

Report to Mousehold Heath Conservators

15 January 2021

Report of Parks and open spaces manager

Subject Mousehold Heath Conservators annual report 2019-20

Item

11

Purpose

To consider the work carried out on Mousehold Heath on behalf of the Mousehold Conservators for the period 1 April 2019 to 31 March 2020.

Recommendation

To note the contents of the report.

Mousehold Heath management plan objectives

The report helps to meet the Mousehold Heath management plan objective B:

To protect Mousehold Heath and ensure that it is a safe and secure place to visit.

Corporate and service priorities

The report helps to meet the corporate priority great neighbourhoods, housing and environment.

Financial implications

Any financial implications arising from this report will have or will be met from approved budgetary provision.

Ward/s: Catton Grove and Crome

Contact officer

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Background documents

None

Background

1. The annual report details the work, activities and issues arising and relating to the delivery of the Mousehold Heath Management Plan objectives during 2019/20.
2. The objectives are:
 - A) To ensure Mousehold Heath is a welcoming place for people to visit.
 - B) To protect Mousehold Heath and ensure that it is a safe and secure place to visit.
 - C) To ensure that Mousehold Heath is clean and well maintained.
 - D) To manage Mousehold Heath in a way that has a positive impact on the environment.
 - E) To improve habitats and the natural environment for wildlife to enhance the biodiversity of Mousehold Heath.
 - F) To safeguard the historic landscape, archaeological features and buildings of Mousehold Heath.
 - G) To provide opportunities for local communities to be involved in all aspect of our work.
 - H) To promote Mousehold Heath to increase awareness, knowledge, understanding and a sense of pride.

Mousehold Heath Conservators

Annual Report 2019 – 20

Introduction

Mousehold Heath

Mousehold Heath is a unique area made up of 88 hectares (184 acre) of woodland, heathland and recreational open space within Norwich. Mousehold has played an important part in the history of Norwich and it is a designated Local Nature Reserve. It is important both for its wildlife and as a place where people can improve their health by exercising and unwind from the pace of city life.

In Tudor times, Mousehold Heath stretched as far north as South Walsham and was 22 miles round. The surviving remnant of the heath was given to Norwich City Council (then known as the local corporation) by the Dean and Chapter, to look after on behalf of the citizens of Norwich.

This was officially recorded in 1884 by Parliament in an agreement called the Mousehold Heath Confirmation Act and a body called the Mousehold Heath Conservators was formed to govern the heath. The Mousehold Conservators is comprised of city councilors, representatives of professional bodies and members of the public and meets four times a year, to oversee the management and protection of Mousehold Heath.

The Conservators also prepare an annual report which provides an overview of the work of the Conservators, any changes to the heath or new biological records and an opportunity to look forward and reflect on changes, opportunities and issues that the heath faces. The report also highlights the level of voluntary activity as well as the numbers of events, walks and surveys undertaken.

The report also highlights how the community are involved with Mousehold Heath; through active involvement in its management and attending events and guided walks and talks, to find out more about their local open space.

The work of the Mousehold Conservators

The management of Mousehold Heath is guided by the Management Plan 2018 -28. This seeks to balance the important ecological value of Mousehold with an equally important recreational site within an urban area.

The main management objectives for Mousehold Heath are therefore to:

- ensure that the area is managed effectively
- maintain and enhance its wildlife and historic value
- promote and enhance people's access to and understanding and enjoyment of the site.

The challenge is to balance these important and at times conflicting objectives.

The Conservators agree an annual work programme and budget in January each year for the following financial year and monitor the implementation of this plan at its meetings.

The management plan and further details of the work of the Mousehold Conservators can be found on the Norwich City Council website.
www.norwich.gov.uk

Priority A: To ensure Mousehold Heath is a welcoming place for people to visit.

AF00/01 PREPARE ANNUAL BUDGET

The Mousehold Heath revenue budget for 2019/20 was £23510,00, with £100,766 capital held in reserves

A100/01 GREEN FLAG AWARD APPLICATION

Submission for application of a Green Flag Award has been formalised with keep Britain tidy, who will keep us informed when the application is to be confirmed.

Priority B: To protect Mousehold Heath and ensure that it is a safe and secure place to visit.

