# Report: The Use of Greenspace in Peterhead



Housing development along north-east area of Peterhead, which connected the 'town' with Buchanhaven. © Copyright <u>Ken Fitlike</u>

## Katrin Prager Macaulay Land Use Research Institute 29 March 2010

## Introduction

This report brings together the results of a social science survey carried out by the students of P6-A of Buchanhaven Primary School in March 2011. The survey was designed, carried out and analysed by the students with the help of Katrin Prager, social science researcher at Macaulay Land Use Research Institute, Aberdeen. The report was written by Katrin Prager for use by the students, the teachers and other interested people.

## **Purpose and objective**

The purpose of the social science experiment was to help primary students learn about social science, in particular the method of *quantitative survey*, as part of their Science Week. The results can be used to share insights on the use of greenspace by local children with other students, teachers, or parents. In addition, the results might be of interest to the council or other organisations involved in town planning, well-being and health.

The objective of the survey was to explore the views of primary children on the availability and use of greenspace in Peterhead. Beforehand, the class discussed the meaning of greenspace. Greenspace is an area of greenery within towns and includes public parks, gardens, football pitches, woodlands, or green strips along waterways. We noted a difference between public greenspace that is available for use by everybody, and greenspace which can only be used by certain people, such as allotment gardens and golf courses.

## **Questionnaire design**

The students designed a standardised questionnaire (every respondent would be asked the same question) that included closed questions. Questions included:

- 1. Is there enough greenspace in Peterhead?
- 2. What do you use greenspace for?
- 3. How far would you cycle and walk, respectively, to a greenspace?

The questionnaire was distributed to both P6 classes at Buchanhaven Primary School as part of the social science experiment, and the results were analysed by P6-A, using Microsoft Excel Software. The total number of respondents was 51 (n=51), of which 23 were girls and 28 were boys.

## Results

#### Is there enough greenspace?

In total, 30% of respondents found there was enough greenspace in Peterhead, while 43% answered there was not enough. 27% stated they did not know (Table 1). If a distinction is made between male and female responses, we see that male respondents are more likely to find the amount of greenspace in Peterhead insufficient (Figure 1). In addition, it is mainly the boys who answered they did not know if there was enough greenspace.

Answer	Frequency	Percent (%)	
yes	15	30.6	
no	21	42.9	
I don't know	13	26.5	
Total	49	100.0	
Missing answer	2		

Table 1: Responses to the question: Is there

enough greenspace in Peterhead?

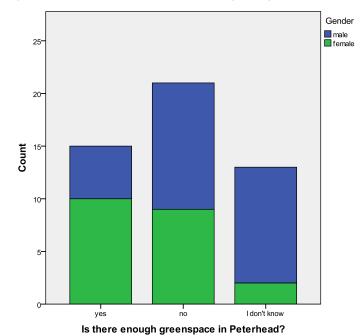


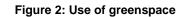
Figure 1: Male and female responses regarding the amount of greenspace

#### Use of greenspace

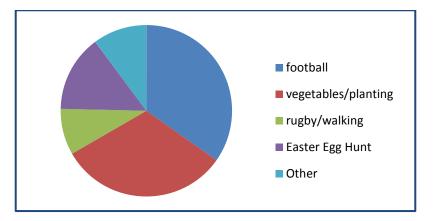
The questionnaire allowed respondents to select any of the following: football, planting/growing vegetables, rugby/ walking<sup>1</sup>, Easter egg hunt or other. Three quarters (75%) of respondents listed one use for greenspace, followed by well over 10% of respondents who used greenspace for three different kinds of activities.

The number of times each use was mentioned was added up and the sums represented in a pie chart. As shown in Figure 2, football is the most common use of greenspace, with 24 out of 51 students listing this activity. Particularly boys listed this use.

<sup>&</sup>lt;sup>1</sup> The combination of these two items was not intended but was an oversight in the design of the questionnaire. For future applications of this questionnaire these items need to be separated in order to avoid skewed results.



Using greenspace for vegetables/ planting (n=22) is the next popular choice. It was mainly girls who stated that they would use greenspace for this activity. Ten respondents said they would use greenspace for an easter egg hunt. Other uses include "playing", "horseriding" and "gymnastics".



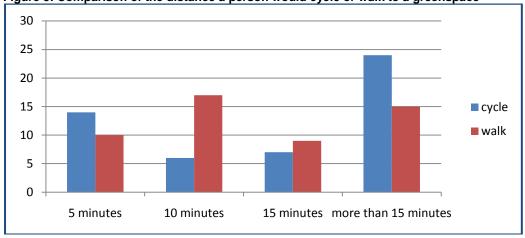
#### **Distance to greenspace**

The survey also asked respondents to indicate how far they would walk and cycle, respectively, to a greenspace, assuming that they considered their home as the starting point. The students designing the questionnaire had preferred the time unit of minutes over a distance unit of kilometres or miles.

