

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA



Twenty-sixth meeting of the Plants Committee
Geneva (Switzerland), 5 – 9 June 2023

Species conservation and trade

Flora

BRAZIL WOOD (*PAUBRASILIA ECHINATA*)

1. This document has been prepared by the Secretariat.
2. At its 19th meeting (CoP19; Panama City, 2022), the Conference of the Parties adopted an amendment to annotation #10 for *Paubrasilia echinata*, as follows:

“All parts, derivatives and finished products, except re-export of finished musical instruments, finished musical instrument accessories and finished musical instrument parts.”

3. As a complement to this amendment to Appendix II, CoP19 also adopted [Decisions 19.249 to 19.253](#) on *Brazil wood* (*Paubrasilia echinata*), as follows:

Directed to the Secretariat

19.249 *The Secretariat shall:*

- a) *issue a Notification to the Parties and relevant stakeholders requesting information on recent developments, national and international enforcement actions, illegal trade and marking of bows regarding Paubrasilia echinata,*
- b) *subject to external funding, in consultation with the Plants Committee and in association with expert stakeholders, evaluate options for the establishment of a traceability system to register the provenance of Paubrasilia echinata (pernambuco) bows produced, acquired, or transported by owners, musicians and manufacturers; and*
- c) *prepare a report on its findings on the implementation of paragraphs a) and b) supra and submit any resulting recommendations to the Standing Committee at its meeting.*

Directed to the Plants Committee

19.250 *The Plants Committee shall advise the Secretariat in the implementation of Decision 19.249, paragraph b).*

Directed to Parties, in particular source transit and destination Parties for Paubrasilia echinata

19.251 *Parties, and in particular source, transit and destination Parties for Paubrasilia echinata, are invited to:*

- a) *continue national enforcement efforts including investigations of illegal trade in Paubrasilia echinata and complement them with joint enforcement actions.*

- b) *consider the registration of stockpiles of Paubrasilia echinata as appropriate;*
- c) *offer support in capacity-building to Brazil and other Parties as appropriate to improve the implementation of the listing of Paubrasilia echinata;*
- d) *provide information to the Secretariat, as requested in Decision 19.249.*

Directed to governmental, inter-governmental and non-governmental organisations and other entities

19.252 *Governmental, intergovernmental, and non-governmental organizations and other entities, are invited to:*

- a) *support the implementation of the listing of Paubrasilia echinata, inter alia by:*
 - i) *exploring ways to increase the traceability of finished bows, including for example, the development and implementation of a system of a unique individual marking and by sensitising producers and consumers (in particular musicians) of the status of the species,*
 - ii) *working with Brazil to identify existing Paubrasilia echinata plantations within Brazil that could be considered source code A or Y to establish a sustainable supply chain; and,*
- b) *provide information to the Secretariat, as requested in Decision 19.249.*

Directed to the Standing Committee

19.253 *The Standing Committee shall:*

- a) *consider any report by the Secretariat resulting from the implementation of Decision 19.249, as well as any other relevant information brought to its attention regarding the implementation of the listing of Paubrasilia echinata in Appendix II; and,*
- b) *make recommendations for consideration of the Conference of the Parties at its 20th meeting, including recommendations relating to the development and implementation of a traceability system of Paubrasilia echinata specimens.*

Progress in the implementation of Decision 19.249

4. Regarding the study called for in paragraph b) of Decision 19.249, the Secretariat estimated the cost of its implementation at USD 60,000 and funds have been secured to undertake the study (see Notification to the Parties [No. 2023/024](#) on *Status of funding for the implementation of valid Decisions after CoP19*).
5. In preparation for the study, the Secretariat has included in Annex 1 to the present document draft terms of reference for consideration by the Plants Committee at the present meeting. The draft terms of reference are based on the scope provided by paragraph b) of Decision 19.249, namely to “*evaluate options for the establishment of a traceability system to register the provenance of Paubrasilia echinata (pernambuco) bows produced, acquired, or transported by owners, musicians and manufacturers*”. Therefore, the draft terms of reference in Annex 1 include the consideration of responses relating to traceability and supply chains received in response to Notification to the Parties [No. 2023/033](#) (see below) as contained in Annex 2 to the present document.
6. On 22 March 2023, the Secretariat published [Notification to the Parties No. 2023/033](#) as called for in paragraph a) of Decision 19.249. The Notification was addressed to Parties and stakeholders mentioned in Decisions 19.251 and 19.252, and included a [questionnaire](#) on *Paubrasilia echinata* requesting information relevant to Decisions 19.249 to 19.253. The responses to the Notification serve as a basis for the background and recommendations of the present document, and have been included in the language and format as they were received, as follows:

Parties (12 responses) : Austria, Brazil, Canada, Czech Republic, Germany, Japan, Netherlands, Slovakia, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland, and United States of America

Private sector (3 responses): Federal Guild Association;

ForestBased Solutions, LLC; and,

Music industry representatives. This is a collective response from the following organizations: American Federation of Violin and Bow Makers (AFVM), Confederation of European Music Industries (CAFIM), Chambre Syndicale de la Facture Instrumentale (CSFI), International Alliance of Violin and Bow Makers for Endangered Species (Alliance), International Federation of Musicians (FIM), International Pernambuco Conservation Initiative (France-Europe, Germany & USA), International Society of Violin and Bow Makers (EILA), League of American Orchestras (League), PEARLE –Live Music Europe (PEARLE)

Other: Mr. Jean de Smett

7. In addition to aspects relevant to traceability and supply chains of *Paubrasilia echinata*, the responses in Annex 2 provide information of cross-cutting relevance for the implementation of Decisions 19.250 to 19.253, such as on enforcement, registration of stockpiles and capacity-building needs for the implementation of the listing of *P. echinata* in Appendix II. As they are quite substantial, an analysis of these responses has also been incorporated as an output (with associated activities) in the draft terms of reference contained in Annex 1.

Recommendations

8. The Plants Committee is invited to advise the Secretariat on the draft terms of reference contained in Annex 1 to the present document, taking into consideration the responses contained in Annex 2 to the present document.

DRAFT TERMS OF REFERENCE

STUDY ON IMPROVED IMPLEMENTATION OF THE APPENDIX-II LISTING OF *PAUBRASILIA ECHINATA*

Output 1: Report on options towards the establishment of a traceability system of *Paubrasilia echinata* bows

Activities

- 1.1 Review literature data relating to traceability systems for timber and wood specimens in trade that are, or could prove useful to, tracing trade of bows of *Paubrasilia echinata*, as per paragraph b) of Decision 19.243.
- 1.2 In undertaking the above, special consideration shall be given to analysing the relevant aspects of the responses to the Notification to the Parties No. 2023/033, as contained in Annex 2 to document PC26 Doc. 31.

Output 2: Report on cross-cutting matters relevant to the implementation of Decisions 19.250 to 19.253

Activities

- 2.1 Review, analyse and summarize the responses to the Notification to the Parties No. 2023/033 (Annex 2 to document PC26 Doc. 31) and undertake an analysis of the following: enforcement, registration of stockpiles, capacity-building needs and other cross-cutting matters relevant to the implementation of Decisions 19.250 to 19.253.
- 2.2 As a complement to the above, undertake a literature review and incorporate its findings in the relevant sections of the analysis of paragraph *supra*.

Output 3: Consolidated report on improved implementation of the Appendix-II listing of *Paubrasilia echinata*

Activity

- 3.0. Prepare a draft consolidated report on Outputs 1 and 2, in preparation for the Secretariat's reporting to the Plants and Standing Committees at their next meetings.

Questionnaire on Brazil wood (*Paubrasilia echinata*)

1. Please complete and submit this questionnaire to the Secretariat at info@cites.org with copy to isabel.camarena@un.org by 17 April 2023.
2. Contact information

a) Party, Organization, or Institution:	Austria		
b) Contact:	Name	Martin Rose	
	Phone	+43 1 71162 611404	
	Email	martin.rose@bmk.gv.at	

Traceability and supply chains of *Paubrasilia echinata*

3. Regarding traceability to register the provenance of *Paubrasilia echinata* bows:

Traceability of <i>P. echinata</i> bows	Answer or comments			
3.1. Are you aware of any traceability system in place for bows of <i>P. echinata</i> ? Tick or mark in bold whichever applies	<input type="checkbox"/> No			
	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Acquired bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers	
		<input checked="" type="checkbox"/> Produced bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input checked="" type="checkbox"/> Manufacturers	Inclusion of serial numbers on newly produced bows
		<input type="checkbox"/> Transported bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers	
3.2. Are you aware of any other traceability system for musical instrument accessories or musical instruments parts? If so, please provide some details.	-			
3.3. Are you aware of any recent developments on the marking of bows of <i>Paubrasilia echinata</i> ? If so, please specify.	As mentioned under 3.1, newly produced bows are marked with serial number and producers provide a certificate with information regarding the origin to the buyer.			
3.4. According to you, what are the key elements of a traceability system for pernambuco bows?	A marking of bows has to accompanied by proper bookkeeping on the manufacturers side and the crucial information to proof origin has to be transferred to the buyer.			
3.5. Please provide any other information you consider relevant to the traceability of bows and other specimens of <i>Paubrasilia echinata</i> .	Traceability of newly produced bows is relatively easy, compared to older bows. A permanent marking of old bows can be challenging			

Traceability of <i>P. echinata</i> bows	Answer or comments
3.6. Please provide any information relating to the existence and status of plantations of <i>Paubrasilia echinata</i> that could be considered source code A or Y.	In preparation of the CoP we received information from the International Pernambuco Conservation Initiative of their projects. We are however not able to provide up-to-date information on these projects. We stand ready to share the information we have.
3.7. List of attachments or relevant links. List here any attachments and links you will provide as a complement to this section.	-

Enforcement

4. Please provide information on recent developments regarding *Paubrasilia echinata* for the following aspects:

Enforcement	Answer or comments
4.1. National enforcement actions:	No enforcements actions specific to <i>Paubrasilia echinata</i> have been taken.
4.2. International enforcement actions:	-
4.3. Illegal trade (e.g. seizures):	There have been no recent seizures in Austria.
4.5. Other relevant information relating to enforcement:	-

Stockpiles

5. Please provide any information relevant to the registration of stockpiles of *Paubrasilia echinata*, as follows:

Registration of stockpiles	Answer or comments
5.1. Are you aware of any stockpile registration system for specimens of <i>P. echinata</i> ?	<input checked="" type="checkbox"/> No/Unknown
	<input type="checkbox"/> Yes. Please elaborate:
5.2. Additional information relevant to the implementation of Decision 19.251	-

Capacity building

6. Please provide a list of the most urgent capacity building needs to support implementation of the listing of *Paubrasilia echinata* in Appendix II, as follows:

Capacity building need list	Comments or justification
1) Harmonization	It is important to have a harmonized approach on these issues, different system can lead to loopholes that can be exploited – this has happened in the past with <i>Paubrasilia echinata</i> and we therefore should pay special attention to that.
2)	
3)	
...add rows as needed	

Decisions 19.249 to 19.253

7. Please provide any additional information relevant to the implementation of Decisions 19.249 to 19.253 on Brazil wood (*Paubrasilia echinata*).

Questionnaire on Brazil wood (*Paubrasilia echinata*)

1. Please complete and submit this questionnaire to the Secretariat at info@cites.org with copy to isabel.camarena@un.org by 17 April 2023.

2. Contact information

a) Party, Organization, or Institution:	Brazilian Institute for the Environment and Renewable Natural Resources - IBAMA	
b) Contact:	Name	Foreign Trade Coordination – COMEX/DBFLO
	Phone	
	Email	cites.sede@ibama.gov.br

Traceability and supply chains of *Paubrasilia echinata*

3. Regarding traceability to register the provenance of *Paubrasilia echinata* bows:

Traceability of <i>P. echinata</i> bows	Answer or comments		
3.1. Are you aware of any traceability system in place for bows of <i>P. echinata</i> ? <i>Tick or mark in bold whichever applies</i>	<input checked="" type="checkbox"/> No		
	<input type="checkbox"/> Yes	<input type="checkbox"/> Acquired bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers
		<input type="checkbox"/> Produced bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers
		<input type="checkbox"/> Transported bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers
3.2. Are you aware of any <i>other</i> traceability system for musical instrument accessories or musical instruments parts? If so, please provide some details.			
3.3. Are you aware of any recent developments on the marking of bows of <i>Paubrasilia echinata</i> ? If so, please specify.			
3.4. According to you, what are the key elements of a traceability system for pernambuco bows?	The origin of the wood used for the manufacture of the bow should be known. Another important point is to know when the wood was extracted from nature in order to verify the possibility of considering it as pre-Convention material.		

Traceability of <i>P. echinata</i> bows	Answer or comments
3.5. Please provide any other information you consider relevant to the traceability of bows and other specimens of <i>Paubrasilia echinata</i> .	We have used isotope testing to identify the origin of wood, but we have no way of knowing when the wood was extracted from nature.
3.6. Please provide any information relating to the existence and status of plantations of <i>Paubrasilia echinata</i> that could be considered source code A or Y.	Ibama created a Working Group to resolve issues such as the origin of wood from companies and existing plantations. We know that there are plantations, but we still don't have this information systematized. This is one of the goals of the Ibama Working Group and everything indicates that the correct classification would be Y.
3.7. List of attachments or relevant links. <i>List here any attachments and links you will provide as a complement to this section.</i>	

Enforcement

4. Please provide information on recent developments regarding *Paubrasilia echinata* for the following aspects:

Enforcement	Answer or comments
4.1. National enforcement actions:	Ibama and the Brazilian Federal Police carried out an inspection of companies that work with exports of brazilwood. As a consequence, brazilwood stocks have been seized and work is underway, with no completion yet.
4.2. International enforcement actions:	Ibama and the Brazilian Federal Police have worked together with U.S. Fish and Wildlife Service to combat the illegal trade in musical instrument bows, and furthermore, Ibama, together with the Portuguese CITES authorities, is working on the recovery of <i>Paubrasilia echinata</i> wood without legal origin.
4.3. Illegal trade (e.g. seizures):	Ibama and the Brazilian Federal Police made several seizures of sticks and bows of musical instruments without having the legal origin proven.
4.5. Other relevant information relating to enforcement:	Ibama reinforce inspections on cargo and passenger baggage into the exit ports, especially at international airports.

Stockpiles

5. Please provide any information relevant to the registration of stockpiles of *Paubrasilia echinata*, as follows:

Registration of stockpiles	Answer or comments
5.1. Are you aware of any stockpile registration system for specimens of <i>P. echinata</i> ?	<input type="checkbox"/> No/Unknown
	<input checked="" type="checkbox"/> Yes. Please elaborate: Brazil has a system for controlling the origin and transport of wood (DOF), but the registered stock of brazilwood is being analyzed by the Ibama working group on Pernambuco wood, as there are possibly

Registration of stockpiles	Answer or comments
	stocks of wood of dubious origin, not proving its legality.
5.2. Additional information relevant to the implementation of Decision 19.251	Ibama created a working group to establish a national protection strategy for <i>Paubrasilia echinata</i> and, among the group's objectives, is to carry out a survey of existing wood stocks in companies, including the separation of unusable material from the wood that has legal origin and can be commercialized. The workgroup is actively working but does not yet have any completed activities.

Capacity building

6. Please provide a list of the most urgent capacity building needs to support implementation of the listing of *Paubrasilia echinata* in Appendix II, as follows:

Capacity building need list	Comments or justification
1) Training in wood quality for the production of bows for musical instruments.	Several bow manufacturing companies have stocks of wood that apparently does not have the necessary quality for making bows. This type of wood must be identified and eliminated from the company's inventory.
2) Isotope training to identify the origin of the wood (natural habitat or plantations).	
3) Training in wood identification.	
...add rows as needed	

Decisions 19.249 to 19.253

7. Please provide any additional information relevant to the implementation of Decisions 19.249 to 19.253 on Brazil wood (*Paubrasilia echinata*).

In the last five years, Ibama has been making a great effort to unmask the frauds of the archetaria sector. The sector used the weaknesses of the DOF control system to insert wood of unproven origin. However, it is essential that the CITES authorities of the importing countries collaborate with Brazil's effort to prevent the reception of wood of dubious origin in their country.

Questionnaire on Brazil wood (*Paubrasilia echinata*)

1. Please complete and submit this questionnaire to the Secretariat at info@cites.org with copy to isabel.camarena@un.org by 17 April 2023.

2. Contact information

a) Party, Organization, or Institution:	Canada		
b) Contact:	Name	Lise Jubinville	
	Phone	819 921 9610	
	Email	Lise.jubinville@ec.gc.ca	

Traceability and supply chains of *Paubrasilia echinata*

3. Regarding traceability to register the provenance of *Paubrasilia echinata* bows:

Traceability of <i>P. echinata</i> bows	Answer or comments			
3.1. Are you aware of any traceability system in place for bows of <i>P. echinata</i> ? Tick or mark in bold whichever applies	<input checked="" type="checkbox"/> No			
	<input type="checkbox"/> Yes	<input type="checkbox"/> Acquired bows	<input type="checkbox"/> Owners	
			<input type="checkbox"/> Musicians	
			<input type="checkbox"/> Manufacturers	
	<input type="checkbox"/> Produced bows	<input type="checkbox"/> Owners		
		<input type="checkbox"/> Musicians		
		<input type="checkbox"/> Manufacturers		
	<input type="checkbox"/> Transported bows	<input type="checkbox"/> Owners		
		<input type="checkbox"/> Musicians		
		<input type="checkbox"/> Manufacturers		
3.2. Are you aware of any other traceability system for musical instrument accessories or musical instruments parts? If so, please provide some details.	No			
3.3. Are you aware of any recent developments on the marking of bows of <i>Paubrasilia echinata</i> ? If so, please specify.	No			
3.4. According to you, what are the key elements of a traceability system for pernambuco bows?	Non-destructive, standardized method and centralized database available to every Parties.			
3.5. Please provide any other information you consider relevant to the traceability of bows and other specimens of <i>Paubrasilia echinata</i> .	A system that distinguishes between finished bows and unfinished blocks or filches exported from Brazil might serve to capture and provide data on the rate of transition from unfinished to finished products.			

Traceability of <i>P. echinata</i> bows	Answer or comments
3.6. Please provide any information relating to the existence and status of plantations of <i>Paubrasilia echinata</i> that could be considered source code A or Y.	NA
3.7. List of attachments or relevant links. List here any attachments and links you will provide as a complement to this section.	NA

Enforcement

4. Please provide information on recent developments regarding *Paubrasilia echinata* for the following aspects:

Enforcement	Answer or comments
4.1. National enforcement actions:	-Curbing the illegal timber trade has been a priority in Canada for the past couple years regarding all CITES listed species -Nationally coordinated threat risk assessment reports were developed to support regional intelligence and operational activities.
4.2. International enforcement actions:	-Canada is involved in several activities to help curb illegal wildlife trade including, on-going work with the Commission for Environmental Cooperation, North American Forestry Commission, INTERPOL, and through the Wildlife Enforcement Networks.
4.3. Illegal trade (e.g. seizures):	None
4.5. Other relevant information relating to enforcement:	-Canada has been an international leader in timber identification training, has developed an officer-friendly field guide on wood id and has trained officer in Tanzania.

Stockpiles

5. Please provide any information relevant to the registration of stockpiles of *Paubrasilia echinata*, as follows:

Registration of stockpiles	Answer or comments
5.1. Are you aware of any stockpile registration system for specimens of <i>P. echinata</i> ?	<input checked="" type="checkbox"/> No/Unknown
	<input type="checkbox"/> Yes. Please elaborate:
5.2. Additional information relevant to the implementation of Decision 19.251	No

Capacity building

6. Please provide a list of the most urgent capacity building needs to support implementation of the listing of *Paubrasilia echinata* in Appendix II, as follows:

Capacity building need list	Comments or justification
1) Standardized traceability system	
2) Centralized database	
3) Ability to differentiate between existing (finished) bows and pernambuco specimens entering trade	
...add rows as needed	

Decisions 19.249 to 19.253

7. Please provide any additional information relevant to the implementation of Decisions 19.249 to 19.253 on Brazil wood (*Paubrasilia echinata*).

