



International Workshop

Ecosystem-Science & -Engineering Approach toward Conservation of Biodiversity

May 13-14, 2010

Nagoya Congress Center, Shiratori Hall

Program

May 13, Thu. 2010

9 : 30	Registration
10 : 00-10 : 30	Opening addresses
10 : 30-12 : 00	Introductory lectures - Crisis of Biodiversity in Local Scale and Global Scale - Challenge of " Ecosystem-Science & -Engineering " toward Conservation of Biodiversity
12 : 00-13 : 00	Lunch
13 : 00-14 : 45	Session Theme A "Habitat Mosaic Restoration"
14 : 45-15 : 15	Coffee break
15 : 15-17 : 00	Session Theme B "Flux Network Rehabilitation"

May 14, Fri. 2010

8 : 30	Registration
9 : 00-10 : 45	Session Theme C "Responsibility of Metropolitan"
10 : 45-11 : 00	Coffee break
11 : 00-12 : 30	Case Studies (Including poster session)
12 : 30-13 : 30	Lunch
13 : 30-15 : 30	Panel Discussion
15 : 30-16 : 00	Coffee Break
16 : 00-16 : 30	Wrap-up Meeting (Adopt "An Appeal from the Ecology and Civil Engineering Society (ECES)")

Main Sponsor

'Ecosystem-Science & -Engineering Approach toward Conservation of Biodiversity'
International Workshop Organizing Committee

Co-Sponsors

Ecology and Civil Engineering Society (ECES) / Ecological Society of Japan (ESJ)
Japan Society of Civil Engineers (JSCE)

Under the auspices of

Ministry of Land, Infrastructure, Transport and Tourism (MLIT)
Ministry of Agriculture, Forestry and Fisheries (MAFF) / Aichi Prefectural Government
City of Nagoya / Foundation for Riverfront Improvement and Restoration (RFC)
Water Resources Environment Technology Center (WEC)
Foundation of River & Watershed Environment Management
The Institute of Freshwater Biology / Public Association for Chubu Region Construction Service
Nagoya Ecology and Civil Engineering Society
Nagoya Hydraulic Research Institute for River Basin Management (NHRI)
Ise Bay Eco-Compatible River Basin Research Project (ERRP)
Aichi-Nagoya COP10 CBD Promotion Committee

• This workshop is partially supported by the River Fund.

Invitation to International Workshop

10th Conference of Parties (COP10) for Conservation of Bio-diversity will take place this October in Nagoya, Japan. Among the various issues that will be discussed at this international workshop, such as the new target for conservation of biodiversity, the Ecology and Civil Engineering Society is focusing on the issue on the “city and biodiversity” . This “city and biodiversity” has been one of the important issues since the last conference (COP9) in Bonn.

We believe that to develop scientific knowledge and technology, and to show a commitment of the city as the center of human activity in the watershed, are the keys to discuss this issue. Through hosting several forums on the “biodiversity and river basin complex” with researchers from diverse fields, we have put together a statement addressed below. This workshop is organized based on this statement. We welcome not only the members of our society, but any researchers, engineers, or citizens who are interested in biodiversity, conservation, and restoration.

"Ecosystem-Science and -Engineering Approach toward Conservation of Biodiversity" An Appeal from the Ecology and Civil Engineering Society (ECES) (Draft)

We strive to carry out action aimed at conserving biodiversity through achieving river basin complex in harmony with nature around three core elements: conservation and restoration of scattered local “landscapes” (habitat mosaics) , rehabilitation of water/material flux networks that link them, and the system (governance) that implements them or the “responsibility of metropolitan” to support them.

We take as our model the Ise Bay river basin complex. This region has characteristics that are valuable in terms of geology and the evolutionary history of life as well as ecology, and the region supports cities that are the nucleus of human activities. The human activities carried on here have on the one hand caused ecosystem degradation such as the loss of biodiversity, but at the same time have concentrated economic power, knowledge, and technology in the cities particularly in the metropolis. With a core comprising the three elements of conserving and restoring landscapes, rehabilitating water/material flux networks, and exercising the responsibility of metropolitan, we will implement action meant to achieve river basin complex in harmony with nature through a challenging approach from ecosystem-science and -engineering and disseminate the results.



International Workshop Organization

Advisors Jiro KIKKAWA Professor emeritus, University of Queensland
Toru KONDO President, Japan Water Resources Association
Satoshi YAMAGISHI Director General, Yamashina Institute for ornithology

International Workshop Organizing Committee

Chair Tetsuro TSUJIMOTO (Nagoya University)

Shuichi IKEBUCHI (Foundation of River & Watershed Environment Management) / Yasuo EZAKI (University of HYOGO)
Yuichi KAYABA (Aqua Restoration Research Center) / Yukihiro SHIMATANI (Kyusyu University)
Yoshihiko SHIMIZU (Gunma University) / Kotaro TAKEMURA (Foundation for Riverfront Improvement and Restoration)
Kazumi TANIDA (Osaka Prefecture University) / Yuji TODA (Nagoya University)
Futoshi NAKAMURA (Hokkaido University) / Seikou FUKUDA (Public Association for Chubu Region Construction Service)
Koichi FUJITA (National Institute for Land and Infrastructure Management) / Seiichi MORI (Gifu Keizai University)
Ikuko MORISHITA (Institute of Freshwater Biology)
Koichi YAMAMOTO (Foundation of River & Watershed Environment Management)
Wataru WATANABE (Water Resources Environment Technology Center)

Abstract of Lectures / Speakers Profile

Reclamation of river basin to support human activities with safety, resources, security and favorable environment has on one side apparently brought about a threat of the sustainability through resources depletion, global warming and loss of biodiversity. ECES (Ecology and Civil Engineering Society) was born to overcome such crisis through ecosystem-science and -engineering. We will provide two lectures from ECES by which you will aware the biodiversity crisis even only focusing on aquatic organisms in local site and in global view, and you will touch the new challenge of ecosystem-science & -engineering toward biodiversity conservation in a river basin complex and recognize the three keywords of this workshop: Habitat mosaic restoration, water/material flux networks rehabilitation, and responsibility of metropolitan.

