

AMERICAN BAMBOO SOCIETY

1101 San Leon Ct.
Solana Beach, CA 92075
(619) 481-9869

Newsletter Vol. VI, No. 1
January, 1985

Dear Member,

The Quail semiannual plant sale will be held from 10 am to 3 pm on Sunday, May 5, 1985 at Quail Botanical Gardens in Encinitas, California. ABS will sell a selection of bamboos at the sale plus a special lot of seedlings of *Phyllostachys heterocyclus* (Carrière) Mitford form *pubescens* (Houzeau de Lehaie) D. McClintock, also known as Mao chu.

毛竹

Mao chu (hairy bamboo) is the most important bamboo grown today in China, where its forests cover 2 million hectares (an area the size of New Jersey). High yield cultivation techniques in China have produced plants over 80 feet tall with culms 7 inches in diameter at eye level. Annual output of timber is about 12 tons per acre. In Japan the species is called Moso-chiku or simply Moso while botanically it is usually called *Phyllostachys pubescens* in the U.S. The *Journal of Bamboo Research*, published in China, contains 13 articles in just the last 3 years about this important species. In one of these articles Li Guo-qing et al. (Vol. 2, No. 1, 1983:132) state that Mao chu has recently been planted for the first time north of the Yellow River in Henan province where "It has been proved that it can stand temperatures as low as -20.5° C (-5° F). The article goes on to say that seedlings are preferred to mother plants when establishing a new grove because seedlings are easy to plant and are much more adaptable. Also, "The cost of transplanting mother plants can be as high as 104 times more than that of transplanting seedlings."

Although Mao chu was first introduced into the U.S. about 90 years ago, it has not been extensively grown here. This may be due to the difficulty of propagating from mature plants and because seedlings have not been available. In March of 1983, ABS received seeds of Mao chu from China. The seedlings have been grown in the quarantine green houses at Quail and are due for release on March 31, 1985. Some seedlings will be given to public gardens, some will remain at Quail and the rest will be sold beginning with the sale on May 5 at Quail.

The seedlings have each been growing in a 2 gallon pot for about one year. There are typically 3 to 6 culms which are 2 to 3 feet tall in each pot. The plants have not been divided so that each is a separate clone. They will be sold in lots as follows: 1 to 9 plants, \$35 each; 10 to 24 plants, \$30 each; 25 to 49 plants, \$25 each; 50 or more plants, \$20 each. No plants will be

shipped for this sale. The proceeds of the sale go half to the Quail Botanical Gardens Foundation and half to ABS.

Annual Report

The ABS annual meeting was held at Quail on December 15, 1984. Several amendments were made to the Bylaws. These include the addition of 2 directors to the present Board of seven. The new directors are Ned Jaquith of Portland, Oregon and Joe Shenker of Coconut Grove, Florida.

The Financial Statement for the fiscal year ending October 31, 1984 is outlined below.

Income:

Memberships.....	\$6897.00
Sales	<u>1655.10</u>
Total	\$8552.10

Expenses:

Postage	\$1750.95
Supplies	241.08
Publications	3866.22
Purchases	880.35
Other	<u>295.07</u>
Total	\$7033.67

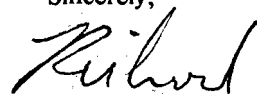
Income minus expenses.....\$1518.43

Cash on Hand.....\$2489.45

The ABS Journal has not come out for about a year. U.S. members should have received Vol. 4, No. 1-2 with this Newsletter. Foreign members will receive this issue of the Journal mailed separately by surface mail. The next issue should be out in about one month.

ABS membership is now 572. The list of current members is on the next 6 pages. We do not sell our membership list but publish it, arranged by country, state and zip code for the convenience of members who might want to contact bamboo enthusiasts in their area.

Sincerely,



Richard A. Haubrich

AMERICAN BAMBOO SOCIETY

1101 San Leon Ct.
Solana Beach, CA 92075
(619) 481-9869

Newsletter Vol. VI, No. 2 March, 1985

Dear Member,

There will be a working meeting of ABS members at Quail Botanical Gardens on Saturday, March 30 starting at 9 am. One plant will be dug out of the ground and others will be planted. Some Mao Chu seedlings will be divided and repotted. This is a chance to get hands on experience in trimming, weeding, fertilizing, digging, dividing and planting bamboos. There will also be a tour and talk on identification of genera and species using the new Conservation Collection of over 70 different kinds of bamboo. Come early and bring your lunch. To reach Quail, exit I-5 at Encinitas Blvd. - about 25 miles north of San Diego. Go east on Encinitas Blvd. one half mile to Quail Gardens Drive on the left. Go north on Quail Gardens Drive one half mile to the Gardens entrance.

Quail Plant Sale in May

We expect to have over 20 different bamboo species at the Quail Plant Sale, 10 am to 3 pm on Sunday, May 5, 1985. Featured will be 2 year old seedlings of Mao Chu (*Phyllostachys pubescens*, also called Moso).

Mao Chu does not flower gregariously like many other bamboos. At any given time only a small percentage of plants flower, making it difficult to find seed in quantity. ABS obtained its seed from China through the help of Panda Products Nursery of Calpella, California. Their many friends and relatives in China gathered the seed from 3 different provinces: Guangxi, Guangdong and Guizhou.

The seedlings should be released from quarantine by March 15. They are now for sale at \$35 each for 1 to 9 plants, \$30 each for 10 to 24 plants, \$25 each for 25 to 49 plants, and \$20 each for 50 or more plants. The number of available seedlings is limited, so if you plan to buy a large lot (25 or more), place your order immediately with a 30% deposit. Small lots, however, will be available at the May 5th sale. Plants can be picked up any time at Quail between April 1 and May 30 by making prior arrangements with ABS. The Docents of Quail Gardens have offered to help package and ship the seedlings. The plants will be shipped anywhere in the U.S. for a ship-

ping charge of \$15 for the first plant plus \$5 for each additional plant. Orders for plants to be shipped must be received before April 1, 1985.

There are still some seedlings available free to public gardens. These will be shipped for the cost of packaging and first class postage.

Northern California Meeting

There will be an ABS meeting on Sunday, April 28, 1985 from 1 to 4 pm at the home of Richard Waters, 1462 Darby Road, Sebastopol, California, (707) 823-0131. I will give a talk on the Bamboo Conservation Project now being carried out at Quail.

