

# Zoology Buzz



Department of zoology

St. Bede's College

## Zoology Highlights

### THE DISCOVERY OF 866 NEW MARINE SPECIES

The Nippon Foundation-Nekton Ocean Census, the world's largest collaborative effort to accelerate the discovery of marine life, today announced the discovery of 866 new marine species. This is a significant step in advancing our understanding of ocean biodiversity, with discoveries expected to grow as the programme continues.

The identification and official registration of a new species can take up to 13.5 years—meaning some species may go extinct before they are even documented. To address this, The Nippon Foundation and Nekton jointly launched the Ocean Census in April 2023 to transform species discovery, accelerating the identification of marine life to close critical knowledge gaps before it's too late.



#### TURRIDRUPA MAGNIFICA – GASTROPOD

A marine gastropod discovered at 200–500m depths off New Caledonia and Vanuatu by Dr. Peter Stahlschmidt (University of Landau, Germany).

#### NEW OCTOCORAL

Found in the Maldives by Aishath Sarah Hashim & Aminath Nasath Shanaan (Maldives Marine Research Institute) and Asako K Matsumoto (Chiba Institute of Technology; The University Museum, the University of Tokyo). There are only 5 known species of this genus.



RIDHIMA KASHYAP  
BSC III YR

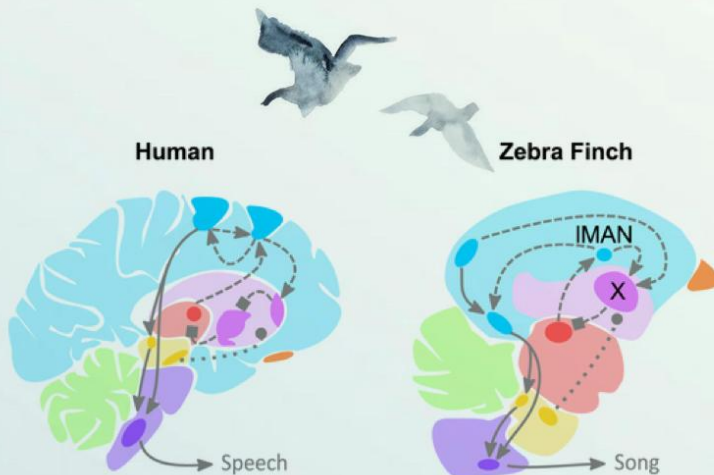
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## Vocal changes in birds may predict age-related disorders in people

University of Arizona neuroscientists studying the brains of songbirds have found that aging alters the gene expressions that control the birds' song. The finding could lead to earlier diagnoses and better treatments for human neurodegenerative disorders such as Parkinson's disease and Alzheimer's disease which are known to hinder vocal production in their early stages.



Zebra finches, native to Australia, have a strikingly similar-looking brain to humans', particularly the area known as the basal ganglia, which is used for motor function, including speech, Miller said. The finches also develop their birdsong by mimicking their parents and other birds around them -- the same way humans learn to speak

ADITI SHARMA  
BSC III YR

The *Melanocetus johnsonii*, or black seadevil angler fish, was captured in photos during a rare sighting.

On Feb. 9, 2025, CNN reported that researchers with the non-government organization Condrik Tenerife took photographs of an adult black seadevil angler fish near the surface. The researchers had been on a shark research expedition when the good fortune struck. Typically, these fish appear between 1,000 and 2,000 meters below the surface, making their appearance in clear blue water a surprise.

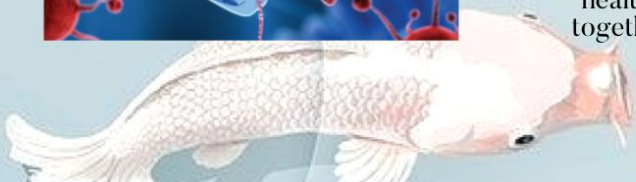
LAKSHYA SHARMA  
BSC III YR



Cancer, a disease marked by uncontrolled cell growth, affects millions worldwide. Despite medical advancements, it remains a leading cause of death globally. However, growing awareness and research are changing the narrative. Early detection, targeted therapies, and immunotherapy have improved treatment outcomes. Lifestyle modifications like a balanced diet, regular exercise, and avoiding tobacco can significantly reduce cancer risk.

