



ST. XAVIER'S COLLEGE FOR WOMEN, ALUVA
REACCREDITED BY NAAC WITH A GRADE (CGPA 3.33)
ISO 9001-2015 CERTIFIED

DEPARTMENT OF ZOOLOGY
ANNUAL REPORT
2021-2022

REPORT OF ACTIVITIES CONDUCTED BY ZOOLOGY DEPARTMENT (2021-22)

EXPERT TALKS

- **An e-workshop series** to explore different ecosystems was initiated on World Environment Day, 2021. First session of the series was led by Dr. R. Sugathan, Head, Bird Monitoring cell, Salim Ali Bird Sanctuary Thattekad.

ABOUT THE SPEAKER
Dr. R Sugathan is a well known ornithologist and a close associate of Dr. Salim Ali. He traversed Western Ghats from Tezhi to Kanyakumari on the trail of Ceylon Frogmouth and could relocate the bird in 1976 from Mukkoti in Silent Valley after a span of 70 years. He has worked for many years in Thattekad Bird Sanctuary and helped to revive its past glory. Presently, Dr. Sugathan heads the Bird Monitoring Cell of the Thattekad Bird sanctuary established by Kerala Forest Department. He has compiled his works in the form of books and field guides for bird lovers.

Contact Details:
Email: zoology@stxaviersaluva.ac.in
Phone: Dr. Seema K- 9846222959

ECO EXPLORER SERIES-1
June 5, 2021, 10.30 a.m.

PRINCIPAL'S MESSAGE ON WORLD ENVIRONMENT DAY, 2021
Rev. Sr. Dr. Geege Joanamma Xavier
Principal
St. Xavier's College for Women, Aluva

EXPLORING FOREST ECOSYSTEM THROUGH BIRDING TRAILS OF THATTEKAD BIRD SANCTUARY
Dr. R. Sugathan
Head, Bird Monitoring Cell
Salim Ali Bird Sanctuary, Thattekad

Click the icon to register
Click the Google meet icon to join

World Environment day
2021

World Oceans day
8th June 2021

WORLD OCEANS DAY 2021

- **Eco Explorer Series 2-** An introduction to Marine Faunal Diversity, Dr. Usha V. Parameswaran, Project Scientist, Centre for Marine living resources and Ecology, Kochi on 17-07-2021.

ABOUT THE SPEAKER
Dr. Usha V. Parameswaran completed her M.Sc. in Marine Biology from the Cochin University of Science & Technology and she obtained a Ph.D. from the same University in 2017 for the thesis 'Echinoderms of the South-eastern Arabian Sea: Systematics and Ecology'. She is an experienced echinoderm taxonomist, specializing on brittle stars, and is also experienced in benthic ecological studies. She has extensive field experience in marine biology, having participated in over 25 research expeditions in Indian waters and also the Third Indian Expedition to the Antarctic Ocean (2009). She is also a certified SCUBA diver and has conducted biodiversity studies in the Lakshadweep atolls.

Contact Details:
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Faculty Coordinator- Dr. Baby Divya- 9846222959
Student Coordinator- Ms. Sadiya P.K.

ECO EXPLORER SERIES-2
July 17, 2021, 10.00 a.m.

AN INTRODUCTION TO MARINE FAUNAL DIVERSITY
Dr. Usha V. Parameswaran
Project Scientist
Centre for Marine Living Resources and Ecology, Kochi

Click the icon to register
Click the Google meet icon to join

World Oceans day
8th June 2021

WORLD OCEANS DAY 2021

- **Eco Explorer series 3-** Mangrove Ecosystems of Kerala- Status and future prospects. Dr. Sreelakshmi S, Post-doctoral researcher, CUSAT, Kochi. 26.07.2021.

ABOUT THE SPEAKER
Dr. Sreelakshmi S completed her MSc in Marine Biology in 2011 and PhD in Marine Biology from Cochin University of Science and Technology in 2018 for the thesis 'Floristic structure, zonation and diversity pattern of major mangrove ecosystems of India. She is the recipient of prestigious awards and fellowships, particularly the Kerala Government Parastarom in Biological Sciences (2019-20) instituted by the Kerala State Government. She is an experienced mangrove ecologist and has been a part of many scientific research projects pertaining to mangrove ecosystems India. She has publications in reputed international journals, authored books, book chapters and popular articles to her credit.

Contact Details:
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Faculty Coordinator- Dr. Baby Divya- 9846222959
Student Coordinator- Ms. Simi Shaji

ECO EXPLORER SERIES-3
July 26, 2021, 04.00 p.m.

