



中華海外生態學者協會
Sino-Ecologists Club Overseas

NEWSLETTER OF SINO-ECO CLUB OVERSEAS

2004 年北京国际生物入侵学术大会专刊

December 31, 2003

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A MESSAGE FROM THE SINO-ECO PRESIDENT

From the sunny state of Florida, I sincerely wish you have a happy holiday season and enjoy this special time with your family, relatives, and friends. After a hard-working year, you and your loved ones deserve quality time together.

After this year's ESA in Savannah, our club has been extensively cooperating with the Institute of Botany, CAS to organize Beijing International Symposium on Biological Invasions (BISOBI). The symposium will be held from June 8 to 11, 2004, focusing on species exchanges between East Asia and North America. The preparation of the Beijing International Symposium on Biological Invasion is running smoothly. Please visit <http://bisobi.sino-eco.org> for details. Drs. Xinguo Han and Jianhui Huang have worked diligently to secure the financial support and provide logistic supports related to the meeting. I greatly appreciate their enormous efforts. Currently, we have an impressive group of speakers covering a myriad of topics on biological invasions, from invasive plants, to animals, fish, and insects; from terrestrial wetland to marine ecosystems, and from invasion status and theories, to management and policy-making. So far, over 40 overseas speakers, including well-known ecologists, Drs. Hal Mooney and Richard Mack, have expressed their intension to attend the meeting;. After the meeting, a special issue on the Journal of Biological Invasions will be organized.

I also greatly appreciate several of our fellow Sino-Eco friends with the endless help that they have provided. Frank Chang setup an excellent meeting website; Weimin Xi promoted our meeting information on many other profession websites; Hong Liu drafted the abstract form; Qinfeng Guo and Harbin Li are involved with various organization processes. Fifteen Sino-Ecologists will submit their abstracts to the meeting. In addition, to promote public education on biological invasion, Weimin Xi, Hong Qian, Hong Liu, Charles Huang, Qinqin Liu, and Ben Gu are writing Chinese articles related to biological invasions to a Chinese newspaper. I genuinely encourage more Sino-Eco friends to participate the meeting.

Happy Holidays!

新年快乐,万事如意!

Shili



2004 SINO-ECO PRESIDENTIAL ELECTION

It is the time again to consider about Sino-Eco president election. According to the club-election bylaw, any members who paid membership dues are eligible to run for or to vote. Our membership starts on August 1 of each year, the members who paid the dues between August 1, 2003 and December 31, 2003 are qualified to be voted for and to vote. To ensure the election runs smoothly, I would like to make the following announcements:

Election Committee:

A three-member election committee was formed consisting of Drs. Dali Guo, Zhong Chen, and Shili Miao.

Election schedules:

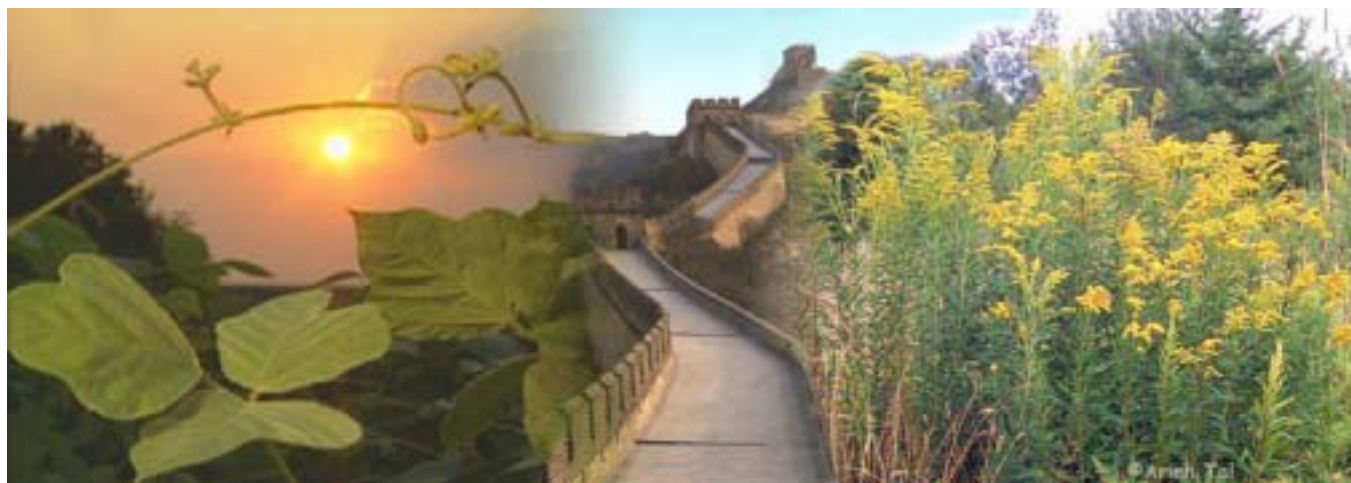
- | | |
|----------------|---|
| Jan.1-Jan.21: | Members nominate candidates |
| Jan.22: | Election committee announces the candidates |
| Feb.1: | Candidates announce their campaign statements |
| Feb.10-Feb.24: | Members email votes to the Election Committee |
| Feb.28: | Election committee checks the validation of the vote |
| March 1, | Election committee announces the election result |
| March 1-April: | President-elect organizes the 2004-2006 committee |
| May 1: | The 2004-2006 committee takes charge of the club Activities |

