

7000 Acres

7000 Acres Response to the Cottam Solar Project Ltd Application on the subject of:

Wildlife and Habitat

Deadline 1 Submission – 17th October 2023

WILDLIFE AND HABITAT

The Cottam Solar Project proposal falls within an Area of Great Landscape Value, its unique and largely unspoilt views have created much local pride, and quite rightly so.

This area is a Gem. Beautiful and wildlife rich.

It must stay this way.

Credit must be given to the management of the land proposed for this Project, whether this has been intentional or not.

The varied tapestry of crops, small fields (for a modern agricultural setting), wide field margins, set aside, and areas of spring sowing. Means that the habitats are both diverse as well as productive.

Spilled grain and seeds provide supplemental food in the Autumn, and Winter stubbles along with set aside provide vital habitat and food for farmland bird species and Wintering birds of prey.

The many mixed woodland areas, small ponds and water courses make the habitat diverse and quite rare for 21st century farmland.

With a farmland bird count of over 130 species, I class this as an important and biodiverse environment with a wide range of Flora and Fauna.

5 species of deer have been identified, with roe deer being the dominant species.

Brown hare numbers are extremely high for this declining UK species. The area is an important UK stronghold.

3 species of newt, 24 species of dragonfly and damselflies have been identified.

6 species of bat are commonly noted in the area.

The wide verges and field headlands are particularly important during the spring and summer when a huge range of wildflowers and grasses provide a rich habitat for wildlife including insects, butterflies, spiders, snails, and small mammals.

**“Red listed” birds species and ones of significant importance.
Seen on and around the land parcels proposed for this solar development.**

List compiled by three local ornithologists.

Little Egret – Steady increase of numbers

Great white Egret – Increasing sightings.

Water rail – Scarce and secretive species.

Grey partridge - Breeding stronghold.

Quail – Recent upturn in breeding numbers.

Corncrake – Reported as potential breeding at one site, 2022 and 2023.

Lapwing – Breeding stronghold.

Ringed plover – Visitor.

Curlew – Visitor.

Woodcock – Breeding, increasing winter numbers.
Turtle dove – Nationally declining Summer visitor, breeding numbers holding.
Cuckoo – Nationally declining Summer visitor, breeding numbers stable.
Barn owl – Breeding stronghold.
Tawny owl – Breeding stronghold.
Little owl – Moderate, breeding species.
Long eared owl – Breeding species, increasing Winter numbers.
Short eared owl – Frequent Winter visitor.
Merlin – Regular Winter visitor.
Hobby – Healthy numbers, Summer visitor.
Honey buzzard – Scarce Summer visitor.
Red Kite – Healthy population
Hen harrier - Winter visitor, hunting over open bare fields.
Marsh harrier – Mainly Spring and Autumn visitor
Montagues harrier – Seen on increasing occasion.
Skylark – Breeding stronghold.
Starling – Healthy population, impressive Winter murmurations.
Fieldfare – Winter stronghold.
Redwing – Winter stronghold.
Mistle thrush – Healthy population.
Spotted flycatcher – Nationally declining species, stable breeding numbers.
Black redstart – Very rare bird, known to have bred in one location.
Redstart – Summer migrant, occasionally seen during breeding season.
House sparrow – Breeding stronghold.
Tree sparrow - Breeding stronghold.
Greenfinch – Recovering numbers.
Yellow wagtail – Summer visitor, breeding stronghold.
Linnet – Breeding stronghold.
Lesser redpoll – Good numbers, mainly Winter.
Yellow hammer – Breeding stronghold.
Corn bunting – Uncommon, breeding species.

Impact on wildlife by large scale solar developments:

There is little evidence in support of ecological improvements made by large scale solar developments on temperate agricultural land.

Developments of this scale have historically been located in countries such as India, China, Egypt and Australia. With higher solar gains and greater land mass than the UK, often in barren or semi desert landscapes, away from habitation. This land is usually deemed of little value or specific purpose.

Ecological impact on these far-flung landscapes would have little in common with the effects of giant solar developments on the UK's important farmland.

