

LAND EAST OF TITNORE LANE (SITE 9) PRELIMINARY ECOLOGICAL SUMMARY REPORT

Prepared for Worthing	Borough	Council
by		

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1 Site summary

- 1.1 Site 9 comprises approximately 6.9ha of land bordered to the west by Titnore Lane with woodland beyond; to the north and south by woodland; to the north-east by a brook corridor with woodland beyond; and to the south-east by a fishing lake with woodled margins.
- 1.2 The site is dominated by two arable fields sown as a grassland ley at the time of survey which are divided by a strip of mixed woodland. An area in the north-east of the site comprises permanent damp semi-improved grassland with a hedgerow and ditch along its western boundary and a flowing brook along its eastern boundary. In the north-west of the site is a detached house with formal garden, a vegetable plot, ornamental hedgerows, and a small area of ruderal vegetation and scrub to its south, bordering Titnore Lane. An unsurfaced single-lane track for accessing the fishing lake to the south-east runs along the southern margin of the site. The western site boundary comprises native hedgerow and a dry ditch, and deciduous woodland borders most other boundaries.
- 1.3 Locations and detailed descriptions of the habitats present at the site are provided in the Phase 1 habitat survey plan and target notes in *Appendix A*.

2 Desk study

- 2.1 No statutory nature conservation designations pertain to the site or adjacent land.
- 2.2 No areas of international importance (i.e. SPA, SAC or RAMSAR) occur within 10km and no National Nature Reserves (NNRs) occur within 5km of the site boundary.
- 2.3 The closest area of national importance to the site is 'Cissbury Ring' Site of Special Scientific Interest (SSSI) which is located approximately 4.1km to the north-east and is designated for its chalk grassland habitat. No other SSSIs are located within 5km of the site boundary.
- 2.4 There are no Local Nature Reserves (LNRs) located within 2km of the site.
- 2.5 The strip of woodland running east-west through the centre of the site, the area of damp grassland in the north-east with hedgerow and ditches, and bordering woodland and fishing lake form part of 'Titnore & Goring Woods Complex' SNCI.
- 2.6 The parts of Titnore & Goring Woods Complex SNCI which border the northern, north-eastern and southern site boundaries are semi-natural woodland listed on Natural England's Inventory of Ancient Woodlands.

- 2.7 Records of protected and notable species provided by SBRC during the desk study potentially pertaining to the site included four records of Grass Snake dating from 2010. Other records provided for within 2km of the site included bats, Hazel Dormouse, Great Crested Newt, Water Vole, Slow-worm, Adder, Common Lizard, and notable birds, invertebrates and plants.
- 2.8 The full results of the desk study including plans showing the locations of nearby designated nature conservation sites and complete protected and notable species records for within 2km from the site boundary are provided in *Appendix B*.

3 Constraints and opportunities

- 3.1 The site is dominated by arable land sown as an agricultural grassland ley which is of **negligible** ecological interest in its own right.
- 3.2 The habitats of highest ecological value associated with the site are those forming part of Titnore & Goring Woods Complex SNCI, including the strip of mixed woodland in the central area of the site, the damp semi-improved grassland, hedgerow, ditches and brook corridor in the north-east of the site, and off-site ancient woodland bordering the northern, north-eastern and southern boundaries. These habitats are considered to be of district value.
- 3.3 The native hedgerows and associated ditches running along the western boundary of the site, although not particularly species-rich, provide opportunities for a range of species and contribute to the network of linear habitats around the site, and are therefore considered in combination to be of **low local** value.
- 3.4 Other habitats present including buildings, hardstanding, amenity grassland, access track, ruderal vegetation, scrub, and ornamental shrubs, trees and hedgerow associated with the residential property in the north-west of the site, are considered of less than local/ negligible value in their own right.
- 3.5 Any development proposals for the site should seek to avoid direct loss of habitats associated with the Titnore & Goring Woods Complex SNCI within and bordering the site and maintain the integrity of these habitats through the maintenance of suitable vegetated buffers, habitat linkages, and implementation of measures to minimise potential adverse indirect effects of development including artificial lighting, hydrology and recreational pressure.
- 3.6 Furthermore, development should seek to retain features of local value and where appropriate enhance all features of ecological interest within the site through management and complimentary habitat creation. Ways in which this could be achieved include:

