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### 内 容 提 要

本书以文字资料和图片的形式,分绪言、馆内史陈、生态园林、科教交流和观光旅游等篇章。绪言记录总结了中国竹子博物馆的成长历程和建馆特色;馆内史陈篇主要陈述了竹子的历史、资源、栽培、利用、文化等各个方面的馆陈史实材料情况;生态园林篇展示了中国竹子博物馆内竹子种类、竹子生态园林和景点等方面的活资料;科教交流篇收集介绍了科技、科普和国内外的交流情况;观光旅游篇介绍了旅游设施、活动和所取得的经济效益;本书附录部分还收录了近300种馆存竹种的名录。

#### **Abstract**

The book "China Bamboo Museum" consists of 5 chapters with rich pictures and exact written description. These chapters provide a historical record of the various categories, including Introduction, Collected Items, Eco-garden, Science Propaganda, Tourism and Sightseeing. The Collected Items refers to bamboo history, uses, resources, cultivation and cultures; Eco-garden demonstrated copious bamboo spesies and innovative ecological gardens; Science Propaganda introduces the scientific research, propaganda of science, education and international exchange; Tourism and Sightseeing presents the perfect facilities, activities organized and significant benefits. About 300 bamboo species in the Museum are listed in the addendum.

竹子是森林资源的重要组成部分,是人类重要的物质财富。全世界共有竹林2000多万公顷,种类达到70多属1200多种,遍布亚洲、非洲、澳洲和南北美洲。我国现有竹林面积500多万公顷,种类达到39属500多种,被誉为世界竹子大国。

竹子浑身是宝。竹材可以用作建筑材料、造纸原料、生产资料、生活用品材料以及工艺品制作材料,还可以烧制竹炭、提取竹酢液和竹纤维;竹笋富含人体需要的氨基酸和纤维素,是 天然的健康食品;竹根、竹壳、枝叶等副产品也可以用于加工工艺品,是提取黄酮、抗氧化剂等生物制品的原料。

竹子一次造林,永续利用,是一种可持续利用的生物再生资源。竹林具有良好的生态环境保护作用,其繁茂的竹竿、枝叶和地下鞭根系统具有极强的水土保持、涵养水源、净化空气、隔离噪音的作用。竹子四季常绿,婀娜多姿,是不可多得的绿化荒山、美化环境的造林和造园植物。

竹子还是中华民族的重要精神财富。竹子洁身自好、虚心向上、高风亮节、团结拼博、欣 欣向荣的精神,是中华民族精神风貌的象征。因此,竹子历来为诗人所赞颂,为画家所描绘, 为乡民所爱护,为社会所崇尚。

《中国竹子博物馆》图文并茂,分绪言、馆内史陈、生态园林、科普交流和观光旅游等篇章,收录了30多年来从竹种园到博物馆的重要历史图片资料,陈述了竹子的历史、资源、栽培、利用、文化等各个方面的馆存史实材料,展示了中国竹子博物馆内竹子种类、生态园林的活资料,介绍了开展科技、科普、旅游以及国内外交流情况,附录部分还收录了300多种馆存竹种的名录。该书融资料性和科技性为一体,是有关方面的一本较好的参考书。欣慰之余,在此也向中国竹子博物馆的建设者和本书的编写者表示热烈的祝贺,并期望竹子博物馆为弘扬中国竹文化发挥更大的作用。

中国工程院院士 浙江林学院院长

張介生 2006.11.20.

## Foreword

Bamboo, one of the important forest resources, is the important physical property of humankind. There are 1 200 species and 70 genera of bamboo in the world, widely distributed in Asia, Africa, Australia and South and North America. China, the richest bamboo producing country in the world, has over 500 bamboo species belonged to 39 genera with over 5 million ha bamboo area, and has long been known as the "Kingdom of Bamboo".

All parts of bamboo can be fully utilized. Bamboo culms are widely used in the fields of construction, papermaking, farming tools, life items and handcrafts, including bamboo charcoals, bamboo vinegar and fibers. Bamboo shoot has rich essential amino acid and edible cellulose, known as a natural health food. Bamboo by-products, such as roots, shells, branches etc., can be made into some arts and crafts, as well as the biologic products such as flavonoids, antioxidant, etc..