Bamboo Sources List

The fifth annual Bamboo Species Sources List is now being compiled. If you were a source last year, you will receive a form to fill out for this year. If you were not on last years List and wish to be included this year, let me know immediately. To receive a copy of the List send a stamped self addressed, business size envelope; the 1985 List will be mailed to you after April 1. Last year's List contained 95 different species and varieties from 22 sources. A brief description of each species makes the List a handy summary of cultivated bamboos.

Bamboo Poles

Many bamboo lovers would like to make things from bamboo poles. If your plants are still small or the culms sparse, you might consider buying imported poles. These are available at many retail outlets, but buying in quantity from direct importers can get you the best price. Two of these in California are: Bond Manufacturing Co., P.O. Box 2278, Martinez, CA 94553 and Orion Trading Co., 1508 Posen Ave., Albany, CA 94706. Both carry a selection of Tonkin Cane (*Arundinaria amabilis*) up to 1 inch in diameter and other poles up to 6 inches in diameter. Mr. Christopher Hall of Orion says he will give a 10% discount to ABS members.

Letters to ABS

Growing Bamboo Indoors

The use of Bamboo in commercial interior landscapes is relatively new. Up until the last few years, tall plants such as *Ficus*, *Schefflera* and palms were used to fill the large open space of atriums shopping centers. Bamboo has become increasingly popular, mainly because of the great heights in which it is available and the relative ease in handling.

My experience in using Bamboo comes from an installation of 165, 40-50 foot plants in an atrium in New Jersey. We originally thought the species was *Bambusa vulgaris*, but after some research we felt it matched more closely the description of *Phyllostachys pubescens*, Moso Bamboo. It has since been identified as *Phyllostachys nigra* Cv. Henon by Dr. Thomas Soderstrom of the Smithsonian Institution. The plants averaged 40 to 45 feet tall with culms 3½ to 4 inches in diameter at the base. They were obtained from Thomas Bros. Nursery, Cameron, North Carolina, and cost approximately \$120.00 per culm. Price is based on caliper inch and height; for example, a culm 3 inches in diameter and 40 feet tall would cost \$120.00, based on \$1.00 per unit of measurement. Prices vary depending on availability.

The installation, originally scheduled for May 1983, was moved up to early December, 1982 to insure our only access through part of a building scheduled for completion at the end of that year. After consulting with the nursery regarding movement of the selected bamboo during the cooler months, we decided to proceed. It had been an extremely mild winter up to that point, with temperatures averaging in the forties, but on the first day of installation it snowed lightly with temperatures dipping into the low thirties.

The complete installation took about ten days. Three of the 20 foot triangular planters were designated for the bamboo. These areas were excavated to 3-3½ feet deep, and the compacted subgrade was used as a planter floor, offering excellent drainage. A six inch layer of gravel and a soil separator mat were added to provide even better drainage.

We used a "soiless" planting mix manufactured by PRO-GRO Inc. The mix includes sphagnum peat moss, horticultural vermiculite, composted pine bark, horticultural perlite and sand, as well as liquid starter fertilizer and a wetting agent. The pine bark, perlite and sand add weight, making a course mixture with good drainage while maintaining excellent water holding capacity. The latter is very important to the acclimatization pro-

cess, as we know that the rhizomes must be kept moist at all times, especially during the first few months.

Over a period of two days the plant material was dug, balled and burlapped, and loaded on two flatbed trailers for shipment. Once loaded onto the truck, the material was wet down, then covered and secured with canvas tarps to provide humidity during transit. After one day for trucking we began installing, only three days after digging.

The plants were mostly single culms in a root ball which averaged 26 to 30 inches in diameter and weighed 200 to 250 pounds. All arrived in excellent condition. Unloading went quickly, with the help of a small lift truck. Each root ball was then hand carted through one of the personnel entrances, down the corridor, and into the open atrium. It proved to be quite interesting to the employees, who witnessed 1¼ miles of bamboo moving through the building. Although the path through the building was fairly straight, once in the atrium the bamboo had to be brought upright to accommodate one sharp corner.

As the plants were moved into place, we carefully sculpted each root ball to fit tightly into the space, as maximum density was desired. Extreme caution was used to prevent any damage to rhizomes, and at times it seemed we were piecing together a puzzle. During the placement process, soil was continually poured into the voids between root balls, hand tamped and constantly irrigated. With the help of some strategically placed guying wires, the desired effect, a canopy out over the atrium floor, was achieved.

During the first two months of the maintenance program, the plants were constantly irrigated. By the end of the second month we had experienced only a 6% loss, although there was considerable leaf drop; we attributed this to transplanting shock and exposure to cold temperatures. In the third month, we began to see new foliage growth as well as new culms emerging from the soil. In a few areas the new rhizomes and culms actually uprooted the perimeter of spathiphyllum ground covering.

A fertilization program began immediately, using a time release fertilizer along with monthly applications of soluble fertilizers, both of which had high nitrogen content as recommended. The only insect pests I observed were spider mites, and they were easily controlled by spraying, which was done in conjunction with monthly foliar feeding. The four open floors overlooking the atrium allowed spraying access at all levels; this greatly aided us during acclimatization misting, which took place three times a week.

After two years, the bamboo is now very stable, with continuous new growth. We attribute the entire success of the project to the speed with which the plants were handled, allowing only two to three days between digging and replanting, and the constant irrigation.

The widely publicized IBM atrium in New York, which also used bamboo, suffered a 40 to 50 percent loss because of delays in shipping and planting. Having some 275 culms of bamboo, the replacement cost was high, as you can imagine.

I would greatly appreciate any information the membership may be able to offer regarding the use of bamboo indoors. Please write me about your experiences.

Alexander F. Cilli
President, Alexander Cilli and Associates
Box 334, RD #3
Boonton, New Jersey 07005

Shakuhachi - The Soul of Bamboo

The Shakuhachi - the Japanese end-blown Zen bamboo flute - is surely the most soulful and esoteric artifact crafted from bamboo. Most people have heard its strangely eerie yet musical sound as background music to Japanese dramas, such as the enormously popular *Shogun*. Few realize that these sounds are produced by the most flexible and expressive of all flutes - a simple section of bamboo, cut from the base of the culm, and with five holes tuned to the pentatonic scale. In place of the complicated Boehm key mechanisms of the silver concert flute, the Shakuhachi substitutes an embouchure so flexible that it can accomplish everything the concert flute can achieve and many things it can not.

