Siting CAFOs in Wisconsin - Public Perception of Impacts
David S. Liebl, July 2001

An increasing number of Wisconsin livestock operations are meeting the 1,000 animal unit definition of a Concentrated Animal Feeding Operations (CAFO). The impact of these facilities upon the local economy, environment and community can differ both in kind and in scale from that from smaller agricultural operations.

To help local officials assess the potential effects of CAFOs on their communities, and give forethought to how best to respond to proposals to site them, UW-Cooperative Extension held five workshops throughout the state during February and March of 2001 for 190 township and county officials (see agenda Pg. 7).

Method
During each workshop (What Issues Emerge When Discussing Expanding and Modernizing Facilities) participants were asked to express their perceptions of the economic, environmental and societal factors associated with siting CAFOs. To facilitate the process of eliciting the perceptions of the participants, while keeping the discussion grounded in the local situation, a graphical representation was used to organize the participants comments.

A typical Wisconsin CAFO (dairy) was represented as a system comprising inputs → processes → outputs, with each aspect of the system located in relation to both the farm and the community (see diagram Pg. 8). Three transparent overlays were used in turn to record participant perceptions of potential impacts upon the economy, environment, and society. Participants were asked whether the impact would have greatest effect within the boundary of the farm, the community, or outside the community. Each comment was then recorded on the overlay appropriately, and at the end of the exercise all three overlays were combined to reinforce the varied and complex nature of CAFO siting.

Outcome
Over the course of the five workshops, local officials expressed a wide range of viewpoints on CAFO siting. Most of the local officials were both actively involved in production agriculture and community opinion makers. As such, their viewpoints can be construed as fairly representing those of the rural community in general. Those viewpoints have been organized below to provided educators, local officials and others with a clearer view of how CAFOs are perceived in rural Wisconsin.
Results
The comments of the participants have been organized into three broad categories: Economic Impacts, Environmental Impacts and Societal Impacts. Within each category the comments are further organized under the headings: Agriculture, Communities, Individuals and Workforce to represent which part of the community would be most effected by the impact.

It should be kept in mind that the participant’s comments do not necessarily represent either consensus opinion or actual fact, but can be better characterized as the hopes, fears, prejudices and opinions currently held by rural communities. As such they are a starting point for those who would like a better understanding of the reasons for controversy surrounding CAFO siting.

**Economic Impacts**

**Agriculture:**

- **Outside vs. local purchases of stock, feed, equipment & supplies**
  Opinions differed as to whether large feeding operations buy locally, or look outside the community for bargain prices. In the case of starter stock and feed, the capacity of the local farm economy to serve the CAFO is a major factor.

- **New dollars available to leverage additional development**
  The influx of capital and income to the local economy would “trickle down” to provide additional Ag development opportunities.

- **Increased local food production**
  Stimulus of the local Ag economy would boost local food production.

- **Local markets for feed and produce**
  Siting CAFOs can lead to the establishment or growth of local wholesale and retail marketing.

- **Increased rents to/by local farmers**
  Demand for land for manure spreading brings income to farms that lease to CAFOS, at the same time this increases costs to farms that need to rent land.

- **Increased income to surrounding farms/dairies, infrastructure**
  CAFOs that rely on the local Ag infrastructure, and purchase feed, stock, and supplies locally could support an otherwise ailing Ag economy.
Communities:

- **Outside capital investment, with return on investment leaving community**
  Corporations coming into the community to establish CAFOs would not use local capital, or reinvest profits locally.

- **New roads needed, increased road maintenance and traffic control, traffic safety and mess**
  The impact of concentrated agricultural operations on local roadways was seen as disproportionate.

- **New low-wage job creation**
  While additional jobs are beneficial, the low wages associated with CAFOs bring in an undesirable labor force.

- **Competition for labor**
  Existing farms will find it difficult to compete with CAFOs in a tight labor market.

- **New support services for outside labor force**
  Workers settling into the community to work on CAFOs bring with them social and economic needs not shared by established community members.

- **New labor spends wages in and out of community**
  While some thought that new labor would spend wages locally, others felt that much of the new income would go to supporting family members elsewhere.

- **New housing requirements**
  The existing housing market is either insufficient, or too expensive for new workers.

- **Loss of local farms**
  As agriculture expands and farmers retire, farmsteads are being converted into tillable land or residential development.

- **Raise or lower property taxes?**
  There was balanced disagreement on whether the local tax base would suffer, improve or remain unchanged.

- **Ag/residential land values could rise or fall**
  Ag land values can fluctuate with demand for acreage, while rural residential values could fall if proximity to CAFOs is seen as undesirable.

- **Cost of deregulated energy**
  As large electricity users, CAFOs can purchase energy outside the community, disrupting the local price structure.
• **Tourism dollars and the threat to water quality**
  Communities that rely on their reputation as a “recreation destination” could suffer because of a spoiled natural resource.

**Individuals:**
• **Surrounding properties may need to lower wells**
  Responding to depleted or contaminated groundwater.

• **Lower resale value of land**
  Farmers hoping to use income from conversion to rural residential for retirement, may be disappointed.

