

Shri Shivaji Education Society Amravati's
Shri Shivaji Science And Arts College, Chikhli
Department of Zoology
Annual Report 2024-25

Department of Zoology conducted curricular, co-curricular and extra-curricular activities during the session 2024-25. A brief report is as follows_

Study Tour at Koradi (31.08.2024)

The educational visit was organized in accordance with the Memorandum of Understanding between the Department of Zoology, Shri Shivaji Science and Arts College, Chikhli, and the Department of Fish Seedling Center, Koradi, under the Government of Maharashtra on **August 31, 2024**.

A total of **24** students from the third year of the Bachelor of Science program participated in this excursion. During the visit, the students explored various types of fish ponds, including nursery ponds, hatchery units, and fish seedling areas, while also gaining insights into the artificial breeding processes of fish. Additionally, they studied several fish species, such as Catla, Rohu, and Cyprinus.



Wildlife Week Celebration- Field Visit at Chikhaldara (10.10.2024)

The Department of Zoology, Shri Shivaji Science And Arts College Chikhli has organized field visit at Chikhaldara, Dist. Amravati, on the occasion of “Wildlife Week” 2024, on dated 10-10-2024. In this field visit 31 students of B.Sc. I year was involved. The “Wildlife Week” 2024 was celebrated by the department of Zoology by visiting various spot of Chikhaldara. During this field visit students experience the forest walk and observation of wild animals.



World Sparrow Day (20.03.2025)

The Department of Zoology, has celebrated World Sparrow Day on 20th March 2025. On the occasion of World Sparrow Day the department of zoology has organized a training workshop on study of birds by using e-bird app. This activity was conducted under MoU in between department of Zoology, Shri Shivaji Science And Arts College Chikhli and WECS Amravati.

On this occasion Mr. Sajid Shaikh raise awareness in the students for the conservation of sparrow in the students of age group of 09-15.



Visit to PHC Laboratory at Rural Hospital Chikhli (07.04.2025)

As per the directions in curriculum, a visit to PHC laboratory was organized on 07.04.2025. Total 28 students of BSc-III, Sem-VI along with Dr. V. M. Hemke and Mr. Sajid Shaikh were visited to Pathology Laboratory of Rural Hospital, Chikhli. At laboratory, their staff members Lab Technician Mr. Gawali and their associates gave demo of sample collection, sample handling, Equipments they are using like Microscope, PCR machines, Centrifuge, Hematological equipments and its careful handling. Students were observed that as at very nominal charges almost pathological tests available there, as it is Government Rural Hospital.

Outcome: After visit students made update regarding many pathological tests including HIV, WIDAL, TB etc available at Rural Hospital, Chikhli and students were satisfied by watching cleanliness and well working of Laboratory.



Research Activities

Research Center in Zoology	Research Scholars Ongoing PhD				
	Dr. M. T. Nikam		Dr. V. M. Hemke		Total Research Scholar
	03	01 (Thesis submitted)	03	01(CSIR-SRF)	08

- 1) Mr. Sandip Nagmote submitted his thesis to Sant Gadge Baba Amravati University, Amravati under the supervision of Dr. M. T. Nikam.
- 2) Mr. Yogesh Giri promoted JRF to SRF for his research fellowship from CSIR.
- 3) Mr. Premraj P. Ware & Ms. Sampada S. Joshi admitted to PhD Course Work Academic Session. 2023-24.

Research Publications:

Sr. No.	Research Paper published/presented
Dr. V. M. Hemke	Published Book (As an author): A Textbook of Tools and Techniques in Biology- ISBN: 978-81-977657-5-9
	Published Book (As an author): A practical Handbook of Tools and Techniques in Biology- ISBN: 978-81-967529-9-6.
	Published Book (As an Editor): Biochemical Methods A Comprehensive Guide ISBN: 978-81-967529-5-8
	Published paper: Impact of Beekeeping on the Socio-Economic Growth of India: A review. Journal <i>Exploration</i> .
	Published paper: Biodegradable Sanitary Napkins For Sustainable Menstrual Health In Women: A Review In a conference Multidisciplinary Research and Innovations (NCMRI- 2024) Akola. Dated 27thSept 2024. Page No. 224-229 <i>Aayushi International Interdisciplinary Research Journal</i> (ISSN 2349-638x).
	Book Chapter: “Conservation status of tigers and the TATR” <i>Book: Habitats And Biodiversity Conservation-</i> ISBN No. 978-81-977657-9-7 Page No. 99-110.
Dr. R. B. Gade	Published paper: An Investigation on the Variety & Seasonal Abundance of Butterflies at the Shri Shivaji College Campus, in Chikhli Di Buldhana. at a National Conference Multidisciplinary Research & Innovations India. <i>Aayushi Int. Interdisciplinary Research Journal</i> . ISSN 2349-638X.
Dr. M. T. Nikam	Published paper: An Investigation on the Variety & Seasonal Abundance of Butterflies at the Shri Shivaji College Campus, in Chikhli Di Buldhana. at a National Conference Multidisciplinary Research & Innovations India. <i>Aayushi Int. Interdisciplinary Research Journal</i> . ISSN 2349-638X.
Mr. S. S. Shaikh	Published paper: Women as catalysts for change: A Systematic Review of

