



Date of Issue: 3<sup>rd</sup> December 2018

A MEETING OF THE **COMMUNITY & ENVIRONMENT COMMITTEE** WILL BE HELD ON **MONDAY 10<sup>TH</sup> DECEMBER 2018** IN THE **COUNCIL CHAMBER SHOTTON HALL, PETERLEE, SR8 2PH** at **6.30pm**

Mr I Morris M.C.I.H, P.S.L.C.C.

Town Clerk

## **A G E N D A**

**Members of the Committee and members of the public are reminded that the public part of the meeting may be recorded in both audio and video, and photographs may be taken.**

**1. Apologies for Absence**

Members are cordially invited to inform the Deputy Town Clerk of their apologies as soon as practical

**2. To receive declarations of interest**

Members are reminded of the need to disclose any interests in items on this agenda, whether pecuniary or otherwise. Please seek advice from the Town Clerk or Deputy Town Clerk prior to the meeting if in doubt.

Members are reminded that they can check their published declaration of interests here: <https://bit.ly/2wVyeLA>

**3. Apollo Pavilion – 50<sup>th</sup> Birthday celebrations**

To welcome representatives of the Apollo Pavilion Community Association and Mr Colin Robson Community Cultural Development Co Ordinator from DCC

4. To Approve the Minutes of the Last Meeting  
Members are asked to agree the attached minutes as a true and correct record of the meeting.  
(Minutes of the Meeting held on 12<sup>th</sup> November 2018 attached)
5. Update on Sports Development Activities  
The report of the Sport & Wellbeing Manager providing information for Members about activities, PACES, events, funding, marketing and litter management.  
The Sports & Wellbeing Manager is unable to attend, so members are requested to direct any specific questions on the report to the Sports & Wellbeing Manager prior to the meeting.  
(report attached)
6. Minutes of the Woodhouse Park Working Party of the 7<sup>th</sup> November 2018  
Members are asked to note and approve the attached minutes of this working party.  
(Minutes of the Woodhouse Park working parties are attached)
7. Minutes of the Events Working Party of the 21<sup>st</sup> November 2018  
Members are asked to note and approve the attached minutes of these working parties  
(Minutes of the Events working party are attached)
8. Review of opening of Town Council Parks, Play Areas and Cemetery review  
The report of the Parks Manager providing members with a review of the arrangements for Town Council's Parks, play areas and cemetery Opening. The report concludes that the overall impact on the parks and play areas has been a positive one, and that further work is needed to engage with local residents and users on maintaining the cemetery's high standards of appearance.  
(report attached)
9. Use of Glyphosate  
The report of the Parks Manager, intended to provide members with a summary of the use of glyphosate across PTC's assets and land and makes a recommendation that the use of this weed-killer is ceased, to be replaced with a seasonal maintenance team.  
(report attached)
10. Land west of Thorntree Gill  
To note the planning application has been approved for the erection of a detached building to create amenity room and storage area.

THE MINUTES OF THE MEETING OF THE  
COMMUNITY & ENVIRONMENT COMMITTEE HELD IN THE  
COUNCIL CHAMBER, SHOTTON HALL,  
PETERLEE ON MONDAY 12<sup>TH</sup> NOVEMBER 2018 AT 6.30PM

PRESENT: COUN M A CARTWRIGHT (CHAIR)

Mesdames:- S Simpson, K J Duffy & A C Long

Messrs:- S McGlen, A Watson, R Moore, T Duffy, G  
Carne, S Miles & S Kirkup

**The Chairman advised Members of the committee that part of the meeting may be recorded by both audio and video, and it may be that photographs were taken.**

50. Apologies for Absence

Apologies had been submitted and accepted from Councillors S McDonnell, K Liddell, R Kyle, A Wilkinson, K Hawley, S Franklin, S Meikle, C Watkins & L Fenwick. **RESOLVED the Council approve the reason submitted for absence received from the Councillors listed, and their apologies for absence be recorded.**

51. To receive declarations of interest

Members were reminded of the need to disclose any interests in items on this agenda, whether pecuniary or otherwise. None were given.

52. Minutes of the last Meeting held on 8<sup>th</sup> October 2018, a copy of which had been previously been circulated with the Council agenda, were approved and signed as a true and correct record.

Prior to the start of the meeting Councillor A Watson asked for it to be recorded that Peterlee was desperate for investment and the Town Council encourage it at every opportunity, this was agreed unanimously by all present who support the development of the proposed retail park. Councillor Cartwright asked for it to be recorded she had been mis quoted.

53. Minutes of the Woodhouse Park Working Party of the 3<sup>rd</sup> October 2018 a copy of which had been circulated, were approved and signed as a true and correct record.

54. Minutes of the Events Working Parties of the 10<sup>th</sup> & 24<sup>th</sup> October 2018 a copy of which had been circulated, were approved and signed as a true and correct record.

Members reported the Halloween Party had been fantastic and the children there had seemed to enjoy it, especially the dancing pumpkins display.

Members also commented on the recent Remembrance Day Parade and how well attended it had been. There were several suggestions made on how both the Parade and the memorial may be improved and it was **RESOLVED a working party be established to consider this in more detail and members of the public be invited to join in. FURTHER RESOLVED the Council's thanks be extended to the Team for organising the Parade.**

55. Update on Sports Development Activities

The report of the Sport & Wellbeing Manager providing information for Members about activities and events, a copy of which had been circulated to each Member, was considered. A Member commented that she felt the events and activities needed to be advertised more extensively. **RESOLVED the contents of the report be noted.**

56. Bring Back the Denes

The report of the Parks Manager providing Members with a summary of the proposed works to be carried out in the North & South Denes was considered. The report provided Members with a summary of the works that would be carried out to "Bring Back the Denes" both North & South, if agreed, using the capital project budget of £25,000 using it for the surveys for the bridges and walls in the North side of the Dene Park, as well as equipment and supplies for the Parks Department to carry out the works in house.

**RESOLVED the contents of this report be noted and the approval be given to the activities proposed for the winter and spring seasons in the Dene Parks area. FURTHER RESOLVED approval be given to the reallocation of the £25,000 capital allocation to revenue.**

**Councillor T Duffy joined the meeting at 7.30pm.**

57. Play Area Investment Strategy

The report of the Town Clerk was intended to provide Members with an update on progress with the development of a Parks & Play area investment strategy for the Town Council. The report made a number of recommendations relating to the allocation of funding to the Town Council's parks and play areas for the provision of new/replacement equipment, fencing and other associated works and recommends that a detailed tendering specification be drawn up to enable a full procurement process for the works. Both Councillor S Miles and G Carne objected to the recommendation 1 contained in the report and asked for the play area to be retained; this was agreed. A Local Member commented that the actual user/visitor numbers to each of the play areas would be useful whilst accepting this would be a costly exercise to achieve.

**RESOLVED that:-**

- 1: Hill Rigg House play area does not receive additional investment under this play area strategy, but is maintained;**
- 2: a new play area installed adjacent to the Pavilion on Helford Road and the Oakerside play area be decommissioned and returned back to a grassed public space;**
- 3: the Town Clerk be authorised to prepare bids for s106 funding for the Woodhouse Park project as part of the funding of this play area investment strategy;**
- 4: the Town Clerk prepare a separate report on the detailed procurement process to put all of the identified sites out to procurement as part of a single process;**
- 5: that Heath Close and Helford Road be prioritised for commencement in the current financial year (i.e. within the existing £110,000 allocation), with the remainder of the works commencing in the 2019/2020 financial year, with the necessary funds drawn from reserves into the capital programme.**

**Councillor Mc Glen left the meeting at 8.00pm. Councillor Long left the meeting at 8.10pm.**

58. Fishing at Shotton Hall Pond

**RESOLVED consideration of this item be deferred.**

**Report To:** Community & Environment, Peterlee Town Council

**Date of Report:** Monday 10<sup>th</sup> December 2018

**Subject:** Information on Sport and Wellbeing Activities & Events

**Report of:** Sharon Pounder; Sport and Wellbeing Manager

**Purpose of Report:**

To provide information for Members about new and existing Sport and Wellbeing Activities, club development and issues raised by Sports Users.

