

Some Research

How important are missing person behaviour statistics in lowland search?

Very Important

Important

Neither Important nor unimportant

Unimportant

A waste of everyone's time

Another Question

When was the last time you did any explicit missing person behaviour training?

In the last six weeks

In the last three months

In the last six months

Within the last year

Over a year ago

ALSAR Stats

How many ALSAR teams filled in stats forms last year?

11

9

7

5

3

Why?

Misper behaviour stats are;

Maths?

Dull?

Difficult to understand?

Child (1-3)

(1-3)	Distance (horizontal) from the IPP (miles)			
	Temperate		Dry	Urban
	Mtn	Flat	All	
n	58	61	13	17
25%	0.1	0.1	0.4	0.1
50%	0.2	0.2	0.8	0.3
75%	0.4	0.6	2.4	0.5
95%	2.8	2.0	5.6	0.7

(1-3)	Distance (horizontal) from the IPP (kilometers)			
	Temperate		Dry	Urban
	Mtn	Flat	All	
n	58	61	13	17
25%	0.2	0.2	0.6	0.2
50%	0.3	0.3	1.3	0.5
75%	0.6	1.0	3.9	0.8
95%	4.5	3.2	9.0	1.1

(1-12)	Elevation (vertical) Change from the IPP (feet)					
	Temperate			Dry		
	Uphill	Down	Same	Uphill	Down	Same
%	33%	36%	31%	29%	51%	20%
25%	48	40		100	222	
50%	100	86		284	550	
75%	370	203		380	1375	
95%	1303	1216		757	2300	

(1-6)	Mobility (hours)	
	Temperate	Dry
n	46	8
25%	0	<2
50%	1	2
75%	2	3
95%	4.3	16

(1-6)	Dispersion Angle (degrees)
	Temperate
n	63
25%	0
50%	23
75%	66
95%	137

Missing Person Briefing

3 year old girl, Daisy
3ft, Blonde Hair

Last seen wearing
Blue "Cinderella" Dress



Ran out of house whilst dad was preparing
talk two hours ago.

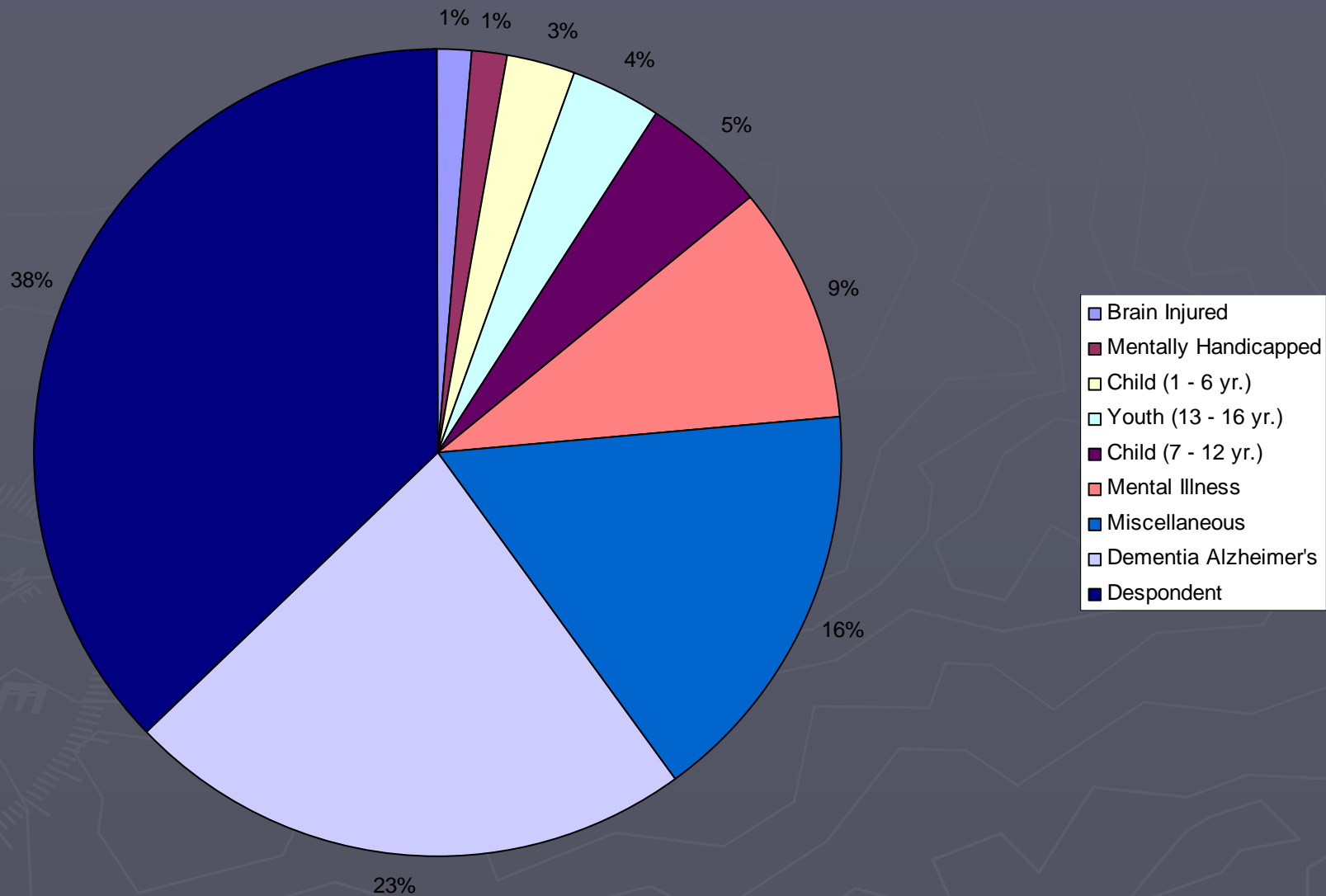
Visualising Missing Person Behaviour Statistics



