The Call of the Forest

The Origins of the Alpine Forest

From the Upper Paleolithic Age, man frequents the forest seasonally.

The discovery and appropriation of this environment are conducive to hunting and gathering. Cembro pines are predominate and in humid zones, juniper and birch thrive due to the climatic warming of the Boreal period.

Intermittent forest clearing and pastoral activities are attested between 6,000 and 4,500 BC thanks to the study of pollens (nettles, plane trees, black napweed and fungi which develop on manure). The sub-alpine level forest cover (1600-2300m) opens up progressively with the presence of cembro pines, fir, larch and alder. Around the lakes, pastoral activity fosters the change from a clayey soil to a peaty one.

A small group of cembro pines (Pinus cembra) in autumn above the Col de la Cayolle (2326 m)

Sheep folds and shelters proliferate. The fire used for the upkeep of the alpine prairies causes the almost total loss of the cembro pines and the progression of larches. In contrast to fir trees, which generate an acid soil as they loose their needles, larches add calcium, magnesium, potassium and phosphorus which encourage the development of the alpine prairie. This is why larch, which is compatible with pastoralism and pastures is favoured.

Larch (Larix decidua), cembro pines (Pinus cembra), prairie and spruce (Picea abiesor Picea excelsa) in autumn.

In the 4th century B.C., the vegetation is marked by the decline of firs which encourages the growth of the Cembro pine and larch at the sub-alpine level and beech at the lower mountain level (900-1700 m). Deforestation and pastoralisme intensify in the 3rd century B.C. Pastures progress to the detriment of the forest and attain altitudes superior to 2,500m (in comparison with 2,200m nowadays) !

Remarkable Scotch pine (Pinus sylvestris) several hundred years old with wide-spread branches. Alpage de « Soleil Boeuf » in Faucon de Barcelonnette.

Today with the reduction of pastoralisme and the restriction of mountain areas, larch is beginning to be in the minority in the forest cover as fir and spruce take over.

This is a story of deforestation and successive reforestations, which have shaped the forests, as they can be seen nowadays, in this region.

Skeleton of a tree under the Ponset (2828m) at the end of the Caïre de la Madone (2532m) Madone de Fenestre, Vésubie 2nd September 1911, Victor de Cessole.

Sub-fossilised larch discovered at the Lac Long Supérieur, Vallée des Merveilles, Mercantour.

Discovered in 1997 during a research mission on the upper limit of the forest in the Mercantour, this sub-fossilised wood was conserved flush with other wood in the peat bog of the Long Supérieur lake situated at 2,000 m altitude in the Valley des Merveilles. It is a section of larch trunk of about 60 cm diameter without the bark, thus a tree of 3m 50 diameter which lived for 362 years as revealed by the counting of the growth rings. The sapwood measuring 1.5 cm thick is intact (complete) each side of the knot (starting point of the branch) which enables us to say that the last ring is the year that the tree died. It was initially carbon dated (C14) at -7050 +/- 85 BP(before present) or calibrated date cal BC (6079)- 5074 (BC before Christ) (Edouard 2002 and Edouard & Thomas 2008) This is the oldest dated tree from the Mercantour. Very recently the tree has been dated using dendrochronology using the European chronology reference for the Alps (Nicolussi et al 2009), the first section in the centre (pith) is dated -5423 and the last peripheral ring is dated 5062, date of the death of the tree. This multi-centenary tree bears witness to a sub-alpine forest, mature forest around the lake and in this high valley of Merveilles, corroborated by the palynological data (of Beaulieu 1977) and paleontomological (Ponel et al) in a context not yet marked, for this tree having lived 7,000 years ago, by the anthropogenic impact. It also carries the climatic memory during its life, recorded in the inter-annual variation in its radial growth (width of the rings). It contributes to the dendochronological data of the massif, constituted to understand the past climatic variations of several millenia and of the history of forests growing at altitude (Tessier and Edouard 2010)

Assarting in the Middle Ages

In the Alps, the lord of the manor reserved the bottom of the valleys for himself. The serfs occupied essentially the mountain-sides bordering on the woods. The tenures given to the peasants by the lord were subject to royalties. They had limits but it was not forbidden to go beyond them. On the wooded flanks of the mountain, the tenant had user rights and the opportunity to expand. Not only could he take wood from the forest but also clear a plot of land which supplemented his tenure. The best lands were those where established trees conserved fertile humus.