A130/02 TREE SAFETY INSPECTION

Due to exceptionally high winds experienced through parts of 2019 – 20, particularly during Storms Ciara on 09.02.20 and Storm Dennis on 16.02.20. an above average number of 59 tree works were carried out by the Mousehold wardens to make dead, dying or dangerous trees safe, especially next to and over main pathways, identified during routine patrols or reported by members of the community. One such windblown, dangerous tree was a large split oak, over a path, near the Valley Drive Cycle Path.

Tree surveys covering all official paths and car parks were carried out by the Mousehold Wardens on a six monthly basis, in September 2019 and March 2020, identifying a total of 45 dead, dying and/or dangerous trees or branches, adjacent to, or blocking pathways, which were requiring, in some cases, urgent attention or ongoing monitoring.

During an inspection of a large twin-stemmed windblown and damaged oak adjacent to Gurney Road, the warden noticed that the other standing section of the tree was seriously damaged. Due to high winds forecast and the 60ft tree leaning over Gurney Road, the tree was reported to a Norwich City Council Arboricultural Officer, who promptly organised for Norwich Norse Environmental to fell the tree before the storm arrived.

Norwich Norse (Environmental) Ltd, the council's joint venture company, carried out essential tree safety works along Gurney Road and adjacent to the Pavilion at the Fountain Ground.

MH08 DEAD AND DECAYING WOOD

Where possible, dead/dying trees were retained, to encourage a diverse structure to woodland and to ensure that there is a supply of dead and decaying wood for those specialist species which require it. Trees identified as posing an unacceptable level of safety risk were removed.

RH35/01 ILLEGAL ACTIVITIES CRIME

The wardens have worked with the council's Homeless/Rough Sleeper Coordinator for support to be provided to rough sleepers (camping or sleeping in vehicles) on the heath. This included site visits, resulting in temporary accommodation being found until a more permanent arrangement could be made.

A number of fly tipping incidents occurred across the site - on one occasion two bollards were removed to gain access from Gertrude Road onto Gilman Road, resulting in a large amount of household rubbish being dumped on the wildflower area adjacent to the mustard pond. The wardens worked in partnership with Norwich City Council officers in the Environmental Services and Highways teams, to reinstall the damaged bollards, to ensure the future security of the site was maintained and to remove the fly-tipped items.

During a similar incident, bollards were illegally removed and damaged, resulting in the wardens working with Norwich City Council Highways Department to order the repair of the bollards and secure the site.

On a day to day basis, to ensure that the site is safe and accessible to members of the community, the wardens work closely with Norwich Norse (Environmental) Ltd, and various Norwich City Council departments and other contractors.

A number of motorcyclists illegally using the site were spoken to by, and asked to leave, by the Mousehold wardens.

BMX riders breaking the Bylaws have been spoken to regarding the construction of jumps and holes, these have now been dismantled by the wardens.

AR01/05: SEAT AND BENCH SPONSORSHIP SCHEME

A bench sponsored by the Mousehold Heath Defenders, was installed at the top of Oak Avenue, by a Warden and a member of the Defenders.

MI60/03 FOOTBALL PITCH PROVISION

A full sized football pitch is available at the Fountain Ground Sports Pitch, Gurney Road, including changing rooms, showers and toilets.

28 senior matches were held at the Fountain Ground in the 2019/20 season, income from the facility was £1609.78.

The cost per booking for the 19/20 season was £64.39 (standard charge) or £53.66 (VAT exempt)

MI60/04 FOOTBALL BOOKINGS MANAGEMENT

This facility can be booked via Norwich Norse (Environmental) on 01603 894140 or email sportsbookings@norwichnorse.co.uk

MP00/01 SITE PRESENCE

The site has two full time wardens who work a rota system to cover weekends weekdays and some summer evenings. They are multifunctional and not only patrol the heath but also carry out management work, surveys, practical tasks, supervise volunteers and contractors, liaise with users of the heath and assist with developing policies and projects and supervise project delivery.

The warden's work has much unseen importance, such as the protection, conservation management and the interpretation of natural resource, including education and awareness, access for all, plus health care (physical and mental health), all of which provides community enjoyment of the site.

Objective C: To ensure that Mousehold Heath is clean and well maintained.

ME01/01 GATES, FENCING AND BARRIERS

The height barrier at Gilman Road car park entrance needed an upright post replacing after being hit by a vehicle.

ME01/02 BOLLARDS

Fifteen new wooden bollards were installed around the perimeter of Britannia Road car park, replacing missing and damaged ones to ensure the security of the site.

