

H. Crow
11 Middlefield
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Wareham
BH20 6BA
10th June 2010

FAO Messrs S Boyt & A Davies
The Planning Officer
Purbeck District Council
Westport House
Worgret Road
Wareham
Dorset
BH20 4PP

Planning Application Reference: 6/2010/0082
Windfarm at East Stoke, Wareham, Dorset

Dear Sirs,

Objection

Official **DART** response to statement made by Holme Estate manager W.Bond letter dated 9th March 2010

Wildlife

Just 5 lines of Mr Bond's 19 page letter address the issue of wildlife. What he expresses therein, however, is revealing:

“For us as contractors too, the impact of climate change has been clear. Fifteen years ago the nesting season was a well defined three month period of April, May and June. Now birds nest earlier in the spring, and consequently get a chance to raise a second brood into July and early August. We now need to avoid disturbance for a period of nearly five months, compressing the workload into an ever shorter period, making men and machines idle for slightly longer every year.”

Aside from Mr Bond's obvious irritation with the wildlife, which he believes is obstructing his business activities; he provides no scientific evidence to support his statement that nesting birds' breeding seasons are already being dramatically affected by climate change. As any bird watcher knows, there are many species which have always produced 2 or more clutches during the Spring and Summer breeding period.

*Climate change `modelling` (prediction) which in no way is a substitute for observed trends, suggest that if the climate changes as predicted - and this is by no measure certain - that breeding seasons of certain species of birds `may` advance by an average of 8 days by 2080. It also states that most of this impact is associated with many factors, one of which is habitat loss due to flooding, food availability and even parasite density.

“.... with warmer temperatures in March and April associated with earlier laying (Crick & Sparks 1999). The authors predict that by 2080, laying dates in the UK, for the species studied, may be on average 8 days earlier.....”

April 2003: JENNIFER SMART & JENNIFER A. GILL
Schools of Biological and Environmental Sciences and Tyndall Centre for Climate Change Research, University of East Anglia.

Their report also states that there are other complex factors that might benefit some species whilst others are affected detrimentally. So, the prediction model suggests that in 70 years time, the advancement of bird breeding seasons `may` be 8 days in the **observed** species.

This is one possibility; however, it is at least based on scientific assessment rather than commercially driven invention and unsubstantiated statements made by Mr Bond, claiming observable changes to **current** avian breeding cycles.

The original mineral extraction planning permission imposed a condition requiring the developer to cease operations and to infill pits in order to restore the natural habitat for birds and wildlife by December 31st 2010. This was in recognition of the ongoing diminishing heathland habitat as a result of manmade, commercial activity.

The current windfarm development proposal is an unashamed attempt to avoid the cost of this and will reduce the amount of available habitat for birds and wildlife.

RPS, the company which carried out the environmental impact assessment (EIA) for the wind farm developer, boasts of its ability to `gets plans through` for projects in the oil industry, (well known protectors of seabirds and marine life!). Indeed, RPS vice-president Shannon Di Sorbo spoke recently at a conference (Unconventional Oil 14th – 15th October 2009) about the challenges and opportunities associated with exploitation of tar sands in Alberta, Canada. This in the face of overwhelming evidence that virtually every facet of tar sands oil development is a deadly threat to the Canadian Boreal forest wildlife and birds -- many of which are `protected` by law(as are our Nightjars and bats) .

If wind turbines are to be used, they should be constructed offshore, as they have been in Liverpool Bay and other sites around the UK where they may actually help to reduce over- trawling and even act as artificial reefs which support marine life.

Bats

This is a difficult issue for the developers; at least 7 species of bat were identified at the proposed windfarm site. **RPS** have acknowledged in their EIA that barotrauma around wind turbines is a recognised cause of death in bat species, but have only referred to the possibility of blade strike in their final conclusions. Natural England has also failed to address this issue, only referring to the possibility of blade strike. **This needs to be urgently addressed.**

Barotrauma is a condition well-known to scuba divers where a drop in surrounding [ambient] pressure leads to the expansion of air in the lungs and the destruction of lung tissue [air embolism]. This effect is a recognised threat to bats in the vicinity of large wind turbines. The delicate lungs of bats suddenly expand, bursting the tissue's blood vessels. See **appendix 1**