Anyone interested in thoroughly exploring the intricate beauties of bamboo owes it to himself to investigate the Shakuhachi. It is a tool of self-expression; one speaks of "Blowing Zen." The simple act of blowing a sustained note, and feeling the bamboo vibrate at one's fingertips gives an inexpressible sense of peace and satisfaction - it must be experienced to be understood. The Shakuhachi is, above all, a private instrument - it is played for the enjoyment of the player, rather than for an audience. Due to the pentatonic scale, one can not produce dissonances; it is the instrument par excellence for improvisation and perhaps more pleasure is obtained from such improvisation than from the playing of set compositions, of which latter there are no lack, since the Shakuhachi is suited to playing everything from the most abstruse Zen music to modern Jazz and Blues.

The Shakuhachi was developed prior to the Meiji era in Japan as the exclusive badge of a

group of wandering mendicant monks known as *Komuso* or *Priests of Emptiness*. They played the Shakuhachi and begged for a living, as members of the Fuke-Zen sect; many were Samurai who had lost their patrons. All came from the highest strata of Japanese society. The combination of infinite time to practice, the precepts of Zen, and the inherent flexibility of the Shakuhachi's construction combined to produce a type of music which is absolutely unique and surely comes close to epitomizing the soul of bamboo.

Anyone interested in pursuing the matter should join the British Shakuhachi Society, 15 Grandison Road, London SW11 6LS, through which full information is available on all aspects of the Shakuhachi - The purchase of instruments, teachers, construction materials, teaching methods, LP records and cassettes, etc.

Dan E. Mayers
President
The British Shakuhachi Society

Bamboos for Cold Climates

This letter is addressed to individuals interested in bamboo who live in the colder regions of the United States and Canada. My definition of a colder region is one in which the culms of even the hardiest bamboos are often winter killed, leaving only the rhizomes to carry on, but I don't intend that to be an exclusive definition. Anywhere the possibility exists that a stand of bamboo will be hard-used in the course of a winter will share the same horticultural concern, and those concerns are significantly different from those of the rest of the country.

I would like to address those differences in a chapter of ABS that would take in those parts of the continent. A chapter bulletin could give a forum for our experiences on hardiness, siting, use etc., and could identify northern gardens open for viewing and comparing. Occasional get-togethers might be possible.

Please send me a note if you are interested. At this stage there is no fixed format or direction, so suggestions about structure, dues and range of topics are appropriate and welcome.

James L. Jones
45 Middle Street
Lexington, Massachusetts 02173

Sincerely,



Richard A. Haubrich

AMERICAN BAMBOO SOCIETY

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(619) 481-9869

Newsletter Vol. VI, No. 3 May, 1985

Dear Member,

Our next meeting will be the International Conference in Mayaguez, Puerto Rico on June 28-30, 1985. By now you should have received information on the Conference from the Caribbean Chapter of ABS. Remaining questions should be directed to Laura Brinkley, 3109 McDonald St., Coconut Grove, FL 33133. (305) 448-6393.

Dues for 1985

Membership dues for 1985 should now be paid. To determine whether you have paid 85 dues (still \$12), look at the 5 digit number above your name on the mailing label. If the first digit is a "4", you have not paid.

Flowers at Strybing

Three of the four clumps of *Thamnocalamus spathaceus* are in flower at the Strybing Arboretum in San Francisco. The flowers were first noticed in May, 1984 by Eric Nagata, caretaker of bamboos at Strybing. Eric believes that flowering began sometime in 1983 since there were already many old, dead flowers in 1984.

In Europe, this species long known as *Arundinaria murielae* is considered one of the most hardy bamboos. Its arching culms grow in a tight clump reaching a height of 10 to 14 feet. Although first collected from China in 1910, flowering of cultivated plants was first observed in 1979 in Denmark. Thomas Soderstrom of the Smithsonian gave the species its present name based on samples of these flowers. But the Danish plants were dwarfs, only a few feet tall. No flowers have been reported on the more typical variety either in Europe or in the US until now.

Last month I collected some of the flowers at Strybing. The clumps are not dwarfs but at least 10 feet tall. The flowers look identical to those from Denmark. We can expect the flowering to increase in intensity over the next few years after which the plants may die. This could well happen to all plants of the species in the US.

Member's Corner

Bamboo to Trade: I have small plants of *Arundinaria amabilis* and over 80 other species to trade for hardy and variegated bamboos. Jim Waddick, 3233 McGee, Kansas City, MO 64111.

Letters to ABS

Bamboo Indoors

Howard E. Troller Associates, a well-known landscape architecture firm, is designing the planting for an

atrium of a large building to be constructed in the Glendale area. The client specifically requests that *Phyllostachys pubescens* be used for the area.

Any information that any ABS members may have concerning the use of *P. pubescens* or other large, mature bamboos in an interior situation, would be greatly appreciated. The client, while wishing to achieve the effect of the famous IBM atrium, wishes to avoid the problems that IBM experienced

Michael O'Brien
Project Researcher
Howard E. Troller Associates
1403-B Kenneth Road
Glendale, CA 91201, (213) 662-1064

Bamboo in Europe

Since there seems to be a recent increasing contact between European and American bamboo lovers, we thought you might be interested in knowing a bit about what is going on in Europe. No doubt, there is a growing interest in the fascinating tree-grasses over here, especially in Germany, France and Switzerland. To our surprise, however, countries like Italy with growing conditions better than ours seem not to care about bamboo. Often they use beautiful groves as garbage dumps. On the other hand we know people in Denmark and even Sweden that struggle to get some bamboo to grow under unfavorable conditions.

In just the last 3 years in Germany, a handful of people crazy about bamboo have started to get to know one another. These contacts did not stop at our borders but reached to our neighbors as well. Considerable visiting back and forth has been going on. Enjoyable hours were spent together and a few bottles of wine lost their lives. Some good friendships were born, along with the exchange of plants and rhizomes that always occurs simultaneously.

