

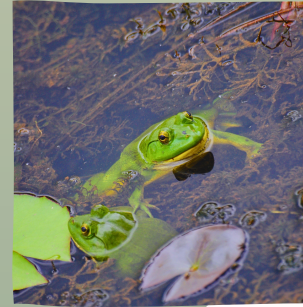
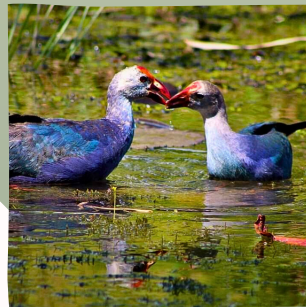
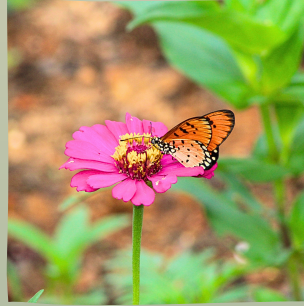
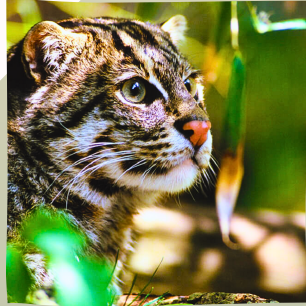
DIYASARU

உயிர்
தியசரு

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Diyasar Park



Ramsar Regional Center
RRC
East Asia



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A publication by *Diyasar Park*



Cover Story

International Day for Biological Diversity May 22

The theme of the 2023 International Day for Biological Diversity is “From agreement to action: Build back biodiversity”

Although every Biodiversity Day carries its own special significance, this year’s global celebrations bring with it a renewed sense of hope with the adoption of the Kunming-Montreal Global Biodiversity Framework at the 15th Conference of Parties to the UN Convention on Biological Diversity (COP 15).

Providing a home to about 300 plant species and 250 animal species, *Diyasaru* park is a significant place to observe biodiversity in Colombo.

Episode 06: Diyasaru History

It is a well-known fact that *Diyasaru* Park wetland was an active paddy field in early 70's where it has been continued to be an abandoned paddy field, to a marsh with different vegetation types such as short grass vegetation, tall grass vegetation, mixed woodlands and *Annona* woodlands.



In post war Sri Lanka, the Colombo capital city was redeveloped to promote the public gatherings and urban recreation to protect the urban greenery for addressing the critical environmental issues such as flooding.



At this point *Diyasaru* wetland and other wetland cluster located around the Battaramulla administrative capital city were mainly developed as urban parks. Nawala Weli Park and Diyatha Uyana are such parks created next to the wetlands to promote the recreation. Meantime *Diyasaru* wetland was selected as an ideal location to study the biodiversity and other aspects related to wetland environmental investigations such as water quality and soil quality studies.

Stay tuned for next episodes for other interesting stories about *Diyasaru* Park wetland.

Biodiversity corner

බක්මී ශාකය

Nauclea orientalis (L.) L.

Rubiaceae කුලයට අයත් *Nauclea orientalis* හෙවත් බක්මී ශාකය වියළි කලාපයේ මෙන්ම පහතරට තෙත් කලාපය, වියළි පතනශීලී වනාන්තර හා ද්විතීක වනාන්තර මෙන්ම ප්ලාශ්ටික ප්‍රදේශ වලද ස්වභාවිකව හමුවන දේශීය ශාක විශේෂයකි.



