

In Loving Memory of



OMAR BIN PIAM ABD KADIR @ OMAR SHARIFF Honorary Secretary of SWCS 2010-2018 Member of SWCS 2006-2018

"A person dedicated to his job commitment and contributed to wetland conservation in Sabah and the nation."



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SEASONAL BIRDS AT KKWRS

More than 90 species of birds were recorded at KKWRS, which can be divided into two groups; water bird and canopy bird. Every end of the year until March, we can spot the seasonal birds in KKWRS, resting and nesting at the bird hide area. There are two types of season either breeding season or migratory bird season.

SABAH WETLANDS CONSERVATION SOCIETY

A Non-Government Organization working on Conservation of Wetlands in Sabah

> Established on 22 August 2005

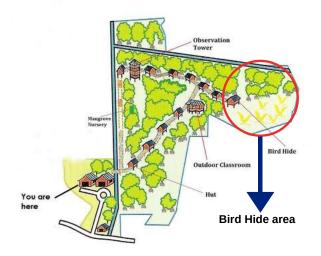
To promote the conservation of wetlands in Sabah and the variety of plants, birds and other kinds of organisms found in them.

OBJECTIVES

To raise public awareness and appreciation of wetlands and public involvement in protecting wetlands. To manage Kota Kinabalu Wetland (KKW) as a model wetlands centre for the purpose of conservation, education, recreation, tourism and research.

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Unique and Beautiful



Breeding Season

Purple Heron spotted nesting at the fern called *Acrostichum Aureum*, the largest fern in wetland. Purple Heron is the biggest bird found in KKWRS which has purple-brown plumage with slate-grey wings, reddish-brown breast, black belly and reddish-purple flanks and scapulars. Female lays 2 to 5 pale blue-green eggs. Incubation lasts about 25 to 30 days, by both parents. The chicks leave the nest at about 10 days after hatching, remaining in nearby branches or hidden in dense reedbed. At the bird hide, you only can spot them using a binocular because they are rarely move and the colour of the young fern same as the Purple Heron colour.

Migratory Season

Early January until end of February we can spot Pacific Golden Plover at the Bird Hide area. Pacific Golden Plover are migratory bird that are flying in "V" formation flock. They across the pacific ocean from Northern through Southeast Asia to Southtern. The Pacific golden plover is a mediumsized, long-legged plover with large head and large dark eyes. To spot this bird at the Bird Hide area, you also need a binocular because their colour same as a mud. They feed in short vegetation or on open tidal mudflats. Pacific golden plover diet consists of small crabs, marine worms, insects, insect larvae, spiders, earthworms, molluscs and plant seeds.



Do you see Purple Heron in this Picture? Credit: Eugene Cheah



Purple Heron is the biggest bird in KKWRS Credit: Eugene Cheah



Pacific Golden Plover Found in KKWRS Credit: Eugene Cheah



The annual migration 'round trip' is 25,000 - 27,000 km. Credit: Eugene Cheah

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Industrial Training 2018

Industrial Training is important strategy to expose students to real work life situations and to equip them with the necessary skills that intensify their job acumen. In 2018, Kota Kinabalu Wetland Ramsar Site welcomed a total of 11 Industrial training students from Universiti Malaysia Sabah (UMS) and University Teknologi Mara (UITM).



From left: Syafiq, Seth Wong, Kenny, Huslyzam, Kamaliyah, Rahayu, Nazrurah (Bachelor in Engineering with Hon. Chemical Engineering) and Marni (Bachelor in Science with Hon. Environmental Science) UMS



From left: Nor Azirah and Noorfazellah (Bachelor in Science Forestry with Hon. International Tropical Forestry) UMS

Fareed (Bachelor in Science with Hon. Biology) UITM Kota Kinabalu.











Wetlands Corner **JAN. 2019 Coral Reefs and its Important**

Coral reefs are the organism living under the water divided into two groups which is hard coral and soft coral. The coral extract calcium carbonate from seawater to create hard and durable exoskeleton to protects their soft and Sac-likes bodies. This process called reef formation. The coral that did not build a reef called as soft coral. These types of corals are flexible organisms often resembling plants and trees.



Zooxanthellae (left) makes coral reef colourful Credit: https://nuscimag.com/its-getting-hot-in-here-so-take-off-your-zooxanthellae

What makes coral reefs colourful? Colour corals contain symbiotic algae or zooxanthellae, which are brownish or green because of the photosynthetic pigment called chlorophyll. The colour of chlorophyll is brown or green. The zooxanthellae are light sensitive, increasing or decreasing based on available light intensities, and as a result becoming darker or lighter. Phycoerythrin, another photosynthetic pigment found in zooxanthellae, fluoresces a bright orange. The pigments are thought to play a major role in the health and resilience of the corals, and how well the corals are able to interact with their environment.

The coral reef become shelter and habitat for marine organism. Coral reef also become breeding area for animal like fish and prawn. Most of fish spawned there and the juvenile spend their time in the coral area until their are matured. Coral reef protect and act as barrier for the land area from the wave and storm by slowing down the speed of wave. Most corals and sponges are filter feeders, which means that they consume particulate matter suspended in the water column. This contributes to enhanced quality and clarity of our near shore waters.