Questionnaire on Brazil wood (*Paubrasilia echinata*)

- Please complete and submit this questionnaire to the Secretariat at info@cites.org with copy to isabel.camarena@un.org by 17 April 2023.
- Contact information

a) Party, Organization, or Institution:	Czech Republic, Ministry of Environment		
b) Contact:	Name	Ondrej Kloucek	
	Phone	+420 724 809 547	
	Email	Ondrej.Kloucek@mzp.cz	

Traceability and supply chains of *Paubrasilia echinata*

- Regarding traceability to register the provenance of *Paubrasilia echinata* bows:

Traceability of <i>P. echinata</i> bows	Answer or comments			
3.1. Are you aware of any traceability system in place for bows of <i>P. echinata</i> ? Tick or mark in bold whichever applies	<input type="checkbox"/> No			
	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Acquired bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers	
		<input checked="" type="checkbox"/> Produced bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input checked="" type="checkbox"/> Manufacturers	Voluntary traceability system <i>P. echinata</i> bows launched in the Czech Republic in 2023
		<input type="checkbox"/> Transported bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers	
3.2. Are you aware of any other traceability system for musical instrument accessories or musical instruments parts? If so, please provide some details.				
3.3. Are you aware of any recent developments on the marking of bows of <i>Paubrasilia echinata</i> ? If so, please specify.	Within the traceability system there is a recommendation for bow makers in the Czech Republic to identify their bows by identification photos or by unique marking specified in the certificates on declaration of bow materials accompanying the produced bows.			
3.4. According to you, what are the key elements of a traceability system for pernambuco bows?	To be able to prove legal origin of pernambuco bows on the basis of the determination of their manufacturer. For this purpose bow makers certificates are to be used in the Czech Republic. Another important element is stockpile registration by bow makers and regular updates of their stockpile, checking of legal origin of this stockpile.			

Traceability of <i>P. echinata</i> bows	Answer or comments
3.5. Please provide any other information you consider relevant to the traceability of bows and other specimens of <i>Paubrasilia echinata</i> .	After the consultation with bowmakers in the Czech Republic a new traceability system for <i>P. echinata</i> bows has been launched this year. Bow makers are recommended to accompany each <i>P. echinata</i> bow with the certificate declaring bow materials used and enabling identification of the bow and its manufacturer. In the certificates bows should identified by photos focusing on specific unique details or unique numbers should be used impacted on the bows.
3.6. Please provide any information relating to the existence and status of plantations of <i>Paubrasilia echinata</i> that could be considered source code A or Y.	No information available.
3.7. List of attachments or relevant links. List here any attachments and links you will provide as a complement to this section.	-

Enforcement

4. Please provide information on recent developments regarding *Paubrasilia echinata* for the following aspects:

Enforcement	Answer or comments
4.1. National enforcement actions:	There are planned controls of bow makers with respect to their pernambuco stockpiles to be conducted by the Enforcement Authorities within 2023.
4.2. International enforcement actions:	-
4.3. Illegal trade (e.g. seizures):	No evidence of illegal trade
4.5. Other relevant information relating to enforcement:	-

Stockpiles

5. Please provide any information relevant to the registration of stockpiles of *Paubrasilia echinata*, as follows:

Registration of stockpiles	Answer or comments
5.1. Are you aware of any stockpile registration system for specimens of <i>P. echinata</i> ?	<input type="checkbox"/> No/Unknown <input checked="" type="checkbox"/> Yes. Please elaborate: CZ bow makers have been contacted to register their pernambuco stockpiles by the end of 2023. They have been also recommended to keep and update records of pernambuco stockpiles.
5.2. Additional information relevant to the implementation of Decision 19.251	

Capacity building

6. Please provide a list of the most urgent capacity building needs to support implementation of the listing of *Paubrasilia echinata* in Appendix II, as follows:

Capacity building need list	Comments or justification
1) Training for determination of pernambuco wood	Training of Enforcement officials for determination of pernambuco bows or wood to distinguish from other materials would be useful for more efficient control and enforcement.
2)	
3)	
...add rows as needed	

Decisions 19.249 to 19.253

7. Please provide any additional information relevant to the implementation of Decisions 19.249 to 19.253 on Brazil wood (*Paubrasilia echinata*).

Questionnaire on Brazil wood (*Paubrasilia echinata*)

- Please complete and submit this questionnaire to the Secretariat at info@cites.org with copy to isabel.camarena@un.org by 17 April 2023.
- Contact information

a) Party, Organization, or Institution:	Germany, Federal Agency for Nature Conservation (FANC)		
b) Contact:	Name	Mario Sterz	
	Phone	+49(228) 84911341	
	Email	Mario.Sterz@bfn.de	

Traceability and supply chains of *Paubrasilia echinata*

- Regarding traceability to register the provenance of *Paubrasilia echinata* bows:

Traceability of <i>P. echinata</i> bows	Answer or comments			
3.1. Are you aware of any traceability system in place for bows of <i>P. echinata</i> ? Tick or mark in bold whichever applies	<input type="checkbox"/> No			
	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Acquired bows	<input type="checkbox"/> Owners	
			<input type="checkbox"/> Musicians	
			<input checked="" type="checkbox"/> Manufacturers	
	<input checked="" type="checkbox"/> Produced bows	<input checked="" type="checkbox"/> Owners		
		<input checked="" type="checkbox"/> Musicians		
		<input checked="" type="checkbox"/> Manufacturers		
	<input checked="" type="checkbox"/> Transported bows	<input type="checkbox"/> Owners		
		<input checked="" type="checkbox"/> Musicians		
		<input checked="" type="checkbox"/> Manufacturers		
3.2. Are you aware of any other traceability system for musical instrument accessories or musical instruments parts? If so, please provide some details.	According to the German domestic measures, all commercial operations have to keep special records showing the legal acquisition of the specimens (bookkeeping). These records can be used to trace from whom a specimen was acquired, whether it was further processed and to whom it was further sold. However, this bookkeeping is no longer required if the finished product is not covered by the CITES provisions due to annotations.			
3.3. Are you aware of any recent developments on the marking of bows of <i>Paubrasilia echinata</i> ? If so, please specify.	In Germany, some bow makers apply a brand mark to the end of the bow stick. In annex 2 on page 2 this is illustrated with a picture.			
3.4. According to you, what are the key elements of a traceability system for pernambuco bows?	The German bow makers' association has developed a proof of legal acquisition which is handed over to the buyers of the bows (see annex 2). On the basis of this proof, a traceability is possible without any problems. However, this measure is voluntary in Germany.			
3.5. Please provide any other information you consider relevant to the traceability of bows and	No information			

Traceability of <i>P. echinata</i> bows	Answer or comments
other specimens of <i>Paubrasilia echinata</i> .	
3.6. Please provide any information relating to the existence and status of plantations of <i>Paubrasilia echinata</i> that could be considered source code A or Y.	Not relevant for Germany
3.7. List of attachments or relevant links. List here any attachments and links you will provide as a complement to this section.	Annex 2 – Proof of legal origin, voluntarily created by bowmakers

Enforcement

4. Please provide information on recent developments regarding ***Paubrasilia echinata*** for the following aspects:

Enforcement	Answer or comments
4.1. National enforcement actions:	On the date of listing of the species <i>Paubrasilia echinata</i> on 13.09.2007, the existing stocks were declared to the competent national authorities ('Federal State Authorities'), registered and entered into the national bookkeeping (see 3.2.). The few imports since listing (see annex 3) as well as purchases within the European Union must also be entered in the national bookkeeping with the necessary proofs of legal acquisition. Further trade within Germany is controlled by the national authorities on the basis of the registered stocks and the mentioned bookkeeping. However, the legal basis required for the bookkeeping applies only for CITES specimens. So far, no infringements/illegal activities have been detected during national controls.
4.2. International enforcement actions:	Compared to wood from other tree species, there is only a small volume of trade. Since the species <i>Paubrasilia echinata</i> was listed, import permits as well as re-export certificates have been issued and used (see Annex 3)
4.3. Illegal trade (e.g. seizures):	No illegal imports into Germany or re-exports from Germany of specimens of the species <i>Paubrasilia echinate</i> have been detected since the species was listed in 2007.
4.5. Other relevant information relating to enforcement:	No information

Stockpiles

5. Please provide any information relevant to the registration of stockpiles of ***Paubrasilia echinata***, as follows:

Currently, the data from all registered stocks in Germany are being processed by the responsible Federal State Authorities and sent to the CITES MA. We will compile this data as a report and submit it as a supplement to the data already provided in annex 1 - if all data from the more than 250 federal state authorities are available and completed.

Registration of stockpiles	Answer or comments	
5.1. Are you aware of any stockpile registration system for specimens of <i>P. echinata</i> ?	<input type="checkbox"/> No/Unknown	
	<input checked="" type="checkbox"/> Yes. Please elaborate:	See annex 1
5.2. Additional information relevant to the implementation of Decision 19.251	The inventory shown in annex 1 includes all the stocks of the members of the German Bowmakers' Association. Other stocks are not included here. This will be part of a national inventory, which could not yet be completed due to the short period of time. A complete stock overview will therefore be submitted later (see 5.)	

Capacity building

6. Please provide a list of the most urgent capacity building needs to support implementation of the listing of *Paubrasilia echinata* in Appendix II, as follows:

Capacity building need list	Comments or justification
1)	Traceability or marking system beginning from exported raw bows to sold finished bows
2)	
3)	
...add rows as needed	

Decisions 19.249 to 19.253

7. Please provide any additional information relevant to the implementation of Decisions 19.249 to 19.253 on Brazil wood (*Paubrasilia echinata*).

No additional information.

Germany
 Notification 2023/033
 Annex 1 to questionnaire

Pernambuco stock
 Survey of the members of the German Bow Makers Association
 Status: 2022

Bow maker (anonymised)	Stock of blanks (no)	Stock of sawn wood (kg)	Stock of logs (kg)	Stock of finished musical instruments (no)				Annual consumption	
				Violin	Viola	Cello	Double bass	Blanks	kg
1	100	200		0	0	2	1	50	
2					1	2	4	6	
3	980	2800		5	3	1	1		80
4	630	380	50	6	1	3	1		40
5	11022	5115						115	
6	43833			1044	127	427	36	2174	
7	6921	5615		150	70	70	12	30	
8	25		4	4				24	
9	3985								
10	4			80	20	100	4	66	
11	17500	11155		20	10	10		180	
12	300			99	29	96	3		
13	20000	986	54						500
14	75	3		2				10	
15	120	2		5	2	4		8	
16	1240	1233							15
17	9020	329		34	18	24	2	150	
18	222000			50	12	25	20	7350	
19	1500	900		20	10	10	5	20	
20	750	49		3		2		12	
21		1500		15	2	7	8	70	
22				1	1	1	2		70
23		3025		28	19	21	17		30
24	300			67	14	35	2	15	150
25				113	44	65	7	450	
26	293	761	2505		2	1	2	1	12
27	1500			4	3	4		20	
28	22000		1100			400		1000	
29	80	800		5	4	6	1	20	
30	4000	655		6	5	7	3	10	
31	25370	304	609						
32	1200	2400	1600	10	7	8	5		200
33	103360			77	34	46	20	300	
34	80	800		5	4	6	1	20	
Sum	498188	39012	5922	1853	442	1383	157	12101	1097

Erklärung zu den Anmerkungen bei den Bogenbestandteilen.

Die Erläuterungen zu den Anmerkungen sind aus der "Liste der in CITES und der VO(EG) 338/97 geschützten Baumarten", veröffentlicht vom Bundesamt für Naturschutz, entnommen.

#5 Bezeichnet Stämme oder Holzblöcke, Schnittholz und Furnierblätter

#10 Bezeichnet alle Teile, Erzeugnisse und fertigen Produkte, ausgenommen Wiederausfuhren fertiger Musikinstrumente, fertige Musikinstrumententeile sowie fertiges Musikinstrumentenzubehör.

Explanation of the annotations on the bow components.

The explanations for the annotations are taken from the "List of tree species protected in CITES and VO(EG) 338/97", published by the Federal Agency for Nature Conservation.

#5 Designates logs or wood blocks, sawn timber and veneer sheets

#10 All parts, derivatives and finished products, except re-export of finished musical instruments, finished musical instrument accessories and finished musical instrument parts.

Nachweis der legalen Herkunft von: - **Proof of legal origin of:**

Fernambuk - **Pernambuco** - *Pau brasilia echinata*

Das Holz wurde am 11.09.2007 registriert bei: - **Wood registration on 09/11/2007 at:**
Stadt Erlangen, Amt für Umweltschutz und Energiefragen, Postfach 3160, 91051 Erlangen

Bundesinnungsverband für das Musikinstrumenten-Handwerk



Zertifikats Nr. - Certifikats No.:

AAA001

Nachweis über die verwendeten Materialien für einen Streichbogen.

Proof of the materials used for bow.

Nachweis erstellt von - **Proof created by:**
 Bogenmachermeister
 XXXXXX

XXXXXXXX
 Germany

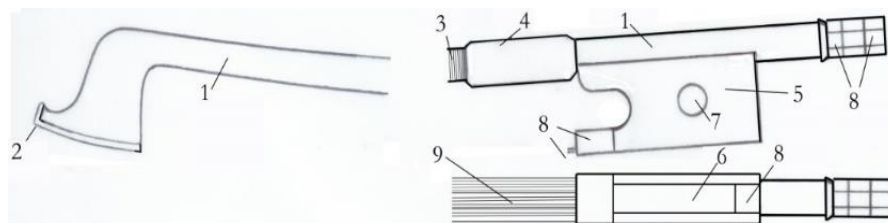
Ort und Datum - **Place and Date of issue:**
 Erlangen, 12.12.2022

Bogenart - **Kind of bow:**
 Violinbogen - Violinbow

Stempel - **Brand:**
 JOSEF P. GABRIEL

Bogen Nr. - **Bow identification no.:**
 DE-A002

Unterschrift - **Signature**



Verwendete Materialien zum Zeitpunkt der Erklärung mit Kernzeichnung der von CITES erfassten Materialien.

Materials used at the time of the declaration with identification of material covered by Cites

Pos.	Bogenbestandteile Bow components	Materialien Materials	CITES relevant	Anmerkung annotation
1.	Stange - Stick	Fernambuk - Pernambuco - <i>Pau brasilia echinata</i>	<input checked="" type="checkbox"/>	B#10
2.	Kopfplatte - Faceplate	Knochen - Bone - <i>Bos primigenius indicus</i>	<input type="checkbox"/>	
3.	Bewicklung - Lapping	Silber - Silver - <i>Argentum</i>	<input type="checkbox"/>	
4.	Leder - Leather	Ziegenleder - Goat leather - <i>Capra hircus hircus</i>	<input type="checkbox"/>	
5.	Frosch - Frog	Ebenholz - Ebony - <i>Diospyros crassiflora</i>	<input checked="" type="checkbox"/>	B#5
6.	Schub - Slide	Goldfisch - Awabi - <i>Haliotis gigantia</i>	<input type="checkbox"/>	
7.	Auge - Eye	Goldfisch - Awabi - <i>Haliotis gigantia</i>	<input type="checkbox"/>	
8.	Metall - Metal	Silber - Silver - <i>Argentum</i>	<input type="checkbox"/>	
9.	Bogenhaare - Hair	Pferdehaar - Domestic Horse Hair - <i>Equus ferus caballus</i>	<input type="checkbox"/>	

Imports of *Paubrasilia echinata* into Germany

13.09.2007 - 31.12.2022

Year	Species	Country of origin	Export-country	Quantity	Unit	Description	Source
2010	PAUBRASILIA ECHINATA	BR	US	4.7	KG	SAW	O/W
2014	PAUBRASILIA ECHINATA	BR	BR	0.121	M ³	SAW	O/W
2015	PAUBRASILIA ECHINATA	BR	BR	0.033	M ³	CAR	O/W
2015	PAUBRASILIA ECHINATA	BR	BR	0.116	M ³	SAW	O/W
2016	PAUBRASILIA ECHINATA	BR	BR	0.818	M ³	SAW	O/W
2017	PAUBRASILIA ECHINATA	BR	BR	0.09	M ³	SAW	O/W
2018	PAUBRASILIA ECHINATA	BR	BR	0.222	M ³	SAW	O/W
2019	PAUBRASILIA ECHINATA	BR	BR	0.036	M ³	SAW	O/W
2020	PAUBRASILIA ECHINATA	BR	BR	0.393	M ³	SAW	O/W
2021	PAUBRASILIA ECHINATA	XX	US	0.03362	M ³	TIM	O/U
2021	PAUBRASILIA ECHINATA	XX	US	22	NO	TIM	O/W

Re-exports of *Paubrasilia echinata* from Germany

13.09.2007 - 31.12.2022

Year	Species	Country of origin	Country of destination	Quantity	Unit	Description	Source
2008	PAUBRASILIA ECHINATA	BR	CN	14508	KG	SAW	O/W
2009	PAUBRASILIA ECHINATA	BR	JP	7.45	KG	SAW	O/W
2010	PAUBRASILIA ECHINATA	BR	US	4.7	KG	SAW	O/W
2010	PAUBRASILIA ECHINATA	BR	CN	580	NO	TIM	O/W
2012	PAUBRASILIA ECHINATA	BR	JP	12	NO	CAR	O/W
2012	PAUBRASILIA ECHINATA	BR	CN	1529	NO	SAW	O/W
2014	PAUBRASILIA ECHINATA	XX	CH	6	NO	SAW	I
2017	PAUBRASILIA ECHINATA	XX	CN	260	NO	CAR	O/W
2018	PAUBRASILIA ECHINATA	BR	KR	2.945	KG	SAW	O/W
2020	PAUBRASILIA ECHINATA	XX	CH	154.8	KG	WPR	O/U

Questionnaire on Brazil wood (*Paubrasilia echinata*)

1. Please complete and submit this questionnaire to the Secretariat at info@cites.org with copy to isabel.camarena@un.org by 17 April 2023.
2. Contact information

a) Party, Organization, or Institution:	Japan		
b) Contact:	Name	Akira OSAWA	
	Phone	+81-3-5501-8245	
	Email	akira.osawa@mofa.go.jp	

Traceability and supply chains of *Paubrasilia echinata*

3. Regarding traceability to register the provenance of *Paubrasilia echinata* bows:

Traceability of <i>P. echinata</i> bows	Answer or comments			
3.1. Are you aware of any traceability system in place for bows of <i>P. echinata</i> ? Tick or mark in bold whichever applies	<input type="checkbox"/> No			
	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Acquired bows	<input type="checkbox"/> Owners	
			<input type="checkbox"/> Musicians	
	<input checked="" type="checkbox"/> Produced bows	<input type="checkbox"/> Manufacturers		
	<input type="checkbox"/> Transported bows	<input type="checkbox"/> Owners		
		<input type="checkbox"/> Musicians		
		<input type="checkbox"/> Manufacturers		
3.2. Are you aware of any other traceability system for musical instrument accessories or musical instruments parts? If so, please provide some details.				
3.3. Are you aware of any recent developments on the marking of bows of <i>Paubrasilia echinata</i> ? If so, please specify.	According to the Japan Musical Instruments Association, some bow manufacturers have introduced a kind of traceability system in which the production number and company name are engraved on the bows they make.			
3.4. According to you, what are the key elements of a traceability system for pernambuco bows?	Considering its role to prevent illegal wildlife trade, a traceability system for Pernambuco bows should ensure reliability on the identification of the bows and management of its data. On the other hand, to establish the system, it should also be ensured as well that the system should not be burdensome so that stakeholders feel difficulty and lose motivation to establish sustainable system. Given its important role to establish traceability, it is necessary to ensure involving the stakeholders especially bow manufactures' organizations to establish the system.			

