



Veteran Trees Reflections and Future Directions

Photo: Tina Axelsson



April 16-17 in Stockholm at Swedish Museum of Natural History & The Bergius Botanic Garden

Day 1: 08.00-17.00

- **Artémis Anest**, Associate Professor at the University of Montpellier, France
- **Tom Joye**, Arboricultural trainer and project coordinator at Inverde, Belgium
- **Reg Harris**, Director of Urban Forestry Ltd, United Kingdom
- **Emma Gilmartin**, Doctor of Philosophy; Arboricultural Association, United Kingdom
- **Jim Mullholland**, Ecologist and arboriculturist. Director at BATS Research & Training, United Kingdom
- **Vikki Bengtsson**, Ecologist and conservation biologist at Pro Natura, Sweden
- **Jaroslav Kolařík**, Consulting arborist and CEO at Safe Trees, Czech Republic
- **Valentino Cristini**, PhD and Assistant Professor at Mendel University in Brno, Czech Republic
- **Karin Sandberg**, Ecologist at the County Administrative Board of Västmanland County, Sweden
- **Ted Green MVO, MBE**, Founder member and President of the Ancient Tree Forum and Honorary Vice President of the International Tree Foundation

Day 2: 08.00-16.00

Outdoor Workshops at Bergius Botanic Garden

Participants will rotate between five different outdoor workshops on the application of the topics from day 1.

· Fungi and beetles

Emma Gilmartin & Karin Sandberg

· Crown development

Reg Harris & Chris Knapman

· Tree habitat

Vikki Bengtsson & Jim Mullholland

· Tree tech for veterans

Jaroslav Kolařík & Valentino Cristini

· Tree architecture

Artémis Anest & Tom Joye

Speakers day 2

- **Gunvor Larsson**, manager of the Bergius Botanic Garden
- **Jill Butler**, Bsc, Msc, VetCert consulting

Welcome to the conference

Veteran Trees – Reflections and Future Directions

As the title suggests, let's take a moment and reflect on how the awareness of old trees have changed during the last decade...

On a professional level things have improved but generally people seem to gradually lose their knowledge and understanding of trees, not just old ones. A report from Pollinate Sweden last year shows that almost half the Swedish population suffer from plant blindness, or plant awareness disparity, which means that they lack fundamental knowledge of wild plants and subsequently lack awareness of biodiversity and ecology. Even most of us in the "green industry" seem to have a slight visual impairment when it comes to the life stages of trees, how they grow old and how to manage them.



*Markus Pettersson
Executive Director
The Swedish Tree Association*

The same questions were addressed some 13 years ago when the Swedish Arborist Federation (SAF) was founded by a group of arborists who looked for answers and knowledge, mainly regarding veteran tree management, that lay beyond conventional arboriculture. It all came to a head when the 600 year old oak at Oxenstiernsgatan was condemned and felled on the 25th of November 2011 for unclear reasons.

The conference Ancient Trees in Urban Environments was SAFs quick and positive response to this unfortunate event and was held at The Natural History Museum 10-11th of May 2012. Now, just more than a decade later, we meet up again, still on a positive note, to reflect and look ahead. Veteran Trees: Reflections and future Directions marks the end of SAF as an organization and a driving force in spreading the understanding of conservation arboriculture. The torch has now been picked up by the Swedish Tree Association, brightening up future directions.

A warm welcome!

Daniel Daggfeldt, Conference Organizer

Peter Hjelmqvist, Conference Organizer

Markus Pettersson, Conference Organizer and Executive Director, Swedish Tree Association



Conference moderator



Chris Knapman

**F Arbor A, Dip Arb (RFS),
BSc (Hons). Arboricultural,
Horticultural and Ecological
Consultant/Contractor,
United Kingdom**

Chris Knapman is a professional arboricultural, horticultural and ecological consultant with a special interest in heritage trees of aesthetic, biological and cultural interest. A member of the Ancient Yew Group, Ancient Tree Forum and a former Local Authority Tree Officer over two decades. Also, two seasons as Tree Protection Officer for the Royal Horticultural Society Chelsea Flower Show. Since 2022, Chris has delivered training for the Arboricultural Association- 'Pests, Diseases and Disorders' course.

