



“New discoveries

Patron

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Highpoints

- ⇒ Newflash
- ⇒ Research Viewpoints of faculty members
- ⇒ Students contributions
- ⇒ Departmental activities

FROM EDITOR'S DESK

This is the first sincere effort of the students and faculty members of the Department of Zoology to upgrade the knowledge of students about the latest development in the animal world . I thank all the contributors for the successful publication of this newsletter.

Dr. P. Mukherjee

Head, Department of Zoology

Introduction to Cancer in Dogs

According to the Texas A&M University College of Veterinary Medicine, "Dogs have 35 times as much skin cancer as do humans, 4 times as many breast tumors, 8 times as much bone cancer, and twice as high an incidence of leukemia. Other common types of cancer found in dogs include cancer of the mouth, lymphoma, testicular and abdominal tumors.

Surbhi Dhurve



Msc III sem Zoology



Indian faunal resource India is one among the seventeen mega-diversity countries in the world. The country embraces more than 92,037 animal species (over 7.50% of world's known species).ian faunal resource

FROM THE PRINCIPAL'S DESK

I would like to congratulate the H.O.D. and the faculty members of Department of Zoology for bringing out the first issue of “ Zoo –Hunt”

The chosen theme “New discoveries in zoo world” will provide deep insight into the latest developments in the field of Zoology .

I hope this issue will deliver a new outlook towards the subject zoology and will inspire our students for more research activities in future..

My blessings and good wishes for this newsletter

Dr.Fr. Vazhan Arasu

Principal

Research Viewpoints

Mr Daya Shankar Gautam is presently working on cytogenetics and genotoxicity effects in Bidi rollers for Ph. D. programme under Dr. Asha Khanna, Head , Department of Biotechnology

♦ **Mrs Runa Paul** is currently working on the effects of immunostimulants in fishes for Ph. D. programme under Dr. Asha Khanna, Head , Department of Biotechnology.

♦ She also attended a faculty development programme in Sonada, Darjeeling.

Research Viewpoints

Taxonomic collections from Dumna Nature Reserve Jabalpur



Dr. P. Mukherjee

MARINE BLOOD SUCKER

The eel like lamprey has a slimy scaleless skin and is not a true fish. To feed, it attaches itself to another fish by means of its sucker- like jawless mouth. Then with its abrasive tongue it make a hole in the fish's body and laps up the blood sucking from the wound.

However not all lampreys feed in this manner. Some species feed on shellfish and worms and one species the brook lamprey does not eat at all when it reaches adulthood.

RENUKUMARI
M.Sc.3RD SEMESTER

Zebra fish

Zebra fish, is a small fresh water fish, owes its name to a striking pattern of blue stripes alternating with golden stripes. Three major pigment cell types, black cells, reflective silvery cells, and yellow cells emerge during growth in the skin of the tiny juvenile fish and arrange as a multi-layered mosaic to compose the characteristic color pattern. It is known that all three cell types have to interact to form proper zebra stripes in the fish .



India logged 248 new species in 2013

The Zoological Survey of India has discovered 248 new animal species in different parts of the country in 2013. Of them, 162 are insects, 19 are arachnids, 36 are fish, five are amphibians and two are reptiles.

Research Viewpoints

Fish culture in undrinkable Lime stone ponds

Fish culture is the rational cultivation of fish in a confined water area where the practices of both agriculture and animal husbandry are applicable. Rock quarry provides a unique environment after mining there are many mines converted in to the natural ponds. We can use it for fish culture.

Dr. Priyanka Sinha

New Species of Catfish Discovered in India

A new species of catfish under the genus *Pseudolaguvia* was discovered in the Indian state of Arunachal Pradesh.

A team of researchers including amateur naturalist Lakpa Tamang and professor D.N. Das from Rajiv Gandhi University (RGU) found the new fish species in the Sille River, in East Siang district of Arunachal Pradesh. The new species has been named *Pseudolaguvia Viriosa*.



Pest of Amla

Research Viewpoints

Aphid *Setaphis bougainvilleae*

Symptom of damage Nymph and adults suck sap by remaining on the undersurface of leaves

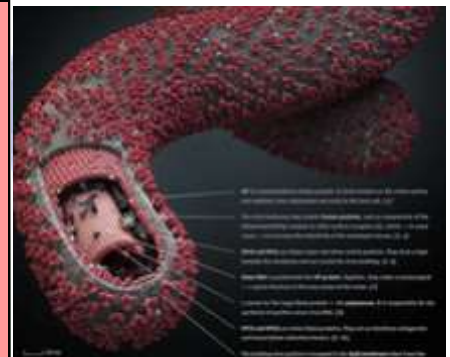


Ms. Chhaya Pasi

Effects of Ebola Virus on Humans

Ebola is a filovirus and causes one of several viral hemorrhagic fevers which are often fatal in humans and non-human primates. The WHO has declared the current Ebola outbreak a Public Health Emergency of International Concern. The first case was documented in Guinea in 2013 but has since spread to Liberia and Sierra Leone. The combined death toll from the epidemic has been 2240 cases with 1229 deaths, with a case fatality rate of 55 percent.