Traceability of <i>P. echinata</i> bows	Answer or comments
3.5. Please provide any other information you consider relevant to the traceability of bows and other specimens of <i>Paubrasilia echinata</i> .	
3.6. Please provide any information relating to the existence and status of plantations of <i>Paubrasilia echinata</i> that could be considered source code A or Y.	
3.7. List of attachments or relevant links. List here any attachments and links you will provide as a complement to this section.	

Enforcement

4. Please provide information on recent developments regarding ***Paubrasilia echinata*** for the following aspects:

Enforcement	Answer or comments
4.1. National enforcement actions:	Correspond to the decision 19.251 to 19.252, Government of Japan has started to communicate with bow producing entities regarding stockpiles and traceability system.
4.2. International enforcement actions:	
4.3. Illegal trade (e.g. seizures):	
4.5. Other relevant information relating to enforcement:	

Stockpiles

5. Please provide any information relevant to the registration of stockpiles of ***Paubrasilia echinata***, as follows:

Registration of stockpiles	Answer or comments
5.1. Are you aware of any stockpile registration system for specimens of <i>P. echinata</i> ?	<input type="checkbox"/> No/Unknown
	<input type="checkbox"/> Yes. Please elaborate:
5.2. Additional information relevant to the implementation of Decision 19.251	

Capacity building

6. Please provide a list of the most urgent capacity building needs to support implementation of the listing of ***Paubrasilia echinata*** in Appendix II, as follows:

Capacity building need list	Comments or justification
1)	
2)	
3)	
<i>...add rows as needed</i>	

Decisions 19.249 to 19.253

7. Please provide any additional information relevant to the implementation of Decisions 19.249 to 19.253 on Brazil wood (***Paubrasilia echinata***).

Questionnaire on Brazil wood (*Paubrasilia echinata*)

- Please complete and submit this questionnaire to the Secretariat at info@cites.org with copy to isabel.camarena@un.org by 17 April 2023.
- Contact information

a) Party, Organization, or Institution:	The Netherlands		
b) Contact:	Name	RVO CITES permit bureau	
	Phone	+31(0)880424242	
	Email	cites@rvo.nl	

Traceability and supply chains of *Paubrasilia echinata*

- Regarding traceability to register the provenance of *Paubrasilia echinata* bows:

Traceability of <i>P. echinata</i> bows	Answer or comments			
3.1. Are you aware of any traceability system in place for bows of <i>P. echinata</i> ? Tick or mark in bold whichever applies	<input checked="" type="checkbox"/> No			
	<input type="checkbox"/> Yes	<input type="checkbox"/> Acquired bows	<input type="checkbox"/> Owners	
			<input type="checkbox"/> Musicians	
			<input type="checkbox"/> Manufacturers	
	<input type="checkbox"/> Produced bows	<input type="checkbox"/> Owners		
		<input type="checkbox"/> Musicians		
		<input type="checkbox"/> Manufacturers		
	<input type="checkbox"/> Transported bows	<input type="checkbox"/> Owners		
		<input type="checkbox"/> Musicians		
		<input type="checkbox"/> Manufacturers		
3.2. Are you aware of any other traceability system for musical instrument accessories or musical instruments parts? If so, please provide some details.	<i>Certain musical instruments like guitars and pianos are individually marked by the manufacturer.</i>			
3.3. Are you aware of any recent developments on the marking of bows of <i>Paubrasilia echinata</i> ? If so, please specify.	No. <i>However, we have heard from one importer working on individually marking of bows from IPE wood for which buyers are said to receive some sort of certificate which includes date and document number of legal import to the EU, photo's and a statement of the material that was used.</i>			
3.4. According to you, what are the key elements of a traceability system for pernambuco bows?	- Involvement of the traders, producers, exporters, importers - Unique serial no. which can be linked to a CITES export permit.			

Traceability of <i>P. echinata</i> bows	Answer or comments
3.5. Please provide any other information you consider relevant to the traceability of bows and other specimens of <i>Paubrasilia echinata</i> .	
3.6. Please provide any information relating to the existence and status of plantations of <i>Paubrasilia echinata</i> that could be considered source code A or Y.	
3.7. List of attachments or relevant links. List here any attachments and links you will provide as a complement to this section.	

Enforcement

4. Please provide information on recent developments regarding ***Paubrasilia echinata*** for the following aspects:

Enforcement	Answer or comments
4.1. National enforcement actions:	
4.2. International enforcement actions:	
4.3. Illegal trade (e.g. seizures):	
4.5. Other relevant information relating to enforcement:	

Stockpiles

5. Please provide any information relevant to the registration of stockpiles of ***Paubrasilia echinata***, as follows:

Registration of stockpiles	Answer or comments
5.1. Are you aware of any stockpile registration system for specimens of <i>P. echinata</i> ?	<input type="checkbox"/> No/Unknown
	<input checked="" type="checkbox"/> Yes. Please elaborate: <i>An importer of Pau Brasilia bows has indicated that remaining bows in stock are marked with a registration number.</i>
5.2. Additional information relevant to the implementation of Decision 19.251	

Capacity building

6. Please provide a list of the most urgent capacity building needs to support implementation of the listing of *Paubrasilia echinata* in Appendix II, as follows:

Capacity building need list	Comments or justification
1)	
2)	
3)	
...add rows as needed	

Decisions 19.249 to 19.253

7. Please provide any additional information relevant to the implementation of Decisions 19.249 to 19.253 on Brazil wood (*Paubrasilia echinata*).

Questionnaire on Brazil wood (*Paubrasilia echinata*)

- Please complete and submit this questionnaire to the Secretariat at info@cites.org with copy to isabel.camarena@un.org by 17 April 2023.
- Contact information

a) Party, Organization, or Institution:	Party – Slovakia (Ministry of Environment of the Slovak Republic – CITES Management Authority)	
b) Contact:	Name	Silvia Rusnakova
	Phone	+421 2 5956 2466
	Email	silvia.rusnakova@enviro.gov.sk

Traceability and supply chains of *Paubrasilia echinata*

- Regarding traceability to register the provenance of *Paubrasilia echinata* bows:

Traceability of <i>P. echinata</i> bows	Answer or comments		
3.1. Are you aware of any traceability system in place for bows of <i>P. echinata</i> ? <i>Tick or mark in bold whichever applies</i>	<input checked="" type="checkbox"/> No		
	<input type="checkbox"/> Yes	<input type="checkbox"/> Acquired bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers
		<input type="checkbox"/> Produced bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers
		<input type="checkbox"/> Transported bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers
3.2. Are you aware of any other traceability system for musical instrument accessories or musical instruments parts? If so, please provide some details.	No		
3.3. Are you aware of any recent developments on the marking of bows of <i>Paubrasilia echinata</i> ? If so, please specify.	No		
3.4. According to you, what are the key elements of a traceability system for pernambuco bows?	To cover the whole chain of custody, find out unique individual marking of bows		
3.5. Please provide any other information you consider	-		

relevant to the traceability of bows and other specimens of <i>Paubrasilia echinata</i> .	
3.6. Please provide any information relating to the existence and status of plantations of <i>Paubrasilia echinata</i> that could be considered source code A or Y.	-
3.7. List of attachments or relevant links. <i>List here any attachments and links you will provide as a complement to this section.</i>	-

Enforcement

4. Please provide information on recent developments regarding *Paubrasilia echinata* for the following aspects:

Enforcement	Answer or comments
4.1. National enforcement actions:	No special national enforcement actions in place
4.2. International enforcement actions:	No special international enforcement actions in place
4.3. Illegal trade (e.g. seizures):	We do not register any seizures
4.5. Other relevant information relating to enforcement:	-

Stockpiles

5. Please provide any information relevant to the registration of stockpiles of *Paubrasilia echinata*, as follows:

Registration of stockpiles	Answer or comments
5.1. Are you aware of any stockpile registration system for specimens of <i>P. echinata</i> ?	<input type="checkbox"/> No/Unknown
	<input checked="" type="checkbox"/> Yes. Please elaborate: We are aware of a stockpile registration system in place in Germany, Austria
5.2. Additional information relevant to the implementation of Decision 19.251	In relation to the Decision 19.251 letter b) (<i>Parties, and in particular source, transit and destination Parties for Paubrasilia echinata, are invited to consider the registration of stockpiles of Paubrasilia echinata as appropriate</i>), we are aware of one producer of bows in Slovakia. We plan to arrange a meeting in May 2023 with him to discuss the process of production/registration/marketing of bows and to agree on a voluntary registration of stockpiles of <i>Paubrasilia echinata</i> . Detailed information on stockpiles (including bows) and its changes in time will be than available for enforcement activities in the future.

Capacity building

6. Please provide a list of the most urgent capacity building needs to support implementation of the listing of *Paubrasilia echinata* in Appendix II, as follows:

Capacity building need list	Comments or justification
1)	-
2)	
3)	
<i>...add rows as needed</i>	

Decisions 19.249 to 19.253

7. Please provide any additional information relevant to the implementation of Decisions 19.249 to 19.253 on Brazil wood (*Paubrasilia echinata*).

Questionnaire on Brazil wood (*Paubrasilia echinata*)

1. Please complete and submit this questionnaire to the Secretariat at info@cites.org with copy to isabel.camarena@un.org by 17 April 2023.

2. Contact information

a) Party, Organization, or Institution:	Sweden	
b) Contact:	Name	Erik Dalarud
	Phone	
	Email	Erik.dalarud@jordbruksverket.se

Traceability and supply chains of *Paubrasilia echinata*

3. Regarding traceability to register the provenance of *Paubrasilia echinata* bows:

Traceability of <i>P. echinata</i> bows	Answer or comments		
3.1. Are you aware of any traceability system in place for bows of <i>P. echinata</i> ? <i>Tick or mark in bold whichever applies</i>	<input checked="" type="checkbox"/> No		
	<input type="checkbox"/> Yes	<input type="checkbox"/> Acquired bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers
		<input type="checkbox"/> Produced bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers
<input type="checkbox"/> Transported bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers		
3.2. Are you aware of <i>any other</i> traceability system for musical instrument accessories or musical instruments parts? If so, please provide some details.	Yes, traceability systems are in place for other musical instruments and accessories, such as guitars made from rosewood (<i>Dalbergia</i> spp.) and others, which are regulated under CITES. These are usually musical instruments that are labelled with a serial number, either through a label, print or engraving. According to manufacturers, these serial numbers also contain secret codes, linked to the manufacturer.		
3.3. Are you aware of any recent developments on the marking of bows of <i>Paubrasilia echinata</i> ? If so, please specify.	We have been informed by music industry representatives that there have been efforts to mark bows using a unique sequence of numbers (serial number or similar), which are etched into it using laser equipment.		
3.4. According to you, what are the key elements of a traceability system for pernambuco bows?	Key elements of a traceability system for Pernambuco bows would need to include unique identification numbers, documentation of origin, and proof of legal acquisition. The industry asks for a system to be standardized and approved/accepted by as many countries as possible (e.g. develop an international tracking system), building upon existing methods (preferably imprinting or engraving). It is questionable whether it if it is possible without		

	compromising the quality of the instrument to label already manufactured bows.
3.5. Please provide any other information you consider relevant to the traceability of bows and other specimens of <i>Paubrasilia echinata</i> .	It is essential to involve stakeholders such as manufacturers, musicians, and enforcement agencies in the development of a traceability system to ensure its effectiveness.
3.6. Please provide any information relating to the existence and status of plantations of <i>Paubrasilia echinata</i> that could be considered source code A or Y.	<p>Several plantation types of <i>Paubrasilia</i> exist within Brazil such as monospecific and mixed tree plantations and agroforestry systems, which potentially could fulfill the criteria to be considered source code A or Y. However, there is limited understanding concerning the plantations long-term productivity, wood quality (there are indications that wood from plantations do not match the quality of wild-grown trees due to faster growing rates resulting in less dense wood and therefore lesser quality for bow making), and economic return. A study by Silke Lichtenberg et al (2018)* provide detailed inventories of nine plantations in the Atlantic Forest of Brazil.</p> <p>* Use and Conservation of the Threatened Brazilian National Tree <i>Paubrasilia echinata</i> Lam.: A Potential for Rio de Janeiro State? (2018). Available in <i>Strategies and Tools for a Sustainable Rural Rio de Janeiro</i> (pp. 205-2019). Doi: 10.1007/978-3-319-89644-1_14</p>
3.7. List of attachments or relevant links. <i>List here any attachments and links you will provide as a complement to this section.</i>	

Enforcement

4. Please provide information on recent developments regarding *Paubrasilia echinata* for the following aspects:

Enforcement	Answer or comments
4.1. National enforcement actions:	None
4.2. International enforcement actions:	None
4.3. Illegal trade (e.g. seizures):	None
4.5. Other relevant information relating to enforcement:	Continued efforts to strengthen enforcement are essential to ensure the conservation of <i>P. echinata</i> .

Stockpiles

5. Please provide any information relevant to the registration of stockpiles of *Paubrasilia echinata*, as follows:

Registration of stockpiles	Answer or comments	
5.1. Are you aware of any stockpile registration system for specimens of <i>P. echinata</i> ?	<input type="checkbox"/> No/Unknown	
	<input checked="" type="checkbox"/> Yes. Please elaborate:	<i>In connection with the listing of P. echinata under CITES in 2007, a registry of existing (pre-conventional) stockpiles was carried out in Sweden. There are 4 pre-conventional stockpiles which weigh in total 1.2 tonnes at the time.</i>
5.2. Additional information relevant to the implementation of Decision 19.251		

Capacity building

6. Please provide a list of the most urgent capacity building needs to support implementation of the listing of *Paubrasilia echinata* in Appendix II, as follows:

Capacity building need list	Comments or justification
1)	Developing a reliable marking and tracing system of bows
2)	Support to Brazilian authorities to combat the illegal trade
3)	Identification materials and training for customs
<i>...add rows as needed</i>	

Decisions 19.249 to 19.253

7. Please provide any additional information relevant to the implementation of Decisions 19.249 to 19.253 on Brazil wood (*Paubrasilia echinata*).

Questionnaire on Brazil wood (*Paubrasilia echinata*)

- Please complete and submit this questionnaire to the Secretariat at info@cites.org with copy to isabel.camarena@un.org by 17 April 2023.
- Contact information

a) Party, Organization, or Institution:	Swiss Management Authority of Switzerland and Lichtenstein		
b) Contact:	Name	Ursula Moser	
	Phone	+41 58 463 83 99	
	Email	ursula.moser@blv.admin.ch	

Traceability and supply chains of *Paubrasilia echinata*

- Regarding traceability to register the provenance of *Paubrasilia echinata* bows:

Traceability of <i>P. echinata</i> bows	Answer or comments			
3.1. Are you aware of any traceability system in place for bows of <i>P. echinata</i> ? Tick or mark in bold whichever applies	<input checked="" type="checkbox"/> No			
	<input type="checkbox"/> Yes	<input type="checkbox"/> Acquired bows	<input type="checkbox"/> Owners	
			<input type="checkbox"/> Musicians	
			<input type="checkbox"/> Manufacturers	
	<input type="checkbox"/> Produced bows	<input type="checkbox"/> Owners		
		<input type="checkbox"/> Musicians		
		<input type="checkbox"/> Manufacturers		
	<input type="checkbox"/> Transported bows	<input type="checkbox"/> Owners		
		<input type="checkbox"/> Musicians		
		<input type="checkbox"/> Manufacturers		
3.2. Are you aware of any other traceability system for musical instrument accessories or musical instruments parts? If so, please provide some details.	We have a system where bow makers can register their stock of wooden parts.			
3.3. Are you aware of any recent developments on the marking of bows of <i>Paubrasilia echinata</i> ? If so, please specify.	No			
3.4. According to you, what are the key elements of a traceability system for pernambuco bows?	The tracability system should provide information of the origin of the Pernambuco wood.			
3.5. Please provide any other information you consider relevant to the traceability of bows and other specimens of <i>Paubrasilia echinata</i> .	-			

Traceability of <i>P. echinata</i> bows	Answer or comments
3.6. Please provide any information relating to the existence and status of plantations of <i>Paubrasilia echinata</i> that could be considered source code A or Y.	I have no information of the existence about plantation of <i>Paubrasilia echinate</i> .
3.7. List of attachments or relevant links. List here any attachments and links you will provide as a complement to this section.	-

Enforcement

4. Please provide information on recent developments regarding *Paubrasilia echinata* for the following aspects:

Enforcement	Answer or comments
4.1. National enforcement actions:	-
4.2. International enforcement actions:	-
4.3. Illegal trade (e.g. seizures):	-
4.5. Other relevant information relating to enforcement:	-

Stockpiles

5. Please provide any information relevant to the registration of stockpiles of *Paubrasilia echinata*, as follows:

Registration of stockpiles	Answer or comments
5.1. Are you aware of any stockpile registration system for specimens of <i>P. echinata</i> ?	<input checked="" type="checkbox"/> No/Unknown
	<input type="checkbox"/> Yes. Please elaborate:
5.2. Additional information relevant to the implementation of Decision 19.251	-

Capacity building

6. Please provide a list of the most urgent capacity building needs to support implementation of the listing of *Paubrasilia echinata* in Appendix II, as follows:

Capacity building need list	Comments or justification
1)	-
2)	-
3)	-
...add rows as needed	

Decisions 19.249 to 19.253

7. Please provide any additional information relevant to the implementation of Decisions 19.249 to 19.253 on Brazil wood (*Paubrasilia echinata*).

-

Questionnaire on Brazil wood (*Paubrasilia echinata*)

1. Please complete and submit this questionnaire to the Secretariat at info@cites.org with copy to isabel.camarena@un.org by 17 April 2023.

2. Contact information

a) Party, Organization, or Institution:	United Kingdom	
b) Contact:	Name	Leigh-Anne Bullough
	Phone	
	Email	l.bullough@kew.org

Traceability and supply chains of *Paubrasilia echinata*

3. Regarding traceability to register the provenance of *Paubrasilia echinata* bows:

Traceability of <i>P. echinata</i> bows	Answer or comments			
3.1. Are you aware of any traceability system in place for bows of <i>P. echinata</i> ? <i>Tick or mark in bold whichever applies</i>	<input type="checkbox"/> No			
	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Acquired bows	<input checked="" type="checkbox"/> Owners <input checked="" type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers	In discussions with industry representatives and individual owners/musicians in the UK, we are aware of the use of detailed photographs and affidavits used in certificates of authenticity for antique bows where it is important for the owners to be able to prove that their bow is the specific bow they claim it to be). As we understand it this isn't as common (and so potentially useful) for new bows.
		<input checked="" type="checkbox"/> Produced bows	<input checked="" type="checkbox"/> Owners <input checked="" type="checkbox"/> Musicians	As above.

