

Tree types

- 01

Maritime pine / *Pinus pinaster*
- 02

English oak / *Quercus robur*
- 03

Chestnut tree / *Castanea sativa*
- 04

Hazel / *Corylus*
- 05

Walnut / *Juglans*
- 06

Strawberry tree / *Arbutus unedo*
- 07

Wild cherry / *Prunus avium*
- 08

Locust / *Robinia pseudoacacia*
- 09

Hawthorn / *Crataegus oxyacantha*
- 10

Black alder / *Alnus glutinosa*
- 11

Cork oak / *Quercus suber*
- 12

White poplar / *Populus alba*
- 13

Juniper / *Juniperus*
- 14

Ivy / *Hedera helix L.*
- 15

Holly / *Ilex aquifolium*
- 16

Birch / *Betula pendula*
- 17

Aspen / *Populus tremula*
- 18

Medlar / *Mespilus germanica*
- 19

Bird cherry / *Prunus padus*
- 20

Bald cypress / *Taxodium distichum*
- 21

Lime, small-leaved / *Tilia cordata*
- 22

European Gorse / *Ulex Europeans*
- 23

Willow / *Salix*
- 24

Eucalyptus / *Eucalyptus*
- 25

Beech / *Fagus sylvatica*
- 26

Elm / *Ulmus campestris*
- 27

Alder buckthorn / *Frangula alnus*
- 28

Boxwood / *Buxus*
- 29

Pyrenean oak / *Quercus pyrenaica*
- 30

Stone pine / *Pinus pinea*
- 31

Serviceberry / *Amelanchier*
- 32

Hornbeam / *Carpinus betulus*
- 33

Downy oak / *Quercus pubescent*
- 34

Sessile oak / *Quercus petraea*
- 35

Green oak / *Quercus ilex*
- 36

Ash / *Fraxinus*
- 37

Bay Laurel / *Laurus nobilis*
- 38

Blackthorn / *Prunus spinosa*
- 39

Dogwood / *Cornus sanguinea*
- 40

Mimosa / *Albizia julibrissin*
- 41

Bog-myrtle / *Myrca gale*
- 42

Apple tree / *Malus*
- 43

Mediterranean buckthorn / *Rhamnus alaternus*
- 44

Whitebeam / *Sorbus aria*
- 45

Wayfaring tree / *Viburnum lantana*
- 46

Guelder rose / *Viburnum opulus*
- 47

Bamboo / *Bambusoideae*
- 48

Lawson cypress / *Chamaecyparis lawsoniana*

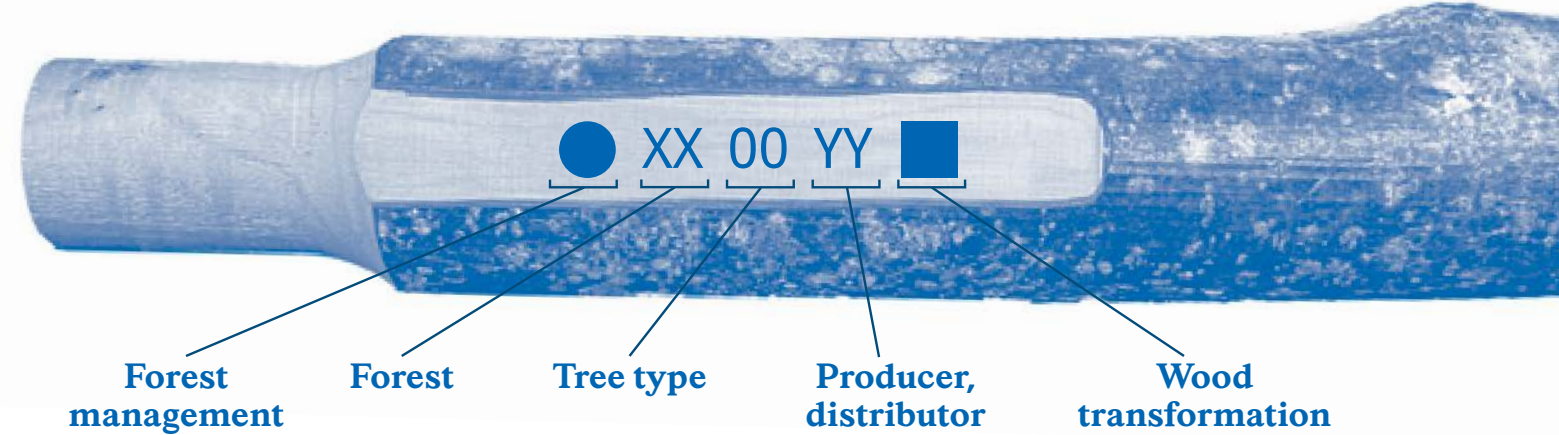
Forest Part
Neringa Forest Architecture

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The Samples Play

The code inscribed on each sample consists of four letters, two numbers and two symbols, each representing:



Between May and November 2024, members of the Neringa Forest Architecture collective and the arc en rêve team visited various forest sites and industrial timber production facilities in Landes de Gascogne, collecting wood samples from each location. These samples were sourced from fallen trees gathered from the forest floor, cut trees stored for further processing, purchased materials, or leftover pieces donated by timber product producers.

