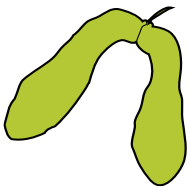

Introduction

LIVING IN THE PRESENT ~ NOURISHED BY THE PAST ~ PROVIDING FOR THE FUTURE

Heritage Trees Definition

Canada's Aboriginal elders teach us that all our actions, whether wise or foolish, will affect seven generations hence. Onondaga Chief Oren Lyons reminds us that "when we walk upon Mother Earth we plant our feet carefully because we know the faces of our future generations are looking up at us from beneath the ground". [1]

Winona Stevenson, a Cree woman, writes that "indigenous people are spiritually attached to a particular place. We never left the bones of our ancestors behind. Every hill, mountain, river, coulee and forest has ancient stories to tell us how we related to it and to each other'.[2] And, Pauline Shirt warns that "this is turnaround time for the earth and we need to get back to the ways that allowed us to live off the land and understand her cycles. We need to tap into our spirits, our minds, our bodies and our hearts. We have to think holistically and communally. Within the dominant culture we've forgotten that and we are becoming spiritually bankrup. Your spirit is the most important part and your body is the vessel that carries it".[3] Deborah McGregor, in her work on traditional ecological knowledge and sustainable development, imparts her basic message namely, that we need to learn how to give back to Creation, rather than take away.

This sense of connection is one that ethno-botanist and ethno-ecologist Nancy Turner[4] refers to in writing about the philosophies of Aboriginal peoples of the northwest coast of North America, philosophies that are akin to those of Aboriginal peoples throughout North America, that

> confirm and reinforce the idea that humans do have a kinship with all the other elements of their world. Ceremonies, customs and stories recognize and validate this connection, as do the ways in which people relate to their lands and resources. This kinship supports and nurtures humans, but it brings with it obligations. The same responsibilities that most humans feel towards their own family members are, in the kincentric view of indigenous peoples, extended to all life. It is the duty of humans to acknowledge and to look after all of their relatives and to consider their health and well-being as inextricably bound to humans. It is seen as a sacred trust to care for Earth and its inhabitants, as they care for us.

Honouring and protecting heritage trees in our communities and in our forests and woodlands beyond them are acts of honouring our elders.

Heritage trees are story tellers. They continue to tell us about our country, our geography and our peoples. While they look after our spiritual well being, they also nurture our bodies and minds. They are our inheritance, a legacy which obliges us to bequeath the same to future generations.

Dan Schneider, senior policy advisor, Ministry of Culture said in 2008 that "it's increasingly artificial to separate so-called natural heritage and environment from cultural heritage and the environment made by humans". The interconnection of our human cultural history and our natural heritage is recognized in the definition of heritage trees articulated by Paul Aird, Professor Emeritus, Faculty of Forestry, University of Toronto. Evaluation instruments (**SECTION D**) that assess heritage value are based on this definition.

Heritage Tree: **a notable specimen because of its size, form, shape, beauty, age, colour, rarity, genetic constitution, or other distinctive features; a living relic that displays evidence of cultural modification by Aboriginal or non-Aboriginal people e.g., strips of bark or knot-free wood removed, test hole cut to determine soundness, furrows cut to collect pitch or sap, or blazes to mark a trail; a prominent community landmark; a specimen associated with an historic person, place, event or period; a representative of a crop grown by ancestors and their successors that is at risk of disappearing from cultivation; a tree associated with local folklore, myths, legends or traditions; a specimen identified by members of a community as deserving heritage recognition.** [5]

Definitions of the terms 'natural heritage', 'cultural heritage', and 'heritage tree' vary thereby causing confusion. For the purposes of this toolkit these definitions are clarified by Professor Aird thus:

Heritage, natural heritage, cultural heritage and heritage tree defined [6]
Key words: *definitions, natural heritage, cultural heritage, heritage tree*
Mots cles: *definitions, patrimoine naturel, patrimoine culturel, arbre patrimonial*

Use of the terms 'natural heritage', 'cultural heritage' and 'heritage tree' is becoming more common in everyday writing and conversation throughout the world. Although these terms now appear in popular, technical, scientific and legal writing, accepted definitions for them are difficult to find. The result is a lack of clarity in the meaning and usage of these words.