A committee member of the Scottish Branch of the Arboricultural Association and recipient of the Association's Award for 2023. Chris works nationally and internationally advising on special trees and is a regular speaker on various tree related topics.



Photo: Tina Axelsson

Veteran Trees – Reflections and Future Directions

Timetable for April 16th

Program day 1	
Time	Program
08.00–08.30	Registration. Coffee/Tea is served from 08.15
08.30–08.35	Markus Petterson , Executive director, The Swedish Tree Association
08.35–08.50	Chris Knapman , moderator - Opens the Conference
08.50–09.25	Artémis Anest , Associate Professor at the University of Montpellier, France Evolution and tree architecture
09.25–10.00	Tom Joye , Arboricultural trainer and project coordinator at Inverde, Belgium Tree architecture and management decisions
10.00–10.30	Break with coffee/tea and snacks
10.30–11.05	Reg Harris , Director of Urban Forestry Ltd, United Kingdom Practical aspects of managing old trees
11.05–11.40	Emma Gilmartin , Doctor of Philosophy; Arboricultural Association, United Kingdom What we know about decay fungi and trees
11.40–12.20	Jim Mullholland , Ecologist and arboriculturist. Director at BATS Research & Training, United Kingdom Bats and tree habitats
12.30–13.30	Lunch
13.30–14.05	Vikki Bengtsson , Ecologist and conservation biologist at Pro Natura, Sweden From tools to habitat – Thirteen years of veteranising young oaks
14.05–14.40	Jaroslav Kolařík , Consulting arborist and CEO at Safe Trees, Czech Republic Techniques for surveying and evaluating veteran trees
14.40–15.20	Valentino Cristini , Ph.D and assistant professor at Mendel University in Brno, Czech Republic Wood degradation: A material interpretation
15.20–15.50	Break with coffee/tea and snacks
15.50–16.10	Karin Sandberg , Ecologist at the County Administrative Board of Västmanland County, Sweden Protected species in veteran trees
16.10–16.30	Ted Green MVO, MBE , Founder member and President of the Ancient Tree Forum and Honorary Vice President of the International Tree Foundation
16.30–17.00	Moderated panel discussion - Saved questions from the day

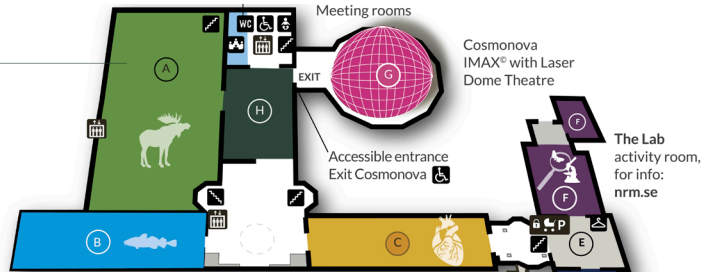
Map of the Swedish Museum of Natural History – day 1



Upper level 5

Exhibitions:

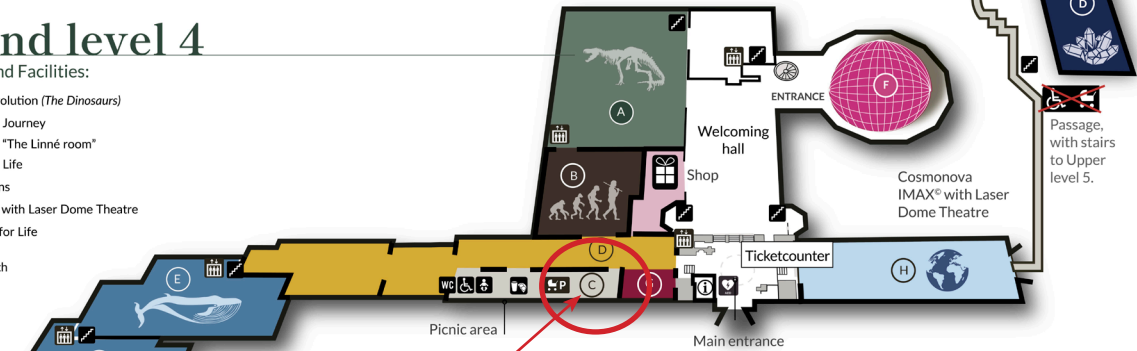
- A Swedish Nature
- B World of Water
- C The Human Animal
- D Treasures from the Earth's Interior
- E Vegasalen
- F The LAB - Activity room
- G Cosmonova IMAX® with Laser Dome Theatre/ Exit and accessible entrance
- H Temporary Exhibition; The research museum