While not aiming for completeness, these samples serve as documents – fragmented elements that offer insights into the mosaic of forest conditions, management practices, and timber industries shaped by the sandy soil triangle that determines the character of the Landes region. The forests chosen for this project were selected to reflect a range of conditions and perspectives, all contributing to the ongoing definition of the forest’s meaning and significance in the Landes. These forests are also a source for companies working with timber, such as sawmills, distributors, and producers that have developed in relation to the forest’s production capacity.

Samples Play is an open-ended game where players of all ages interact with an assembly of wood elements, guided by their own imagination and intentions. Each sample can also be read and decoded by linking it to its origin—whether to the specific forest and habitat where the tree grew or the process that transformed it into a timber product. The accompanying texts provide an overview and introduction to these sources.



Experimental Forests

An experimental forest is a designated area used for scientific research on forest ecosystems under controlled conditions. These forests are studied to understand tree growth, biodiversity, ecosystem services, forest management practices, and the impacts of climate heating or other environmental factors. INRAE (*Institut national de la recherche pour l'agriculture, l'alimentation et l'environnement*) is one of France's leading research institutes for agriculture, food, and environmental studies. Established in 1964, INRAE in Cestas specialises in analysing the structure, function and dynamics of biodiversity with an emphasis on temperate forest ecosystems. INRAE Cestas houses several research units: BIOGECO (biodiversity genes and communities), ISPA (soil-plant-atmosphere interactions), and UEFP (Pierroton Forest Experimental Unit).

IA

Planted in 2012, the **Arboretum de Castillonville** at INRAE Cestas is part of the REINFFORCE network, which extends from Portugal to Scotland. It features 35 economically valuable species selected for their ability to thrive in the current and future climate of the Atlantic region in Europe. These species are grown under various climatic conditions to study their health, growth and seasonal changes in response to climate change. Among them are different types of cedar, oak, eucalyptus, pine, and beech, as well as Douglas fir, black locust, coast redwood, carob tree, maple, birch and China fir.

IO

The **ORPHEE experiment** at INRAE Cestas started in 2008 and studies how tree diversity influences forest ecosystems in a changing climate. It includes 8 blocks of 32 plots, mixing one to five species, including silver birch, pedunculate oak, Pyrenean oak, green oak, and maritime pine. Half of the blocks are irrigated to observe changes in the functioning of the ecosystem under conditions of water scarcity. Researchers study tree growth both above and below ground, biodiversity, herbivore damage, and plant interactions to improve forest management practices and enhance ecosystem resilience.

IC

The first **Maritime Pine Clonal Archives** at INRAE Cestas were established in the 1960s, marking the beginning of the breeding programme. Today, about 50 hectares of clonal archives are located in Cestas. The archive serves two main purposes: 1) to create controlled crosses, with seeds used in progeny trials to select the best trees for future clonal archives, and 2) to use the best trees for seed orchards, where seeds are collected for commercial planting. A clonal archive consists of grafted trees, which start producing seeds at 8 years old. After 20 years, the trees are too tall for control crosses. The optimal period for control crosses and scion collection (for seed orchards) is between 8 and 20 years old. The clonal archive is kept until 40 to 50 years old but with minimal research activity.

Gardened Forests

Pro Silva's method of 'gardened forestry' involves irregular stand management, where forests are carefully curated over time to ensure diverse, multi-aged tree stands. Instead of clear-cutting, gardened forestry uses selective harvesting and natural regeneration to maintain continuous forest cover. Established in Slovenia in 1989, Pro Silva is a pan-European association of foresters aiming to balance timber production with ecological, economic and social sustainability and respecting forest ecosystems. Pro Silva outlines four key purposes of forests: timber and other product production, soil and climate protection, ecosystem maintenance, recreation and cultural value.

