Active, clean, and bountiful rivers: The Wetlands BioBlitz Program

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Presentation Outline

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- II. What is Wetland Bioblitz?
- III. Who are involved in Wetlands Bioblitz?
- IV. What are the parameters involved in Wetlands Bioblitz?
- V. Launching Event Active, Bountiful, and Clean Rivers: Wetlands Bioblitz
- VI. A Project: Wetlands BioBlitz at the Laguna de Bay Region





What is BioBlitz?

- 'Bio' means 'life' and 'Blitz' means 'to do something quickly and intensively'.
- a collaborative race against the clock to document as many species of plants, animals and fungi as possible, within a set location, over a defined time period (usually 24 hours)
- a biological inventory

A bioblitz differs from a scientific inventory -

- Scientific inventories are usually limited to biologists, geographers, and other scientists.
- A bioblitz brings together volunteer scientists, as well as families, students, teachers, and other members of the community.











What is Wetlands BioBlitz?

- An adoptation by the SCPW designed for wetlands
- Added dimensions including geographical, climate-related and ecosystem services as indicated in the Ramsar Information Sheet or the locally adopted Wetland Information Sheet
- It also uses the Ramsar Assessment of Wetland Ecosystem Services or RAWES.















What is Wetlands BioBlitz?

General objective:

To characterize and assess priority rivers employing citizen-science and increase the awareness and capacity of local communities to take action for their wise use.



Specific objectives:

- To identify the flora, fauna and fungi found in selected rivers
- To learn about river ecosystems, the benefits derived from them, and initiatives to manage and conserve them.
- To operationalize a citizen-science-based strategy in the rehabilitation of selected rivers







What is Wetlands BioBlitz?

The Wetlands BioBlitz is being implemented under the flagship program of SCPW - Active, Clean and Bountiful Rivers.



Objectives of the Program:

- 1. increasing awareness of local communities
- 2. generating scientific information to inform rehabilitation and conservation efforts, and
- 3. increasing capacity of local communities to embark on wetland conservation activities.

The Active, Clean and Bountiful Rivers will be replicated in other wetlands in the country, particularly those with very little data and information at present.











What is Wetlands BioBlitz?

The Wetland BioBlitz of the SCPW is a 3-day activity that is being implemented in selected rivers. It is spearheaded by the Youth volunteers/participants with the guidance of scientists and other experts.

The activities include:

- 1. introduction on wetlands (importance and the current efforts to conserve)
- 2. an orientation on the methods in the field activity;
- 3. actual field work
- 4. data consolidation and processing;
- 5. Visioning and Action Planning;
- 6. presentation to the local government executives, school officials, and other partners.









Who are involved in a Wetlands BioBlitz activity?

- scientists
- students
- nature advocates
- government or corporate employees
- etc



It provides an opportunity for participants to learn together and share their expertise and enthusiasm for nature, particularly wetlands.











Who are involved in a Wetlands BioBlitz activity?

The data that will be collected will be shared with the partner organizations and agencies, most specially with the River Basin Coordinating Office for possible roll-out to other river basins in the country.



The Youth groups may continue to monitor the rivers and upload the results in the website of the project.





What are the parameters to be determined in the Wetlands BioBlitz activity?

- Macrofauna/Avifauna
- Flora and Fungi
- Invertebrates

- Basic Profile
- Ecosystem Services
- Hydrology
- Water Quality



















The Launching of the Program -

Active, Clean and Bountiful Rivers: The Wetlands BioBlitz

Panguil River Ecotourism Park Pangil, Laguna 16-17 March 2018

It underscored the relationship between nature and water, and nature-based solutions for water-related issues which is the theme of the celebration - "Nature for Water".









The Launching of

Active, Clean and Bountiful Rivers: The Wetlands BioBlitz

The launching event was participated by -



- ASEAN Centre for Biodiversity
- Biodiversity Management Bureau of DENR
- CLEAR Youth Network Members from Los Baños, Lumban, Mabitac, Morong, Muntinlupa City, Pangil, Pila, Sta. Rosa City and Tanay
- Ecosystems Research and Development Bureau of DENR
- Laguna Lake Development Authority
- Philippine Water Partnership
- University of the Philippines Los Baños
- Unilever Philippines







The Launching of

Active, Clean and Bountiful Rivers: The Wetlands BioBlitz

Profile of Participants:

Volunteer Scientists/Experts -

- 3 from Ecosystems Research and Development Bureau of DENR
- 2 from Biodiversity Management Bureau of DENR
- 1 from UPLB

CLEAR Youth Network Members from Los Baños, Lumban, Mabitac, Morong, Muntinlupa City, Pangil, Pila, Sta. Rosa City and Tanay:

- 6 high school teachers/ coordinators
- 3 Local government coordinators
- 56 Students



