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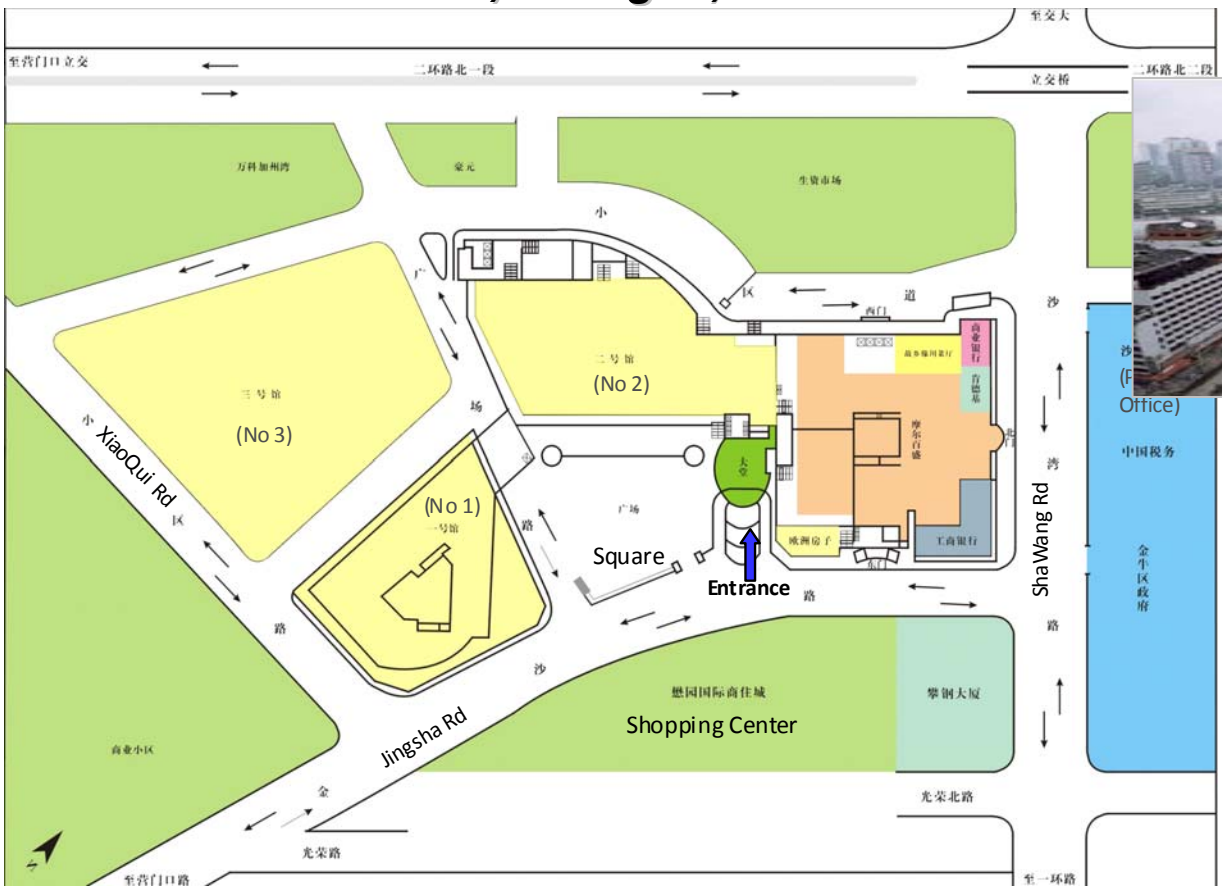
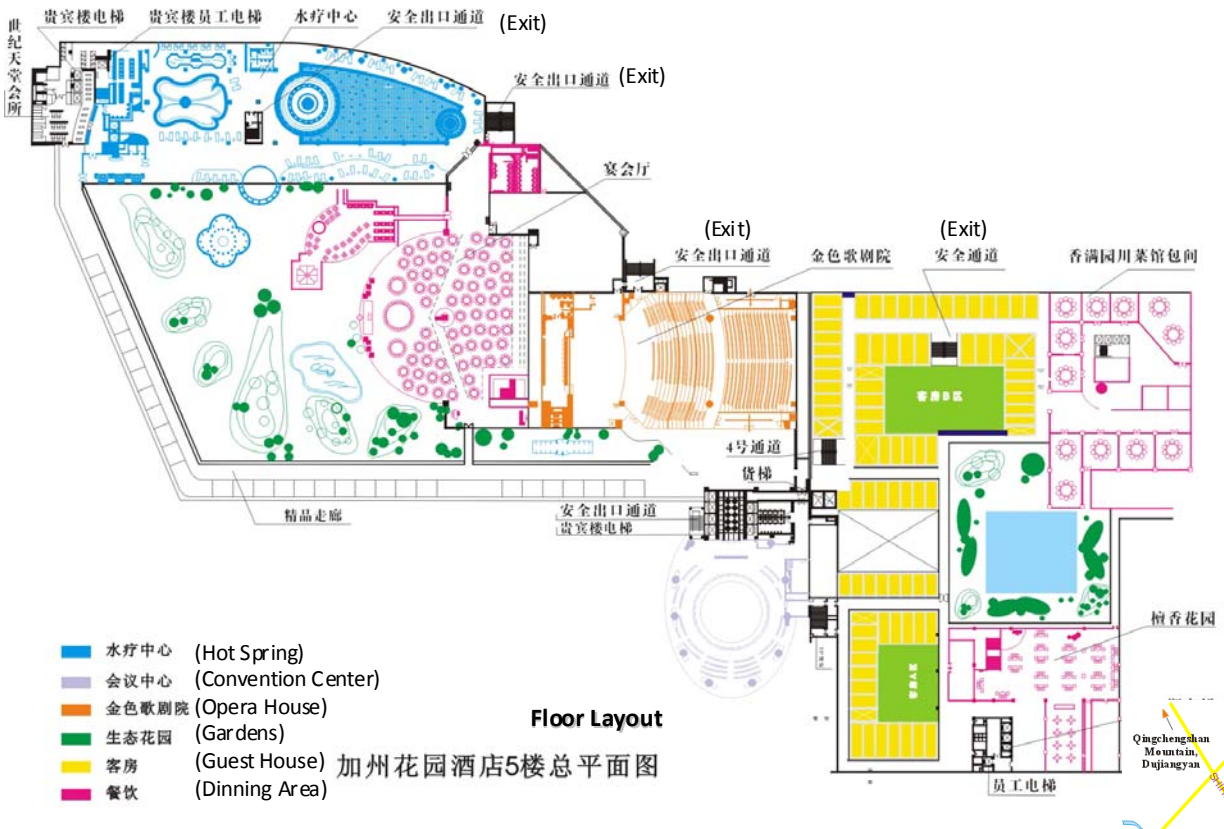
About Chengdu





Chengdu is located in the western Sichuan Plain and has a rich history of over 2,300 years. As the capital of Sichuan Province, Chengdu is renowned for its fertile land and agricultural wealth, which have earned the city the nickname "Storehouse of Heaven". It is the gateway to scenic Jiuzhai Gou, the Buddhist Mountain of Emei Shan and Le Shan, as well as home to one of the most important panda breeding centers. It is also a traveler's haven and a place to gather information between trips. The people are friendly and the pace is unrushed. Because Chengdu is one of the few cities with daily flights to Lhasa, many travelers come here to arrange transportation to Tibet.

Spicy food, overcast skies, and a leisurely existence best describe life in Chengdu. Chengdu's famous hotpot restaurants will leave you breathing fire, while street vendors on every corner sell spicy "Shao Kao". Ask anyone in China about Chengdu and they will immediately

rave about 'Chuan Cai', or Sichuan cuisine. The only question they will then ask you is, "Ni pa chi la ma?", which means, "Are you afraid of eating spicy food?" To the west of Chengdu, the steep ascension of the Tibetan Plateau begins. Chengdu enjoys a subtropical monsoon climate, characterized by an early spring, hot summer, cool autumn and warm winter. The average annual temperature for the year is 16°C, but the plateau's moisture is to blame for the frequent cloud cover. Still, the temperature rarely drops below freezing, and the city enjoys many months of comfortable weather.

About California Garden

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California Garden Hotel is a subsidiary of the Chengdu Meeting and Exhibitions Group. It is a popular and luxurious hotel in town with warm atmosphere and excellent services. The hotel is located on Sha Wan Road in the Northwest of Chengdu and 2 km from the downtown, 22 km from the Chengdu Airport. With the walking distance is a post office, the bureau for tax, a bank, and a shopping mall. The hotel is equipped with hot spring therapies, large exercise room, an opera house, and much more ….

KEYNOTE ADDRESSES

Dr. Danny C. Lee, Eastern Forest Environmental Threat Assessment Center, USDA Forest Service, USA

Using Landscape Ecology to Anticipate and Respond to Emerging Forest Threats

Dr. Lee is the inaugural Director of the Eastern Forest Environmental Threat Assessment Center, which was established in early 2005 to develop knowledge and tools needed to predict, detect, and assess environmental threats to forests of the Eastern United States. In 2006, the Center merged with the Southern Global Change Program and the National Forest Health Monitoring Research Unit; Dr. Lee is the Director and Project Leader of the combined unit. Dr. Lee's own research has focused on the application of systems analysis, risk assessment, and modeling to large-scale ecosystem management issues. Previously positions included Project Leader with the Pacific Southwest Research Station in Arcata, California, and the science team leader for the Sierra Nevada Framework for Conservation and Collaboration from 1998-2000. From 1991 to 1998, Dr. Lee worked at the Rocky Mountain Research Station in Boise, ID, on aquatic and land interactions in the Columbia River Basin, including work on the Interior Columbia Basin Ecosystem Management Project. His work on integrated ecological and economic planning efforts began while at Resources for the Future in Washington, DC, from 1985-1991. Dr. Lee earned a Ph. D. in Wildlife and Fisheries Sciences at Texas A&M, a MS in Applied Statistics from Louisiana State University, and M. S. and B. A. in ecology and zoology from the University of Tennessee.