- Establishing new native trees, species-rich scrub, rough and meadow grassland along SNCI/ Ancient Woodland buffers to create 'ecotone' habitats noted for their ability to support a high diversity of species.
- Enhancement of SNCI woodland and grassland habitats through sensitive management, control of non-native/ invasive species and creation of complimentary habitats where appropriate.
- Enhancement of existing hedgerows/ linear scrub habitats along field boundaries through selective clearance of Bramble, infilling using a species-rich mix of native shrubs and trees, and appropriate long-term management.
- Use of native species-rich hedgerow, scrub and tree planting as boundary features to further enhance habitat connectivity across the site and complement existing habitats.
- Creation of a range of habitats with high wildlife interest within areas of public open space currently comprising arable land of negligible interest for wildlife, such as species-rich grassland, native scrub and hedgerows.
- Creation of new wetland habitats such as ponds, swales, ditches and reedbeds in conjunction with SuDS proposals.
- Creation of new opportunities for roosting bats and nesting birds through provision of bird and bat boxes on existing trees and new buildings.
- Use native species typical of the local area in landscape planting where appropriate to do so. Where possible these should be sourced from stock of local provenance.
- Prioritising the use of plants which benefit native wildlife within formal landscaping schemes, including nectar- and pollen-rich and fruit- and nut-producing species.

