Sandy Heath and Flagstaff gorse sites

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1.0. Site description

1.1 Location

Sandy Heath and Flagstaff gorse sites are both located on the western side of Spaniards road towards the west of Hampstead Heath. One patch is located in an area widely known as West Heath and the other on Sandy Heath. The centre of the Sandy Heath gorse site is at grid reference 526,354; 186,795 and covers an area of approximately 0.22 hectares. The centre of the Flagstaff gorse site is at grid reference 526,116; 186,335 and covers an area of approximately 0.2 hectares. The 2009 Hampstead Heath vegetation survey shows the two locations as being in compartments 1,179 and 1,199-1,201.

The compartment boundaries can be seen in figure 8 and 9. The Sandy gorse site is bordered by secondary woodland to the east and west with the Sandy ponds to the north and an open paddock to the south. The Flagstaff gorse site is bordered to the south by West Heath road and to the north and west by secondary woodland. To the east of the patch is an open grassy area containing the Flagstaff. A track runs through the centre of both patches with the Sandy track running north to south and the Flagstaff track running approximately east to west.

Both areas are unfenced and it is only the gorse itself which provides a barrier to access. The Sandy Heath site is on relatively level ground although the surrounding area is pitted and hollowed due to previous sand extraction and is several meters below the level of Spaniards road. The Flagstaff site is spread across a varied topography with a gradual slope downhill from east to west.

1.2 Geology, Soils, Hydrology

Both the Sandy and Flagstaff gorse sites are believed to be located on areas of Bagshot sand. The Sandy Heath site is situated on an area of level ground whilst the Flagstaff site gradually falls away from east to west with a height change of approximately 5m. The ground also falls away from north to south towards the road from the central path and is pitted and hollowed.

1.3 Ecology

Both sites are typified by the presence of European gorse in relatively extensive patches. Along with the Vale of Health site these are the only extensive gorse areas on the Heath. Gorse is a typical plant of heathland and with a relatively short lifespan (15 years) requires management in order to maintain its presence. Without active management scrub and then trees easily invade and the areas will succeed to woodland. Gorse provides nesting habitat for bird species such as long-tailed tit, blackcap and whitethroat which is of considerable local importance. Infrequent visitors such as stonechat nest in compact gorse and continued and improved management may encourage breeding.

The Sandy Heath gorse site has within its bounds 2 wild service trees which are uncommon on the Heath and are classed as ancient woodland indicators. Alder buckthorn also grows within the Sandy site and although planted it is also relatively uncommon on the Heath and is a larval food plant of the brimstone butterfly. A large suckering apple tree borders the Sandy site. A small number of planted junipers (planted in 2000) are present in one part of the Sandy area and broom frequently occurs throughout. A few plants of heather were present until recent years in the Sandy site but are no longer believed to be alive. Bracken occurs within the less dense sections of the Sandy Heath gorse and can cause shading problems for seedling regeneration.

Rabbits occur in both sites and can be detrimental for regeneration of gorse coppice stands and seedling growth, but may maintain open grassland areas in nearby areas.

Figure 1: Growth phases of Gorse. (Symes + Day, 2003[1])

