

Committee(s):	Date(s):	Item no.
Hampstead Heath, Highgate Wood and Queen's Park Committee	23 rd September 2013	
Subject: Progress Report on construction of a stumpery in the woodland walk way - Golders Hill Park	Public	
Report of: Superintendent of Hampstead Heath	For Information	
<u>Summary</u>		
<p>This report informs members on the construction of stumpery in the woodland walk way in Garden in Golders Hill Park.</p> <p>Recommendation</p> <p>That the Committee notes :</p> <ul style="list-style-type: none"> • the successful construction of the stumpery as an important new feature in Golders Hill Park. • acknowledges the close working relationships developed between Open Spaces Department staff and inspirations and knowledge gained from a visit to Highgrove House, Gloucestershire. 		

Main Report

Background

1. Over the past five years Golders Hill Park has become a hub for environmental education with the construction of RSPB classroom and pond dipping platform, conversion of a disused glasshouse into a butterfly house, installation of demonstration beds for vegetable & fruit growing and the creation of an insect hotel and adjacent wild flower meadow.
2. Two members of staff from Golders Hill Park wanted to add to the environmental learning experience and they initially proposed the concept of building a stumpery. The idea was supported by the Superintendent and agreed by your Committee as part of the 2013 annual works programme.
3. The area identified was an underused parcel of land in the fenced-off woodland walk leading from the hump bridge at the Lily Pond down into the main north / south pathway. The area was thick scrub with non - flowering rhododendrons and self-seeded tree saplings – map 1 and appendix three (photographs 1 and 2).

Map 1: Golders Hill Park



A Stumpery

4. Stumperies were a popular feature of a nineteenth century garden and can be described as structure similar to a rockery but instead of using rocks and alpine plants, dead tree stumps and woodland plants are utilised, particularly ferns. Ferns were fashionable and hundreds of new species were introduced into Britain from around the world during this time. Stumperies have been described by commentators as a:

“grotesque form of Victorian folly’, a product of the Romantic imagination and it's obsession with the unadorned beauty of nature, and in particular ferns”.

5. The first stumpery was built in 1856 at Biddulph Grange which is now a National Trust property in Staffordshire. The largest and perhaps the most famous modern stumpery is that at Highgrove House, Gloucestershire and the home of His Royal Highness The Prince of Wales.
6. A stumpery generally works on three congruent levels as an aesthetic structure, a wildlife haven and horticultural landscape - photograph 1

Photograph 1:

Completed Planted Stumpery



An aesthetic structure

7. Any tree species can be used to construction a stumpery however, the most attractive and durable woods are *Quercus robur* (Common Oak), *Castanea sativa* (Sweet Chestnut) and *Taxus baccata* (Common Yew). The root plates of these three tree species rot down to a hard skeletal core, which retain the outlines of the main root systems which makes them ideal in terms of visual impact, durability and longevity.
8. The success to building a stumpery is in the attempt to strike a precarious balance between maximising the aesthetic appeal of the wood structure and creating the illusion that it could of conceivably have occurred naturally or in a natural setting.

A wildlife haven

9. Regardless of the level of desiccation, tree stumps provide an ideal environment for mosses, lichens, fungi and woodland plants to establish and flourish. Partially buried stumps enrich the surrounding soil and provide an excellent habitat for a wide variety of invertebrates, including wood boring beetles, hoverflies, bees and woodlice. Invertebrates in turn attract a variety of birds, particularly ground feeders such as dunnocks, wrens and song thrushes. Small mammals also like to burrow down into the dark and fertile soil around the stumps.

A horticultural landscape

10. The twisted bowls and hollows in the stumps make ideal planting pockets for ferns and other woodland plants such as *Hepatica nobilis* (Common hepatica) and *Convallaria majalis* (Conval lily) and *Trillium flexipes* (Nodding wakerobin). The grain and colour of the wood beautifully highlight the differing shapes, shades and shadows of plants.

Current Position

Highgrove House

11. In September 2012 two members of staff visited Highgrove House and were given a private tour of the stumpery by the Senior Gardener who was in charge of the stumpery at Highgrove House - appendix one. A friendship was formed and the Senior Gardener kindly offered his services free of charge in the construction stage of the stumpery at Golders Hill Park.
12. The Senior Gardener with ten years knowledge and experience of constructing and working within the stumpery has proven an invaluable expertise resource which has given confidence and motivation and knowledge transfer to Golders Hill Park staff.

Epping Forest

13. The majority of stumps were gathered from buffer land adjoining Epping Forest. The stumps had been laying in-situ for decades and the environmental impact of removing them was negligible particularly as all had lost most of their soft wood and pulp which is a vital food source and habitat for insects. The Head of Conservation at Epping Forest was briefed and supported the project.
14. Approximately twenty stumps were removed from Epping Forest and given the current national concerns on tree heath the Tree Management Officer at Hampstead Heath gave bio-security clearance before the stumps were transported to Golders Hill Park.

