YORKSHIRE DALES NATIONAL PARK AUTHORITY **ITEM 7**

Date: **15 December 2020**

Report: **DALES WOODLAND STRAGEY**

Purpose of the report

1. To adopt a new Dales Woodland Strategy.

Strategic Planning Framework

2. The information and recommendation(s) contained in this report are consistent with the Authority's statutory purposes and its approved strategic planning framework:

    - ***National Park Management Plan ambition***
      By 2040 the National Park will be resilient and responsive to the impacts of climate change, storing more carbon each year than it produces.

    - ***2020-21 Action Plan***
      Adopt a new Dales Woodland Strategy

Background

3. The first Dales Woodland Strategy was published in 1995 and was endorsed by the National Park Authority and the Dales Woodland Forum. The Strategy is used to guide the woodland work of the Authority and the Forum.

4. The Dales Woodland Forum draws its membership from a wide range of organisations and individuals. All of the members have an interest in the woodlands within the National Park and all the members support the Dales Woodland Strategy. The Forum usually meets around 3 times a year and discusses issues relevant to trees and woodlands within the National Park.

5. The Authority is represented on the Forum by the Member Champion for the Natural Environment.

Impact of the strategy

6. The original Dales Woodland Strategy set out an ambition to double the amount of woodland in the National Park by 2020. As more accurate data on woodland cover became available, this was re-cast to an figure of 2,000 ha, equivalent to 80 ha per year. At the heart of the efforts to deliver that ambition has been the 'Dales Woodland Restoration' programme – an informal partnership between the Forestry Commission,

the national park authority, and the Yorkshire Dales Millennium Trust, supported increasingly in recent years by the National Trust, Woodland Trust and others. The partners have successfully worked with farmers and landowners across the National Park throughout the last 25 years. As a result, 2,168ha of new woodland will have been created by the end of this year.

Developing a new strategy

7. The achievement of that ambition is something that should be marked and a suitable event will be organised after the current pandemic is resolved. However, as Members will be aware, the pressure to plant trees and to create woodlands has never been higher. The Government's recently-published '10 point plan for a green industrial revolution' confirmed a commitment to create 30,000 ha per year in the UK. Despite the success of the previous strategy, figures show that the level of woodland cover in the National Park (now 4.3%) is still lower than in London (4.5%). Whilst, the open landscape, priority habitats and cultural heritage of the National Park are all important parts of what makes the Yorkshire Dales National Park special, the last 25 years has demonstrated that — by working closely with the landowners and farmers — it is perfectly possible to create woodlands that are sustainable and also benefit the special qualities of the area.

8. A detailed Evidence Report was prepared to inform the development of a new strategy by the Dales Woodland Forum (and is available on the Members' intranet). The Forum has had the climate and ecological emergency at the forefront of its thinking, and in particular the ambition for 2040 in the National Park Management Plan (see para 2) above. While the proposed new Strategy (**Annex A**) is certainly ambitious, the vast majority of its proposals are relatively uncontentious. However the scale of the proposed woodland creation merits some further consideration.

9. The Forum considered a summary of the various national and sub-national commitments to woodland planting in recent years (**Annex B**). In reaching its conclusion, the Forum wanted to contribute towards these commitments by being as ambitious as possible whilst remaining realistic over the 10 years of the strategy. Creating woodlands within the National Park continues to be a complex balance between farmer and land owner objectives, landscape, priority habitats and cultural heritage, whilst taking advantage of financial opportunities and delivering schemes on a practical level. The climate net zero model is relatively simplistic and based on a number of broad assumptions, which may change significantly in the coming years. Nevertheless, it provides a starting point for the current discussion. It will be important, though, for the Forum to keep that modelling under review in order to deliver appropriate levels of woodland creation over the course of the Strategy.

10. Whilst the target is hugely ambitious in *absolute* terms, it is important not to lose sight of the context. An area of 6,000 ha represents less than 3% of the National Park, and would take the total woodland cover up to only 7%. The Forum, therefore, believes this is entirely compatible with retaining the National Park as a (primarily) agricultural landscape. Indeed, it is likely that increasing woodland cover will play an important role in helping to sustain farm businesses – by providing new sources of revenue to improve viability, and in providing important shelter for livestock as our climate continues to change.

