

TONEWOODS





# T O N E W O O D S

# At Maton we use an extensive range of timbers (both traditional and newly discovered) to produce our guitars.

Whilst we acknowledge and have a deep respect for traditional tonewoods, we are also excited by the potential we have discovered in non-traditional woods.

In some cases we feel that the alternative timbers offer a better result (both tonally & aesthetically) than the more traditional species. The musical instrument making community is becoming increasingly concerned about the lack of availability of some of their favorite traditional tonewoods. Brazilian Rosewood and Honduras Mahogany have become virtually impossible to obtain and will vanish unless drastic action is taken. Ebony is also becoming rare, and it would be environmentally irresponsible to keep utilising these timbers without looking for alternatives.

Fortunately, Australia has a wide range of under-utilised tonewoods, and as the supply of traditional material diminishes these timbers will come into their own as a world standard. Many of the Australian timbers are plantation grown and will yield musical instruments after 80 years, as opposed to the hundreds of years required for traditional woods. Maton

has been developing the use of these timbers for the last 50 years and it would be safe to say that nobody knows Australian tonewoods better than Maton. We are fortunate enough to have the support of many of Australia's most knowledgeable and skilled timber gatherers and continue to try new species on guitars and to learn more about the way these timbers are capable of producing beautiful music.

Our suppliers know exactly the cut, quality and dimensions of the woods we need. They are in the best place to source previously unused timbers for us to investigate, and they frequently do. It is not unusual for a pallet of timber full of different timber species to arrive on our doorstep for us to play with. Every now and again we'll find a gem amongst it and another timber will find a new role as a fantastic tonewood. Unfortunately this doesn't happen that often as, for a wood to work well as a tonewood, it needs to meet a very strict set of characteristics. It needs to be strong for its weight, it needs to be resonant, it needs to be stable and it needs to look the part (musicians evaluate guitars with their eyes as well as their ears...).



One of the most visually stunning timbers available, Blackwood has also become an important tonewood. Most of our Blackwood comes from the Otway Ranges in Victoria, Australia. It often displays "fiddleback" character and "AAA" grade Blackwood can be intensely figured. It has a warm, full tone with a particularly pleasing mid frequency response and has become one of our most sought after timbers. It may be of interest to learn, that whenever

000

a Maton employee gets to make their own guitar, they almost always choose Blackwood. Maton have been using Blackwood in their instruments for close to 40 years, still working with the same family business to responsibly harvest this precious resource.









QUEENSLAND MAPLE (Flindersia breyleyana)

Originally used as a Mahogany "substitute", Queensland Maple has become the backbone of the Maton sound. It is used in nearly every Maton either as a neck, back & sides, or internal component. A rainforest hardwood from Northern Queensland, this timber is light, strong, and visually striking. Queensland Maple is extremely well balanced with an even response across all frequencies. If you are looking for the secret to Maton's great tone, this is a good place to start.



Maton pioneered the use of this outstanding Australian tonewood in the mid 1990's and have made some of our finest guitars from Bunya. It has an earthy, wild, evocative tone, a change from the conventional - but with the volume, tone and beauty to stand up in its own right. Bunya is also a sustainable guitar making soundboard, reaching maturity in 80 years.



A staple species with guitar makers the world over, Rock Maple comes from the North East of North America. It is a beautiful, clean looking timber and is commonly used as backs, sides and necks on acoustic guitars. It also bends well making it an ideal choice for bindings and other trimmings. Tonally, Rock Maple is fairly even across the frequency spectrum with a bit of added presence in the upper range, resulting in a sweet, rich tone. As a tree, Rock Maple is often referred to as Sugar Maple, it is in plentiful supply and is not considered endangered or threatened.

#### PAU FERRO (Machaerium scleroxylon)

A South American tonewood with a smooth feel. Lighter in color and harder than rosewood, but similar tonal characteristics, Pau Ferro's warm tone is tempered by its snappy attack, creating a crisp, clear sound ideal for fingerboards and bridges.

## WESTERN RED CEDAR (Thuja plicata)

Found on the West Coast of North America, Western Red Cedar is lighter, softer and a little more stable than Spruce. Due to a lighter mid presence, it has a sweeter tone than Spruce, making it a favorite with finger stylists and classical players.

# SAPELE (Entandrophragma cylindricum)

Originally used in backs and sides as an alternative to Honduran Mahogany this Tropical African tonewood has seen widespread use throughout the guitar making industry and has now become sought after in its own right. As well as its use on our Heritage series ECW80C range Maton has also used it as a soundboard on our M series guitars with great success. Tonally it is most closely aligned to traditional Mahogany or Queensland Maple.

