



## SAVE HARDY'S VALE – BIODIVERSITY AND ECOLOGY REVIEW

Case Officer: Simon McFarlane  
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Dear Simon McFarlane,

**Full Planning Application [P/FUL/2021/01018](#)**

**Install ground-mounted solar panel photovoltaic solar arrays, substation, inverter and transformer units, security fencing, gates and CCTV; form vehicular access, internal access track, landscaping and other ancillary infrastructure.**

### **Our Interest**

'Save Hardy's Vale' (SHV) is an unincorporated community association.<sup>1</sup> It was formed to protect 190 acres of productive agricultural land in a sensitive and valued landscape, at the heart of the Blackmore Vale, from the significant harm that would result from granting the Application.

The development proposed is for the installation of approximately 150,000 metal mounted solar arrays, substation, inverter and transformer units, security fencing, gates and CCTV and the formation of vehicular access and ancillary infrastructure, on a site of 190 acres (77 hectares).

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<sup>1</sup> SHV committee members are David Horrell, Catherine Langham, Mark Bentley, Peter Moise and Ian Bryan

## SAVE HARDY'S VALE BIODIVERSITY REVIEW

### Ecology and Biodiversity

Whilst we make no claim to be qualified ecologists, we believe we are interested and informed parties with experience of the wildlife and farming practices in this part of the Vale. As such, many of the claims in the ES Biodiversity Statement, Landscape and Ecological Management Plan and Biodiversity Metric seem to a layperson's eye, perversely determined to overstate benefits and brush severe harms aside. Many of the improvements claimed are no more than other farmers in the immediate vicinity already practice under Country Stewardship arrangements. It should be pointed out that farmers have a wide choice of greening measures to further achievement of carbon neutrality, and in contrast to this industrialisation of the countryside, these Nature-based solutions would work perfectly to maintain and improve the magnificent landscape.

We examine and challenge some of these claims below.

As the Applicant confirms, part of Paragraph 175 of the NPPF is particularly relevant to their assessment

*If significant harm to biodiversity resulting from a development*

- a) cannot be avoided (through locating on an alternative site with less harmful impacts),*
- b) adequately mitigated,*
- c) or, as a last resort, compensated for,*

*then planning permission should be refused.*

We believe there are substantial negative impacts that have not been adequately mitigated, principally because the very design and purpose of the site is to exclude trespassers, whether human or animal from the site. Just one example of unmitigated impact is the complete blockage of commuter transit routes for otter across the site. Otter are regularly spotted traversing fields and gardens, well away from water bodies, throughout Mappowder.

We note the Applicant uses CIEEM produced guidelines to assist with ecological evaluation and impact assessment (CIEEM, 2019); but that they accept these "have no legal standing and are not a substitute for professional judgement and interpretation, particularly where

the ecological value of a site and/or the magnitude of effects are not clear or are borderline between two categories of value/magnitude.”

## **Landscape and Ecological Management Plan**

### **Wildlife – Disturbance and Death**

The applicant acknowledges that wildlife will be severely disturbed during construction and indeed that animal will die – leverets being a particularly prominent victim. None of this death and disturbance needs to happen.

### **Inadequate Survey**

In Paragraph 58 South West Ecology admits that it was “sub-optimal” to conduct the habitat survey in December. It is imperative that applicants for planning permission as large as this provide accurate and fair assessments. An accurate assessment of flora in December is not just sub optimal, it is impossible.

Furthermore, in Table 7.8 the applicant confirms Surveys for hazel dormice, hedgehogs, invertebrates, reptiles, water vole and otter were not carried out for varying, self-assessed reasons such as no loss of habitat or in the case of otter because the streams were “unlikely to support” them. Butterflies of open pasture, such as Meadow Brown, Ringlet, Small Copper and Common Blue, breed in these fields. We sought in vain for the butterfly survey and the appropriate mitigation proposals for the loss of their habitat but could find none. Again, we dispute the rationale for not surveying these vital species. Despite our limited resources, we carried our two bird surveys (Appendix 2) which establish that the site and immediate vicinity has rich birdlife.

### **Biodiversity Gain – reasons to dispute**

In paragraph 69 the biodiversity metric is stated to deliver a biodiversity net gain. The metric is presented in ES Technical Appendix 7.2. It uses Natural England’s Biodiversity metric 2.0 which to quote Natural England is designed to provide “developers, planners, land managers and others with a tool to help limit damage to nature in the first place and to help it thrive.” The metric itself “is being initially released as a beta version because we are seeking feedback on its real-world application, whether that be the calculation tool or documentation, in order that improvements can be made and bugs fixed.”

