



IPCI Actions 2001 – 2022

INTERNATIONAL PERNAMBUCO CONSERVATION INITIATIVE
October 2022

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IPCI Actions

In 2000, bow makers from France, Germany and the United States responded to the serious depletion of Brazil's Atlantic Rainforest and pernambuco populations by forming the International Pernambuco Conservation Initiative (IPCI) to develop a plan of action. As pernambuco is the primary wood used in bow making for professional and advanced musicians and is endemic to the Atlantic Rainforest, its survival is essential to bow-making and the greater musical community. Without pernambuco, stringed instrument music and the cultural heritages of countries across the world would not exist as we know them today. It was understood then, as it is today, that bow makers must work with Brazilian partners to do everything possible to help conserve the species.

Today, there are four IPCI international organizations collectively known as IPCI: IPCI-Canada, IPCI-COMURNAT (France), IPCI-Germany and IPCI-USA (see Appendix 1 for the officers of each). IPCI represents approximately 400 artisanal members in 24 countries.¹ Each member makes 10 to 20 bows per year—requiring the amount of wood provided by one mature tree during an entire lifetime of bow making.

IPCI's mission is to 1) preserve genetic diversity of *paubrasilia echinata*, 2) conserve and restore the species, and 3) put in place a framework for its future sustainable use. All program expenses are paid for by the groups' members, the vast majority of which are bow makers. IPCI has developed its fund-raising capacity to support its long-term commitment to conservation.

At the beginning, IPCI searched for Brazilian governmental and scientific partnerships in Brazil. IPCI established partnerships with FUNPAB to dig wells for seedlings and with CEPLAC to establish the Programa Pau-Brasil (PPB). During this period and since, IPCI has worked with officials from IBAMA and state governments to understand and ensure compliance with Forest Code regulations and other applicable laws. Its principal partners have included CEPLAC, Instituto Floresta Viva (IFV), Associação Plantas do Nordeste (APNE), and several universities and scientific institutions (see Appendix 2 for a full list), as well as small-scale cacao farming enterprises.

After two years of careful planning, IPCI created its 5-year PPB program, followed by projects with other partners (including IFV and APNE). IPCI's comprehensive approach to sustainability has included scientific research, participation of local communities, educational outreach, plantings, and has produced encouraging outcomes (see Appendix 3 for a detailed list of actions). In summary, 340,800 total seedlings were planted (divided between farming/sustainable use and conservation/civic-cultural) and financial expenditures to-date (\$423,572) include project expenses in Brazil (\$348,681) as well as international educational outreach and fundraising (\$74,891).

IPCI Conservation & Science Focus

- Inventories
- Phenology & collection
- Soil & climate studies
- Work with local communities & farmers
- Environmental education
- Replanting seedlings

¹ Australia, Austria, Belgium, Bulgaria, Canada, China, Denmark, France, Germany, Iceland, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland, Taiwan, UK, USA

Summary of Actions

Planting Projects • 340,800 total seedlings planted

230,800 seedlings planted for farming/sustainable use
110,000 seedlings planted in conservation/civic-cultural areas

Comissão Executiva do Plano da Lavoura Cacaueira [CEPLAC], 2004 – 2008	Programa Pau-Brasil (PPB) / 300,000 seedlings planted: <ul style="list-style-type: none">▪ Commercial / 87,000 seedlings planted for future sustainable use▪ Conservation & Civic / 87,000 seedlings planted▪ Settlements / 8,000 seedlings planted for future sustainable use [PDF]▪ Project TAMAR, 2007 / 11,000 seedlings planted for conservation▪ Ecological Corridor Project, 2008, Ministry of Environment, State of Bahia / 7,000 seedlings planted for conservation▪ 100,000 seedlings planted on cacao farms for future sustainable use— following conclusion of PPB (IPCI-supplied seedlings and scientific data)
Associação Plantas do Nordeste [APNE], 2012 – present	17,000 total seedlings planted [DOCX] : <ul style="list-style-type: none">▪ 5,000 seedlings planted for conservation▪ 12,000 seedlings planted for future sustainable use
Instituto Floresta Viva [IFV], 2013 – present	3,800 total seedlings planted for future sustainable use
FUNBRASIL , 2001 via Ana Cristina Roldao	<ul style="list-style-type: none">▪ 20,000 seedlings planted for future sustainable use▪ IPCI supported drilling wells [JPG] for the growth of an additional 80,000 seedlings

While IPCI field projects were greatly impacted by the Covid pandemic, IPCI’s project work has continued, principally in the form of research. IPCI is strongly committed to continuing and expanding its work for the conservation of pernambuco.