The actual breakthrough in Germany took place when IGA 83, the International Garden Show, took place in Munich attracting 11 million visitors. There, in the gardens of Japan, China, Thailand, Nepal and Burma, Germany's number one bamboo man, Dr. Hans Simon, exhibited a number of beautiful bamboo specimen plants. Later there was a special Chinese Week, but they still needed more plants. The leading architect at that time contacted Baumschule Eberts in Baden-Baden. In only two weeks, a show was put on that was beyond what even the Chinese could expect. Together with Prafrance a wide range of bamboo, some over 25 feet tall, were arranged.

Anyone who talks bamboo in Europe must mention PRAFRANCE, a beautiful 100 acre park in southern France about 100 miles northwest of Marseille. It was esta-

blished over a hundred years ago by a rich man who had journeyed to China to study the raising of silk worms. Instead, he met bamboo, was fascinated and took a shipload home. Back in southern France he dammed a river and started to work together with his crew of 40 private gardeners over a period of nearly 20 years. He finally ran out of money, but he had built the foundation of a unique setup. Over the years, there have been many ups and downs, but since my friend Yves and his wonderful wife Muriel took over it is an "up". Last year they had 230,000 visitors. Yves has started a good size container growing nursery. Even though production has almost doubled every year, he still can not cope with demand.

Prafrance grows a wide range of hardy *Phyllostachys* and other bamboos from 3 liter (less than 1 gallon) to huge pots housing 35 foot culms as big around as a beer can. Yves has just planted 20 acres of mother plants in rows far enough apart to go through with a fork equipped front-end loader tractor and harvest rhizomes. For potting he uses a mixture of decomposed, shredded culms and branches, peat moss, and ground lava rock which assures the best drainage. Small fellows get overhead irrigation, whereas bigger containers get their water through spaghetti-type mini tubes. He uses long term fertilizer like Osmacot. Fertilizing is cut down early in fall to make sure the plants become hardened off.

Back in Germany now, in 4 weeks, there will be the first 52 page color picture catalog giving a lot of worthwhile information. Of course we could never have started this if Prafrance did not exist. With all our enthusiasm, however, we did not take into consideration one factor that can hit a gardener every so often, the weather. We have had the roughest winter in over 20 years. Even Yves in southern France had -15° Celsius (5° F) for a period of more than 15 days. Here in Baden-Baden the thermometer dropped to -20° (-4° F) and in Munich to -30° (-22° F). I don't think I have to tell you how our bamboo looks. Instead of the fresh green look that we announced in the catalog even

during wintertime, they are a pale gray all over. We are therefore building 2 more quite big plastic greenhouses to get the new leaves on as fast as we can. Soon orders will come in and here we are with naked bamboo plants. Our new greenhouses will be covered with the latest in plastic technology, a special thermocushion foil with air bubbles like the packaging material that you all know. It has a far better insulation factor. There will also be a heating system to avoid low temperatures, so we do not get trapped once more as we did.

When I talked to Yves by phone the other day I said "Well Yves, when it comes time to buy the Lufthansa ticket to Puerto Rico, I guess we will both go to our bank and borrow some money, won't we." Not much can hold us back from coming to the meeting in Mayaguez this summer, that's for sure. We both look forward to meeting other people crazy about bamboo.

On behalf of all Europeans suffering bamboo fever, I would like to express a hearty: See You this summer!

Wolfgang Eberts
 Saarstrasse 3-5
 7570 Baden-Baden-Oos
 West Germany

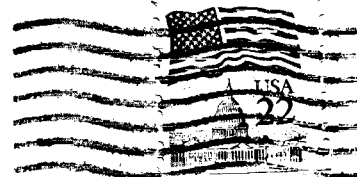
The 52 page catalog mentioned above is now complete. It contains over 80 exceptionally good, colored photos of bamboos. Species are labeled with their Latin names; the text is in German. If you would like a copy, send \$7 in US currency to Wolfgang Eberts at the above address. The catalog will be mailed to you by air, along with 2 bamboo car stickers and 2 postcards.

Sincerely,



Richard A. Haubrich

American Bamboo Society
 1101 San Leon Ct.
 Solana Beach, CA 92075



FIRST CLASS MAIL

AMERICAN BAMBOO SOCIETY

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Newsletter Vol. VI, No. 4 August, 1985

Dear Member,

The International Bamboo Conference was held the end of June at the University of Puerto Rico in Mayagüez, PR. Over 50 delegates from 10 countries attended. The Conference lasted 4 days; the first two were spent with the mornings devoted to field trips within the USDA Tropical Agricultural Research Station (TARS) and afternoons devoted to the presentation of papers.

The field trips covered the 19 different species growing at TARS including the unusual *Cephalostachyum pergracile* whose shoots are bright orange, and the running giant tropical *Melocanna baccifera*. Six species are in flower; three of these have produced enough seed to perform seedling experiments. This work is part of a research project on bamboo flowering being carried out by Tom Soderstrom, Gerald Deitzer and David Edelmanm of the Smithsonian Institution.

A total of 14 papers were presented during the Conference. The list of titles follows:

Bamboos Cultivated in the U.S.
Bamboo Introduction and Research in Puerto Rico
Flowering Physiology of Bamboos in Puerto Rico
Bamboo Resources at the Smithsonian
The *Bambusa guadua* Complex
The Bamboueraie of Prafrance
The Origin of Bamboos
The Classification and Distribution of Bamboos Naturally Eaten by the Giant Panda
Architecture and Bamboo in Colombia
Uses of Bamboo in Ecuador: Past, Present, and Future
Bamboo as a Natural Resource in Costa Rica
Cultivation and Utilization of Bamboo in Costa Rica
The Chinese Technical Assistance Programs on Bamboo in Costa Rica
Bamboo Flowering Patterns: A Global View

The Proceedings of the Conference will be published by ABS later this year. It will include all the papers and a list of attendees.

Many of the bamboos growing at TARS have been established in other parts of Puerto Rico. The third day was devoted to a field trip in the vicinity of Mayagüez. Here we saw an unusually large clump of *Bambusa tulda* as well as some of the native bambusoid grasses. One of these was *Lithachne pauciflora* a close relative of *L. humilis* (Lithy). I dug a small plant to bring back to California.