The UK's agricultural land is under constant competition for projects that cannot be realised elsewhere. Land must be given over to these such developments. Solar does not require to be land mounted and is commonly a rooftop installation giving the roof an important secondary function.

With 4 giant solar developments proposed together in one concentrated area of Lincolnshire. Wildlife will inevitably suffer.

The considerable construction period of these massive solar developments with the impact caused spanning many years, would be an intolerable disturbance to all wildlife.

With thousands of transient workers and the transportation of millions of solar panel etc... Plus heavy machinery operating 12 hrs a day, all year round, would decimate fragile breeding habitats and destroy soil balance and structure.

Removing hedgerows would be catastrophic. Habitat and ecosystems cannot be created overnight with token planting schemes.

Imposing and non-wildlife friendly security fencing is now a requirement at new solar power sites.

The many miles of steel fencing required would exclude important mammal species from thousands of acres of their normal habitat, channelling deer, hare and rabbits to existing and newly planted hedgerows, which would be destroyed or seriously damaged in a very short period of time. Biodiversity net gain targets would disturbingly never be achieved.

Mitigation measures fall woefully short, expecting farmland birds to move to isolated fields when they have been maintaining healthy strongholds, naturally selecting their breeding sites from choice.

The Developers inexperience of large scale solar deployment in the UK and their naivety of the natural world is clearly demonstrated.

The thousands of acres of manmade structures deployed in the countryside by solar farms has been shown to impact bat numbers significantly and must be considered a real and avoidable threat to rare and protected species.

Glint and Glare from these vast solar schemes are a concern for its effect on birds as well as humans, bird collisions have regularly been reported. With vast swathes of important open countryside lost to solar installations, this could easily have a negative impact on the numbers of protected raptor species in the area.

Loss of vital insects due to panel attraction, is also well documented. With literally a sea of solar panels in one area. The attraction to this false water would bring a huge ecological unbalance to the area.

Artificial microclimate formations around the arrays and in the locality alter ambient temperatures by several degrees, combined with constant shading of much of the soil below is real concern especially on long term soil health, invertebrate habitat and the increased risk of wildfires.

Cumulative effect.

There is no evidence of wildlife benefit from large ground mounted solar schemes in the UK.

The only possible improvements would be on the most barren and intensively farmed areas.

This proposal is anything but that. With much of the farmland appearing to have been cared for extremely well, demonstrated by its beauty and the abundant flora and fauna.

Many people get much pleasure from their immediate surroundings and the wildlife it contains. Indeed, many live in the countryside for this reason alone.

The incongruous proposal of 4.5m high panels, security fencing, CCTV, and excessive hedge heights. Makes me ask, has the Human species been considered by the Developer?

Any wildlife remaining would be excluded from human enjoyment by this ugly and unnatural landscape. To lose on such an immense scale could be catastrophic not just for impacts on wildlife, but for the pride and ownership of the communities involved and their continued quality of life.

I can see much harm coming from this unparalleled amount of industrial development, and the associated loss of our natural and semi-natural landscape. National planning policy states that we should be “protecting and enhancing valued landscapes”.

The impact of this scheme on the natural world and those who enjoy it, has not been addressed thoroughly by the Developer. We must not sugarcoat the reality that each scheme is an industrial project on a scale that dwarves every other type of past development. Token planting and the mere hope of mitigation success is too much of a gamble to take, with no evidence backing the effects of land use change of this magnitude.

The issues highlighted in this report with a worst-case scenario of 10,000 acres of development over 4 projects, means the level of disturbance and impact would be compounded to a level never seen before. With an outcome no one can be sure of.

REFERENCES: -

EUROPEAN COMMISSION - POTENTIAL IMPACTS OF SOLAR, GEOTHERMAL AND OCEAN ENERGY ON HABITATS AND SPECIES PROTECTED UNDER THE BIRDS AND HABITATS DIRECTIVES

RSPB

BTO

Wildlife Trust

Hare Preservation Trust

British Deer Society

Renewable energies and biodiversity: impact of ground-mounted photovoltaic sites on bat activity, Journal of Applied Ecology (2023).