Man holding an axe (detail),1451 chapel Saint-Erige, Auron.

This conquest required a lot of effort : first of all it was necessary to heap up the brambles and bushes which were covered in grass cuttings to form ovens or small furnaces which were then set alight. The big trees were cut down and all that was left here and there, were blackened tree stumps. In 1314, the peasants from Thiéry and Rigaud opened up clearings freely, supposedly continuing a tradition as old as their village. At the end of the 16th century peasants from the Bollène in the valley of the Vésubie transformed the forest of the Planquette into cultivable plots where they sowed wheat and vegetables. However, it was dangerous to infringe on royal land. The community of Belvédère was fined heavily in 1346. The assarts were cultivated for several years but often rainfall washed out the earth leaving only rock.

For a long time the decline of trees was considered a victory. Adjacent to inhabited areas, the forest was a perpetual danger, impenetrable to the human eye. It limited the area where vigilance was necessary. Its depth and obscurity favoured ambushes and sudden attacks: wild animals thrived and destroyed crops or decimated herds and flocks. Travellers passed through, not without a sense of fear. In the large woods between Allos and Colmars to Digne, bandits lay in waiting, "*latrones, murterri*". In 1341, two men, one from Allos and the other from Seyne were assainated there.

Royal sentence following the destruction of the woods in Belvédère, 1346.

A thousand years of deforestation

The cultivation of new arable plots causes an increase in the population and contributes largely to the disappearance of fine primeval forests. North facing terrains, unsuitable for crops were progressively deforested to provide the daily survival of the villagers, of which a non-negligible portion live in the "forests" in the Middle Ages.

The ravined mountain flanks in the Oxfordian marls on the left bank of the torrent of Puget Rostang, opposite the village. Late 19th century.

Box decorating the the Saint Jean festivities in Entrevaux. First quarter of the 20th century.

Firewood. Péone, Saint Brès, 1982.

As pasture for herds of sheep, goats and pigs, the forest is regularly frequented. Wood is an indispensable complement for families as firewood, for tools (plough tillers, handles) and furniture. Deciduous trees are cut back at the end of the summer to make bundles of brushwood. In the winter the leaves are fed to the animals and the kindling is used for cooking. Box is used as litter and for decorating village fetes. Deforestation accelerates relentlessly despite the efforts of the community. In 1786 the community of Puget Rostang complains that they have no longer have enough wood to fire the lime kilns used in building. So much wood is cut in Guillaumes that the Revolutionary administration forbids it. The punishment for contravening this has to be exemplary: 3 days work or 3 days in prison.

Timber in Guillaumes 1760-1860

The council consents free logging in general when property is damaged. In Guillaumes nine inhabitants from the hamlet of Villetalle are allowed to cut down 45 larches and 63 pines in an emergency to rebuild their houses destroyed by fire in March 1810. Poor wretches whose houses have fallen down are allowed to take wood to repair them.

The elected representatives are careful to preserve their forest domains and to regenerate these. When the woods are not damaged by falling rocks and avalanches, an excess of sheep and goats erode the mountains. The herds of goats are so destructive that the authorities beg the Sardinian Governor General to limit them to three per inhabitant.

The woods of Sylva Longua (no 26) shown with the limits of the communes of Chateauneuf d'Entraunes and Guillaumes around 1715.

Between 1760 and 1860 the management of the woods in Guillaumes is shared by the Sardinian Governor general and the local council.

Logging is reserved exclusively for building. Experts are designated by the council to estimate the number of trees to be felled depending on the type of building work. But this is not enough to stop all abuse. On the 14th June 1787, an inhabitant is discovered in the woods of Amé cutting down larches. 28 larches and 7 pines were felled when the authorised limit was 12 larches and 6 pines !

To prevent the free grazing of transhumant herds in the woods and to facilitate access to regulated pastures, specific paths, which were sufficiently wide (sheep-tracks) channel the herds.

