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Tributes to Trees

Introduction

In the Centenary year of the Forestry Commission (FC) (1919-2019) members of the public were invited to take a moment to celebrate the trees in their life by submitting a poem, letter, story, memory or image through the 'Tributes to Trees' website¹. To help the FC understand what trees mean to people the tributes were analysed using the framework shown (Figure 1) which focuses on different aspects of place and activities, and seeks to understand how these may contribute to well-being. This short report presents the key results.

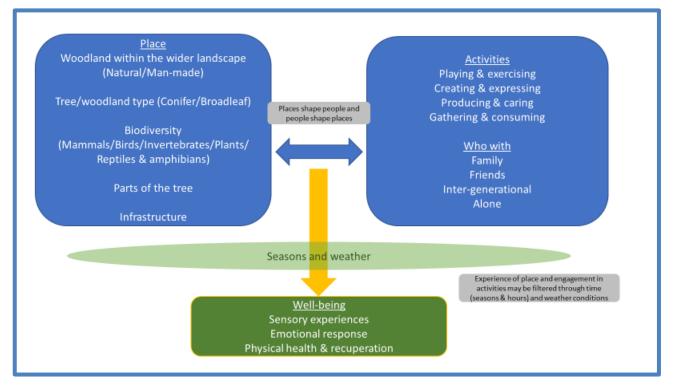


Figure 1: Framework used to analyse the entries to Tributes to Trees²

Number of entries to Tributes to Trees

Of the total 334 entries (at the beginning of September 2019), 128 were classified as prose and 158 as poems. In addition there were 156 images submitted (photographs of trees, drawings or sketches, and photographs of text). In some cases people submitted a photograph along with their poem or prose, while in other cases the image was

¹ <u>https://www.forestryengland.uk/tributes</u>

² Adapted from: Robert Fish, Andrew Church, Michael Winter, 2016. Conceptualising cultural ecosystem services: A novel framework for research and critical engagement. Ecosystem Services, Volume 21, Part B, Pages 208-217

submitted alone (Table 1). The majority of entries were from people living in England (275) (Table 2). Two hundred were submitted by females, 117 by males, with the remaining 17 of unknown gender (Table 3).

Table 1: Entry types

| Tribute to Trees entry type | Number of entries |
|------------------------------|-------------------|
| Prose only | 63 |
| Prose plus image | 65 |
| Total prose | 128 |
| Poem only | 114 |
| Poem plus image | 42 |
| (Prose plus) poem | 1 |
| Poem (plus prose) plus image | 1 |
| Total poems | 158 |
| Image only | 48 |
| Total images | 156 |
| Total of all entries | 334 |

Table 2: Location of participants

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| Location | Number of entries |
|-------------------------------|-------------------|
| South England | 150 |
| English Midlands | 53 |
| North England | 50 |
| Wales | 7 |
| Scotland | 7 |
| Northern Ireland | 2 |
| England (no county specified) | 22 |
| GB (no county specified) | 1 |
| UK (no county specified) | 10 |
| Other country | 5 |
| No location given | 27 |

Table 3: Gender of participants by type of entry

| Gender | Prose | Prose plus image | Poem plus image | Poem | Image only | Total |
|-----------|-------|------------------|-----------------|------|------------|-------|
| Female | 39 | 43 | 21 | 68 | 29 | 200 |
| Male | 19 | 21 | 19 | 43 | 15 | 117 |
| Not known | 5 | 1 | 2 | 5 | 4 | 17 |

Key words

The word clouds below (Figure 2) show the top 100 most commonly occurring words in the prose and poems entries (after removing common words such as 'went' and 'two', and also the most obvious words, 'tree', 'trees' and 'forest'). Table 4 also lists the top 25 words ('tree' and 'trees' have been combined in the table) with the number of times they were mentioned in the prose entries. While words such as 'tree' and 'trees', 'forest', and 'woods' are to be expected, these results show that other significant words include 'beautiful', 'love' and 'favourite' which begin to hint at how trees are special in peoples' lives. Other words such as 'leaves', 'branches' and 'nature' start to demonstrate the aspects of trees that people notice, and the recognition of the place of trees in a broader environmental context. The presence of the word 'walk' in this top 25 word list already makes it clear what activity is most common in woodland settings. In addition, time appears to be an important aspect of peoples' experiences with trees as there are many relevant words including 'now', 'always', 'day', 'years', 'old', and 'time'. Looking at the top 25 words found in the poems there are many similarities with the prose words.