Dr. Jianguo (Jack) Liu, Michigan State University, USA

Landscapes as Coupled Human and Natural Systems

Dr. Jianguo (Jack) Liu is Rachel Carson Chair in Ecological Sustainability, University Distinguished Professor, and Director of the Center for Systems Integration and Sustainability at Michigan State University (MSU), USA. He has been on the MSU faculty since completing his postdoctoral study at Harvard University (he was on sabbatical at Stanford University from 2001-2002). Dr. Liu is keenly interested in integrating ecology with socioeconomics as well as human demography and behavior. His work has been published in journals such as *Nature* and *Science*, and has been widely featured in the global media. Dr. Liu has served on various international and national committees and panels. He is President-Elect (2007-2008) and President (2008-2010) of US-IALE (US Regional Association, International Association for Landscape Ecology). In recognition of his efforts and achievements in research, teaching, and service, Dr. Liu has been given many awards, such as the Guggenheim Fellowship Award from the Guggenheim Foundation, CAREER Award from the National Science Foundation, Distinguished Service Award from US-IALE, and Aldo Leopold Leadership Fellowship from the Ecological Society of America.

Dr. Bojie Fu, Chinese Academy of Sciences, P.R. China

Landscape ecology for the sustainable environment: recent advances in China

Dr. Bojie Fu is Director–General of Bureau of Sciences & Technology for Resources & Environment，Chinese Academy of Sciences. He coordinates researches of Ecology, Environmental Sciences, and Earth Science in the Chinese Academy of Sciences. He is Professor of Landscape Ecology in Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences. His major research interests are Landscape pattern and ecological processes, Land use

change and environmental effects, Ecological and Environmental Impacts Assessment. Dr. Fu is an executive board member of International Association for Ecology (INTECOL), and the Chairman of International Association of Landscape Ecology-China Chapter, Vice Chairman of SCOPE China, Vice Chairman of CNC-IGBP, Vice Chairman of Scientific Committee of Chinese Ecosystem Research Network and Vice President of the Chinese Society of Geography. He was invited as editorial board member of international journals of 'Landscape Ecology", "Soil Use Management", "Landscape and Urban Planning" and "Sustainability Science". He has published more than 260 scientific papers and 7 books, about 70 papers published in the international journals.

Dr. Eric J. Gustafson, Institute for Applied Ecosystems Studies, USDA Forest Service, USA

Using spatial models to support landscape management

Dr. Gustafson is Team Leader for Landscape Ecology Research at the Institute for Applied Ecosystems Studies in Rhinelander, WI. Dr. Gustafson was a primary architect of the Institute, which opened in 2007 within the Northern Research Station of the US Forest Service. The mission of the Institute is to focus on the theory and application of scaling science to provide scientific knowledge at policy-relevant scales for the benefit of people, their economies, and the environment. Dr Gustafson was Project Leader of the Landscape Ecology Unit at Rhinelander from 1998 until the formation of the Institute. He served US-IALE from 1993-2004 in various capacities, including Councillor-at-Large, Award Committee Chair and President. He is currently an Associate Editor for the journal Landscape Ecology. Dr. Gustafson's research is focused on natural resource management and the consequences of broad-scale ecological phenomena on the sustainability of biotic resources. He develops quantitative approaches to the integration of resource extraction and the conservation of biotic diversity. This involves development of spatial models and application of other predictive models in a spatial context. These tools are applied to answer strategic research and management questions about how the factors that structure forest landscapes can be managed to sustain biotic resources. Dr. Gustafson earned a Ph.D. in landscape ecology from Purdue University, a Master's degree in wildlife ecology from the SUNY-College of Environmental Science and Forestry (Syracuse, NY) and a B.S. in biology from Wheaton College (Wheaton, IL).

Dr. Jiquan Chen, Landscape Ecology & Ecosystem Science, University of Toledo, USA

Biogeographic Landscapes of China – Ecology, Culture, Economics, and People

Dr. Jiquan Chen received his B.S. in plant ecology from Inner Mongolia University, M.S. in forest ecology from the Chinese Academy of Science, and a Ph.D. in ecosystem analysis from University of Washington (1991). He has authored over 130 scientific articles and six books (total citation >1700). Dr. Chen is broadly interested in ecosystem science and landscape ecology. His research on forest edges, three dimensional canopy structure, ecosystem carbon and water fluxes, energy balance, riparian zone management, and fire ecology are very influential in ecology, forest management, and micrometeorology. He has taught landscape ecology, conservation biology, forest ecology, biophysics, forest modeling, ecosystem management, and a dozen others in natural science. In 1996, he proposed the Ecological Society of America to establish the Asian Ecology Section and became its first chair. He serves as a co-chair of the Landscape Ecology Working Party of the IUFRO (2004-present), the chief scientist for the US-China Carbon Consortium, the Chair Professor for the Advanced Ecology Lecture Series at Fudan University (2004 – present), and one of the team leaders for the Great Lakes NEON Initiatives (GLACEO). He has been an associate editor for several scientific journals (e.g., *Forest Science*, *Agricultural and Forest Meteorology*, *Forest Ecology and Management, Journal of Plant Ecology, Journal of Integrative Plant Biology*), past president of Sino-Eco Association (1992-1993), and president of the Chinese Association of Greater Toledo (2005- present). He received the Sigma Xi/Dion D. Raftopoulos Award for

Outstanding Research in 2004; and the Outstanding Faculty Research Award in 2006 at the University of Toledo.

FILED TRIP: JINSHA ARCHEOLOGY MUSEUM

Composed by Jiquan Chen, University of Toledo, USA

Jinsha (Chinese: 金沙; pinyin: Jīnshā) is an archaeological site in Chengdu, Sichuan, China. Located in the western suburbs of Chengdu, Jinsha was accidentally discovered in February, 2001 during real estate construction. The area revealed by the bulldozer's blade was a ceremonial site where the ancient people offered sacrifices to the gods. After the rites, they apparently buried the utensils used during the ceremony in a pit. Each pit holds a minimum of 10 to 20 utensils, but some pits used by high-ranking officials or for particularly important gods have as many as 1,000 objects. Located about 50 kilometers away from Sanxingdui, the site flourished around 1000 B.C. and shares similarities in burial objects with the Sanxingdui site. Ivory, jade artifacts, bronze objects, gold objects, and carved stone objects were found at the site. Unlike the site at Sanxingdui, Jinsha did not have a city wall (http://en.wikipedia.org/wiki/Jinsha). The artifacts provide evidence of the relics of a mysterious 3,000-year-old Jinsha kingdom in the mountains of southwest China. In the past six years, the site has yielded about 6,000 gold, jade, bronze, and stone artifacts, tens of thousands of pottery items, and hundreds of elephant tusks.

From People's Daily (http://english.peopledaily.com.cn/90001/90782/6220982.html): Jinsha means ''gold sand''. True to its name, the site has proven to be extraordinarily rich in gold relics. One relic is a round foil-bearing image of the sun and of four flying birds. The gold foil is only about 0.02 cm thick (the width of a piece of paper), 12.5 cm in diameter, and 94 percent pure. Some people have speculated that the twelve lights around the sun represent the twelve months and the four flying birds the four seasons. Some suspected that the ancient Chinese may have believed that the sun is carried from east to west on the backs of birds. The sun and birds appear on many Jinsha relics. The piece, dubbed the Sun and the Immortal Birds, has since become a logo for Chinese cultural heritage protection. Another important piece of gold ware is a gold mask, discovered in February, 2007. The mask was probably worn by sorcerers who communicated with divine forces. It is 19.5 cm wide, 11 cm long, 0.04 cm thick, and weighs 46 grams. Gold masks were not common in China at that time, but widely were used in Egypt and the Middle East.

Sichuan is known for pandas rather than elephants but, despite this, literally tons of elephant tusks have been extracted from the site. Measuring 1.60 meters long, on average, with one gigantic 1.85-meter tusk, the elephant tusks are an impressive sight.

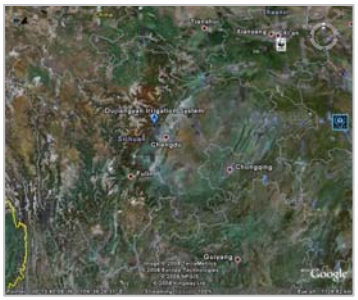
One of the greatest mysteries of Jinsha culture is that it left no written characters, despite the fact that most ancient cultures were already developing and using characters at that time. The ancient Chinese used tortoise shells for divination purposes. They would burn the tortoise shells and then predict the future or tell people's fortunes by studying the rifts and patterns on the backs of the shells - called "oracle bones." Most oracle bones in the vast plain of China carried inscriptions showing the date of the fortune-telling operation, the identities of the people who carried it out or gave some clues as to why divine forces were being consulted. But, the oracle bones excavated in Jinsha are eerily silent - they have no characters on them at all.

Jinsha shares many cultural similarities with Sanxingdui, or Three Star Mound, an important archaeological site about 50 km away. For example, the Jinsha gold mask looks like the bronze masks uncovered in Sanxingdui. The bronze masks in Sanxingdui show facial features so different from local Chinese that some people have joked that they must have been built by extraterrestrial beings.

FIELD TRIP: DUJIANGYAN – EMEI – LESHAN

This three-day field trip is organized to visit several places toward the west of Chengdu, where rugged landscapes, diverse plants and animals, and vegetation will be explored. The primary stops include: Dujiangyan hydrological engineering, Emei Mountains, Leshan Cultural site, Bifengxia Cannon, YaAnn Panda Breeding Center, Wuxiangang, and Leidongping forest landscapes. Before returning to Chengdu on Sept. 21, we will also stop at a commercial teahouse to experience a Chinese tea demonstration.