Shili



SYMPOSIUM ANNOUNCEMENTS

Beijing International Symposium on Biological Invasions



(created by Dr. Frank Chang)

Species Exchanges between Eastern Asia and North America: Threats to Environment and Economy

June 8-11, 2004
Institute of Botany, CAS
Xiangshan
Beijing, China

Biological invasions by non-indigenous plants and animals have become major global threats because they may alter landscapes, reduce biodiversity, and endanger national economies. Eastern Asia and North America share a wide range of similar environments and related biota, which may result in each region being more susceptible to the immigrant species from the other region than from many other parts of the world. Exchanges of alien plants and animals across the Pacific Ocean are increasing markedly as commerce between these two distant regions has soared in the past few decades; the rate of these species exchanges will almost undoubtedly accelerate. As a result of this commerce, an unknown number of accidental and deliberate immigrant species have and will arrive in both regions; some of these alien species will become strong invaders in the opposite continent. Thus, there is an urgent need to promote effective international communication, collaboration, and cooperation between ecologists, policy-makers, and quarantine officers in both eastern Asia and North America, so that the experience, research results, and resources of investigators may be shared for combating these common environmental and economic threats.

Symposium Goals

The goals of this symposium are multi-fold: 1) to bring together scientists and policy makers to

share their knowledge about the state of biological invasions in their countries, as well as their information on general invasion processes and the consequences, detection and management of these species, 2) to assess the current ability to predict future invasions by plants, insects, and another animal groups that are faced by each country, 3) to compare the ecology of invasive species in their native habitats as well as invaded habitats as a means to develop more effective strategies to address these serious environmental and economic problems, and (4) to provide a productive forum for discussing research, management, and policy associated with biological invasions and their management.

Sponsors:

The Institute of Botany of the Chinese Academy of Sciences (CAS)

The Sino-Ecologists Club Overseas (SINO ECO)

The Asian Ecology Section of the Ecological Society of America (ESA)

China State Bureau of Surveying and Mapping (SBSM)

United States Geological Surveys (USGS)

International Affairs, ESA

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Speakers and tentative presentation titles

Thomas P. Albright, "Prediction of the potential distribution of plant invaders between China and the US: Sino-US collaboration, ecological modeling, and GIS implementation"

Peter Alpert, "Invasiveness as a relative trait: the advantages and disadvantages of having been introduced"

Shuqin An, "Invasive process, consequence and fate of *Spartina* in coastal China"

David E. Boufford, "Alien Plants and the Flora of the Hengduan Mountain Region"

Ragan Callaway, "Allelopathy and naïve natives: the "novel weapons hypothesis"

Jiquan Chen et al. "Invasive and Native Plants in a Heavily-Managed Forest Landscape"

Young Choi, "Foreign wars in home-turf? Interactions of the exotic invasive plants in native wetlands of Lake Michigan watershed in North America"

Ming Dong, "What types of species become invasive: any general pattern to follow?"

Takashi Enomoto, "Naturalized weeds from foreign countries into Japan"

Wei Fang, "Spatial analysis of an invasion frontier: Dynamic inferences from static data"

William Gregg, "Developing Information and Tools for Conservation in an Invaded World - Perspectives from the Invasive Species Program of the U.S. Geological Survey"

Ben Gu, "Ecological effects of a submerged aquatic invasive species (*Hydrilla verticillata*) on water quality in shallow lakes and constructed wetlands: implication for invasive species management"

Qinfeng Guo, "Transcontinental bioinvasions: comparisons between native and introduced habitats and populations"

Jessica Gurevitch, "Experiments on forest invasibility in the northeastern U.S."