11. It will not be possible to jump immediately to the level of planting 600 ha per year (and this is acknowledged in the Strategy). The target should be seen as a statement of intent – to do whatever is necessary to help deliver on the widely-shared ambition to make the National Park 'net zero' by 2040. The partners will monitor both the overall progress of the Strategy and the wider modelling of a path to net zero, and adjust the ambitions accordingly. This will include setting realistic milestones across the 10 year period, especially for future woodland creation. In the meantime, the Authority and its partners can continue to use the current objective in the National Park Management Plan ("at least 450 ha by 2024") as a target against which to report progress.

Conclusion

12. Great progress has been made over the last 25 years in increasing the amount of woodland in the National Park through a coalition of local partner organisations and willing farmers and landowners. However, the Climate and Ecological Emergency dictates that this partnership working now needs to be taken to another level.

Geoff Garrett
Senior Trees and Woodlands Officer

1 December 2020

DALES WOODLAND STRATEGY: 2020-2030

1. This Dales Woodland Strategy is the key document providing strategic direction on the future of trees and woodlands within the Yorkshire Dales National Park. The Strategy has been guided and produced by the Dales Woodland Forum — a partnership of local organisations that have an interest in the future of woodlands within the National Park. The Dales Woodland Forum will continue to have a role in the implementation and monitoring of the success of the Strategy in the future.

National Park context

2. The Yorkshire Dales National Park was designated in 1954 and is one of ten National Parks in England, which cover around 9% of the country. In 2016, the boundary of the National Park was extended to include parts of the Orton Fells, Northern Howgill Fells, Mallerstang, Barbon, Middleton and Casterton Fells in Cumbria, and Leck Fell in Lancashire.

3. The statutory purposes of English National Parks are set out in Section 61 of the Environment Act 1995. These are:

    - **to conserve and enhance the natural beauty, wildlife, and cultural heritage of the national parks;**

    - **to promote opportunities for the understanding and enjoyment of the special qualities [of the national parks] by the public.**

4. The purposes are underpinned in law by the 'Sandford Principle'. This makes it clear that the first purpose should take precedence over the second in cases of irreconcilable conflict.

5. The landscapes of National Parks have been home to communities and industry for thousands of years, and continue to be so. The National Park Authorities, therefore, also have a duty under Section 62(1) of the Environment Act:

    - **in taking forward the national park purposes, [to] seek to foster the economic and social well-being of local communities within the National Park.**

6. The most recent statutory guidance on the English National Parks is set out in 'English National Parks and the Broads: UK Government Vision and Circular 2010'.

Introduction

7. This strategy is concerned with the trees and woodlands of the Yorkshire Dales National Park. We want the trees and woodlands to be rich in diversity, healthy, attractive, and of maximum benefit to people and wildlife.

8. In an area where over 95% of the land is in private ownership, woodlands help to define the landscape of the area, as well as being the home to some of the most diverse and irreplaceable habitats and species. Ancient semi-natural woodland, the jewel in our woodland crown, covers less than 1% of the land area but is an irreplaceable habitat of flora and fauna. Conifer plantations in the northern part of the National Park are important refuges for the native red squirrel, and the fringe of mixed woodland (as part of a mosaic of habitats) is vital to ensuring that our black grouse population continues to flourish. Individual trees make a significant contribution to the unique landscape of the Dales, and the location and previous

management of individual trees can often provide a historic continuity going back, in some instances, up to 800 years.

9. In 1995 the Yorkshire Dales National Park Authority published its first Dales Woodland Strategy (1995-2020). At that time, the Dales Woodland Forum advised on the strategic approach to trees and woodlands. Over the course of the last 25 years, and with continued guidance from the DWF, three revisions were undertaken. Over the last 25 years the strategy has delivered 2168ha of new woodland.

