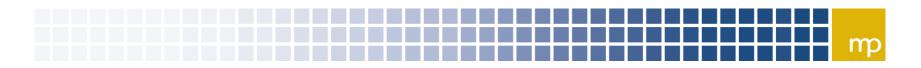


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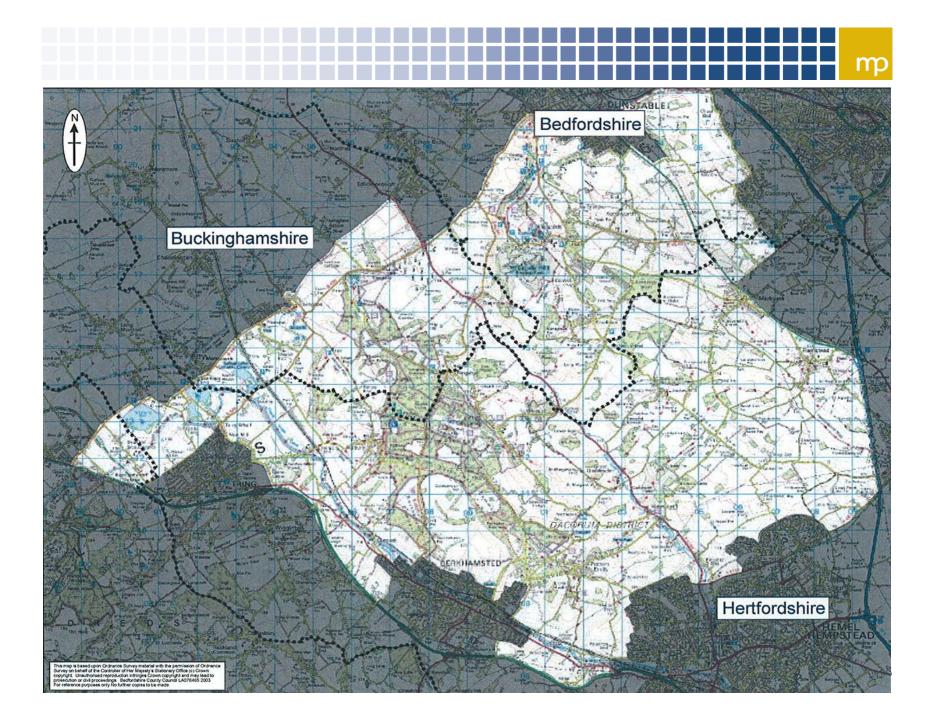
## Traffic Management Measures within the Three Counties Area

Magedie Pretorius – Project Director, Mouchel Group



#### Introduction

- Three Counties (Herts, Beds & Bucks), National Trust and Chilterns Conservation Board Partnership – 2003
- Traffic Management Study led to a report which raised current issues in the Chilterns AONB
- Issues in the Study Area included:
  - Speeding through Ashridge Estate
  - High number of deer/vehicle collisions (DVC's)



#### What did we do to address the issues?

- Addressing the issues through a range of Traffic Management measures in and around the Ashridge Estate
- Measures implemented was sympathetic to the area's status of AONB, Ashridge Woods and Commons Site of Special Scientific Interest (SSSI) and Chiltern Beechwood's Special Area of Conservation (SAC), which is a European designation.



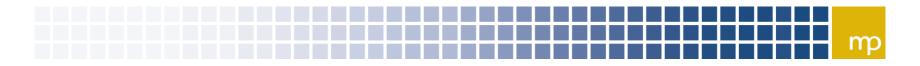
#### **Traffic Management Measures**

#### Speeding

- Blanket 50mph speed limit throughout the Estate
- Looking at sensitive areas in the Estate and introduced lower speed limits to warn drivers of the dangers
- Areas identified included high personal injury accident sites and high visitor movement areas
- Special authorisation from DfT carriageway roundels only as repeater signs

