

Southern California Bamboo

The Newsletter of the Southern California Chapter of the American Bamboo Society

A California 501(c)-3 non-profit educational corporation, incorporated July 22, 1991

Chapter website: www.ABSSoCal.org

ABSsoCal Activities / Events planned: (Monthly meetings are usually on the third Saturday of month.)

Date:	Time:	Activity / Event:
Sat. Nov. 20, 2004		None.
Sat. Dec. 18, 2004		TBA
Sat. Jan. 15, 2005		TBA

Unscheduled days of bamboo collection maintenance are often held at Quail Botanical Gardens, Encinitas, CA, on some Saturdays, 10:00 to 3:00. Workers generally meet in front of the Gift Shop and then move to the activity areas. If you meet no one by the Gift Shop, check in reference collection. Contact Adam Derrickson for guidance: 619-200-1444. Bring your own lunch, drinks (non alcoholic, that is!) and have a great 'hands-on' time.

Election of Directors, Alternates, and Chapter Representative to ABS national board

Not many votes, but we go with what we got, and what we got was the following: (of 175 members only votes were cast and at that, some by proxy.)

Don Binnix and Christian Lydick will be directors through 2007 - three years. Mike Mullert and Adam Derrickson will be alternate directors for one year, through 2005. Jo Anne Wyman will be our Chapter representative to the ABS national organization for next three years,

Other Board Decisions: (See also full minutes beginning pg. 2.)

Those present voted to accept the logo as now printed on the outside of the newsletter. The symbolism can be interpreted as follows: A picture of bamboo - of course almost a necessity. The word "Bamboo" is largest and most important, then the words "Southern California" and "Society" are next in size and importance. The border on lower left is slanted in giving the overall shape much like that of a map of California. If you want to use to logo on a hat, T-shirt, etc, email Theo Smith (trsmith@pe.net) and request a .jpg file of the logo image be emailed to you.

The ABS SoCal directors voted to transfer the BOTA project from its auspices to that of ABS National should ABS so accept; which ABS did at its 2004 Convention.

The planning and coordination of the ABS 2004 at The Huntington pulled a lot of energy from our vice president and other members. There were also resignations of several key people.

We decided to wait until the October National ABS Convention is over before making further Chapter plans. That's the explanation for the sparse calendar above. Lots of TBA to figure out and announce!! And we're still recovering, kind of like a plant in shock or stressed out. It doesn't do new leaves until it gets its equilibrium back.

A spreadsheet showing the "outcome" of the fall bamboo sale at Quail, Sep. 17, is shown on page 9.

Southern California Bamboo

American Bamboo Society Southern California Chapter Officers:

Director, President, Newsletter Editor	Theo Smith to '06	951-359-1706	Trsmith@pe.net
Director, Vice-President	Bob Dimattia to '06	760-726-4038	Bamboobob@cox.net
Director, Treasurer	Roy Wiersma to '05	909-980-1740	Rhiersma@aol.com
Director, Secretary	Don Binnix to '07	714-531-2710	Dbinnix@msn.com
Director	Christian Lydick to '07	760-352-7095	CLydick@ivnet.org
Alternate Director	Michael A. Mullert to '05	619-465-4690	Mamullert@yahoo.com
Alternate Director	Adam Derrickson to '05	619-200-1444	Exoticbamboo@aol.com
Chapter rep. to ABS National	JoAnn Wyman to '07	760-749-5716	Wymanrsf@incom.net

ABS Southern California Chapter

Meeting Minutes September 11, 2004

Opening: The meeting was called to order by President Theo Smith at 3:00 PM

Present:

Theo Smith	Director - <i>President & Newsletter Editor</i>
Bob Dimattia	Director - <i>Vice President</i>
Vikki Dimattia	
JoAnne Wyman	<i>ABS Representative</i>
Roy Wiersma	Director - <i>Treasurer</i>
Christian Lydick	Director
Donald Binnix	Director - <i>Secretary</i>

Results of Election of New Officers

The votes for the 2 new Directors were counted; the two new Directors are:

Donald Binnix (*appointed as Secretary*)

Christian Lydick

The votes for new Alternate Directors were counted; the new Alternate Directors are:

Mike Mullet

Adam Derrickson

Votes for new Chapter rep. to ABS were counted, our rep is:

JoAnne Wyman

Reports:

1. Treasurer's Report and Audit status was gone over in detail by Roy Weirmsa.

2. Status of Reference Collection:

- Bob Dimattia reported that it would take about 1 more full day to finish up putting down the agricultural cloth in the reference collection. That date has not been determined at this time.

- They have not had time to do much propagation of plants as the majority of the time available has been spent cleaning up the Reference collection in anticipation of visitors from the ABS 26th Annual Conference.

- Bob reported that the electrical system was set up by an electrician and is now in proper working order.

- There are plenty of pots and sufficient amounts of potting soil and fertilizer for the reference collection.