As we strive for a cancer-free future, promoting awareness and supporting research are crucial. Individuals can take proactive steps towards a healthier tomorrow. By understanding risk factors, adopting healthy habits, and encouraging others to do the same, we can work together to combat cancer. Let's unite in the fight against this disease and create a brighter, healthier future for all.

PRANJAL THAKUR  
BSC III YR





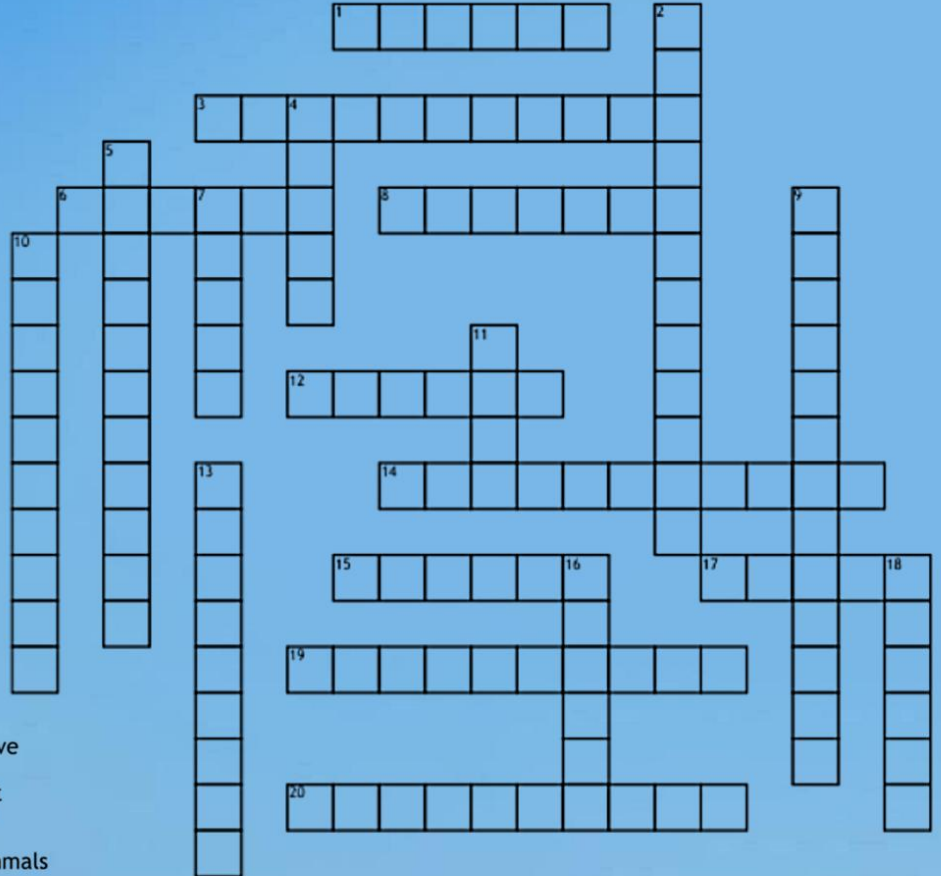
# VERTEBRATES AND INVERTEBRATES

## Across

1. invertebrate with six legs
3. An animal that takes on the temperature of its surroundings.
6. both vertebrates and invertebrates need to breath in this gas
8. they produce milk for their young
12. Symmetry in which body radiates out from a central hub
14. Able to maintain a constant body temperature.
15. vertebrates like us
17. These animals fly, and belong to the class Aves.
19. Frogs, toads, and salamanders
20. An animal that has a backbone.