Dujiangyan -- The World Cultural Heritage Site



Constructed in 256 B.C. under the leadership of Governor Li Bing, the Dujiangyan irrigation system was the world's oldest and only damless project that is still functioning and distributing the water of the Min River to the farmland of the Chengdu Plain, supporting a population of over 10 million today. It best embodies the ancient Chinese philosophy that man should always stay in harmony with nature while taking its advantage rather than working against it (such as damming a river to build a reservoir).

The irrigation system consists of three sections: the Fish Mouth, which splits the Min River into the inner and outer rivers, the Feisha Dike, which helps reduce the amount of silt carried by the inner Min River before it flows into the Baopingkou ("mouth of the treasure bottle") Aqueduct, and the third section, which leads the water into the Chengdu Plain. The bed of the outer river is convex while that of the inner river is concave. This fact, an integral part of Li Bing's original design, results in less silt going into the inner river, which is primarily used for irrigation.

The Feisha Dike is situated at the point where the inner Min River makes its first turn after splitting from the outer Min River at the Fish Mouth. Li Bing and his people cleverly used the fact that the waters flow at different speeds at the river turn with the outer ring moving slowly and thus carrying most of the silt, which is then filtered at the dike and goes back into the outer Min River (which eventually merges into the Yangtze River). The dike also adjusts the capacity of the inner river for irrigation such that it carries 40% of the water capacity in the entire Min River in a flood season and 60% of the capacity in a drought season.

The Baopingkou Aqueduct is a passage cut through the Yulei Mountain. Before the invention of explosives, the builders accomplished this by repeatedly heating the rock with wood fires and cooling the rock with the water from the river below to crack and weaken it. The strenuous work lasted seven years before the mountain finally yielded the opening.

Emei Mountains -- Show of the World

Mount Emei is one of the Four Sacred Buddhist Mountains of China. The patron bodhisattva of Emei is Samantabhadra, known in Chinese as Puxian (普贤菩萨). In the 16th and 17th centuries, Emei was alluded to the practice of martial arts in the monasteries of Mount Emei, making the earliest extant reference to the Shaolin Monastery as Chinese boxing's place of origin. Mt Emei is a large surrounding area of countryside and is geologically known as the **Permian Emeishan Large Igneous Province**, a large igneous province generated by the Emeishan Trap's volcanic eruptions during the Permian Period. Mt. Emei was made an UNESCO World Heritage Site in 1996.

Mount Emei is the location of the first Buddhist temple built in China in the 1st century CE. The site has approximately 70 Buddhist monasteries of the Ming and Qing periods, mostly located near the mountaintop. The monasteries demonstrate a flexible architectural style that adapts to the landscape. Some, such as the halls of Baoguosi, are built on terraces of varying levels, while others, including the structures of Leiyinsi, are on raised stilts. Here, the fixed plans of Buddhist monasteries of earlier periods are modified or ignored in order to make full use of the natural scenery. The buildings of Qingyinge are laid out in an irregular plot on the narrow piece of land between the Black Dragon River and the White Dragon River. Its summit, Wan Foding, peaks at 3079.3 m above sea level. Jinding is an ideal place to **"sunrise", "sea of clouds", "Buddha", and "Shengdeng"**. Buddha is the most spectacular wonders of Emei Mountain, with dozens of small Buddhist temples that are characterized with many exquisite collections of Buddhist relics. In 1982, the State Council approved Mount Emei as a Scenic Area for China. In 1996, Mount Emei and the

Leshan Giant Buddha were included in the "World Natural and Cultural Heritage List". In 2007, the Emei Mountain was formally approved by the National Tourism Administration as one of China's 5A-class tourist destinations. Emeishan city, located in upper reaches of the Yangtze River, and the tower in the Dadu River and Qingyi Jiang will be our lodging sites.

Emei-Shan is a lush and tall sacred mountain dotted with 20 active temples and monasteries linked by hundreds of thousands of stairs. It has been one of the Middle Kingdom's four Buddhist Mountains since the advent of Buddhism in China and is now a popular pilgrimage site. In season, you will share the path with people of all ages and all walks of life attempting the arduous climb of the more than 2500m elevation gain. Despite the boisterous activity at the temples, shrouded in clouds of incense, the mountain is vast, so there are plenty of opportunities to enjoy the area without disturbing the scenic views over precipitous crags and the beautiful forests of pine, fir, and cedar trees. Emei-Shan is an UNESCO World Heritage site. Emei is in Sichuan, 200km south of Chengdu, and can be reached by train (http://www.terragalleria.com/asia/china/emei-shan/emei-shan.html).

Bifengxia (碧峰峡 meaning, "Green Peak Canyon" in Chinese, is situated 8 km from Ya'an City and 150km from Chengdu. There are three parts of the Bifengxia scenic site: Bifengxia Mountain Park, Bifengxia Wildlife Park, and Bifengxia Panda Bear Research Base Center. Bifengxia Mountain Park and Bifengxia Wildlife Park are operated and owned by the Wanguan Group and Bifengxia Panda Bear Research Base Center is owned and operated by the China Conservation and Research Center (Wolong) for the Giant Panda and is a branch of the Wolong Panda Center (http://forum.china.org.cn/viewthread.php?tid=1673).

Construction on the Bifengxia Panda Base (Panda Research Center) began in October, 2002 and was completed in October, 2003 and the planned area totals 400ha. It is located at an altitude of 1100 to 1800m (E102º57'37.02 - E103º00'0.94; N 30º03'25.47" - N 30º04'43.75) and is divided into four functional areas: raising and breeding area, office area, bamboo plantation area, and training area for pandas to be released into the wild (training in simulated-wild environments). After the earthquake of 2008, the base is the best place to see the pandas in the natural scenery they inhabit and it has been selected as China's latest giant panda protection base giving Bifengxia a new role to play in altering the destiny of this endangered species.

In Bifengxia Mountain Park, the best scenery is the gorge or canyon, which connects the Panda Base. It is breathtaking, with various-shaped waterfalls and beautiful scenery. If time permits, we may include hiking about 3-5 hours, or about 5-8 km. In Bifengxia Wildlife Park, there are many animals for you to see. Bifeng Xia Gorge Scenic Area includes two 7km-long, V-shaped canyons. The canyon is about 30-70m wide, 100-200m high, and 700-1971m above sea level. Near the reception center, one can take the "National Scenic First Escalator" up 88.8 m to find the mysterious Bifeng Temple - a romantic female legend.

From China.Org

(http://russian.china.org.cn/english/2003/Aug/71635.htm): The Bifengxia Giant Panda Base, located in the ravine of Bifengxia (Green Peak Canyon) at 1100 to 1200m above sea level, was planned and built especially for the giant panda releasing.

Construction of the first phase of the base will be completed by the end of August. Sixteen giant panda "pioneers" will be migrated from the China Research and Conservation Center for the Giant Panda in Wolong to the Bifengxia Giant Panda Base in September. They will be given wild-release training in the base to alter their endangered fate. The program is, so far, the world's largest for giant panda migration.

In the dense broadleaf forest with singing birds and murmuring streams stands a large gate with the image of a lovely giant panda carved on it, marking the entrance to the Bifengxia Giant Panda Base. Walking through the gate and along the meandering mountain slope for a while, you see several European-style cabins made of bricks and tiles. These are the pandas' houses, including kindergartens. Lush arbor plants such as camphor trees and oaks add more mystery to the unusual environment. Soon, your eyes are brightened by an artificial lake of about 1,000 square meters. The most amazing site is the S-shaped breeding ground, which, separated from the outside by ditches, is dotted with water pools and shrubs.

At present, the base has 16 houses for the 16 coming giant pandas, each of whom will have its own individual residence. There are also 16 grazing grounds, each covering at least 1,000 square meters, nine times bigger than the central one in Wolong. Several different varieties of bamboo, all favorites of giant panda, have been planted in the base either near the water or on the slopes. The new home for giant pandas will appear like a park with a natural environment for giant panda, bamboo, and human beings all living in harmony.

The giant panda is widely known as a "living fossil." In 1961, the World Wildlife Fund (WWF) selected the image of the panda as its logo as well as the pattern for its flag. Wild giant panda can only be found at the southern foot of the Qinling Mountains and the northwest brink of the Sichuan Basin. With the threat of extinction, there are altogether about 1,000 giant pandas in the world today. In China, the giant panda is under first-class state protection.

Leshan – the Begonia Country: Leshan (乐山; pinyin: Lèshān), literally meaning "happy mountain", is a prefecture-level city located in the Sichuan province of the People's Republic of China. Leshan is on the southwestern fringe of the Red Basin in Southern Sichuan, about 120km from Chengdu. It is a relaxed town set at the confluence of the Dadu He and Min He rivers. The Leshan Giant Buddha, the largest stone-carved Buddha in the world, was declared a World Heritage Site by UNESCO. The Buddha was built during the Tang Dynasty (618-907). It is carved out of a cliff face that lies at the confluence of the Minjiang, Dadu, and Qingyi rivers in the southern part of Sichuan province in China, near the city of Leshan. The stone sculpture faces Mount Emei, with the rivers flowing below his feet.

The construction, started in AD 713, lasted 90 years, and includes a water drainage system to prevent the sculpture from weathering. The best way to visit is to combine a trip on the river, which gives a unique angle of view, with a walk along the staircase carved in the cliff, which allows you to best appreciate the monumental scale.

From http://en.wikipedia.org/wiki/Leshan_Giant_Buddha: Leshan is the ancient Shu State. Construction began in AD 713, led by a Chinese monk named Haitong. He hoped that the Buddha would calm the turbulent waters that plagued the shipping vessels travelling down the river. When funding for the project was threatened, he is said to have gouged out his own eyes to show his piety and sincerity. Construction was completed by his disciples 90 years later. Apparently, the massive construction resulted in so much stone being removed from the cliff face and deposited into the river below that the currents were indeed altered by the statue, making the waters safe for passing ships.

