WHISTLER'S OLD AND ANCIENT TREES

WALKING / HIKING / BIKING GUIDE

WHISTLER'S OLD AND ANCIENT TREES

STEP BACK INTO ANCIENT WHISTLER

Whistler is on the eastern edge of the Pacific Northwest's magnificent temperate rainforest, an ecosystem that is globally significant for the antiquity of its forests, for its unique species, and as a carbon sink that helps slow climate change.

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Logging and urban development have removed vast areas of forest at lower elevations. Pockets of spectacular old and ancient trees nonetheless remain throughout the Whistler area.

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Whether you are travelling by foot, bike or vehicle, use this map to explore the oldest, most charismatic, and most accessible ancient trees in Whistler.

TREE-MENDOUS FACTS

Whistler's oldest known living tree is over 1,250 years old!

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Virtually all of Whistler's remaining unlogged forests are over 300 years old.

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Despite their rarity and uniqueness, Whistler's old forests are still being logged.

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Temperate rainforests are globally rare and remarkable for their large, ancient trees and ability to store more carbon than tropical rainforests.

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A large proportion of the world's temperate rainforests are found in coastal BC, including around Whistler.

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From 2003 to 2018, almost 1,000 trees throughout Whistler have been cored.

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Core samples reveal the tree's age, growth rate and how the tree's environment has changed over time.

Find out more about the old and ancient forests around Whistler and what you can do to protect them at: > AWAREWHISTLER.ORG

HOW DO WE KNOW TREE AGES ?

Trees grow each year by producing cells that accumulate on the outer edge of the stem and branches. Drilling into the middle of the tree with a hollow borer allows researchers to extract a core sample that shows how many annual rings the tree has, that is, how many years it has been growing.

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Cores from almost 1,000 trees were painstakingly extracted, glued to a mounting block, prepared to a fine finish to reveal the rings better, then counted under a microscope.

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This process can be very exact for younger, fast-growing trees which have obvious rings. Many old trees are more difficult to age since they can be hollow or be partially rotten, both of which prevent exact aging.

HOW TO USE THIS MAP

ANCIENT FORESTS

25 WHISTLER'S OLDEST KNOWN LIVING TREE

STARTED GROWING ≈ 650–750 | AGE 1268–1368+ | TREES CORED 1

This yellow cedar was discovered in 2012 uphill of Whistler Olympic Park near the ski jumps. After careful preparation, 1,174 rings were counted under the microscope and the...

- Colour-grouped parts of Whistler.
- Number and name of site that corresponds to the map on the other side.
- Estimated year the oldest tree started growing.
- Estimated tree age in 2019.
- Number of trees cored at this site.
- Historical facts and tree stories from local forest ecologist Bob Brett

ABOUT THIS PROJECT

The information on this map comes from over a decade of tree coring by Snowline Ecological Research and AWARE. Almost 1,000 trees from the Whistler area have been cored and this map is the first complete compilation of that data.

This map project is to highlight original (uncut) old forests in a time when they have become increasingly rare. Logging and development have reduced low-elevation forests to a small fraction of their original extent and these human pressures continue to threaten our remaining old forests.

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AWAREWHISTLER.ORG

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AWARE – Association of Whistler Area Resider for the Environment

SNOWLINE Ecological Research

THANK YOU TO OUR PROJECT SPONSORS

Community Foundation of Whistler

WHISTLER

Whistler Blackcomb Foundation ENVIRO FUND – STAFF GIVING BACK TO THE ENVIRONMENT

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WHISTLER VILLAGE

1 FITZSIMMONS CREEK TRAIL

STARTED GROWING 1758 | AGE 261 + | TREES CORED 21

The big cedars on this trail are relatively young compared to most forests in Whistler, probably due to flooding and movements of the main channel over centuries. The creek was channelled in the 1970's to prevent future flooding, which means this grove is likely to continue to develop for centuries.

2 REBAGLIATI PARK

STARTED GROWING 1689 | AGE 330 + | TREES CORED 16

Whistler's oldest cottonwoods, and some of the oldest in the world, are found at the edge of Rebagliati Park. They date back to the same time as the Douglas-firs beside them & probably started growing after a fire or maybe a change in the course of Fitzsimmons Creek. Large cottonwoods like these provide very important habitat for birds, mammals, lichens, and other species.