Kazumi TANIDA

Professor, Department of Biological Science,
Osaka Prefecture University.

Research Fields : Ecology/environment, Living organisms diversity/classification



Tetsuro TSUJIMOTO

Professor, Department of Civil Engineering,
Nagoya University.

Research Fields : Fluvial Hydraulics, River Ecology, Flood Management, River Planning



Session Theme A : Habitat Mosaic Restoration

River ecosystem is composed both of instream landscape elements (such as riffle and pool structure, braided streams, shore area and local pool around a bend, those are induced by fluvial processes, and complex habitats generated by fallen timbers) and of flood plain landscape elements (such as flood plain mosaic, back swamp, natural bank and oxbow lakes). In the session of "Restoration of Habitat Mosaic", we will clarify how the linkage of landscape elements and variation of them affect on aquatic biota and river ecosystem. The fundamental approach for restoring the lost linkages of landscape elements due to the past development of river basin complex will be discussed based on the experiences in Missouri river and Mississippi river in USA and in Japanese rivers.

David L. GALAT

Associate Professor, Department of Fisheries and Wildlife Sciences, School of Natural Resources, University of Missouri.
Research Fields : Large river ecology, native fish ecology and restoration ecology



Futoshi NAKAMURA

Professor, Department of Forest Science, Agriculture, Hokkaido University.
Research Fields : Stream ecology, Forest ecology, Forest ecosystem management



Session Theme B : Flux Network Rehabilitation

Local ecosystems scattered in river basin complex are interrelated each other through connecting the flux network of water and materials in the river basin complex. Recent development of human activities has required the resources and energy from surrounding basin area and the natural flux network have been changed and modified by installing the artificial facilities, consequently affecting the local ecosystems. Therefore the rehabilitation of flux network is essentially important to conserve and restore the biodiversity in the river basin complex. On the other hand, the rehabilitation of flux network has faced a difficulty of manifesting the relation of local ecosystems to an overall perspective due to the largeness of the flux network compared with local ecosystem scale.

In the session of "rehabilitation of flux network", we aim to discuss and clarify why, how far and how we should consider the rehabilitation of flux network of river basin complex for restoring local ecosystems through the experiences of Kissimmee river restoration project in USA and Ise bay river basin complex research project in Japan.

John Lawrence GLENN, III

Director, Kissimmee Division, South Florida Water Management District, West Palm Beach, FL.
Research : Distributions and community structure attributes of floodplain, River channel, and Larval fish assemblages



Koichi FUJITA

Research Coordinator for Watershed Management / River Department, National Institute for Land and Infrastructure Management, Ministry of Land, Infrastructure, Transport and Tourism



Session Theme C : Responsibility of Metropolitan

Alteration of landscape elements, exploitation of natural resources such as water, material and energy and the resulting environmental loads, which have been preliminary induced by the growth and expansion of cities, lead to the loss of biodiversity in river basin complex. At the same time, cities are the centers of human activities in river basin complex, where economic power, human resources, information and technology are concentrated. Therefore, cities have both responsibility and ability against the crisis of biodiversity in river basin complex. In the session of "Responsibility of Metropolitan", in order to conserve and restore biodiversity in river basin complex, environmental governance for the management of anthropogenic impacts induced by cities will be discussed through the experiences of the Yahagi River in Japan and the Mersey River in the United Kingdom based on the understanding of the responsibility of cities.

Walter MENZIES

Chief Executive, Mersey Basin Campaign (MBC),
Non-executive Director, Waterwise (UK NGO dedicated to improving water efficiency),
 Mersey Waterfront (regional park): board member and chair of projects and partnerships subcommittee



Kohei SUZUKI

Mayor, Toyota City.
 City of Toyota is working to promote environmental initiatives that take its urban characteristics into account - in term of developing transportation infrastructure and cultivating forests.



Call for Poster presentation

Poster presentation will be available for workshop participants. The workshop invites you to submit poster presentation abstracts regarding projects or activities of "conservation of biodiversity in river basin complex". Please send the completed application form in reverse included a brief description of not more than 100 words of the presentation in English.

※Poster submission due by Wednesday, April 28, 2010.※

Access to Nagoya Congress Center

Nagoya Congress Center
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Nagoya 456-0036
Tel: +81-52-683-7711
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The information on access is available
on the following :
http://www.ncvb.or.jp/ncc_e/index.html



Applications and Inquiries

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Email : nhri@civil.nagoya-u.ac.jp
URL : <http://www.nhri.jp/>

International Workshop Application

The deadline is May 7th.

E-mail : nhri@civil.nagoya-u.ac.jp FAX : + 81- 52-789-3727

Name :
Affiliation :
E-mail :
TEL :
Address : -----
City : -----
State : -----
Country : -----

Participant

Name	Affiliation	Name	Affiliation

Poster Presentation Application

The deadline is April 28.

Name :	Affiliation :
E-mail :	TEL :
Title :	
Abstract (100 words) :	