As if this was not enough, the councillors forbid logging for 15 years and common usage in certain communal forests to enforce the implementation.

Certain areas are put into reserve in order to become forest lands. Others are sown with acorns and elms to retain earth where ravines form and provoke considerable damage.

Detail from the fire of Guillaumes 1682, by Jean Ardisson.

Flock, shepherd and "floucas" (mascot sheep recognisable by its 3 pompons) First quarter of the 20^{th} century.

The lure of profit

In the first half of the 19th century, communities constrained by financial contributions enforced by the Sardinian administration in order to build the road in the valley of the Var or the bridges, fall into debt. The woods of Guillaumes are affected in particular. In 1838, 6,126 pines are felled in the communal woods of Amé and in 1858, 701 larches.

At the same time there is an increasing demand for wood for building and heating from the coastal towns which incites owners of private woods, to sell with the help of unscrupulous wood merchants. In 1850, Paulin Pons, from Puget-Rostang organises the floating of 200 spans of wood for construction work, originating from the valley of Amé, on behalf of several owners.

Trunks waiting to be loaded, Haute-Tinée, end of 19th century.

If we consider the state of impoverishment that previous logging has reduced the woods of the Alpes Maritimes to, the carelessness of local councils or more precisely their repugnance to help the forestry administration every time they propose to reforest, the egoism of influential owners who tend to constantly increase pasture land, and in fact the almost total destruction of specific wood since the current legislation has given them free rein, one can only contest the fear that in continuing this prodigality, Province will finally deplete all its resources and the town of Nice will be compromised by its own consumption which increases as wood diminishes. Durante, Essay on logging, 1847.

In 1890, M.Hallauer the inspector of the Water and Forests Board makes an alarming assessment "The poor pasture land of the Maritime Alps, which covers 180,000 hectares approximately, is used every year for 10,200 local sheep and 30,000 transhumant sheep who spend the winter in La Crau and which for speculative reasons are responsible for having provoked and continue to provoke the major part of the degradation that can be seen". He adds "We can affirm that in this county, transhumant sheep have been the most efficient cause of the ruin of our mountains as they are still too numerous."

Thieves are heavily punished as in the case of Joseph Toche sentenced to a fine of 84 pounds and 25 days in prison by the royal judge of Guillaumes for having cut down 54 larches in the forest of Buserche. However this is to no avail. In communal forests, tree stumps bear witness to shameless pillaging.

Added to this is the increase in sheep in the county of Nice, 17,220 animals pass through the territories of Guillaumes and Villeneuve-d' Entraunes in 1674 heading for valleys of Haute-Tinée with the consequent damage they cause.

Flock of sheep grazing in alpine pastures. Photo Michel Graniou.

Carts crossing a bridge. Attributed to Johann Georg Schûtz (Frankfurt am Main 1755-1813) Town hall Grasse.

Logging near the Var, Albanais de Beaumont, Picturesque travels, 1787 Collection of Cessole library, Nice

A century of reforestation

Faced with the aggravation of mountain areas, especially the state of the soil and the consequent danger to lower land, the Second Empire decrees the law of 27th July 1860 which is committed to the restoration of mountain terrains. The law establishes obligatory sectors for reforestation and the subsidising of facultative perimeters on common land, in order to combat deforestation and land erosion. Serious flooding in the Alps in 1856 and 1859 influenced this vote.

Reforestation perimeter maps in the Maritime Alps.

This also affects La Roudoule, during violent storms Puget Théniers is subjected to the raging attacks of the torrent which regularly floods the village square and sometimes reaches the first floor of inhabitations. The Inspector of the Water and Forestry board, Hallauer, points out that "during storms, this torrent precipitates into the Var, mud, seeds, stones, blocks of rock which sound like an artillery charge as they pass through Puget Théniers".

The law was very unpopular with certain sections of the local population as it affected their livelihood by restricting grazing. In 1864 the law of the 8th June is decreed which substitutes the sowing of prairies to reforestation to preserve the interests of pastoralisme.