Purpose of this Strategy

10. In December 2018, the Yorkshire Dales National Park Authority and its local partners published a new statutory National Park Management Plan. The Plan was produced following extensive public consultation and with the collaboration and participation of over 100 local organisations. It sets out a shared local vision for the future, which includes 6 long-term ambitions for what the National Park will be like by 2040:

    - A distinctive, living, working, cultural landscape that tells the ongoing story of generations of people interacting with their environment
    - Home to the finest variety of wildlife in England
    - A friendly, open and welcoming place with outstanding opportunities to enjoy its special qualities
    - Resilient and responsive to the impacts of climate change, storing more carbon each year than it produces
    - Providing an outstanding range of benefits for the nation based on its natural resources, landscape and cultural heritage, which underpin a flourishing local economy
    - Home to strong, self-reliant and balanced communities with good access to the services they need

11. This Strategy sets out how trees and woodlands will help to deliver these 6 ambitions. The proposals within this strategy have been agreed by the Dales Woodland Forum, and the partners within the Forum will be instrumental in delivering them.

12. A strong and consistent message will ensure that landowners get advice that can support and enhance farm businesses whilst creating natural capital and contributing towards improving the land in the long term.

A distinctive, living, working, cultural landscape that tells the ongoing story of generations of people interacting with their environment.

13. Trees and woodlands reflect the story of previous generations, and are an important part of our understanding of the past.

    - *The design of new woodlands will enhance the landscape and continue the story into the future.*

14. Woodlands are an integral part of the Dales landscape.

    - *Positively managing the existing woodlands will become an equal priority to creating more woodlands.*

15. Field trees and hedgerows mark important boundaries which, along with dry stone walls, describe the land use from the past. When field trees and hedgerows are restored and maintained as features they will continue the story within the landscape.

    - *The extent of the individual trees and hedgerows within the area will need to be mapped, and additional funding for individual tree planting by farmers, landowners and communities will be sought.*
    - *Using the latest data available we will create a map showing the location of hedgerows, which will be compared to historic maps in order to identify the best places to create new hedgerows.*

16. The special qualities of the National Park are important and proposals for woodland management and woodland creation should enhance rather than detract from these qualities.

    - *Each proposal will be assessed against the qualities of the National Park to ensure that they can add value. This will be done by using the existing Landscape Character Assessment and the Woodland Siting and Design Guide, as well as making assessments against archaeology, , biodiversity and access.*

17. Right across the National Park, there are opportunities to enhance the landscape and increase connectivity including creating small new native broadleaved woodlands.

    - *We will aim to make it as quick and easy as possible for landowners to create small woodlands.*
    - *Work with partners to access suitable grants that can be accessed with ease but are sufficiently robust to protect the special qualities of the area.*

18. Multi-purpose forestry schemes that incorporate productive forestry will be considered if they provide tangible benefits to the natural beauty, wildlife, and cultural heritage of the National Park.

    - *In order to identify the benefits that can be provided by the creation of productive commercial plantations the best available data will be used in order to advise on the suitability or not within the area.*

Home to the finest variety of wildlife in England

19. A way of creating a robust and resilient habitat network for wildlife is by significantly increasing the area of native woodland in order to increase connectivity between existing woodlands and associated habitats, making them more permeable to wildlife, without compromising the overall quality of other priority habitat and priority species.

    - *Use the best available data and, if necessary, original survey data in order to avoiding planting woodland on 'core' areas of other priority habitats, and avoid planting which may become a barrier to other species.*

20. Guidance for appropriate woodland creation that may be in, or adjacent to key wading bird habitat is critical so that careful siting, species mix and density can significantly reduce the detrimental impact of woodland planting on wading bird populations.

    - *Apply the Forestry Commission guidance for afforestation to the YDNP, and also utilise other additional breeding wader and black grouse survey data.*
    - *Undertake further work using breeding wader Habitat Suitability Models and other data sets to help identify areas of high importance for breeding waders where tree planting may not be appropriate, or where it could be undertaken with careful consideration of species mix and location.*

21. Ancient semi-natural woodlands are the most important woodlands for wildlife and require positive management in order to thrive. Ancient semi-natural woodlands identified by Natural England within their inventory — including those that are currently planted with non-native conifers (plantation on ancient woodland sites – PAWS) — will be the priority for management.