Anson H. Hines, G.M. Ruiz, A.W. Miller, P.W. Fofonoff, and B. Steves, "Invasive species in marine ecosystems of North America: Temporal and spatial patterns of taxonomy, source and vectors"

Mohammed K. Hossain and M.K.Pasha, "An Account of the Tropical American Flora in Bangladesh and its Ecological and Economic Consequences"

Charile Zhangzhi Huang, "Biological Invasion of the Chinese Mitten Crab (*Eriocheir sinensis*) in California, USA."

Peter T. Jenkins, "Regulatory and Non-regulatory Policy Tools to Minimize Introductions of Invasive Species in the U.S.-China Trade Context"

Hong Jiang, "Spatial analysis of alien species invasion in USA"

R. C. Joshi, "Importance of Developing Global Scientific Information Databases as CD-ROM on Two Alien Invasive Pests for Extension Staff: Golden Apple Snails (GAS) and Vegetable Leaf Miner Flies (LMF): Lessons Learnt and Implications"

Bo Li, "Predicting the distribution of plant invasions in China from natural, economic and social factors"

Hong Liu and Peter Stiling, "A Phylogenetically Controlled Test of the Enemy Release Hypothesis"

Richard Mack, "Does inter-regional floristic relatedness foster plant invasion: exchanges between eastern Asia and North America"

Leslie Mehrhoff, "The Invasive Plant Atlas of New England: A regional approach to rapid assessment of potentially invasive plants"

Irving Mendelssohn, "Why is the salt marsh grass, *Spartina alterniflora*, an effective invasive species?"

Shili Miao, "Importance of comparative studies on invasive species in their native and invaded habitats: an effective approach to search for invasion mechanisms and management tools"

A. Whitman Miller, G.M. Ruiz, K. Lion, E. Verling and A.H.Hines, "Ships as vectors for marine invasions: Ballast water delivery and ecology in North America"

Professor Akira Miyawaki, "Indigenous species against exotic species in ecosystem restoration in Japan"

Robert Pemberton, "The potential for biological control of American plant invaders in China and Chinese plant invaders in America through the exchange of natural enemies of these invading plants from their native areas"

Richard Primack, "Using Thoreau's Concord to Investigate Species Loss, Biological Invasions and Climate Change."

Hong Qian, "Exchanges of plant species between eastern Asia and North America"

Sheng Qiang, "An overall review of exotic weeds and integrated management in China"

Dov F. Sax, "Changes in species diversity at global, regional and local scales: the role of non-native species"

Michael T. Smith, "Invasion, Spread and Host Selection by the Asian Longhorned Beetle (*Anoplophora glabripennis*): Development of tools and strategies for eradication and management."

Jianghua Sun, "Geographical variation of red turpentine beetle to host semiochemicals (*Dendroctonus valens*) and its implication for managing invasive species" coauthored with Nancy Gillette, USDA Forest Service, PSW Research Station.

Joel Trumbo, "Invasive Exotic Plant Control on California Department of Fish and Game Lands."

Fang-Hao Wan, "Current status of invasive alien species and its management strategies in China"

Izumi Washitani, "Plant invasions in Japanese riparian habitats: impacts and countermeasures"

Mark Williamson, "Factors that determine biological invasions"

Weimin, Xi, "Common or Uncommon ground: a biogeographically comparison of Eastern Asian and North America"

Dr. Yan Xie, topics about the information management for invasive alien species in China

Haigen Xu, "The distribution and economic losses of invasive alien species in China"

Weixing Zhu, "Differential plant growth, litter decay and nitrogen dynamics between invasive *Lythrum salicaria* and native *Typha latifolia* in New York, USA."

(Note: some participants have not submitted their presentation titles)

The 4th International Symposium on the Tibetan Plateau

First Circular (<http://www.cstp.org.cn>)

4 - 6 August, 2004 / Lhasa, Tibet, China and Post-Symposium Field Excursions

Organized and Hosted by
Chinese Academy of Sciences (CAS)
The People's Government of Tibet Autonomous Region of China

Co-Sponsored by
National Natural Science Foundation of China (NSFC)
China Meteorological Administration (CMA)
International Center for Integrated Mountain Development (ICIMOD)
Institute of Natural and Humanity (INH)

Main topics:

Themes of this symposium will focus on the formation and evolution, resources and environments, and sustainable development on the Tibetan Plateau. The main topics list as follows:

Formation and lithosphere Geodynamics of the Tibetan Plateau
Uplifting and Environmental Change of the Tibetan Plateau
Epigenic processes on the Tibetan Plateau and Global Changes
Resources, Environment and Sustainable Development in the Tibet area

NEWS ABOUT SINO-ECO MEMBERS

Dr. Shili Miao has recently been promoted as a Supervising Senior Environmental Scientist by the South Florida Water Management District. She will lead the landscaping group to conduct research in the Florida's Everglades. Congratulation to Shili!

