Guide to the Guitar

soundwood

THIS GLOBAL MAP WAS ASSEMBLED FROM THE REGIONAL DATA USED IN A 1997 STUDY CONDUCTED BY THE WORLD CONSERVATION MONITORING CENTER & THE CENTRE FOR INTERNATIONAL FORESTRY RESEARCH. THE FOREST TYPE CLASSIFICATION HAS BEEN SIMPLIFIED HERE FOR EASIER INTERPRETATION AND THE SPARSER FORESTS WERE ELIMINATED FROM THE COVERAGE.

The high value of the world's forests

stems in part from the production of musical instruments.

Almost half – 3 billion hectares – of the original forest cover on earth is gone. Forest loss between 1980 and 1995 was at least 200 million hectares, an area the size of Mexico. Each year, at least another 16 million hectares of natural forest, an area the size of Washington state, is lost in developing countries.

Only 40% of the world's remaining forest cover is in large expanses of forest otherwise known as forest frontiers. These frontier forests are divided fairly evenly between boreal and tropical forests. By the early 20th century, Europe, North Africa, the Mideast, and temperate North America had been mostly stripped of their original forest cover. In the last thirty to forty years, most forest loss has happened in the tropics, where deforestation is increasing. Between 1960 and 1990, one fifth of all tropical forest cover vanished. Asia lost one third, and both Africa and Latin America lost about 18% each.

(1 hectare = 2.5 acres)

TEXT SOURCE: "TAKING A STAND: CULTIVATING A NEW RELATIONSHIP WITH THE WORLD'S FORESTS," JANET N. ABRAMOWITZ, WORLDWATCH PAPER 140, APRIL, 1998

SoundWood was started to help protect the tree species used in the production of musical instruments.

The manufacture of guitars, woodwinds, violin bows, pianos, and other instruments relies on the natural characteristics of wood to create their unique sound. The most prized species of wood combine not only ideal working properties, but also great beauty, and these same species have also been over-harvested or destroyed with little thought to their long-term survival, their role in the forest ecosystem, or their ongoing value to music.

Rosewood. Ebony. Mahogany. These popular woods – and many lesser-known species – are all threatened by commercial exploitation and other causes of deforestation. Because these trees grow very slowly, they take years to reach sizes suitable to produce the high-quality woods needed for fine musical instruments. Brazilian rosewood is now so rare it is banned from international trade. Other trees, like mahogany, should have strict trade controls in order to protect them from irreversible endangerment.

SoundWood recognizes that musical instrument manufacture is not the leading force behind the demise of these species – nor is it the largest consumer of these woods. However, musical instruments require the high-quality timber of older trees. Searching for and logging this high-quality wood is a major factor in the opening of pristine forests. Once logging roads are established, a forest area will almost inevitably become highly degraded, both from timber extraction and other means, such as clearance for agriculture.

Guitars in particular are made from many of these threatened species, and guitarists cherish these very woods as much for their rich resonance as for their aesthetics. Because these woods are ideal for guitars, some manufacturers feel a particular responsibility in protecting these tree species and their forest home. SoundWood is committed to working with these manufacturers to find solutions to protect these beautiful, but endangered, trees.

SoundWood also believes that musicians, whether professional or amateur, need to know about the plight of these trees and their forest habitats in order to help minimize the negative impact of consumer demand. Well-known guitar players are not only emulated for their sound but also their prized guitars, which are often made with these special timbers. While we are not advocating the boycott of guitars made from these threatened species, we do want people to make informed decisions and to support manufacturers who are trying various means to protect these trees.

The SoundWood Guide to the Guitar describes these varied efforts, and the guitar manufacturers listed in the Guide have established clear policies and manufacturing processes to reduce their impact on the more commonly used – and thereby threatened – species. The manufacturers' experienced use of these woods and the decline in high-quality timber has often been the catalyst behind the development of creative solutions. The Guide is not meant to imply that other manufacturers are not making similar efforts; the companies listed here are simply the ones who responded to our inquiries. We want to encourage and support all musical instrument manufacturers to take actions which reduce the pressure on these threatened trees.

Ultimately, SoundWood would like to see all wood used for guitars originate from forests that are well-managed and where the harvest technique has had a minimum effect on the forest ecology, as well as those which provide social and economic benefits to local people. The determination of a well-managed forestry operation should be done by an independent certification company accredited by the Forest Stewardship Council (see page 3 for more on the FSC). This Guide will be periodically updated with new entries by other manufacturers and the progression of the ones already listed. We encourage you to become a member of SoundWood and receive our newsletters to track our progress in protecting these special trees.