3. Status of the 2004 ABS Convention at Huntington Botanical Gardens:

- JoAnne Wyman, Bob Dimattia and Vikki Dimattia reported that the attendance was somewhat less than expectations, however if they can get about 100 people signed up that would be a good amount. The Westin is filled up so the overflow will be going to the Hilton which is close by. Also the shuttle from the Westin will stop along the way to pick up others staying at the Hilton and Vagabond Hotels.

- Bob Dimattia suggested that we get Ann Richardson a gift since she is hosting the Conference.

- The suggestion was made to blast out e-mails to all the ABS members that there are 9 more rooms available.

4. Old Quarantine Greenhouse Status – Dead

- The status was discussed and it was considered a bad idea to spend time and money trying to refurbish it. The Board thinks it would be a better to try and move forward with the construction on a new one.

5. The Position of Librarian is Open and needs to be filled.

6. Plant Sales and Events:

- In a rare moment of consensus everyone felt it would be a good idea if we could in some way allow people to use their credit cards at our annual sale. After the aye of consensus passed the storm wall hit in the details of it's implementation. It was decided that we would look into this matter further after the convention was over.

- It was suggested by members of the board that sellers should get more involved in the work involved with the sale itself. Possibly even making it a requirement of being allowed to participate in the sale.

- Problems with the auction were expressed and suggestions for its improvement were brought up. Don Binnix thought it would be a good idea to have the auction later at noon esp. if credit cards could be used. Bob thought we should have the auction as usual but have people take and pay for the plants right then. Also some people suggested the idea of a holding coral for the auctioned plants that people have purchased. However there were concerns if people would get cold feet after a large bid and decide not come back and pay for them.

7. Status of Liaison with QBG: Bob Dimattia will be the new person filling this role

- Bob stated that when we have our annual work parties/days people should be instructed not to park by Julian's House. Members should park either in the back parking lot which is close by or in the main parking lot.

8. Proposed ABS SoCal logo: A vote to accept the logo appearing on this newsletter was approved.

9. BOTA (Bamboos of the Americas)

- After some considerable discussion it was agreed upon by all that this should be handled by the national ABS and not our local chapter.

10. Chapter Web Site: Continue with Ralph Evens?

- The board discussed this and decided to continue with Ralph in the short term but would like to look into owning our web site and having it run by a professional web support company/business.

Old Business:

1. ABS SoCal mail pick up. Schedule for picking up from QBG and from P.O. Box 230181, Encinitas CA 92023-0181

- It was mentioned that we are still getting a lot of mail at Quail.

2. Volunteer worker release of liability form: Completed and in use. This will not appear in future.

3. Directors/Organizational Liability Insurance

- The board is still looking into this matter.

4. Proposal to purchase a canopy to shield cashier's tables at plant sales. Still under consideration.

5. Proposal for new loudspeaker to replace old one.

- Voted to buy new one.

6. The item of a greenhouse conservatory for bamboo that are not well suited to our climate has been put on hold until the matter of the new Quarantine House is finished.

7. Status of proposed by-law amendment to reflect that mail-in ballots will count toward quorum at annual ABS SoCal meeting.

- The idea was suggested of doing e-mail for quorum
- It was decided to go over this further at next meeting.

8. Martin Berghuis is seeking bamboos for the Bravo Lake Botanical Gardens in Woodlake, CA. Who can donate some smaller more cold hardy ones? Martin will be picking some up from Theo Smith.

9. How to handle issue of someone spending money for doing something for Chapter and seeking reimbursement without express prior authorization by a board motion to make such expenditures. – Will discuss further at next meeting.

New Business:

1. New Quarantine Greenhouse Status

- It was decided that we will try to build a mock-up and get quail to move. Bob said he will attack Quail and get them to make a decision on this.

2. Calendar of events for 2004 & 2005

- Members of the board were asked to think of what events we should have in the coming months and who will be involved in the various tasks of setting them up.

3. Directorship of BOTA – This was decided to be transferred to ABS under Susan Turtle.

4. Need to look into getting forms for so when people donate plants or other items they can get a write off. Roy Weirsma said he would look into this.

5. Bob Dimattia brought up the idea of taping the speakers at the National Convention and the Idea of taping future events in general. – We will discuss this further at next meeting.

Close: The meeting was closed at 5:26 PM September 11, 2004.

Bamboos spread to central CA:

Just like the running bamboos sending up shoots some distance from the initial grove, so too, two of our ABS SoCal members, Eva and Martin Berghuis left the Southern CA region for Exeter, CA and have taken their love of bamboos with them. In fact, they have volunteered to sponsor a bamboo collection in a newly-formed Bravo Lake Botanical Gardens in Woodlake, CA (near Visalia, off highway 198 to Sequoia Nat'l Park). They promote bamboo and ABS memberships at the local garden clubs and the Tulare County Fair.

