Maidstone's Biodiversity Strategy

A Local Biodiversity Action Plan Phase 1: 2009 – 2014

Background & Introduction

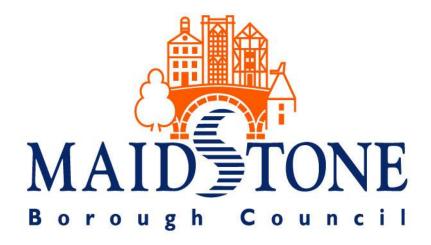


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Executive summary

Biodiversity - What does it mean?

Biodiversity (Biological Diversity) describes the amazing richness and variety of life around us. Biodiversity refers to diversity between and within ecosystems and habitats, the variety of different species and also to genetic variation within individual species. The intricate network of ecosystems, habitats and species comprising biodiversity provides the support systems that sustain human existence. It is the most important indicator of the state of our environment.

Maidstone's biodiversity

Maidstone borough is rich in biodiversity and contains 10% of the county broadleaved, mixed and yew woodland representing 12% of the borough's land cover. Maidstone's landscapes have influenced and shaped local culture. Maidstone borough is made up of characteristic areas defined by differences in rock type, topography, soils, slope and drainage, which in turn resulted in a great variety of habitats. Most of Maidstone falls in to the North Downs, Wealden Greensand and the Low Weald landscape natural areas. In both rural and urban areas wildlife makes an important contribution to the quality of life. Biodiversity conservation is central to maintain a healthy countryside and townscape.

Purpose of this strategy

The past ten years have seen significant changes relating to the environment particularly in terms of planning policy, legislation, and practical action and the need to balance social, economic and environmental aspirations. This Local Biodiversity Strategy and Action Plan provides the opportunity to review current activities and issues, identify aims and set specific objectives and targets for action by a wide range of internal and external partners. It provides a much-needed overarching strategy for everyone involved in safeguarding and enhancing Maidstone's natural environment.

Direct action and delivery

The strategy and action plan for biodiversity allows the council to be strategic in determining where to apply its own resources in delivery. The development of the Maidstone's Biodiversity Project Plan is a leading and novel approach at local authority level, in that it clearly defines a programme of projects that cover a range of work including research, monitoring, protocol development and capital one-off site projects. These projects show how the Council will lead and be directly involved in protecting and enhancing the borough's biodiversity and raising awareness of the issues. Maidstone's Biodiversity Projects Plan clearly describes the localness of our approach as a governing body in the biodiversity framework highlighting our innovative approach to delivering better services to local people.

Background to biodiversity

What is biodiversity?

- 1.1 The word biodiversity was first officially cited as the title of the proceedings¹ of the 1986 National Forum on Biological Diversity organized by the National Research Council (NRC) and is derived from biology and diversity.
- 1.2 The definition of the word biodiversity often relates to three forms of diversity: 1. Ecosystem diversity, 2. Species diversity and 3. Genetic diversity. In 1992 at the United Nations Earth Summit in Rio de Janeiro defined "biodiversity" as "the variability among living organisms from all sources, including, 'inter alia', terrestrial, marine, and other aquatic ecosystems, and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems" and it is this definition that has been adopted by the United Nations Convention on Biological Diversity.

Why is biodiversity important?

- 1.3 Biodiversity is vital to life; in its simplest term biodiversity supports life itself and has an intrinsic value that should be cherished and preserved for its own sake.
- 1.4 Biodiversity includes a range of ecosystem services and resourses, such as the production of oxygen, processing carbon, nutrient storage and recycling, pollution breakdown and absorption, climate stability, reducing flooding, pollination, pest control, food, clothing, medicinal resources and pharmaceutical drugs, wood products, and ornamental plants.
- 1.5 A stimulating and biological diverse environment has social positive impacts on mental and physical health, education and well-being. The natural environment can motivate, inspire and enrich our quality of life and has aesthetic and spiritual values.
- 1.6 There is an array of economic benefits that can be gained from a 'green environment' by setting an attractive setting for business, representing quality and prosperity. Recreation and tourism provide a range of investment opportunities within 'eco-tourism'.

The current status and need to conserve biodiversity

- 1.7 The recent ICUN (International Union for Conservation of Nature) Red List of Threatened Species² indicates that 75% of plant species, one in three amphibians, one in four mammals and one in eight birds have so far been assessed are at risk of extinction.
- 1.8 The Red List includes a total of 16,000 species across the world currently at risk of extinction. This estimation is considered to be an underestimate of the true figure.
- 1.9 The main causes of man-made species extinction are habitat loss and hunting. For example, over 40% of mammals are currently at risk due to the loss and fragmentation of habitats².

1.10 A recent project highlighted the need for action to prevent habitat fragmentation in Kent due to estimated changes in the distributions of species as predicted by climate change³.

Environmental sustainability

- 1.11 Sustainable development can be defined as "development, which meets the needs of the present without compromising the ability of future generations to meet their needs" and encompasses three elements; society, economy and the environment all of which need to be considered and balanced to achieve sustainable development.
- 1.12 Biodiversity is dependent upon and an indicator of a sustainable and healthy environment. Species lost can never be replaced and habitats can not simply be recreated. A clearer understanding of the way in which development may affect biodiversity, will better inform decisions relating to the capacity of the environment to accommodate our growing needs, without adverse effect.
- 1.13 Maidstone's Local Strategic Partnership has a clear vision of sustainable growth and prosperity for the Borough, as described in the draft of the Borough's sustainable communities strategy 'Maidstone Matters, Partnership in Action' and 'The Draft Issues and Choices Report'. Both acknowledge the Local Biodiversity Action Plan (LBAP) and the enhancing and creating of habitats to meet targets.

Shared priorities and a shared commitment

- 1.14 The new Local Area Agreement (Kent Phase 2) has a strong emphasis on environmental excellence and includes an indicator specifically for biodiversity (NI197), the delivery of which will be driven by county—wide strategies and plans, and working in partnership. Specifically, work towards NI197 targets will be co-ordinated with the overall vision, aims, objectives and actions of the LBAP.
- 1.15 The LBAP paints a detailed picture of the Borough's biodiversity, the issues affecting it and proposes a series of conservation actions, to achieve specific outcomes and outputs within a certain time-frame. This underpins the duty placed on all local authorities towards biodiversity protection, as set out in the Natural Environment and Rural Communities Act 2006⁶, and at a strategic level will ensure that biodiversity principals are;
 - Adopted into approaches regarding the delivery of services and function and involve all Partner landholdings
 - Promoted in urban design and regeneration/development plans and projects
 - Incorporated into land management practices in rural regeneration/development schemes
 - Encourage to help engender local pride and environmental stewardship

The biodiversity framework

The national response

- 2.1 In 1992 Biodiversity became a global agenda when 150 governments signed the Convention on Biological Diversity at the Earth Summit in Rio de Janeiro. It called for national strategies and action plans to be created and enforced which would conserve, protect and enhance biological diversity and was the first time a legal framework was applied to biodiversity.
- 2.2 In 1994 the 'UK Biodiversity Action Plan' (UK BAP) was launched endorsing a multiorganisational approach to biodiversity conservation with an agreed set of targets and objectives. The overall goal of the UK BAP is to conserve and enhance biological diversity within the UK and to contribute to the conservation of global biodiversity through all appropriate mechanisms.
- 2.3 The UK BAP main objectives are;
 - 1. To conserve and enhance:
 - The overall populations and natural ranges of native species and the quality and range of wildlife habitats
 - Internationally important habitats and species
 - Habitats and species (natural and managed) that are characteristic of local areas
 - Natural and semi-natural areas that have declined in recent years
 - 2. To increase public awareness of, and involvement in, conserving biodiversity
 - 3. To contribute to the conservation of biodiversity on a European and global scale
- The following principals apply to the national UK action plan and are also applicable at a local level;
 - The sustainable use of biological resources
 - The cautious use of non-renewable resources
 - The promotion of a multi-agency approach to biodiversity conservation, including individuals and communities and not just government lead. This is being championed through Local Biodiversity Action Plans
 - Biological conservation should be based upon a sound knowledge base
 - The conservation of biodiversity should be integrated within government programmes, policy and action
 - Decisions should be guided by the precautionary principal, that is, where
 decisions are complex or insufficient knowledge or information exists to
 understand biodiversity impact, then precautionary conservation measures
 are necessary.
- 2.5 Following the publication of 'Biodiversity: the UK Action Plan'⁷, the UK Biodiversity Steering Group was established to advise the government on how to fulfil its commitment to delivering the Plan. In 1995 'Biodiversity: the UK Steering Group Report meeting the Rio challenge'⁸ was produced, which set out how to achieve this through the Local Biodiversity Action Plan process. The most recent list of priority species and habitats was produced in 2007 contains 1149 species and 65 habitats⁹. The Steering Group also set up guidelines, with the Local Authority Association and the Local Government Board that could be used at a local level. Maidstone Local Biodiversity Action Plan (LBAP) is one of 152 Local Biodiversity Action Plans in England.

