

## **Section 2 – Publication Draft Borough Local Plan**

### **Representation ID: 6786**

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This statement builds upon my original objection (2017) to the allocation of 1000 houses on Middlewick Ranges, to the impact this will have on wildlife and biodiversity.

This site was included in the Local Plan in 2017 with little opportunity for public consultation or examination of its ecological value at that time. Its importance as publicly used open space and low user density enabling 'immersion' in the open landscape, was also overlooked.

Middlewick Ranges is a designated Local Wildlife Site (LWS) (ref Co122) and therefore a 'material consideration' when determining planning applications with a presumption against development under the NPPF. This framework obligates CBC to protect and enhance valued landscapes and sites of biodiversity value (para 170); protect and enhance biodiversity (para 174); and states that if significant harm to biodiversity cannot be avoided, adequately mitigated, or as a last resort compensated for, then planning permission should be refused (para 175). The area at risk from development, identified by the 'the red-line' allocation boundary detailed in the DIO 'Vision For Development' document (December 2020) encompasses 95% of Middlewick Ranges LWS, and part of the Birch Brook LWS (Ref Co128) It is extremely doubtful that CBC can meet their obligations under the NPPF if the site is included in the Local Plan, or ensure subsequent development that its inclusion will promote, can be 'sustainable' as also required by this framework.

The high wildlife value and presence of rare and protected species and habitats within Middlewick are well documented, making it a candidate for SSSI designation. The site is dominated by UK Priority habitat Lowland Dry Acid Grassland, and Essex Priority Lowland Grassland, and forms an integral part within the wider ecological network linking with SSSIs and other LWS's within the local environment. In addition to Red Data Book species, the site supports numerous Species of Principle Importance (Section 41 Natural Environmental and Rural Communities (NERC) Act 2006) which requires CBC to consider its statutory duty to have regard for biodiversity (Section 40 of the Act), when considering the actual or potential impacts on biodiversity and other ecosystem services resulting from the full or partial loss of Middlewick Ranges.

It is important to note that the disposal of Middlewick Ranges by the DIO, will result in the transfer of live-firing activities to Fingringhoe Ranges. The increase in lead and other materials being deposited onto the Fingringhoe Ranges SSSI, Colne marshes SSSI, Essex Estuaries Special Area of Conservation (SAC) and the local marine environment in general, may breach The Environmental Protection (Restriction of Lead Shot) (England) Regulations 1999, and will almost certainly result in a significant increase in noise disturbance to wildlife, particularly populations of protected waders and wild fowl. This level of disturbance would usually require an Environmental Impact Assessment (EIA), but Colchester Borough Council (CBC) have instead adopted a screening opinion (27/03/2018) exempting this development. In addition, to ensure compliance with the Habitat Regulations (2010), impacts on the

Essex Estuaries SAC require CBC, and the DIO as a public body, to ascertain that the transfer will not have an adverse effect on site integrity, through 'Appropriate Assessment'; it appears that the MoD have undertaken their own Habitat Regulations Assessment.

The DIO ecological report in support of this development, and its inclusion in the Local Plan: *Local Plan Housing Allocation: Ecological Evidence Base Report Middlewick Ranges (Stantec November 2020)* was published on CBC website on December 2020 (*hereinafter referred to as 'the report' or 'the DIO report'*). This was also late in the Local Plan process and 3 years after the consultation period and opportunity for the public to comment or object to the development had passed.

The report reveals an indicative footprint of the proposed development (Figure 25. *Pre-development Habitats*.) extending between Mersea Road and Old Heath, covering approximately half of the LWS overall. In addition to UK Priority Habitat Lowland dry acid grassland, this footprint obliterates an extensive area of Essex Priority habitat Lowland Grassland (possibly UK Priority Habitat Lowland Meadows), a belt of woodland and mature scrub, and mosaic heath-scrub of high wildlife value, and is the most widely used area for public recreation.

