Livestock Recommendations -- 1998-99

FINAL RECOMMENDATIONS
OF THE NOSB ON LIVESTOCK ISSUE PAPERS # 1 and # 2

1. Comments to USDA concerning antibiotic use in animals:

The NOSB Livestock Committee reaffirms its prior recommendations concerning the use of antibiotics in organic livestock production, including the NOSB clarification recommended at its Ontario, CA meeting. Taken together these recommendations stipulate that once a certified animal is treated with an antibiotic for any reason, none of its products can again be sold as organic. They also clearly state that a producer is required to use an antibiotic to restore an animal to health in the event that other "organic" health maintenance management fail to maintain the animal's health. Failure to use all means available to restore an animal to health, even if such therapies disqualify the animal for organic production,, may result in decertification.

We would like to note that no NOSB recommendation yet exists with regard to the use of antibiotics in bee agriculture and aquaculture since our draft recommendations in these two areas have not yet completed their public review process. We hope to have final recommendations on these two categories of livestock production within the next several months.

2. Comments to USDA concerning the use of synthetic parasiticides in organic livestock production:

The NOSB Livestock Committee reaffirms its recommendation adopted at the Sante Fe, NM meeting (June 4, 1994) [including the addendum] concerning the use of synthetic parasiticides in organic livestock production. That recommendation prohibits the "regular, planned or periodic use of parasiticides" and allows them as a "last resort" only in accordance with strict guidelines (see addendum). The recommendation prohibits the use of parasiticides in "slaughter stock that is labeled or sold as organically produced." Parasiticides may be used on a restricted basis in breeder stock and dairy stock, again under strict guidelines noted in the addendum.

The recommendation does provide for "species specific" exemptions, including "sheep, goats, and swine". Provisions for such species specific exemptions are to "be set forth in a separate document" (yet to be developed).

3. Comments to USDA concerning Livestock confinement.

The NOSB Livestock Committee reaffirms its previous recommendations with regard to livestock confinement including its clarification recommended at the Ontario, CA meeting. Some minor addenda have been added to those recommendations for further clarification, namely the requirement of pasture for ruminant animals (see rationale below).

Those recommendations stipulate that certified organic livestock farms shall be based on a system of agriculture that incorporates access to the outdoors, direct sunlight and managed pasture for ruminant animals. Any exceptions to this requirement must be detailed in the farm plan. The only exceptions allowed are temporary confinement for:

1. inclement weather,

2. conditions where the health, safety or well-being of the animal could be jeopardized,

3. the protection of plant, soil or water quality,

4. when pasture is not available to animals for any of the above reasons, dry hay must be made available.

5. These exceptions do not usurp or nullify any local, state or Federal regulations. It is the responsibility of the certified operation to be familiar with and in compliance with such laws and regulations.

[Rationale for requiring managed pasture for ruminant animals:]

Recent research has delineated the advantages of pasturing ruminant animals. See, for example: Farm Bureau News, Vol. 44, No. 5 (May, 1998) which states the Conjugated Linoleic Acid inhibits growth of some cancer.

Report from 87th AOCS Annual Meeting which delineates some of the dietary effects of Conjugated Linoleic Acid contents in cow's milk. Iowa State University of Science and Technology, Cooperative Extension Service, reports on the economic advantages of intensive grazing of ruminant animals.

Economics of grass-based dairying in Missouri by Ken Bailey and Stacey Hamilton (Extension Associate Professor and Regional Extension Dairy Specialist at the University of Missouri-Columbia) spell out the economic advantages of grass-based dairies.

4. Additional Clarification

The NOSB Livestock Committee would also like to encourage USDA to add an additional clarification to the Rule concerning livestock production as it relates to the overall issue of nutrient cycling in organic agriculture systems. We recognize that the following recommendation needs to be crafted into regulatory language that constitutes a formal recommendation.

The following concept/recommendation has been approved in principle by the full board. The NOSB looks forward to working with the National Organic Program staff in crafting language to address this important issue.