IPCI does not engage in any trade.

It is a conservation organization interested in the growth and regrowth of pernambuco in the wild, in civic areas, and on small-scale cacao farms, where they provide shade to plants and may someday provide a source of income for farmers in accordance with applicable laws and regulations.

While IPCI is indirectly aware of replanting efforts being undertaken by Brazilian bow makers, it has only been working independently and in direct partnership with Brazilian agricultural, scientific, environmental, government institutions and organizations.

IPCI has engaged in public policy conversations in Brazil with representatives from IBAMA, CEPLAC and state environmental authorities in an effort to understand and at all times comply with Brazil’s legal framework. These discussions have focused on a number of areas, including changes to Brazil’s Forest Code, the development of a national strategy for pernambuco by IBAMA, and the creation of a legal pathway to harvest pernambuco grown on cacao farms for income and eventual use in making bows for professional and advanced stringed instrument musicians.

IPCI Commitments

- Work in partnership with Brazilian government agencies, conservation and scientific institutions.
- Develop joint comprehensive strategy and fundraising for future conservation efforts.
- Build on the work of IPCI partners (e.g., IFV, APNE and UESB) to develop new conservation, agroforestry and science initiatives.
- Expand education and outreach to build greater awareness of the threatened status of pernambuco and opportunities to save the species.
- Promote legal compliance and science-based sustainable use policies.

IPCI fully supports efforts to stop illegal trafficking of pernambuco, which harms the species and hurts the bow making trade. In 2007, IPCI members made a pledge to only purchase legally sourced wood, to encourage the development of inventories of pernambuco populations, to develop and implement a conservation plan, and to educate the trade about the urgent need to conserve pernambuco and comply with applicable laws. They did so in recognition of the fact that conservation of the species is of the greatest importance for the future of Brazil's forests and stringed instrument music.

Because most IPCI members are also bow makers, IPCI is aware of the trade of bows, even if the organization does not facilitate or participate in trade. IPCI supports Brazil's efforts to ensure that the export of raw wood and bow blanks is done in full compliance with applicable law. IPCI also supports Brazil's domestic export permit requirement for pernambuco products as well as enforcement efforts that will ensure compliance. IPCI believes additional measures would be appropriate for the trade, including the establishment of traceability, tagging or stamping, and certification systems. It is also important that international sales using false "IBAMA papers," whether online or in person, be stopped. Such measures would help international buyers of bows to verify that the products they are purchasing are legal, sustainable, and protective of pernambuco and music. These measures, together with an enhanced, multi-stakeholder scientific and replanting program can create a path toward conservation of the species without adversely impacting stringed-instrument music around the world.

IPCI has partnered with, and is a member of, the International Alliance of Violin and Bow Makers for Endangered Species, known as the [Alliance](#). Violin and bow makers created the Alliance in 2018 to advance understanding and awareness of the need for conservation of all species used for violin and bow making, and to invest in conservation projects, such as the work of IPCI. Understanding that much more work is needed, IPCI worked in close cooperation with the Alliance to prepare a "Pernambuco Conservation Strategy," which can be found in Appendix 4. The Strategy sets forth IPCI's and the trade's commitment to building on and expanding the work of IPCI, so that pernambuco can regain health and sustainability.

The conservation of pernambuco is crucially important to our craft and to stringed-instrument music. For advanced players and professionals there simply is no substitute for the playing ability and tone creation made possible by pernambuco. Like instruments, each bow is unique in its qualities and is itself a work of art and historic culture. It is not an exaggeration to say that the future of stringed-instrument music as we know it depends on achieving both conservation of the species and a balanced approach to trade regulation.

The IPCI and Alliance are prepared to make significant contributions to the planning, funding and implementation of future research and reforestation efforts in Brazil. Our goal is to join in partnership with Brazilian authorities, scientists, environmentalists and small-scale farmers to coordinate a broad-scale effort to conserve pernambuco and music for future generations.

