

Challenges in instrument making - January 2025 Focus on pernambuco and bows

NOTE (pages 1-4) and its appendices (pages 5-8) drawn up by CSFI and IPCI France-Europe.

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With less than a year to go until the next CITES CoP in November 2025, **bow makers and all musical instrument professionals are calling for mobilization to reinforce the commitments made at CoP19**. Our objective must necessarily be twofold:

- complete the action plan requested by Brazil and adopted by CITES on November 27, 2022 ([CITES Decisions 19.249 to 19.253](#)), and
- create the conditions for a lasting end to the crisis and the establishment of a stable legal framework for all players in the music world (musicians, bow makers and luthiers, etc.).

The future of bow making is intimately linked to the preservation and conservation of the pernambuco tree, so dependent is on this species. The reverse is also true: the good state of conservation of the pernambuco tree can be helped by a strong mobilization of bow makers and musicians in favor of this tree. That's what we've been doing for over 25 years now.

We must continue to work together to put in place a regulatory framework that will enable sustainable trade in timber resources, while preserving the natural populations of this species. To this end, all available means must be used, in particular to ensure the highest possible level of traceability. And, where necessary, we will need to jointly create the new tools required to achieve these objectives.

In particular, the international community must support Brazil so that the police actions carried out by the Brazilian authorities, especially since 2022, can eradicate the illegal trade affecting this species. Without this, it will not be possible to move forward.

It is essential for Brazil to master the development of a strictly controlled, legal, quota-based supply chain, so that artisanal archaeologists can benefit from a legal supply of pernambuco

Public authorities, scientists and stakeholders also need to work in synergy to **support the structuring of a sustainable timber industry based on replanting programs**. This is a *sine qua non* condition for guaranteeing the future of the pernambuco as a species, and a crucial strategic orientation for everyone to commit to the protection and regeneration of the Mata Atlantica by sanctuarizing protected areas, where this is still possible.

To get there, we need to work together and share a strong ambition that must be supported by professionals in the musical instrument sector, the entire musical world and public authorities.

Recourse to CITES Appendix I would lead to a definitive ban on the use of pernambuco, and would seriously hamper the use of the millions of existing bows that have been produced for over 250 years. CITES Appendix I is by no means an appropriate response to this ambition.

In 2022, at its 19th meeting, the Conference of the Parties to CITES considered a proposal to transfer pernambuco from Appendix II to Appendix I of the Convention. At the end of the discussions, it was decided to maintain this

species in Appendix II (authorized and controlled trade), an action plan was adopted for the period 2022-2025 and it was agreed that the subject would be re-examined at CoP20 (Samarkand, Uzbekistan, November-December 2025).

The industry is committed to respecting the [Decisions adopted by CoP19](#) (Panama, November 2022) to preserve pernambuco while guaranteeing the distribution and sharing of music.

The table below summarizes the main actions already taken by instrument makers to contribute to the implementation of certain actions in the "pernambuco action plan" approved by CITES CoP19:

Decision CoP19	IPCI achievements since CoP19
Assessment of the relevance of setting up a rigorous traceability system for each scrap produced (Decisions 19.249 and 19.250).	<ul style="list-style-type: none"> • IPCI responded to and collaborated with Sofia Hiraokuri in her investigation commissioned by the CITES Secretariat General. • Proposal to mark new bows produced in correlation with registered pre-Convention stocks; these stocks being the cornerstone of a rigorous traceability system.
Registration of pernambuco stocks worldwide (Decision 19.251.b)	Stock status promoted by IPCI to CITES authorities
Raising awareness among industry players - from manufacturers to musicians - of the importance of sustainable resource conservation (Decision 19.252.a and b)	<ul style="list-style-type: none"> • CSFI and IPCI have made several public appearances each year to raise awareness of these issues among industry players and the general public. • The CSFI and IPCI France-Europe websites also relay all information relating to the conservation and sustainable use of resources.
Collaboration with local and international authorities to ensure legal and responsible timber harvesting	<ul style="list-style-type: none"> • In 2023, IPCI France-Europe set up a collaborative "wood exchange" for its members, to facilitate the transfer of pre-Convention stocks, duly registered as such, between bow-makers, thus ensuring business continuity. • IPCI representatives took part in the National Ecology Symposium "Conservation and sustainable production of pau-brasil" held in Ilhéus, Bahia, Brazil, on December 05 and 06, 2024. The symposium brought together numerous Brazilian researchers as well as local and national authorities.