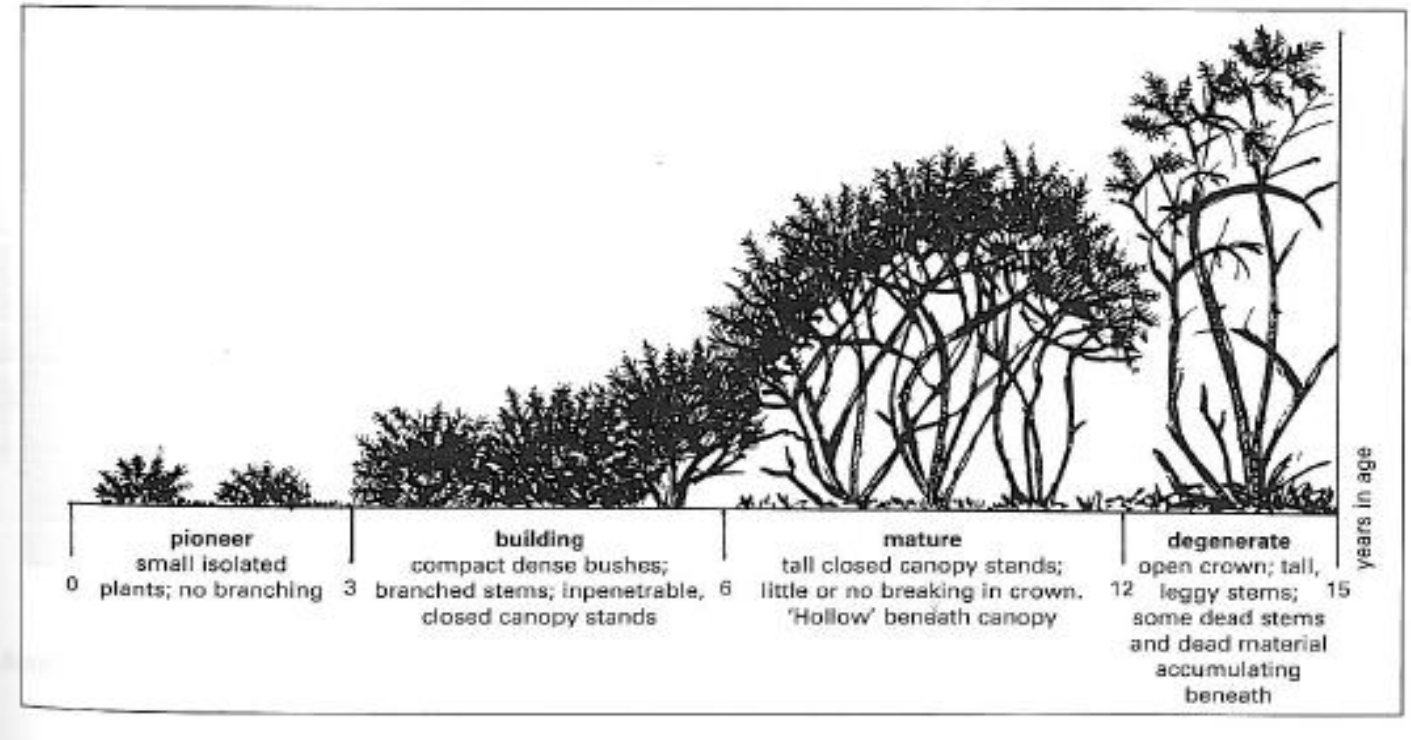


Figure 1 shows gorse reaching maturity between 6 and 12 years and then degenerating. In areas adjacent to woodland and other scrub the gorse may well be shaded out by sapling trees or engulfed by bramble well before this degenerate phase.

1.4 Public and educational uses

There is a low amount of public use in the vicinity of the Sandy Gorse patch. The track running through the patch is the main path joining Sandy road with Spaniards road and used mainly by walkers. There is very infrequent educational use of the area.

1.5 History

Both sites would have been much more open until the last 50 years or so with more extensive patches of grassland, bare ground and gorse scrub. The Sandy Heath site has developed from a barren landscape in 1867 due to the extensive sand digging in the area and has gradually developed into scrub and woodland through succession and reduction in grazing.

Figure 2: Photograph of the Sandy Heath area in 1867. Credit Hampstead Museum/Burgh House

The area surrounding the Flagstaff was also a great deal more open until more recent times with figures 3 and 4 below from old postcards showing open areas of grassland and bare ground.

Figure 3: Postcard view from the Flagstaff towards Harrow in 1910. Courtesy of Michael Hammerson

Figure 4 : Postcard painting view from Flagstaff towards Harrow in 1919. Courtesy of Michael Hammerson.

The above colour image indicates gorse growing in the vicinity of the current Flagstaff gorse patch in 1919.

The aerial photograph below gives further indication of the open and eroded ground in the vicinity of what is now the Flagstaff gorse patch.