The perspective presented here is intended to help generate both a national and global consensus and understanding of the meanings of, and connections among, 'natural heritage', 'cultural heritage' and 'heritage tree'. It expands on the definitions for 'natural heritage' and cultural heritage' in Aird (1994) and adds a definition for 'heritage tree'. Note that a heritage tree may be part of the world's natural heritage, part of its cultural heritage, or both.

Heritage: *that which is or may be inherited by individuals or communities and passed on to successors*

Natural heritage: *land; water; air; fire; rocks; fossils; soil; native plants, animals and microorganisms; habitats; ecosystems; landscapes; natural beauty.*

Cultural heritage: *customs; traditions; language; folklore; literature; art; sculptures; theatre; music; crafts; archaeological sites; sacred sites; cemeteries; museum collections; quarries; buildings; ruins; implements; machines; roads; trails; fields; fences; gates; gardens; wells; dams; bridges; landmarks; historic events; introduced or domesticated plants, animals and microorganisms; cultural beauty.*

Heritage tree: *a notable specimen because of its size, form, shape, beauty, age, colour, rarity, genetic constitution or other distinctive features; a living relic that displays evidence of cultural modification by native or non-native people, including strips of bark or knot-free wood removed, test hole cut to determine soundness, furrows cut to collect pitch or sap, or blazes to mark a trail; a prominent community landmark; a specimen associated with a historic person, place, event or period; a representative of a crop grown by ancestors and their successors that is at risk of disappearing from cultivation; a tree associated with local folklore, myths, legends or traditions; a specimen identified by members of a community as deserving heritage recognition.*

An Ontario Heritage Tree Designated Under the Ontario Heritage Act ~ Comfort Maple

"The Town of Pelham promotes the designation of the sugar 'Comfort' maple as having heritage value. Pelham is fortunate to have a tree such as the Comfort maple in our community. It has strong historical significance and is believed to be the oldest and largest sugar maple in Canada. The Comfort Maple has been on the Honour Roll of Trees of the Ontario Forestry Association for more than 20 years. (See back cover for photo of Comfort Maple).

The Comfort maple is a Pelham landmark; its importance and significance have been recognized through its use on the front of Pelham's tourism brochure for 1999 and has been incorporated into the Coat of Arms for the Town of Pelham since 1979 as a symbolic emblem of Pelham's place in Canada.

David Pearl

The Comfort family had owned the land where the Comfort maple stands since 1816. Robert Comfort was a United Empire Loyalist. Originally the land belonged to Major David Secord, brother-in-law of Laura Secord, and the Comfort maple was part of a 100-acre Crown grant to Secord in 1808.

The Comfort family has a long history of philanthropy in the community: John Comfort donated land for the North Pelham Presbyterian Church; Dr. William Mingle Comfort donated the land for the manse of this church; Dr. Comfort's children donated land for a buffer west of this church.

The tree is a source of pride for the Comfort family, the citizens of Pelham, the Niagara Region and beyond. The designation of this tree is an opportunity for the Town of Pelham to officially recognize the contributions of volunteer groups and individuals such as the Niagara Peninsula Conservation Authority, the Comfort family, and the current owner of the Comfort maple, Dr. Paul Coyne, who have given so much to the community."[7]

A Sampling of Other Heritage Trees Designated Under the OHA:

B. Heidenreich

Osage Orange Tree Hedgerow (Caledon)

The Osage Orange Tree Hedgerow (Caledon) This hedge was planted in the 19th century as a natural fence. It was well known in southwestern Ontario as a dense hedge capable of keeping farm animals in, or out, of farm fields; the hedge also served as a windbreak

Double-trunked Grafted Sugar Maple (Binbrook) The double trunks are approximately 12 feet high to the graft and 40 feet high overall. Trees were grafted in this fashion many years ago by Aboriginal peoples as territorial markings. This particular tree may have been used as a marker by the Cayuga.