Preserving wild resources

There is no question felling and using trees growing in the wild. Brazilian national legislation does not authorize the extraction of pernambuco wood from its natural habitat. (Source [E-CoP19-Prop-49.pdf](#)) and both IPCI and CSFI fully support these measures. Indeed, Federal Law no. 11,428 of 2006 and Federal Decree no. 6,660 of 2008 already prohibit the exploitation of native species on the *Official List of Threatened Species of Brazilian Flora* in the Atlantic Forest, and pernambuco is included on this list

In addition, as pernambuco is listed in Appendix II of CITES, any export of pernambuco from Brazil is subject to a CITES export permit. CITES export permits are not issued by the Brazilian CITES authorities, in view of the aforementioned national regulations.

So, quite clearly, in practice, timber exports from Brazil are already virtually impossible.

The question of replanting wood

The point that really needs to be addressed, with the aim of setting up a supply chain and sustainable, and for which progress is essential, is that of wood from forestry programmes planting.

Since the early 1970s, replanting programs have been developed in Brazil for this species. The *Funbrasil* Foundation, for example, claims to have propagated over 3,000,000 trees of this species through its actions alone.

For their part, archaeologists (through the IPCI - *International Pernambuco Conservation Initiative*) have been initiating and financing pernambuco replanting programs since 2000, in partnership with local associations and governmental organizations in Brazil. This was even before the pernambuco trade was regulated by CITES. For over 25 years, IPCI initiatives have been aimed at restoring degraded forest areas. They also aim to create the conditions required for the sustainable use of this resource, particularly in conjunction with local development programs, and to promote such a proactive approach. For example, pernambuco is often planted in association with cocoa trees, protecting them by providing the shade they need to grow. At the same time, scientific work has been carried out to improve our knowledge of this essential archaeology species.

Over the past 25 years, IPCI has planted more than 340,000 pernambuco trees. This figure is particularly significant when compared with the annual needs of the world's artisanal bow makers, which amount to just a few dozen trees (around 20 m³ of lumber). This strong investment by the profession demonstrates that, for a quarter of a century, it has resolutely a responsible and sustainable approach to pernambuco preservation.

On the very specific subject of replanting timber, CITES CoP19 (Panama, November 2022) invited governmental, intergovernmental and non-governmental organizations and other entities to work with Brazil "*to identify existing Brazilian plantations of *Paubrasilia echinata* that may be considered source code A or Y¹, with a view to establishing a sustainable supply chain*" (Decision 19.252.a.ii).

This line of work is of major importance in view of the objective of setting up a supply chain for pernambuco wood, duly controlled by the authorities.

Indeed, despite the existence of numerous pernambuco plantation programs in Brazil (over 3,500,000 trees of this species have been planted in Brazil since the early 1970s), **the existence of these trees is not recognized today**. This gap is particularly damaging in the context of CITES, as a significant proportion of these trees are eligible for *source code* Y, and another proportion could, potentially, be eligible for *source code* A. These trees therefore form the basis on which a sustainable supply chain can be established in the terms adopted by CITES CoP19.

This option is all the more promising, both in terms of pernambuco conservation and the future of archaeology, as pernambuco is growing relatively rapidly, particularly in *Cacau Cabruca* areas². These trees could therefore not only offer a sustainable solution for archaeology, but also demonstrate that it is possible to preserve natural pernambuco populations and make reasonable use of this resource on the basis of trees planted for future use.