UZ

The **Usufruct Forest of Biscarrosse** is a gardened and mixed forest where trees regenerate through self-seeding. It was established in 1277 when the lord of Biscarrosse gave 1,000 hectares to local residents. Today, the forest spans 322 hectares, about 15% of the municipal forest. Residents have the right to use the forest for wood harvesting, hut building, gardening, grazing, hunting, and fishing. In the 19th and 20th centuries, the forest was heavily used for resin collection, with many 'bottle pines' still showing signs of this practice. Now managed by an association led by the mayor and four members from the Association for the Defence of Usage Rights, the forest is protected and maintained for public use and future regeneration.

SL

Stéphanie Lafitte's forest in Saucats spans 170 hectares of maritime pine and was planted in the 19th century. It was gifted to her in 2007 by her parents. It includes a 12-hectare non-exploited area where English oak, birch, chestnut, willow, hazel, and some maritime pine grow. After Cyclone Klaus damaged large areas of the forest in 2009, she adopted the Pro Silva management approach to improve its resilience and biodiversity. Part of the untouched area is used for leisure, while a smaller section is strictly for conservation.

EC

Forest Caplane in Moustey was purchased by Eric Castex in 2013 after most trees on the 15-hectare site were brought down by Cyclone Klaus in 2009. The forest has since regenerated through self-seeding and includes maritime pine, pedunculate oak, Pyrenean oak, sweet chestnut, and aspen. Managed using the Pro Silva method, it prioritises ecosystem resilience and biodiversity with high-quality timber production. The forest hosts a festival each June and serves as a teaching site for forestry students learning about continuous cover mixed forestry.

State-Administered Forests

State-owned forests are mostly former royal, abbey, or seigneurial forests that were transferred to state ownership during the Revolution. The National Forests Office (*ONF – Office national des forêts*) manages France's state-owned forests, focusing on biodiversity, the long-term health of forest ecosystems, and balancing ecological, economic, and social goals. It supports local authorities by creating forest management plans, overseeing maintenance and infrastructure, cutting activities and ensuring heritage conservation. In Landes, ONF manages 65,000 hectares of forest, including 25,000 hectares of state-owned forest (mainly along the coastal dune strip), 10,000 hectares of military land, and 30,000 hectares of municipal and departmental forests.

OT

The **State Forest of La Teste-de-Buch** covers 2,030 hectares of dune forest, including 9 km of coastal dunes. Managed by the ONF, it serves multiple functions: protecting against erosion, preserving biodiversity, and providing recreational access. Despite its maritime pine dominance, the forest features diverse habitats shaped by the dunes, including green oak and cork oak. In the 2022 fires, nearly 1,000 hectares burned, but ONF foresters and naturalists are now observing biodiversity recovery.

OB

The **State Forest of Biscarrosse** covers nearly 6,400 hectares and dates back to 18th-century stabilisation efforts. Much of it is closed to the public due to the 1962 establishment of the DGA Essais de missiles – a launch site for missile testing. Along the coast, a 'protective' forest shields the dunes with low, wind-sculpted maritime pines near the shoreline and taller, straighter pines further inland. Beyond these, the production forest dominates with diverse vegetation on steeper, less exploitable slopes.

OM

The **Public Forests of Marensin**, a coastal area between the Contis and Soustons currents, is covered by an ancient forest with cork oak dating back to 1845, originally planted to support the cork industry supplying the Bordeaux vineyards. The area's unique topography made intensive pine forestry impossible, allowing cork oak to survive despite the cork industry's decline. Today, initiatives like the Liège Gascon association are reviving the cork oak sector, promoting its climate resilience and benefits when grown alongside pine.

Usufruct Forests

In a Usufruct Forest, the landowner keeps ownership, but local residents (users) are allowed to use the forest's resources under centuries-old agreements. These agreements balance the economic needs of both the landowners and local communities, with resources typically used for non-commercial purposes such as heating, construction, hunting, foraging, or other personal needs. Trees are felled individually, avoiding clear-cutting, and the forest is managed like a well-cared-for garden. This approach creates mixed-age pine stands, and when trees are cut, sunlight reaches the forest floor, encouraging natural regeneration in the fertile humus.

UB

The **Usufruct Forest of Biscarrosse** is a gardened and mixed forest where trees regenerate through self-seeding. It was established in 1277 when the lord of Biscarrosse gave 1,000 hectares to local residents. Today, the forest spans 322 hectares, about 15% of the municipal forest. Residents have the right to use the forest for wood harvesting, hut building, gardening, grazing, hunting, and fishing. In the 19th and 20th centuries, the forest was heavily used for resin collection, with many 'bottle pines' still showing signs of this practice. Now managed by an association led by the mayor and four members from the Association for the Defence of Usage Rights, the forest is protected and maintained for public use and future regeneration.