Eastern Larch (Tamarack) 'The Maguire Tree' (Township of Springwater) This tree found in the Village of Elmvale is believed to be one of the largest eastern larchs in Ontario measuring 59.5 feet high with a crown spread of 42.5 feet. Records indicate that this tree was planted by William 'Miner Bill' Ritchie (1842-1929) in the 1870s ~ his nickname he received because he worked for 13 years as a carpenter in the Sudbury mines. Many of the homes and barns in the Elmvale area were built by Miner Bill. The tree is located on Amelia Street where the McGuires built a house during WWI in 1915. They operated a drug store which was later operated by their son Donald McGuire.

Jacob Fisher Bur Oak (Woodbridge) This 260-year old bur oak stood on Part Lot 5, Concession 6 in Woodbridge in 1837 when local farmers secretly practised their musketry for the Rebellion led by William Lyon Mackenzie. Named after the original owner of the crown grant property, Jacob Fisher, this old tree dates back to the first settlers of Vaughan

David Pearl

Eastern Larch "The Maguire Tree"

Allanburg Heritage Oak

Township. Early pioneers were required to clear the land for planting. Those trees that remained served as property markers and wind breaks. Fisher was an early immigrant from Pennsylvania.

Allanburg Heritage Oak (Thorold) The tree can be seen from Highway 20, on the north side between Centre Street and Falls Street. This tree is a 350 year old oak and has been identified by the community as an important part of their neighbourhood. Its long life has provided pleasure since the 17th century and in the 21st century is still here for the appreciation of a new generation of families in the area.

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[1] S. Wall and H. Arden, Wisdomkeepers: *Meetings with Native American spiritual elders*. Hillsboro OR: beyond Words Publishing, 1990;68. See also The Royal Commission on Aboriginal Peoples Report (1991) http://www.rrc.mb.ca/library/dc/3roya.htm

[2, 3] *Ethnic Assimilates Indigenous: A Study in Intellectual Neocolonialism*, Wicago Sa Review, Spring 13 (1998) 37

[4] Nancy J. Turner. *The Earth's Blanket:Traditional Teachings for Sustainable Living*. Vancouver BC:Douglas & McIntyre, 2005;73

[5] *Forestry* Chronicle 81(4) July/August 2005; 593

[6] *Forestry* Chronicle 81 (4) July/August 2005; 593. See also Aird, P.L. 1994, "Conservation for the sustainable development of forests worldwide: A compendium of concepts and terms".

[7] Excerpt from Schedule B from By-law No. 2172 (2000) The Corporation of the Town of Pelham Passed June 5, 2000

On Trees and the Sacred Birch

As long as the Anishnaabeg lived in harmony with the land they have always used the white birch tree. It was used to make bowls, containers, canoes and for starting fires. When the sap would start running in the spring, they made birch bark containers to catch the sap for making medicines. It was also used as art. The women would bite designs into the bark as decoration

For my people, we always understood that the trees were living and had to be treated with respect because they carried so much knowledge and wisdom. We were told that without trees we could not breathe because trees take in pollution and replace it with clean air. That, to me, is amazing. We always looked after each other. We looked after the forests by maintaining them and burning the dead trees.

The elders say we have lost our connection with the land and we must gain that connection by going in the forest and just sitting and listening to the birds, the animals and hearing the leaves of the trees blowing in the wind. It is that reconnection that will help with self identity to remember who we were and our ancestors, to honour our mother, the one who gives us everything we need to survive. It is time to take back our ways and our trees are a good reminder of that.

Ashton Monture
Student,
Lloyd S. King Elementary School
Mississaugas of New Credit First Nation Reserve
April 2010

The Tree of Peace and Thor's Helper (Canada and Iceland)

What Do These Ancient Trees Tell Us?

