

The 21st International Congress of Zoology held in Haifa, Israel

The 21st International Congress of Zoology (ICZ) was held in Haifa, Israel from 2-7 September 2012. Over 250 researchers and research students from 18 countries attended. The theme of the Congress was “Zoology in a Changing World: How Animals Respond to Human Activities.”

The Congress was co-hosted by the International Society of Zoological Sciences (ISZS) and the University of Haifa, Israel. The Israel Academy of Sciences and Humanity, Ministry of Science and Technology, Israel, the Israel Nature and Park Authorities, Hebrew University of Jerusalem, the Zoological Society of Israel, Weizmann Institute of Science and the Oranim-Academic College of Education, Israel supported the Congress.

The Congress first began in 1889 under the impetus of the Société Zoologique de France and currently it is the premier event of the ISZS.



Left: Some delegates and attendees at the Congress; Right Dr. Husam Masaleha from the Ministry of Science and Technology, Israel, delivering the opening speech at the Congress

The Congress was divided into 15 symposia and 5 plenary sessions. There were also opportunities to display of posters by the delegates and attendees at the Congress.

The 15 symposia were: Endocrine Basis of Social Behavior Patterns; Ecological Physiology; Molecular Ecology; Animal Response to Human Changes of Habitat and Management; Daily Rhythms and Seasonality; Human-Wildlife Conflicts; Biological Consequences of Global Change; Life History Physiology and Behavior; Ecology and Behavior of Mammals; the Future of Zoology Training in Higher Education; Change of Diversity and Structure in Rodent Communities as a Result of Urbanization; Agriculture and Invasions; Inter-kingdom Interactions; Levels of Selection and Evolutionary Zoology; Marine Animals Response to Human Activities; Light Pollution and Its Ecological Consequences; Eastern Mediterranean Becoming Tropic; and Limits on Adaptations to Adverse Environments.

The 5 plenary lectures were the biology of sexual orientation by Marc Breedlov from Michigan State University, USA; an emerging movement ecology paradigm by Ran Nathan from the Hebrew University of Jerusalem, Israel; the hologenome concept: role of microorganisms in the adaptation and evolution of animals and plants by Eugene Rosenberg from Tel Aviv University, Israel; effects of human activities on the marine biota of the Levant Basin of the Mediterranean: an overview and predictions by Ehud Spanier and Dor Edelist from University of Haifa, Israel; and DNA methylation as an evolutionary conserved mechanism for adapting the genome to the environment by Moshe Szyf from McGill University, Canada. A congress excursion to Mt. Carmel sites took place with explanatory lecture by Aby Nevo from the University of Haifa



Left: Posters at the Congress; Right: Symposia lectures at the Congress

Before the Congress opening in Haifa, there was a Panel Session entitled "The Future of Animal Evolution under the Human Aegis" at the Hebrew University of Jerusalem in Jerusalem. 7 speakers delivered speeches. They were Marvalee Wake (Berkeley)) "We have new evolutionary knowledge to enhance the lives of species evolution"; Alessandro Minelli (Padova) "Endangered species, from victims to mutualistic, culture-driven evolution"; Jean-Marc Jallon (Paris Sud) "Enzyme cascades make *Drosophila* cuticle more resistant in new environment"; Simon Conway-Morris (Cambridge) "The Biosphere has become irreversibly more complex. Intelligence is the inevitable outcome of evolution. So what next?"; Dieter Ebert (Basel) "Rapid parasite evolution in a changing world"; Jürgen Heinze (Regensburg) "Social evolution in times of global change leads to "unicolonial" insect societies"; and Francis Dov Por (Jerusalem) "In this first phase of the "Anthropozoic", naturally evolving species are handicapped by cultigens".



Left: Panel Session venue at Hebrew University of Jerusalem; Right: Some attendees at the Panel Session

On the first day of the Congress, Zhibin Zhang, the leader of an IUBS/ISZS international scientific research program, Biological Consequences of Global Change (BCGC), delivered a research presentation on “Agricultural irrigation mediates climatic effects and density dependence in population dynamics of Chinese striped hamster in North China Plain,” after Chunxu Han, assistant leader of the BCGC program, presented an introduction and progress on the program. Then, Xinhai Li, another assistant leader of the BCGC program, presented his research on “Climate change and human impact caused retreat on large mammals in ancient China.”



Left: Zhibin Zhang delivering a speech; Right: Xinhai Li doing presentation

In the middle of the Congress (4 September), the ISZS Executive Committee had a meeting concerning Society’ business. Issues discussed included: changes to ISZS Statutes, the role of Emeritus EC Members, the next ISZS Congress, increasing the number of EC Members, financial report of ISZS and membership recruitment for ISZS.



Left to right: Abraham Haim, Vice President; Juergen Heinze, EC Member; Rosa Polymeni, EC Member; Zhibin Zhang, Vice President; and Jean-Marc Jallon, President meet in Haifa

At the end of the Congress (6 September), the ISZS had its General Assembly (GA). Chunxu Han, Treasurer of the Society, presented the Progress Report 2008-2012, including financial information and statements, on behalf of Yan Xie, the Secretary General of the Society.



Left: Jean-Marc Jallon, ISZS President, Abraham Haim, Vice President of ISZS and Chair of the 21st ICZ; and Zhibin Zhang, Vice President and legal representative for ISZS; Right: Some delegates at the GA

Yoshitaka Nagahama, President of the Zoological Society of Japan, presented that the Zoological Society of Japan will host the 22nd ICZ in Okinawa in 2016. Sarita Maree, President of the Zoological Society of Southern Africa invited the 23rd ICZ to Cape Town, South Africa in 2020. The GA accepted both bids.



Left: The Beach in Okinawa, Japan; Right: Table Mountain in Cape Town, South Africa

During the Congress, there was an excursion around the city of Haifa and to Mt. Carmel in the suburb of the city. Aby Nevo from the University of Haifa, Israel delivered an explanatory lecture on the biological consequences of the “Mediterranean side and African Side” of a valley in Mt. Carmel.

After the Congress, a Post-Congress Excursion was organized by the local organizing committee to the Negev and Eilat. Abraham Haim from the University of Haifa, Israel accompanied the excursion and gave lectures on the history, landscape, biological coverage and conservation biology in Israel.



Left: Excursion around the city of Haifa and to Mt. Carmel; Right: Post-Congress Excursion to Negev and Eilat in Israel