3 WHISTLER GOLF COURSE

STARTED GROWING 1679 | AGE 340 + | TREES CORED 10

There are three notable places on the course to see old trees during your round of golf on the Whistler Golf Course. There are large red cedars beside the first tee and clubhouse patio, impressive Douglas-firs beside the first green, and a beautiful grove of huge cedars beside the eighth tee.

4 CUT YER BARS BIKE TRAIL

STARTED GROWING 1694 | AGE 325 + | TREES CORED 16

The lower part of this trail has regrown since logging in the 1950s. Higher on the hill there's still an uncut Douglas-fir and western hemlock forest that is over 320 years old.

5 BLUEBERRY HILL PARK

STARTED GROWING 1669 | AGE 350 + | TREES CORED 15

A fire at the south end of Blueberry Hill in the early 1800s created conditions for new trees to grow. It must not have been an intense fire because there are many surviving veterans that are 350 years old – a similar age to the trees on the adjacent golf course.

LOST LAKE PARK

6 CENTENNIAL TRAIL VIA SPRUCE GROVE

STARTED GROWING ≤ 1301 | AGE 718, 569, 344, 199 + | TREES CORED 18

The Douglas-firs uphill of Spruce Grove Park date back to at least four fires in approximately 1300, 1450, 1675, and 1820. Douglas-firs typically start growing after a fire and these mixed ages show that some trees survived previous fires. Look closely and you will see where fires charred bark at the base of some trees.

7 SPRUCE GROVE PARK

STARTED GROWING 1852 | AGE 167 + | TREES CORED 6

Subdivisions are often named after what used to be there, as is the case with Spruce Grove. There is a small remnant of the original spruce forest beside the baseball diamonds. It likely started growing after Fitzsimmons Creek changed its course in about 1850.

8 LOW-ELEVATION YELLOW CEDARS

STARTED GROWING < 1400 | AGE 619 + | TREES CORED 13

Even though yellow cedars more commonly grow at higher elevations, they are also found in remnant groves near the entrance to Lost Lake Park, uphill of the Chateau Golf Course. Yellow cedars often live longer than 600 years and some are well over 1,000 years old.

9 CHATEAU GOLF COURSE

STARTED GROWING 1536, 1820 | AGE 483 + 199 + | TREES CORED 5

Golfers on this course enjoy great views of the original forest, especially on the uphill side. It's possible the remnant ancient forest beside the 9th green originated from the same fire almost 500 years ago that also burned in Lost Lake, above the Spruce Grove field house, and parts of the valley towards Wedge.

10 SEA TO SKY TRAIL NORTH

STARTED GROWING 1527–1680 | AGE 389–492 + | TREES CORED 36

Some of the big Douglas-firs on this trail overlooking Green Lake are almost 500 years old and the younger trees are about 400 years old. The older ones likely survived an intense fire that allowed the younger Douglas-firs to establish. The thick bark of Douglas-fir makes it the most fire-resistant tree in our area.

VALLEY TRAIL WEST

11 RAINBOW PARK PINES

STARTED GROWING ≥ 1913 | AGE 106 + | TREES CORED 10

The gnarled pines and other trees beside the Valley Trail en route to Rainbow Park owe their existence to the railway line. Most date back to a five-year period after 1913 when the railway was built. The rail bed drained the lake-side of the previous wetland which created favourable growing conditions for these trees.

12 EMERALD FOREST

STARTED GROWING 1629–1681 | AGE 338–390 + | TREES CORED 13

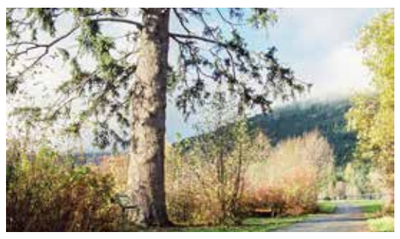
The biggest Douglas-firs in this forest are between about 340 and 390 years old. Parts of this protected area were previously "highgraded," which is why you'll see cedar stumps amidst original trees. The Emerald Forest became a protected area in 2000.

13 RIVER OF GOLDEN DREAMS BIG SPRUCE

STARTED GROWING 1800 | AGE 219 + | TREES CORED 1

Surely this huge spruce is ancient? Actually, no. It's instead a good example of how size is not always a good predictor of age. Spruces grow very fast in moist, productive sites like this and can achieve huge sizes. Although, almost 2m in diameter, this spruce is only 219 years old.

14 MEADOW PARK BIG SPRUCE



STARTED GROWING 1829 | AGE 190 + | TREES CORED 1

The huge spruce beside the River of Golden Dreams at Meadow Park is a relative youngster at about 190 years; 20 years younger than the similarly-sized giant at the base of Lorimer Road. This tree has survived repeated floods over its almost two centuries.

