



# **Trees in Crisis: Questions & Answers!**

Welcome to another great MTOA Seminar.

When and where? 14<sup>th</sup> May 2014 at the Museum of Cannock Chase, Hednesford, Staffordshire, WS12 1TD (click here for the map location)

The MTOA continue to bring you must attend seminars at treemendous value, please see below for the speaker details.

### The itinerary for the day is;

9.00 - 9.30	Registration
9.30 - 9.35	Moray Simpson - Introduction to the day & MTOA News.
9.35 - 10.00	Tom Walsh.
10.00 -11.15	Dr Dealga O'Callaghan & Dr Alex Cornish.
11.15 - 11.30	Comfort Break
11.20 - 12.30	Dr Dealga O'Callaghan, Dr Alex Cornish & Dr Glynn Percival - Field Demonstration of TMI and application of 'Revive'.
12.30 - 13.20	Lunch – Sponsored by Sygenta.
13.20 - 13.40	Dr Dealga O'Callaghan & Dr Alex Cornish - Q & A Session.
13.40 - 14.50	Neville Fay.
14.50 - 15.10	Comfort Break.
15.00 - 16.00	Neville Fay
16.00 - 16.15	Summing Up & Final Questions.

PLEASE NOTE THAT THE PROGRAMME MAY CHANGE ON THE DAY TO SUIT THE SPEAKERS PRESENTATIONS. SEE OVERPAGE FOR INFORMATION ON THE SPEAKERS AND THEIR PRESENTATIONS.

All this for only £20, yes £20.00 for MTOA, CAS and ISA members. Nonmembers £65 (dependant on space availability), bookable in advance by contacting Jean McDermott on 0121 556 8302, <u>enquiries@isa-arboriculture.org</u> or write to MTOA, 148 Hydes Road, Wednesbury, West Midlands, WS10 0DR. If this is easy enough then there is an electronic booking form attached.

The MTOA are sponsored by:-







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## About the Speakers:

### Tom Walsh MBA, M.HORT. (RHS), M. Arbor. (RFS).

Tom Walsh is the Parks and Open Spaces Manager with Cannock Chase Council and is responsible for all of the maintenance and management of Green Spaces at the Council. He has previously worked in an arboricultural capacity for Birmingham City Council. Tom Walsh is a Fellow of the AA, and was vice chair of the Arboricultural Association's Local Authority Sub Committee, spoken at the AA national conference and wrote that Committee's original guidance note on tree work contracts. He has been an examiner for the Certificate in Arboriculture and has represented the industry for the Association of Metropolitan Authorities on Fastco.

Tom will give an introduction to the day, an overview of Cannock Chase District Council' including tree services and will tell us about Hednesford Park, where the day's tree micro-injection demonstration will be held.

#### Dr Dealga O'Callaghan & Dr Alex Cornish

Dr Dealga O'Callaghan is a Chartered Arboricultural Consultant practicing through his own company, Dealga's Tree Consultancy Ltd which is based in Liverpool. He has been involved in the arboriculture industry for over 30 years and has worked in research & education at Myerscough College, the utility sector with E.ON UK: Central Networks and as a private sector consultant. Dealga has a great deal of experience in the areas of planning, TPO law, tree caused subsidence and expert witness. He is currently working with Syngenta developing a new Level 3 competency in *Controlling Tree Pests & Diseases using Tree Micro Injection (TMI)*, which will be available through Lantra later in 2014.

Dr Alex Cornish is the Global Technical Manager in Vegetation Manager at Syngenta Crop Protection AG based in Basel in Switzerland. Alex leads the team that developed the tree-micro-injection process and equipment and is involved with the development of a plant protection product that is effective in controlling horse chestnut leaf miner (HCLM) and oak processionary moth (OPM) in the UK and red palm weevil (RPW) in Spain and France.

Dealga's and Alex's presentation will start with a review of the current and possible future threats to the nation's trees from invasive pests and diseases. It will cover the results of trials of the UK insecticide on HCLM and OPM in the UK and will look at the development of tree injection systems up to an including the TMI approach. It will also address the way in which pest populations can be managed and controlled, and in some instances eradicated using different approaches. The presentation will cover the TMI process and equipment and will include a field demonstration of the application of the insecticide against HCLM in Cannock on some horse chestnut trees in the park. Some will be treated and others left untreated as controls. Over the summer that differences in levels of infestation between test and control trees will become obvious and delegates can always come back to see the results for themselves.

#### Neville Fay MA (Hons), MICFor, MArborA, FLS, FRGS, FRSA

Neville Fay, a chartered arboriculturist and principal arboricultural consultant at Treework Environmental Practice, has worked in arboricultural consultancy for 25 years, including as expert witness in tree related personal injury and environmental damage cases. He lectures and advises on conservation arboriculture, veteran trees and tree related policies, including public safety management, advising The Royal Parks, English Heritage, City of London, Natural England and local authorities. He chaired the Ancient Tree Forum until 2010 and is founder of Tree Aid. He co-authored Natural England's

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Specialist Survey Method and provides training and seminars through his Innovations in Arboriculture seminar series.

In his presentation Trees in crisis - exploring resilience through an ecosystem *approach*, the crisis in question relates to declines and losses in our tree populations and threats to our tree species from natural and man-made impacts - of biosecurity, pollution and climate change. From the perspective of conservation arboriculture, an ecosystem philosophy is required to optimise natural processes and improve sustainability and resilience in our tree populations. In arboriculture an ecosystem approach to tree health and disease has yet to be clearly defined. While understanding of physiological processes is undoubtedly important for assessing tree condition, we need to improve understanding of tree health and resilience, without which diagnostic and treatment claims should be limited or at least gualified. Morphological observation methods (employing visual signs of ill or declining health) are clearly important for making reasonable diagnosis. However, despite the inherent difficulties of dealing with the invisible and incredibly complex soil system, we need access to information on below-ground ecology (soil-root-microbiology-chemistry interactions) to better understand the dynamics of health and factors influencing stress. Working with soil laboratories will contribute to this understanding.

Despite current limitations to our knowledge, there is likely agreement that biodiverse and functioning soil is fundamental for healthy root function. However, this raises certain questions:

- Who takes soil samples as a matter of course for analysis?
- What might be something we call 'healthy' soil or a soil ecosystem capable of supporting / buffering tree functions through disease processes?
- We have expensive acoustic and electrical impedance methods for mapping trunk tissue condition. What standard soil investigation devices should we have to help understand natural processes, physiological and metabolic functions?
- Why is it not axiomatic that wherever tree disease is investigated, soil should be studied, even if only to provide baseline information and potential influences predisposing to disease?
- Do we know whether pollution is influencing soil fertility, biological diversity, mycorrhizal condition and, therefore, disease susceptibility and resilience?
- Given the fundamental relationship between trees and mycorrhizas, should tree disease studies not first explore mycorrhizal associations and comparisons between diseased and non-diseased trees?

Neville will overview current collaborative studies into mature trees affected by Massaria and AOD taking place at the Royal Parks using integrated approach to crown and soil assessment, monitoring change in relation to various treatments and / or amendments (applications of woodchip, compost teas, pruning, rock dust, irrigation as compared with controls). The overview will consider data collection method for assessing soil chemistry and microbiology, where we see this going in the future, the development of new collaborations including extension work with universities, PhD studies, and commercial laboratories.