This complex report, and the bespoke Biodiversity Net Gain calculations it contains, effectively limits all but specialist examination and comment, and this hearing is the first opportunity to do so. The usual expectations of such a report is to evaluate site habitats, the potential for wildlife, how these will be effected by the proposed development, and explore measures to avoid, mitigate against, and (as last resort) to compensate for the direct and indirect impacts of such a development on local biodiversity. This report is disappointing in that respect, although does make clear that further and more detailed surveys will be necessary at the planning application stages to fully evaluate the site. However, objections by that stage will be severely disadvantaged if the site has already been included in the Local Plan with the presumed suitability for development this implies.

Rather than objectively evaluating habitats and wildlife overall, the report focusses on the rare species and habitats referenced in its LWS information, failing to fully assess habitats directly impacted by the proposed development. Although this undervaluation aims to justify inclusion in the Local Plan, it undermines its claimed biodiversity net gain of between 9-16% if development goes ahead. This is matched by an over-valuation of proposed habitat creation, which may or may not actually be achieved, within arable land south of the site to compensate for site losses. The report identifies that such compensation habitats could take 10 years to reach maturity but offers no mitigation measures for displaced wildlife and biodiversity loss for this interim period.

The following examples from the DIO report, question the efficacy of habitat evaluation, particularly those areas directly impacted by the proposed development. References to the DIO report are in brackets:

The Phase 1 habitat survey (2017) found that "The tall grassland had just been cut for hay", and that "...plant species may have been overlooked" (B.5.4). Weather conditions were 20 degrees and "dry for the survey period" (B.5.5) making it probable that cut vegetation would be dried out and difficult to identify accurately, and parts of the sward likely obscured by arisings.

An updated Phase 1 habitat survey completed on March 16<sup>th</sup> 2020 was outside of the optimal survey period (B.7.2). A botanical survey undertaken during June 2018 during unusually hot and dry conditions with vegetation described as “heavily parched.”. It was also considered “..likely that a number of ..species were no longer in evidence..” (B.6.10).

The report describes a list of plants as “..not necessarily indicative of acidic conditions” (D.1.15) but appears to ignore their value as neutral grassland indicators.

Site habitats were limited to “..a site walk-over rather than a formal National Vegetation Classification (NVC) survey” (B.6.1) despite the latter being the industry standard methodology. Plant species were instead “..identified and categorised based on relative abundance ...using the DAFOR scale” (B.6.2) although the report does not contain this data.

The areas most at risk from development i.e. Areas D, E & F (*Figure 7a. Habitat Survey Areas and Results.*) do not appear to receive any mention in *Appendix D. Habitat Survey Results* other than a cursory, general description of poor semi-improved grassland (D.1.20), which contains no significant information on species composition, habitat structure, potential to support priority wildlife, and only specifically refers to grassland east of the allocation boundary.

Despite a lack of information, and the difficulties experienced in evaluating these extensive grassland areas, they are mapped as ‘Poor semi-improved grassland’ (*Figure 7a, marked SI with no colour*). This undervaluing continues with the report ascribing them a ‘best fit’ NVC category of MG1 grassland (D.3.13 *et seq.*) - a common grassland type of low value. Independent survey carried out by Save the Middlewick Ranges Group (SMRG) using the NVC methodology, found a strong correlation to MG 5 grassland (Lowland Meadow)<sup>1</sup>. It should be noted that not every stand of grassland will closely match NVC descriptions currently published and additions and revisions of current vegetation types are ongoing by JNCC<sup>2</sup>.

Further, the *Summary of Status of Grassland Areas (Table 10 pg.12)* states the ‘Relative Conservation Value’ of these areas as ‘Negligible’, which equates to zero when carried over into its bespoke biodiversity metric. Unsurprisingly then, the loss of these extensive habitat areas and the high wildlife value they contain, has no bearing on the Biodiversity Net Gain calculations.

