been pronounced something like *bānana. The name is related to the verb *wabāna (spelled wbn in Egyptian texts becoming Coptic ouoein), meaning "to rise brilliantly," or "to shine." The Bennu bird was the mythological phoenix of Egypt. It was associated with the rising of the Nile, resurrection, and the sun. Because the Bennu represented creation and renewal, it was connected with the Egyptian calendar. Indeed, the Temple of the Bennu was well known for its time-keeping devices.

According to ancient Egyptian myth, the Bennu had created itself from a fire that was burned on a holy tree in one of the sacred precincts of the temple of Ra. Other versions say that the Bennu bird burst forth from the heart of Osiris. This would mean that Rah reincarnated himself through Osiris, creating a precedent for Pharaohs. The Bennu was supposed to have rested on a sacred pillar that was known as the benben-stone. The Egyptian priests showed this pillar to visitors, who considered it the most holy place on earth.

The bird is may have been modeled on the gray heron (*Ardea cinera*), purple heron (*Ardea purpurea*) or the larger Goliath heron (*Ardea goliath*) that lives on the coast of the Red Sea. The Bennu Bird is described as having twin red and gold plumes on it's head. Archaelogists have found the remains of a much larger heron that lived in the Persian Gulf area 5,000 years ago. There is some speculation that this bird may have been seen by Egyptian travelers and sparked the legend of a very large heron seen once every 500 years in Egypt. A large species of heron, nowadays extinct, occurred on the Arabian Peninsula in comparatively recent times; it may have been the ultimate inspiration for the

Bennu. Reflecting this, the species was described as Bennu Heron (*Ardea bennuides*).

The bird was frequently depicted in the vignettes of the netherworld books as well as on heart amulets and other objects, particularly those of a funerary nature. When carved on the back of a heart-scarab and buried with the dead, it is a symbol of anticipated rebirth in the netherworld and ensures that the heart does not fail in the examination of past deeds in the Hall of the Two Truths (judgment of the dead). In the Book of the Dead there are formulae to transform the deceased into the Great Benu. Here, the deceased says, "I am the Benu, the soul of Ra, and the guide of the gods in the Duat." In another verse, he says, "I am pure. My purity is the purity of the Great Benu which is in the city of Sutenhenen."

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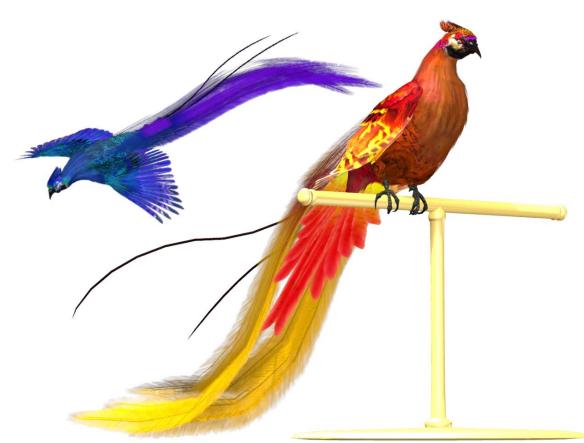
The PHOENIX

Size: 43-56 inches (109-140 cm)

Habitat: Worldwide

Status: Mythical. Global population: unknown

Diet: Small mammals



Nesting: Unknown but since Phoenixes are reborn every 500 to 1000 years there's probably no need to nest.

Myths, Stories & Legend: The phoenix is a mythical sacred firebird that can be found in the mythologies of the Persians, Greeks, Romans, Egyptians, Chinese, Phoenicians and American Indians.

A phoenix is a mythical bird that is a fire spirit with a colorful plumage and a tail of gold and scarlet (or purple, blue, and green according to some legends). It has a 500 to 1000 year life-cycle, near the end of which it builds itself a nest of twigs that then ignites; both nest and bird burn fiercely and are reduced to ashes, from which a new, young phoenix or phoenix egg arises, reborn anew to live again.

The new phoenix is destined to live as long as its old self. In some stories, the new phoenix embalms the ashes of its old self in an egg made of myrrh and deposits it in the Egyptian city of Heliopolis (literally "sun-city" in Greek). It is said that the bird's cry is that of a beautiful song. In very few stories they are able to change into people.

One theory about the origins of the Phoenix legend is rather bizarre, but may be closer to the truth than some others: The original 'Phoenix' may have been a crow or raven dancing in a dying fire. Ravens and crows have been known to practice a peculiar form of behavior called 'Anting'. The bird will disturb an ant's nest, or sit over something sweet (like spilled honey or an almost empty sodapop can), spread out its wings, and allow ants to run up and down its body. It is thought that the ants give the bird a sort of 'back massage' this way, or that they feast on feather mites which live on the bird and cause irritation. For whatever reason, they seem to enjoy the sensation and have been known to do it repeatedly.

