

Dear Sir

A new website associated with www.grunweb.org.uk has been published at <http://myweb.tiscali.co.uk/aferrand> also a new finance initiative for helping the development of Renewable Energy Technologies has recently been announced on www.shellspringboard.org Further the CEO of General Electric USA in a recent BBC Interview stated that Renewable Energy Technologies would form a major item in his company's future development and manufacturing operations.

best regards

Andrew Stobart

I think, in view of the present concern about Avian 'flue, the following notes should also be considered. They are the reason I came into "environmental matters" 35 years ago, [as a chemical engineer], I did not learn about Global Warming until 1986 !! The matter is touched on in <http://myweb.tiscali.co.uk/aferrand> on page 2

best regards

Andrew Stobart, Secretary, Grünhaus Project

NOTES ON POSSIBLE LINK BETWEEN GLOBAL WARMING & AVIAN 'FLU

In the late 1980's I was in touch with the Carbon Dioxide Division of the US Dept of Energy, concerning the Bethesda Conference in June 1980 on The Effect of Carbon Dioxide on Mammalian Organisms. A subsequent letter down played the physiological effects discussed at the conference. BUT:

In a telephone conversation with the Chairman of the Bethesda Conference, a Professor at New York State University, it became clear that no attention at all had been paid to any possible effects of rising CO₂ levels on Virus Activity. Thus putting a different complexion on the possible importance of rising CO₂ levels than that suggested by the US Dept. of Energy's letter. Which also did not refer to possible viral activity problems.

This may be very important, as CO₂ is an acid gas and virus' prefer more acid conditions. This has been confirmed recently about the Foot and Mouth Virus, is well documented for the Influenza Virus, and may well also apply to the AIDS, EBOLA and SARS Virus'. This form of "life" passes through many "generations" in a short time scale, and is therefore much more likely to "mutate" under the stimulus of more "benign" (acid) conditions. Than Mankind, or any other air breathing species, with much longer "breeding cycles".

Increasing CO₂ in the atmosphere might cause changes in breathing rates [it is used in resuscitation apparatus as a breathing stimulant], and blood stream pH by lowering this, making it "more acid" ? The latter would in theory encourage viral activity. Especially in warmer conditions. However as far as can be determined the foregoing was not a subject at the 1998 International Conference on Emerging Infectious Diseases at Atlanta, USA. HIV and Climate Change were subjects for discussion. A number of individuals and organisations listed in the programme and abstracts would be worth consulting. And concerns have been expressed at the Exeter conference recently on the increased acidification of the Oceans, with harmful effects to Marine Life.

It is suggested therefore that the biological plague of Mankind has both a physical and a physiological problem with rising CO₂ levels. Given that Nature made mammalian life possible by using leguminous life to reduce the CO₂ content of the atmosphere. Followed by "burying" it. The reverse could now be starting with that "locked up" Carbon being released by the life form its reduction made possible. Following an old saying that plagues contain the seeds of their own destruction.

The reported plague affecting seals in the North Sea could be an example of the above in the non human world ?

And given the intense use of coal in China, a "CO₂ induced plague" is more likely to start there ? The current problems with Avian 'flu there are being treated with Amantadine [see

reference 11 below], which is causing concern in case the "avian" strain if/when it transfers to humans may become resistant to this drug. This is probably unlikely, as the drug's effect is a purely physical one of pH increase [acid reduction]. However if human and other blood streams are increasingly "acidified", then the pH balance could be altered.

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- 12/. Super Bugs Dr Pete Moore, Trinity College, Bristol, published by Carlton Books Limited, London, 2001, ISBN 1 84222 179 5 (Possible effects of increased carbon Dioxide not covered)