**1. Activities**

PACES

We recruited four new members during November and sold 6 monthly class passes. Both attendances and new member recruitment figures were lower than last month.

Xmas Cracker Challenge

begins 23rd December and ends January 2nd, 2019

Xmas is the most challenging time of the year with temptation all around us, so to keep our members motivated over the Christmas period, we are rolling out the Christmas cracker challenge. We are asking members to take a snapshot/selfie of themselves dancing, out walking, running, going to the gym or any other physical activity they partake in over Christmas and send it in. The photos will be posted on the PACES Facebook page and a winner will be selected to win a free monthly class pass for January 2019.

New classes for 2019

We are introducing Wellness Wednesdays in 2019, which focuses on Wellbeing and mental health rather than physical health/activity.

We are introducing a Meditation class as part of Wellness Wednesday commencing in January 2019. This class will run 2.00 – 3.00 p.m. every Wednesday at The Pavilion and is available to anyone wishing to attend.

The Circuit challenge class is the most popular class in terms of attendances, therefore, a second class will be introduced into the PACES timetable in the New

Year and will take place at the same time on a Thursday morning 9.45 – 10.45 a.m.

There is a new fitness craze sweeping the nation very similar to Metafit called MetaPwr, this class is circuit based high intensity workout and PACES staff have managed to find an Instructor to deliver a class from The Pavilion in the New Year. The class will take place every Thursday evening 6.15 – 6.45 p.m. from 10<sup>th</sup> January 2019.

### Partnership working

Julie Johnson; a physiotherapist from Tees, Esk and Wear Valley NHS Foundation Trust, attended a PACES Chi Kung (Tai Chi) Session in November. Julie's client base is people living with Parkinson's and she wanted to check to see if the class would be suitable for her clients to attend. Julie also wanted to know what other activity sessions were delivered at the Pavilion and whether they would be suitable for her clients. Julie will be promoting PACES sessions to her clients and will also be attending future Dementia Friendly Peterlee meetings.

## **2. Events**

### Festive Film Screening

A Christmas Celebration for people living with Dementia/Parkinson's will be taking place at The Pavilion on Tuesday 11<sup>th</sup> December from 10.00 a.m. the event includes a festive film screening, lunch, carol singing and Christmas crafts. Asda in Peterlee are providing food for the event, Dene House school are providing the choir, and East Durham Creates are providing the arts and crafts. This event is free of charge, but places must be pre-booked at The Pavilion. Family members, carers and friends of people living with dementia and/or Parkinson's are welcome to the event.

### Tie Your Laces for PACES

We are repeating this event, which was held in October this year,. The event will be held at the Pavilion on Tuesday 26<sup>th</sup> February 2019 6.00 – 8.00 p.m. and is live on ticket source. The format of this event will follow on from the event in October. 25-minute taster sessions in exercise classes will be provided to boost attendances at existing classes at The Pavilion. Early bird tickets available on ticket source now for £3.00, going up to £5.00 in the New Year.

### **3. Funding**

An application has been submitted to the Area Action Partnership's Social Isolation Fund to run a new session from The Pavilion. The new session; Taste Buddies' will provide participants with a low-cost/subsidised meal in the Bistro and 1.5 hours of social activities if the funding application is successful.

The Sport and Wellbeing team are attending a funding workshop hosted and delivered by County Durham Sport on Wednesday 5<sup>th</sup> December 6.00 – 9.00 p.m. The workshop will hopefully provide some top tips in writing successful funding applications. This event is free of charge to attend.

### **4. Marketing**

Sport and Wellbeing staff have been promoting classes and events through social media utilising The Pavilion and PACES Facebook page.

A meeting has taken place with the PTC Marketing and Communications Officer to help improve the marketing of Sport and Wellbeing activities and events.

A PACES Newsletter has been produced to help promote activities and improve communication to members and non-members. See Appendix 1 (attached)

#### **New Facebook Pages**

New Facebook pages have been set up for Peterlee Helford FC and Peterlee Koryo Taekwondo Club. The pages have been created to increase awareness of the two clubs and to help improve communication between members and Coaches.

### **5. Litter Management**

East Durham Football Club have agreed to assist with litter collection on all football pitches at Low Hills. The club play all their home games from Low Hills and are keen to work with PTC to address the litter problem on pitches. A similar partnership will be setup with teams and clubs playing from Helford Road.



## CHRISTMAS NEWSLETTER

### PACES Christmas Party

WEDNESDAY 19TH DECEMBER 2013

12.00-2.00 PM

JOIN SHARON OR ELAINE FOR PARTY AT THE PAVILION

AT THE PAVILION

TICKETS £4.00 AVAILABLE FROM REPT

## See a classic Christmas movie at the Pavilion

An invitation for people living with Dementia/Parkinson's, their family, friends and carers to join us for a fun-filled afternoon.

Popcorn & Refreshments from 10.00 a.m.

(Movie Screening starts at 10.30 a.m.)

Carols singing courtesy of Dene House School Choir

Christmas Craft making and Fabulous Festive Food

Come independently, or with family, friends or carers.

To inquire about the film and to book your FREE place

Contact: Sharon or Elaine at The Pavilion 0191 5869957

Book early to avoid disappointment

Booking Essential

# JANUARY 2019

## EXERCISE CLASS TIMETABLE

Monday	Tuesday	Wednesday	Thursday	Friday	Sunday
Circuit Challenge 9.45-10.45 a.m.	FitSteps 9.30-10.30 a.m.	Body Tone 9.30-10.15 a.m. & 10.20 - 11.00	Circuit Challenge 9.45-10.45 a.m.	Body Tone 9.30-10.15 a.m.	Hoop Nation 10.00- 10.45 a.m.
Pilates 10.45-11.30 a.m.	Health Walk 10.00 a.m.	Yoga 11.00-12.30 p.m.	Pilates 11.00-12.00 p.m.	Body Tone 10.20-11.00 a.m.	
Active Seniors 12.15-1.15 p.m.	Aerobics 10.45-11.30 a.m.	Meditation 2.00-3.00 p.m.	Active Seniors 1.00-2.00 p.m.	Chi Kung (Tai Chi) 10.30 11.30 a.m.	
Zumba 6.15-7.00 p.m.	Pound 6.00-6.45 p.m.	Yoga 5.30-7.00 p.m. & 7.15 - 8.45 p.m.			

### PACES CLASS ANNOUNCEMENTS

FitSteps last session 5th Dec 2019 return Tuesday 8th January 2019

Yoga Barbara's last session Wed 5th December 2018 return Wed 16th January 2019

Thursday morning Pilates last session Thurs 6th Dec 2018 return Thurs 17th Jan 2019

Classes cancelled due to very low attendance

Sit & Get Fit and To The Core will be removed from the timetable in the New Year

Monday's Pilates Session from 7th of January 2019 will begin at a new time of 10.45 –11.30 a.m.

Brand New Meditation Session for 2019 begins Wed 16th January 2019 2.00-3.00 p.m.

Brand New Metapwr session for 2019, begins Thursday 10th January 6.15 -6.45 p.m.

### PACES XMAS CRACKER CHALLENGE

Starts Friday 21st December 2018 & finishes January 2nd 2019

Stay Active over the festive season, take a selfie of you exercising alone or with friends and family and email your pics to [elaine.hancock@peterlee.gov.uk](mailto:elaine.hancock@peterlee.gov.uk) I will upload all pics onto PACES Facebook page.

The winner will receive a month's free class pass!

# MERRY FITNESS EVERYONE!

THE MINUTES OF THE MEETING OF THE WOODHOUSE PARK WORKING PARTY  
HELD IN THE COUNCIL CHAMBER, SHOTTON HALL, PETERLEE  
ON WEDNESDAY 7 NOVEMBER 2018 AT 10.30AM

PRESENT: COUN R MOORE (CHAIR)

Mesdames:- A Long

Messrs:- S Miles

Mrs U Wilding, Mr J Warne & Mr G Pratt - Howletch Resident's Association

Dr Maggie Parker - Artist

Michelle Burr - PCSO

Jackie Smith - Direct Steps

65. Apologies for Absence

Apologies had been submitted and accepted from Councillor S Meikle and PCSO Jack Duffy.