## Down

2. Humans and other vertebrates possess this type of skeleton.
4. Used by land animals to extract oxygen from the air.
5. Insects possess this type of skeleton.
7. Fish use these to extract oxygen from water.
9. These animals have no backbones.
10. The phylum that includes insects and crustaceans
11. The skin of mammals is covered by\_\_\_\_\_.
13. Body symmetry equal on both sides
16. invertebrate with 8 legs
18. The skin of a fish is made of these.





# TEACHER'S ACHIEVEMENTS

## Dr. Shweta Thakur

1. Published book chapter: The role of noctuid moths as umbrella taxa in insect conservation: A Review. International Book Chapter (Interdisciplinary Studies in Humanities and Science Vol 1(II) ISBN: 9789359965338
2. Received an acknowledgment and trophy from CMAI National Technical Education Empowerment Committee for excellent contribution in education sector in the month of December 2024.
3. Attended Workshop on Generative AI Tools for Enhancing Teaching & Learning on October 23, 2024 organised by IQAC Cluster, Pune.
4. Attended 6 day FDP on Enhancing Quality Assurance in Higher Education: Insights into NEP 2020 and NAAC Binary Accreditation Framework from December 16–21, 2024 organised by IQAC, St. Bede's College.
5. Attended 8 Days Online NEP Orientation & Sensitization Programme from September 23, 2024 to October 1, 2024 organised by HPU, MMTTC, Shimla, Himachal Pradesh.
6. Received an acknowledgement for reviewing chapters of the manuscript provisionally titled Non-Chordata: From Protists to Pseudocoelomates by Cambridge University Press India, New Delhi.
7. Attended a Webinar on "CMAI-CSAI-IHRO Cyber Warrior Mission: A Pathway Towards Employability" organised by Department of Computer Science, St. Bede's College, Shimla on November 22, 2024.
8. Attended 5 Days Online Faculty Development Program on "Academic and Administrative Audit for NAAC Binary Accreditation" from August 8th to 13th, 2024 organised by Institute for Continuous Learning Outcome based Education in Higher Education.
9. Attended One Day All India IQAC Workshop 2024, on June 29, 2024 organized by IQAC, Uttarakhand University, Dehradun with support from the Department of Higher Education, Uttarakhand.

## Dr. Jyotika Brari

### **Published a book chapter**

The role of noctuid moths as umbrella taxa in insect conservation: A Review. International Book Chapter Interdisciplinary Studies in Humanities and Sciences. Volume: I Issue: II : 24-28

Attended Six-day Faculty Development Program on "Enhancing Quality Assurance in Higher Education: Insights into NEP 2020 and NAAC's Binary Accreditation Framework at St. Bede's College, Shimla (16 -21 December, 2024).

Attended NEP Orientation and Sensitization programme under Malaviya Mission teacher Training Programme of UGC organized by MMTTC HPU Shimla from September 23 to October 1, 2024.







# Editor's Note

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Welcome to this edition of Zoology Buzz! As we explore the fascinating world of animals, it's important to reflect on the critical role zoology plays in understanding life on Earth. Zoology, the scientific study of animals, is not only about observing and classifying species—it is fundamental to addressing some of the most pressing challenges of our time, including biodiversity conservation, habitat destruction, climate change, and the protection of endangered species.

