

**St Mary's Lands
Warwick**

Monitoring of Ground Nesting Birds

October 2023

Final

Produced by
*Ecology and Land Management and
ASW Ecology Ltd.*
**For Plincke Landscape on behalf of
Warwick District Council**



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Summary

- 1 Overall, a total of 14 occupied skylark territories were proven to be present during the 2023 breeding season at St Mary's Lands, along with 1 meadow pipit breeding territories.
- 2 9 of the 14 skylark breeding territories were observed within the fenced off ground nesting bird protection enclosure and the meadow pipit breeding territory was also observed within the fenced off enclosure.
- 3 During this survey, it was clear that ground nesting birds at Lammas Field, were being disturbed by dog walkers when present outside of the fenced off breeding bird enclosure due to dogs being off the lead as well as dog owners walking through grass of unfenced areas and not staying on paths thus allowing dogs both on and off the lead to flush birds off their nesting sites.
- 4 Following three monitoring sessions (2019, 2021 and 2023) there is evidence to suggest that the fencing has benefitted skylark numbers and the recommendation is that the fencing should be adjusted and expanded to cover the main area as well as the area to the southwest. Although the skylark numbers have increased it is likely that they would increase further if the fenced off areas were increased to the southwest as one territory was observed in the southwest area.
- 5 Long term increase in the population of ground nesting birds would be invaluable at St Mary's Lands, given the significant historic decline in skylark number over the decades at this site. Bird monitoring is recommended for future years since to continue to investigate measures used to protect the ground nesting birds and their success or otherwise.

Introduction

- 1.1 Ecology and Land Management were commissioned by Plincke Landscape on behalf of Warwick District Council to undertake monitoring of ground nesting birds at St Mary's Lands as part of a three monitoring year programme.
- 1.2 This report is part of a monitoring programme of ground nesting birds at Lammas Field, Warwick Racecourse, which commenced in 2019 with surveys every other year. This updated bird survey is required due to the need to formally assess the new fenced off enclosure erected to protect ground nesting birds, mainly the skylark and meadow pipit population, at Lammas Field. The findings of this study have assessed the continued usage of the site by ground nesting birds in particular skylark (*Alauda arvensis*) and meadow pipit (*Anthus pratensis*).
- 1.3 The aims of the study are: Assess the impact of fencing on breeding ground nesting birds

Legal Protection of Birds in England and Wales

- 2.1 All birds have the following legal protection (although there are exceptions for game birds, some waterfowl and designated pest species). This is listed below. All birds, their eggs and nests are protected by law under the Wildlife and Countryside Act 1981 (as amended). It is an offence to kill, injure or take any wild bird, or to take or destroy their eggs. It is also illegal to take, damage or destroy the nest of any wild bird while it is in use or being built (RSPB, 2001). No provisions can be made for the

destruction of occupied bird nests, eggs, or young for development purposes, and no licences are available for this purpose. Certain rare and/or vulnerable bird species such as red kite, hobby, peregrine falcon, barn owl, kingfisher and black redstart are specially protected under Schedule 1, and have the following additional legal protection: It is an offence to intentionally (or recklessly, in England and Wales only) disturb any wild bird listed on Schedule 1 whilst it is nest building or is at (or near) a nest with eggs or young; or disturb the dependent young of such a bird.

- 2.2 Ground nesting birds at St Mary's Lands include two species of conservation concern. Skylark, which is on the Red list of Species of Conservation Concern. This means that the bird is globally threatened and has suffered severe UK breeding decline (at least 50%) over the past 25 years. The meadow pipit, which is on the Amber list has unfavourable conservation status in Europe. This has suffered moderate UK breeding decline (25-50%) in over the past 25 Years.