Partners:

- 21from government agencies
- 6 from local/international non-government organization







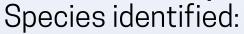




The Launching of

Active, Clean and Bountiful Rivers: The Wetlands BioBlitz Team Flora

Results from the 2-hour Activity:



- Zingiber sp.
- Sellaginella plana
- Justicia sp
- Codiaeum variegatum
- Acalypha hispida
- Dieffenbachia maculata
- Cordyline fruticosa
- Sanseiviera zeylanica
- Thumbergia affinnis

















The Launching of Active, Clean and Bountiful Rivers: The Wetlands BioBlitz

Results from the 2-hour Activity: Team Fauna

Species identified:

- Philippine Bulbul
- Passer montanus (Eurasian Tree Sparrow)



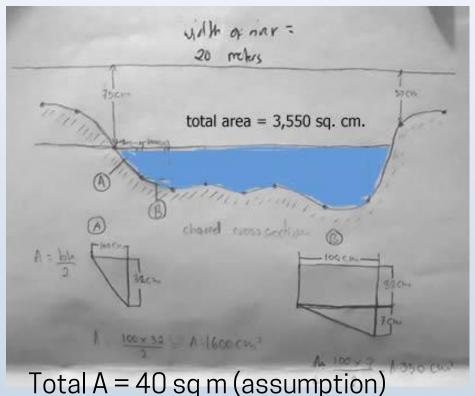




Scpw Wetlands BioBlitz

The Launching of

Active, Clean and Bountiful Rivers: The Wetlands BioBlitz Results from the 2-hour Activity: Team Hydrology







Water current flow = 0.27 m/sec

Discharge = 10.71 sq m/sec









The Launching of

Characteristics

society for the conservation of Philippine wetlands

Active, Clean and Bountiful Rivers: The Wetlands BioBlitz

Midstream

With human activity

Moderate flow

Organised Session 06: Wetlands for a Sustainable Urban Future International Conference on Human Settlements Planning and Development

Downstream

Less human activity

Very moderate flow

Results from the 2-hour Activity:

Upstream

No human activity

Rapid water

Temperature	26.09	25.52	26.79
рН	6.15	8.01	7.62
ORP	382	193	196
DO	5.93	11.45	19.38
ms/cm	0.094	0.075	0.067
NTU	0	13.3	200
TDS	0.061	0.047	0.040
Time tested	1:00pm	1:07pm	1:35pm
	Little sunlight	Shaded	Exposed to sunlight

Team Water Quality





The Launching of

Active, Clean and Bountiful Rivers: The Wetlands BioBlitz

Results from the 2-hour Activity:

Using the Rapid Assessment of Wetland Ecosystem Services (RAWES) Field assessment Sheet, the area was assessed for its –

- Provisioning Services
- Regulatory Services
- Cultural Services
- Supporting Services



Team Ecosystem Services









PWWW Wetlands BioBlitz

A Project: Wetlands BioBlitz at the Laguna de Bay Region

- three pilot tributary rivers of Laguna de Bay
 - Pangil
 - •Pagsanjan-Lumban
 - Mabitac.
- Funded by the Nagao Wetland Fund of the Ramsar Convention.
- The CLEAR Youth Network Groups spearhead the Wetlands BioBlitz activities



CLEAR is Conservation of Laguna de Bay's Environment and Resources, a partnership of SCPW, LLDA and Unilever Phils.









Wetlands BioBlitz at the Laguna de Bay Region

Why Laguna de Bay?



Laguna de Bay at Pangil side

- → largest inland wetland in the country (about 90,000 km²)
- ★ Approximately 100 rivers and streams drain into the lake, of which 22 are significant river systems.
- → one outlet, Pasig River (through the Napindan Channel that drains lake waters to Manila Bay)



Wetlands BioBlitz at the Laguna de Bay Region

Why Laguna de Bay?

- Major threats in the Laguna de Bay include:
 - a) pollution from wastewater discharges;
 - b) siltation/sedimentation
 - c) watershed habitat alteration and urbanization;
 - d) proliferation of IAS such as janitor fish and knife fish;
 - e) conflicts between fishpens and cages and open water fisheries



Laguna de Bay at Cardona side











Wetlands BioBlitz at the Laguna de Bay Region

Laguna de Bay



The ecological integrity of Laguna de Bay is largely affected by the water quality of the rivers that drain into the lake.

Considering the ecosystem services that could be provided by these wetlands, it is of great importance that communities affecting and are benefitting from these bodies of water are mobilized into action that will help protect them.









References:

Robinson, L.D., Tweddle, J.C., Postles, M.C., West, S.E., & Sewell, J. (2013) Guide to running a BioBlitz. Natural History Museum, Bristol Natural History Consortium, Stockholm Environment Institute York and Marine Biological Association.