The regional response

- 2.6 The Maidstone borough forms part of the County of Kent in the South-East region. The Kent Biodiversity Partnership support biodiversity conservation via the Kent Biodiversity Action Plan¹⁰ (Kent BAP). The Kent Biodiversity Partnership forms part of the larger South-East England Biodiversity Forum (SEEBF).
- 2.7 The South-East Biodiversity Strategy¹¹ targets and strategic biodiversity opportunity map and the Kent BAP¹⁰ targets and actions are currently under revision, however through consultation the Maidstone LBAP will contribute towards this in a local context hierarchy linking into county, regional and national action plans.
- 2.8 In 2003 the Kent Biodiversity Partnership released an audit of the distribution of UK priority habitats in Kent¹². This audit contributed to the Kent BAP and listed 28 priority habitats of importance to the County, of which 27 were of UK priority importance.
- 2.9 Eight Local performance Indicators have been developed to examine Biodiversity with respect to Local Authority actions by the National Audit Office and the Development and Improvement Agency. The Maidstone LBAP would improve on four of these local performance indicators.

The legal framework

- 2.10 The United Kingdom has a series of national and international obligations in relation to the conservation of biodiversity. These are often imposed through statutory designations, structured around;
 - The protection of specific sites or areas
 - The protection of habitats of nature conservation significance, or specific issues affecting them
 - The protection of important populations of species or groups of species, or specific issues affecting them
 - The conservation and enhancement of natural beauty and amenity, wildlife (fauna and flora), cultural heritage, and natural heritage (including geological and geomorphological features).
- 2.11 The Local Government Act 2000¹³ places a statutory duty on Local Authorities to prepare Community Strategies, and recognises Local Biodiversity Action Plans as examples of 'good practice' within this framework.
- 2.12 Section 74 of The Countryside and Rights of Way Act (CROW) 2000¹⁴ places a duty on Local Authorities to conserve biodiversity in accordance with the Convention. Whilst Section 78 deals with duties in relation to Sites of Special Scientific interest (SSSIs).
- 2.13 The Natural Environment and Rural Communities Act 2006⁶ places a duty on every public authority to, "in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity."
- 2.14 The Wildlife and Countryside Act 1981, as ammended¹⁵, is the statutory basis for species and habitat protection within the UK. The Act sets out the protection afforded to wild plants (Schedule 8) and animals (Schedule 5) in the UK, and reviews the species to which it applies every

5 years. The protection can be connected to the actual species, or its habitat (resting or breeding). Sites of Special Scientific Interest (SSSIs) are also notified under the Act. These sites are nationally important and are intended to reflect the best examples of particular features of interest (biodiversity, geodiversity and/or physiographical) across the country. Maidstone Borough has 9 sites of Species Scientific Interest.

- 2.15 Adopted in 1992, the Conservation of Natural Habitats and of Wild Fauna and Flora 16, (commonly known as the Habitats Directive), requires each member state to make legislative and administration provision to enable them to maintain or restore natural habitats and wild species at favourable conservation status, through site and species protection objectives. Of particular interest in Maidstone Borough is the Special Areas of Conservation (SAC) designation under the Habitats Directive. SACs are designated for their importance as natural habitat types and as the habitats supporting international species of importance listed within the Directive. Along with Special Protection Areas (SPAs), which are designated under the Birds Directive, these sites form a European network of designated sites called 'Natura 2000'. In Maidstone part of the North Downs is designated SAC and are therefore of international conservation status.
- 2.16 The Habitats Directive is applied in the UK via the Conservation (Natural Habitats & c.)
 Regulations (England) 1994 (as amended), commonly shortened to the Habitats Regulations.
 These build upon the existing provisions of the Wildlife and Countryside Act 1981, as ammended 15, Town and Country Planning Acts and others, to define and protect 'European sites'.
 The Regulations require development plans and decisions to contribute to biodiversity conservation through the inclusion and application of policy, conditions and compensatory measures to sustain the Natura 2000 network. Plans or projects, which are likely to have a significant affect on a European site, are required to undergo Appropriate Assessment, and be assessed according to their implications for the site's conservation objectives. Under the Regulations all Planning Authorities must have proper regard to the protection and enhancement of these sites in the formulation of development plans.

The planning framework

- 2.17 Planning Policy Statement 9 Biodiversity and Geological Conservation¹⁷ further strengthens the importance of habitat; wildlife and geological features in planning policy and development control decisions and embodies the government's commitment to sustainable development. The key principals are summarised below;
 - Development plan policies and planning decisions should be based upon upto-date information about the environmental characteristics of their areas
 - Plan policies should aim to maintain, and enhance, restore or add to biodiversity and geological conservation interests
 - Plan policies should take a strategic approach to the conservation, enhancement and restoration of biodiversity and geology.
 - Plan policies should promote opportunities for the incorporation of beneficial biodiversity and geological features
 - The aim of planning decisions should be to prevent harm to biodiversity and geological conservation interests. Where granting planning permission would result insignificant harm to those interests, local planning authorities will need to be satisfied that the development cannot be reasonably located on any alternative sites that would result in less or no harm

- 2.18 Under the current planning system, introduced by the Planning and Compulsory Purchase Act 2004¹⁸, the term "statutory development plan" has particular importance to biodiversity and requires under section 38 to consider sustainability. The system is plan-led which means most planning decisions have to take as their starting point the content of the Statutory Development Plan before any other considerations are taken into account. The Statutory Development Plan (more commonly referred to as the Development Plan) is not a single document consisting of documents at both regional and local levels; including Regional Spatial Strategies and Local Development Frameworks (LDF). In practice this means Regional Planning Policies are as relevant as the LDF that Maidstone produces itself. The draft South-East Plan¹⁹ section D5 policies NRM4 and NRM5 relate directly to biodiversity and UK priority habitat conservation, enhancement and creation.
- 2.19 Maidstone's emerging Local Development Framework (LDF) will replace the Local Development Plan (LDP) as the new system that determines the use of land in Maidstone. The LDF contains a number of components, including strategic policies, development control policies and site allocations.
- 2.20 The LDF and a suite of complementary Supplementary Planning Documents (SPDs) are currently being developed. The LBAP and in particular spatial maps contained in this document highlighting UK priority habitats and areas that could increase linkage between these sites should be consulted in conjunction with the development of these plans to ensure that statutory biodiversity duties are fulfilled.
- 2.21 Within the Annual Monitoring Report that is produced by Planning Policy is required by legislation to report on core output indicator E2 which monitors change in area of biodiversity, in addition to providing contextual supporting data when available on biodiversity, for example change in area of UK priority habitats.