What is SoundWood?

A program of Fauna & Flora International, SoundWood's mission is **to conserve threatened tree species** used in the manufacture of musical instruments. Founded in 1903, Fauna & Flora International is the world's oldest international wildlife conservation organization. It is one of only a few devoted to the protection of the entire spectrum of endangered species of animals and plants worldwide. SoundWood works in collaboration with the music industry and others to develop solutions for the survival of threatened tree species, and a key component of our approach is to promote the use of timber from well-managed sources in ways that protect the integrity of forest ecosystems:

- Assess and monitor the conservation status of tree species used for musical instrument manufacture;
- Raise awareness of the plight of tree species used in music instruments;
- Assist the music instrument industry toward the use of timber independently certified from well-managed sources;
- Develop forest conservation strategies in partnership with local people;
- Encourage improved efficiency of both timber production and musical instrument manufacture.

Musicians Strive to be Different.

As creative people and as musicians, we believe our playing makes a difference in our own lives, as well as the lives of others. We strive to be different, and the same kind of acceptance to different musical styles and techniques needs to go into **seeking out guitars made with lesser-known woods which perform with beautiful tonal properties.** It's not an easy goal, but it is achievable, and it is up to everyone of us to play a part in protecting these trees. In order to use certified wood, manufacturers need to know that guitar buyers are open to change. We strongly encourage guitar buyers to be more open to wood with color varied from ones they have typically accepted such as mahogany and rosewood.

What is the Forest Stewardship Council?

Public concern about deforestation has resulted in an increasing demand for wood that comes from ecologically sustainable forestry operations. However, sustainable management has varied definitions and interpretations and is often confused with sustained yield. **Sustainable management is different** in that it is concerned with more than the number of trees that can be annually harvested. When a forest is sustainably managed, an annual yield can be taken from the forest, provided the entire forest ecosystem—fauna, flora, soils, water systems, biological diversity and cultural values—has been protected in perpetuity. Without careful consideration, timber cutting can be disastrous for forest wildlife, soils, rivers, local people, and the long-term survival of timber species themselves. The concept of sustainable management aims to take all these factors into consideration.

How can the consumer be assured that the wood they buy actually comes from a sustainable operation and that claims of sustainability are not false? To help solve this problem, a diverse group of representatives from environmental and social organizations, the timber trade, and forestry professionals worldwide founded the Forest Stewardship Council (FSC) in 1993. The FSC works in all forest types and plantations, including tropical, temperate and boreal.

The FSC works to eliminate confusing and false claims by evaluating and accrediting independent certification companies according to internationally agreed guidelines. While the FSC does not itself engage in certification, it evaluates, accredits, and monitors certifiers for adherence to the FSC Principles and Criteria of Forest Management and to the FSC Guidelines for Certifiers. Currently, the FSC-accredited certifiers are Scientific Certification System (SCS), SGS Forestry, SKAL, SmartWood, and Woodmark.

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the SoundWood Guide to the Guitar

While few for us can ignore the alarming rate of deforestation, doing something about it often seems beyond the capabilities of the individual. It is very hard to adopt the "don't use it" philosophy of some environmental groups as you strum a chord on your favorite guitar's ebony fingerboard. Yet SoundWood has, over the past few years, taken a unique route; it is solely dedicated to finding solutions that will protect trees used for making musical instruments. To that end, SoundWood has met with many of the world's leading guitar builders, large and small, listening and advising. It is simply concerned with the preservation of the wonderful tonewoods that in the hands of skilled luthiers can be fabricated into fine musical instruments. The Guide is intended to inform guitar buyers of the variety of approaches manufacturers are taking to minimize their role in both the depletion of threatened tree species and the destructive impact of logging on the forest.

Guitar manufacturers are not guilty of raping the forests, but the majority consume a percentage of rainforest timber that will eventually either disappear from international trade (as with Brazilian rosewood) or become so scarce and highly valued that most manufacturers will be unable to utilize them for commercially viable instruments.