In a similar way, some of these birds will sit over a hot surface, such as the dying embers of a fire, and spread out their wings. Perhaps they do it for the same reason we sit in a sauna - they just enjoy the heat - or perhaps they use the intense heat to encourage feather mites to find a different home.

However, if a bird such as a large raven sits on the embers of a fire, and for some reason chooses to flap its wings (maybe as a way to cool off, or maybe because it's ready to take to the air) then it could stir the fire to life again. The sudden resurgence of flames around it would almost certainly cause the bird to take off... and voila - you have a bird rising from the midst of flames and ashes.

Phoenix in Ancient Greek: Φοῖνιξ

The bird proudly willing to burn,
So that he may live again,
Chooses the flames of fires
That burn the aged Phoenix
The nature stands still
Till a new young bird starts again,
and begins the legend of the Phoenix.

- Claudian (Roman author)

The Roman poet Ovid wrote the following about the phoenix:

Most beings spring from other individuals; but there is a certain kind which reproduces itself. The Assyrians call it the Phoenix. It does not live on fruit or flowers, but on frankincense and odoriferous gums. When it has lived five hundred years, it builds itself a nest in the branches of an oak, or on the top of a

palm tree. In this it collects cinnamon, and spikenard, and myrrh, and of these materials builds a pile on which it deposits itself, and dying, breathes out its last breath amidst odors. From the body of the parent bird, a young Phoenix issues forth, destined to live as long a life as its predecessor. When this has grown up and gained sufficient strength, it lifts its nest from the tree (its own cradle and its parent's sepulchre), and carries it to the city of Heliopolis in Egypt, and deposits it in the temple of the Sun.

French author Voltaire thus described the phoenix:

It was of the size of an eagle, but its eyes were as mild and tender as those of the eagle are fierce and threatening. Its beak was the color of a rose, and seemed to resemble, in some measure, the beautiful mouth of Formosante. Its neck resembled all the colors of the rainbow, but more brilliant and lively. A thousand shades of gold glistened on its plumage. Its feet seemed a mixture of purple and silver; and the tail of those beautiful birds which were afterwards fixed to the car of Juno, did not come near the beauty of its tail.

The STYMPHALIAN BIRD

Common Name: Stymphalian Bird

Scientific Name: Threskiornis stymphaliana



Size: 36-39½ inches (90-100

cm)

Habitat: Europe. Found at Lake Stymphalia in Arcadia, Greece

Diet: Humans

Status: Mythical. Global population: unknown

Nesting: Nesting habits are unknown but probably would be similar to the ibis; The bird nests in tree colonies, often with other large wading birds such as herons. It builds a stick nest and lays 2-3 eggs. Both the male and female take turns in guarding the nest site until the chicks are large enough to defend themselves. In addition, both parents help feed the chicks.

Myths, Stories & Legend: In Greek mythology, the Stymphalian Birds were vicious birds with beaks of bronze and

sharp metallic feathers and were sacred to Ares, the god of war. They had migrated to Lake Stymphalia in Arcadia to escape a pack of wolves the Arabs set loose to kill them, and bred quickly and took over the countryside, destroying local crops and eating the townspeople. Supposedly, their dung was highly toxic.

King Eurystheus sent Hercules who had just returned from his success in the Augean stables, to drive away an enormous flock of birds which gathered at a Lake Stymphalian near the town of Stymphalos.

Arriving at the lake, which was deep in the woods, Hercules had no idea how to drive the huge gathering of birds away. The goddess Athena came to his aid, providing a pair of bronze krotala, noisemaking clappers similar to castanets. These were no ordinary noisemakers. They had been made by an immortal craftsman, Hephaistos, the god of the forge.

Climbing a nearby mountain, Hercules clashed the krotala loudly, scaring the birds out of the trees, then shot them with bow and arrow, or possibly with a slingshot, as they took flight. This was known as Hercules' "Sixth Labor"

Some versions of the legend say that these Stymphalian birds were vicious maneaters. The 2nd century A.D. travel writer, Pausanias, trying to discover what kind of birds they might have been, wrote that during his time a type of bird from the Arabian desert was called "Stymphalian," describing them as equal to lions or leopards in their fierceness. He speculated that the birds Hercules encountered in the legend were similar to these Arabian birds.

"These fly against those who come to hunt them, wounding and killing them with their beaks. All armor of bronze or iron that men wear is pierced by the birds; but if they weave a garment of thick cork, the beaks of the Stymphalian birds are caught in the cork garment... These birds are of the size of a crane, and are like the ibis, but their beaks are more powerful, and not crooked like that of the ibis."

-Pausanias

Pausanias also saw and described the religious sanctuary built by the Greeks of Stymphalos and dedicated to the goddess Artemis. He reported that the temple had carvings of the Stymphalian birds up near its roof. Standing behind the temple, he saw marble statues of maidens with the legs of birds.