On a recent visit to a son in Lake Elsinore (you see, Eva and Martin do return to So CA now and again!) they stopped by the home of ABS SoCal president Theo Smith in Riverside, near Corona, and picked up a trailer-full of bamboos including: *B. Beecheyana* 15g, *B. Dolichomerthalla* 5g, *B. Dolichoclada* 5g, *B. Tulda "striata"* (*B. longispiculata* ?) 15g, *Bambusa Vulgaris "vittata"* 5g, *Chimonobambusa marmorea* 5g, *Fargesia nitida* 3g, *Hibanobambusa Tranquillans "Shiroshima"* 3g, *Indocalamus tessalatus* 2g, *Otatea acuminata acuminata* 5g, Pl. "fuji garden" 1g, Pl. *Distichus* (dwarf fearnleaf) 1g, Pl. *Pygmaeus* 1g, Pl. *Shibuyan* "tsuboi" 5g, Pl. *Simonii* 5g, *Sasa tsuboiana* 2g, *Sasaella masamuneana* 1g, *Sasaella masamuneana "albostrata"* 1g, and *Thamnocalamus tessalatus* 5g. Theo was more excited about donating plants to a new botanic garden than taking them to the Quail sale!

Please be free to contact Martin and donate other species to the collection. Contact him berghuis@wcvinc.net

Day One of The ABS 2004 Conference, One person's experience. By Theo Smith

Thursday, Oct. 14, a day of 'pre tour' designed especially for those unfamiliar with The Huntington. I am familiar with The Huntington, but had two bamboos to take for the auction, A 15g pot of *B. Dolichoclada* and a 5g pot of *D. Latiflorus* "Mei-Nung." So I showed up at the registration table at the Botanical Center where Bob Dimattia fetched my registration information to determine what "goodies" I had requested and paid for. A T-shirt - yes, a tote-bag - yes (containing the "menu" of events to comprise the Conference), tickets to Pacific Asia Museum Reception - No, meal passes - some, Westin hotel banquet tickets - yes! Donated plants were unloaded and I was then on my own.

No docent tour for me. The Huntington is like my "first bamboo home," which I began visiting back in 1963 upon moving to Riverside from Stanford, CA. My *B. Vulgaris* "vitata" was gotten at one of The Huntington's annual plant sales years ago. So I wandered the grounds at my own discretion seeking out favorite things to see.

The favorite bamboos are: The clump of *D. Asper*; the HUGE clump of *B. Beecheyana* near the entrance; the sino-bambusa tootsik (not the variegated one!) found running on a hillside - its culms are so round, straight and smooth; the grove of *Ph. Nigra Punctata*; the grove of *Ph. Vivax*; and the groves of *Ph. Aurea* near the Japanese house, and the clumpers down by the Lily ponds inhabited by Koi fish. These clumps of *B. tuldoidea*, *B. Beecheyana*, *B. Oldhamii* have been there for many years and were recently cleaned up - many old interior culms removed - just in time for the ABS 2004 Convention. New varieties of bamboo are just being started in this area, too.

Let's digress a moment to give thanks to Ann Richardson and Cynthia Dickey for their diligent work on behalf of The Huntington to make the Conference happen. You're the best.

After viewing favorite stands of bamboo I wandered back to the bookstore. I love books, and there were books to be signed by their authors. I'm a sucker for books, for bamboo books, and for books signed by their authors! "The Craft and Art of Bamboo" by Carol Stangler, and "Bamboo Style" by Gale Beth Goldberg found their way into my ABS Conference tote bag. The "Bamboo Preservation Compendium" by Walter Liese had to wait because the bookstore did not have the price available. Not to worry. I would return the next day hoping the price would be known. And I would bring my books back seeking their author's signatures.

Bamboo of the Americas Project (BOTA)

By Darrel DeBoer

<http://www.DeBoerArchitects.com>

Oscar Hidalgo-Lopez is a man who has now done as much as anyone to teach us all the many ways to appreciate bamboo. He tells the story of when he was a young professor nearly 40 years ago that he realized the "caña guadua" surrounding the region where he lived and from which people had built almost everything they needed had never been scientifically studied. He was teaching architecture and wished to understand the local methods so they could be understood and improved, but the dean told him he not only could not study it on campus, he wouldn't even be allowed to publish what he wrote on his days off. It was only a material of the poor, and the purpose of their school was to find better materials to work with.

But imagine how powerful this plant makes us when a builder can grow all of his building material and never have to worry about the cost of it. When this material is as strong as steel – using simple and familiar building methods — capable of structures that literally no other building material could make. And imagine there are special species that only exist on one mountain in the whole world. Even there it is routinely cut down to plant corn or to run cattle.



The Olmeca recta forest stops abruptly at a pasture

That is the current situation with *Olmeca recta*, a bamboo with uniquely strong branches almost as large as the main stalk. Right now, it is not clear what the best use is for this species, but because of the Bamboo of the Americas Project, many people are aware of it and there is now a testing regimen that can find the best characteristics of this unique species. For the future, nobody yet knows what the genes from this plant might help to produce. So, for now, this rare habitat can at least be preserved, and it can be made clear to the

people there what a special plant they have.