The Grand Buddha is part of a sprawling complex of temples set on two hills, which are said to resemble the shape of a lying Buddha. At 71 m (233 feet) tall, the statue depicts a seated Maitreya Buddha with his hands resting on his knees. His shoulders are 28m wide and his smallest toenail is large enough to accommodate a seated person. There is a local saying

that, "The mountain is a Buddha and the Buddha is a mountain". This is partially because the mountain range in which the Leshan Giant Buddha is located is thought to be shaped like a slumbering Buddha when seen from the river, with the Leshan Giant Buddha as its heart.

The Leshan Buddha has fallen victim to the pollution emanating from the unbridled development in the region. According to Xinhua: "The Leshan Buddha and many Chinese natural and cultural heritage sites have succumbed to weathering, air pollution, inadequate protection, and negative influences brought by swarms of tourists." The local government has shut down factories and power plants close to the statue. However, the statue is already suffering a "blackened nose" and smears of dirt across the face.

Wu Xian Gang:

Description coming

Lei Dong Ping:

Description coming

Symposium 1: Carbon Science and Landscape Ecology: Estimation of Ecosystem Carbon Dynamics across Multiple Spatial and Temporal Scales

Organized by Yude Pan and Richard Birdsey

The combustion of fossil fuels and deforestation have increased atmospheric carbon dioxide (CO_2) concentration and radiative forcing of climate change. There is widespread interest in improving knowledge of the global carbon cycle in the context of climate change, and in developing strategies for reducing atmospheric CO_2. Carbon cycle processes operate at spatial scales from cellular to global, and over time scales from seconds to millennia. However, there is a confluence between the carbon cycle and landscape ecology involving ecological processes and patterns at intermediate scales where land management, natural disturbance, and policy formulation intersect. Because of the system complexity and multiple spatial and temporal scales, we know little about key processes at landscape scales that control carbon fluxes and storage: how ecosystem carbon dynamics might respond to climate and disturbances, and how the changes in terrestrial ecosystem carbon dynamics might feed back on atmospheric CO_2 and climate. It remains a great challenge for the research community to provide critical understanding of major uncertainties in causes and magnitudes of ecosystem CO_2 fluxes and to improve the accuracy of landscape and regional scale carbon estimates. Various approaches have been developed, such as monitoring observations of eddy flux networks, remote sensing and land inventories, manipulative experiments, ecosystem models, and model-data integration. However, there is a lack of consensus about how different natural and human-caused factors contribute to the evolving global carbon budget, and the relative importance of factors in different geographic regions. This symposium will serve as a venue for reporting progress and methodologies in estimating terrestrial carbon fluxes and storage, at multiple scales, for different ecosystems. We anticipate that the symposium will demonstrate a broad interdisciplinary perspective and reflect the state-of-the-art in estimation of terrestrial sources and sinks of carbon in the context of climate change and landscape-scale management and disturbance.

Symposium 2: Cumulative Effects of Forest Management and Climate Change on Hydrologic and Sediment Balances at the Watershed Landscape Scale

Organized by Ge Sun, Koichiro Kuraji and Pengsen Sun

Clean water is often a key goal for forestation-based landscape restoration. The general forest-water-erosion relationships are well documented in forest ecology and hydrology literature at the small watershed scale. However, few empirical data are available at a large watershed scale that shows the same effects as documented in smaller ones. Little is known about the cumulative effects of forestation practices used in landscape restoration on streamflow and sediment loading at larger spatial and temporal (large watershed and long-term) scales. Model and field experimental studies show climate warming affect forest evapotranspiration at small scale, but little hard evidence is available that shows it alters the hydrologic cycle and water quality at a large scale. We invite researchers to present case studies around the globe to explore answers to the following questions.

- Does forestation-based watershed restoration alter streamflow?
- Does forestation-based watershed restoration reduce peakflow rates and volumes, thus mitigate extreme floods?
- Does forestation-based watershed restoration reduce sediment yield?
- What are the best designs of landscape patterns, structures, and compositions to maximize the intended benefits to water quality and quantity?
- How does global warming complicate the forest-water relationships and landscape restoration practices?

Symposium 3: Managing landscapes for natural resource sustainability

Organized by: Eric J. Gustafson and Ajith Perera

The mandate to manage natural resources sustainably has become ubiquitous in the developed world and is increasingly recognized as important in developing countries. Stable human societies and an adequate standard of living cannot be realized unless adequate supplies of natural resources can be ensured, including ecosystem services. Landscape ecologists have long argued that a landscape perspective can improve the effectiveness of natural resource management. Presentations in this session will provide evidence and illustrations to support this view. A broad spectrum of the world's ecosystems and societies will be featured to provide a comprehensive, diverse and synthetic view of the application of landscape ecology principles to the management problems facing human societies around the world.

Symposium 4: Remote sensing and scaling issues in forest landscapes

Organized by Richard Lucas, Bin Zhao, and Santiago Saura

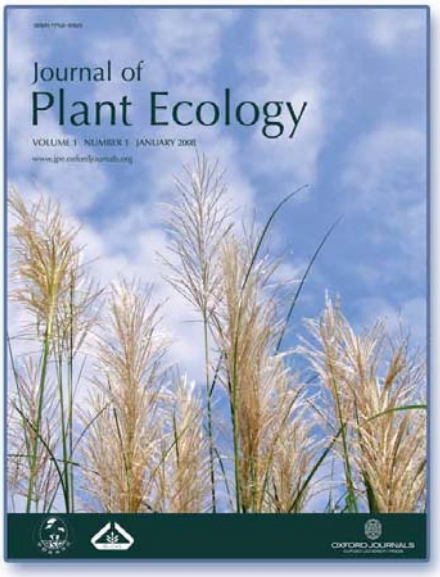
During the past few decades, technological advances in remote sensing coupled with theoretical advances in landscape ecological modelling have contributed to a better understanding of forested landscapes and dynamics at multiple scales. However, for practical and scientific applications in forest management, conservation and sustainable utilisation, there is still the requirement to effectively integrate, communicate and transfer this knowledge effectively. This Symposium therefore aims to summarise the most recent research on the retrieval and scaling of forest attributes (e.g., species type, structure, volume, biomass and change) from both airborne and spaceborne remote sensing data and advance our understanding of how the knowledge gained can be used, either singularly or in combination with ecological models, for practical application. The Symposium also intends to stimulate interest in and discussion on how such information can provide insights into forest structure, function and dynamics and ecosystem response to both natural and anthropogenic change. Particular emphasis will be placed on how these new sources of information can be best integrated to enhance our understanding of biodiversity distributions and species interactions at different spatial and temporal scales.

Special Workshop: Forest Networks

Organized by Ken Sugimura and W. Keith Moser

Forests have a variety of function, such as wood production, land and water conservation, CO_2 sequestration and provision of amenity and biodiversity. Many of our forests have degraded functions or greater potentials. In order to make more efficient use of forests for long-term sustainability of forest landscapes, we need to develop an effective "network" system to share information among people of relevant interest, instead of leaving them to a limited specialist groups or a strong government power. Thus, a forest network involves information from various disciplinary sources and/or various locations as well as people from various groups of interest or specialty. Some examples are "Inventory network on a global scale", "Monitoring network for forest health on a regional scale", and "Networking people and information for sustainable management planning".

Journal of Plant Ecology



A new quarterly peer-reviewed journal publishing from 2008, the *Journal of Plant Ecology (JPE)* published by Oxford Journals on behalf of The Institute of Botany (CAS) and The Botanical Society of China. The Editors-in-Chief are Shiqiang Wan, Guanghui Lin, and Bernhard Schmid.

JPE publishes original research articles, reviews and short communications, and includes special issues/ features focusing on the frontiers in plant ecology.

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WELCOME & ACKNOWLEDGEMENTS

IUFRO INTERNATIONAL CONFERENCE – 2008

Welcome to the International Union of Forest Research Organizations' Annual Conference. This year's meeting theme is Landscape Ecology and Forest Management: Challenges and Solutions. …

From the Co-Chairs:

The Co-Chairs for the Landscape Ecology Working Group, Dr. Thomas Crow of the United States Department of Agriculture and Dr. Jiquan Chen of the University of Toledo, would like to thank …

Conference Schedule At-A-Glance

ALL EVENTS HELD AT THE CALIFORNIA GARDEN HOTEL

Monday, September 15, 2008		
17:00	Registration	Social Reception with cash bar (snacks and soft drinks provided).
Tuesday, September 16, 2008		
08:30	Welcome & Keynote Addresses	Facilitated by Wenming Lu ***Meeting Room: Golden Hibiscus Hall*** **See Page X for detailed schedule.**
12:30	Group Photos and Brownbag Lunch	***Location: California Garden Hotel Lobby***
13:30-18:30	Poster Sessions: 1, 2 & 3	Coordinated by Janet Silbernagel and Jessica Schaefer **See Page X for detailed schedule.**
19:30-21:30	Welcome Banquet	Facilitated by Shirong Liu and Raffaele Lafortezza ***Meeting Room: California Dining Hall***
Wednesday, September 17, 2008		
08:00 – 17:30	Symposium 1: Carbon Science and Landscape Ecology: Estimation of Ecosystem Carbon Dynamics across Multiple Spatial and Temporal Scales	Chaired by Yude Pan ***Meeting Room: Welcoming Hall***
08:00 – 12:00	Symposium 2: Cumulative Effects of Forest Management and Climate Change on Hydrologic and Sediment Balances at the Watershed Landscape Scale	Chaired by Ge Sun and Koichiro Kuraji ***Meeting Room: Jinjiang Hall***
08:00 – 12:00	Oral Session 1: Landscape Management and Conservation	Chaired by John Hom and Jan Bogaert ***Meeting Room: Silver-Fir Hall***
08:00 – 12:00	Oral Session 2: Tools and Technology in Landscape Studies	Chaired by Limin Dai and Francisco J. Escobedo ***Meeting Room: Golden Orchid Hall***
12:00 – 13:00	Box Lunch Break	Box Lunch Break
13:00 – 17:30	Symposium 3: Remote Sensing and Scaling Issues in Forest Landscapes	Chaired by Bin Zhao and Peter Vogt ***Meeting Room: Jinjiang Hall***
13:00 – 17:00	Oral Session 3: Landscape Management and Conservation II	Chaired by Urmas Peterson and Stefan Schindler ***Meeting Room: Silver-Fir Hall***
13:00 – 17:00	Oral Session 5: Landscapes and Sustainability	Chaired by Juan Blanco and Zehao Shen ***Meeting Room: Golden Orchid Hall***

