

## SEMINAR NO: 4

NAME OF THE DEPARTMENT: ENVIRONMENTAL SCIENCE

TITLE OF THE SEMINAR: World wetland day



DATE: 04-02-2019 to 05-02-2019

2.00 – 3.00 pm : **DR. JOBY PAUL**  
Assistant Professor  
Department of Botany,  
St. Thomas College, Thrissur

Topic: Wetland vegetation and climate change

Vote of Thanks : **Dr. Brilliant Rajan**  
Assistant Professor &  
Co-ordinator

**NATIONAL ANTHEM**



**WETLAND DAY  
2019**

**Focal Theme**  
**"Wetland and Climate change"**  
04 & 05 February 2019

**Organized by**  
Department of Environmental Sciences  
St. John's College, Anchal

**Sponsored by**  
Kerala State Council for Science Technology & Environment (KSCSTE)  
Government of Kerala

**PROGRAMME**  
**Wetland Day Celebrations 2019**  
*Focal Theme - "Wetland and Climate change"*  
04 & 05 February 2019

**DEPARTMENT OF ENVIRONMENTAL SCIENCES**  
*Cordially invites you to the Inaugural session held in the  
College Auditorium*

World Wetlands Day is celebrated every year on the 2nd of February to raise global awareness on the value of wetlands for humanity and the planet. Theme of this year's edition is Wetlands and Climate Change. It has been chosen to initiate action against the drainage of wetlands. Wetlands play an important role in reducing the impact of extreme weather events such as floods, droughts and cyclones. Wetlands act as a natural sponge, absorbing and storing excess rainfall and reducing flooding. During the dry season, they release the water stored, delaying the onset of droughts and reducing water shortages. The frequency of natural hazards has more than doubled; the majority is climate and weather related. Wetlands are a natural safe guard against disasters and help us cope with extreme weather events. Well managed wetlands ensure communities are resilient and can bounce back from disasters. Take actions that help conserve and promote sustainable use of wetlands. World Wetlands Day marks the signing of the Convention on Wetlands, called Ramsar Convention, on 2 February 1971, in the Iranian city of Ramsar on the shores of the Caspian Sea. There will be events held worldwide to celebrate the purpose of the day, from seminars to nature walks and community clean up days worldwide.

**05th February 2019 (2nd Day)**

9.00 – 9.30 am : Registration  
10.00 – 11.00 am : **INAUGURAL SESSION**

**PRAYER**

Welcome Address : **Dr. Brilliant Rajan**  
Inaugural Address : **Rev. Fr. Johnson G.**

Felicitations : **Dr. George Thomas**  
(HOD. Dept. of Commerce)  
: **Prof. Jerry C Jackson**  
(HOD Dept. of Botany)  
: **Dr. Alexander T.**  
(Dept. of Env.Science)

Prize Distribution : **Rev. Fr. Johnson G.**  
Vote of Thanks : **Prof. Kaladevi V.**  
(Dept. of Env.Science)

11.00 – 11.15 am : Tea Break

11.15 – 12.30 am : **TECHNICAL SESSION**  
**DR. PRASANTH KARBAYANAN S.**  
Advance center for Environmental studies  
and Sustainable Development (ACESSD)  
School of Environmental Sciences  
Mahatma Gandhi University, Kottayam

Topic: Wetland avifauna and climate change

**LUNCH BREAK**

**04th February 2019 (1st Day)**

10.30 onwards : Essay writing competition  
Elocution competition  
Poster presentation Competition  
Painting competition

Topic: **WETLANDS AND CLIMATE CHANGE**

# **WORLD WETLAND DAY**

**04<sup>th</sup> & 5<sup>th</sup> February 2019**

## **REPORT**



**ST. JOHN'S COLLEGE, ANCHAL**

**Organized by**

**P. G. DEPARTMENT OF ENVIRONMENTAL SCIENCE**



**Funded by**

**KERALA STATE COUNCIL FOR SCIENCE TECHNOLOGY &  
ENVIRONMENT**

### Rationale of Seminar

Dear Sir,

We are organizing two day programmes in association with World Wetland Day celebrations in our college funded by *Kerala State Council for Science Technology & Environment, Government of Kerala.*

All countries depend heavily on their environment. Forests, grasslands, rivers, lakes, coral reefs and other ecosystems provide essential resources that provide food, water, shelter and energy. But those ecosystems and those resources are under incredible pressure.

Environmental issues such as climate change have been increasingly visible in the development agenda in the last few decades. The loss of forests and other natural habitats, overexploitation of natural resources, chemical contamination, drought, Flood and lack of safe water and sanitation in a large proportion of the developing world continue to affect societies and hinder development.

The Wetland Day 2019 slogan carries a clear message and asks everyone to get involved in making the world a better place to live in. The main objective of the programme was to inculcate environmental protection and conservation of wetlands in the minds of youth and not consider wetlands as waste lands.

We kindly request your presence and blessings.