Trees are storytellers. What would they tell us if we were to take time to reflect about their presence? Aboriginal people refer to the eastern white pine as the Tree of Peace. The Iroquois say that it is a symbolic tree beneath which warring nations buried their weapons. As depicted by artist David General, an eagle sits atop the Peace Tree to guard against approaching evil while the roots reach out extending peace to all nations.

These ancient champions can be found in Greenwood Lake Conservation Reserve in Northwestern Ontario. Charles Wilkins, a Thunder Bay writer, speaks eloquently about these arboreal giants, approximately 10 000 of them in 5 sq. km. of crown land having escaped loggers' saws. Many are a metre or more in diameter and more than 40 metres tall and can be expected to live 450 years. He goes on to say that historically white pine has been a cultural, recreational and economic mainstay for Canadians. In the early 1800s agents of the British crown scoured eastern forests marking the tallest and straightest pines for use as masts, booms and spars on British ships. Early in the 20th century the white pine became a Canadian artistic icon depicted by the Group of Seven. The eastern white pine is Ontario's official tree.

Thor's Helper can be found in Iceland. It is commonly known as a rowan or a mountain ash. Rowan is a Norse term meaning 'getting red'. Its hardiness ensures its survival in Iceland. It is known for its physical denseness therefore good for rune staves. But it is also deemed to have mystical powers as described in Icelandic lore. For instance, its wood makes for sturdy magicians' and druids' staffs; it is supposed to protect against witches and sorcerers and carries with it myths and folktales. The tree was sometimes planted on graves to keep the dead from rising. Because it is found both in Iceland and Canada, some Icelandic-Canadians feel this tree generates a sense of kinship between these countries..

Ontario has many heritage trees with stories to tell. Recently Michael Henry and Peter Quinby produced *Ontario's Old-Growth Forests ~ A Guidebook with History, Ecology and Maps*. These authors document heritage trees in Ontario through photos and stories, an impressive example being the 'three kings'. These ancient cedars found near Lion's Head are over 1000 years old.

The Ontario Heritage Tree Alliance, a project of the Ontario Urban Forest Council, continues to work with individuals and communities to identify heritage trees in Ontario and to devise ways of protecting them for future generations. The OHTA has developed criteria that determine heritage value. Do you know of a tree worthy of recognition as a heritage tree? Should you wish to tell your story you can contact Fran Moscall c/o the OHTA at hegilles@rogers.com

This article was originally prepared by the author for publication in *The Bulletin*, a publication of the Ontario Historical Society.

Heritage Trees: Canada's Timeless Story Keepers

The Ontario Urban Forest Council

By Fran Moscall, originally appeared in OHS Bulletin October 2009

Dedication Ceremony for The Sitting Duck, a 175-year old bur oak, Alliston ON 2005

Old growth trees in Romanian folklore are considered siblings of the people who live in their midst. It is believed that ongoing existence of these trees absorb peoples' stories, consequently Romanians continue to honour them for their importance to human life for all time.

In Canada, Onondaga Chief Oren Lyons reminds us that "when we walk upon Mother Earth we plant our feet carefully because we know the faces of our future generations are looking up at us from beneath the ground". Caring for the land is an ancestral tradition since it affects Aboriginal people culturally, spiritually, nutritionally and socially. This spiritual connection results from years of coexistence with the land.

This is true for all peoples as is shown in the many legends across nations. The maple tree brings success and abundance; the oak is endowed with powers of protection, health, healing, wisdom; the hawthorn symbolizes caution; the fir is associated with clear vision of what is to come; the elm symbolizes dignity and grace and the elder, compassion.

Across Canada and particularly in Ontario, citizens recognize heritage trees for their value in telling our stories. But many of our ancient champions are in peril. Development continues to threaten old-growth stands in isolate, urban and rural areas. Unless we protect them we risk the loss of their historic, cultural and physical significance.