NUTRIENT RECYCLING IN ORGANIC LIVESTOCK PRODUCTION SYSTEMS

Producers of certified organic livestock shall be required to detail nutrient recycling plans in their overall farm plan. The plan must clearly describe how nutrient cycling is achieved on the farm. Such plans may encompass cooperation among several organic farms to achieve nutrient cycling within a watershed. It may include nutrient cycling from other certified organic enterprises as long as such nutrients are properly composted and/or meet the other requirements of NOSB recommendations.

While the NOSB recognizes that comprehensive nutrient cycling may not be practical give today's structure of agriculture, it is an essential goal of organic agriculture and every producer must demonstrate progress toward that goal in his/her farm plan.

Nutrient Cycling vs Nutrient Flow

Nutrient cycling is central to the concept of organic agriculture. It is a concept borrowed from nature. In nature there is no waste, everything excreted in the system becomes food for something else in the system. Other than solar energy there are very few inputs into the system. Organic agriculture attempts to mirror this ecosystem function. This is the primary characteristic that distinguishes organic agriculture from industrial agriculture.

Modern industrial agriculture is based on the concept of nutrient flow. Inputs are brought into the system to replace the outputs taken out of the system. Ultimately it makes little difference, as Miguel Altieri and others have argued, whether the inputs are synthetic or "natural". If one manages a farm based on input/output nutrient flow, rather than nutrient cycling one has an industrial, rather than an agroecological system.

Industrial systems are not only inconsistent with organic principles but they are unsustainable in the long run. Modern industrial agriculture can only be sustained because of the availability of cheap energy which became available with the first American oil well in Titusville, PA in 1859. There is compelling evidence that the century-long era of cheap oil will come to an end within the next decade. (See Scientific American, March, 1998)

One of the principle reasons that it is so difficult for us to imagine an agriculture system that is based entirely on nutrient cycling is that we have broken fundamental ecologies during the past two centuries. (For a graphic description of modern cycling disruptions see the attached graph by Dr. Fred Magdoff).

But the difficulties imposed by these cycling disruptions should not dissuade us from adhering to the principle. If the principle distinction between a "factory" system ad an "ecological" system is a nutrient flow (input/output) system as distinguished from a nutrient recycling system then organic animal husbandry has to be designed to reinstate nutrient cycling.

This doesn't necessarily mean that every organic farm has to have a well-balance, mixed crop/livestock system, although such systems clearly make nutrient cycling easier. Since most nutrients fed to animals go right through the animal, fewer nutrients leave the farm then if all the crops are sold.

While the reinstatement of nutrient cycling may not require that every farm have both crops and livestock, it does mean that every organic farm has to have a farm plan that describes how nutrient cycling is achieved on that farm. Such a farm plan may be designed by several farms cooperating to achieve nutrient cycling in the watershed in which the farms exist. It might be a farm plan that demonstrates how organic vegetables grown in a California valley are hauled to a local organic restaurant, and the restaurant garbage is taken back to the farm, composted and returned to the fields. Although some off-farm flows of nutrients are part of all types of agriculture, where the nutrients cannot practically be returned, special care must be taken to encourage nutrient cycling from other enterprises on the farm and to return crop residues back to fields.

Nutrient cycling plans should also recognize that while green manure cover crops and good crop residue management can compensate, to some extent, for nutrient losses from fields, they do not help cycling.

Nutrient cycling plans will, of course, limit the distance that nutrients can be transported, and it will tend to limit the concentration of animals in a given ecological neighborhood. Such limits will be self-imposed by the need to return "waste" nutrients to the fields from which "food" nutrients were taken. Such systems may seem impossible to create given our broken ecologies, but if we want organic agriculture to be "organic" we have to insist that this is the goal and every producer should be required to demonstrate progress toward that goal in his/her farm plan.

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The NOSB is indebted to Dr. Fred Magdoff, Soil Scientist at the University of Vermont for his helpful distinction between nutrient recycling and nutrient flow.