National Organic Standards Board

JOINT CROPS & COMPLIANCE, ACCREDITATION, AND CERTIFICATION COMMITTEE

Implementation of Biodiversity Conservation in Organic Agriculture Systems

I. INTRODUCTION:

The organic community largely supports biodiversity conservation being incorporated into organic systems, but some have issues with increased paper work, requirements that do not produce real on the ground results and the added costs. A particularly controversial issue is how to deal with conversion of native forests or grasslands for organic crop cultivation.

The goal of this "guidance" is to improve and increase biodiversity conservation implementation in organic agriculture systems as directed in previous NOSB Guidance statements. This is to be achieved through increased education and information for farmers, inspectors and certifiers; uniformity of inspections and certification and NOP requirements during accreditation and audit follow through.

The Crops and Compliance, Accreditation and Certification committees appreciate feedback from the public and members of the organic community.

II. MAIN POINTS OF A POSSIBLE RECOMMENDATION:

Biodiversity conservation implementation in the program may occur through two different routes, which are outlined for discussion:

1) NOSB Role:
Add biodiversity considerations to the materials checklist for the review of petitioned materials for addition to the National List.

2) Organic System Plan development and implementation requiring:

> **a) Certified Grower/Producer Needs and Role:**
> Information and training for producers on a continual basis. Producers should incorporate biodiversity conservation into their OSP using the Template or comparable guidance tools such as developed by WFA and others. The producer should be ever vigilant to biodiversity problems and conservation opportunities on his and adjacent properties.

b) Inspectors Role
Receive training in biological diversity conservation such as is currently given by IOIA and include biodiversity concerns in all inspection using appropriate checklists and other guidance.

c) Certifiers Role
Require use of OSP Templates that include biodiversity conservation management. Document the degree producers are addressing biodiversity in their farm plans by using a compliance checklist sanctioned by NOP.

d) NOP's Role:
NOP should emphasize biodiversity in its ACA training. During training, inform ACA's that the issuance of both minor and major non-compliance statements to growers on this subject is a tool to be considered in all audits to increase attention to biodiversity conservation as required. NOP should also add a biodiversity prompt to the ARC Auditor checklist.

Each of the above actions would require additional work for producers, certifiers, NOP and NOSB, but can be integrated into existing plans and operations. The focus should be on education, teaching practices and the benefits of conservation. At this time, it is anticipated that only severe violations would lead to certification revocation.

Implementation of Biodiversity Conservation in Organic Agriculture Systems

DRAFT

I. INTRODUCTION:

Organic agriculture systems by their very nature are friendlier to biodiversity than conventional agriculture and certainly organic farmers' value biodiversity understanding that agriculture innately functions within and interacts with the larger ecosystem.These ecosystems extend beyond what is typically thought of as bio diverse environments and include diversity with the flora and fauna below ground as well as aquatic systems.

The value of biodiversity for healthy agriculture and for society at large is recognized in the NOP Rule in several mandates and directions. In response, NOSB has issued guidance statements in 2004 and 2005 pertaining to biodiversity conservation.

The organic community largely supports biodiversity conservation being incorporated into organic systems, but some have issues with increased paper work, requirements that do not produce real on the ground results and the added costs. A particularly controversial issue is how to deal with conversion of native forests or grasslands for organic crop cultivation.

The goal of this "guidance" is to improve and increase biodiversity conservation implementation in organic agriculture systems as directed in previous NOSB Guidance statements. This is to be achieved through increased education and information for farmers, inspectors and certifiers; uniformity of inspections and certification and NOP requirements during accreditation and audit follow through.

The time is ripe to move forward with stronger implementation as substantial funding has been authorized in the new farm bill that may be used in part for this purpose including: NOP increased funding from 3.1 million to 11 million in 2012, including organic role in conservation under USDA's Environmental Quality Incentive Program (EQIP), 5 million annually in mandatory funding through 2012 for Organic data collection, grants for beginning organic farmers and ranchers and $78 million in competitive grants to research institutions for organic initiatives.

II. BACKGROUND

A number of the organizations interested in biodiversity conservation and sustainability in organic agriculture have produced work to advance these goals. In particular, the Wild Farm Alliance (WFA) and the National Center for Appropriate Technology (NCAT) has worked with NOSB on implementation means. The IOIA has played an important role in identifying the need

for biodiversity educational materials and criteria. IOIA has subsequently used developed materials and criteria in their inspector training programs.

The Wild Farm Alliance (WFA) has published guides, one each for farmers and certifiers, describing practices and actions farmers can take to conserve biodiversity. These guides were mailed in 2006 to all farmers and certifiers in the nation. In addition, ATTRA's Organic System Plan (OSP) template for certifiers under D. Natural Resources includes biodiversity management. Rodale Institute also provides electronic versions of the OSP's. IOIA includes the OSP's and WFA guides on conserving biodiversity in their inspector training classes. Recently in 05/08, WFA issued "Biodiversity Compliance Assessment…." which is a list of compliance indicators to measure progress.