Our timber suppliers cut specifically for us which ensures that virtually every piece of timber cut from the log has a use within the manufacture of our guitars. Guitar making requires different cuts to the furniture or building industries that use the same timbers. Virtually every piece of wood in a guitar needs to be quarter sawn for stability and strength and only specialist saw millers are able to rotate a log while sawing to provide the appropriate cuts. Once the wood arrives at the factory it is dried in special kilns and aired until it reaches Equilibrium Moisture Content. Then each piece is marked out with templates to achieve best yield and sawn accordingly. Backs and sides billets are sawn with a Wintersteiger Frame Saw which uses ultra-thin blades to produces a smooth surface and waste as little wood as possible through thickness of kerf. Soundboards (Spruce & Cedar) arrive in the factory as sets, already sawn in pairs. This reduces waste, both in wood and in shipping. There is not much point in shipping wood from Canada and the USA to Australia only to lose half of it in saw kerf or extra width.

Our work force are all passionate about guitars and about wood, so every step is taken to reduce wood waste to an absolute minimum.

This applies to fine tuning machining processes to eliminate damage through chipping through to the honing of hand skills to make sure each piece of the guitar is crafted correctly and meets our exacting quality specifications. As work proceeds on the guitars great pains are taken to ensure the instrument is not ruined through accidental damage or lack of care through the production process. We want to see as much of this precious tonewood making music as possible.



## MULGA

(Acacia aneura)

This tough, stable desert tone wood is widely distributed through Australia (with the exception of Victoria and Tasmania) and has long been used successfully as fingerboards and bridges on various Maton models over the years. It's heartwood is dark brown, with contrasting markings of golden yellow and it is probably the most common of the desert acacias used in guitar making.

#### BAUHINIA

(Bauhinia carroni

Also known as Queensland Ebony.
Redder in hue than Mulga and
Gidgee and similar to Ebony in its
properties, this timber makes a
brilliant looking and sounding bridge
and fingerboard.

## GIDGEE

Sourced from the dry inland plains of New South Wales and Queensland this tough little tree produces a dark brown, dense timber that echoes the harsh conditions of its environment. Similar in density to Ebony, Gidgee makes a superb fingerboard and bridge, and it sounds as good as it looks.



The traditional choice of soundboard timber for many guitar manufacturers, "Sitka Spruce" has become the benchmark against which all other timbers are measured. It is found on the West Coast of North America from Northern California to Alaska.







## EBONY

(Diospyros crassiflor

A very dark, dense wood sourced from Equatorial West Africa, Ebony has been a long term staple for instrument makers as a material for fingerboards and bridges due to its toughness and ringing tone. It ranges in colour from jet black to dark brown and often contains lighter streaks. In days gone by the colour was thought to be an indication of quality but this has been disproven in recent times by many guitar makers. This has led to a vastly improved sustainability outcome for this precious resource. At Maton, waste reduction is one of the most important parts of our sustainability plan, all of our timbers are sustainably sourced.

## STREAKY EBONY

Streaky Ebony is exactly the same wood as used as the fingerboards and bridges on our Messiah range. The only difference is the colour range throughout the wood. Traditionally it was considered that "good Ebony" should be jet black and uniform in colour. As a result of this convention more trees were left to rot on the forest floor than were cut to produce parts for musical instruments. The truth is that the ebony with colour streaks through it is every bit as good a tonewood as the jet black material favoured over the years. Changing attitudes have led to acceptance of these variations and a far more sustainable use of this incredible resource. At Maton we celebrate variations within timber and we know Streaky Ebony performs as well as its jet black variation in every respect.

#### INDIAN ROSEWOOD (Dalbergia latifolia)

Ranging in colour from dark browns to intense red / purples this attractive timber also possesses outstanding acoustic properties. Over the years it has become one of the standard materials for use on acoustic guitar backs, sides, fingerboards and bridges.

Maton is working alongside Vic Forests and the global treaty for timber to ensure every part of our supply chain is responsibly acquired and is adhering to and supporting CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora)

On Jan 2 2017 CITES laws regulating how rosewood is traded internationally came into effect. CITES (the Convention of International Trade of Endangered Species of Flora and Fauna) is a global agreement that has existed since 1975 to ensure international trade of wildlife does not threaten the health of species and ecosystems.

In late 2016, it was decided that rosewood, namely Indian and Indonesian rosewood (more specifically, the genus Dalbergia and three bubinga species -- Guibourtia demeusei, Guibourtia pellegriniana, and Guibourtia tessmannii), will be protected under CITES Appendix II. Any transportation or shipment of an instrument or instruments for commercial purposes with any amount of rosewood requires a CITES Export Certificate issued by the U.S. Fish and Wildlife Service, and possibly a CITES Import Permit required by the receiving country. International imports and exports of items or products containing any of these listed rosewood species must be accompanied by relevant CITES documentation

Maton is committed as a brand to comply with all CITES regulations.