One of the most elegant of all bamboos is the elegant, pendulous Rhipidocladum racimiflorum

So, the Bamboo of the Americas Project tries to do what Oscar Hidalgo was once not allowed to: to involve the academic community to catalog, identify, and collect plants for botanic gardens in order to understand local traditions and preserve what we still have until we really understand the best relationship of people to the bamboo. One of the surprising developments has been discovering how important it is for the bamboo to be utilized before it is then naturally conserved and protected and valued by the local people.

The idea of the Bamboo of the Americas project was that of Gib Cooper, owner of a North American bamboo nursery. His appreciation of American bamboos led to the desire to "give something back" to the efforts to conserve, appreciate and find better uses for native bamboo. He formed a board of advisors and directors helps to suggest direction, and I am one of those advisors. But the people who do the most important work are the botanists and scientists whose collecting and testing efforts serve to define the unique physical qualities, pests and diseases.

Most of this work so far has been in Mexico, but in Peru, there was a workshop to build a house using the local Guadua that had not been well utilized. Also, in Guatemala and Honduras, the new Bambu Maya project seeks to catalog traditional bamboo uses and to collect the plants and craft works of the people so they can be better understood.

This past June, 9 people interested in the project traveled to Veracruz, Mexico to see the progress. For me, there were several unexpected results. Coming from a country where bamboo is only a horticultural plant, it was odd to see so little bamboo used as a decorative part of the landscape. Imagine that this is not only such a delicate and graceful plant, but it makes very durable furniture. It could be such a source of local pride if the plants were appreciated more.

In another place, we saw *Guadua*, a thick wall species said to be one of the best for building. The local people told us they did not use it for building, but they have been propagating a rare thorn-less variation just because they liked the plant. So, all they need is a small step to know how to build with it and they will have complete control over their source of building material.



Botanist Gilberto Cortes next to a grove of Guadua aculeata near Catemaco, Veracruz



Now there is a National Collection where every native species in Mexico will be represented and a Botanical Garden which will host it. There is a new Mexican Bamboo Society to encourage people to talk to one another and share ideas.

Also in Mexico, there is a tremendous testing facility where the natural properties of each plant can now be determined. An electron microscope, equipment for testing physical properties, an entomology department, and a herbarium keeps record of all the characteristic parts - especially the rare flowers.



The craftsmen of Monte Blanco share their precise bending skills

There were some innovative building projects that we saw. The people in one particular village have organized themselves into a cooperative business structure and they produce very well-built furniture. Now, some of their best curving techniques at the furniture scale are being applied to entire buildings.



The Instituto de Ecología in Xalapa, Veracruz

And it is part of a graduate school where people can go to choose new research directions. Many of these facilities existed and were used for understanding other plants, but now due to positive outside pressure, the faculty is able to work on bamboo as well.

All of this helps scientists put together what is really a puzzle. First the characteristics of the plant are found, then the information needs to get into the right hands.



Earth Healing with Bamboo – Ecoservices, Bioremediation, Agroforestry

Prepared* for the 25th Anniversary Conference of the
American Bamboo Society 15-17 October 2004

by Adam Turtle FLS and Susanne E. Turtle
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*Significant portions of this paper first appeared in
"Temperate Bamboos; a non-timber forest product of great
value" which was presented before the First World Congress
of Agroforestry in Orlando, FL on 29 June '04.

Preface

We, the human race collectively, and "over developed" societies in particular, are no longer living on the "yields" of natural systems. We have disrupted, degraded, and even destroyed many interrelated systems to the point that a number of essential services are no longer functioning. We are in what may be termed the 'Esau Syndrome'. We are trading our (and, more importantly, our children's and grandchildren's) birthright for a "mess of pottage". We are eating, that is -- consuming &/or degrading not only our seed corn but also the topsoil, the clean water, even the quality of sunlight needed to produce future crops for future generations. We need to somehow disassemble the prevailing colonial paradigm, the Euro-American "success" model. We may try to salvage, in a modified form perhaps, those aspects that are fair and equitable, but we must somehow replace our consumptive and competitive behavior with a more communal and cooperative ideal – our children are at peril. Remember that war is the ultimate competition as well as our most disruptive and consumptive act.

"Agroecology", "Agroforestry", "Alternative Energy", "Bioremediation", "Community-Supported-Agriculture", "Good Stewardship", "Land Reform", "Permaculture", "Plant-a-Row-for-the-Hungry", "Systems Thinking" – these are some of the newer "buzz words" indicating our growing awareness that the status quo ante is not sustainable. Each and all of the above concepts or disciplines have valid contributions to make in our quest for a more equitable and mutually viable future. However, for any or even all of them to truly reverse our social and ecological decline, we must first examine and revise the underlying attitudes and assumptions that led us to our current dilemma. The deadly combination of ignorance and arrogance implicit in our cutthroat competition and business-as-usual mindset is increasingly unsupportable. We need to look into our hearts and minds seeking to find a sense of unity, realizing and acknowledging that we are all in this together. Only if so motivated are we likely to succeed in building a better future for our children.