Appendix 1: ICPI Board Members

Group	Date of Incorporation	Board Members
IPCI-COMURNAT	2000	President: Arthur Dubroca, Board: Peter Beare, Emmanuel Carlier, Jean Marc Panhaleux
IPCI-Germany	2001	Chairman: Thomas Gerbeth, Board: Helmut Paulus, Klaus W. Uebel, Gerald Knoll, Christian Wanka
IPCI-USA	2002	President: John Bennett; Board: Tania Simoncelli, Morgan Andersen, Tom Dignan, Yung Chin, Dr. Wayt Thomas
IPCI-Canada	2002	President: Tom Wilder, Board: Aurele Parisien, Francois Malo
International Chair		Yung Chin

Appendix 2: ICPI Project Partnerships, 1999 – 2022

Associação Plantas do Nordeste (APNE)	Fundacao Pau Brasil (FUNPAB)	Universidade Estadual de Santa Cruz (UESC)
Ministry of Environment, State of Bahia	Instituto Floresta Viva (IFV)	Universidade Federal da Paraíba (UFPB)
Instituto Biofábrica de Cacao (Biofábrica)	Instituto para a Salvaguarda das Paisagens Inspiraforas e dos Refúgios (INSPIRA)	Universidade Federal Rural de Pernambuco (UFRPE)
Centro de Pesquisas do Cacao (CEPEC)	Rio de Janeiro Botanical Garden (JBRJ)	Universidade Federal do Rio Grande do Norte (UFRN)
Comissão Executiva do Plano da Lavoura Cacaueira (CEPLAC)	New York Botanical Garden (NYBG)	

Appendix 3: ICPI Projects, 2003 – 2020, by Partnership

Pau-Brasil (PPB) Projects						
Project Year	Documentation	Photos	Action	Seedlings	Description of Action	Status
2003 5-year Plan		PPB Signing			Official government acceptance of PPB signing 12/31/2003 Document	
2005 Actions Begin			Prospection Inventory	85	Identify pernambuco in natural occurrence—139 sites, 12 sites recommended for biometric and phyto-sociologic inventory	Complete
2004 – 08			Inventory		Biometric and phyto-sociologic inventory	Complete
2004 – 08	Dissertation: PDF	Cacao Farm	Inventory		Inventory and phenology—cabruca inventory Doctoral Dissertation	Complete
2004 – 08		Inventory	Population Dynamics		Plots in 14 different fragments—1767 trees measured	Complete
2004 – 08	Research: PDF	Three Variants	Base Population Diversity/ Conservation		69 samples collected—three morphological variants Master's thesis	Complete
2004 – 08			Reproduction & Propagation		Refurbish CEPLAC seed germinator	Incomplete: seed germinator repair
2004 – 08			Silviculture & Seed Predation		Growing and cultivation of trees-birds	Incomplete
2004 – 08			Pau-brasil inventory		Mapping main forest patches	Complete
2004 – 08	Report: PDF	Pau-brasil Planting to Shade Cacao	Fomento		Promote planting-commercial 50%	Complete

2004 – 08		Planting Civic	Fomento		Promote planting-civic cultural 20%	Complete
2004 – 08		Porto Seguro Pau-brasil Reserve	Fomento		Promote planting-conservation 30%	Complete
2006			Environmental Impact		Undergraduate Monograph: "Programa Pau-brasil" Environmental Impact, Authur Tayla Ribeiro Marroccos, College of Science and Technology (FCT), Itabuna, BA	Complete
2004 – 08	Seedling List: DOC	Paulo Jackson Settlement	Bolsa Verde		All seedlings planted that survived to 4 years were georeferenced by IBAMA for future selective cutting and legal sale	Complete
2004 – 08	Report: PDF	Settlement Planting	Bolsa Verde	400	Training implemented to improve success rate for trees planted. All dead trees were replaced.	Complete
2004 – 08	Project Outline: DOC	Paulo Jackson Settlement Planting	Bolsa Verde	8,000	Seedlings planted in 3 Agrarian Reform Settlements. Of the 7,600 original seedlings distributed, 400 were replaced and additional training provided.	Complete
2004 – 08		Collecting Seeds	Phenology & Seed Collecting		Seeds collected	Complete
2004 – 08		Biofabrica Nursery	Phenology & Seed Collecting	145,295	Seedlings planted at Biofabrica	Complete
2004 – 08		IPCI Farm Planting	Communications		Raise conservation awareness in urban and rural communities: 5 exhibits, 11 lectures, 2 interviews, 9 meetings, 1 campaign	Complete
2004 – 08		Exhibit	Legal Reserve Brochure		1 brochure about the Legal Reserve: 5,000 copies 1 newsletter "A Brasilina": 1,000 copies 1 brochure about ESPAB: 4,000 copies	Complete
2004 – 08			Roundtable		Strategy designed with support of SEMARH for implementation of CONAMA Resolution N° 317 in Bahia	Complete
2004 – 08			Conservation & Use of Pernambuco		- Database: 48 scientific papers, 5 maps made available - Prepare list of Mata Atlântica endemic flora species in Bahia, - Design Conservation/Protection Unit for the three morphological variants	Complete
2004 – 08			Website		To make available technical and administrative information about the PPB. The website will include background and educational information to support the conservation of the species.	Complete
2004 – 08	Instrument Invoice: JPG	Youth Orchestra	Musical Groups		Orchestra and chorus—22 students of Ibirapitanga. Orchestra and chorus—67 students of Itabuna. All instruments by IPCI.	Complete
2008	XLS		Review of PPB		CEPLAC Final Review	Complete
2008	PDF		Review of PPB		FUNPAB Final Review	Complete
2008 – 16 After program end	Project Outline: PDF		Planting	100,000	10,000 trees planted yearly from 2008 to 2016—IPCI seedlings and research after the end of the PPB	Complete
After program end			Planting	11,000	Restoring the islands at the mouth of the Rio Doce River—IPCI supported planting of pernambuco by CEPLAC after PPB ended	Complete
After program end			Planting	7,000	Bahia State Government, Ministry of Environment	Complete

