



ENVIRONMENT

BIODIVERSITY

OBJECTIVE: to conserve and enhance Oxford's biodiversity, particularly in relation to priority habitats and species.

Indicator/type of indicator		Targets	On target?
19 core	Change in areas of biodiversity importance	To show losses or additions to biodiversity habitat	
20 contextual	Local biodiversity measures	Development should not result in a reduction in populations of biodiversity importance.	

19. Change in areas of biodiversity importance

Figure 36 provides details of the areas of the various sites designated for their intrinsic environmental importance and their associated area. The only change in area in many of these sites between 2008 and 2009, is as a result of the some of the Sites of Local Interest for Nature Conservation now qualifying for the stricter criteria of the Local Wildlife Sites designation.

Figure 36: Areas of sites designated for their intrinsic environmental value

Designated site	Area in hectares (2008)	Area in hectares (2009)	Loss of biodiversity habitat (hectares)	Addition of biodiversity habitat (hectares)
Sites of Special Scientific Interest (SSSI)	278.2	278.2		
Special Areas of Conservation (SACs)	177.1	177.1		
Local Wildlife Sites	76.16	89.22		
Sites of Local Interest for Nature Conservation (SLINCs)	202.5	202.5		
Local Nature Reserves	11.5 (3 sites)	11.5 (3 sites)		
Regionally Important Geological or Geomorphological Sites (RIGS)	2.0 (2 sites)	2.0 (2 sites)		

20. Local Biodiversity Measures

i. Change in area of UK Biodiversity Action Plan (BAP) priority habitat.

As reported in previous years, although the aim is for the habitat data to record actual changes in UK BAP priority habitats on a year-on-year basis, there is still an overall lack of data to adequately capture the baseline situation. This situation is improving, but slowly. The tabulated data represent a refining of the baseline position as new mapping of the survey data

is undertaken. Only the habitat types relevant to Oxford have been included in Figure 37 below.

Figure 37: UK Biodiversity Action Plan priority habitat resource in Oxford

UK BAP priority habitat type	Area (hectares) 2008	Area (hectares) 2009	County context 2008	County context 2009
Eutrophic standing water	10.2	10.15	929.6	931.91
Lowland Fens	17.2#	17.25#	142.9#	142.89#
Lowland meadows	233.2	233.29	1080.0	1081.22
Lowland mixed deciduous woodland	47.7	47.71	4555.0	4602.91
Reedbeds	1.0	1.05	25.8	25.82
Wet woodland	6.2	6.17	138.4	138.69
Wood pastures and parkland	11.2	11.16	1844.0	1860.50
Total area of BAP priority habitat	320.87	326.7	9259.1	10664.6

Combined figure of Fen and Reedbed resource

ii. Change in number of UK Biodiversity Action Plan priority species.

There has been an increase in the number of species found in Oxford from 2007, when 96 species were recorded. The number of Biodiversity Action Plan species found in Oxford is now 98. These species – two plants (creeping marshwort and marsh stitchwort) – are not new to Oxford but were not correctly attributed to the Oxford figures in the previous year's report.

iii. Distribution and Status of Water Vole

Information for this indicator is entirely from systematic survey work carried out by trained volunteer surveyors and co-ordinated by the Buckinghamshire, Berkshire and Oxfordshire Wildlife Trust (BBOWT) as part of a wider water vole project. BBOWT has recently recruited a new water vole project officer and, consequently, water vole survey data have not been gathered for a full reporting year. This data is still being awaited. It will need to be reported on in the next Annual Monitoring Report.

iv. Condition of Site of Special Scientific Interest (SSSIs)

Not all SSSI units are visited by Natural England in any one year. No further units were surveyed beyond those reported on in the figures for the 2008 Annual Monitoring Report. As such the figures remain the same: 88% of Oxford's SSSIs are in a favourable condition and 9.46% are in an unfavourable but recovering condition. Overall the figures are very encouraging and indicate that Oxford is meeting the government's 2010 target of 95% of SSSIs in target condition. The target condition for SSSIs includes all those SSSI units in favourable or unfavourable recovering condition. Just over 97% of Oxford's SSSIs are in target condition. By comparison, Oxfordshire County Council's just over 90% of the SSSIs are in target condition.