A number of bollards were vandalised and pulled out of the ground in Britannia Road car park and Gilman Road. After minor repairs to the bollards, they were reinstalled by a Mousehold warden assisted by a TCV volunteer

ME02/01 BENCH AND SEAT PROVISION

A request was received from Norwich Labour Group to sponsor a bench in recognition of former Norwich City Council councillor David Bradford's service both as a councillor and a Mousehold Heath Conservator. A seat was purchased and installed by the Mousehold wardens and a seat dedication ceremony took place at the Fountain Ground, Gurney Road, on Monday 28 October at 11.00am.

Two vandalised benches were removed and new benches installed by the Mousehold wardens working with a City College DofE group - one is adjacent to the Vinegar Pond and the other on the Desert wildflower area.

A vandalised bench along the Nature Trail leading down to the Long Valley has also been repaired and reinstalled by the wardens.

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ME04/01 LITTERPICKING

The Mousehold Heath Mousketeers volunteer group cleared large amounts of rubbish from the Beech Drive area during a litter pick.

Two areas used for camping have been cleared and rubbish removed by the wardens. Assistance was provided by the NorwichNorse Environmental litter picker, as part of his daily work.

ME04/02 LITTER BINS

Graffiti was removed from two litter bins; one at the Pitch and Putt car park and the other adjacent to the ice cream van concession; this fell within the terms of the maintenance contract provided by Norse Environmental Services.

ME04/03 FLY TIPPING

A burnt-out motorcycle was found in the open heathland area adjacent to the Vinegar Pond. Through the council's online reporting system, arrangements were made to remove it, with an Area Management Team member and Mousehold warden working in partnership to drag it across the heath to a car park location, where it could be safely picked up by a rescue vehicle.

ME12/01 REMOVE GRAFFITI

On two separate occasions, graffiti had to be removed from the historical interpretation panel (adjacent to the ice cream concession) and the pavilion on Gurney Road. The graffiti was reported using the council's online reporting system and removed the next day with the police were also informed.

Cllr Bradford's seat had graffiti removed and given a coat of wood preserver, by a Mousehold warden, shortly after it was installed.

Following a report from a member of the Mousehold Heath Defenders, a trail of offensive graffiti on trees leading from the Pitch and Putt car park was removed by a Mousehold warden.

ME41/01 PATH

Over thirty paths have been maintained by brushcutting and raking, including those on Gilman Road Open Space and the Wildflower Meadow, from Gilman to Gertrude Road, Mustard Pond Glade, Gilman Road copse, in front of the Pavilion, etc., by the wardens and the help of volunteers.

ME41/03 CYCLEWAYS

Leaf fall build-up on our main cycle routes at Gilman Road, Mousehold Avenue and Valley drive were not being cleared as per contract specification, this was a public health and safety issue, a site meeting was held with our contractor Norwich Norse, to agree a more structured maintenance programme, this was agreed, the cycle routes are now being swept regularly.

ME44/02 CAR PARK SURFACING

The Pitch and Putt and Britannia Road public car parks were re-graded and potholes filled.

Priority D To manage Mousehold Heath in a way that has a positive impact on the environment

Priority E: To improve habitats and the natural environment for wildlife to enhance the biodiversity of Mousehold Heath

Heathland and Grassland management

Lowland heathland is a scarce and threatened habitat and only a sixth of the heathland that was present in England in 1800 now remains.

However, Britain still has 20 per cent of the world's total area of heathland and this makes it important to conserve the existing heathland areas and look for opportunities to extend them.

The Government UK Biodiversity Action Plan for Lowland Heathland includes targets for establishing more lowland heathland to provide space for wildlife and open access to members of the community.

Similar declines have been seen in acid grassland habitat. Both of these habitats can be found at Mousehold and provide a home to a high number of notable, declining and threatened species.

Heather is an important nectar source for many insects, such as bees, butterflies and hoverflies. A survey of solitary bee and wasps found a number of scarce and threatened species on heather and bare ground, inhabiting the heath.

Butterflies, such as Small Heath, Small Copper, Common Blue, and Green Hairstreak are associated with heathland and acid grassland areas.

One of the priority management objectives is to address the reduction of open heathland and acid grassland across the site, which has occurred over the last 40

years. Of the total area of 88 hectares, only 9 hectares of Mousehold is covered by heathland.