The significant area of UK Priority habitat Lowland dry acid grassland within the development footprint, appears confined within the fenced firing range (*Figure 25 -shown as orange hatching*), while the immediately adjoining area outside the fence (formerly also a firing range), is mapped as ‘poor semi improved grassland’. The difference between these valuations, and the mitigation measures required in relation to development is stark- the former must be compensated for, at least in theory, while the latter can be dismissed as ‘Negligible’. Site walk-over survey on behalf of SMRG found areas of dry acid

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1 Shellswell CH et al. (2016) *Restoration of existing lowland grassland – timescales to achieve favourable condition*. Plantlife, Salisbury.

2 Mountford E. (2011) *A Compilation of Proposed Additions and Revisions to Vegetation Types in the National Vegetation Classification*. JNCC Report, No.448

grassland at least as good as that within the fenced area, in addition to areas of lichen-heath, grass heath and scrub mosaic including rare examples of Heather (*Calluna vulgaris*).

It is important to note that acid grassland and neutral grasslands derived from them are often not very diverse botanically, and undervalued because of this. However, all grassland habitats within Middlewick are composed of native species, and have escaped the destructive agricultural practices of arable conversion, re-seeding, and excessive herbicide and nutrient input responsible for the loss of semi-natural grassland in lowland UK on a massive scale. The relatively consistent management that Areas D, E & F have been subject to over the last 5-6 decades (possibly since adopted by the army), comprising of a single hay cut in mid-summer, is likely responsible for the current neutral sward<sup>3</sup>. Unfortunately this annual cut coincides with peak flowering season (June-July) promoting grass dominance and limiting the colonisation and spread of native flowers suited to the changing conditions<sup>4</sup>. Slower growing perennial 'meadow' plants will struggle to establish in any great abundance while this management continues to restrict flowering and seed set. However, in areas that have escaped annual cutting for several years, e.g. within grass-scrub mosaic habitat in the east, a diverse mix of neutral grassland indicator species are abundant in the sward, including: Red clover (*Trifolium pratense*), Common knapweed (*Centaurea nigra*), Agrimony (*Agrimonia eupatoria*), Perforate St-Johns'-wort (*Hypericum perforatum*), Field scabious (*Knautia arvensis*), Bulbous buttercup (*Ranunculus bulbosus*), Red fescue (*Festuca rubra*), Meadow foxtail (*Alopecurus pratense*) and others. Independent survey (2019-20) undertaken on behalf of SMRG has recorded these species as constant, although often sparse, in all grassland Areas across the north and north-east of the site, and rarely, Green-winged orchid (*Orchis morio*) was recorded in Area D. By contrast, vegetation within the fenced firing range area is subject to intensive management with numerous cuts taken per year to maintain the short sward required for the firing activity. This has prevented the build-up of organic matter, maintained the nutrient poor and free-draining conditions, and the typical ephemeral, annual and low growing perennial flora associated with the often parched, acidic soil conditions.

Rather than the 'poor semi-improved grassland' of 'negligible conservation value' assigned to Areas D E & F in the report, these areas could equally be described as "wild-flower meadow" or Priority Habitat Lowland Meadow, albeit in need of minor management adjustments to encourage the development of a sward more in keeping with the usual expectations for a meadow<sup>5</sup>

In addition to not fully evaluating habitats that will be directly effected, the DIO report fails to consider the impacts of such a development on the protected and priority wildlife they support, and the impacts that will arise from increased user pressure on what will remain.

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3 *Mid to late succession stage habitats may develop due to an accumulation of nutrients and organic matter arising from low intensity management, e.g. annual mowing.*

4 *This is likely to have become worse in recent decades as sources of potential colonisers have diminished.*

5 *Shellswell CH et al. (2016) Restoration of existing lowland grassland – timescales to achieve favourable condition. Plantlife, Salisbury.*

Observation and walk-over surveys by members of SMRG found Areas D, E & F contained signs of badger foraging, high levels of bat activity, nesting birds, reptile presence throughout, and abundant 'common' insects. The less acidic conditions here favour earthworms, a major prey item for badgers, and for hedgehogs which are also likely present; both species will not only lose existing foraging grounds, but will be vulnerable to traffic fatalities when searching for substitute feeding grounds particularly when exploring the 'green corridors' (*Figure 23, Master-plan Appraisal*) which are dissected by the primary road through the development.