However, the Applicant’s Biodiversity metric summary gives only the headline results and no indication of how they are calculated on a site-specific basis. Whilst some gains, such as

screening hedgerows are obvious, one is left to speculate whether conversion of the site from arable to grassland “counts” as a major gain. In addition, there is no indication as to whether clear detriments such as extensive interference with cross-farm commuting routes for birds and mammals counts as a negative mark. Nor, due to the nugatory backup data provided, is there any way to judge whether the applicant considers seven HGVS of industrial material daily for six months – to be placed in the fields for 35 years - is biodiversity neutral. In short how are negatives scored when calculating gains?

We were relieved to note the fence specification was made of wooden posts and galvanised wire as the type used at BSR’s site seven miles away at Canada Farm is finished in a polyester powder coating known as PPC that contains polyethylene terephthalate or PET. PET is a synthetic petroleum-based plastic and it is recognised, sheds micro plastics throughout its lifetime and takes more than 200 years to decompose. Given the Applicant’s previous use of this material, we would want confirmation that they will definitely not be using it North Dairy Farm given the pollution it continues to cause at their other Dorset site.

In a further irony – when or if the site is properly decommissioned, and the non-recyclable 150,000+ solar panels, concrete standings and plastic-coated electrical cable are sent to landfill, the next planning applicant will gain a huge number of biodiversity points for ridding the land of so much toxic industrial refuse.

### **Bird Life**

The Ecology Assessment notes Flocks of between 10 and 30 corn bunting and linnet were seen over the site during the winter. The flocks were seen exclusively over the stubble fields to the southern and eastern parts of the site where they exhibited feeding behaviour. Despite this, it appears to be a biodiversity gain to get rid of the stubble habitat these birds prefer.

Corn bunting and skylark were noted exhibiting breeding behaviour. Both species nest on the ground. The shorn grass typical of solar farms will offer little cover for future breeding.

Owls tend to hunt at 4 to 10 metres using vision. We question how will they see prey beneath panels and suspect they may well be injured if they venture into the maze of stanchions underneath the panels. Faced with such obstacles we believe they will stay away. Our cherished summer visitors, Swallows and House Martins, typically feed high over grass fields before swooping just above ground level in short sweeping curves. Unless they learn to dive in long straight lines, avoiding hard metal scaffolding, this site will be a giant obstacle course antagonistic to their natural behaviours.

We have listed much of the research that informs our comments on bird life below in the Appendix 1. Research.

### **New Inappropriate Field Boundaries**

Paragraph 20 references the “restoration of lost field boundaries”. We struggle to see from the plans where this restoration will be, as most of the fields appear from Google Earth and site visits to already have hedges, though not necessarily all in good condition. However, there is one clear new creation – a completely ahistorical straight 700m screening hedgerow in the fields with the electricity substation and pylon. This meagre attempt at screening will simply be grubbed up at the end of the period as it introduces an arbitrary impediment to regular farming practices. We have looked at maps of the parish as far back as 1778 and there has never been any such hedge.

### **Benefits or Detriments?**

A number of proposals in paragraph 23 are disturbingly described as benefits.

- Mammal access points in the fence are a small sop to wildlife commuter routes across the site and we take on trust that prey species that currently have 360-degree escape routes can remember the exits when being hunted. Depending on the size of these access points there may well be an unintended consequence of dogs getting in and being trapped on site. The plan seems to rely on particularly clever animals that won't be utterly confused by the involuntary arrangements being made for them. The applicant promises 50 mammal underpasses, approximately 4 per field or one for every 200 metres of security fence. We are concerned as to whether there is adequate provision for regular checking for mammals and the promised sheep being trapped if these scraped slits become blocked. Hedgehogs (*Erinaceus Europaeus*) will have trouble navigating the fenced fields and aren't quick, so for them it will be a day's possibly fruitless journey from one exit to the next.
- The erection of an information board detailing the benefits of renewable solar energy. We are certain that ramblers will not wish to be reminded of the municipal degradation of a treasured landscape. It will be all around them.

### **Failed Objectives**

Paragraph 25 states the over-arching objectives of the LEMP which are then detailed in numbered Objectives in paragraph 27. We consider these Objectives fail on a number of counts.

- Objective 2 states that “Pasture is a key element that contributes towards the character of the landscape”. We whole-heartedly agree. It then goes on to discuss the restoration of the arable fields to species-rich pasture. However, the neutral grassland promised beneath the solar array will invariably turn into a grass

monoculture as the dominant, most shade tolerant, species thrive and the rest, lacking sunshine are crowded out. In short, pasture will be created that is unlikely to remain species rich and which no one will see. We question how that contributes to the character of the landscape.