HL40/06 NATURAL ENGLAND HLS AGREEMENT

In 2012, Norwich City Council secured - on behalf of the conservators – grant funding from Natural England's Higher Level Stewardship Scheme (HLS), to restore and conserve areas of heathland and acid grassland over a 10 year period.

A grant of £30,600 was awarded to be paid in equal annual payments until the year 2022. This funding has been allocated to restoring heathland and acid grassland, removing scrub, mowing with a tractor-mounted Rytex mower, grinding stumps and stripping humus, giving heather seeds in the seed bank a chance to grow. This has resulted in existing heathland areas being enlarged and linked up.

The funding has enabled the conservators to access specialist contractors to achieve this objective as part of the HLS agreement.

Ongoing habitat conservation improvements were carried out through the HLS agreement during 2019-20.

This year, a further 0.5ha of poor quality, degenerating heathland habitat, covered in dense bracken and invasive scrub was restored.

Removal of encroaching trees, scrub and leggy gorse from existing heathland areas has been carried out. These works are usually undertaken by volunteers and contractors under the supervision of the wardens, in compliance with the Higher Level Stewardship agreement. The works also include humus stripping and the use of a cut and collect machine to control nutrient enrichment of soil, in line with management plan objectives. The works also have the added benefit of creating fire breaks between stands of gorse and heather.

In short sward open areas, tree poppers have been used to pull up birch saplings, which rapidly out-compete heather and grassland species.

Future management will increasingly move from heathland restoration to maintenance as areas in the agreement are restored.

Natural England, who is overseeing the HLS agreement, carried out an annual habitat condition assessment and site meeting with the wardens and complimented the quality and quantity of the works undertaken this year, and the progress of the HLS agreement to date, and suggested that the heath could be eligible for another similar Environmental Stewardship agreement in 2022.

MH12/01 MAINTAIN ACID GRASSLAND

Important areas of acid grassland were also included in, the HLS agreement, with the Ant Hills, Desert, St. James Hill and the area adjacent to the wildlife pond, cut

and arisings raked and removed in early to late autumn, depending on weather conditions.

All arisings were removed from site, minimising nutrient enrichment of the soil. These management techniques provide and maintain acidic soil conditions required by specialist grasses and wildflowers found on the heath.

Where present, the conservation of ant hills is ensured through sympathetic management techniques, such as using a cord trimmer and carefully raking around the habitats.

MH39/01: BRACKEN REMOVAL

Large areas of bracken were cut, pulled, raked and removed from heathland, grassland and woodland glade habitats by volunteers and the wardens. This summer task is crucial to ensure conservation of nectar rich heather species and to comply with the Mousehold Heath Higher Level Stewardship Agreement.

Woodland management

Mousehold today is largely covered in secondary woodland and scrub, consisting mainly of oak and birch, with some rowan and sycamore. These are species which readily invade open areas.

MH00/01 COPPICING

Woodland areas were managed through a number of techniques to diversify and enhance the habitat through ride creation, coppicing, and pollarding.

Work to maintain access to a section of woodland adjacent to Gilman Road by clearing dead and overgrown vegetation has continued. This work has been carried out to increase community access to a formally impenetrable area, with the aim of improving biodiversity and creating a more diverse environment for fauna and flora to become established.

MH03/01 NATURAL REGENERATION

Natural woodland regeneration is encouraged, rather than the importation of new trees, which ensures the trees within the woodland are of local provenance, minimising the spread of pests and disease.

MH04/01 GLADE MANAGEMENT, MAINTENANCE and MH04/02 CREATION

Vegetation management work has continued to restore woodland glades behind the pavilion and adjacent to mustard pond, to provide a more diverse structure to the vegetation and to increase biodiversity.

Aquatic habitats

MH60/01 Vinegar Pond and MH60/02 Wildlife Pond

The Vinegar and Mustard Ponds are the only source of water on the heath. These habitats are continually monitored to identify any unwanted imported plants, such as Reed Sweet-grass, Yellow Flag Iris, etc., needing removal, along with collecting debris.

Since the installation of clay linings in each of the above ponds, water levels have remained high, even in prolonged dry weather conditions, providing an ideal environment for spawning common frogs.

These conditions have also resulted in the presence of common newts, which can be seen in the margins, along with a wide variety of damselfly and dragonfly species. The ponds are also important as bathing and drinking resource for birds and mammals.