However, there are additional words including 'green', 'woodland', 'air', 'oak', 'spring', 'winter', 'wind', 'birds', 'sun' and 'earth'.

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Figure 2: Word clouds: Prose (left) and poems (right) entries (top 100 words) Note: The words 'tree', 'trees' and 'forest' were excluded from the word clouds

| Word | Count | Word | Count | Word | Count |
|------------------|-----------|-------|---------|-----------|---------|
| Trees / tree | 232 (214) | Day | 24 | Old | 20 (24) |
| Forest | 54 (46) | Like | 24 (42) | Time | 19 (45) |
| Love | 41 (25) | Many | 24 | Favourite | 18 |
| Life | 30 (44) | Walk | 23 | Leaves | 18 (55) |
| Now | 29 (28) | Years | 23 | Nature | 18 (25) |
| Beautiful | 27 | Look | 21 | Place | 18 |
| Always | 25 | New | 21 | Branches | 17 (33) |
| Woods (woodland) | 25 (27) | See | 21 | Still | 17 (23) |

Table 4: Top 25 words (prose entries)

Note: The words highlighted red also occur in the top 25 words in the poem entries, and the numbers in brackets are the count figures from the poems.

Key themes

To explore in more depth the meaning of trees to people, Table 5 presents the themes³ that were used to analyse the content of the prose and poems that people submitted, and it shows how many times each of these were mentioned in the text. In the sections following the table we explore the themes of well-being, place and activities in more

³ Refer back to the framework at the beginning of this document.

detail. The column 'examples of relevant terms' shows single words, these were used to search for and examine sentences, phrases, poems and larger text excerpts.

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| Themes | Sub-themes | | Examples of relevant | Number of times mentioned | |
|-------------|-------------------------------|--------------------------|----------------------|------------------------------|-------|
| | | | terms | Prose | Poems |
| | | Bird | Sparrow, pigeon | 13 | 39 |
| | rsity | Invertebrates | Spiders, butterfly | 3 | 10 |
| | live | Mammals | Squirrel, stag | 24 | 27 |
| Blace Intra | Siod | Plants | Bluebell, ivy | 22 | 37 |
| | ш | Reptiles & amphibians | Frog, toad | 1 | 0 |
| | structure | Bench, path ⁴ | 24 | 4 | |
| | Parts | of the tree | Branches, leaves | 37 | 94 |
| | Broa | dleaf | Oak, ash | 39 | 44 |
| | Coni | fer | Sitka, pine | 5 | 11 |
| | Trees in man-made environment | | Street, wall | 51 | 28 |
| | Trees in natural environment | | Hills, countryside | 14 | 42 |
| | | | | | |

Table 5: How many times did the themes occur in the prose and poems?

| | Creating & expressing | Exploring, photographing | 32 | 31 |
|----------------|-----------------------------------|--------------------------------|----|----|
| | Gathering & consuming | Firewood, axes | 1 | 13 |
| | Playing & exercising | Walking, climbing | 42 | 39 |
| A | Producing & caring | Tool | 7 | 4 |
| Activities | With family | Mother ⁵ , son | 50 | 24 |
| | With friends | Friends, pal | 15 | 9 |
| | Inter-generational | Grandson, grandmother | 12 | 6 |
| | Alone | Alone | 5 | 4 |
| | | | | |
| 14/-11 | Emotional responses & experiences | Mood, sanctuary | 89 | 97 |
| Well- being | Physical health and recuperation | Hospital, illness ⁶ | 9 | 20 |
| Demg | Sensory experiences | Smell, noise | 76 | 92 |

Wellbeing

Table 5 above shows that there were 89 and 97 text excerpts (from the prose and poem entries respectively) that referred to some kind of emotional response or experience. In addition, there were 76 (prose) and 92 (poem) excerpts that referred to sensory experiences of some kind. Of all the sub-themes included in the study these two were

⁴ Note: Some of the content captured by this term refers to metaphorically finding the right path.