Baseline information on habitats and species in Maidstone

- 3.1 Up-to-date habitat information is most readily available for Sites of Special Scientific Interest (SSSI) and Special Areas of Conservation (SAC). Designated sites of such standing are subject to management plans, studies and assessments for the species or habitats of conservation concern and annual condition monitoring and reporting is also an important means to assess their conservation status. In addition to routine survey, such sites are more likely to attract local naturalists, and conservation volunteers who provide regular biological records.
- 3.2 Both the Department for Environment, Food and Rural Affairs (DEFRA) and the Forestry Commission (FC) award Environmental Stewardships for the management, enhancement and creation of habitats which can be used to understand the distribution of conservation efforts in the Borough.
- 3.3 Data on ancient woodland and lowland deciduous woodland distribution is available from Natural England woodland inventory.
- 3.4 Biological records have been centrally stored in Kent since 2003 by the Kent and Medway Biodiversity Records Centre (KMBRC) and the biological records held date back to 1854.
- 3.5 The Kent Habitat Survey (2003)¹² used Ariel Photographic Interpretation Methods and some Selected ground surveying of sites to map the ground cover of Kent using the Integrated Habitat Classification system.
- 3.6 The Kent Wildlife Trust (KWT) holds information on Local Wildlife Sites designations. The local site selection criteria are administered by KWT on behalf of the Kent Biodiversity Partnership following guidance from DEFRA. Management plans for these sites, studies and assessments for the species or habitats of conservation concern, and routine condition monitoring and reporting are all performed by KWT on behalf of the partnership.
- 3.7 A recent Orchard Project ran by Mid-Kent Downs collected data on priority orchards within the Maidstone Borough to feed into the wider National Project on Orchards ran by People's Trust for Endangered Species.
- 3.8 Several of Maidstone's owned natural and semi-natural sites have phase 1 survey data collected as part of the Borough's Green Space Strategy²⁰.
- 3.9 There are a number of natural history/wildlife organisations within the county who record data on specific species/species groups and send these data to KMBRC.
- 3.10 As with all data of this type limitations exist relating to the availability, accuracy and completeness of the information presented, which is often specialist and heavily reliant upon the survey interests and efforts of the voluntary sector. Variation in data exists between different habitats and species. Data can be 'gappy' in coverage, age, detail, and our own understanding, and therefore open to misinterpretation. The information collated does however represent a comprehensive gathering of reliable biodiversity data and an important baseline upon which further efforts in biodiversity conservation should be based. This data enables us to provide the following general overview of the Borough's Biodiversity.

Biodiversity of Maidstone borough - An overview

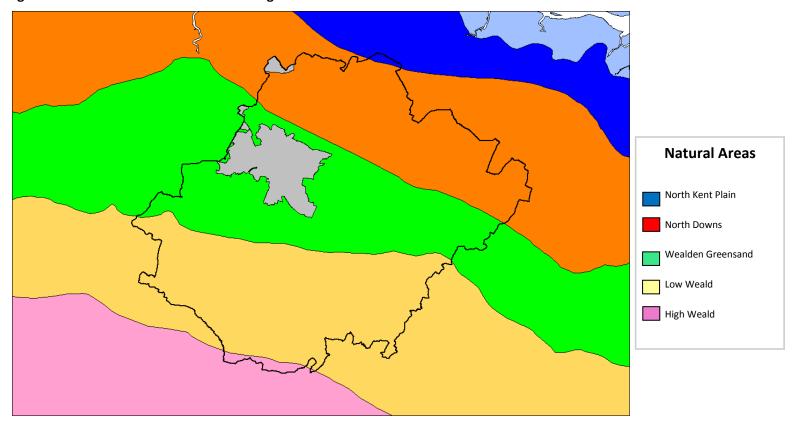
Natural areas

4.1 In response to 'Biodiversity challenge' initiative ran by Government after the Convention on Biodiversity meeting in 1992, English Nature (succeeded by Natural England in 2006) developed the Natural Areas concept. A Natural Area has been defined as a 'biogeographic zones which reflect the geological foundation, the natural systems and processes and the wildlife in different parts of England, and provide a framework for setting objectives for nature conservation' in a report on Biodiversity by the UK Biodiversity Steering Group in 1995²¹. These features give a Natural Area a "sense of place" and a distinctive natural character with associated targets and issues. The concept is based on the premise that, as wildlife rarely pays regard to administrative boundaries, an alternative sub-division of the countryside is necessary for identifying conservation priorities and co-ordinating action. Natural Areas offer an effective framework for translating national level targets into Local Biodiversity Action Plans and are also recognised in National Planning Policy Statements.

The following 5 Natural Areas occur in Maidstone Borough and can be seen in Figure 1:

- North Kent Plain
- North Downs
- Wealden Greensand
- Low Weald
- High Weald

Figure 1 Natural Areas in Maidstone Borough



[Data Source: Natural England Natural Areas GIS Data (2008)]

- 4.2 Maidstone borough is made up of characteristic areas defined by differences in rock type, topography, soils, slope and drainage, which in turn have resulted in a great variety of habitats. Most of Maidstone falls in to the North Downs, Wealden Greensand and the Low Weald.
- 4.3 The North Downs is a distinctive chalk downland with a continuous and steep scarp giving extensive views across Maidstone and the rest of Kent. Chalk soils support areas of high-quality unimproved chalk grassland. Clay-with-flints soils on the upper parts of the dip-slope supports oak/ash woodland and scrub with beech/ash/maple is common on the valley sides. Land use includes a few pockets of traditional downland grazing however land is largely dominated by arable fields.
- 4.4 The Wealden Greensand area within Maidstone is characterised by old orchards and woodland. The fruit belt is dissected by two rivers, the Loose and Len. The landscape is generally a varied and pleasant mix of winding lanes and mixed farmlands with a high percentage of fruit, scattered small woodlands and grasslands interspersed with larger arable fields. Orchards and hops used to be more frequent but now the landholdings are fragmented and much of the land use converted to arable.
- 4.5 The Low Weald generally includes an abundance of ponds and small stream valleys often with wet woodlands of alder and willow and scattered orchards. Traditionally, however, orchards and hops were widespread as the soils are well drained. These crops were most prosperous in the late 19th century, the 20th century seeing a conversion of orchards and hop gardens to horticultural and arable crops.

Local biodiversity and climate change

- 4.4 The geographic position of Maidstone in the British Isles also introduces an interesting climatic influence. Several species from Europe are able to extend their ranges in warm summers. The milder climate of the South means that there are plenty of species that are only found in the South of England.
- 4.5 Changing climatic conditions will affect the ability of residential wildlife to survive locally and is also likely to result in species shifting their geographical distribution from parts of Europe, like the Mediterranean into the South-East. Both of these scenarios mean that planning co-ordinated conservation effort across the South-East and connected regions will play an important factor in the success to conserve biodiversity from a both a local and global perspective.
- 4. 6 BRANCH a project to examine the effects of climate change on biodiversity in Kent reported³ that there is an urgent need to ensure greater connectivity of habitats across Kent to ensure that species shifting geographical distributions due to climate change affects are possible.

Designated nature conservation sites

- 4.7 A great number of sites have been recognised throughout the borough for their biodiversity value, and a series of designations (statutory and non-statutory) have been awarded to acknowledge their importance and offer varying degrees of protection through a variety of different controls.
- 4.8 Maidstone Borough holds a variety of Statutory Nature Conservation sites. At the highest level, Special Areas of Conservation (SACs) are designated to provide a network of protected

sites, holding important wildlife and geological features that are threatened or rare in a European context. Within Maidstone Borough one area of the North Downs is designated SAC, due to its existing and regenerating chalk grassland, and mature beech and yew woodland.