Conference Schedule At-A-Glance *(Continued…)*

Wednesday, September 17, 2008		
18:30 – 21:30	Conference Banquet	Facilitated by Shirong Liu and Sandra Luque ***Location: Shunxing Authentic Tea House***
Thursday, September 18, 2008		
08:00 – 12:00	Symposium 4: Managing Landscapes for Natural Resource Sustainability	Chaired by Eric Gustafson and Ajith Perera ***Meeting Room: Jinjiang Hall***
08:00 – 12:00	Symposium 5: Urban Forest Landscapes in the Context of Developing Countries and Rapid Urbanization	Chaired by Raffaele Lafortezza ***Meeting Room: Silver-Fir Hall***
08:00 – 10:50	Oral Session 4 (Special Session): Forest Monitoring Networks	Chaired by Ken Sugimura ***Meeting Room: Wuhou Hall***
08:00 – 12:00	Oral Session 6: Ecosystem Processes in Forest Landscapes	Chaired by Hamish Kimmins and Zhiyun Ouyan ***Meeting Room: Golden Orchid Hall***
12:00 – 12:45	Conclusion	Chaired by Shirong Liu ***Meeting Room: Jinjiang Hall***
12:45 – 13:30	LUNCH BREAK	***California Garden Hotel Lobby***
13:30 – 17:00	**Field Trip to Jinsha Archeological Museum, Chengdu**	Organized by Pengsen Sun and Hong Wang
19:30 – 21:30	IUFRO8.01.02 Business Meeting	Chaired by Jiquan Chen ***Meeting Room: Wuhou Hall***
September 19-21, 2008 (Friday – Sunday)		
07:30 Leave Chengdu **20:00** Arrive Back to Chengdu	**Field Trip to Dujiangyan, Emei, Leshan, Panda Breeding Base - BiFengxia**	Organized by Hong Wang, Fei He, Xingliang Liu and Scott Bearer

FULL PROGRAM, ABSTRACTS AND ALL OTHER INFORMATION ARE LOCATED ON THE CONFERENCE WEBSITE

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Full Conference Program - Sessions

Tuesday, September 16, 2008

Welcome and Keynote Addresses *Meeting Room: Golden Hibiscus Hall*		
08:30	Shirong Liu and Hong Wang	Welcome and Logistics
08:50	Jianguo Liu *Introduced by Janet Silbernagel*	"Landscapes as coupled human and natural systems"
09:40	Danny Lee *Introduced by Ge Sun*	"Using landscape ecology to anticipate and respond to emerging forest threats"
10:30	Break	Break
10:50	Bojie Fu *Introduced Xingyuan He*	"Landscape ecology for the sustainable environment: recent advances in China"
11:40	Eric Gustafson *Introduced by Jiquan Chen*	"Using spatial models to support landscape management"
12:30	Break	Group Photos and Brownbag Lunch

Poster Sessions – Coordinated by Janet Silbernagel and Jessica Schaefer
Time: 13:30 – 18:30

Poster Session 1: Landscape Conservation and Management Chaired by Anna Michalak and Carlos Ribeiro **Meeting Room: Welcoming Hall** (Posters are listed by Abstract Code number)		
13	Yoseph Assefa	"Global scenarios and regional perspectives in biodiversity and ecosystems services in the era of global change"
39	Bixia Chen, Yuei Nakama & Genji Kurima	"A study on Feng Shui village landscape and house-embracing trees in a small island - A case study of Aguni Island in Okinawa Prefecture, Japan"
273	Ming-Xing Cui	"Reconstruction of winter evaporation since AD 1865 in Shenyang by tree-ring stable carbon isotope composition"
193	Kunwar Vijay Shah & Ajit Kumar Shrivastava	"Examining the impact of natural disasters of sal (*Shorea robusta*), borer (*Hoplocerambyx spinicornis*) and bamboo (*Dendrocalamus strictus*) flowering on the forest landscape in central India: Highlighting socio-economic implications"
107	Rekha Kharel-Bastola	"Assessing Social impact of Urban Forestry program in East London, A Collaborative Project between Center for Human Geography- Brunel University, Groundwork- London and Forestry Commission- London"
6	V. A. J. Adekunle	"Impacts of logging in tropical lowland humid forest on tree species diversity and environmental conservation"
283	Meimei He, Bin Zhao, Yaner Yan & Zutao Ouyang	"Application of linear spectral mixture analysis of Landsat TM imageries in monitoring estuarine invasive plant"

Poster Session 1: Landscape Conservation and Management ***(Continued)***		
74	Krishnamurthy Ramesh, Qamar Qureshi, Gopal S. Rawat & Pradeep K. Mathur	"Contextualizing landscape ecology in wildlife management in India"
108	Bunnath Khun	"Land Use Planning in Cambodia"
15	Víctor Ávila-Akerberg	"Forest quality in southwest Mexico City Assessment towards ecological restoration of ecosystem services"
160	Liviu Nichiforel	"Property rights distribution and multi-purpose forest management in Romania A private forest owners' perspective"
284	Yaner Yan, Bin Zhao, Shusong Jin & Qianhong Wu	"Detecting the spatiotemporal changes of tidal flood in the estuarine wetland by using MODIS time series data"
285	Zhang Wenguang, Hu Yuanman Hu, Jinchu Chang, Yu Zhang Jing & Liu Miao	"Impacts of land-use change on mammal diversity in the upper reaches of Minjiang River, China: implications for biodiversity conservation planning"
260	Marie Yee, Simon Grove, Ruiping Gao, Tim Wardlaw & John Hickey	"Using a 'proximity metric' to quantify landscape structure in the Tasmanian Southern forests 'Experimental Forest Landscape'"
114	Weijing Kong, Wenting Xu, Yaning Chen & Osbert Jianxin Sun	"Spatial and temporal changes in vegetation and landscape patterns as affected by altered water-flow in the lower reaches of the Tarim River in West China"
87	Elizabeth Margarita Hernández López & José de Jesús Hernández López	"The landscape aestheticization of the tequila region"
281	Shuo Mou, Zebing Xue, Zhicai Liu, Yong Lin, Shirong Liu & Xiaojun Kou	"Time series analysis of rainfall and runoff in the Upper Zagunao catchment"
282	Xiaoxuan Zheng	"Effects of biodiversity and plant community composition on productivity in semi-arid ecosystem, Inner Mongolia, China"
170	Kostas Poirazidis, Stefan Schindler, Vasiliki Kati, Dionisios Kalivas, Aristotelis Papageorgiou & Thomas Wrbka	"Conservation of biodiversity in managed forests An integrated approach using multi-function forest services"
251	Yuxin Zhang , Keming Ma & Bojie Fu	"The scaling behavior of forest spatial pattern over time"
41	Jiquan Chen	"Edges in Fragmented Forest Landscapes -- The Frontiers in Landscape Studies"

Poster Session 2: Tools and Models Supporting Landscape Management

Chaired by Pekka Kauppi and Bo Song

Meeting Room: Silver-Fir Hall (Posters are listed by Abstract Code number)

43	Ying Chen, De-wen Li, Yi Shi & Xing-yuan He	"A Study of the Biogenic Volatile Organic Compound Emit from Urban Trees in Shenyang, China"
276	Zhang Zhou, Yide Li & Dexiang Chen	"The Climate Characteristics of Different Tropical Forest Landscape"
194	A. Sheykholeslami & A. Kialashakei	"A Study of the Forest Types in Beech sites in Hyrcanian Forest (Case Study, Watershed No. 44 of Noshahr Forests-Iran)"
206	J. Suchomel, M. Heroldová, P. Hadaš & J. Zejda	"Effects of moisture conditions on the small mammal communities of floodplain forests in central Europe"