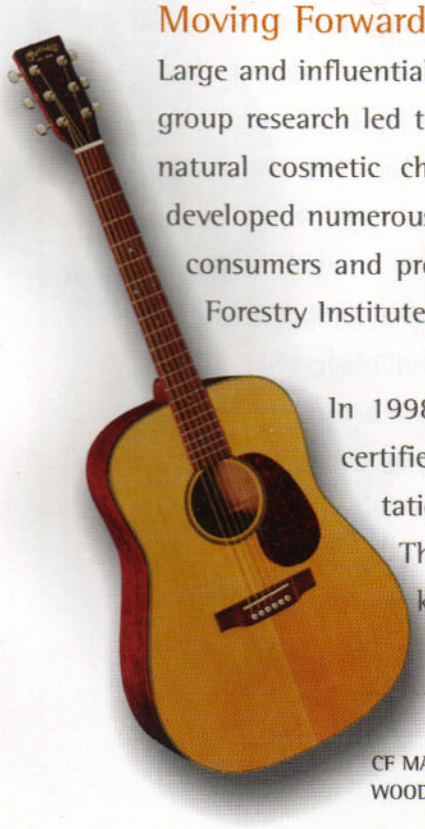
The answer lies in the development, promotion, and acceptance of sustainably managed timber accredited by the likes of the Forest Stewardship Council (FSC). Already we're beginning to see FSC-accredited products entering our do-it-yourself stores. A range of timber products may now be purchased with the FSC mark and, even at this early stage, competing retail chains are noticing that FSC accreditation is a positive sales point which could ensure that the range of products increases as competing companies enter the market.

By comparison, the guitar industry has been very slow to incorporate the independently certified wood assessed by FSC accredited certification programs. The reasons are multifarious. Some companies believe their wood stocks come from good sources, but without FSC certification, this is doubtful, at best. Others have taken a more intelligent route by sourcing alternative timbers or recycled woods (many of which are available from certified sources). Many companies believe that by not using the few classic tonewoods—mahogany, rosewood, and ebony—they will lose a commercial advantage.

Moving Forward.

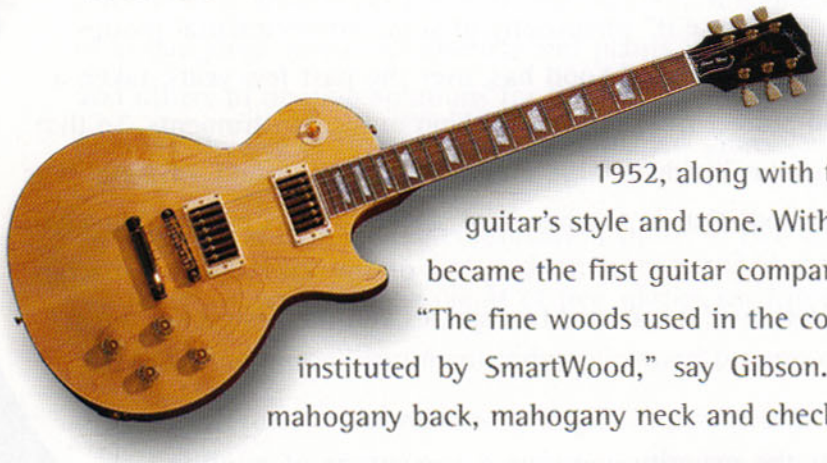
Large and influential makers like CF MARTIN, however, have already made significant moves. "Our consumer focus group research led to the introduction and widespread acceptance of guitars utilizing structurally sound woods with natural cosmetic characteristics which were formerly considered unacceptable," illustrate Martin. "We have also developed numerous sustainable-yield alternative wood guitars for industry-wide exhibitions intended to educate our consumers and provide direction for the company and industry. Recently, we assisted SoundWood and the Oxford Forestry Institute at the University of Oxford in their research of the practices of the rosewood trade from India."

In 1998, Martin introduced the SWD Certified Wood guitar. "The SWD model utilizes 73% of woods certified by both the SmartWood program and SCS, which both have Forest Stewardship Council accreditation. The sides, backs, neck, and interior blocks of the SWD model are made from certified cherry. The interior ribbon is made from certified basswood. The fingerboard and bridge use certified katalox, a Mexican hardwood. Certified hard maple is used for the bridge support plate on the underside of the top. And for the soundboard, we have used quartersawn Sitka spruce that comes from logs destined for pulpwood. Although the spruce is not certified, we are pursuing certification