**AGREED the apologies for absence be accepted and recorded.**

66. Notes from the Woodhouse Park Working Party held on 3 October 2018, a copy of which had been previously circulated were considered and agreed. An update was also provided by the Deputy Town Clerk about the new noticeboard.

A local Member reported that the Skatepark Event in Woodhouse Park on Friday 2 November 2018 was a great success and helped break down barriers as everyone from younger children, teens and adults had fun. It was agreed the Town Clerk/Parks Manager be made fully aware of future events when arranged by the Police. There was also discussion on the graffiti project and it was suggested it be painted to allow youths to do their own graffiti designs and then this could then be repainted again, in time, to do the same again.

67. The Park – The Future

The Parks Manager explained the Play Investment Strategy report would be considered at the Community & Environment meeting to be held on Monday 12 November, after which, he would then report back to the Group on the approved works and improvements at the next Woodhouse Park Working Party meeting.

(a) Fir Trees/leylandii

The Parks Manager discussed the fir trees with Members and reported that it had been confirmed the trees were not diseased, just wind damaged, however, due to their size and the difficulty of their upkeep, he suggested that they be removed and replaced with Beach hedges, which he explained were very robust and encourage a wide variety of wildlife. A grant could be applied for through Durham County Council to plant new trees during National tree Week. **AGREED the leylandii be removed in house and replaced with a beach hedge and the Parks Manager is to look into applying for a grant towards the new trees.**

(b) Lighting in the Park

The Parks Manager reported he had discussed the lighting in the Park with the Town Clerk and it was confirmed that the quotes sought to have lights installed were extremely expensive. Solar lights were discussed and The Parks Manager explained they were a good idea, however, may be disappointing in the winter due to the lack of light. A local Member suggested looking into finding solar lights to install along the pathways. Agreed the Parks Manager to look into options for lighting in the Park.

(c) Skatepark fence

During the recent evening event in the skatepark the youngsters had asked again for the fencing around the skatepark to be removed. The Deputy Town Clerk explained the design of the skatepark and the fencing was installed to ROSPA standards when the plans for the Skatepark were originally drawn up. Part of the fence also needed to remain in place for health and safety reasons as it ran alongside a footpath. The Parks Manager explained that there were proposals for a teenage area with the pump track and DJ booth and it may be the plans would be to fence the entire area and so the skatepark fence may be altered in time.

(d) CCTV

The Parks Manager confirmed CCTV was in operation in the park and was motion censored, therefore, images would be captured and can be provided to the Police, if necessary.

(e) Period Poverty

The Deputy Town Clerk reported that Peterlee Town Council had adopted a policy of tackling period poverty and would be providing sanitary products free of charge in their public toilets. This would be trialled in the Woodhouse Park public toilets.

68. The Community Building

A local Member explained there was a need for groups to use the building, however, there was limited storage, and the building was not ideal for the type of groups wishing to use it. It was suggested that perhaps a pop up type of containers or demountable building may be an option. This was a vision for the future however it was stressed work should be done to demonstrate the need and use of a community building.

69. Date and time of the next meeting

**AGREED the next meeting be held on 5 December 2018 at 10.30am in the Council Chamber, Shotton Hall.**

THE NOTES OF THE MEETING OF THE EVENTS WORKING PARTY HELD IN THE COUNCIL CHAMBER, SHOTTON HALL, PETERLEE ON WEDNESDAY 21<sup>ST</sup> NOVEMBER 2018 AT 10.00AM

PRESENT: COUN S MEIKLE (CHAIR)

Mesdames:- K Hawley & S Simpson

Messrs:- A Watson & T Duffy

47. Apologies for Absence

Apologies for absence were offered and accepted from Councillors K. Duffy, V Watson, R Moore, L Fenwick & A C Long.

48. Notes from the last meeting held on 24<sup>th</sup> October 2018 were considered and agreed as a true and correct record. Reference was made to Minute Number 44(a) regarding the layout for next year's event and it was **AGREED that this be considered at the next meeting of the Resources Committee in December. It was AGREED the possibility of a lit Christmas Tree in the Dene Parks be pursued for next year.**

49. Peterlee Show 31 August & 1 September 2019

The Corporate Services Manager reported information had been gathered confirming prices and availability of bands for the main stage and she offered suggestions to the Working Party. **AGREED Bootleg Blondie, (with a band if possible), a U2 Tribute band be booked to headline the Saturday evening.**

Details of acts for the Sunday afternoon were also provided. **AGREED Little Fix, Take That v West Life and Soul Inferno be booked for the Sunday afternoon.**

The draft of the updated Horticulture schedule was circulated at the meeting. Some Members felt that adding a baking and jam section back into the event was, in their opinion, a backward step. **AGREED the contents of the new schedule be accepted.**

50. Events

(a) **HELD** Children's Halloween Party, 31<sup>st</sup> October 2018

This event had been successful, it had sold out and it was agreed it be held again. It was suggested that perhaps a scary puppet show be held next year rather than the dancing pumpkins.

(b) **HELD** Abba, 9<sup>th</sup> November 2018

This event had also been successful. A balance sheet had not yet been prepared. It was suggested that a meal not always be provided at events with tickets being priced accordingly.

(c) HELD Remembrance Day Service & Parade, Sunday 11<sup>th</sup> November 2018

It was reported it was a lot busier this year and extension of the road closure to outside the church was discussed along with terminating the Parade at the bottom of Edenhill Road. The Organiser advised she would consult with the Police on both suggestions. It was asked that the smaller children be allowed to go to the front when the service was being held outside the church.

(d) Christmas Tree Lighting Event, 30<sup>th</sup> November 2018

Officers gave details of the arrangements for the event, there were over 9 stalls already booked along with the brass band, choir and a local girl band. Members asked their thanks be passed on to staff for the great job they had done with the Christmas tree.

(e) Over 60's Event, 11<sup>th</sup> January 2019

Arrangements were in hand for this event and tickets were going well. It was **AGREED Members wishing to help and support by serving would need to fill in a volunteer form before the event.**

(f) Burns Night, 25<sup>th</sup> January 2019

Arrangements were in hand for this event.

(g) 80's Extravaganza, Friday 15<sup>th</sup> February 2019, (Mayor's event)

There was nothing to report.

(h) Garden Competition, July 2019 – to consider

**AGREED this event be held again in 2019.**

(i) Pizza and Prosecco Night, Friday 12<sup>th</sup> July 2019

It was suggested that perhaps a pizza oven should be used/hired in.

(j) Summer Fun Days, August 2019, where and how many?

**AGREED Summer Fun Days be held again and:-**

**(i) the budget be increased to £6,000 in total for all of the Fun Days**

**(ii) they be held during the six weeks summer break**

**(iii) a local ward Fun Day be held in the Denehouse, Edenhill and if possible, Acre Rigg ward and it be left to local Members to discuss their wishes for the Fun Day in their Ward with the Corporate Services Officer.**

(k) Chef – update

Members reported they had received positive feedback on the meals offered at recent functions.

(l) Polar Express, The Pavilion on Wednesday 19<sup>th</sup> December 2018, The Pavilion, tickets free of charge

51. Items for the next agenda

It was asked that the following items be placed on the agenda for the next meeting:-

- Alternative for the Fake Festival
- Booking a Touring Gin Festival to come to Shotton Hall, and
- A proms at Shotton Hall Event

52. Date and Time of Next Meeting

It was **AGREED** the next meeting held on **Wednesday 23<sup>rd</sup> January 2019 at 10.00am until 12.00 noon in the Council Chamber at Shotton Hall Banqueting Suites.**

**Report to:** Peterlee Town Council Community & Environment Committee  
**Date:** 10<sup>th</sup> December 2018  
**Subject:** Review of opening of Town Council Parks, Play Areas and Cemetery Review  
**Report of:** Ian Hall, Parks Manager

**Report purpose:** To provide Members with a review of the arrangements for Town Council's Parks, Play Areas and Cemetery opening. The report concludes that the overall impact on Parks and Play Areas has been a positive one, and that further work is needed to engage with local residents and users on maintaining the cemetery's high standards of appearance.