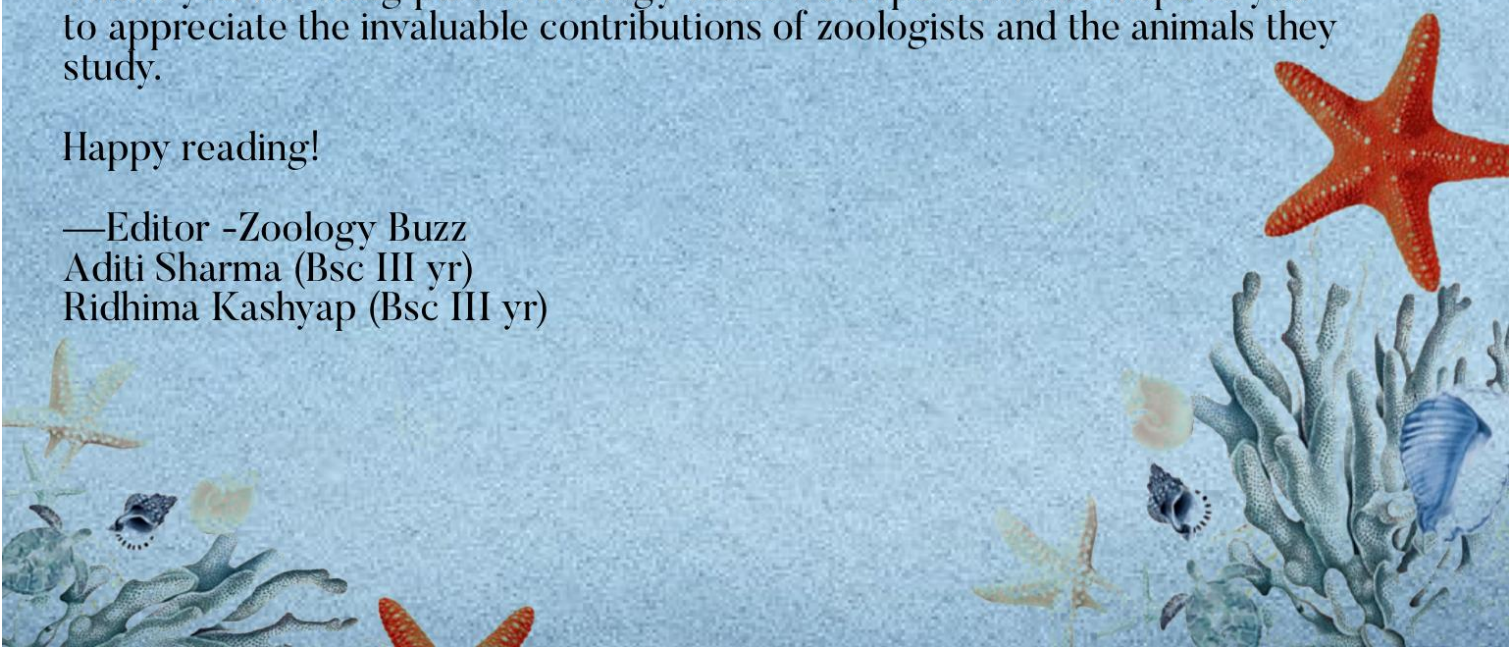
Zoologists work at the intersection of research and real-world application, helping us comprehend the behavior, genetics, physiology, and ecology of animals. This knowledge is vital for sustaining ecosystems, improving animal welfare, and even enhancing human health through advancements in medicine and biotechnology.

As we continue to face environmental challenges, the study of zoology becomes more crucial than ever. It empowers us to make informed decisions that affect wildlife conservation policies, improve sustainable practices, and ensure that future generations can witness the rich biodiversity that our planet has to offer.

Thank you for being part of Zoology Buzz. We hope this issue inspires you to appreciate the invaluable contributions of zoologists and the animals they study.

Happy reading!

—Editor -Zoology Buzz  
Aditi Sharma (Bsc III yr)  
Ridhima Kashyap (Bsc III yr)





# Art Gallery



-by Aditi Sharma (Bsc III yr)



# Academic Achievements

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## Pranjal Azad

BSC third year student, Pranjal Azad secured the first position in zoology BSC second year.



## Lakshya Sharma

BSC third year student, Lakshya Sharma secured the second position in zoology BSC second year.



## Pranjal Thakur

Certificate of recognition was awarded to Pranjal Thakur for being in the student council as the secretary of Hackathon cell



# Ridhima Kashyap

Student of BSC third year Ridhima Kashyap was awarded with the certificate of recognition of being in the student council as the President of the music club.



She was also awarded with Sir Pascal memorial scholarship for academic excellence in zoology.



# Aditi Sharma

Student of BSC third year, Aditi Sharma was awarded with the certificate of recognition for being in the student council as the President of society.



She was also awarded with PTA award for all rounder in zoology department.



