

**National Organic Standards Board
Compliance, Accreditation and Certification**

**Discussion Document:
Implementation of Biodiversity Conservation in Organic Agriculture Systems**

July 23, 2012

I. INTRODUCTION:

The purpose of this Discussion Document is to review progress in implementing the Board's recommendations on biodiversity conservation, made on May 6, 2009, and to identify other aspects of implementation of the NOP biodiversity standards that may require attention.

Another purpose of this document is to draw attention to the value of biodiversity to organic production systems and the importance of implementing conservation practices.

The value of biodiversity for healthy agriculture and for society at large is recognized in the NOP rule in several places. In response, the NOSB issued Guidance statements in 2004, 2005 and as indicated above, again in 2009.

It is worth stating here what is encompassed in the term "biodiversity." Biological diversity is the diversity of life existing at three levels: genetic, species and ecosystem diversity. Therefore, the concept of biological diversity (biodiversity) includes all of the following:

- Variety in all forms of life, from bacteria and fungi to grasses, ferns, trees, insects, and mammals;
- The diversity found at all levels of organization, from genetic differences between individuals and populations (groups of related individuals) to the types of natural communities (groups of interacting species) found in a particular area; and
- The full range of natural processes upon which life depends, such as nutrient cycling, carbon and nitrogen fixation, predation, symbiosis and natural succession.

II. BACKGROUND:

The *Principles of Organic Farming*, as adopted by the NOSB on Oct 12, 2001, expresses the values and goals that link organic farming with protection of biodiversity. Many organic production systems recognize the value of biodiversity to a farm's long term sustainability as well as an understanding that agriculture systems function within, and interact with, the larger ecosystem.

A number of individuals and organizations interested in biodiversity conservation in organic agriculture have worked to advance these ideas. In particular, the Wild Farm Alliance (WFA) has published guides about biodiversity conservation for farmers and for certifiers, has produced a document on Biodiversity Compliance Assessment, and has contributed many valuable suggestions to the NOSB and NOP on ways to advance biodiversity conservation. The International Organic Inspectors Association (IOIA) has also played a very important role in filling the need for trainings on biodiversity for inspectors using the organization's own materials as well as the WFA guides. ATTRA has developed templates for Organic System Plans that include a section on biodiversity. This provides a mechanism for operators to document the practices they use to support biodiversity conservation and to convey that information to their certification body.

On April 29, 2004, the NOSB adopted a guidance document "*Compatibility with a System of Sustainable Agriculture and Consistency with Organic Farming and Handling*," which included the following factor to be considered in the process of materials review: "*L) Does use of the substance have a positive impact on biodiversity?*"

The next year (August 16, 2005) the NOSB adopted an amendment to the OSP template which added a criterion on biodiversity to the form.

The discussion of biodiversity at the May 2008 NOSB meeting resulted in a plan for joint review of implementation of biodiversity standards by the CAC and Crops Committee and, as necessary, for the Joint Committee to prepare further guidance for Board consideration. The analysis by the Joint Committee determined that the biodiversity conservation requirements were not being implemented fully or consistently.

The Joint Committee produced a discussion paper in 2009, titled "*Implementation of Biodiversity Conservation in Organic Agriculture Systems*." The document received more than 60 written and oral comments—most strongly supported the need to improve and increase implementation of biodiversity conservation in organic agriculture. Many commentors expressed a sense of urgency for timely action.

Based on the findings of the Joint Committee, on May 6, 2009, NOSB sent a recommendation to NOP that addressed improvements in the implementation of biodiversity standards through two different vehicles:

- 1) Material Review by the NOSB—Add biodiversity considerations to the check list used for the review of materials; and

- 2) Development and implementation of the Organic System Plan—this included specific recommendations for actions to be taken by a) certified grower/producer, b) inspectors, c) certifiers, and d) NOP.

III. RELEVANT AREAS IN THE RULE:

1. The Preamble

The Preamble to the Rule (Federal Register/Vol. 65, 246/Thursday, December 21, 2000/pg. 80563) (4) CONSERVATION of BIODIVERSITY states in part:

“We agree with commenters and have amended the definition of organic production to require that a producer must conserve biodiversity on his or her operation. The use of “conserve” establishes that the producer must initiate practices to support biodiversity and avoid, to the extent practicable any activities that would diminish it. Compliance with the requirement to conserve biodiversity requires that a producer incorporate practices in his or her organic system plans that are beneficial to biodiversity on his or her operation.”

2. NOP Rule passages relevant to Biodiversity Conservation are as follows: §205.2 Terms defined:

Crop Rotation. Perennial cropping systems employ means such as alley cropping, intercropping and hedgerows to introduce biological diversity in lieu of crop rotation.