Poster Session 2: Tools and Models Supporting Landscape Management *(Continued)*

103	Zahra Rafiei Karahroodi	"Study resistances of poplar clones to two important xylophagus pests"
4	Sunday Adeniyi Adeduntan & Olusegun Oyewole	"Diversity and abundance of soil mesofauna and microbial population in selected tropical rainforest Nigeria"
270	Yuandong Zhang, Shirong Liu & Yanchun Liu	"The influence of forest restoration on aboveground biomass in subalpine region of southwest China"
78	Chongfeng Gong, Shixiao Yu & Jiquan Chen	"Species diversity of five major urban vegetation types in Shenzhen City, China"
104	Zahra Rafiei Karahroodi & Reza Vafaii	"Collection and identification natural enemies of poplar aphids"
148	Zewei Miao & Chao Li	"Predicting tree growth dynamics of the west-central Canadian boreal forest in response to climate change"
265	Xingyuan He, Kun Yan, Wei Chen, Tao Lu & Dali Tao	"Response of the anti-oxidative system in Ginkgo biloba leaves with different size to elevated ozone concentration in urban area"
231	Shenglan Zeng, Yu Gao, Tingting Zhang, Zutao Ouyang, Jiquan Chen, Bo Li & Bin Zhao	"Effects of roads on roadside vegetation: A case study in the Yellow River Delta"
171	L. Purchart, E. Kula & J. Suchomel	"Response models of ground beetles (Coleopteran, Carabidae) to vegetation cover and heavy metals soil concentrations in mining landscape – case study from central Europe"
48	Wenbin Cui & Ajith H. Perera	"Exploring regional scale forest fire regime and succession patterns using the simulation model BFOLDS"
256	Alexander M. Duncan & Johan F. Gottgens	"Evaluation of the fern *Azolla caroliniana* to phytofiltrate arsenic from contaminated water"
55	Rui Dias & João C. Azevedo	"Distribution and spatial configuration of holm oak woodlands in the Montesinho/Nogueira site, Portugal"
84	Masoud Hajizadeh, E. Kouhgardi & A. Pazira	"Ecological capacity of Lotus in adaptation with environmental conditions"
267	Xingyuan He, Guoyou Zhang, Ling Tang, Wei Huang, Tianhong Zhao & Wei Chen	"Phytochemical response of Pinus tabulaeformis in urban area to elevated O_3 and CO_2 concentrations"
188	Jessica N. Schaefer, Jiquan Chen & Kimberley D. Brosofske	"Contribution of landscape elements to plant distribution in managed landscape"
280	Suili Xiao, Xiaowen Li, Xiaofei Hao, Xinfeng Chen & Liming Jia	"Progress reported on construction techniques of mountain forest landscape in Beijing XiShan, China"
259	Toru Terada & Makoto Yokohari	"An optimum management scheme of satoyama woodlands for the reduction of CO_2 emission"
85	Hiroshi Hashimoto, Ayumi Imanishi, Kentaro Murakami & Yukihiro Morimoto	"History of urban woods in Kyoto, Japan"
271	Junhua Chen, Changlong Mu*, Xiuming Chen, Chenghua Xiang, Chengrong Luo, Huabai Han, Guoxian Chen & Yanjun Du	"Structure regulation of land use and landscape pattern changes based on matter element analysis in a small watershed in Sichuan, China" *Presenter

Poster Session 2: Tools and Models Supporting Landscape Management *(Continued)*

161	Stoyan C. Nikolov	"Comparison of bird communities in fragmented and continuous Macedonian Pine forests: inferences at microhabitat scale"
250	Laiye Qu, Takayoshi Koike, Satoshi Kitaoka & Kaichiro Sasa	"Seasonal changes in soil respiration and its components in a Japanese larch forest in Northern Japan"

Poster Session 3: Multipurpose Management and Landscape Sustainability

Chaired by Werner Kurz and Christine Wulandari

Meeting Room: Golden Orchid Hall (Posters are listed by Abstract Code number)

262	Li-min Dai, Xiao-kui Xie & Shao Guofan	"A Platform for Forest Resources Information Management"
76	Steve N. Gillanders, Nicholas C. Coops, Sarah E. Gergel, Trisalyn Nelson, Michael A. Wulder & Nicholas R. Goodwin	"Landscape pattern analysis of mountain pine beetle infestation in British Columbia, Canada using a multi-date image time series"
224	C. Welham, B. Seely, G. Liu, A. Makitalo & J. P. Kimmins	"Evaluating alternative salvage strategies in a forested landscape following wide-spread insect-induced tree mortality"
221	Tianming Wang, Jinzhao Li, Xiaojun Kou, Pu Mou, Jianguo Wu & Jianping Ge	"Observed evidence for a greening trend in the Chinese Loess Plateau: Grain-for-Green policy drivers and climate impacts"
190	B. Seely, D. Cavens, J. P. Kimmins, S. Sheppard & K. Scoullar	"An interactive decision-support tool for assessing the long-term impacts of variable retention management on indicators of sustainable forest management"
264	Robert Pipala	"Structure and changes of cultural landscape in the Little Pieniny Mts., Western Carpathians"
96	Ekeoba Matthew Isikhuemen	"Rehabilitation of degraded forest landscape in Ologbo Forest Reserve, Edo State Nigeria"
22	Scott Bearer, Dylan Jenkins & Matt Durnin	"The FoRest decision tool: A habitat decision tool for restoring ecological values to working forests"
105	Tõnis Kärdi	"Quantification of the changes in urban forests and in urban greenery in the Baltic Sea region during the last twenty years"
279	Zeng Chong	"Spatiotemporal changes of landscape structure, tree species diversity and carbon storage at forest management unit level during 10 years after implementation of the natural forest protection project"
30	John Bradford, Peter Weishampel, Marie-Louise Smith, Randall Kolka, Michael G. Ryan & Richard Birdsey	"Carbon pools and fluxes in temperate forest landscapes: variability and implications for sampling design"
232	Tingting Zhang, Bin Zhao, Shenglan Zeng, Yu Gao & Zutao Ouyang	"Effects of agricultural and industrial activities on land salinity in channel-shifting Yellow River Delta, China"
274	Houjun Wang, Xiaoyu Li , Zulu Zhang, Xingyuan He & Wei Chen	"Landscape Pattern Analysis of Center Multi-cities of Liaoning Based on Optimization-Scale"
134	Z. L. Liu, X. Y. He, W. Chen, F. H. Yuan & K. Yan	"Responses of a liana (*Lonicera japonica Thunb.*) to cadmium stress"
115	Esmaiel Kouhgardi, M. Akbarzadeh & A. Pazira	"Classification of vegetation cover and its relation with physiographic characteristics in a natural landscape"
73	Joseph Adeola Fuwape & Sunday Adeniyi Adeduntan	"Changes in plant diversity due to intensity of logging in tropical rainforest – Akure"

Poster Session 3: Multipurpose Management and Landscape Sustainability *(Continued)*

119	Cosmas Lambini, Dayak Kombat & Sakab Kombat	"Incentives for farmers for the management of on farm timber trees"
168	Azucena Pérez-Vega, Jean-François Mas, Alejandro Velázquez & Lorenzo Vázquez-Selem	"Modeling vegetation diversity patterns in Mexico using topographic features"
272	Pengsen Sun, Shirong Liu, Zhen Yu & Zhang Lei	"Large-scale phenological change of main vegetation types in the north-south transect of eastern China (NSTEC)"
205	J. Suchomel, M. Heroldová & L. Purchart	"Isolated woods in rural landscape: Important biodiversity centers"
197	Ajit Kumar Shrivastava & Rishikesh Sharma	"Finding a feasible solution for greening of deep ravines of Chambal landscape in northern India"
186	Santiago Saura, Mónica Rodríguez Freire, Christine Estreguil & María Lidón Rubio	"Managing for the conservation of forest landscape connectivity under different land cover change scenarios"
247	Shenlai Xu, Liding Chen, Xiuzhen Li & Xingyuan He	"Analysis of land pattern on basin water balance - A case study from upper reaches of Minjiang River"

Welcome Banquet

Facilitated by Shirong Liu and Raffaele Lafortezza
Time: 19:00 – 22:00
Meeting Room: California Dining Hall

18:00	Shirong Liu	Welcoming Address
19:00	Shirong Liu	Forestry Research in China
19:15	Jiquan Chen	The Landscape Ecology Working Group (IUFRO 8.01.02)
19:30	Sandra Luque & Raffaele Lafortezza	The IUFRO-IALE Working Party
19:45	Michelle Gauthier	FAO Development
20:00	Hong Wang	Cultural Presentations

Wednesday, September 17, 2008

Symposium 1 – "Carbon Science and Landscape Ecology: Estimation of Ecosystem Carbon Dynamics across Multiple Spatial and Temporal Scales"

Chaired by Yude Pan and Richard Birdsey
Time: 08:00 – 17:30
Meeting Room: Welcoming Hall

1. GLOBAL AND CONTINENTAL CARBON BUDGETS		
08:05	FANG, J.	"Changes in Growing Stocks of Global Forests: an Assessment Based on Satellite and FAO Data"
08:30	KAUPPI, P.	"Improvement of Science or Change in Forests: Why Did European Forest Sequester Increasing Carbon in 1971-2005?"
08:55	KURZ, W.	"Canada's National Forest Carbon Monitoring, Accounting and Reporting System: Recent Improvements"
09:20	PAN, Y.	"Forest Carbon Changes of the United States in Response to Impacts of Disturbances, Succession, Climate Variability and Atmospheric Chemistry"
09:45	Break	Break
2. Carbon dynamics across time and landscapes		
10:00	HUNTZINGER, D.	"Quantification and Attribution of Spatial and Temporal Variability of North American Biospheric Carbon Flux Estimates"
10:25	ZHENG, D.	"Reassessing Missing Carbon from a New Perspective: Scaling Effects"
10:50	MICHALAK, A.	"Bridging Across Spatial and Temporal Scales in Carbon Dioxide Flux Estimation Through Geostatistical Analysis of Scale-Dependent Relationships Between Carbon Flux and Auxiliary Environmental Data"
11:15	LIU, SG.	"Modeling Terrestrial Carbon Dynamics in the Eastern United States"
12:00	Break for Lunch	Break For Lunch
3. Challenges for managing carbon at landscape scales		
14:30	BIRDSEY, R.	"Carbon Cycling in a Nested Hierarchy of Watersheds of the Delaware River Basin"
14:55	HOM, J.	"Elevated CO2 and Ozone Effects in Face Experiments Compared to Urban to Rural Gradients Studies"
15:20	COOMES, D.	"Developing Mechanisms for Reducing Deforestation: the Challenges that Lie Ahead"
15:45	Discussion	Discussion

Symposium 2 – "Cumulative Effects of Forest Management and Climate Change on Hydrologic and Sediment Balances at the Watershed Landscape Scale"

Chaired by Ge sun and Kuraji Koichiro
Time: 08:00 – 12:00
Meeting Room: Jinjiang Hall