Once bamboo stand is established, it can be continually managed as sustainable and renewable bio-resources. Bamboo forests show good ecological function and play an important role in whole natural ecosystem. Its flourishing culms, branches, leaves and fine mat of fibrous root system are efficient in conserving soil and water, cleaning air and keeping apart of noise. With graceful culms and evergreen leaves, bamboos are beautiful plants for landscaping and gardening, as well as covering mountains.

Bamboo is also an important treasure of our country's culture. Some biological properties of bamboos have been imagined as ideal embodiment of the Chinese nationalities, such as keeping the moral integrity, straightforward, sincere qualities, and stick together vigorously and flourishing. Thus, bamboos have been praised in many Chinese songs, painted by the artists, cherished by local people and appreciated by societies.

The book "China Bamboo Museum" consists of 5 chapters with rich pictures and exact written description. These chapters include Introduction, Collected Items, Eco-garden, Science Propaganda, Tourism and Sightseeing, which collected all of the important history records in the past 30 years from establishment of Bamboo Botanic Garden to the Museum, including the bamboo history, resources, cultivation, utilization, culture, etc. The book shows the bamboo species and life in the eco-garden that are collected in China Bamboo Museum, introduced the science and technology, science popularization, tourism and domestic and international exchange. 300 bamboo species that collected in the Museum are listed in the Appendix. This is a preferable reference book for related readers. Being gratified, we congratulated the constructors of the Museum and editors on having published this book, and looking forward to playing more roles in carrying forward bamboo culture.

Zhang Qisheng
Academician of Chinese Academy of Engineering
President of Zhejiang Forestry College
Nov. 20, 2006

竹子生长快,繁殖力强,一次种植,可以永续利用。竹产业是健康环保和可持续发展经营的传统产业,又是一项符合世界发展趋势,推动人类社会从工业文明向生态文明发展的朝阳产业。

我国不仅竹类资源丰富,而且竹文化历史悠久,博大精深,被誉为竹子文明的国度。竹子 为我国的传统农耕文明和现代工业文明作出了重大贡献,在刚刚兴起的生态文明中,竹子也逐 渐崭露出了独特的优势和魅力。

竹子是竹区的重要经济资源,2005年我国竹产业产值达到了596亿元,出口创汇6亿美元。在全国的主要竹产区,发展竹产业经济成为山区脱贫、农民致富的重要途径,发展竹产业、振兴地方经济已经成为竹区新农村建设的重要战略。

浙江是竹资源的大省,竹产业和竹文化的强省。全省每个县、市、区都有竹子分布,竹林资源占全省森林面积的13.4%,2005年全省竹业总产值达到180亿元,约占全国的1/3,极大地推动了广大竹区新农村建设的进程。

2000年在闻名世界的浙江安吉竹乡建成了中国竹子博物馆,无疑为中国竹文化的发展建设了一座不可多得的前沿阵地。中国竹子博物馆建设6年多时间以来,为中国竹文化的弘扬作出了重要贡献,同时带动了竹文化旅游经济的发展,成为科研、科普和旅游密切结合,良性循环的经营发展的典范。

中国竹子博物馆的建设和发展是中国林科院亚林所和安吉县人民政府的专家和工作者几十年努力的劳动结晶,也是国家有关领导和社会各界大力支持的结果。《中国竹子博物馆》回顾、记录了中国竹子博物馆的建馆历程,总结了中国竹子博物馆健康成长的经验,作为一个长期从事竹业事业的工作者,看到该书的编撰出版感到非常欣喜,对作者的辛勤耕耘表示由衷的感谢。借此机会,并祝愿中国竹子博物馆不断发展、不断壮大,为发展竹产业、弘扬中国竹文化作出更大的贡献。

浙江省林业厅厅长 中国林学会竹子分会主任委员

是黄河村里 11月22日

## Preface

Bamboo plants grow and propagate fast. Once bamboo stand is established, it can be continually managed. Bamboo sector, taken as the traditional industry of the environment-friendly and sustainable management that is the current global trend of development, is regarded as a sunrise industry that promote the human development from industry civilization to ecological civilization.