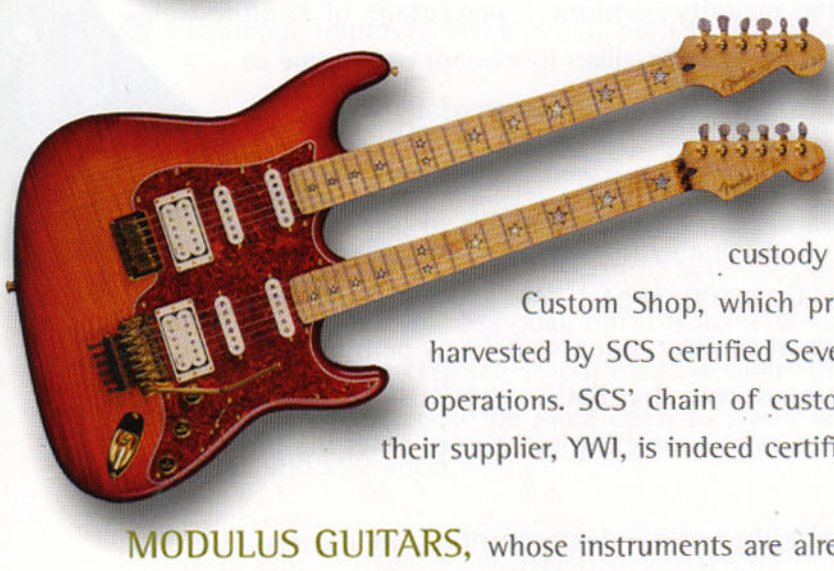


CF MARTIN'S SWD CERTIFIED WOOD GUITAR, LEFT

of spruce though the various vendors that supply guitar tops to the music industry." It is Martin's hope that the SWD model will serve to "educate consumers about some of the environmental issues surrounding wood usage for musical instruments and lead to future Martin-certified wood models, thus helping to insure the responsible use of our valuable wood resources."

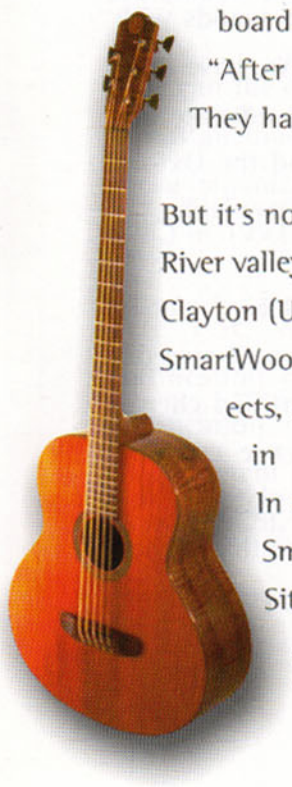


Like Martin, GIBSON also has a long heritage in guitar building. Their Gibson Les Paul guitar, launched back in 1952, along with the Fender Stratocaster, remains the benchmark for the electric guitar's style and tone. With the introduction of the SmartWood Les Paul in 1996, Gibson became the first guitar company to craft a model composed entirely of FSC certified woods. "The fine woods used in the construction were harvested in strict accordance with guidelines instituted by SmartWood," say Gibson. "The body is made from bookmatched maple top with a mahogany back, mahogany neck and chechen fingerboard."



FENDER annually produces about 350,000 to 450,000 guitars worldwide. About 90% of its traditional guitar wood is from non-threatened species, such as alder, ash, poplar, and maple. But they are working toward having SCS conduct a chain of custody for the high-grade maple used for guitar necks built in their Custom Shop, which produces about 6000 guitars per year. Currently they use maple harvested by SCS certified Seven Islands Land Co., one of the largest US-certified forestry operations. SCS' chain of custody procedure will help Fender ensure that the wood from their supplier, YWI, is indeed certified maple.

MODULUS GUITARS, whose instruments are already largely non-wood by virtue of their graphite composite necks, are intent on making their smaller-production electric solidbody instruments even more resource-friendly by moving to sustainably harvested woods for bodies and fingerboards. "We are a pioneer in the research and implementation," a Modulus spokesman says, "of renewable source woods in the guitar-building industry." "A great deal of effort has gone into the testing of available renewable timbers for their tonal qualities and structural stability. It's important to note that Modulus, over the next 12 to 18 months, will move to a large percentage of certified wood content in our entire line. Many companies are jumping on the politically-correct bandwagon by showcasing one model with sustainable woods. "While that's a step in the right direction, we will be one of the first manufacturers of our size to switch over as completely as possible across the board." Modulus uses phenolic (a plastic) fingerboards, but offers granadillo and chechen as options. "After extensive testing, we selected Mexican granadillo and chechen, which are SmartWood certified. They have similar cosmetic and sonic characteristics to rosewood and pau ferro, and are stable in use."