A NOSB Guidance Document on Compatibility with a System of Sustainable Agriculture and Consistency with Organic Farming and Handling was adopted 4/29/04 by a vote of YES-3…NO-0……The Guidance stated in part:

> *"In order to determine if a substance, its use, and manufacture are compatible with a system of sustainable agriculture and consistent with organic farming and handling, and in consideration of the NOSB Principles of Organic Production and Handling, the following factors are to be considered:*
>
> *L) Does use of the substance have a positive impact on biodiversity?"*

The Guidance Document stated that *"There is strong support by all commenters for this position"*.

The NOSB Policy and Procedure Manual mentions biodiversity in the section called "NOSB Guidance on Compatibility with a System of Sustainable Agriculture and Consistency with Organic Farming and Handling (page 31: 12)." Does use of the substance have a positive impact on biodiversity?" However, this requirement has not been added to the materials checklist used by committees in evaluating petitions.

At the NOSB's fall 2004 meeting, WFA requested that the Board incorporate biodiversity criteria into their model Organic System Plan. The request was sent to the Crops Committee and subsequently the Board, at the spring 2005 meeting, approved a draft on biodiversity conservation. Further refinement in the draft was made with assistance from NCAT. On August 16, 2005, NOSB approved an Amendment to NOSB Organic System Plan Template "Maintaining or Improving Natural Resources", which added criteria to the OSP on biodiversity management. Although the use of the OSP forms are not mandatory, it was hoped the use of the model would help to bring consistency to inspection, certification and accreditation.

<u>The approved biodiversity criteria for the OSP are as follows:</u>

D. Natural Resources

NOP Rule 205.2 defines Organic Production as a production system managed in accordance with the Act and its regulations to respond to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity. NOP Rule 205.200 and 205.203(a) requires that production practices maintain or improve natural resources (soil and water quality, wetlands, woodlands and wildlife) of the operation.

BIODIVERSITY MANAGEMENT

Whole Farm Biodiversity Considerations:

Does your field map include features such as hedgerows, woodlands, wetlands, riparian zones, and special habitats? Yes No

List wildlife and dominant native plants present on the farm: (note priority species)

_____

_____

_____

What steps do you take to plan/provide for biodiversity conservation? (suggest adding "this includes above ground, below ground and aquatic systems.")

- understand farm's location within watershed
- ascertain what wildlife and dominant native plants existed on the land prior to farming
- learn about regional natural areas and conservation priorities
- work with neighbors/others to enhance biodiversity (connectivity, restoration, etc.)
- other* describe/explain:

How do you manage water for the needs of crops/livestock, native species and riparian ecosystems?

- plant regionally appropriate crops
- conserve water
- manage water for priority species
- retain/restore vegetated riparian buffers/wetlands
- protect/improve natural hydrology/ecological function of riparian area
- other*

Uncultivated Area Biodiversity:

What actions do you take to provide habitat for pollinators, insect predators, birds and bats?

- bird/bat/bee boxes
- hedgerows/windbreaks
- maintain/provide natural roosting/nesting/ foraging sites
- other*

How are you restoring and/or protecting natural areas?

manage for native plants/wildlife specific to the site

- preserve/restore wildlife corridors/large blocks of habitat
- establish legal conservation areas
- native habitats not converted to farmland since certification
- other*

List problem invasive:

_____

_____

What actions do you take to control invasive plant/animal species, especially those threatening natural areas?

- learn about invasives
- use weed- and pest-free seed/planting stock/soil amendments/mulches
- monitor for new introductions and control immediately
- suppress invasives using organic methods
- other*

<u>Cropland Area Biodiversity:</u>

How do you conserve and provide habitat for wildlife?

- companion planting/intercropping
- crop diversity
- wildlife-friendly fences
- manage fallow fields for wildlife
- suggest adding "manage soil" and" waterways: aquatic plants, wild bird habitat and other native species habitat"
- other*

Do you schedule farm practices to benefit wildlife?

- avoid nests during breeding season
- stagger mowing/tilling practices
- plan fields to leave food/cover for wildlife
- other*

Biodiversity When Livestock are Involved:

How do you protect riparian areas and sensitive habitats?

- fence to minimize impacting wildlife
- control sensitive area access
- prevent bank erosion
- animals fed away from water
- other*

What are you doing to improve your pasture or rangeland?