Aim of session

To present common
missing person behaviour
statistics visually.

ALSAR Searches



Despondents

What are the statistics?

Table 24 Men Travelling on Foot – Suicide

Percentage of cases	Distance between place missing and found
40%	500 m
50%	850 m
60%	1.1 km
70%	1.3 km
80%	1.7 km
90%	2.4 km
95%	4.1 km
99%	8 km

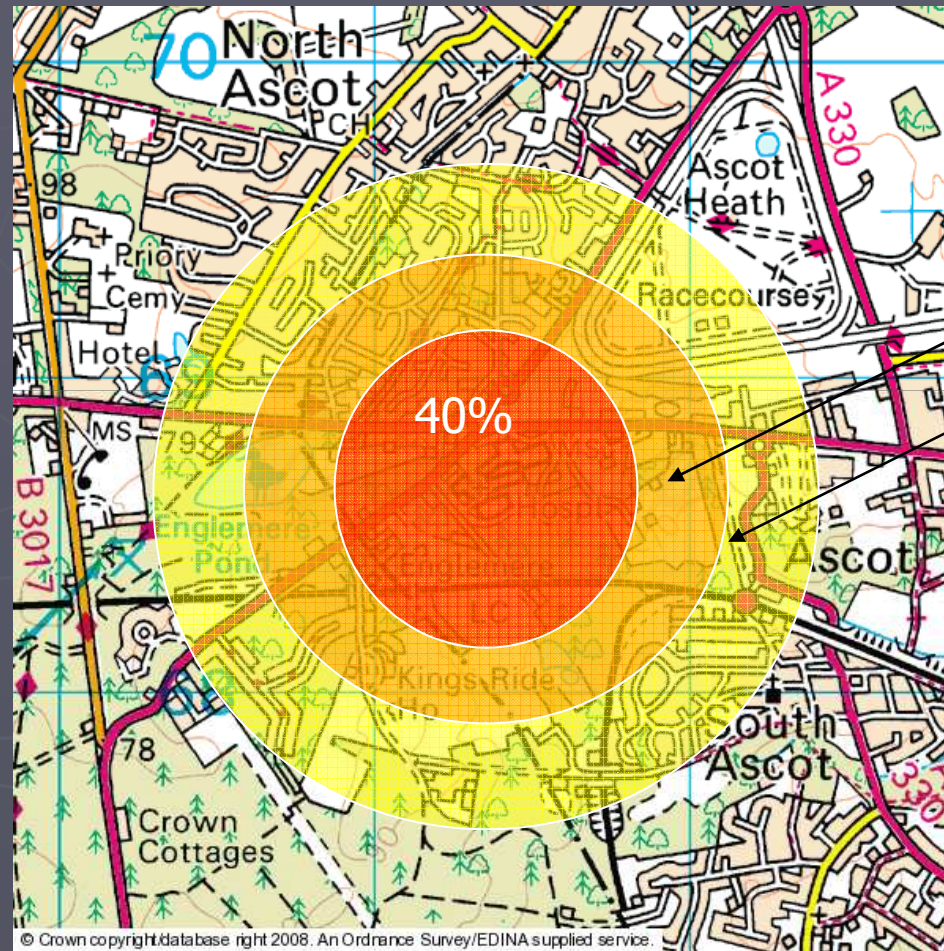
Grampian Stats, taken from Practice
Advice on Search Management, 2006

POA (Probability of Area)

Definition: The probability that the search object is contained within the boundaries of a region, segment, or other geographic area.