**Dr. Brilliant Rajan**

(Co-Ordinator)



**World Wetlands Day** occurs annually on February 2nd, marking the date of the adoption of the Convention on Wetlands on February 2, 1971. Established to raise awareness about the value of wetlands for humanity and the planet, WWD was celebrated for the first time in 1997 and has grown remarkably since then. Each year, government agencies, non-governmental organizations, and groups of citizens at all levels of the community, have taken advantage of the opportunity to undertake actions aimed at raising public awareness of wetland values and benefits. Some of these benefits include: biologically diverse ecosystems that provide habitat for many species, serve as buffers on the coast against storms and flooding, and naturally filter water by breaking down or transforming harmful pollutants

Wetland ecosystems are often undervalued. Few people realise the range of products derived from freshwater habitats like wetlands: food such as fish, rice and cranberries; medicinal plants; peat for fuel and gardens; poles for building materials; and grasses and reeds for making mats and baskets and thatching houses. These complex habitats act as giant sponges, soaking up rainfall and slowly releasing it over time. Wetlands are like highly efficient sewage treatment works, absorbing chemicals, filtering pollutants and sediments, breaking down suspended solids and neutralising harmful bacteria.

They are also the most biologically diverse ecosystems on Earth.

The most significant social and economic benefit that wetlands provide is flood control. Peatlands and wet grasslands alongside river basins can act like sponges, absorbing rainfall and controlling its flow into streams and rivers. When peat becomes completely saturated and unable to absorb any more water, surface pools and peatland vegetation – including sedge meadows and some types of forest – help to slow and reduce runoff.

Similarly, floodplains alongside the lower reaches of major rivers, such as the Nile, Yangtze and Danube allow heavy rainfall or spring snowmelt to spread out slowly. When the peat bogs are drained or the floodplains reduced, the risk of flash floods is increased. Wetlands act as the Earth's filters, cleaning up water in a number of ways. For example, nitrogen in water is transformed to harmless nitrogen gas, nutrients are taken up by wetland plants in the water. Wetlands remove pollutants such as phosphorous, heavy metals and toxins which are trapped in the sediments of the wetlands. In addition, nitrogen and heavy metals are incorporated into peat during its formation. New York City found that it could avoid spending USD\$3-8 billion on new waste water treatment plants by investing USD\$1.5 billion in the purchase of land around the reservoirs upstate. This land purifies the water supply for free.

Rice is the staple diet of nearly 3 billion people - half the world's population. It is grown in wetlands across Asia and west Africa, and in the United States. Almost as important is sago palm, which provides starch from which sago flour is made. And palms from the wetlands of Africa yield valuable oils for cooking and soap making. The devastating effects of natural phenomena such as hurricanes, cyclones and tsunamis cannot be denied. Worldwide, an estimated 200 million people who live in low-lying coastal regions are at potential risk from catastrophic flooding.

Coastal wetlands – such as reefs, mangroves and saltmarshes – act as frontline defences against potential devastation. The roots of wetland plants bind the shoreline together, resisting erosion by wind and waves and providing a physical barrier that slows down storm surges and tidal waves, thereby reducing their height and destructive power. Throughout history humans have gathered around wetlands and these areas have played an important part in human development

and are of significant religious, historical or archeological value to many cultures around the world. For example, on the Coburg Peninsula (the world's first Ramsar site), traditional Aboriginal owners still conduct an active ceremonial life and undertake semi-traditional hunting and gathering in this coastal wetland. Wetlands yield fuelwood for cooking, thatch for roofing, fibres for textiles and paper making, and timber for building. Medicines are extracted from their bark, leaves, and fruits, and they also provide tannins and dyes, used extensively in the treatment of leather. Wetlands everywhere provide important leisure facilities - canoeing and fishing, shell collecting and bird watching, swimming and snorkelling, hunting and sailing.

The Ramsar convention, signed in 1971, is an international convention to protect wetlands. Every year they celebrate, along with their members and partners, World Wetlands Day on the 2nd of February. Climate change is one of the most pressing problems facing humanity and our planet. Wetlands and Climate Change, the theme to celebrate World Wetlands Day in 2019, draws attention to the vital role of wetlands as a natural solution to cope with climate change.

This year's World Wetlands Day has produced a range of materials to help you to celebrate the day, [click here](#) to see more. The resources include information sheets, guide to holding events, a cartoon, a t-shirt design and much more. There is also the regular youth photo contest - for those between 18-25, so please encourage people to take pictures of wetlands that play a role in disaster risk reduction.





**WORLD WETLAND DAY 2019**  
FOCAL THEME: WETLAND AND CLIMATE CHANGE  
ON  
FEB 4<sup>TH</sup> AND 5<sup>TH</sup>  
ORGANIZED BY DEPT. OF ENVIRONMENTAL SCIENCES,  
ST. JOHN'S COLLEGE ANCHAL  
VENUE: COLLEGE AUDITORIUM  
FUNDED BY KERALA STATE COUNCIL FOR SCIENCE, TECHNOLOGY AND  
ENVIRONMENT

Wetland Birds of Kerala  
Dr. Praveen K. P., PhD  
Advanced Centre of Environmental Studies  
and Sustainable Development  
Maroma Gandhi University