උසින් මීටර 30ක් (30m) පමණ වන කුඩා ප්‍රමාණයේ ශාකයක් වන මෙහි කඳ හොඳින් අතු බෙදී ඇත. කඳ පතුරු ගැලවෙන ස්වභාවයක් සහිතය. ශාක පත්‍ර වටකුරු හෝ මීවලාකාර හැඩති වන අතර ලපටි කාලයේ තඹ පැහැතිව ක්‍රමයෙන් වර්ධනය වත්ම තද කොළ පැහැයට හැරේ. Rubiaceae කුලයට ආවේණික වන උප පත්‍ර ,ශල්කමය වන අතර ලා රෝස පැහැතිය. ශීර්ෂ ලෙස පිහිටන පුෂ්ප මංජරී බොහෝ විට තනිව පිහිටයි. කහ පැහැති මුකුටය හා මුකුට නාලයද සුදු පැහැති තර්කුරුපී කලංකයද බක්මී පුෂ්ප මංජරිය වර්ණවත් කරන අතර එහි ආවේණික සුවඳක්ද සහිත බැවින් කෘමි පරාගකාරක ආකර්ෂණය කරයි. එලය දුඹුරු කොළ පැහැති දැවමය වේ. ආහාරයට ගත හැක. පාංශු බාදනය වැලැක්වීමටද, සෙවණ ලබා දීමටද හැකියාවක් ඇති අතර විවිධ දේශීය ඖෂධ සඳහාද ශාකයේ සමහර කොටස් භාවිතා කරයි.

දියසරු උද්‍යානය තුළ බක්මී ශාක කිහිපයක් දැක ගත හැකි අතර අධ්‍යයන උද්‍යානයට පිටුපසින් ඇති හොඳින් වැඩුණු බක්මී ශාකය ඒ අතරින් සුවිශේෂී වන්නේ දුර්ලභ හැඩයේ පුෂ්ප දරණ මෙම ශාකය බාල මහලු සැමගේ ආකර්ෂණයට ලක්වන බැවිනි.

CEPA Activity Highlights at *Diyasaru Park*

07 April

Diyasaru Spring Picnic

Diyasaru Park hosted a "Spring Picnic" event for kids on April 7, 2023 from 3pm - 6pm, offering a range of engaging and entertaining activities focused on learning about nature. About twenty five (25) kids participated for this event.

Nature trail leading to the butterfly garden, berry picking, scavenger hunt, art and craft sessions, and nursery rhyme sing-along were the main activities conducted to aware and entertain the kids. The event also featured picnic eats and treats, allowing children to enjoy snacks and interact with one another in a novel environment. These activities aimed to educate children about the importance of conservation of natural habitats for other living creatures around us. As a way to memorize the *Diyasaru Spring Picnic*, printed group photographs and nature-themed gifts were provided.

The event was successfully held and both kids and their parents were thrilled to experience this novel concept here in Sri Lanka, especially in the post Covid country. The little learners were well aware about the ecosystem services of urban wetlands through this program.

Little Nature Lovers Fun Day
Diyasaru Spring
Picnic
to boost your kid's sensitivity to the nature, creativity & fun at a star wetland!!!

Kids will be busy with,

- Nature trail to butterfly garden
- Berry picking
- Scavenger hunt
- Art & Craft
- Nursery rhyme sing along
- Picnic Eat & Treat

Age Limit
Year 3-7

For 20 Lucky Kids only

Date - 07 April 2023
Time - 3pm to 6pm
Venue - Diyasaru Park (Open Study Area)

Cost - 2000/= per kid

PACKAGE INCLUDES- PICNIC FOODS & BEVERAGE, MATERIALS FOR ACTIVITIES, GROUP PHOTOGRAPH, NEW YEAR GIFT

Organized By - *Diyasaru Park* in collaboration with Wetland Link-Asia and Ramsar Regional Center-East Asia.
For more details contact : 071 - 2418 128 | 071-1945 265



CEPA Activity Highlights at *Diyasaru* Park

25 May

Visit of Ladies' College students to *Diyasaru* park

About hundred (100) students of Grade 9 classes of Ladies' College, Colombo visited *Diyasaru* park on May 25, 2023 for a guided nature tour to explore the features and functions of *Diyasaru* Park. They were made aware on urban wetlands, wetland eco system services, biodiversity, threats and wetland restoration. Further they are willing to contribute the Park for an upcoming project as a social service project under their curriculum with the funds they raised.