Selected Inland Search Definitions
by Donald C. Cooper and John R. Frost

Probability Map

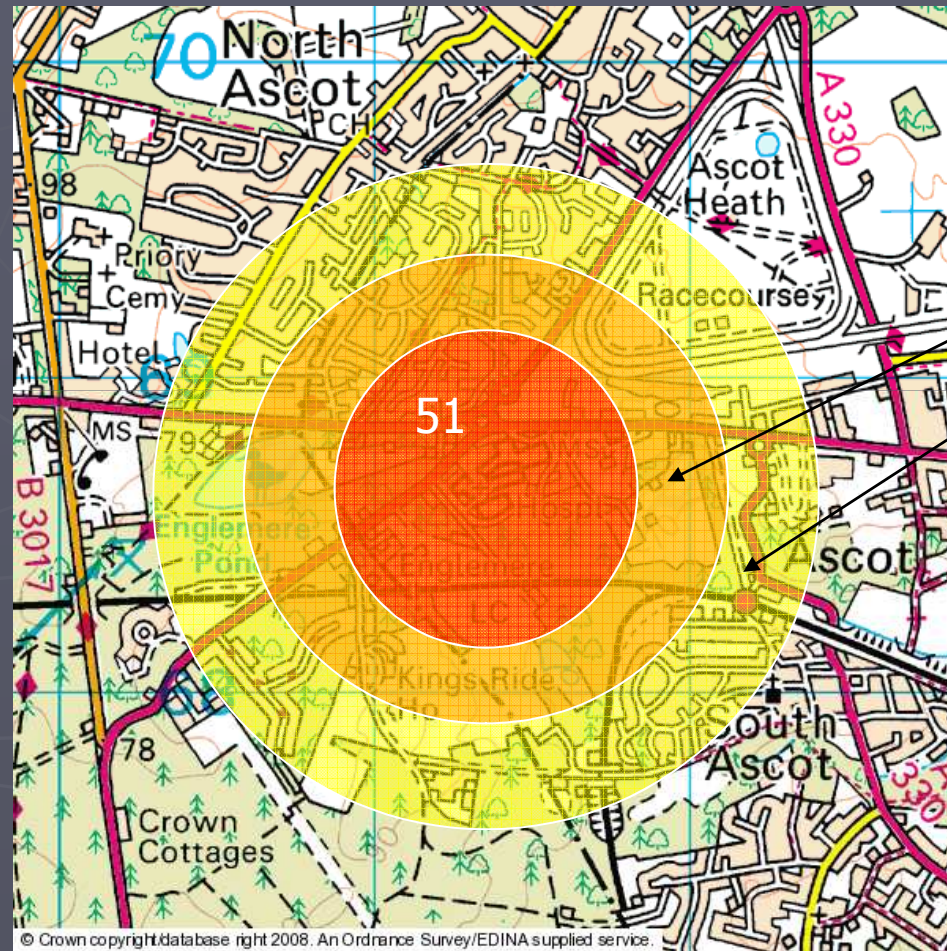


Pden (Probability Density)

Definition: The ratio of a region's or a segment's probability of area (POA) to its physical area.

Selected Inland Search Definitions
by Donald C. Cooper and John R. Frost

Probability Density Map



6.8

6.5

Some more

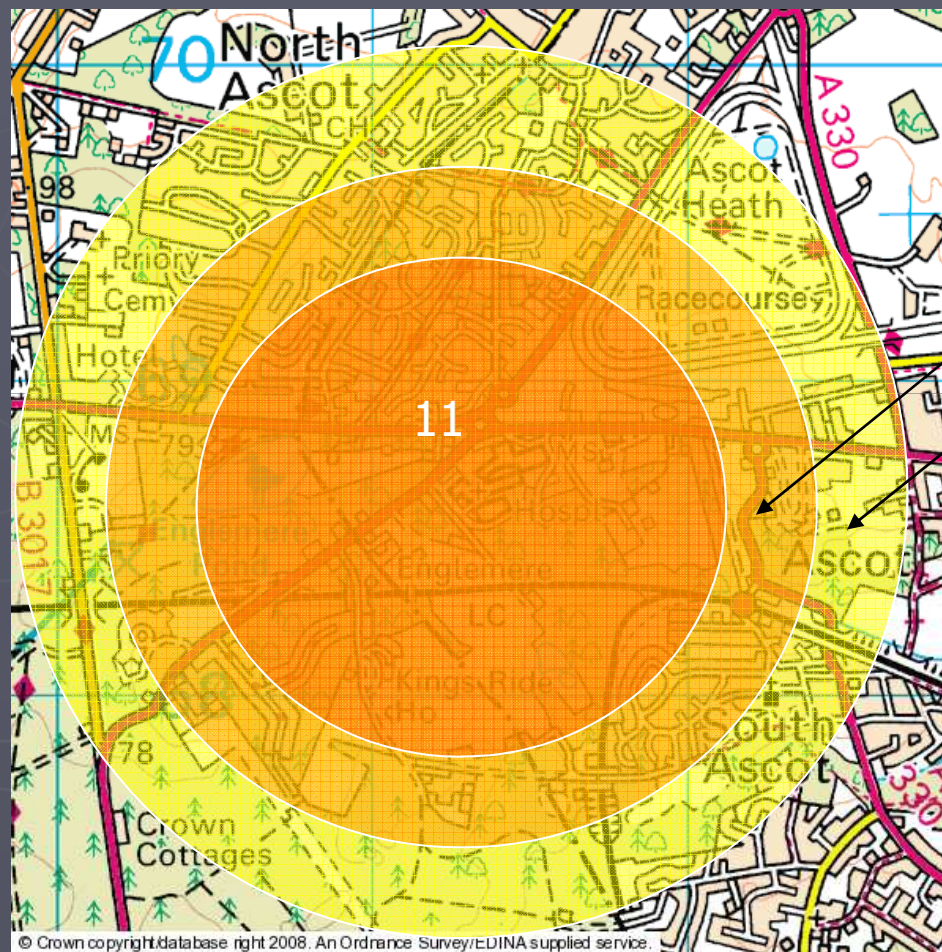
Table 20 Women Travelling on Foot – Suicide