**Background:** Members will be aware that Peterlee Town Council provides a number of Parks and Play Areas for residents and visitors in Peterlee:

- Woodhouse Park: The Council's largest park, with both toddler and senior play areas within the park perimeter
- Oakerside Drive Play Area
- Hampshire Close Play Area
- Eden Lane Play Area
- Heath Close Play Area
- Hill Rigg House Play Area

The Council also owns and maintains Peterlee Cemetery.

The cemetery and all of the parks and play areas have a tall (generally 2m or higher) perimeter fence with gate(s) and historically these were routinely locked and opened by Town Council staff on a 'dawn to dusk' basis, 7 days a week.

In September 2017 the Town Council removed the 'dawn to dusk' policy for the parks, play areas and cemetery, and agreed for the parks, play area and cemetery to be left open. The sites were subsequently opened on a phased basis, to manage the transition process and enable a quicker response should any major issues arise.

In April 2018 the Council considered a request from local residents to revert to 'dusk to dawn' locking of Hampshire Place play area following reports of anti-social behaviour at the site. The Council resolved to keep the play area unlocked, and instead worked with the local Neighbourhood Police team and local residents to promote the prompt reporting of any concerns of anti-social behaviour to enable the Police to target perpetrators if required. The Council agreed to review this position after another six months.

In May 2018 the Council's new staffing structure went live, with the former Parks Attendants roles deleted and the Parks Team added to with a new Senior Manager, Gardener role, and two Horticultural Apprentices.

**Review:** The Parks Manager has now been in post for 4 months and has taken the opportunity to review the impact of the opening of the parks, play areas and cemetery since the council decision in September 2017. As part of this review he has consulted with the 3 Parks department team leaders regarding the 24-hour opening of all parks and the cemetery.



The results of the review are as follows:

#### Peterlee Cemetery

The Cemetery Officer has reported an increase in complaints and negative issues at the cemetery site since the opening of the gates. These have ranged from dogs off-leash, an increase in dog waste, children playing within the Cemetery, reports of missing graveside items, and occasional dumping of domestic household waste in Cemetery bins.

Members have been asked to note that the Council has not yet provided any additional forms of resident/cemetery user engagement to tackle these issues.

#### Woodhouse Park

Opening & closing of toilet facilities - At the beginning of the transitional period the toilets were closed by existing staff, Managers, Cleaners etc. This led to several occasions where the toilets were either left open or not opened at all (particularly weekends). To ensure that the toilets were routinely opened and closed at weekends a local security company has been engaged to open, check and close the toilets at the park every weekend.

Weekend Events - (e.g. cycling club, Community Garden) There has been a positive impact on the ability of the park to host weekend activities as there is no longer an issue with opening and closing times and staff availability at weekends. The gates for the community garden and glasshouses/community building are now on combination locks to enable selected access to approved community users.

Vandalism - Incidents of vandalism at the park have decreased, with a particular reduction in damage to fence palings which were previously being removed to gain access to Woodhouse Park after closing time. There are ongoing incidents of vandalism within the toilets at Woodhouse Park, including fire damage (arson), physical damage (tiles, heater) and one incident of graffiti.

#### Other Play Areas

The Parks team are responsible for the inspection and repair of all of the Town Council's play areas. The team has reported that since the unlocking of the play areas they are not having to replace fence panels on the play areas. The only exception is the Eden lane MUGA facility, but even this site has seen a significant reduction in damage over the past few months and the MUGA does not get trashed on a daily basis like it used to when the site was being locked.

The team has also reported a drastic reduction in damage to locks and gates and there is noticeably less vandalism to play equipment. There was damage reported at Hampshire Place and a few pieces of equipment and grass matting needed attention or replacing earlier in the year but this has not recurred at any significant level.

Overall, the Parks Team have reported that issues in Woodhouse Park and the other play areas have reduced since the blanket locking policy was removed. This is what the Town Council had hoped to achieve when it made the decision to stop locking the areas back in September 2017.

**Recommendation:**

Members are recommended to note the contents of this report and the reduction in issues of damage and misuse of the Parks and Play Areas in Peterlee since the decision was made to open up the sites and not lock them from dusk to dawn.

For the cemetery site it would seem that the impact has not been as positive. Anti-social behaviour and missing items was an intermittent problem when the cemetery was still being locked, and so these issues are not directly caused by having an open cemetery. However, it is felt that more could be done to try to engage with cemetery users and wider community to help the Council to maintain this beautiful cemetery site, and so it is recommended that Officers and local Members be authorised to engage with the Eden Hill residents group to establish how we may be able to encourage people to treat the site with more respect and work with the Parks Team to keep it litter and dog-mess free. Members are further recommended to review the situation with the cemetery in another 6 months time.

## **Appendix 1: Implications**

**Finance** – No immediate implications. If the Council did wish to consider re-establishing locking of any of the sites there would be a likely financial cost associated with staffing that decision.

**Staffing** – There are no immediate implications arising from the recommendation in this report.

**Risk** – Each of the sites is subject to individual risk assessments and inspections on a routine basis.

**Equality and Diversity, Cohesion and Integration** – There are no immediate implications arising from the recommendation in this report.

**Crime and Disorder** – No implications.

**Consultation & Communication** – The Park and Play Area Strategy and Woodhouse Park Working Group have been engaged in transition process for the unlocking of the parks and play areas. If approved, further consultation will take place with residents in the Eden Hill area to establish how the Council can better engage with local residents and cemetery users to help us maintain the site to the high standards that the Council aspires to.

**Procurement** – There are no immediate implications arising from the recommendation in this report.

**Legal** – No implications.

**Report to:** Peterlee Town Council Community & Environment Committee

**Date:** 10<sup>th</sup> December 2018

**Report of:** Ian Hall Parks Manager

**Report Title:** Use of Glyphosate

**Purpose:** This report is intended to provide members with a summary of the use of Glyphosate across Peterlee Town Council assets and land and makes a recommendation that the use of this weed-killer is ceased, to be replaced with a seasonal maintenance team.

**Background:** As members will be aware, the Town Council's Parks Department uses the herbicide Glyphosate in the weedkiller used for the control of weeds on Town Council land in Peterlee, along fence-lines, paths, around trees etc. The actual weedkiller in use by the Town Council is Nomix Enviro's Nomix Dual herbicide.

Glyphosate is used in well-known household products around the world, including the agriculture company Monsanto's 'Roundup'. In the wake of a much-publicised US court finding of glyphosate's potential as a carcinogenic, Members of the Town Council have suggested that the Parks Manager look into alternatives for glyphosate's use across the town council's assets.

With regard to glyphosate and human health, the most recent ruling in the US pertains to levels of exposure and practices that are not experienced and employed by the town council, and it should be noted that the composition of Roundup, the most common commercial name for glyphosate, is composed of binding agents in the US that are banned in Europe and therefore do not feature in any spraying undertaken in Peterlee by the parks department.

A number of local authorities are currently looking to ban or reduce the use of glyphosate. For example, a 2017 report from Bristol City Council (see appendix 2) concluded that the Council should look to eradicate the use of glyphosate's use in the town by 2021. However, the Council has since stated that there have there has been no suitable replacement found that don't cause other environmental impacts and they have deemed glyphosate safe for use as its been fully licensed for UK use for another 5 Years<sup>1</sup>.

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<sup>1</sup> See: <https://www.bristolpost.co.uk/news/council-spraying->

After substantial research by the Parks Manager, it can be said with some confidence that there has been no suitable alternative herbicide found to use that does the same as Glyphosate and that doesn't have its own impact on the environment.

**Proposals:** This is a topic that has split views not just over the country but the world. The current view of the Parks Manager is that the continued use of glyphosate in products used for herbicide treatment is relatively safe and risk-free (provided proper practices and equipment, as currently used).