MANGROVE ECOSYSTEMS OF KERALA CURRENT STATUS & FUTURE PROSPECTS
Dr. Sreelakshmi S.
Post Doctoral Researcher
Cochin University of Science & Technology, Kochi

Click the icon to register
Click the Google meet icon to join

International day for the conservation of the Mangrove Ecosystem
26th July 2021

- **Eco Explorer series 4-** Arctic Biodiversity by Prof. Mohammed Hatha, Professor, Department of Marine Biology, Microbiology and Biochemistry, School of Marine Sciences, CUSAT, Ernakulam on 15.01.2022.

- Departments of Zoology and Botany jointly organized two sessions of **FINCHE -Finding Your Niche 2021**—Talk on Opportunities after B.Sc. Life Science for final year students by Shri. Krishna Kumar S. Deputy Chief, University Employment and Guidance Bureau, CUSAT, Kochi and Shri. Shaju P.J., Former district employment officer, District employment Exchange, Thrissur on 19.07.2021 and 27.09.2021 respectively.

- **Webinar on Biomedical Research- A Bird's Eye View-** Dr. Mohamed Febin Farook, Post-Doctoral Researcher, Cleveland Clinic, USA, 27.08.2021.

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BIOMEDICAL RESEARCH- A BIRD'S EYE VIEW

Supported by DBT-STAR College Scheme

Dr. Mohamed Febin Farook
 Post doctoral researcher
 Cleveland Clinic
 Cleveland, USA

August 27, 2021. 04.00 P.M.

Click the icon to register
 Click the Google meet icon to join

ABOUT THE SPEAKER

Dr. Mohamed Febin Farook completed his Masters in Marine Biology from the Cochin University of Science & Technology and Ph.D. in Biochemistry from the University of Kerala. His doctoral thesis focused on a key protein named Estrogen Receptor Activation Factor (E-RAF), which binds with a non-classical Estrogen Receptor (noER). Dr. Febin Farook recently worked as a researcher in Cleveland Clinic, Cleveland, Ohio on developing an in vitro model for Cortical Dysplasia to study the mechanism of epileptogenesis using rat neurons. During his Post-Doctoral Fellowship at University of Tennessee Health Science Centre, Memphis Tennessee he worked on the mouse model of Autism and Angelman disorders. As a post-doctoral fellow at VIB-KU Leuven, Belgium he focused on elucidating the molecular mechanism of Myoclonus Dystonia. He is a molecular neurobiologist interested in developing a career in academic teaching and research.

Faculty Coordinator: **Dr. Annie Feby**
 Student Coordinator: **Angel Sandreya Correya**
 Contact No. 9207745336

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- **ZALS- Zoology Alumni Lecture Series-** Talk on Opportunities for higher education in in life science. Ms. Sneha Jos. Ph.D. Scholar, NIMHANS, Bangalore (B.Sc. Zoology Model 2- 2013-16 batch) 13.11.2022.

ST. XAVIER'S COLLEGE FOR WOMEN, ALUVA
DEPARTMENT OF ZOOLOGY
 Presents
ZALS- ZOOLOGY ALUMNI LECTURE SERIES-2021
Ms. SNEHA JOS
 Ph.D Scholar
 National Institute of Mental and Health sciences
 (NIMHANS), Bangalore
 B.Sc. Zoology Model 2 (2013-16 Batch)

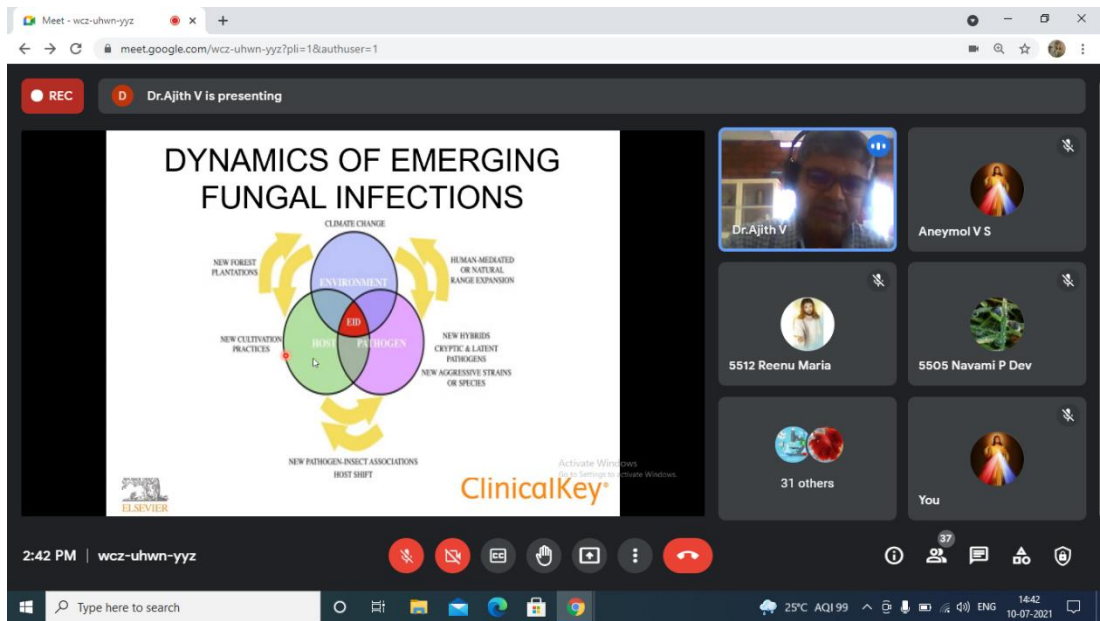
Faculty Coordinators:
 Dr. Aneymol V.S & Dr. Anu Anto
 Student Coordinators:
 Jisha Ann George, Advithi E P &
 Sruthi Pushpangadan