27 May

Seed collection Campaign

"Tree planting is no more meaningful unless you grow the most suitable plant species to the ecosystem." Colombo urban wetlands are covered many Alien Invasive Flora, which are well established being a part of the wetland ecosystem. Restoration of such wetlands has become a challenge due to the lack of native flora species. Therefore, *Diyasaru* seed collection campaign was designed to collect native wetland seeds and propagate them at our nurseries for the future restoration purpose.

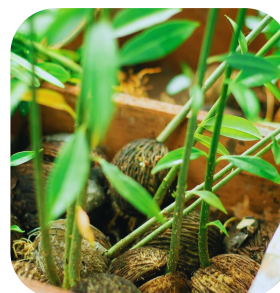
Accordingly, our second seed collection campaign was successfully held at *Diyasaru* Park on 27th May with the participation more than fifty students representing the Environmental Society of Faculty of Technology of University of Colombo. The undergraduates were able to collect the seeds of more than fifteen native plant species, to pot them to grow at the *Diyasaru* Mini Nursery with the guidance and assistants of *Diyasaru* Park.



27 May

Tree planting Campaign

The Rotaract Club of the Faculty of Management & Finance of the University of Colombo successfully conducted a Tree Planting campaign at *Diyasaru* Park on 27th May 2023. Wetland trees such as Diya Na, Domba, and Mudilla were planted in different habitats to restore the vegetation and there by the wetland. The program was sponsored by the Rotaract club of Colombo Mid Town.



Project Updates

Assessment of Carbon Sequestration Potential of Colombo Wetland Complex

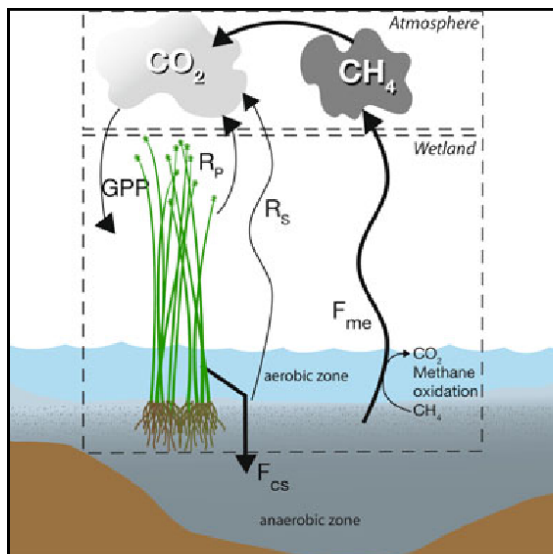
Wetlands are globally important carbon sinks, storing vast amounts of carbon and thereby helping to mitigate climate change.

Wetland plants take up Carbon via photosynthesis and build plant biomass, which can accumulate in the soil as organic matter. Wetlands also release carbon to the atmosphere in the form of the greenhouse gases CO_2 and CH_4 (methane). The balance between carbon uptake and release varies by wetland type and determines their ability to act as a carbon sink.

The Carbon sequestration potential of Colombo Wetland Complex was assessed to cater an important data gap as no detail wetland plant and soil carbon estimates have conducted.

The study is being conducted in five major wetland types in Colombo Wetland Complex: Herb dominated low vegetation; Herb dominated high vegetation; Annona woodland; Mixed woodland; and Highland vegetation associated with wetlands. Kotte marsh, Heen Ela marsh, Madinnagoda wetland, Gothatuwa wetland and *Diyasaru* park representing these vegetation types were selected for the study.

Soil samples were collected in both dry and wet seasons to measure organic carbon, total soil carbon, total Nitrogen at the laboratory. Emission rates of Methane, Carbon dioxide and NO were determined at the field by installing non-steady gas sampling chambers and measured by portable air quality meters.