- Further to the point above, recent scientific research (Armstrong, A, Ostle, NJ, & Whitaker J 2016 Solar Park microclimate and vegetation management effects on grassland carbon cycling. Environmental Research Letters 11:7) points out that the year-round shading effect from solar panels has a demonstrable negative impact on both the species-richness, productivity and carbon cycling benefits of grassland. This further undermines the contention that there will be biodiversity benefits from the development. No gardener or farmer would ever consider planting grass under year round shade. The healthy establishment for every single one of these grasses requires a certain amount of sun exposure. The inter and under panel grasses will get very little if any direct sun exposure. This actually suits the developer as it will require less maintenance and cosmetic “sheep” grazing. We say cosmetic because elsewhere in the Application it is admitted non-committally that the site may “potentially” graze under the panels.
- Objective 4 claims, in what must be describing a different site, that connectivity will be improved around the site. The extensive network of new concrete tracks and cul-de-sacs will improve connectivity for HGVs and vehicle traffic. However, 9 kilometres of fence will severely block connectivity on a vertical plane for land-based life-forms and 300,000 square meters of panels will block connectivity between the ground and the sky for avian, invertebrates and bat species.
- Objective 4 also claims the planting will mitigate against flooding and quotes Cook and McCuen 2013. This claim is comprehensively disproved elsewhere in our letters of representation as the paper based its calculations on U.S. soil sites bearing no resemblance to the much more impermeable heavy clay soils of North Dairy Farm.
- Objective 6. This seeks to protect and enhance recreational amenity from Public Rights of Way whilst enhancing engagement with the Natural Environment. We should remind ourselves that footpath N46/20 - currently a very informal 750 metre footpath has a beautiful ten-mile view of the escarpment from Dungeon Hill, round through The Knoll, Ball Hill, Nettlecombe Tout, Bulbarrow, Rawlsbury Fort to Ibberton Hill (broadly the route of the Wessex Ridgeway) that will be totally obliterated. It will be replaced with high urban fences, a maze of metal superstructures, panels and security cameras. The walker will be totally hemmed in. This will not in any sense be “an enhanced experience”. Whilst the walker may learn all about solar energy from the site board, they will learn nothing whatsoever of the extraordinary landscape that used to exist. The promised tussocky grass at their feet will be small compensation. Much more on the devastating impact on local PROWs is contained in our Landscape Statement.

## Local Planning

The National Character Area Profile for the Blackmore Vale lists 'Statements of Environmental Opportunity'. SEO 1 promises to "Protect, manage and enhance the diverse but coherent pastoral landscape character of the clay vales" and "manage the simple patterns of land use maintained by the long history of agriculture." This proposal introduces a huge industrial complex into the currently coherent pastoral landscape. An unsuspecting passer-by will feel they have stumbled from The Forest of Arden onto the set of Blade Runner.

The NCAA further suggests in SEO 2 that it will "*Work with local people to raise their understanding of the way in which the area's strong landscape character, sense of place and distinctive wildlife are rooted in the continuity of agricultural land use, strong historic landscape character and legibility of historic features.*" This proposal is very clear in its intention to scrap all continuity of agricultural land use which in turn will seriously diminish any sense of place both on site and in the surrounding area. Hedgerows may remain but will disappear from view, hidden by the higher panels.

## National Planning

National Planning Policy Framework (NPPF, Paragraph 170, 2019) advises that: *Planning policies and decisions should contribute to and enhance the local environment by ... establishing coherent ecological networks that are more resilient to current and future pressures.* For the reasons above we believe these coherent ecological networks will be disrupted albeit the applicant proposes to make some meagre biodiversity improvements on a hyper-localised basis.

## Conclusion

We consider the proposals made by the applicant to be poor and inadequate compensation for the huge loss of landscape and biodiversity threatened by this application. And whilst it might be a cry in the wilderness, we implore Dorset Council to expedite its Draft Local Plan which we trust will coherently align with national planning policy. The council states that it "*recognises the importance of this outstanding environment and seeks enhancement with a move towards a more sustainable future.*" Specifically in relation to this application, this would ensure robust spatial targeting of carbon zero policies. Priorities from renewable energy, bioenergy crops, woodland creation, electrification even to domestic insulation can and should be tailored for specific places and landscapes. If that is put in place, the county will be a happier place where we can work together to achieve carbon zero rather than against each other.

Mark Bentley

31st May

For and on behalf of the Save Hardy's Vale community group<sup>2</sup>

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<sup>2</sup> David Horrell, Catherine Langham, Mark Bentley, Peter Moise and Ian Bryan

## **APPENDIX 1 - RESEARCH**

BIRDLIFE EUROPE (2011) discusses the significant negative impacts to bird species such as skylark and lapwing where solar panels are sited on farmland, with reduced opportunities for foraging, roosting and breeding. In a response to a previous application for this site Natural England suggested they would need measures to compensate for loss of skylark nesting sites.

B.S.G ECOLOGY – STUDY BY BERNATH ET AL – Birds that drink on the wing such as swallows could be at risk of collision with solar panels which also reflect polar light.