13 November 2021 | 09:30 a.m.
 Google Meet

Click the icon to register
 Click the Google meet icon to join

10:29 | ZALS- Zoology Alumni Lecture Series

- **Webinar on Pandemic fungal infections- An overview -** Dr. Ajith Vijayan, Assistant Professor, Microbiology department, Pushpagiri Institute of Medical Sciences, Thiruvalla on 10.07.2022.



- The department conducted an **Induction Program** for first year B.Sc. Zoology Model 1 and 2 students to inculcate a holistic understanding of the B.Sc. Zoology program of the college on 25.10.2021.

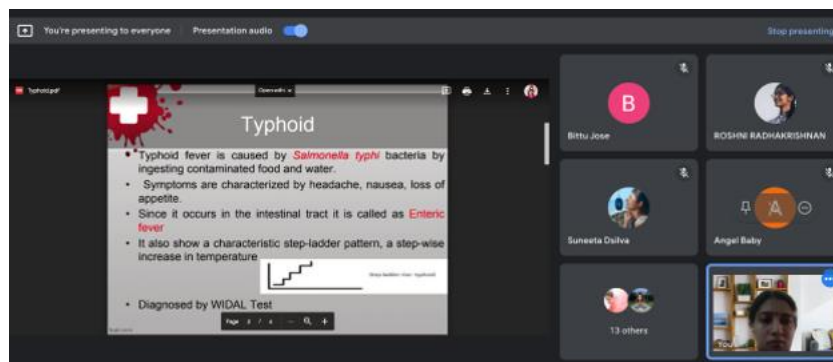


- **Meet the Innovator** session in association with IIC- Maria Kuriakose- Founder of “Thenga”- 18th December, 2021.

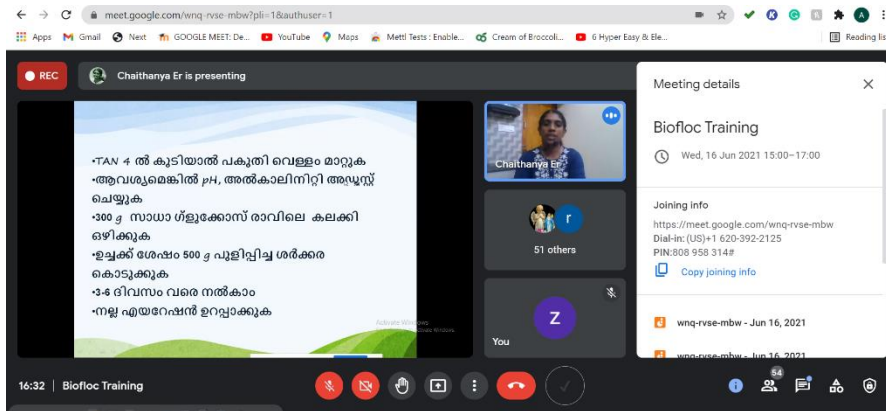
The poster is for a 'Meet the Innovator' session. At the top, it features logos for Kerala Startup Mission, Innovation and Entrepreneurship Development Centre, Institution's Innovation Council, and IPI. The main text identifies the event as being organized by IEDC & IIC in collaboration with the Department of Zoology at St. Xavier's College for Women, Aluva. The session is scheduled for 18 December 2021, from 10 AM to 11 AM. The resource person is Maria Kuriakose, founder of 'Thenga', which manufactures bowls and other products from coconut shells. The poster also lists IEDC Nodal Officers (Ms. Shereena John and Ms. Bilu Job) and IIC Convenors (Dr. S Revathi and Ms. Jonis V C). Registration is available via Google Meet.