Plants:

RF22/01 MUSTARD POND GLADE SURVEY

Two monthly surveys in the Mustard Pond Glade and the Desert wildflower area, have been carried out by members of the Mousehold Heath Defenders, recording a wide variety of nectar providing wildflowers.

RF22/02 ST JAMES HILL

A monthly plant survey on St James' Hill, was carried out by members of the Mousehold Heath Defenders and a warden.

The surveys provide important data to site managers to monitor and inform habitat conservation and management decisions. The collection of data also increases interest, understanding and enjoyment of the site through volunteering.

Birds:

RA12/01 COMMON BIRD CENSUS

A Common Bird Census (CBC) survey was carried out by the wardens with the help of volunteers. 34 species of bird were recorded (singing and/or calling) having breeding territories based on the British Trust for Ornithology (B.T.O.), CBC methodology.

Bird territory numbers were roughly the same as the 2018 nesting season, with Greenfinches, House Sparrows, Blue tits, Robins and Great spotted woodpeckers, having a particularly good year. Robins had the most territories with 43, followed by Wrens (34) and Blackbirds 32). With bird numbers and many species declining nationally, the consistently high species territory abundance, along with new species being recorded in recent years, suggests that conservation management work undertaken to increase habitat diversity (i.e. height, age and structure), along with an increasing dead wood habitat, is having a positive effect.

Over 30 volunteers from the community assisted the warden with the surveys.

Reptiles and Amphibians

RA26/01 REPTILES SPECIES LIST

Common Lizards were recorded in good numbers throughout spring and summer months, with many seen basking in recently restored open heathland and grassland habitats.

Frogs had a very productive year with many adults being seen in March and frog spawn and tadpoles in the Vinegar and New Pond.

There were ad hoc sightings of both Slow Worm and Grass Snake at various locations across the site.

Butterflies

RA42/01 BUTTERFLY CONSERVATION SURVEY

Two, Butterfly Conservation, Butterfly Monitoring Scheme (BMS) transects were surveyed by the wardens, on a weekly basis, between the beginning of April and the end of September.

The BMS is the largest and longest running biological survey in the country (established in 1976). Data is collected from over 1,200 sites in the UK, with 31 sites surveyed in Norfolk.

Butterflies are uniquely placed among British terrestrial insects and other invertebrate groups to act as indicators of the state of the environment. The results of the surveys are used by the national government to assess the impacts of climate change and the progress of governmental policy initiatives such as the UK Biodiversity Action Plan and Higher Level Stewardship (HLS) schemes.

Not only are butterflies biologically suitable as indicator species, having rapid lifestyles and, in many cases, high sensitivity to environmental conditions, but the recording and monitoring volunteer and datasets built up by Butterfly Conservation and the Centre for Ecology and Hydrology, enable accurate assessment of their trends.

When taking into consideration that butterfly numbers have been declining nationally over recent years, it is pleasing to see that the butterfly population trend line on Mousehold - when taking into account annual weather fluctuations and national population changes - is increasing.

There were 702 (606 in 2018) butterflies recorded during the survey on the Western side of Gurney Road. The highest abundance of butterflies were recorded in Hawthorn Glade and the heathland/acid grassland plateau areas between Vinegar Pond and the Wingfield.

Recently restored open habitat areas, such as the heathland area near the Wingfield, have seen a significant increase in abundance in recent years.

The Mousehold Heath East BMS transect survey recorded a total of 1025 (702 in 2018) butterflies, mainly in the recently managed and restored areas of the anthills and heathland in the Pilot Project area.

The large increase in butterfly abundance on both transects in 2019, and average upward trend of butterfly abundance over a number of years, suggests that management work to provide open habitats, such as heathland, acid grassland and woodland glades, has had a positive effect (resulting in increased sunlight and nectar producing plants), on the abundance and diversity of butterfly species.

Over 55 members of the community were involved in the surveys.

Moths:

RA44/01 MOTH TRAPPING

Five public moth survey evenings, along with ad hoc surveys, have been completed. Over 150 moths were recorded during the surveys, including 11 new species to the site. Many colourful and characteristic heath species were recorded during the surveys, including an impressive Buff Tip viewed on 30.05.19 and an attractive Light Emerald recorded on 12.09.20.

These surveys have taken place in a mixed heathland habitat area, adjacent to Gurney Road, resulting in the site species list increasing to 262 species!