Figure 5: Aerial photograph postcard of the Flagstaff gorse area looking towards Hampstead

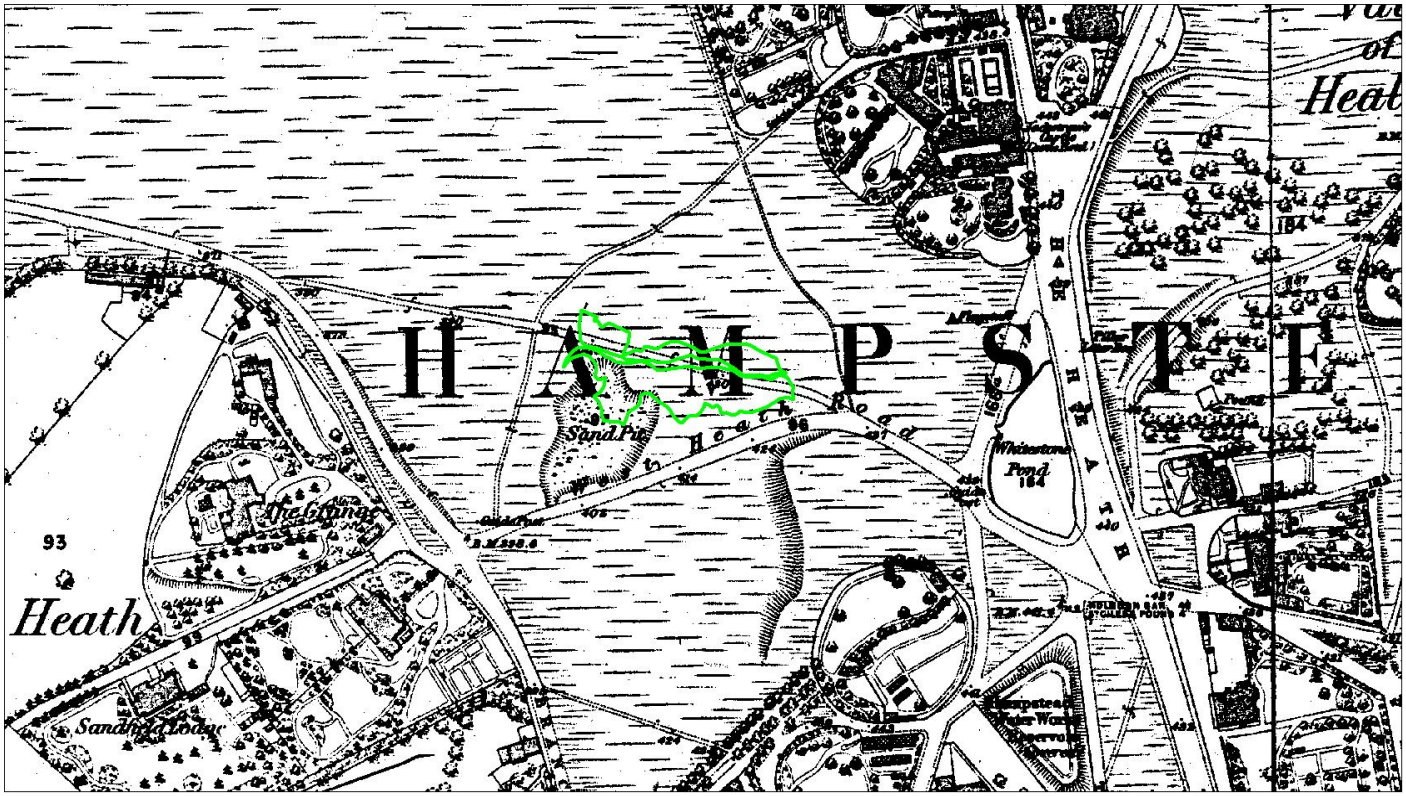
Although no date is given for the above image it is believed to be in the region of 100 years old.

The area around the Flagstaff and Whitestone pond was also great deal more heavily frequented than today as can be shown in the postcard below. As well as human foot traffic, the area was also used for donkey rides. This is likely to be the main reason for the scarring shown above and would have maintained open ground and a patchwork of grassland and low scrub.

Figure 6: Whitestone pond postcard image. Courtesy of Michael Hammerson

The image below is a small section of an 1870 Ordnance Survey map of the Flagstaff area and shows the Flagstaff gorse site in green and indicates a large area annotated sand pit under this patch. This is assumed to indicate some form of sand extraction from the area. The map also shows a lack of trees marked in the area.

Figure 7: 1870 Ordnance survey map of the Hampstead area.



Both sites have been actively managed in the last 10 years with regular coppicing of the gorse on a 6-8 year rotation. Gorse seedlings taken from the site have also been grown on and used to re-establish gorse in open patches and other Heath sites. The area of gorse within the Sandy Heath site was expanded by 5% to the west in 2003 and then again by a further 5% in 2012. Junipers were planted in the Sandy Heath site in 2000.