Prof. Junda Lin co-organized (as Vice Chair of the Organizing Committee) and gave a

presentation at the 2003 China International Recreational Fishery and Aquarium Congress at Shenzhen in November, 2003.

RECENT PUBLICATIONS

Joyce Zhang

Zhang, J., S. A. F. Ray and A. Steinman. 2002. Potential phosphorus load reductions under the Lake Okeechobee regulatory program. *Journal of American Water Resources Association* 38(6): 1613-1624.

Hiscock, J., S. Thourot, J. Zhang. 2003. Phosphorus budget - land use relationships for the northern Lake Okeechobee watershed, Florida. *Journal of Ecological Engineering* 21(1): 63-74.

Ben Gu

Havens, K.E., B. Gu., B. Fry and C. Kendall. 2003. Stable isotope food web analysis of a large subtropical lake: alternative explanations for ¹⁵N enrichment of pelagic vs littoral fisheries. *TheScientificWorldJOURNAL*. 3: 613-622

Knight, R. L., B. Gu, R. A. Clarke, and J. M. Newman. (2003). Long-term phosphorus removal in Florida aquatic systems dominated by submerged aquatic vegetation. *Ecological Engineering*. 20: 45-63.

Dierberg, F., T. DeBusk, J. Potts and B. Gu. 2002. Biological uptake vs. coprecipitation of soluble reactive phosphorus by 'P-enriched' and 'P-deficient' *Najas guadalupensis* in hard and soft waters. *Verh. Internat. Verein. Limnol.* 28: 1865-1870.

ECOLOGICAL LITERATURE (生态文学)

古诗

李白三峡诗两首

上三峡
巫山夹青天。
巴水流若兹。
巴水忽可尽。
青天无到时。
三朝上黄牛。
三暮行太迟。
三朝又三暮。
不觉鬓成丝。

早发白帝城
朝辞白帝彩云间，
千里江陵一日还。
两岸猿声啼不住，
轻舟已过万重山。

散文

奇怪的湖：湛江湖光岩玛珥湖记趣

广东新闻网记者刘永

广东湛江驱车向西南行十八公里，有一座颇负盛名自然景观--湖光岩。那里风景秀丽神奇、空气特别清新、有很多奇闻的地方，也是都市人休闲避暑的好去处。湖光岩最为出名的是，它是世界罕见的两个玛珥湖之一(另一个在德国玛珥地区)。

玛珥湖的得名

玛珥的英文“Maar”，来源于拉丁文“mare”，即海的意思，是居住在德国莱茵地区的人们对当地有水的湖泊、沼泽的称呼。十九世纪早期，德国科学家 Steininger 最早从德国西部艾费尔高原(Eifel)第四纪火山区的小而圆形的火山口湖研究开始，初步把玛珥(Maar)定义为一种火山类型。这种火山喷发后，在火山口形成的湖泊就叫玛珥湖。据联合国地质专家考证，

大约在距今十四
光岩所在的地
岩浆与地下水混
并产生强大的蒸
土层发生爆炸，
屑不断的喷发，
沉，形成四百四



万年间，现今湖
下，深部的炽热
合，形成过热水
气，冲破岩石及
蒸气与地壳的碎
爆炸口冷却下
十米深的地坑成

湖，湖水低于海平面，因而旱不涸涝不溢。经十几万年的自然沉积物的积累，湖光岩湖底不断上升(平均每年上升零点二六五厘米)，现在的水深仅为二十二米。与其他火山湖靠降雨维持湖泊积水不同，湖光岩湖水是地下岩层渗出的矿泉水。湖光岩玛珥湖略比德国玛珥湖大，有四点七平方公里，湖水面积一般在两点三平方公里左右，悠悠驱车绕湖一周，要十多分钟。