- prevent overgrazing
- reseed/protect trampled/eroded areas
- plant native pasture

□ecologically-sound grazing system
□prescribed burning
Suggest adding "manage soil"
□other*

What wildlife-friendly management practices do you use?
□guard animals
□grazing scheduled when predation pressure low
□livestock spend night in protected area
□circumstances of livestock death documented
□other*
□list problems with predators or other wildlife

_____
_____
_____

Have you assessed the farm for biodiversity problems and greatest opportunities, and developed goals a timeline for biodiversity conservation? (suggest adding " including soil life and aquatic life diversity, yes no
describe/explain:_____
_____
_____

How do you monitor farm biodiversity?
□visually
□species counts
□other*

<u>Wild Harvest Enterprises Biodiversity:</u>
How do you maintain or improve the sustainability of the harvested species?
. harvest from stable populations
. minimize disruption of priority species/sensitive habitats
□ avoid erosion
□allow re-establishment
□monitor wild crop sustainability
□other*
***If you check other, please explain.**

_____
_____
_____

Add the following boxes under the Natural Resources: Water Use:

What practices are used to protect water quality?
. sediment basin
. compost/fertilizer stored away from water

The use of the WFA guides on biodiversity conservation in IOIA training has been largely well received and useful calling attention to needs and opportunities. However, the use of the OSP templates including the section on biodiversity management has been limited. A recent survey by the WFA (attached) provides a detailed response by certifiers to the Biodiversity Guidance. The NOP's audit review compliance checklist does not include any requirement that ACA's are implementing the natural resources standard in 205.200.

III. RELEVANT AREAS IN THE RULE

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."*

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.

See Also:
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. Discussion

Biodiversity conservation implementation in the program may occur through two different routes, which are outlined for discussion:

1) NOSB Role:
Add biodiversity considerations to the materials checklist for the review of petitioned materials for addition to the National List.

2) Organic System Plan development and implementation requiring:

a) Certified Grower/Producer Needs and Role:
Information and training for producers on a continual basis. Producers should incorporate biodiversity conservation into their OSP using the Template or comparable guidance tools such as developed by WFA and others. The producer should be ever vigilant to biodiversity problems and conservation opportunities on his and adjacent properties.

b) Inspectors Role
Receive training in biological diversity conservation such as is currently given by IOIA and include biodiversity concerns in all inspection using appropriate checklists and other guidance.

c) Certifiers Role
Require use of OSP Templates that include biodiversity conservation management. Document the degree producers are addressing biodiversity in their farm plans by using a compliance checklist sanctioned by NOP.

d) NOP's Role:
NOP should emphasize biodiversity in its ACA training. During training, inform ACA's that the issuance of both minor and major non-compliance statements to growers on this subject is a tool to be considered in all audits to increase attention to biodiversity

conservation as required. NOP should also add a biodiversity prompt to the ARC Auditor checklist.

Each of the above actions would require additional work for producers, certifiers, NOP and NOSB, but can be integrated into existing plans and operations.

The focus should be on education, teaching practices and the benefits of conservation.
At this time, it is anticipated that only severe violations would lead to certification revocation.

CERTIFIERS REPORTS

(Compiled by Wild Farm Alliance)

In 2006 almost all of the organic certifiers were contacted to see if they were aware of the 205.200 biodiversity/natural resources standard and if they were addressing or had plans to address it in their inspection process. The agencies that responded positively at that time were contacted in 2008 to determine their current status. It is possible that more certifiers than noted are inspecting for the standard.

CERTIFIER	HOW THEY DETERMINE COMPLIANCE WITH 205.200	FIRST ESTIMATE OF FARMER MEMBERS	LATEST ESTIMATE OF FARMER MEMBERS MID SEPT 08
	blue means as of 9-08 they still check for biodiversity		
Check for Compliance with 205.200			
California Certified Organic Farmers	Inspector asks CCOF questions	1100	1508
Global Culture	Farmer answers NOSB adopted biodiversity questions	50	65
Idaho Dept. of Agriculture	Farmer answers NOSB adopted biodiversity questions	90	190
Indiana Certified Organic	Farmer answers many of the NOSB questions	195	300
Nature's International Certification Services	Farmer answers ICS questions	230	100
Marin County Dept. of Agriculture in California	Farmer answers Marin Co questions	40	47
Midwest Organic Services Association	Farmer answers many of the NOSB questions	550	1000
MN Crop Improvement Assoc.	Farmer answers MCIA questions	45	30
Oregon Tilth	Farmer answers OT questions	800	640
Quality Certification Services in FL	Farmer answers most NOSB adopted biodiversity questions	220	241
Stellar/Demeter	Farmer answers Stellar biodiversity questions	100	109

Washington State Dept of Ag	Inspector looks for noncompliances	840	791
Planning to Incorporate Biodiversity Questions When They Get Staff time:			
Maine Organic Farmers and Gardeners	NO	360	0
NM Organic Commodities Commission	YES	100	120
RI Dept. of Ag.	NO	18	0
Total		**4738**	**5236**