Clearing the site & Construction

15. Work on clearing the site began in December 2012. Works included removal of the thick non - flowering rhododendrons, self-seeded tree saplings and clearing the stream. Judicious pruning works were undertaken to existing trees to enhance light levels in order to allow for a wider variety of plants to establish both in and around the stumps.
16. In July 2013, for one week, the Senior Gardener from Highgrove House working alongside key staff members from Golders Hill Park constructed the stumpery. In order to re-landscape and create mounds which the stumps were built into, twenty tonnes of re-cycled soil was introduced into the area. A telescopic front loader with pallet fork attached and other heavy plant was used to transport and embed the stumps - appendix three, photographs 3 and 4.
17. Interpretation boards were installed at both ends of the woodland walk-way which were approved by the communications office at Highgrove House - appendix two. During the construction phase the woodland walk-way was closed off for one week.
18. Forty meters of poor condition chestnut pale fencing was replaced by a dead hedge at the back of the stumpery which will provide an additional habitat for wildlife including invertebrates, amphibians and small mammals, as well as a perching spot for small birds. It was cheap and allowed the re-use of natural material and it created an effective and impenetrable barrier to ensure protection of the stumpery.

19. The finished stumpery resembles a structure which is pre-historical and fossil like in appearance - appendix three, photographs 5 and 6. Verbal feedback to staff has been very positive and welcoming. An article on the construction was published in 1st August Ham & High 2013.

Future Planned Works

20. Once the stumps have settled into the surrounding ground, the bowls and hollows will be packed with soil to provide planting spaces for a variety of native ferns and woodland plants *Hepatica nobilis* (Common hepatica), *Convallaria majalis* (Conval lily), *Trillium flexipes* (Nodding wakerobin) etc. A few interlopers such as *Acer species* (Acer) and *Dicksonia antarctica* (Tree Fern) will be planted to add form and drama.
21. Bog and marginal plants such as *Calla palustris* (Bog Arum), *Iris pseudacorus* (Yellow Iris) and *Lysichiton americanus* (Skunk Cabbage) will be planted to line the damp sides of the gully which runs through the Stumpery area. This will provide a variety of foliage and form which will fully compliment the structure of the stumpery. Bee friendly plants such as *Digitalis purpurea* (Common Foxglove) and *Pulmonaria officinalis* (Common lungwort) will be planted along the dead hedge line at the back of the stumpery.
22. Creating the remaining twenty meters of dead hedge and removal of chestnut fencing at the back of the stumpery during winter 2013.
23. A wood chip walk-way will be incorporated into the design to allow schools groups and supervised tours to gain closer observation and a submersible pump will be installed to create a slow moving stream through the stumpery.
24. An experiment with the use of Tufa Rock, an extremely porous volcanic rock which is ideal for growing small plants and mosses will be looked at. The use of this material was very popular in the late Victorian era and would add a differing and complementary structure to the stumpery and intensify the mysterious and arresting ambience of the Woodland Walk area.
25. Shade and moisture levels in the immediate environ will be managed to encourage the stumpery to become a haven for fungi, lichens and mosses to establish and spread. An overall review of the design and acquire new stumps and extend north.

Corporate & Strategic Implications

26. The stumpery supports several of the City Together Strategy - The heart of World Class City 2008-2014 themes, including: ... *supports our communities ... protects, promotes and enhances our environment ... is vibrant and culturally rich.*
27. The project shares the Open Spaces Department Business Plan 2013-2016 aims & objectives for environment and people: - *“Deliver sustainable working practice to promote the variety of life and protect the Open Spaces for future generations”* and *“Manage, develop and empower a capable and motivated work force to achieve high standards of safety and performance”*.
28. The stumpery also supports the Essential Action in the Hampstead Heath Management Plan Part 1 – Towards a Plan for the Heath 2007-2017, NL9: -

“Retain dead and dying wood wherever possible to encourage invertebrates, fungi and birds.” NL10: “Use interpretation boards to explain and make available the Heath’s landscape and wildlife resources to a wide and diverse audience”.

Implications

29. The costs associated with the construction of the stumpery have been met from the Superintendents local risk budget. The costs have been kept to a minimum as the material was sourced from our other open spaces and in-house staff were able to undertake the creation of the main feature.
30. There are no legal, property implications or human resource implications

Conclusion

31. The stumpery will serve as an arresting visual feature in its own right, as well as being a haven for insects, amphibians, small mammals and bird species and provide planting spaces for shade woodland plants.
32. The stumpery can be used as a convenient interactive resource in which school groups can explore issues and acquire knowledge and skills in ecology, conservation and wildlife in a novel and innovative manner.
33. The project has given a unique opportunity to encourage close working relationships and knowledge transfer from teams across Hampstead Heath and Epping Forest, including sports & recreation keepers, gardeners and trees & conservation. It has also enabled Golders Hill Park to develop a relationship with the Gardens department at Highgrove House.
34. It is acknowledged that Golders Hill Park is a popular community facility, used by local residents and the construction of a stumpery will be a welcome additional attraction.

Appendices

- Appendix 1 - Highgrove letter
- Appendix 2 - Interpretation board
- Appendix 3 - Photographs

Contacts:

Simon Lee
020 7332 3322
simon.lee@cityoflondon.gov.uk

Declan Gallagher
020 7332 3771
declan.gallagher@cityoflondon.gov.uk

Sean Dillon
020 73326652
Sean.Dillon@cityoflondon.gov.uk

Ciaran O'Keeffe
020 73326652
Ciaran.O'Keeffe@cityoflondon.gov.uk

Appendix 3 – Photographs

Photograph 1: Stumpery site before works – rhododendrons scrub



Photograph 2: Stumpery site before works – the stream



Photograph 3: Construction - Prepare ground to place a stump



Photograph 4: Construction - creating a soil mound



Photograph 5: Completed stumpery infrastructure showing stream



Photograph 6: Completed stumpery infrastructure showing dead hedge and outline of chip barked path