Dragonflies and Damselflies

RA56/01 DRAGONFLY SPECIES LIST and RA56/02 DAMSELFLY SPECIES LIST

A good number of species have been recorded such as Large red, Common blue, Azure damselflies along with the Norfolk hawker, Red Darter and Emperor dragonflies, with over 100 Migrant hawkers been recorded feeding over heathland vegetation in August. Norfolk hawker, which is a nationally threatened and scarce British Red Data Book species, was recorded for the third year in succession. Its nearest breeding site is Thorpe Marshes so they are presumably venturing up to the heath to feed on the abundance of insects in open habitats.

Many species are now seen near the Vinegar Pond, which following its restoration a few years ago, is now holding water throughout the year.

Bumblebees

RA82/01 ST JAMES HILL SOLITARY BEE AND WASP SURVEY

A monthly survey was carried out by a member of the Defenders and a warden on St James Hill. The Bumblebee Conservation Trust, BeeWalk transect survey, recorded a number of bee species, including Buff-tailed bumblebee, White-tailed bumblebee, Re-tailed bumblebee and Common carder bee. Bee numbers increased along the

transect route in 2019, with numbers doubling compared to 2018, suggesting that habitat management work, such as opening up the Cavalry Track and clearing scrub from St James Hill, to conserve grassland and encourage nectar producing plants, is having a positive effect.

Bats

RA92/01 NATIONAL BAT MONITORING PROGRAMME

Two Bat Conservation Trust Field Surveys were completed in July by the wardens assisted by volunteers. On 11.07.19, 18 Common Pipistrelle, 10 Soprano Pipistrelle and 25 Pipistrelle spp. passes were recorded on the bat detector. The second survey undertaken on 24.07.19 recorded 31 Common Pipistrelle, 16 Soprano Pipistrelle, 14 Pipistrelle spp. and 1 Noctule/Serotine passes along the transect route. A big thank you to all the volunteers who stayed up late to collect important site and national bat survey data.

Objective F: To safeguard the historic landscape, archaeological features and buildings of Mousehold Heath.

MC03/01 ST WILLIAMS CHAPEL – VEGETATION REMOVAL

Following interpretation panel installation, it was apparent that the site needed to be managed; with the intention of visitors being able to visibly see key areas of the chapel's remaining earthworks from the information panel. This would involve removing vegetation from the boundary markers and areas of the chapel.

The wardens worked in close partnership the Historic Environment Officer for Norfolk County Council, to implement a management plan, which was adopted by the Mousehold Conservators in January 2016.

The aims and objectives involved the removal of vegetation and scrub, such as bracken and bramble, from selected areas of the site to improve interpretation and access.

These works, involving cutting, raking and removing vegetation, were carried out this year involving many local volunteer groups, including a Naked Wine Company corporate group, supervised closely by the wardens. Some of these works were in preparation for the Heritage Open Weekend, St William and Kett's Rebellion History Walk.

Map 1 outlines the banks and ditches that were cleared and the main pathways leading to and through the site itself, that were cleared and maintained.

Map 1: St William's Chapel



MC81/01 VIEW FROM MOTTRAM MEMORIAL

Encroaching scrub and saplings have been cleared to retain maintain the historic view of the city by TCV volunteers, and a City College Duke of Edinburgh group.

MC81/03 CAVALRY TRACK

Maintenance work has continued involving cutting back encroaching vegetation and clearing debris from the gullies which run parallel to the track.

Objective H: To promote Mousehold Heath to increase awareness, knowledge, understanding and a sense of pride.

RH90/05 VOLUNTEERING CONTRIBUTION

5186 hours (an average of 99 hours a week) of volunteer time were recorded for the site in 2019/20, an increase of 88 hours on last year's total. These tasks were organised, overseen and supervised by the wardens, making sure that the practical works were implemented in a safe working environment and adhering to management plan objectives.

A wide range of practical management tasks were undertaken, including bracken and grass cutting and raking, path maintenance, coppicing, woodland thinning, tree safety works, litter picking, installation of bollards and benches, sapling pulling, wildlife surveys, etc.

These tasks increase community involvement with the site, Norwich's largest open space, and not only help to deliver the management plan objectives but also improve people's involvement, understanding and enjoyment of the site, build up a sense of ownership and pride in the site and also have benefits relating to physical and mental health.