The above awareness came to me in a vision 34 years ago. Included in that vision was the awareness that all life depends on plants. So I began my research in practical or applied ethnobotany with a focus on warm temperate climatic zones. In the late 70's I became aware that there were temperate as well as tropical bamboos so I began to study whatever literature was then to be found as well as acquiring extensive hardy taxa for field trials in USDA zone 6. In the early 90's, with a new wife and an established "palette" of over 200 can-

Everywhere I have traveled, there are usually people who know how to work with bamboo but they do it only in the way they have discovered without knowing the one or two slight improvements that will make their furniture look better or their buildings last longer. A project like Bamboo of The Americas can put together those missing pieces.

Other countries can now easily follow this model. For example, Chile has only 11 species even though it is a country with almost every climate zone known. The effort to raise awareness and appreciation will be of great benefit to those who seek to understand plant ecologies and use natural materials in sensible ways the world over.

In Mexico, the interest from outside has helped the scientists convince the government and fund raisers that bamboo is important, and the projects are on their way to becoming self-sufficient.

I can only hope that Bolivia also finds a way to participate in putting the pieces together to find the ways we can best work with bamboo and have bamboo work for us.

Mexico and bamboo

The ABS SoCal directors voted to transfer the BOTA project from its auspices to that of ABS National should ABS so accept; which ABS did at its 2004 Convention. Now BOTA can more easily continue to mature as an example of means by which bamboos indigenous to other countries can protected from inadvertent destruction by a burgeoning population. BOTA has been active primarily in Mexico.

A recent article, (Nov. 7, 2004) in the San Diego Union-Tribune states that Mexico's new crop is bamboo! Check it out at: http://www.signonsandiego.com/uniontrib/20041107/news_1n7bamboo.html

didate species and forms of temperate bamboos representing 20 plus genera, we began use and application trials. Meanwhile we acquired training in such ancillary disciplines as Erosion Control, Integrated Pest Management, Permaculture and Soil Science which broadened the scope of our investigations.

Thus far, we are persuaded that the bamboos, wherever climatically suited, possess a larger and more varied suite of benefits, uses, and virtues than any other group of plants – as we will seek to demonstrate here briefly.

The Plant

Bamboos are grasses and native to all continents except Europe where they were extirpated during a recent ice age. They belong to the super tribe Bambusoideae which is composed of both herbaceous and woody tribes. We are here concerned with the largest and most widespread tribe, the Bambusae or woody bamboos, specifically, select members of the sub tribes: Arundinariinae and the closely related Shibataeinae which might be termed the hardy or temperate runners. These can vary from ankle high ground covers (many of which have more mass below grade than above) to giant tree grasses of 20 meters or more. Bamboos' natural range is from 50° N. latitude in the Kurile Islands to 47° S. latitude in southern Chile and from sea level to 4,000 meters. However, when introduced, many hardy bamboo species can semi-naturalize outside their original range in areas receiving at least 75 cm (30 inches) of rain annually. The larger and hardier bamboos are mostly found in genus *Phyllostachys*. Many occur naturally as forest understory and/or as edge species, although most are quite tolerant of full sun. Actual height, diameter, wall thickness, wood quality, and frost tolerance vary with both species and site conditions. These factors need to be carefully matched for successful realization of their full potential. The annually updated Species Source List published by the American Bamboo Society on their web site www.americanbamboo.org gives approximate growth parameters, requirements, sources, and some of the uses for over 300 bamboo taxa currently available in the U.S.

Growth

Bamboos are the fastest growing plants on earth, up to 1.07 meters in 24 hours. Being grasses they are extremely culture responsive, ie. nutrient levels that would be toxic to trees only accelerate Bamboo growth rates. The new shoots in spring emerge at their finished diameter and achieve their full stature in 60 days or less. At first they are soft, made firm only by hydrostatic pressure. They need to stand "on the root" for five (5) years to become fully lignified and realize their optimal potential strength. Tropicals, with a longer growing season, mature in approximately three (3) years. Immature culms can be used for biomass, paper pulp, weaving or anywhere compressive strength or stiffness is not needed. Multiple use management is possible – ie. shoots and poles, their ecoservices and ability to bioremediate compromised systems are a free, included bonus. Establishment requires five (5) to ten (10) years before first harvest, depending on end use, and is annual thereafter. Harvest can be selective, culm by culm on an annual basis, similar to "high-grading" a forest or rotated swath cutting with a mixed age yield requiring hand sorting for various applications.

Benefits or Services

Bamboos' function in the hydrologic cycle is of particularly great value for future ecoservices applications as there is essentially no rain runoff except in the most torrential downpours. What little does seep out of the grove tends to be clear. Thus, both natural and managed bamboo groves can minimize erosion as well as providing an ideal ground water recharge cover and/or water course protection. Tall bamboos on high ground comb moisture and airborne soil from the atmosphere much as trees do, but bamboos tend to have a greater leaf surface area. On flood plains they slow the water and harvest silt. Their continuous high nutrient leaf drop makes them self-mulching and quantitatively increases topsoil while improving its moisture holding ability. Bamboos accumulate, improve, and protect soils as well as cleaning the air and raising the water table. And they can do all this on a diet of municipal or feedlot effluents or any nutritious organic waste providing a truly renewable or sustainable resource base.