But it's not just large mainstream companies that are utilizing accredited timbers. In a small shop in Oregon's Rogue River valley, DAVE MAIZE builds around ten acoustic guitars and basses each year for influential players like Adam Clayton (U2), Phil Lesh (Grateful Dead), Jack Casady (Hot Tuna) and Jeff Ament (Pearl Jam). "I use a combination of SmartWood certified woods and SmartWood "rediscovered" woods from reclaimed sources such as demolition projects, street trees which have to be cut, and other sources. The origins of the materials that I use, and the way in which they are harvested, are just as important to me as their appearance or tonal properties. In addition to my guitars, I now have available a wide variety of guitar woods, most of which are certified by SmartWood. These re-sawn soundboards, backs and sides, fingerboard and bridge blanks include redwood, Sitka spruce, Port Orford cedar, walnut, bay laurel, black locust, granadillo and katalox."

FROM TOP TO BOTTOM: GIBSON'S SMARTWOOD LES PAUL; FENDER'S DOUBLENECK ELECTRIC;
THE MODULUS GENESIS ONE, WITH SPRUCE NECK & ALDERWOOD BODY; DAVE MAIZE'S HEADWATERS BASS

As yet, however, there is simply not enough accredited timber of the correct species and high grade to satisfy the demand of timber-hungry guitar builders. For large companies, like TAYLOR GUITARS, this is a major reason why they haven't, as yet, come to market with a certified wood guitar. "We have invented radically new procedures for making our guitar necks. These systems [implemented in 1997] allow us to make necks without using the "cream" or highest grade mahogany that is typically required for quality guitar manufacturing. This ability to use nearly any grade of mahogany will make way for us to use certified woods. This is important because any supplier of certified woods will not be able to guarantee the highest grades. The highest grades are yielded as a result of cutting a high volume of wood and selecting that small minority of wood that happens to be high grade. This doesn't fit into the idea of a certified program."

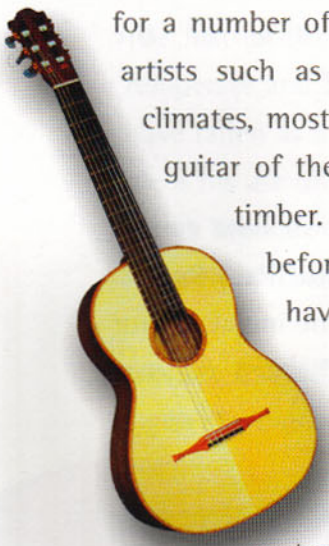
Looking for Alternatives.

The use of alternative species may seem an obvious route though numerous concerns are raised. Traditionally very few tonewoods are used in both acoustic and electric guitar making. Players and dealers like to stick with tradition so if a company changes from a recognized timber, like mahogany (used for necks, acoustic backs and sides and electric guitar bodies), they have a fight on their hands to persuade the market of a new timber's sonic performance—an important point if the company is facing stiff competition from another brand still using the traditional wood.

TAYLOR have sought alternatives to the normal avenues of wood procurement and processing for many years. "We have done extensive testing with alternative species in an attempt to find woods that would ease the burden on the traditional species while still supplying players with quality guitars and factory workers with safe conditions." Taylor reckons this may be one reason some alternative timbers have never found their way to the market successfully: "many alternative woods turn out to have adverse effects on people who work with them."

However, for many years, Ireland-based LOWDEN GUITARS has been "pioneering the use of non-equatorial timbers by aggressively promoting walnut instruments as a substitute for mahogany. These have been exceptionally well-received and are, in fact, preferred by many discerning players. In January 1996 we launched the Premiere range which mostly features temperate hardwood instruments such as maple and highly figured walnuts. These instruments have an incredible response, being both stunningly beautiful to look at and to play."