Xaverian Zoology Outreach Program

- Four online sessions were conducted for the public under the title **Arogya Jalakam** to create awareness on Water and food borne diseases and reemerging diseases and its prevention.



- In association with UBA two E Workshops were conducted for the public on **Biofloc Fish farming: Innovations & Entrepreneurial Opportunities**. by Dr. Chaithanya ER, Research Assistant, Regional Shrimp hatchery, Azhikode and Mr. Georly George General secretary integrated modern farmers society on 16.06.2021 and 26.02.2022 respectively.



- Academic week observation-** Expert talk on Concepts of Sustainability by Dr. Shanthi Prabha V, Post Doctorate fellow in M.G. University.
- Student Led Talks were conducted as part of **interact program of Academia 2021-22**

- **Bridge Course** in Instrumentation & Lab Techniques in Zoology was conducted for I st year B.Sc. Zoology students.
- **Add on course** on Essentials of Microgreen, Environmental Microbiology and Biofloc fish

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Certificate Course: Essentials of Growing Microgreens
 Offered by the Department of Zoology
 2021-2022

Objectives

- To introduce the participants with novel microgreens technology and their unique nutritional composition, comprehensive scientific and practical understanding about the technology of growing microgreens.
- To sensitize and popularize this novel product among the health-conscious consumers

Course Outcome:
 Entrepreneurship skills Experiential learning
 Health boosting

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Certificate Course: Essentials of Growing Microgreens
 Offered by the Department of Zoology
 2021-2022

Total Hours: 36 Hrs
 Theory : 20 Hrs
 Practical: 16 Hrs

Click to Enroll
Click to Join Google Classroom

Course Coordinator: Dr.Revathy.S
 Resource Persons: Dr.Seema.K, Ms Binu Correya, Dr. Baby Divya,
 Dr. Anu Anto, Dr. Linda Louis & Dr. Revathy.S

farming were conducted

- **Newsletter** on the theme “Down the Lane of Pandemic” based on the theme COVID-19 was published

ACHIEVEMENTS

- Dr. Revathy. S won **Inspiring Teacher Award** by DC Group of Institutions
- **Dr. Revathy S** won certificate of appreciation towards her contribution as an exceptional women achiever in her field by district women and child development office, Ernakulam



- **Aleena Dennis, Meenakshi Shibu and Varna Sreekumar** -bagged First, second and third Position with A+ for the M.G. University BSc Zoology Model II examination held in March 2021.



Aleena Dennis Meenakshi Shibu Varna Sreekumar

- **Megha Maria Lal** won Second prize in CRISPR -2021 :-Outlook on a scientific phenomenon (English), SCMS Institute of Bioscience and Biotechnology Research &Development, Kerala



- **Aleena Sabu**- Certificate of Appreciation as Best N.S.S. Student Volunteer - M.G. University.



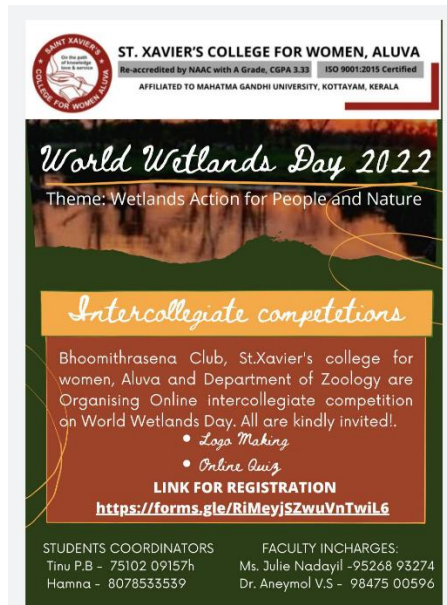
- **Lakshmi K**- M G. University Swimming Competition- Backstroke- 50 and 100- 3rd prize, IInd- 4 X 100 freestyle, IIIrd- 4 X 100 medley relay, IInd- 4 X 200- freestyle relay.