A banquet was held the evening of the third day. Tom Soderstrom gave an entertaining talk on the history of bamboo systematics.

The last day of the Conference was devoted to a trip to see the stand of *Arundinaria amabilis* (Tonkin Cane) growing in the National Forest at Toro Negro. This was one of McClure's favorite bamboos; he established a grove in Savannah, Georgia from material obtained in China. In recent years plants from Savannah have been established in several places on the U.S. West Coast. *A. amabilis* was introduced into Puerto Rico in 1948 with a single plant. From it, 200 plants were propagated and experimental plantings made at Mayagüez (sea level), Maricao (elev. 2000 feet) and Toro Negro (elev. 3000-3500 feet). Only the later survives today.

Toro Negro is located near the geographical center of Puerto Rico about 40 miles east of Mayagüez. The bamboo is well off the highway, a 2 hour walk up a stream valley. For most of the distance there is no trail; walking is difficult with progress often best made by hopping from rock to rock along the stream bed.

The bamboo is spectacular. It seems to cover several acres with culms so dense that only a few large trees interrupt the bamboo which shades out all other plants. We cut one of the largest culms; it measured 53 feet long and 2½ inches in diameter (3 feet above the base). The culm was branchless except for a few short branches at midculm and longer branches from nodes on the top 12 feet. Although the vegetative features of the plants here match those from Savannah in every respect, we dug several propagules just in case this is a super clone.

The walk out was a bit worse than going in; I slipped several times on the rocks in the stream bed. There were twelve of us going in, but only eleven came out. Roger Stover, who became separated from the group on the way back, failed to reach the highway by 6 pm. The police were called and by 7 pm a rescue unit arrived, but little could be done as it was fast becoming dark.

A full civil defense team located Roger by 10 am the next morning. He had broken a leg from falling into a gully and couldn't make it out on his own. The team brought him out of the forest on a stretcher about 4 pm. Roger, though somewhat shaken by his night in the jungle, managed to hold onto his bamboo plants, propagules of the super *amabilis*.

Overall I found the Conference to be both fun and informative. Credit should go to the organizers, Laura Brinkley and Joe Shenker of the ABS Caribbean Chapter; to the people at USDA TARS and the University of Puerto Rico; and to Tom Soderstrom whose enthusiasm for Bamboo has inspired us all.

Arundinaria funghomi

ABS received two plants from Robert Lester, 280 W. 4th Street, New York, NY 10014. The species is native to China; it was first described in 1940 by McClure. Robert Lester writes: "The plants came to me by way of Floyd McClure sometime in the early sixties with the USDA P.I. (Plant Introduction No.) 139,883. They were growing in Savannah at that time and huge rhizomes were sent to me. They were growing in the ground at the station when I was there in 1972-73 all mixed up with *A. amabilis*. The plants I collected in 1973 matched identically those sent me earlier by Floyd. They are now 18 feet high in the greenhouse and would be taller if not so underpotted. They grow outdoors in my climate as a 3 foot dwarf and have a very primitive and lovely quality. They answer Floyd's description of his potted plants perfectly. I wish he had lived to see the 30 to 35 foot plants I saw in Savannah. They were very handsome indeed. Mr. Robert A. Young did live to see them as large plants and we discussed the characteristic white bloom on new growth on mature plants which lasts and lasts. You will probably see it in time."

The ABS plants are growing vigorously and have produced new branches and leaves. The white bloom is already apparent on the new branchlets.

Bamboo Art

Linda Teague writes about a recent article on bamboo carvings: "Walter E. Lutz has written an article titled 'Miniatures of Japanese Bamboo Art' in the March-April, 1985 issue of *Arts of Asia*. This is an extensive 17 page article on objects used in the Japanese Tea Ceremony, Calligraphy, Netsuke, Inro (small medicine cases) and even a small, bamboo musical instrument. There are 57 black and white photos and an explanation of the use of each item. Lutz gives good advice on how to distinguish small items made of bamboo from those made of wood and how to choose quality bamboo miniatures. You may still find the issue of *Arts of Asia* at a specialty book store, or you can order it as a back issue from Arts of Asia, 1309 Kowloon Centre, 29-39 Ashley Road, Kowloon, Hong Kong for \$6 plus \$2 shipping charge."

Bamboo Posters

The color picture catalog of bamboo described in the May Newsletter is still available from Germany. There is also a large (27 x 29½ inch) colored poster depicting a variety of the most interesting bamboo culms. To receive one catalog and 2 posters by air mail, send \$10 in U.S. cash (send a ten dollar bill - do not send a check) to Wolfgang Eberts, Saarstrasse 3-5, 7570 Baden-Baden-Oos, West Germany.

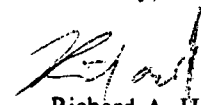
Member's Corner

Bamboos to Trade: Small plants of *Dendrocalamus strictus* and 80 other species to trade for other bamboos. Jim Wad-dick, 3233 McGee, Kansas City, MO 64111

A New Book

Dicken Castro, an architect from Colombia, attended the Conference in Puerto Rico and introduced his new book titled *La Guadua - The Versatile Bamboo*. The book looks at the uses of native bamboos (specifically *Bambusa guadua*) as a material in urban construction. Housing, offices, churches, bridges and other structures are shown in 147 mostly black and white photos. The text is in both Spanish and English. The book is available in paperback from Daphne Lewis, 936 Broadway E., Apt. 7, Seattle, WA 98102 for \$15, postpaid.

Sincerely,



Richard A. Haubrich

American Bamboo Society
1101 San Leon Ct.
Solana Beach, CA 92075

FIRST CLASS MAIL

AMERICAN BAMBOO SOCIETY

1101 San Leon Ct.
Solana Beach, CA 92075
(619) 481-9869

Newsletter Vol. VI, No. 5 October, 1985

Dear Member,

The ABS annual meeting will take place at 1 pm on Saturday, November 23 at the Ecke Building in Quail Botanical Gardens, Encinitas, California. To reach Quail exit off I-5 at Encinitas Blvd. and go east for ½ mile. Turn left at the light onto Quail Gardens Drive and go north ½ mile to the Gardens entrance on the left.