Bamboo groves provide habitat for birds, small animals, invertebrates, and fungi ... and are a great playground for children of all ages. The ecology of a bamboo grove can be quite diverse. Even large animals will bed or seek shelter in Bamboo.

Management strategies vary with type of bamboo, site conditions, and intended product yield or end use.

Uses

Bamboo-based cultures have evolved not only in Asia but also in South America and Africa. The pre-European Indians of the southeastern U.S. made extensive use of "cane" (*Arundinaria gigantea*) our only native North American bamboo.

What can't be made with bamboo might provide a shorter list than what can. For instance, symbiotic edible fungi can be cultured in the grove. The new shoots are a healthy, nutritious and currently pricey human food. The foliage furnishes a very palatable high-protein feed (up to 22%) for livestock which, by the way, must be excluded from growing areas especially during the shooting season. The cut culms are a good source of pulp for papermaking and according to joint studies by the USDA, Champion Paper, Scott Paper and Auburn University can out-yield pine 6 to 1. Studies from trial plots in Germany, Ireland, and Brazil have indicated bamboo can yield a high BTU biomass for low emission energy generation. Up to 37 tons per hectare annual biomass production have been reported. Mature bamboo wood quality is similar to other medium density woods and is superior to pine in strength. Dr. Andy Lee at Clemson University in South Carolina has found that when sawn and laminated, bamboo can be used in place of tree wood in many applications. When used in the round, bamboos' unique form and its strength to weight ratio offers many advantages both architecturally and in applications such as water and gas piping for use in low cash flow remote areas or even ganged as stiffeners in recycled plastic-encapsulated utility poles. When treated with borates in a modified Boucherie treatment, bamboo is resistant to insects as well as fungi. Gary Young in Hawaii, working with woven bamboo mat impregnated with an organic epoxy and vacuum molded, found it could assume

almost any shape, with strength and weight comparing favorably to fiberglass. A high quality, knitted fabric has recently been developed directly from bamboo fiber in China. Bamboo fibers can be substituted for carbon fibers in some applications. Bamboo plywood or "plyboo" as well as bamboo O.S.B. or oriented-strand-board and laminated bamboo flooring are now being marketed. When used for durable applications, ie. furniture, architectural materials, concrete reinforcement, etc., bamboos can provide significant carbon sequestration. Even when burned for fuel there is still a benefit in that it is contemporary carbon rather than fossil carbon that is released.

The U.S. currently has a tremendous negative balance of trade even as we import over 50 billion dollars a year worth of bamboo shoots, poles and other products. We also have: massive unemployment, many abandoned small farms, overburdened landfills, organic waste disposal issues, receding water tables and diminishing water quality, severe soil erosion, material shortfalls, inequitable land distribution, worsening air pollution, etc., etc. Domestic production and use of bamboo could favorably address many of these interrelated issues; and if given subsidies and incentives similar to the timber and mining industries, a "bamboo industry" could be very competitive and beneficial on many levels.

International bamboo trade is presently estimated at over 10 billion U.S. dollars annually. Internal or domestic uses are estimated to be as much as an additional 50 billion. These figures are for current use levels and do not reflect the potentials possible with new applications from bamboo substitution or use in new technologies. Nor do they put a value to environmental services or social benefits. As a quick growth, short cycle feedstock for industrial applications, bamboo is peerless. And being a high-annual yield, short-rotation crop, bamboo could give small farms and rural economics a renewed viability.

Projects like the Bamboo of the Americas (B.O.T.A.) can be effective in encouraging the conservation of native habitat, which includes the native Bamboos of an area, while offering profitable economic uses (such as construction and furniture, etc.) for low income areas. BOTA sponsors projects throughout the Americas so that farmers and rural communities as well as local and national governments will see the potential economic and environmental value of saving their native stands of Bamboo. Margaret Certain at the University of Memphis in Tennessee and others are addressing canebrake restoration in the Southeastern U.S. We need to encourage and support these kinds of efforts.

Sensibly grown and utilized, bamboo can greatly reduce our dependence on tree wood and to some extent it can substitute for and/or be co-fired with coal. It is even used like mild steel for concrete reinforcement and "Ferro-cement" type applications.

Virtues

The seven sages of Chinese lore are said to have valued life in a bamboo grove as it provided the tranquility needed for their contemplations. Part of the explanatory rationale for this lies in the gentle susurration or white noise made by the leaves. In addition to inducing emotional tranquility, a virtue in short supply in our hurried and harried society, bamboo is intellectually stimulating as any child fortunate enough to have played in a grove can attest. There are also subtle symbolic attributes. Bamboo is known as "the gentleman", up-

right but able to bend and always willing to serve. Bamboo is hollow, lightweight and resilient illustrating that mass and rigidity are not the only paths to strength. Bamboo is also known as "the brother" available to comfort or help. Its ever-green beauty and calming effect where known are highly appreciated. As a colony organism, bamboos offer a model of mutual support and cooperation, as well as multiple benefits to their "guests" and neighbors.