China has rich bamboo resources and long history of broad and deep bamboo culture, and it known as the "Kingdom of Bamboo Civilization" Bamboo has largely contributed to the traditional farming civilization and modern industry civilization. During the uprising ecology civilization building, bamboo gradually expresses a unique superiority and charm.

Bamboo is the important economic resource in bamboo-growing regions. The total output value of bamboo sector in China in 2005 reached more than 596 billion RMB Yuan and the export value reached 600 million U.S. dollar. In main bamboo-growing areas in China, development of bamboo economy is an important way to alleviate poverty and enrich local people. Development of bamboo sector to promote the local economy has been an important strategy to build New Socialist Countryside in bamboo regions.

Zhejiang has rich bamboo resources with developed bamboo sector and bamboo culture. Bamboo distributes widely in every cities and counties around Zhejiang, occupied 13.4% of total forestry area. The total output value of bamboo sector in Zhejiang in 2005 amounted to 18 billion RMB Yuan, which occupied one third of China's total output value of bamboo secfor, that promote largely the progress of New Socialist Countryside.

In 2000, China Bamboo Museum has been established in famous Bamboo Homeland of Anji County in Zhejiang Province that is indubitably a unique platform to develop bamboo culture. It contributed greatly to development of bamboo culture in the past six years after established, along with the tourist development. China Bamboo Museum shows a paradigm for well development bonding the research, education and tourist.

Construction and development of China Bamboo Museum attributed to the Research Institute of Subtropical Forestry of Chinese Academy of Forestry, the People's Government of Anji County for their efforts and inputs in past decades, and to all related national leaders and proponents for their supports alike. The Book *China Bamboo Museum* reviewed its history and summarized the experiences of its development. As a practitioner of bamboo sector for long term, I appreciated very much to publish this book and wish to express my thanks to all authors and editors for their hard efforts, and take this chance to hope that China Bamboo Museum will be developed continuously and contribute more to development of bamboo sector and China's bamboo culture.

Chen Tiexiong

Director General of Forestry Department of Zhejiang Province

President of China Bamboo Society

Nov. 22, 2006



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◎安吉地理位置图 Geographical location of Anji

竹子是重要的森林资源。它具有分布广、生长快、用途多、可持续经营的特点,被誉为"绿色的金矿"。青青翠竹,伴随并推动了人类文明的进步。进入现代文明社会,在全球面临生态环境恶化,能源紧缺,人类文化素质亟待提高的21世纪,竹子已经从单纯的经济利用进入到经济、生态和文化的全面利用,成为人类生态文明发展中的和谐伴侣和良师益友。

我国是世界竹子大国, 地处 世界竹子分布的中心,是世界上 最主要的产竹国。全国现有竹林 面积500多万公顷,竹种30多属 500多种。我国不仅竹类资源极 其丰富,而且是最早利用竹子的 国家,素以"竹子文明国度"而 享誉世界。早在新石器时代, 竹 子就已进入炎黄子孙的生活。举 凡衣食住行、科技文化, 无不留 下竹子的踪迹。竹子高风亮节、 虚心向上,从古至今为国人所讴 歌推崇、寄情言志,为诗人所题 咏、画家所描绘、艺人所雕刻、 游人所憧憬, 被视为人格境界的 理想化身。



◎中国竹子博物馆位置图 Location of China Bamboo Museum

安吉县位于"长三角"经济区的西部,是我国闻名遐迩的"竹乡",具有丰富的竹类资源和悠久的竹文化历史,全县现有乡土竹种50个,竹林面积6.8万公顷,占国土总面积的1/3以上,是全国竹林集约经营的典范,2005年竹业产值达到50多亿元,名列全国之首。中国竹子博物馆坐落在浙江省安吉县城南6公里的浒溪河畔。

Bamboo is one of the important forest resources. Because of its wide distribution, fast growing, multiple utilization and sustainable development, bamboo has been named the "green gold". The virid and tender bamboo witnesses and propels the development of human civilization. In the 21<sup>st</sup> century when deterioration of environment, shortage of energy sources and lack of knowledge are the main issues faced by human society, the uses of bamboo are extended from economy to multiple purposes including economic, environmental and cultural realms, and bamboo becomes harmonious friend and co-worker of development of human ecological civilization.