There will be a plant sale beginning at 10 am and an auction following the meeting. We expect to have a good selection of bamboos for the sale with special, rare and unusual items for the auction. No plants will be shipped for the sale or auction. The November Newsletter will contain a list of species for sale and auction. Come to Quail and spend the day. You will want to see the more than 100 species and varieties of bamboo now growing at the Gardens.

Chapter News

The Pacific Northwest Chapter recently elected new officers: Rick Valley - president, Ned Jaquith - vice president, Daphne Lewis - secretary, Clint Cleveland - treasurer, and Allen Sarno - Newsletter editor. To obtain information or to become a member, contact the Membership Chairman, Larry Reuter, 8829 Gothic Way, Everett, WA 98204, w (206) 338-0535, h (206) 621-6239.

Untimely Loss

It is with regret that I announce the death of Jim Smith at age 33, on August 7, after an extended illness. Jim had been a Director of ABS for several years and a contributor to our Journal. He was the founder and inspiration of the Northern California Chapter. The James R. Smith Endowment Fund has been established to support the development of the Cloud Forest Collection at Strybing Arboretum and Botanical Gardens. Contributions may be sent to Strybing Arboretum Society, 9th Avenue and Lincoln Way, San Francisco, CA 94122.

What Book?

Wolfgang Eberts in his cover letter that accompanies the catalog "Bambus," refers to the "DUMONT bamboo book." The book is *The World of Bamboo* by Shinji Takama, Heian International,

South San Francisco, CA. It was reviewed in the September, 1983 Newsletter.

Letters to ABS

Bamboo Shoot Growers Find Roots in China

Panda Products is one of Mendocino and Lake counties newest agricultural enterprises. No, we do not breed pandas, but we grow a commodity that any panda would enjoy; bamboo. Since people have also enjoyed the taste of bamboo shoots in Oriental cooking and have used the poles to manufacture utensils for thousands of years, we plan to supply these to a needy market.

Some four years ago, the three of us, Yat Ying Cheung, Gib Cooper and Tim Hansken made contact over a short period of time and began uniting individual dreams into a solid business. Cheung was a teacher of Soil Sciences in his native China, Cooper is a vocational horticulture instructor for Mendocino County Schools ROP, and Hansken is a student of Asian languages at San Francisco State. The common bond of bamboo and the hope to bring this marvelous plant to a commercial beginning in the U.S. is the foundation of our partnership.

First, we identified the best bamboo to grow for agricultural purposes. This elegant plant is known as Moso bamboo (*Phyllostachys pubescens*). It is the most widely planted commercial bamboo in Asia. For the production of fresh, springtime bamboo shoots and timber, it has no equal.

Secondly we propagated young plants on a large scale to sell nursery stock to others, as well as to plant acreage for bamboo production. Panda Products Nursery, located in Mendocino county, is now an international mail order bamboo nursery. We have shipped live plants to Switzerland, France, Germany and Australia. The domestic sales in 1984 were over 700 plants shipped throughout the U.S.

Early in 1984, the third phase came into being with the acquisition of ten acres of prime, Lake County, pear orchard. The pears were removed and the land was planted with Moso bamboo plants from the nursery in Mendocino County. An irrigation system capable of watering the entire plantation was designed and constructed. By summer 1985, the bamboo farm was well on its way to be in food

production, on a limited scale, in two or three years. Timber, which can reach the amazing size of eight inches in diameter and eighty feet tall when mature, will not be harvested for at least five years.

The work involved in the development of this project, while not keeping the partners in fine financial condition, has brought us other rewards. On several occasions we have presented lectures and workshops on the use of bamboos and the types to plant. Articles have been published on the landscape uses of bamboo and growing bamboo from seed. An extensive, cross reference list has been prepared on the Chinese names versus the scientific names of 200 species growing in China. For the past few years we have been actively assisting the American Bamboo Society and Quail Botanical Gardens in Encinitas, California to acquire more Moso bamboo and other desirable species.

Recently, Cheung, Cooper and Hansken were invited to the International Bamboo Workshop in Hangzhou, China for a week long symposium. Beginning October 6 1985, scientists will exchange knowledge on protection, exploration, enlargement and utilization of bamboo resources. About 50 bamboo researchers from Asia and the world are expected to attend. Two days of the conference will be devoted to field trips. Conferees will visit the Subtropical Research Institute, look at paper making from bamboo pulp, explore the Bamboo Botanic Garden, the Experimental and Operational Bamboo Forest, and the Mogan Shan Mountain Bamboo Forest Park, and go to the Nanjing Institute of Forestry.

Since Panda Products is well known as a source of information on bamboo, people, over the years, have been requesting a certain type of bamboo or bamboo product. We plan to bring a list of useful products to the workshop to facilitate their development. The products include, for example, large sheets of bamboo veneer and large timber for use in landscaping and interior decorating.

We are still a small, struggling entrepreneurship, but we should be pleased to assist anyone in their search for a particular bamboo product. The upcoming trip to China will be expensive. Contributions to assist us will be appreciated. For more information contact Gib Cooper (707) 485-0835 or Tim Hansken (415) 777-4899.

Panda Products Nursery
Box 70
Calpella, California 95418

Mayagüez - Bamboo

Dear Bamboo Friend,

Indeed, the World's First International Bamboo Conference in Puerto Rico was a great event. The lectures were interesting but even more impor-

tant is the fact that we met so many people in the field of bamboo. We made friendships that will be a good excuse for further travelling.

It was surprising that there were all kinds of bamboo lovers. We were impressed by the architects from Costa Rica, Ecuador and Colombia who have a deep respect for this plant as a building material. They train people and offer solutions with a bamboo (*guadua*) that is omnipresent there. Unfortunately Oscar Hidalgo, the *spiritus* rector of it all, could not come. There was Gilberto from the Universidad de Manizales and Jorge from Guayaquil Universidad who invited us to go with him to the Galipagos. Dicken Castro offered us his book on how to use bamboo as a building material.

The field trips were good and truly hot. McClure, about 40 years ago, had planted many bamboos on the station that he had shipped over while he worked and stayed in China. For many years they were neglected and left alone, but now they are saved largely due to Dr. Tom Soderstrom who took McClure's proud heritage. Dr. S., a bright young man, is no doubt leading in the world when it comes to taxonomy. He speaks fluent German and said to call him Tom.