Ground level 4

Exhibitions and Facilities:

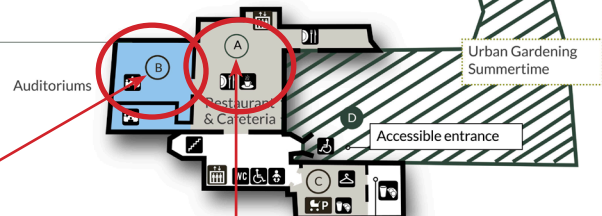
- A Fossils & Evolution (*The Dinosaurs*)
- B The Human Journey
- C Picnic area; "The Linné room"
- D Diversity of Life
- E Polar Regions
- F Cosmonova with Laser Dome Theatre
- G A Souvenir for Life
- H Mission: Climate Earth



Lower level 3

Facilities and out door exhibition:

- A Restaurant and Cafeteria: *Bistro Naturhistoriska*
- B Auditoriums
- C Picnic area and Cloakroom
- D Urban Gardening Exhibition



Restaurant for special dietary needs

Conference hall

Main restaurant

Registering for ISA CEUs, ETW, ETT- or VETcert-certificate

Are you ISA-, ETW-, ETT- or VETcert-certified? Or just want a certificate for the conference?

Day 1 gives you 7 CEUs
Day 2 gives you 6 CEUs

Please note! Scan the QR-code at the registration table.



Conference presentations

Conference presentations will, where possible, be available to download after the conference for continuing learning.



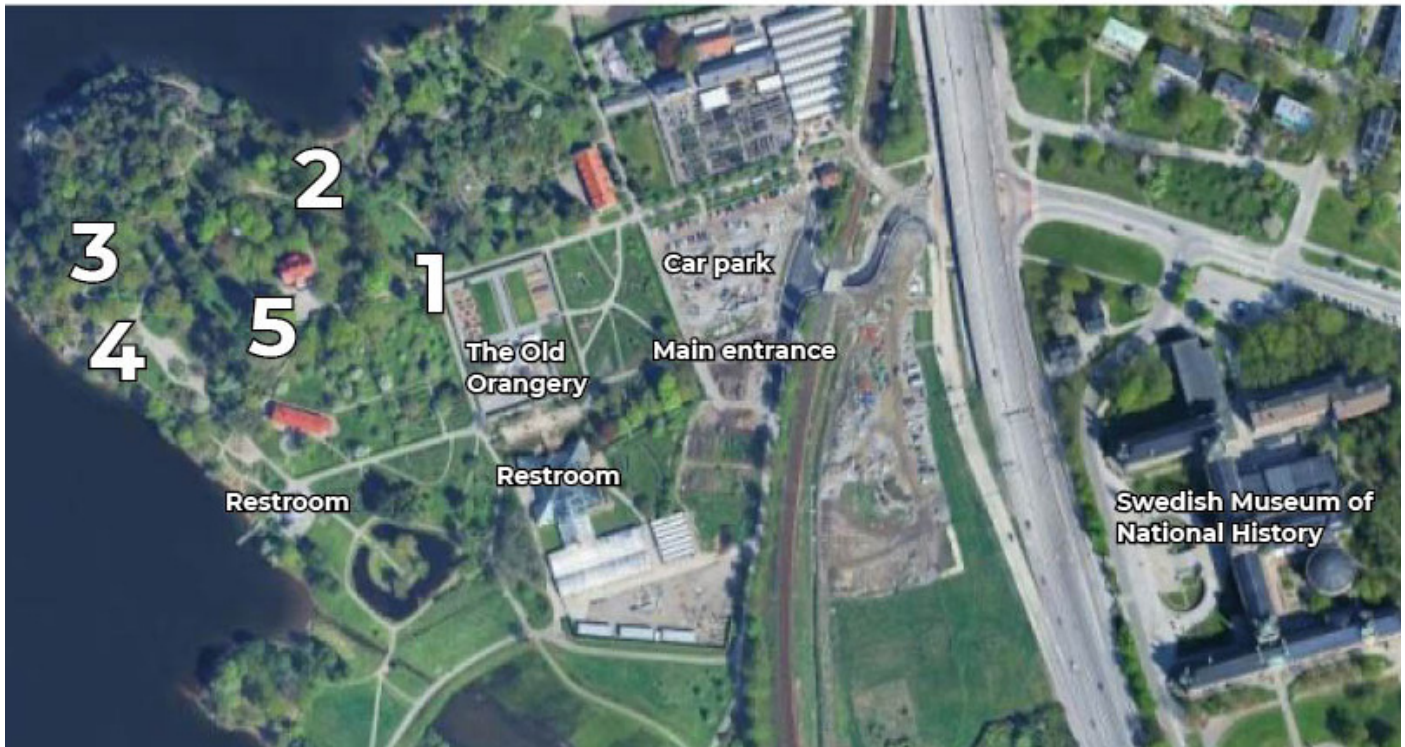
Veteran Trees – Reflections and Future Directions