- 4.9 Similarly, at a national level, Sites of Special Scientific Interest (SSSIs) represent Britain's finest sites for fauna, flora, geology and physiographical features. Some of our nationally important SSSI sites are also designated SPAs or SACs. SACs, SPAs and SSSIs are all protected by legislation, thus ensuring the continuity of these irreplaceable features of our heritage. These sites are also protected by policies within the Local Development Framework.
- 4.10 In Maidstone there are 9 SSSIs (as listed below); each supporting what is considered to be one of the finest examples of their respective habitats and geological features;

Purple Hill ~ Chalk grassland, scrub and woodland

Hollingbourne Downs ~ Chalk grassland, beech, oak, ash woodland

Wouldham to Delting Escarpment ~ Chalk grassland, scrub and woodland

Oaken Wood ~ A geological SSSI

River Beult ~ Clay River

Lenham Quarry ~ A geological SSSI

Marden Meadows

~ Unimproved neutral grasslands

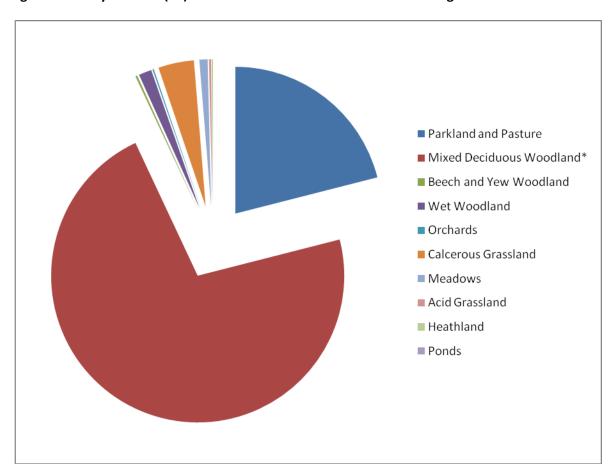
Allington Quarry ~ A geological SSSI Spot Lane Quarry ~ A geological SSSI

4.11 Maidstone also holds 4 Local Nature Reserves (LNR), 4 Wildlife Trust Reserves (WTR) and two community nature areas (CNA) which are publicly accessible reserves of local/regional wildlife value where enjoyment by the public is actively promoted. These reserves are owned and maintained either by Maidstone Borough Council, Kent Wildlife Trust or Community Groups and are listed below;

Boxley Warren (LNR)
Vinters Valley (LNR)
River Len (LNR)
Sandling Park (LNR)
Marden Meadows (WTR)
Kiln Wood (WTR)
Quarry Wood (WTR)
Westfield Wood (WTR)
Fant (CNA)
Bell Lane (CNA)

4.12 Non-Statutory Nature Conservation Sites, known in Maidstone as Local Wildlife Sites (LWS), are regionally and locally important nature conservation sites. Maidstone borough has approximately 59 sites that occur within its boundary, which cover approximately 2629 hectares (ha). The majority of habitat found in LWS within the borough is Lowland Mixed Deciduous Woodland (Figure 2).

Figure 2 Priority habitats (ha) found in LWS within the Maidstone borough



^{*}Mixed deciduous woodland does not include woodland that falls into other woodland categories already represented within the pie chart.

[Data Sources: Natural England Deciduous Woodland Inventory (2008), Kent Habitat Survey (2003), Mid-Kent Orchard project (2008), Kent and Medway Records Centre Pond data (2008), Kent County Council Parkland Inventory (2008) and Kent Wildlife Trust Local Wildlife Sites (2008) Under recording of certain habitats including, heathland, lowland acid, calcareous grassland and wet woodland is possible as a result of reliance on aerial photographs for historic survey work. The Atlas of the Kent Flora (E.G. Philp Kent Field Club) also provides a useful guide to vegetation and therefore habitat types. This issue of under-recording should be addressed in the on-going Kent Habitat Survey – commencing 2010 – which will use aerial photography allied to a substantial amount of ground truthing].

4.13 Maidstone's 59 LWS represent a substantial nature conservation resource. Currently 31 (59%) of these LWS are under or have been under management within the last five years. The Map in figure 3 shows the distribution of LWS in Maidstone Borough.

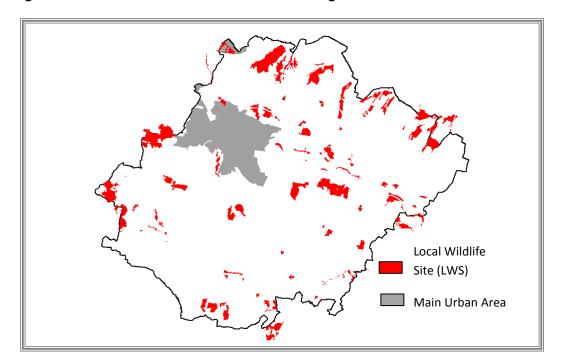


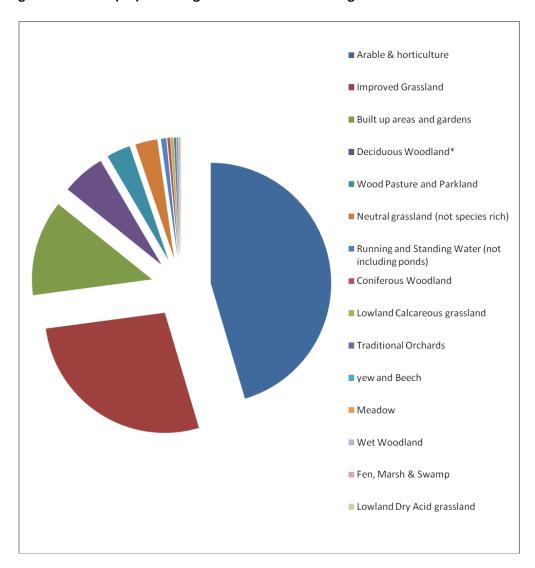
Figure 3 Local Wildlife Sites in the Maidstone Borough

[Data Source: Kent Wildlife Trust. Local Wildlife Sites (2008)]

An overview of habitats in Maidstone

4.14 The majority of the borough is covered by arable and horticulture land practices, however Maidstone holds a large amount of Lowland Mixed Deciduous Woodland, a UK priority habitat. A large amount of calcareous grassland, representing 9% of the county resource is found in the borough. A summary of land cover found within Maidstone can be seen in Figure 4.

Figure 4 Habitats (Ha) occurring in the Maidstone borough



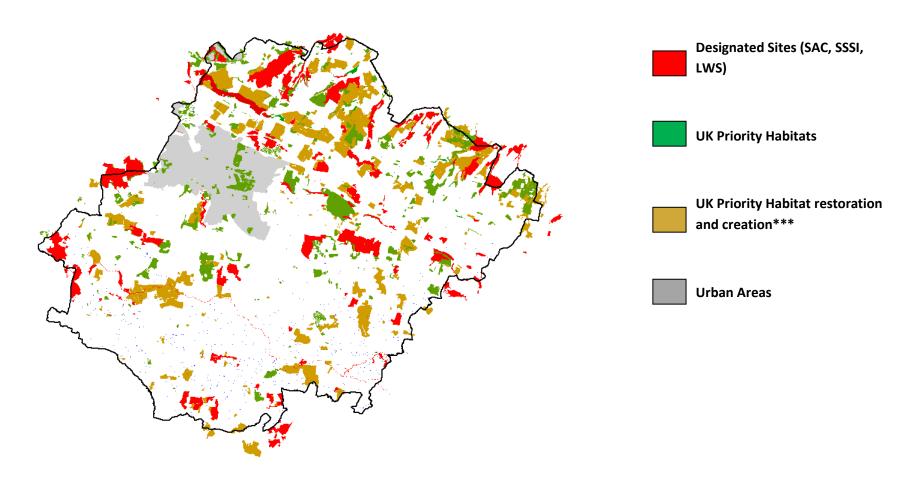
^{*}Mixed deciduous woodland does not include woodland that falls into other woodland categories already represented within the pie chart.

[Data Sources: Natural England Deciduous Woodland Inventory (2008), Kent Habitat Survey (2003), Mid-Kent Orchard project (2008), Kent and Medway Records Centre Pond data (2008) and Kent County Council Parkland Inventory (2008)]

Current biodiversity action in Maidstone

4.15 Through environmental stewardship schemes run by Natural England (NE) and the Forestry Commission (FC) a significant area of Maidstone is currently managed to promote biodiversity, a summary of this alongside designated sites and priority habitats can be seen in Figure 5.

Figure 5 Distribution of current biodiversity action, site designations and priority habitats in Maidstone



[Data Sources: Natural England Deciduous Woodland Inventory (2008), Kent Habitat Survey (2003), Mid-Kent Orchard project (2008), Kent and Medway Records Centre Pond data (2008), KCC Parkland Inventory Data (2008) Kent Wildlife Trust Local Wildlife Sites (2008), Forestry Commission: English Woodland Grant Scheme (2008), Woodland Grant Scheme (2008), and Natural England: Countryside Stewardship Agreement (2008), Environmental Stewardship Scheme (2008)]

^{***}Estimated distributions of creation and restoration of UK priority grassland and woodland habitats active in the last 5 years using Natural England (Countryside Stewardship Agreement, Environmental Stewardship Awards) and Forestry Commission (Woodland Grant Scheme and English Woodland Grant Scheme) data.