Again, many smaller makers have experimented with alternatives. GARY SOUTHWELL has been making handmade guitars since 1983 and produces a variety of historical and modern concert guitars. "In recent years I have worked for a number of distinguished musicians ranging from classical performers Julian Bream and David Starobin to pop artists such as Sting." Gary created his Temperate Guitar in 1989. "It is made using timber from temperate climates, most of which has been gathered locally. No tropical timbers are used at all, which shows that a concert guitar of the finest quality can be made without having to depend on our continual use of tropical rainforest timber. The great musical instrument makers of the past made instruments using timber found locally to them, before exotic timbers became more fashionable. I have returned to using these often neglected woods which have a beauty and quality all of their own."



Gary's Temperate Guitar employs European spruce for the front and timbers like walnut, yew, maple, and cherry – "mostly from British woodlands" – for the back and sides. The bridge is pear, "a light, close-grained wood which historically was a popular material for lute and guitar bridges." Maple or pear both give a pleasant smooth feel to the neck, while the fingerboard is bog oak, a type of oak that is semi-petrified and is found in the bogs of Ireland and the fens of Norfolk. It is black in colour and very hard.

GARY SOUTHWELL'S TEMPERATE GUITAR, LEFT, AND WOOD GRAIN DETAIL, RIGHT

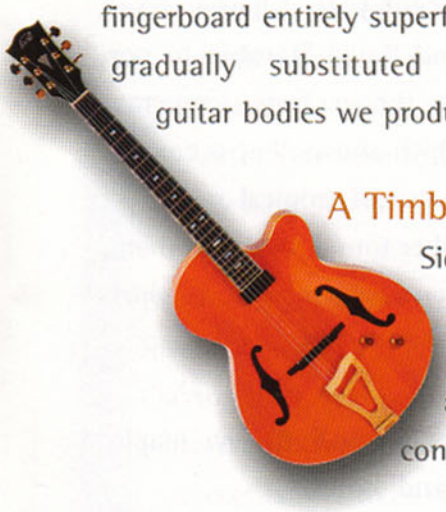
BROOK GUITARS produces handmade acoustics in southwest England. They have built up large stocks of English hardwood including flamed sycamore, cherry, walnut, lacewood, and yew, preferring these to the more traditional rosewoods and mahoganies. They support the SoundWood program in trying to locate sustainable supplies of materials and the use of alternatives to the more commonly used endangered timbers.

Roger Bucknall's FYLDE GUITARS have always made occasional "specials" from unusual materials. "In the past, this has often meant selected pieces of Brazilian rosewood, snakewood, tulip wood etc. but more recently we have been offering less exotic timbers which still provide dramatic visual effect and good tonal characteristics. Ash necks, sycamore backs and sides, and walnut fittings have worked very well. For our standard production guitars, our policy is to replace stocks with timber from sustainable sources. Even though that may mean certain changes in design and marketing, the way forward is to see this as an opportunity for change, rather than a problem."

And why not combine this "opportunity for change" with a commercial gain? WASHBURN USA, a big player in both electric and acoustic instruments, continues to share SoundWood's conservation concerns. "We have implemented policies to aid in these efforts and to reduce the threat to endangered species. With the support of Craig Chaquico, we have introduced a program called "A Tree for a Guitar." This program promotes public awareness, and for every EA26 Craig Chaquico Signature Series guitar sold, a tree is planted in various areas throughout the US.

Washburn makes a relatively small number of models in the USA and manufactures the balance abroad. In the Far East, the majority of mass-market instruments are made and the implications in moving to sustainable timbers for this scale of manufacturing is highly problematic. However, Washburn believe they are "diligent in the sourcing of hardwoods from South America and seek to utilize importers who are sensitive to this issue. We continue to research the use of woods from FSC endorsed forest operations and continue to reject offers of non-compliant hardwood sources, those which are endangered or not certified."

Electric makers have also been experimenting. GORDON-SMITH GUITARS, the longest-running production electric guitar builder in the UK, has experimented with, unusually, one-piece mahogany necks. "The latter play very well but, regrettably, customer acceptance has been poor. This is unfortunate, as of course, they render the scarce rosewood fingerboard entirely superfluous." More successful with the consumer, however, is a change in body timber. "We have gradually substituted mahogany for entirely sustainable English poplar in around 30% of the guitar bodies we produce. These have been very well received the tone is, we feel, rather superior."



A Timber Economy.

Sid Poole's POOLE CUSTOM GUITARS are UK-built custom guitars which have earned international acclaim and are used by many top pros like Geoff Whitehorn (Paul Rogers, The Who) and Andy Fairweather-Low (Eric Clapton band). "I really think the initial act for any manufacturer is to value their timber, to be really economical, that's the first stage of conservation and it's something we all can do." It's a sentiment shared by many.