Almost half of the respondents would cycle more than 15 minutes to a greenspace. When it comes to walking, one third of respondents would prefer a greenspace to be only 10 minutes away, while slightly less than a third of respondents is willing to walk for more than 15 minutes (Table 2 and Figure 3).

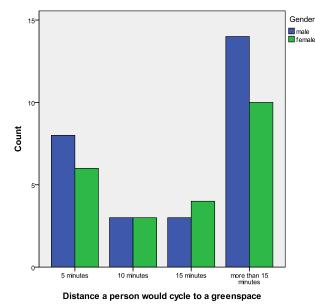


Distance in minutes	CYCLE		WALK	
	Frequency	Percent (%)	Frequency	Percent (%)
5 mins	14	27.5	10	19.6
10 mins	6	11.8	17	33.3
15 mins	7	13.7	9	17.6
> 15 mins	24	47.1	15	29.4
Total	51	100.0	51	100.0

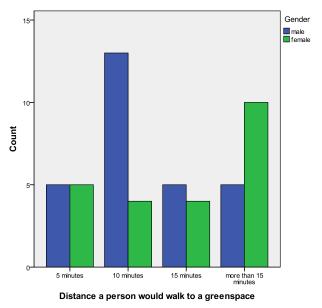




If the data is distinguished by gender, results show that boys are prepared to cycle for longer to a greenspace whereas more girls would be willing to walk for more than 15 min. The majority of boys prefer a walk of no longer than 10 minutes (Figure 4).







## **Discussion**

According to the perception of the majority of P6 students, there is a lack of greenspace in Peterhead. Boys tend to miss greenspace more than girls, which might be related to boys preferring outdoor activities such as football. This interpretation is supported by the responses of boys that football is their preferred use for greenspace. The results also show that about a quarter of the surveyed students – mainly boys – did not know whether there is enough greenspace which may indicate that they have not previously given the matter much thought.

The answer options for what kinds of activity student use greenspace for were somewhat limited because the options 'rugby' and 'walking' had slipped together on the questionnaire so may have confused respondents. More options could be given in a future questionnaire including 'playing', 'horseriding' and 'gymnastics'. The use of greenspace for football and for planting/vegetables was dominant. If new greenspace was created in Peterhead, this finding should be taken into account by establishing football pitches and opportunities



Balmoor Park – Peterhead, August 2008. This photo belongs to tcbuzz's photostream on flickr

for gardening activities. An approach worth considering is the public herb and vegetable gardens in Todmorden in England<sup>2</sup> which has proven a very successful initiative. Perhaps there is also a space to create gardening opportunities at the school.

The location of greenspace in relation to students' homes is also an important consideration. In the discussion before the survey many students said they cycle. Many of the surveyed students indicated that they were happy to cycle more than 15 minutes to a greenspace. This could translate to approximately 2-3 miles. Having children on the road for this amount of time suggests that cycle paths throughout the town of Peterhead are a worthwhile investment, helping the safety of the children and providing opportunities for exercise and environmentally friendly transport. The time needed to walk to a greenspace should not exceed 10 minutes for the majority of students. However, it should be noted that a large number of girls were also happy to walk for more than 15 minutes. Implications of this result would be that without cycling opportunities greenspace would need to be spread throughout the town more evenly to reduce the walking distance for users.

## Limitations

The survey has some limitations relating to the way it was designed and carried out as a social science experiment with the main purpose of learning about social sciences. The empirical results reflect only the perceptions and needs of one age group (10-11 years). If results were to inform planning for the provision of greenspace, students of all ages from both primary and secondary school would need to be surveyed.

Data input from the questionnaires into Microsoft Excel was initially via students raising their arm for each ticked answer option on the questionnaire they were allocated. This turned out to create too many counting errors. To produce a reliable and valid analysis, the data entries needed to be cross-checked against the questionnaires.

## Acknowledgements

Katrin Prager's visit to Buchanhaven Primary School was supported by the Macaulay Land Use Research Institute. Thanks goes to Claire Eade for organising the researchers' visit to the school. The interest of Mrs Ingram, P6 teacher, and the enthusiasm and curiosity of the P6 students is greatly valued.



Aerial view of Peterhead. From: http://www.cruisescotland.com/imagegallery

Any comments and questions on the report and the survey are very welcome. Please email to Katrin Prager at **k.prager@macaulay.ac.uk** or **katrin.prager@hutton.ac.uk** (after 1<sup>st</sup> April 2011)

<sup>&</sup>lt;sup>2</sup> See their website: <u>http://www.incredible-edible-todmorden.co.uk/</u> or a news story in the Telegraph: <u>http://www.telegraph.co.uk/earth/countryside/4806351/Todmorden-turns-into-a-giant-vegetable-patch.html</u>