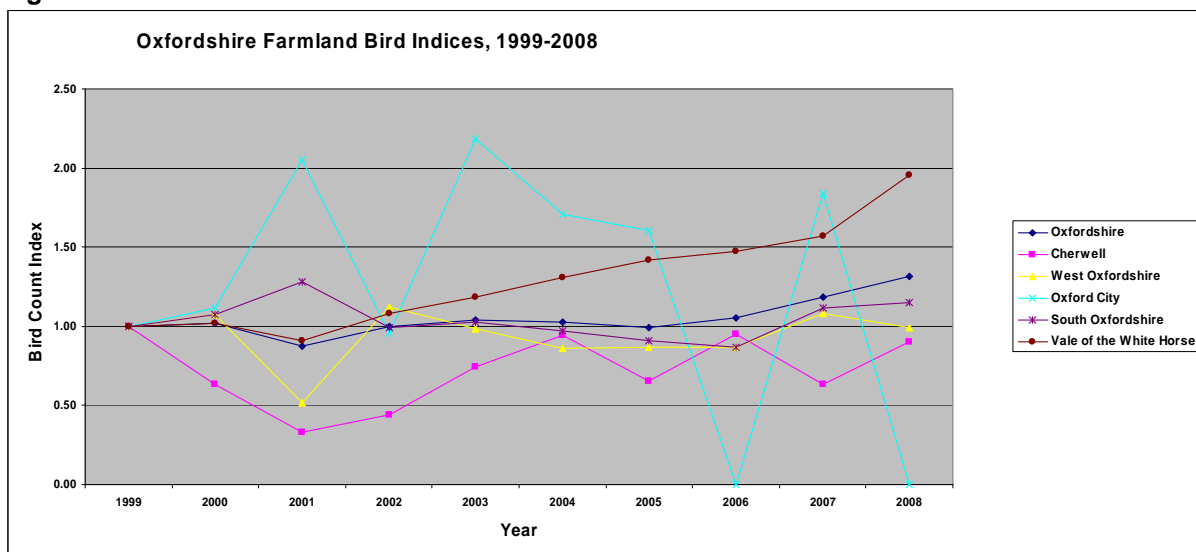
v. Distribution and status of farmland birds

This indicator uses an established list of 19 species, identifiable as farmland birds, compiled by the Royal Society for the Protection of Birds (RSPB). Records associated with these species generated through British Trust for Ornithology breeding bird surveys in specific 1km x 1km squares are then used to determine a farmland bird index. The Thames Valley

Environmental Records Centre has obtained these records and followed the RSPB methodology to plot the trend in changes in the index over time. To establish a timeframe from which any kind of meaningful trend can be identified, a shifting baseline has been used and changes in bird populations in subsequent years (over a 10 year window) are then relative to that baseline year. In this case, the figures have used a baseline of 1998.


There has been a marked improvement in the farmland bird index in Oxford from 2006 to 2007. The numbers of species identified in 2007 surveys was an improvement on those surveyed in the last two years when surveys were undertaken (2004 and 2005). 9 species were recorded in 2007 whilst only 5 and 6 species were recorded in 2005 and 2004 respectively. No surveys were undertaken in Oxford during 2008 which means that a figure for the farmland birds within the administrative district cannot be provided. As a consequence, a commentary on the suite of farmland bird species in Oxford cannot be provided.

Figure 38: Distribution and status of farmland birds in Oxfordshire



Conclusions – Biodiversity

The monitoring data shows that Oxford maintains a strong biodiversity resource. This indicator is considered to be on-target. The local indicators are also considered to be on target. The majority of SSSIs remain in favourable condition, and Oxford maintains a healthy number of UKBAP priority species. No planning decisions have been taken in the monitoring period that would have an adverse effect on biodiversity areas.

FLOODING			
OBJECTIVE: To take the Environment Agency's advice into account when determining planning applications which have a potential impact on the water environment.			
Indicators/type of indicator		Targets	On target?
21 core	Permissions contrary to Environment Agency (EA) advice	EA advice should be followed when determining applications.	