UT

The **Usufruct Forest of La Teste-de-Buch** spans about 3,900 hectares near the Pilat dune. This ancient pine-oak grove has been known since Roman times. Managed for nearly two thousand years, the forest hosts a unique ecosystem shaped by gardened forest practices and the tapping of maritime pines for resin production. It is unique as France's only private forest with indivisible rights of use based on 15th-century agreements. Residents have rights to collect deadwood for heating and construction, while landowners have exclusive rights to resin harvesting, an arrangement that has often been the source of tensions. In July 2022, a fire destroyed 3,000 hectares. The fire, sparked by a vehicle, was intensified by extreme heat, dry conditions, and strong winds. Landowners and user associations are currently working on a blueprint for a new reforestation plan, due to be presented in 2027.

Plantation Forests

Monoculture forestry in the Landes region primarily involves the cultivation of a single species, mainly maritime pine, to maximise timber production through regular stand management. This involves large-scale, mechanised practices like soil preparation, fertilisation, and planting genetically selected, fast-growing species, clear-cutting, and managing underbrush with specialised tractors called rouleaux landais. These methods prioritise maritime pine for high yields, tailored to meet the technological and quantity demands of industries like plywood production.

AF

Alliance Forêts Bois was established by private forest owners in the Landes region through the gradual merging of different cooperatives that started to form after the devastating fires of 1949. It provides a range of silvicultural services such as planting, handling timber operations, and offering legal and financial guidance to maximise forest investment value. The cooperative also uproots, collects and processes roots for biomass and invests in forest research. Its subsidiary, Florelite, breeds and cultivates forest plants. It is one of the region's largest providers of all-encompassing silviculture services that forest owners entrust the management of their forests to.

CF

Cécile Faye's 40-hectare maritime pine **forest in Callen**, within the Landes de Gascogne Regional Natural Park, is more than managed woodland; it is also her home. Faye resides at the heart of her forest, observing and monitoring its daily rhythms and changes. This closeness drives her holistic approach to forest management, rooted in a desire to enhance the social meaning and resilience of the forest. Gifted by her mother as a pine plantation with trees at various stages of growth, the forest reflects a family legacy dating back to the mid-20th century, when it supplied materials for the Versaillaise sawmill. Today, guided by a 20-year plan, it is transitioning into a mixed-species, multi-age landscape that connects ecology with social purpose. The latest development includes a section titled 'Forêt Tranquille' that will become a natural cemetery, bridging environmental stewardship with human needs.

Other Diverse Forests

Smaller privately owned forests that are not exploited in a particular manner or for significant economic purposes can be seen as extensions of domestic environments. Historically, they may have provided materials for homestead construction, tools, or heating. Today, these functions are most often fulfilled by cultivated forests, leaving the smaller forests to grow at their own pace and shape and provide refuge for wildlife and spaces for childhood games like hide and seek, building tree houses and climbing trees. Unlike industrial forestry, protected reserves, or recreational forests, these spaces have a different function—forests that are not valued for what they produce or their symbolic value but simply for being there.

BH

Near Bazas, just beyond the edge of the characteristic Landes Forest, on the side of 'solid land', members of the **Husky family** own forests adjacent to their homes. The oldest plot, near an ancient homestead on the banks of the Beuve River, consists of deciduous trees such as oaks, blackthorn, and hazel, among others. Signs of a failed poplar plantation from 40 years ago remain, with many dead trees now hosting mistletoe, lichens, and birds. A fraction is occupied by bamboo growth. Another, larger, plot is similarly maintained as a mixed forest, with numerous chestnuts and a scattering of maritime pines. Apart from minimal personal use, the primary purpose of these forests is not timber production but the preservation of an environment interwoven with and integrated into daily life.

Protected Forests

As part of France's national strategy, protected areas include national and regional parks, nature reserves, and the European network Natura 2000, among others. The Landes de Gascogne Regional Natural Park was founded in 1970. It stretches along the valleys of the river Leyre, forming a forested plateau with sandy, acidic soil. In Aquitaine, around 8.5% of forest land is designated as Natura 2000 to protect rare or fragile species of flora and fauna in riparian forests, coastal lakes, dunes, and streams.

VC

The beech stands in the **Ciron River Valley** are a relic of the Late Glacial period, thriving in limestone gorges with high humidity. This Natura 2000 site hosts diverse flora and a unique ecosystem. Despite their diversity, the population of beech trees has shrunk from 35 km in 1992 to 4.4 km, with only about 1,000 mature trees left. The SEPANSO (Society for the Study, Protection, and Management of Nature in the South-West) and the Commission for Forest Genetic Resources have launched two initiatives to strengthen the beech population by providing local residents with beech saplings grown from seeds collected on-site for planting.

