

Seventh World Congress of Herpetology – 2012

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The seventh World Congress of Herpetology (WCH) was held at the University of British Columbia (UBC), Vancouver, Canada during 8th-14th August 2012. About 1000 Herpetologists and Ichthyologists from over 100 countries took part in this congress. The prime aim of WCH is to promote Herpetological research, education and conservation by facilitating communication between individuals, societies and other organizations engaged in the study of amphibians and reptiles. It is a forum where researchers, academicians and conservation professionals meet to present and discuss new research findings in Herpetological and Ichthyological science and practices.

The WCH is held every four year at different places across the globe. To date, seven such international congresses have been held. The first meet of the Congress was held in Canterbury (United Kingdom) during 11th-19th September 1989; second at Adelaide (Australia) from 29th December 1993 to 6th January 1994; third at Prague (Czech Republic) during 2nd-10th August 1997; fourth at Bentota (Sri Lanka) during 3rd-9th December 2001; fifth at Stellenbosch, (South Africa) during 19-24th June 2005 and sixth at Manaus (Brazil) during 17th-22nd August 2008.

Seventh conference started with registration of participants on the evening of 8th August 2012. On 9th August 2012, Patrick Gregory, Chairperson of local organizing committee of WCH-7 delivered inauguration speech. The welcome address was done by Aaron Bauer, Secretary General of WCH and Angela Redish from UBC which was followed by society meeting of Herpetology and Ichthyology. Opening session included welcome address and introduction of American Society of Ichthyologists and Herpetologists (ASIH) presidential address.

Every day the programme featured plenary talk of 30 minutes by eminent scientists followed by 15 concurrent sessions with oral paper presentations of 15-minute (or multiples of 15 minutes in the case of symposia) totalling 133 sessions of oral presentations featuring diverse aspects



of Herpetological and Ichthyological research. The meeting was supported by over 13 different agencies, NGO's, Wildlife equipment companies, Canada government, various universities and the scientific publishers. The programme also witnessed workshops, organized discussions, short courses and formal meeting of the members of the Society for Study of Amphibians and Reptiles.

The technical session began with two plenary lectures on 9th August 2012. The first plenary talk was delivered by Tyrone Hayes, University of California who talked about "The Cause of Amphibian Decline". The deliberation pointed that 70% of all amphibians are declining globally. According to Hayes atrazine and other environmental chemical contaminants interact with other factors which causes major amphibian decline. Second plenary speech by Karen Warkentin of Boston University discussed about "Environmentally cued hatching". Karen Warkentin briefed that the breadth and depth of environmentally cued hatching (ECH) is currently better understood in amphibians than in any other major clade. He also emphasized the study of hatching which offers excellent opportunities for integrative and comparative research on a critical transition point in animal lives. Concurrent sessions started after the plenary under different

headings such as monitoring, distribution, pesticides, biogeography and evolution.

On 10th August 2012, the conference started with plenary speech by Lara Ferry of Arizona State University West. She spoke on the evolution and function of the central nervous systems in shark and ray brains. Lara Ferry highlighted the sensory hierarchy from black tip sharks; the mechanism of stingrays crushing hard prey which has inspired new biomaterials, and inherent ability of shark immune system to recognize self and non-self organs/cells of shark and its application and usefulness to human kind.

Susan Evans from University College, London discussed about the evolution of lepidosaurian reptiles as second plenary of the day. According to Susan Evans, Lepidosaurian originated 240 million years ago and later splitted into Squamata and Rhynchocephalia lineages. They further diversified in the late Jurassic but during early Cretaceous Rhynchocephalia disappeared from Northern continents

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and subsequently Squamates became dominant in that part. She elaborated that new fossil discoveries combined with the application of more rigorous phylogenetic analyses (molecular and morphological) have helped to clarify the path of evolution and early history.