Methodology

- 3.1 The surveys were undertaken by Mr Andrew S. Waller MSc BSc (Hons) MCIEEM, Director of ASW Ecology Ltd who has been a Consultant Ecologist since 1997 and has very extensive experience of wildlife and knowledge of protected wildlife species. He has been studying wildlife in general for 40 years and is a Full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and meets the requirements of being a Suitably Qualified Ecologist.
- 3.2 During March, April and June 2023, a total of three morning-based bird monitoring survey visits were undertaken at Lammas Field at St Mary's Lands, with all bird species identified by sight or sound, by Andrew Waller.
- 3.3 The bird survey visits were undertaken on the following dates (with the weather conditions stated): 22.3.2023 (dry, patchy cloud, mild and light wind), 23.04.23 (cloudy, dry, light wind and mild) and 24.6.2023 (mainly cloudy, warm, dry and with a light wind).
- 3.4 A slow standard walk of the stated site was undertaken, with all fenced boundaries and adjacent land walked, so that the total number of ground nesting birds could be detected on each survey visit.
- 3.5 The presence of singing male skylarks and meadow pipits plus where they were located in their occupied territories were noted carefully, and follows the method outlined for territory mapping in Bibby et al, 2005.
- 3.6 Evidence of bird nests and/or breeding pairs for the target species including bird contacts and singing males were plotted on maps for each visit.
- 3.7 The bird survey has recorded existing data on bird presence as well as mapping bird territories in accordance with BTO/CBS (British Trust for Ornithology/Common Bird Census) methodology.
- 3.8 The number of territories was determined from the mapped distribution of registrations for each species using standard rules for analysis as recommended by the British Trust for Ornithology. This method was used to look for differences in numbers of territories in relation to where the fencing is located. Results of the census on that part of the site where there is no fencing can be used as a control for comparing with that part where there is fencing. Direct observations on the location

of birds on site were made. Incidental observations were also made relating to the presence of walkers and dog presence.

Constraints

- 4.1 The main constraint to the monitoring survey is that this follow-up monitoring survey was not undertaken over the total Spring/Summer period. However, visits were conducted to ensure the most suitable time of year for breeding ground nesting birds were observed. For comparative reasons the monitoring visits were carried out at similar times to previous years.
- 4.2 This survey was though undertaken to determine breeding bird status and the number of active territories at the application site, especially in regards to the skylarks and to meadow pipits. The survey was indeed conducted when birds were most active and all breeding territories would have been encountered during the appropriate visits at this peak time.

Survey Data

- 5.1 Skylark Results are shown in table 1 below:

Table 1 - Bird Observations

Species Code	Visit 1 (22.03.23)	Visit 2 (23.04.23)	Visit 3 (24.06.23)
Skylark (S)	<u>Inside fencing:</u> 5 singing males <u>Outside fencing:</u> 6 singing males. The singing males were close to paths so are very vulnerable to off the lead dogs as well as walkers.	<u>Inside fencing:</u> 9 singing males within protected fenced off area. <u>Outside fencing:</u> 2 singing males in unfenced area, with 2 other birds noted	<u>Inside fencing:</u> 8 singing males heard and seen within the protected fenced area <u>Outside fencing:</u> 4 singing males in unfenced area, including near to reedbed/wet grassland area
Meadow pipit (MP)	<u>Inside fencing:</u> 1 singing male in fenced area. <u>Outside fencing:</u> None	<u>Inside fencing:</u> None <u>Outside fencing:</u> 1 bird seen feeding only in unfenced area.	<u>Inside fencing:</u> 1 adult noted in protected fenced area, with food in beak. It flew into the protected fenced area grassland carrying food to a nest, to feed chicks. <u>Outside fencing:</u> None

Species Code	Visit 1 (22.03.23)	Visit 2 (23.04.23)	Visit 3 (24.06.23)
Comment	Observations on dog walkers on this morning visit: 1 male dog walker seen on this visit walking clearly through the unfenced grassland with their dog. Walked through occupied skylark territories	Observations on dog walkers on this morning visit: 2 labradors seen, running with no lead through unfenced area with occupied skylark territories. Dogs were allowed to run around with skylark nests are present.	Observations on dog walkers on this morning visit: A dog walker with 3x labradors walked straight through the unfenced grassland, with dogs off the leads. They traversed through much of the unfenced grassland near the model aircraft area and through occupied skylark territories, with chicks no doubt present at the time. This shows how vulnerable nests are to dogs in unfenced area.

