

REPORT FOR WORK PARTY SUNDAY 5TH JANUARY 2014

ATTENDEES: Simon Braidman, John Winter, Neville Day, Mo Farhand, John Bugler, Josh Kalms, Sue Kable and Rajinder Hayer

10.30am to 2.00pm

Weather : clear then clouding over, light rain shower then dull dry 5 degrees centigrade

TASK: Work along the top edge of Bluebell Heath, removing scrub saplings.

Secondary tasks:

- 1) thinning scrub retention blocks by taking out lower branches
- 2) removing Holly from behind eastern end of bare earth bank
- 3) checking on whether the bare earth bank stops water flow across New Scrape
- 4) checking on flytips on Heathbourne Road and new really bad one on Common Road

It was really great to see people after the long Christmas break.

It is important to control the scrub level in Bluebell Heath. A lot of money has been spent re-opening the clearing and the danger is the area, re-scrubbing up. The most insidious threat are the masses of tiny scrub saplings which look like whole areas have had the Woodland Trust in, planting trees.

Young scrub is an important habitat but it is superabundant and the quicker one can deal with them the better. The extremely heavy rainfall should make it easier to remove the whole tree.

If only it was that easy. The reality is that these are not single trees often each flimsy stem is attached to others by an underground horizontal root. This root can be 2 inches thick. Also there are living stumps with suckers growing from them sometimes with horizontal roots wrapped around them or even fused to them.

The weapons we used were; lazy dogs, with 3 pronged forks and geodesic struts making them light but strong, mattocks which we used to lever out the roots and just brute force.

It was difficult work but we successfully took out these plants. The arisings were added to the dead hedge made by T+T Earthworks when they cleared Bluebell Heath during the autumn/winter of 2012.

By the time we finished we had cleared another 15m of scrub saplings. Now 85% of all the scrub saplings along the northern belt across Bluebell Heath up to where it meets New Scrape have been removed. This is a distance of 150m

There is damage to the ground in this method but any fine grasses torn out were replanted.

Secondary Tasks

The scrub retention blocks are due to be thinned. They are not to be removed nor are their extent necessarily reduced. The intention is to get light into the block. The method chosen was not to fell the trees but just to take off the side branches and the suckers. The block selected to work on was Rt04 which lies adjacent to the northern belt we were working on. This work was carried out by Josh and John Bugler.

Holly is an important wildlife plant but highly invasive and will shade out all competition and ground cover beneath. It is essential to carry out Holly control. Mo did a fantastic job clearing Holly scrub along the southwest frontage of Parcel 11. This Holly was growing around the base of 3 magnificent trees a Beech, an Oak and an old Silver Birch. I had noted these trees in the tree survey done in the summer of 2012 before the Bluebell Heath contractors started and I clearly remember how dark the area was and how I had so much difficulty getting close to these old trees. Now the whole area is now opened up and lit.

Josh started taking out the Holly behind the bare earth bank.

The arisings from Mo's work needs clearance.

Work finished early as the rain came down but we also wanted to check out water flow and flytips.

Water Flow Across New Scrape

One of the comments made during the Field Visit from the Acid Grassland/Heathland action group to Stanmore Common on the 22nd October 2013 was that the new bare earth banks might block water flow across New Heath or down to supply the flushes that run north to south. The heavy rain which has fallen should provide a good test to see if this is a problem. If it is there should be water pooling on the northern side of the bare earth bank. No such pools were found and it is clear there is no disruption, water must flow through the bank and anyway the slope of New Heath is west to east, parallel to the bare earth bank. There were numerous pools and ditches filled with water on New Scrape. New Scrape itself is vegetating up nicely with lots of fresh new growth. We have removed over 90% of the scrub saplings on New Scrape and most of the scrub saplings on New Heath have also been removed. The bare earth banks look good with plenty of bare earth but Bramble could be a problem. Foxgloves have colonised part of the bank as has the garden escape Orange Hawkweed (*Pilosella aurantiaca*)



This plant originates from Northern and central Europe and is a plant of Hillsides and mountain meadows.

It has been grown in gardens since 1629 and recorded in the wild in the UK in 1793.

I think insects prefer the yellow hawkweeds but the Muncjac love the bright flowers

Orange Hawkweed

Flytips

Due to the large distance between the flytips and our work area we decided to return the tools first and then John and myself checked the flytips.

There are 2 areas: one along Heathbourne Road and it looks like an old rocking chair which has been dismembered. John will report this in.

The very bad spot is along Common Road around 30 metres south of Heathbourne Road. It is clear this is multiple dumps from a builder possibly the same one. We took pictures of both spots. The original dumping area at the northern end of Heathbourne Road is clear. There is a gradually increasing level of rubbish thrown from cars along the Heathbourne Road which is not too bad. There is rubbish all along Common Road but the level is not high until this one area

OTHER ISSUES

We looked for signs of the off road vehicle but there were no definite signs of further invasion. The wood block at the Heathbourne Road end of the Horseride is still intact.

We saw three horseriders use the ride they were going north past Bluebell Heath and then returned, perhaps there is a block or the ground is too soft.

The dead Bracken on Hollybrook Rise has completely collapsed in the heavy weather. It is now longer forming a sheltering habitat but a smothering one. There is now a priority to remove the dead bracken before the new growing season.

The Pynding Mersc wetland looks fantastic after all the rain.

We talked to members of the public and ensured we were seen.

The next work party is this Wednesday and we will complete the work along the northern belt in Bluebell Heath.

REPORT FOR WORK PARTY WEDNESDAY 8TH JANUARY 2014

ATTENDEES: Simon Braidman, Neville Day, Mo Farhand, David Green, and John Winter

10.30am to 3pm

Weather sunny mild 9.5 degrees centigrade

TASKS: 1) To continue the scrub sapling removal across the northern belt

2) To remove the pile of cut Holly beneath the group of 3 mature trees just to the south west of Parcel 11

3) To remove Holly from behind the bare earth bank along the northern edge of New Scrape

When we arrived in the car park, John passed the message that trees had fallen across Jake's Path during the strong winds.

We split the group into two. Neville and myself headed straight for Bluebell Heath and Mo, John and Sue went down the western end of Jake's path.

The trees were right along the western end of the path, parallel to Heathbourne Road. Two were removable by hand but the third is a chainsaw job.

After the trees were dealt with, the others went to Bluebell Heath.

Meanwhile Neville and I were mattocking out tree roots. It is very hard work but it keeps you fit.



Sue and Mo admiring their handiwork



Mission impossible!



Horizontal underground root plus suckering Willow.

David arrived and worked on tree root removal and then Holly removal behind the bare earth bank. Mo moved the cut Holly to the Holly wall which lines the southwest corner of Parcel 11.

Mo and David attacked the Holly. The work was successful. Now 90% of the scrub saplings have been removed from the northern belt.

WILDLIFE

Birds were very evident. Great Spotted Woodpeckers were drumming and there was interaction between individuals. Nuthatches were calling in territorial display.



Eurasian Nuthatch (*Sitta Europa*)

This bird spends most of its life climbing up tree trunks using its long claws and two toes forward, two back two arrangement to give a good grip. The beak is powerful and the bull neck has a lot of power. It uses the beak to chisel into cracks and crevices on tree trunks to look for insects, their pupae and their eggs. They can also break open nuts after wedging them in crevices.

Nuthatches nest in holes in trees and they plaster mud around the entrance to ensure a tight fit so reducing predator access.

There are 27 species of Nuthatch but Britain has only one species, the Eurasian Nuthatch.

Nuthatches tend to stay in one place and only one species the American Red-Breasted Nuthatch is migratory.

Average lifespan is between 2 to 3.5 years in the wild.

The Nuthatch we saw was acting in a territorial manner which is unusual in winter but the weather is very mild and in such conditions birds carry out breeding behaviour.

Under a dug-up root we found:



It looks like bunch of grapes in miniature. Each bulb is only 1mm long. The arrow points to stalks. The whole mass dangles from the tree root.

The structure is caused by a fungus. The fungus infects the roots of the tree. The fungus forms a mutually beneficial relationship with the tree and they exchange nutrients. The fungus can get the benefits of photosynthesis and the tree get water and phosphate. Many trees and plants die or grow poorly if there is no fungal infection of the roots. Over 90% of all plants form such associations with fungal partners.

This particular fungus is an ectomycorrhizal fungus. This means that the fungus does not penetrate deep into the root centre but just fuses to the outside layers.

We also found a tiny snail.



This is the same snail underside and upperside. This snail is the Discus Snail (*Discus rotundatus*). This is the adult size. It lives up to 3 years and breeds May to October, all individuals (they are both male and female) laying from 5 to 50 tiny flattened whitish eggs. They live under logs and leaf litter and it is a common species. The big hole underneath the snail shell is called the umbilicus and is important in snail identification.

WORK PARTY REPORT FOR SUNDAY 19TH JANUARY 2014

10.30 am to 3.40pm

ATTENDEES: Simon Braidman, Neville Day, Josh Kalms, Tim Marc and Richard Maylan.

Weather sunny mild 6 degrees centigrade

- TASK: 1) Remove tree blocking path
- 2) Remove Holly and Yew behind bare earth bank (Flushing Wood)
 - 3) Rake northern belt across the top of Bluebell Heath
 - 4) Hard rake bare earth bank, Bonzo Bank East on New Heath
 - 5) Sharpen the 2 handled Austrian Scythes and the normal scythes

A hawthorn which had split and was resting on a Rowan had split further and the weight of the trunk had caused it to block Druid's Path on the preferred route to Witling Ride.

We quickly cut it back from the outermost branches and took a section of the uppermost trunk, relieving the weight and unblocking the path. The cuttings were pulled into the woodland edge and the moss encrusted wood exposed uppermost.

We moved to Bluebell Heath via Druid's Path which has a brand new extension to the footbridge across Pynding Mersc. This new 10 meter extension to the south takes one across the very worst of the wet ground and joins directly onto the main boardwalk. This was completed on Friday by Trimlock Ltd and paid for by a Green Grid Grant. This is money allocated by the borough to improve public access to open spaces.

We divided up with Josh, Tim and Richard working in Flushing Wood on the Yew and Holly and Neville and myself on raking the northern belt. The idea is to control the shade producing invasive trees and add the cuttings either to the dead hedge that fronts Flushing Wood or to a single separate pile.

Raking the section of Bluebell Heath where we had removed the scrub saplings will reduce the leaf litter and the dead bracken. This will reduce

the nutrient load and hopefully expose the underlying seedbank . The rakings were added to the dead hedge.

Some bare soil is exposed which will encourage insect basking and nesting.

It was found that previously cut Holly where it had been left had re-rooted and this needed to be dug up and lifted on to the dead hedge. It asks the question how much of the dead hedge will actually die if the Holly re-roots. It is a concern how much of Flushing Wood and elsewhere on the reserve lacks ground cover. Is this shading out or is it deer grazing. A Muncjac was disturbed by Tim and Richard hiding behind the dead hedge and it bolted away. Richard did ask about the point of piling the Holly. The alternative would be to hire or buy a chipper but we would need to tow it onto the reserve. Then we could chip all the material and then create compost piles for Grass Snakes.

After Lunch I sharpened 2 of the Austrian Scythes. They did not seem to need peening which is hammering. I used the very fine sharpening stone and used the narrow edge moving it lengthways diagonally away from me and keep working it until one feels a burr on the underside and then reversing the blade and using the flat edge of the stone in short overlapping strokes to remove the burrs. To prove I had sharpened them I cut my thumb.

I did the same to two of the standard scythes but I used a coarser sharpening stone first as these were old with chipped blades.

Tim and Richard continued with tree removal and Neville continued with raking the northern belt whilst Josh and I moved to New Heath via New Scrape.

New Scrape looks fantastic with lots of water held in its many trenches and holes. There is lots of new growth of rushes, sedges and grasses and heathers. I checked the Bell Heather, it is still alive but is suffering from being too wet.

There is lots of bare soil on the bare earth bank but it would still be worth attacking the bramble, both on the bank and in the scrape.

New Heath is also looking good and the Heather is maturing nicely. With new Gorse appearing. The Hard Fern is thriving. We looked for Heath Grass but failed to find it.



Heath Grass *Danthonia decumbens*

Tufted perennial grass found usually on infertile acidic soils. Rare in London.

Identification features : White hairs around leaf sheath.

Relatively large flowers = spikelets in comparison to the plant.

Less than 10 spikelets per stem.



View across the northern strip of Bluebell Heath after all the scraping and scrub sapling removal



Josh , Tim and Richard heading back

We moved to Bonzo Bank East, named after John Winter's old dog. This bank dates from 2007 when New Heath was created by bulldozer and the topsoil pushed into south facing bare earth banks.

Bare earth banks do not stay bare soil forever and this bank has been colonised by rank grasses and Foxgloves. Josh and I hard raked the slopes and top of the bank raking out leaf litter and dead grass. The idea is to bring back the bank to an earlier stage and have more bare soil for insects. The rakings were piled in an area 5 meters away just next to a tree root plate with good ground cover around. This area should be good for Grass Snakes.

Wildlife

The broken Hawthorn had Blushing Bracket fungus and we found tree stumps in Bluebell Heath colonised by *Trametes versicolor*. The Muncjac sighting was good and we heard Nuthatch, Great Spotted Woodpecker, Ring Necked Parakeet, Siskin, Goldfinch and Bullfinch.

The best sighting was a very good view of a Sparrowhawk. We saw it twice over Bluebell Heath. I had the impression it was a male bird by size and it was displaying. It showed a typical flap, flap guide pattern and another time it flapped repeatedly.



REPORT FOR WORK PARTY WEDNESDAY 22ND JANUARY 2014

ATTENDEES: Simon Braidman, John Winter, John Bugler, Neville Day, Johnathon Freedman, Sue Kable, David Green.

Russell Sutcliffe from Hoipolloi

10.30am to 3.45pm

Weather dull start but became sunny gorgeous day 6 degrees centigrade.

- TASKS:
- 1) Holly control in Holly Wood
 - 2) inspection of Ancient Apple Tree in Bluebell Heath
 - 3) creation of wetland features in Holly Wood
 - 4) sharpening of Scythes

An inspection of Holly and Dyke Wood had revealed the huge amount of Holly understorey which threatens ground cover. It also revealed the complexity of the flows of Holly Brook and the Brightwen streams and there are a number of existing wetland features with the possibility of creating further ones.

The area we were working is marked in red on the map below.

Whilst most people got started on the Holly control. John Winter and myself headed to Bluebell Heath with Russell Sutcliffe from Hoipolloi.

Hoipolloi is an organisation concerned with fruit trees, orchards and local foods. They are involved in community orchards at the Royal National Orthopaedic Hospital and the Grimsdyke Hotel. Russell attended the last Harrow Nature Conservation Forum meeting on Tuesday 14th January and I took the opportunity to approach him about the ancient apple tree on Bluebell Heath.

He seemed quite impressed with the tree and said it was about 200 hundred years old.

He collected a few of the apples to grow on. He said that these would not be genetically identical to the parent tree as one does not know which apple it was cross-pollinated with. He also said it was the right time to clone the tree by burying the sprawling branches. It would take a year to get a vigorous tree. He will try to get someone else to have a look at the tree to see if it

needed pruning. Other subjects discussed was using reserve timber to make things, getting groups like the Harrow Woodcraft Folk involved in the site, grazing and natural fences and water supply.

John and myself rejoined the others and we cleared large amounts of Holly creating 2 huge Holly piles.



A section of Holly Wood before we started



The same view after clearance



John's caption "How many conservationists does it take to free one saw"

Map showing work area for 22/01/14 as a red circle

STANMORE COMMON (Not to Scale)



There is still a lot of Holly and the potential is there to continue the work. Neville is keen to clear the Holly Brook north of the footbridge and clearing some Holly off towards the car park will help calm down the anti-social activity as well.

Disadvantages to Holly removal is loss of evergreen shelter, loss of foodplant for Holly Blue Butterfly, loss of shielding from street lighting.

There is a huge amount of Holly and so Holly control will not result in serious loss of evergreen shelter. Holly Blue Butterfly will still have plenty of Holly and Ivy is an alternative foodplant and there is no shortage of that. There is still a large population of trees fronting Warren Lane and these will help shield the wood from lighting.

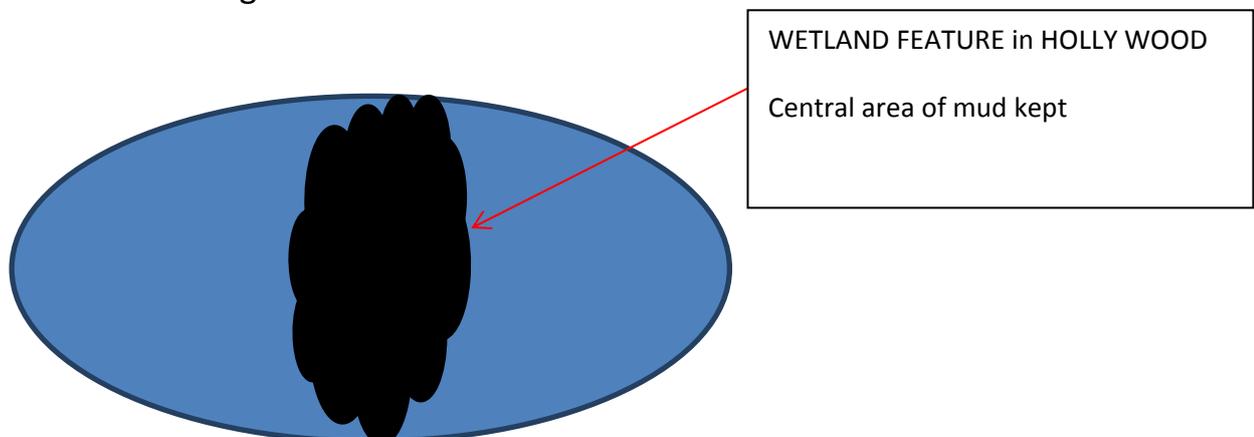
I did notice floodlighting alight on the rugby ground. It is the first time I have noticed it. However bats will be in hibernation and the rugby season is a winter one.

Water

As we were working close to the Holly Brook, one could see the fantastic flow pattern. The stream splits and rejoins and at high flow levels water spills into adjacent marshy ground. The whole area is highly attractive. The stream bed changes from silty mud to gravel on yellow clay and the stream channel deepens from temporary variable routes to deep gulleys, marking long term flow patterns.

Close examination of the ground east of the Holly Brook in our work area, revealed water pooling just below the surface of the ground in depressions and on the downslope towards the stream. Two were adjacent to one of the piles of waste Holly cuttings.

These are locations for creating water features. Sue and I dug out these areas. The idea is not to create a straightforward pond as I felt one would be losing too much of the existing feature which is the sodden soil.



Wet mud is important for the larval stages of many invertebrates. Also the mud will help to retain moisture. It is likely this wetland feature will be seasonal in terms of keeping open water but it will remain damper than the surrounding soil and will therefore fulfil its desired function.

The second depression was unexcavated this work session. A few other possibilities were located



Excavated water feature in Holly Wood.

Finally 2 more scythes were sharpened ready for use.

Wildlife

There were nice fungi, one oak branch had *Peniophora quercina* and what was possibly *Meruliopsis tremulosus*. An upright branch had the Eared Fungus *Auricularia auricular-judae*.

Birds are being fooled by the mild weather and are holding territory and singing to attract mates and even nest building.

One bird that was singing conspicuously was a Coal Tit (*Peripatus ater*). The song is a characteristic 2 note repetition which sounds like one of the mn ay songs of the Great Tit. However each note is more musical in tone and higher in pitch.

Coal Tit's are a common woodland bird with an estimated UK population of 680,000 breeding pairs. They nest in tree holes and are more associated with conifers than broad-leafed trees.



Eared fungus (*Auricularia auricula-judae*)



Coal Tit (*Peripatus ater*)

REPORT FOR WORK PARTY SUNDAY 16TH FEBRUARY 2014

ATTENDEES: Simon Braidman, Emmanuelle Braidman, Neville Day, David Green, Mo Farhand, Margaret Griffin, John Bugler, Josh Kalms.

(Thanks for the fantastic pictures)

10.30am to 3.30pm

Weather Sunny but slightly chilly

TASK The set task according to the tasks table was work around Great Brewer's Pond but we are behind with dead bracken removal so we did that instead at Bluebell Heath.

I was short of proper footwear as one set of wellies were not a set but two right feet! I surrendered the other pair to Emmanuelle.

We went the long way to Bluebell Heath. This is because I wanted to check on Tykes Water, the stream that flows between Cerrisland and Oakmead. It had had a pollution incident on Wednesday 5th February.

Issues

Bring a bag for tool sharpening tools. Also increase number and range of tools and tasks to create variety. Lots of Holly located just north of Cerrisland. Monitor regrowth of Giant Horsetail in Cerrisland. The new Countryman wheelbarrow performed brilliantly and use pitchforks for picking up cuttings.

Tykes Water

The stream was clear and flowing well, there was only a small flow through the offshoot that Neville created but water had pooled there. There was no sign at of pollution, either in the water or the adjacent mud.

Neville went down stream and reported back that things were fine.

The Orchid Field

Our target area was the Orchid Field in Bluebell Heath. This area is habitat parcel 4 and there is a large amount of dead bracken present. We used the Austrian Scythes to cut the bracken. They do a brilliant job.



A sunny day on the Orchid Field ,with John Bugler and Neville on Scythe and Margaret Griffin on rake but who is the person showing her back? It is my better half Emmanuelle!!

The cut material was raked off goes into an existing pile of material.



Neville Day adding rakings to the pile

This pile is located at the boundary of Parcel 3 and 4 and is south facing. It is in a location with masses of cut timber with excellent ground cover and within 30 metres of a known Grass Snake hibernaculum. If this material stays moist and gets hot it could be selected for Grass Snakes to lay eggs in.

I think the trick is to keep it damp and so that allows decomposition of the vegetation to take place. Also the pile should be big. I want to have dead wood in or adjacent to the heap as it provides cover and the excellent ground cover will give a concealed approach.



Orchid Field: The type of material being raked off.

Raking

There is a technique to the raking as this is a sensitive area. Interesting plants like St. John's Wort species, Common Dog Violet and Heath Bedstraw and others are already above the surface. Raking should be soft at first just to remove the bracken and then watch for delicate plants. If it is clear then increase the power of the rake. Try to get as much leaf litter off and if bare soil is exposed this is good. Plants can get established in the gaps and insects nest in the bare soil.

I back-rake in the opposite direction to finish off to ensure plants do not all lie in the same direction.