F_{cs} - Carbon Sequestration
 F_{me} - Methane Emissions
GPP - Gross Primary Productivity
 R_p - Plant Respiration
 R_s - Soil Respiration



Measure the gas emissions in the field

(Mitsch, William & Bernal, et al (2012). Wetlands, carbon, and climate change. Landscape Ecology. 28. 10.1007/s10980-012-9758-8.)

The results will be of much significance in promoting conservation and restoration measures of urban wetlands in Colombo Metro Region to increase climate change mitigation.

Carbon sequestration is the removal of carbon from the atmosphere and its storage in an ecosystem in a given area over a given time. This is caused by biological processes such as photosynthesis.

A **carbon sink** results from the long term (of at least one year) sequestration of carbon by an ecosystem (i.e., more carbon is taken up than is released). Living and dead vegetation, as well as soil carbon, constitute the carbon sink.

(Source: Ramsar briefing note 10-Wetland Restoration for Climate Change Resilience)

Diyasaru Park is there for you,

To educate you while you relax in the nature associating various natural, semi-natural and man-made urban wetland landscapes to provide an unforgettable wetland experience.



Tag Diyasaru Park Facebook page in your next photograph taken at *Diyasaru Park* & win a chance to feature your photograph in our next Newsletter.

Purple -faced Leaf Monkey

ශ්‍රී ලංකා කළු වඳුර

The Western Purple-faced Langur (*Semnopithecus vetulus nestor*), also known as the Purple-faced Leaf Monkey, is a long-tailed arboreal monkey endemic to Sri Lanka. It is Critically Endangered and has been listed by the World Conservation Union (IUCN) as one of the 25 most endangered primates in the world.

Lives in urban environments, as small and widely scattered groups.

The loss of habitat due to urbanization has created human monkey conflict as most cultivations and home gardens are negatively affected by the Purple-faced Leaf Monkeys.

බටහිර කළු වඳුර ශ්‍රී ලංකාවට ආවේණික දිගු වලල සහිත වඳුරෙකු වන අතර දැඩි ලෙස වඳවීමේ තර්ජනයට ලක්වී ඇත. මේ විශේෂය ලොව අතිශය අන්තර්ගත ලක් වූ ප්‍රසිද්ධතාවෙන් 25 දෙනා අතරට ඇතුළත් වේ.

මොවුන් නාගරික පරිසර වල කුඩා හෝ පුළුල් ලෙස විසිරී ඇති කණ්ඩායම් ලෙස දක්නට ලැබේ.

නාගරීකරණය සමග කළු වඳුරගේ වාසස්ථාන විනාශවීම නිසා බොහෝ නාගරික හා අර්ධනාගරික ගොවිතැන් සහ ගොවතු වගා සඳහා හානිදායක සතෙකු ලෙස ප්‍රසිද්ධය. නාගරික තෙත්බිම් සුරැකීම තුළින් ඔවුන්ගේ වාසස්ථාන ආරක්ෂා කිරීමෙන් මෙවැනි ගැටුම් අවම කරගත හැකිවනු ඇත.

වෙස්ටර්න් පිලාක් ඉරාටුරු ඉන්පත්‍ර ඉලක්කයට සොබාදාමාන නිසි වාසස්ථාන කොටසක් ලෙස මර්ණයට පත්වනු ඇත. මර්ණයට පත්වනු ඇත. මර්ණයට පත්වනු ඇත. මර්ණයට පත්වනු ඇත.

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This Purple -faced Leaf Monkey was captured at Diyasaru Park by photographer Rasika Gayan Gunarathna

Spotted on 15th February 2023, at Diyasaru Park.

From Visitor's Eye

Visit *Diyasaru Park* to live-spot this mammal. Further, browse the "Citizen Science Corner" at the study centre of *Diyasaru Park* to know more information on **Purple-faced Leaf Monkey** & other animals.

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