We had some landscape architects complaining that you can not buy bamboo in large enough quantity to use it for projects in the U.S. If it were not for the tough import laws in the U.S., I guess we would give it a try in 2 or 3 years time and send some over. Some clever gardeners from Florida are already pouring thousands of palms and *Ficus benjamina* into European countries, so why shouldn't we try and fire back a few bamboo?

There was Raphael, an engineer from the Panama Canal, full of good plans. I guess we will hear from him. (If you swim through the Canal, it will cost you \$1.60; Queen Elizabeth II pays \$92,000. to go through). There was Ned, a friendly 6 foot 5 brakeman from Western Pacific Railroad, Julian, officially Dr. Campbell, a real scientist of course with a beard, who had worked and lived in China up in the mountains together with the Panda. He was sent by the World Wildlife Fund. Just think about the first hand data we were able to get from him: all interesting people that have something in mind with bamboo. Surprising enough, only very few gardeners or tree nursery people were there. Most of the "professionals" still seem to be sound asleep. This apparently applies for both the Old and the New World.

Until we saw the bamboo in Puerto Rico, I didn't know that such beautiful and colorful ones do exist. Of course they are mostly clumpforming *Bambusa* and other non cold-resistant varieties. Now I am very happy and grateful to know that they are really there. You should have seen some of the new culms coming up - beauties. They reminded me of

the multicolored fish that you can admire diving on the reefs of Bora Bora Island compared to what you would find in our meanwhile quite dirty North Sea. Or compare it with a sparrow and the birds in the tropics if you prefer.

The lectures and slide presentations were held in the University auditorium. Often they lasted till 10 pm which was definitely too much. We had used all their facilities, above all the showers. The remote control air-conditioning is as sophisticated as a space shuttle and turned itself off quite often. Those who attended the conference knew all about bamboo but little about computer controlled air conditioners. Most delegates and guests stayed at the University Hotel. The breakfast, together with hundreds of students in the cafeteria was first class. We, that means Yves Crouzet, our Swiss friend Toni Grieb, Albrecht Weiss and his wife Sunhi, my wife and I arrived two days ahead and toured the garden. There, a few bamboo seedlings asked to come along to Europe with us. Well - what can you do. They were literally jumping up on us and disappeared in plastic bags. Toni not only had a "Swiss knife" but also a "Swiss saw" that can be used as a digging instrument. During the rest of the trip, while we went further south to Dominica Island, the seedlings were given tender loving care and were allowed to breath some fresh air on several intermittent stops. At Antigua Airport, a friendly big, black woman in a dark blue uniform with twinkling metal buttons, saw a green leaf sticking out of my bag and told us it is forbidden to bring in any kind of plants. She must have been trained in California - where otherwise could she have learned such horseradish? Of course the seedlings were carefully packed in moist (soft) American toilet paper. I have never seen a vegetation like that on Dominica before in my life, with 7000 mm of rain over the year. The temperature stays pretty steady between 24 and 29 C. Now at home our bamboo babies are potted in the greenhouse and do well. I have about 4; as Toni and Albrecht are 200% bamboo crazy, I guess it could well be that they have 5. I hope the people on the Station and Tom in his distant Washington office will never find out...or we might be surprised on entering the U.S. next time when the immigration officer has our names on his black list.

Unfortunately there was not enough time to get to know one to each other as it should have been. The food was mostly "McDonald" type, which actually didn't matter too much as we were feeding on the delicious mangos anyway. We escaped a few times in town, loading up to 12 friends from all over the world in our van and then sit around the pool at the Hilton Hotel beyond the wonderful stars of the Southern Hemisphere, until very late, drinking "Piña Colada" (made out of coconut milk, rum, fresh juices?) and talk. Moments we won't forget. We had a good time with the Chinese delegation and the

professor from Japan. Their English was poor but still there was perfect understanding. If some people think we Europeans are enthusiastic with the tree grasses, just wait until you meet our friends from the Far East.

The next meeting will be in "Prafrance" in two or three years time. Just think about the travelling that you can do before or after. It's half an hour to the Cote D'Azur. Start making plans - put some money in the pot. How about if we had a tiny little "Castillonis" for you by then?

May the rhizomes of friendship grow--
Wolfgang and the other European Bamboo Freaks
Baden - Baden, West Germany

Bamboo Bonsai

Bonsai have fascinated me for a long time. We have grown and sold many over the years. I have had the pleasure of photographing collections in China, Japan, Hawaii, Hong Kong and all over the U.S. Nowhere in the U.S. have I seen any Bamboo Bonsai, only in the Orient.

Looking at a clump of Bamboo in the ground one wonders just how it could be reduced to a bonsai? We removed some small shoots from potted bamboo and tried these. We also made cuttings and eventually got a few small plants. We found seed from three plants and these will eventually make lovely little bonsai when they get big enough.

The easiest way to obtain plants is to pot up whatever you have and keep it well fed. In time, it will hit the side of the pot with a shoot. Slip the plant from the pot carefully and remove the shoot. Trim it to fit a small pot. Snip the top off while it is small to stimulate side shoots and limit the height. One of the books on Japanese bonsai refers to the masters removing sheaths from young shoots to limit elongation of the culms, but the entire culm must be done without stopping. If left over night, internodes with sheaths will continue to elongate. Removing the sheaths will definitely limit culm length.

We currently have a number of different types of bamboo in bonsai form: runners, clumpers, large and small. All are dainty, graceful, and lovely. Addition of moss to the surface, a bit of rock or driftwood, ceramic items, all add to the feeling of the bonsai. The accessories can be endless and most attractive. We have two types of bamboo in come containers. The contrast is pleasing.

The care of bonsai is the same as for full size plants; just be careful not to allow them to dry out. Do not over fertilize since you want to keep them small but in good color.

If you like bamboo you will enjoy them additionally as a BAMBOO BONSAI. Try them, it is a

real challenge, something you can bring indoors for a day or so to enjoy. They also make excellent gifts.

Robert L. Perry
Sunset Nursery Inc.
4007 Elrod Avenue
Tampa, Florida 33616

Member's Corner

Trade Plants and Seed: I am interested in acquiring bamboo seed and trading bamboo plants for species I do not have. My collection consists of 70 different species and varieties. Henry Evans, P.O. Box 640, St. Helena, CA 94574.