Bats are frequently sighted within Middlewick and adjoining gardens, and there is a high probability that adjoining housing support roost sites. A single visit, walk-over survey at dusk recorded high levels of activity to the central and eastern sections of the development footprint and 5 species including Barbastelle. Unimproved grassland is a major source of invertebrate prey for bats, and the proposals will result in a huge loss of foraging for local bat populations. In addition, the increased light pollution and spillage from development, infrastructure and traffic movements will render large areas of remaining habitat unsuitable for many species.

The site is important for an extensive range of nesting birds, including skylarks which are regularly recorded in Areas D, E & F where the robust grassland structure is more suited to nesting than the sparse and shorter dry acid grassland. This same structure creates good conditions for small mammals and the those that prey on them including barn owl and kestrel. Middlewick also supports an important population of nightingales, with occasional nesting recorded to scrub to Areas F, and increasing numbers to Area D and habitats further to the south. Significant losses of suitable habitat, and increased disturbance from more site users in a smaller available space, will significantly undermine the value of this site for all bird species.

The presence of reptiles within Middlewick Ranges is well known locally with common lizard, slow worm, grass snake and adder recorded anecdotally. Observation surveys during 2019-20 confirmed presence of all species except adder, and enabled distribution and population sizes to be assessed. Surveys recorded an 'exceptional' population of common lizard, and 'good' population of slow-worm as defined in *Froglife* Advice Sheet 10; grass snake were recorded in low numbers, close to the site margins. Reptiles were widely distributed throughout the site and may reasonably be concluded will be present in all areas of suitable habitat; grassland within the development footprint has particularly good habitat structure to support reptiles. With 3 or more species present, and meeting population size class criteria set out in CIEEM and *Froglife* guidelines, Middlewick Ranges is classed a 'Key Reptile Site'. Development will cause direct loss and the degradation of extensive areas of current reptile habitat, and loss of habitat connectivity within the site and between the site and wider environment. Increased disturbance from recreational use, dog walkers and pet cats accompanying the new housing, will devastate reptile populations on what remains of the site.

Although Middlewick contains nationally rare and protected invertebrate species, the scrub and grassland habitats most effected by the proposed development support large numbers of less specialist, 'common' insects, providing essential foraging for a wide range of predatory invertebrates, birds, bats, reptiles etc. It is well documented that all insect groups are currently suffering catastrophic

decline, and the loss of rather ordinary habitats as here, especially on such an extensive scale, is a major factor in this decline. Habitat loss and degradation of this key site, and the subsequent loss of connectivity between it and the wider environment will have serious negative consequences for local biodiversity and ecosystem function.

In conclusion, the DIO report fails to fully evaluate habitats directly impacted by the proposed development, mitigate impacts on the remainder of the site from increased user pressure, or take into account time-frames necessary for the proposed habitat creation schemes to reach maturity and meaningful compensation; these factors undermine the Biodiversity Net Gain calculations to the extent that it is unlikely that the required 10% minimum can be achieved. Further, a 2020 study into the application of Biodiversity net gain<sup>6</sup> found “..planning enforcement guidance advises councils not to take enforcement actions unless the violation results in ‘serious harm to a local public amenity’”. It concludes that this will mostly not be the case, and the high quality semi-natural habitats promised to secure planning permission are essentially not enforceable. Confidence in the BNG system to deliver improved biodiversity in development is widely discredited.

Development at Middlewick Ranges will result in significant loss of local biodiversity and is therefore unsustainable, making its inclusion in the Local Plan unsound within the NPPF. Inclusion, and the suitability for development this implies, despite the caveat that further ecological surveys are required, risks the wholesale destruction of this important Local Wildlife Site. Middlewick Ranges should be removed from the Local Plan, pending a full Ecological Impact Assessment to determine its suitability for development or otherwise.

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6 *Will Biodiversity Net Gain improve English biodiversity? Sophus zu Ermgassen and Dr Joseph Bull, (December 2020) Wildlife and Countryside Link (WCL.org.uk)*