Common issues effecting local biodiversity

Agricultural intensification

5.1 Land is under increasing pressure for use in agriculture. Changes in agricultural practices have a major influence on both habitats and species. There has been a trend towards predominantly arable agriculture, loss of hedgerows, habitat fragmentation, land drainage, improvement of grassland and widespread use of pesticides, herbicides and fertilisers. All of which decrease biodiversity on farmland.

Development pressure

There is a continuing pressure for expansion of the urban areas to economic and social needs. Within towns there is pressure to build on open areas, such as gardens, school fields, allotments, open spaces and on urban fringes, leading to a loss of urban wildlife habitats and fragmentation. Infilling within and between rural settlements is also a threat to habitats such as unimproved pastures, wetlands and scrub. Conversion of old farm buildings to residential uses can result in the loss of roosting habitats for both bats and for birds such as the barn owl.

Air quality

5.3 Increasing development and urbanisation inevitably lead to increasing amounts of fossil fuel consumption and hence greater emissions into the air. These arise from the direct use of fuel in homes and factories, during the production of materials used in constructing and furnishing our homes, and in the manufacture and transport of the products which we use and consume every day. The emissions of carbon dioxide and other greenhouse gases from the burning of fossil fuels are thought to be responsible for changes in the world's climate. Changes in average temperatures, rainfall and sunshine will alter the biodiversity of Maidstone and the UK as a whole.

Groundwater and surface water abstraction and pollution: Sustainable Urban Drainage Systems (SUDS)

- 5.4 In recent years the availability and quality of water has been a major issue. Increased abstraction from aquifers causes reduced water levels in many wetlands. Increased urban development, requiring additional water supplies, puts mounting pressure on the water resource. Agriculture, industry and residential areas all produce pollutants which can affect the quality of wetlands, open water bodies and flowing waters. Nutrient enrichment, or eutrophication, stimulates the growth of aquatic algae to the detriment of other wetland and aquatic plants. Bacterial growth also reduces the amount of oxygen available to fish and other aquatic animals.
- 5.5 The European Water Framework Directive (WFD) came into force in December 2000 and became part of UK law in December 2003. The Environment Agency are the competent authority for carrying out the Directive and gives an opportunity to plan and deliver a better water environment, focusing on ecology. The Directive will help to protect and enhance the quality of:
 - surface freshwater (including lakes, streams and rivers)
 - groundwaters
 - groundwater dependant ecosystems

- estuaries
- coastal waters out to one mile from low-water.
- The Thames River Basin which includes the River Medway and its tributes was the second river basin in England to be consulted on under the WFD and the Thames River Basin Management Plan is due to be published in 2009. The latest WFD categories for Maidstone's rivers are as published by the Environment Agency at http://wfdconsultation.environment-agency.gov.uk/wfdcms/en/thames/Intro.aspx. It is worth noting that the River Medway is listed as (Moderate), River Beult (Poor) and the River Len (Bad). All other tributaries can be reviewed at this website.
- 5.7 Sustainable drainage is a concept that includes long term environmental and social factors in decisions about drainage. It takes account of the quantity and quality of runoff, and the amenity and environmental value of surface water in the urban environment. Many existing urban drainage systems can cause problems of flooding, pollution or damage to the environment and are not proving to be sustainable. In order to meet the WFD new developments need to include SUDS as part of their water management and this is highlighted within Planning Policy Guidance 25: Development and Flood Risk²³ (2001).

Transport

5.8 Transport is an increasingly important issue in today's society. Commuting by car from rural settlements to work in towns and cities is increasing, and the amount of freight carried by road has never been higher. This leads to increasing pressure to build new roads and improve existing ones. Whilst vehicles directly contribute to air, noise, and water pollution; road improvements and new roads have direct effects on habitats by causing disturbance to, or loss of, roadside verges, hedgerows, trees, ditches and farmland. Large numbers of street trees have been lost across Maidstone Borough to road widening, cable damage, wind-blow and disease.

Woodland management

5.9 The decline of markets for woodland products has led to the abandonment of traditional woodland management such as coppicing and pollarding. Replanting with non-native tree species, particularly conifers, has a detrimental effect on the ground flora by preventing sunlight reaching the woodland floor. Similarly a cessation of traditional rotational coppicing management allows dense undergrowth to shade out herbaceous species including spring flowers. Newly developed Woodland Management Plans will draw upon these traditional silvicultural techniques; areas of coppice with standards have already been started in several woods. Longer term management will see Ancient Woodlands restored to their native composition through the removal of the non-native components, and by actively encouraging natural regeneration. This will benefit the ground flora and will help stimulate the migration of existing flora throughout the woods.

Climate change

5.10 The ability of those animal and plant species existing at the limit of their climatic range, to prevail locally, will be a key concern. The general range and distribution of species may change, in

response to the change in climatic conditions and to prevent localised extinctions connectivity of habitats is essential. For example; a changing climate may alter the nature of the woodland that is able to survive. Warmer summer conditions may mean that some tree species can set more seed whilst others could fail to propagate and eventually die out. Spring and winter droughts may lead to drought stress in other species.

Light pollution

5.11 Light pollution is caused by artificial light such as street lighting, advertising and display lighting, floodlights for sporting events and building illumination. Light pollution can impact on biodiversity in a variety of ways including; causing migratory birds to collide with lighted buildings, cause a false dawn which disrupts bird's behaviour, cause moth deaths, and disrupt tree and plant biological mechanisms that are controlled by day length.

Noise pollution

5.12 Noise pollution comes from a range of sources including road, rail and air traffic, intensive agriculture, construction work and factory machinery. Noise can cause stress to animals, interfere with delicate predator-prey interactions, and cause detrimental effects on mating behaviour of animals.

Invasive species

5.13 Invasive species can cause problems for biodiversity as they are often faster growing/populating species in comparison to endemic flora and fauna; this often means that they displace endemic flora and fauna causing a loss of biodiversity.

Developing Maidstone borough Biodiversity Action Plan

Primary conservation aims

- 6.1 In accordance with the UK BAP, the Partnership's primary aims for biodiversity conservation are:
 - Maintain and enhance the populations and natural ranges of species and the quality and extent of wildlife habitats and ecosystems.
 - Conserve internationally, nationally and regionally important species, habitats and ecosystems and to enhance their conservation status where possible.
 - Conserve species, habitats, and natural and managed ecosystems that are locally characteristic and to enhance their conservation status where possible.
 - Maintain the genetic variation within species and hence habitats and ecosystems.
 - Contribute to the conservation of biodiversity on a local, regional, national, European and global scale.
 - Ensure that current policies and practices which affect the environment do not damage global biodiversity, but instead contribute towards conserving and enhancing it.
 - Increase public awareness of, and involvement in, conserving biodiversity

Key conservation objectives

- 6.2 To achieve these aims the Partnership has developed Maidstone's Local Biodiversity Action Plan to deliver the following broad objectives;
 - To develop and consolidate a sound biological knowledge base.
 - To consistently translate national biodiversity targets into effective action at the local level.
 - To examine local biodiversity status and issues, and identify conservation targets for locally important habitats.
 - To develop sustainable local partnerships to help deliver programmes for biodiversity conservation, education and environmental stewardship.
 - To increase public awareness of, and participation in, conserving biodiversity locally.
 - To ensure that opportunities for biodiversity conservation and enhancement are identified and fully considered via all statutory and local processes and initiatives.
 - To provide a basis for measuring and monitoring progress in biodiversity conservation at a local level, and contributing to national efforts.

The partnership approach

6.3 The objectives underpinning the LBAP have been identified and incorporated into the Local Biodiversity Action Planning process, based upon the following approach.