The following groups carried out work this year:

- The Conservation Volunteers (TCV)
- Mousehold Heath Mousketeers Volunteer Group
- Mousehold Heath Defenders
- The Assist Trust
- Norwich City College Duke of Edinburgh group
- Students from George White School
- East Coast College student group
- Norwich High School for Girls
- GoodGym Norwich
- Amey
- Crown Commercial Services
- RBS and Natwest Corporate Groups
- Naked Wine Company
- Many individual volunteers from the community.

Volunteer Christmas thank you meals were held at Zaks Mousehold restaurant for all the volunteers, who had given their time and energy to improving the site for people and wildlife during the year.

AT00/01 Volunteer Development

The new community groups and business' that have worked on and used the heath are Respect4us, Pit Stop mental health group, GoodGym, Natwest and RBS corporate groups and Crown Commercial Services.

A number of new individual volunteers joined the Mousketeers and TCV volunteer groups during the year, offering the following benefits;

- Improve physical and mental health
- Be part of a team of like-minded volunteers improving the site for people and wildlife
- Be inspired and enthused by the positive work being carried out to increase biodiversity and conserve and interpret natural and cultural landscapes.
- Take positive action to conserve and improve landscapes and ecosystems
- Help restore nationally important areas of heathland and its associated wildlife species
- Improve access for all by maintaining paths and other access hubs
- Join surveys that help monitor biodiversity locally and create evidence to inform the national government on climate change and ecosystem health.
- Improve your wildlife knowledge and skills through attending work parties, workshops and guided walks.
- Get to know the unique and precious natural area on your doorstep.

Looking forward, our aim is to increase this community involvement and volunteering in 2020/21.

AT50/02 Corporate Volunteers

Corporate Community Action Days, involving employees from Amey, RBS/Natwest, Crown Commercial Services and the Naked Wine Company, have undertaken practical tasks to improve the site for people and wildlife.

MI20/04 GEOLOGICAL TRAIL

The Earth Heritage Trail Interest Points have been maintained by a joint Geological Society of London and Norwich work party, led by the Mousehold Wardens, on 1st June 2019. The trail's interest points were also maintained before the Mousehold Geodiversity Heritage Open Weekend.

MI60/01 EVENTS

While the heath is used considerably for informal recreation, the conservators and council have continued to ensure it is available for events and activities aimed to

widen resident's understanding and knowledge of its local history and nature conservation management, through organised guided walks and volunteer days

Through guided walks, education activities, volunteer work days and other activities, there has been an increase in partnership working this year. Please see examples below;

With mental health issues on the increasing in the community, the wardens liaised with Norfolk's County Council Adult Learning Officers, to discuss ways in which the heath could be used to improve people's well-being. Following the discussion, a trial 'Well-being walk – Healthy Habits for your Head' has been jointly led by an Adult Learning Officer and Mousehold warden. The walk was a success with twelve people in attendance. Following this, five, fortnightly Well-being walks have been undertaken on Monday afternoons between January and mid-March.

The Mousehold wardens worked in partnership with Norwich Orienteering Club to put forward a proposal to hold an orienteering event on the heath in October, this was discussed at committee level and approved.

A new partnership with Good Gym Norwich started in July, with twenty eight members running up to the heath from The Forum, carrying out an hours bracken raking and pulling, and then running back to the city centre. The activity was a great success so further Good Gym sessions are being planned on the heath next year.

The Earth Heritage Trail Interest Points have been maintained by a joint Geological Society of London and Norfolk work party, led by the Mousehold wardens on 01.06.19.

The Mousehold wardens have been liaising with Fringe Project Officers to conserve and improve adjacent habitat and prevent non-native invasive Laurel from spreading onto to the heath from surrounding land.

Other events include;

An Armistice Day service was organised by the Mousehold Heath Defenders on Monday 11 November 2019. Held at the Airmen's Memorial, Gurney Road, to remember those who gave their lives, especially in recognition of the 5 airmen (Plt.Off Colin Barton RNZAF, Flt.Sgt. James Lemon RCAF, Flt.Sgt. Robert Kater RCAF, Sgt. Donald Carpenter RAFVR, Sgt.Ernest Nightingale DFM RAFVR), who were killed there during World War 2.

Five Well-being walks named 'Healthy Habits For Your Head', covered five topics; Connecting; Be Active; Keep Learning; Take Notice; Give; explored different parts of the heath to stimulate discussion and feelings, aimed at improving mental and physical health.