Traceability of <i>P. echinata</i> bows	Answer or comments		
			<input type="checkbox"/> Manufacturers
		<input checked="" type="checkbox"/> Transported bows	<input checked="" type="checkbox"/> Owners <input checked="" type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers Individual arrangements may be in place to maintain a verifiable chain of custody, especially for valuable older instruments/ accessories, for certain processes, e.g. the repair of instruments by other craftspeople either domestically or overseas. This could include specific receipting, but does not appear to be consistent across the industry.
<p>3.2. Are you aware of <i>any other</i> traceability system for musical instrument accessories or musical instruments parts? If so, please provide some details.</p>	<p>UK domestic legislation requires certification for the domestic commercial use of some highly protected species, either for each transaction or for the lifetime of the specimens (usually depending on whether the specimens can be identified through a permanent and unalterable marking). We have experienced some difficulties ensuring all musicians, collectors and traders are aware of the rules and have the means to comply with them. As a result, this process creates a not insignificant burden on the UK authorities outreach and compliance functions.</p>		
<p>3.3. Are you aware of any recent developments on the marking of bows of <i>Paubrasilia echinata</i>? If so, please specify.</p>	<p>We have been in discussion in the UK with bow makers, musicians and owners about addressing the issue of traceability in bows. Though there may be resistance in the community to marking existing/antique bows, the marking of new bows appears likely to be tolerated. Particularly if that helped to address concerns over the trade in the species and allowed for the continuation of traditional bow making.</p> <p>At present, we are not aware of any concrete plans to move forward with wide-scale marking. However, laser engraving has been talked about – engraving a stamp for the specific bow maker, a number or a QR code for example.</p> <p>At CoP19, Mr P Guillaume of ‘Guillaume Archetier’ in Belgium did show many parties and observers a bow that he had laser engraved using a small portable machine. He said that this did not impact the quality (and therefore commercial value, in his opinion) of the bow. However, as far as the UK is aware, this has not been adopted on a wider scale within the community at present.</p>		

Traceability of <i>P. echinata</i> bows	Answer or comments
	<p>We do not have a position to prefer this over any other system of marking or traceability.</p> <p>We would strongly support a uniform global standard if universal marking is to be recommended to ease the use of such a system.</p>
<p>3.4. According to you, what are the key elements of a traceability system for pernambuco bows?</p>	<p>Any method by which we may mark bows in the future, would need to be backed up by a database/tracking system that allowed enforcement officials to check the legality of the bow.</p> <p>This system would therefore have to be global, easily accessible with every day technology, consistently updated and not replicable.</p> <p>There is a risk that bows/ID markings could be fraudulently added to any database, in an attempt to legitimize bows from illegally sourced wood. Therefore, any traceability system that uses physical marks should link to a secure database that is well maintained and easily accessed by officials to cross reference the marked bows.</p>
<p>3.5. Please provide any other information you consider relevant to the traceability of bows and other specimens of <i>Paubrasilia echinata</i>.</p>	<p>Legitimate industry appear to genuinely want to work collaboratively on a solution that would address the concerns behind the CoP19 listing proposal for Pernambuco, while still supporting the ongoing cultural practices of bow making, repair and use/performance.</p>
<p>3.6. Please provide any information relating to the existence and status of plantations of <i>Paubrasilia echinata</i> that could be considered source code A or Y.</p>	<p>We are aware of plantations managed by an organization called ‘FunBrazil’ who penned an open letter to CITES ahead of CoP19 in which they outlined their work in reforestation and plantation creation.</p> <p>An excerpt of the letter reads –</p> <p><i>“In addition to his outreach work which we continue to this day, prior to the creation of FUNBRASIL Professor Fontes was active in plantation and reforestation – he planted 50,000 Pau-Brasil trees on the safety margin of the Tapacurá dam in the municipality of São Lourenço da Mata, and established several hundred plantations in various states and municipalities of Brazil. Professor Fontes and FUNBRASIL have collectively been responsible for the planting of some two million seven hundred thousand specimens of Pau-Brasil on Brazilian soil.”</i></p> <p>The viability, age or survival rate of these planted species have not, as far as we know, been made publicly available. We are unsure if they have been conducted, and we are unsure of the current state of the plantations, or their management or sustainable harvest practices and so would not be able to comment on their ability to sustainably meet trade demands. An audit of planted specimens would be a valuable exercise to inform future steps towards the conservation and sustainable management of the species.</p>
<p>3.7. List of attachments or relevant links.</p>	

Traceability of <i>P. echinata</i> bows	Answer or comments
<i>List here any attachments and links you will provide as a complement to this section.</i>	

Enforcement

4. Please provide information on recent developments regarding *Paubrasilia echinata* for the following aspects:

Enforcement	Answer or comments
4.1. National enforcement actions:	
4.2. International enforcement actions:	
4.3. Illegal trade (e.g. seizures):	
4.5. Other relevant information relating to enforcement:	

Stockpiles

5. Please provide any information relevant to the registration of stockpiles of *Paubrasilia echinata*, as follows:

Registration of stockpiles	Answer or comments	
5.1. Are you aware of any stockpile registration system for specimens of <i>P. echinata</i> ?	<input checked="" type="checkbox"/> No/Unknown	
	<input type="checkbox"/> Yes. Please elaborate:	
5.2. Additional information relevant to the implementation of Decision 19.251		

Capacity building

6. Please provide a list of the most urgent capacity building needs to support implementation of the listing of *Paubrasilia echinata* in Appendix II, as follows:

Capacity building need list	Comments or justification
1)	<p>Red List Status update – <i>Paubrasilia echinata</i> was last updated on the IUCN Red List in 1998. A lot of available information is outdated and needs revising so we have a better idea about the conservation status of the species. Botanic Gardens Conservation International (BGCI) are currently undertaking a project under the Global Trees Assessment aiming to undertake a Red List assessment for all tree species. Thus, they will update the <i>Paubrasilia echinata</i> status within that. However, the date of when they hope to have completed this particular species is currently not known.</p> <p>Within this assessment, threats to the species as well as population status of remaining wild trees are assessed. However, it was made clear in Brazil’s original proposal, as well as in subsequent discussions with experts at Royal Botanic Gardens Kew, that the population trends and status of remaining trees of this species were unknown. Thus, the Red List assessment may not be able to assess this as there may not be enough data, so we cannot rely on the Red List Assessment. Since this data is lacking, experts need to undertake a population survey of this species as a matter of urgency, so we can better understand the viability of the species in the wild and how this resource can be managed more sustainably.</p>
2)	<p>Enforcement support – In Brazil’s original proposal to CoP19, it was made clear that bows and bow blanks made from wood with no traceable legal origin had been seized during inspection. As the species is endemic to Brazil, reducing the amount of illegal logging within the Atlantic Forest biome, and strengthening long term management of wild populations is imperative to the species survival.</p> <p>Brazil will have specific needs to aid in the enforcement of the new annotation in order ensure that real changes to the use of illegal wood are seen as a result of the CoP19 discussions. Liasing with Brazil so that these needs can be supported is key to support the implementation process.</p>
3)	
...add rows as needed	

Decisions 19.249 to 19.253

7. Please provide any additional information relevant to the implementation of Decisions 19.249 to 19.253 on Brazil wood (*Paubrasilia echinata*).

Questionnaire on Brazil wood (*Paubrasilia echinata*)

1. Please complete and submit this questionnaire to the Secretariat at info@cites.org with copy to isabel.camarena@un.org by 17 April 2023.

2. Contact information

a) Party, Organization, or Institution:	United States of America	
b) Contact:	Name	Naimah Aziz, Head, Division of Management Authority
	Phone	
	Email	naimah_aziz@fws.gov

Traceability and supply chains of *Paubrasilia echinata*

3. Regarding traceability to register the provenance of *Paubrasilia echinata* bows:

Traceability of <i>P. echinata</i> bows	Answer or comments			
3.1. Are you aware of any traceability system in place for bows of <i>P. echinata</i> ? Tick or mark in bold whichever applies (See additional information at end of survey)	<input type="checkbox"/> No			
	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Acquired bows	<input checked="" type="checkbox"/> Owners <input checked="" type="checkbox"/> Musicians <input checked="" type="checkbox"/> Manufacturers	SISCITES DOF System Pau-Brasil Platform
		<input checked="" type="checkbox"/> Produced bows	<input checked="" type="checkbox"/> Owners <input checked="" type="checkbox"/> Musicians <input checked="" type="checkbox"/> Manufacturers	SISCITES DOF System Pau-Brasil Platform
		<input checked="" type="checkbox"/> Transported bows	<input checked="" type="checkbox"/> Owners <input checked="" type="checkbox"/> Musicians <input checked="" type="checkbox"/> Manufacturers	SISCITES DOF System Pau-Brasil Platform
3.2. Are you aware of any other traceability system for musical instrument accessories or musical instruments parts? If so, please provide some details.	<p>Please note: Our response should not be taken as an endorsement of these devices but rather, we are providing information on their existence.</p> <p>There are commercial GPS tracking devices and services that are available to track and monitor movement of musical instruments, accessories, and parts for traveling musicians and orchestras (e.g., Tempo (https://www.musicarts.com/tempo-gps-tracking-system-for-instruments-and-gear-main0117909),</p> <p>Geo-TraxMicro (https://easytracgps.com/other-assets-equipment/guitar-gps-tracking/). There are online registry services for musical instruments (e.g. PlayChecked (https://www.playchecked.com/), Immobilize in the U.S. (https://www.immobilize.net/) and in UK-(https://www.immobilise.com/)).</p> <p>IBAMA (Brazilian federal environmental agency) has the following platforms to control the production and commercialization of wood in Brazil:</p> <p>System for issuing Cites and non-Cites licenses (Siscites). It consists of two modules: one external and one internal. Using the external module, the user will request the license. IBAMA has exclusive access to the internal</p>			

Traceability of <i>P. echinata</i> bows	Answer or comments
	<p>module for analyzing requests and issuing licenses. https://www.gov.br/ibama/pt-br/servicos/sistemas/siscites</p> <p>DOF+ Traceability System is the tool for issuing, managing and monitoring the Forestry Origin Document (DOF), a mandatory license for transporting and storing forest products from native species in Brazil. Public consultations can be carried out on IBAMA's open database.</p> <p>DOF - Transportes de Produtos Florestais - Conjunto de dados - IBAMA</p> <p>PAU-BRASIL platform, which is being used to issue licenses for the export of biodiversity products and by-products. This platform is integrated with the Brazilian foreign trade system, including native species that are included in the CITES Appendices. The system is not publicly accessible.</p> <p>https://login.sso2.ibama.gov.br/cas/login?service=https%3A%2F%2Fpaubrasil.ibama.gov.br%2Flogin%2Fcas</p> <p>IBAMA also opens its fines and embargoes database for public use, where it is possible to verify parties involved in the illegal extraction and commercialization of <i>Paubrasilia echinata</i> wood.</p> <p>https://servicos.ibama.gov.br/ctf/publico/areasembargadas/ConsultaPublicaAreasEmbargadas.php</p>
<p>3.3. Are you aware of any recent developments on the marking of bows of <i>Paubrasilia echinata</i>? If so, please specify.</p>	<p>Certain bow makers install a microchip in the bow (e.g., https://michaelvann.com/contents/en-ca/d2066504611_Microchip-solution.html).</p>
<p>3.4. According to you, what are the key elements of a traceability system for pernambuco bows?</p>	<p>Traceability systems should provide accurate, timely, and consistent information about the movement of the items tracked throughout the process.</p> <p>More rigid registration and control of purchase and manufacture using parts of <i>P. echinata</i> wood.</p> <p>Logging permits only in public forests under concessions (controlled origin)</p>
<p>3.5. Please provide any other information you consider relevant to the traceability of bows and other specimens of <i>Paubrasilia echinata</i>.</p>	<p>See above</p>
<p>3.6. Please provide any information relating to the existence and status of plantations of <i>Paubrasilia echinata</i> that could be considered source code A or Y.</p>	<p>In 2018-2019, Charles Espey visited eight plantations in Espírito Santo, Brazil, which he describes in his report “Paubrasilia echinata plantations in Espírito Santo.” According to Mr. Espey, in 2019, one of the plantations received authorization from IBAMA to cut and mill ten trees from the plantation. We are providing the enclosed report on behalf of Mr. Espey, a U.S. citizen and bow maker. Note: providing this report does not constitute our endorsement of its findings.</p> <p>Since 2000, the International Pernambuco Conservation Initiative (IPCI) has planted over 800,000 nursery-grown Brazilwood trees in the Mata Atlântica, and is collaborating with the Federal University of Southern Bahia's Center for Agroforestry Sciences on several projects. IPCI is also working with local groups, Instituto Floresta Viva in Bahia and Associação Plantas do Nordeste,</p>

Traceability of <i>P. echinata</i> bows	Answer or comments
	in Northeastern Brazil in planting nursery-grown Brazilwood trees and monitoring trees.
3.7. List of attachments or relevant links. List here any attachments and links you will provide as a complement to this section.	The report “Paubrasilia echinata plantations in Espirito Santo” by Charles Espey (charlesespey@gmail.com). International Pernambuco Conservation Initiative USA (http://www.ipci-usa.org/)

Enforcement

4. Please provide information on recent developments regarding *Paubrasilia echinata* for the following aspects:

Enforcement	Answer or comments
4.1. National enforcement actions:	<p>In the last two years (2021 and 2022) IBAMA and the Brazilian Federal Police have carried out operations to combat the illegal exploitation and trade in <i>P. echinata</i> wood in the region of the Atlantic Rainforest. Below a summary of the two inspection operations:</p> <p>(i) The “Dó, Ré, Mi” operation was carried out in Espírito Santo, Minas Gerais and São Paulo (Southeast Brazil). Twelve notices of infraction were applied and the fines totaled R\$9.7 million. More than 20,000 violin bows made from wood from endangered species were seized by agents of the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA).</p> <p>(ii) Operation “Ibirapitinga” (phases I and II): This police operation investigated a criminal group with international ramifications, which had been operating in the states of Espírito Santo, Rio de Janeiro, Bahia and Alagoas and specialized in the illegal exploitation of endangered species of Brazilian flora, in particular, <i>P. echinata</i></p> <p>https://www.gov.br/pf/pt-br/assuntos/noticias/2022/11/policia-federal-e-ibama-deflagram-a-operacao-ibirapitanga-ii</p>
4.2. International enforcement actions:	See above
4.3. Illegal trade (e.g. seizures):	See above
4.5. Other relevant information relating to enforcement:	<p>Investigative journalism websites and blogs are giving space for denouncing the trafficking of violin bows.</p> <p>https://piaui.folha.uol.com.br/como-o-pau-brasil-arvore-ameacada-de-extincao-e-simbolo-nacional-acaba-em-arcos-de-violino-na-europa/</p> <p>Operation Dó-Ré-Mi: The Brazilian Bow Makers Under Investigation For Dealing in Endangered Wood - OCCRP</p>

Stockpiles

5. Please provide any information relevant to the registration of stockpiles of *Paubrasilia echinata*, as follows:

Registration of stockpiles	Answer or comments	
5.1. Are you aware of any stockpile registration system for specimens of <i>P. echinata</i> ?	<input checked="" type="checkbox"/> No/Unknown	
	<input type="checkbox"/> Yes. Please elaborate:	
5.2. Additional information relevant to the implementation of Decision 19.251		

Capacity building

6. Please provide a list of the most urgent capacity building needs to support implementation of the listing of *Paubrasilia echinata* in Appendix II, as follows:

Capacity building need list	Comments or justification
1) Wood anatomical identification	Training of inspection agents in the anatomical identification of wood to be more effective in control actions.
2) equip and train laboratories with stable isotope techniques, and/or mass spectrometry analyzes and genetic identification	These techniques have been shown to be efficient in identifying the wood origin.
3) Non-detriment findings	Making of non-detriments findings for the export of specimens from Brazil.
4) Artificially propagated specimens	Applicability of Resolution Conf. 11.11 and determination if any plantations of Brazilwood are producing specimens for export.
...add rows as needed	

Decisions 19.249 to 19.253

7. Please provide any additional information relevant to the implementation of Decisions 19.249 to 19.253 on Brazil wood (*Paubrasilia echinata*).

Supplemental information

- 3.1. Are you aware of any traceability system in place for bows of *P. echinata*?

US response: With Law No. 8 (Normative Instruction, March 25, 2022), the Brazilian agency IBAMA (Brazilian Institute for the Environment and Renewable Natural Resource) has implemented an online database to report and track wood and wood products of Brazilwood for the issuance of official documents, including CITES export permits and Document of Forest Origin (DOF). The new electronic system and law provide Government officials the ability to track and enforce all commercial transactions in the chain of custody of Brazilwood, from the authorized harvest site to the port of export in real time.

PAUBRASILIA ECHINATA PLANTATIONS IN ESPIRITO SANTO
Charles Espey



A pure stand of *Paubrasilia echinata* planted in the mid 1980s at Ascuá. 2018 photo.

Starting in the late 1980s an enclave of Brazilian violin bow makers in Espírito Santo State created a number of Pau-brasil (*Paubrasilia echinata*) plantations, several of which are producing seedlings for distribution and actively planting trees today. Deforestation of the Atlantic Forest in the state has reduced the pockets of specifically Pau-brasil habitat to several small fragments of ‘capoeira’ or second growth woodland. These locations are neither specifically protected nor recognized. The giant pulp mill, Aracruz Cellulose was responsible for clearing most of this habitat in order to plant Eucalyptus beginning in the 1980s. In the remaining forest fragments, even if no mature Pau-brasil trees are present, stumps invariably send out suckers one or two of which can exceed the girth of the original tree. In addition where a flowering tree was present, numerous seedlings and saplings can be found. As a result, even if the mature trees were cut illicitly, there is usually plenty of regeneration as long as the area is not burned and converted to pasture as is most often the case.

However because of the extremely limited scope of this habitat, plantations created by Brazilian bow makers contain the overwhelming majority of the genetic diversity of the *Paubrasilia echinata* variety endemic to the region. Because the proposed CITES listing would financially ruin the owners of these plantations and make it impossible for them to continue their trade, there is a real concern that the various farms planted with Pau-brasil will be sold off and effectively cleared for agricultural purposes sooner or later. This tragic loss would be a Pyrrhic victory for conservation since, effectively in this case, there are no mature trees to protect from logging in the region. All

trees of over 20cm in diameter are on plantations. Maintaining *P. echinata* in its natural state requires habitat that no longer exists in Espírito Santo. It is difficult to convey the amount of time and care necessary to raise even one seedling to the point where it can flourish on its own. Realistically the bowmaker owners are the only people with the knowledge and financial commitment to hire farmhands to maintain these stands, collect seed and continue producing seedlings. In addition it



Eucalyptus on *Paubrasilia echinata* habitat. 2003.

was demonstrated in 2019 by Floriano Schaeffer that these trees of 18 to 24 years of age and measuring as little as 15cm diameter are perfectly adequate for making the student level bows that represent 95% of Brazilian bow production.

The Brazilian CITES proposal ignores or refutes many of the conditions noted in the preceding paragraphs. The owners of plantations have made numerous attempts to register and inventory their plantings over the years but the authorities (IBAMA) have not made the effort to establish protocols for Pau-brasil plantations or help them in any way. The purpose of this paper is not to discuss the use of illegal wood by some makers of bows nor the fact that most makers use wood that is carefully documented with IBAMA permits.

IBAMA is an enforcement agency without the resources to promote Pau-brasil's conservation and

the author has not identified any regional government or non-profit organizations promoting the species either. The author's concern here is simply to document every significant plantation of Pau-brasil in Espírito Santo. With the exception of one site, the author has visited and photographed every plantation and observed planting procedures starting in 2001. Most of this information was collected in 2018 and 2019. Because of the lack of forewarning, there has not been time to count the exact number of trees on these plantations or measure the number of hectares planted. As a result some of these estimates will not be accurate and the the reader will have to interpolate the importance of these stands with the help of the photographs. The important thing is that these plantations exist. This data will be updated as inventories are conducted. The precise location of these plantations and forest fragments is not disclosed here but is available to researchers.



Floriano Schaeffer on his plantation. Guarana, ES. 2018

ROÇA SCHAEFFER, Guarana, ES.

The bowmaker, Floriano Schaeffer developed his interest in botany as a boy assisting the botanist Augusto Ruschi in Santa Teresa. He has an expert knowledge of Atlantic Forest flora. This small farm surrounded by the Eucalyptus plantations supplying the Aracruz Cellulose pulp-mill was acquired by Floriano Schaeffer in 1995 and he began raising seedlings and initially planted pau-brasil in a matrix of other crops such as coffee and papaya. Soon he moved to planting two areas; one mixed with other forest species and the other



Schaeffer's *P. echinata* seedling production in 2003.