At Original Drawing Size This Line Measures 100mm H Original Drawing Size A3 Speed limit transition point to be located 4m west of the west boundary of Trust Cottage 6 Speed limit transition point to be located 75m (primary) or 37m (secondary) south of the center point of the track leading to Grendon House CHILTERNS\ASHRIDGE Speed limit transition point to be located 40m south of the center point of the track leading to Clipper Down Cottages and Down Farm ESTATE Speed limit transition point to be located 27m south of the Herts. Bucks. border Speed limit transition point to be located 25m north of the center point of the Little Gaddesden Road Speed limit transition point to be located 57m north of the center point of the access road leading to Princes Riding Existing speed limit transition points Speed limit transition point to be located at the site of the existing Speed limit transition point to national speed limit transition point be located 110m south of the center point of the track leading to Thunderdell lodge Speed limit transition point to be located 50m west of the center point of the access to the National Trust car park Speed limit transition point to be located at the site of the existing national speed limit transition point Notes Revision with Dotes Project No. Drg. No. Rev M/NID/ITP05095/4/002 737755 PROPOSED 50MPH SPEED LIMIT Project Title CAD RURAL PROGRAMME PROPOSED 40MPH SPEED LIMIT AK AK THREE COUNTIES PROJECT Hertfordshire Highways 09/05 09/05 Dole PROPOSED 30MPH SPEED LIMIT Drowing Title Shi P Tel: 01707 356200 Fax: 01707 356380 Highways 41-45 Broy 1 ASHRIDGE ESTATE Welwyn Garden City Al7 3SP A DASHED LINE REPRESENTS AN EXISTING SPEED LIMIT Scoler PROPOSED NEW SPEED LIMITS NTS

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### **Carriageway Roundels**



