



Birds





Hello there, I'd like to bring you to get to know an animal that comes in a huge variety of species. It's a bird.

Birds are categorized as class Aves under phylum Chordata. The word "Aves" is derived from Latin meaning "birds". They are generally characterized by two legs, the laying of hard-shelled eggs, warm blood and



lightweight and hollow bones. Birds reproduce sexually, fertilize internally and lay a few hard-shelled eggs in terrestrial nests.





Types of Birds

There are no less than 9,672 species of birds around the world. Bird Conservation Society of Thailand reported in 2008, there were 996 bird species in Thailand and the number of new species discovered is rising. When it comes to the number of birds per area, Thailand takes the top ranking among countries.

Some types of birds have never been seen as they live only in high mountain ranges. Some live in specific habitat such as masked finfoot bird that is found only swampy area in the south of Thailand. For Bangkok and its surrounding areas, there are about 200 species of birds.





The Evolution of Birds

It is believed that birds are descended from reptilian ancestors and shares some characteristics with reptiles such as skeletons, muscles, leg scales, laying of eggs and embryo development.

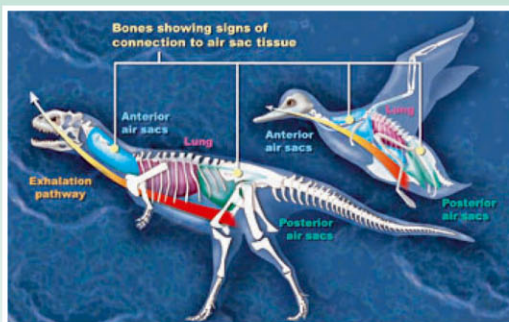




Illustration: The evolution of birds that are believed to have dinosaurian ancestry.



The fossil evidence supporting the theory was discovered in Bavaria, Germany in 1961. It was recognized as a half-bird and half-reptile creature with teeth, wing claws, long tail and feathers, and was named *Archaeopteryx*, which is believed to be the ancestor of birds.



Importance of Birds in Ecosystems

Birds play important roles for ecosystems and human beings. Nature ecosystem provides habitats and food for birds as well as birds help maintain the balance of nature. Roles of birds can be summarized as follows.



1. Birds as Pollinators: They feed on nectar, sweet liquid inside some flowers. Olive-backed sunbirds and Leafbirds, for example, have long bills, and when they insert their bills into flowers to sip nectar, pollen will be deposited on the bills. When bird visit other flowers of the same species, allows pollination to happen.



2. Birds as seed Dispensers: They feed on fruits. Bulbuls and Hornbills, for example, eat fruits and drop feces containing seeds which can grow in soil.



3. Birds as Pest Controller: They feed on pest such as insects and rice-field rats. Hawks and Tailorbirds are examples for this type of the birds.



4. Birds as Scavengers: They feed on dead animals. Vultures, for example, play this important role in ecosystems to prevent diseases caused by carcasses.

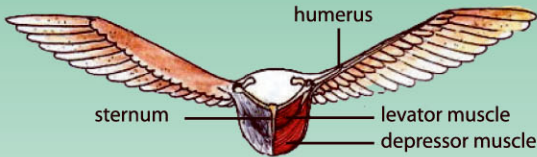


How does a bird fly?



First of all, let's see a bird's body. It had been developed for flying. The skeleton of a bird consists of hollow and lightweight bones. Some organs had been omitted to be light enough to fly. For example, a bird has only one ovary and a mouth with no teeth to chew food-swallowing food as a whole instead.

The flight of a bird is a complicated process. It has two wings for locomotion. They are streamlined. The upperside wing is curving out and the underside one is curving in.



Birds use their strong chest muscles for flapping to lift up their bodies, causing difference of air pressure which moves them up in the air.

Do you know what the tiniest bird in the world is?



The answer is hummingbird.



Hummingbirds are the tiniest birds with 6 centimeters in length. Female Hummingbirds are a bit bigger than male. They have long and narrow bills. Their small wings can flap 80 times per second. This speed allow body lifting in the air. They can also fly backwards.