Table 2 - Breeding territories during 2023 survey

Species	Breeding territories within fenced off area	Breeding territories outside fenced off area
Skylark	9	5
Meadow pipit	1	none

Table 3 - Comparative breeding territories during 3 surveys

Species	1961	2011	2019	2021	2023
Skylark	60-70	8+	8	11	14
Meadow pipit	Not known	2-4	3	2	1

Conclusions

- 6.1 In conclusion, there are signs that the skylark breeding population has increased over the past monitoring survey visits. This is likely to mean that the bird population is adapting to the new conditions. It is therefore recommended that as a minimum the fencing trial continues for a further 2 years. Following the further 2 years it can then be decided if the area can be expanded and permanent fencing introduced with gates and improved signage.
- 6.2 A total of 14 occupied skylark territories were proven to be present during the 2023 breeding season at St Mary's Lands, along with 1 meadow pipit breeding territory compared to a total of 8 occupied skylark territories were observed to be present during the 2019 breeding season at Lammas Field, along with 3 meadow pipit occupied territories. This shows a positive trend in the numbers of skylark territories. It was noted that the population of meadow pipit has decreased since 2019 as it has nationally and the causes of this are unclear.
- 6.3 9 of the 14 skylark breeding territories were within the fenced off ground nesting bird protection enclosure as was the meadow pipit breeding territory was within the enclosure. Territories were observed within the previously fenced off area and not the smaller fenced off area to the north. The reason for this is unclear, but may relate to the smaller size of that area.
- 6.4 During this survey, it was clear that ground nesting birds at Lammas Field, were still being disturbed by dog walkers, where present outside of the fenced off breeding bird enclosure.
- 6.5 In summary, the number of skylark territories within the fenced off enclosure has increased since 2019 and this trend has continued with 14 pairs in 2023 (see Appendix I for mapping).