Timetable for April 17th

Program day 2					
Time / Groups	TROLL	KORIBA	RAUH	MASSART	LEEUVENBERG
08.00-08.30	Registration & Coffee at the Old Orangery				
08.30-08.40	Welcome by Gunvor Larsson , Manager of the Bergius Botanic Garden				
08.40-08.50	10-minute transition to workshops				
08.50-09.40	TREE ARCHITECTURE	TREE TECH	HABITAT	CROWN DEVELOPMENT	FUNGI & BEETLES
09.40-09.50	10-minute transition to workshops				
09.50-10.40	TREE TECH	HABITAT	CROWN DEVELOPMENT	FUNGI & BEETLES	TREE ARCHITECTURE
10.40-10.50	10-minute transition to lunch				
10.50-11.50	Lunch at the Old Orangery				
11.50-12.00	10-minute transition to workshops				
12.00-12.50	HABITAT	CROWN DEVELOPMENT	FUNGI & BEETLES	TREE ARCHITECTURE	TREE TECH
12.50-13.00	10-minute transition to workshops				
13.00-13.50	CROWN DEVELOPMENT	FUNGI & BEETLES	TREE ARCHITECTURE	TREE TECH	HABITAT
13.50-14.00	10-minute transition to break				
14.00-14.30	Break with coffee/tea and snacks				
14.30-14.40	10-minute transition to workshops				
14.40-15.30	FUNGI & BEETLES	TREE ARCHITECTURE	TREE TECH	HABITAT	CROWN DEVELOPMENT
15.30-15.40	10-minute transition to final speaker				
15.40-16.00	Concluding remarks, Jill Butler , BSc, MSc, VetCert Consulting, at the Old Orangery.				

Workshops: Participants remain in their assigned groups throughout the day. Please note the name of your group at the top of the schedule and on your nametag. Each workshop is 50 minutes long.