Percentage of cases	Distance between place missing and found
40 %	1.1 km
50 %	1.5 km
60 %	2 km
70 %	3.2 km
80 %	4.9 km
90 %	6.9 km
95 %	8 km
99 %	10 km

Grampian Stats, taken from Practice
Advice on Search Management, 2006

Probability Density Map

Suicidal Woman
on foot



3.1

1.8

Some more

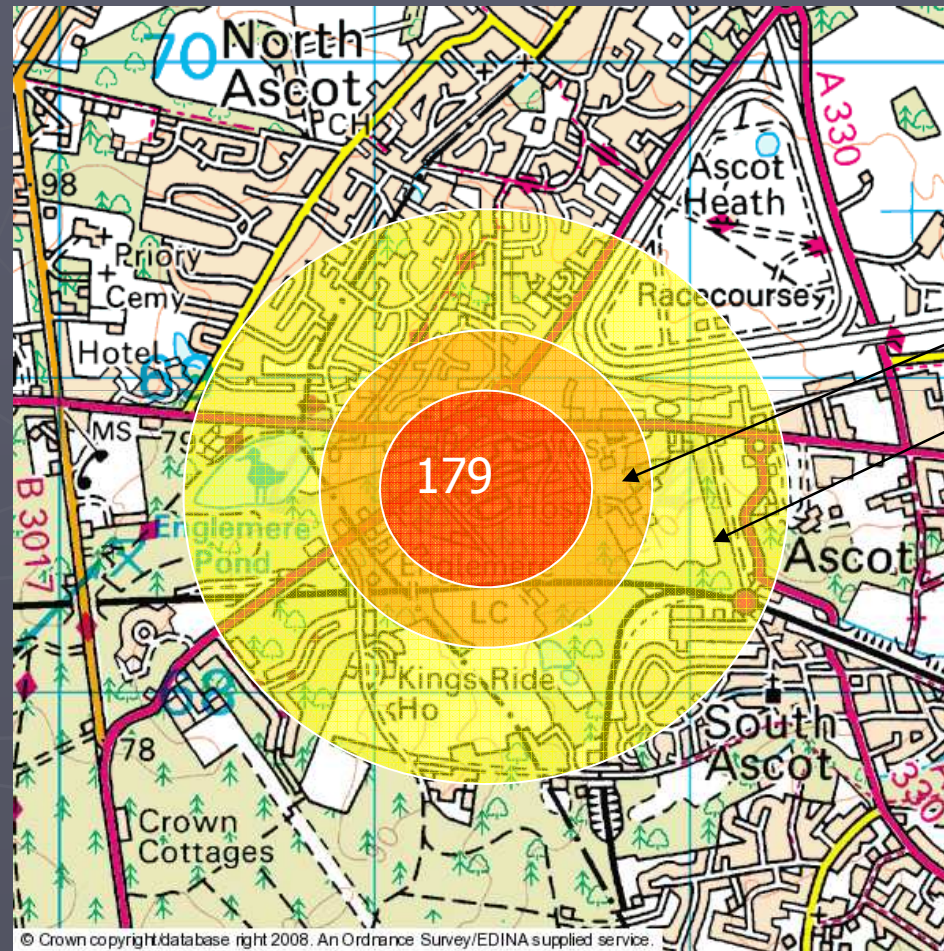
Table 26 Distances Travelled by Men on Foot from a Car

Percentage of cases	Distance between place missing and found
40%	250 m
50%	300 m
60%	400 m
70%	500 m
80%	600 m
90%	900 m
99%	1.4 km

