Walpole Bay beach surveys 2013

Introduction

The 2013 bathing season saw surveys carried out on the beaches of Walpole Bay, Kent for the purposes of EU monitoring site assessment. The beach was divided into survey zones according to appropriate permanent land marks, and the number of people within each zone both on the beach and in the sea was recorded. Optimum survey time was during the middle of the day when the number of people at the beach would be most indicative of EU monitoring site appropriateness.

Method

The beach at Walpole Bay was divided into 13 zones, as seen in figure 1, and the number of people on the beach and in the sea recorded. The boundaries of the survey zones were based on land marks above the beach, as well as the groynes, and therefore recognisable throughout the tidal range.

Figure 1: Map indicating the 13 zones used for Walpole Bay.

During the first week of surveys, it was decided not to continue using the zones A and B as it was felt to be in Fulsham Rock Bay. Therefore the data presented in the results section is from zones C to M.

Survey date	Start time	Finish time	Weather conditions
29/07/2013	08:00	18:30	Sunny, moderate wind ~ 22C
30/07/2013	08:00	13:00	Sunny until 9:30 and then raining
31/07/2013	08:00	17:30	Sunny/cloudy intervals ~ 24C
01/08/2013	08:00	17:30	Hot, Sunny ~ 28-34C
02/08/2013	08:00	17:30	Warm, sunny, occasional rain during morning ~ 22C
03/08/2013	08:00	17:30	Warm, Sunny 23C
04/08/2013	09:00	17:30	Warm, sunny 23C
05/08/2013	08:00	17:30	Hot (~25C) sunny some showers
06/08/2013	08:00	17:30	Warm, cloudy, some sun ~ 21C
07/08/2013	08:00	13:30	Warm, showers and rain in the afternoon
08/08/2013	08:00	15:30	warm, sunny
10/08/2013	09:00	16:30	warm, sunny intervals
11/08/2013	09:00	16:30	warm, sunny intervals ~ 22C
17/08/2013	08:00	17:30	Warm, cloudy with sunny intervals, showers later ~ 21C
18/08/2013	08:00	17:30	Warm, cloudy with sunny inervals ~ 23C
26/08/2013	09:00	17:30	Sunny, dry, warm 22'C
28/08/2013	09:00	17:30	Sunny, warm, dry
29/08/2013	09:00	17:30	Warm, sunny, dry
01/09/2013	09:00	17:30	Dry, warm, part cloudy
03/09/2013	09:00	17:30	Sunny, warm, dry

Table 1: Environment Agency survey dates, times and weather conditions

Note: School holidays were between the period 19th July and 2nd September 2013.

Results

Mean summarised results of surveys conducted at Walpole Bay during the 2013 bathing season:

Zone	Mean Number of people in sea	Peak number of people in sea	Total number of people in sea	Mean number of people on beach	Peak number of people on beach	Total Number of people on beach
C	2	11	42	14	37	275
D	1	4	11	3	14	64
E	0	8	9	5	46	110
F	1	4	13	6	24	111
G	1	8	30	9	28	186
H	0	3	4	3	10	50
I	3	14	66	22	56	444
J	3	14	55	28	100	567
K	18	157	368	46	200	924
L	1	9	29	10	32	203
M	0	6	6	1	6	29

Table 2: Average (mean), peak and total EA results of the surveys at Walpole Bay

The total number of people in the sea and on the beach at the 11 zones surveyed during 2013 at Walpole Bay is illustrated in Figure 2.

Figure 2: Map showing the mean number of people in the sea and on the beach at the 11 zones surveyed during 2013.

The results from the intensive bather usage surveys at zone H (EU bathing water) were compared to the routine data collected during the bathing water season. Generally, the data collected from the routine sampling was higher compared to the intensive sampling results (mean from routine data was 0.99 bathers, mean from intensive survey was 0.22 bathers). However, the numbers were too small to make a true assessment.

Conclusion

Intensive bather number surveys were carried out at Walpole Bay during 2013 bathing water season. The data shows that, at the EU bathing water sampling point, the total number of people in the sea was 4, and the total number of people using the beach was 50.

The surveys were also conducted at 10 other locations within the Walpole Bay area. The results from the survey indicated that zone K had the most number of people using both the beach and the sea. However, it was frequently observed that people were using the bathing pool and not the natural coastal waters. The next zone with the highest numbers was zone I (mean number of people in the sea was 3.28, and the mean number of people using the beach 22.20).

In conclusion, the location of the EC sampling point is not representative of an area used by the public. Also, the weather during these surveys was exceptionally sunny and warm compared to previous years, so the data represents the most users that are likely use the beach.