In April 1882 a law is created for the restoration and conservation of mountain terrains specifying the creation of generalised perimeters for reforestation. These tasks comprised not only planting and the creation of nurseries, but also the consolidation of embankments with "fascine" metallic cages and rock-containment barrages and the purging of the bed of the big ravines. Notwithstanding the difficulty of establishing the perimeters, work started in 1889 in La-Croix-sur-Roudoule and in 1894 in Puget Rostang. Between 1885 and 1914, 15,000 hectares were reforested in the Maritime Alps.

Saint-Etienne-de-Tinée, reforestation workers, near the Pal Pass. Early 20th century.

The Tree Nurseries

It is to the engineer for the Water and Forestry board, Prosper Demontzey, that we owe the tree nurseries. After failed attempts at sowing, he elaborates during the reforestation of the Mont Boron, a new method of planting. The saplings grow in nurseries for 2-3 years before being reintroduced to the forest where they are planted in twos or threes in holes of 40 cm. The holes are staggered and spaced out at 1,5 to 2m. A hectare requires the preparation of 3,500 to 4,000 holes.

Portrait of Prosper Demontzey. French engineer of the Water and Forestry commission, born on the 21st September 1831 at Saint-Dié-des-Voges, died in Aix-en -Provence 21st February 1898. He was the instigator of the Restoration of mountain terrain services for the Water and Forestry commission. He made a massive contribution to the reforestation of the southern Alps.

"These new nurseries will be established on plots of land which were formerly cultivated before their acquisition by the state and which are of relatively good quality: they will be near to our Forestry barracks of the Chaise and the Grossière. These barracks have water cisterns so the seeds can be watered several times during the summer. The soil after having been broken down and lightly spread with manure will be sown as specified, partially with spruce and partially with deciduous seeds."

Domanial brigadier's report in 1897.

Forestry hut and nursery of the Grossière late 19th century.

Forestry hut of the Chaise. View taken about 150m to the east of the hut looking towards the west.

Nursery of the Perdighière, late 19th century.

Nursery and area of the Perdighère April 1942.

Timber Rafting

In the mountainous forestry zones of the Haut-Var, the transport of wood is carried out by timber rafting. The trunks are dragged near to the river and the autumn rains and spring melting of the snow are used to move them. This is an ancient method dating to the Middle Ages. In the 18th century, Louis XIV makes the task easier by opening up "this mean torrent" whose rocks block the felled timber for his navy. In the wider sections near Puget-Théniers and Saint-Martin-du-Var floating rafts are guided by men are prescribed in the 19th century to protect the river banks.

Timber rafting on the Var near Guillaumes, 1905.

The timber is felled in the Vale of Entraunes and the woods of Amé where laricio pine and larch is abundant. This trade is profitable to dealers from Nice who sell them for building and heating. The wood which arrives at destination, after losses and plundering by residents, is depreciated by the shock of impacts. This is compensated by the quantities involved; Massot, a dealer from Entrevaux, conveyed 20,000 beams, 20,000 joists and 20,000 planks !

Dam for timber rafting, Vallon de Chastillon, Tinée 23rd May 1899. Photo by Victor de Cesole. Collection of the Cessole library, Nice.

The conveyers had to obtain a permit for timber rafting. The councillors in Puget-Théniers refuse several times to do this, despite the security deposits, as lost floating wood causes major damage to the river banks, accentuated by flooding. They consider "this means of transport entirely detrimental to the poor owners of agricultural land and of the land register of all land adjacent to rivers for the speculation of just a few".

Timber rafting is still witnessed on the river at the beginning the 20th century. Causing damage to the engineering works which are more and more numerous, requiring more man-power for conveyance, losses during the journey and high security deposits, it is progressively abandoned in favour of rail and road transportation which is more secure.

Map of the valley of the Var, 17^{th} century. This map indicates the places wood is removed from (A) the places where the wood is floated from (B), the points where work has been done for the passage of the logs.

Lost floating logs during the flooding of the Var in 1851.

Timber rafting on the Var, early 20th century.