Recommendations

Expanded protection of ground nesting birds at Lammas Field

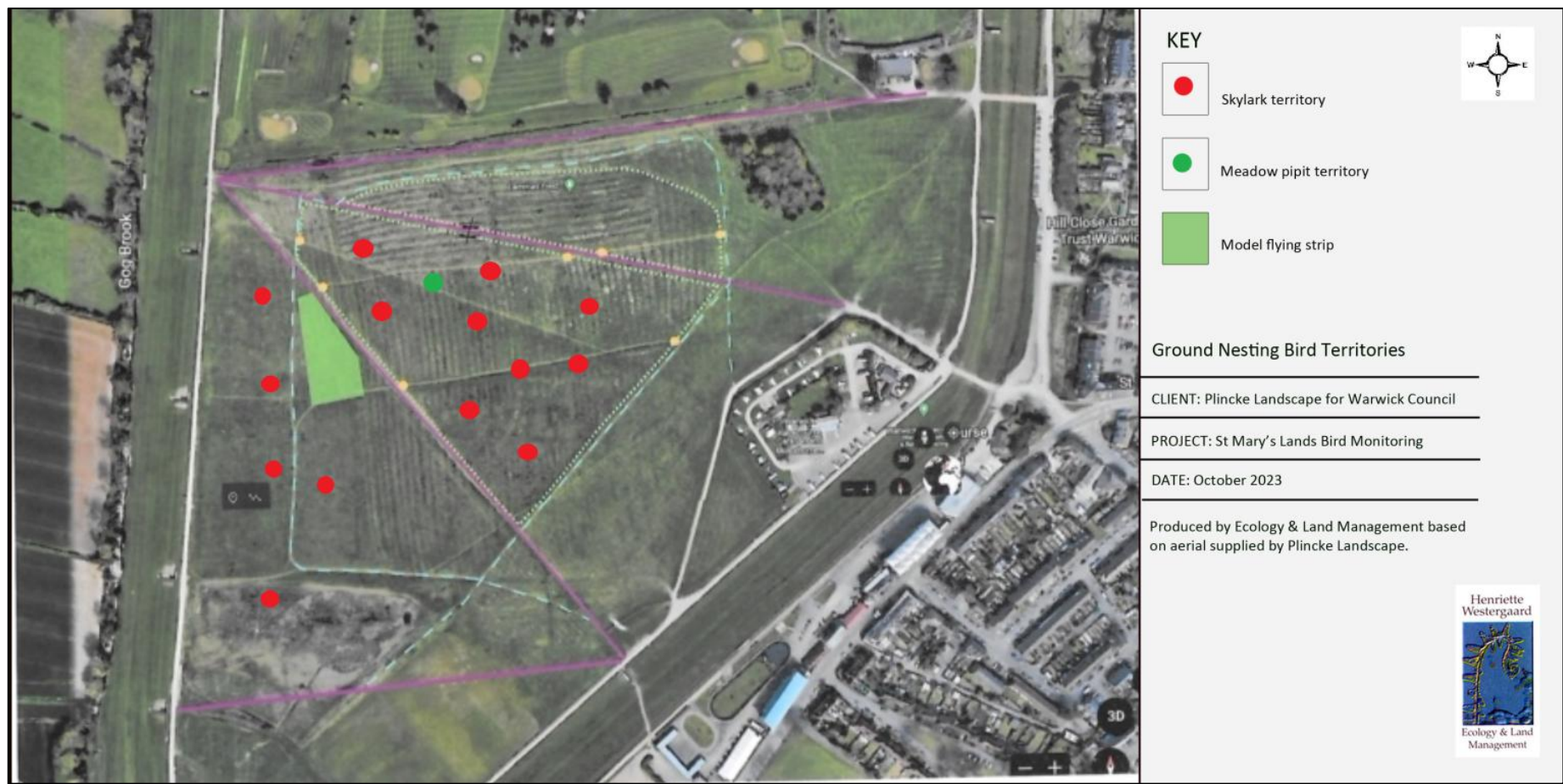
- 7.1 It is again strongly recommended that during the entire skylark breeding season period e.g. March to late August, the key part of Lammas Field, where the skylarks and meadow pipits are nesting, is fenced off completely with appropriate temporary fencing.
- 7.2 Visitors should be encouraged to stay on designated routes that avoid sensitive areas. These routes should be clearly defined so that it is easy to follow and signage should inform people about the importance of staying on marked routes. Well established desire lines should where possible be kept open to avoid other routes becoming established, creating more disturbance.
- 7.3 It is recommended that the protected fenced off area is altered to allow for breeding skylark territories to be protected in the breeding season, to the west and southwest of the existing protected area, where skylarks were also observed setting up territories (see Appendix IV for proposed additional area). The area north of the main fencing does not seem to be used so could be unfenced.
- 7.4 This may mean that new public consultation is needed due to the change in fencing due to the alteration area to be protected. The altered fencing will allow further skylarks' pairs to be protected from dog walkers during the breeding season.
- 7.5 The exact date for this fencing to be carefully removed after the end of the nesting season for skylarks will depend on when the final broods are considered to be fully

- fledged. The fencing will allow skylarks to rear two to three broods at the site, which are required to maintain population levels.
- 7.4 Fenced off protected zones will allow ground nesting bird species such as skylark and meadow pipit to breed normally within Lammas Field, with no disturbance from dogs.
- 7.5 There must be high quality signage at regular intervals around the fencing perimeter, explaining to the general public, why such fencing is needed, which bird species are being protected and that all dog walkers must keep out of the fenced area at all times.
- 7.6 It will be vital that such fences are maintained at all times by Warwick District Council, that any damage to fencing is repaired promptly and that targeted monitoring is allowed to ensure that dog walkers are keeping out of the fenced protection zone for birds.
- 7.7 It is important to establish effective communication between dog owners and the management team to ensure everyone feels engaged and welcome. This would encourage understanding and co-operation to support aims of the site and desired behaviours.
- 7.8 Further bird monitoring should be permitted in future years of the protected enclosure to allow for the long term assessment of trends in the skylark and meadow pipits