Nightjars

1. Observations (by RPS) were initially carried out at the proposed site for 10% of their expected flight time. For a red listed species which is threatened with extinction, this is barely sufficient. However, 138 Nightjar visits were recorded, which, extrapolated as a crude statistic, would represent 1380 visits to the area if observations were carried out for 100% of the expected flying periods.
2. Nightjars have been observed flying at higher altitudes than 20 metres and this has been witnessed by credible sources. See **appendix 2**(Natural England)
3. Natural England's suggested mitigation, (the collection and counting of bird corpses to a trigger point whereby mortality is sufficient to require remedial action) is unworkable. Ensuring accurate counting would require observations to be carried out through the night, every night, beneath every turbine. This is what scavengers do very efficiently, thus destroying every trace of evidence.
4. Enumerating corpses of an endangered species after they have been killed as the result of an industrial development is an appalling and unworkable approach to conservation.
5. Commercial disbenefits associated with counting protected species mortality, militate against contractor openness and honesty. Because the expenditure of the required resources to properly determine such information would also be of no advantage to the contractor (and in any case, would be unenforceable), cursory action, if any, would be the likely outcome.
6. The activity described in the 2008 survey is related to the establishment of breeding territory for Nightjars. Loss of such areas will inevitably lead to reduced opportunities to successfully raise young and presents an additional serious threat to endangered Nightjar populations.

Ospreys

There are several letters on the Purbeck District Council website referring to the presence of this country's most highly protected species, in close vicinity to the proposed wind farm (25th February 2008 & 22nd April 2008 see **appendix 3**). I have spoken to the individuals concerned and they informed me that they had avoided publicising this fact previously; such information can encourage large numbers of visitors which inevitably disturb habitats and causes annoyance to residents. This information has so far not been addressed by RSPB or other wildlife protection organisations.

Other Protected Species

There are a number of rare and threatened species which breed, migrate or forage in the area. Sand Lizards, the rarest lizard in the UK, are under additional pressure as a result of the illegal release of foreign species (which cause disease) around quarries in Purbeck. Also, Smooth Snakes, the UK's rarest native reptile whose natural range has shrunk due to massive historical loss of its heathland habitat.

Peregrines, Bitterns and Egrets will also be affected. Juveniles of all species are particularly vulnerable. As Mark Avery of the RSPB pointed out in a New Scientist article (July 2006): *"...it is large birds - eagles, vultures, storks and the like - that seem to be most vulnerable. Large birds are not that nippy, and they can struggle to get out of the way of turbines, particularly in bad weather, or the dark, or if they're tired."*

General

The continuous use of bird scarers (loud bangs), noticed by a number of residents during the summer of 2007 would certainly have affected the results of bird studies carried out during that period. This is the first time these devices have ever been used in the East Stoke area. This was pointed out at the time by myself but was not taken into consideration.

It is clear from close inspection of this planning application, that the damaging effects of wind turbines at East Stoke on birdlife and other protected species has not been fully addressed by the applicants, despite the volume of paperwork they have produced. In particular, the use of loud bird scarers has distorted the statistical data collected by RPS and assessed by statutory bodies.

It appears that RPS were able to set up their second Nightjar survey, between the last week of May and the 2nd week of June 2008, within 2 weeks of PDC's receipt of Natural England's letter requiring a further investigation (7th May 2008) and **before** RSPB's (27th May). Given the complexity of the task in hand and expertise required, RPS's speed of implementation is barely credible. Furthermore I have heard Nightjar churring during the 2nd week of May in Hethfelton Wood this year, somewhat earlier than the start date of the RPS survey.

Yours sincerely

Helen Crow
Secretary
DART (Dorset Against Rural Turbines)

NewScientist.com news service

Wind turbines make bat lungs explode

25 August 2008

Catherine Brahic

``Beware: exploding lungs`` is not a sign one would expect to see at a wind farm. But a new study suggests this is the main reason bats die in large numbers around wind turbines.

The risk that wind turbines pose to birds is well known and has dogged debates over wind energy. In fact, several studies have suggested the risk to bats is greater. In May 2007, the US National Research Council published the results of a survey of US wind farms showing that two bat species accounted for 60% of winged animals killed. Migrating birds, meanwhile, appear to steer clear of the turbines.

Why bats - who echolocate moving objects - are killed by turbines has remained a mystery until now. The research council thought the high-frequency noise from the turbines' gears and blades could be disrupting the bats' echolocation systems.

In fact, a new study shows that the moving blades cause a drop in pressure that makes the delicate lungs of bats suddenly expand, bursting the tissue's blood vessels. This is known as a barotrauma, and is well-known to scuba divers.

"While searching for bat carcasses under wind turbines, we noticed that many of the carcasses had no external injuries or no visible cause of death," says Erin Baerwald of the University of Calgary in Canada.

Internal injuries

Baerwald and colleagues collected 188 dead bats from wind farms across southern Alberta, and determined their cause of death. They found that 90% of the bats had signs of internal haemorrhaging, but only half showed any signs of direct contact with the windmill blades. Only 8% had signs of external injuries but no internal injuries.