Natural Resources of the Operation. The physical, hydrological, and biological features of a production operation, including soil, water, wetlands, woodlands, and wildlife.

Organic Production. A production system that is managed in accordance with the Act and regulations in this part to respond to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity.

Organic System Plan. A plan of management of an organic production or handling operation that has.....

Pasture. Land used for livestock grazing that is managed to provide feed value and maintain or improve soil, water, and vegetative resources.

Soil and Water Quality. Observable indicators of the physical, chemical, or biological condition of soil and water, including the presence of environmental contaminants.

§205.200 General. Production practices....must maintain or improve the natural resources of the operation including soil and water quality.

3. Other sections of the Rule related to Biodiversity

- §205.203 Soil fertility
- §205.205 Crop rotation
- §205.206 Crop pest, weed, and disease management practice
- §205.707 Wild-crop harvesting
- §205.237 Livestock feed
- §205.238 Livestock health care
- §205.239 Livestock living conditions

IV. PROGRESS and DISCUSSION:

This section of this Discussion Document presents progress reports and discussions that are based on an analysis of the points in the NOSB's 2009 Recommendation, "*Implementation of Biodiversity Conservation in Organic Agriculture Systems*":

1) **The Materials Review Process:**

Recommendation from 2009: Add biodiversity considerations to the checklist used for review of materials as shown below for specific categories and lines:

Category 1. Adverse impacts on humans and the environment?

Line 3. Is the substance harmful to the environment and BIODIVERSITY?

Category 3. Is the substance compatible with organic production practices?

Line 2. Is the substance consistent with organic farming and handling and BIODIVERSITY.

Progress Report & Discussion Points: These changes in the Materials Review Checklist were made and approved for addition to the PPM on November 5, 2009.

To assist in material review: Technical reports are frequently requested by the NOSB. Evaluation question 8 now directs the TR contractor to "describe any effects of the petitioned substance on biological and or chemical interactions in the agro-ecosystem, including physiological effects on soil organisms (including the salt index and solubility of the soil), crops, and livestock (7 USC 6518 (m)(5))."The following additional requirement to question 8 is being added:" In addition the response should describe the potential or actual impacts of the substances upon endangered species, populations, viability or reproduction of non-target organisms and the potential for measurable reductions in genetic, species of ecosystem biodiversity, if possible."

With regard to materials review, the following question comes to mind:

QUESTION: The check list question now asks, “Is the substance harmful to biodiversity?” The NOSB Guidance Document adopted 4/29/2004 asks another question, “Does use of the substance have a positive impact on biodiversity?” Although both of these questions address biodiversity, they do so from different reference points, creating harm vs. having a positive impact. ***Should the questions on used on the checklist for materials review focus on asking whether a material has a positive impact on biodiversity, in addition to the question about harm?***

2) Development and Implementation of the Organic System Plan:

NOSB recommended that the following actions be taken with regard to the OSP:

a) Certified Grower/ Producer - Recommendation from 2009:

Producers shall incorporate biodiversity conservation into their OSPs. The questions on ATTRA's OSP templates (Pages 7&8 on the farm template) or guidance tools such as those developed by WFA, provide detailed information and direction. The producer shall be ever vigilant to biodiversity problems and conservation opportunities. Conversion of native habitat to crop production has consequences to biodiversity that must be considered and the producer should discuss such planned conversion with his or her certifier before action is taken.

Progress Report: In the spring of 2011, the NOP published an updated version of the natural resources section of the OSP, with assistance from ATTRA.

On May 12, 2012, after extensive work, the Wild Farm Alliance and 39 signatories, submitted a Biodiversity Conservation Document to the NOP for inclusion into the National Organic Program Handbook. The Guidance is intended to assist producers and Certifiers understand how to comply with requirements related to the conservation of biodiversity in crops, livestock and handling operations.

The NOP is reviewing the document submitted by WFA for possible use as guidance document.

The NOSB 2009 guidance document raises the issue of conversion of native lands to organic production. In the Introduction it states “a particularly controversial issue is how to deal with conversion of native forests or grasslands for organic crop cultivation”. The document then under 2 (a) Certifier Grower/ Producer states that “conversion of native habitat to crop production has consequences to biodiversity that must be considered and the

producer should discuss such planned conversion with his or her Certifier before action is taken”.