GORDON-SMITH concludes that the rosewood fingerboard constitutes the most significant resource depletion on the neck. "We realized that for a fingerboard which has a finished thickness of 5mm thick, a 10mm sawn plank would be the minimum starting dimension. That's 50% wastage in preparation. With a slight modification to our neck design

TOP TO BOTTOM: FYLDE'S ROGER BUCKNALL MAKES A COMMITMENT TO ??;
WASHBURN'S EA26; SID POOLE'S HOLLOW BODY ELECTRIC

and the development of some new jigs, we succeeded in maintaining our usual neck profile but utilized commercially sawn 1.5 mm rosewood veneers. That reduces our wastage from 50% to less than 10%."

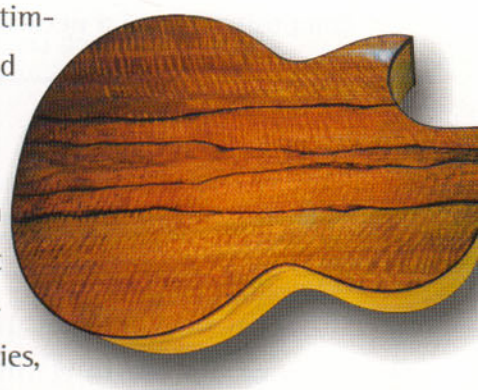
"We've aggressively invested in factory processes and custom-machinery to reduce waste both by creating less scrap in the first place and by re-manufacturing scrap into usable components," says TAYLOR. "For example, all of our kerfing [the ribbons of timber that connect the sides to the back and front inside an acoustic guitar] is supplied to us by gluing back together the waste wood from sawing one-piece necks and then cutting kerfing strips from the longer boards. With over 800 strips of kerfing currently required each day, this savings on the wood supply becomes substantial."

KEN SMITH BASSES, one of the pioneers of the modern multi-stringed electric bass, not only employs many alternative timbers like morado, bubinga and granadillo for fingerboards but makes a concerted effort to eliminate waste from the lumber and wood-based products used in the everyday operations of their workshop and offices. "Great care is taken in the layout of every board to ensure that the highest amount of pieces can be obtained from each board. Cut-off pieces are used for veneers and body features. Leftover scraps are then used for firewood in the factory's heating system, employees' homes and local business or are donated to local craftspeople. Lumber that is not to the standard for Smith Bass construction is sold for local furniture manufacturers."

Ken Smith ensures that they are aware of the ever-changing conditions in the world's lumber supplies. This allows the company to adjust its purchasing and usage amounts to help the lumber industry avoid eliminating any particular species. "The company mainly buys lumber, not pieces, and tries to utilize all of it. For example, for curly maple, the AAA grade accounts for about 25% of the load. We use the other 75% for core stock and laminations to the top and back. Other woods like walnut with pin knots is used as veneer and lesser grades for the backs of bases and tops in our lower line models. The use of this lower grade wood allows us to produce more product from every lumber shipment without lessening the high quality manufacturing standards. This also decreases our demand for AAA hardwood lumber."

Timber Salvaging.

For small makers, without the headaches of large scale production, there is more of an opportunity to use recycled or salvaged timber. Sid Poole's commitment to timber conservation and the use of sustainable timbers has led him to source reclaimed Brazilian mahogany in the UK for both solidbody and acoustic instruments.



The instruments designed and built by RICHARD MERMER use tonewoods from both temperate and tropical forests. "I deal with vendors who obtain this material from trees that have fallen as a result of natural phenomena, such as wind, erosion, and the like." An example is his use of highly-figured mango. "Mango is generally not a commercially available species, states Mermer, but he managed to procure a tree that was felled "due to a highway construction project in Hawaii." In addition, Mermer will use "alternative species and sustainable-yield materials whenever possible and appropriate."

UK-based VIRTUOSO GUITARS believe they are on the right track too. "I haven't bought any non-European timber in the last 5 years. The only timber I buy now is Swiss pine, for soundboards, as we have a good stock of recycled timber and a selection of wood that I've either felled myself as a tree surgeon or converted from locally-felled timber – all within Leeds, so it's subject to Council regulations regarding urban trees."