- **Aleena Dennis** - Excelsior award for the Best UG Project in National Conference RICERCA 2021 organized by St. Joseph's College for Women in association with Kerala Sasthra Sahithya Parishath and Society of Biotechnologists, India

Competitions organized

Wetland day- Intercollegiate Logo making and Online quiz competition



Wildlife week- Intercollegiate Photography, Reels on Wild life conservation and Slogan writing competitions were organized

BEST PRACTICE OF THE DEPARTMENT- MONITORING BIODIVERSITY THROUGH CITIZEN SCIENCE PROGRAMS

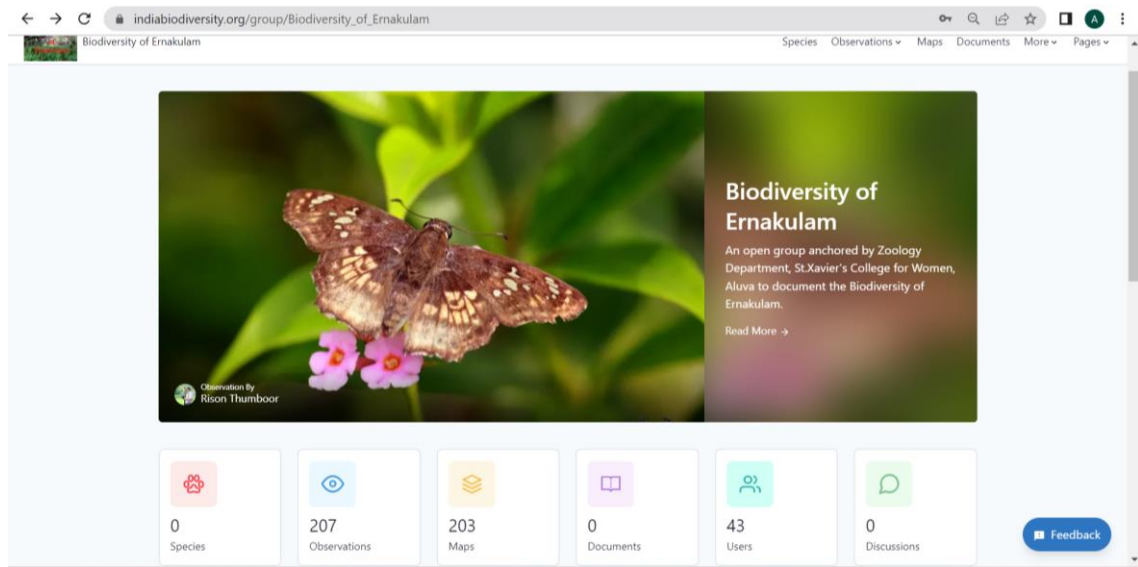
Citizen science is the public involvement in inquiry and discovery of new scientific knowledge. Students and faculty of Zoology department actively participated in the citizen science programmes. An overview of citizen science programmes is provided to first year students during their bridge course.

INDIA BIODIVERSITY PORTAL- BIODIVERSITY OF ERNAKULAM

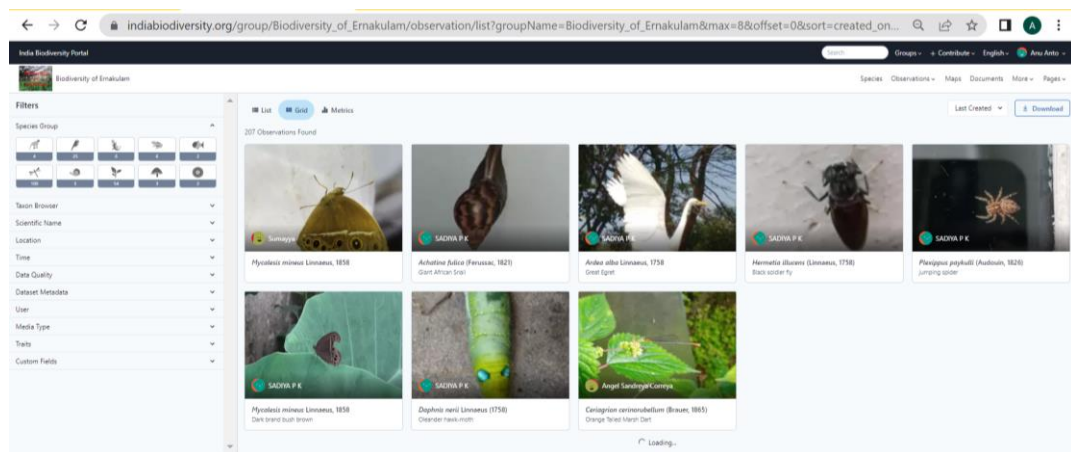
India Biodiversity Portal is a unique repository of information on India's biodiversity. The portal aims to aggregate data through public participation and provide open and free access to biodiversity information.