The Future

In the 1890's the first modern (well, western anyway) wave of bamboo prophets put forth their vision of a bamboo sourced society. Among them were such luminaries as Fredrick Law Olmstead who designed bamboo into the Biltmore Estate, the site of the first scientific school of forestry in the U.S. Thomas Edison's use of bamboo (selected out of over 6,000 materials tested) for the first commercial light bulb filament is well known. Others included David Fairchild, E.H. McIlhenny, Barbour Lathrop – all of whom subscribed to Ben Franklin's admonition that "The greatest service a man (or woman) can provide their country is to introduce a useful new plant." I believe that still holds true today, but I would add that besides "introducing" the plant, we need to explore and promote its virtues ... again and again as necessary.

Most of the above came to naught, except horticulturally, do largely to Europeans (and us as their cultural heirs) lacking any bamboo tradition except in their colonies where it was viewed as a "native" resource, and to our entering what might be termed a corporate neo-colonial period of wasteful resource exploitation. Now as our various follies catch up to us, we may at last have no choice but to reconsider and accept the manifold gifts of the bamboos.

Worldwide there are pockets of exploration and research. Tissue culture protocols have been developed for a number of species. Induced flowering techniques now allow the creation of hybrid forms with elite characteristics. New plantation management strategies are increasing potential yields. INBAR (International Network of Bamboo and Rattan) does a good service in coordinating/informing but could use more participation from both individuals and organizations such as the ABS. As a wealthy nation, we should be leading the world in research and information sharing to improve conditions for all people. So why is the U.S. non-signatory to the INBAR treaty? Ask your congresscritter or representative.

If we had just one George Washington Carver and some research funding, imagine what we could do with bamboo. Imagine what the ABS could do. What each of us members could do. The U.S.D.A. bamboo Germplasm collections are neither active in new accessions nor adequately curated, nor are enough climatic zones even represented. ABS could begin to redress this situation. It could also make promotional and research materials available to encourage university students to pursue a bamboo career. We also need more bamboo programs in elementary, middle, and high schools – Carol Stangler and others have already begun some programs, and we need more – what can you do?

More informed contact with other groups / disciplines / professions can be very helpful in raising bamboo consciousness – speak to your Rotary or Lions or whomever. Write articles for your local paper – do check your facts – there's enough misinformation already published! Invite your local TV or even radio station to come visit and do a piece on your bamboo, be sure to mention ABS and put in a plug for bamboo's uses and earth healing aspects. If you are an alumnus, ask your alma

mater to include bamboo studies. If you've also been blessed financially, consider a contribution or scholarship earmarked for bamboo studies. Or with less expense you could donate bamboo books and/or an ABS magazine subscription to your university or high school and/or the town's public library. Many ABS members just like the looks of bamboo, but we also have some awareness of its virtues and so we have important information to share. We need to get "proactive" in spreading bamboo awareness – and soon!

Conclusion

Bamboos contribute needed ecological services, manifold agro-industrial advantages, desirable socio-political virtues and can do this while providing a soothing and evergreen beauty. If bamboos had no directly harvestable aspect, they would still be worth planting extensively if only for their ecosystem services. Fortunately we get both. If our desire for healing the Earth is to be validated, we can no longer afford to ignore the many gifts and advantages of the bamboos. We need every ally we can find.

Acknowledgement of the cumulative negative synergies of our extractive and wasteful practices would insist that we step off the treadmill of unsustainable economic growth which is made possible only by externalizing true costs, suppression of "others", not cleaning up our mess, etc. Perhaps then we can jointly and mutually begin an integrated and holistic age of enlightened siblinghood. Toward and within this scenario we believe the temperate bamboos have gifts to offer, lessons to teach and a prominent role to play.

-- Thanks Adam, for sharing this article with us!!

Reference collection gets (another) face lift:

You know how it is. You invite guests over and then realize the house needs new carpet and new draperies or at least clean the draperies! Well. ABS SoCal is no different. Having made arrangements for the attendees at recent ABS2004 Conference at the Huntington in San Marino to follow up their experience with a visit to the "mother clump" - the Quail Botanical Gardens where the ABS "intellectual germplasm" had its beginning - conference movers and shakers Bob Dimattia and Ralph Evans couldn't let our ABS SoCal reference collection look like an abandoned nursery. It sort of is, but we couldn't let other's see it that way!!

So several weekends of Chapter bambusero effort improved the reference collection area suitable for outsiders to visit. The newly installed irrigation system was momentarily disconnected and pulled aside so all the potted plants could be moved off the area of a former clay-surfaced tennis court. Then all the weeds were dug up, as were all the bamboos, both clumpers, but mostly runners, which had sought freedom by surreptitiously growing out of their containers into the adjacent soil. The soil was raked level and smooth, and nursery weed cloth was spread over it. Then the containers of bamboo were relocated and the irrigation lines re assembled. Bob D. is, and has every right to be, proud of the display.