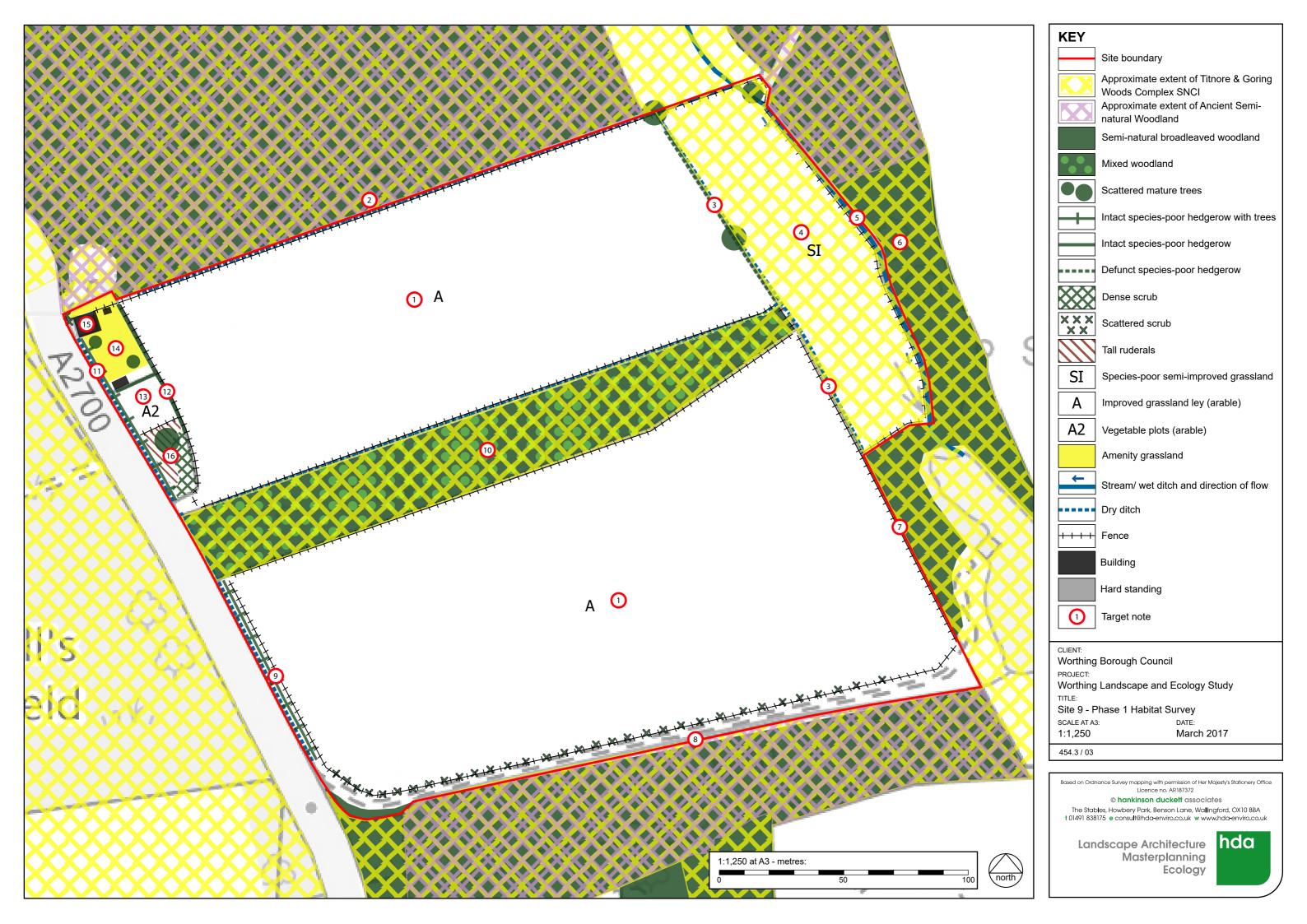
4 Further information requirements

- 4.1 In view of the findings of the desk study and/or habitat resource of the site, consideration should be given to the requirement for the following further surveys and assessment work in support of a planning application:
 - Phase 1 bat survey (scoping inspections of trees and buildings)
 - Phase 2 emergence surveys (if potential for roosting bats identified during Phase 1 bat survey)
 - Phase 2 bat activity survey
 - Great Crested Newt survey
 - Dormouse survey
 - Reptile survey
 - Badger survey
 - Water Vole/ Otter survey
 - Implications of increased recreational pressure on off-site designated areas both alone and in combination with other plans and projects.

4.2 It is recommended that the extended Phase 1 habitat survey and desk study are updated by the applicant prior to submission of a planning application. This is in order to ensure that the assessment of habitats at the site and its potential to support protected and notable species reflect any subsequent changes in the ecological character of the site and its surrounds, and strategic nature conservations objectives. The actual requirements for further work should also take into account the nature and extent of proposed development works.