An orienteering event approved by the conservators was booked through our Events team to take place on Sunday 13th October. The event started and finished from the Wingfield Open Space, there were a number of courses marked out with varying levels of difficulty to try and accommodate all abilities.

There was a total of 82 competitors who completed the course on the day.

Two Norwich Heritage Open Weekend walks were organised by the wardens. The first was a geological themed, superbly led walk by Tim Holt-Wilson, supported by the wardens. The second was a fascinating social and landscape history walk, focussing on the stories of St William's Chapel and Kett's Rebellion by local historians Colin Howey and Trevor Nuttall. Both walks were fully booked and a great success.

Staff of Zaks restaurant joined forces with the wardens to organise an Easter Egg Hunt along a designated trail across the heath.

MI60/02 GUIDED WALKS PROGRAMME

A guided walks programme organised and led by the wardens and local naturalists, was delivered to increase involvement, understanding and enjoyment of the site. Walks and wildlife surveys this year have included, four seasonal community wildlife watch workshop walks, fungi forays, a dawn chorus, butterfly management, site management and five moth survey evenings.

A Management and Wildlife walk led by a warden in July, looked at the work that has been undertaken to manage the site for people and wildlife and reduce the risk and impact of damaging fires.

Norfolk County Butterfly recorder Andy Brazil led a butterfly walk for 9 participants, viewing a wide range of insects, including Small Copper and Brown Argus butterflies.

A fungi foray walk was led by Norfolk's County Fungi Recorder, Dr Tony Leech and a Mousehold warden, on Tuesday 15 October. Heavy rain a few weeks before the event resulted in a large number of Fungi being present. A record 63 species were recorded, with 17 species new to the site list, which now stands at an incredible 314 species. Star of the show was a tiny bonnet on conifer needles found and identified by Norfolk expert Yvonne Mynett as Purple Edge Bonnet *Mycena purpurofusca*, which had not previously been recorded from Norfolk and indeed is only common in Scotland. As usual, the event was well attended and attracted over 25 members of the public.

On Bank Holiday Monday 6 May, a Dawn Chorus Survey Walk, which included a Common Bird Census (CBC) survey, was led by a Mousehold Heath warden. Three members of the community joined the walk at 4.15am, on the chilly morning, to mark International Dawn Chorus Day – a celebration of nature. A number of notable bird's species were recorded, including Common Buzzard, Green and Greater Spotted Woodpecker, Tree Creeper and Chiffchaff

A number of additional walks were led by the wardens for specific groups and members of the community throughout the year on request, including walks for Respect4us, Horning walking group and Norwich Community Green Gym.

RH31/O1 FOREST SCHOOLS

There has been continued support to encourage, develop and implement Forest School activities. Mousehold Avenue Infant School run one session a week (depending on the weather), with approximately 15-20 pupils taking part in each session.

The Mousehold wardens liaised with Forest School staff at George White School, resulting in them leading outdoor activities for 187 pupils. During the sessions, children helped conserve woodland glade biodiversity, by working with a Mousehold warden to remove encroaching scrub from woodland glades and using the material to build a dead hedge between the school's nature area and Silver Road. The hedge also provides important dead wood habitat, along with nesting areas and hibernacula's for wildlife.

A total of fifteen community based ROOTS activities took place, providing environmental education and play for children.

RH31/02 ONSITE EDUCATIONAL VISITS

The site, with its accessible city location, is an ideal environment for children to experience the 'great outdoors'. The conservator's ongoing development of environmental education has continued this year

Additional environmental activities involving pupils from local schools are to be initiated by the wardens through 2019/20 and also through the inclusion of professional conservation organisations, including county wildlife recorders and other local experts providing wildlife walks and community education workshops.

These activities increase involvement, understanding and enjoyment for local children and local community groups regarding nature conservation and its importance.

RH90/02 COUNCIL EVENTS

Two Brass Band concerts took place at the Fountain Ground on June 26th and 10th July, along with a Playdays children's activity event in July; these were free for the public to attend. A number of cross-country runs were organised for large numbers of Norwich School students.

Covid-19

Due to central government implementation of a nationwide lockdown, to mitigate the spread of Covid19 in mid-March 2020, there was a significant reduction in visitors using cars to visit the heath for the last two weeks of the year. Visitor numbers increased through people exercising locally with the main usage from dog walkers. Volunteer activity was suspended but the main impacts of the restrictions affected 2020/21.