Grampian Stats, taken from Practice
Advice on Search Management, 2006

Probability Density Map

Suicidal Men on foot after leaving car



Some more

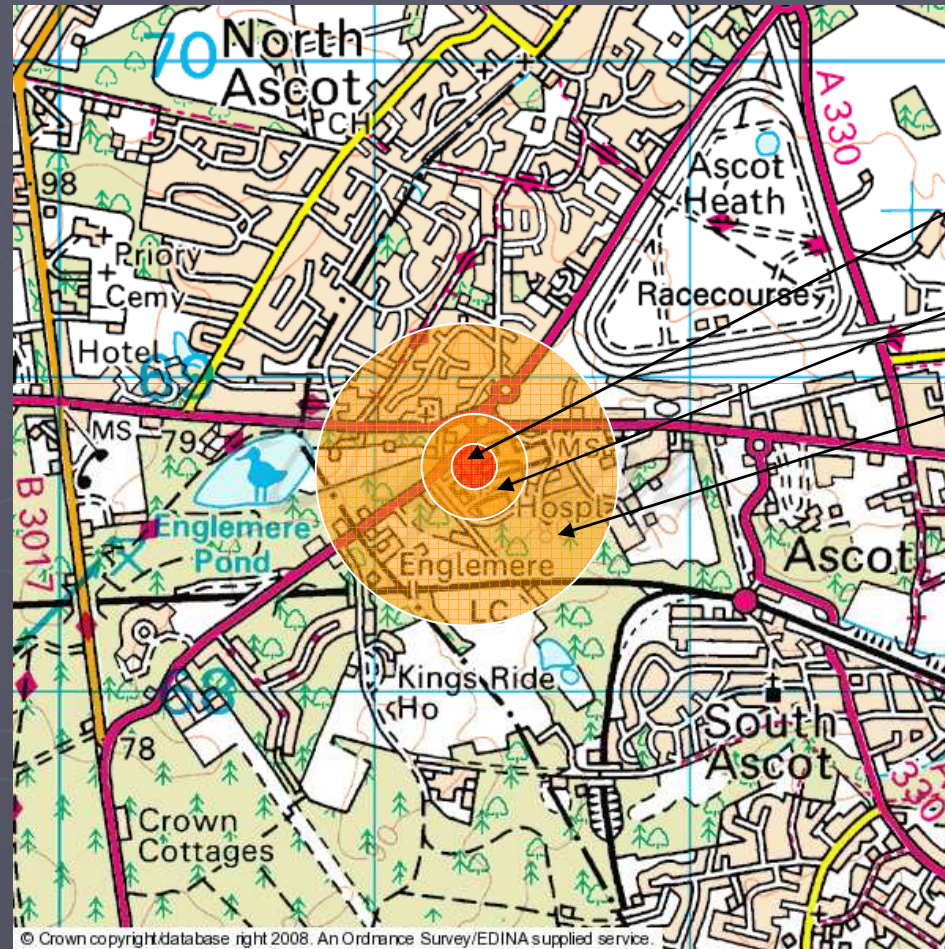
Table 22 Distances Travelled by Women on Foot from a Car

Percentage of cases	Distance between place missing and found