However, the Parks Manager is aware that Members wish to consider the matter carefully, and so has identified three deliverable solutions to bring to Members' attention:

1. A blanket ban on the use of Glyphosate within Peterlee Town Council, with the areas that we use Glyphosate being subject to a manual strimming regime 3 times per year, April-July-October. The '3 times a year' cycle is all that can be managed within existing team resources. This option will have a visual impact around Peterlee, with areas previously treated with herbicide looking increasingly unkempt in appearance prior to the next scheduled trim. Members are asked to note that anecdotal evidence from other areas in the region that have moved to a reduced strimming rota is for an increase in public complaints and negative publicity for the Council;
2. A blanket ban on the use of Glyphosate within Peterlee Town Council, to be 'replaced' with the employment of 2 seasonal Grounds staff from 1<sup>st</sup> April until 31<sup>st</sup> October each year (6 months fixed term contracts). This continual strimming regime would negate the visual impact of ceasing to use glyphosate but with the benefit of no chemicals being involved. There will be an additional benefit to the Parks Team with two additional employees who could also be use for other urgent work within the Parks Department from time to time. The additional cost to the Council would be in the region of £22,000 per annum;
3. Continue using glyphosate across Peterlee Town Council assets and monitor events as the current 5 year UK license sees it's course. This option is basically 'no change', with no additional visual or financial impact.

**Recommendation:** Members are recommended to note the contents of this report and provide feedback to the Parks Manager on Glyphosate use proposed for the summer season.

Members are further recommended that if there is a desire to cease the use of glysohate, then they approve the inclusion of additional £20,000 in the Parks budget for 2019/20 for seasonal staff as per option 2 in this report.

#### APPENDIX 1: IMPLICATIONS

Finance – members are recommended to approve £20,000 for seasonal staff if option 2 is agreed.

Staffing – if option 2 is agreed, the casual staff will be recruited in line with the Council's recruitment processes and the seasonal workers will be offered 6 month posts at scale 2 grades.

Risk – no direct implications

Equality and Diversity, Cohesion and Integration – no direct implications

Crime and Disorder – no direct implications

Consultation & Communication – no direct implications

Procurement – no direct implications

Legal – no direct implications

Data Protection – no direct implications

# Weeds, treatment of unwanted vegetation

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Trial and comparison for glyphosate free weed treatment in Bristol parks and highway surfaces



**Bristol City Council**

**28/03/2017**

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## 1.Introduction and background

The council has been approached by individuals and campaign groups calling for a ban on its use of *glyphosate* for the purposes of weed control and horticultural management . At the same time the Pesticide Action Network UK (PAN UK) launched a campaign for pesticide free towns and cities (PAN UK, 2016).

Glyphosate is a widely used systemic herbicide which acts to kill a whole plant, including its root, when applied to its foliage (Kristofferssen & Rask, 2012, p. 129; PSU, 2016).

In March 2015, the International Agency for Research on Cancer (IARC) report re-evaluated herbicide, glyphosate, carcinogenetic classification to group 2A as “probably carcinogenic to humans” (WHO, 2015). The evidence in humans came mostly from studies carried out on agricultural workers (Hortweek, 2015).

However, a subsequent peer-review of the IARC assessment in September 2016 concluded that glyphosate is “unlikely to pose a carcinogenic risk to humans” (Williams, et al., 2016). Other national and international organisations such as Food and Agricultural Organisation of the United Nations, FAO, and US environmental Protection Agency, EPA, have following the IARC report re-evaluated glyphosate status and found it unlikely to be carcinogenic (Appelby, 2016).

Prior to pending EU re-licensing of glyphosate in July 2016, the European Food Safety Authority (EFSA) also reviewed its glyphosates toxicological profile finding it “unlikely to pose a carcinogenic hazard to humans” (EFSA, 2015). The licence was renewed for 18 months only in wait of European Chemicals Agency (ECHA) evaluation. In March 2017 ECHA's Committee for Risk Assessment (RAC) “concluded that the available scientific evidence did not meet the criteria to classify glyphosate as a carcinogen, as a mutagen or as toxic for reproduction” (ECHA, 2017).

The Council’s response has been to carry out research into alternatives to glyphosate and an assessment of the need for its use and to carry out a 12-month trial of an alternative method of weed control. The trial took place across all relevant land in Cotham ward and St Andrews Park.

## 2.Research questions

The aim of the trial is to research possibilities to further reduce synthetic herbicide use in public areas, concentrating specifically on glyphosate reductions. Answers to the following questions are sought:

- How affective is vinegar compared to glyphosate as an herbicide?
- How is the public responding to visual changes in parks and streets?
- What are the costs of alternative weed control?
- Will further reduction on herbicide application effect infrastructure?
- How and where can herbicide use be reduced without damage to infrastructure or increasing public concern?

### 3. Secondary research – Case study Sweden – alternative control of weeds on hard surface

The commonly available methods for weed control can be listed as prevention, chemical, thermal and mechanical treatments (Cederlund, 2016; EMR, 2015; Kristofferssen & Rask, 2012; Nielsen, et al., 2005; Cederlund, 2015; Kristofferssen & Rask, 2007; SKL, 2006). The alternatives for chemical weed control, such as thermal and mechanical, are 'contact' herbicides (not systemic as glyphosate) which affect only the visual parts of the plant, leaving the roots intact. A previous BCC report (BCC, 2016f; BCC, 2015) has covered both synthetic herbicides used in weed control and some alternative methods in detail. The report used research material available in English. This report will include studies available in other languages, as research available in English has been sparse (EMR, 2015, p. 2).

In Sweden, both railways and power transfer stations, where the protection of infrastructure is of national importance, are still using synthetic herbicides whereas most municipal authorities have severely restricted the use of synthetic herbicides. Over a ten year period, from 2006 to 2015, the Swedish University of Agricultural Sciences (SLU) has conducted research on weed control on behalf of Banverket (Swedish Rail Administration) testing various methods and their effects on railways. Methods such as hot foam and acetic acid spray have been tested (Henningsen, 2013; Cederlund, 2015).

#### Alternative Method – Hot Foam

The energy and water use for the hot foam method are high and operations speed slow, but compared with other thermal methods such as flaming, the method is found to be more versatile in difficult to reach areas (EMR, 2015, p. 7). The operational speed, problems with transporting large amounts of water combined with high energy use give a high price and environmental impact. Whether the high energy doses needed for thermal treatments can be considered as sustainable needs careful consideration (Ascard, et al., 2007, p. 172; Cederlund, 2016, p. 24).



Figure 1 NCC Spuma hot foam treatment

The water use for hot foam method was estimated to be between 15,000 - 17,000 litres/ha, compared to 3000 litres/ha for acetic acid and 200 litres/ha for the tested glyphosate product. Working speed for truck mounted hot foam system was estimated to 1620m<sup>2</sup> per hour whereas when operated by hand the work output varied between 142 – 325m<sup>2</sup>. The size of the water container also affects the working speed (Cederlund, 2015, p. 12).

#### Alternative Method – Acetic Acid

Acetic acid has also been tested in a railway environment. It was found to be effective at killing weeds at 12% concentration, but needed more treatment times and higher doses for acceptable weed removal levels when compared with synthetic, systemic herbicides. Although no effects were detected during the experiment, the possibility of the acid corroding rails and signal systems made Banverket abandon further experiments (Cederlund, 2016, pp. 38 - 39).

### Alternative Method – Mechanical

The most commonly used alternative weed control on streets in Sweden is wire brushes with a side arm attachment (SKL, 2006, pp. 15 - 20).

Parking restrictions in place for necessary winter snow clearance make it possible to get easy access for the sweepers in the summer.



Figure 2 Mechanical wire brush sweeper

## 4. Primary research – Rationale for weed spraying and costs

The Council's street cleansing contract covers the council's statutory duty to *"keep specified land clear of litter and refuse"* (Defra, 2006, p. 5), this includes litter collection. The duty covers both street and park land and was previously known as NI195, NI196. Weeds are not specifically mentioned but are understood to be included under detritus - *"dust, mud, soil grit, gravel, stones, rotted vegetation, twigs and alike"*. Bristol Centre is maintained to grade A\* and the rest of the city to grade B as described on grading principles on cleanliness in amenity setting (Defra, 2006, p. 14).

The cost of the weed spraying work carried out by Bristol Waste Company (BWC) is embedded in the total value of street cleansing and cannot be accurately isolated. In 2016, weed control on the highway was carried out by BWC. In 2017, weed control will be the subject of a tender and will be delivered through a contractor.

BWC has sought prices costs for using both hot foam treatment and acetic acid treatment. The two contractors approached were not willing to consider hot foam treatment because the equipment is too large to be of use in restricted spaces deeming it not to be an effective treatment. They did not recommend the use of vinegar and were concerned that complaints about its 'smell' would harm their reputation.