# Departmental Activities

## VISIT TO HIMALAYAN FOREST RESEARCH INSTITUTE PANTHAGHATI SHIMLA

On September 3, 2024 the students of B.Sc. - III, Department of Zoology, St. Bede's College visited Himalayan Forest Research Institute, Panthaghati Shimla. The visit was organized to provide students with practical exposure to real-world research activities. The visit was designed to deepen students understanding of the challenges and solutions in forest conservation, management, and biodiversity, equipping them with both knowledge and practical skills essential for their academic and professional growth. The visit to the Himalayan Forest Research Institute was highly educational and impactful, providing them with valuable insights, practical skills, and enhanced knowledge. This fostered a greater appreciation for the role of scientific research in protecting forests and ecosystems, while equipping students with hands-on experience and knowledge that will benefit their future studies and careers.



## HANDS ON TRAINING IN BEEKEEPING AT Y. S. PARMAR UNIVERSITY OF HORTICULTURE AND FORESTRY NAUNI

On October 23, 2024 the SEC students of B.Sc. III and B.Sc. II Department of Zoology, St. Bede's College visited Y. S. Parmar University of Horticulture and Forestry Nauni, Solan for hands on training in beekeeping. The training introduced students to the fundamentals of beekeeping, focusing on two bee species:

*Apis mellifera* and *Apis cerana*

This session provided a unique blend of theoretical knowledge and practical skills, bridging classroom learning with real-world applications. The training provided students with hands-on skills in hive management, understanding bee behaviour, and recognizing diseases. They learned about honey, pollen, and wax production, emphasizing ethical harvesting and bee welfare. The program highlighted bees crucial role in pollination and biodiversity, linking it to ecosystem health. Students left with a foundation in sustainable beekeeping and potential career pathways in apiculture and conservation.





## RAISING AWARENESS ON BIODIVERSITY CONSERVATION

On October 23, 2024, students from the Zoology Department conducted an awareness activity through PowerPoint presentation on biodiversity conservation at Frontline Public School in Thanedar, Shimla. This initiative was aimed at raising awareness among school students about the critical importance of preserving our planet's biodiversity. The event was organized to engage young minds in discussions about environmental issues and to inspire them to act in their communities. The awareness program successfully increased students awareness of the significance of biodiversity and the urgent need for its conservation. The presentation provided practical conservation strategies, encouraging students to consider their contributions to environmental efforts. The event inspired students to become advocates for biodiversity conservation and take part in stewardship activities.



## RAISING AWARENESS ON SELF-BREAST EXAMINATION

On November 27, 2024, the Department of Zoology, under the aegis of the IQAC, organized an impactful awareness session on Self-Breast Examination to promote early detection and prevention of breast cancer. The program saw active participation from students of Shimla Nursing College, Bhattakulfa, and local residents from the Shimla region, ensuring a broad outreach. The primary objective of the initiative was to educate and inform the community about breast cancer, empowering individuals to take charge of their health through awareness and proactive practices. Dr. Kalpana, a renowned social worker and a supporter for breast cancer awareness, graced the occasion as the resource person. The awareness program on self-breast examination was a significant step toward fostering a proactive approach to women's health. It provided participants with vital knowledge and practical skills, emphasizing the importance of early detection and prevention. The Department of Zoology, along with IQAC, reaffirmed its commitment to organizing similar programs that address pressing health concerns and contribute to the well-being of the community.





## NATIONAL SCIENCE DAY

On February 28, 2025, the Department of Science at St. Bede's College celebrated National Science Day under the theme "Empowering Indian youth for global leadership in science and innovation for viksit bharat". The event featured a diverse range of activities. Students gained valuable insights into career opportunities in science and technology while developing research, presentation, and problem-solving skills through hands-on activities. The integration of science with mathematics, technology, and real-life applications enhanced their appreciation for scientific advancements. Idea-pitching sessions and creative competitions encouraged innovation and practical application of scientific concepts, while group activities fostered teamwork and collaboration among participants.