Associação Plantas do Nordeste (APNE) Projects						
Project Year	Documentation	Photos	Action	Seedlings	Description of Action	Status
2011	Ordinance: PDF		Conservation Status		Conservation status of IPCI pernambuco reforestation initiatives	Complete
2012			Viability & Cultivation	468	IPCI sponsored planting of pernambuco seedlings	Complete
2013			Mapping		Mapping size and shape of forest fragments in all 3 states	Complete
2014			Pilot Study		Pilot study of conditions necessary to replant through community-based projects	Complete
2015	Report: PDF		Planting	5,395	IPCI sponsored planting of 5,395 pernambuco seedlings—12,000 seedlings obtained	Complete
2015	Report: DOCX					Complete
2016	Totals: DOCX		Research & Planting	3,579	IPCI sponsored planting of 3,579 pernambuco seedlings—Genetic diversity of intact populations	Complete
2016			Planting	1,120	IPCI sponsored planting of 1,120 pernambuco seedlings	Complete
2017			Scientific Research			Complete
2018			Planting	5,070	IPCI sponsored planting of 5,070 pernambuco seedlings	Complete
2019			Scientific Research		18,500 seedlings obtained	Complete
2020	Report: PDF		Scientific Research		Research report	Ongoing
Instituto Floresta Viva (IFV) Projects						
Project Year	Documentation	Photos	Action	Seedlings	Description of Action	Status
2013			Assessment		Assessing survival rates of IPCI plantings	Complete
2014			Growth Rates		Assessing growth rates of pernambuco variants	Complete
2015			Planting	3,800	IPCI sponsored planting of 3,800 pernambuco seedlings—13,600 seedlings obtained	Complete
2015			Wood Properties		Wood properties of pernambuco under different climate conditions	Complete
2017			Wood Properties		Wood properties of different varieties	Complete
2019			Scientific Research		12,000 seedlings obtained	Complete
2020	Report: PDF		Scientific Research		Research potential to advance pb conservation through planting varieties better adapted to specific climate conditions.	Ongoing



International Alliance of Violin and Bow Makers for Endangered Species Pernambuco Conservation Strategy

Brazil's Atlantic Rainforest encompasses a fraction of its original size for many reasons including agriculture, urban expansion, and industrial development. As a result of this deforestation, *paubrasilia echinata* (also known as pernambuco or brazilwood) is endangered. Demand for pernambuco used in bow making, though relatively minor compared to other driving forces (one tree provides a lifetime supply for an artisanal maker), is also a contributing factor.

In 2000, becoming aware of the threats to pernambuco, bow makers formed the International Pernambuco Conservation Initiative (IPCI). IPCI has partnered with Brazilian government agencies, scientific institutions, and environmental NGOs to invest in replanting, science and music education in Atlantic Rainforest states for more than 20 years. Bow makers remain deeply committed to conserving the species for future generations and to promoting the legal and sustainable use of pernambuco.

To address these goals, the Alliance has developed the Pernambuco Strategy outlined below. The Strategy is intended to be a living document that will evolve in partnership and dialogue with the Alliance's partners and other stakeholders.