The Flagstaff site has been expanded also by approximately 5% in the last 5 years through planting of propagated seedlings into open and eroded patches.

1.6 Natural and human-induced trends

In the vicinity of the Sandy Heath gorse site in the pits and hollows there is erosion caused by bike riding, although only 2 relatively thin erosion scars run through and around the site. The gorse has previously been set alight and a more regularly coppiced fire break has been maintained along the main north-south track. In patches of less dense gorse, picnic debris has previously been found but the recent thicker gorse has prevented much of this.

The Flagstaff gorse patch is regular frequented by 'cruising' men with large amounts of sexual litter left behind in open patches. The patch used to be criss-crossed with numerous scars and tracks preventing regrowth and causing erosion and accumulating sexual litter. A more regular coppice regime and planting of bare patches in recent years has allowed gorse to establish on previously open ground, although in a number of areas the establishment of gorse has been prevented through vandalism and continued use for sexual activity. A number of fires presumed deliberately started have occurred at the Flagstaff gorse site.

Both sites are bordered by secondary woodland and trees frequently seed in bare areas.

1.7 External influences

The southern edge of the Flagstaff patch is adjacent to West Heath road so will suffer from some road pollution and littering.

2.0. Evaluation

2.1 Natural landscape

Lowland Heathland is a target for the London Biodiversity Action Plan and indeed the national BAP. Gorse is one such component of lowland heath and the Flagstaff and Sandy Heath sites are 2 of only 3 large patches of gorse to be found on the Heath. Gorse occurs in patches within the Heath's heather sites and in isolated clumps elsewhere but these isolated groups become difficult to manage and are easy to lose to scrub and then woodland. Opportunities exist in both areas to expand the current extent of gorse and ensure that this 'heathland' plant remains, providing more of the lowland heath habitat which gave Hampstead Heath its name. In general tree growth should be prevented within the gorse sites but isolated low growing trees or shrubs may provide bird singing perches and can be left in low numbers.

Gorse should be managed in rotation to ensure a mosaic of heights and age structures to provide a variety of conditions for invertebrates and birds. It is recommended that the gorse on both sites is managed on a 12 year rotation in line with the rotation timescale at the Vale of Health site. This rotation is subject to review and may require shortening if the gorse is found to be diminishing or being out competed. Suggested rotational section locations are given in Figures 8 and 9 but the exact pattern of coppicing may be altered if a section is seen to require earlier management.

The Wild service saplings although not a constituent of lowland Heath should be maintained due to their uncommon nature on the Heath

2.2 Public and educational uses

Due to their location little educational use is possible but both areas provide an important interpretative link to lowland heath habitats through interpretative information.

2.3 History and built environment

The geology of both areas is typical of conditions on which lowland heath occurs and provides a diminishing link with the Hampstead Heath of old. The presence of gorse on both sites should continue.

2.4 Overall vision

Maintain extensive patches of European gorse to provide lowland heath habitat for birds and invertebrates alike.

Seek opportunities to expand areas of European gorse on Hampstead Heath.
Maintain wild service saplings within the Sandy Heath site.
Maintain a diverse age range of European gorse.

2.5 Relevance to achieving the 2007-2017 Hampstead Heath Management Plan ????

Policy 13: The existing areas of acid grassland and heathland, including heather and gorse, will be managed to protect and enhance their nature conservation importance

Policy 14: The areas of acid grassland and heathland, including heather and gorse, will be extended where possible

Aspirational Policy 15: Areas of acid grassland and heathland, including heather and gorse, where appropriate will be restored and extended as functioning, sustainable habitats

Policy 46: Populations of plants and animals protected by law, identified as being Priority Species in national and local Biodiversity Action Plans, or subsequently identified as worthy of protection will be protected and enhanced