Currently, heritage trees that have been recognized as telling our stories are protected under the Ontario Heritage Act. Examples include the Comfort sugar maple in Pelham; Jacob Fisher oak tree in Woodbridge; cottonwood tree in Sutton; Osage orange tree hedgerow in Caledon; copper beech in Drummond Hill Cemetery, Niagara.

What is a heritage tree? Because of its concern for their preservation the Ontario Urban Forest Council (OUFC) through its project, the Ontario Heritage Tree Alliance, adopted a definition coined by Paul Aird, Professor Emeritus, University of Toronto:

> *Heritage tree ~ a notable specimen because of its size, form, shape, beauty, age, colour, rarity, genetic constitution, or other distinctive features; a living relic that displays evidence of cultural modification by Aboriginal or non-Aboriginal people, including strips of bark or knot-free wood removed, test hole cut to determine soundness, furrows cut to collect pitch or sap, or blazes to make a trail; a prominent community landmark; a specimen associated with an historic person, place, event or period; a representative of a crop grown by ancestors and their successors that is at risk of disappearing from cultivation; a tree associated with local folklore, myths, legends or traditions; a specimen identified by members of a community as deserving heritage recognition.*

This definition is included in its publication *Securing the Future of Heritage Trees: A Protection Toolkit for Communities, 1st Edition 2006*. This document and its definition are being used by communities across Ontario to identify and protect heritage trees. Anyone interested in undertaking such a venture is invited to contact the Ontario OUFC at jradec@mountpleasantgroup.com

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Old-growth forests 101

Why are old-growth forests important?

When thinking about healthy forests, it's not often we think about dead, dying or diseased trees. But any forest manager will tell you that they're an essential part of a healthy forest ecosystem, and a key characteristic of old-growth.

Dr. Bill Freedman, a professor of biology at Dalhousie University in Halifax, Nova Scotia, and Chair of the Nature Conservancy of Canada's (NCC'S) National Board of Directors, explains that "old-growth forest contains some large and old trees, but all age classes are present." Old-growth forests exist because they have not been subjected to a significant disturbance such as wildfire or clear-cutting for a century or more. Overall, it's not easy to pin down an age at which a forest becomes old, because depending on the climate, geography and soil, a forest's composition and lifespan will vary drastically.

So what makes old-growth forests unique, and why are they important? The first answer is that old-growth forests contain trees in all phases of their life cycle, from saplings, to mature trees, to dead standing trees and finally as rotting trees on the forest floor. This provides a home for many species of plants, fungi, invertebrates, salamanders and snakes, and makes old-growth forests hotspots of biodiversity and a refuge for high concentrations of Species at Risk.

"Protecting old-growth forests means respecting the elders, letting them die a natural death and crash down even if they're diseased," notes Mark Stabb, NCC's Central Ontario Program Manager. Dead trees significantly change the structure and composition of the forest, but there are always saplings waiting in the shadows to take their place. "This helps us understand how they will respond to disease and natural disturbances such as fire, tornadoes or earthquakes," say Stabb.

"There aren't many old-growth forests left compared to a couple hundred years ago," he adds. But the 200-year-old Happy Valley Forest (HVF) Natural Area in Ontario is a good example of a forest that is growing old. Located just 35 kilometres from Toronto, this 2 851-acre (1 154-hectare) forest is an outstanding example of mature sugar maple and beech forests characteristic of the Oak Ridges Moraine. The HVF is critical habitat for over 110 breeding bird species, including the nationally significant Acadian Flycatcher and Cerulean Warbler and amphibians like the Jefferson Salamander.

Dr. Henry Barnet whose land NCC helped protect in the HVF and who has been instrumental in convincing neighbours to put their land under conservation protection, remarks, "with more than 210 acres (85 hectares) protected so far, hopefully the Happy Valley Forest will have a chance to become truly old-growth in the years ahead".