Map of the The Bergius Botanic Garden - day 2



Outdoor Workshops at Bergius Botanic Garden

1. **Workshop: Fungi and beetles**, Emma Gilmartin & Karin Sandberg
2. **Workshop: Crown development**, Reg Harris & Chris Knapman
3. **Workshop: Tree Habitat**, Vikki Bengtsson & Jim Mulholland
4. **Workshop: Tree tech for veterans**, Jaroslav Kolarik & Valentino Cristini
5. **Workshop: Tree architecture**, Artémis Anest & Tom Joye

Speakers of the conference

Veteran Trees: Reflections and Future Directions



Artémis Anest

**Associate Professor at the
University of Montpellier, France**

Ecological and evolutionary perspective on veteran tree management to guide current and future practices

I am Associate Professor at the University of Montpellier. My research interest focuses on understanding drivers of plant morphological and functional diversity. My approach is built on the integration of historical botany, through the use of PlantArchitecture analysis, trait-based ecology, and their integration within a macroevolutionary framework. By reconstructing the ecological history of major plant lineages my aim is to create new insights on 1) ecological processes involved in plant dispersal and explaining their current distribution, 2) morphological and functional evolution, and their role in escaping biome conservatism; 3) the synergistic effect of ecological changes and morpho-functional evolution on plant lineage diversification and biodiversity maintenance.

Can veteran trees adapt to the ongoing and coming global changes? While asking this question, we know that tree biodiversity, shaping ecosystem structure, is threatened by rising ecological challenges. Over evolutionary time, plant lineages have experienced many ecological threats: diversification of browsing mammals; rise in temperatures and glaciations, affecting physiological functioning; increase in fire and other disturbances, affecting aboveground biomass. Faced with these threats, lineages have either moved to other environments or changed to adapt to new pressures. These processes have shaped the evolutionary history and architecture of veteran trees. Understanding when and how trees have followed one path or the other can inform current management strategies. In this talk, I will illustrate how this knowledge can improve our capacity to manage veteran trees through: 1. describing mechanisms facilitating tree resilience and survival under browsing and disturbance; 2. identifying evolutionary steps that have enabled trees to persist in challenging environments; 3. understanding how these processes can inform interventions such as pruning, deadwood retention, and habitat management. I will finally explain why understanding these evolutionary processes can actively guide conservation and management of veteran trees.



Tom Joye
Arboricultural trainer and
project coordinator at Inverde,
Belgium

Tree Architecture, Resilience, and the Quest for Accuracy in Assessment

In the management of veteran and ancient trees, decisions are often made based on a tree's chronological age or visible decay. However, tree architecture offers a more nuanced "blueprint" for understanding a tree's true vitality and resilience. This presentation explores the critical distinction between ontogenetic (developmental) age and chronological age, highlighting how even very old trees can exhibit young, vigorous growth patterns if they succeed in reorganising.

Tom Joye will address common biases in tree assessment of old trees, where 'decline' is often misidentified as 'senescence', and where reorganisation processes are often overlooked. By 'reading' the tree through the lens of architectural concepts and reiteration, managers can more accurately assess a tree's reaction potential to stress and management interventions. This session will challenge linear development models and provide a framework to evaluate a tree's reorganisation potential to deal with environmental constraints, leading to more informed, evidence-based management of our most precious veteran trees.

Tom Joye is an arboricultural trainer and project coordinator at Natuurinvest (Inverde), Belgium, where he specializes in the management of veteran trees and the architecture of trees. Tom has been a leading figure in making tree architectural concepts—pioneered by French and Canadian scientists—available to the non-french speaking part of the the arboricultural industry, introducing it as a practical tool for tree managers across Europe. He served as the project coordinator for the EU-funded VETree project and was a key member of developing the VETcert pan-European certification scheme. By advocating the tree architectural concepts, as an "education of the eye," Tom's work focuses on bridging the gap between scientific concepts on tree architecture and field-based arboriculture to ensure a correct understanding of the long-term resilience and reorganisation processes in ancient and veteran trees.