⁵ Note: Some of the content captured by this term refers to mother nature.

⁶ Note: Some of the content captured by the terms used in this theme refers to sick or dying trees.

found to be present in the entries most frequently. These are considered to be important aspects of peoples' well-being. The following quotes illustrate the ways in which people expressed their emotional and sensory experiences of trees and woodlands.

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| PROSE | POEMS |
|---|--|
| "The forest brings me a sense of calm it | "One walk, was all it took, To see how your |
| feels so special to be able to live here". | boughs would shield me: A refuge have I |
| (Female, Glos). | found in you From the city's twisted power". |
| "I love to hug a tree, it makes me smile and | (Male, London). |
| it is comforting. There is something majestic | "Autumn browns Trees whisper dryly, fallen |
| and magical about older trees". (Female, | leaves crunch, each sunny day a crisp |
| Devon) | surprise". (Female, London). |

While not featuring so frequently in the entries, the theme of physical health, which here focuses on illness and recovery from sickness, reveals some important aspects of peoples' feelings about trees. The following quote (which has been edited to reduce length) is one of the more powerful.

"Dear woodland, Do you remember me? You were my escape at the time I needed you most. In 2010 I spent a year in hospital. When I think back to that year, it was you, not the hospital, that saved me. I felt trapped inside a building that had everything to do with illness and nothing to do with life. But once a week, for two precious hours, I would visit you. I lived for these visits. You reminded me of what it was to be alive. Your soft shade, subtle smells and soothing sounds, created a safe space that contrasted so completely with the bright lights, sterile odours and loud noises of the hospital. As your bare branches produced new leaves, you showed me that even when everything seems to have been lost, there is always a chance to re-grow, to try again". (Female, Bristol).

The importance of trees for mental well-being is present in many of the prose and poem entries under the theme emotional responses. Again, one entry has been selected as it represents a particularly striking example of the power of trees to help people in times of emotional need.

"Trees are like friends to me. They protect me, support me, they are always there for me. When I'm feeling down or anxious or stressed they sit with me, quietly, no judgements, while I contemplate life, think up new ideas, get lost in a book, watch the time pass and the world go by or simply cry". (Female, Yorkshire) Another aspect of the entries under the theme 'emotional responses' was the role of trees in providing a refuge, a sanctuary or a safe place. The following quotes demonstrate this.

PROSE "I spent hours in that tree, gazing over the lupin fields. It was my house, my pirate ship, my school, my playmate and my refuge". (Female, Shropshire) "On my brother's untimely tragic death his loving family brought some of his ashes from France, to scatter beneath you. That day you witnessed the broken hearts and tears of his nearest and dearest. You gave him back his peaceful sanctuary and the deer now sleep under your boughs". (Female, Warks).

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POEM "She ran through the forest Imagined herself to be The lost princess waiting, Surviving until he comes and rescues her. There amongst the ferns The aged oaks The swaying elms. The majestic forest her realm Her safe place. She imagined herself a forest fairy Wild and free Invisible to danger Safe from harm". (Female, England)

Sentiment analysis was used to further analyse the content of the poems and prose. This works by using a statistical computer package to identify pre-defined positive and negative terms within sentences. Each individual poem and prose entry is assigned a sentiment score and can be plotted on a graph. Figure 3 below shows that on average the prose entries had a more positive sentiment score than the poem entries.

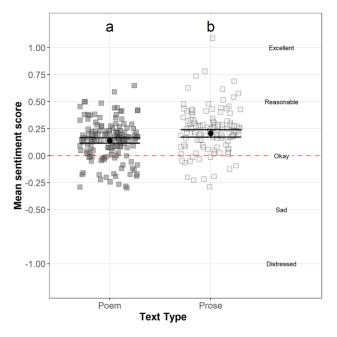
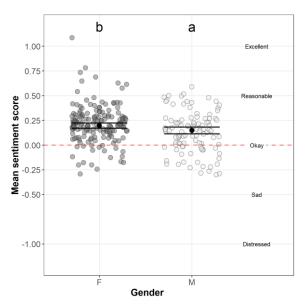


Figure 3: Sentiment analysis of poems versus prose

Note: Text to the right of data points is provided to aid interpretation of the sentiment axis, with words plotted in line with their relevant sentiment scores.