China, the richest bamboo producing country in the world, has over 500 bamboo species belonged to 39 genera with 4 million hectares of bamboo area. Furthermore, China is the earliest nation making use of bamboo, thus she was known as "a bamboo culture country" for long. Since New Stone Age, bamboo among all plants has rooted deeply in the Chinese daily life and culture, and colored the lives of Chinese, such as clothing, food, housing and transportation, also in their literature and arts. Some biological properties of bamboos have been imagined as ideal embodiment of personality realm, which have been praised in many Chinese songs, poems and traditional paintings since ancient time. It has been held in esteem as a country with the brilliant bamboo culture.

China Bamboo Museum is located about 6 kilometers far from County seat of Anji. Long been known as the "Bamboo Homeland", Anji locates in western part of Yangtse River delta region. She has abundant bamboo resources as well as a long history of bamboo culture. There are 50 native bamboo species covering 1/3 of Anji, which is about 68,000 hectares. It established an excellent model for intensive management of bamboo. In 2005 the annual production of bamboo sector is over 5 billion RMB Yuan, ranking the first in China.



◎安吉中国大竹海 China Bamboo Sea



◎ **1974年3月建园** Anji Bamboo Botanic Garden established in March, 1974



◎1981年获得加拿大国际发展研究中心项目资助 Financial support from Canada's International Development Research Centre (IDRC)in 1981



◎1982年新建的竹种园大门 Gate built in 1982

1973年,中国科学院学部委员、中国林科院 院长郑万钧教授和副院长吴中伦教授在安吉调研 毛竹科研和生产工作时,提议在安吉建设一座竹 子植物园。1974年3月中国林科院亚林所、安吉县 灵峰寺林场和县林业局共同规划筹建安吉竹种 园, 当年引种竹种50多种。1981年得到了加拿大 国际发展研究中心的援助, 引种了新竹种, 并修 建了大门、围墙和喷灌等基础设施, 开展了抗寒 竹种的研究试验。1985年林科院副院长侯治溥先 生主持对竹种园进行了科技成果鉴定,获得了 省、部科技进步三等奖。1990年引入旅游概念, 在县府和亚林所领导主持下开始二期规划建设, 逐步修建了竹林精舍、翠湖、咏竹廊等旅游景 点。1996年10月建成安吉竹子博物馆,11月李鹏 总理等党和国家领导人视察竹种园。1997年97′ 中国竹文化节参会贵宾在竹种园营造了国际竹子 友谊林。1998年开始三期扩建规划,先后修建了 草坪广场、修竹湖和中国竹子博物馆馆舍。 2000年10月中国竹子博物馆试开馆,2001年组建 了安吉竹子博览园有限责任公司。2002年竹博园 通过国家评审,获得湖州市首家国家AAAA级景区 称号。2005年规划第四期扩建工程,投资二千多 万元,修建了孟宗园、修竹长廊、千琅阁等22个 景点,增设了游览车、游客中心等旅游设施。

中国竹子博物馆位于安吉县城南的浒溪之畔,由史实材料展藏馆和生态竹种观光园区两大部分组成。史实材料展藏馆分7个展厅,生态竹种观光园区引种栽培竹种350多种,并融入了50多个竹文化旅游景点。全馆集收藏、科研、科普宣传和生态观光旅游功能为一体,依靠自身理念的不断创新,形成了一座独具生态特色的、企业管理模式的竹类主题文化博物馆,将中国竹文化的魅力发挥得淋漓尽致,不仅极大地提高了经济效益,壮大了经济基础,而且探索了一条生态、科研、科普和旅游观光相得益彰、良性循环,不断追求、不断发展的成功道路。

