Native Hedgerow Management
(presentation by Nigel Adams, at New Hall Farm, and Tylers Hall Farm visit arranged by Don Catchment Rivers Trust (DCRT) 13.12.22. The day was aimed at farmers, and people interested in developing, managing, and conserving native hedgerows. Rural setting.)

Nigel is an experienced, professional, hedge craftsman: planting, surveying, hedgelaying, managing hedgerows, and creating wild flower meadows; member of the National Hedgelaying Society.

Brief summary of Nigel's presentation and information from the walk and talk around Tylers Hall Farm with Chris (manager), Jenny Palmer (Agricultural Officer DCRT), and Ann Hanson (ecologist, Yorkshire Farming and Wildlife Partnership) :

Rural hedges were planted to show land ownership, provide windbreaks and shelter and to keep stock in the field.

Historically 2 main types:

1. Species rich ancient hedges–often small, random shaped fields often on top of banks. Frequently formed by leaving woodland edges when clearing forested areas. These old hedges have the most biodiversity.
2. Enclosure hedges – planted between 1750 and 1860, a planned landscape. Commonly single species Hawthorn.
3. **Now** different types of hedgerow have emerged, depending on how hedge has been managed over its life :

- regularly cut on 2/3+ year cycle to form dense healthy hedge 2-4m high
- over-trimmed to same level, producing hard knuckles of wood at trim height
- left for non-intervention period of several years
- neglected - left to allow trees to grow and gaps to form… (no longer a functioning hedge).

A survey in 2007 found that 50% of hedgerows were in a fair condition, but only 12% of those on arable land.

Significant loss of hedgerows due to widening of fields to ease use of large machinery. Neglect, or over-cutting.

- When **neglected**, hedges can, over years, become a line of trees – excellent in one respect – but may prevent/retard growth of smaller hedgerow plants beneath, reducing that wildlife habitat. Also, less useful as a barrier or shelter for stock.
- Remedy by removing some trees, or raise canopies to allow light to reach hedgerow. **Over-trimming** a hedge at the same height stresses its constituent plants, and gaps develop, instead of the dense continuous cover ideal for birds and small animal life. Elderberry thrives on this regime and once in a hedge gives off toxins, stunting/killing plants either side. If you remove it, dig in some compost to rejuvenate the soil.

Hedges have a natural life cycle and need rejuvenating periodically, when they become thin/hollow at base or over tall.

- annual **light trimming** of new plantings, encourages density at an early stage. After that cut on 2 or 3+yr cycle, raising the cutting height a little each time
- healthy, dense hedge 2m high – **cut on 3+yr rotation**, raising cutting height if hard knuckles forming at trim line
- **coppicing or significant re-shaping** perhaps every 8-10 years to stimulate new growth. Ideally use a circular saw for reducing height, rather than a flail – less damaging to the hedge. This buys time for an old hedge. Coppicing gives an opportunity to plant into gaps to make an old hedge more dense.
- **research experiment showed that incremental cutting in Sept or late winter trimming in February – after berries gone, was most successful, allowing hedge to grow, more flowers and berries, and more butterfly eggs to survive.**

***Hedge laying** (aka pleaching) can be used to create a dense hedge: established stems (2-3" diameter) over 3m in height are cut-into diagonally, near the base and laid over to 35 degrees to form a living fence. The process also encourages the sprouting of new vertical growth which thickens the hedge. (This is a skilled traditional craft, with a variety of 30-35 regional styles across the UK – local one is 'Midland' or 'Derbyshire'.)
Hedge laying produces instant habitat, and a wildlife corridor.
Average cost is between £14 to £18 per metre to lay a hedge.
Aftercare is important: trim quite tight for first 5 years to encourage it to fill up, then cut every 2 years. Bi-annual cutting encourages blossom and berries – good for insects and birds.

Ideally a hedge should be trimmed to an 'A shape' in cross section – the sloping sides provide maximum light for leaf growth and health.

Individual trees eg Hawthorn, Hazel, Wild Cherry/Plum, Holly, etc may be left to grow up through the hedge or be planted, at intervals to **increase flora and fauna species development and biodiversity** through variety of food and habitat, and to provide **song posts** to assist birds to mark territory. If tree is young, put a stake next to it or tie a bright marker to it to indicate where to cut hedge up to, and so avoid cutting the tree.

Hedgerows can provide up to 21 ecosystem services – more than any other habitat.
Of the 19 rare farmland birds associated with hedgerows, 10 use hedges as their primary habitat

- Some animals and birds use hedgerow corridors for travel, bees navigate by them
- Shelter for farm stock
- Help stop soil erosion
- Help percolate pesticides, fertilisers, sediment, before they reach water courses
- Store carbon
- Culturally part of our landscape

Government target is 200,000 km new hedgerows by 2050 – ideally joining up existing hedges, filling gaps, or connecting to woodland, to form wildlife corridors and diversity of habitat.
Potential for Carbon storage credit.