Additional sentiment analysis shows that on average the entries from females had a higher (more positive) sentiment score than the entries from males (Figure 4).



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Figure 4: Sentiment analysis comparing average scores of entries from females and males

Place

The analytical framework shows two interacting components that influence the wellbeing effects of engaging with trees, woodlands and forest environments. These are 'place' and 'activities'. These two components, and how they featured in the Tributes to Trees entries, are discussed here.

Among the most frequently mentioned sub-themes, within the overarching 'place' theme, were broadleaf trees, trees in the wider man-made and natural landscape, and the different parts of trees such as branches, leaves, trunk, roots and canopy. It was also important to people to experience broader biodiversity, particularly other plants, mammals and birds. These points are illustrated by the quotes below.

POEMS PROSE "Tree Outside My Window Delicate bow Muscular "And as I pass beneath it reach Framing sea of cloud Look out for starling I feel so free and fortunate to be able Fingers of twig Sway bare Catch light Sparrow to touch its bark, feel its leaves, flutters in Twisted trunk Elbows of branch Clutch seed admire its blossom and step over its Blackbird takes flight Still, silent, Gulls, circle, Snow, huge roots. I find peace beneath that drips, Pigeon in to rest" (Anon) tree". (Female, Glos). "Walking I look up as I wander And wonder at you, "I love trees. I love the lumpy erect stretching your limbs out Swaying, blown by the bumpy oak, the bark-shredded, leafwind. Soon leaves again will cover your frame, Green. twinkling silver birch, the magnificent I step out into the beyond Onto fields, banks, dunes horse chestnut, with its creamy and sand We will soon meet again my dearest friend. flowers like conical candles, the fiery You will hold me in your shade and shelter, Forever". foliage". (Female, Northants) (Male, Norfolk).



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Leaves (Male, England)



Bluebells (Female, Cumbria)

We also examined all the images to define what features they contained (Figure 5). By far the most frequent aspect of place within the images was broadleaf trees.

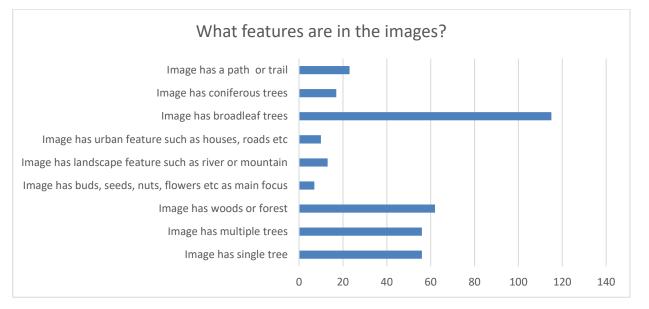


Figure 5: The number of images containing different aspects of place

One of the most striking differences within the 'place' theme, between the prose and poem entries, is the number of sentences or phrases relating to trees in the wider manmade or natural environments. Within the prose entries there were more references to trees in the wider man-made environment than the natural environment, while in the poem entries the reverse was true. Poems allow people to express themselves very differently than they might in 'normal' prose writing or talking, and this may be the reason for the differences in content.

Activities & who with

When it comes to activities, by far the most commonly mentioned category was that of 'playing and exercising'. As the quotes below illustrate this included activities such as

dog walking, discovery, and climbing. Importantly, people often referred to family in their descriptions of trees and why they matter to them. Again, the quotes below provide an indication of this importance.

POEMS

"A child in the forest, summer sun showering glints of light through an exciting gloom, Imagination running wild,

Every tree to be climbed, every giant branch & leaf seeming to reach out into the depth of sky as you peer up in awe

Fallen branches becoming toys that bring joy and childish laughter, a clashing of wooded sword, a tool in which to explore the canopy under your feet and watch insects crawl". (Male, England).

"Children climbing On woody fallen bones Children clinging From your mighty arms Having the most fun. Warm sun rays Filtering through leafy lace Creating a myriad of patterns on my face. Laughters, shouts, Echoing sounds. Happy families Precious memories.