3.0. Prescription and work programme

Figure 8: Flagstaff gorse site 2012

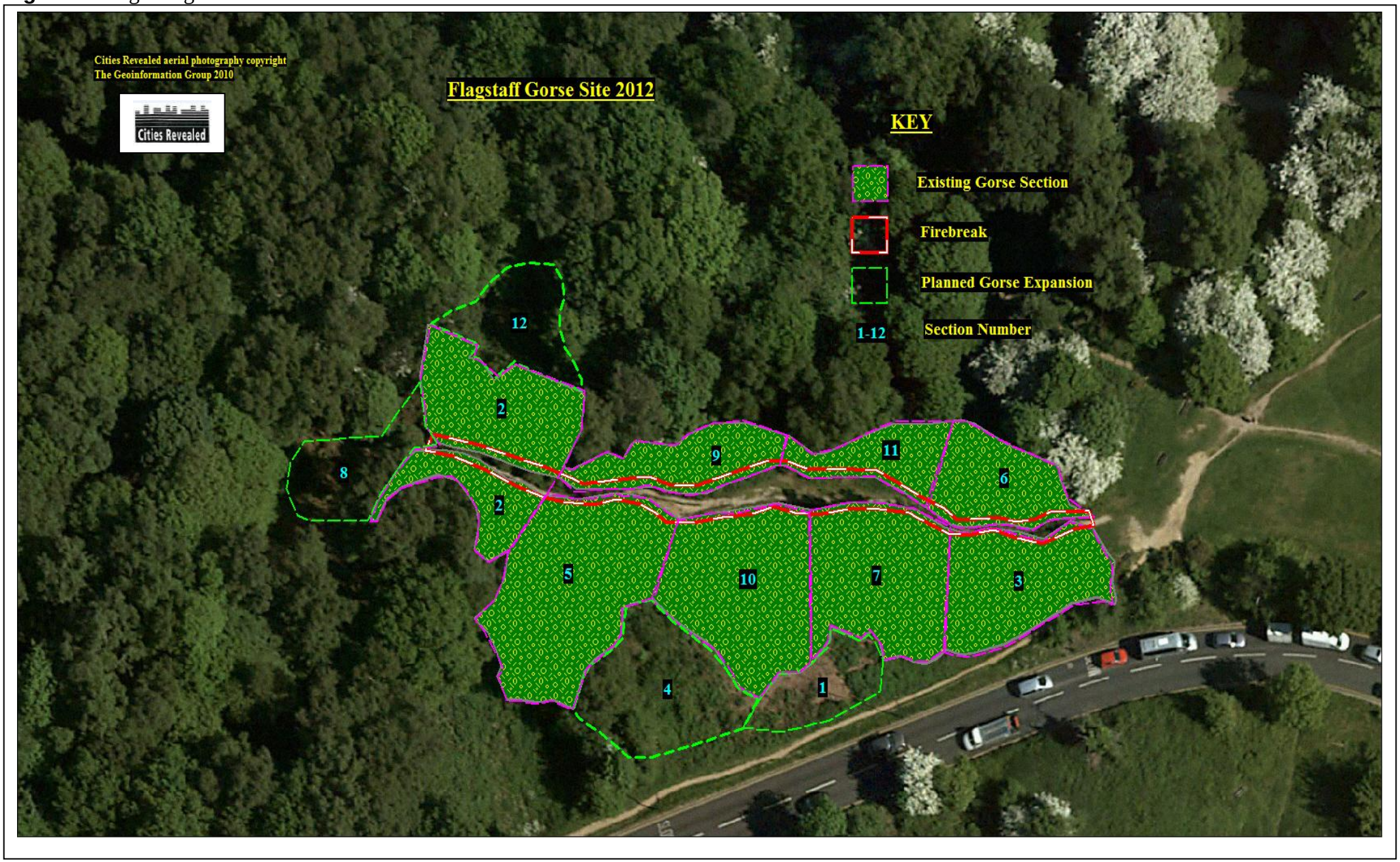
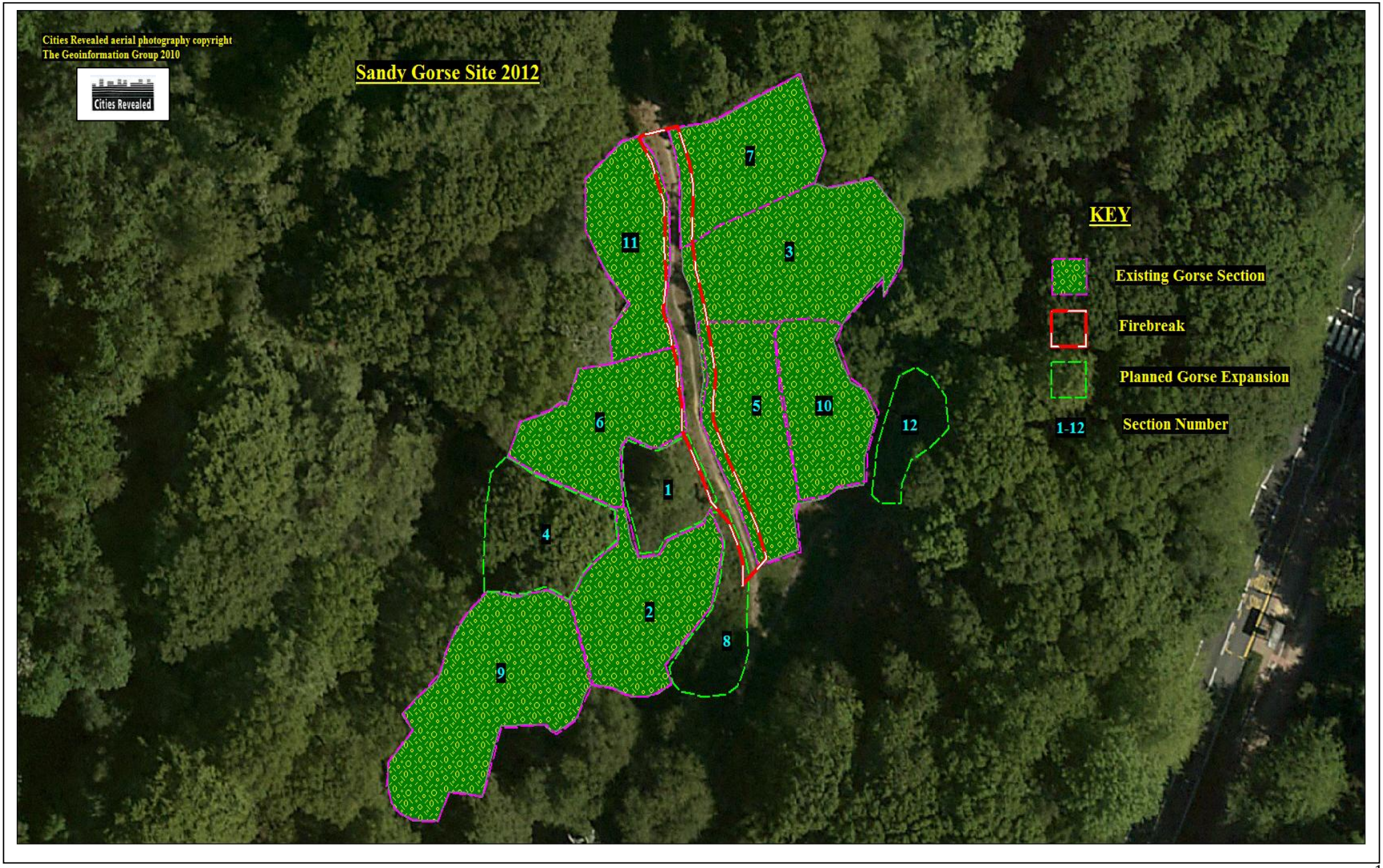