1 CITES source code A is used to designate specimens that meet the definition of "*artificially propagated plants*". The Y *source code* is used to designate specimens that meet the definition of "*plant obtained by assisted production*".

2 *Cacau Cabruca* is an agroforestry system in which cocoa trees are planted in the shade of thinned native forest trees.

CSFI and IPCI are therefore determined to support the Brazilian authorities in the implementation of CITES Decision 19.252.a.ii mentioned above.

Conclusion

The preservation of pernambuco and the long-term future of quality bows depend on a collective and sustainable strategy, embodied in the continuation and improvement of the action plan adopted at CITES CoP19 in November 2022. This plan represents the best opportunity to protect this emblematic species while supporting the exceptional skills of bow makers and the musical world as a whole.

Rather than an Annex 1 classification, which would be a source of administrative and economic bottlenecks and risk discouraging replanting initiatives, it is imperative to reinforce the commitments made.

This implies :

- Structuring a legal and traceable supply chain for the sustainable exploitation of plantation wood ;
- International support for efforts to conserve the Mata Atlantica and regenerate its ecosystems;
- Rigorous implementation of CoP19 commitments, including resource inventories and control of illegal trade.

Maintaining the pernambuco in Appendix II, combined with ambitious measures to structure and promote replanting, will enable us to reconcile protection of the species with the vitality of the music industry. This framework offers a pragmatic and realistic way of guaranteeing both the survival of this unique tree and that of the crafts that are inseparable from it. Together, bow makers, musicians, public authorities and the international community must continue to work towards a future where tradition, sustainability and artistic excellence coexist harmoniously.

Useful links: [IPCI France-Europe](#) - [CSFI](#) - [Trees and Initiative](#)

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Appendix 1 - Some background information

The pernambuco, an emblematic species inseparable from the bow ...

It was from the specific qualities of pernambuco that, at the very end of the 18th century, Parisian bow maker François-Xavier Tourte - in collaboration with the virtuosos who passed through his workshop - developed the modern bow as it is still played today. Since then, bow making and pernambuco have been inextricably linked.

... but whose habitat is endangered

Paubrasilia echinata (Brazilian: pau-brasil, ember wood) grows exclusively in Brazil, giving its name to the country's national tree. It takes its name from its intense red color, used for its dyeing qualities by the textile industry until the early 20th century.

Pernambuco grows in the Mata Atlantica, Brazil's Atlantic Forest, from São Paulo in the south to the northeast of the country (this biome has nothing to do with Amazonia). A forest remarkable for the diversity of its species, said to be the largest in the world, with over 100 different tree species per hectare. But the Mata Atlantica is in serious danger. According to various estimates, only 5 to 10% of the original area remains today. Despite a strong legal arsenal adopted by the Brazilian authorities over the years with the aim of protecting this remarkable biome, it turns out that the measures adopted not always succeed in counteracting deforestation, particularly when intensive agriculture - the main factor in the forest's disappearance - resorts to programs to convert land to other uses.

The quality bow, a European story

While the violin, which was invented in Northern Italy and sublimated by great masters such as Stradivarius, is Italian in essence, the bow, whose modern evolution was perfected by François-Xavier Tourte at the very end of the 18th century, originates in France. Late 18th - early 19th centuries, the modern bow became European, and workshops developed in Great Britain and Germany. Throughout the 19th and 20th centuries, exceptional bow makers such as the Tourte brothers, Dominique Peccatte, Jean-Pierre Marie Persoit, Nicolas Maire, François Nicolas Voirin, Eugène Sartory and the Fétique brothers left their mark on the history of this art in France, the Hill and Tubbs workshops and the Dodd family in England, and the Bausch, Knopf, Pfeftzschner and Nürnberger workshops in Germany. Their work is still highly sought-after.

In the 21st century, this tradition continues with a new generation of talented creators, many of whom have been distinguished for their excellence. Their expertise and know-how continue to accompany the world's most renowned musicians, ensuring worldwide prestige for the art of bow making.