    - *All ancient semi-natural woodlands and plantations of ancient woodland sites will be assessed for lack of positive management and given priority*

22. Ancient semi natural woodlands take centuries to develop and are therefore a difficult habitat to recreate. Some areas of ground flora, however, will indicate the previous presence of woodland. Former ancient semi-natural woodland sites (identified from ground flora and historic map comparison) will be treated as a priority for woodland creation.

    - *Draw together all data that shows ancient semi natural indicator species and create comparisons to existing woodland data sets and maps to identify where former ancient semi natural woodland sites exist.*

23. A significant amount of new woodland has been created since 1995. Many of these new woodlands require urgent action in order to ensure they reach their full potential as woodlands.

    - *The Yorkshire Dales National Park Authority Volunteers have been critical in the process of monitoring young woodlands in the past and their work will be expanded to cover all woodlands created since 1995.*

24. Scrub is an important woodland habitat for wildlife, and needs care, consideration and management. Scrub habitat provides links between woodland areas and will be utilised to contribute towards woodland connectivity. Scrub can develop into new native woodland of high wildlife value if managed appropriately.

    - *Guidance for scrub management and scrub establishment will be developed in conjunction with partners.*

25. Wood Pasture is an important but probably under recorded habitat, which brings together the importance of grassland and woodlands within a farming context. Some ancient wood pasture sites have been identified across the Dales, with associated veteran trees and complex land-use histories, including deer park, coppicing or pollarding. There is also great scope to establish new wood pasture habitats through a combination of extensive grazing and tree planting or natural regeneration. Wood Pasture will, where appropriate, provide links between semi natural habitats including woodland and scrub and enhance wildlife value of grazed land.

    - *Raise the profile of wood pasture within the National Park and seek additional funding for both maintenance of existing and creation of new wood pasture habitat*

26. Red Squirrel refuges and their 'buffer zones' are an important refuge for the survival of red squirrels.

    - *Support new mixed woodlands that contain only 'red squirrel-friendly tree species in those areas designated as Red Squirrel reserves and their 'buffer zones'*
    - *Ensure that woodlands within the buffer zones are managed to provide suitable habitat for red squirrels, without increasing the suitability for grey squirrels*
    - *Encourage co-ordinated control of grey squirrels in the refuge and buffer zones.*

27. The National Park contains 18 different recorded types of ancient semi-natural woodlands, which require protecting and, where possible, expanding.

    - *Support creation, as appropriate, of all the 18 different woodland habitat types . When woodland is being created use suitable datasets e.g. soil maps to identify the appropriate woodland type for the area*

28. Natural regeneration is an important management technique for creating new woodlands and managing existing woodlands. Natural regeneration can provide many benefits including: less risk of importing disease; a more natural woodland character; lower landscape impacts; less plastic in the environment; and, giving wildlife chance to adapt gradually to habitat changes.

    - *Creation and management of woodland habitats will use natural regeneration or a mix of low density planting to establish a seed source coupled with natural regeneration, where circumstances allow.*

29. At present the records of ancient semi natural woodland relate to woodlands that are 2ha and larger. Smaller remnants of ancient semi natural woodlands provide important areas of flora and fauna which require identifying and bringing into opportunity mapping.

    - *Identify all ancient semi natural woodlands greater than 0.5ha with a minimum width of 20m and map these on a GIS layer as part of the opportunity mapping process.*

A friendly, open and welcoming place with outstanding opportunities to enjoy its special qualities.

30. Access to woodlands is an important part of enjoying the special qualities of the area and exploring opportunities for recreation within woodland is an important part of the management of woodlands.

    - *Seek to maintain, and where appropriate, improve the current level of access.*

31. Many woodlands within the National Park are too small to contribute individually to recreational opportunities. However, links can be made between woodlands to create connections with established routes.

    - Identify important links between small woodlands so that recreational opportunities can be created.

