



NATURE & WATER

Today, the land at North Fossil farm is dominated by arable crops and grassland, grown to feed beef cattle. Hedgerows, trees and small copses of broadleaved trees make up the field boundaries and some field boundaries have managed ditches which meet a minor watercourse flowing to the north, forming a tributary of the River Frome.

While there are some healthy hedgerows and small areas set-aside for nature within the site, the land has been subject to the intensive practices of modern farming for many years, leaving minimal habitat for local wildlife to exist.

ENHANCING ECOLOGY

If our proposal is approved it will end the intensive agriculture, replacing the crops with a mix of native grass and wildflowers around the panels. This would provide an abundance of semi-natural habitat significantly increasing the potential for:

- A broad range of invertebrates typically associated with the field boundary habitats and also within the fields when in flower or being grazed.
- Common reptiles such as slow worm, common lizard, grass snake, adder.
- Amphibians such as palmate newt, smooth newt, common frog and common toad and possibly great crested newt (although our surveys have not find evidence of this species).
- Farmland birds, and potentially certain species of heathland birds due to the proximity to this habitat some 200m to the east.

- A wide range of bat species foraging over the land and using potential roost features likely to be associated to mature boundary trees and offsite woodland and farm buildings.
- Other mammals including badger, fox, deer, brown hare, hedgehog and smaller rodents. Dormouse could utilise the boundary hedgerows and offsite woodland and other arboreal habitats.

IMPROVING HYDROLOGY

Some of the most significant ecological benefits we can deliver is by changing the way we manage water and land drainage at North Fossil farm and Manor farm.

The existing network of local agricultural land drainage lowers ground water levels across a broad area. This has impacted a rare example of habitat transitions: from dry heath to wet heath to species rich floodplain grassland to small chalkstream (the Tadnoll Brook). Such complete transitions from wet heath and mire through to chalk stream floodplains are highly unusual; there are very few examples of such habitat complexity across the Dorset Heaths.

Our designs will take a holistic approach to water management so current drainage arrangement can be used to create areas of wetlands and wetland features across both our proposals. There would be significant benefits from

this approach; alongside the provision of new habitats, real improvements to water quality could be achieved by feeding surface water flows through wetlands prior to their eventual discharge to the Tadnoll Brook.

During the design of our proposal we have consulted with Natural England. Their view of our proposed changes to water management is that, "In conservation terms, restoration of hydrology to enable the full range of habitats and their natural hydrological functioning would be an outstanding conservation outcome."

AGRICULTURE CONTINUES

The solar park can continue to be used for food production for the lifetime of the solar park. Sheep can graze the wide spaces between and underneath the panels in Autumn

and Winter and the land rested in Spring and Summer (conservation grazing) so the wild flower meadow can bloom. The planning permission and the agreement made with the landowners both require the land to be returned to agricultural use at the end of the 40-year life of the park.

PROVEN TO SUPPORT WILDLIFE

A 2019 report* proves that well-designed and well-managed solar farms deliver broad benefits for British biodiversity and sustainable agriculture. Solar farms are providing a haven for rare species including moths, foraging bats, yellowhammers and grey-legged partridges when developers cultivate tree-

rich hedgerows and some sites are recorded as hosting six times more pollinators than control sites. Other benefits include:

- Increased fruit crop pollination for orchards close to wildflower meadows.
- Significantly higher plant and invertebrate diversity on sites with open drainage.
- Positive impacts on wetland bird breeding when artificial wetland features are introduced.

There is wide acceptance that if we continue current farming practice we are in danger of totally eradicating the fertility of our soils – if we exhaust our soil we can't grow crops.

If our project proceeds, the land will be rested from intensive agricultural use, reducing chemical inputs, restoring soil condition and replenishing soil carbon: essential for building healthy and resilient ecosystems.

And our project is fully reversible: after its operational life (40 years) all of the solar farm equipment is easily removed and the rested land will be revitalised, ready for harvest and benefit from an improved ecosystem

* 'The Natural Capital Value of Solar' by the Solar Trade Association endorsed by the Natural Capital Coalition, the Centre for Alternative Technology and Ashden.