党和国家领导人及林业部、国家科委、浙江省等部省级领导曾先后莅临博物馆视察指导,对 博物馆的发展给予了大力支持。

社会各界知名人士对中国竹子博物馆的建设始终给予热情关怀和支持。2000年,中国竹子博物馆试开馆前夕,88岁高龄的著名国学大师、中央文史研究馆馆长、全国政协常委、书法家启功先生特地为之题写了馆名——中国竹子博物馆。

In 1973, called for by Zheng Wanjun, former president of Chinese Academy of Forestry, Anji Bamboo Botanic Garden was founded by the joint efforts of the Research Institute of Subtropical Forestry (RISF) of Chinese Academy of Forestry (CAF), Linfengsi Forest Farm of Anji and the Forestry Bureau of Anji. In the same year, over 40 species were introduced into the garden. In 1981, under the financial



◎1985年10月首次中国国际竹子学术研讨会代表参观竹种园 Participants of 1<sup>st</sup> China International Bamboo Workshop visited Bamboo Botanic Garden in Oct. 1985

support of Canada's International Development Research Centre (IDRC), more bamboo species were introduced, and facilities were available for commercial and academic use. In the meantime, research on cold-resistance of bamboo species were conducted. In 1985, Anji Bamboo Botanic Garden was awarded by 3<sup>rd</sup> Prize of Development on Science and Technology of Zhejiang Province and National Ministry of Forestry in the appraisal of achievements presided by Hou Zhipu, Vice President of Chinese Academy of Forestry. In 1990, bamboo house, Cui Lake, Gaofeng Gloriette and Yongzhu Porch were built for tourism purpose according to the Second Period Program under the instruction of leaders



◎1988年8月8日竹种园遭受洪灾袭击 Flooding in Bamboo Botanic Garden on Aug. 8, 1988

and RISF. In October 1996, Anji Bamboo Museum was founded. In November the same year, former premier Li Peng visited the Museum. In 1997, Bamboo Forest of International Friendship was planted by the honored guests of China Bamboo Culture Festival. Lawn square, Xiuzhu Lake and building of China Bamboo Museum were finished after 3 years' efforts since the Third Period Program commenced in 1998. In October 2000, China Bamboo Museum opened on trial. In 2001 Anji Bamboo Museum & Garden Co. Ltd. was founded by RISF, Linfengsi Forest Farm of Anji and the

Forestry Bureau of Anji. In 2002, it became the first National AAAA Attraction of China in Huzhou City after a national evaluation. In 2005, the Forth Period Program with the investment of nearly ten million RMB was planed. Mengzong Park, Xiuzhu Porch, Qianlang Pavilion and 19 sights were constructed, tourist cars were introduced and Tourist Center was established.

Located at the side of Hu Stream in the south of Anji County seat, China Bamboo Museum was consisted of two parts: Collection of historical bamboo items and Eco-garden. Collection of historical bamboo items consists of 7 sections while Eco-garden has a collection of over 350 bamboo species in more than 50 sights for tourists. We innovated a new way to build our bamboo culture topic museum with Eco-characteristics and Cooperation-management which composes the functions of collection, scientific research, science education and eco-tourism, Representing China bamboo culture thoroughly and vividly. It did not only enormously increase the local economy but also explores a successful way to promote a



◎1990年开始投资建设旅游景点 A tourism spot built after 1990

◎1991年11月县政府领导现场策划旅游景点建设 Leaders of County Government were designing the sight spot in Nov. 1991



◎1992年重建的竹种园大门 Gate rebuilt in 1992



◎1997年完成安吉竹子博物馆建设 Anji Bamboo Museum finished in 1997

virtuous cycle and continuous development of ecosystem, scientific research, education and ecotourism.

Leaders of the national government and the Party, the State Administration of Forestry, National Science and Technology Committee, Zhejiang Province and Huzhou City have visited to the Museum to inspect our work and provided us the great supports.

The celebrities have offered cares and supports to us. In the eve of the founding of China Bamboo Museum in 2000, Qi Gong, a famous calligrapher, Master of Chinese Learning, Curator of the Central Research Institute of Culture and History and member of the National Committee of CPPCC, inscribed the Museum's name.