PROSE

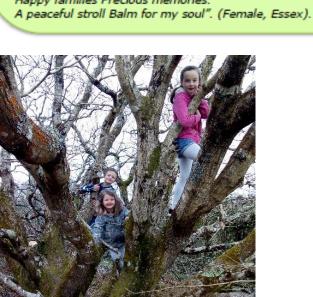
"There is a tree I see on my daily dog walk, A magnificent giant of a tree, I watch it through the seasons, It means so much to me. It stands so high and mighty" (Female, Glos).

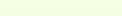
"Now I have adventures with my children in the forest, always creating a sense of discovery. We visit the 'magical woods', search for gold coins and look for pieces of wood worthy of the mantle 'adventure stick'. My children, like the forests themselves, will grow and flourish. And one day they'll bring their children to the magical woods looking for adventure sticks & creating new stories as the cycle continues". (Male, no location specified).

Kids climbing (female, Cornwall)



Sheltering together (Male, Notts)





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The images were also analysed to see how many featured adults, children or animals (Figure 6).

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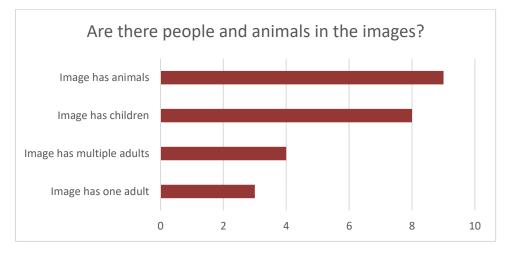


Figure 6: The number of images featuring people or animals

Seasons and weather

There are two additional themes that we found to be important to how people experience trees, woodlands and forests. These are seasons/time and weather. Evidence suggests peoples' experiences are often 'filtered' through these aspects, as shown in the framework at the start of this report. This emerged in a number of parts of the analysis. For example, the images revealed the importance of seasons and Figure 7 shows how many of them were taken across the four different seasons. The chart also includes an additional bar to show how many images were 'sunny'.

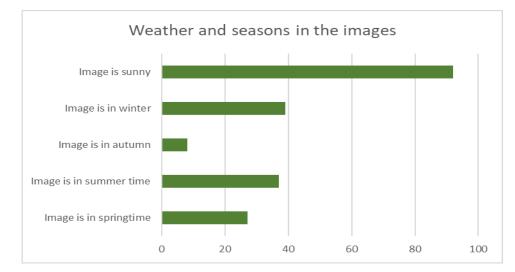
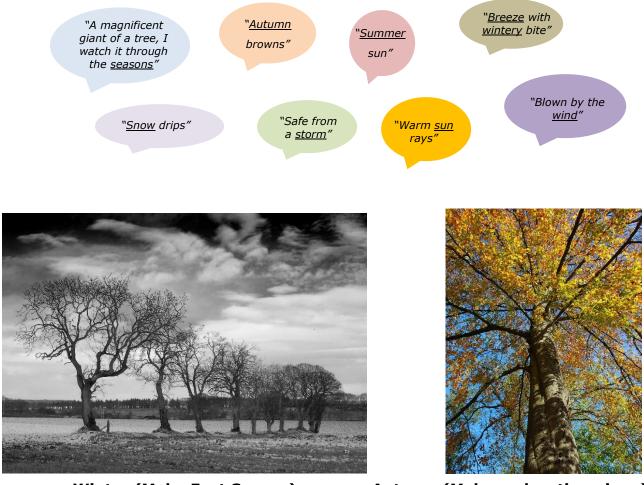


Figure 7: Number of images taken in the different seasons, and when it was sunny

There were also many references to aspects of time and seasons in the key words, as noted earlier. In addition, the importance of time, seasons and the weather is found in many aspects of the prose and poems and some are found in the quotes included in this report. We repeat some short extracts here:

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Winter (Male, East Sussex)



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The connections between place and well-being

The charts that follow show firstly how 'Place' relates to 'Well-being' and secondly, how 'Activities' relate to 'Well-being'. For example, the blue stacks in the first chart below (Figure 8) show how many times the different aspects of place were also coded to 'emotional responses and experiences' in the prose entries (similar results were found in the poems). This illustrates that peoples' emotional experiences of trees and woodlands were connected to a number of aspects of 'place'. Evidence suggests that broadleaf trees were important, as was the presence of birds, mammals and other plants. The different parts of trees that people could recognise and experience were also important, along with the place of trees within the wider landscape. The quotes that follow the chart help to illustrate these relationships.