The movement of wind-turbine blades creates a vortex of lower air pressure around the blade tips similar to the vortex at the tip of aeroplane wings. Others have suggested that this could be lethal to bats, but until now no-one had carried out necropsies to verify the theory.

Baerwald and her colleagues believe that birds do not suffer the same fate as bats - the majority of birds are killed by direct contact with the blades - because their lungs are more rigid than those of bats and therefore more resistant to sudden changes in pressure.

Bats eat nocturnal insects including agricultural pests, so if wind turbines affected their population levels, this could affect the rest of the local ecosystems. And the effects could even be international. "The species being killed are migrants," says Baerwald. *"If bats are killed in Canada that could have consequences for ecosystems as far away as Mexico."*

Natural England: Thorne and Crowle Moors Windfarm 13TH JUNE 2007

***Extract: CLOSING SUBMISSIONS ON BEHALF OF NATURAL ENGLAND**

Ecology

13. It is considered to have the potential to affect breeding Nightjars through risk of collision with the turbine blades. The Defendant rely on the minimal information available regarding Nightjar flight heights. Generally it is contended that they do not fly above a height of 25m which would not take the birds at turbine blade height. However there are within the Defendant's own evidence documented 6 traces which fit the Nightjar rule (flight speed between 3.7-9.7m/s, reflectivity between 834-1023, and flying between 22:00 – 04:00) and were within (or were approaching) blade height.

14. NE have expressed concern relating to the Appellant's data – the Nightjar rule is felt to have been based on too small a sample size and only average or typical speeds and therefore potentially discounts some Nightjars. It seems strange that having carried out a survey to determine whether or not Nightjars would be likely to fly into conflict with the turbine blades that the 6 traces that would indicate that night jars might fly into such conflict have been discounted by the appellant simply because they would not expect Nightjars to be flying at this height! As a result of this NE are not able to be **convinced** that there would be no adverse effect on the integrity of the site.

15. It is by no means certain that Nightjars do not fly above 25m. Dr Melling gave evidence that he was an expert ornithologist while not technically an expert on Nightjars due to not having carried out any primary research on the subject. He indicated that he had carried out observations on Nightjars over a period of 30 years and had observed Nightjars flying at heights over 25m. He also indicated that he had consulted Nightjar experts regarding heights of Nightjar flight and produced a number of emails to the inquiry.

16. Jenny Bright email 26/02/07 "Palmer has observed high spiralling flights in Nightjars and Rollie (pers.comm.) observed a flight to a height over 30m; presumably these birds were chasing prey. Wooton (pers.comm.) has frequently seen birds flying above mature conifer height (over 20m+) during display flights, flying from one churring spot to another, and on foraging flights."

17. Tony Cross email 23/02/07 "I have seen Nightjars moving between sites within forestry plantations at heights of ca. 100ft+. It is obviously difficult to be certain just how often this occurs but I get the impression that birds travelling between two different clearfells or going off to a more distant feeding site after dark proper often do so at about this height. I have certainly heard birds flying over and shined a spotlight up to see them at what I estimate to be 80-100ft. I wouldn't like to say how often they get over 35m but don't think it can be ruled out completely"

18. The Appellant conceded that the loss of 1 breeding pair per year would be significant – and NE would emphasise that any effect on adult breeding birds will have a more significant effect than loss of eggs or juvenile birds such that suggestions including culling foxes would not be appropriate or sufficient mitigation.

19. The defendant has carried out a collision risk assessment, however while NE concede that this model has some utility in assessing risk, it includes a number of variables which cannot be accurately determined by Nightjars [see Annex 2 TM proof]. No work specifically on Nightjar appears to have been done, so the figures used are based on comparisons with other species and NE would urge caution in reliance on such figures. Further due to severe lack of data regarding avoidance behaviour of Nightjars there can be no certainty in assertions that either Nightjars would be able to avoid the turbines or become habituated to the turbines.

20. The Appellant contends that a condition allowing for monitoring of the proposal for 9 turbines would deal with any objections on ecology grounds. NE do not contend that monitoring of the effect of 9 turbines on the Nightjar populations will not provide any data at all. However Dr Melling explained the difficulties in finding the carcasses of any Nightjars that had been hit by a “giant cricket bat” and attributing deaths to contact with the turbines rather than encounters with predators. Further bearing in mind the fact that the proposed 9 turbines are to be located in an area of little Nightjar activity it is important to consider carefully the question that needs to be answered by any further monitoring – namely whether or not the decision maker can be **convinced** that the proposed turbines will not cause adversely affect the integrity of the site [in this circumstance will not significantly harm the Nightjar population]. It is submitted that any data that arises from the assessment of the effect of 9 turbines cannot be extrapolated to give any relevant or useful information regarding the effect of a greater number of turbines in another location.