• **More money to local farmers**
  Increased income from manure rents, feed and starter stock.

**Environmental Impacts**

**Agriculture:**
• **Nutrient depletion in fields supplying feed but not receiving manure creates a nutrient imbalance**
  This complex scenario is based on the assumption that CAFOs will ship in feed from a long distance, but spread the manure locally rather than apply it to the fields where the feed was grown.

• **Impacts of intensive cropping**
  Expansion of tillable acreage will lead to increased soil erosion.

• **Ag chemical spills**
  Concentrated farming operations increase the risk of large spills.

• **Dead animal disposal**
  Poultry farms in particular are seen as a problem.

• **Nutrient and pest management programs**
  Each CAFO should have a NPM program that will improve the performance of the operation.

• **Farmers learn to practice stewardship**
  The challenges of managing a CAFO will raise farmer’s awareness about environmental issues.
Communities:

- **Threat of ground/surface water contamination**
  CAFOs can create a constant concern about water quality within the community.

- **Point discharge from manure storage**
  Spills from large manure pits and tanks represent a new threat to the local environment.

- **Excessive nutrients in fields, runoff, groundwater**
  Pressure to dispose of large quantities of manure on limited acreage can lead to poor nutrient management practices.

- **Land applied industrial waste**
  CAFOs are more likely to accept disposal of industrial byproducts on their fields.

- **Groundwater depletion**
  High capacity wells for livestock and irrigation threaten groundwater supplies.

Individuals:

- **Offsite odor, noise, dust, lighting, spills, pests, pathogens**
  CAFOs have the capacity to impose a variety of unwanted impacts on neighboring farms and rural residences.

- **Night work disturbs neighbors**
  Intensive agriculture related to CAFOs can lead to field work taking place during non-traditional hours.

Societal Impacts

Agriculture:

- **Will CAFOs support agriculture as a way of life?**
  Wisconsin’s rural society is built on a large number of family farms. Will consolidation lead to the collapse of that society?

- **Impact on Ag infrastructure**
  The demise of small farms, combined with purchase of equipment and supplies from the lowest bidder will lead to the collapse of the rural infrastructure, making it impossible for remaining small farms to survive.

- **Farmsteads become more obvious**
  Giant livestock sheds, manure storage tanks and pervasive manure spreading will blight the countryside.
Communities:

• **Reduced local food security**
  Concentrated farming practices will lead to dependence for food from outside the community.

• **Fewer people farming**
  With fewer people farming what will our rural communities be like?

• **New social services available**
  Low wage labor will require services that can also benefit the rest of the community.

• **Rural-Residential ghettos and development setbacks**
  Negative environmental impacts from CAFOs will force the concentration of rural housing development.

• **Right to farm conflicts**
  Disputes between rural-residential & CAFOs about odors, etc. will spillover into the rest of community life.

• **Change in the rural character**
  Our rural communities are already changing, CAFOs accelerate that change.

• **Change in social balance**
  New workers entering the community, combined with the concentration of wealth on large farms, will upset the local order.

• **Rural flight**
  People will move to cities to find work, and to escape declining rural communities.

Workforce:

• **New workforce from outside the community**
  Unwanted racial and cultural diversity will disrupt rural communities.

• **Increased need for housing/schools/ESL**
  Low wage workers will create new social burdens on the community.

• **More 911/EMS services**
  More accidents and crime from new community members.

• **Increased community conflict**
  Youth and adults in conflict with outsiders and each other as the community changes and declines.
• Dependence on non-community labor
  Loss of local self reliance.

How Local Officials Can Plan for Expanding and Modernizing Animal Agriculture Facilities in NE Wisconsin: Issues, Opportunities & Strategies
February - March 2001

AGENDA
8:45 Registration

9:15 Introduction to the Challenge
  Local Extension Educator

9:25 The Structure of Ag in Wisconsin
  Doug Jackson-Smith, Program on Agricultural Technology Studies, UW-Madison

10:00 What Issues Emerge When Discussing Expanding and Modernizing Facilities
  David S. Liebl, Solid Hazardous Waste Education Center, UW-Extension

10:30 Break

10:45 Specific CAFO Issues:
  – Manure, Water and Pathogens
    Leslie Cooperband, Department of Soil Science, UW-Madison
  – Air Quality
    Bill Bland, Department of Soil Science, UW-Madison
  – Social and Economic Questions
    Gerry Campbell, Center for Community Economic Development, UW-Madison

12:00 Lunch

1:00 Options for Local Government
  Merritt Bussiere, Land Use Education Specialist, UW-Extension

1:45 Break

2:00 CAFO Case Studies:
  – Evolution of Green County Rules
    Mark Mayer, Agriculture Agent, Green County
  – Insights From the Town of Porter
    Dave S. Liebl & Gerry Campbell
  – Local Host Presentation/Case Study
The Author:

David S. Liebl is a Faculty Associate in the College of Engineering, UW-Madison; and a Waste Reduction and Management Specialist in the Solid and Hazardous Waste Education Center UW-Extension. David works closely with communities, industry and government to provide training, educational programming, policy review and technical assistance for pollution prevention and waste reduction.