Shaeffer's original *P. echinata* plantings in 2003.

in a monoculture. These plantings represent an estimated 7,000 Pau-brasil trees over an area of 7.5 hectares. The author noted Schaeffer's shade houses in 2001 where he was propagating approximately 50,000 seedling per year. Most of these seedlings were distributed for free or provided to the Aracruz Cellulose pulp-mill to plant in watersheds where Eucalyptus could not be planted. By estimate, Floriano Schaeffer has distributed over half a million pau-brasil seedlings.



Preparation for *P. echinata* seedlings in 2018.



Farm workers planting Pau-brasil on Schaeffer's farm. 20018

MARCO RAPOSO

The bow maker Marco Raposo is established in the hill town of Domingos Martins, ES. and he started his mountainside plantation in the year 2000. His trees are up to 20cm. He maintains a large propagation facility at another location where he raises pau-brasil seedlings as well as seedlings of other native species.



Marco Raposo on his Pau-brasil plantation. 2018



Raposo's *P. echinata* seedling production. 2018

RENATO CASARA

The bowmaker Renato Casara began his plantation in about 1998 near the village of Dimitrio Ribeiro, ES. His initial plantings are now up to 25cm in diameter. An area planted in the recent years goes up a hillside and has saplings of up to 1.5 meters in height. He keeps a moderate sized shade house to produce seedlings.



Renato Casara on his *P. echinata* plantation. 2018.



Renato Casara's shade house with *P. echinata* seedlings. 2018

JACUPEMBA

This plantation was planted by Floriano Schaeffer for a landowner near the town of Jacupemba about ten years ago. It features a regional variety of *P. echinata* from Bahia, 'folia d'arruda'. The trees, which number in the hundreds are up to 7cm in diameter.



Pau-brasil plantation near Jacupemba, ES. 2018



Floriano Schaeffer with Bahian variety of *P. echinata*, 'folia d'arruda'. 2018

ASCUA

This remarkable stand of Pau-brasil trees was planted in the late 1980ies on a private ranch by Florianio Schaeffer. Instead of using seedlings propagated from seed, seedlings were dug up in forest fragments prior to clearing and transplanted in the site as a monoculture. This location may be the most important remnant of the Espirito Santo variety's genetic diversity. The trees here are up to 20cm and those of at least 15cm number in the hundreds covering about one hectare. More recently germinated seedlings and saplings number in the thousands.



Ascua, refuge of *Paubrasilia echinata* diversity. 2018

JOSE BOTTONI

The bowmaker Jose Bottoni has a small plantation of Pau-brasil on his farm near Jacupemba ES. His trees are up to 20cm in diameter.



Jose Bottoni on his plantation of *P. echinata*. 2018

TINTORI

The bowmaker Alexandre Tintori started a plantation on his family's farm in the hills above João Neiva in 2019. To date he has planted approximately 1000 seedlings some of which are now 2 meters in height.



Tintori on his Pau-brasil plantation

HORST JOHN (Jaci Souza)

Horst John operated a small sawmill and bowmaking workshop starting in the late 1970s. Shortly afterwards he purchased property and created a plantation near Santa rosa, ES. which is still in existence. The author has not seen it. It is reported to have 3,000 Pau-brasil trees. In addition, a compound of about one hectare at his workshop in Guarana, ES. was planted in 1987. An estimated 100 Paubrasilia echinata trees are growing there, some as much as 30 cm in diameter. The bowmaker Jaci Souza who inherited the Horst John business currently maintains this property and continues planting.

FAZENDA ANDRE

This cocoa farmer has a small plantation of Pau-brazil up to 20cm in diameter.



The town of GUARANA.

From seedlings distributed mostly by Floriano Schaeffer since the 1980s, Pau-brasil is a very common tree found in people's gardens throughout the town and also in the city of Aracruz. Pau-brasil is valued as an ornamental on account of its attractive foliage and bright yellow flowers. These trees can be up to 40cm in diameter.



FOREST FRAGMENTS

CÓRREGO D'AGUA

This forest fragment was selectively logged over the years but was originally ideal pau-brasil habitat. In recent years additional seedlings were transplanted into the area by Floriano Schaeffer.



Pau-brasil sapling at Corrego D'agua. 2018



Paubrasilia echinata. Corrego D'agua, ES. 2018

FAZENDA LIMAO

This forest fragment was originally adjacent to a lemon orchard. Although selectively logged and encroached upon by coffee plantations, it shows extensive regeneration of pau-brasil.



Young *Paubrasilia echinata* at Fazenda Limao. 2018.



Flavio Schaeffer with *P. echinata* sapling at Fazenda Limao. 2018

POSTSCRIPT

It should be recognized here that currently the illegal cutting of Pau-brasil is occurring in the state of Bahia where some habitat remains for the time being. Large scale propagation and planting is also occurring however the author has not been in the area for some years so reporting on that work can come from the IPCI and other organizations active in Bahia. The author's concern is that placing *Paubrasilia echinata* on CITES appendix One will barely address the problem of sustaining *Paubrasilia echinata's* diversity while putting out of business the very people who have been planting trees. The author urges the delegates to postpone this decision.

ABOUT THE AUTHOR

Charles Espey studied violin bow making in Paris and in 1983 made the first of several extended trips to Brazil where he purchased pau-brasil wood to last his career; (about 2 cubic meters which was documented as pre-convention in 2007). At that time he met Floriano Schaeffer who introduced him to the incredible diversity of the Atlantic Forest. In 2001-03 he spent many months in Bahia working on the development of a major *Paubrasilia echinata* conservation project; a partnership between the Brazilian agricultural research institute, CEPLAC, and the IPCI, a bow maker's conservation initiative. In 2018-19 he spent several months in Brazil visiting plantations and helping plant and propagate trees. A personal project to expand the scope of seed collection was interrupted by the pandemic. Any requests for information are welcome. charlesespey@gmail.com

Questionnaire on Brazil wood (*Paubrasilia echinata*)

1. Please complete and submit this questionnaire to the Secretariat at info@cites.org with copy to isabel.camarena@un.org by 17 April 2023.
2. Contact information

a) Party, Organization, or Institution:	Bundesinnungsverband (Federal Guild Association), Head of Bowmaking Section	
b) Contact:	Name	Josef Gabriel
	Phone	+49 9131 990994
	Email	gabriel@bowmaker.info

Traceability and supply chains of *Paubrasilia echinata*

3. Regarding traceability to register the provenance of *Paubrasilia echinata* bows:

Traceability of <i>P. echinata</i> bows	Answer or comments		
3.1. Are you aware of any traceability system in place for bows of <i>P. echinata</i> ? Tick or mark in bold whichever applies	<input checked="" type="checkbox"/> No		
	<input type="checkbox"/> Yes	<input type="checkbox"/> Acquired bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers
		<input type="checkbox"/> Produced bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers
	<input type="checkbox"/> Transported bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers	
3.2. Are you aware of any other traceability system for musical instrument accessories or musical instruments parts? If so, please provide some details.	No, I am not aware of any such traceability system for other musical instruments. Some manufacturers mark their instruments with labels for internal identification. However, these are not intended as a control system. For example, most pianos and many guitars are labelled. Ibanez guitars, for example, have a serial number which can be used online to find out the place of manufacture, year of manufacture and production number, see the following link. https://legendary-guitars.com/de/ibanez-seriennummern-so-bestimmst-du-alter-und-herkunft-deiner-ibanez-gitarre/		
3.3. Are you aware of any recent developments on the marking of bows of <i>Paubrasilia echinata</i> ? If so, please specify.	I am not aware of any recent developments on the marking of bows. Bows have been marked for a long time (at least 30 years) by some manufacturers with identifiers (numbers/character combinations). Marking is done with branding stamps, engraving machines and/or lasers. Only the manufacturers have databases to use these markings. There is no superior, official authority for inspections. I myself have stored the following information in a database for each sheet: Bow number, bow type (for violin, viola or cello), which bow model, the most important dimensions, from which piece of wood (tree number) and physical properties (bending stiffness, modulus of elasticity, sound travel time, specific weight). I created this database to be able to draw conclusions about the influence of the parameters on the properties of the bows based on feedback from the musicians.		

Traceability of <i>P. echinata</i> bows	Answer or comments
<p>3.4. According to you, what are the key elements of a traceability system for pernambuco bows?</p>	<p>In my view, the following requirements are necessary to prevent the use of illegal wood.</p> <ol style="list-style-type: none"> 1. Pernambuco wood stocks must be recorded so that the material consumption of the bow manufacturers can be tracked. The best way to do this is to record the number of sticks. Volume or mass of wood are not suitable because there is a lot of scrap or off-cuts in the raw material, which could be unlawfully replaced by high quality illegal wood. I know that the pernambuco wood stocks of the Brazilian bow makers are recorded by number of pieces and each stick is individually numbered. However, the raw sticks are processed (planed, filed, etc.). As a result, these numbers are not preserved and after processing it is no longer possible to determine whether it is the same piece of wood. For a unique identification, physical or optical characteristics would have to be determined for each stick, a kind of "fingerprint". In my opinion, this is currently only possible with a very large technical effort, and is not feasible in practice due to the large number of pieces of wood. On the other hand, it is easy to control the stock of the pernambuco wood by the number of bows made, which corresponds to the number of pernambuco sticks used. 2. The system for registering each newly built bow must be absolutely unambiguous. This means that there must be exactly one bow for each registration entry. A simple material declaration with a registered marking in the bow (engraving/laser/fire stamp) is not sufficient for this purpose, because one marking could be used for several bows with a similar appearance. Thus, it would be possible to put bows made of illegally acquired wood on the market by using the same marking several times without it being noticed. It would not be possible to distinguish whether the wood is legal or illegal. Therefore, the system must ensure a unique identification and must be managed and controlled by an independent organization.
<p>3.5. Please provide any other information you consider relevant to the traceability of bows and other specimens of <i>Paubrasilia echinata</i>.</p>	<p>The bow passport of the German Bundesinnungsverbands.</p> <p>For the Bundesinnungsverbands I have designed a bow passport, which allows to identify the bow, as well as to document the used material while being easy to realize. The letter paper for this bow passport is provided by the Bundesinnungsverband. It carries an embossing of the Bundesinnungsverband with its logo. The letter papers are pre-numbered and belong to the sheet like a vehicle registration document to a car. The pre-printed number on the bow pass serves as proof of material consumption. Each bow maker prints out the bow passport himself on the provided letter paper. It contains: Manufacturer, bow type, bow number, lists all materials used at the time of creation, photos of the head, frog and bow number, and information on materials affected by CITES. Since the bow passport letterhead is issued by a central office and is unique due to the unique numbering, it can only be used as proof of a single bow. Attached is a scan of the bow pass from the Bundesinnungsverband for illustration purposes. Look attachment 01.</p>
<p>3.6. Please provide any information relating to the existence and status of plantations of <i>Paubrasilia echinata</i> that could be considered source code A or Y.</p>	<p>Besides the well-known larger projects, I ran a planting project with European and Brazilian colleagues. You can see a report 2016 in the attached for information. Look attachment 02.</p>

Traceability of <i>P. echinata</i> bows	Answer or comments
3.7. List of attachments or relevant links. List here any attachments and links you will provide as a complement to this section.	

Enforcement

4. Please provide information on recent developments regarding *Paubrasilia echinata* for the following aspects:

Enforcement	Answer or comments
4.1. National enforcement actions:	
4.2. International enforcement actions:	
4.3. Illegal trade (e.g. seizures):	
4.5. Other relevant information relating to enforcement:	

Stockpiles

5. Please provide any information relevant to the registration of stockpiles of *Paubrasilia echinata*, as follows:

Registration of stockpiles	Answer or comments	
5.1. Are you aware of any stockpile registration system for specimens of <i>P. echinata</i> ?	<input type="checkbox"/> No/Unknown	
	<input checked="" type="checkbox"/> Yes. Please elaborate:	The companies have reported their pernambuco inventory to the Federal Environment Agency and registered it. In the appendix, a survey that was carried out by the Federal Guild Association on the stock of goods in the companies. Look attachment 03.
5.2. Additional information relevant to the implementation of Decision 19.251		

Capacity building

6. Please provide a list of the most urgent capacity building needs to support implementation of the listing of *Paubrasilia echinata* in Appendix II, as follows:

Capacity building need list	Comments or justification
1)	
2)	
3)	
...add rows as needed	

Decisions 19.249 to 19.253

7. Please provide any additional information relevant to the implementation of Decisions 19.249 to 19.253 on Brazil wood (*Paubrasilia echinata*).

Nachweis erstellt von - **Proof created by:**
 Bogenmachermeister
 Josef P. Gabriel
 Barschenweg 7
 91056 Erlangen
 Deutschland

Bogenart - **Kind of bow:**
 Cellobogen - Cellobow

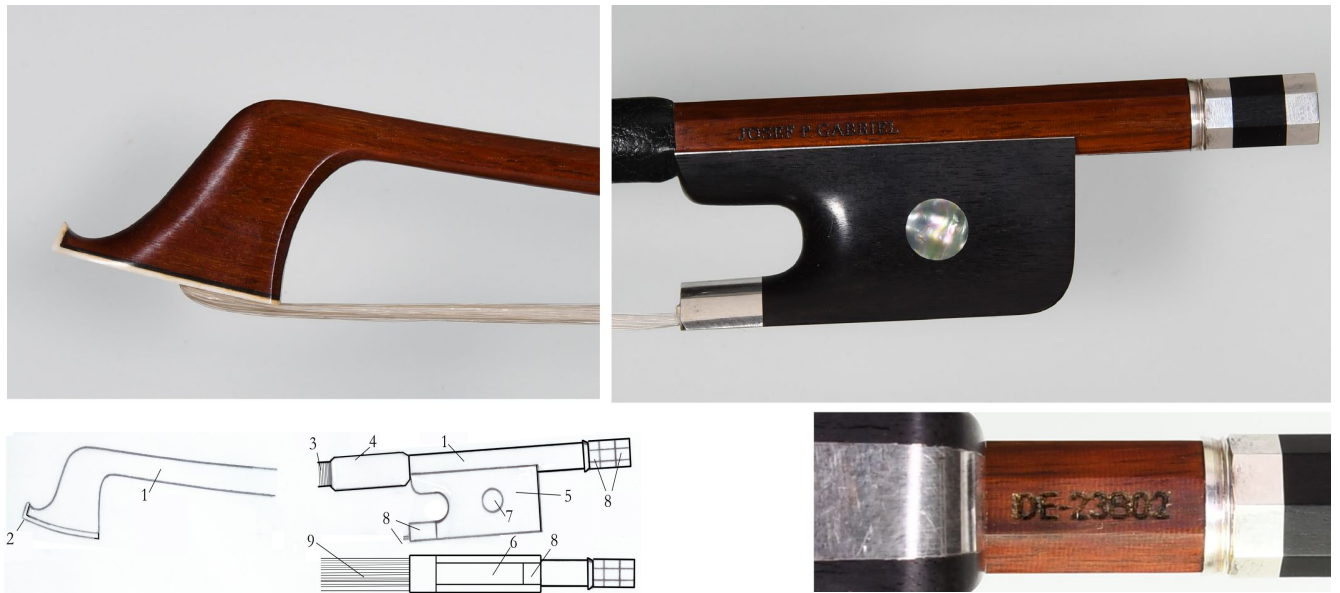
Stempel - **Brand:**
 "JOSEF P. GABRIEL"

Stangen Nr. - **Stick identification no.:**
 DE-23B02

Erlangen, 03.02.2023

Unterschrift - **Signature**

Ort und Datum - **Place and Date of issue:**



Verwendete Materialien zum Zeitpunkt der Erklärung mit Kennzeichnung von CITES erfassten Materialien.

Materials used at the time of declaration with identification of materials covered by Cites.

Pos.	Bogenbestandteile Bow component	Material - Material	CITES relevant	Anmerkung annotation
1.	Stange - Stick	Fernambuk – Pernambuco – <i>Pau brasilia echinata</i>	<input checked="" type="checkbox"/>	B #10
2.	Kopfplatte - Faceplate	Knochen – Bone – <i>Bos primigenius indicus</i>	<input type="checkbox"/>	
3.	Bewicklung - Lapping	Silber – Silver – <i>Argentum</i>	<input type="checkbox"/>	
4.	Leder - Leather	Ziegenleder – Goat leather – <i>Capra hircus hircus</i>	<input type="checkbox"/>	
5.	Frosch - Frog	Ebenholz – Ebony – <i>Diospyros crassiflora</i>	<input checked="" type="checkbox"/>	B #5
6.	Schub - Slide	Goldfisch – Awabi – <i>Haliotis gigantia</i>	<input type="checkbox"/>	
7.	Auge - Eye	Goldfisch – Awabi – <i>Haliotis gigantia</i>	<input type="checkbox"/>	
8.	Metall - Metal	Silber – Silver – <i>Argentum</i>	<input type="checkbox"/>	
9.	Haare - Hair	Pferdehaar – Domestic Horse Hair – <i>Equus ferus caballus</i>	<input type="checkbox"/>	

Erklärung zu den Anmerkungen bei den Bogenbestandteilen.

Die Erläuterungen zu den Anmerkungen sind aus der "Liste der in CITES und der VO(EG) 338/97 geschützten Baumarten", veröffentlicht vom Bundesamt für Naturschutz, entnommen.

#5 Bezeichnet Stämme oder Holzblöcke, Schnittholz und Furnierblätter

#10 Alle Teile, Erzeugnisse und Endprodukte mit Ausnahme der Wiederausfuhr von fertigen Musikinstrumenten, fertigem Musikinstrumentenzubehör und fertigen Musikinstrumententeilen.

Explanation of the annotations on the bow components.

The explanations for the annotations are taken from the "List of tree species protected in CITES and VO(EG) 338/97", published by the Federal Agency for Nature Conservation.

#5 Designates logs or wood blocks, sawn timber and veneer sheets

#10 All parts, derivatives and finished products, except re-export of finished musical instruments, finished musical instrument accessories and finished musical instrument parts.

Nachweis der legalen Herkunft von: - **Proof of legal origin of:**

Fernambuk - **Pernambuco** - *Pau brasilia echinata*

Holzregistrierung am: - **Wood registration on: 11.09.2007**, bei - **at:**
Stadt Erlangen, Amt für Umweltschutz und Energiefragen, Postfach 3106, 91051 Erlangen

Bundesinnungsverband für das Musikinstrumenten-Handwerk



Zertifikats Nr. - **Certifikats No.:**

AAA700

Dokument über die verwendeten Materialien für einen Streichbogen.
Document of the materials used for a bow.

Planting Project Report - Status April 2016

We started our Pernambuco project about a year and a half ago. For the first year, a starting fee of 1200€ was paid per share, which corresponds to an area of 2500m². The money is now used up and it is time to transfer the annual support of 400€ per share.

What happened during this time?

Already before the bow making course in Joao Neiva I had talked with Renato and Floriano about the possibility of a planting project. In the meantime, I was already a bit nervous, because the start was very slow. In the meantime, however, Ibama had inspected the planned cultivation areas at Renato's and determined which areas must be protected and which areas may be used for the planned cultivation. In order to have enough seedlings, the seeds could only be collected in October 2015. Now, after half a year, the grown seedlings can be planted. For this project phase, the experience of Floriano was very important!

Renato will plant on 2-3ha, Floriano and Antonio Caniçali on 1ha each.

Renato bought his land in 1992. It is located on a south-facing slope and at that time only grass grew there. In the meantime there is a water reservoir, well to recognize on the photo 1.1, and also 2 small ponds were put on. Vegetables and some coffee are grown there.

Much of the current tree population, mostly Lantana Camara, has grown wild, as Renato has not managed these areas. The trunks have a diameter of 8-12cm. In our country Lantana Camara is known as Wandelröschen and is kept as an ornamental plant much on terraces in tubs. However, in warm and humid areas it spreads strongly as a tree on wasteland and pastures.

The following satellite images show Renato's land and provide an overview of the land already in use and the acreage for the project.