Do you know what the largest bird in the world is?



The answer is ostrich.



Ostriches are the largest birds in the world. At maturity they can be from 2-2.5 meters in height and weigh around 160 kilograms. Their life spans are 65-75 years. Male ostriches are bigger than female. They are incapable of flying due to their large size bodies. But they can run 80 kilometers per hour.

What are birds that can swim?



The answer is penguins.



Penguins have wings adapted for swimming, not for flying so they cannot fly. They live in the Southern Hemisphere where sea water becomes ice.

They can dive very fast. They have short hair covering all over their bodies to keep themselves warm. They are social animals so they live in large colonies. They use vocal calls for communication. Female penguins lay eggs and leave them to their couples for hatching. They eat fishes, shrimps, or squids.



Let's draw a bird! Prepare your paper, pencils, pastels and erasers. And here we go.

1



Draw 2 rectangular shapes. The one on the top should be smaller.

2



Create 2 circles for the eyes.

3



Add the mouth.

4



Add the wings and the feet.

5



Draw the tail to complete the bird shape.

6



Color it. Then you have a nice drawing of a bird to show your friends.



Let's test your memory.
Can you match each bird to
its shadow?



Do you know What kind of birds are preserved wildlife under the Wildlife Preservation and Protection Act, B.E. 2535 (1992) of Thailand? The example of those preserved wildlife listed in the Act are White-eyed River-Martin.



White-eyed River-Martin

(*Pseudochelidon sirintarae*)

is 15 centimeters long. It was found in 1968 in Buengboraped, Nakorn Sawan, Thailand.



Crane (*Grus antigone*)

is large-sized bird. It is approximately 150 centimeters in length. It feeds in pairs. It has long-term pair bonds. It eats insects, small reptiles, rice grains and emergent plants. It lays 2 eggs in a single clutch.



Gurney's Pitta (*Pitta gurneyi*)

is 21 centimeters in length. It feeds on earthworms, beetle larvae, termites, crickets, grasshoppers, snails and frogs. Its alarm call is "taew taew" to give a warning signal to other birds. It lays 3-4 eggs in a single clutch.




Dos and Don'ts

Dos

-  Beware that our activities may cause damage to bird habitats.
-  Make our houses a safe place for birds.
-  Plant fruit trees such as cherry tree, banyan trees or ivy gourds which birds can feed on.
-  Watch birds in natural areas if you want to learn about birds.
-  Plant tree to form a forest in order to be bird habitats.

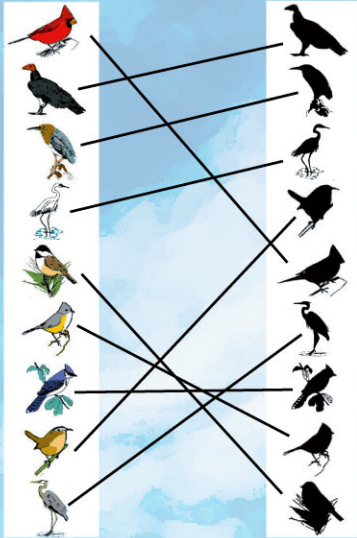


Don'ts

-  Consider birds as food.
-  Domesticate birds or shoot them as a hobby.
-  Support merit release of captive birds.
-  Cause damage to habitats of birds by harming nature.



The answers



Thank you

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<http://www.bcst.or.th>

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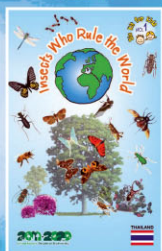
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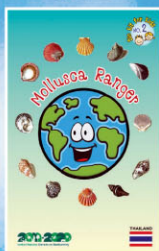
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Bio Kit for Kids

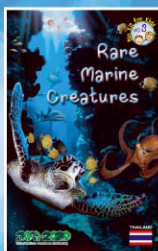
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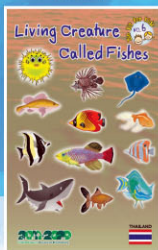
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United Nations Decade on Biodiversity



Biological Diversity Division
Office of Natural Resources and Environmental
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