Ancient Woodland? Explorations in the history and archaeology of Norfolk's woods by Dr. Tom Williamson, University of East Anglia Saturday 1st November 2014.

Ninety-seven people attended to listen to Tom give one of his usual energetic and engaging presentations. He began by acknowledging the work of his UEA colleague Dr. Gerry Barnes, Research Fellow and co-author of their new book *Ancient Trees in the Landscape* which took ten years of work and is about to be published. He used the Natural England definition of Ancient Woodlands as areas that have been wooded continuously since at least 1600 and managed on traditional lines with coppicing involving cutting trees close to the ground in order to encourage new shoots to spring up around the edge of the stump; harvesting the resulting long straight stems every seven to ten years; bundling these together as 'faggots' used for hedges, river and sea defences.



These woods are often assumed to provide a direct link with the natural vegetation of England and the way the landscape looked before the virgin forests were fragmented by farming. They produced oak for buildings and ships every 80 years as well as for tools and fencing. Names like coppice and fells indicate old woodlands, now often outgrown and derelict like Wayland Wood near Watton (opposite), Such woods were once supported by earthen banks and ditches, one purpose of which was to keep livestock out of the wood and stop grazing in order to protect new growth. The banks would have had a living hedge or fence on top often with a ditch either side

Ancient woodlands have a distinctive ground flora of flowering plants and ferns like primroses, bluebells, yellow archangels, sedge, spurge and sorrel. They are fragments, isolated islands of natural vegetation, which may be primary or secondary (re-invasion of cleared land adapting characteristic plants). They are not evenly spread in Norfolk with more old enclosed woodland in the south-east but little in the west of the region. Investigating such places, like East Wood, Denton, is hard work; GPS systems cut out and Lidar scanning equipment doesn't always pick up the earthworks. Tom quoted many examples of woodland and illustrated his talk throughout with numerous photos and old maps.

Tom asked whether the model of 'ancient', as fragments of pre 16th century woodland, holds up to scrutiny? In 2000, Franz Vera, published *Grazing Ecology and Forest History* in which he challenged the prevailing 'high-forest' hypothesis which claimed lowland temperate Europe was dominated by mixed-deciduous 'primeval' forest before the onset of human impact 6000 years ago. Vera argues that during the early post-glacial period, large herbivores (e.g. deer, bison, aurochs and wild horses) were important in creating and maintaining a dynamic landscape-mosaic of open grassland, scrub and forested groves: a sort of parkland rather than dense woodland. This 'wood-pasture' hypothesis maintains that forests must have been relatively open to enable oak and hazel regeneration because both require canopy gaps to regenerate. Whichever is correct, Norfolk, during the iron-age and Roman period wasn't densely forested, which raises the question of how many ancient woodlands are actually original or re-invasions of abandoned farmland during the post-Roman period when the population fell.

Identifying ancient woodland isn't that easy. Tom gave lots of examples (Sexton's Wood, Tindle's Wood) where there is little evidence for longevity as it is difficult to date. Most of the larger woods occupied areas of used woods and pasture whilst some like Swanton Morley are relatively open. As for the Medieval period, the Domesday Book is never quite clear or consistent. It recorded pigs in woodland being used for grazing and this might show an ancient pattern. In South Norfolk the landscape around Scole and Dicklebury may show prehistoric features, i.e. parallel fields cut through by the Roman Road. The main settlements were in valleys like the Waveney; parallel lines or tracks incised into the landscape from the high ground downwards aren't remnants of field systems but 'rides' initially created to allow the easy removal of timber. These rides now support a great variety of woodland trees, grasses and flowers so it looks as if woodland regenerated itself on top.One should

find fields inside the woods but this isn't the case. Such areas were used but not as farmland bounded by banks because of the movement of stock to woodland for grazing. However, the Hockering earthwork and a similar structure at Fulmondeston, may be for controlling such grazing.

The Medieval management of coppiced woodland prevailed up to the end of the 13th century and is well documented on Manorial and Church land. Manorial ownership of land led to enclosure creating separate farmland, common land and woodland. William Faden's 1797 map of Norfolk shows the landscape just prior to Parliamentary Enclosure Acts with all three types next to one another, after which woods were often carved out of commons. Places like Bradenham, Denton and Woodrising show woodland with enclosure banks used for managing stock and grazing, not for coppicing. Other portions of woodland were turned into managed coppices with large banks to stop livestock entering and keep trespassers out. Banks, sometimes with hedges, fences and ditches became symbolic structures: a field boundary system to designate private ownership of land appropriated by the Manors. In places it resulted in an interesting geographical pattern, the 'doughnut of woodland', areas with lowland or farmland in the middle and trees on the higher ground and poorer soils outside. Hockering is an interesting example of these sectional divides, with enclosure of the most accessible areas close to the village, banks and fish ponds were created. Outside the enclosed areas was farmland and common land (with small trees and shrub cut down and grazed). A lot of commons and common woodland remained until the late 18th century but much was lost later. A remarkable number of woods grew up after the Black Death in the middle of the 14th century which implies they were deliberately planted. Tom used numerous maps as visual examples of such activity especially at Hedenham, the south and north woods around Hell Yards and the fish ponds.