25%	50 m
50%	150 m
80%	500 m
99%	900 m

Grampian Stats, taken from Practice
Advice on Search Management, 2006

Probability Density Map

Suicidal Women
on foot after
leaving car



3571

416

42

Despondents

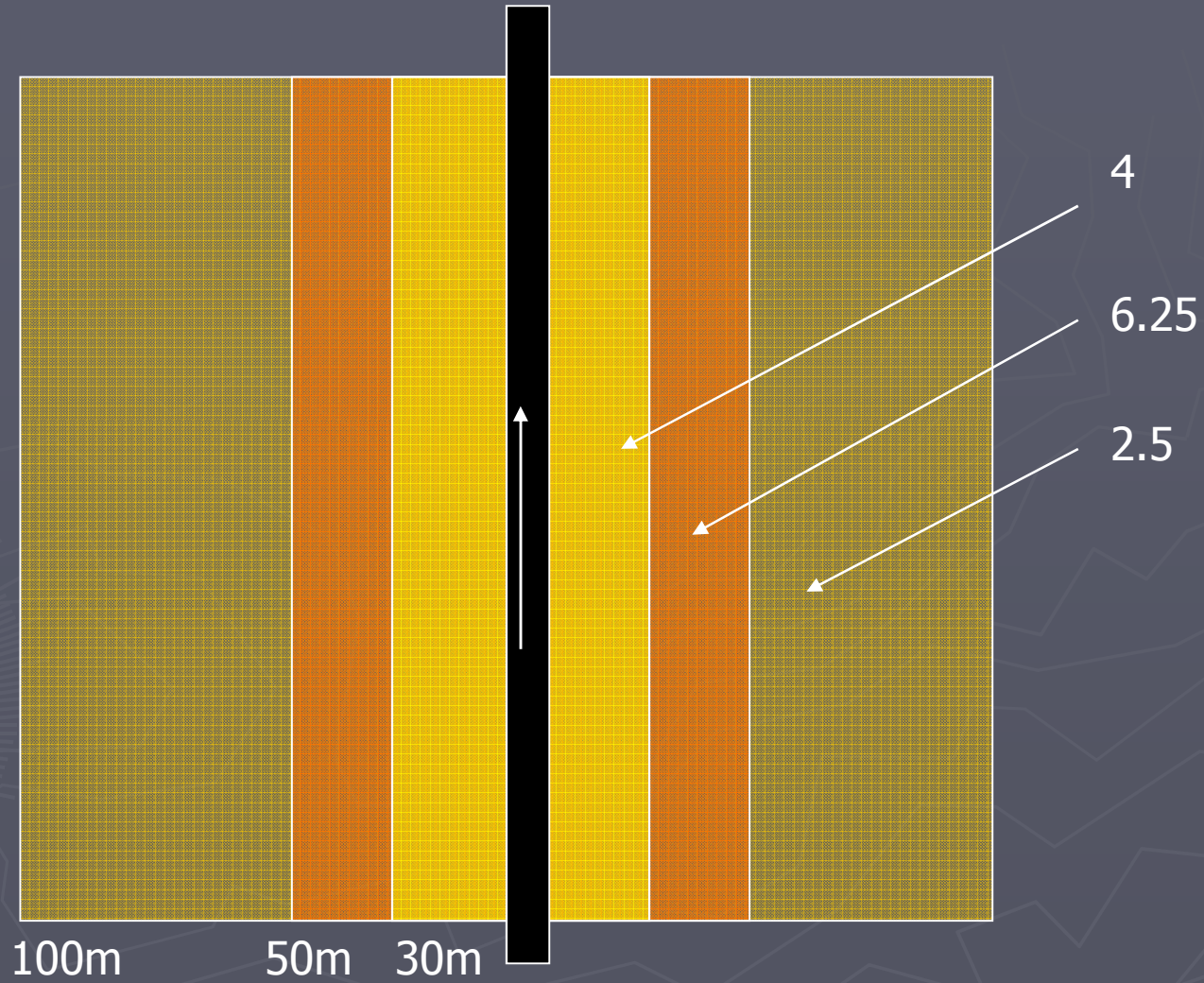
“Just out of sight”