The Ark, Spring Issue, 2008
Courtesy of the Nature Conservancy of Canada www.natureconservancy.ca

Looking Outside Ontario

Winnipeg's Heritage Trees

This tree was growing in an open field, property once owned by the Richardson family in Winnipeg. In 1993, while the land was sold for development, the city made protection of this tree a condition in their development agreement. The tree now thrives as a boulevard tree on Great Elm Place.

Richardson American Elm

Diversity Among Purity in the Carpathians

Temperate forests around the world covered a large range of climatic, site and species conditions. In Europe currently about 26% of the total area in the temperate zone is covered by often fragmented forests. "Virgin" or primeval temperate forests are rare in Europe due to the long-lasting continuous human use of forests and due to high human population densities. Coniferous, broadleaved or mixed forests occur depending on the histories and sites of the various areas.

European beech is an important late-successional tree species in a swath of Europe where rainfall and the water balance of the soil are able to supply its transpiration needs during the summer and the winters are not too cold. Where life conditions are suitable, European beech tends to an absolute dominance. Thus, natural European beech forests are often almost pure stands of this single species. Nevertheless they display an enormous spectrum of minority associates and different plant (and related animal) associations below their canopies. Furthermore, biodiversity is a multidimensional concept and characteristics such as the diversity in habitat structure and "naturalness" also need to be considered.

In 2007, UNESCO's World Heritage Committee recognized the Primeval Beech Forests of the Carpathians (Slovakia and Ukraine) as a transnational serial natural area of 10 separated parcels totaling more than 29,000 hectares (excluding buffer zones and connecting corridors). This was cited as an outstanding example of complex temperate forests exhibiting the most complete ecological patterns and processes of pure stands of European beech. The biodiversity is not linked to a single forest type, but to many different and varying associations. The area contains 123 documented forest associations and major forest types from oak-beech at lower elevations to fir-beech-spruce at higher elevations. It contains the largest and tallest beech specimens in the world, reaching an amazing height of 57 metres, and all the necessary elements essential for the long-term conservation of the various beech forest types and their associated ecological processes. It was the consensus of a number of experts that the best remnants of beech forests are situated here. Although not the only remaining undisturbed beech forests, these are the best of the last.

The recognized sites are true "virgin", primeval forests that are original in structure and have developed under natural conditions. These values have attracted long-term scientific study of the sites and their complex ecological systems, and will be important to the understanding of the effects of global climate change in temperate regions. The ten separate parcels are core areas of larger existing protected areas in a single biogeographic region, with similar overall climatic conditions, across the border of two countries, on various soils, slopes, aspects, elevations and temperature gradients. Individually,

each parcel has great value; together, they best represent primeval beech forests across a variety of environmental conditions. Discussions are ongoing concerning possible future extensions to the series with additions of other locations in Central Europe.

These forests have the visual appeal commonly associated with "primeval" old-growth forests that some believe inspired European Gothic architecture. However, they were selected for the quality of how they represent the re-colonization and development of the temperate broadleaf ecosystems after the last ice age, a process which is still ongoing.

Paul Maycock from Ontario has compared the composition and structure of some of these forests with other mesic deciduous types from around the world. Old-growth forests in southern Ontario were found to be generally richer in species of trees and other vascular plants. One general explanation for lower species richness in Europe is that the east-west mountain ranges created a barrier causing more extinctions during the ice ages. Maple is a major component in Ontario, but relatively minor in Europe. Beech dominance tends to restrict the ground flora, but many similarities in genera are evident in both continents. Average canopy heights were found to be lower in Ontario at 35 metres compared with 42 metres in the Slovak and Ukrainian Carpathians.

I have visited and hiked the largest of the parcels – the Uholka area in Ukraine with a core area of 11,860 ha and additional buffer zones of 3,500 ha. It was quite an experience. Although the core area has much deadwood (10-20 times more than in wood production forests), the general impression is that of a lot of healthy large trees. Sample plots indicate that an average hectare here contains 21 trees with diameters greater than 80 centimetres, and heights of 45 metres or more are reached.