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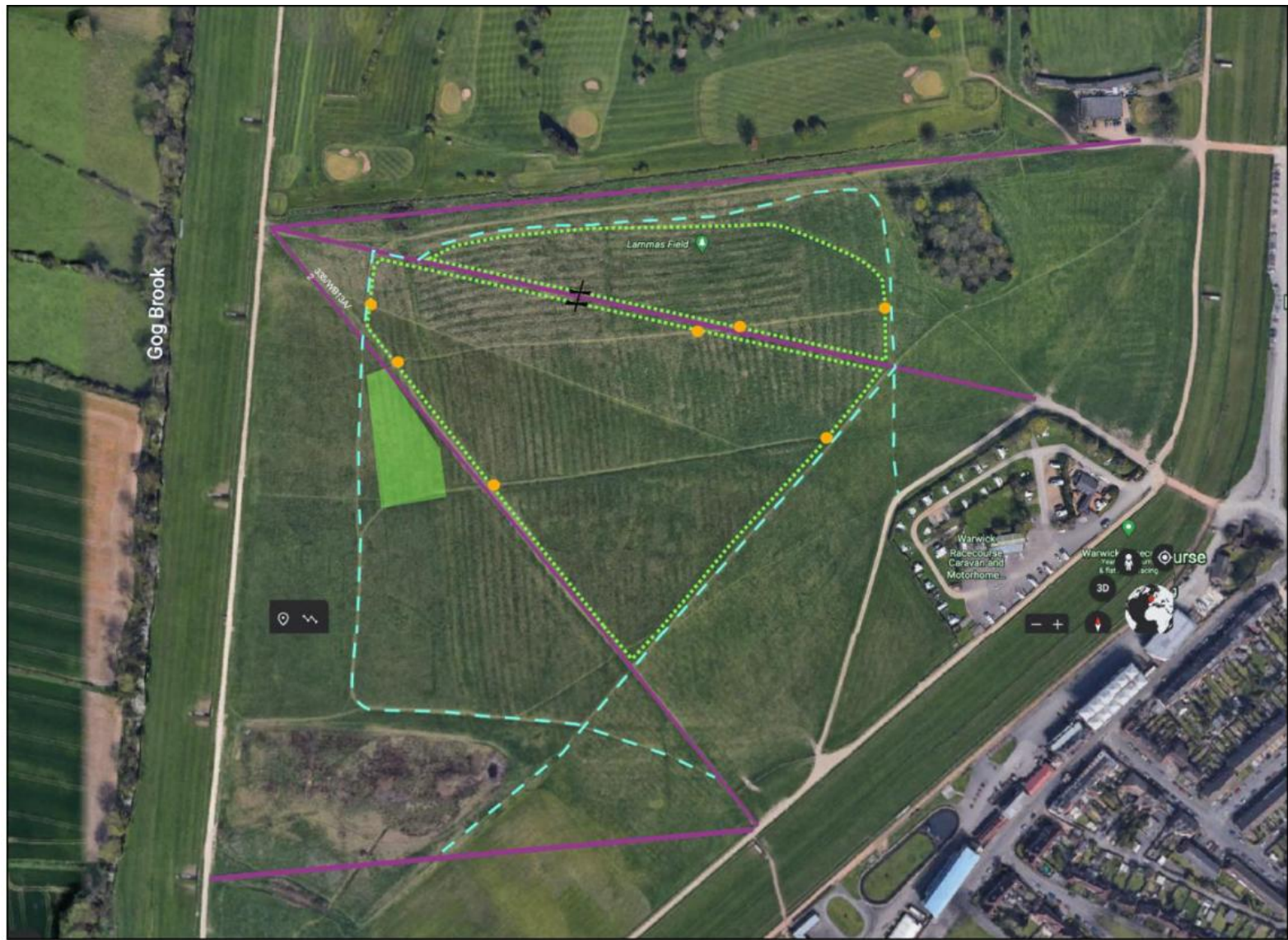
Appendix I – Map of breeding bird territories