Part of Parcel 5 after cut and rake

Parcel 5

Mo and Josh work on the opposite side of the path to the Orchid Field in Parcel 5, they rake and take off dead bracken here. John Bugler takes off overhangs along The Hawthorn's Walk . There are a larger number of visitors than normal onto the Common and we try to chat to them all. Mo scythes and rakes the very north west tip of Parcel 5. David, Josh and John go off to hack down Holly and they attack Holly in the Compartment known as the Aspens which lies immediately to the west of Bluebell Heath. Some extra work was done in this area by the contractors in this area during the autumn and winter of 2012. A small amount of scrub was removed because of the need to preserve Aspen a very important tree because of its rarer insect associates. No Aspens were felled here.



A fantastic picture. Gorse (*Ulex europaeus*) in foreground

Task Success

Almost all the dead material was removed from the Orchid Field and the area was raked off. A good portion of the opposite slope in Parcel 5 was also cleared with some scrub saplings controlled here. The very top section of Parcel 5 was controlled. Some Holly was removed from the Aspens and also at the very west end of New Heath.

Work still to do

There is still a huge amount of dead bracken that can be removed from Bluebell Heath. There is an argument for temporary retention as it provides shelter for overwintering invertebrates and amphibians, hidden food stores and small mammals.

Other clearings also need work and the next area to be worked on is Hollybrook Rise.



Emmie on the Orchid Field; thinking of Cappucino at Café Roma or is it the new job?

Heather in Bluebell Heath

During the work Heather was examined in the Orchid Field. There is one healthy plant. Across the path in Parcel 5, there were a number of heather plants all looking very healthy. This shows that Heather is spreading across parts of Bluebell Heath.

The good botany of Parcel 4 is noted and we hope that the hard rake will encourage further development of this habitat parcel and continue the gradual recovery of the Orchids.



“ I did this “ John Bugler in The Aspens.



Mo Farhand scything down the north-west tip of Parcel 5



The End of the day in the Orchid Field.

Wildlife



The picture above shows a fantastic bracket fungus on a dead stump in the Orchid Field. Originally it was thought to be Turkey Tail (*Coriolus versicolor*) but the hairiness on the upper surfaces means this must be *Stereum hirsutum*.



Many trees (here Aspen) near the work area had an orange growth on the trunks.

The orange growth is an green algae called *Trentepohlia abietina*. The orange colour comes from pigments called Carotenoids. This is the same pigment found in Carrots. The pigment protects the algae from blasting direct sunlight. *Trentepohlia* algae are the second commonest algal component of lichens. However here the algae is living an independent lifestyle. This is a western UK species, indicating Stanmore Common is a wetter spot than normal.

Trentepohlia abietina under the microscope.



REPORT FOR GUIDED WALK ON SATURDAY 1ST MARCH 2014

A lovely day in quite cold weather.

Attendees:

Simon Braidman, Rosemary Etheridge, Agnetta Burton, David Lawes, Josh Kalms, David Winton, and Alan and Marianne Smith.(plus one other)

I have to thank the fantastic Rosemary and Agnetta for their knowledge on mosses. It certainly did help.

We dawdled in the car park and then down the main ride and had to speed up to get to Bluebell Heath.

Here are some pictures of the walk.



Agnetta showing specimens



Rosemary and the group by the ancient apple tree .



Looking at the Moss *Funaria hygrometrica*



Moss capsules with calyptra intact



Mnium hornum



Cladonia lichens and Brachythecium



The Moss *Bryum capillare*



The Moss - *Didymodon fallax*



Unidentified Moss

Mixed Liverworts including *Frullania dilatata* – the red objects are spore capsules





The native land Planarian *Microplana terristris*



The Early Bumble Bee *Bombus pratorum*



REPORT FOR WORK PARTY WEDNESDAY MARCH 5th 2014

ATTENDEES: Simon Braidman, Alan and Marianne Smith, Sue Kabel, David Green and Neville Day

10.30am to 3.30pm

TASK

To clear dead bracken, Bramble and leaf litter from the south east section of Bluebell Heath

Weather Dry and bright .

It is all about getting nutrients off and disturbing the soil. Cuttings and rakings are added to a new pile of dead material. This is on the dead hedge created during the work on Bluebell Heath by the contractor last winter. Work to keep Bluebell Heath open continues. In the south east of the clearing we are removing dead bracken, bramble and scrub saplings. Where possible we are digging them up by the roots. Otherwise we are using loppers to cut back the re-growth from the stumps of trees.

The flush that runs down between Parcels 8 and 9 is an important habitat. Flushes are flows of water where impermeable soil forces the water to flow across the surface of the ground instead of being absorbed. Many insects have larval stages in flushes.

We hard cleared the line of this flush taking out a lot of the regenerating scrub. Male Goat Willow, an important early nectar resource was spared. One can tell the male saplings by the bright white flower buds.

Mattocks and loppers were important tools. Leaf litter was raked off to reduce soil fertility.

The arisings were added to the Grass Snake nest (hopefully) pile at the extreme east edge of Bluebell Heath.

The fallen Silver Birch in Parcel 9 was cleaned up and the smaller branches removed.

The cut wood was incorporated into the Grass Snake nest pile.



View of work area before work started.



After work finished



Grass Snake nest pile.

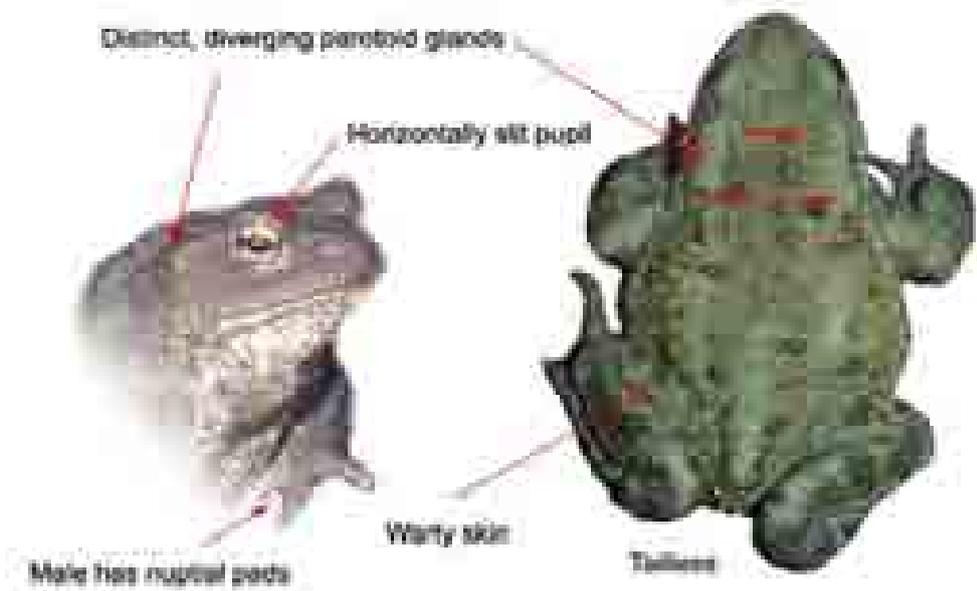
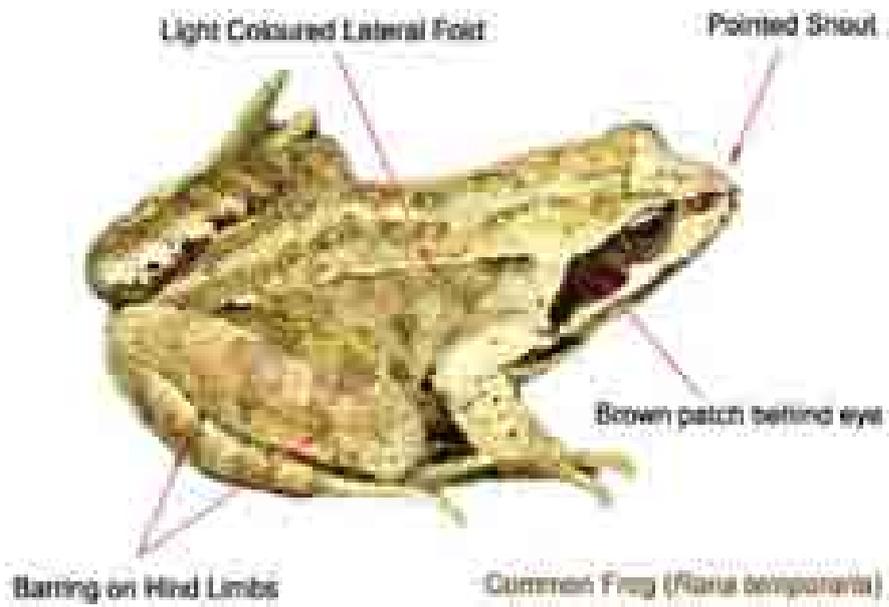
We have now done a substantial control on parcels 8, 9 and 10. We have also done a lot of work on Parcels 4, 5, 6 and 11.

There is more work to be done on Parcel 1,2 ,5 and parcel 8 south block in terms of sapling control and Purple Moor Grass control. Also the scrub blocks will need thinning.

WILDLIFE

Now we are finding frogspawn in Pynding Mersc. We are also finding adult and juvenile Toads on Stanmore Common.

Below are pictures of the two amphibians. Look for the brown mark behind the eye on the Common Frog and the warty skin of the Common Toad. Common Frogs often lay eggs earlier than Common Toad. Common Frog eggs are laid in clumps and Common Toad eggs are laid in strings.



Common Toad (*Bufo bufo*)

REPORT FOR ST. ALBANS U3A GUIDED WALK FRIDAY 11TH APRIL 2014

It was a lovely warm day and we had a lot of people come:

Pam Taylor

Ann Bartlett

Jean Bowler

Brenda Bladd

Ann Elliott

Ann Hutchinson **ALL PHOTOGRAPHS CURTOSY OF NEIL HUTCHINSON UNLESS MARKED WITH ***

Neil Hutchinson

Rose Ennis

Sue Taylor

We went to the Brewer's Ponds and did a circuit around them. The best thing was the Water Mint, with its lovely smell. It is nice to see that the tree work has increased the grassland on the east side of the pond. Neil Hutchinson said he used to fish there for decades and the ponds used to be a lot more open.

There is a case for more tree removal.

We found Red Tailed and Buff Tailed Bumble bees on the cricket pitch.

Once on the main part of the Common we headed down Jake's Path looking at largely trees and plants, including how to tell Hornbeam trees from Beech trees.



Beech leaf

Hornbeam Leaf *

We got to Cerrisland and we saw a Grass Snake at the base of the dead tree by the path on the western side of the clearing.

We also saw Erisalis Hoverflies and Brimstone and Peacock butterflies.

Beeflies were with their long proboscis.



* Common Beefly

Bombylius major

Bee flies are nectar feeders and they flick their eggs into the entrances of solitary bee and wasp nests. The beefly larvae feed on the pollen store and the bee/wasp larvae themselves.



The group in Oakmead- Is this one tree?

Everyone loved the old Oak and the amazing ability of a tree to heal itself. The weight of the bough had split the tree. Once the council had removed the weight the tree did the rest. We looked at the inlets along the north edge of Oakmead and the need to control trees on grassland.



The bracket fungus *Bjerkandia adusta*

From Oakmead we walked down the Hawthorn's Walk and we saw the ancient Hawthorn and the magnificent splintered Oak to the west.

There is a lot of Holly around the Ancient Hawthorn and this will need removal.



Young Orchid



A Bluebell on Bluebell Heath



Female flowers of Goat Willow *Salix caprea*

We moved onto New Heath and compared New Heath and New Scrape.

It was explained that the project to set up New Heath was the inspiration for New Scrape and Heather seed from New Heath had been sown onto New Scrape by children from the Hatch End Masorti Synagogue.



Matt Grass *Nardus stricta*

The bulldozing of the topsoil uncovers the original seed bank and so we get rare species like the one above.

It was explained that great care was taken. Preliminary surveys revealed a bat roost in a tree in the bulldoze area. Also a snake hibernation site was found on the edge of the bulldoze zone and the bulldoze boundary had to be moved.

We moved across the top of Bluebell Heath showing the scrub sapling removal. Then we came to the fantastic Wild Apple tree.



Wild Apple Tree Blossom

This tree had been hidden in a mass of trees and now it is in the open. It is magnificent and is probably 200 years old. We are trying to clone the tree by burying branches and growing more from seed.

The new trees will be planted across the reserve. This project may inspire similar ones with other rare tree species such as Spindle, Wild Service Tree, Alder and Wild Privet.

From Bluebell Heath we moved down to Pynding Mersc.

This is a wetland delta at the valley floor which all the streams discharge into. A local ecologist and ex-warden, John Dobson had the idea to dam the outlet and backflood the valley floor. Now Toads and Frogs are common and a very good quality wetland has formed.



The group on the footbridge at Pynding Mersc

Whilst there we had a few guests on one ladies top.



**An aquatic baby
Stonefly ***

Stoneflies are harmless insects who live besides clean rivers and streams. Their eggs laid into water hatch into predatory larvae



AN ADULT STONEFLY *



Pynding Mersc

We walked up Druid's Path back to the car park passing a lovely clump of Wood Sorrel on the way. I am pretty sure everyone enjoyed it and a big thanks to everyone who came and to Neil for the pictures.



Wood Sorrel *Oxalis acetosella*

REPORT FOR GUIDED WALK SATURDAY 12TH APRIL 2014

Nice weather but not as warm or sunny as the walk the day before.

Attendees: David Winton, Wendy Knight, Barry Harris, Anita Harris, Molly Harris, Chloe Harris, Coby Harris, Norman Sartin, Maria Sartin, Joanne Colthrup, Pat Becklay, Jane Cox, Mo Strangeman, Geof Saunders, David Bearfield, Yvonne Zane, Una Zane, Josh Kalms, Emmanuelle Braidman.

We began right next to the car park. A Jay was seen hanging around in the trees and gave good views.

On the dead stalks of last years vegetation was a group of White Lipped Snails, (*Cepea hortensis*) showing different colour variants. We saw the stripped and the yellow variant.





An Oak and Hornbeam

We headed down towards Herne's Path. There were a number of Bumble bee corpses.

These were the result of birds attacking bumble bees caught by the colder weather.

All the bees at this time of year are mated queens which are establishing nests.



We found Highclere Holly a non-invasive Holly variety. The leaves are have forward pointing spines and tend to be flatter than Common Holly.



We also found the pretty blue flowers of Green Alkanet. This plant is a member of the Borage family. The name Alkanet derives from its use as a Blue dye. In fact with the right treatment you can get red and purple, Bergundy and green colours from extracts from the root of this plant. The plant is also rich in fatty acids and one Gamma Linolenic acid is known to be a powerful reducer of cholesterol in the blood. However the plant also contains poisonous alkaloids

Flowers of Green Alkanet *Pentaglottis sempervirens*



We went down Herne's Walk.

Lots of nice trees. We looked at Hornbeam and Beech and Sycamore



Sycamore leaves. Note palmate (hand shape) and blunt toothed leaves

We got to the Brightwen stream and Emmanuelle spotted a mammal of some kind at the base of a beech tree.



Mammal spotting on the banks of the Brightwen stream

We waited and some of us were rewarded with fair views of Bank Voles (*Myodes glareolus*)

Binoculars showed the distinctive red tinted brown fur. We thought it was two individuals which is possible in spring.

Bank Voles are associated with woodlands with good ground cover and if the woodlands get too shady they disappear and are replaced by Woodmice as the dominant species.



Bank Vole *Myodes glareolus*

Both Bank Voles and Woodmice are territorial and will exclude others during the breeding season. The Juveniles are expelled from the territory. In winter Bank Voles continue to hold territories with little overlap whilst Woodmice will share with others.

Bank Voles communicate by scent marking. They have glands on the soles of the feet and on the flanks, Hips and around the anus and genital areas.



Woodmouse *Apodemus sylvaticus*

Note the Mouse has larger and more prominent ears, more pointed face, bigger eyes and a much longer tail and lacks the reddish tint to the upper fur

Woodmice are nocturnal and Bank Voles are active both by day and night with activity peaks at dawn and dusk. Bank Voles feed on nuts, berries, roots and bulbs and fungi.

They live about 2 years and breed up to 5 times a year producing between 3 to 5 babies in each litter. Females from the first litter can breed in their first year.

Then just at the same time, the Harris family discovered a Large Yellow Underwing Moth caterpillar inside a crevice in a tree.



We arrived at Fox-Earth Mound and it looks fantastic and I spoke about the misnaming of the structure. The actual Boudicca's Mound is at Lymes House and that this structure was thought to be a tudor rabbit warren.



13th century woodcut of tending an artificial rabbit warren

A lot of the trees to the east of Fox-Earth Mound were being kept because they were Aspen *Populus tremula*. This tree has characteristic bark and leaves.

Aspen is the foodplant of some uncommon insects. The straplike leaf stalk means it shakes in the slightest breeze, giving the term “to shake like an Aspen.

From there we walked into Cerrisland.



ASPEN BARK



ASPEN LEAF

We looked for the Grass Snake seen the day before but we did not see it. We showed the Heather and the Gorse. One of the best things were these weird objects.



Giant Horsetail *Equisitum telmateia*

This is an ancient non-flowering plant, it has remained unaltered for 100 million years. Back in those days they grew as tall as trees. The stem is full of silica(sand) and the plant used to be called scouringrush. In the picture is the structure that releases the spores. The plant also spreads by underground roots (rhizomes). The large size and thick stem over 5mm separate this Horsetail from other Horsetail species.

We found some lovely leaves of Tormentil, a member of the Rose family which loves the harsh acidic soils of Stanmore Common.



Tormentil *Potentilla erecta*



The leaves of Tormentil- note the palm like leaflets



Another characteristic species here is Turkey Oak. Cerrisland is named after this Balkan species (*Quercus cerris*).

The leaves are deeply notched and the buds surrounded by bristly hairs. The acorns have hairy cups

Native oaks lack the hairy cups and the lobes are blunt.

The Common native Oak on the reserve is Pedunculate Oak. (*Quercus robur*)

We moved from Cerrisland and across Tykes Water and once again I failed to find a Stonefly larvae in the stream. These insects are indicators of good water quality and I had found lots in Tykes Water but further upstream and also some had already turned into adults which we did not see but if we did this is what they look like.



An adult stonefly

(Perlodes microcephala)

Keen eyes spotted some Marble Galls on tiny examples of the native Pedunculate Oak (*Quercus robur*).

Marble Galls are caused by a tiny wasp called *Andricus kollari*. This female insect no more than a few millimetres long injects an egg into the leaf bud of a native Oak. The wasp larvae secretes chemicals which hijacks the trees development mechanism for that individual bud and instead of producing leaves, it swells into a tumour-like growth with a rock hard exterior and a spongy inside.

Marble Gall with exit hole



The wasp larvae eats the tissue inside the gall. It pupates inside the gall and then hatches into an adult wasp which bites it's way out of the gall.



The Wasp *Andriscus kollari*. 2-3mm long.

The wasp then lays it's eggs in the leaf buds of Turkey Oak and makes a different form of gall. The eggs are fertile but have not been fertilised by a male wasp. They are what is called an asexual generation. The adult wasps both male and female emerge from these galls in spring undergo sexual reproduction and females lay eggs in native Oaks.

However it takes time for marble galls to harden and when the gall wall is soft it is vulnerable to attack by birds or worse other wasps.



Synergus galleopomiformis



Torymus nitens

Above are two more tiny wasp species. The one on the left, *Synergus gallaepomiformis* is an inquiline and the one on the right *Torymus nitens* is a parasitoid. An inquiline invades the living space of another animal. The adult *Synergus* wasp lays eggs into the marble gall and the *Andriscus* wasp larvae has to share the gall and its resources with the invaders. This can result in the death of the *Andriscus* larvae through starvation.

Torymus deliberately targets the *Andriscus* larvae and lays an egg on the larvae and the *Torymus* larvae slowly eats its host. Small exit holes on the gall indicate invaders of the structure. All these tiny wasps have adapted their stings to be egg laying devices.

We moved into Oakmead with the giant multistemmed Oak. This tree if one tree is over 400 years old. One can still see the heal scar from when the tree was almost split apart by the weight of the heavy bough.



Moll, Chloe and Coby climb the mighty Oak

We looked at the south facing inlets cut into the woodland edge. They do look good and lots of insects like to sunbathe in them.

Peacock Butterfly *Inachis io*



Peacock Butterflies overwinter as the adult and lays up to 400 eggs on Stinging Nettles (or hops).



Peacock Caterpillar

We saw molehills in Oakmead. These are excavations of underground tunnels which are used as traps for earthworms. The mole eats half its body weight of between 72 to 128g a day. This adds up to 7 to 12 earthworms per day.

Moles are not blind they have eyes. The vision is poor and is used for movement and light detection.

I picked up a Red Tailed Bumblebee (*Bombus lapidarius*)



We moved down the Hawthorn's Walk and looked at another old Oak and we saw from a distance the ancient Hawthorn tree. We came out into Bluebell Heath at its south-west corner after crossing the Heathbourne Stream.

We heard a number of Nuthatches on the Common giving a variety of calls. This bird climbs up trees
And uses its powerful beak to
Hammer out insects under bark
Or break open nuts and seeds.
They nest in old woodpecker
Holes and plaster the entrance
With mud to get a tight fit.





Muncjac Deer slots (footprints) on mud in the Hawthorn's Walk

We went straight into the Orchid Field and searched high and low. We did eventually find a few young Orchids. These are Heath-Spotted Orchid, although some people say this is actually a hybrid between Heath Spotted Orchid and Common Spotted Orchid. Common Spotted Orchids are found in chalk areas whilst Heath Spotted Orchid is found in poorer more acid soils.

The numbers of Heath Spotted Orchids vary from year to year. The populations go in cycles of boom and bust. In 1999 there were 750 flower spikes. By 2008 there were just 5. Last year numbers broke the 60 mark.

The Orchids will flower in early June. There is another Orchid species on the Common which is Broad Leafed Helleborine. This flowers in July in an area west of Cerrisland.



Heath Spotted Orchid *Dactylorhiza maculata*

The Orchids have a lot of competition and the most robust of these is an uncommon Thistle species. This is Marsh Thistle



Marsh Thistle *Cirsium palustre*

This Thistle species is said to be non-invasive but it certainly is rapidly increasing.

This very attractive Mint is Betony (*Betonica officianalis*)



It too is not yet in flower but it is a beauty. We found the distinctive crinkly edged leaves, also in the Orchid field.

We heard and saw (flying) Great Spotted Woodpecker. We also heard Coal Tit and Great Tit.



From the Orchid field we went to New Scrape and told the story of the restoration of Bluebell Heath.

We saw the new Heather plants.



These could be from the original seedbank that was smothered by the invading trees rather than seed sown from Heather plants growing in New Heath, the area restored in 2009. The stones are Stanmore Pebbles or Stanmore Gravels and originate from the River Thames which flowed here 2 million years ago.