Reg Harris
Director of Urban Forestry Ltd,
United Kingdom

Practical Aspects of Managing Old Trees: An evaluation of retrenchment pruning at Hatfield Forest in Essex, UK

In this presentation, Reg explores the evolution and impact of retrenchment pruning, a tree management practice applied to veteran and ancient trees, with a focus on Reg Harris's experiences at Hatfield Forest in Essex, UK. A renowned arborist with four decades in the industry, Reg was introduced to retrenchment pruning in the early 2000s, a method designed to mimic natural crown reorganisation observed in ancient trees. Despite initial optimism, the method's drawbacks became apparent, urging a reassessment of retrenchment pruning considering modern environmental challenges and the trees responses. His experience serves as a cautionary tale, emphasising the need for adaptive management strategies informed by ecological sensitivity and scientific research.

Reg is an arborist and consultant based near Bury St Edmunds in Suffolk, UK. He has specialised in working with veteran and ancient trees for the last 25 years and works throughout the UK and beyond whenever possible. Reg is an examiner for Vetcert and is and member of the Ancient Tree Forums Technical Advisory Panel.



Emma Gilmartin
Senior Technical Officer at the
Arboricultural Association,
United Kingdom

What we know about decay fungi and trees

Advances in scientific methods, together with increased interest and awareness, has greatly increased the amount of studies of fungi and trees. In this talk, I reflect on how much of this expanding body of research is truly relevant to the management of veteran trees. From the perspective of a fungal ecologist working in arboriculture, I will summarise the key insights from recent years and consider their practical implications for tree management.

Emma Gilmartin is Senior Technical Officer at the Arboricultural Association, where she manages the charity's technical work, including overseeing the VETcert examinations in the UK. She has contributed to numerous projects on the conservation and management of trees and their associated wildlife, including completing a PhD on decay in beech. Emma is also a member of the Ancient Tree Forum's Technical Advisory Panel and the UK Wood Pasture and Parkland Network.



Jim Mulholland
Ecologist and arboriculturist,
Director at BATS Research &
Training, United Kingdom

Bats and Tree Habitats

Most European bat species live in trees, with some species residing in them year-round. Jim will discuss which bats use trees and how they use them, the ecology of different bat species, the tree features that provide habitat for bats, and the threats facing bat populations, as well as what we can do to help support them.

Jim is an ecologist and arborist specialising in bats & veteran trees. Jim's current research interests include; improving how we survey trees for bats and creating artificial bat roosts in trees.



Vikki Bengtsson
Ecologist and conservation
biologist at Pro Natura, Sweden

From Tools to Habitat - Thirteen Years of Veteranising Young Oaks

Veteranisation is a means to create habitat more quickly on younger trees, whilst still ensuring the trees survive. There are many sites across Europe with few ancient trees and a large age gap between the existing old trees and their successors, which means time is not on our side. There is thus a great risk that the biodiversity associated with the old trees may be lost if we do nothing. The technique has gained popularity across Europe, but there are limited studies showing if it actually works. An international trial to test veteranisation on oak was set up in 2012. This presentation will share results from this trial, highlighting how wood-living beetles have responded positively after just two years, which techniques seem to be more effective, and first insights from the most recent monitoring in 2025.

Vikki Bengtsson is a PhD student at SLU and senior ecologist at Pro Natura, with more than 30 years of experience working with ancient trees, habitat restoration and veteranisation across Europe. Her research focuses on how veteranisation can accelerate habitat development in young oaks for biodiversity. She was also project manager for the VETree and VETcert projects.



Jaroslav Kolařík
*Consulting arborist and CEO at
Safe Trees, Czech Republic*

Techniques for surveying and evaluating veteran trees: Assessment and Management Planning for Veteran and Ancient Trees: Experience from the VetExt Approach

Within the Veteran Tree Experience Exchange project (2023–2025), a dedicated and structured approach to the assessment of veteran and ancient trees was developed, tested, and applied in practice. This methodology was implemented through the VetExt application and integrated into an online inventory system hosted at www.checktrees.com.

The assessment framework goes beyond basic qualitative descriptions of tree condition. It systematically records key structural, biological, and site-related parameters, and—crucially—defines the baseline information required for the detailed design of management interventions and the formulation of long-term care objectives for individual trees.

An integral part of the approach is the use of advanced technological tools, including 3D scanning of trees and their subsequent biomechanical interpretation. These tools support a more informed understanding of tree structure, load distribution, and potential risk, while respecting the specific needs and values of veteran and ancient trees.