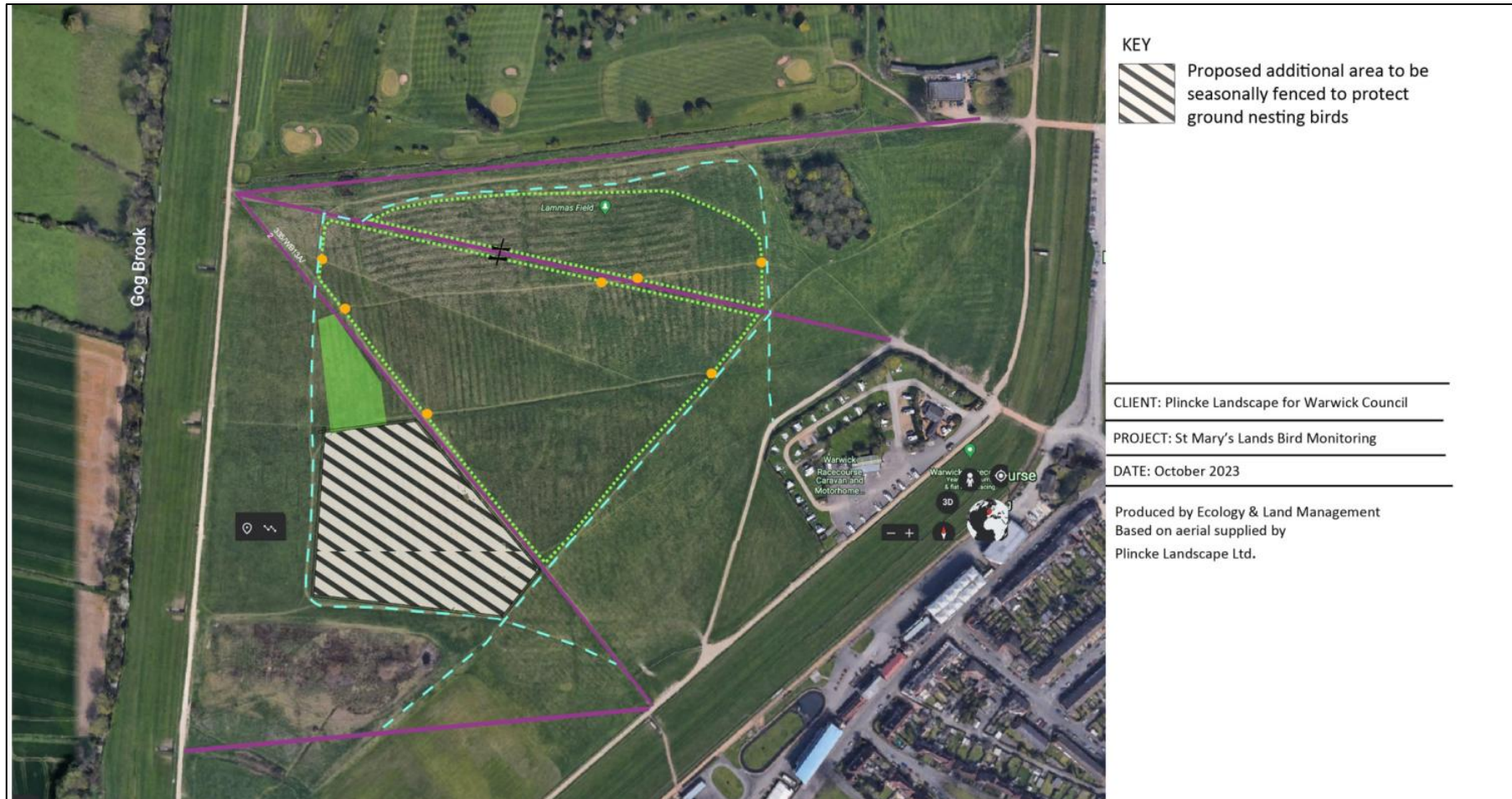
Appendix II - Photos of survey area

		<p>Photographs Taken during ground nesting bird monitoring Survey 2023.</p> <p>Looking across areas of fenced off grassland.</p>	
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Appendix III – Plan of existing seasonally fenced off area