Nice plants are regenerating on the bare soil and one of them is the early flowering Coltsfoot(*Tussilago farfara*) , a member of the Daisy family.



We headed across the top of Bluebell Heath and then arrived at the fantastic Wild Apple Tree.

This tree was hidden from view for many years. It was only discovered about 10 years ago. When the Bluebell Heath restoration project took place the surrounding trees were removed.

Now it looks fantastic

The plan is to grow new trees both from seed and from cloning new trees by burying branches. The branches put out new roots and after a year the branch can be cut off the main tree and planted elsewhere.



The Wild Apple tree

The blossom attracts lots of insects and one of them is the Garden Bumblebee. There are a number of white tailed Bumblebees but this one ***Bombus hortorum*** has a distinctive additional yellow orange band on the back of the middle section of the body, the thorax. Only one other Bumblebee has a similar pattern and this one is the rare Heath Bumblebee ***Bombus jonellus***. The key difference is in the face which is long in ***B. lucorum*** and rounded in ***B.jonellus***. Also the queen is noticeably larger in ***B. lucorum***.



The Garden Bumblebee *Bombus hortorum* on Wild Apple flower

We headed down Bluebell Heath and onto the footbridge at Pynding Mersc. The wetland looks fantastic. No sign of tadpoles. We walked on up Druid's Path and stopped at the carpet of stunning Wood Sorrel.



Wood Sorrel

Oxalis acetosella



Wood Sorrel leaves

This flower is in a family all of its own:- The Wood Sorrels. One may see a small yellow cousin as a garden plant called Creeping Wood-sorrel ***Oxalis corniculata***.

We walked back to the car park through Hollybrook Rise and the Witling clearings.

I think everyone enjoyed the event.

REPORT FOR WORK PART SUNDAY 13TH APRIL 2014

ATTENDEES: Simon Braidman, David Green, Margaret Griffin, Neville Day, John Winter, Steve Bolsover (briefly), Emmie.

10.30am to 3.30pm Weather Dry 16°C, sunny.

We did a number of jobs.

John Winter worked on the tools hut. He installed a frame and dividers to form racks for the tools. He did a fantastic job.

Meanwhile the rest of us headed down Jake's Path. We got to the 1st footbridge which goes over the Hollybrook. This footbridge has got loose decking plants on its far western end.

Further inspection revealed the timber at the western end on the southern side was rotten. This meant the whole 4x2 long axial rail would need replacing. This would mean the whole footbridge being disassembled.

Neville thought we could put in a parallel piece of timber with a cross brace.

We carried on to the area just north of Cerrisland where we had worked on April 2nd. We proceeded to clear up the mess of cut Holly left behind and putting the cuttings onto the main pile.

We carried on and David and Neville cut down a few Sycamore just beside Tykes Water.

Finally we got to New Heath.

Neville and myself pulled Silver Birch saplings.

David cut down trees west of New Heath.

The pulled saplings were placed in an existing pile of cut Holly.

Neville gave out some of the Bluebell Heath response cards.

We also attacked bracken and pulled some grass from the Bonzo Bare earth banks.

There is a huge amount of saplings from windblown seeds. We left areas around the fronds of Hard Fern *Blechnum spicant*. This rare fern needs some shade.

Whilst we were pulling saplings, David was attacking an area west of New Heath which is closing over.

Small trees were being taken down to get a canopy gap, to get light in.



Hard Fern



Bonzo

Bonzo Bank West central.

Bracken has survived on the bare earth banks and this was controlled by breaking the young fronds. Some bramble was piled from the banks and New Heath. Hopefully this will maintain sunny conditions to support invertebrates and reptiles.

One animal to benefit from the more open conditions has been Peacock Butterflies. David took this stunning shot



Clearance of the bare earth banks has improved the amount of bare soil. It seems however the some banks may be too damp and not packed densely enough. Where the soil is more clay and less topsoil and the soil is packed tight, solitary bees and wasps are making their homes.

The extent of the trees to the west of New Heath and the saplings in New Heath means a lot more work is required.

WILDLIFE

The best thing we saw was a Grass Snake. A Grass Snake had been seen close to a dead tree in Cerrisland on Friday and we had looked for it on Saturday but no luck. This time the snake was coiled up in the open at the base of the tree. It was a stunning Bronzy colour and we saw the small head and yellow collar quite clearly.

Grass Snakes are non-poisonous and just grab and swallow their prey which are Frogs, Toads, Newts, small mammals.

They lay eggs in decaying vegetation which is one reason why we have created so many piles of brash and leaves.

They have a huge home range and they are loyal to their nesting and hibernation sites.

Grass Snake *Natrix natrix*



Above is a mystery plant which we would like to know what it is.

REPORT FOR WORK PARTY WEDNESDAY 16TH APRIL 2014

ATTENDEES: Simon Braidman, John Winter, Neville Day, John Bugler, John Dobson and Ciara Segreue.

10:30am to 3:30pm

Weather: 13 degrees centigrade sunny wind 7mph SW

TASKS: 3 Tasks:

1. Continue pulling saplings from New Heath
2. Continue felling trees West of New Heath
3. Botanical surveying and training

The extent of the Silver Birch growth was such that extensive work is required in New Heath. The only proviso is to maintain shade over the Hard Fern (*Blechnum spicant*). Some shade is provided by the trees on the western edge of New Heath.

So when the work is done to fell trees west of New Heath, the borderline of trees is kept intact.

Otherwise Silver Birch saplings are kept around the fronds of the ferns especially to the south of the ferns.

These saplings will never be allowed to grow to maturity and will be kept as dwarf specimens.

New Heath looking east



The background green on the above photo is Silver Birch growth.



On the photo above is the area worked on. The foreground has had the Silver Birch completely removed. The middle has remaining Silver Birch around the ferns and the shade thrown by the trees to the west(right) can be seen

Once again we have produced a load of organic waste of saplings which we have added to a pile of Holly cut by David Green and Josh Kalms on a work party some weeks ago.

Despite the work done, we need to do more.

This is the second work party to work west of New Heath. Some more light is now entering the work area but here again more work is required. There is a lot of Holly and I am looking to create a hole in the tree canopy. The woodland is secondary woodland and as such has less old wood biology associated with it.



Secondary woodland west of New Heath



John B working west of New Heath



Pile of cut timber west of New Heath.

John Dobson and our newest volunteer Ciara went on a botany walk and survey. They came back very excited. They had found a very rare plant, an ancient woodland indicator species of the Cabbage family called Coralroot (*Cardamine bulbifera*).

This species has not been recorded for 100 years on the reserve. It lies just close to the Horse Ride not far from the pedestrian path to the Grove Estate. There was not just one plant there was a huge carpet of it.

John thought it had been missed because of its short flowering season.



Coralroot *Cardamine bulbifera*

REPORT FOR WORK PARTY SUNDAY 27TH APRIL 2014

ATTENDEES: Simon Braidman, John Winter, Neville Day, David Green, Josh Kalms.

10.30am to 3.30pm

Weather sunny periods 15 degrees centigrade. Wind easterly 14mph

A continuation of recent weeks:

1. The footbridge

We wanted to fix the damaged footbridge and we brought as new support rail, but as we started to dismantle the damaged section, more problems came to light. The vertical support to the vertical rail that holds the hand rail was also badly decayed. We also could not remove the original coach bolts without destroying the threads.



Rotten support block with Coach Bolts



Checking how far the problem goes down



Bottom of the hole

To see how far the timbers went down we dug out the supports with mattock and spade. We found solid sodden clay and then water. The water table is only a matter of 6 -8 inches below the ground. Amazingly the vertical rail and the bottom of the support rail were sound. It seems a mixture of exposure to air and water and caused the timber to rot.

We discussed what to do next and we thought a concrete support post would do to replace the wooden one. We discussed the high water table and the

effect of concrete setting would have on it. One consideration are toxins released on concrete set so close to a water body.



Stonefly on the footbridge



The footbridge as left

We decided at the time just using the original hole to put in a precast concrete support and then just bolt the vertical rail to it and then bolt a new horizontal support rail to that.

The 23rd Wembley scouts are coming to the reserve on the 25th May and they can help as they want to do some bridge building.

We are seeking costing for the materials. Since then further discussions have taken place regarding how to fix the bridge.

Bluebell Heath

We went to Bluebell Heath via Cerrisland (no sign of Grass Snake). Neville attacked the bracken on the Orchid Field (parcel 4). Some orchids are up but not in flower. Lots of Betony, Common Dog's Violet, Tormentil and especially Marsh Thistle. Also a unknown clover like pea family plant.



Note hairy undersides to leaves.

Josh and David worked on tree felling North-West of New Heath and found a new area with grass remnants and attacked this area felling trees to get more light in.

Neville once he had finished with the Orchid area moved to the sapling removal on New Heath working with John Winter.

I worked on the bare earth banks lying north of New Heath, removing the bracken.

We have now removed a great deal of the young saplings on New heath but more work remains to be done here.

More saplings need removal and bramble as well. Shade needs to be kept on the Hard Fern in New Heath.

Bracken needs spraying across all areas again.

Work needs to continue to open up glades west of New Heath.

Wildlife

We found this remarkable structure on many of the Silver Birch saplings.



This is a scale insect. These insects are members of the true bug Order; the Hemiptera. The family is the Coccoidea and there 8000 worldwide species. Scale insects show sexual dimorphism; the males are tiny winged insects and the females are wingless. Both males and females emerge from the eggs as “crawlers” and walk around. Some species have ants as associates and they carry the young around, being bribed by a sweet secretion. Once a female has found a bare spot she stops and moults the legs and produces a waxy secretion to form a protective shield. Here we can see the legs from the old moult

sticking out. Under the shield she will produce red eggs inside a white egg sac which gets bigger and bigger.

The female insect feeds on the tree sap with a sharp tubular mouthparts. Scale insects are treated as pest species as they transmit fungal and other diseases. This insect could be *Pulvinaria regalis*, the Horse Chestnut Scale which infects a range of Woody species. Other scale insects are quite specific to their host plant.



This picture shows Germander Speedwell (*Veronica chamaedrys*) being visited by a hoverfly. The hoverfly shows abdominal markings and also shows a lower face projection, suggesting it is of the Tribe Chrysogastrini.



This green crab spider is *Diaea dorsata*.

Crab spiders have very strong venom (don't worry they cannot penetrate human skin). They also have the habit of male spiders tying down the females with silk I assume to stop them being eaten.

I am trying to trace the spider records to see if this species has been recorded before on the reserve.

Finally below is a stunning picture of Wood Anemone (*Anemone nemorosa*), A woodland plant and an ancient woodland indicator species.



REPORT FOR WORK PARTY WEDNESDAY 30TH APRIL 2014

ATTENDEES: Simon Braidman, John Winter, Neville Day, John Bugler.

10.30am to 3.30pm

Weather Sunny warm.

Tasks

To continue to remove Silver Birch saplings from New Heath.

To continue to open up woodland west of New Heath.

We split into 2 teams. John Winter and Neville worked on task 1 and John Bugler and myself worked on task 2.

By the end of the session we have cleared a substantial portion of the Silver Birch in New Heath.

There is still more work to do here and further South in New Heath are bramble and young Scots Pine.

New Gorse is coming up and a search was carried out for Heath Grass (*Danthonia decumbens*).

Note the white hairs instead of the ligule a membranous flap. The florets are relatively large. In the UK the florets do not tend to open and the plant self-pollinates



Large florets

The other thing to look for is the tufted growth and the quite coarse leaves as below.



Canopy Holes

The area west of New Heath is being worked on. Holly understorey scrub is being removed to get light into the woodland floor.

However removing understorey may not be adequate and also if carried out extensively removes an important woodland component especially for bats.

Going out at night with the bat detectors indicates that small sheltered clearings with holes in the canopy are favoured by woodland bats.

The best example of this is Fox-earth Mound which is a favoured feeding area for Common Pipistrelle bat.

Taking out selected larger canopy trees will create this type of woodland structure.

Aligning the clearing in a roughly southerly line will ensure that the area will receive plenty of sunlight.

I removed a large Silver Birch and younger Silver Birches around it, to create a canopy holes.

Trees were checked before felling to ensure they did not have holes, cracks, climbing ivy or substantial dead timber.

More work is still required in this area as the woodland will benefit from further thinning but this can be left until the autumn/winter.

Cut trees were trimmed and the small brash was placed in an existing pile in shade.

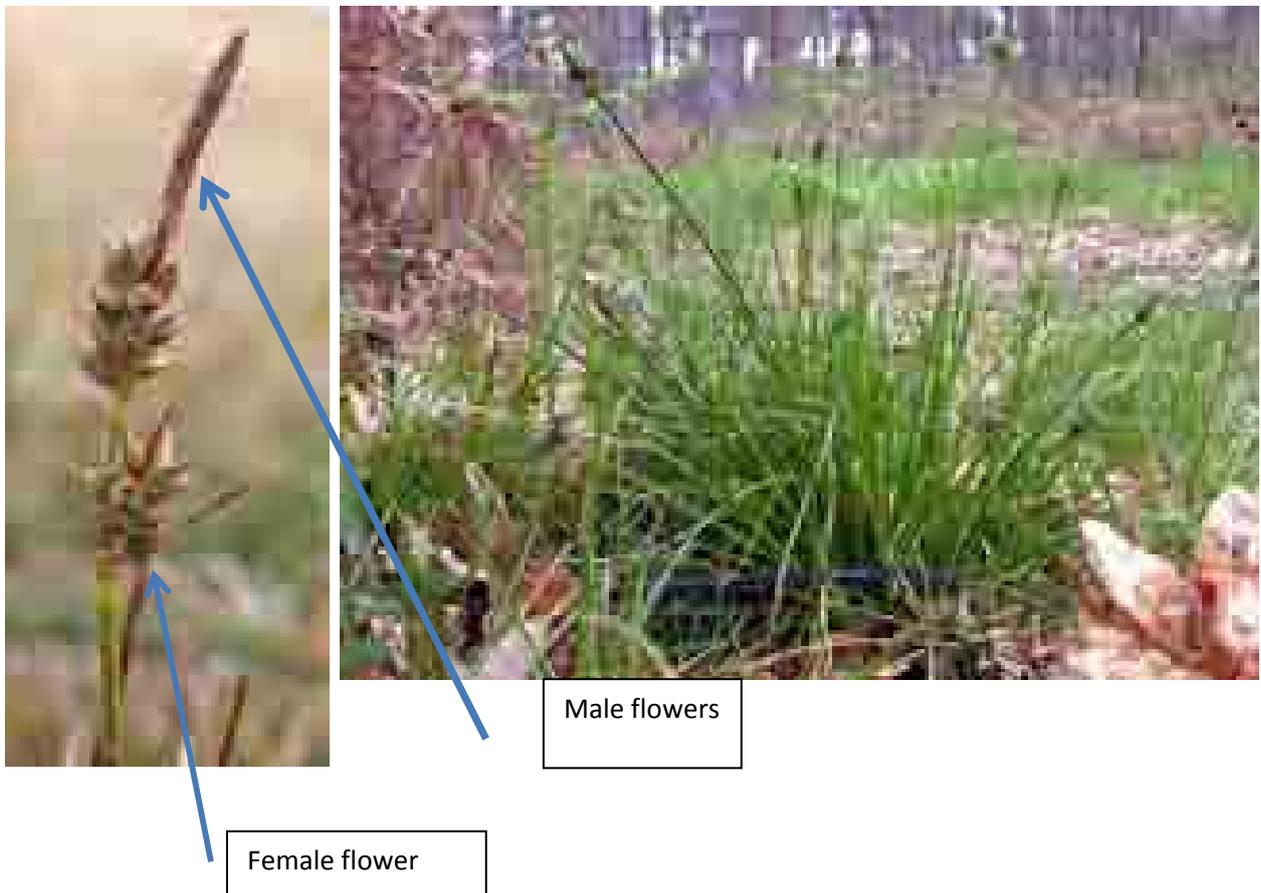
The larger timber was left in situ.

Wildlife

There was an amazing gathering of soldier beetles attracted to a chemical given off by the large silver birch. The beetles were laying eggs in cracks in the timber stump. I have never seen anything like it.



Pill Sedge (*Carex pilifera*) was in flower. This is an uncommon species



REPORT FOR WORK PARTY WEDNESDAY 28TH MAY 2014

ATTENDEES: Simon Braidman, Neville Day, John Winter, John Bugler and David Green.

10.30am to 3.30pm

TASK : To carry out Bracken control on the open areas.

We brought along a brushcutter to help with the cut. Last year we did the botany survey very late in the season and it did not match the survey dates for 2012. This is because last year we spent the whole of June controlling Bracken.

So there will be only one day doing bracken control until the botany survey is done.

We started at Hollybrook Rise. We had problems with the fuel as we had all forgotten the fuel system. The fuel was already pre-mixed a mixture of unleaded petrol and an approved engine lubricant (2 stroke). The other chamber of the red fuel can contained chainsaw oil and it was lucky we checked this.

Once started we had no trouble. Everyone had a turn with the brushcutter.

It is a good device giving good control and the ability to bring it down vertically on target plants and take the vegetation to ground level.

Another brilliant tool is John Winter's blunt/bent slasher with excellent balance and its lightness make it give ideal control of stroke and it has very good slashing qualities.

We should get some more of this tool.

We also used normal scythes and these too did the job well.

All the cuttings were raked off and added to the existing brash pile on the northern edge of the clearing.

This pile is now partly shaded by the growing trees around it.

We did not cut all the bracken but we cut most of it.

Having done Hollybrook Rise we moved to Bluebell Heath.



John with the Brushcutter in Hollybrook Rise

We started in Bluebell Heath at parcel 10 and worked our way north. We eventually ran out of fuel and the machine kept cutting out indicating a spark plug readjustment is needed. We cut the bottom third of parcel 10.





The Foxgloves

Since the restoration of Bluebell Heath has started we have noticed a huge recovery/invasion of Foxgloves in Bluebell Heath. They are fantastic.



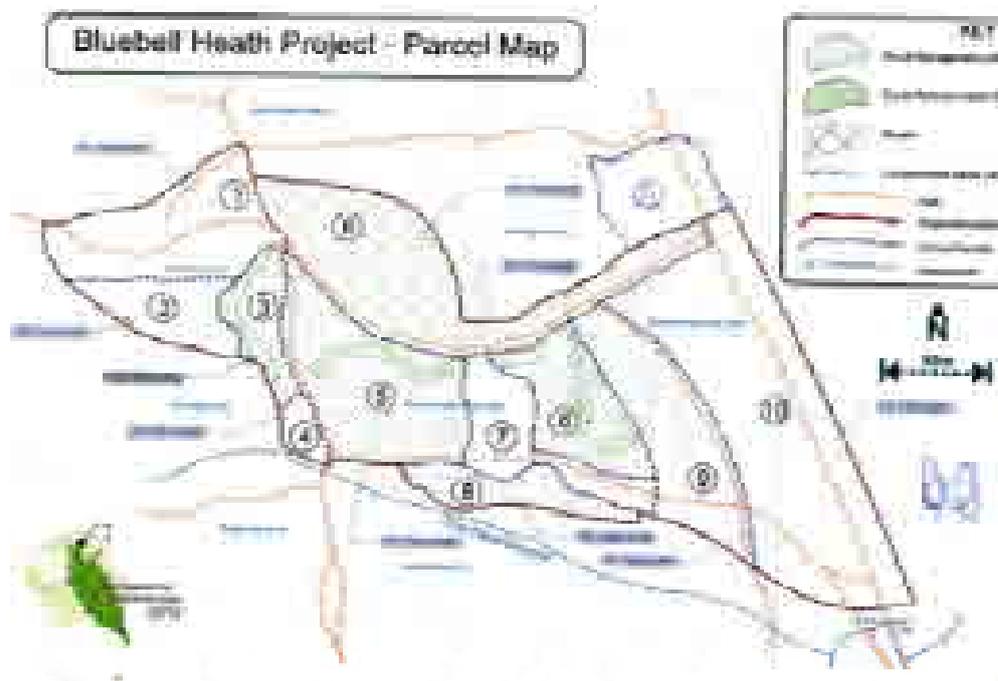
REPORT FOR WORK PARTY SUNDAY 8TH JUNE 2014

ATTENDEES: Simon Braidman, John Winter, David Green, Neville Day, Josh Kalms, Emmanuelle Braidman and Margaret Griffin

TASK: To start the botany survey of Bluebell Heath and to count the Heath-Spotted Orchids.

I brought along maps and crib sheets and survey sheets for the survey.

Bluebell Heath has been split by John Dobson into 10 habitat parcels each is a characteristic area.



We have since added an additional area parcel 11 (the area marked in pen).

We practised the 26 key species we needed to recognise, starting in Parcel 10.

These species are indicators of acid grassland condition. They are either important species where a good population means the area is on good condition or invasive species where population increases means the clearing is deteriorating.

A key species for good condition is Tormentil (*Potentilla erecta*)



This member of the Rose family has characteristic leaves composed of leaflets in groups of 3. The flowers are quite like Buttercups but the petals are 4 in number. It is a perennial and a typical acid grassland species.



Young Bracken *Pteridium aquilinum*

Bracken is another of the 26 species. It is found on acidic soils and is a food source for about 30 species of invertebrates. It also provides shelter and shade, however it is an invasive aggressive native species which can shade out acidic grasslands and can become impassable to walk through.

