Chilterns Land Use Survey 2008



Data from land use surveys from 2006 to 2008 show:

- An increase in the cropping of arable land and a reduction of set-aside and uncropped arable land.
- 5% of the AONB, (20% of the grassland) was used by horses, ponies and donkeys.
- More than half of cropped land used for growing wheat.



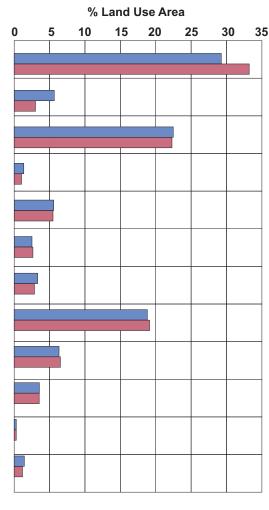
Traditional farmed landscape near Little Gaddesden, Herts.

2006

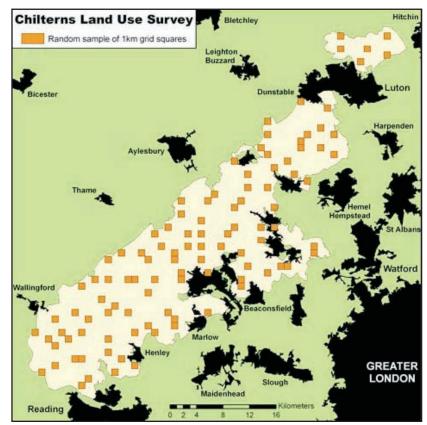
2008

Survey Findings - The results from the 105 1km squares surveyed in 2008 show the following pattern of land use/land cover:

Land Use Categories area surve	2006 eyed %	2008 %	change %
A Cropped arable land	29.20	33.04	3.84
U Uncropped arable land (including set-aside and field margins)	6.12	2.65	-3.47
G Agricultural grassland	22.43	22.38	-0.05
F Other farmland (yards, buildings, etc.)	0.62	0.94	0.32
E Equestrian (including stables, arenas, etc.)	5.59	5.32	-0.27
L Leisure (golf courses, sports grounds, etc)	2.34	2.55	0.21
N Rough/unmanaged grassland	3.35	2.68	-0.67
W Woodland	18.67	19.03	0.36
B Built-up (including gardens and grounds)	6.12	6.48	0.36
T Transport	3.53	3.51	-0.02
H Open water (not garden ponds)	0.24	0.24	0.00
O Other, unclassified	1.70	1.17	-0.53
	100.0	100.0	







Location of 105 survey squares within the AONB.

Objectives of the survey

- To provide data on the current extent of land use and land cover
- To identify the rate and type of land use and land cover changes
- To determine how such changes vary between different landscape types
- To assess the impact of such changes on landscape character
- Where possible, to identity the drivers of land use and land cover change

Background to the Survey

This document summarises the results of the 2008 Land Use Survey carried out by the Chilterns Conservation Board, the body responsible for protecting and enhancing the Chilterns Area of Outstanding Natural Beauty (AONB). It updates the summary report detailing results from surveys carried out annually from 2005-2007. Copies are available from the Chilterns Conservation Board office or website (see over).

Why carry out a survey?

The Chilterns Conservation Board is the body responsible for the Chilterns. By recording land use annually in a representative sample of squares across the AONB, the Conservation Board can monitor land use change and where necessary take action to protect the Chiltern's landscape.

How does the survey work?

Each year surveyors assess the land use in every parcel of land within each 1km square that is visible from a road or public right of way and also take photographs from fixed viewpoints. The results are entered into a Geographical Information System (GIS) to allow measurement of different land uses and annual comparisons to be made. The 105 1km squares represent 12.5% of the total AONB area.

Land Use Changes 2006-8 Farmland

- An annual increase in arable cropping and corresponding decrease in un-cropped areas is the biggest land use change since 2006.
- In 2006 and 2007 world wheat demand outstripped supply – increasing market prices.
- Poor returns from farming in previous years had prompted land in addition to set-aside to be left uncropped in reflection of poor returns from farming and high production costs.
- The most common crop was wheat, growing on just over 50% of cropped land.
- The prediction that oilseed rape area would increase due to growing demand for biofuels is not borne out here, the area grown in the Chilterns has dropped by almost 30% between 2006 and 2008.
- Oats have been growing in popularity as a healthy option to wheat based products.
- Economics will continue to be the driving force behind farm decisions, particularly now that support payments are no longer linked to crop area and livestock numbers.