The extraction of logs

Until the end of the 19th century, the extraction of logs was done by floating or by hauling. When the lay of the land permits it the trunks are dragged down specially made tracks "the drags" by oxen or mules. When the mountain massifs are very difficult to access, the trees are cut down directly on the spot, transformed into semi-finished timber and taken towards Nice by mule until cart tracks permit carts to take over the relay. If not, they are skidded down slopes to the edge of torrents into which they are thrown.

In the 1960's caterpillar tractors used on cart tracks replace horses. Nowadays extraction by winch is dominant.

"Cargaaaaa...ooooo.....!

The call comes from below. It travels up the steep slope of the valley. It slips between the larches in the thin mountain air. The narrow valley is like a trench in the earth, a clear scar in the green tree tops of the forest.

For lumberjacks the valley is also a natural path for the evacuation of logs: they are thrown from the top and retrieved 500m lower down.

Sometimes the trunks get stuck en route. The bottom of this canal is covered with enormous logs, laid out in a rough giant's floor. On top of this, the trunks thrown down, slide like express trains. Claude Mercadié "Lumberjacks and forests of the mounts of silence" Nice Matin, 17/08/1960

Carts transporting wood, Villars-sur-Var, the church and the town hall. First quarter of the 20^{th} *century.*

Wood haulage by Jules César, owner of a saw-mill in Entrevaux around 1952.

Wood haulage, late 19th century.

Forestry cables

Forestry cables were used on a large scale between 1930 and 1960.

The profession of cable rigging was mastered predominantly by Italians who brought their skills with them. French contractors recruited them in Milan. In this way Antoine Pignato came to Entrevaux in 1956. He had learnt his trade in his father's business in the mountains of Calabria. Installing a forestry cable was complex. A month and a half was needed for a cable of three kilometres and many men and resources. Between 1940 and 1960, three forestry cables were installed in the Gourdan woods between Puget-Théniers and Entrevaux.

Sketch of a forestry cable, Saint-Martin-Vésubie.

Once the site was chosen, a system of pickets or cloth markers tied to the tree tops was used for the alignment. Then the vegetation which might obstruct the proper functioning of the forestry cable was cut back. Next the various cables making up the forestry cable had to be hauled. The suspension cables measured at least 2km long.

To avoid cutting the cables the contractor recruited all the mule owners in the area. The cable was rolled up either side of the pack saddle to constitute a charge of nearly 80 to 100 kilos. Then 3 metres from there a worker carried a 30 to 40 kilo section on a shoulder strap, followed by another mule and in this way the chain continued to carry the cables to the summit. This stressful work was very painful due to the friction it caused.

Tightening a a forestry cable by Antoine Pignato and other lumberjacks near Entrevaux about 1960.

The men built an initial gantry of wood to suspend the cable 4 metres from the ground. Thereafter each gantry was spaced out at every 150 metres or more.

The tension was obtained using pulleys *(les moufles)*. Pierre Trévia used a lorry weighted by stones to tighten the cable, it eventually stopped by rearing in the air !

The logs were fixed onto hooked pulleys suspended on the main cable. 40 square metres of wood was extracted in a day, depending if the men were paid on a task or daily rate. Thanks to the modernisation of the techniques of cable haulage, it is still in use today.

Tightening a forestry cable by Antoine Pignato and other lumberjacks near Entrevaux in 1960.

The Pit Sawyers

This technique which goes back to the 14th century, has left few traces in the archives, except for a carpenter from Guillaumes, who supplied larch planks in 1483. It continues, however, for domestic purposes until the 20th century.

Sawing is carried out in the forest during winter campaigns, as soon as the trees are felled. Even if the processing is more expensive, wood cut by hand is reputed to be of better quality as more regular and better conditioned than that of mechanical saws, especially as there is no damage from floating.

The sawyers form small teams of between 2 and 8 workers, made up, often, of members of the same family and generally natives of the same community in which the forest is found. They may be recruited by a local contractor known as a "maestro sciatore" (master sawyer) or by a merchant owner of the logging area. In this case they are led by a foreman.

Le Lagas, Beuil. In the foreground the sawing area of the pitsawyers.