An open group 'Biodiversity of Aluva' was launched in the India Biodiversity portal (IBP) anchored by the Department of Zoology, St. Xavier's College for Women, Aluva for documenting the biodiversity of Aluva. The group was renamed as "Biodiversity of Ernakulam" to include more wider landscapes. Forty-three users have registered in this portal and 207

observations were made as part of documenting biodiversity of this area. Photographs of the specimens along with their taxonomy were uploaded to the portal.



Screenshot of opening page of Biodiversity of Ernakulam page hosted by the college



Biodiversity documentation of the area by our students

BIRDING AS A CITIZEN SCIENCE EVENT

ebird.org- Birders of the college are turning their sightings into digital data by reporting where, when and how many of which species they see. Students and faculty of the college made bird observations from their regional areas, and they are uploaded to ebird. So far, they have made observations of more than 198 species of birds from different locations of India. These students are having their life list of birds and can compare their sightings with those of friends and know where to look for birds they haven't seen before. And for our students, the eBird project has given their pastime a new sense of purpose.

This year, the fifth campus bird count was organized during February 18-21,2022 as a part of Greater Backyard Bird Count, a citizen Science event. During a stretch of four days, we could

report 30 species of birds and the list includes White throated kingfisher, Greater Racket tailed Drongo, Purple sunbird, purple heron etc. This annual exercise help to answer how birds are distributed across the country and how they are affected by habitat changes and weather. Events like this demonstrate the power of involving students/common citizens to contribute valuable information about bird populations. Our students also made ebird.org portal for uploading their undergraduate project findings.

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| <p style="text-align: center;">eBird Field Checklist</p> <p>St.Xaviers College for Women, Aluva Ernakulam, Kerala, IN ebird.org/hotspot/L6765773 51 species (+15 other taxa) - Year-round, All years</p> <p>Date: _____ Start time: _____ Duration: _____ Distance: _____ Party size: _____ Notes: _____</p> <p>This checklist is generated with data from eBird (ebird.org), a global database of bird sightings from birders like you. If you enjoy this checklist, please consider contributing your sightings to eBird. It is 100% free to take part, and your observations will help support birders, researchers, and conservationists worldwide.</p> <p>Go to ebird.org to learn more!</p> | <p>Waterfowl</p> <p>___ Lesser Whistling-Duck <i>Dendrocygna javanica</i></p> <p>Pigeons and Doves</p> <p>___ Rock Pigeon <i>Columba livia</i> ___ pigeon/dove sp. <i>Columbidae</i> sp.</p> <p>Cuckoos</p> <p>___ Greater Coucal <i>Centropus sinensis</i> ___ coucal sp. <i>Centropus</i> sp. ___ Asian Koel <i>Eudynamis scolopacea</i></p> <p>Swifts</p> <p>___ Indian Swiftlet <i>Aerodramus unicorn</i> ___ swiftlet sp. <i>Collocalia/Aerodramus</i> sp. ___ swift sp. <i>Apodidae</i> sp.</p> <p>Rails, Gallinules, and Allies</p> <p>___ White-breasted Waterhen <i>Amaurornis phoenicurus</i></p> <p>Shorebirds</p> <p>___ Red-wattled Lapwing <i>Vanellus indicus</i> ___ Bronze-winged Jacana <i>Metopidius indicus</i> ___ Wood Sandpiper <i>Tringa glareola</i></p> <p>Gulls, Terns, and Skimmers</p> <p>___ Little Tern <i>Sternula albifrons</i> ___ Whiskered Tern <i>Chlidonias hybrida</i> ___ large tern sp. <i>Hydroprogne/Thalasseus</i> sp. ___ tern sp. <i>Sternae</i> sp.</p> <p>Cormorants and Anhingas</p> <p>___ Little Cormorant <i>Microcarbo niger</i> ___ Indian Cormorant <i>Phalacrocorax fuscicollis</i> ___ cormorant sp. <i>Phalacrocoracidae</i> sp.</p> <p>Hérons, Ibis, and Allies</p> <p>___ Purple Heron <i>Ardea purpurea</i></p> | <p>___ Intermediate Egret <i>Ardea intermedia</i> ___ Great/Intermediate Egret <i>Ardea alba/intermedia</i> ___ Little Egret <i>Egretta garzetta</i> ___ white egret sp. <i>Ardea/Egretta/Bubulcus</i> sp. ___ Indian Pond-Heron <i>Ardeola grayii</i> ___ Black-crowned Night-Heron <i>Nycticorax nycticorax</i> ___ Black-headed Ibis <i>Threskiornis melanocephalus</i></p> <p>Vultures, Hawks, and Allies</p> <p>___ Brahminy Kite <i>Haliastur indus</i></p> <p>Kingfishers</p> <p>___ Common Kingfisher <i>Alcedo atthis</i> ___ Stork-billed Kingfisher <i>Pelargopsis capensis</i> ___ White-throated Kingfisher <i>Halcyon smyrnensis</i> ___ Pied Kingfisher <i>Ceryle rudis</i></p> <p>Bee-eaters, Rollers, and Allies</p> <p>___ Green Bee-eater <i>Merops orientalis</i> ___ Blue-tailed Bee-eater <i>Merops philippinus</i> ___ bee-eater sp. <i>Merops</i> sp.</p> <p>Barbets and Toucans</p> <p>___ Coppersmith Barbet <i>Psilopogon haemacephalus</i> ___ White-cheeked Barbet <i>Psilopogon virdis</i></p> <p>Woodpeckers</p> <p>___ Greater Flameback <i>Chrysocolaptes guttacrastatus</i> ___ Greater/Common Flameback <i>Chrysocolaptes guttacrastatus/Dinopium javanense</i> ___ Black-rumped Flameback <i>Dinopium benghalense</i></p> <p>Parrots, Parakeets, and Allies</p> <p>___ Rose-ringed Parakeet <i>Psittacula krameri</i> ___ White-cheeked Parakeet <i>Psittacula virdis</i></p> <p>Old World Orioles</p> <p>___ Indian Golden Oriole <i>Oriolus kundoo</i></p> |
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Ebird Filed Checklist from St.Xavier’s college for Women, Aluva (Hotspot id- L6765773)