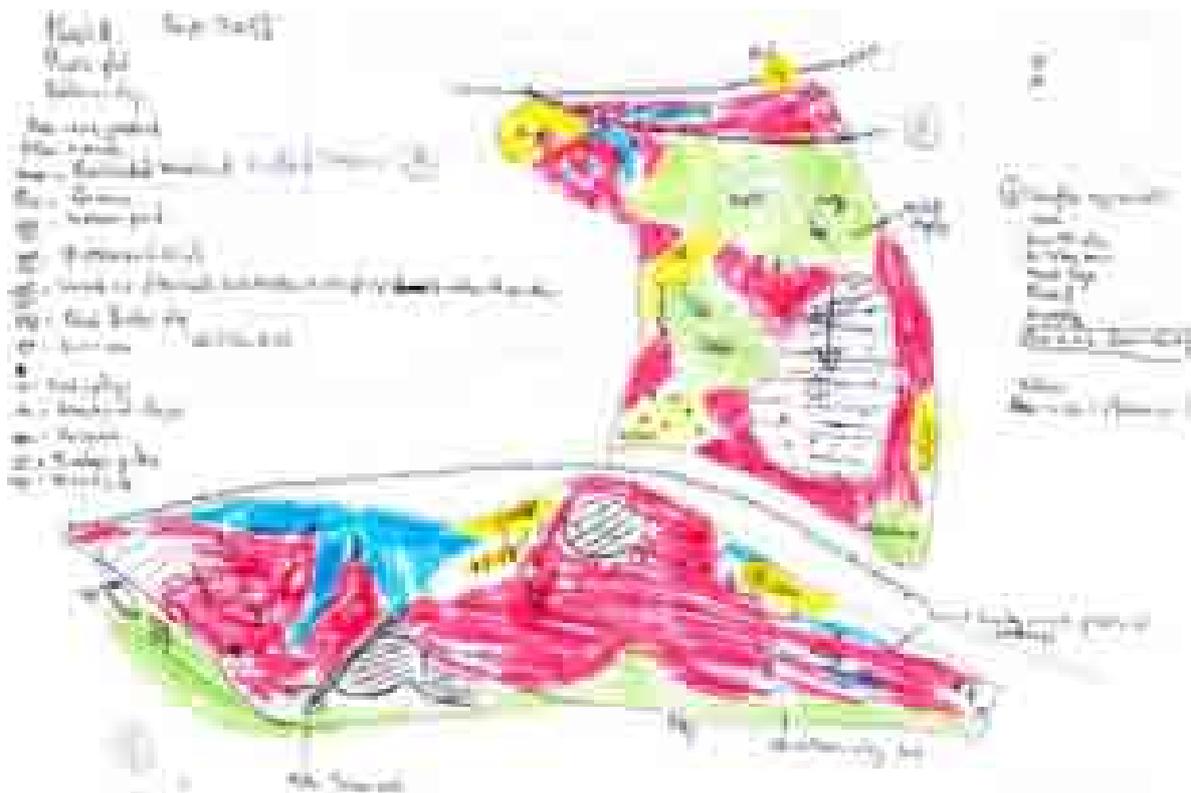
This species is being controlled and its population on Bluebell Heath monitored through the survey

The laminated crib sheets work well they are a help. We did Parcel 10 together.

We did 3 pieces of work for each parcel:

1. A Phase 1 habitat survey sheet which describes the plot of land and expresses the habitats in terms of % area as viewed from above. One also notes the conservation condition of the land, the invertebrate or other interest and key features.
2. A survey sheet for the 26 key indicator species. Each species is estimated in terms of ground cover and given a DAFOR rating. This stands for Dominant, Abundant, Frequent, Occasional and Rare. It is assessed on ground cover.
3. A sketch map of each parcel giving the habitats, key species and features.

Below is a sketch map of Parcel 8 from 2013.



It is hoped this way we can monitor the changes in the vegetation over time.

Parcel 8 has proved a problem in assessment as it comes in 2 sections. In previous years the results have been averaged.

It is decided to split the 2 into 8a and 8b but still present also the result average.

We carried out the full process on parcels 10 and 4.

Parcel 4 is the Orchid field and we did a count of 69 Heath Spotted Orchids, this is slight increase from last year.

WILDLIFE



This lovely caterpillar was on some Oak that Margaret was cutting down to provide material for Devonshire Road Day Nursery. This is the caterpillar of the Black Arches Moth (*Lymantria monacha*).

This caterpillar feeds on Oak and some conifers and the adults for in July and August.

This is a southern Uk species and a common one.

The picture below shows a stunning view of the feather antennae of an adult male Black Arches Moth.

A big thanks goes to David Green, Josh Kalms and John Winter for their photographs, although the one below is an externally acquired picture.



A mysterious yellow foam. This is probably the Slime Mould ***Physarum polycephalum***. Slime moulds are strange creatures. They are composed of

millions of individual cells that act together like a colony. The cells can move and the cell walls lack chitin which means they are not a fungus. They are classified under the Protista, the one celled animals. The foam will harden and go brown and then will produce millions of spores which float off.

The cells of the slime mould ingest bacteria, fungal spores and other protists, engulfing them like an Amoeba.



A display of white Heath Bedstraw (*Galium saxatile*) and Tormentil (*Potentilla erecta*).

Above shows lovely acid grassland flowers.

Emmanuelle accidentally kicked over this fungus. It remains unidentified I had thought it was ***Aminita citrina***. The white gills and the swollen base to the stem suggesting a Volva. There is no ring which there should be on. The scales on the cap are greyish and the fungus had an earth or smell of potatoes. The latter fits in with *A. citrina* but the general greyness of the mushroom and the chalkiness of the stem suggests otherwise. I now suspect it is a young ***Aminita rubescens***. This is a poisonous species as are almost all of that genus. The flesh produced reddish spots at home.





Heath Bedstraw, Purple Moor Grass and Bracken



Male Large Skipper Butterfly

Note the black scent mark across the forewing which is used to attract females. This common species flies June to August. The Caterpillar feeds on various

grass species including Purple Moor Grass, Cock's-foot, False Brome and Wood Small-Reed.

The survey will continue and we will put on extra work parties to ensure we get the work done as soon as possible.

REPORT FOR WORK PARTY WEDNESDAY 11TH JUNE

ATTENDEES: Simon Braidman, John Bugler, Sue Kable and John Winter.

10.30 am to 5.30pm for surveying and 10.30am to 3.30pm for practical work.

Weather warm, sunny.

TASKS

We split into 2 teams. John Winter and John Bugler went to the first clearing west of New Heath to continue to open up the woodland.

Sue and myself continued the plant surveying.

We surveyed parcels 9 and 8a and 8b.

Wildlife

Another Black Arches caterpillar was found. A pair of Buzzards circled low over the area.



Black Arches



Blackbird Egg



The crab spider *Diaea dorsata* grabs the Theridiid spider *Enoplognatha ovata*.



Escape!!!!



Adult Common Toad

REPORT FOR EXTRA WORK PART SUNDAY 15TH JUNE 2014

ATTENDEES: Simon Braidman, John Winter and David Green.

10.30am to 5.15pm

TASK

To continue the botany survey of Bluebell Heath.

We surveyed habitat parcels 7,6 and then I carried on and did 5.

Wildlife

We found that the grass/bracken pile in Parcel 8b had been occupied by Voles. There were lots of holes and one or two had piles of cut grass in them.



Setaceous Hebrew Character Moth (*Xestia c-nigrum*)

This stunning insect is a common species. The name comes from the black mark on the mid forewings which looks like a Gimel (see below). The caterpillar feeds on a wide range of herbaceous plants such as Willowherbs, Stinging Nettle and Burdocks. The insect overwinters as the caterpillar. There are in southern Britain two flight generations, a small one in May to July and the large one in August to October. There is another moth which is similar called the Hebrew Character (*Orthosia gothica*) which also has a similar mark but this insect lacks the pale collar just behind the head and the pale panel between the Gimel mark and the mid center wing edge is much paler, almost

white in Setaceous Hebrew Character. The flight periods too are different and the Hebrew Character flies very early; March to early May in southern Britain.



Hebrew Character.

ט	ח	ז	ו	ה	ד	ג	ב	א
Tet	Chet	Zayin	Yod	Hei	Dalet	Gimel	Beit	Alaf
(T)	(Ch)	(Z)	(V/U)	(H)	(D)	(G)	(B/V)	(Silent)
ס	נ	נ	מ	מ	ל	ך	כ	י
Samakh	Nun	Nun	Mem	Mem	Lamed	Khaf	Kaf	Yod
(S)	(N)	(N)	(M)	(M)	(L)	(Kh)	(K/Kh)	(Y)
ת	ש	ר	ק	ץ	צ	ף	פ	ע
Tav	Shin	Reish	Qof	Tzadai	Tzadai	Fe	Pei	Ayin
(T/S)	(Sh/S)	(R)	(Q)	(Tz)	(Tz)	(F)	(Pf)	(Silent)



A long-jawed Orb web spider *Tetragnatha species, under a leaf*. Tetragnatha species are very hard to identify and need close and detailed examination. It could be any of 6 UK species. A key need is to look at the underside of the spider to see if there is a large dark mark down the axis of the spider.



Continuing our pictures of spiders is this lovely shot of a Nursery Web Spider *Pisaura mirabilis*. The white median stripe on the dorsal surface of the

carapace is diagnostic for the species. Female spiders of this species hold the eggs in the silken egg sac in her jaws until just before hatching when she suspends the sac by silk on a low growing plant and then spins a nursery web around it. The male entices the female in courtship by catching prey and offering it as silken wrapped parcel. He mates whilst she is eating.



This is a very nice butterfly indeed. It is a key species of good quality grassland. This is a Ringlet (*Aphantopus hyperantus*). The caterpillar feeds on various grasses Cock's-foot, False Brome, Meadow Grasses and Tufted Hair Grass. Favourite nectar plants on the Common will be Marsh Thistle and Bramble. This butterfly seems to like sheltered and damp places.



Ringlet Caterpillar



Slender St. John's Wort (*Hypericum pulchrum*)

This lovely plant is a plant of acidic soils and as such indicates the area is in good condition. There are a number of similar species but this one is a more "open plan" looking with lots of branching pairs of flowering shoots. The flowering shoots are asymmetric and have a pair of heart shaped leaves which are opposite, often with slightly downturned edges which clasp the stem. Note the red flush on the unopened flower buds. The leaves have tiny pale translucent dots and black dots around the petal and sepal edges. The diagnostic feature is in red. Other St. John's Worts recorded on the reserve

are: Square-stalked, Perforate and Trailing St. John's Wort (**The latter may be extinct on Stanmore Common**

LOOKING FOR TRAILING ST. JOHNS WORT.

. Trailing St. John's Wort (***Hypericum humifusum***) is a sprawling , prostrate plant with few flowers. The following pictures show this rare plant.



Points to look for petals hardly or less than sepals (bracts enclosing flowers). Stem very thin with 2 raised lines. Plant is hairless, and it has black dots on the underside of leaves, petals and sepals. It often grows in bare worn places and it grows often in a mat habit.





The survey continues this Sunday.

REPORT FOR WORK PARTY SUNDAY 22ND JUNE 2014

ATTENDEES: Simon Braidman, John Winter, Neville Day, Josh Kalms

10.30am to 4.40pm

Weather hot and sunny

TASK

To finish the botany survey for Bluebell Heath.

We carried out the 4 survey methods for parcels 1,2,3 and 11.

The methods were:

1. A phase 1 survey sheet to give % of each habitat type for that compartment.
2. A DAFOR rating in terms of ground cover for 26 key species
D= Dominant over 75% A= Abundant 51%-74% F=Frequent 26-50% O =Occasional 11-25% R=Rare 1-10%
3. A Sketch of the compartment showing the vegetation type and distribution with key species noted.
4. A complete list of what plants were found in that compartment, plus anything animal wise.

We started in Parcel 11 the clearfell area. Here there was a large bracken regeneration and Holly was returning after taking a big hit. There are some small open areas and acid grassland species are in the southern half. There was more variety towards the eastern edge.

We found a very busy ant colony inside a dead Silver Birch. They were pilling sawdust out of the tree.

We moved after lunch to Parcel 1 which is the northern half of New Heath. It looks fantastic but there are still a lot of saplings. The nicest find was Heath Grass (*Danthonia decumbens*). We found a half-eaten Blushing Amanita ***Amanita rubescens*** in the far north west corner of Parcel 1. This fungus is poisonous when raw but delicious when cooked properly.



We also found an interesting caterpillars

We moved into Parcel 2. This is the damper ground with lots of Soft Rush and Compact Rush. There are a lot of new Foxgloves in Parcel2.

After doing Parcel 2 we stayed later to do the last Parcel which was number 3. The parcel boundaries are a problem here.

Overall it is highly pleasing to see so much acid grassland. The level of scrub and bracken is a concern and we will make it a priority to hit both.

WILDLIFE

The wildlife was excellent. There were loads of Blue damselflies flying about. There are a number of similar species

This a male Damselfly. Males are the prettier ones.



Identification of damselflies can be difficult. The area to look at is circled. The key feature is the shoulder stripes on the shoulder as pointed to by the yellow arrow. The books call these the **antehumeral stripes** . The blue stripe is wider than the black stripe and this is characteristic of **Common Blue Damselfly, (*Enallagma cyathigerum*)**. Confirmation comes from the black mark on Segment 2 of the abdomen. **It looks like a club mark or lollypop.**

The females are duller and come in 2 colour forms. A Blue form and a Green Form. Identification comes from the shape of the black markings on top of the abdominal segments. These are described as rocket shaped. **also**

There is only **1 blue stripe as viewed from the side red arrow and yellow arrow respectively** on the of the Thorax (the middle bit) and there is a small spine sticking out underneath abdominal segment 8.



1 blue stripe

spine

Female Common Blue Damselfly (blue form).



Female Common Blue Damselfly (green form)

You may see a third colour form which is a pale brown/pink. These are immature female Common Blue Damselfies just emerged from their larval cases.



Immature female

Common Blue Damselfly



Immature male Common Blue Damselfly.

The other Blue damselfly which is in good numbers is the **Azure Damselfly**.



Adult male Azure Damselfly *Coenagrion puella*

The area of interest is circled. Note the Antehumeral stripes on the shoulders. The black line is now **Bigger** than the blue line. Also note there is a second smaller black line on top of the blue stripe if viewed from the side of the animal. Finally the mark on the second abdominal segment is **U-SHAPED**.

The females again come in 2 colour forms. 90% are the green form.



FEMALE AZURE DAMSEFLY GREEN FORM.

Note the 2 stripes on the **side** of the thorax (a green one with a small black one on top) Also the marking on abdominal segment 2 is a thistle shape. There is **no** spine under abdominal segment 8.



FEMALE AZURE
DAMSEFLY BLUE
FORM

There are other blue damselfies but they are much less common. However there is another common species of blue Damselfly. This is

the Blue-Tailed Damselfly. Males are unmistakable being almost black with a blue band near the tail.

MALE BLUE TAILED DAMSELFLY *Ischnura elegans*



Females come in 5 Different colour forms, from Blue to Pink

But the key feature is the light and dark marks together in the wings (circled). This is found in both males and females and is characteristic for the species. This mark is called the pterostigma.

John Winter found this lovely face looking at him.



The face belongs to a solitary bee. Not all bees behave like Honey and Bumble Bees. Around 225 british bee species live in a solitary lifestyle. Each female makes her own hole in bare ground. She collects pollen and then moulds it into a ball on cells branching out

from the main tunnel. She lays one egg per pollen ball. Males patrol and pounce on returning females.

Some solitary bees are not so solitary. Some show evidence of evolution towards a colony lifestyle. Some females do not start their own hole and collect pollen for a “queen”. They are invariably the “queens” daughters.

Identifying solitary bees is very difficult. There are only a few that can be identified in the field or from photos. I think this is a bee from the genus **Lassioglossum**. These are small blackish species.



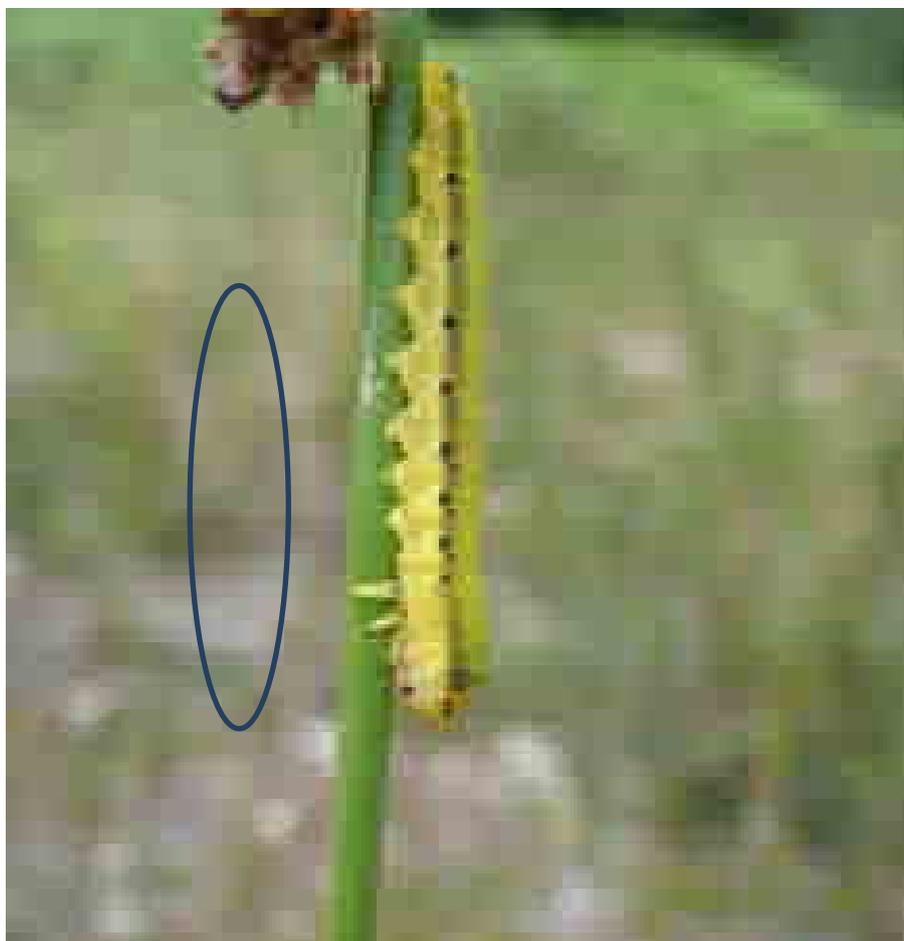
The yellow colour comes from the pollen.



This is a Speckled Wood Butterfly *Pararge aegeri*. It is a common woodland species which likes shadier conditions and in the UK has increased greatly. It's caterpillars feed on course grasses such as Yorkshire Fog, Cock's –foot, False-brome and Couch Grass.



The beastie above is the Black Headed Cardinal Beetle *Pyrochroa coccinea*. This is a vegetarian beetle and feeds on the leaves of a range of trees particularly Oak. This is not a common species and is an indicator of ancient woodland.



This is the interesting caterpillar mentioned above. It was on Heather and other plants in parcel 1 and 2. Here it is Compact Rush *Juncus comglomeratus*.

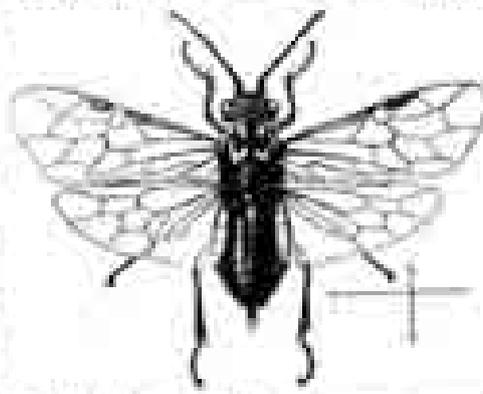
It is a caterpillar or larvae but not of a butterfly or moth (Order Lepidoptera). This is a wasp caterpillar of a group called the Sawflies. The Sawflies are wasps of the suborder Symphyta. How is not a Lepidopteran larvae? If you count the number of false legs (prolegs circled). There are 8 pairs and no Lepidopteran larvae has that many (maximum is 5 pairs).

Sawflies are largely vegetarian. They are quite specific to their foodplant. This species I think is *Pachynematus extensicornis*.

insects attain a length of nearly an inch, are usually dull or dirty whitish in color, with the head marked with brown. Some of them are also marked with brown stripes or spots along the side of the body. They occur, as a rule, singly and are rarely in sufficient numbers to be of any economic importance.

GRASS SAWFLY (*Phyllocnistis cunicularia* Nort.)

A more important species is the insect bearing the scientific name of *Phyllocnistis cunicularia* Nort. (fig. 33), a grass sawfly about the size of a common house fly, which occurs throughout the North-



ern States east of the Rocky Mountains. The eggs of this insect are inserted in rows along the edge of the blades of wheat, or more commonly in grasses, and the larvae hatching from these feed on the leaves

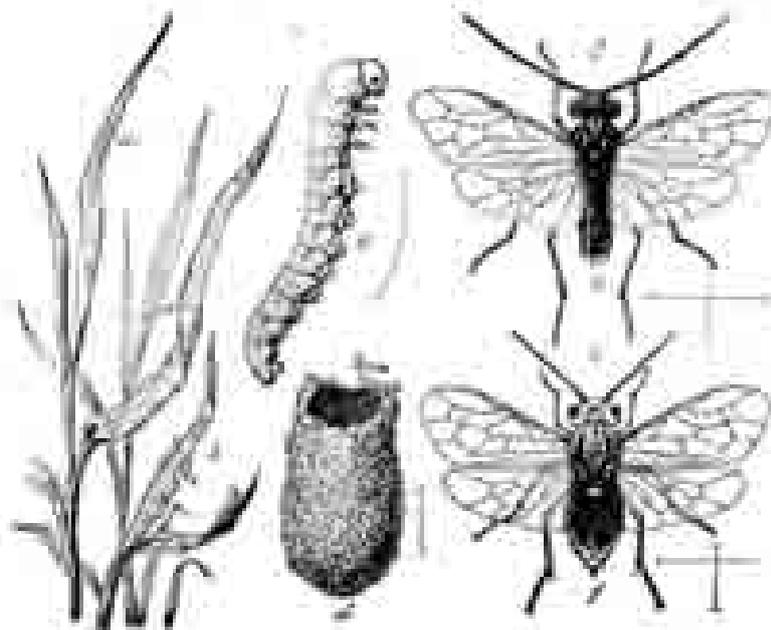


Fig. 33.—Grass sawfly (*Phyllocnistis cunicularia*): a, eggs in row attached to blade of grass; b, young larvae; c, full grown larva; d, pupa from which adult has formed; e, male; f, female; and g, female seen from ventral aspect of abdomen.

more or less gregariously while young. As they become full grown they separate and become practically solitary feeders, as in the case of the larvae of *Dolerus*. They may be distinguished from the latter,

The drawings are from an American book but this species occurs in the UK.

The species feeds on various grasses which includes rushes and sedges.

Finally a Common Frog in our in-stream pond.



REPORT FOR WEDNESDAY 25TH JUNE 2014

ATTENDEES: Simon Braidman, John Bugler, John Winter and Neville Day.

Weather warm and sunny

TASK 1. To continue to open up the canopy and clear Holly in clearing west of New Heath.

TASK 2. To determine the positions of the posts for the Heritage Lottery Nature Trail.

We split into 2 teams. John Winter and John Bugler did task 1 and Neville and myself did Task 2.

TASK 1

We have been working now since April 30th on opening up the woodland in glades west of New Heath. Already light pours into some areas. The 2 John's moved slightly further south and continued to clear this area. They removed Holly which was shading the area.



before



After

We intend to continue the work to join up clearings but to still keep them relatively small. Open to sunlight but surrounded by trees will allow bats and invertebrates to thrive.

TASK 2.