However BWC previously estimated that the relative cost of each method is £60k per application for glyphosate, £216k per application for acetic acid and £392K per application for hot foam (Note: a considerable effort has been made to compare prices of acetic acid spray with use of glyphosate but it has proved too difficult to be sure we are comparing like with like in terms of outcome. BWC's estimate does this. What is clear is that the use of acetic acid and hot foam are always considerably more expensive than glyphosate.

## 5. The Glyphosate-free trial – Method and findings

### Method:

The Council carried out a trial across all relevant land in Cotham ward and in St Andrews Park.

No glyphosate based products were used by the council or its contractors throughout the trial area on BCC owned and maintained land apart from invasive weed spraying. The trial was delivered to existing budgets for this work (BCC, 2016b). Three alternative methods for weed control were considered and priced. Acetic acid was chosen as an alternative control method (BCC, 2016c, p. 9; BCC, 2016g).

The trial involved monitoring the impact of not using glyphosate within the trial with other 'control' areas where weed control was continuing as normal. Monitoring took place on relevant streets, hard surfaces and green spaces.

The total trial area of Cotham ward is about 1 square kilometre (100ha). There is approximately 20km of highways roads in the ward. The trial started in March 2016 and the ward boundaries changed in May 2016. The trial follows largely the old boundaries.

The control routes were established by finding parks with similar path condition as Cotham Garden (a space within the trial area) and including surrounding streets. Existing road hierarchy system was used and road surface checks were done on google street view to select roads with similar characteristics in both trial and comparison areas. The sites were given a number to enable easier management of research material. The areas are divided in four routes of total of 9,639m (excluding parks). Route 1.0 was separated to two areas as some streets were added after the first visit. Route 2.0 was also separated as the weed treatment was carried out late and road surface conditions in route 2.2 (Easton) were worse than elsewhere thus causing a distortion in the scores.

**Route 1.0:** from Clifton Down Station to Cromwell Road, divided to:

**1.1 Cotham;** 2,016m of streets, three housing sites and two parks (Cotham Green and Redland Grove OS) from Whiteladies Road to Cheltenham Road

**1.2 Clifton and Ashley;** Total of 2,974m of streets and one park (St Andrews Park); Clifton East from Clifton Station to Whiteladies Road and Ashley from Cheltenham Road to Cromwell Road.

**Route 2.0:** from Lawrence Hill station to Stapleton Road divided in to (divided due to road surface conditions in 2.2):

**2.1 Lawrence Hill;** 1,071m of streets and one park (Gaunts Ham Park), from Lawrence Hill Station to Easton Way.

**2.2 Easton;** 878m of streets from Easton Road to Stapleton Road.

**Route 3.0:** streets on route to St George Park

**Route 4.0:** Road by Stapleton Road Station closed for traffic, not maintained

Both trial and control areas were visited once a month and a photographic record made.

The areas were assessed for weed levels using the method introduced in Defra report "Weeds" (EMR, 2015, pp. 18 - 23). The criterion was used to view the emerging differences between trial and comparison area. Weed complaints received by BWC have also been considered.

St George Park acted as a 'control' comparison site for St Andrews Park to add more horticultural features. For

Criteria			Score	Level	Description
Height mm	Weed diameter or legth mm	Joint covorage %			
<10	<50	<10	<3	1	No noticable weeds
10 to 50	50 to 100	0 to 20	4 to 6	2	Occational small weeds
50 to 100	100 to 150	20 to 30	7 to 9	3	Patchy weed growth with some flowering weeds
100 to 150	150 to 200	30 to 40	10 to 12	4	Numerous weeds, many flowering, view annoys or irritates public
150 to 200	200 to 300	40 to 50	13 to 15	5	Numerous large weeds, risk to slip or trip
>200	>300	>50	16 to 18	6	Numerous large weeds, many tall and flowering, causing obstruction

the parks the monitoring was concentrated on horticultural feature condition and visual amenity round obstacles in grass, such as park benches and bins. Possible public complaints have been taken into account.

### Findings - Streets

Table below illustrates the differences between trial and comparison where 1.1, Cotham, is the trial area and the rest are control areas used for comparison.

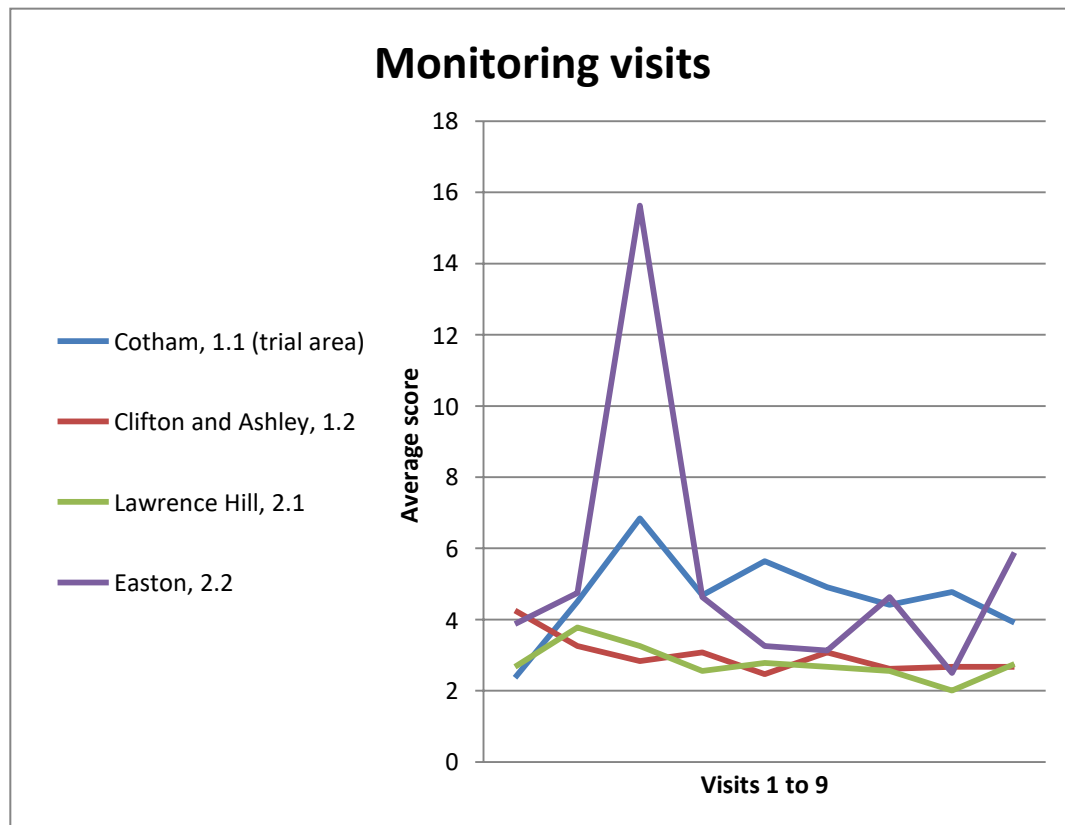


Figure 4 Average weed scores

The highest score recorded on a control area came from St Marks Road, Easton, where the herbicide spraying was carried out late in the season. After treatment, the score was more in line with other areas treated with glyphosate.

The score charts from Cotham trial area had two clear low score times, one after acetic acid treatment and one after hand weeding. Glyphosate treated areas score lower for longer after treatment. For the monitoring results it was the clearest difference between the trial and comparison areas. It shows the length of time the different methods were effective.

The monitored streets in the trial area had resident parking scheme in place whereas the comparison area did not with more parked cars as a result. Especially North Street in comparison area Ashley (1.2) was very busy making both sweeping and weed treatment tricky. On occasions it was difficult to find a gap wide enough between parked cars to walk through. It seemed to have resulted in difficulties for the spraying operations with missed weeds as a result.

The average scores for route Ashley (1.2) and Lawrence Hill (2.1) were good or acceptable throughout the monitoring period. Area Lawrence Hill (2.1) is seems more densely populated which might result on higher footfall and less weeds on the area. The jointing points between

hard surfaces were mostly weed free at all times apart from round street signs and furniture. There were no or few street trees in this area.