32. Newly created woodlands provide opportunities for access and recreation in order to enjoy their special qualities.

    - *Consider, where relevant, the opportunities for welcoming people into newly created woodlands.*

33. Opportunities exist in existing woodlands and plantations to enhance access for recreational activities.

    - *Consider, where relevant, the opportunities for reducing barriers and improving access for all into existing woodlands and plantations.*

Resilient and responsive to the impacts of climate change, storing more carbon each year than it produces.

34. Changes to our climate are becoming more apparent each year. There is a climate emergency that requires an unprecedented step-change in our efforts as a nation to both reduce our emissions of greenhouse gases and to increase their sequestration through better land management. Trees and woodland will contribute towards significantly increasing carbon storage in the National Park.

    - *Increase carbon storage by significantly increasing rates of woodland planting, especially for schemes that will strengthen the woodland habitat network and help to reduce flooding.*

35. Identifying the best locations for increasing woodland cover and, conversely, those parts of the National Park where large new woodlands are unlikely to be supported, is an important step towards achieving ambitious targets. .

    - *Opportunity mapping will identify which parts of the National Park will be inappropriate for significant amounts of woodland creation as well as those areas that have the most likely potential.*

36. Managing woodlands will make them more resilient to the pressures of climate change.

    - *Positive management of woodlands will result in improved resilience in the form of appropriate species diversity and age range.*

37. Existing smaller woodlands can be expanded and linked together by new planting to create larger, more robust woodland networks.

    - *The opportunity mapping process will identify where small woodlands have potential for linking within the woodland network.*

38. Adding diversity to woodlands will not prevent climate change or a new disease from killing a specific population but it will improve the resilience of each individual woodland.

    - *The primary way to 'future proof' woodlands is to introduce as much species diversity as possible within the confines of the management objectives (e.g. whilst protecting ancient semi natural woodland).*

39. Woodlands often suffer from damage caused by grazing livestock, rabbits, deer, voles or a combination of these. There are a variety of techniques that can be used to mitigate damage and these need to be given careful consideration when creating woodland or developing management plans.

    - *Ensure woodlands, where possible, are stock proof and appropriate tree protection is used to mitigate damage from grazing animals.*

40. Diseases including Ash dieback and *Phytophera* in juniper and larch will take a significant toll on woodlands and the landscape will take generations to recover. However, assisting with the recovery will allow trees in the future to become a natural part of Dales woodlands.

    - *An Action Plan for dealing with Ash dieback will be adopted by the Dales Woodland Forum and publicised in order to raise the profile of the issues arising from this disease.*
    - *Publicise enhanced biosecurity measures in order to slow the progress of diseases*

41. Woodlands growing adjacent to rivers contribute to raising water quality. They also help slow the flow of flood waters during extreme weather events, help regulate the temperature of the water, protect the aquatic environment from the impact of prolonged warm, dry weather and reduce soil erosion.

    - *Use data sets in order to identify unmanaged woodlands adjacent to rivers and give priority to their management.*

42. When appropriate woodland can be extended and joined as part of a mosaic of semi-natural habitats that will allow species to pass though the landscape as the climate changes.

    - *Use habitat network maps to identify areas where woodland can be extended and joined in order to create the maximum benefit for species.*

43. Plastic has become a huge environmental problem, and is still often being used as a tool to manage and create woodlands. It is important to reduce the overall reliance on plastic within woodland creation and management schemes and to protect the environment from plastic pollution.

    - *Use alternative management techniques to create new woodlands including alternatives to plastic.*
    - *Identify alternative methods of protecting newly planted trees without the need for single use plastic so that they will be able to establish successfully.*

Providing an outstanding range of benefits for the nation based on its natural resources, landscape and cultural heritage, which underpin a flourishing local economy.

44. The special landscape of the National Park – and the way that it is managed – provides the basis for a multi-million pound tourism industry, and supports thousands of jobs. The presence of trees and woodlands is a key element of that landscape and can be enhanced further.

    - *Positively manage existing woodlands and carefully plan the creation of new woodlands using tools such as the 'Woodland Siting and Design Guide'.*

45. A wooded landscape can provide more opportunities for economic development, improve landscape amenity and reduces the visual impacts of development and recreational activities.