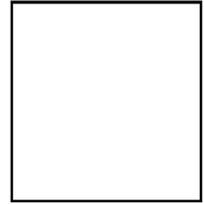
Now that our Chapter energies are freed up from planning and hosting the 2004ABS Conference, we can focus on the needs and concerns of our local So Cal interests, two of which are greenhouses - one that meets the specifications of an upgraded quarantine greenhouse, and one in which we can more easily propagate bamboos from the collection to make available at plant sales.

Speaking of plant sales, at the ABS Convention there was an auction of bamboo plants donated by many and various members. And the plant which sold for the highest amount, a 15g container of *Chimonocalamus fimbriatus*, was grown in and donated from our ABS SoCal collection. It sold for \$1000. to Ralph Evans, an ABS SoCal grower who, we hope, will propagate the plant and make many more available at our Quail sales. The plant is beautiful; much like a *Chusquea*.

Matrix showing results of the ABS SoCal Bamboo Sale, Sat. Sep. 17, 2004.

Pot Mark	Grower	Plants Sold	Gross w/tax	Sales Tax @ 0.0775	Gross w/o tax	To Quail	To Chapter	To Grower
QBG	ABS SoCal	11	\$330.00	\$25.58	\$304.43	50% \$152.21	50% \$152.21	\$330.00
B4U	JoAnne and Bill Wyman	1	\$100.00	\$7.75	\$92.25	10% \$9.23	20% \$18.45	70% \$64.58
B4C	Bob Dimattia	56	\$3,418.00	\$264.90	\$3,153.11	\$315.31	\$630.62	\$2,207.17
BHQ	Ralph Evans	234	\$8,945.00	\$693.74	\$8,251.26	\$825.18	\$1,650.35	\$5,776.23
C4L	Christian Lydick	26	\$1,005.00	\$77.85	\$927.15	\$92.71	\$185.42	\$645.98
D4B	Don Binnix	1	\$95.00	\$7.36	\$87.64	\$8.76	\$17.53	\$61.36
S4G	Eric Gigler	9	\$430.00	\$33.32	\$396.68	\$39.67	\$79.34	\$277.67
J4R	Jim Rohrer	53	\$2,745.00	\$213.85	\$2,071.01	\$207.10	\$414.20	\$1,449.71
M4M	Mike Muller	27	\$400.00	\$31.00	\$369.00	\$36.90	\$73.80	\$258.30
R4B	Sidney Bowman	20	\$555.00	\$43.01	\$511.99	\$51.20	\$102.40	\$358.36
S4H	Sieu Van Hoang	2	\$950.00	\$73.63	\$876.38	\$87.64	\$175.28	\$613.46
T4S	Thao Smith	18	\$945.00	\$73.74	\$871.26	\$87.18	\$174.35	\$616.23
Total Plant sales:		458	\$19,418.00	\$1,504.90	\$17,913.11	\$1,913.08	\$3,673.95	\$12,326.08
ABS SoCal Mbrship dues			\$310.00				\$310.00	\$310.00
Source Lists		45	\$135.00	\$10.46	\$124.54		\$124.54	\$135.00
Totals:			\$19,863.00	\$1,515.36	\$18,037.64	\$1,913.08	\$4,108.49	\$12,326.08
source cash return to Roy W			\$300.00				\$300.00	
expected total \$ cash + checks =			\$20,163.00				\$3,808.49	due chapter
actual total \$ cash + checks			\$19,909.00					
surplus received"			\$254.00				\$254.00	due chapter

The Southern California Chapter of the
American Bamboo Society, Inc.
P. O. Box 230181
Encinitas, CA 92023-0181



**Application for membership in the American Bamboo Society
and The Southern California Chapter of the American Bamboo Society**

Renewal New

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone: (____) _____ Fax: (____) _____ e-mail: _____

Membership for 2004 is (check one)

- | | |
|---|---|
| <input type="checkbox"/> Annual: \$40 - ABS and ABS SoCal Chapter | <input type="checkbox"/> Supporting: \$60 - ABS and ABS SoCal Chapter |
| <input type="checkbox"/> Lifetime: \$600 - ABS Membership only | <input type="checkbox"/> Patron: \$120 - ABS and ABS SoCal Chapter |
| <input type="checkbox"/> Lifetime: \$300 - ABS SoCal Chapter only | <input type="checkbox"/> \$15/year for each additional Chapter checked below: |

- Florida Caribbean; Hawaii; Louisiana-Gulf Coast; Mid-States; Northeast; Northern California;
 Oregon Bamboo Assoc.; Pacific Northwest; Southeast; Texas Bamboo Society; Tierra Seca

Make check to ABS-SoCal: Mail to: ABS SoCal Membership, P. O. Box 230181, Encinitas, CA 92023-0181

Check here only if you do NOT want your phone number and e-mail address listed in directories.

Note: One: Newsletter is available in .pdf format at the ABS SoCal website: www.abssocal.org - IN COLOR!