Recording 1 Renatos land with surroundings

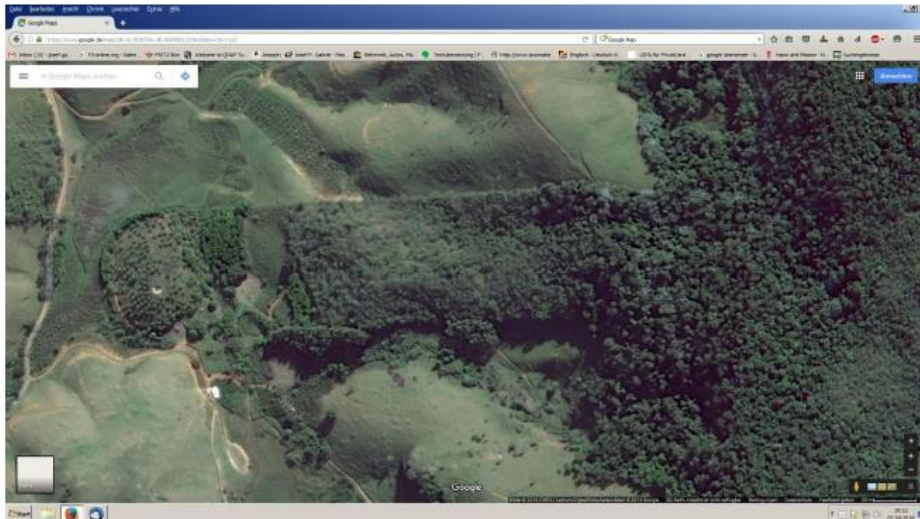
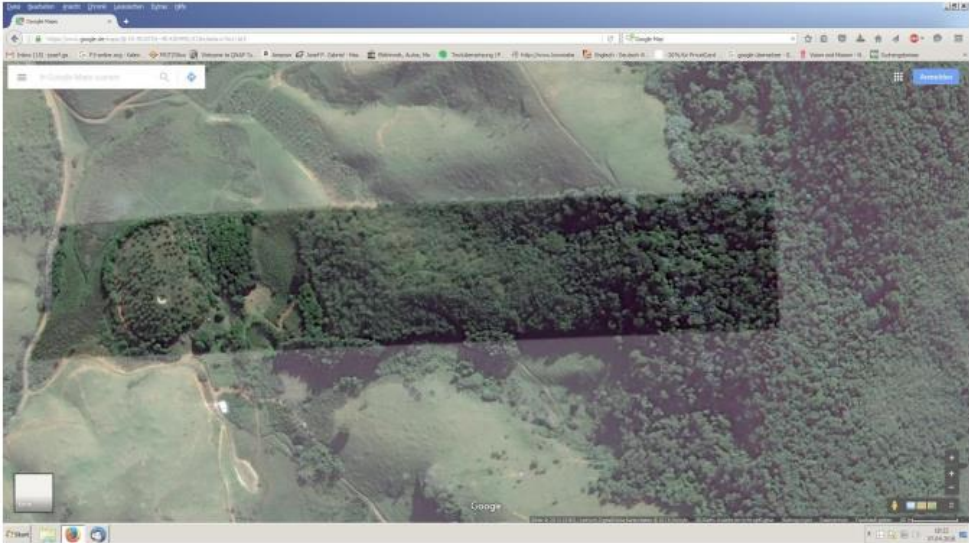
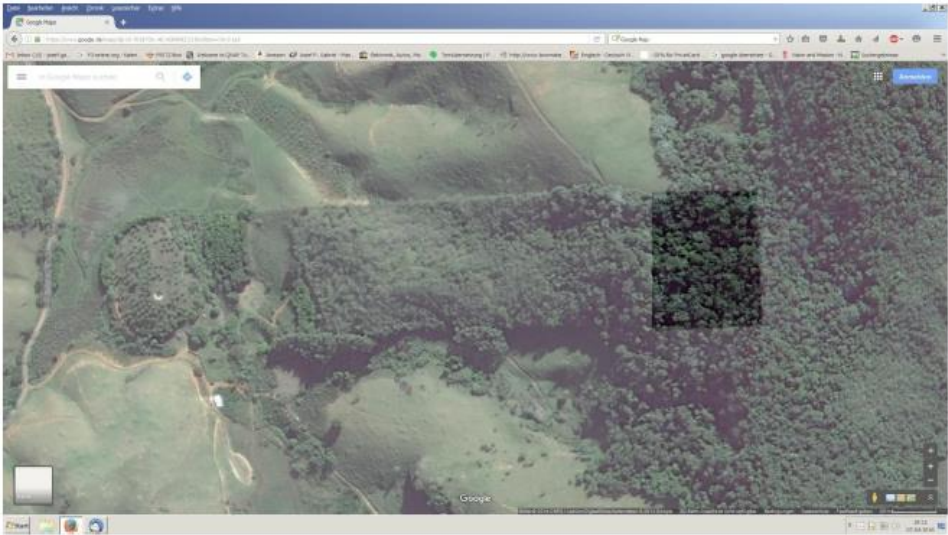


Image 1. Renato's land, highlighted.



Record 2 This area, about 10% of the total area, is registered and protected may not be farmed commercially.



Recording 3 Same is the small stream and protected on both sides up to 10m

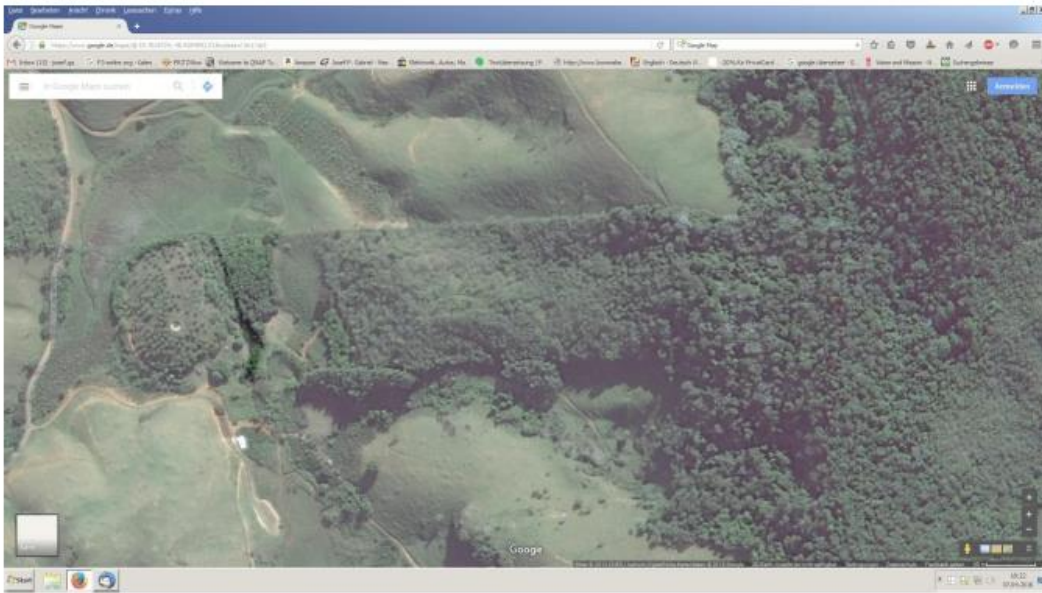


Photo 4 About 380 trees were planted here in 1998

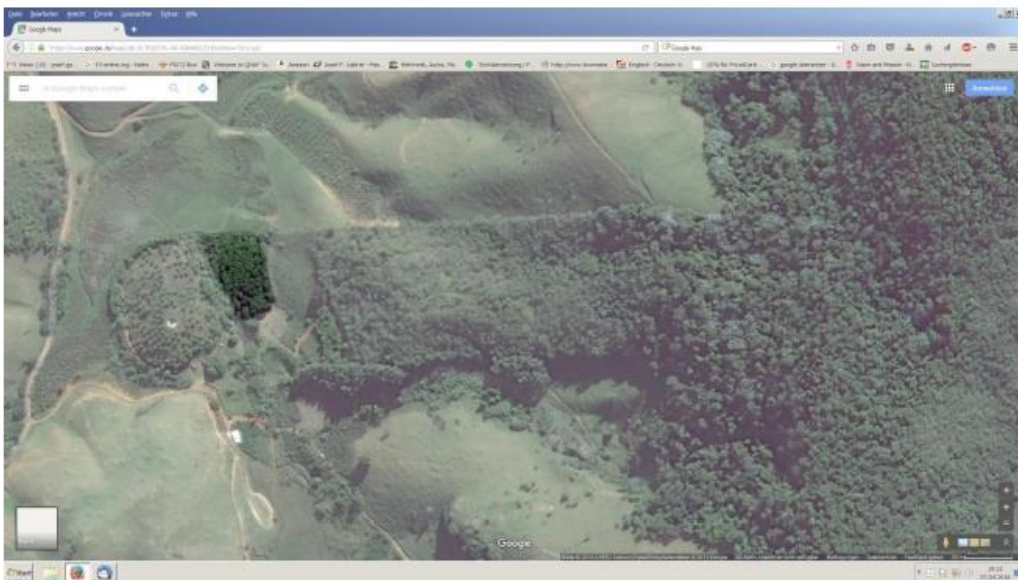
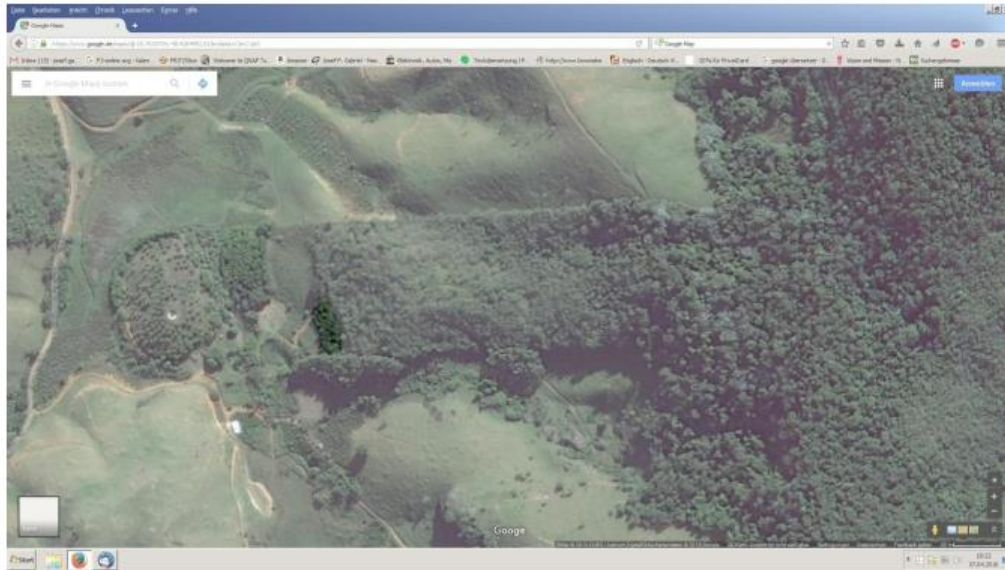


Photo 5 About 180 trees were planted here in 2002



Record 6 These 2 ha are earmarked for the project and can now be planted The existing trees, Lantana Camara, will be kept and our seedlings will be planted between them, removing the grass that is growing wild beforehand. In this way, these trees will serve as shade, an important condition for the seedlings to grow straight, as this is how they strive towards the light! The forester Senvil will take care of the necessary registration of the plants and issue the required official papers for Ibama.

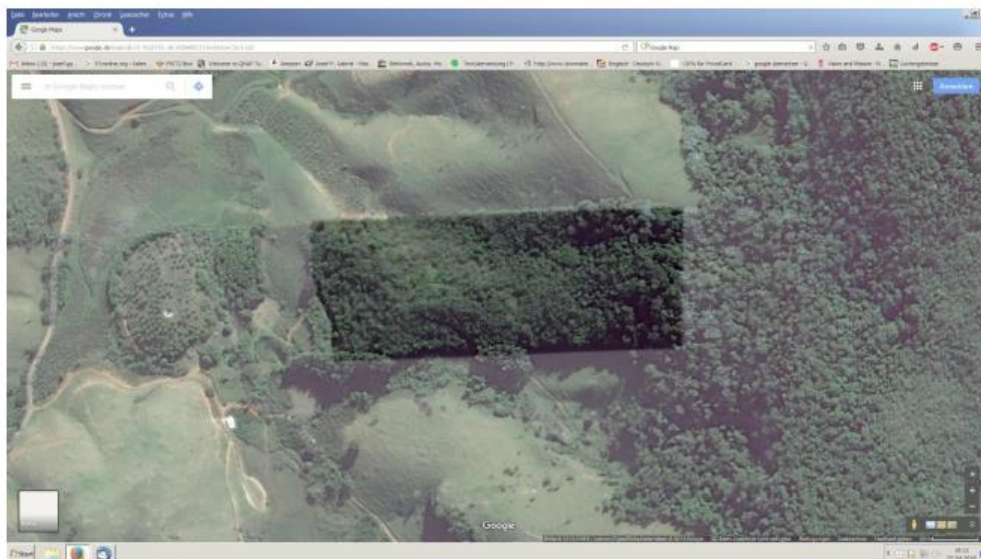
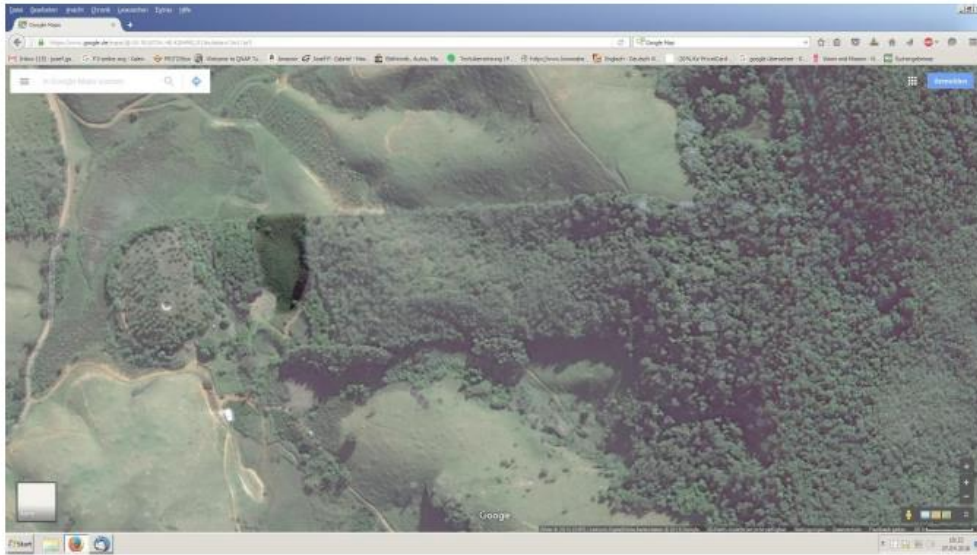


Image 7 Additionalcultivation area of 1 ha to be used for the project. Coffee was previously grown there.



The old coffee-growing area will be cleared for the planting project.



*Floriano's seedlings are
planting*



delivered Employees of Antonio Caniçali during



Lantana Camara with grass cover on Renato's land where seedlings will be planted.

What's next?

After planting, the seedlings must be checked daily for the next 3-6 years to prevent ants from destroying everything. Renato will hire and pay someone for this task.

In 2014, I selected pernambuco rods in Brazil and these rods have since been legally imported last year. They are numbered by me, photographed and technical data such as Lucchi, Young's modulus and density are determined and entered into a database. In this way, each rod is documented and its legality can be proven. From my point of view they are very good bars, they will cost about 250€ and I would like to enable the project participants to buy this wood.

Postscript

Without the support of Renato and his family, the project would not be possible. The fact that the Casara family, in addition to the management, organization and support of the Instituto Preservate, also look after our planting project is a great achievement, for which I would like to express my sincere thanks at this point. I know that it is not easy in Brazil at the moment and that it takes a lot of effort to collect the necessary money for the continuation of the music and violin school.



DeepL

Subscribe to DeepL Pro to translate larger documents.
 Visit www.DeepL.com/pro for more information.

Federal Guild Association for the Musical Instrument Trade													
Survey on the subject of Cities				Data Anonymized									
Name	Quantity Employees	Stock	Stock	Stock	Finished products				Annual consumption		Purchase 10 years	Demand 10 years	
		Bar blank	Boards kg	Logs kg	Violin	Viola	Cello	Double bass	Rods	kg	Pcs / kg	pcs/kg	
1	1	100	200		0	0	2	1	50		250kg	250kg	
2	4					1	2	4	6				
3	2	980	2800		5	3	1	1		80			
4	1	630	380	50	6	1	3	1		40	100kg	300kg	
5	4	11022	5115						115		539 pcs.		
6	60	43833			1044	127	427	36	2174		5506 pcs.	80000 pcs.	
7	1	6921	5615		150	70	70	12	30				
8	1	25		4	4				24		30 pcs.	50 pcs.	
9	4	3985											
10	5	4			80	20	100	4	66		450 pcs.	500 pcs.	
11	1	17500	11155		20	10	10		180				
12	3	300			99	29	96	3					
13	28	20000	986	54						500	500 pcs	2000pcs.	
14	1	75	3		2				10		150 pcs.	50 pcs.	
15	1	120	2		5	2	4		8		150 pcs.	80 pcs.	
16	1	1240	1233							15			
17	5	9020	329		34	18	24	2	150		645 pcs.	500 pcs.	
18	36	222000			50	12	25	20	7350		5944 pcs.	50000 pcs.	
19	1	1500	900		20	10	10	5	20				
20	3	750	49		3		2		12				
21	2		1500		15	2	7	8	70				
22	3				1	1	1	2		70		700kg	
23	2		3025		28	19	21	17		30			
24	4	300			67	14	35	2	15	150		150 kg	
25	8				113	44	65	7	450		4500 pcs.	5000 pcs.	
26	3		293	761	2505			2	1	2	1	12	50 pcs.
27	1	1500			4	3	4		20				
28	10	22000		1100			400		1000				
29	1	80	800		5	4	6	1	20				
30	1	4000	655		6	5	7	3	10				
31	1	25370	304	609									
32	3	1200	2400	1600	10	7	8	5		200		2000kg	
33	2	103360			77	34	46	20	300				
34	1	80	800		5	4	6	1	20				
Total	205	498188	39012	5922	1853	442	1383	157	12101	1097	350kg/ 18464 pcs	3400kg/138180pcs.	
Status 13.07.22													
Average percentage of new construction by pernambuco: 63%.													