The workers are paid per dozen planks and may also receive part of their salary in kind (cheese, polenta, rice, stockfish, tobacco). They are housed in very basic conditions in barracks erected at the logging site or at local inns. Violent conflicts break out when workers deal with unscrupulous merchants who exploit them. Reason, equity, humanity justice, require that any worker who labours should be paid for his sweat (Text of demands of 6 sawyers from Coaraze against a contractor, Valentino Penasse).

In the 19th century the production of pit sawyers rivals that of hydraulic saw-mills: 14,400 planks sawed in Marie in 1833 and 837 beams produced in Utelle in 1840.

Albert Vérani and Lieutenant Grelot (top) sawing century beams, Beuil, 23/01/1911.

Léon and Louis Rancurel, pitsawyers, Péone late 20th century.

"Bouscante"- lumberjacks

The lumberjack is quasi-mythical character, a man of the woods, the sylvester is a marginal man. He has a hard life and habits, he works in a small circle and cultivates solitude, a necessary virtue in the forest. Living in almost complete isolation during long weeks, he takes part in village social events at the end of logging or during religious festivals.

He may be a native of the village, but most of the time they are Italians who migrate at the opening of the logging season.

In this way Félix Pignato obtains his first contracts in Entrevaux in the early 1950's.

At this time in Italy there was no more work and we had friends who put us in contact with this boss. We still hoped to emigrate....

The season was very, very hard and we didn't earn much. We worked in the Gourdan woods. We slept in a wooden hut with a bit of tar paper. We made it. Summer it was an oven and winter, from November, it was a glacier. We made fires on the ground to cook but not for long...... pasta, a little sauce, five minutes. Every Saturday we went down to Entrevaux to get our provisions. Sunday we waited till 10 o'clock then we went to see the boss, to hear that he had no money.

Bark stripping, valley of the Vésubie early 20th century

The days are long, muscles become tetanised in the hellish to and fro movement of the "troupeliero" the multipurpose saw. Once the tree is felled, the branches are removed by axe. Then the bark, before it is fixed to the mule for extraction.

Lumberjacks in the valley of the Vésubie early 20th century.

The hydraulic sawmills

At the end of the middle ages, the forestry riches of the Maritime Alps awaken the greed of merchants. Part of the felled wood (larch, fir, spruce) are sent to Nice then exported to further destinations. Manual sawing may take place in the forest. But at the beginning of the 14th century hydraulic sawmills are built in the valley of the Vésubie. With intesive exploitation of communal forests as from the 18th century, saw-mills multiply in the alpine valleys and on the plain of the Var where floated timber is sent.

Hydraulic saw, drawing by Villard de Honnecourt around 1230.

To build a saw mill represents an enormous investment. Buying the land and establishing a canal to provide water, the fitting, the mechanics of the hydraulic wheel and the upkeep of the tools...... Most saw mills are in the hands of a few rich merchants who don't operate them directly but rent them prorata of the throughput, 37.5 centimes the dozen for planks of 10 hands (2.62m). In the lower valley of the Var, the activity of the saw mills depends on the whims of the river. The structures for water intake are destroyed and the factories are periodically flooded. And in the summer when the levels drop the saws stop !

The production of the saw mills are variable and depend on the number of saws fitted. Between 10,000 and 15,000 planks per saw and year in the 18th century against 18,000 in the 19th century. This output is favourised by the appearance of alternative movement saws "manchote" (where the saw is used on the up and on the down stroke) around 1820.

Above and below Hydraulic saw-mill near Saint-Martin-Vésubie. Saw-mill of the Paillon valley.

The Brouchier furniture factory

Joseph-Antoine Brouchier sets up his carpentry shop in the area of la Clue in the 1840's. The canal

feeds a vertical wheel which powers a wood saw.

Casimir succeeds his father and expands the furniture business. Walnut trees insure a production of good quality. He opens a sales warehouse in Nice and becomes rich with the seasonal clients and hotels which are in full growth on the coast.

In 1897 the forests near the village no longer fulfill his requirements. The business owner decides to start logging in the forests of Saint-Pierre, Entrevaux, Annot and Beuil.

The Casimir Brouchier factory, Puget-Théniers early 20th century.