6.4 Maidstone LBAP's conservation objectives are based upon a series of protection, restoration and, re-creation and expansion, and public stewardship measures. The fundamental means of conserving habitats and species is through the protection of existing biodiversity, often on a site basis, and the implementation of appropriate management to maintain the feature of interest in a favourable condition. Site, species and habitat protection is heavily reliant upon a supporting legislation and policy base, and agreed protocols and management practices. Restoration and enhancement measures are often applied to degraded habitats, to re-address their condition and wildlife value, whilst re-creation and expansion, where possible, seeks to expand the habitat resource. Suitable site conditions and other necessary variables mean that habitat re-creation and expansion opportunities can be few and far between, therefore every prospect should be thoroughly explored. Each measure offers opportunities for environmental education and public participation.

Criteria of habitat selection

6.5 Habitats are defined by the assemblage of plants and animals that are found together, along with the geology and soils they occur on, and the climate of the area. Maidstone LBAP first developed a **long LBAP list** based on the following criteria;

Long List LBAP

- Any UK BAP priority habitat that occurs in Maidstone Borough
- Any semi-natural habitat that occurs in Maidstone Borough
- Any habitat that is characteristic or locally distinctive of Maidstone Borough

The long LBAP list was then shortened using the following criteria; For a habitat to be selected from **Long List** and onto the **Priority List** at least one criteria from 1 and either 2, 3, 4 or 5 must be met or the habitat was specifically recommended by a partner organisation for conservation.

Priority List Criteria:

- 1. The habitat is a UK-BAP priority habitat that occurs in Maidstone Borough And is also one of:
 - a) Locally present and threatened
 - b) Potential for habitat to be restored or extended
 - c) The habitat is locally and regionally important
- 2. Specific actions for Maidstone have been identified within the Kent BAP/South-East England Biodiversity Action Plan and Opportunity Mapping for this habitat
- 3. Easy to identify and engage public interest for non-specialist volunteering/monitoring
- 4. Easy to obtain reliable monitoring data from organisations
- 5. Able to work in partnership with an Organisation with a specific focus on the habitat

In addition, Urban Green Space was considered a priority habitat for Biodiversity Action within Maidstone Borough despite not meeting the above criteria as it is not a UK priority habitat. Urban Green Space connects people with wildlife which is a fundamental objective of the UKBAP.

6.6 The following 13 habitats have been considered a priority within the Borough;

Grassland:

- 1. Lowland Dry Acid Grassland
- 2. Lowland Calcareous Grassland
- 3. Lowland Meadow

Woodland:

- 4. Wood Pasture and Parkland
- 5. Wet Woodland
- 6. Lowland Beech and Yew Woodland
- 7. Lowland Mixed Deciduous Woodland

Water Habitats:

- 8. Ponds
- 9. Rivers
- 10. Urban Green Space
- 11. Lowland Heath
- 12. Traditional Orchards

All are UK priority habitats except Urban Green Space.

The action plans

- 6.7 Each Action Plan within the LBAP follows a similar format, which includes; a description of the habitat, followed by details of national status, local status, current factors causing loss or decline, current local action, funding resources, national and local plans and targets, and Maidstone's objectives and proposed actions. The Habitat Action Plans also provide distribution maps, which broadly indicate habitat coverage within the Borough (when data is available).
- 6.8 Conservation status maps have been created specifically to aid and target further conservation efforts in the Borough in a strategic and coordinated manor, ensuring that current habitat links are maintained and created.
- 6.9 A conservation status map showing where woodland and grassland UK priority habitats are being maintained/enhanced/restored/created, areas that were identified as UK priority habitats in the 2003 Kent Habitat Survey, and designated sites can be seen in figure 3. Conservation status maps have also been developed individually for woodland and grassland habitats and are within the habitat statement documents.
- 6.10 The conservation status map developed in this LBAP shows that areas of the borough current biodiversity action areas tend to be areas highlighted as biodiversity opportunity areas (BOA) within the SEEBF biodiversity opportunity map and the two maps show high spatial correlation. This indicates that a large amount biodiversity action in the borough is currently achieving connectivity of key UK priority habitats in a strategic and co-ordinated manor.
- 6.11 To monitor biodiversity action the conservation status map developed and contained within this document will be updated annually to compare spatial changes over time. This map will inform Development Control decisions via developing a Planning Biodiversity toolkit and Protocol and allow partnership organisations to target schemes in strategic areas to ensure connectivity of habitats across the borough.

6.12 Partner organisations involved in the development and implementation of the LBAP are listed below:

British Trust of Conservation

Volunteers (BTCV)

Environment Agency (EA)

Forestry Commission (FC)

National Farmers Union (NFU)

Natural England (NE)

Kent Wildlife Trust (KWT)

Kent County Council (KCC)

Kent and Medway Biological Records

Centre (KMBRC)

Medway Valley Countryside

Partnership (MVCP)

Mid-Kent Downs Project (MKDP)

Setting Maidstone LBAP targets

- 6.13 The most common methodology used to set targets for the Maidstone Borough habitats was calculated on the basis of the UK BAP habitat targets and are proportional contributions based on the quantity of the habitat found in Maidstone. Although, in some cases a target has been set due to specific targets for Maidstone borough being outlined within the Kent BAP.
- 6.14 The UK BAP has the following three main objectives for each habitat:
 - 1. Maintain current distribution and extent.
 - 2. Achieve favourable condition or recovering favourable condition.
 - 3. Restore priority habitat.
 - 4. Create priority habitat by expansion of current distribution.

However, there are also additional objectives for some habitats which specify connectivity conditions for creation/re-establish/expand objectives; these have been included when required within objective for these habitats within the Habitat Action Plans.

- 6.15 UK BAP targets have been set until 2030 for most habitats and are split into the following phases 2005-2010, 2010-2015, 2015-2020 and 2020-2030 and so the targets for 2026 within the Maidstone LBAP proportionally correspond to the UK BAP targets for 2030.
- 6.16 The Maidstone LBAP targets are set until 2026 to coordinate with the Borough's LDF, Core Strategy, and the South-East Plan¹⁹ however, the document will be reviewed across three time periods; 2009-2014 (Phase 1), 2014-2019 (Phase 2) and 2019-2026 (Phase 3).
- 6.17 As some habitats in the Maidstone LBAP are new UK BAP habitats (Rivers, Ponds, Traditional Orchards) national targets have not yet been set.
- 6.18 Data on Rivers and Ponds is currently limited and so numerical targets for some of these habitats have not be made, other than to maintain the area of these habitats at current levels if current levels are known.
- 6.19 Targets for Traditional Orchards have been based on targets set for the Maidstone area in the revise Kent BAP Traditional Orchard habitat action plan.

- 6.20 The draft UK habitat action plan for this Lowland Mixed Deciduous Woodland habitat²² has been consulted when setting targets for this and related woodland habitats and realistic targets have been calculated for Maidstone.
- 6.21 Lowland Wood Pasture and Parkland is set on a site basis, however no-where within the UK action plan for this habitat is the term site defined. As there is no definition of what can be considered a site for this habitat it has been difficult to set targets. Targets have therefore been determined on a site basis to reflect Kent BAP targets and also ensuring they are realistically achievable.
- 6.22 The baseline data used to calculate targets were collected in the Kent Habitat Survey 2003, Ancient Woodland Inventory (2008), Kent County Council Parkland Inventory (2008) and Orchards for Everyone Project (2008).
- 6.23 Maidstone's LBAP habitat targets as a percentage of how much of that habitat is found in Maidstone can be seen in Table 1.
- 6.24 Maidstone's LBAP habitat targets in hectares can be seen in Table 2.