Track Offset Data

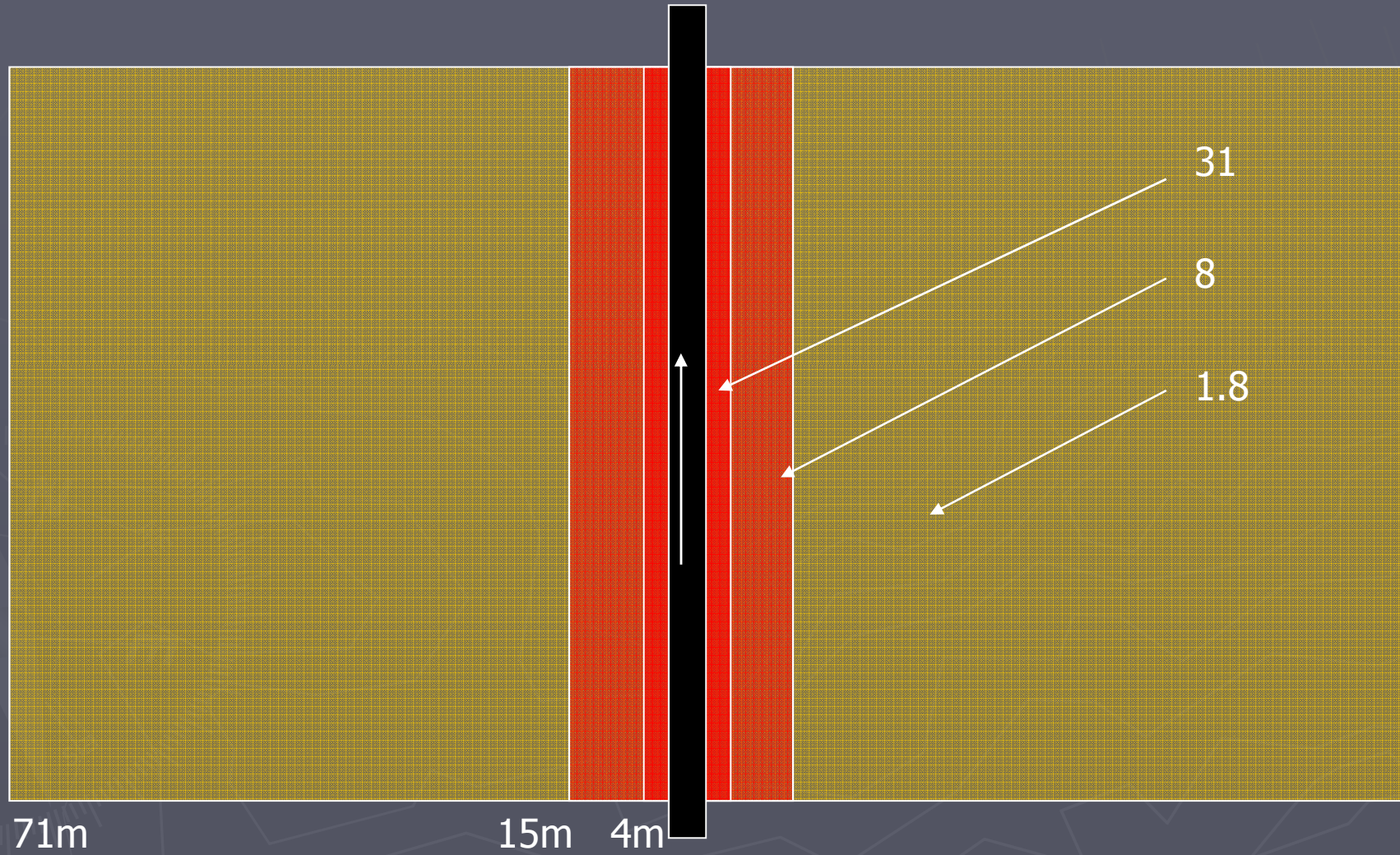
25%	30m
50%	50m
75%	100m
95%	275

Lost Person Behavior – Robert Koester

Track Offset



Track Offset - Dementia



Some more Dementia

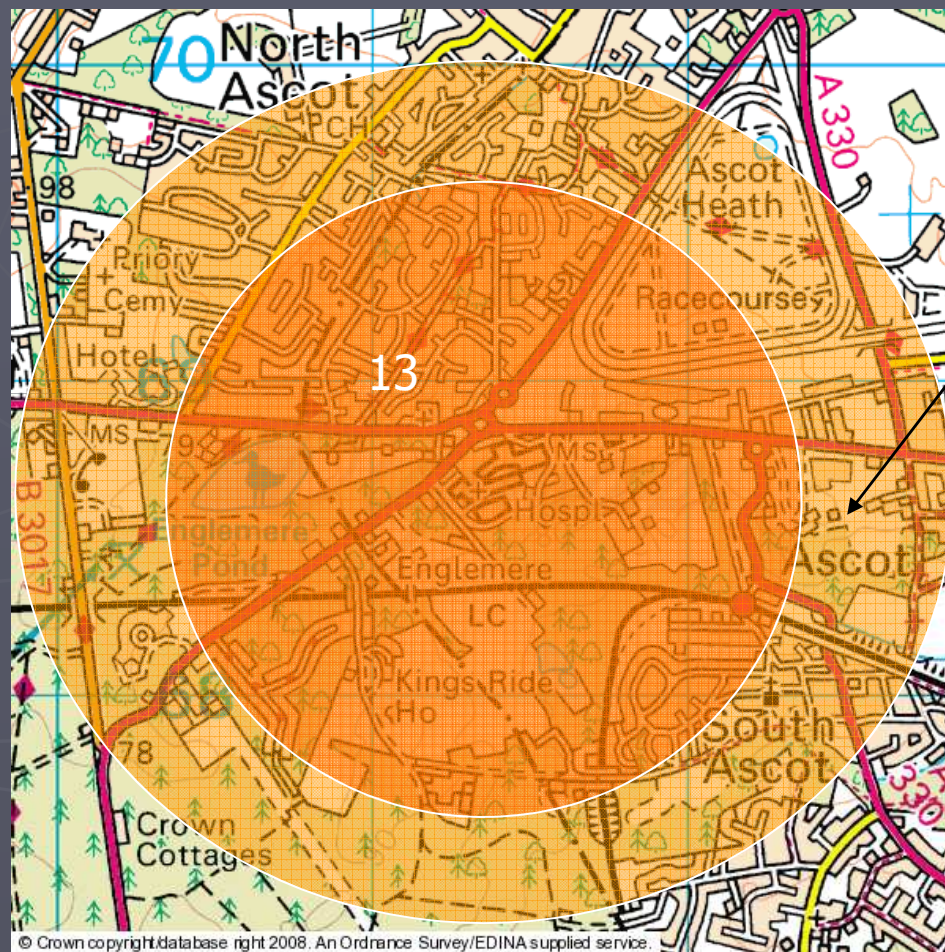
Table 35 Men Travelling on Foot – Dementia

Percentage of cases	Distance between place missing and found
40%	1 km
50%	1.6 km
60%	2.6 km
70%	4.6 km
80%	6.0 km
90%	7.2 km
95%	10 km
99%	14 km

