



## CONSERVATION INFORMATION GUIDE FOR NC ORGANIC OPERATIONS

**PURPOSE:** To advise organic farming producers on existing Natural Resources Conservation Service (NRCS) practices which may be useful during conservation plan development to address farm resource concerns.

**BACKGROUND:** Organic agriculture has become an increasingly important way of growing conventional and specialty crops over the past several years, as consumers have become more interested in buying foods produced without chemical inputs or inorganic fertilizers. Many organic producers have not traditionally participated in USDA programs, and may not be aware that NRCS can provide assistance in developing conservation plans. Many existing conservation practices could be used by organic producers to address resource concerns on their operations.

### CONSERVATION PRACTICES:

- **Residue Management (Conservation Tillage):** To manage plant residue on the soil surface year round while limiting soil disturbing activities

#### Benefits to organic operations:

- Reduced sheet and rill erosion
- Improved soil organic matter content
  - Note: Long term organic matter left on the surface can assist in weed suppression*
- Increased plant available moisture
- Reduced carbon losses from the soil
  - Note: Increased carbon within the soil can lead to reduced fertilizer use due to more efficient carbon/nitrogen cycle*
- Provide food and cover for wildlife

- **Pest Management:** The use of environmental sensitive prevention, avoidance, monitoring and suppression strategies to manage weeds, insects, diseases, animals and other organisms

#### Benefits to organic operations:

- Development of enhanced Integrated Pest Management strategies that are inherent in organic crop production
- Pest Management plans which reduce the use of chemicals to the maximum extent possible
- Protection of water quality through reducing or eliminating offsite transport of chemicals
- IPM strategies emphasize pest scouting, reduced-risk pesticide usage, and pheromone use
- Use of alternative fumigants to methyl bromide now addressed in Pest Management for protection of air and soil quality

- **Nutrient Management:** Managing the form, placement, and timing of nutrient and soil amendment applications, including organic sources

Benefits to organic operations:

- Protection of water quality through agronomic application of nutrient sources
- Excessive applications can result in leaching and surface runoff of nutrients that can harm aquatic life
- Provides an understanding of recommended nutrient application levels through routine soil sampling, and precision-type soil sampling is available as a cost-sharing practice

- ***Cover Crop:*** Crops including grasses, legumes, and forbs that provide seasonal vegetative cover

Benefits to organic operations:

- Allowing proper maturity increases levels of soil organic matter
- Increased soil organic matter increases biological nitrogen fixation
- Provides supplemental forage for organic livestock
- Reduces seasonal water and wind erosion
- Certain species enhance wildlife habitat when managed for that purpose

- ***Field Borders:*** Grasses, legumes, or forbs established along field edges that act as traps for sediment and particulate runoff

Benefits to organic operations:

- Traps organic fertilizer sources such as poultry litter in vegetated field edges
- Protects water quality through sediment and particulate trapping
- Can be natural vegetation that enhances wildlife habitat
- Can be a part of an IPM strategy that attracts beneficial insects
  - *Note: CP33—Continuous Conservation Reserve Program practice available for organic producers—purpose is to use field border practice to establish/enhance grassland bird nesting habitat*

- ***Conservation Crop Rotation(sod-based):*** Perennial soil conserving cool season grass mixes (may include legumes) established and maintained for a period of time following row crops

Benefits to organic operations:

- Forage-type vegetation that can provide forage to livestock during organic transition period
- Improves long-term soil organic matter when part of a no-till rotation
- Improves soil infiltration and moisture retention
- Helps with erosion control
  - *Note: Sod-based rotations of differing lengths (minimum 17 months) are available in NRCS and NC Cost-Sharing Programs*

Other conservation practices that may be of interest to organic producers:

- Composting Facility
- Waste Storage Facility
- Diversion
- Grassed Waterway
- Upland Wildlife Habitat Management
- Filter Strip
- Pasture And Hayland Planting
- Prescribed grazing
- Contour Farming
- Hedgerow

*Information on all NRCS conservation practices and programs is available by contacting your local Soil & Water Conservation District or on the NC NRCS website: [www.nc.nrcs.usda.gov](http://www.nc.nrcs.usda.gov)*