15 SHIT HAPPENS TRAIL

STARTED GROWING 1664, 1813 | AGE 355 + 206 + | TREES CORED 19

In spite of their small size, the Douglas-firs on the Shit Happens trail are over 340 years old. The intermingled lodgepole pines range in age from about 140 to 200 years which is evidence of relatively minor fires that didn't kill many canopy trees. This forest is one of many examples in the valley of lower-severity fires that create more than one cohort (trees that started growing at the same time).

VALLEY TRAIL SOUTH

16 ALPHA LAKE PARK

STARTED GROWING 1703 | AGE 316 + | TREES CORED 4

The big Douglas-fir grove behind the swings in this park is a little over 300 years old, which makes it one of the younger uncut forests in our valley. Based on the ages of other Douglas-firs around Whistler, these trees can expect to live another 100 to 400 years.

17 NITA LAKE HANGING FIR

STARTED GROWING 1432 | AGE 587 + | TREES CORED 1

This charismatic Douglas-fir is a landmark on the Valley Trail beside Nita Lake. Its relatively small size is deceptive – it's actually close to 600 years old! Some of the planet's oldest trees, such as bristlecone pine, are also found on very dry sites. Lack of moisture slows growth and results in very narrow annual rings.

BLACKCOMB MOUNTAIN

22 DECKER TRAIL

BURNED ≈ 1881 | TREES CORED 36

In approximately 1881, a large fire burned uphill to treeline below Decker tarn. The burned area is still visible from Whistler Mountain. Whitebark pines that died in the fire remaining standing as bleached "ghost trees.

WHISTLER SOUTH

18 CHEAKAMUS LAKE TRAIL

STARTED GROWING 1447–1517 | AGE 502–572 + | TREES CORED 36

The huge Douglas-firs at the entrance of the trail started growing almost 500 years ago, likely after a fire. The western hemlock forest near the cable car is multigenerational, meaning at least some of the canopy trees you see started growing in the shade of older trees. The oldest hemlock cored is close to 600 years old, and there are likely even older trees in the area.

19 TRAIN WRECK

STARTED GROWING 1660 | AGE 359 + | TREES CORED 21

The forest around the old boxcars is about 360 years old. The Train Wreck dates back to the mid-1950s when the railway hired a logging contractor to drag the derailed and damaged boxcars into the forest. What's particularly amazing is how neatly that contractor managed to get the boxcars into the forest!

23 BIG BURN TRAIL ANCIENT SNOWFOREST

STARTED GROWING < 1200 | AGE 801 + | TREES CORED 26

The oldest trees found to date on Blackcomb Mountain are yellow cedars near the top of the Wizard Chair, some of which are accessible by the Big Burn Trail. Although relatively small, some are over 800 years old. These ancient forests tend to be on cool-aspect, flatter sites where snow shortens the growing season.

WHISTLER MOUNTAIN

20 SINGING PASS TRAIL

STARTED GROWING 1655–1710 | AGE 309–364 + | TREES CORED 11

This trail passes through some beautiful forests, all over 300 years old. It is likely that additional coring would discover even older trees as the north-facing aspect of Whistler's side valleys tends to have fewer lightning-caused fires than the south-facing.

21 WHISTLER MOUNTAIN'S OLDEST KNOWN TREE

STARTED GROWING 700–750 AD | AGE ≈ 1,300 | TREES CORED 3

The oldest tree known on Whistler Mountain was a yellow cedar from just below the Emerald Chair. It was about 1,300 years old when cut for the gladed ski run called Side Order. The photo shows a disk being cut from the stump (the disk is now at the Whistler Museum). Many old trees grow elsewhere on Whistler Mountain, for example, the 800+ year old yellow cedars in the Lower VDs.

24 SEVENTH HEAVEN TREELINE

STARTED GROWING > 1865 | AGE 156 + | TREES CORED 17

The treeline marks the highest elevation at which trees are capable of growing. It may be surprising to learn that the highest elevation trees (at treeline) are young, but it makes sense in a warming climate. As snow and ice receded at the end of the Little Ice Age, circa 1865, trees were able to grow. The treeline will continue to climb uphill with longer summer growing seasons as our climate warms further.