The WFA proposed Guidance presented to the NOP addresses conversion of “high conservation value land” as shown in this italicized text:

If an operation is considering converting high conservation value land, the benefits of more farmable acreage is weighed against the loss of habitat functions that may provide pollinator and predatory insect food and cover, and water quality protection to the farm. If the decision to proceed in converting the land is made, the following steps are taken depending on certification status:

i) When the land is certified organic:

- (a) The operator submits for approval to the ACA a revision to the Organic System Plan (OSP) describing the proposed actions prior to implementing any conversion. This eliminates the possibility of loss of certification. The request includes photos and written evidence from a conservation organization such as USDA NRCS using their two pages Environmental Evaluation Worksheet CPA 52 which documents any adverse effects that will occur to threatened, endangered, and rare species, or causes soil erosion, degradation of water quality and other biological and environmental effects. If any adverse affects are noted, mitigation measures are implemented elsewhere on the property or in the region to compensate for loss to biodiversity. An agreement between the operator and the ACA will be made where the ACA monitors the mitigation measures until success is achieved, or more mitigation efforts are required.*

ii) When none of the land to be converted is certified organic:

- (a) The operator is treated as above, if the operator first creates an OSP describing the proposed actions prior to conversion and seeks approval by the ACA.*
- (b) If the operator does not first seek approval by the ACA, she/he submits photos and written evidence of any past adverse effects caused by the conversion, as mentioned above. An agreement between the operator and the ACA will be made where the ACA possibly requires mitigation measures that are monitored until success is achieved or more mitigation efforts are required.*

The NOSB is interested in the community's response to this recommended guidance and other thoughts on this important topic.

The primary tool for ensuring biodiversity conservation compliance is education and the Guidance could be an important part of that.

Recent efforts by NCRS and NCAT projects are assisting farmers build a bridge with NOP resulting in improved conservation compliance. These efforts must continue and be strengthened.

b) Inspectors - Recommendation from 2009:

Inspectors shall receive training in biological diversity conservation such as is currently given by IOIA and include methods for verification of NOP biodiversity standards in all inspections of organic farms using appropriate checklists and other tools. Other issues not explored by biodiversity verification methods, but that should be evaluated by inspectors include:

- Sustainable practices for incorporating new land into agriculture
- Practices which enhance soil biodiversity

Progress Report: IOIA now emphasizes biodiversity conservation in its inspector training and has developed webinar training with a biodiversity focus.

Comments from individual inspectors support the need more training. Education and training about biodiversity is needed at all levels of the organic food production process before the full capacity of improved biodiversity will be realized. Stated by one inspector “from the farmer to the shopper, the value of improved biodiversity must be better appreciated and implemented. The opportunities are huge. We’ve only begun the process.”

c) Certifiers - Recommendation from 2009:

Certifiers shall adopt an OSP and other certification documents that address the NOP biodiversity requirements. Certifiers may devise a format and content for these documents that is suitable to their own certification system.

Certifiers shall require all production operations to address biodiversity conservation in their OSPs. Conversion of native habitat to crop production has important consequences to biodiversity and normally should be discouraged.

Certifiers shall document the degree to which producers are addressing biodiversity when performing inspections and when making certification decision. Only severe violations would lead to suspension or revocation of a producer’s certification, other violations would be cited as minor non-compliances by the certifiers and corrected by the operator within a specified timeframe.

Progress Report: Information received indicates that more certifiers are addressing biodiversity requirements in a systematic way. However, it

appears that to achieve consistently full implementation of requirements, more guidance from the NOP is needed.

An issue that has been reported is that some certifiers do not want inspectors to address §205.200 subject matter in inspection of handling operations. This needs to be clarified.

A suggestion for addressing “new land” issue is made in the above statement on Certified Grower/Producer.

The CACS would like to hear from Certifiers on what they have done since the 2009 recommendations were issued: what works and what doesn't. Also CACS what like to learn from Certifiers (and Inspectors) what biodiversity conservation issues they have encountered with handling operations.

d) National Organic Program - Recommendation from 2009:

The NOP shall emphasize biodiversity in its training of NOP-accredited certification bodies. Trainings shall include such topics as indicators of compliance with biodiversity standards, differentiating major and minor non-compliances for violations of biodiversity standards, evaluating corrective actions taken to correct minor violations. The focus should be on education, teaching practices and the benefits of conservation. The NOP shall also revise the checklist used to audit certifiers so that it includes questions about NOP's biodiversity standards in every audit.

Progress Report: The NOP is addressing the 2009 recommendations and has started to make changes in the audit check list.

Wild Farm Alliance has provided the NOP suggestions for changes in the NOP's audit checklist to address biodiversity standards in every audit of ACAs.

V. REQUEST FROM THE CAC Subcommittee:

The CAC Subcommittee would appreciate receiving answers to the questions posed above as well as other suggestions on methods for strengthening biodiversity conservation within organic production systems for all scopes of accreditation, particularly handling.

Sub Committee Vote:

Moved: Richardson Second: Stone

Yes- 8 No- 0 Abstain- 0 Recusal- 0 Absent- 0