21. Permissions contrary to Environment Agency advice

Figure 39: The Environment Agency objected to 1 major¹ application in 2008/09

Number of applications	Reason for Environment Agency objection	Response by Environment Agency	Outcome
1	Unsatisfactory Flood Risk Assessment (FRA)/Flood Consequences Assessment (FCA)	Objection withdrawn after further information was submitted	Planning permission granted

Figure 40: The Environment Agency also objected to 8 minor applications in 2008/09

Nos of Applications	Reason for Environment Agency objection	Response by Environment Agency	Outcome
2	Unsatisfactory FRA		Withdrawn
1	No dry access		Withdrawn
1	Unsatisfactory FRA and no dry access		Refused
1	Unsatisfactory FRA	Objection maintained after further work submitted	Planning permission granted. It is considered that every effort was made to address the Environment Agency concerns. The application was for conversion of a listed building to hotel use (with very limited additional floorspace). Flood risk will not be increased as it is an existing building. Although it was not possible to provide dry access, the hotel has 24 hour staffing and can monitor a flood risk situation, and an evacuation plan was set out for each room. The listing means there are constraints on raising floor levels. The restoration of a Grade II listed building was an important consideration.
1	Risk to the development	Objection withdrawn	Planning permission granted
1	Request for FRA/FCA	Objection withdrawn after submission of a satisfactory FRA/FCA	Planning permission granted
1	Adverse impact on surface water run-off	Objection removed	Planning permission granted



¹ See Glossary for definition of major applications

Figure 41: Number of planning permissions granted contrary to Environment Agency advice on flooding or water quality grounds in 2008/09

	Flooding	Water quality	Total
Number of permissions	1	0	1

Conclusions – Flooding

In this monitoring year, one minor application was approved despite an outstanding Environment Agency objection. The Environment Agency objection was carefully considered and weighed up against other considerations, and it was decided there was little likelihood of increased flood risk from making a decision contrary to their advice. No major applications were allowed contrary to Environment Agency advice. There were no applications during the monitoring period where the Environment Agency objected on water quality grounds.

ENVIRONMENTAL QUALITY			
OBJECTIVE: To maximise the amount of energy produced from renewable energy schemes and thus reduce the amount of energy derived from fossil fuels, thereby reducing greenhouse gas emissions.			
Indicator/type of indicator		Targets	On target?
22 core	The amount of renewable energy generation by installed capacity and type	There should be an increase in renewable energy installed each year.	
23 local	Development complying with Natural Resource Impact Analysis (NRIA) requirements	Qualifying developments should only be approved if there is a suitable NRIA.	

22. Renewable energy generation by installed capacity and type

One of the problems with monitoring renewable energy schemes in Oxford is that in most cases they consist of solar hot water and photovoltaic schemes (using sunlight to generate electricity) on domestic properties. Normally these can be installed under permitted development rights without the need for planning permission, so it is difficult to monitor the implementation of schemes. However, often a permitted development check is carried out. During the year 2008/9, approval was given for 8 solar panel installations and 1 oil and biomass boiler. In addition, there were 10 permitted development right checks for solar panels. This is an increase on the previous 2 years. It is also worth noting that this indicator is for renewable energy generation and therefore does not include low-carbon technologies such as gas-fired combined heat & power. Ground-source heat pumps are also not included in this indicator as it measures electricity generation only.

Figure 42: renewable energy installed by type in 2008/09

	Wind on-shore	Solar photo-voltaics	Hydro	Biomass						Total
				Land-fill gas	Sewage sludge digestion	Municipal (and industrial) solid waste combustion	Co-firing of biomass with fossil fuels	Animal bio-mass	Plant bio-mass	
Permitted installed capacity MW	0	15kW	25kW	N/A	N/A	0	0	0	0	40
Completed installed capacity in MW	0	38kW	0	N/A	0	0	0	0	0	38

23. Development complying with Natural Resource Impact Analysis (NRIA) Supplementary Planning Document (SPD) and sustainable buildings award

The Natural Resource Impact Analysis SPD requires that a minimum of 20% of the energy requirement of new developments should be produced by on-site renewables. The SPD applies to larger developments of 10 or more dwellings or 2,000m² or more floorspace. The following table lists the developments that qualify for submitting an NRIA, and the renewable energy technologies that will be installed on each development.