DEPARTMENT OF ZOOLOGY
ST.XAVIER'S COLLEGE FOR WOMEN, ALUVA
PRESENTS



Campus
Bird Count

(An event of the
Great Backyard Bird Count-India)

18 - 21 February
2022

SPOT US

ON YOUR
CAMPUS

HOW TO DO CAMPUS BIRD COUNT?

The protocol is quite flexible: basically, you would walk around, and collect as many 15-minute 'complete' lists as possible. In other words, each 15 min list should contain all species detected in that time period. Write it in a paper and submit to Zoology department of the college.

Those who interested in joining for bird walk in the campus can join us on 18th and 21st February-7.30 to 8.30 a.m.

COORDINATOR- DR. ANNIE FEBY



Campus bird count 2022

PROGRAMS THROUGH XAVERIAN ZOOLOGY OUTREACH PROGRAM (XAV ZOP)

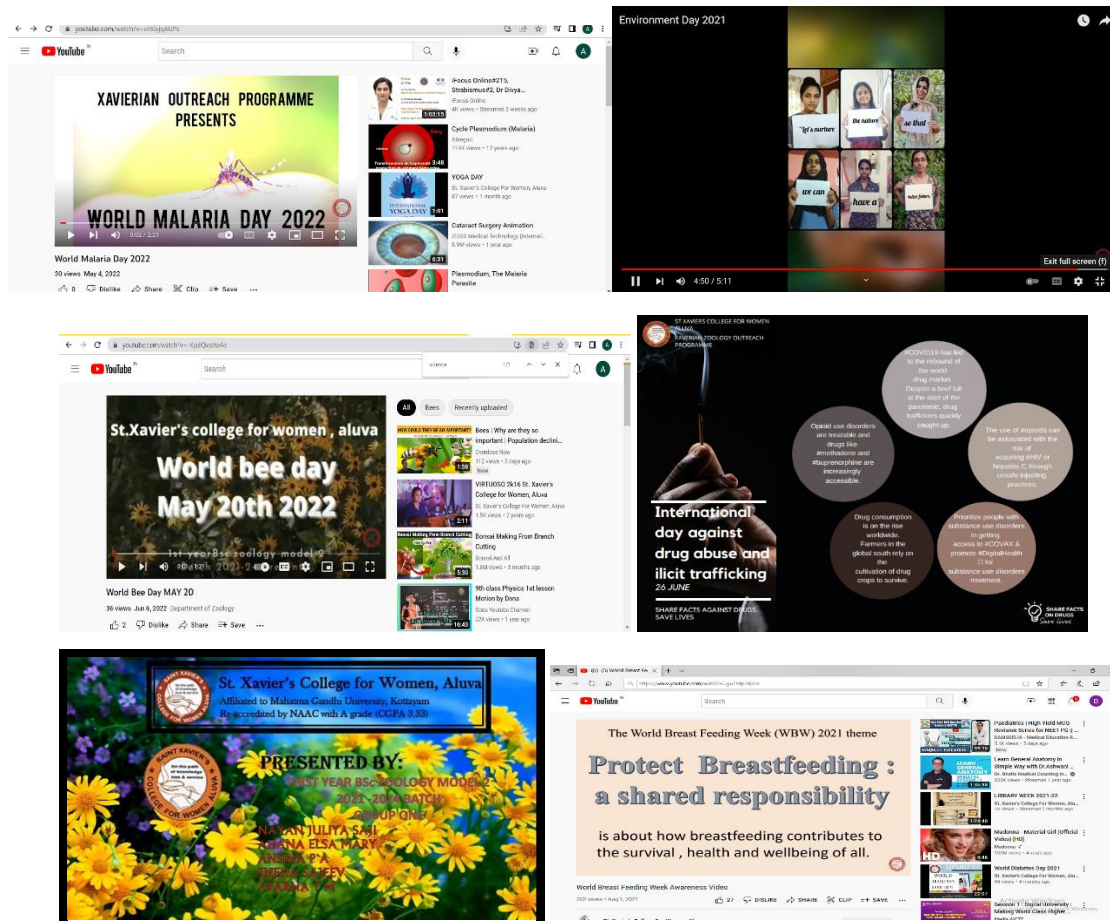
Department of Zoology has been actively involved in extension activities in the neighbourhood. Due to Covid -19, most of the community outreach programs were based on virtual volunteering. Virtual volunteering when designed well and delivered efficiently, can lead to the creation of a stronger sense of volunteering for students. These programs focussed on specific days proposed by United Nations as occasions to mark particular events or topics in order to promote peace and security in the world, respect for human dignity, freedom of expression, gender equality for sustainable development.