ANCIENT FORESTS

25 WHISTLER'S OLDEST KNOWN LIVING TREE

STARTED GROWING ≈ 650–750 AD | AGE 1269–1369 + | TREES CORED 1

This yellow cedar was discovered in 2012 uphill of Whistler Olympic Park near the ski jumps. After careful preparation, 1,174 rings were counted under the microscope and the tree was estimated to be at least 1,250 years old. Trees in ancient forests, like this one, are exceptionally slow-growing which is why they are deceptively small in spite of their antiquity.

26 BRANDYWINE VALLEY

STARTED GROWING < 1100 | AGE 901 + | TREES CORED 16

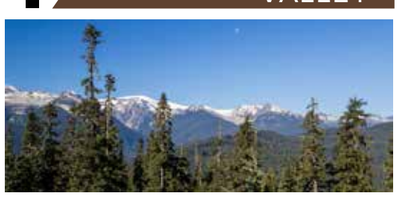
The main way to access ancient forests here is via the trails to Brandywine Meadows. The photo shows the AWARE team coring a yellow cedar that's at least 900 years old. This tree is adjacent to the upper road leading to Brandywine Meadows and beside recent logging.

27 RAINBOW LAKE TRAIL

STARTED GROWING ≈ 1200–1300 | AGE 701–801 + | TREES CORED 14

This trail is home to Whistler's oldest known mountain hemlocks, which grow amidst gnarled old yellow cedars and amabilis fir. The ancient forest along the long and flat section at 1,100 metres elevation is a classic example of subalpine forest on the B.C. Coast.

28 CALLAGHAN VALLEY



STARTED GROWING ≈ 750–1500 | AGE 501–1251 + | TREES CORED 100

The paved road that was built for the 2010 Winter Olympics takes you into some of Whistler's oldest forests. All 17 Callaghan sites sampled for this project had trees older than 500 years and most were close to or older than 1,000 years. Watch for the shaggy white bark of ancient yellow cedars from the paved road and from the many trails near Whistler Olympic Park.

29 ANCIENT CEDARS

STARTED GROWING ≈ 1250 | AGE 769 + | TREES CORED 35

The Ancient Cedars are famous for the grove of huge red cedars. Since all of these trees are hollow it's impossible to know exactly how old they are. Based on ages of the yellow cedars and Douglas-firs that are nearby, it's safe to assume they are at least 750 years old.

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Did you know?

SIZE AND AGE ARE NOT ALWAYS RELATED

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Whistler's largest trees are often not that old, for example, the big spruces in the valley bottom. Meanwhile, some of Whistler's oldest trees are not very large.

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Trees typically grow faster on moist, productive sites and therefore have much wider rings – the fastest-growing trees can have rings as wide as the nail on your little finger.

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By comparison, some slow-growing yellow cedars can have up to 100 rings in that same width

SHINRIN-YOKU

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The Japanese term "Shinrin-Yoku" roughly translates as "Forest Bathing." Use this map to plan your own forest baths!

CULTURAL SIGNIFICANCE

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Whistler is located within the traditional territory of the Sḵwxwú7mesh and Lìl̓wat7úl First Nations who have lived in and passed through these forests for thousands of years.

A TALE OF THREE FORESTS

Look up and you will see an uneven line about halfway up the mountains. Trees below the line have grown back after logging – most of which was 50 to 80 years ago. Trees above the line are original old forests – never logged and never altered in any significant way by people.

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The coring done for this project leads to two main conclusions: (1) that virtually all unlogged forests are at least 300 years old; and (2) that some are much older, ancient forests. Before industrial logging, British Columbia's coastal temperate rainforests contained a significant portion of the world's old and ancient forests. Today, these magnificent forests are increasingly rare due to logging and other human activities.

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The tale of Whistler's three forests includes young forests, old forests, and globally rare ancient forests.

Photo courtesy of Whistler Museum and Archives.

LOGGED, YOUNG FORESTS

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The photo above shows ski pioneer Franz Wilhelmsen pointing to Whistler Mountain, soon after it opened in 1966. The snowy area below was logged mostly in the 1950s.

Logging between the 1930s and early 1970s cut most of the forests in Whistler Valley, from valley bottom and to halfway up the valley sides.

The young stands that have regrown can by distinguished by a lighter green colour and slightly shorter stature than adjacent old forests.

ORIGINAL, OLD FORESTS

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Tree coring revealed that virtually all forests that weren't logged in the past century are over 300 years old.

The canopy trees in these stands typically started growing after a fire or other event that killed some or all of the previous trees.