Appendix IV – Plan of Proposed additional seasonally fenced off area



Appendix V - Skylark Habitat and Behaviour

Habitat and Breeding

- i The centre of Lamma Fields provide suitable habitat within which skylarks can hide their nests and raise their young. Skylarks lay 2-6 eggs (usually 3 or 4) and incubate them for about 10-13 days. Chicks leave the nest after about 8 days but the parents continue to feed them until they are about 20 days old at which point they can fly.

Breeding

- ii Male and female skylark raise their young in a season. The nest is a simple lined scrape on the ground within tall grassland. The eggs are incubated for 11 days and the young leave the nest sometimes after only 8 days. They are looked after for approximately 25 days after hatching, after which they are sent out, with juvenile plumage, into the wild to fend for themselves.

Feeding

- iii Skylarks have been observed to make approximately 30 feeding trips per day each lasting between 10 and 12 minutes.

Territory

Skylarks are known to use scrapes to defend territories.

Display Song/Flight

- iv It is usually sung in a display-flight. The sound starts just after the bird lifts off at a steep angle to the ground, continues on its rise to 50 m or more, is maintained for a period of hovering (at 10-12 wing-beats per second), and accompanies the display's slow, spiralling descent. Only for the final plummet to earth does the Skylark's song fall silent, so that the bird can reach the ground with a degree of privacy.
- v Research has shown that the average display flight lasts for 2½ minutes up to a maximum of 5 minutes. The reason, for hearing continuous skylark song at the end of a summer afternoon is that Skylarks often hold contiguous territories, and one male may simply follow another into the sky, without any interval. The males, who mainly sing, are under pressure to keep singing to maintain their territorial boundaries. If a dangerous predator such as a Merlin attacks, the boldest males carry on singing regardless of the risk, and it is shown these suffer fewer casualties as a result.

Appendix VI - Example Dog Walking Information

Example from Hampshire County Council, Countryside Service

Dogs disturbing, chasing or injuring wildlife (ground nesting birds)

- improve your signage
- identify where off-lead is not a problem
- signpost alternative or better routes
- speak with visitors
- reroute the path
- fence off the path
- involve a dog warden

Improve your signage

Good signage that's tailored to your specific situation can reduce conflict. However, getting signage right is not easy and needs thought, as poorly worded or badly installed signs are of limited use. Your signage will be most effective when it: say precisely what behaviours you do want, eg "keep dogs on the path", avoid using imprecise terms like "close control" or "be responsible", give explanations to backup what you are asking for. Indicate where sensitive areas start and finish, say where off-lead is not a problem

Signpost alternative routes with paw routes

Signage should include wording such as:

- 1 Dogs harm ground nesting birds
- 2 Help your dog help wildlife
- 3 Skylarks nest here – please keep your dog on a lead
- 4 Do not feed the birds

Speak with visitors

Public communication should be:

- 1 Realistic, fair and proportionate
- 2 Confined to specific locations where they are required
- 3 Clearly state the reason for the request

Creating access

Different types of access routes can be created to allow for all activities. For example:

- 1 Routes for dogs on lead
- 2 Routes for dogs off lead
- 3 Routes for no dogs

These routes should be accompanied by clear codes of practice whereby the restrictions are defined e.g. if dogs are required to be on a short lead and under 'close control', specify what this means (e.g. less than two metres lead length and meaning that a dog responds immediately to commands and is kept close at heel). Where possible, provide alternative areas nearby where dogs may be exercised safely off-lead without threat to wildlife when closing areas off completely to dog walkers.

Disclaimer

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