Historically, until the first world war this area was reserved by Austro-Hungarian landowners only for hunting. Since then, inaccessibility, lack of nearby settlements and increasing recognition of the uniqueness of this publicly-owned area have limited the exploitation of its resources. This is not an urban forest. However, it is urban academics, scientists and occasional tourists that visit the area and spread knowledge about it. Close-to-nature silviculture is allowed in the buffer areas for the subsistence of the local rural population. Management challenges with respect to illegal cutting are likely to continue, but so far do not appear to be overwhelming. It is hoped that international recognition will increase appreciation and support by local populations.

Finally, the trailing blackberries that grow in those forests (not restricted to old growth) are the most delicious I have ever tasted.

by Bohdan Kowalyk
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ZAPOROZHIAN OAK (UKRAINE)

Few trees from the very oldest times have been so honoured by people as the oak, one of the most long-lived and strongest trees on earth. Not many places on our planet can boast of such a majestic old-timer as the Zaporozhian oak. Over seven centuries the girth of the tree reached 6.32 metres and its crown of leafy branches now has a spread of 43 metres in diameter. When the oak was still young is was probably bereaved of its crown for at a height of one to three metres there appeared lavish offshoots.

In the quiet valley near the Verkhnyaya Khortitsa River, they grew until they reached 36 metres, a record height for oak trees. If you look at the tree from afar, it looks like a gigantic shrub. Maybe this is the reason that the oak was spared the axe in the 19th century when the virgin forests of the Dnieper River area were so ruthlessly felled after the tsarist government had given the land over to landlords and colonizers.

According to specialists, the Zaporozhian oak is in its prime. It bears fruit once every two years. Tourists eagerly carry off its acorns as souvenirs and take them to all corners of the world planting them in their yards. So the leaves of the Zaporozhian oak saplings rustle in many spots on the globe. And their rustlings seem to relate legends of old to today's generations.

It is believed for instance, that Bogdan Khmelnitsky stopped under the Zaporozhian oak in 1648 with the army he was leading to fight the enslavers. And what wonderful words were put into the Hetman's mouth by a folk legend: "Hard trials have befallen us, as our lot. Let us then in battle be as strong and enduring as this Herculean oak, as inseparable from our Homeland as the roots of this tree from the soil". Another legend has it that it was the Zaporozhian oak that listened to the rowdy laughter of the Zapororzhian Cossacks when they wrote their famous letter to the Turkish Sultan. (A famous painting by Ilya Repin '*The Zaporozhye Cossacks Writing a Mocking Letter to the Turkish Sultan 1880-91*). This old-timer witnessed the brilliant historical events that took place after the October Revolution (1917). It saw the birth of the Dneproges (Dnieper Hydroelectric Station ~ a huge dam constructed with manual labour of men and wormen).

Zaporozhians (residents along the Dnieper River in Ukraine) love this famous tree and tenderly look after it. Systematic and qualified care of the tree began in 1910 when a Petersburg political exile founded a 'Society for the Preservation of Nature' in the village of Verkhnyaya Khortitsa. Today the Zaporozhian oak is regarded as a unique specimen of nature and is under state protection.

Young and old alike keep coming to look at the mighty old-timer as if wanting to come in touch with eternity. And the century-old wrinkles time has engraved in its bark do not remind us of swift-flowing years but of the triumph of life.

(Excerpt from *ZAPOROZHIAN OAK*, published in Kiev Ukraine, 1979)

SWEDEN'S NORWAY SPRUCE

9 550 year-old Root System

This persistent survivor was found at an altitude of 910 metres (2 985 feet) in Dalarna Province, Sweden. It is said that it is the world's oldest living tree that first took root at the end of the last Ice Age. It has been exposed to harsh weather conditions of the mountain range that separates Norway from Sweden, and because of its location it has been spared the loggers' axe. Leif Kullman, professor at Umea University's department of ecology and environmental science said that the tree's longevity is due to its ability to clone itself. The spruce's stems or trunks have a lifespan of around 600 years, "but as soon as a stem dies, a new one emerges from the same root stock".