21. The directive requires that the decision maker be **convinced** that there be no adverse effect. Landelijke Vereniging tot Behoud Van de Waddenzee, Nederlandse Vereniging tot Besgerming Van Vogels v Staatssecretaris Van Landbouw, Natuurbeheer en Visserij A 99 “As regards the decision on authorisation, the second sentence of the German version of the second sentence of Art 6(3) of the habitats directive provides that such decision is to be taken only when in the light of the conclusions of the assessment of the implications for the site, the competent authorities have ascertained that it will not adversely affect the integrity of the site concerned. As the Commission correctly emphasises, the other language versions go further than a mere ‘ascertainment’ in that they require that the competent authorities establish **certainty** (my emphasis) in this request.”

22. European Commission’s Assessment of plans and projects significantly affecting Natura 2000 sites Para 2.2 “Implicit in the habitats directive is the application of the precautionary principle, which requires that the conservation objectives of Natura 2000 should prevail where there is uncertainty.”

23. In these circumstances it is submitted that there must be no reasonable doubt left in the decision maker’s mind that there would be an adverse effect. In these circumstances it is submitted that there is reasonable doubt regarding the effect of the turbines on the Nightjar population, certainly in the light of the justifiable concerns and the uncertainty due to the limited data raised by NE it is contended that while the evidence produced by the Appellant may be the best available information it is not sufficient to allow the Inspector to be **convinced** that there be no adverse effect.

13TH JUNE 2007
BRIDGET FORSTER
JENNY WIGLEY
NO 5 CHAMBERS
BIRMINGHAM BRISTOL LONDON

Appendix 2 cont.

Trigon Fisheries,
Trigon Estate,
Wareham,
Dorset,
BH20 7PD
Tel/fax 01929 552559



25th February 2008

To whom it may concern in the planning office,

We are writing to you with our concern about the proposed wind farm at Masters Pit - Puddletown Road in Wareham, Dorset.

We have lived at Trigon for the past 23 years running a Fish farm, opposite the proposed wind farm.

Having been to all the meetings with Infinergy, we are outraged at the size of each turbine and the proximity of them to our home [622 metres] as you can see from the photomontage enclosed, which is taken from our French windows on the front of the house. Also there is the issue of the efficiency of these turbines and how little power they produce! They are a blot on the landscape only working 25% of the time.

As a family we are concerned about the Wildlife and its habitat. Many protected and rare birds such as Ospreys, Bitterns and Egrets and many others visit the area throughout the year. This is a pleasure to see. On a family position we have two sons who are busy studying for exams to get on in life, and we are concerned about the level of noise the turbines make, as we have not heard a good word said about the noise level the turbines make from people who have had close proximity to them.[not being able to sleep] Of course Infinergy would say different as all the Companies make very good promises to what they can do to help these problems, but they don't have to live with them 24 hours a day.

We would be pleased to meet you, so you could see the position we are in.

Mr & Mrs J.A. Adami

Fountain Cottage
Trigon
Wareham
BH20 7PD

Dear Sirs

I wish to register my concern about the proposed Alaska Wind Farm at Masters Pit.

Although I fully understand the need for and support in general the use of alternative energy I feel that this development is in an appropriate place. The proposed site is close to my own home and there will be substantial visual intrusion by the proposed development. The proposed turbines are very high. This obviously increases their visual impact. The blades will obviously be turning and this attracts the eye making an already large intrusion on the environment even more obvious.

In addition is considerably less than 1 Km from the housing on Trigon and the other side of the river. In France research had underpinned the policy that wind farms are not built less than 1.5 Km from housing due to the potential for harm to people.

On an ecological point the river valley is used by osprey in their migration. Has this been taken into account?

The wind farm, if it goes ahead will be visible from many miles away. This blot on the landscape will be clearly visible from along the Purbecks, the various lookout places including the Studland road. Many of our visitors love this part of the country and come here regularly. Dorset relies heavily on tourism for jobs. We cannot do anything to reduce this trade when we already have to compete with cheaper holiday abroad.

I also have concerns that this planning submission has been made before the initial 2 year data collection from the already erected mast has been collected or analysed. Surely this data should be evaluated before any further work can proceed. This wind farm is small thus producing relatively little energy but will have great visual, potential medical and financial deterrent to tourism. The full cost benefit analysis has to be taken into account before any further planning should be granted. If this is not the case then why do the research?

Yours sincerely _____

D E Beaumont (Mrs)