Table 1 Setting Maidstone's LBAP targets as a percentage of the habitat area in the borough

			2014			2019				2026				
UK Priority Habitat	Targets based on	На	maintain	achieve	restore	expand	maintain	achieve	restore	expand	maintain	achieve	restore	expand
Calcareous Grassland	UK	143	100%	83%	2%	20%	100%	84%	2%	20%	100%	86%	3%	21%
Lowland Dry Acid Grassland	Kent	9	100%	56%	12%	50%	100%	64%	12%	60%	100%	65%	12%	60%
Lowland Meadows	UK	45	100%	77%	21%	4%	100%	80%	24%	4%	100%	82%	26%	4%
Lowland Beech and Yew	UK	84	100%	53%		13%	100%	57%		15%	100%	58%		16%
Wet Woodland	UK	39	100%	53%		13%	100%	57%		15%	100%	58%		16%
Lowland Mixed Deciduous Woodland *	UK	2259	100%	53%		13%	100%	57%		15%	100%	58%		16%
Lowland Heathland	UK	4	100%				100%				100%			
Traditional Orchards	Kent	107	100%			14%	100%	100%		16%	100%	100%		18%
Lowland Wood Pasture and Parkland	UK	1250	100%				100%				100%			
Lowland Wood Pasture and Parkland (sites)	Kent				1 site	1 site			2 sites	2 sites				

^{*}Mixed deciduous woodland does not include woodland that fits into other woodland categories

[The baseline data used to calculate targets was collected in the Kent Habitat Survey 2003, Ancient Woodland Inventory, Kent County Council Parkland Inventory (2008) and Orchards for Everyone Project]
LBAP targets are based on the quantity of the habitat in Maidstone borough reflecting UK targets proportionally or, Kent specific targets for the Maidstone borough.

Table 2 Maidstone's LBAP habitat targets (hectares)

		2014			2019				2026				
UK Priority Habitat	На	maintain	achieve	restore	expand	maintain	achieve	restore	expand	maintain	achieve	restore	expand
Calcareous Grassland	143	143	119	3	29	143	120	3	29	143	123	4	30
Lowland Dry Acid Grassland	9	9	5	1	5	9	6	1	5	9	6	1	5
Lowland Meadow	45	45	35	9	2	45	36	11	2	45	37	12	2
Lowland Beech and Yew	84	84	45		11	84	48		13	84	49		13
Wet Woodland	39	39	21		5	39	22		6	39	23		6
Lowland Mixed Deciduous Woodland *	2259	2259	1207		287	2259	1279		347	2259	1317		352
Lowland Heathland	4	4				4				4			
Traditional Orchards	107	107			15	107	107		17	107	107		19
Lowland Wood Pasture and Parkland	1250	1250				1250				1250			
Lowland Wood Pasture and Parkland (sites)				1	1			2	2				

^{*}Mixed deciduous woodland does not include woodland that fits into other woodland categories

Targets are cumulative across the time periods i.e. the totals for restore in 2019 include habitat that was restored in 2014.

Assessing progress on Maidstone LBAP targets

- 6.24 Assessing progress towards Maidstone LBAP targets is possible using data on Environmental Stewardship such as the agri-environmental and forestry schemes. These schemes are the main method for implementing and delivering Biodiversity Action Plan Targets within the UK. However, to fully examine whether targets have been met in the borough would require repeated habitat surveys at regular time periods and a comparison of the these data sets over time with respect to habitat change and land cover analysis.
- 6.25 An INTEREG bid is currently in progress via the Kent Biodiversity Partnership to repeat the Kent habitat survey of 2003 and analyse habitat change and land cover analysis at a county and district level. Data on Environmental Stewardship schemes is patchy and does not cover all habitats within the UK BAP framework.
- 6.26 Agri-environmental stewardship schemes include the Countryside Stewardship Agreement (CSA) which was replaced in 2004 by the Environmental Stewardship Scheme (ESS). These schemes give funds to meet the UK BAP objectives for Species-Rich Grasslands (Lowland Calcareous Grassland, Lowland Meadows and Lowland Dry Acid Grassland), Lowland Heathland, Traditional Orchards and Ponds. The CSA gives funds to meet these objectives for 10 years and the ESS for 5 years.
- 6.27 The Woodland Grant Scheme (WGS) replaced by the English Woodland Grant Scheme (EWGS) in 2003 gives funds to meet the UK BAP objectives for all woodland habitats within the UK BAP framework. Both forestry schemes give funding for 5 years.
- 6.28 By examining stewardships that have been active in the last 5 years on land that has been identified as a UK BAP priority habitat it is possible to assess the amount of this habitat which is in or will reach a favourable condition in the next 5 years.
- 6.29 By examining stewardships that have been active in the last 5 years and do not occur on identified BAP habitat it is possible to make the assumption that a UK BAP priority habitat is being created, restored and/or expanded.
- 6.29 The ESS data does not distinguish between different species-rich grassland. The WGS and EWGS data does not distinguish between woodland types. When these schemes do not occur on identified BAP habitat the data suggests that this broad habitat that is being restored, expanded or created.

Progress towards Maidstone LBAP targets

6.30 Progress towards Maidstone LBAP targets can be seen in Table 3 as the amount of UK BAP priority habitat under environmental stewardship and therefore achieving condition or recovering condition.

Table 3 Current progress towards 2014 achieving condition targets for Maidstone's priority habitats

	Amount in the	Achieving condition
UK Priority Habitat	borough (Ha)	(Ha)
Calcareous Grassland	143	123
Lowland Dry Acid Grassland	9	0
Lowland Meadow	45	5
Lowland Yew and Beech	84	76
Wet Woodland	39	1
Lowland Mixed Deciduous Woodland *	2259	1414
Lowland Heathland	4	3
Traditional Orchards	107	66
Lowland Wood Pasture and Parkland	1250	106

^{*}Mixed deciduous woodland does not include woodland that fits into other woodland categories

[Data use from the Kent Habitat Survey (2003), Kent County Council Parkland Inventory, Ancient Woodland Inventory, Orchards for Everyone Project, 2008 data for Countryside Stewardship Scheme, Environmental Stewardship Scheme, Woodland Grant Scheme and English Woodland Grant Scheme]

- 6.31 If a comparison is made with the 2014 targets set for the Maidstone LBAP as seen in Table 1 it is possible to observe that targets for meeting favourable condition are being met for three priority habitats: Calcareous grassland, Yew and Beech Woodland and Deciduous Woodland (not including woodland in other categories). Traditional orchards habitat is showing good progress towards meeting targets for area in favourable condition by 2019. All other habitats are showing limited progress towards meeting targets for 2014 and a strong emphasis on targeting these habitats with stewardship should be made in the next few years.
- 6.32 Progress towards targets on restoration, expansion and creating priority habitats can be seen in Table 4 as the amount of land that has not been classified as a UK BAP priority habitat but is under environmental stewardship.
- 6.33 Progress towards 2014 targets on restoration, expansion and creating habitats is currently exceeding requirements for all habitats except traditional orchards. Good progress has been made towards traditional orchard expansion target. However, within a biodiversity hierarchy it is more important to protect established habitats than create new ones.

Table 4 Current progress towards 2014 targets on restoration, expansion and creation of priority habitats

Habitat	На	Restoring + Expanding + Creating	LBAP Targets: Restoring + Expanding + Creating
Species-rich grassland	197	238.37	48
Woodland	3632	1045	303
Traditional Orchards	107	4	15

[Data use from the Kent Habitat Survey (2003), Kent County Council Parkland Inventory, Ancient Woodland Inventory, Orchards for Everyone Project, 2008 data for Countryside Stewardship Scheme, Environmental Stewardship Scheme, Woodland Grant Scheme and English Woodland Grant Scheme]

Conclusions from target setting and progress analysis

- 6.34 It is essential that regular habitat surveys are performed in order to examine whether targets are being met, understand changes in biodiversity and assess current efforts.
- 6.35 By using data on environmental stewardship it is possible to understand how targets are progressing, however a number of assumptions are made in performing this analysis.
- 6.36 Developing more detailed data collection when awarding stewardships would benefit the monitoring of habitats considered a priority for biodiversity action. Suggested data collection, such as specifying the UK priority habitat on the land, assessing its current condition and predicted condition at the end of the stewardship would be of a great benefit for the LBAP framework.