% of Crop Types Making up Cropped Area (A)

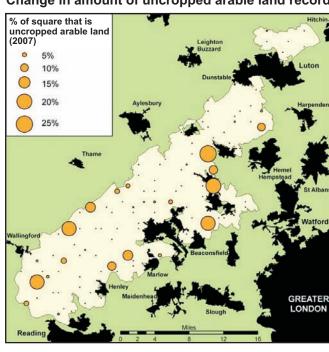
	2006	2008
Wheat	51.24	50.66
Barley	17.76	19.56
Oilseed rape	14.70	10.71
Field beans	4.34	3.92
Lupins	0.28	0
Maize	2.98	3.79
Oats	2.71	5.72
Unclassified	5.26	3.08
Poppies	0.16	1.25
Peas	0.50	0.13
Sunflowers	0.06	0

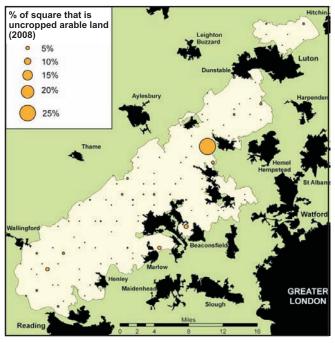
Set Aside and Uncropped Land

- Set aside was originally introduced in 1992 to EU member states as a method of controlling arable production in time of excessive food surpluses.
- Leaving a percentage of land uncropped usually in the form of stubble, was obligatory for farmers receiving support payments.
- Farmers were allowed to grow industrial non-food crops on set aside if they had a contract to do so, for example oilseed rape for biodiesel.
- At its inception in 1992, the set aside rate was 20% falling to 10% in 1999.
- In 2007 EU wheat stores fell to their lowest level in 28 years and the set-aside requirement from farmers was set at 0%.
- Set aside was formally abolished in 2008.

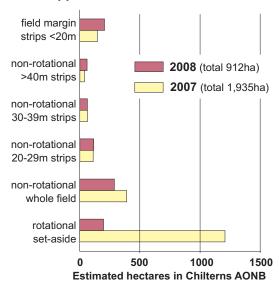
- Evidence suggests that appropriately managed "rotational set-aside" which was moved around the farm, was beneficial to declining farmland birds such as yellowhammer, lapwing and skylark offering nesting and feeding opportunities.
- In the Chilterns many farmers have set croppable land aside in wide strips or margins, particularly next to woodlands where land is unproductive.
- As these 'permanent set-aside' strips have remained in-situ for many years some have developed into valuable chalk grassland with numerous wildflowers.
- The data from the survey was examined to see how the changes in set aside rules affected land use in the Chilterns, in particular which types of set aside had been incorporated back into production (rotational, non rotational or permanent, strips or whole fields).

Change in amount of uncropped arable land recorded 2007-2008





Breakdown in types of set aside and uncropped land



Woodland

- Woodland area has fluctuated between 2006 and 2008.
- This reflects new areas of planting in 2007 and areas of felling – on one estate an area of woodland had been clear-



Insensitive fencing in woodland

felled and replanted with grass presumably to improve the view from the adjacent house.

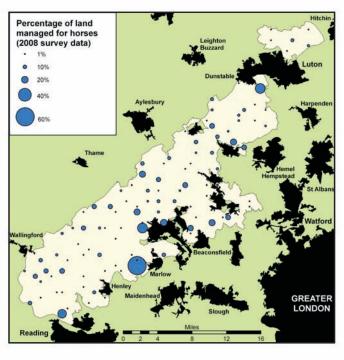
 Anecdotal evidence highlights the increase in fences within woodland. This can change the character of woodland from open to enclosed particularly where inappropriate fencing is used.

Equestrian Land Use

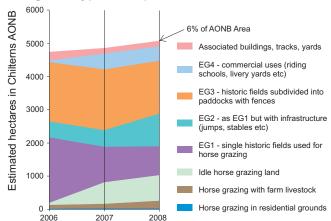
- Land used for equestrian purposes, be it just grazing or commercial premises has remained constant at around over 5% of all land surveyed.
- This figure represents over 20% of grazed grassland in the Chilterns.
- There is a concentration of equestrian usage around towns as shown below.
- Further investigation of the data collected allows a breakdown of the type of land use in the equestrian sector by intensity of use, see below.
- Commercial uses and subdivision of fields have grown in the period 2006 - 2008 whilst the area of small historic fields used for the informal keeping of horses has decreased.
- More intensive uses have potential to cause more landscape impact but are an alternative income stream in rural areas where traditional industries have been in decline for years.



Commercial equestrian enterprise on former livestock farm



Changes in types of equestrian land use



Conclusions

Numerous small changes in land use may not appear to be significant in themselves, but depending on their nature and location can cause a noticeable shift in the character and feel of an area. A traditional rural area can start to lose its character and feel suburban with the advent of numerous paddocks within existing field boundaries, electric fencing, field shelters, close boarded fencing and security lighting, yet all of these can take place without planning permission. Development associated with equestrian businesses and horse keeping does not always have to have a negative impact on the countryside, in fact horses and ponies provide an alternative grazing animal where cattle and sheep numbers are declining. The Board are working to improve guidance available to horseowners to ensure development and land management is appropriate and of high quality.



Field shelters and new fencing does not always need planning permission but often causes a negative landscape impact.

For further information contact

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www.chilternsaonb.org/caring/farming