Plenary was followed by concurrent session of oral presentation. There was a special session on Canadian herpetofauna and their threats. Tracy Tuberville was described about the impact of climate change which was relevant to the context of Himalaya and Western Ghats. On the 3rd day plenary lecture featured "Walking the natural history trail" by Laurie Vitt from Sam Noble Museum. The talk stressed that the natural history observations were the source of conceptual studies and hypotheses that we test in biology. But he remarked that most of the natural history studies suffer from lack of funds. There was a presentation on the Gharial of India and another one on reptile population and distribution of Pakistan. Basundhara Chettri presented on "Elevational Distribution Pattern, their underlying causes and Conservation of Herpetofauna along the Eastern Himalayan Elevation Gradient, India". Based on this study results participants also suggested to initiate study on climate change impact on species breeding phenology, sex determination, and thermoregulation of Herpetofauna in the Himalayas.

On 12th August, plenary session was on 'West African amphibian diversity, threats and future' by Mark-Oliver Rödel from Museum fuer Naturkunde, Berlin. First part of the talk highlighted about insufficient studies on the biodiversity especially amphibian in the Afrotropics. Second half focussed on the exploitation of natural resources including habitat loss due to logging, mining, conversion of forest to agricultural land and illegal trade. Among the very few Indian participants, Rachunliu Kamei presented on caecilians of North East India. She highlighted that though North-East harbours comparatively less number of caecilians than Western Ghats, it may be due to lack of extensive survey and awareness in these areas. Another full session was on the impacts of climate change and invasive species.

On 13th August, programme started with plenary talk by Kelly Zamudio of Cornell University on diversification and conservation of reptiles and amphibians: genomes, populations and landscapes. Ramesh Chinnasamy spoke about the application of natural marking in ecological studies on Indian python especially usage of blotch pattern in estimation of population and home range of the snake in a session titled "Reptile conservation tools and programs". Invited speaker Richard Wassersug from Dalhousie University delivered a lecture on "Neither fish nor frog, but polliwog: Key features in the design of anuran larvae" on the last day of the conference. The talk featured anuran larvae and its function during their fast aquatic growth and rapid transformation into frogs at metamorphosis. He also highlighted fluid mechanics modelling about the adaptive significance of the tadpole body form in swimming and tadpole's interaction with aquatic parasites.

The poster sessions and intervals gave an opportunity to discuss and interact among the participants. In addition to the academic and social programs, exhibitions including commercial publishers, book-sellers, and equipment suppliers were also present throughout the conference. Special workshop was organized for students to discuss how dissertation can be turned into publishable manuscript in peer-reviewed journals.

The Seventh WCH was very exciting and great learning experience especially for young researchers. The meeting with scientists/conservation professionals working in different parts of the world helped to exchange ideas, share knowledge and received suggestions from the renowned herpetologists. Another significant impact of WCH is in highlighting the role of citizen science in long term Herpetological research. This initiative plays crucial role in conservation of the area where biodiversity and human beings are living in a close symbiotic manner. The next conference (WCH-8) in the series will be held in Hangzhou, China during 8 to 15th August 2016.

Announcement : Training Programme "Mainstreaming Climate Change in Development Planning" 21-22 February 2013, New Delhi

Sambodhi Research & Management Institute is pleased to announce the training programme on Mainstreaming Climate Change in Development Planning to be held at New Delhi on 21-22 February 2013.



It has been globally acknowledged that Climate Change is one of the greatest challenge humanity ever faced. The everyday reality of the phenomenon is increasingly being witnessed in various forms. These are expected to continue, resulting in frequent and more intense weather related disasters. While the changes affect all, it is anticipated that developing countries will be the most affected with climate change aggravating hunger, disease and poverty. To address the issue, numerous interventions have been furthered across the globe – at regional, national and local levels. The imperatives underscore the enormity of the task that requires huge efforts by all actors in the form of global cooperation and synergy. While there are specific actions for adaptation and mitigation, it is quintessential to look at all actions with a climate change lens and weave adaptation strategies into sectoral interventions. It has become necessary for mainstreaming climate change concerns in livelihoods, natural resource, water and sanitation, health and population and other sectoral programmes. It is in this context that the training programme on Mainstreaming Climate Change in Development Planning is being organized. The programme is targeted at augmenting the knowledge and skills of strategic and operational level functionaries in development organizations.

Discounts on training fee are available for early and group registrations as well as for organizations and individuals that have participated in any of our trainings in the past. For more details: B-23, Lajpat Nagar-II, New Delhi-110 024, Call on: +91-11-47593300-99, +91-11-49242424-44 Write to: trainings@srmi.in