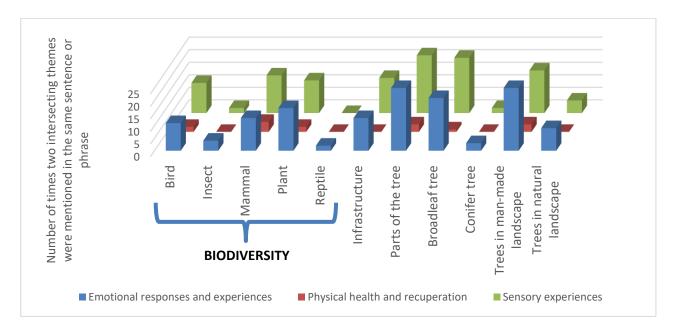


Figure 8: Prose entries: Examining how place intersects with well-being

"The springlike sun is betrayed by a breeze with wintery bite Crunching through leaves and twigs causing birds to take hasty flight

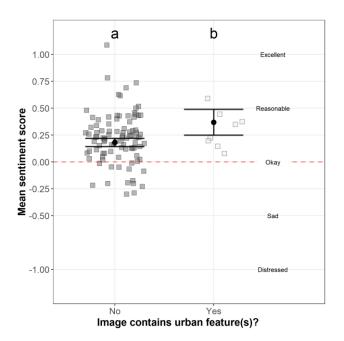
The distant bark of farm dogs shatters the illusion of solitude To be so close to this oasis of peace fills my heart with gratitude More lucky folk are passing with nod of head and friendly smiles The stresses and worries melt away as you meander through the miles" (Male, England)

"When children whinge and need fresh air The woodland meets the challenge With swords of branches, hide and seek Nature's dens and climbing frames Sounds of laughter soon ring out For harmony and happy memories The woodland takes some beating When I'm feeling tired and weary and I need a clear perspective The woods cannot be beaten". (Female, Wales). "When I was a little girl, in the unloved space between our garden and the tennis club, stood a cherry tree, tall and with climbable branches. I spent hours in that tree, gazing over the lupin fields". (Female, Shropshire).

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"I was a shy child living in a prefab. But at the bottom of the communal path I was allowed to venture as far as the oak tree. I could watch people go by from here and maybe test out saying hello. It felt safe under my tree; just the smell of it was comforting. And the acoms were endlessly fascinating". (Female, Suffolk).

Again, sentiment analysis was conducted to further analyse the entries in order to understand more about the 'place' theme (Figure 9). This time the analysis was carried out on the poems and prose combined, but only those that had an image submitted alongside them. Results show that those text entries submitted with images that had urban features in them (such as houses or a road) have a higher average positive sentiment score.



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Figure 9: Sentiment analysis of text submitted with an image – urban features

The connections between activities and well-being

We have already seen how many sentences and phrases relate to the theme 'playing & exercising'. However, to further add to our understanding, Figure 10 shows that there were many instances (28) within a poem or part of the poem where the phrase that had been written referred not just to the activity (for example, walking, cycling or climbing) but also to how that made people feel. This helps to demonstrate the direct link to the activities that people say they like to do in a forest or woodland setting and their emotional responses and hence well-being. While the poem entries are presented here, similar results were found within the prose entries.

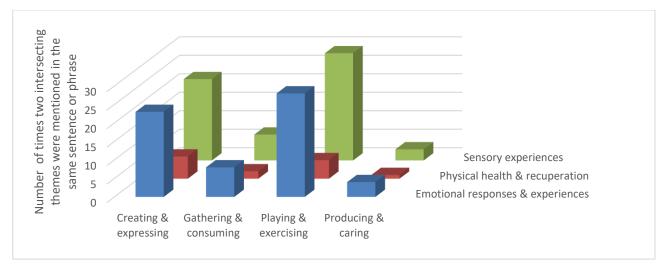


Figure 10: Poem entries: How did activities intersect with well-being?