In 2006, an award for environmentally friendly, resource efficient buildings was set up as a way to promote best practice. The award is aimed at developments that incorporate resource efficient technologies and sustainable energy approaches. In 2008, the award was postponed due to the lack of actual development that had been completed in the previous year. Initial work undertaken on the award this year has shown that there are likely to be a full complement of categories for the Sustainable Buildings Award this year.

Figure 43: applications received in 2008/09 that required NRIs and whether NRI requirements were met.

Application and date received	Application status	Type of development	% energy to be generated from renewables and type of technology	NRI requirement met? Reasons and notes
08/00688/FUL 02.04.08 Land At The Junction Of Marston Road And John Garne Way Oxford	APPROVED	361 study bedrooms	20% from Combined Heat & Power (CHP) – type not specified in NRI 75kW CHP plant for heating, hot water and electricity during peak periods.	Yes
08/01736/FUL 269 Cowley Road	REFUSED	35 study bedrooms	N/A	N/A
08/01741/FUL Mansfield College	APPROVED	78 student rooms	20% from combination of solar PV (6%), Solar Water Heating (2.3%), Ground source heat pump (7.9%), and Ground Source Cooling (5.5%)	Yes 15kW Solar PV
08/02254/FUL Iffley House, Iffley Turn	APPROVED	80 study bedrooms	31% through Gas Fired CHP	Yes
08/02261/FUL 14.10.2008 4 To 6 Queen Street And 107 - 119 St Aldate's Oxford	NOT DETERMINED IN MONITORING PERIOD	14 new retail units (at ground and first floor) and St Aldates with 96 student units and office development above.	20% Biomass	Yes
08/02670/FUL 16.12.2008 Windmill House, Headington	APPROVED	Redevelopment of Windmill House – 6 new socially rented units	Residential – 30.5% solar panels Non-residential – 43% solar panels	Yes
09/00247/FUL Lamarsh Road	NOT DETERMINED IN	Erection of 3 non-food	30% from heat pumps and solar	

Retail	MONITORING PERIOD	retail units consisting of 6669m ² of floorspace (inc. mezzanine)	water heating – awaiting final figures regarding renewable energy components.	
09/00390/FUL Leslie Martin Building South Parks Road	NOT DETERMINED IN MONITORING PERIOD			
09/00404/FUL Extensions to Heyford Hill Sainsburys Store	NOT DETERMINED IN MONITORING PERIOD	Extensions to Sainsburys Store, Heyford Hill. Just over 2,000m ² non-residential floorspace threshold	20% (further information to be submitted)	None as yet
09/00553/FUL Land At Pembroke College And Campion Hall And Brewer Street And Littlegate Street	NOT DETERMINED IN MONITORING PERIOD	96 study bedrooms, multi-purpose hall, café and seminar room		
09/00575/FUL Former Mabel Pritchard School Site	APPROVED	16 houses, 9 flats 33 parking spaces and bin stores	Ground Source Heat Pump – 68MWh Solar water heating systems – 24MWh	Yes
09/00576/FUL St Nicholas House, St Nicholas Road	APPROVED	13 houses and 3 flats 26 parking spaces	Ground Source Heat Pump – 68MWh Solar water heating systems – 24MWh	Yes

Conclusions – Environmental quality

At present, only a small amount of electricity in Oxford is generated from renewable energy. It is very important that this is radically increased in the next few years in order to reduce reliance on fossil fuels and emissions of greenhouse gases, which contribute to global warming. There are signs of an increased interest in installing renewable energy technologies. The NRIA provides a significant tool in persuading developers to include renewable energy in larger new development schemes, and the sustainable buildings award is proving to be a good incentive and provides useful publicity about renewable energy schemes. It is encouraging that all the developments that were granted planning permission in the monitoring period met the NRIA requirements.