Reporting on the LBAP delivery

- 6.37 Accurate reporting on numerical habitat target outcomes within the LBAP will rely on future habitat surveys and analysis. However, if data collection on environmental stewardships is made more detailed then this could provide a useful aid to examine outcomes for certain habitats.
- 6.38 The Maidstone LBAP will report on numerical target outcomes when data is available to do so, and will focus on reporting LBAP outputs when this data is not available. Output reporting will primarily focus on projects lead by MBC and MBC contributed partner projects.
- 6.39 Biodiversity is currently recognised within the draft Strategic Plan 2009-2011 and Key Performance Indicators are currently being developed. These indicators will reflect biodiversity effort and enhancement on MBC owned land.

- 6.40 KMBRC are currently developing a biodiversity indicator composed of data from a number of key species, to estimate historic, current and future biodiversity levels at a county and borough level. The Biodiversity Index should provide an additional measure to report in Annual Monitoring Report to monitor the success of biodiversity efforts in relation to PPG9¹⁷, in addition to monitoring habitat changes via regular habitat surveys.
- 6.41 Encouraging local people to share their knowledge and observations on a particular area's wildlife or of a specific habitat or species, with KMBRC is especially important in achieving this understanding.
- 6.42 The LBAP's delivery is a partnership undertaking and partners will not be held responsible if the proposed targets are not met. Furthermore aspects of plan delivery will be reliant upon the development of relationships and agreements with private stakeholders, businesses and funding providers, which often cannot be guaranteed, or tied into the timeframes proposed by the LBAP.
- 6.43 MBC commitment to the LBAP will be outlined within the 'Biodiversity Projects' document and it is proposed will be monitored by associated Key Performance Indicators.

The LBAP format

- 7.1 Maidstone's Local Biodiversity Action Plan is made up of a series of linked documents. As a complete set, the LBAP will provide a comprehensive insight into all aspects of Maidstone's biodiversity and its conservation, although specific components can also be referred to as standalone documents.
- 7.2 The LBAP is an evolving document, as policy and data are updated regularly, and will be used for a variety of purposes including; a planning and conservation tool, an educational resource, and by a wide range of users including the local authority, other agencies, businesses, local interest groups and the public.
- 7.3 The main components of Maidstone Local Biodiversity Action Plan are;
 - This document: 'Maidstone's Biodiversity Strategy: A Local Biodiversity Action Plan An Introduction & Overview'
 - A Funding Strategy For Maidstone's Local Biodiversity Action Plan (2009-2014)
 - 12 Habitat Action Plans (HAPs)
 - 2 Habitat Statements: Habitat overview of Grassland and Woodland (including conservation status maps)
 - 'Biodiversity Projects' summarising MBC led and supported projects, showing our commitment to NERC 2006 duty on biodiversity
 - A 'Further Information' document which contains useful bibliography and useful web addresses in relation to biodiversity
 - An annual update on the biodiversity action that has occurred in the borough within the MBC Update Green Section of the Downs Mail
 - A Biodiversity Web Page on the MBC Environmental Services Section Pages, which will contain all associated LBAP documents, information on events and projects
 - Maidstone Biodiversity in Action A leaflet and poster summarising the LBAP and how to get involved

- 7.4 Currently the LBAP does not contain specific Species Action Plans, however UK priority and protected species should be considered when implementing management practices for each habitat. Animal and plant species tend to be associated with specific habitats and are often included within the definition of 'habitat'. Currently, the regional perspective on conservation of biodiversity is via habitat action plans rather than species action plans. Most species that are at threat of extinction are at threat due to a decrease in quantity, quality or connectivity of their habitat and so theoretically by conserving a variety of well connected and high quality habitats the risk of species extinction should reverse. The issues affecting biodiversity in Maidstone often have a direct impact on the habitats of the Borough, which in turn affects the species associated with those habitats. Each Habitat Action Plan will include details of associated animal and plant species that occur in the Borough and are of importance conservation status, however for a full list of associated animal and plant species reference to the UK BAP should be made.
- 7.5 Conservation efforts via habitat management must consider all associated animal and plant species and the term 'favourable' to describe the desired condition of a habitat within this LBAP defines the ability of the habitat to provide ecological provision within a balanced network of ecological interactions for all associated flora and fauna; in particular all associated UK BAP species as described and determined within the UKBAP.

Views on biodiversity

Maidstone and biodiversity

- 8.1 Currently monthly surveys are completed in four of MBC parks (Whatman, Clare Park, South Park and Brenchley Gardens). The questions on biodiversity and the importance of biodiversity to people in Maidstone Borough included were based on questions designed by Kent Wildlife Trust for as part of their Wildlife Survey of 2008.
- 8.2 Between November 2008 and February 2009 a total of 141 people were questioned regarding biodiversity. The questionnaire and responses can be seen in Appendix 1.
- 8.3 People in Maidstone are most familiar with the term Wildlife (56%) rather than Natural History (14%), or Biodiversity (13%). Effort should be made to communicate the meaning of biodiversity and how this relates to wildlife and natural history.
- 8.4 Sixty-nine percent of people in Maidstone consider areas for wildlife very important or important to their quality of life and 91% of people in Maidstone think it is very important or important to ensure areas for wildlife are protected and enhanced. This further supports the theory that biodiversity enhances quality of life either directly or indirectly.
- 8.5 When people in Maidstone were asked what things they would like improving/changing with respect to biodiversity the majority of people requested for more wildlife places they could visit for free (25%), however nearly an equal number of people did not respond to this question (24%). Other suggestions were more spaces for wildlife in town (18%) and more of Maidstone protected for wildlife (15%).

Kent and biodiversity

- 8.6 Kent Wildlife Trust completed a survey across Kent and Medway on people's view on wildlife in 2008 and they have kindly shared their data with MBC. Over 2,500 people responded and the results are similar to findings found during the surveys completed in Maidstone Borough Council parks. The full report from KWT can be seen in Appendix 2.
- 8.7 The survey found that 91% of people viewed wildlife places being important to them and 30% of people visit a wildlife place at least once a week. In addition 63% of people wanted more information on wildlife places they could visit. This reflects communicating where biodiversity action is taking place and encouraging community engagement on these projects as being vital to public relations.
- 8.8 The majority of people surveyed (94%) think it is very important that Local Authorities protect and enhance places for wildlife, with 80% of people wanting greater protect through the Development Control procedures.

8.9 The greenness of a political party is a key factor for voters with over 90% of respondents citing this as an important factor.

Conclusions

8.10 It is clear that people consider places to visit wildlife to be very important. However effective communication is vital, whether this is to give details on places they can visit or explaining the relationship of biodiversity, wildlife and natural history. The surveys strongly suggest that controls on wildlife protect need to be strong and they would like to see more done within the development control process to ensure this happens. Finally, it is clear that people enjoy spending time at places for wildlife and more emphasis should be made to make more use of public areas of natural and semi-natural space by enhancing these sites and making them accessible.

Play your part in biodiversity

- 9.1 Everyone can play a part in conserving biodiversity, and contributing on a personal level will help to meet and address the bigger targets and issues that present us.
- 9.2 Some of the most important contributions to be made are in the hands of Maidstone's communities, and people are encouraged to;
 - Use the LBAP to learn about local nature conservation sites and natural areas.
 - If you have a garden look to make it wildlife friendly, using wildflowers and creating a variety of micro-habitats.
 - Record and share wildlife observations with KMBRC or local natural history group.
 - Take advantage of and enjoy the environmental activities provided by Maidstone Borough Council, natural history and local interest groups.
 - Keep abreast of environmental initiatives, through Biodiversity related web pages and other bulletins and contribute wherever possible.
 - Examine the individual Action Plans and contribute wherever possible.
 - Report environmental incidents and/ or abuse to the appropriate body.
 - Give and seek support to help deliver local biodiversity projects.
 - Enjoy local, accessible, nature conservation sites and support their aims.
 - Report and celebrate conservation efforts.
- 9.3 A number of the planned biodiversity projects will be utilising volunteers and it is hoped that local communities will become involved and take these projects forward.
- 9.4 If you are an educational establishment or a local community group and would like to become more involve with a biodiversity project in your area please contact Maidstone's Biodiversity Action Plan Lead Officer who will discuss local projects and different funding options available.