Grampian Stats, taken from Practice
Advice on Search Management, 2006

Probability Density Map

Dementia Man
on foot



Some more Dementia

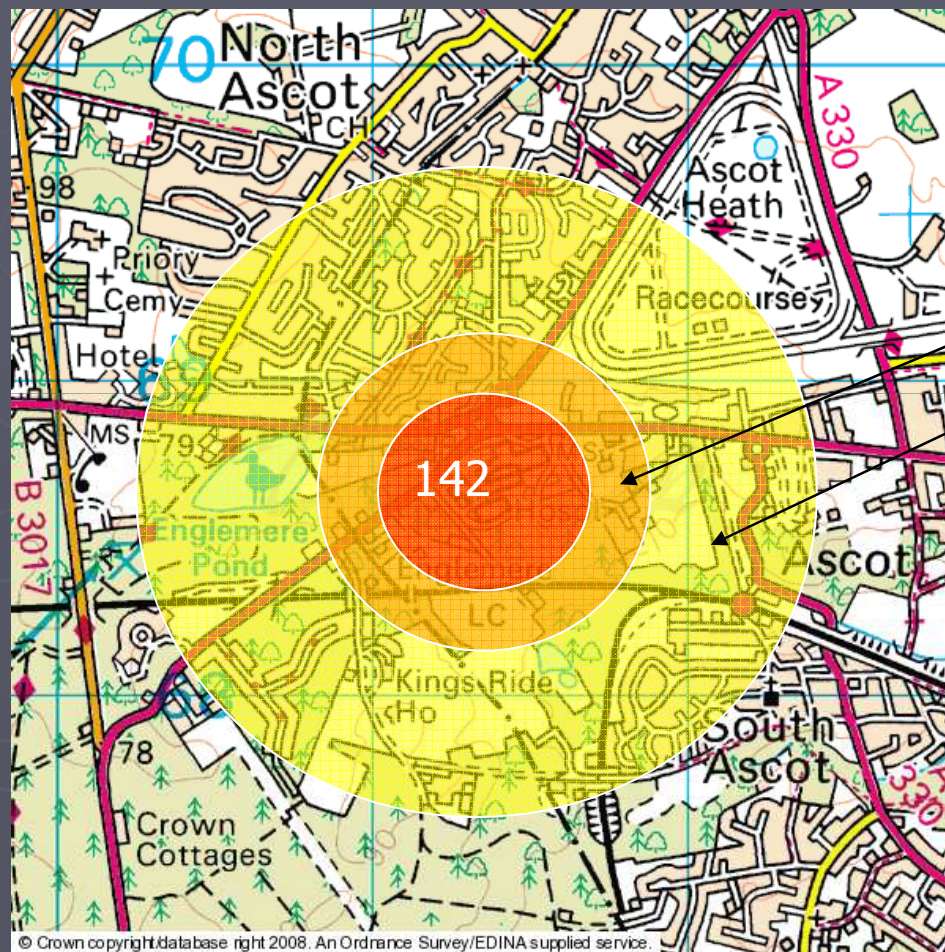
Tables 37 Women Travelling on Foot – Dementia

Percentage of cases	Distance between place missing and found
40%	300 m
50%	700 m
60%	900 m
70%	1.2 km
80%	2.0 km
90%	3.7 km
95%	5.8 km
99%	12 km

Grampian Stats, taken from Practice
Advice on Search Management, 2006

Probability Density Map

Dementia
Woman on foot

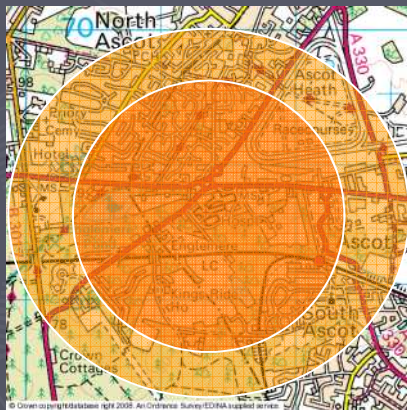


Review

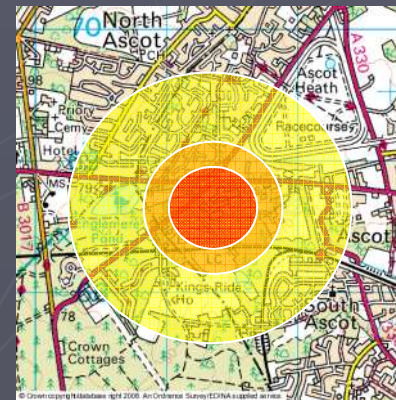
“Test”

Who travels further on foot with Dementia –
Men or Women?

Dementia
Man on
foot

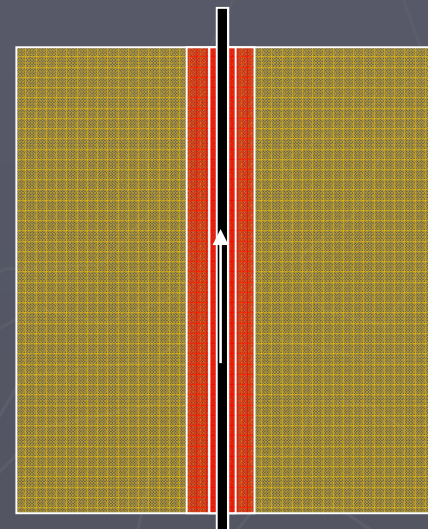
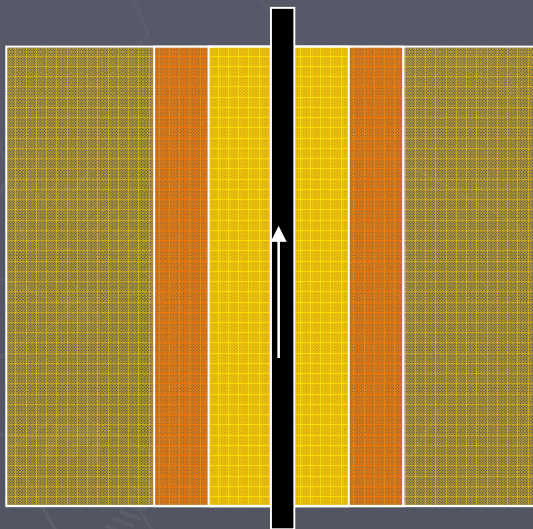


Dementia
Woman
on foot



Review

Who is likely to be found nearer the route and path? Despondents or Dementia?



Training

All search training exercises should be realistic
– using realistic misper scenarios and behaviours

Colouring as a misper behaviour training exercise.