    - *Using careful design and specification, priority will be given to woodland creation that will reduce visual impacts and create an environment for various forms of recreation, including cycling, walking, camping and other types of holiday accommodation.*

46. Timber and locally sourced woodfuel can bring direct benefits to farm businesses with suitable management of existing woodlands.

    - *When the creation and management of woodlands is being considered timber production and woodfuel production will be part of the objectives of the scheme wherever possible.*

47. Woodland and individual field trees can provide many different benefits, such as animal welfare (shade/shelter/micro and macro nutrients/medicinal/body condition), which can contribute towards the economic viability of farms and livestock farming.

    - *Develop guidance for farmers which will illustrate the economic contribution that trees and woodlands can provide to the economic viability of farms and livestock farming.*

48. Providing advice and information to farmers and landowners will bring more woodland habitats into active management including wood pasture.

    - *Members of the DWF will continue to offer support and assistance to land owners in order to encourage positive active management of woodland and other woodland habitats.*
    - *Agri-environment schemes will be promoted in order to be sure that farmers and land owners are aware of the financial opportunities for help towards woodland management.*

49. Woodland habitats have the potential to deliver many benefits to people and nature.

    - *As part of the opportunity mapping process, partners will work together to identify GIS data sets that will result in a map that will show the opportunities for woodland creation that will deliver the maximum benefit to people and nature.*

50. Many farmers and landowners have ambitions for woodland creation but can lack the appropriate skills to develop their ideas.

    - *Provide support to farmers and landowners to help them achieve their own ambitions by offering help to design schemes, identifying constraints, accessing grants, or supporting contractors to undertake work.*
    - *Explore opportunities to deliver short courses on creation and management of woodlands.*

51. Agroforestry is an additional way of providing opportunities to blur the edges between farming and forestry so that trees and woodlands can become an active part of the agricultural system.

    - *Identify opportunities to undertake regenerative agricultural practices that will offer benefits within the farming system such as flood alleviation, soil improvement and livestock welfare*

Home to strong, self-reliant and balanced communities with good access to the services they need.

52. Woodlands can bring many benefits to local communities in many different forms.

- *Explore opportunities to support young people within the Dales by generating opportunities and access local skills and jobs associated with woodlands.*
- *Where possible support local jobs within the woodland sector and help to publicise local skills which when mixed with other countryside skills, increases the overall benefit to the local community.*
- *Explore the opportunities to link trees and woodlands with the health and wellbeing of local communities.*
- *Publicise the additional benefits of trees and woodlands such as shade, shelter, filtering air pollution and combatting anxiety and depression.*

53. Local communities can provide important support for woodlands and woodland habitats.

- *Create opportunities for local communities to volunteer to help with creating woodland habitats that are resilient and responsive.*
- *Work with local communities to explore where successful community action has resulted in protection of woodlands and tree planting. Use this as an opportunity to advise other communities.*

Our vision for 2040

50. Our vision for 2040 is that:

> *Trees and woodlands in the Yorkshire Dales will: contribute significantly to a carbon net zero National Park, enable habitat connectivity, improve water quality and reduce flooding, in a way that enhances the landscape and special qualities of the area, provide health and amenity benefits to people, and be economic for landowners.*

51. In order to fulfil this vision, woodlands will need to expand in size and number and become increasingly connected as well as being resilient and sustainably managed. Current estimates indicate that, along with other initiatives, around 600ha of woodland might need to be created each year for woodland cover to deliver a net zero national park by 2040.

53. Our ambition for the 10 year life of this strategy is to create 6,000ha of additional woodland

54. An opportunity mapping exercise is currently underway and is scheduled to be completed in February 2021. This will contribute towards establishing realistic targets over the next 10 years. An action plan will then be developed, with the Dales Woodland Forum, to work with landowners and funders in order to deliver these targets.