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| POEM | PROSE |
|---|---|
| "We're going for a walk, | "I love forestsKielder Forest where I visited with my |
| We're taking our animal friend. | mates on a school adventure week at Plashets in the |
| Put on our boots, put on our coats and | 1970s, now under waterHarwood Forest |
| Into the woods. | mountainbiking on Simonside,the downhill |
| Over the road, down the path | raceThe Sunday rides round Kidland Forest with a |
| Left or right? | great bunch of matesThe Kielder Circuit riding back- |
| Right and down the hill | marker with Simon, fixing broken down bikes on the |
| And there he sits: our gnarly magical | way roundTeaching my daughter to read maps, |
| friend. | which she does very well, in Thrunton Woods when she |
| Mossy feet and jelly ears. | was youngProtect our forests for future generations |
| We sit, quiet, feeling safe if there were a | to know them and love them too" Male, |
| storm". (Female, Oxon) | Northumberland. |

In both the prose and poems we found many examples of people describing their connection to trees, woodland and forests. In many cases these descriptions mentioned being with other members of their family. The tallest green and blue bars in Figure 11 below show the number of occasions where particular sentences or phrases in the prose referred to both members of their family and the emotional or sensory experiences. Quotes illustrate these connections.

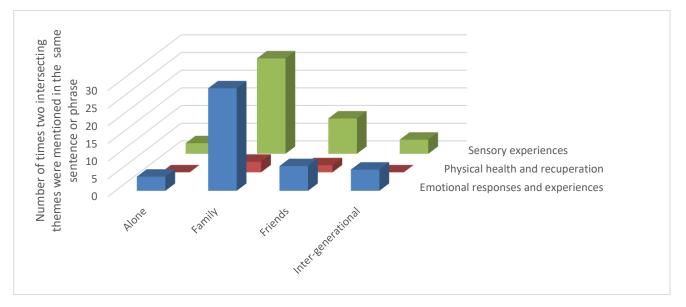


Figure 11: Prose entries: Examining how the social aspects of activities intersect with well-being

"My son is all grown up now, when he was a toddler we lived in Exmouth Devon. We would ask him every Sunday after lunch if he wanted to go to the beach or the woods. He always wanted to go for a walk in the woods. We all loved walking through the woods and no matter how bad our week had been it all melted away as soon as we were walking amongst the trees". Female, West Midlands.

Conclusions

Connection to well-being

Our analysis helps to make explicit the connection between activities in the forest, peoples' experiences of trees, woodlands and forests as place, and their well-being.

In particular, people express emotional and sensory experiences from their connections with trees, woodlands and forests, and these are inextricably linked to the important aspects of place, people and activities.

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The relationship between trees and broader biodiversity seems to be extremely significant for many people.

In addition, many people articulate very detailed descriptions of the different parts of trees, the leaves and bark for example, that appear to be fundamental to how they experience trees in their lives, emotionally and through their senses.

Emotional experiences and sensory experiences

A lot of prose and poems are full of sentences and phrases expressing emotional experiences and sensory experiences, two aspects of well-being investigated in this study. These themes were found more often than all other themes we explored.

What's important about place?

There are a number of particularly important aspects of place that were mentioned. These include: broadleaf trees; trees in the wider environment – manmade or natural; the different parts of the tree such as the bark and leaves; being able to see other biodiversity, such as birds, mammals and other plants.

What's important in terms of activities?

When it comes to activities, evidence shows that the category 'Playing and exercising' is the most common to be undertaken in woods and forests. Importantly, when describing what trees mean to them, family members are often mentioned.

The importance of seasons, time and weather

Throughout the analysis we found evidence that peoples' experiences of trees, woods and forests are filtered through time, the seasons and weather.

Poems versus prose

There is value in allowing people to express themselves in whatever way suits them, for example, through poems. This frees people from more conventional means of communicating such as through interviews or focus group discussions. There is evidence that the way people talk about the value of trees, woodlands and forests in their lives is different in poems.