Questionnaire on Brazil wood (*Paubrasilia echinata*)

- Please complete and submit this questionnaire to the Secretariat at info@cites.org with copy to isabel.camarena@un.org by 17 April 2023.
- Contact information

a) Party, Organization, or Institution:	ForestBased Solutions, LLC		
b) Contact:	Name	Robert Garner	
	Phone	+1-415-902-6893	
	Email	rgarner@forestbased.com	

Traceability and supply chains of *Paubrasilia echinata*

- Regarding traceability to register the provenance of *Paubrasilia echinata* bows:

Traceability of <i>P. echinata</i> bows	Answer or comments			
3.1. Are you aware of any traceability system in place for bows of <i>P. echinata</i> ? Tick or mark in bold whichever applies	<input checked="" type="checkbox"/> No	ForestBased emphasized the need for this prior to the COP with CITES Management authorities and the trade!! We have worked on issues of trade of pau brasil and Brazilian RW for 20 years.		
	<input type="checkbox"/> Yes	<input type="checkbox"/> Acquired bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers	We can provide
		<input type="checkbox"/> Produced bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers	We can provide
		<input type="checkbox"/> Transported bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers	We can provide
3.2. Are you aware of any other traceability system for musical instrument accessories or musical instruments parts? If so, please provide some details.	Yes, ForestBased Solutions, LLC has the Forest-Source program which has been providing due diligence and traceability systems for musical instruments for 20 years. The system is multi-level traceability with the main tools digital platforms through modular data capture for inventory, processing and transporting woods used for musical instruments.			
3.3. Are you aware of any recent developments on the marking of bows of <i>Paubrasilia echinata</i> ? If so, please specify.	FBS has suggested developing an inventory management system for all pre-convention unfinished stocks outside Brazil and for finished bows. To date there has not been any new developments since the COP.			
3.4. According to you, what are the key elements of a traceability system for pernambuco bows?	<ul style="list-style-type: none"> • Inventory management • Industry Standard • Digital tools to capture individual bow makers unique codes or ids 			
3.5. Please provide any other information you consider relevant to the traceability of bows and	There needs to be a NDF on stocks in the wild. There needs to be an LAF for stocks in the wild. Moreover, there needs to be a practical system that can be used to create data management for traceability as bow makers do not always agree on what should be implemented as			

Traceability of <i>P. echinata</i> bows	Answer or comments
other specimens of <i>Paubrasilia echinata</i> .	they are in different countries and are guarded about their craft and stocks of wood. This is true in luthiery globally. They are small businesses often one person.
3.6. Please provide any information relating to the existence and status of plantations of <i>Paubrasilia echinata</i> that could be considered source code A or Y.	<p>There is the IPCI program but as I understand it, they planted a significant amount of seedlings in natural forest without any geo-location or markings.</p> <p>There are some young plantations also that could be considered A or Y.</p> <p>This is one of the issues of the management of the program. It was a good effort but did not have expert forest management people advising.</p>
3.7. List of attachments or relevant links. List here any attachments and links you will provide as a complement to this section.	www.forest-source.com

Enforcement

4. Please provide information on recent developments regarding *Paubrasilia echinata* for the following aspects:

Enforcement	Answer or comments
4.1. National enforcement actions:	
4.2. International enforcement actions:	
4.3. Illegal trade (e.g. seizures):	
4.5. Other relevant information relating to enforcement:	

Stockpiles

5. Please provide any information relevant to the registration of stockpiles of *Paubrasilia echinata*, as follows:

Registration of stockpiles	Answer or comments
5.1. Are you aware of any stockpile registration system for specimens of <i>P. echinata</i> ?	<input checked="" type="checkbox"/> No/Unknown
	<input type="checkbox"/> Yes. Please elaborate:
5.2. Additional information relevant to the implementation of Decision 19.251	As mentioned, there needs to be an investment in Brazil on NDF and LAF but moreover an investment in completing a species assessment – inventory, distribution, regeneration, silviculture. My company is willing to work on this and we have some private sector partners that are interested in funding part our work.

Capacity building

6. Please provide a list of the most urgent capacity building needs to support implementation of the listing of *Paubrasilia echinata* in Appendix II, as follows:

Capacity building need list	Comments or justification
1) Traceability System of Stocks and Finished Bows	<ul style="list-style-type: none">• 95 percent of all the wood available is outside Brazil already• There needs to be an industry standard for bows to demonstrate legal trade•
2) NDF Insitu	This should have been done with the 2007 listing and it was not
3) LAF Insitu	This should have been done with the 2007 listing and it was not
4) Species assessment	This is critical to fully understand the dynamics of the conservation and trade of the species.
<i>...add rows as needed</i>	

Decisions 19.249 to 19.253

7. Please provide any additional information relevant to the implementation of Decisions 19.249 to 19.253 on Brazil wood (*Paubrasilia echinata*).

ForestBased Solutions LLC has the knowledge and capacity to work with CITES and the private sector to develop a practical system for traceability.

The Forest-Source program is a digital traceability system that can work in all aspects of the supply chain from tree to finished product.

It is customizable through modules that can be integrated with small and large businesses.

FBS has been a pioneer in sustainable use, traceability and trade of woods for musical instruments.

It is time to make the necessary investments to address CITES II listed timber species that are actually almost commercially extinct.

Questionnaire on Brazil wood (*Paubrasiliaechinata*)

1. Please complete and submit this questionnaire to the Secretariat at info@cites.org with copy to isabel.camarena@un.org by 17 April 2023.
2. Contact information

<p>a) Party, Organization, or Institution:</p>	<p>American Federation of Violin and Bow Makers (AFVM)</p> <ul style="list-style-type: none"> • Confederation of European Music Industries (CAFIM) • Chambre Syndicale de la Factice Instrumentale (CSFI) • International Alliance of Violin and Bow Makers for Endangered Species (Alliance) • International Federation of Musicians (FIM) • International Pernambuco Conservation Initiative (France-Europe, Germany & USA) • International Society of Violin and Bow Makers (EILA) • League of American Orchestras (League) • PEARLE – Live Music Europe (PEARLE) 	
<p>b) Contact:</p>	<p>Name</p>	<p>John Bennett (AFVBM, Alliance, EILA, IPCI-USA) Michael Jousserand (CAFIM) Jacques Carbonneaux (CSFI) Benoît Machuel (FIM) Edwin Clement (IPCI France-Europe) Arthur Dubroca (IPCI France-Europe) Paul Sadka (IPCI France-Europe) Thomas Gerbeth (IPCI-Germany) Heather Noonan (League) Silke Lalvani (PEARLE)</p>
	<p>Phone</p>	<p>J. Bennett: +1 917-403-9849 M. Jousserand: +49 6119545886 J. Carbonneaux: +33 660585423 B. Machuel: +33 660 625 494 E. Clement: +33645481540 A. Dubroca: +33671639732 P. Sadka: +44 7718 213051 T. Gerbeth: +43 699 10350680 H. Noonan: +1 202-776-0215 S. Lalvani: +32 4 76 02 71 87</p>
	<p>Email</p>	<p>J. Bennett: bennettandassoc@aol.com M. Jousserand: michaeljousserand@buffetcrampson.com J. Carbonneaux: carbonneauxjacques@gmail.com B. Machuel: benoit.machuel@fim-musicians.org E. Clement: clemedwin@gmail.com A. Dubroca: latelierdathur@wanadoo.fr P. Sadka: pnsadka@gmail.com T. Gerbeth: bogenbau@gerbeth.eu H. Noonan: hnoonan@americanorchestras.org S. Lalvani: silke@pearle.eu</p>

Traceability and supply chains of *Paubrasiliaechinata*

3. Regarding traceability to register the provenance of *Paubrasiliaechinata* bows:

Traceability of <i>P. echinata</i> bows	Answer or comments			
<p>3.1. Are you aware of any traceability system in place for bows of <i>P. echinata</i>? Tick or mark in bold whichever applies</p>	<input checked="" type="checkbox"/> No	<p>We are not aware of any comprehensive international traceability system for bows. At the same time, we have also answered yes below because bow makers in various countries have been voluntarily marking and using documentation that they have developed to declare the materials contained in the bows they make.</p>		
	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Acquired bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers	
	<input type="checkbox"/> Produced bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input checked="" type="checkbox"/> Manufacturers	Signature, Stamp (Branding iron mark)	
<input type="checkbox"/> Transported bows	<input type="checkbox"/> Owners <input type="checkbox"/> Musicians <input type="checkbox"/> Manufacturers		<p>3.2. Are you aware of any other traceability system for musical instrument accessories or musical instruments parts? If so, please provide some details.</p>	<p>Yes. Some other instruments, such as guitars or woodwinds are marked with serial numbers and/or name and/or year of manufacture. Because of their size and shape, bows do not lend themselves to extensive marking beyond marks identifying their maker. Also, at present, because the practice of making unique marks on individual bows has not been often used, there is not yet a generally accepted trade standard.</p>
<p>3.3. Are you aware of any recent developments on the marking of bows of <i>Paubrasiliaechinata</i>? If so, please specify.</p>	<p>Generally, the marking of bows has not been practiced during the long history of artisanal bow making or even by the very small number of makers today that make more than 50 bows per year (most artisans make approximately 20-25 annually). A very small handful of bow makers have begun exploring unique marking options.</p>			
<p>3.4. According to you, what are the key elements of a traceability system for pernambuco bows?</p>	<p>After more than two centuries of production, millions of bows exist in trade today. The overwhelming majority of these are not accompanied by documents describing the provenance of the pernambuco they contain. In addition, only an extremely small number of top bow-making experts would potentially have the ability to identify even the approximate age of a bow.</p> <p>Moreover, marking a valuable older or antique bow would create the risk of potentially devastating impacts on the originality, value and preservation of precious artistic and cultural artifacts. It will not be practicable, therefore, to create a traceability system for already existing bows. The focus should be on newly created bows.</p> <p>When pernambuco was first placed on CITES Appendix II, a few CITES management authorities, particularly in Europe (e.g., Germany), created national registration systems to identify existing stocks of pre-Convention wood. Most CITES authorities did not take this step. Decision 19.251(b) encouraged the Parties to “consider the registration of stockpiles of <i>Paubrasilia echinata</i> as appropriate”. Some bow makers in countries with no registration system have already voluntarily created their own inventories and stock documentations. Others have done so since CoP19. It is too early to identify the key elements of a traceability system for pernambuco bows. The trade sector is diverse and predominantly comprises individual makers with their own methods and systems of</p>			

Traceability of <i>P. echinata</i> bows	Answer or comments
	<p>accounting. That said, efforts by national CITES authorities to encourage and support the voluntary registration of existing stocks according to internationally agreed standards have the potential to benefit the identification of bows produced from existing stocks. In addition, the strengthening of Brazil's permit verification system would make it possible for international buyers of pernambuco specimens to be confident that the future wood, blanks or bows entering their markets have been legally sourced. It will also be important to have broad acceptance of any system, across the music sector but also across nations.</p>
<p>3.5. Please provide any other information you consider relevant to the traceability of bows and other specimens of <i>Paubrasiliaechinata</i>.</p>	<p>The bow making trade is interested in learning more about the traceability tools that have been used for timber and other commodities. We would like to understand more about the potential for traceability to be applied to pernambuco specimens (wood, blanks and bows) first leaving Brazil. Examples exist in certain European countries of the elements of systems that may have the potential to be used internationally. In France, for example, artisanal bow makers are registered at the Chamber of Crafts or Chamber of Commerce and the bows they produce are branded with their name.</p> <p>European and US bowmakers are small artisan workshops. A more limited number of larger, industrial companies around the world may also use pernambuco, some of which is of low quality. Putting aside the need for valid CITES permits at all times, the manufacturing of inferior bows from pernambuco wood that has been cut before it is mature should never be allowed or brought to the market.</p> <p>In order to be fully effective, any voluntary system will require interest and participation from throughout the world.</p> <p>Where existing bows are concerned, music sector observer organizations have been preparing guidance to help makers, musicians and consumers take near-term voluntary steps towards documenting what might be known about the materials used in bows made prior to the February 23, 2023 implementation date of the CoP19 listing. Samples of the guidance that has been developed and distributed to bow makers musicians and consumers (one of which is in draft form) are enclosed. These documents will continue to be updated for distribution.</p> <p>The bow-making trade is currently encouraging makers to assess and document their inventories to the extent possible (see above-referenced guidance for makers). Because of the vast number of bows in existence, however, the marking and documentation of all existing bows in circulation among makers, retailers and musicians is impossible. Many owners of older valuable bows, however, have documents of authenticity provided to them by recognized experts. It may be possible for this work to be expanded and standardized to some extent, taking into account the very limited number of experts worldwide.</p>
<p>3.6. Please provide any information relating to the existence and status of plantations of <i>Paubrasiliaechinata</i> that could be considered source code A or Y.</p>	<p>For more than 20 years, the International Pernambuco Conservation Initiative (IPCI) has worked with Brazilian government authorities, scientists and NGOs to conserve pernambuco. In addition to investments in science and awareness building, IPCI has supported the replanting of approximately 340,000 pernambuco (and other) seedlings in reserves, civic areas and on privately owned farmlands using an agroforestry approach, especially with cocoa farmers using a "cabruca" system in which pernambuco provides helpful shade for crops. The existing legal framework on the national and state levels is not well understood by landowners and, it seems, needs to be strengthened and harmonized in order to ensure that plantation-grown trees can be legally harvested and sustainably used. A well-functioning and verifiable legal framework has</p>

Traceability of <i>P. echinata</i> bows	Answer or comments
	the potential to relieve the pressure on wild populations created by illegal cuttings. It would also make it possible for landowners to see the long-term economic value of planting pernambuco on their lands. Bow making requires very little wood on an annual basis. The science and other conditions exist to support the creation of a sustainable national commodity that would support bow making and music throughout the world. The music community, and instrument makers in particular, are prepared to support such an initiative.
3.7. List of attachments or relevant links. <i>List here any attachments and links you will provide as a complement to this section.</i>	AFVBM: https://afvbm.org Alliance: https://www.alliance-usa.org CAFIM: https://www.cafim.org CSFI: https://www.csfi-musique.fr EILA: https://www.eila.org FIM: www.fim-musicians.org IPCI-Germany: https://www.ipci-deutschland.org IPCI-USA: http://ipci-usa.org League: https://americanorchestras.org PEARLE: https://www.pearle.eu Traceability: a management tool for businesses and governments (FAO 2016): https://www.fao.org/publications/card/en/c/83dcd903-46ce-4612-859c-460e883e5e59/

Enforcement

4. Please provide information on recent developments regarding *Paubrasiliaechinata* for the following aspects:

Enforcement	Answer or comments
4.1. National enforcement actions:	We are aware that enforcement actions have been taken in Brazil.
4.2. International enforcement actions:	We are aware that other enforcement agencies have been cooperating with Brazilian authorities. knowledge
4.3. Illegal trade (e.g. seizures):	We have seen news reports regarding seizures of illegal pernambuco specimens.
4.5. Other relevant information relating to enforcement:	Our organizations and the bow makers and musicians we represent condemn in the strongest possible terms the Illegal harvesting of pernambuco, which poses an existential threat to the tree that gives life to stringed instrument music and, with it, our professions as they have been practiced for centuries. We support continued enforcement and the establishment of verifiable permitting that will ensure the credibility of legal pernambuco specimens in the international market. “ Into the Wood ” Symphony Online, January 6, 2023

Stockpiles

5. Please provide any information relevant to the registration of stockpiles of *Paubrasiliaechinata*, as follows:

Registration of stockpiles	Answer or comments	
5.1. Are you aware of any stockpile registration system for specimens of <i>P. echinata</i> ?	<input type="checkbox"/> No/Unknown	
	<input checked="" type="checkbox"/> Yes. Please elaborate:	In 2007, France’s Ministry of Ecological Transition began the voluntary registration of stocks of pre-Convention wood. Since then, no monitoring has

Registration of stockpiles	Answer or comments
	<p>been recommended or imposed. The status of the current stocks is unknown to the CITES management authority.</p> <p>In 2007, on the initiative of the IPCI, the quantity (sticks, boards, logs) of <i>Paubrasilia echinata</i> was recorded in Germany and Austria and reported to the CITES authorities. Since then, separate material accounting has been mandatory. In some regions of Germany, CITES officials are making repeated checks of these documents.</p> <p>In Belgium it seems that it has always been possible to declare stockpiles.</p> <p>In Italy, the registration depends on the areas or regions.</p> <p>Some European countries do not have systems for the registration of stockpiles.</p> <p>In the United States, makers were encouraged in 2007 to voluntarily document their stocks of pre-Convention wood. No formal governmental registration process was initiated.</p>
5.2. Additional information relevant to the implementation of Decision 19.251	Bow makers and musicians encourage the creation of a uniform system for registration (and recognition) of pre-Convention stocks of pernambuco wood. Such a system is essential in order to make possible the fluid, legal and sustainable use of pernambuco.

Capacity building

6. Please provide a list of the most urgent capacity building needs to support implementation of the listing of *Paubrasiliaechinata* in Appendix II, as follows:

Capacity building need list	Comments or justification
1) Registration of existing stocks of pre-Convention wood	A standard, uniform international system is needed.
2) Investigation of potential voluntary traceability system	A voluntary traceability system for post-CoP19-produced bows has potential. Makers and musicians will need to work with experts to learn more about the tools and approaches that may be best suited to the specific qualities of bows.
3) Awareness building activities	The music sector is in urgent need of support from national CITES authorities to increase awareness of CITES, CITES decisions pertaining to pernambuco, and how to be legally compliant.
Support for conservation	
4) Inventory of trees	We encourage the undertaking by the Brazilian government of an exhaustive inventory of wild pernambuco populations as well as plantation-grown trees on Brazilian soil in all states of the Atlantic coast from Sao Paulo to Recife in collaboration with Brazilian public and private organizations. IPCI and other international organizations are prepared to support such an initiative, as appropriate.
5) Protection of the Atlantic Rainforest	The survival of pernambuco will depend on regional and state-level planning that prioritizes conservation of timber resources throughout the Atlantic Rainforest. Unchecked urban and agricultural development pressures threaten to destroy what little remains of the Atlantic

	Rainforest’s globally significant forests.
Legal permitting and plantations	
6) Elimination of fraud from the permitting process	Without reliable, verifiable permits, illegal activity will continue, forests will be depleted, and international markets will struggle to recognize fraudulent documents. Bow makers and musicians want to support Brazilian enforcement efforts to the greatest extent possible and would welcome cooperation in this connection.
7) Information about illegal activities	Information about illegal activities, to the extent it can be shared, would help the music sector to fight against illegal trafficking, which is an important goal of the sector.
8) Legal framework for plantation wood.	The creation and promotion of a fully integrated (national and state), transparent legal framework for the sustainable harvesting and use of plantation-grown pernambuco holds the potential to reduce illegal cuttings, strengthen populations of pernambuco, create livelihoods and support bow making and stringed instrument music.

Decisions 19.249 to 19.253

7. Please provide any additional information relevant to the implementation of Decisions 19.249 to 19.253 on Brazil wood (*Paubrasiliaechinata*).

Bow makers and musicians are mobilized and motivated to work in cooperation with Brazilian and other environmental authorities to promote legal compliance, explore a voluntary traceability system and continue to support science and the conservation of pernambuco.

Question 2

- a) -Independent importer of *Paubrasilia echinata* bows from Brasil since 2004.
-Wholesale function: bows were sold only to violin-and bow makers in NW Europe
As sole legal importer in the Netherlands, according to CITES prop 49 data,
5th largest importer worldwide (no wood or blanks)
-Recognized by CITES NL as stakeholder, hearing took place on 8 September 2022
- b) Name: Jean de Smet
Phone: +31 113 23 26 48 (land line)
Mail: office@jeandesmet.com

I like to emphasize that this writing is strictly related to my position as an importer/wholesaler.
Therefore this writing is strictly related to new, Brazilian made bows.
Until June 2022 import consisted only of *Paubrasilia echinata* bows, as from November 2022 only
Handroanthus spp. bows (due to an export stop on *Paubrasilia echinata* by IBAMA)
These bows were and are legally imported and distributed in EU.

Please consider this writing in the perspective mentioned above.
Already existing bows, wherever they were made, "recent" or "old" making; those bows have their
specific problems and issues to be solved by other specialist organisations.

Question 3.3

One of the items presented at my hearing of 8 September at CITES NL was about transparency and
proof of legal origin.

I then introduced a system developed by Josef P. Gabriel, Master Bow Maker, Erlangen, Germany.
Mr. Gabriel kindly granted, helped and taught me how to make use of his system.

I have put it in effect since 3 November 2022.

The system consists of an inerasable engraving of the bow stick by laser and the issue of an
accompanying certificate.

Question 3.4

- non-erasable marking of the bow stick at the earliest possible moment
(in my specific and actual situation only possible at legal entry of the bow in the EU*)
- issuing a certificate which accompanies the bow stick for its lifetime.
- provide a unique match between the engraved stick number and a certificate number.
- for the certificate number investigate the cooperation with an independent "umbrella organisation"
(in my case the German based "Bundesinnungsverband für Musikinstrumentenbau")
- to avoid fraud, develop a "one certificate / one bow stick" system (similar to "one man/one vote")

*there should be a supervised/controlled match at the source between the raw-material and the
bow stick.