Introduction		
08:00	SUN, GE	Introduction
Moderator: Kuraji, Koichiro		
08:05	ZHANG, XIAOPING	"Developing a decision support tool for China's re-vegetation program: Simulating regional impacts of afforestation on average annual streamflow in the Loess Plateau"
08:30	ZHANG, ZHIQIANG	"Effects of soil conservation practices on stream sedimentation at multiple scales"
08:55	CHEN, LIDING	"Effects of Landscape Organization on Watershed Hydrology and Soil Erosion Processes"
09:20	LIU, SHIRONG	"Hydrological response to a changing environment in Minjiang River"
09:45	Break	Break
Moderator: Zhang, Zhiqiang		
10:00	ZHOU, GUOYI	"Influences of climate and landuse change on water resources in Guangdong Province, Southern China"
10:25	KURAJI, KOICHIRO	"Forest and Water Issue in Japan"
10:50	ZOU, CHRIS	"Predicting the effects of large scale forest management practices on hydrological processes in the Southwest US"
11:15	GE, SUN	"Modeling the impacts of climate change, population growth, forest management, and groundwater on water availability and demand across the United States"
11:40	Group Discussion	Moderated by Ge Sun

Oral Session 1 – "Landscape Management and Conservation"

Chaired by John Hom and Jan Bogaert
Time: 08:00 – 12:00
Meeting Room: Silver-Fir Hall

08:00	John Hom & Jan Bogaert	Welcome
08:20 Abstract **156**	K. Nagashima & S. Yoshida	"Regional study on vegetation recovery patternsat abandoned plantation clearcut sites"
08:40 Abstract **177**	Carlos Antonio Alvares Soares Ribeiro, Vicente Paulo Soares, Andrea Brandão Gonçalves & Sebastião Venâncio	"Visual depictions of the Brazilian Forest Code: Helping to better understand landscape ecology principles"

Oral Session 1 – "Landscape Management and Conservation" ***(Continued)***		
09:00 Abstract **266**	Xingyuan He, Sheng Xu, Wei Chen, Dali Tao, Wenduo Xu, Yue Zhang, Yu Sun & Daoyan Su	"Responses of growth, photosynthesis, endogenous hormones and polyamine in leaves of Ginkgo biloba to elevated CO_2 and O_3 in an urban area"
09:20 Abstract **98**	Jian Ji, Hong Jiang & Wunian Yang	"National Policy's Influence on Baoxing County's Landscape Patterns and Giant Panda Population"
09:40	Break	Break
10:00 Abstract **5**	Sunday Adeniyi Adeduntan	"Influence of landscaping on diversity of macro and mesofauna in Federal University of Technology Akure, Nigeria"
10:20 Abstract **166**	Guillermo Martínez Pastur, María Vanessa Lencinas, Pablo Peri, Alicia Moretto, Juan Manuel Cellini, Inés Mormeneo & Ricardo Vukasovic	"Forest management adaptations to biodiversity conservation in sawmill industry of south Patagonia"
10:40 Abstract **89**	John Hom, Kenneth Clark & Lewis Ziska	"Carbon flux associated with management and disturbance along urban to rural gradients: from Baltimore, Maryland to the New Jersey Pine Barrens"
11:00 Abstract **163**	Jonathan C. Onyekwelu & Joseph A. Fuwape	"Conservation and Restoration of Degraded Forest Landscapes in Rainforest Zones of Nigeria Through Reforestation Projects"
11:20 Abstract **213**	Christian Traficante	"Landscape ecology for the evaluation of ecological network planning"
11:40 Abstract **28**	J. Bogaert, K. J. Koffi, S. Sibomana, I. Bamba, D. Kasalwe, V. Deblauwe, F. Munyemba Kankumbi, Y. S. S. Barima, A. Diouf & J. P. Kabulu Djibu	"The spatial dimension of species diversity: Where phytogeography, landscape ecology and conservation meet"

Oral Session 2 – "Tools and Technology in Landscape Studies" **Chaired by Limin Dai and Francisco J. Escobedo** **Time: 08:00 – 12:00** **Meeting Room: Golden Orchid Hall**		
08:00	Limin Dai and Francisco J. Escobedo	Welcome
08:20 Abstract **53**	Emilie Andrieu, Marc Deconchat, Sylvie Ladet, Florent Arrignon &Gérard Balent	"Plant species distribution in forest fragments: Landscape and logging influences"
08:40 Abstract **248**	Wei Wei, Liding Chen, Bojie Fu & Yihe Lü	"Responses and sensitivities of water erosion to the interaction of land use and rainfall in a loess hilly area, China"
09:00 Abstract **180**	Mónica Rodríguez Freire, Christine Estreguil & Peter Vogt	"Patterns of functional connectivity"
09:20 Abstract **69**	Daniel Fortin, Réhaume Courtois, Pierre Etcheverry, Claude Dussault & André Gingras	"Landscape selection by forest-dwelling caribou varies along geographical gradients in habitat attributes"
09:40	Break	Break
10:00 Abstract **63**	Francisco J. Escobedo, Mary Duryea, Christine Staudhammer, Scot Smith, Bon Dewitt, Luis F. Osorio, Zoltan Zsantsoi & Benjamin Thompson	"Rapid Assessment of Urban Forest Landscapes Following a Hurricane: Damage and Debris"
10:20 Abstract **49**	Limin Dai, Fuqiang Zhao, Dapao Yu & Li Zhou	"Forest landscape change and its driving forces of Lushuihe in Jilin province"

Oral Session 2 – "Tools and Technology in Landscape Studies" ***(Continued)***		
10:40 Abstract **269**	Ling Tang, Li Tan,Guo-you Zhang, Wei Chen & Xingyuan He	"The landscape patten and the gradient analysis of urban green space in Shenyang City of china"
11:00 Abstract **152**	César Moreira, João P. Castro, Carlos Loureiro & João C. Azevedo	"Landscape change and fire hazard in a mountainous area in northeastern Portugal"
11:20 Abstract **278**	Zhihua Liu, Hong S. He, Yu Chang & Yuanman Hu	"Analyzing the effectiveness of alternative fuel reductions of a forested landscape in Northeastern China"
11:40 Abstract **52**	Yu Dapao, Zhou Li & Limin Dai	"Simulation of Landscape restoration on fragmentized forest ecosystems induced by over-cutting in Changbai Mountain"
12:00 – 13:00	Box Lunch Break	Box Lunch Break

Symposium 3 – "Remote sensing and scaling issues in forest landscapes" **Chaired by Bin Zhao and Peter Vogt** **Time: 13:00 – 17:30** **Meeting Room: Jinjiang Hall**		
13:30	VOGT, P.	"Scale independent pattern analysis"
14:00	ESTREGUIL, C.	"Hot spots of forest pattern processes over the last decade in Europe"
14:30	ADAMCZYK, J.	"What high resolution remote sensing technologies change in landscape ecology methods"
15:00	BĘDKOWSKI, K.	"Application of standard GIS analyses in obtaining selected forest stand characteristics from airborne LiDAR data"
15:30	Break	Break
15:45	ZANG, R., Z. ZHANG & Y. DING	"Predicting the potential distribution of natural vegetation based on functional groups in species rich forest regions: A case study in a fragmented tropical forest landscape"
16:15	MAS, J., A. NAVARRETE & Y. GAO	"Sensitivity of landscape pattern metrics to remotely sensed data classification approach"
16:45	LIIRA, J., U. MANDER & U. PETERSON	"Magnitude and distance of edge influence at anthropogenically created forest edges: Analysis of very high resolution IKONOS satellite images"
17:15	REMMEL, T. & A. H. PERERA	"Fuzzy approach for the assessment of the spatial geometry of boreal forest fires"

Oral Session 3 – "Landscape Management and Conservation II"

Chaired by Urmas Peterson and Stefan Schindler
Time: 13:00 – 17:00
Meeting Room: Silver-Fir Hall

13:00 Abstract **94**	Ovidiu Iacobescu & Ionut Barnoaiea	"The use of aerial photos in decision making processes for landscape management: Soil erosion GIS database at landscape level"
13:20 Abstract **271**	Junhua Chen, Changlong Mu, Xiuming Chen, Chenghua Xiang, Chengrong Luo, Huabai Han, Guoxian Chen & Yanjun Du	"Structure regulation of land use and landscape pattern changes based on matter element analysis in a small watershed in Sichuan, China"
14:00 Abstract **7**	Mehrdad Akbarzadeh, E. Kouhgardi, A. Pzira & S. Babaie.Kafaki	"Monitoring and controlling land cover and population change in Ilghineh Chay basin Arasbaran using landscape metric and Landsat 7&5 imagery"
14:20 Abstract **242**	Haeyoung Choi	"Processing of pricing system in National Park of Korea"
14:40 Abstract **56**	Emilio R. Diaz-Varela, Manuel F. Marey-Pérez, Carlos J. Álvarez-López & Pedro Álvarez-Álvarez	"Overcoming undesired influences of deficient quality in spatial data on the analysis of forest landscape patterns: A study based landscape metrics"
15:00	Break	Break
15:20 Abstract **169**	Urmas Peterson & Jaan Liira	"Robustness of forest boundary change detection in the conditions of afforestation of abandoned agricultural lands in Eastern Europe using medium resolution imagery"
15:40 Abstract **118**	R. Lafortezza, D. A. Coomes, V. Kapos & R. M. Ewers	"Assessing The Impacts Of Forest Fragmentation In New Zealand: Scaling From Survey Plots To Landscapes"
16:00 Abstract **189**	Stefan Schindler, Kati Vasiliki, Kostas Poirazidis & Henrik von Wehrden	"The performance of landscape structure variables as predictors of biodiversity: testing the effects of scale, method of composing sets and taxon under concern"
16:20 Abstract **23**	Krzysztof Będkowski	"Impact of forest stand on the accuracy of DTM derived from airborne LIDAR data"
16:40	Zhibin Hu	

Oral Session 5 – "Landscapes and Sustainability"

Chaired by Juan Blanco and Zehao Shen
Time: 13:00 – 17:00
Meeting Room: Golden Orchid Hall