The Stymphian Birds in Ancient Greek: Στυμφαλίδες ὄρνιΘες



Hercules and the Stymphalian birds (Photograph courtesy of the Trustees of the British Museum, London)

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- 2010 Release: Ali, Bea, Kelvin, Jan, Nancy, Sandra and Lyrra
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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:

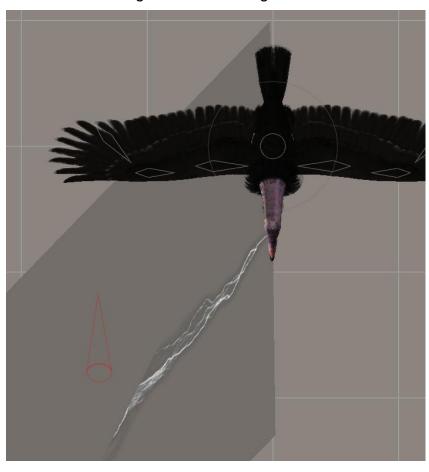
- Wikipedia (http://www.wikipedia.com)
- Cornell Labs Birds of the World (https://birdsoftheworld.org)
- Birdlife International (http://wwwbirdlife.org)
- New Zealand Birds (http://www.nzbirds.com)
- The Mythology Encyclopedia (http://www.mythencyclopedia.com)

Using Nerd3D's "Smoke & Flames Tool" with "Birds of Legend"

One of the easiest ways to create the effects needs to have lightning shoots from the Thunderbird's eyes or a Phoenix rising from the flames is to use a preexisting product such as Nerd3D "Smoke and Flames Tool" (available at DAZ3D). Here are two tutorials using this product using Poser.

Adding Lightning to your Thunderbird's eyes

- 1. First Load the Models... LOAD the Condor Base and two FLAME EMITTERS from Nerd3D's "Smokin' Flames".
- 2. In Poses... APPLY the Thunderbird material pose to the Condor from the Birds of Legend Folder. APPLY the MAT-Lightning White from the "Smokin' Flames" Flame Emitter Folder to both of the FLAME EMITTER tools.
- Select the first FLAME EMITTER tool and go to the CONTROL part. Use the Effect Scale (and Effect Scale X/Y) dial(s) to scale the lightning. I find a setting of "4" is about right.



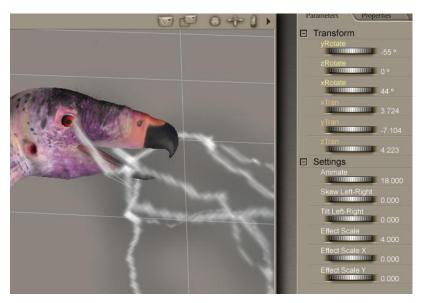
4. Now position the **FLAME EMITTER** using the Rotate and Trans dials of the **CONTROL** part so that the lightning bolt lines up with the Right Eye of the Thunderbird. Using the Top and Side Views will help to line this up. The settings I've used are:

> yRotate: -125 zRotate: 0 xRotate: 44 xTran: -3.810 yTran: -7.104 zTran= 4.223 Effect Scale= 4.0

- 5. Now **Parent** the FLAME EMITTER tool to the Thunderbird's **HEAD** (On Poser Tool Bar: Figure → Set Parent Figure...)
- 6. Do the same thing with the second FlameEmitter Tool this time though positioning it to the Left Eye. This one will be harder to place using Poser only sees on side of the polygon's texture.

yRotate: -55 zRotate: 0 xRotate: 44 xTran: 3.724 yTran: -7.104 zTran= 4.223 Effect Scale= 4.0

7. Now with both Flame Emitters parented to the Thunderbird's head you're free to play a little. Try the **Animate** dial on the **Control** part of the Flame Emitters to vary the Lightning. One



drawback to Flame Emitter is that pivot point is center of the lightning so that any addition rotation or scaling will make you have to reposition the bolts to pair up with the eyes.

8. Now with the lightning set to your satisfaction and parented to the Thunderbird. Select the Thunderbird and pose it for your scene.



Adding in a Phoenix Rebirth Pyre

- 1. First Load the Models... LOAD the Gamebird Base/Tail 9 and the FLAME EMITTER from Nerd3D's "Smokin' Flames". Conform the Tail piece to the Gamebird.
- 2. In Poses... APPLY the Phoenix material poses to the Gamebird and Tail pieces from the Birds of Legend Folder. APPLY the MAT-Fire B Natural from the "Smokin' Flames" Flame Emitter Folder to the FLAME EMITTER tool. I sometimes will use MAT-Fire C Natural material or both by creating a second Flame Emitter and putting one behind the other. Remember that the Animate dial on the Flame Emitter Control part will vary your flame.
- 3. That's it! Now pose each as you would like for the scene.