Question 3.5

Description of the procedure actually applied:

- at legal entry of the bows in the EU, the bow sticks are laser-engraved at a non-erasable way.
My engraving consists of a 8-digit combination of my country code + characters + numbers
(removing the engraving will lead to loss of the bow stick!)
- 3 pictures are taken, head + frog + number.

-the certificate is filled out and printed on marked paper issued by the “umbrella organisation / authority”.

The certificate contains the next information:

- the unique certificate number (as issued by the “umbrella organisation / authority”)
 - description of kind of bow
 - the unique laser engraved bow stick number
 - date and document number issued by my import carrier as proof of legal (fiscal) entry in the EU.
 - branded (name) stamp
 - space for extra remarks, for instance: size of the bow, special characteristics etc.
-
- issuing date of the certificate
 - name, address and signature of me as importer
-
- an extended material declaration
 - CITES relevant remarks, for instance; number of CITES import licences

For now: pictures and certificates are electronically filed on my computer.

The “Bundesinnungsverband für Musikinstrumentenbau” provide me the necessary imprinted paper with their logo thrown into relief. They also provide me with the certificate numbers.

The number of sheets they provide is accounted for and matches with the number of bows I import and the number of certificates I issue. On a regular basis I report the actual status.

The earlier mentioned “one certificate/one bow-stick” for me as a legal importer is easy and secure to handle

NB: As I am not a maker, I don’t have a woodstock to account for; a big advantage!

Question 3.6

It is undoubtedly known to you that since June 2022, NO *Paubrasilia echinata* bow can be exported from Brazil. To my knowledge IBAMA still does not permit legal exportation.

To my knowledge IBAMA still does not:

- permit the use of stocked *Paubrasilia echinata* wood at manufactures in order for bow-making
- allow harvesting so called “plantatation wood” for future bow making.

One of the plantations on which prof. D. Piotto (University of Bahia) is researching wood quality of plantation wood is one in the possession of my Brazilian supplier. This plantation is still blocked.

On request I can sent you a preliminary report of the work of prof. Piotto

Attached a survey of existing plantation’s in the state of Esperito Santo.

A survey by Charles Espey, a US based bow maker. He kindly permitted me to forward his survey.

Question 3.7

-A marked copy of certificate nr. AAA-327

-A survey of existing *Paubrasilia echinata* plantantions by Mr. Charles Espey

Question 7

In case IBAMA releases the export of *Paubrasilia echinata* bows, the here described system is immediatly applicable and will be applied by me.

In my opinion it meets some of the CITES requirements as published in CITES decisions 19.249-19.253

Since 3 November 2022 this system is in effect on importing and distributing Brazilian made bows of *Handroanthus spp.* (24 November 2024 CITES appendix II #17)

By the way, *Handroanthus spp.*, one of the very usable alternatives for student bows to replace *Paubrasilia echinata* in order to reserve *Paubrasilia echinata* for high end bows.

Some remarks.

I would like to draw your attention to the fact that EU regulation is more strict than CITES regulation. CITES appendix I is transferred to EU Appendix "A" meaning only "artificial multiplied material" is allowed to be used, no "natural material" is allowed.

At my knowledge, at the present there is no such "artificial multiplied material" available.

Ergo: in future, if CITES at CoP20 would decide to transfer *Paubrasilia echinata* to Appendix I, this turns the here presented system useless for importation in the EU. No matter the origin.

In my opinion a non-equal treatment in relation to non-European CITES parties.

However EU Appendix "A" allows existing *Paubrasilia echinata*, with legal proof of already being present in the EU, to be used until the woodstock is "out".

In the latter situation a supervised/controlled match between the raw material and the bows stick would be possible.

J.R.P. de Smet ,

14 April 2023 ,

NL-Goes

Nachweis erstellt von - Proof created by:

Groothandel in Strijkstokken

Jean De Smet

Mozartlaan 8

4462JS Goes

Nederland

Ort und Datum - Place and Date of issue:

Goes 12-03-2023

Zertifikats Nr. - Certifikats No.:

AAA-327

Bogenart - Kind of bow:

Violinbogen - violin bow

Stangen Nr. - Stick identification no.:

NL-AA268

Importnachweis - Import proof:

06-02-2023 3FDX-99302 625

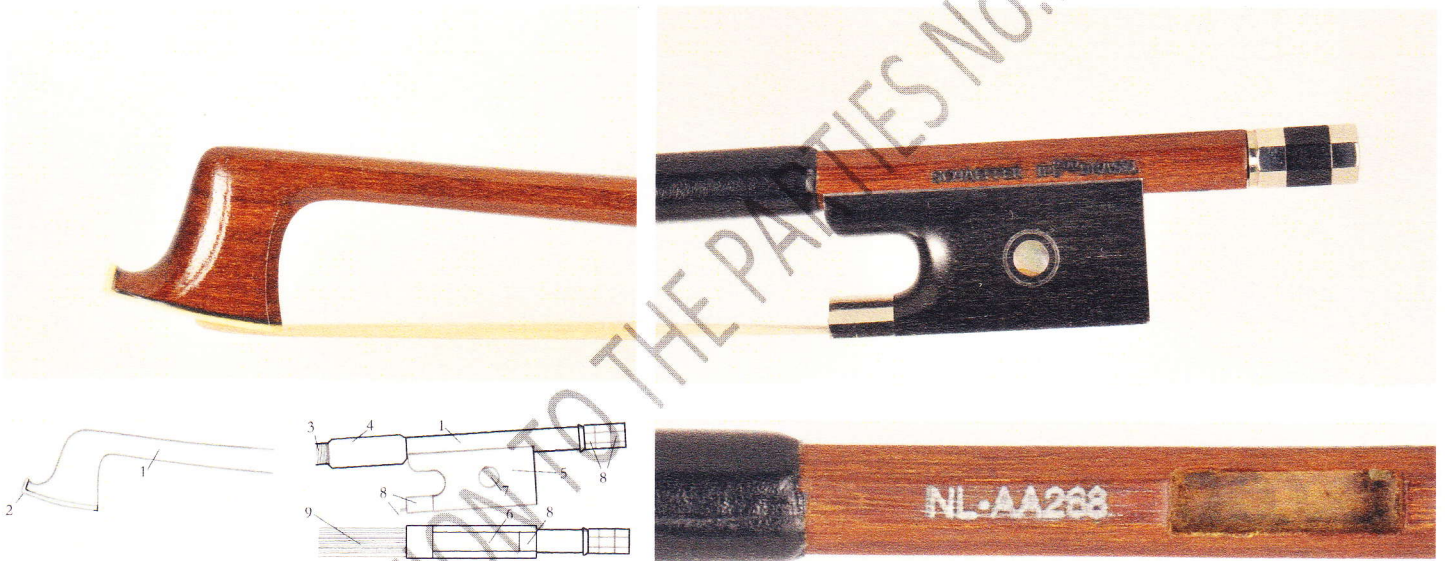
Stempel - Brand:

"SCHAEFFER IPÊ DO BRASIL"

Besonderheiten - Specifies:

keine - nothing

Unterschrift - Signature



Verwendete Materialien zum Zeitpunkt der Erklärung mit Kennzeichnung von CITES getroffenen Materialien.

Materials used at the time of declaration with identification of materials affected by Cites.

Pos	Bogenbauteil Bow component	Material Material	CITES relevant	Fußnote Footer
1.	Stange - Stick	IPÊ - IPÊ - <i>Handroanthus albus syn. Tabebuia alba.</i>	<input type="checkbox"/>	
2.	Kopfplatte - Tipplate	Knochen - Bone - <i>Bos primigenius indicus</i>	<input type="checkbox"/>	
3.	Montage - Mounting	Silber - Silver - <i>Argentum</i>	<input type="checkbox"/>	
4.	Leder - Lapping	Rindleder - Bovine leather - <i>Bos primus indicus</i>	<input type="checkbox"/>	
5.	Frosch - Frog	Ebenholz - Ebony - <i>Diaspyros crassiflora</i>	<input checked="" type="checkbox"/>	B#5
6.	Einlage - Inlay	Iris grün - Green abalone - <i>Haliotis fulgens</i>	<input type="checkbox"/>	
7.	Auge - Eye	Iris grün - Green abalone - <i>Haliotis fulgens</i>	<input type="checkbox"/>	
8.	Ring - Ring	Neusilber - Nickelsilver - <i>Argentan</i>	<input type="checkbox"/>	
9.	Haare - Hair	Pferdehaare - Domestic Horse Hair - <i>Equus ferus caballus</i>	<input type="checkbox"/>	

Nachweis der Legalität von CITES relevanten Bestandteile. Die folgenden Angaben sind den entsprechenden CITES entnommen.

Proof of legality of Cites relevant components. The following information is taken from the relevant CITES

Material	CITES Nr./ No.	Ausstellende Behörde Issuing authority	Anhang/Annex CITES / EU	Herkunft / Source	Zweck / Purpose	Ursprungsland / Country of origin	Genehmigungs Nr. / Permit no.	Ausstellungsdatum / Date of issue
Ebenholz - Ebony <i>Diospyros crassiflora</i>	-	-	II #5 / B #5					

Erläuterung der Fußnoten: Auszug aus der Liste vom Bundesamt für Naturschutz "Liste der in CITES und der Vo(EG) 338/97 geschützten Baumarten"

#5 Bezeichnet Stämme oder Holzblöcke, Schnittholz und Furnierblätter

Explanation of the footnotes: Excerpt from the list of the Federal Agency for Nature Conservation "List of tree species protected in CITES and VO(EG) 338/97".

#5 Designates logs or wood blocks, sawn timber.

Erläuterungen, dem CITES Formular entnommen - Explanation, taken from the CITES form
Herkunft - Source

W: der Natur entnommene Exemplare - **specimens taken from nature**

O: Exemplare aus der Zeit vor dem Übereinkommen - **Pre-Convention specimens**

Zweck - Purpose

T: Kommerzielle Zwecke - **Commercial purposes**

Bundesinnungsverband für das Musikinstrumenten-Handwerk



Erklärung für Streichbögen über den legalen Ursprung der Materialien zum Zeitpunkt der Erstellung.
Declaration for bows about the legal origin of the materials at the time of creation.

PAUBRASILIA ECHINATA PLANTATIONS IN ESPIRITO SANTO
Charles Espey



A pure stand of *Paubrasilia echinata* planted in the mid 1980s at Ascuá. 2018 photo.

Starting in the late 1980s an enclave of Brazilian violin bow makers in Espírito Santo State created a number of Pau-brasil (*Paubrasilia echinata*) plantations, several of which are producing seedlings for distribution and actively planting trees today. Deforestation of the Atlantic Forest in the region has reduced the pockets of specifically Pau-brasil habitat to several small fragments of ‘capoeira’ or second growth woodland. These locations are neither specifically protected nor recognized. The giant pulp mill, Aracruz Cellulose was responsible for clearing most of this habitat in order to plant Eucalyptus beginning in the 1980s. In the remaining forest fragments, even if no mature Pau-brasil trees are present, stumps invariably send out suckers one or two of which can exceed the girth of the original tree. In addition where a flowering tree was present, numerous seedlings and saplings can be found. As a result, even if the mature trees were cut illicitly, there is usually plenty of regeneration as long as the area is not burned and converted to pasture as is most often the case.

However because of the extremely limited scope of this habitat, plantations created by Brazilian bow makers contain the overwhelming majority of the genetic diversity of the *Paubrasilia echinata* variety endemic to the region. Because the proposed CITES listing would financially ruin the owners of these plantations and make it impossible for them to continue their trade, there is a real concern that the various farms planted with Pau-brasil will be sold off and effectively cleared for agricultural purposes sooner or later. This tragic loss would be a Pyrrhic victory for conservation since, effectively in this case, there are no mature trees to protect from logging in the region. All

trees of over 20cm in diameter are on plantations. Maintaining *P. echinata* in its natural state requires habitat that no longer exists in Espírito Santo. It is difficult to convey the amount of time and care necessary to raise even one seedling to the point where it can flourish on its own. Realistically the bowmaker owners are the only people with the knowledge and financial commitment to hire farmhands to maintain these stands, collect seed and continue producing seedlings. In addition it



Eucalyptus on *Paubrasilia echinata* habitat. 2003.

was demonstrated in 2019 by Floriano Schaeffer that these trees of 18 to 24 years of age and measuring as little as 15cm diameter are perfectly adequate for making the student level bows that represent 95% of Brazilian bow production.

The Brazilian CITES proposal ignores or refutes many of the conditions noted in the preceding paragraphs. The owners of plantations have made numerous attempts to register and inventory their plantings over the years but the authorities (IBAMA) have not made the effort to establish protocols for Pau-brasil plantations or help them in any way. The purpose of this paper is not to discuss the use of illegal wood by some makers of bows nor the fact that most makers use wood that is carefully documented with IBAMA permits.

IBAMA is an enforcement agency without the resources to promote Pau-brasil's conservation and

the author has not identified any regional government or non-profit organizations promoting the species either. The author's concern here is simply to document every significant plantation of Pau-brasil in Espírito Santo. With the exception of one site, the author has visited and photographed every plantation and observed planting procedures starting in 2001. Most of this information was collected in 2018 and 2019. Because of the lack of forewarning, there has not been time to count the exact number of trees on these plantations or measure the number of hectares planted. As a result some of these estimates will not be accurate and the the reader will have to interpolate the importance of these stands with the help of the photographs. The important thing is that these plantations exist. This data will be updated as inventories are conducted. The precise location of these plantations and forest fragments is not disclosed here but is available to researchers.



Floriano Schaeffer on his plantation. Guarana, ES. 2018

ROÇA SCHAEFFER, Guarana, ES.

The bowmaker, Floriano Schaeffer developed his interest in botany as a boy assisting the botanist Augusto Ruschi in Santa Teresa. He has an expert knowledge of Atlantic Forest flora. This small farm surrounded by the Eucalyptus plantations supplying the Aracruz Cellulose pulp-mill was acquired by Floriano Schaeffer in 1995 and he began raising seedlings and initially planted pau-brasil in a matrix of other crops such as coffee and papaya. Soon he moved to planting two areas; one mixed with other forest species and the other



Schaeffer's *P. echinata* seedling production in 2003.



Shaeffer's original *P. echinata* plantings in 2003.

in a monoculture. These plantings represent an estimated 7,000 Pau-brasil trees over an area of 7.5 hectares. The author noted Schaeffer's shade houses in 2001 where he was propagating approximately 50,000 seedling per year. Most of these seedlings were distributed for free or provided to the Aracruz Cellulose pulp-mill to plant in watersheds where Eucalyptus could not be planted. By estimate, Floriano Schaeffer has distributed over half a million pau-brasil seedlings.



Preparation for *P. echinata* seedlings in 2018.



Farm workers planting *P. echinata* on Schaeffer's farm. 20018

MARCO RAPOSO

The bow maker Marco Raposo is established in the hill town of Domingos Martins, ES. and he started his mountainside plantation in the year 2000. His trees are up to 20cm. He maintains a large propagation facility at another location where he raises pau-brasil seedlings as well as seedlings of other native species.



Marco Raposo on his Pau-brasil plantation. 2018



Raposo's *P. echinata* seedling production. 2018

RENATO CASARA

The bowmaker Renato Casara began his plantation in about 1998 near the village of Dimitrio Ribeiro, ES. His initial plantings are now up to 25cm in diameter. An area planted in the recent years goes up a hillside and has saplings of up to 1.5 meters in height. He keeps a moderate sized shade house to produce seedlings.



Renato Casara on his *P. echinata* plantation. 2018.



Renato Casara's shade house with *P. echinata* seedlings. 2018

JACUPEMBA

This plantation was planted by Floriano Schaeffer for a landowner near the town of Jacupemba about ten years ago. It features a regional variety of *P. echinata* from Bahia, 'folia d'arruda'. The trees, which number in the hundreds are up to 7cm in diameter.



Pau-brasil plantation near Jacupemba, ES. 2018



Floriano Schaeffer with Bahian variety of *P. echinata*, 'folia d'arruda'. 2018

ASCUA

This remarkable stand of trees was planted in the late 1980ies on a private ranch by Floriano Schaeffer. Instead of using seedlings propagated from seed, seedlings were dug up in forest fragments prior to clearing and transplanted in the site as a monoculture. This location may be the most important remnant of the Espirito Santo variety's genetic diversity. The trees here are up to 20cm and those of at least 15cm number in the hundreds covering about one hectare. More recently germinated seedlings and saplings number in the thousands.



AscuA, refuge of *Paubrasilia echinata* diversity. 2018

JOSE BOTTONI

The bowmaker Jose Bottoni has a small plantation on his farm near Jacupemba ES. His trees are up to 20cm in diameter.



Jose Bottoni on his plantation of *P. echinata*.

TINTORI

The bowmaker Alexandre Tintori started a plantation on his family's farm in the hills above João Neiva in 2019. To date he has planted 1000 seedlings which are now up to 2 meters in height.



HORST JOHN (Jaci Souza)

Horst John operated a small sawmill and bowmaking workshop starting in the late 1970s. Shortly afterwards he purchased property and created a plantation near Santa rosa, ES. which is still in existence. The author has not seen it. It is reported to have 3,000 trees. In addition, a compound of about one hectare at his workshop in Guarana, ES. was planted in 1987. An estimated 100 *Paubrasilia echinata* trees are growing there, some as much as 30 cm in diameter. The bowmaker Jaci Souza who inherited the Horst John business currently maintains this property and continues planting.

FAZENDA ANDRE

This cocoa farmer has a small plantation of Pau-brazil up to 20cm in diameter.



The town of GUARANA.

From seedlings distributed mostly by Floriano Schaeffer since the 1980s, Pau-brasil is a very common tree found in people's gardens throughout the town and also in the city of Aracruz. Pau-brasil is valued as an ornamental on account of its attractive foliage and bright yellow flowers. These trees can be up to 40cm in diameter.



FOREST FRAGMENTS

CÓRREGO D'AGUA

This forest fragment was selectively logged over the years but was originally ideal pau-brasil habitat. In recent years additional seedlings were transplanted into the area by Floriano Schaeffer.



Pau-brasil sapling at Corrego D'agua. 2018



Paubrasilia echinata. Corrego D'agua, ES. 2018

FAZENDA LIMAO

This forest fragment was originally adjacent to a lemon orchard. Although selectively logged and encroached upon by coffee plantations, it shows extensive regeneration of pau-brasil.



Young *Paubrasilia echinata* at Fazenda Limao. 2018.



Flavio Schaeffer with *P. echinata* sapling at Fazenda Limao. 2018

POSTSCRIPT

It should be recognized here that currently the illegal cutting of Pau-brasil is occurring in the state of Bahia where some habitat remains for the time being. Large scale propagation and planting is also occurring however the author has not been in the area for some years so reporting on that work can come from the IPCI and other organizations active in Bahia. The author's concern is that placing *Paubrasilia echinata* on CITES appendix One will barely address the problem of sustaining *Paubrasilia echinata*'s diversity while putting out of business the very people who have been planting trees. The author urges the delegates to postpone this decision.

ABOUT THE AUTHOR

Charles Espey studied violin bow making in Paris and in 1983 made the first of several extended trips to Brazil where he purchased pau-brasil wood to last his career; (about 2 cubic meters which was documented as pre-convention in 2007). At that time he met Floriano Schaeffer who introduced him to the incredible diversity of the Atlantic Forest. In 2001-03 he spent many months in Bahia working on the development of a major *Paubrasilia echinata* conservation project; a partnership between the Brazilian agricultural research institute, CEPLAC, and the IPCI, a bow maker's conservation initiative. In 2018-19 he spent several months in Brazil visiting plantations and helping plant and propagate trees. A personal project to expand the scope of seed collection was interrupted by the pandemic. Any requests for information are welcome. charlesespey@gmail.com