Jaroslav Kolařík is an arborist and CEO of Safe Trees s.r.o. with more than 33 years of professional experience in arboriculture. He holds a Ph.D. from Mendel University in Brno and specialises in tree stability, risk assessment, and tree valuation.

Over the course of his career, he has carried out visual assessments of approximately 900,000 trees and conducted more than 2,000 instrumental tests, including pulling tests and sonic tomography. He is the author of several professional publications on tree planting, pruning, and tree care, and has been involved in the development of arboricultural standards and digital tools for tree assessment and management.



Valentino Cristini
Ph.D and assistant professor
at Mendel University in Brno,
Czech Republic

Wood degradation: A material interpretation

Wood degradation in veteran trees is a natural and dynamic process that alters wood material properties, including strength, stiffness, density and dynamic properties. Understanding how these changes affect structural performance is essential for reliable tree stability assessment and conservation-oriented management. This presentation examines the relationship between biological wood degradation and its material-based consequences, focusing on how degradation modifies elastic wave propagation and residual load-bearing capacity. Particular attention is given to the interpretation of device supported methods, as acoustic tomography and resistance drilling. We demonstrate that the interpretation of acoustic tomography outputs depends strongly on wood heterogeneity and image reconstruction parameters. Case examples illustrate how different defect types affect acoustic behaviour in distinct ways. By linking degradation processes with measurable material changes, this contribution presents a transparent solution for interpreting AT results, supporting more informed decisions in the management of veteran trees.

About me:

I was born in Italy and moved to the Czech Republic in 2013 to study arboriculture, while gaining practical experience as a professional tree climber. After graduation, I worked in arboricultural consultancy and applied phytopathology, focusing on tree health and decay diagnostics. My Ph.D. research focused on changes in the acoustic and mechanical properties of green wood due to fungal activity. After completing my doctorate, I became an assistant professor specializing in urban tree care. My current research focuses on wood degradation at the material level, integrating biomechanics, wood anatomy, pathology, and advanced non-destructive diagnostic methods for the assessment of veteran and urban trees.



Karin Sandberg
***Ecologist at the County
Administrative Board of
Västmanland County, Sweden***

Trees worthy of protection in Sweden: how we've worked and what the future holds

Karin Sandberg is a biologist and has worked as national coordinator for the action plan for trees with high conservation value since 2011. Karin will talk about what the work with the action plan has entailed over the past 15 years.

She will describe how inventories are carried out and what types of measures are being worked on in Sweden. She will describe what the work will involve in the future and how it can be implemented in the work with the Nature Restoration Law.



Ted Green MVO, MBE
Founder member and President
of the Ancient Tree Forum



Jill Butler
BSc, MSc, VetCert Consulting

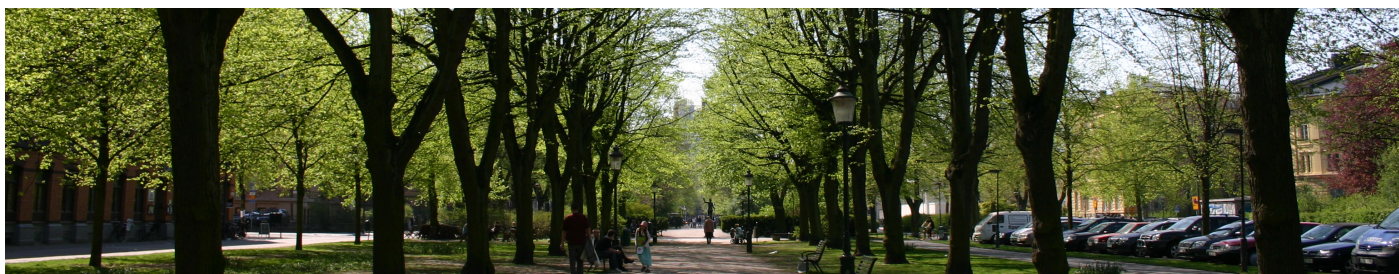
Guests of honour

Ted Green MVO, MBE, founder member and President of the Ancient Tree Forum and Honorary Vice President of the International Tree Foundation. He was awarded MBE in recognition for his work in conservation especially trees and fungi and MVO for distinguished work for King Charles III. He was given the Arboricultural Association Annual Award for his contribution to arboriculture. Was awarded The Gold Medal by The Royal Forestry Society for his distinguished services to Forestry. Made an Honorary Lecturer by Imperial College, London University.