APPENDIX A

Phase 1 habitat survey: Plan and Target Notes



Site 9 - Target Notes

- 1. Grassland ley: Species-poor grassland seeded on arable land comprising perennial grasses including Perennial Ryegrass Lolium perenne. The sward was generally free of any arable weeds or other forb species at the time of survey. The fields were bordered by post and wire fence and had a short sward, having been recently grazed by sheep.
- 2. Northern boundary woodland: Broadleaved woodland bordering the northern boundary of the site is dominated by mature Pedunculate Oak *Quercus robur* trees in the sparse canopy with a dense Hazel *Corylus avellana* coppice understorey. Other species recorded on the margins of the site included Silver Birch *Betula pendula*, Ash *Fraxinus excelsior*, Holly *Ilex aquifolium*, Dogwood *Cornus sanguinea*, Wild Privet *Ligustrum vulgare*, Gorse *Ulex europaeus*, Bramble *Rubus fruticosus* agg., Dog Rose *Rosa canina* and Honeysuckle *Lonicera periclymenum*. Ground layer vegetation was sparse at the time of survey and included Ivy *Hedera helix*, Bracken *Pteridium aquilinum* and sedges *Carex* sp. The woodland is listed on Natural England's Inventory of Ancient Woodland and forms part of 'Titnore and Goring Woods Complex' SNCI. There is a shallow (<50cm deep) dry ditch which runs along the woodland edge which becomes wet at its eastern end.
- 3. **Defunct hedgerow and ditch:** Field boundary comprising an outgrown defunct hedgerow and shallow ditch. The hedgerow includes outgrown mature Hawthorn *Crataegus monogyna* and Hazel with occasional mature Oak trees. The southern end of this boundary (to the south-east of the central woodland belt TN10) had been recently coppiced at the time of survey. The ditch along this boundary is generally dry with some localised puddling and has a channel measuring up to 50cm deep and between 1-2m wide. Flora recorded along the ditch included Nettle *Urtica dioica*, False-brome *Brachypodium sylvaticum*, Hart's Tongue Fern *Asplenium scolopendrium*, *Dryopteris* sp. and mosses.
- 4. Semi-improved grassland: A damp area comprising permanent grassland. The sward was short, having been subject to recent grazing by sheep, and few forb species were visible at the time of survey. Species in the sward included Cocksfoot Dactylis glomerata, Meadow-grass Poa sp., White Clover Trifolium repens and occasional patches of Hard Rush Juncus inflexus. This area forms part of 'Titnore and Goring Woods Complex' SNCI.
- **5. Stream:** Flowing watercourse along the north-eastern boundary of the site. The majority of the southern section of the stream is bordered by broadleaved woodland to the east (TN6) but is open and bordered by grassland with scattered trees and scrub in the north including an Ash tree and mature Hawthorn and Hazel shrubs. The channel is approximately 1.5m wide and the flow of water up to 0.5m deep at the time of survey. Flora recorded in the channel included Hemlock Water-dropwort *Oenanthe crocata*, Ivy, Hart's Tongue Fern and *Dryopteris* sp.
- 6. North-eastern woodland: Woodland bordering the north-east of the site, along the eastern bank of the stream (TN5) dominated by mature Oak trees with frequent Hazel and Holly in the understorey. The northern section of this area of woodland is listed on Natural England's Inventory of Ancient Woodland as well as forming part of 'Titnore and Goring Woods Complex' SNCI.
- 7. South-eastern boundary: Bordering the southern section of the eastern site boundary is a small wooded area with a fishing lake beyond. The woodland comprises early-mature and mature Oak trees with occasional Silver Birch, Hawthorn and Elder Sambucus nigra, with Bramble dominating the ground layer.
- 8. Southern boundary: The southern margin of the site comprises a stone/ rubble surfaced track leading from Titnore Lane to the fishing lake to the south-east of the site. The site boundary itself is bordered by broadleaved woodland which is listed on Natural England's Inventory of Ancient Woodland as well as forming part of 'Titnore and Goring Woods Complex' SNCI. The woodland is dominated by mature Oak and Ash with a dense understorey of Hazel, Elder, English Elm *Ulmus minor*, Willows *Salix* sp. and Hawthorn. A fence along the southern boundary of the southern arable field (TN1) supports occasional Bramble scrub and frequent young Ash.
- **9. South-western boundary:** The western boundary of the southern arable field which borders Titnore Lane comprises an outgrown hedgerow and ditch. The hedgerow is dominated by Hawthorn and

English Elm with frequent semi-mature Ash and Elm trees. Bramble is also abundant. A mostly dry ditch runs along the western side of the hedgerow along the verge of Titnore Lane.

- 10. Central woodland belt: A strip of mixed woodland spanning east to west through the centre of the site. The woodland predominately comprises broadleaved species but also supports frequent coniferous trees. The dominant tree species are early mature and mature Ash and Oak with Pine Pinus sp., Spruce Picea sp. and Cypress Cupressus sp. The understorey is dominated by Hazel coppice although this is comparatively sparse relative to woodland bordering to the north and south of the site. Other species recorded in the understorey included Hawthorn, Wild Privet, Holly, Willow Salix sp., and occasional Cherry Laurel Prunus laurocerasus. A shallow dry ditch runs along the northern edge of the woodland.
- **11. North-western boundary:** The northern end of the western site boundary comprises an outgrown hedgerow and ditch similar to TN9 but less dense and with fewer young trees.
- **12. Ornamental hedgerow:** An ornamental managed Box *Buxus* sp. hedge forming the boundary between the residential garden and arable field in the north-west of the site.
- 13. Vegetable plots: Small area formerly used for vegetable/ fruit growing forming part of the residential curtilage of the South Lodge (TN15). Supported abundant grasses and ruderal vegetation at the time of survey.
- **14. Garden:** Garden of South Lodge dominated by regularly mown amenity grassland with a fruit tree and occasional shrubs including Leyland Cypress *Cupressus leylandii*. There is also a garden shed in the south of this area and summer house to the north.
- **15. South Lodge:** Detached residential dwelling in the north-western corner of the site constructed of brick with pebble dash render, wooden soffits and barge boards.
- **16. Scrub/ ruderals:** Small area of outgrown scrub and Bramble with a mature Oak tree. Some of the scrub has been partially cleared for siting of a bee hive.

APPENDIX B

Desk Study Results