

New Study Finds Corn Ethanol Production Has Little Impact On Land Use

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There has been a great deal of activity on evaluating ethanol and its carbon footprint. Several groups have been trying to say that corn ethanol is an environmental problem since it encourages more people to plant corn. For those interested, a detailed study of everything involved in supplying corn to an ethanol plant has just been finished.

Steffen Mueller, University of Illinois, and Ken Copenhaver, Institute of Technology Development, have published a detailed study of the corn supply area around the Illinois River Energy ethanol plant. This study looked at multiple years of land use, corn yields, tillage practices, fertility rates, amount of fuel and equipment used, and changes in land use. The purpose of the study was to evaluate the carbon footprint and land use changes. Read the study at www.erc.uic.edu/PDF/mueller/20081211.pdf

One finding from the study showed that the current government models that predict land use were grossly in error. In fact, actual ground truthing showed many problems in the prediction and monitoring of land use. The computer

model had problems differentiating roadsides, ditch banks and mowed farmsteads from crop fields. The result is greatly flawed land use ratings. Contrary to the negative conclusions alluded to by environmental groups and the media, the results showed little land use impact over the years of the study. The only significant land use change appeared to be farmland converted to subdivisions and other urban use.

Furthermore, the study would suggest that the efficiency of corn production in this area is so good that the ethanol produced would qualify as an advanced biofuel because of the low carbon footprint. This finding is significant because corn ethanol can compete with cellulosic ethanol guidelines. As the efficiency of ethanol production improves, along with the increase in conservation tillage practices, the carbon footprint from ethanol plants will continue to decrease, making corn ethanol production more "green" or environmentally friendly.

Now, some environmental groups are focusing on nitrous oxide. These groups seem to think it is a significant "greenhouse gas" and that farm use of nitrogen is a problem. It looks like researchers will have yet another issue to tackle. Δ

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