Coral reefs in Sabah. Credit: http://www.diverse-borneo.com/

The different shape and colour make the coral reefs very attractive. The Coral reefs have aesthetic value and important in tourism. Malaysia is one of the country that have diverse coral reefs. Coral reefs become one of the important tourism attraction in Malaysia. Sipadan Island, Tioman Island, Mabul Island and Redang Island are the best places to explore the colourful corals and sea creatures in Malaysia.

Article references:

https://www.livingoceansfoundation.org/colorful-corals/ https://www.livescience.com/40276-coral-reefs.html http://www.qm.qld.gov.au/microsites/biodiscovery/05human-impact/importance-of-coral-reefs.html

#SAVEOURPLANET

Do not litter !

Litter consist of solid and liquid waste that improperly disposed to the water or land. The smallest as cigarette butt, the biggest as tyres and food waste are all litters. The liquid chemical from factory and farm also categorise as litter. They are several causes of littering for example the presence of a litter in an area where people will attracted to throw the litter at the same area.



Do you see where is the dustbin?

Improper waste management in the project site will cause a lot of litter in the surrounding area. The pieces of wood, metals, concrete debris and plastic from the construction site are all litter. Research and experience have shown that litter is the result of individual behavior choosing to litter or being careless in the handling of waste. We commonly see people discard the trash out from their kitchen windows or balconies, throwing the trash from the vehicles and leaving the trash overflowing beside the dustbin. When we throw the litter to the sea, the litter can travel kilometers away from the place it was thrown.

Littering can cause several problems to environment and human. The chemical liquid that washed into the river, lake or sea will effect the fresh and marine flora and fauna. Most of the liquid chemical from industrial area are toxic to fresh and marine life that bring to death. For example, the run-off that bring the pollution can cause coral bleaching.

Littering also can spread the disease. The trash can be the breeding and living area for the pest animal like rat and cockroach that will bring the diseases. Besides that, the trash also can become the breeding area for Aedes that are known to spread the Dengue fever. Litter also can cause physical harm or injury to us. The sharp object like broken glass, blade and pieces of wood will make people injured. Do you know by throwing the litter from vehicle will cause an accident? Lastly, the trash and litter will effect the aesthetic value and tourism. The public and tourist tend to avoid the area that have lot of trash.



People will avoid go to the dirty place

There are solution to overcome this problem. First, put more dust bin at the crowded place like in the park, beach and marketplace. The dustbin must be emptied regularly to avoid overfilling and it is more easy if the dustbin separated by recycle bin category. The authority also can put stop littering signs at the specific place to avoid people littering. In conclusion, we should change littering behavior for our better environment and life. "Clean Environment, Better Life'



Article references: https://www.conserve-energy-future.com/causes-problems-solutions-littering.php https://education.seattlepi.com/littering-affect-environment-6802.html

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12th January 2019. Mangrove Tree Planting & Environmental Education Programme with students from Keisei High School Japan.



24th January 2019. RRCEA Programme with Students from Almacrest International Kota Kinabalu.

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26th January 2019. Environmental Voluntary Work with students from SM All Saint Kota Kinabalu.



30th January 2019. Envionmental Education Programme with students from Jesselton International School Kota Kinabalu .

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Very breathtaking view and I like it! - *Aiwa Tamura, Japan*



We heard sound of snapping shrimp for the first time. Keep up the conservation effort! - **Pieter and family, UK**



Very good place and I enjoy walking inside the mangrove! - **Ming, China**

Upcoming Events

Environmental Education Programme

• Jesselton International School

Tree Planting Programme

Aiesec Malaysia

Voluntary Work Programme

- Aiesec Malaysia
- AMC College Kota Kinabalu
- KLCC Urusharta
- Aeon Credit
- SMK Bandaraya Kota Kinabalu

Others

- RRC-EA Project Programme (Cosmopoint College Kota Kinabalu)
- RRC-EA Project Programme (Asian Metropolitan College Kota Kinabalu)
- World Wetlands Day 2019



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Volunteer Needed

01 Volunteering is good for your heart

Voluntering for KK Wetlands Ramsar Site can be great fun! If you have passion for the environment or just want to gain more outdoor experiences, this is the appropriate channel. Do not miss the chance! Sign up to be a volunteer now or contact us for more information.

Monthly Bird Monitoring

FOR

MORE INFO

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Join our monthly birding activity on every 15th-17th day of the month

> Call us at 088-246955 or drop us an email at swcs@sabahwetlands.org

membership

Benefits of being our member

- As a member, you will be able to participate
- in members' events and enjoy free entry to
- Kota Kinabalu Wetlands Ramsar Site
- Eligible for 50% discount for binoculars
- rental*.
- Most importantly, you know you are helping
- this ecosystem to survive and provide
- essential services to it.



Give your workable old laptop or desktop a new life by donating us!

Support us by joining our programmes

1. Environmental Education Programme

- i. KK Wetlands Mangrove Experience Programme
- ii. Mangrove Conservation Experience Programme
- iii. Handcrafting from Mangrove

Environmental Voluntary Work

i. Nursery Work ii. Mangrove Clean-Up

CONTRIBUTORS

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