Neville and myself started at the car park and decided where we wanted the first post of the trail to go. We then started to follow the first of 2 routes. There is going to be a long route and a short route. We walked the long route which starts at Jake's Path. What we are trying to do is to find points on the route which illustrate places of interest. We have certain aims:

1. The interest must be all year around
2. The points must cover not only plants but animals and views and features
3. The points must also help get one around without getting lost and be unambiguous.

It was a fascinating exercise and it makes one think about the reserve in a different way.

We noted the animals and birds we saw. It can be argued that such information is not usable as how can one guarantee seeing something that moves at a particular point? However it is the possibility of seeing it that matters.

It would be good to repeat the same exercise in winter.

We did not quite complete the long route which follows Jakes Path.

We will finish this off next time.

REPORT FOR WORK PARTY SUNDAY 6TH JULY 2014

ATTENDEES : Simon Braidman, John Winter and David Green.

TASK: To go over the nature trail and the notes associated with it.

10.30am to 2.30pm

Weather Sunny and hot.

John brought his hand made terrapin trap to catch the terrapin on Great Brewer's Pond.

Terrapins are a threat to other wildlife particularly baby waterfowl and animals get too big and expensive for their owners and they are released into the wild.

The trap needs to be tested so it can float correctly.

The idea is that the terrapin likes to sunbathe and climbs up the wooden bridge but they like to exit sideways and drop into the gaps either side.



Once caught a charity has offered to rehome the terrapin. Unfortunately they are inundated with terrapins at the moment and we are awaiting an opportunity to use the trap.

THE NATURE TRAIL

Part of the Heritage Lottery Fund (HLF) project is to have a nature trail for people to follow.

This a: helps people not to get lost

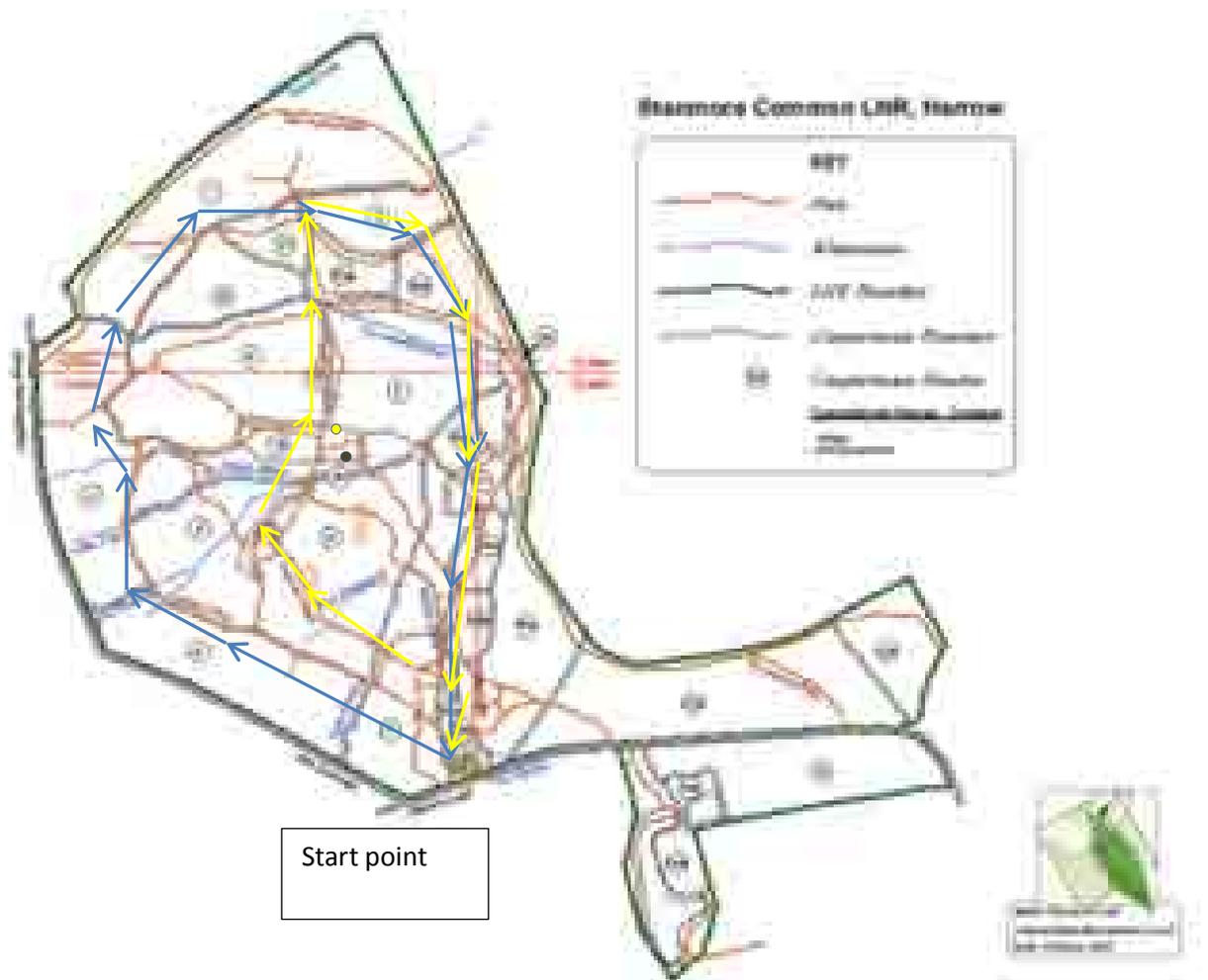
b: Adds site value and it may get more visitors

c: It may encourage people to report what they see

d: Keeps people to defined routes.

The trail will consist of a number of posts about 80mm square. These will be placed in locations of note. This is notable wildlife areas and features. There will be 2 routes a short one and a long one.

The blue line is the long route and the yellow line is the short route.



We need help volunteers to walk the route who can advise us on whether the commentary is a good one.

WILDLIFE

We also saw this unknown caterpillar on a tree. I have not had time to look this one up so if anyone wants to have a go please do.



REPORT FOR WORK PARTY WEDNESDAY 9TH JULY 2014

ATTENDEES: Simon Braidman, John Winter and John Bugler.

10.30am to 2.45pm

Weather warm.

TASK : To clear a start point for the nature trail and to remove unsightly debris.

The start point for both nature trails is Warren Lane Car Park.

The Long trail goes down Jake's Path which starts from the north-west corner of the Car Park.

The first post is due to go in just to the left of the path and it is right next to a large Holly tree.

People have been using the tree as a dumping area for years.

We decided to remove as much of the tree as possible and to clear the rubbish out.



The above picture was the before shot



This is after.

Most of the Holly has been removed.

REPORT FOR WORK PARTY SUNDAY 20TH JULY 2014

ATTENDEES: Simon Braidman, Josh Kalms, Neville Day and David Green

10:30am to 3.30pm

Weather hot and sunny

TASKS

The pile of leaves left when the Holly at the corner of the car park was taken down was removed.

To sharpen the tools for the students taking part in the Bentley Priory Lottery Project. Bentley Priory Nature Reserve has won a £60,000 grant to restore its acid grassland habitat. Part of the Lottery Project objectives is to run a course on Nature Conservation for A level students. I was employed to deliver the course.

We sharpened billhooks and scythes and checked bowsaws and loppers.

We had had an email from a horserider over a fallen tree on the Horse Ride and we walked from one end to the other trying to locate the tree. We eventually found the fallen tree and we cut it up and removed the tree to the side of the path.

The Japanese Knotweed on the Horse Ride is showing signs of spreading. This species was controlled eight years ago and has since shown no signs of increasing. The plant does need treating with Glyphosate.

We had lunch at New Scrape in Bluebell Heath. We had a look at Heath Rush which is growing in a small group of plants in the far northern edge of the scrape.

This is very rare plant in London and so it's appearance in the new habitat is very pleasing.



HEATH RUSH *Juncus squarrosus*

HEATH RUSH *Juncus squarrosus*



REPORT FOR GUIDED WALK SATURDAY 2nd AUGUST 2014

ATTENDEES: Simon Braidman, Emmanuelle Braidman, Anita Harris, Molly Harris,

Weather sunny with one short sharp shower.

Turkey Oak was identified just beyond the car park.

We went along Jake's Path pointing out Holly and Sycamore. The Holly was interesting as it had lots of *Lyniphia triangularis* sheet spider webs.

We looked at the differences between Bracken and other ferns.

A big Aspen gave the chance to pick out the distinct diamond pattern in the bark and the straplike leaf stalks.

We looked at a number of tree dwelling spiders and the children used the pooters I gave them.

There were no Water Crickets in Holly Brook but there was young Eared Pond Snail and *Hydrobia* snails in the water and a Black Fly larvae.

The *Polytrichum* moss on the root plate was partly shrivelled up.

We found a *Lycoperdon* species puffball and the children had great fun puffing out the spores.

The adults were told how important fungi were to the regeneration of the forest and the importance of dead timber.

We found a number of Birch Shield Bugs *Elasmotecthus interstinctus* and their nymphs.



Elasmotethus interstinctus

We also saw the Plant bug *Notostira elongata*.





Polytrichum moss with capsules



Brown Hawker *Aeschna grandis*

We got to Cerrisland and a Brown Hawker Dragonfly *Aeschna grandis* was buzzing about. It flew into a Gorse bush and hung up there.

We collected a huge caterpillar which I think was a Meadow Brown Butterfly Caterpillar.

There was lots of Marsh Thistle and Wild Angelica in Cerrisland and people were taken back by the swollen leaf sheaths of the Angelica.

It was pointed out that the clearing is serverly overgrown and in need of some work.

Oakmead was fantastic and they loved the flowering Heather. We saw Roesel's Bush Cricket and the Median Wasp *Dolichovespula media*.



Dolichovespula media

Oakmead too is in need of work.

We walked down the Hawthorn Walk and pointed out the damaged Large Oak.

We had already been out for nearly 2 hours and the sky was looking ominous so we took the southern path across Bluebell Heath. We showed the in stream pond which is on need of a bit of work.

We covered a few Grasses Yorkshire Fog, Creeping Soft Grass, Cocks-Foot and Purple Moor Grass.



Yorkshire Fog *Holchus lanatus*



Creeping Soft Grass diagnostic Hairy Knees



Creeping Soft Grass *Holcus mollis*

We crossed Pynding Mersc which still has some water and then we got rained on as we climbed back towards Hollybrook Rise.

The Tormentil looked fantastic and Red Bartsia and Wood Sorrel were pointed out.

REPORT FOR WORK PARTY MONDAY 4TH AUGUST 2014

ATTENDEES: SIMON BRAIDMAN

10.30AM TO 2.30PM

WEATHER WARM SUNNY

Task: To spray Hollybrook Rise and Bluebell Heath

Introduction

Bracken is a native fern able to survive dryer environments than many ferns. It is a branched fern arising from buds on black tough horizontal runners lying up to 0.5m below ground. It emerges in April and is an extremely fast growing plant. It is host to 30 species of invertebrates which makes it quite an important species. Bracken also forms wind shelter and can hold a moist microclimate below the fronds. However it is poisonous both in the adult plant and the spores and it can form dense clumps growing to seven to eight foot tall. These clumps are so thick they are impenetrable and no light gets beneath them.

Stanmore Common has always had a large Bracken population as it grows in the thin acidic soils very well. Bracken has never spored on the reserve and always spreads by underground runners. Bracken control has always in the past been a once a year cut and then multiple cuts. Multiple cuts reduce the vigour of the Bracken. Bruising the bracken can also reduce vigour. For the last few years chemical control has been used.

The chemical control is the carbamate herbicide Asulam which is sold under the trade name Asulox. The mode of action is not well understood. The herbicide acts as an enzyme inhibitor acting on 7,8 dihydropteroate an enzyme essential to form the active form of Folic Acid (Vitamin B9). Folic Acid is vital for making the building

blocks (Nucleic acids) of DNA. The herbicide also interferes with microtubule formation. Microtubules act as scaffolding for cells and are used as transporters for chromosomes in cell division.

This herbicide can affect other fern species and also mosses.

It has low insect and mammalian toxicity and is safe to use in the environment. The only proviso is it is dangerous to aquatic life and so should not be directly sprayed on water bodies or near ditches.

Asulox was recently nearly withdrawn from legal use within the EU due to the costs of extra safety testing. Pressure from Grouse Moor managers has resulted in a Emergency Use Authorisation being granted to land managers. This lasts only for a year and will need to be re-applied for on a yearly basis until the extra safety data is gathered.

Spraying should be done on a dry day with little or no wind.

EQUIPMENT

12 LITRE HAVELOCK BACKPACK SPRAYER with grey Course Droplet size feed nozzle 2ml/sec

40 litre water reservoir on a metal transport trolley

Asulox herbicide in 25 litre containers.(180ml transferred to plastic bottle)

For Bracken 60mls of Asulox to 12 litres of water.

Adjuvant : a chemical designed to help Asulox dissolve in water add 1 part to 50 parts water

Measuring Cylinder

Measuring jug

Disposable protective paper suit with hood

Plastic gloves

Nitrile chemical resistant gloves

Respirator with Class A filters (organic gas/liquids)

Wellington boots

Water was obtained from Stanmore Cricket Club, permission was sought both the day before and confirmed on the day. There is an outside tap for horticultural use. The reservoir is easy to transport and it was wheeled down

the horse ride to Bluebell Heath and stored in heavy cover in Bramble in Parcel 10 in the south east corner of Bluebell Heath.

The rest of the equipment was transported with a wheelbarrow and stored in the same position.

The sprayer was checked out and tested using pure water. A leak was found due to cross-threading of the lance mounting which was corrected.

The water barrel reservoir came with a tap which was screwed into one of the two access caps on the barrel. However due to air bubbles the rate of water flow was low.

Water was collected by the measuring jug and added to the knapsack sprayer reservoir after removal of the reservoir cap.

After addition of about 5 litres of water. 60mls of Asulox and approximately 5mls of adjuvant were added by the measuring cylinder to the knapsack reservoir.

It is essential that the knapsack reservoir filter is kept in place in the knapsack reservoir entrance to prevent dirt particles from entering the knapsack reservoir. Due to the location dirt was picked up and the filter intercepted it.

Pure water was used to keep the measuring cylinder clean and the washings were added to the knapsack reservoir.

The reservoir was topped up with pure water and the reservoir cap screwed down tightly to produce the pressure

AREA SPRAYED

The whole of Hollybrook Rise was sprayed. Then I moved onto Bluebell Heath and sprayed parcel 10 and 11. I was then exhausted by the hot weather and the dense bracken stands.

REPORT FOR EXTRA WORK PARTY TUESDAY 5TH AUGUST 2014

ATTENDEES: SIMON BRAIDMAN

10.30AM TO 2PM

TASK : To carry on spraying Bluebell Heath

I sprayed all of Bluebell Heath except for the bare earth banks at the back of Parcel 6 and New Heath.

I ran out of water and had to stop.

I did not get a chance to re-spray so OAKmead never got sprayed and all areas were treated only once.

Next year all areas will be sprayed twice in July and August.

REPORT FOR WORK PARTY WEDNESDAY 6TH AUGUST 2014

ATTENDEES: Simon Braidman, John Bugler, Johnathon Freedman, Josh Kalms, Steve Bolsover, John Winter and David Green.

10.30am to 3pm

Weather sunny and warm.

TASKS

The first task was to fell a large Silver Birch that has blocked the Long Route of the Nature Trail.

Steve quickly felled the tree and the stump which visibly sat back on the root plate. Then the heavy end of the suspended trunk was taken off leaving a thoroughly but safe hung up end of the tree clear of the path.

We rolled the felled section out of the way having halved it.

We then moved back down the path to the path junction to Cerrisland.

The woodland west of the path north to Cerrisland is called Compartment 8 or The Mound. It's most distinctive feature is Fox Earth Mound an post medieval rabbit warren.

The woodland here is well structured with good ground cover. However it is a closed canopy and I decided to create a canopy opening.

A tall straight Oak was a suitable tree and this was felled and left to rot.

A nearby Yew was also taken down and chopped up and the arisings put under a Holly.

A few nearby young hollies were also removed.

The chainsaw was not working well and had trouble starting.

We moved down through Cerrisland and across Tykes Water in Oakmead and then north into the Hawthorn's Walk

Towards the northern end of the Hawthorn's Walk on the eastern side is an ancient Hawthorn tree which is surrounded by young Holly.

The chainsaw refused to start. However with all our volunteers we madce shirt work of the surrounding trees, bringing the Hawthorn into the open.

However the tree is still largely shaded especially to the south and south east. This will ensure the tree does not suffer from heat shock.

A nearby dark area was used to stack the cut material.

Finally we moved out and down towards the south west entrance to Bluebell Heath.

This is extreme north east edge of Enigma Wood and is marked by a stand of Willow adjacent to the Heathbourne Stream.

I decided to get a bit more light in and we felled 1 limb in 4 of each the Willow Coppice stands. This just gets a bit more light in.

The cut timber was added to the dead hedge adjacent to Furze Path.

John Winter, Steve Bolsover and myself stayed on to walk the Long and Short routes of the Nature Trail, to establish the actual positions of each post.



Before 1



Before 2



After 1



After 2



Honeysuckle strangling tree



A view across New Heath Compartment 21



A pair of *Melanostoma scalare* Hoverflies claspng Purple Moor Grass. We found whole groups of dead and dying *M. scalare* hoverflies. Notice the swollen and split abdominal plates. The white colour is a fungus called *Entomophthora muscae*. This fungus attacks different groups of flies including Houseflies. Some Hoverflies are more vulnerable than others. The

fungus spreads inside the body and invades the brain and the fly changes its behaviour. The fly flies to a tall plant and moves to the top, it straightens its hind legs and opens its wings. Once infected at this stage a disturbed fly will just go back to its original position where it dies. Spores called Conidia are forcibly ejected and are picked up by other flies. The fungus is sensitive to temperature and infections become rampant in cool damp conditions. The Hoverfly identification comes from the yellow spots on the abdominal plates and the yellow antennae and lack of swollen front tarsi.

REPORT FOR GUIDED WALK SATURDAY 9TH AUGUST 2014

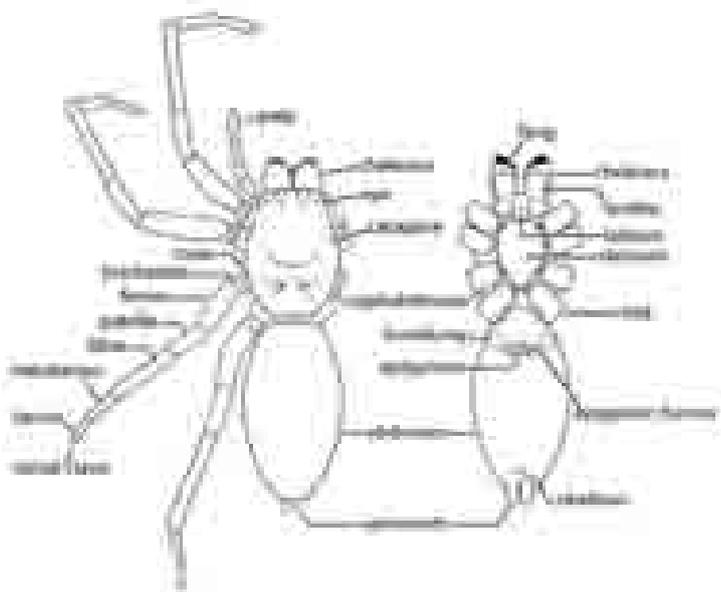
ATTENDEES: Simon Braidman, Emmanuelle Braidman, David Winton, Josh Kalms, Alan and Marianne Smith, Joanne Colthorp and Jeremy Worstley.

LED BY ED MILNER

WEATHER SUNNY AND WARM AFTER HEAVY OVERNIGHT RAIN

We started at the car park with an introduction to Spider identification. Ed has written a new key to identifying spiders to families.

Below is a diagram showing spider external anatomy.



IDENTIFICATION OF MALES IS BY PALP SHAPE. These are various view of the mature palp of a male *Amaurobius kopeneni* spider.

Females will be identified on the shape of the Epigyne the female genitalia.



Epigyne of mature female *Pityohyphantes costatus* a Money Spider

We started along Witling Ride and picked out Garden Cross Spider *Araneus diadematus*. We looked at Linyphia sheet webs. Ed told us the web shape helps to get spiders identified to families. He also having caught an Orb Web Spider called *Metallina segmentata* how the back legs of web spinning spiders drags. Many of the spiders were juveniles and hence almost impossible to identify. June is a better month for spider id



Metallina segmentata

The *Metallina* was at GPS reference 51.7.44.4N and 0.19.35.1 W.

We saw a lot of Harvestmen which are of the class Arachnida like Spiders but belong to a separate Order called the Opiliones. They lack the poison glands of spiders and they also lack silk glands. Their bodies are single segmented unlike spiders. There are 28 species.



This one was photographed on the footbridge over Pynding Mersc. This is *Mitopus morio* . This species is found in both woodland, grassland and garden habitats.

Another spider we found was a Tangle Web spider (Theridae) called *Enoplognatha ovata* which although a common species has not been recorded at the reserve before according to Ed Milner. I am trying to check for Chris Spilling's spider records.



Enoplognatha latimana

We found a few and one was with a green egg sac inside a rolled up leaf in Hollybrook Rise GPS 51.37.45.8N 0.19.33.7 W.

Also in the same clearing was a Flame Shoulder Moth *Ochropleura plecta*



Flame Shoulder Moth *Ochropleura plecta*

and lots of Grasshoppers and Roesels Bush Cricket..

Also in Hollybrook Rise was the Orb web Spider *Mangora acalypha*.



Mangora acalypha

This species lives in heathland and open woodland and spins it's web on Gorse and other low growing shrubs.

We moved into Bluebell Heath via Pynding Mersc. On the bridge and adjacent to it were Long Jawed Orb Web Spiders from the Genus *Tetragnatha*. Ed thought they were *T. montana*. *Tetragnatha* have very parallel sided elongated abdomens.



Underside of *Tetragnatha montana*



***Tetragonatha* species (possibly *T. montana*)** at Pynding Mersc.

Southern Hawker Dragonfly was patrolling over Pynding Mersc the last 3 blue basal abdominal segments show well as do the broad green antehumeral stripes on the thorax.



Southern Hawker Dragonfly *Aeschna cyanea*



Pachygnatha degeeri

In plot 10 in Bluebell Heath; a ground search revealed large numbers of the tiny Large Jawed Orb Web Spider *Pachygnatha degeeri*.

This is a very common spider of dry grassland.

We also found lots of evidence of Field Vole with loads of droppings in the grassland.

We saw the sheet web of a Tegerania House Spider and the funnel web of *Agelena labyrinthica*. Ed has not recorded this species.