There have been over 120 health care workers who have died of Ebola after caring for others with the disease. The fact that there is no convincing evidence that the epidemic is under control, and new cases in Liberia -- which shares no common border with the affected countries -- have raised further concern. Nitendra chouksey Msc III Sem Zoology



Female butterflies have good sense in choosing ideal partner

The mating success of male butterflies is often lower if they are inbred. But how do female butterflies know which males to avoid? New research reveals that inbred male butterflies produce significantly less sex pheromones, making them less attractive to females. A recent study showed that female butterflies can smell the difference between inbred and outbred males — a talent that helps them pick mates with more successful genes.

Mohwati Parashar Msc III Sem Zoology



Natural Products

Plant-derived natural product chemicals could offer protection to the skin from the harmful effects of gamma radiation during cancer radiotherapy, suggests research. The radiation damages the cancer cells irreparably. Unfortunately, such radiation is also harmful to healthy tissue, particularly the skin over the site of the tumour, which is then at risk of hair loss, dermatological problems and even skin cancer. As such finding ways to protect the overlying skin are keenly sought. Hakim and colleagues discuss the benefits of the organic, antioxidant compounds coffee acid (CA), rosmarinic acid (RA) and trans-cinnamoyl acid (TCA) used at non-toxic concentrations

Renu Kumari Msc III Sem Zoology



Museum specimens, modern cities show how an insect pest will respond to climate change

Recent studies found that scale insect populations increase on oak and maple trees in warmer urban areas, which raises the possibility that these pests may also increase with global warming," says Dr. Elsa Youngsteadt, a research associate at NC State and lead author of a paper on the work. "More scale insects would be a problem, since scales can weaken or kill the trees they live on," Youngsteadt says.

Saraswati Patel Msc III sem Zoology



Interesting facts

- ◆ Babblers are birds that are always found in groups of six or seven known as seven sisters
- ◆ Fishes are second only to insect in term of number they out number all other vertebrates mammals birds reptiles and amphibians put together

Neha kumari Singh

Msc III sem Zoology

California blue whales rebound from whaling; first of their kin to do so

The number of California blue whales has rebounded to near historical levels and, while the number of blue whales struck by ships is likely above allowable U.S. limits, such strikes do not immediately threaten that recovery.

NITISHA KUMARI

MSC IIIIRD SEM ZOOLOGY



Amazing living world

Using light as bat :-

The swimmer birds has a fishing technique which is probably unique in ovarian world .it is hunts at night .with its beak open and lower mandible trailing in the water as flies low on the surface it creates a line of light which attract fish. it than returns along the same path snapping up the fish that have been attracted to the surface .

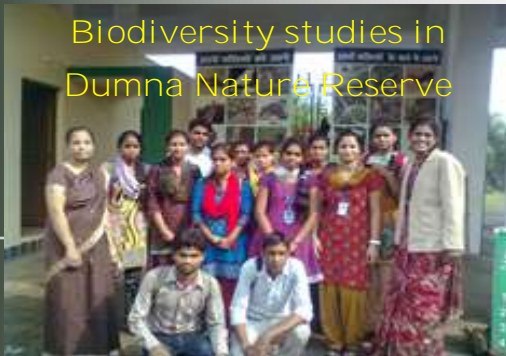
Deepa shukl

MSC IIIIRD SEM ZOOLOGY

Roadshow on Nature Conservation



Biodiversity studies in Dumna Nature Reserve



BEAUTIFUL NEW SPECIES OF FROG DISCOVERED IN MADAGASCAR

A multinational team of scientist headed by Kent's Durrell institute of conservation and ecology has described a new species in the tree frog genus *Boophis* belonging to the family Mantellidae from the hidden streams of Ankarafa forest on the Sahamalaza peninsula in northwest Madagascar. *Boophis* is endemic to the Comoros and Madagascar and comprises over 70 species. *Boophis Ankarafensis* is green colour With red speckling across its head and back. adult males are about 23-24mm long and female are about 28-29mm long.

Deepali Kushram
Msc I sem Zoology



BETI

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Devendra
Dhurwey
M.Sc. I Sem
(zoology)

Guest lecture held by Dr. Neeta S Bhatia, consultant, Tata memorial Hospital Mumbai and National hospital Jabalpur on **CARCI NOGENS**



Ms Anu Mishra .
M.Sc. I Sem
(Zoology) won 1st
Prize in debate
competition on the
topic -"Progress in
India after 67th yr.
of independence
satisfactory or not



LIFE

Life Is A Soul
Every Body Has To Play His Role
Life Is Like A Game
Which We Have To
Play And Collect Fame
Life Like A Roller Coaster
Of Shape Round
With Various Ups And Downs
That Is We Have To Live Together
Through Pleasant And Cloudy
Weather which
Life Is A Race
In Which Various Problems
We Have To Face

NITIN KUMARVISHWAKARMA
Msc III Sem Zoology

Upcoming activities by department of Zoology

- ⇒ AIDS awareness programme on 20th Sept.
- ⇒ Health awareness programme in Cantt. Khalsa School, Jabalpur .
- ⇒ Intercollegiate competitions under "JIGYASA" on 23rd Sept, 2014.
- ⇒ UGC sponsored workshop on "Applied Biological Techniques "