SG

The **Graoux natural site** has been shaped over time by various pastoral, forestry and industrial activities, resulting in a unique, biodiverse environment. Along the Leyre River and its flooded banks, a forest of black alder and bald cypress trees has developed with its 'feet in the water', remnants of past forestry experiments. A veritable mosaic of environments, this forest, with its marshes, is home to nearly 800 species. For this reason, the Landes de Gascogne Regional Natural Park is working to create a 170-hectare nature reserve.

FH

The **Hostens Departmental Forest** spans 486 hectares within the Hostens Departmental Estate, a collection of lakes, wetlands, and forests formed on former lignite quarries mined until 1960. Owned by the Gironde Departmental Council since 1967, it is the largest sensitive natural area in Gironde, with unique wildlife offering spaces for environmental engagement and recreation. In 2022, wildfires burned 390 hectares of forest, with an underground 'zombie fire' continuing to smoulder along lignite seams for over a year. Managed by the ONF (National Forests Office) and studied by the INRAE (National Research Institute for Agriculture, Food and Environment), the site now serves as an 'open air laboratory' for forest regeneration in response to climate heating.

Solid wood

Solid wood, the least processed and manipulated material, is milled and dried for use in construction, Euro pallet manufacturing, and furniture production. In this installation, large logs from the Hostens Forest, affected by the 2022 forest fire, were used to construct the playscape platform. These logs were processed by the **Labrousse et Fils (LF)** timber mill in Préchac, treated with antifungal chemicals, and stored for future use. Beams for the sample racks were supplied by **Bagnères Bois (BB)** in Cestas. The various samples come from the cork manufacturing process by **Au Liegeur (AL)** in Souston and **Adam (AD)**, a wood packaging producer in Sainte-Hélène. Sections of maritime pine and acacia used in **Samples Play** were cut by Labrousse et Fils timber mill and **Ribeyre (RB)** timber mill in Linxe. Although this maritime pine originated from industrial plantations, its precise origin is difficult to trace due to the blending of timber during industrial processing.

Unrolled wood

Maritime pine plywood is made by peeling freshly supplied, debarked trees in a continuous unrolling process. The veneers are then promptly dried and glued together, with each layer arranged at right angles to the next. For this installation, some of the **Samples Play** items and the platform surface were crafted using boards from the **Thébault Ply-Land (TB)** and **NP Rolpin (RP)** plywood factories in Solférino and Labouheyre. These boards were made from maritime pine sourced in the Landes region and distributed by **Société Générale des Bois (SB)** in Bordeaux. The pattern on the walls in the darkroom is constructed from a single continuous veneer sheet originating from the same source. The cores of the peeled pines were repurposed to form the columns supporting the lattice structure of the chamber.

Composite wood

Glue laminated timber, or glulam, is a solid wood material made by bonding smaller sections of wood to create larger, stronger, and more durable pieces with consistent quality. The process involves grading, drying, and resawing the wood to remove defects before bonding the sections together into extended lengths and larger dimensions. This installation features a variety of samples, including finger-jointed timber elements from **Lesbats (LB)** in Léon, and profiled, longitudinally glued boards supplied by the **Labadie (LB)** timber mill in Roquefort, typically used for terrace or façade cladding. It also includes large-dimension glued beams produced by **Lamecol (LC)** in Canéjan, specialists in structural timber for construction, and glued timber sections produced for exterior joinery by **Gascogne Bois Sévignac (GB)**.

Pulpwood

Cardboard is made by cooking chips of maritime pine wood supplied from the Landes forests in a chemical solution to create wood pulp. The pulp is then washed to remove impurities, dried and formed into kraft paper sheets. These sheets are combined to form a wavy, fluted layer, which is sandwiched between two flat sheets of kraft paper. This structure provides added strength and cushioning, making corrugated cardboard ideal for shipping boxes and packaging materials. The cardboard used in the installation is supplied by **Smurfit Westrock (SW)** in Facture Biganos, while the baking paper is from **Gascogne Papier (GP)** in Mimizan. Particleboards are made by pressing small timber particles together with adhesives or mineral binders. The pressed fibreboard samples were produced by **Séripanneaux (SP)** in Saint-Vincent-de-Tyrosse. Essential pine oil, extracted from the wood, is provided by **Biolandes (BL)** in Le Sen.