Funnel web of *Agelena labyrinthica*

We walked onto New Scrape. Ed was keen to find Jumping spiders which we did not find. We did catch some Mouse Spiders Clubonia species. These spiders have few distinctive markings but their abdomens are covered with a mat of fine hairs.



Clubonia terristris

but they were juveniles. Ed says to get more large stones and logs to increase habitat for spiders.

Some Money Spiders Linyphiidae were caught under stones and taken for identification.

Ed was sent a Raft Spider Dolomedes fimbriatus from Scotland through the post. He showed the animal to us. It was fantastic. They are very uncommon. It's cousin Dolomedes plantarius is the extremely rare one.



Dolomedes fimbriatus

He did not know what to do with the animal and in the end we released it into Pynding Mersc. Claire Abbot thinks this species is present in Stanmore. I have seen similar things. There is a Wolf Spider called *Pirata piratius*. It too likes to run across the water surface.



***Pirata* genus spider**

which looks similar and also runs about on the water surface but Ed says it is quite different. The white lines down the side of cephalothorax on *Dolomedes* extends either up to or onto the face which it never does on *Pirata*. Also the white stripes down the side of the abdomen on *Dolomedes* are far brighter and clearer and more complete.

So I am now on the hunt for similar looking spiders. My students and I saw a spider on Bentley Priory top pond on the pond surface.

We caught a few adult Wolf Spiders on New Scrape. These do not make webs for catching food and ED identified them as *Pardosa pallustris* on New Scrape this is a colonising species of bare ground.



Pardosa palustris

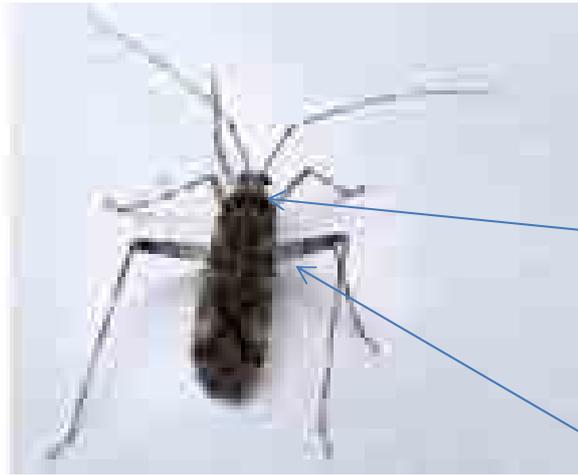
We also found a Knot Grass Moth Caterpillar on young Birch.



OTHER ANIMALS

We caught a few other things whilst sweepnetting one was a hemipteran insect. The Hemipterans are an Order of insects. All Hemipterans have sucking mouthparts. They have 2 pairs of wings but one pair has a hardened protective upper portion. The wings at rest are held flat over the body which is often flattened on its upper surface (dorso-ventrally flattened). They have an exposed triangular portion of the thorax just behind the head exposed (Scutellum) and the antennae have 4-5 segments.





Pronotum

Hind
femur

On the left is the picture of the insect Alan took on the walk. On the right is what I am pretty certain is the same insect species. The insect is the Plant Bug ***Phytocoris longipennis***. This is a common member of the Plant Bug Family (Miridae). It was well camouflaged and is a predator on small insects and mites. It lives on deciduous trees. There are 9 UK members of the Genus *Phytocoris* and ***P. longipennis*** is determined from the similar ***Phytocoris tilae*** by the lack of well defined black marking along the sides of the pronotum (There is black marking along the base of the pronotum). Also the white bands on the tibia on the midlegs is as long or longer as the dark bands whilst in *Phytocoris tilae* the black bands are wider than the white bands. All 9 *Phytocoris* species have a very long 1st antennal segment and a very large femur on the hind leg.

REPORT FOR WORK PARTY SUNDAY 31ST AUGUST

ATTENDEES: Simon Braidman, Steve Bolsover, John Hollingdale, Neville Day, and Josh Kalms.

10.30am to 3,30pm

Weather; Sunny, warm and calm 22 degrees centigrade

TASKS:

1. Tools maintenance. As we use the hand tools a lot and we have winter works coming up and the teenagers of the Challenge. It is a good opportunity to get tools in good condition.

We used a lubrication oil (engine oil) on the loppers to free them up. We could have done with a spanner to tighten up a few bolts.

We also sharpened all the scythes and the axe with cigar stones and water.

2. DR TRIMMER TEST

John Hollingdale brought the DR TRIMMER bought from Taylors a few weeks before. This machine is a powerful strimmer which is choke driven. It had been tried out by John Hollingdale in his garden and worked Ok but it kept grounding.

A better trail would be the harsh terrain of Stanmore Common. We tried it out in Hollybrook Rise and in Witling Glade on Bramble which it cut OK on Bracken stands and it at first failed to cut them properly. A few adjustments and it was applying full power but it cut too finely.

We took it to Bluebell Heath and tried it there. The machine was quite temperamental and cut out at least once but that may have been inexperience. However it would not take scrub and it was obvious it would struggle in the very dense bracken and with all the tree stumps in the clearing they could easily damage the machine or it will fall over.

On consideration we could cut it better with a brushcutter or better still by scythe as the cuttings are larger and hence easier to remove.

It was agreed that the machine was not good enough for the job and Steve will try to return the machine to Taylors and get the money back.

3 .HAND CLEARANCE OF BRACKEN .

We started hand clearance of bracken by scythe and we really got stuck in and we cleared an area about 30meters east to west and 20 meters north to south. All the arisings were raked up and added to an existing timber arsing pile downslope and on the southern edge of Bluebell Heath in Parcel 9. The eastern end of the pile may need moving as it is close to the flush line.

Work will continue on Hollybrook Rise and Witling Glade to remove the remaining DR TRIMMER trimmings and then to move the arising pile east end and to continue the work in Bluebell Heath.

WILDLIFE

We saw Hobby and we also had a Buff Tip Moth caterpillar. I collected 2 spiders from Bluebell Heath. Brown Lipped Snail was also present.

One spider was *Zora spinimana*. The other was not identified.

REPORT FOR WORK PARTY WEDNESDAY 3RD SEPTEMBER 2014

10.30AM TO 3,30PM

ATTENDEES: Simon Braidman, Josh kalms, John Winter, John Bugler, Johnathon Freedman.

Weather Sunny and warm 22 degrees centigrade.

TASK

To clear up the mess left by flytipping beside Common Road

To Clear up the cuttings left in Witling Glade and Hollybrook Rise left by the trials of the DR Trimmer.

To carry on cutting the scrub: Bracken , Bramble , Saplings in Bluebell Heath.

WILDLIFE SEEN Brown Lipped Snail and Discus rotundus (Common Road)

Hobby 2 over Bluebell Heath calling to each other. Sparrowhawk attacked by Crow over Bluebell Heath and a Buzzard.

2 Toads , Buff Tip Moth Caterpillar and White Admiral Butterfly(John Winter)
Volucella pellucens and Tachina fera . Bluebell heath.



The path is narrow in Bluebell Heath this is looking east on the south path the thick young willow scrub is in the background. Before clearance John views the job in hand.



After clearance



Cleared ground in the south east corner of Bluebell Heath Parcel 9 looking east.



Comma Butterfly (*Polygonia c-album*) on Devil's Bit Scabious(*Succisia pratensis*)





Cynipid wasp galls on underside of Oak

We cleared across Parcel 10 and into Parcel 9 in Bluebell Heath east
Compartment 20b.



The gang line up

REPORT FOR GUIDED WALK THURSDAY 4TH SEPTEMBER 2014

7.30PM-10.15pm 14 PEOPLE TURNED UP INCLUDING JOHN HOLLINGDALE AND MARGARET HUITSON, I DID NOT BUT SHOULD HAVE TAKEN DETAILS. A young boy Reese and his mum and Wendy Knight. Also members of St. Albans U3A including Neil Hutchinson. Josh Kalms and David Winton.

We had intended to go to Pynding Mersc and do some night fishing to find newts and then to head for the Brewer's Ponds for bats.

We started out on Jakes Path and we did not get very far. We quickly found lots of spiders including *Linphya triangularis* and *Meta segmentata*. The bat detectors started sounding almost immediately and we got very clear views of what Wendy confirmed as Common Pipistrelle bat.

Wendy analysed all the calls and all were Common Pipistrelles.

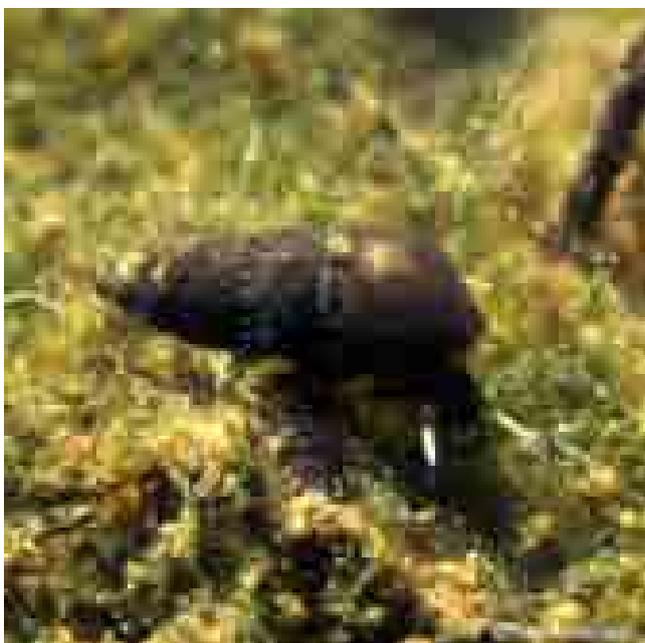
We saw Water Cricket in the Holly Brook



WATER CRICKET *Veiia caprai*

This is a member of the bug family and it is related to Pond Skaters. The legs are bent in Water Crickets but they are also predators and they can fly.

We also saw tiny pond snails of the genus *Hydrobia*



We did get over the ist bridge and tried to push on. There were lots of slugs



such as this *Arion ater*.

Some were on the ground and some on the trees. We saw Meadow Spiders *Pisuara mirabilis*.

We also heard Twany Owls calling more than one of them which was very exciting.

We found deer droppings and slots.

We did get around the reserve after a very slow start.

REPORT FOR GUIDED WALK SATURDAY 6TH SEPTEMBER 2014

ATTENDEES: simon Braidman, David Winton, Julian and Katherine Grant, Peter Elion, Rosemary Etheridge.

It was thought that we would not see very much due to the dry conditions however we were quite successful and we found the following species:

Oak Mazegill *Daedalea quercina*

Common Grey Disco *Mollisia cinerea*

Birch Polypore *Piptoporus betulinus*

Turkeytail *Trametes versicolor*

Unidentified *Mycena* sp

Buttercap *Collybia butaracea*

Amythyst Deceiver *Laccaria amythystea*

Sulphur Tuft *Hypholoma fasciculare*

Peeling Oysterling *Crepidotus mollis*

Horse Hoof Fungus *Fomes fomentarius*

Bay Bolete *Boletus badius*

Oak Milk Cap *Lactarius quietus*

Common Yellow Brittlegill *Russula ochroleuca*

Common Purple Russula *Russula atropurpurea*

Blackening Waxcap *Hygrocybe conica*

Common Earthball *Scleroderma citrina*

There were a few that could not be identified.

We also saw the moss *Hypnum cupressiforme*, *Brachythecium (rutabile?)*

We also saw this colourful bug



Corizus hyoscyami.

REPORT FOR SURVEY DEVELOPMENT VISITS

Thursday 11th September, Wednesday 24th September and Friday 26th September 2014

11th September 4 hours/ 24th September 4 hours and 27th September 6 hours

A new compartment survey is being developed for the management plan for Stanmore Common. This is because the last comprehensive survey of the reserve was in 2010, conducted by John Dobson. This was a botanical survey.

There is a need for the reserve to be re-surveyed especially in the light of the new management plans (both the comprehensive plan being developed by John Dobson and the short version being written by Steve Bolsover and Simon Braidman).

The new survey is to look at compartment condition. It must not be just a botanical survey and needs to cover other groups as well.

This survey is a work in progress and so repeated visits are being made to the same compartment. Compartment 1 – Silver Aspen Pines is the compartment.

The work has found interesting new features in the compartment. Problems have been, determining compartment boundaries and having a version of the survey sheet that does the job.

BOTANY AND ANCIENT TREES

The botany will include old trees and their successors. The trees will be located and identified and their girth measured. Woodland structure in terms of canopy, understorey and groundcover will be described and in 3 places a tree survey undertaken from a known point to give figures. Light levels will be measured.

INVERTEBRATE

The survey sheet will have an invertebrate habitat assessment section. Also invertebrates will be actively collected by sweep net and passively collected by pitfall trap. A pitfall trap has been installed in Compartment 1.

BIRDS/MAMMALS/AMPHIBIANS/REPTILES

Any sightings of the above groups will be recorded. There is a key short list of bird species. Any of these species will be recorded. Mammal trapping will also take place in management compartments.

The photographic survey was completed on the morning of the 26th as re-takes of photoposition 16 were taken and photopoint 14 was taken.

WILDLIFE

A Grass Snake yearling was seen on the Photosurvey it went into a arisings pile in Parcel 11 (Flushing Glade)



The Arising pile the arrow shows the snakes point of entry. The pile is located on the western edge of the glade.

A final section will list work that can be done in the compartment.

OTHER ISSUES

One property off the Horse-Ride is dumping material onto the Common. They have also installed rather a grand gate.



Rubbish on the Common from the House



An image from the Photosurvey in Parcel 11 now called Flushing Glade



Sap runs are very important for wildlife. Many rare insects are associated with sap runs. On the day I discovered the sap run 11th September the run was actively dripping very sweet sap and was visited by lots of insects including a Dryomizid Fly by the 26th the run was almost dry and not sweet. Sap runs are a symptom of the bacterial disease sudden Oak death.

Penduculate Oak Sap run in compartment 1 Silver Aspen pines –



**Creeping Jenny (*Lysimachia nummularia*) on the Horse Ride
Compartment 1**

Also on the Horse Ride was Thyme Leaved Speedwell. (*Veronica serpyllifolia*). I first saw it and identified on the 11th September and I keyed it out on the 26th.

A kestrel was seen off New Heath on Saturday 27th September.

John showed me the only known colony of Wild Privet (*Ligustrum vulgare*). We found another colony but it could be Lesser Perewinkle. This plan needs confirmation.



Ancient and huge Sessile Oak Tree 4.6m girth newly discovered in Compartment 1

REPORT FOR WORK PARTY WEDNESDAY 17TH SEPTEMBER 2014

ATTENDEES: Simon Braidman, Sue Kabel, John Winter and Nathan Day

10.30am to 3.30pm

WEATHER Warm 18 degrees cloudy, dry

TASK A continuation of the cutting of Bluebell Heath.

The attention has now shifted to parcel 8b and 8a, either side of the southern path. This area has scrubbed up really badly. Cutting 8b from the eastern end going westwards. Bracken, Bramble and young Grey/Goat Willow, Pedunculate Oak, Silver Birch and Aspen were removed. Some was cut by scythe using the normal curved scythe, some using loppers. A mattock was used to remove root stock were possible. Many little treelets had formidable roots many times thicker than the above ground stems.

The arisings were removed to the existing arising pile in the southeast corner just off and downslope of the clearing. An additional pile was started but due to concerns that it might be close to the Lilly of the Valley clump it was moved to the main pile.

Work needs to continue in this clearing.



John and Neville clearing scrub, the southern path runs into the picture centre and one can see the extent of the years growth on the northern (right foreground) uncut side.



Cleared area to south of path. This is not a complete removal as can be seen small standing vegetation clumps are kept. This was thick impenetrable scrub.

OTHER ISSUES

Sue and myself went to Compartment 1 Sylver Aspen Pines looking for a plant called Sanicle but I failed to refind it. Sue is practising on her botany skills. We did find Wild Angelica and a Bittercress species. Bittercress is hard to identify one counts the stamens in the flower or look for the basal rosette of leaves in Wavy Bittercress (not always there).

I am developing a new survey sheet for surveying management compartments and I am sopping a lot of time on the Common.

An athletics club wants to use the Common for a tournament run in 2015. I will need to talk to them to ensure the Common is protected and what can they contribute to the Common.

The residents of the Grove estate are concerned about light blocking from trees on the Common overhanging over their gardens. This will have to be investigated. However it sounds like this is a job for their maintenance company.

Wildlife

We saw Buzzards and heard Great Spotted Woodpecker and a Muncjac crashed through a bracken patch in Sylver Aspen Pines. Speckled Wood Butterflies were flying and there were 7 spot ladybirds in parcel 8b. We photographed a caterpillar and I took home a male spider which is a Ghost spider. The species is Zora spinimana.

There are 4 UK Zora species but *Z. spinimana* is the largest and commonest of them.



Cephalothorax of *Z. spinimana* showing eye arrangement characteristic of the genus *Zora*. The black lines are very clear on male *Zora* spiders.

The diagnostics for species is the size. This male was 5mm which is too large for the other 3 *Zora* species. As the specimen was alive I found it too difficult to get a view of the male palps but it did show the dense grey/black hair pads on the underside of the Coxa 4 which is characteristic of *Z. spinimana*.

The other UK *Zora* species are: *Z. armillata* (rare and only found in wet marshy areas), *Z. nemouralis* only up to 4mm in the male and *Z. silvestris* also quite uncommon and associated with Heather stands.

PHOTOSURVEY VISIT DATES

REPORT FOR EXTRA WORK PARTY FRIDAY 19TH SEPTEMBER 2014

ATTENDEES: Simon Braidman and John Winter

Weather dry and cloudy

10.30am to 2pm

John and I carried out the 2014 Bluebell Heath photographic survey. We had a few problems working out our position. At the time it was not felt worth taking pictures in Parcel 11. Photographs were taken later on Saturday 20th September of Parcel 11. Except for Photopoint 14.

Saturday 20th September 2014 Simon only 9am to 11am

Sunday 26th September 2014 simon only 9am to 10.15am

REPORT FOR WORK PARTY SUNDAY 28TH SEPTEMBER 2014

11am to 3.15pm

Weather pleasant

ATTENDEES: Simon Braidman, Neville Day, John Winter, Steve Bolsover, David Green, Inga Becker-Hansen and 60 teenagers plus leaders from the Challenge.

INTRODUCTION

For the last 3 years, the Harrow Nature Conservation Forum has been working with a group called "The Challenge". This is a registered charity whose aims are to create a more cohesive society where people from different backgrounds work together. They work with young people. It is a national organisation and has government backing. As part of The Challenge 60 teenagers from all over Harrow with a few from other sources took part in a series of events over 3 weeks during the summer. This culminated with a day's work party at Stanmore Common.

They were divided into 4 groups which was too many per group.

They were working in and around Compartments 20b and 20c(new designation) , 21 and 23. This translates to Bluebell Heath East, New Scrape, New Heath and The Aspens.

We used most of our tools. We bought 8 new loppers and loads of gloves with the sum of money that comes from The Challenge to support the event. Despite this there were still not enough tools.

The tools list at present is in appendix 1 to this report.

THE TASKS

Bluebell Heath is scrubbing up fast. Scrub regrowth is particularly bad around the edges of reduced woodland blocks. There is an urgent need to reduce scrub. A complication is that these are teenagers with no experience most may have never been to a nature reserve/woodland. Due to the Devil's Bit Scabious growing in the south central area of the clearing, it was decided to get a group to clear light scrub by loppers from east to west concentrating in the south east section around the southern path. There is also an urgent need to control young tree saplings in the bulldozed areas: New Heath and New Scrape. A

group was sent to clear each open area. Finally there is also a need to continue to open up the woodland lying to the west of Bluebell Heath. This area is called The Aspens and a lot of work has been done there this year.

Pulling treelets is a thankless task and my group wanted to do something else and so they started thinning the scrub block Rt06 in Habitat Parcel 5 on Bluebell Heath which lies immediately south of New Scrape. Emma the leader and a few others cleared young sapling growth in Habitat Parcel 7 just to the east.

The arisings were rather clumsily put onto the extreme south east tip of the bare earth bank and this will need re-locating.

Some people were clearing scrub in Parcel 7 in its south east corner and others were clearing scrub in Parcel 3.

Everyone seemed to enjoy themselves and quite a lot of work was done. There is a need to move some of the arising material.



Knot Grass Moth Caterpillar



Attacking scrub in Rt06



Pulling saplings in New Scrape



Relieving compression pressure on Goat Willow as it is being cut



Meeting Silas and his owner



Cleared area around south path



Neville and his gang with an arising pile



Always time for a chat



Clearing Willow scrub in compartment 3



A toad in the hand ...



Another view of the Toad



In Compartment 23 The Aspens



John's group in the Aspens



Group Edward

A big thanks to The Challenge and the great work they did. Thanks to all the group leaders.

REPORT FOR WORK PARTY WEDNESDAY 1ST OCTOBER 2014

ATTENDEES: Simon Braidman, Neville Day, John Bugler and John Winter

Weather 19 degrees centigrade warm and dry couldly sunny intervals

10.30 am to 2.45pm

TASK : To clear up after the Sunday work party, and to start controlling treelets and light scrub in the western half of Bluebell Heath.

Tools used Mattock, Bowsaw and Billhook.

The Sunday work party from the challenge was a great success, but cut material was left lying around on the grassland or on arising piles which had crept too close to the grassland.

We started on clearing arisings in parcel 9 in the north east of Bluebell Heath but there was very little there. The existing arising pile on the eastern boundary had crept towards the grassland. So the new cuttings were moved 7m eastwards into the woodland, a few small trees were felled to improve access. The new site is shady woodland edge. A lot of the material was old and colonised with invertebrates., so the original woody material was left.

We moved to New Scrape now called Compartment 20c and moved the arisings on the far south east of the bare earth bank. Here some Bluebells grow. The material was moved behind the bank into an existing large arisings pile, Some small trees were removed to improve access. Neville was in charge of the big pile of arisings behind the bare earth bank and we fed material to him.

I was clearing Bramble from the bare earth bank itself. This is one of the management objectives of the new management plan for Stanmore Common. I was also pulling treelets out of New Scrape in the right angled corner which gives access to the arisings pile. This is ripping up the soil, decompressing it,, making the soil less likely to be used by solitary bees and wasps but disturbance creates new opportunities by altering topography, removing top soil and, decompressing embedded stones, giving opportunities for invertebrates to live under the stones. Putting new stones and logs or decompressing them is another management objective.

John Winter and John Bugler were clearing cut timber of Rt -06 (Retention Block 06). The timber was moved to Neville's pile.

After lunch Neville was using the mattock to try to get the treelets out of Parcel 6 at it's near tail end.