WAISTON ET AL (2016) acknowledged more research is needed on bird fatalities due to solar panels. This could be due to mistaking these for water or flight path issues.

DE VAULT ET AL (2014) looked in to why raptor species declined at sites – and whether this is due to lack of visible prey area or other reasons.

(GRIEF ET AL 2017) Smooth glass surfaces can deceive bats maybe by interfering with their flight paths

(HORVATH ET AL 2010) Insects that lay their eggs in water (e.g., Mayflies and Stoneflies) may mistake solar panels for waterbodies due to the reflection of polarised light. They have been found to lay their eggs on these surfaces reducing their reproductive success and diminishing the potential food for birds.

**APPENDIX 2 –**

**SURVEY 1. RIVER LYDDEN SE 02/02/2021 09:40 - 11:00**



Complete list

Weather comments:

Dry, hardly any wind temp about 10 deg C. fully overcast and there had been significant rain in the previous week. Grounds were generally very wet with standing water in many places.

Visit comments: With Nigel Spring. Using 10x42 binoculars. Some good hedges and wet ditches, small streams. Grass was all improved grassland and on one side the field were largely stubble from Maize crop last year. One scrubby plantation of willow, not woodlands. Noticeable by their absence in the South East area compared to the North West area, but also compared to areas not many miles away were a variety of song birds including Bullfinch, Linnet, Coal Tit, Wrens and Yellowhammers. A couple of flocks of about 40 birds not identified as too far off. Possibly larks.

**SPECIES RECORDED (BIRDS): 29**

Blackbird (9)

Blue Tit (10)

Carrion Crow (20)

Chaffinch (3)  
 Collared Dove (2)  
 Common Gull (43)  
 Flying over  
 Dunnock (7)  
 Fieldfare (5)  
 Goldfinch (2)  
 Great Tit (7)  
 Herring Gull (3)  
 House Sparrow (20)  
 Jackdaw (4)  
 Long-tailed Tit (1)  
 Mallard (40)            Circling after disturbed from the river course  
 Meadow Pipit (10)    In ones and twos  
 Mistle Thrush (1)  
 Pheasant (3)  
 Pied Wagtail (yarrellii) (1)  
 Raven (2)  
 Red-legged Partridge (7)  
 Redwing (90)            In flocks of 30 or 40, plus a few small groups. Mostly flying out from  
 trees or hedges, or just flying over  
 Robin (9)  
 Rook (30)                Feeding in a rich meadow by Cannings Court  
 Skylark (5)  
 Song Thrush (5)  
 Starling (66)            some singletons, several in flocks flying round  
 Woodpigeon (7)  
 Wren (3)

SPECIES RECORDED (MAMMALS): 3

Badger

Mole

Rabbit (1)

**SURVEY 2 RIVER LYDDEN NW 02/02/2021 08:45 - 12:00**



Complete list

Weather comments: Dry fully overcast, occasional glimpse of sun. Minimal wind temp about 9 deg C. Very wet underfoot, lying water in many fields and gateways. River Lydden flowing strongly but within the banks. Large numbers of Red Legged Partridge in the area of Micanthus and scrubby grass, used for shooting at East Pulham Farm. The farmer there reported seeing a lot of owls now, including Tawny, Barn and another brown one. He puts in a major programme to eradicate rats.

Visit comments: With Nigel Spring. 10x42 binoculars Hedges had generally not been cut this year and one farmer said that he aims to cut some of his ones in summer, not sure of timing in view of bird nesting.

Species recorded (Birds): 31

Blackbird (10)

Blue Tit (16)

Bullfinch (2)

Buzzard (1)

Carrion Crow (10)

Chaffinch (7)

Coal Tit (1)

Cormorant (1) *Down near the river*

Dunnock (7)

Fieldfare (20) *typically in small flocks of a bout 5, perched in trees and bushes and flying over*

Great Tit (7)

Grey Wagtail (1)

House Sparrow (33) *Around house gardens and farm buildings*

Jackdaw (15)

Linnet (1)

Long-tailed Tit (1)

Magpie (3)

Mallard (12) *Mostly on the pond at East Pulham Farm, but two by the river*

Meadow Pipit (11) *Across the area in ones and twos*

Mistle Thrush (2)

Pheasant (12)

Pied Wagtail (*yarrellii*) (2)

Red-legged Partridge (45)

Redwing (40) *mostly flocks flying over with stops in trees, not foraging, but berries had gone*

Robin (15)

Rook (22)

Song Thrush (1)

Sparrowhawk (1)

Starling (63) *mostly in flocks flying over*

Woodpigeon (25)

Wren (3)

Species recorded (Mammals): 3

Badger

Mole

Roe Deer (2)