Coring showed some stands have different ages (cohorts) of trees within their canopy. This result is evidence of fires that didn't kill all the trees and shows that historic fires in our area were not always catastrophic.

MULTIGENERATIONAL, ANCIENT FORESTS

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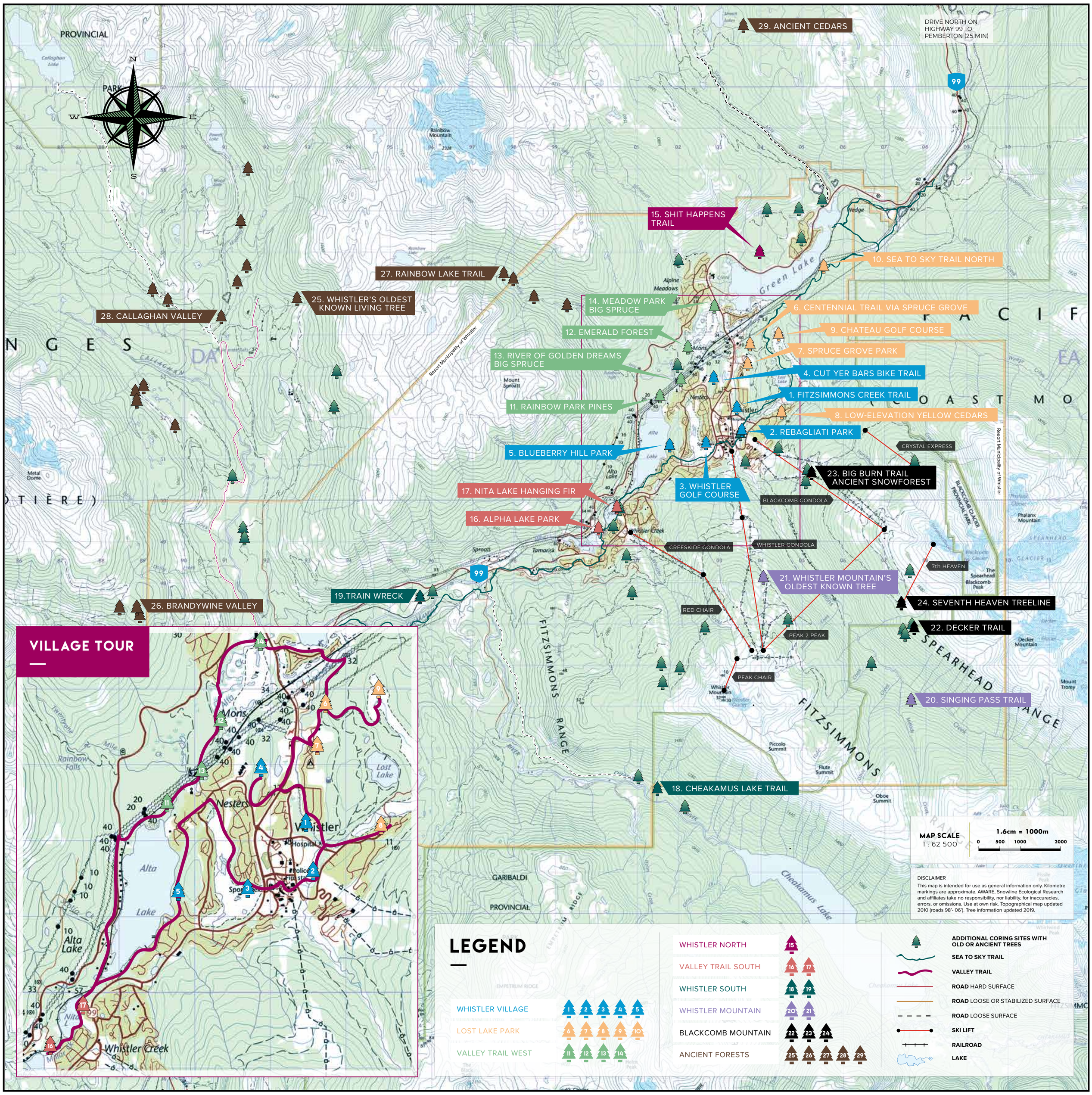
There are still many ancient forests in Whistler in which the canopy trees are 400, 600, and even 1,000+ years old.

What's even more amazing is that on some sites, those ancient trees replaced other, long-dead ancient trees without fire or other disturbance.

Multigenerational forests are incredibly rare in the world because of fires, logging, and other reasons. Whistler is incredibly lucky to still have some standing.