When Rt06 was cleared, three of us moved to the west end of Bluebell Haath to parcel 3 Here fresh cut material had been piled on existing neat wood piles. The cut material was either put onto an existing pile in the hollow where the Scots Pine trees were or were dragged north into the woodland behind New Heath – Silver Aspen Pines; Compartment 1 and scattered in shade.

Once the log piles had been cleared of new arisings, they looked so much better. Three of us moved into the Aspens; Compartment 23 and we checked the work done by The Challenge. They had cleared a lot of Holly but there were loads more. There were too many arising piles and they need consolidation.

By now we were all tired and we finished early.

WILDLIFE

We saw and heard Buzzard which is quite common, there were quite a few 7 Spot Ladybirds about. The most significant thing is the northward spread of Wood Small-Reed, *Calamagrostis epigejos* This plant was concentrated at the boundary of Parcels 7 and 5 in the mid upper section of Bluebell Heath but it has now spread in a thin line to meet the northern path. There was also a lovely clump of Heath Grass *Danthonia decumbens* in New Heath.

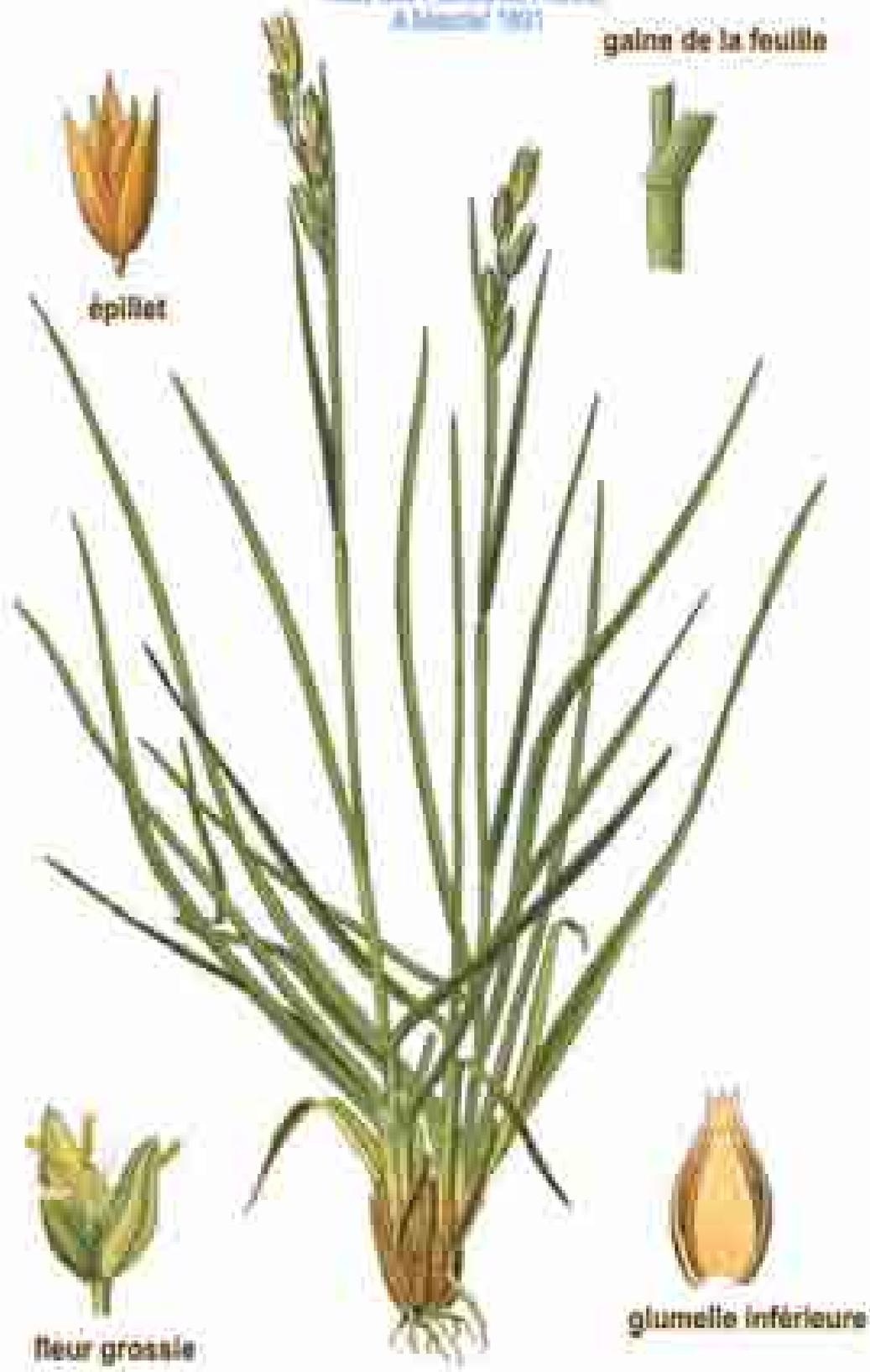
OTHER NEWS

The very low water level of Great Brewers Pond is allowing John Winter to clear out the rubbish. A tyre is proving a problem. A strong grapple hook and a rope is required. The bottom of Great Brewer's Pond is mostly gravel except at the northern end. Some strange jelly shapes have been seen hanging down from debris. John is going to check this up. People are removing Crayfish – brilliant and there are quite a few Terrapins.

A lady called Katherine who lives on the Grove Estate has been complaining about loss of light due to tree growth on Stanmore Common. I have investigated by a visit to Samuel Close and a look at the site plans when the estate was developed and the trees are not on Stanmore Common but on the grounds of the Grove Estate. The worst culprits are Yew secondary woodland of low value. As the trees are on private land we cannot do anything ourselves in terms of control. I intend to check the trees further and if I am satisfied they are of low value, I would write a letter of support to the Management Company who manage the grounds of the estate.



The tussock forming invasive native grass Wood small –Reed *Calamagrostis epigejos*



Pl. 382. *Danthonia inclinée*. *Danthonia decumbens* DC.

REPORT FOR WORK PARTY MONDAY 6th OCTOBER 2014

ATTENDEES: Simon Braidman, Jack Newman(Leader TCV), Archie Lenson, Graham Eagling and Tony O' Dea (all TCV)

10am to 4pm

Weather Rain constant at times very heavy rain stopped 3pm

TASK : To continue clearance of scrub on Bluebell Heath.

INTRODUCTION

Mechanical cutting has stopped on Bluebell Heath for a number of years. This is because of the lack of cutting control, the inability to change the cutting height, and the many tree stumps which are hidden in the grassland.

To replace the mechanical cut manual cutting is required which is a huge effort. The advantage is the ability to produce a more structured result.

There have been manual cutting on Bluebell Heath through the winter works of 2013/ 2014 across the top of Bluebell Heath (The linear stretch of Parcel 6), Parcel 4 – the orchid field(April 2014) and Parcel 5 and Parcel 10(March 2014). Clearance work started again in August. There have been 3 work parties so far concentrating on the bulk of Bluebell Heath and work is intended to continue to bring the clearing back to a more open state.

Clearance means the cutting or digging up of young trees, the removal/drastring thinning of bramble and the removal of bracken. Some scrub will be left. There will also be removal of some tussocks of Purple Moor Grass (*Molinia caerulea*) and perhaps a few of Wood Small Reed (*Calamagrostis epigejos*).

This is an extra work party. The work force comes from the TCV (The Conservation Volunteers). The TCV are a national charity supplying volunteer labour and they also do training courses. The London branch of the TCV has a North London Biodiversity Action Team. They have a new leader called Jack Newman and he brought 3 other volunteers by minibus to the Common.

The number brought was very disappointing. He thought there would be more but 3 people cancelled. The weather was very poor and this must have been a factor.

The lack of numbers has been the reason that I have stopped using TCV. The cost of a TCV visit is not far off £400 a visit.

However we all got stuck in. What was nice is that some of them have been to the Common before.

We were working in the south east corner of Bluebell Heath, in parcel 8a close to the large Sycamore Tree. There was masses of dead leaves and I concentrated on raking these up.



Sycamore leaves

These leaves will smother the ground cover. I hard raked to disturb the surface soil layer.



Parcel 8a Bluebell Heath looking north.

One can see the huge leaf litter problem and the large amounts of scrub. In the foreground is Bramble which left unchecked will smother grassland.



This is Archie one of the TCV guys



A poor shot with my new camera very many blurry pictures. Plus the date is wrong

The chief problems was the difficulty of digging out the scrub. I was pleased with what they had done.



A cleared area Parcel 8a.

Note the removal of scrub in the foreground and the raking off of cut material.



Another view of a cleared area.

Because of the lack of numbers we will have them back hopefully for free.

REPORT FOR WORK PARTY SUNDAY 12TH OCTOBER 2014

ATTENDEES: Simon Braidman and David Green

10.30 am to 3.30pm

Weather cloudy and dry, temp

TASK : To remove tree saplings and restore bare earth bank habitat on New Scrape – Habitat Parcel 6/ Compartment 20c

Further Task – To record what is growing by quadrat analysis

INTRODUCTION

New Scrape was once part of Flushing Wood; an area of secondary woodland with an acidic soil. As part of the Lottery funded Bluebell Heath Restoration Project this area of woodland was felled in the winter of 2012 and the topsoil removed by a bulldozer on the 31.1.2013.

The topsoil was shunted into south facing bare earth banks. This type of habitat suits soil nesting/sun basking invertebrates and reptiles.

The area has been sown with Common Heather in November 2013 (*Calluna vulgaris*) taken from existing Heather stands on New Heath (Habitat Parcels 1 and 2/ Compartment 21).

Since the bulldozing there has been substantial regeneration of plants of all kinds.

Some are desirable plants of acid grassland such as Common Bent Grass (*Agrostis capillaris*) and Brown Bent Grass (*Agrostis vinealis*). Others are typical acid soil plants but are invasive such as Bracken (*Pteridium aquilinum*) and Purple Moor Grass (*Molinia caerulea*).

The real invaders are trees. Windblown seeds of Willows and particularly Birches.

We worked in the easternmost section where the bare earth bank curves southward.

David cleared the bare earth bank and I cleared the treelets in the scrape. Arisings were piled onto the Countryman wheelbarrow (probably the best buy we ever made). The arisings were transported beyond the bare earth bank to an existing pile formed by the tongue of land projecting southward between

the bare earth bank and the dead hedge (piled linear branches and timbers) that line the northern edge of Bluebell Heath.

The bare earth banks were covered in bramble on the eastern zone and they had smothered whole sections of bank. They could be levered out and the disturbed ground re-compacted.

We cleared 10 metres of bank, revealing lots of Sedges beneath.



Exposed sedges on bare earth bank

Whilst working in the area we made 2 discoveries. One was a prostrate creeping member of the Rose family, growing on the scrape. It had flowered but was now in seed. All the leaflets were in fives which suggests that the plant is Creeping Cinquefoil (*Potentilla reptans*). The other possibility is Trailing Tormentil (*Potentilla anglica*). Identification is very difficult, the species freely hybridise. Hybridisation is shown by variation in the numbers of leaflets and petals on the same plant. This specimen showed no leaflet variation. The flowers did not show withering or swelling indicating that cross fertilisation had not occurred. Creeping Cinquefoil cannot self-pollinate and this is another indication that this is not Trailing Tormentil nor a hybrid.

The other discovery was another plant of Heath Rush (*Juncus squarrosus*). There is known to be a separate location in the same scrape with an estimated 32 plants.

The grid reference for the new plant is TQ15865 94141.



Heath Rush

The deeply channelled leaves and the only slight projection of the tepals above the seed are characteristics of this species. Heath Rush is in decline in lowland England and is known from only 1 other site in London.

After lunch we moved to the main Heath Rush colony and we cleared the bare earth bank to protect the young plants. Bracken dominates the bare earth banks here and the plants sprawl out from the bank.

Another substantial stretch of bank was cleared.



A cleared stretch of bank

In all another 8m stretch was cleared. More work needs to be done on the banks but we have exceeded our target of 2 metres by a large margin.

The Heath Rush were now better protected from Bracken sprawl. Tree seedlings were weeded out closeby.

I attempted to translocate roots of Heath Grass *Danthonia decumbens* from New Heath to New Scrape. I went to the location where the grass grows and checked carefully. I selected a healthy young plant and with a mattock separated part of the root stock. I moved the soil with the root stock to a location on New Scrape not far from the Heath Rush at TQ 15817 94184.

Finally I decided to record the regeneration of New Scrape. I had brought along a quadrat frame and carried out 3 complete analysis.

QUADRAT RESULTS

Arrows = direction of slope and lines = ridges North = straight up

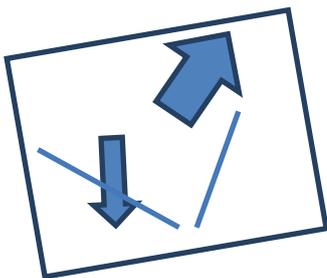
1 TQ 15858 94148

% Tree seedlings 0.25%

% Moss unknown species (sample taken) 55%

Bare soil 45.75%

Topography slopes to south slightly and North east greatly forms a V shaped ridge.



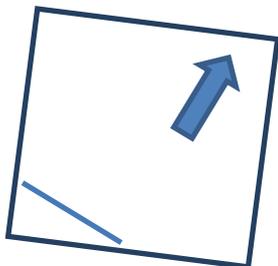
2. TQ15857 94155

%Grass (too young to identify) 0.10%

% Moss (same species as above) 8%

% Bare soil 91.9%

Topography slight slope to the north east with a ridge



3. TQ 15832 94167

%Silver Birch Seedlings 0.2%

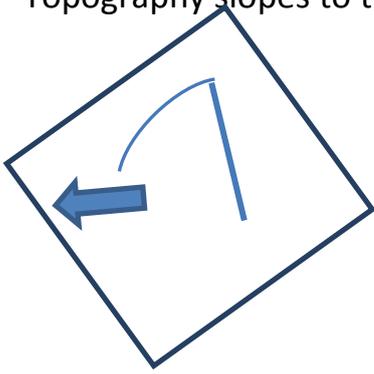
% Yorkshire Fog 0.5%

% Purple Moor Grass 0.5%

% Moss (same species) 1%

% Bare Ground 97.8%

Topography slopes to the west



FURTHER WORK

There is a need to continue to grub out the unwanted scrape plants. Also there is more scope to clear some bare earth bank vegetation. Also more quadrat recording could be done.

REPORT FOR WORK PARTY WEDNESDAY 15TH OCTOBER 2014

ATTENDEES: Simon Braidman, John Winter and John Bugler

10.30am to 3,30pm

Weather 12.5 degrees centigrade dull, cloudy dry

TASK To start scrub control work in the East section of Bluebell Heath

TOOLS : 1 21inch bowsaw, 2 forks , 2 slasher, 2 mattocks and 1 rake and 4 sets of gloves. A second rake would have been usefull all the tools were used especially John Winters blunt hand slasher- very good for bracken.

INTRODUCTION

Virtually no work has been done to control scrub the main section in Bluebell Heath East or Compartment 20a. A small amount of work was done by The Challenge in Parcel 5.

There is an urgent need to protect the grassland component in 20a. Scrub has regenerated rapidly and uncut bramble(*Rubus fruticosus ssp.*) and honeysuckle (*Lonicera periclymenum*) scrub has sprawled badly. Parcel 4 is suffering from Bracken(*Pteridium aquifolium*), Marsh Thistle(*Cirsium palustre*) , Purple Moor Grass (*Molinia caerulea*) and now Raspberry(*Rubus idaeus*) invasion.

Devils Bit Scabious(*Succisa pratensis*) grows by the path that runs northwards to the eastern boundary of Parcel 4. The grassland habitat needs to be protected to allow this species to flourish and to protect the Heath Spotted Orchids.(*Dactylorhiza maculata*).

However there is a need to do more on work party days. So we are trying to squeeze other tasks in.

PHOTOGRAPHY

In the management plan it is stated that more fixed photographic points will be set up to try to record vegetation growth and management of the compartments. The compartments listed are: Compartment 14a Great Brewers Pond, Compartment 14b –Little Brewer’s Pond ,Compartment 16a Witling Rise, Compartment 16b Witling Marsh, Compartment 16c –Witling Glade, Compartment 17 –Hollybrook Rise, Compartment 19 – Cerrisland, Compartment 20c-New Scrape.

We walked the long route down Jake’s Path and down through Compartment 19 or Cerrisland. We took 3 sets of pictures here to ensure this complex clearing is well photographed. North, center and south sections were covered.

We arrived at Bluebell Heath and started work. The priority was to clear scrub in Parcel 4 (John Winter) and to clear scrub on the south facing slope in Parcel 5 the western side of the path running north to the pines (John Bugler and myself).

Bracken and Honeysuckle was pulled and Bramble was matted out and Marsh Thistle was also gently matted. John Bugler cut down scrub trees Willows and Oaks.

All the arisings were put on the existing dead hedge fence lying to the west of path.

Parcel 4 needs a lot of work especially at its lowest and highest ends.

Despite there being only 3 of us we cleared quite a lot.



The 2 Johns and a pile of arisings

There were some nice plants surviving in the area. Besides the Devil's Bit Scabious there were Greater Bird's Foot Trefoil (*Lotus pedunculatus*), Slender St. John's Wort (*Hypericum pulchrum*), Wild Angelica (*Angelica sylvestris*) and Betony (*Betonica officinalis*). So unwanted species were carefully removed and any dislodged wanted plants replanted. Also there were carpets of the mosses *Kindbergia* and *Brachythecium* and these are important for craneflies to lay eggs in. So small areas of mosses were left intact or returned in.

WILDLIFE

A Muntjac (*Muntiacus reevesi*) was disturbed in Willow scrub in Oakmead. We were virtually on top of the animal before it moved.

Skylark (*Alauda arvensis*) and Goldfinch (*Carduelis carduelis*) were heard flying overhead. Great Spotted Woodpecker (*Dendroscopus major*) was calling. Brown Lipped Snail (*Cepea hortensis*) were sheltering in the ground we disturbed and we disturbed the spiders *Araneus diadematus* and *Meta segmentata*.

There was a really fine Stripped Woodlouse(*Philosia muscorum*) with a jet black head, beautiful marbling and orange uropods. A Millipede was recovered for identification.



Cleared miniglade west of path in Parcel 5



Cleared section of Parcel 4- The Orchid Field.

FURTHER WORK

More work is required in this area. The treescrub in the eastern edge of Parcel 5 badly needs to be thinned. Also more work is required to control unwanted plants in Parcel 4.

REPORT FOR WORK PARTY WEDNESDAY 26TH NOVEMBER 2014

ATTENDEES: Simon Braidman, Marios Brooks, John Winter, Neville Day, John Bugler, David Green.

Weather gloomy, damp but not raining.

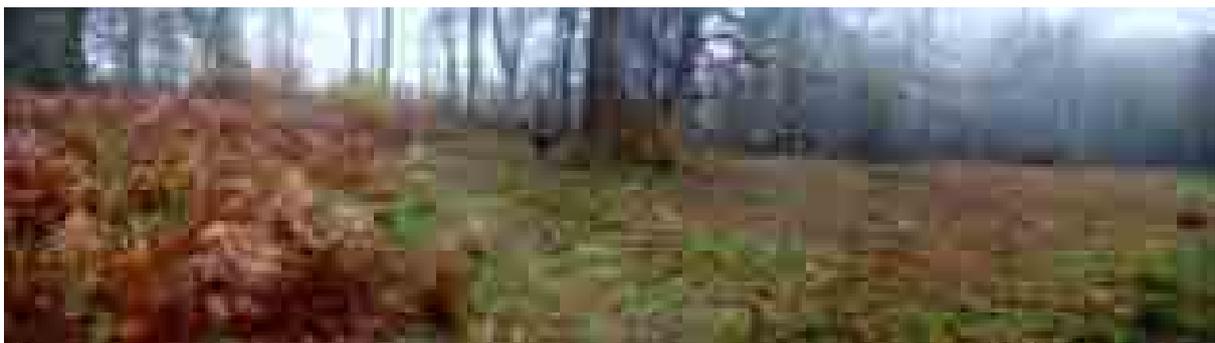
10.30am to 3.30pm

TASK To clear dead bracken and reduce soil fertility on the bottom of the slope of Parcel 10 Bluebell Heath.

Bluebell Heath has been the destination of virtually all our work parties for weeks but the work goes on. Heavy autumn rains has collapsed some of the dead bracken. Collapsed Bracken forms a shield or roof and it is good for small mammals or hibernating amphibians. However it can smother the ground underneath and not allow next years' grassland growth to come through. By spring collapsed bracken needs to be removed.

Waiting until spring is too late so work has to start now to remove the bracken and put it onto arising piles.

The bottom third of the parcel 10 was completely scalped of bracken and the area hard raked in places to remove humus. All arisings were added to the arising pile on the eastern edge of the clearing.



View of Parcel 10 after clearance.

REPORT FOR EXTRA WORK PARTY WEDNESDAY 3RD DECEMBER 2014

ATTENDEES: Simon Braidman, Neville Day, David Green.

10.30am to 4pm

Weather sunny and stunning

TASK To start work on New Heath (Compartment 21) and its surrounds.

INTRODUCTION

New Heath is the habitat created from the 2006 -2009 Lottery funded London Heritage Heathlands Project (LHHP). The project was run by the London Biodiversity Partnership, an umbrella body of various organisations to implement London's Biodiversity Action Plan (BAP).

The London BAP has various habitat and species action plans and heathland is one of the habitat action plans. Heathland is a manmade habitat caused by a combination of acid, nutrient poor soils and deforestation followed by topsoil stripping.

It creates an open landscape dominated by low shrubs and grasses which are tolerant of the very poor soils. The low shrubs are typically Heathers, Gorse and Broom. Interspersed with the shrubs are tussock forming grasses.

Heathland is an important habitat as it is very open and sunny so it is rich in invertebrates and reptiles.

Heathland was maintained by grazing and many heaths were common land owned by the people. Heathland is a temporary landscape unless it is maintained and the heathland can revert back to woodland if not managed.

The LHHP was started to create more heathland habitat and Stanmore Common was one of the London sites selected. Other sites included Barnes Common and Addington Hills. Some of the best habitat in London is at Hounslow Heath.

The LHHP involved publicising this rare habitat, running walks and training sessions and creating new habitat. Stanmore Common had an area which had been ravaged by fire. All the trees had been killed and the area was a sea of Bracken. This area was recognised as one suitable for heathland restoration. The area was bulldozed in 2008 and the soil pushed into south facing bare earth banks.

Heather seed from Hounslow Heath was sown by local schoolchildren. Now 8 years later the area looks like a real heathland and an unusual one. The land slopes from north to south so the upper slope is dry heathland and the lower slope is damp heathland.

Where there is no Heather, Gorse or Broom or there is little shrub cover the grasses become dominant and the habitat is described as acid grassland.