湖光岩玛珥湖奇景奇闻由于地质考察进行缓慢，以及很多自然现象用现代科学还无法解释的原因，湖光岩一直有着不少的神奇之谜。也由于湖光岩形成的原因奇特，留下了神奇的景色。奇景之一，“天然年鉴”。因湖水不受外界水系干扰，其沉积层忠实地记录了地球古植被的变化，成为研究地球古气候与环境演变的"天然年鉴"和"自然博物馆"。奇景之二，“净湖”。湖水清澈见底，不脏不臭，到了湖中手机信号会基本消失。有关专家说，这是因为湖光岩有一个强大的磁场，使湖水产生一种神奇的自我净化功能。奇景之三，不见树叶的湖。湖光岩玛珥湖周围绿树成荫，每逢刮风下雨，树叶花草飘落湖中，但总能消失得无影无踪。奇景之四，不见蛇、蛙、蚂蟥，但鱼成群。有道是有水必有蛙，而两点三平方公里的湖光岩，水中竟没有一只青蛙，也没有蛇和蚂蟥的踪影。但是，从湖畔往清澈的湖面细看，可以看见成群的游鱼，据说，在晴天的时候，还有机会看见跃出湖面长达四米的鱼。奇景之五，天然氧吧。由于季风不断从山口进入，湖光岩周围植被茂盛，一年四季鸟语花香，空气清新。在水杉林区形成一个负离子区，负离子含量达上十万个立方厘米，现在这个被称为“天然氧吧”的林区，每天很多游人慕名而来，有一位老人，竟一来不返，在这个林区住了下来。

人文湖光岩

湖光岩名字的来历，是从楞严古寺上方岩壁上“湖光岩”三字考证而来。相传宋朝年间，丞相李纲被贬海南途经雷州时，当时楞严寺长老释琮邀其游湖光岩时题下的。这里还有一个有趣的民间传说，传说当时李纲题完字后，忽见湖里碧波荡漾，银光闪闪。刹那间，“湖光岩”三个大字变成了三只天鹅飞奔湖光映照的岩石上，顿时金光四射，三只天鹅变成了“湖光岩”三个大字神奇地镌刻在岩石上……近年来，由于玛珥湖的考证，湖光岩开始远近闻名，经政府的保护和开发，已建成狮子岭、狮子岗、岩狮洞、七星洞、火山壁奇观、望海楼、观波台、白牛仙女景区、白牛仙女雕像、九龙爬壁、神蛙和中国最大的玉兰园等人造景观。现已初具规模的旅游景区，众多的天然景观和人文景观已把亚热带风光和玛珥湖特色融为一体。现在的湖光岩，除了古藤老树，奇花异草外，散于湖边的奇树珍木，无不是“青松拨雾擎红日，翠柳垂丝吻碧湖，百卉馨香狂蝶舞，湖山处处惹人游”的别致佳景。

ECOLOGICAL PHOTOGRAPHY (生态摄影)

Swallowed whole



Jim Lavrakas / Anchorage Daily News

A rainbow trout fingerling peers out from the gullet of a northern pike at the Alaska Department of Fish & Game aquarium in Anchorage.

A useful lesson



David Gray / Reuters

A German shepherd named Pepper sits with two endangered Bengal tiger cubs and a cougar cub, far right, at the home of veterinarian Rob Zammit outside Sydney, Australia.

The little duckling who could



Mallard ducklings wait their turn May 14 as a sibling struggles to make it up a curb in South Bend, Ind. The mother, who had already cleared the obstacle, flirted with traffic for 20 minutes before leading her offspring safely across the busy road.

(above photos are selected from “The Best Photos of the Year”, thanks to Dr. Changhui Peng for recommendation)

SINO-ECO CLUB MEMBERSHIPS

Any individual with Chinese origin and at least one year of overseas professional in ecological fields, willing to recognize and follow the bylaws and paying the membership dues, shall be deemed to be eligible as a member. The due for Regular and Student Members in developed countries will be \$10 and \$5, respectively, for those in developing countries will be \$5 and waived, respectively. For new members, dues paid before March 1 will cover the current year and the following year; those paid between Oct. 1 and Feb.28 will be half of the due and will cover the current year. Donation is greatly appreciated. Please fill in the application form which may be downloaded from: <http://www.sino-eco.org/current/membership.htm> and sent it, with your check payable to SINO-ECO, to the treasurer (2002-4): Dr. Zhong Chen, School of Forestry, Northern Arizona University, Flagstaff, AZ 86011-5018 (US Dollars or equal foreign country’s currency).