Grow Timber Bamboo: We are looking for someone to grow timber bamboo on our large property in Northern California, in the mountains near Upper Lake at elevations 2000-4000 feet. Jan Kubat, 232 Lobos Ave., Pacific Grove, CA 93950.

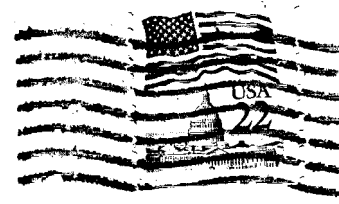
Arundinaria funghomi: I will trade *A. funghomi* for other rare species only. Dr. James Waddick, 3233 McGee, Kansas City, MO 64111.

Sincerely,

Richard A. Haubrich



American Bamboo Society
1101 San Leon Ct.
Solana Beach, CA 92075



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Newsletter Vol. VI, No. 6 November, 1985

Dear Member,

The ABS Annual Plant Sale and Meeting will take place on Saturday, November 23 at the Ecker Building in Quail Botanical Gardens, Encinitas, California. The sale will begin at 10 am. The Meeting will begin at 1 pm and will be followed by an auction of specimen plants. All sales are local only; no plants will be shipped.

A partial list of species offered at the sale follows: *Arundinaria argenteostriata*, *A. pygmaea*, *Bambusa beecheyana*, *B. longispiculata*, *B. multiplex* 'Alphonse Karr', *B. multiplex riviereorum*, *B. multiplex* 'Tiny Fern', *B. textilis*, *B. ventricosa*, *B. vulgaris* 'Vittata', *Dendrocalamus strictus*, *Chimonobambusa marmorea*, *C. quadrangularis*, *Chusquea coronalis*, *Oatea acuminata*, *Phyllostachys bambusoides*, *P. nigra*, *P. pubescens*, *P. viridis*, *P. viridis* 'Robert Young', *Semiarundinaria fastuosa*.

Auctioned species include: *Bambusa bambos* (arundinacea), *B. dissimulator*, *B. malingensis*, *B. sinospinosa*, *Dendrocalamus asper*, *Drepanostachyum khasianum*, *Semiarundinaria villosa*.

Chapter News

The Northern California Chapter will meet on January 11, 1986 from 1:30 to 4 pm at the Hall of Flowers, 9th Ave. and Lincoln Way in San Francisco. Gerald Bol will prepare a program. The next plant sale is scheduled for April 19, 1986. For more information, contact Diana King, 480 West I street, #2 Duck Cove Way, Benicia, CA 94510. (707) 745-4091.

Quail Sale

The Quail Botanical Gardens Foundation will hold its semiannual plant sale on Sunday, December 8 starting at 10 am at Quail Gardens. A broad variety of plants will be offered including bamboos.

A New Book

Hong Kong Bamboos by Paul But, L. Chia, H. Fung and S. Hu, The Urban Council of Hong Kong, 1985, in English (also available in Chinese).

This beautiful little book contains descriptions of 57 kinds of bamboos that grow in Hong Kong. A page is devoted to each bamboo; the top half contains 2 or 3 colored photos of the plant, an overall view plus closeups of the culms with culm leaves and in some cases the flowers. The rest of the page contains text which includes the Latin name, author, common English names and Chinese names followed by a description of the plant. A paragraph each is devoted to the clumps, the branches, culm leaves and foliage leaves. The descriptions are brief but concise and the few technical terms that are used are defined in a glossary at the end of the book. The final paragraph of the page tells where each type of bamboo grows in Hong Kong and lists its economical uses.

A six page introduction discusses those vegetative features of the bamboo plant which are most useful in telling one species from another. There are line drawings of the four major types of rhizome, five types of branch complements and typical culm and foliage leaves, parts critical to the identification of bamboos. Also included is a 10 page key to the 57 Hong Kong bamboos based on vegetative characteristics. The key is one of the best I have seen on bamboo. With it I was able to identify, as *Bambusa sinospinosa*, an unknown thorny plant collected near Canton. The book also contains a list of references and indexes to the common names in both English and Chinese. About 30 of the 57 bamboos grow in the U.S. Although most of the 57 are tropicals, at least 17 are more or less hardy.

The book can be ordered from Dr. Paul But, CUHK, Shatin, N.T., Hong Kong for US\$7.00 postpaid by air, or US\$5.50 postpaid by sea. The authors would welcome donations to the McClure Memorial Research Fund which will be used as seed money for further studies on bamboo in both the Chinese University of Hong Kong and South China Institute of Botany. For donations over US\$50, the authors will send the donor a copy of the book duly autographed. Make checks payable to "The Chinese University of Hong Kong" and send to Dr. But.

ABS Members Around the World

Gerald Bol from Sebastopol, CA left November 2 for Southern Chile. He will collect as many of the native *Chusqueas* from that area as he can find. Many of these are considered quite hardy, but none are cultivated in the U.S.

Eric Nagata of San Francisco left last month for Japan. He will try to collect and bring back several of the highly variegated species which have been cultivated for so many years in Japan.

Gib Cooper and his partners Tim Hanskin and Yat Ying Cheung have returned from the Bamboo Workshop in Hangzhou bringing back several bamboo species from China. Some of these like *Phyllostachys bambusoides* f. *holochrysa* are already shooting vigorously in the quarantine greenhouse.

Claude Rifat of Geneva, Switzerland has been traveling in Thailand for the last few months. He has sent us seeds of several bamboos from that country. Many seedlings are now growing including some of *Thyrsostachys siamensis*, one of the most attractive bamboos of Southeast Asia.

Wolfgang Eberts sent us photos of his bamboo exhibit at the recent Garden Show in Berlin. The exhibit must have been impressive for Mr. Kohl (Chancellor of West Germany) came by and picked up an Eberts' catalog. Now Wolfgang is planning the Chancellor's Garden in Bonn. He even brought the Kohls a potted bamboo for their living room. Next, Wolfgang may ask Chancellor Kohl if he would like to become a member of ABS.

Sincerely,

Richard A. Haubrich

American Bamboo Society
1101 San Leon Ct.
Solana Beach, CA 92075



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