Some information on the number of archers

At the beginning of 2025, in four major countries on the music scene, the situation of the profession is as follows:

United Kingdom	The majority of bow makers are over 50
Germany	Only a few apprentices still train in bow making
Austria	There is only one workshop in the country that makes modern bows by hand.
France	There is still a pool of young bow makers, but it is fragile and depends on the availability of certified pernambuco to perpetuate France's internationally recognized excellence.

On a global scale, this professional network is extremely precarious, and the transmission of the bow-maker's trade and related know-how is extremely fragile. The legal constraints associated with a possible listing of pernambuco in Appendix I of CITES would threaten the very existence of bowmaking.

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Appendix 2 - Some thoughts and questions

Reflections

CITES Appendix II and the CoP19 Decisions: a pragmatic, coherent and sustainable solution

Pernambuco is currently listed in Appendix II of CITES. This listing is accompanied by an annotation (#10), which specifies how CITES applies to this species.

Annotation #10, as revised at CoP19 (Panama, November 2022) and complemented by the implementation of the Decisions adopted at this conference, represents the best opportunity for all stakeholders to set up a legal supply chain, without entailing a disproportionate, unrealistic and effectively unattainable administrative burden, and without any favorable effect on the conservation of the species in the field.

In view of the provisions of CITES, Appendix II of this Convention is **the only option** for establishing a legal and sustainable supply chain for the archaeology industry, based on trees planted as part of **assisted production** programs³ such as, for example, the "*replanting*" component of the *Programa Pau Brasil* implemented by CEPLAC⁴, a public institution under the supervision of the Brazilian Ministry of Agriculture. Under this program, which is the fruit of a partnership between IPCI, CEPLAC and a large number of Brazilian organizations, particularly in the State of Bahia, over 300,000 trees were planted between 2004 and 2008.

Annotation #10, approved by the Conference of the Parties to CITES, secures the circulation of existing bows. Its importance is extreme, as musical instruments have two essential characteristics: they are durable objects (some of them have been around for over 250 years) and they travel a great deal.

Around the world, millions of bows for quartet instruments have been made and are still in use decades or even centuries later. These bows, which contribute to the richness of international musical life, are not the result of recent exploitation of pernambuco populations. It is therefore important that they continue to circulate freely. Regulating the circulation of these ancient bows would cause a disproportionate administrative burden for all management authorities and players in the musical world, with no positive effect on the preservation of the species.

3 Source code Y as defined by CITES

4 *Comissão Executiva do Plano da Lavoura Cacaueira (Cocoa Plan Executive Committee)*.

Questions & Answers

Can we, should we, consume even less pernambuco by concentrating the use of wood solely on high-end bow making, as we know it in France?

Yes, as long as we remain uncertain about the legality of the industrial sector's supply chain, which produces large quantities of low-grade pernambuco bows.

Studies, financed by the IPCI, are currently underway to enable the selection of standing trees with the aim of exploiting only those specimens suitable for making quality bows. A great deal of work also needs to be done on the issue of traceability from tree to bow. In-depth work must be pursued to move towards a more sustainable and even more reasoned use of the resource.

However, the answer to this question is less simple than it seems.

In fact, we need to think about the best possible use for each tree felled, and work on adding value to the wood by avoiding losses, thinking about outlets for second-quality wood, etc.

Can these efforts save the Mata Atlantica?

This is a delicate question: the causes of deforestation in Brazil are multiple and mainly linked to the development of intensive agriculture and other human activities; the cutting of pernambuco is not the cause of the fragmentation of the Mata Atlantica. On the other hand, the attention paid to this emblematic species, combined with President Lula's declared desire to preserve Brazil's forest heritage, offers hope of finally halting the massive destruction of this forest.

Every Brazilian landowner is required to set aside 20% of the surface area of his or her property for the preservation of biodiversity (this portion of the territory of each property is known as a *Legal Reserve*). The aim is to preserve the flora and fauna of the Mata Atlantica. These areas can easily support populations of Pau-brasil in areas where the species thrives naturally.