13:00 Abstract **27**	Juan A. Blanco, Brad Seely, Clive Welham & J. P. (Hammish) Kimmins	"Use of soil organic matter as a tool to predict forest productivity at the stand and landscape level"
13:20 Abstract **228**	Christine Wulandari	"Payment for environmental services as a sustainable development tool based on landscape approach"
14:00 Abstract **200**	Janet Silbernagel, Nicholas Miller & Tzu-fen Li	"Effective conservation? Modeling forest conservation scenarios"
14:20 Abstract **195**	Ze-Hao Shen & Daoxing Li	"Demography, Topographic Pattern and Mechanisms of Gap Disturbance of the Mountain Mixed Forests in the Three Gorges Region of Yangtze River, China"
14:40 Abstract **45**	Song Cheng	"Interactive effects of elevated CO_2, light and soil on biomass and growth traits in yellow birch seedlings"

Oral Session 5 – "Landscapes and Sustainability" ***(Continued)***		
15:00	Break	Break
15:20 Abstract **67**	M. Feliciano, A. Fernandes, T. Nunes, P. Alves, A. Gonçalves, L. Nunes, P. Cortez & L. Dias	"The role of urban green spaces in air quality"
15:40 Abstract **99**	Hong Jiang, Shuquan Yu & Guomo Zhou	"The dynamics analysis of landscape pattern and process"
16:00 Abstract **204**	Bo Song, Jiquan Chen, Janet M. Silbernagel, Kimberley D. Brosofske & Jerry F. Franklin	"Spatial relationships between canopy structure and understory vegetation of an old-growth Douglas-fir forest"
16:20 Abstract **21**	Jyotish Prakash Basu	"Forest Landscape Restoration and Local People Participation: An Analysis in the Drought prone Area of West Bengal, India"
16:40 Abstract **173**	Syed Ajijur Rahman & Ni Ni Shein	"Potentiality of agroforestry to poverty reduction and tropical forestland restoration in south and southeast Asia: Agroforestry to poverty reduction and forest management"

Conference Banquet

Facilitated by Shirong Liu and Sandra Luque
Time: 18:30 – 21:30
Location: Shunxing Authentic Tea House

19:15	**Pan Yude**	Update on species issue for *Forest Ecology & Management*
19:30	**Raffaele Lafortezza**	Update on special issue on *Urban Forestry & Urban Greening*
19:45	**Chao Li**	Update on edited book by the Higher Education Press and Springer
20:00	**João Azevedo**	IUFRO8.01.02 Conference for 2010
20:15	**Shiqiang Wan**	The *Journal of Plant Ecology*
20:30	**Jiquan Chen**	Biogeographic Landscapes of China – Ecology, Culture, Economics, & People

Thursday, September 18, 2008

Symposium 4 – "Managing Landscapes for Natural Resource Sustainability"

Organized by Eric Gustafson and Ajith Perera
Time: 08:00 – 12:00
Meeting Room: Jinjiang Hall

07:55	GUSTAFSON, ERIC	Introduction
08:00	RAMESH, KRISHNAMURTHY	"Contextualizing landscape ecology in wildlife management in India"

Symposium 4 – "Managing Landscapes for Natural Resource Sustainability" *(Continued…)*		
08:30	HU, YUANMAN	"Historic and current fire regimes in the Great Xing'an Mountains, northeastern China: Implications for long-term forest management"
09:00	CUI, WENBIN	"Simulations of forest fire size distribution as a guide to assessing forest policy guidelines in Ontario"
09:30	Break	Break
09:45	PERERA, AJITH H.	"Towards ecological sustainability of boreal forests: emulating natural forest disturbances as a forest management goal"
10:15	LUQUE, SANDRA	"A landscape perspective to forest management and conservation in South American native forests"
10:45	GUSTAFSON, ERIC J.	"The cumulative effects of multiple-owner and multiple-use management on forest ecosystem sustainability"
11:15	SAURA, SANTIAGO	"Management, biodiversity and patterns of change in Mediterranean forest landscapes"
11:45	Group Discussion	Synthesis and publication opportunities

Symposium 5 – "Urban Forest Landscapes in the Context of Developing Countries and Rapid Urbanization"
Organized by Raffaele Lafortezza and Cecil Konijnendijk
Time: 08:00 – 12:00
Meeting Room: Silver-Fir Hall

08:00	LAFORTEZZA, RAFFAELE	Introdction
08:05	GAUTHIER, MICHELLE	"Global urban forestry – the FAO Perspective"
08:30	HE, XINGYUAN	"Advances in urban forest research in China"
08:55	LI, ZHIYONG	"To improve the life quality by developing the forest leisure in urban and peri-urban areas"
09:20	SANESI, GIOVANNI	"Assessing the status of forest trees in the context of highly dense and industrialized urban areas"
09:45	Break	Break
10:00	ESCOBEDO, FRANCISCO	"Integrating urban forestry, ecology, and policy to improve air quality a comparative case study of two Latin American cities"
10:25	FUWAPE, JOSEPH	"Urban forest development in West Africa: benefits and challenges"
10:50	KONG, FANHUA	"Impacts of urban potential growth on green spaces: a case study in Jinan, China"

"Urban Forest Landscapes in the Context of Developing Countries and Rapid Urbanization" *(Continued…)*		
11:15	CHACALO, ALICIA	"Solid rain - application for street trees in Mexico City"
11:40	KÄRDI, TÕNIS	"Quantification of the changes in urban forests and in urban greenery in the Baltic Sea region during the last twenty years"
12:00	Group Discussion	Synthesis and publication opportunities

Oral Session 4 (Special Session) – "Forest monitoring networks"

Organized by Ken Sugimura
Time: 08:00 – 10:50
Meeting Room: Wohou Hall

08:00	Ken Sugimura	Introduction
08:10 Abstract **207**	Ken Sugimura & Theodore E. Howard	"Development of a forest network system to improve the Japanese zoning process"
08:35 Abstract **142**	S. Makino, H. Goto, T. Inoue, M. Hasegawa, K. Okabe, H. Tanaka & I. Okochi	"Networking ecological information for evaluating ecosystem functions"
09:00 Abstract **112**	Hiroshi Kondoh, Koichi Ikeda & Toru Koizumi	"Sustainable management of deer-forest systems based on network hazard assessment"
09:25 Abstract **220**	Bing Wang, Guangdong Zhao & Hao Guo	"Introduction and progress of Chinese Forest Ecosystem Research Network"
09:50	Break	Break
10:00 Abstract **287**	Ge Sun, Steve McNulty, Jiquan Chen, Xingguo Han, Shiping Chen, Guanghui Lin, Zhiqiang Zhang, Xudong Zhang, Bin Zhao & Guangsheng Zhou	"Quantifying the impacts of landuse and climate change on carbon and water balances through the United States - China Carbon Consortium (USCCC)"
10:25 Abstract **257**	S. Luque & A. Regolini	"FRAGFORNET: A network of experts on forest fragmentation and biodiversity loss in south America"
10:50	Group Discussion	Synthesis and publication opportunities

Oral Session 6 – "Ecosystem Processes in Forest Landscapes"

Chaired d by Hamish Kimmins and Zhiyun Ouyan
Time: 08:00 – 12:00
Meeting Room: Golden Orchid Hall

08:00	Hamish Kimmins and Zhiyun Ouyan	Introduction
08:20 Abstract **57**	Renata A. Duarte	"Rule of Law, Corruption and Conservation Stewardship"
08:40 Abstract **286**	Zhiyun Ouyang, Weihua Xu, Rencai Dong, Xuzhi Wang & Keming Ma	"Impacts of Wenchuan earthquake on ecosystems and wildlife habitats in Minshan region, Sichuan Province, China"

"**Ecosystem Processes in Forest Landscapes**" *(Continued…)*		
09:00 Abstract **229**	Jun Yang	"Urban forest management in Beijing under the context of climate change: a study of potential impact and adaptation measures"
09:20 Abstract **150**	Khaled Misbahuzzaman	"Integrating community resources management practices into forest landscape restoration programs in uplands of Bangladesh"
09:40	Break	Break
10:00 Abstract **90**	Seyed Mohsen Hosseini, Niloufar Islamzadeh & Hamid Reza Moradi	"Rehabitation of Crown imperial in Iran Using Landscape Ecology"
10:20 Abstract **111**	James Peter (Hammish) Kimmins, Fuliang Cao & Shirong Liu	"Scaling up from stand to landscape scales: the importance of driving landscape models with bottom-up ecological details from the stand level ecosystem"
10:40 Abstract **8**	Mehrdad Akbarzadeh, S. BabaieKafaki, E. Kouhgardi, A. Pzira & A. Faramarzi	"Environmental challenges in *MARDANAGHOM* CHAY basin Arasbaran forests northwest of Iran"
11:00 Abstract **122**	Chao Li	"Optimal Utilization of Forest Resources within the Integrated Land Management Framework: A Landscape Ecology Perspective"
11:20 Abstract **219**	N. Wales, E. Bruce & R. Murphy	"The use of a mixed-methods approach in understanding the influence of World Heritage zoning on subsistence forest practices"
11:40 Abstract **159**	Yosihiro Natuhara, Kensuke Imai &Ayumi Imanishi	"Hierarchical conservation planning in Japan"

CONCLUSION **Chaired by Shirong Liu** **Time: 12:00 – 12:45, Meeting Room: Jinjiang Hall**		
12:45 – 13:30	Lunch Break	Lunch Break
13:30 – 17:00	Field Trip	Field Trip to Jinsha Archaeological Museum, Chengdu Organized by Hong Wang
19:30 – 21:30	IUFRO8.01.02 Business Meeting	**Chaired by Jiquan Chen** ***Meeting Room: Wuhou Hall***

Friday – Sunday

September 19 – 21, 2008

Field Trip to Dujiangyan - Emei – Leshan - Panda Breeding Base – BiFengxia

Organized by Hong Wang, Fei He, Xingliang Liu and Scott Bearer

07:30	Leave Chengdu
20:00	Return to Chengdu