New planting:
For guidance on **species mix** for new plantings, see what is growing wild locally, check soil make-up, and add appropriate native species to enhance biodiversity and wildlife support, particularly for local species in decline. Avoid too much maple as it is too vigorous.

- Prepare soil and remove weeds (size of job on agricultural land may require herbicide preparation, to allow good establishment of young plants)
- Plant 5/6 whips staggered per metre.
- Protect with (ideally non-plastic) spirals, or fence either side, 1.5m from centre.
- Plant before end of January.
- When planting young plants, keep moist, in their bags, until ready to plant.
- Plant each species randomly along the hedge not in clumps. Hawthorn usually makes up 50-60% of the total plants used. Use 5-7 species with the hedge.
- ***Tip***: plant least numerous variety first, then next numerous…. Hawthorn will be the infill last of all.
- Mulching and watering essential but not always possible– factor into aftercare plan and budget.
- Ideally leave strip for wild flowers and grasses beside hedge - increases cover and food for wildlife.

Although all the above information relates to native hedgerows in rural locations, the basic principles can be adapted for the urban setting: to encourage biodiversity by providing a range of native hedgerow species managed with care for maximum habitat and food sources from both flowers and berries.

See also: ***The Lifecycle of a Hedge***, A4 sheet of info provided by Nigel Adams (below).
hedgelink.org.uk – website on hedges, including short videos
www.woodlandtrust.org.uk/trees-woods-and-wildlife/habitats/hedgerows/

Current shortage of home-grown whips, Hawthorn being imported from Hungary and Italy!
*Potential for **community collection** of wild berries, and growing on into whips??*
Devon Hedge Group making grant application for this.
Other possible contacts:
Northern Forest
Peoples Trust for Endangered Species (re survey of Public Footpaths)
Yorkshire Wildlife Trust
Woodland Trust (some free young hedge plants available for native hedges that are publicly accessible, and have a group of people dedicated to caring for the hedge throughout the year).

Thanks to all contributors for an informative and inspiring day.
Thanks to Nigel Adams for checking and amending this summary.

Lynda Josse, for Nether Edge Sustainable Transformation (NESST), Sheffield

[end]

13/12/22
New Hall Farm
RED/AMBER/
GREEN

The Lifecyle of a Hedge

- **1 Heavily over-trimmed with many gaps and sparse stems, their bases gnarled or rotting. May be invaded by elder, sycamore or other invasive species.**
- **ACTION** Coppice and re-plant gaps. Grub out or poison invasive species.

- **2 Over-trimmed, infrequent stems too far apart to be 'let up' for laying perhaps evidence of laying in the past. Hard knuckle trim at trim line, shrubs developing mushroom shaped growth form.**
- **ACTION** Coppice and re-plant gaps.

- **3 Over-trimmed, frequent stems. Stems still healthy but require more height. Hard knuckle may be starting to form at trim line.**
- **ACTION** Allow incremental height gain at each cut or 'let up' up for laying.

- **4 Recently laid, coppiced, or planted hedgerow.**
- **ACTION** Trim lightly for first few years, then cut on a two, or preferably three or more year rotation, allowing height to increase a little each time.

- **5 Healthy, dense hedgerow with frequent stems and more then 2m in height.**
- **ACTION** Trim on a two or preferably three or more year rotation. Raise cutting height if hard knuckle forming at trim line.

- **6 a) Hedgerow more than 3m high and trimmed on rotation. b) May also be non-intervention hedge, having intentionally been left un-trimmed for several years.**
- **ACTION** a) Enter hedge into non-intervention period. b) Re-shape with circular saw then return to rotational trimming or non-intervention period.

- **7 Hedgerow with frequent healthy stems more than 4m high**
- **ACTION** Lay or reduce height and width with circular saw blade. Would also respond well to coppicing.

- **8 Mature tall hedgerow with spreading tops. Stems still healthy (although they may be infrequent) and too large for laying.**
- **ACTION** Lay if possible. Or either reduce in height and width with circular saw blade or coppice and re-plant gaps if necessary.

- **9 Over mature hedgerow with tops dying back, collapse possible. Perhaps becoming dominated by tree species such as oak, ash or sycamore.**
- **ACTION** Coppice, retaining a few selected healthy trees and plant up gaps.

- **10 Hedge developed into line of trees**
- ACTION Retain as line of trees. Selectively thin for possible safety reasons. Raise canopy height if hedge remains underneath.