List of Programs done as part of (XAV ZOP)

| Sl.No. | Event | Date |
|--------|---|--------------------------------------|
| 1 | E Workshop on Biofloc Fish farming: Innovations & Entrepreneurial Opportunities | 15.06.2021 |
| 2 | E Workshop on Biofloc Fish farming: Innovations & Entrepreneurial Opportunities | 26.02.2022 |
| 3 | ArogyaJalakam- Series | 26.07.2021, 13.09.2021,20.09.2021 |
| 4 | World Environment Day | 05.06.2021 |
| 5 | World Ocean Day | 08.06.2021 |
| 6 | World Food Safety Day | 07.06.2021 |
| 7 | Blood Donor Day | 14.06.2021 |
| 8 | International day against drug abuse and illicit trafficking | 26.06.2021 |
| 9 | International Day of Tropics | 29.06.2021 |
| 10 | National Doctor's Day | 01.07.2021 |
| 11 | World Zoonoses Day | 06.07.2021 |
| 12 | World Population Day | 11.07.2021 |

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| 13 | World Hepatitis Day | 28.07.2021 |
| 14 | Global Tiger Day | 29.07.2021 |
| 15 | World Breast feeding week | 01.08.2021 |
| 16 | International Day For Ozone Preservation | 16.09.2021 |
| 17 | World Elephant Day | 12.08.2021 |
| 18 | World Diabetes Day | 14.11.2021 |
| 19 | World AIDS Day | 1.12.2021 |
| 20 | Human Rights Day | 10.12.2021 |
| 21 | International Day for Epidemic Preparedness | 27.12.2021 |
| 22 | International Day of women and girls in science | 11.02.2022 |
| 23 | World Wetland Day | 02.02.2022 |
| 24 | World Water Day | 22-03-2022 |
| 25 | World Malaria Day | 25-04-2022 |
| 26 | World Migratory Bird Day | 08.05.2022 |
| 27 | World Bee Day | 20.05.2022 |
| 28 | International Day for Biological Diversity | 22.05.2022 |
| 29 | World No tobacco Day | 31.05.2022 |

Screenshots of online awareness videos prepared by students to spread awareness on special days





ST.XAVIERS COLLEGE FOR WOMEN, ALUVA
Affiliated to Mahatma Gandhi University, Kottayam

XAVERIAN ZOOLOGY OUTREACH PROGRAM

Presents

School level quiz competition
(For 8th, 9th, 10th Grade students)

Quiz on food safety



**WORLD FOOD
SAFETY DAY
JUNE 7**

"Safe food now for a healthy tomorrow"

Faculty coordinator : Dr. Anu Anto

Student coordinator : Lakshmi Sathyapal

Date: 07 / 06 / 2021

Time : 10:00 AM - 4:00 PM

' Earn a free e-certificate '

Students who score above 50% will be awarded e-certificates

To attend the quiz just click on the link : [food safety quiz](#)

Contact mail id : zoology@stxaviersaluva.ac.in

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