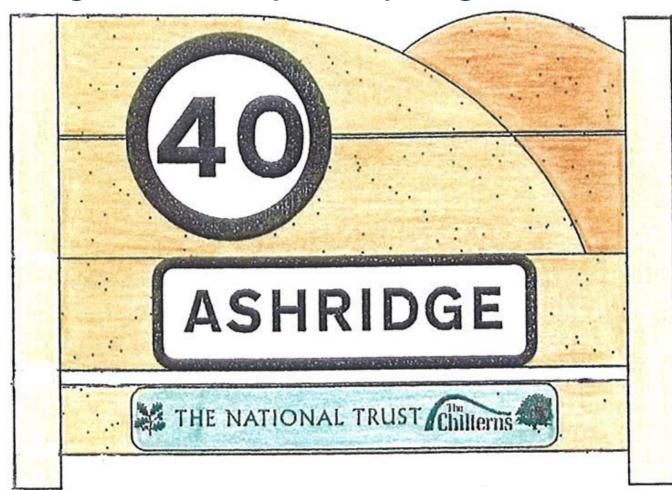


#### **Cattle Grids**





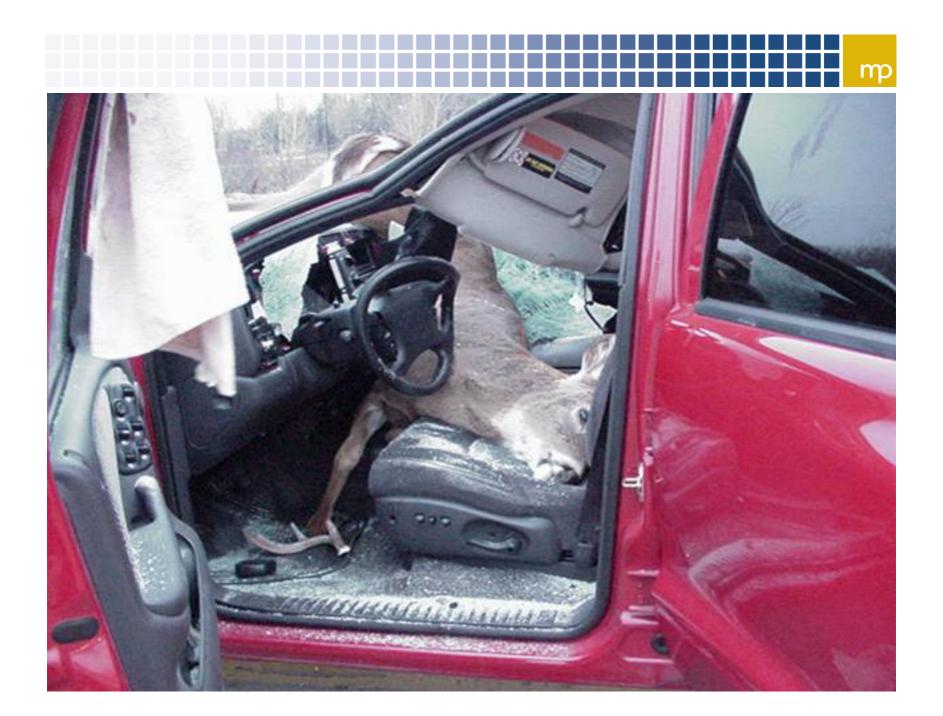
#### Village Gateway Entry Signs

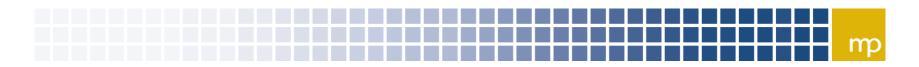




#### The deer/vehicle collision issue

- Annually around 30,000 deer get killed on our roads
- 2003 10 human fatalities & more that 250 human injuries
- Estimated cost of car repairs alone £11M per year
- Highest number of DVC's occur in the home counties (high traffic volumes, etc)
- Ashridge Estate 120 p.a. for 5 years since 2000
- Highest number anywhere in the UK (source NDCP 2005)





#### Innovation

- Detailed research on measures to reduce DVC's
- Secured the services of Dr Jochen Langbein National Deer Collisions Project Leader (UK's leading expert on deer)
- Trial of new deterrents over 12 month-period aimed at reducing DVC's
- Two types of deterrents used for Ashridge
  - Wegu Acoustic Reflector
  - Eco Pillar



#### **Deterrents used**





#### How do they work?

- Activated by light through sensors built into the devices
- Solar panels self charging battery cells
- Wegu Acoustic Reflector emits a high pitched whistling sound
- Eco Pillar is able to emit ultrasound, infrasound and seismological vibrations
- Aim is not to prevent the deer from crossing the road, but to delay their crossing until AFTER a vehicle has passed



#### How was this monitored?

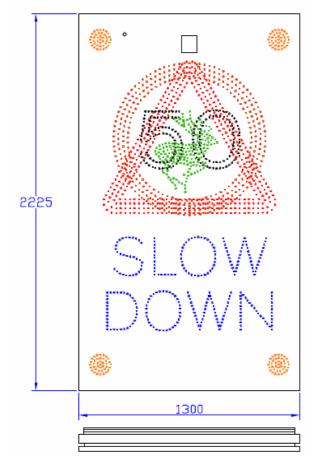
- Dr Langbein looked at the deer behaviour over the trial period
- Special recording equipment will be used to record deer behaviour at a controlled site and at the two deterrent sites
- DVC stats over the monitoring period

#### **Other Innovative Measures Implemented**

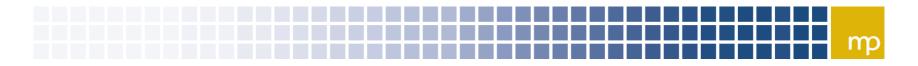
- Need to warn drivers of the deer crossing in the area
- Inter-active sign activated by either vehicle speed, or animals on the side of the road
- Similar technology to overhead detection systems
- Infra red beam on both sides of the road 120m
- When beam is broken, sign displays deer crossing warning sign
- If activated by vehicle speed speed limit will be displayed



#### **Interactive Signs**

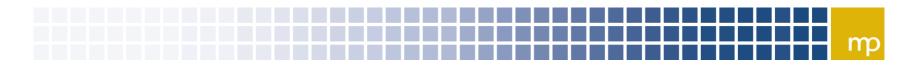






#### **Raising Awareness**

# SLOH DOWN FOR WILDLIFE www.deercollisions.co.uk



#### Conclusion

- Using a range of measures proved to be the best way to tackle the issues
- Partnership working is essential
- Continual monitoring required



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## **Thank You**