Much of the literature talks about fragments of ancient woodland as being stable in the landscape. Tom said they were not as stable as people think; woods extended and contracted throughout the centuries. Wayland Wood is a good example and Pulham Big Wood added a new plantation during the 17th century. The old earthworks and ditches often show lost boundaries of woods. Lots of modern woods are secondary, recolonized from grazed areas in the past. They are not natural features but show a particular form of land use. The botanical aspects, such as flowers sedges and ferns, are part of a slow colonisation and not a feature of grazed woodland until the 13th century. Bluebells survive grazing and flourish because of coppicing; they have adapted to the restricted light but tree saplings do not survive ground disturbance.

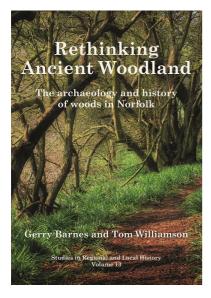
Tom mentioned native trees such as oak as in north Norfolk around Edgefield; beech; bird cherry in Wayland; the most common early tree, lime; ash on boulder clay areas and hornbeam in SE Norfolk. The latter is rare in prehistoric pollen but first occurs in the Middle Ages. When and why it became popular is not mentioned in 12th century sources but Hornbeam is common in the 14th century when planting expanded massively because it made such good charcoal.

'Ancient woodland' is not really a discrete environment at all: in vegetational terms woods aren't natural; they are an artificial production along with meadows and heaths, as part of land management. It is often argued that after Enclosure trees weren't planted in Norfolk but this isn't true either. At Holkham in the 18th/19th centuries new plantations arose. There was a lot of planting by large landowners after the 16th century for enclosure and landscape design, and for shoots as at Sandringham and Merton. The west of Norfolk became the most wooded area often on the poor sandy soil. The old idea of the 18th century gentry landowner not being interested in coppice was based on the fact that coal replaced charcoal, wood and metal fencing replaced faggots, so the economic value of such woodland declined. Yet there were plenty of coppice woods for other reasons; in the Hethel area they became denser barriers. Landowners planted new woods on old areas. The landscape was forever changing and developing.

As for the distinctive ground flora indicating ancient woodland, tracking back through the one-fifth of woodland 1600-1830s would show the ground cover of Dog's Mercury sedge was not around pre-1730. It has colonised woodland since then, along with anemones and Yellow Archangel. As long as these plants survive in the hedgerows then they can take over woodland which creates the impression that such woodlands are old but this isn't the case. If one looks at Common land enclosed around 1800, the perimeters have the woodland plants like primroses; they are reservoirs of relic populations which invade but do not indicate the wood is old.

The Chairman, Sophie Cabot, thanked Tom for an interesting lecture and invited questions from the audience. One person asked whether hornbeam was native. Tom felt it almost certainly is but might be an introduction from outside Norfolk as is the sycamore, a 16th century introduction but indigenous to other parts of England. Another member queried if, after the cold of the ice age, post glacial conditions really were savannah-like. Tom didn't believe in wall-to-wall woodland but he felt there is a real problem with Vera's hypothesis about high levels of grazing; perhaps he has a bit right. Asked whether most woodland was "managed", Tom thought the description with regard to wood and timber use applies quite late and not for the Medieval period which was mainly for fuel and hedging/fencing. For Wayland Wood the description applies quite late.

As for the effect of present Global Warming, Tom was slightly sceptical since many species are thriving. There is an argument with regard to tree diseases and Limes have been in decline since they don't set seed well but they are more prevalent now particularly in Hockering Wood. So many other factors at work: deer are a real threat; the county needed proper deer parks to keep them under control. As for the acute oak decline problem and the oak jewel beetle (*Agrilus biguttatus*), this might be a nitrogen effect or an age group issue since many trees were old. It was a question of the balance of trees in woodland, the old and the new species. Tom wondered whether it is that abnormal since there must have been temperature increases and disease epidemics in the past.



See: Rethinking Ancient Woodland. The archaeology and history of woods in Norfolk by Gerry Barnes and Tom Williamson: Studies in Regional and Local History Vol. 13 Hardback £35 Paperback £18.99

Edmund G. Perry Hon. Secretary NNAS