BEYOND THE TREES is the company name of Fred Carlson, who began building wooden stringed instruments over 25 years ago. "I've always been drawn to using woods local to my home

RICHARD MERMER'S WOODS, ABOVE, ARE OBTAINED FROM NATURALLY-FALLEN TREES; VIRTUOSO GUITARS, LEFT, ALSO ACHIEVES BEAUTIFUL RESULTS FROM ALTERNATIVE WOODS

area, and had a fascination with discovering the wood myself. I continue, in my work building unusual, original guitars on commission, to try to make use of salvaged or sensibly harvested, local woods, and to encourage my customers to value that way of relating to the precious resource of wood. My Dreadnautilus guitar, for example, uses woods almost exclusively grown in my area of Northern California. The top of the standard model is made from old-growth redwood salvaged from stumps and old logs left behind by logging operations near Santa Cruz in the early part of the century. For the back and sides I use local black walnut; the fingerboard is black acacia that fell down 10-15 years in an old Santa Cruz street. I now use black walnut almost exclusively for all my guitar necks, instead of mahogany. I have been using west coast big leaf maple a lot recently, as I was able to get some pieces of salvaged logs. This is a wonderful wood for backs and sides. Other local woods I am experimenting with include madrone, acacia decurrens [a common, imported local weed tree] and bay laurel."

SANTA CRUZ GUITARS, founded by Richard Hoover, takes great pride in using materials in its guitar making that have been responsibly acquired. "That means buying from like-minded people who value the resources," say Santa Cruz. "In many cases our wood suppliers are actually recycling the material. Our koa supplier in Hawaii cuts guitar wood from windfalls and stumps while our Sitka spruce for guitar tops is harvested from abandoned bridge pilings, fishtrap floats, or driftwood. Rosewood from India is either plantation grown with sustainable yield or acquired from naturally downed timber." But even when alternative sources of timbers are found, the company faces other problems: "We have located a responsible source for mahogany," says Santa Cruz, "but the goal is to find how to get it the 5000 miles from there to here!"

Alternative Technologies.

The history of both electric and acoustic guitars is littered with the use of non-wood materials. **SoundWood is not promoting the use of non-wood guitars.** On the contrary, we are promoting the use of synthetic materials to provide structural integrity thus allowing unusual hardwoods to be used. This method is being used by some forward-looking brands like PARKER GUITARS and MODULUS GUITARS. In 1997, Modulus debuted a new neck technology combining a graphite composite spine and wood. "Our new Genesis neck uses proprietary construction techniques allowing us to use non-traditional neck woods," explains Modulus. "We will use New Guinea red cedar, alder and soft maple that is sourced through EcoTimber. The combination of soft tonewoods and rigid composites create a neck with brilliance and warmth."

Conclusions.

"Any change made toward alternative woods or certified woods is more complicated than may seem with simple discussion," reckons TAYLOR. Yet Taylor remains "committed to a long-term attitude of changing methods and species in order to do our part in the fight against deforestation. This year alone, we have **reduced our need for Indian rosewood by nearly 30%** and we hope to reduce our mahogany need as well in addition to transferring much of our use to certified wood supplies for the construction of many of our necks. We are seeking permanent industry-changing methods and supplies and feel that we are approaching the time when many of our ideas will be implemented."

"It's been said that the guitar industry is too small to make an impact on the global use of wood and wood products," concludes MODULUS. **"Our belief, however, is that it takes action at every level to create change.** It requires all our efforts together to guarantee that there will always be a sustainable supply of wood with which to build beautiful instruments."

TO BUILD THEIR UNIQUE DREADNAUTILUS, TOP, BEYOND THE TREES USES LOCAL, SENSIBLY-HARVESTED WOODS FROM NORTHERN CALIFORNIA; SANTA CRUZ GUITARS OBTAINS FINE KOA WOOD, LEFT, FROM WINDFALLS AND STUMPS

FOR MORE INFORMATION on certification, please contact the following organizations:

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*Gordon-Smith Guitars
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* By the year 2000 these companies hope to be using only wood certified by a Forest Stewardship Council accredited certification company.

A SPECIAL THANK YOU

SoundWood would like to thank Dave Burrluck for contributing to the Guide. Dave is a respected freelance technical journalist who has written for numerous guitar-related books and magazines. He is currently Reviews Editor of Guitar Magazine, UK. The source information was taken from statements provided by the companies mentioned.

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