In 1906 he has the Sarret factory built on the right bank of the Var with a canal to feed an electric turbine which powers his machines and which provides public lighting. The factory employs up to 200 workers who work night and day. However a violent fire destroys the factory on the night of November 9th 1910.

The factory is rebuilt. The production of classical-style furniture continues from felling to varnishing.

Pierre succeeds Marius who employs an architect to design modern furniture. At the beginning of the second world war, the women of Puget work to assemble the hinges of ammunition boxes.

Portrait of Casimir Brouchier

The Poirier building known as "Snow White" late 20th century.

On the third of May 1944 the efforts of the family are dashed once more. On this day two German officers are killed near Breuil, not far from Puget Théniers. In retaliation the Wehrmarkt burns down the factory.

After the war, a manufacturer from Lyons, Edmond Burin and Maurice Saulnier from Nice become partners in relaunching the business. In 1958 M. Poirier announces the reopening of the furniture factory "Au vieux Chêne". Paternalist, the businessman has an imposing building built, commonly known as "Snow White", to house his employees. A local electoral setback leads M.Poirier, who is vexed, to abandon his activity in Puget Théniers.

Extracting wood in the forests of Entrevaux, first quarter of the 20th century.

Marius Brouchier surrounded by his employees, first quarter of the 20th century.

Timber for building

Larch is the most sought out wood for building in the mountains. It is rot-proof and very resistant to bad weather. However in Barels, beams made of lime, ash and aspen have been found dating from the 18th century.

The oldest methods of construction seem to be of trunks stacked and fitted together (meshed or blockbau) in evidence from the 12th century, on a dry stone base. Later this technique evolves with the hewing of the trunks which take on the aspect of beams.

The roofs of houses in the mountains are designed to resist the weight of snow. The slopes are accentuated so that it does not accumulate in too thick a layer. They most also be resistant to the force of the wind and some roof coverings have a cross key, where two long planks cross and are nailed to one of the beams supporting the floor.

In the Haut-Var the roofs are generally covered with larch shingles. They overlap and are nailed to the battens. A gouged channel helps the rainwater to run off. On the ridge the shingles cross over to overlay those on the other side. Some spaced regularly, have a diamond shaped edge. This is a point of fixation for a rope used for repairs to the roof. On the houses, on the edge, the drainpipes are gouged out of tree trunks.

Barns are closed on the top floor by trellises made up of logs with a small girth, held into place by two vertical rails. They are spaced out to air the hay.

Les Laves, hamlet of Barels; Larch is dominant: shingles on the roofs, supporting poles, balconies, wooden frames with a wooden wall section in the centre of the hamlet. Drawing by Jean-Benoit Héron, 2004.

Turini, the assembling of a barrack by the army, July 1905.

Sousta, (shelter) with a larch roof, hamlet of Barels 2001.

Diagram of a light framework with crossed rafters.

This variation is frequent in small buildings and precedes

- 1. Ridge panels 2. Rafters 3. Purlin 4. Larch shingles 5. Sand beam 6. Tie rod
- 2. Drawing by Paul Raybaut and Michel Perrérard

Framework, hamlet of Serre, Barels.

A: Knotted rafters B: C: Crossbow rafters.

Petrol chainsaw for use by 2 men

Rexo, Thiers 1930's.

This 11 hp petrol chainsaw corresponds to a miltary model as can be seen on the metal plaque on the side. Four-stroke engine, magneto ignition.

Doloire or wagoner's axe 19th century

Floater's perch 19th century Used for guiding felled logs in mountain torrents and rivers.

Pine hook 19th century Used for turning logs over.

The remains

Wood, resin, plaster, acrylic paint, varnish, ink. 2019-2020 Léo Thubin

The remains are the pieces of wood left behind by lumberjacks after logging. They are what is left of the tree, residual witnesses that the forest leaves behind.

They are also available materials which offer an opportunity for artistic transformation. The successive layers of paint and plaster, carefully smoothed, cover their surface, fix their shape and protect them from damage. In this way precise silhouettes are revealed, the raised knots and deep veins of the wood which are endlessly revealed to the eye. The fragments take form through a kind of artificial fossilisation. They are piled up in the exhibition like material souvenirs of the forest.