Deforestation of the Atlantic Rainforest and ongoing endangerment of pernambuco

Deforestation of populations of pernambuco must be halted and replaced by effective, joint initiatives promoting conservation and wise use of pernambuco.

Therefore:

1. Build greater awareness about the need for conservation of pernambuco by expanding educational outreach to include more musical organizations, musicians, students and makers in Europe, North America, and Asia, and in partnership with Brazilian cultural and ecological institutions.
2. Educate teachers and shops to eliminate the wasteful practice of using pernambuco for low-grade student bows and to instead use available alternative materials or older restored bows. Pernambuco is essential for the creation of high-quality bows, which are used primarily by professional musicians and advanced students. For these players, there is no adequate substitute that will not diminish playing technique and sound quality. The market for pernambuco can be reduced by discouraging the unnecessary use of this precious resource, and by taking steps to ensure that only fully mature, legally sourced wood is used.
3. Organize and help develop stakeholder roundtables or other types of events among bow and violin makers, musicians, conservation organizations and country regulatory agencies to promote comprehension and unwavering support for conservation.
4. Partner with the IPCI to include other species including in their plantings; woods that have been used for the production of student bows

Sound data

Stakeholders interested in supporting the science-based conservation of pernambuco depend on the existence of reliable, up-to-date data. More and better data are needed about the status of the species.

Therefore:

1. Explore a contribution to the IUCN to update the Red List data (from 1998) on pernambuco.
2. Continue to support studies initiated by scientific and technical experts in Brazil, including in the areas of wood anatomy, phenology, and silviculture.

Renew and increase investments in conservation

Bow makers are aware of the crucial importance and complex challenges of advancing a conservation agenda for pernambuco. Although few in number around the world, bow makers have, with passion and determination, carried the responsibility of creating and implementing the IPCI. It is urgently important that greater numbers of musicians, musical organizations, all bow and violin makers and supporters of the arts look with clear eyes at how important music is in their lives and join forces in support of pernambuco conservation.

Therefore:

1. Expand support and cooperation with the IPCI and other stakeholders to invest in science and the conservation of pernambuco.
2. Increase outreach to donors outside the music field including museums, universities, conservation groups and philanthropists who support the arts, science, conservation, and livelihood creation.
3. Develop information materials that would inform and inspire musicians who travel around the world, often performing to large audiences, to share the important story of pernambuco, the music tree that is a global ambassador for Brazil, and the need for its conservation.

Legal compliance

It is critically important that everyone in the music field, the distributors, music shops, makers, teachers, parents, and students know what bows are legal and appropriate for purchase. Currently, it is impossible to know what is legal or illegal as there is no documentation or guidelines to follow.

Therefore:

1. Support Brazil's efforts to impose domestic export measures that will make it possible to verify the legality of exported finished products.
2. Work with national CITES management and enforcement authorities to organize CITES compliance initiatives, which might include national level trainings and or webinars for the trade.
3. Regular alliance-usa.org website updates to provide a database of CITES information pertaining to pernambuco.
4. Engage with enforcement officials and other stakeholders to explore other opportunities to reduce illegal trafficking through, e.g., traceability, tagging or stamping, and certification.

About the International Alliance of Violin and Bow Makers for Endangered Species

EILA, l'Entente Internationale des Luthiers et Archetiers (The International Society of Violin and Bow Makers) was established in 1950. EILA has been a major financial supporter of the International Pernambuco Conservation Initiative since its very beginning. Many EILA members have been and remain active in leadership of the IPCI groups. In 2000, EILA and other professional organizations began to collaborate on conservation projects. In 2018, the International Alliance of Violin and Bow Makers for Endangered Species was created as an adjunct to EILA, under the umbrella of EILA's history, reputation, and international stature. The Alliance seeks to actively protect the natural resources used in traditional artistic instrument and bow making through cooperation with national and international regulatory agencies and by supporting activities to conserve and restore these species.

The Alliance has informed violin and bow makers and the wider musical community about recent investigations in Brazil and around the world. The Alliance is engaging with regulatory authorities and categorically opposes illegal cutting, transporting, or selling of illegally harvested pernambuco or bows made of illegally harvested wood. Such illegal activities are devastating to pernambuco and the Atlantic Rainforest of Brazil, putting at risk the continuation of the research and reforestation projects of the IPCI and threatening the very future of our classical music traditions. The Alliance continues to expand its role to educate and promote responsible conservation actions around the world. It is not enough to rest on the accomplishments of the IPCI. We must all join Brazil's call to action to save pernambuco.