Figure 9: Sandy Heath gorse site 2012



3.1 Regular management tasks

Flagstaff and Sandy Heath gorse Site Objectives

Objective	Prescription	frequency	Month(s)	Years	Who by	Priority : low, medium or high
Rotational coppice of gorse to maintain vigour and different age ranges. 	Coppice gorse on a 12 year rotation in Section 1. Grub out seedling trees and remove bramble. Plant up any bare/dead patches with potted gorse. It should be noted that in year 1 for this section the area will require scrub/trees removal and the planting of gorse plants as described in the One-off tasks section.	Every 12 years	October-February	2013 +2025	Cons Team/ Volunteers	High
	Coppice gorse on a12 year rotation in Section 2. Grub out seedling trees and remove bramble. Plant up any bare/dead patches with potted gorse.			2014 +2026		
	Coppice gorse on a12 year rotation in Section 3. Grub out seedling trees and remove bramble. Plant up any bare/dead patches with potted gorse.			2015 +2027		
	Coppice gorse on a 12 year rotation in Section 4. Grub out seedling trees and remove bramble. Plant up any bare/dead patches with potted gorse. It should be noted that in year 1 for this section the area will require scrub/trees removal and the planting of gorse plants as described in the One-off tasks section.			2016 +2028		
	Coppice gorse on a 12 year rotation in Section 5. Grub out seedling trees and remove bramble. Plant up any bare/dead patches with potted gorse.			2017 +2029		
	Coppice gorse on a12 year rotation in Section 6. Grub out seedling trees and remove bramble. Plant up any bare/dead patches with potted gorse.			2018 +2030		