New Heath is an interesting area as it slopes quite steeply north to south so it's northern end is dry and it gradually wets up as one goes downhill to produce vegetation that changes across the compartment.

THE TASK

One of the concerns of the area is the loss of bare soil. Dry bare soil is a very important habitat for invertebrates to nest in and bask on. As the plants grow the bare soil habitat is being lost. Careful examination of the area shows that the northern dry zone still has a lot of bare soil. However in discussion with John Dobson it was decided to create more bare soil habitat.

Neville worked on the bare earth banks bordering New Scrape (Compartment 20c), pulling up bracken and bramble, whilst I dug up new bare soil with a mattock; removing tussocks of Purple Moor Grass (*Molina caerulea*) or young Scots Pine (*Pinus sylvestris*) or Willow (*Salix sp.*). The area chosen had already a fair degree of bare soil so one could work carefully and still make a measurable difference. Inevitably I was digging up Heather (*Calluna vulgaris*). It felt really weird, we had worked so hard to get more heather and here was I digging it up. All the heather that was dug up was carefully saved into a

wheelbarrow. I also at first tried to avoid digging up young Sedges (*Carex sp*) and Bent Grasses (*Agrostis sp.*)

David joined us and he and Neville worked on the bare earth banks at the back of New Heath, clearing bracken on Bonzo Bank East.

Just before lunch I called the guys over as a Purple Moor Grass Tussock had some interesting inhabitants.

The tussock had a number of insects amongst the roots. There were two Rove beetles, one of which was *Staphylinus erythropterus*. There were also



Staphylinus erythropterus

There were also 2 wasps, both of the same species. It has proved a real struggle to even get close as to what the wasps were. At first I thought they were solitary hunting wasps of the Aculeatae, then Sawflies (which are another wasp group and finally Ichneumon wasps. It turns out there are about 3000 ichneumon wasp species in the UK. There is no guide to the group and many can only be identified by dissection. However it is possibly something called *Ichneumon confusor* but there are very similar insects as you will see from the captions below. We thought the 3 white spots on the last abdominal segments would be diagnostic but this is not the case.



The handsome Ichneumon wasp *Ichneumon confusor*

Our insect was very similar to this one but we did not take a specimen thinking the 3 white spots should be distinctive but a number of the genus *Ichneumon* have this feature. *Ichneumon* wasps are a wasp family whose sting has been modified into an egg laying tube or ovipositor. The wasp targets insect larvae or adult insects and the female wasp lays eggs inside the insect. The poor victim is slowly eaten from the inside. Such a way of life is called a parasitoid. Wasps from the genus *Ichneumon* tend to attack moth caterpillars.

It was amazing to find so much life in one grass tussock.

I replaced the tussock in its hole as carefully as I could.

The other plants were put into a wheelbarrow and were wheeled out of New Heath.

The plants were translocated to new locations across Bluebell Heath. Translocation was achieved by clearing away bracken using a mattock to dig a hole and then the clod of plants was carefully pressed into the hole.

One location was on the top northwest corner of Parcel 5 and then another behind the retention scrub line across the north end of Parcel 5. Other locations include the north east end of Parcel 5 and a point in the linear extension of Parcel 6 and across the top of Parcel 7. Final locations in Bluebell Heath were in the north ends of Parcel's 9 and 10.

By the end of the day Bonzo bank east had been completely cleared of bracken.

We then went back to the car park and whilst most of the tools were being packed away, Neville and myself wheeled the wheelbarrow containing the remaining heather to the other side of Warren Lane and onto the edge of the cricket pitch and we proceeded to plant clods of earth containing young heather along the edge of the pitch under the Gorse going from west to east.

We ran out of heather plants but a future work party will continue this work.

Work is still required in New Heath. The northern end needs to be weeded of Scots Pine and the southern end needs to be weeded of bramble.

The remaining bare earth banks need clearing.

REPORT FOR WORK PARTY SUNDAY 7TH DECEMBER 2014

ATTENDEES: Simon Braidman, Neville Day, David Green, Pamela Swain.

10.30am to 3.30pm

Weather: Started dry then Neville and I got very wet in sudden heavy downpour then it tailed off and the sun came out it clouded over again later.

TASK To open up compartment 24 or Flushing Glade.

INTRODUCTION

Flushing Glade is the newest compartment designation. It was created as an addition to the Bluebell Heath Project. There was pressure to enlarge further the Bluebell Heath and in the final marking out in September 2012 of the area to be felled this was an additional area.

The habitat originally was secondary woodland. This is woodland which has grown up fairly recently. The ground would originally have been acid grassland/ heathland. There were some older trees there but most of the trees were Silver Birch. The contractors T+T Earthworks were asked to cut down this area and to treat it like a storm had hit it. So they made the trees safe but left the trees as they had fallen instead of stacking the timber.

The original idea was to watch the area as it regenerated back to woodland. But this was just a waste of an additional open area and it was quickly decided that this area should become a proper addition to Bluebell Heath.

The area was surveyed and became Parcel 11 of the DAFOR botany survey. A lot of work was carried out in 2013 but no more work had been done for many months.

THE TASK

Neville and myself started out to clear the approaches to Flushing Glade, removing bracken (*Pteridium aquilinum*) and Bramble (*Rubus fruticosus*). Arisings were removed to a pile on the eastern boundary of Bluebell Heath. This is in the woodland belt and off the grassland. The location is on a pile of already cut timber just to the east of the Horse Ride.

Leaf litter was scraped off. We stopped very briefly as a sudden very heavy rainshower came down. We were joined by David and Pamela a new volunteer and we worked hard to re-expose the lovely features of the southern end of Flushing Glade.

Flushing Glade has a series of hillocks running in a line going south west to north east of unknown origin. These hillocks were re-exposed all the Bracken, Bramble and leaf

litter were removed and the hillocks reduced to bare soil and moss cover. Closeby is a colony of Sedges but I do not know which species of Sedge it is. Just off to the east of the hillocks is a miniglade and here there is a rapidly expanding colony of Heath Bedstraw (*Galium saxatile*). A bit of Heath Bedstraw was accidentally pulled up with the bramble and it was carefully replanted in another spot in Flushing Glade.



Yellow
anthers (4)

Looks like 4 petals but
actually is a 4 lobed (star
shape) –tube =corolla

Heath Bedstraw flowers 2.5-3 mm diameter. Flowers July –August.



Leaves in whorls around stem 4-6 leaves in whorl. Leaves stalkless . Very narrow leaf base , smooth margin rough, hairy.

Tiny blunt tip to leaf
=mucro

Non flowering shoot Heath Bedstraw



Heath Bedstraw stem and leaf whorl. Stem is 4 edged not cylindrical.

The plant is a member of the Bedstraw family or Rubiaceae. The most well known member of the family is Goosegrass or Common Cleavers (*Galium aparine*). The fruits of Cleavers is what children call sticky weed.

Heath Bedstraw is a specialist of acidic soils with low nutrient levels. It likes the sun. It can spread easily by sending out horizontal shoots or runners which root. It is an indicator of unimproved grassland, that is grassland which has never had fertilizer added to it. Heath Bedstraw is not a common plant especially in the south east of England.

To help the Heath Bedstraw the Bramble (*Rubus fruticosus*) was stripped out. The heavy rains meant it was relatively easy to pull out the bramble roots. Besides the Heath Bedstraw was a small colony of Wood Sage (*Teucrium scorodonia*). This is a member of the Mint family, Lamiaceae with a hop like smell and a bitter taste. It was used in herbal medicine as a diuretic and astringent for skin and blood diseases. More work is required to remove more bramble here.

There are lots of very young trees growing in the work area and these were either chopped down with loppers or grubbed out with a mattock.

The leaf litter lying between the logs and trunks was stripped out at least partially to reduce soil nutrient levels and allowing new plants to grow. Tiny areas containing mollusc eggs or very young seedlings were left with some leaf cover so that they remained moist.

After lunch I went off to New Heath (Compartment 21) and with a mattock carefully removed a few baby Scots Pine (*Pinus sylvestris*) for disposal. I also selected young Mat Grass (*Nardus stricta*), Heather (*Calluna vulgaris*), Purple Moor Grass (*Molinia caerulea*), Wavy Hair Grass (*Deschampsia flexuosa*) and Common Bent Grass (*Agrostis capillaris*) and translocated specimens to carefully raked areas in Flushing Glade. I wanted to translocate Heath Grass (*Danthonia decumbens*) but the population is low (but increasing) and I decided to wait for more specimens to come up on New Heath.

No planting was on the hillocks so to preserve bare earth habitat and no planting was done near the Heath Bedstraw to ensure the Bedstraw had little competition.

RESULT

About 18% of Flushing Glade has been partially cleared. There is plenty of scope to do more.

WILDLIFE

Great Spotted Woodpecker (*Dendrocopus major*) flew into a Silver Birch in the compartment and I found a White Lipped Snail (*Cepea hortensis*) in the leaf litter.

REPORT FOR WORK PARTY WEDNESDAY 10TH DECEMBER 2014

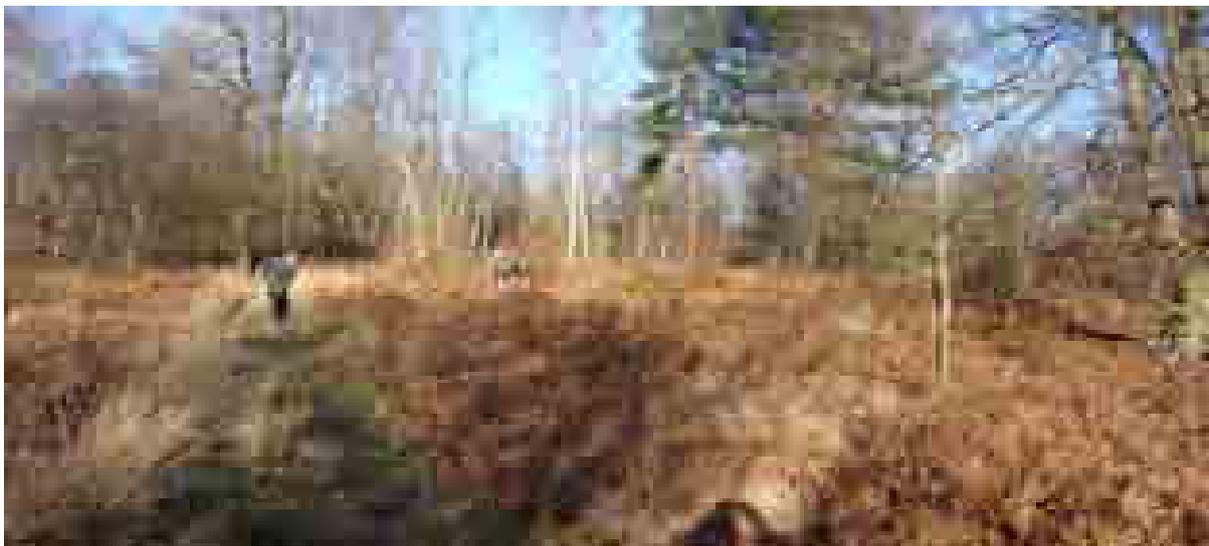
ATTENDEES: Simon Braidman (beginning), Marios Brooks, John Bugler, Jonathan Freedman, David Green, Peter Swinson and John Winter

HOURS: 10.30am to 3.00pm

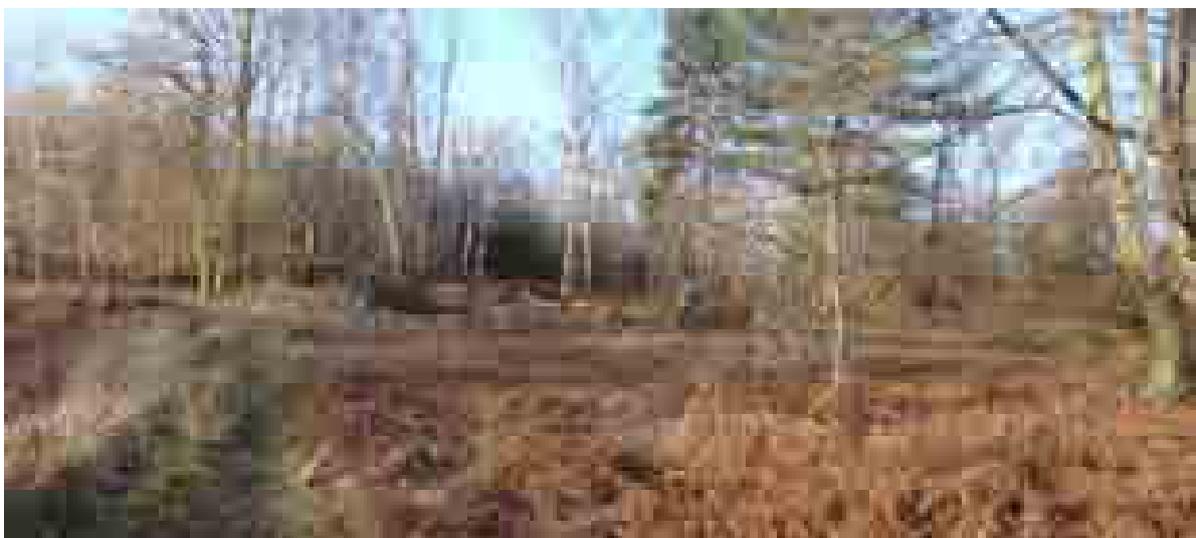
WEATHER: Sunny 7 degrees Celsius

TASK A continuation of the cutting of Bluebell Heath bracken.

Simon Braidman was unable to work on the common due to personal commitments but kindly came in to meet and greet a new volunteer Peter Swinson and to brief the team on the work that he wanted carried out. This comprised the clearing of bracken and thinning out of sapling yews in the northern half of Bluebell Heath East and West and the southern edge of Flushing wood, just the other side of the footpath. The team commenced work on the Eastern side and put the cut materials into an existing pile adjacent to the horse ride. Marios Brooks, John Bugler and Jonathan Freedmen all had to leave earlier than usual due to various reasons so it was decided to concentrate efforts on the Eastern side.



Jonathan Freedman and John Bugler at the start of the work



John Bugler and David Green in the same area just before lunch

Only one wheelbarrow was taken from the lock up at the start of the day which was a bit of an oversight on our part. By lunchtime a large area had been cleared in both Bluebell Heath East and Flushing Wood. There were, however, quite a few piles of cut bracken, brambles and saplings. Shortly after lunch those leaving early left David Green, Peter Swinson and John Winter who continued to rake up the cut materials and move the cut pile to the main pile adjacent to the horse ride. When this was completed it was decided that a logical stopping point had been reached and the work party returned the tools to the lock up slightly earlier than planned.

REPORT FOR EXTRA WORK PARTY FRIDAY 12TH DECEMBER 2014

ATTENDEES: Simon Braidman

10.30 to 3.30pm

Weather dry but cloudy then very heavy downpour but it was brief and then cleared to sunny conditions.

TASK

Following an on site consultation with an ex- warden John Dobson who is still very involved in the reserve, concerns were raised about the locations of 2 of the arising piles around Bluebell Heath.

Arising piles are cut material such as young trees and bracken and the problem is what to do with the material. On reserves with grazing the vegetation is eaten and the cow pats or sheep dung provides homes for invertebrates. On other reserves, especially those cutting by machine the material is taken off site and composted.

On Stanmore Common arising piles are formed. The ideal is in woodland location downslope from the low nutrient grassland area. This is to ensure that nutrients from the cuttings run away from the grassland.

Most arising piles are in woodland downslope locations but not all.

The arising pile on the south edge of Bluebell Heath East (Compartment 20b) is in a woodland downslope location but it is very close or on top of a colony of Lilly- Of – the Valley (*Convallaria majalis*). Unfortunately, no record was made of where the colony was exactly located.

Lilly –of – the Valley is a perennial flower , flowering in May-June and in winter dies off completely above ground.

There are a few colonies on the Common but it is not a common plant.

I decided to move the arising pile. However first I had a look at the arising pile to the east. This arising pile lies directly across the flush that runs down the eastern half of Bluebell Heath.

A flush is a surface flow of water down a slope. Underneath a porous top layer is an impervious layer (London clay) and this stops the water draining deep into the soil. Flushes are supplied by rainwater collecting in small natural resevoirs just under the soil surface. Flushes are long-standing features, they do not always flow all year around. The line of a flush will be marked by greener vegetation and plant species more suited to damp conditions, for examples Rushes.

Flushes are very important for the plant and invertebrate communities associated with them. The Eastern flush runs down the boundary between Parcels 8a and 9 and down the slope into the woodland.

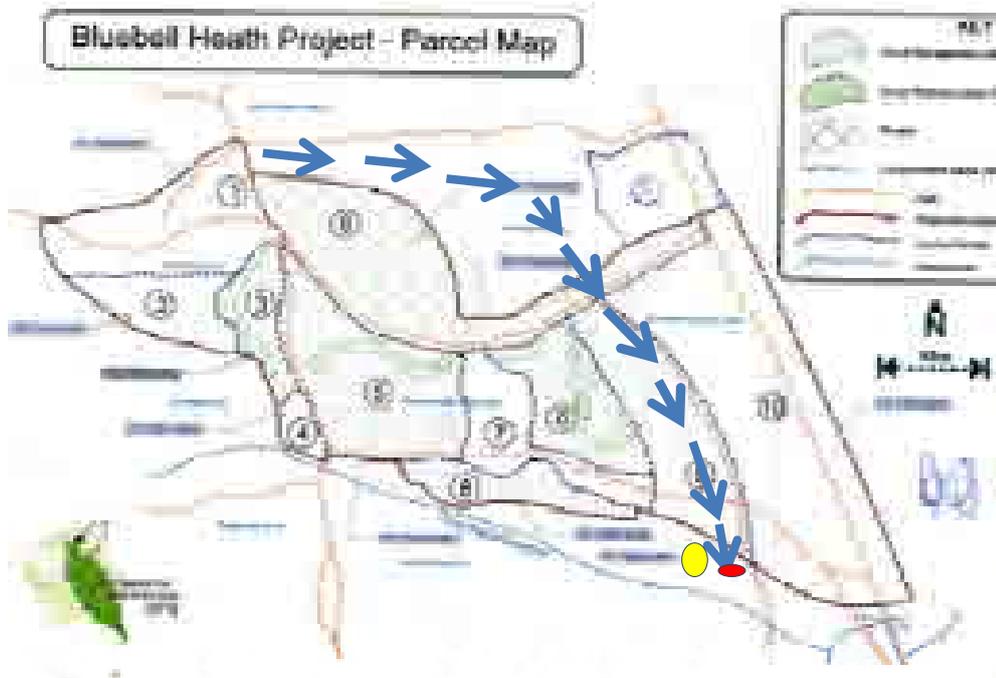
The arising pile was blocking the flush line and so I decided to make a gap in the arising pile to let the flush through. There was a large amount of material to shift and the young saplings were pinned under the heavy weight of sodden bracken. The trick was to work from the far side of the bank of vegetation.

A gap was cleared and one could see the flow re-starting.

MAP SHOWING LINE OF THE FLUSH ACROSS BLUEBELL HEATH EAST

Red oval shows the arising pile blocking water flow

Yellow oval shows location of arising pile adjacent/on top of Lilly-of-the Valley



Once the flow was restored, I moved material from the arising pile to the west to the adjacent arising pile, ensuring the gap in the receiving pile was retained. The western arising pile is huge and much of it derives from the initial clearance of Bluebell Heath by the contractors T+T Earthworks in the winter of 2012. I could not move all of the pile.

I had a good look at Bluebell Heath and the condition is now much better. At least one probably two more work parties are required:

1. To remove Bramble close to the Apple tree as good grassland species are coming up and they will be lost.
2. To clear in a line going from south east to north west across parcel 8a and parcel 7.
3. To dig out some of the tree saplings along the southern edge of Bluebell Heath
4. There are 1 or 2 tiny patches of thick scrub in the southern end of Bluebell Heath that can be thinned.
5. To thin bracken just east of a track that cuts down parcel 7. Here there are colonies of Wood Anemone (*Anemone nemorosa*).

There is a lot of Slender St. John's Wort (*Hypericum pulchrum*) all over Bluebell Heath and this is an excellent plant. In the newly re-cleared area at the south end of Parcel 5a there are new plants of Sheeps Sorrel (*Rumex acetosella*). This is the food plant of the Small Copper Butterfly (*Lycaena phlaeas*).



Small Copper and Sheep's Sorrel. Note outward pointing "tails to leaves".



The grassland has definitely spread back into the woodland in Parcel 8a. New grass shoots are appearing.

I also checked the 2 ponds in Parcel 8b and the off-stream pond is holding water and the in-stream pond Emmie's Pond is working beautifully with a lovely flow both in and out, the outflow wetting the ground between the pond and the Heathbourne Stream.

Worryingly Holly Brook has foam on it and it is only stream to show foam. It is possible that pollution is coming down this waterbody. This needs to be checked.

REPORT FOR EXTRA WORK PARTY WEDNESDAY 17TH DECEMBER 2014

ATTENDEES: Simon Braidman, Marios Brooks and David Green.

10.30 am to 3.30pm

Weather dull, grey but dry. Mild - 12 degrees centigrade.

TASK

Morning - To drastically thin out the Bramble (*Rubus fruticosus*) close to the ancient Wild Apple Tree (*Malus sylvestris*).

The bramble in Bluebell Heath is invasive and forms dense clumps or banks. Although sunlit bramble is important form wildlife, bramble can shade out more sensitive plants.

The ground was soft and much of the bramble could be hand pulled. A mattock dealt with more resistant roots.

A few Bluebell bulbs (*Hyacinthoides non-scripta*) were accidently dig up and were re-buried.

The bramble that had been collected was taken to the arising pile on the south east boundary of Bluebell Heath.

Afternoon.- We moved a short distance to the west. Marios raked off fallen leaves just under the old Pendulate Oak (*Quercus robor*) stands. David using a pair of loppers reduced the line of saplings bordering the southern path and I raked and hand collected (*Anemone nemorosa*).

Marios joined me and we cleared a small oblong area extending up the slope.

We discovered lots of Slender St. John's Wort (*Hypericum pulchrum*) and there was also some more Devil's-Bit Scabious (*Succisa pratensis*)

The population of this plant on the reserve is low but stable but we are doing some work to increase this species.

Further work is required on Bluebell Heath and there is still an awful lot of bracken, bramble, leaves and saplings which need control in parcels 8b, 7 and the northern ends of 9 and 10. Our last work party for 2014 is the 28th December and then we are

not scheduled to re-visit Bluebell Heath until March 4th. If we cannot clear all the material on the 28th we may have to do some extra work days.





Flowers and leaves of Wood Anemone