The tarmac quality, surface materials and late treatment time gave route Easton (2.2) some of the worst scores in earlier visits.

The route can illustrate what the outcomes of no weed control could be. The area received most public complaints. The type of hard surfacing at St Marks in Easton was not present in any other monitored sites – the small paving's and large amounts of joints are a favorable growing surface for weeds. The placing of street furniture and



Figure 5 Easton, Chelsey Road

other objects increased the weediness levels, as shown on Chelsey Road (Figure 5) with a parking area surrounded by trees and a cluster of street furniture preventing normal footfall. The parking area had empty, but still open tree pits and epicormic growth surrounding the trees. The area was sprayed later than most making the overall appearance very poor. However, one of the clearest differences between the trial and control areas was that the treatment time was clear to see. Once the area was treated its scores were comparable with the rest of the control area.

The streets on route 3.0 are grouped together being on the way to St George Park. Some of the route had newly resurfaced paths where the effects of good quality tarmac were clear to see. The new tarmac also covers the cracks between curb stones thus giving far less weeds.

Route 4.0 is a road closed to vehicle traffic next to Stapleton Road Station (Figure 6). It is owned by Network rail. As it doesn't seem to be on a regular weed control route, perennial species like brambles, nettles and sycamore samplings are present. Although the area was treated mechanically once during the monitoring period, it shows how the perennial weeds start to appear without weed control.



Figure 6 Stapleton Road Station

Altogether 367 complaints for street weeds were received of which 26 were in the trial or comparison areas giving 7 in Cotham, 11 in Easton and 8 in St George/Redland. No complaints were received from Ashley.

It is difficult to find distinguishing any difference in the number of complaints between the trial and comparison areas.



### Findings – Parks:

In parks in the trial area no alternative weed control was used. All herbicide use was ceased and normal maintenance work, such as shrub bed maintenance, path sweeping and grass cutting was continued as normal. In practise this meant that the so called “obstacle” and path spraying was not carried out. Obstacles mean anything in grass like lamp posts, trees, seats and fence lines, normally sprayed to ease the grass cutting operations and to maintain the traditional visual appearance.

Some of the paths in Cotham Gardens (Figure 7), one of the parks in the trial along with Redland Grove and St Andrews Park, were in very bad state with worn of tarmac surface and tree root damage. Tarmac quality is one of the major contributors for weediness levels and one of the most difficult to solve without the use of chemicals as if normal machine sweeping is used the tarmac will deteriorate even further.



Figure 7 Cotham Gardens path

The paths at the top part of Cotham Gardens were scheduled for resurfacing during the trial period. They needed to be treated for weeds which was not possible during the trial. The alternative would have been to cut out the areas affected, fill in with new sub-base and tarmac over. The additional cost for the 150m<sup>2</sup> area would have been £1356, about £9 per square metre.

Park entrance design and the installation techniques used for park furniture are playing part on weediness levels. Where the footfall is low, weeds will grow on a hard surface. Benches installed without a plinth are sprayed or strimmed underneath to stop the grass growth reaching the seat. Installation of concrete plinths would reduce weeding need. In the case of Redland Grove, volunteers cleared areas under the benches during the trial period.

Cotham Gardens also has fencing around its playground where grass was left untouched during the trial. Within the trial period the visual impact of this was minimal as the species growing in the base were mostly grasses. However in St Andrews Park the fenced areas had larger species mix and the visual impact was noticeably worse. With time the possibility of perennial woody species, like elder and buddleia, being established increases. In the short term the visual affect would be negative and in the long term damage to the fence may occur. The effects of no spray can also be seen in many walls round Bristol's parks.

It seems that leaving tree bases untreated (Figure 8) would be acceptable although attention needs to be paid to possible damage to trees from cutting operations. In some areas path edges have been sprayed in the 'old fashioned' way which can seem unacceptable to the modern eye, whereas in



Figure 8 St George Park long grass

other areas the visual impact of no spraying also seems unacceptable.

St Andrews Park was added to the trial at a later state to include horticultural features not present in Cotham Gardens, such as annual floral meadows. The annually seeded meadows require herbicide treatment prior to installation. For the trial period two areas were seeded with annual mixture and four areas with perennial mixture both without herbicide treatment. An other small area of floral meadow was intalled in existing grass also without treatment as a comparision. All areas in St Andrews had more weeds than before, but germination did happen and flowers apeared. It can also be stated that after six years of intalling floral meadows throughout bristol, that the existing seed bank and the amounts of time that the same spot has been used, play a crucial role in weedines levels. Amaranthus and docs have established themselves in one park to the level where a decision to move the meadow has been made.

**Further notes:**

For the 2016 season Bristol Waste Company (BWC) took the spraying contract in-house when previously it was contracted out. A new spraying application method was employed, Total Droplet Control (TDC), a method perceived to have less environmental impact with precision spraying, quicker drying times and less wind drift. It also turned out to be slower. BWC only completed one treatment in most areas, a change from two treatments the previous year.

With the short trial time it is impossible to say if or how the weed flora would change with different treatment methods. In both the control and trial areas, the weeds present later in the season were mostly tap rooted plants, such as taxarum ssp, and grasses.

The crews carrying out the weed control stated that the weeds started to regrow in acetic acid areas a quicker than elsewhere. As the outcome for the acetic acid was set to “as with glyphosate” hand weeding was carried out later in the season on some streets. Both statements are reflected in the score results.

An unexpected effect of the acetic acid on spraying equipment was that the acid is presumed to have damaged the spraying equipment nozzles. Most of the available equipment is made for synthetic herbicides and alternatives would have to be sought for future use.

During the short trial it was not possible to identify any long term impact to highway surfaces. The highways department states that the biggest deteriorating aspect on bitumen surfaces is UV radiation followed by heavy and frequent traffic. Little or no research has been available as to weeds affecting surfaces. There is available research on tree roots affecting surfaces and therefore it can be anticipated that if larger woody weeds get established, the infrastructure will get affected on the long term. The highways department carries out surface condition surveys and the resurfacing is carried out in about a ten year cycle subject to inspection.



## 6. Research questions – summary of findings

### **Question 1: How effective is vinegar compared to glyphosate as a herbicide?**

The large trial areas, involvement of several operators, lack of infrastructure investment and use application methods may have affected trial results to some degree. However, clear differences between the methods can be shown, like the length of time before weeds started re-emerging. For acetic acid and hand weeding the weeds started to re-emerging within a month, the interval of monitoring times. On comparison sites, treated with glyphosate, the weediness scores stayed low for five to six months. This is reflected in secondary research material studied.

Acetic acid can be as effective as glyphosate in removing the surface appearance of weeds if used more frequently. However the cost becomes prohibitive.

Many Swedish municipalities have had a total ban or restrictions for synthetic chemical use since 1996. A study and guidance document has evaluated ten years of experiences from different councils of weed control without synthetic chemicals. It finds that the weed problem in places is now so severe and that either more resources is needed or long-term removal process of hard surfaces needs to be started (SKL, 2006, p. 3). The main reason for herbicide bans has been to protect groundwater. Other protective measures, such as recommendations not wash your car on the streets are also in place.

### **Question 2: How is the public responding to visual changes in parks and streets?**

During the trial period only one weed treatment was completed with glyphosate resulting in some complaints. No guidelines have so far been used as for wished for outcomes of spraying or what is an acceptable level of weeds on streets. We know that the public does react to an increase in weeds on streets.

We can also assume that, as most authorities across the UK and Europe carry out some method of weed control, this is because of their impact on the attractiveness of an area and the public response to that.

Within parks, the trial-time of one year did not result in significant enough visual changes and therefore no increase in public concern. There was an increase in volunteering activity in Redland Grove, where benches have no base and weeds were starting to grow through. The grass was cut under benches by volunteers who also have been fundraising to install plinths for benches.

### **Question 3: What are the costs of alternative weed control?**

As the trial was set up within the existing budgets it is considered the no extra costs should have occurred. However, the contractor did hand weed some of the trial area with an estimated additional cost of £1.06/linear<sup>1</sup> meter. Also the parks department had scheduled a path surfacing for Cotham gardens and would have incurred an increase of £9.04/m<sup>2</sup> if the work had been done.