The bow makers, with the support of all music industry professionals, are working to consolidate the work already accomplished via the IPCI and make it more visible and understandable. Participating in pernambuco replanting programs in *Legal Reserve* areas is an action we are keen to get involved in.

Under *Programa Pau Brasil*, only 50% of the trees planted and financed by the archers were for future use (the other 50% were divided between 30% for conservation and 20% for educational, social and awareness-raising purposes).

In France, we are working hand in hand with the professional associations of the instrument-making industry - GLAAF, ALADFI and CAFIM - to better structure the actions undertaken to protect biodiversity and the wood species used by the instrument-making industry, and to combat deforestation and illegal trafficking. A dedicated association was created at the end of 2023: the *Trees and Music Initiative*.

CITES Appendix I: what does it mean?

The listing of a species in Appendix I of CITES corresponds to a ban on trade and border crossings of timber in all its forms

Annex I listing and the resulting administrative overload would do nothing to preserve either the Mata Atlantica forest or the pernambuco.

- Bows are durable objects. Musicians use them, buy and sell them, and travel with them. Listing pernambuco in Appendix I of CITES would require administrative documents to waive the trade ban for each existing bow. This derogation, which would take the form of a certificate issued by the CITES

Management Authority on a case-by-case basis, would be required at each stage (purchase, sale, restoration, travel, etc.): such administrative pressure would be substantial for the CITES Management Authorities and unmanageable for the musicians and other professionals concerned;

- The identification of bows, which generally have no distinguishing marks or serial numbers, can prove complicated. Preparing and processing permit applications would therefore be a delicate task, as it would be necessary to establish, with supporting documents and arguments, that the wood from which they were made had entered Europe before 2007;
- The administrative authorities responsible for issuing permits, whose services are already under heavy pressure, would find it extremely difficult to process the volume of permits and other certificates that would then be required;
- What's more, such an influx of permits would create bottlenecks at customs for the documents to be stamped, further complicating musicians' journeys. Indeed, this type of document needs to be stamped at every border crossing, and this can only be done at specific ports of entry in certain countries (for example, in the USA, there are only 18 CITES ports of entry for the entire country);
- A transfer of the species to Appendix I would prohibit any exploitation of pernambuco wood from plantations, past or future, and would mean a total halt to the momentum initiated 25 years ago by archaeologists to preserve this species;
- Another deleterious effect of an Appendix I listing would be the possible disappearance of certain plantations, which would immediately lose their economic interest. Owners who have planted Pau-brasil would risk replacing them with higher-yielding species with shorter maturity cycles, in order to maintain a viable rate of return. Some have already mentioned this possibility.

Listing pernambuco in Appendix I of CITES would severely restrict musicians, bow-makers and luthiers, and even hinder their activities.

This would quickly call into question the very use of pernambuco bows.

Replacing pernambuco bows with composite models on musical stages would impoverish the art of music. So why train young musicians in the excellence of subtle, beautiful sound at conservatories? Why organize orchestral competitions to recruit top musicians if, in the end, they are restricted in the expression of their art and forced to produce a simplified, homogenized sound, thus distorting the richness of the music?

For bow makers, already under pressure since the listing of pernambuco in Appendix II in 2007, this would mean the disappearance of their trade on a generational scale due to lack of access to raw material; stocks of pernambuco built up before 2007, when depleted, could not be renewed.

And yet, bow makers are the guarantors of a unique know-how that has been tried and tested for over 250 years.

Such an outcome would make even less sense, and would be all the more unjustified, given that the plantations they have helped to set up in Brazil over the past 25 years, thanks to their strong involvement in partnerships with Brazilian organizations, form a sound basis for setting up an exemplary sustainable use program that can serve as a benchmark worldwide. Among these IPCI initiatives is the *Programa Pau Brasil*, implemented by an agency under the Brazilian Ministry of Agriculture.