	Gender Dimension in Environmental Conservation. <i>Athrav Publication</i> at Womens' Conference on 8 th March 2025 on Gender Equality & Sensitization at Shri Shivaji Science And Arts College, Chikhli
Mr. S. D. Lodhe and P. P. Ware (Research Student)	Published paper: A Preliminary Checklist of Entomo Fauna from Shri Shivaji College Campus Chikhli, Di:Buldhana Maharashtra:-IMPACT-2025 organized on 27th March 2015 at Rajshri Shahu Science College, Chandur Railway.
Ms. Sampada Joshi (Research Student)	Published paper: Molecular Tools In Conservation Genetics :- DNA Barcoding, Microsatellite, eDNA at at International Conference on IMPACT-2025 organized on 27th March 2015 at Rajshri Shahu Science College, Chandur Railway.

Extension Activities:

- 1 Department of Zoology conducted, "Blood Group Detection" of the college students.
- 2 Zoology Students regularly check the Haemoglobin percentage of college students as well as completed different projects related to Hb% among pregnant women in society.
- 3 Department of Zoology conducted, "Blood Pressure Measurement" of the college staff and Completed different projects related to "BP Measurement" of people in society.

Best Practices

1 Study of Avian Fauna with eBird App

Aim: To make students aware to understand global e-platform eBird App and motivate them to start observed and upload checklist of birds of Chikhli Region on eBird.

The Practice: During field study Zoology students made aware about eBird App.

On the occasion of World Sparrow Day-20th March 2025 a departmental Training Program was organized. Trainer was Mr. Somesh Lodhe. He gave detailed ideas about how to use eBird app to students. This app is worldwide use for studying bird. At first stage, students downloaded eBird Mobile App from Play store b) Set there preferences c) Downloaded and installed packs d) Started a checklist e) Selected a location f) Reviewed, Submitted and Shared Students submitted checklist of birds which are commonly found in premises.

Evidence of success: Zoology staff and students regularly enter the sightings on eBird App. Data

available on eBird database.

Teachers Activities

Dr. Vijayshree M. Hemke

- Worked as a chairperson in the National Conference on frontiers in Multidisciplinary Approaches in Life Sciences (NCFMALS-2025) organized by Rayat's D. P. Bhosale College, (NAAC 4th Cycle A++ CGPA-3.77) Koregaon, Satara on 16th April 2025.
- Worked as a Rapporteur for Research Paper Presentation at International Conference on Innovative Multidisciplinary Perspective and Collaborative Transformation in Science and Technology:-IMPACT-2025 organized on 27th March 2015 at Rajshri Shahu Science College, Chandur Railway.
- Worked as a University Subject Expert of the Screening Cum Evaluation Committee for the placement of Mr. Pidhekar at G.S. College, Khamgaon.
- Worked as a University Subject Expert of the Screening Cum Evaluation Committee for the placement of Dr. Khawal & Dr. Tandale at Shri Vyankatesh Mahavidyalay, D. Raja.
- Working as a Criterion Coordinator for "Criterion-I Curricular Aspects" of NAAC.
- Working as a Coordinator for Alumni Association.
- Working as a Single Point of Contact (SPOC) for SWAYAM-Local Chapter, LCID-5455.
- Published newspaper articles on "Environment and Wildlife Awareness" in reputed Journal Shivsanstha.

Dr. Rajendra Gade

- Worked as an Exam Co-officer at Anuradha Engineering College, Chikhli
- Dr. Gade granted a patent on "Method and Composition for Targeted Cancer Treatment Using pH-Responsive Nanoparticles for Controlled Drug Release" on 27/11/2024.
- Worked as an Organizing Secretary for State level Worksop on Research Methodology organized strengthening component 3.00 PM-USHA.

Dr. V.M. Hemke
Head
Department of Zoology