	Coppice gorse on a12 year rotation in Section 7. Grub out seedling trees and remove bramble. Plant up any bare/dead patches with potted gorse.			2019 +2031		
	Coppice gorse on a12 year rotation in Section 8. Grub out seedling trees and remove bramble. Plant up any bare/dead patches with potted gorse. It should be noted that in year 1 for this section the area will require scrub/trees removal and the planting of gorse plants as described in the One-off tasks section.			2020 +2032		
	Coppice gorse on a12 year rotation in Section 9. Grub out seedling trees and remove bramble. Plant up any bare/dead patches with potted gorse.			2021 +2033		
	Coppice gorse on a12 year rotation in Section 10. Grub out seedling trees and remove bramble. Plant up any bare/dead patches with potted gorse.			2022 +2034		
	Coppice gorse on a12 year rotation in Section 11. Grub out seedling trees and remove bramble. Plant up any bare/dead patches with potted gorse.			2023 +2034		
	Coppice gorse on a 12 year rotation in Section 12. Grub out seedling trees and remove bramble. Plant up any bare/dead patches with potted gorse. It should be noted that in year 1 for this section the area will require scrub/trees removal and the planting of gorse plants as described in the One-off tasks section.			2024 +2035		

 Maintain Firebreak	Coppice 1-2m strip of gorse from either side of main east-west track.	Every 2 Years	October-February	2013, 2015, 2017, 2019, 2021	Cons Team/ Volunteers	High
Follow up maintenance on coppiced gorse sites	Section 1- Revisit section to remove any returning scrub or bramble growth. Replant any failed gorse.	The year after any coppice work	Autumn or Winter	2014	Cons Team/ Volunteers	
	Section 2- Revisit section to remove any returning scrub or bramble growth. Replant any failed gorse.			2015		
	Section 3- Revisit section to remove any returning scrub or bramble growth. Replant any failed gorse.			2016		
	Section 4- Revisit section to remove any returning scrub or bramble growth. Replant any failed gorse.			2017		
	Section 5- Revisit section to remove any returning scrub or bramble growth. Replant any failed gorse.			2018		
	Section 6- Revisit section to remove any returning scrub or bramble growth. Replant any failed gorse.			2019		
	Section 7- Revisit section to remove any returning scrub or bramble growth. Replant any failed gorse.			2020		
	Section 8- Revisit section to remove any returning scrub or bramble growth. Replant any failed gorse.			2021		
	Section 9- Revisit section to remove any returning scrub or bramble growth. Replant any failed gorse.			2022		
	Section 10- Revisit section to remove any returning scrub or bramble growth. Replant any failed gorse.			2023		
	Section 11- Revisit section to remove any returning scrub or bramble growth. Replant any failed gorse.			2024		
	Section 12- Revisit section to remove any returning scrub or bramble growth. Replant any failed gorse.			2013		

3.2 One-off tasks

Objective	Prescription	Month(s)	Year	Who by	Priority	Est. cost
 Expand area of gorse in section 1	Remove tree and scrub cover from area. Grub out any bramble. Rake and remove as much top soil as possible. Plant up with potted gorse.	October-February	2013	Cons Team	Medium	Local Budget
 Expand area of gorse in section 4	Remove tree and scrub cover from area. Grub out any bramble. Rake and remove as much top soil as possible. Plant up with potted gorse.	October-February	2016	Cons Team	Medium	Local Budget
 Expand area of gorse in section 8	Remove tree and scrub cover from area. Grub out any bramble. Rake and remove as much top soil as possible. Plant up with potted gorse.	October-February	2020	Cons Team	Medium	Local Budget
 Expand area of gorse in section 12	Remove tree and scrub cover from area. Grub out any bramble. Rake and remove as much top soil as possible. Plant up with potted gorse.	October-February	2024	Cons Team	Medium	Local Budget

4.0 Review

Author	Date	Task	Observation, event or alteration to task

5.0 References

1. Symes, N. and Day, J. 2003. A practical guide to the restoration and management of Lowland Heathland. The RSPB, Sandy. P31.