Our ambitions for 2020-2030

- Create 6,000 ha woodland habitat that enhances the National Park's landscape, with priority given to projects that strengthen habitat networks, increase carbon storage and help to reduce flooding.
- Ensure that 75% of all woodland including ancient semi natural woodland, plantation ancient woodland and scrub is brought into positive management.
- Plant 6,000 individual or small groups of field trees.

Membership of the Dales Woodland Forum – 2020

Mark Corner (Interim Chair)	Landowner
Jane Harrison	Country Landowners Association
Neville Elstone	Cumbria Woodlands
Alastair Boston	Forestry Commission Deer Officer
Sam Cooper	Forestry Commission (Yorkshire and NE)
Jeremy Dick	Forestry Commission (Yorkshire and NE)
Paul Clavey	Forestry Commission (NW and West Midlands)
James Bickley	Forestry Commission (Cumbria)
Bruce McLeod	Friends of the Dales
Mike McKenzie	Landowner, Arncliffe
Martin Davies	National Trust
Frances Graham	National Trust
Pippa Merricks	Natural England
Victoria Manton	Natural England
Will Richardson	Rural Development Initiative
Dylan Cammack	Forest Manager, Tilhill
Peter Leeson	Woodland Trust
Geoff Garrett (Secretariat)	YDNPA, Senior Trees and Woodlands Officer
Helen Keep	YDNPA, Senior Farm Conservation Officer
Tony Serjeant	YDNPA, Senior Wildlife Conservation Officer
Ian McPherson	YDNPA, Member Champion
Phil Lyth	Yorkshire Farming and Wildlife
Carol Douglas	Yorkshire Dales Millennium Trust

Potential 10-year targets for woodland creation

1. Current Government target[1] = 30,000 ha from 2019 to 2025 in England
= 5,000 ha per year

Area of England = 130,395 km^2
Area of YDNP = 2,179 km^2
= 1.67%

Therefore, target for YDNP = 1.67% of 5,000 ha per year
= 84 ha per year

2. 25 Year Environment Plan ambition[2] = 180,000 from 2017 to 2042 in England
= 7,200 ha per year

Area of England = 130,395 km^2
Area of YDNP = 2,179 km^2
= 1.67%

Therefore, target for YDNP = 1.67% of 7,200 ha per year
= 120 ha per year

3. 10 point plan for a green industrial revolution[3] = 30,000 ha per year in UK

Area of UK = 242,495 km^2
Area of YDNP = 2,179 km^2
= 0.90%

Therefore, target for YDNP = 0.90% of 30,000 ha
= 270 ha per year

4. Y&NY 'Carbon Abatement pathway'[4] = 2,000 ha per year

Area of York and North Yorkshire = 8,654 km^2
Area of YDNP (in NY) = 1,551 km^2
= 17.92%

Therefore, target for YDNP (in NY) = 17.92% of 2,000 ha
= 358 ha per year

Therefore, *pro rata* target for YDNP = 358 ha x 1.29
= 462 ha per year

[1] Conservative Party Manifesto (November 2019)
[2] *'A Green Future: Our 25 Year Plan to Improve the Environment'*, Defra (January 2018)
[3] *The Ten Point Plan for a Green Industrial Revolution*, HM Government (November 2020):
[4] *York and North Yorkshire Carbon Abatement Pathways - Key Findings Report (draft)*, York and North Yorkshire Local Enterprise Partnership (June 2020)

5. ‘Net Zero National Park’ = 12,000 ha by 2040

Therefore, target for YDNP = 12,000 / 20
= 600 ha per year

Assumptions for net zero model

Total Greenhouse Gas emissions from YDNP	= 560,000 t CO_2e
Assuming average 50% reduction across all sectors by 2040	= 280,000 t CO_2e
Assuming all peatland restored by 2040 (60,000 ha)	= -60,000 x 3 tCO_2e per year = -180,000 t CO_2e
Assuming retention of existing woodland (8,000 ha)	= -8,000 x 5 t CO_2e = -40,000 t CO_2e
Residual emissions needing to be sequestered	= 60,000 t CO_2e
Assuming average lifetime rate of 5 t CO_2e per ha	= 60,000 / 5 ha = 12,000 ha