The BWC estimations mentioned earlier indicate 3.6 times higher costs for acetic acid applications and 6.5 times higher costs for hot foam treatment. However, BWC was not able to

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<sup>1</sup> Based on estimated weekly work increase for a crew of 2.

<sup>2</sup> Based on cutting out areas affected by weeds, filling new subbase opposed to just spraying.

get quotes for either of the alternative treatments for the coming season as the contractors asked did not deem the alternatives as viable options.

#### **Question 4: Will further reduction on herbicide application effect infrastructure?**

For the short period of the trial no structural damage was detected. Control route 4 indicates that with the increase in perennial weed composition and appearance of woody weed such as sycamore and buddleia the future damage is possible. Literature also talks about increased wind and water erosion in spots where weeds start to grow and estimates that the life span of a surface can be reduced. The time is depending of surface materials which can vary widely between countries. The Swedish study from 2006 after ten years of alternative weed control by municipalities recommends that the weed control efforts are greatly increased or start ripping out tarmac. The nationally important structures such as electricity substations and railroads have not introduced glyphosate bans as they have, despite efforts, not been able to find good enough substitute. The railways did find acetic acid good enough but the metal signal systems stopped future experiment although research did not show great corrosive effects on metal structures.

#### **Question 5: How and where can herbicide use be reduced without damage to infrastructure or increasing public concern?**

In parks the reductions can be made in so called obstacle spray resulting in high grass round trees and poles. It might be more difficult to exclude spraying all together round fence lines as woody weeds will emerge with time. It should however be possible to use sprays only every other or third year if high grass round bases is visually acceptable.

For the street scene hard surface it will be more difficult. Parked cars will restrict the introduction of a machine based approach and affect cost. Defra recommend longer contracts which would allow the contractors to invest in specialist machines, especially applicators that use technology to detect weeds and measured amounts of herbicide going down to greatly limit the amount of glyphosate used. There are areas where spraying is needed for both visual amenity and for protecting infrastructure.

## **7. Conclusions**

Although synthetic herbicides are still widely used in domestic, agricultural and public space settings and are more effective than alternatives, the desire to protect water courses, stop the progress of resistant weeds and political pressure has led to restrictions of herbicide use in some European countries (Kristoffersen, et al., 2007, p. 370; Cederlund, 2016, p. 43).

Since the European Chemicals Agency (ECHA) risk analysis dictating glyphosate as not carcinogenic the debate between industry and campaigners is still ongoing. For example, the Crop Protection Association states the following:

*"Glyphosate is, and always has been safe. This ruling is another reminder this debate has never really been about safety, it has been hijacked and politicised to force a wider debate on modern agriculture. It's right that we're having that debate, but it's wrong to use health scares to get there."* (Appleby, 2017).

...and one of the campaign organisations, Greenpeace, states the following:

*“Echa has gone to great lengths to sweep all evidence that glyphosate can cause cancer under the carpet. The data vastly exceeds what’s legally necessary for the EU to ban glyphosate, but Echa has looked the other way” (Neslen, 2017).*

It can be difficult for the policy makers to decide a course of action with this divergence of views. However, the legal requirement for weed control on public areas, public perception and protection does require weed control to be carried out.

When deciding a method, all the environmental aspects of synthetic herbicides and alternative weed control methods should be considered. The costs and effectiveness of the alternative methods will also influence the choice. Removing glyphosate completely at the moment, especially on hard surfaces and in control of invasive weeds, is not the right option.

The Swedish SKF study recommends better understanding of how the alternatives work and deters from total ban of glyphosate. It also finds that after ten year of restrictions and bans the situation in places is so severe that either weed control needs to be increase severely or long term removal of hard surface needs to start (SKL, 2006, p. 3) The recommendation from “Weeds” for integrated pest control, using synthetic herbicides along with alternative weed control methods, seems like the best alternative for a way forward. Even then more work and investment is needed to choose an appropriate control, adapt the equipment and operators skills and evaluate the street environment for suitable methods. Also, as with glyphosate is not a suitable comparison. The acceptance levels of weeds needs agreeing instead and several methods will need to be used alongside each other to achieve acceptable weed control.

The recommendation for street scene is for BWC to find a progressive contractor and find out technologies of spraying with sensors etc. for best reductions. This would require longer-term contracts to allow the contractors to invest in appropriate machinery and be able to follow latest developments in the industry.

Parks will soon be testing newly licenced pelargonic acid along with other naturally occurring herbicides. The choices at the moment are acetic acid and pelargonic acid. This will require re-educating the spraying operators.

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## Route maps



Figure 9 Route 1.2, Clifton



Figure 10 Route 1.1, Cotham



Figure 11 Route 1.2, Ashley

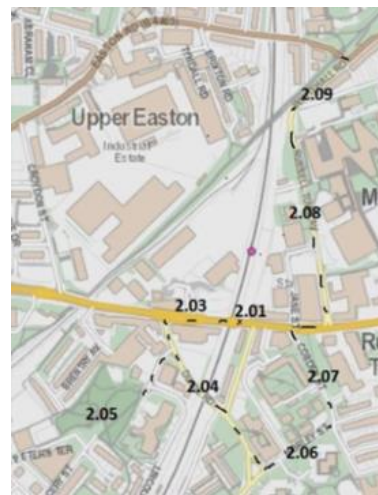


Figure 12 Route 2.1, Lawrence Hill



Figure 13 Route 2.2, Easton



## Weed habits and common weeds

As most alternative weed control methods are contact affecting the need to recognize species and growth habits (Figure 14) becomes more important.

The main two categories of weeds on hard surfaces are annuals, growing from seed, and perennials which can grow from root encroachment or seed. For a seed to germinate it needs nutrition, water, light and warmth. A millimeter size crack or joint is big enough for gathering dust particles and water to allow germination process to start. Curbs and other joints are the weak points in a hard surface especially where footfall is low like house edge and round obstacles (Hein, 1990, p. 9). Some of the most common weeds on hard surface are annual meadow grass (*Poa annua*) along with other grasses, dandelion (*Taxarum spp*), and mosses (*Bryophyta spp*) (EMR, 2015, p. 10). Some fast growing tall weed species worth mentioning are willowherb (*Chamaenerion angustigolium*), sow thistle (*Sonchus spp.*) and horseweed (*Conyza Canadensis*) (Melander, et al., 2008, p. 8) all of which have been prominent in Bristol hard surfaces during monitoring. (See Appendix 1 for weeds).

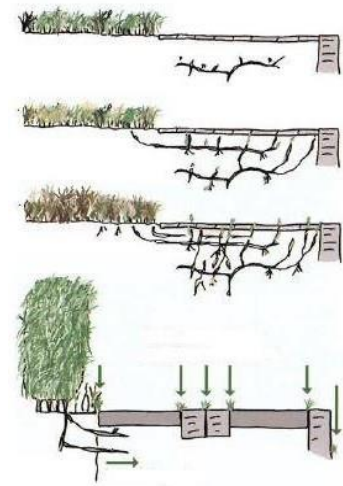


Figure 14 Weed growth habits on hard surface

The prevailing weeds have often they growth meristem below the hard surfaces and tolerate wear and tear (Rask, 2012, pp. 13 - 14). Besides the unkempt look of weeds on hard surfaces they can speed up the deterioration of the surface. The roots further brake down the surface allowing further erosion by wind and water (Kristofferssen & Rask, 2007, pp. 370 - 371).

### Pictures of the most common weeds in trial:



*C. angustifolium* – willow herb



*Sonchus spp.* – sow thistle



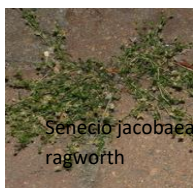
*Conyza canadensis* – horseweed



*Taxarum spp.* – dandelion



*Capsella bursa-pastoris*, shepherd's purse



*Senecio jacobaea* – ragwort

*Plantago ssp.*, Plantain



*Poa annua* – winter grass

*Myosotis arvensis* – field forget-me-not

*Bryophytes ssp.* – mosses



*Sagina procumbens* L. -  
procumbent pearlwort

*Arenaria serpyllifolia* –  
thyme leaved sandwort