Ted is Conservation Consultant to the Crown Estate at Windsor. Ted is a regular broadcaster, writer and speaker at international conferences on ancient trees and fungi.

Jill Butler has a specialist interest in ancient and other veteran trees, ancient Forests, wood-pastures and parkland. This interest led her to look at the history and structure of past landscapes through ancient trees and the important ecological aspects of managing open grazed Forests or wood-pastures with large herbivores. She has travelled widely in Europe to look at the sites Frans Vera researched for his landmark book Forest History and Grazing Ecology. Along with Ted Green, she was involved in the early stages of the Knepp Wilding project in West Sussex.

Jill is a qualified VetCert Consultant through the Arboricultural Association and a keen surveyor and verifier for the Ancient Tree Inventory. She is a Trustee of the Tree Register of the British Isles. In September 2020, Jill received the Arboricultural Associations Annual Award in recognition of her significant and positive contribution to the arboricultural industry or profession.



The Swedish Tree Association – Professional network for urban tree management

Who we are

The Swedish Tree Association is a professional network that promotes knowledge exchange and best practice in urban tree management.

We connect practitioners, researchers and decision-makers.

What we do

The Tree Days - national tree conference

The Swedish Tree Climbing Championship

TRAQ & professional certification courses

Publications & research exchange

Our members include:

- ◆ Arborists
- ◆ Landscape architects
- ◆ Researchers
- ◆ Municipal tree managers
- ◆ Consultants
- ◆ Students

We bring together Sweden's urban tree community to raise standards, share knowledge and shape the future of **arboriculture**.

Get involved

- Join a committee
- Contribute to Trädbladet
- Expand your professional network

→ ***Become a member today!***

www.tradforeningen.org



svenskatradforeningen



Discover upcoming courses and events by the Swedish Tree Association

2026 April 20-22	TRAQ Tree Risk Assessment Qualification · Göteborg
2026 April 21 **	Blågröngråa system · Stockholm
2026 April 21-22 **	Grundläggande besiktning · Sollentuna
2026 May 20 **	Trädinventering · Örebro
2026 May 22-24	Swedish Tree Climbing Championship · Jönköping
2026 September 10 **	Grundläggande svampkurs · Linköping
2026 September 17	First Aid and CPR for Arborists · Kungälv
2026 September 18	Rescue course for arborists · Kungälv
2026 September 19-20	ETW-certification · Kungälv
2026 October 1 **	Framgångsrik träd- och buskanvändning · Uppsala
2026 October 6 **	Rapportskrivande grundkurs · Digitalt
2026 October 7-8 **	VETcert-kurs · Göteborg
2026 October 14-15 **	Grundläggande besiktning · Göteborg
2026 October 20 **	3-30-300 · Digitalt
2026 October 20-21 **	Hamlingskurs för arborister · Brokind, Östergötland
2026 November 3-4*	The Swedish Tree Conference 2026 · Upplands Väsby

* Registration opens May 1, 2026

** The language of instruction for this course is Swedish



Photo: Tina Axelsson

For more information and registration, please visit
www.tradforeningen.org

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the Swedish Tree
Association, you
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discount on our
courses.

The Swedish Tree Conference 2026



*An international and national
Conference for everyone working with
trees!*

November 3-4 in Stockholm

Day 1 08:00 - 17.00 (The international day - in English)
Including conference dinner & annual meeting

Day 2 08:00 - 16:30 (Swedish day)

Registration opens on May 1st, 2026
via: www.tradforeningen.org

