

MINIMUM TILLAGE DEMONSTRATION PROJECT
AGRICULTURAL CONSERVATION PROGRAM (ACP)

BY

Betty P. Jones, County Executive Director, Alachua County ASCS Office

ACP Program Objectives

The Agricultural Conservation Program (ACP) provides cost-sharing as an incentive to encourage farmers and ranchers to carry out conservation measures that:

1. control erosion and sedimentation from agricultural land and conserve the water resources on such land;
2. control pollution from animal wastes;
3. conserve wildlife habitat;
4. facilitate sound resource management systems through soil and water conservation;
5. contribute to the national objectives of assuring a continuous supply of food and fiber necessary for the maintenance of a strong and healthy people and economy; and
6. assures performance of the type conservation measures needed to improve water quality in rural America.

ACP is a joint effort by agricultural producers and Government to restore and preserve the environment and basic land resources. Cost-share assistance is available under annual or long-term agreements.

Program Administration

The ACP is administered by Agricultural Stabilization and Conservation (ASC) State, county and community committees, working under the general direction of the Agricultural Stabilization and Conservation Service (ASCS) of the U.S. Department of Agriculture. County and community committee members are elected by farmers within the local county. Funds for cost-sharing are appropriated annually by the Congress. In recent years, the appropriation has been about \$190,000,000.

The ASCS county committee in the local county approves cost-sharing on the basis of requests filed by individual producers. After receiving the official practice approval, performance is done according to specifications developed for the specific practice. All expenses incurred during performance are paid by the farmer. Later, after the practice has been certified as being performed according to practice specifications, the farmer is reimbursed on an average of from 50 to 75 percent of the out-of-pocket cost of performing the practice.

Technical Assistance for Farmers

Farmers are provided necessary technical assistance to perform engineering type practices by the Soil Conservation Service (SCS). Forestry practices are performed under the supervision of the Florida division of Forestry personnel located in the county where the participating farm is located.

Demonstration Project Concept

Demonstration type special projects are authorized under the ACP. The purpose of such projects is to help achieve enduring soil and water conservation and environmental benefits through the use of innovative, up-to-date methods for treating conservation problems. Cost-share assistance is provided under approved projects as an incentive to encourage farmer participation.

Alachua County Demonstration Project

Based on past experience, farmers generally consider minimum tillage farming ineffective and conducive to crop failure. With the availability of existing herbicides, insecticides, and pesticides, and improved planting equipment, the Alachua County ASC Committee recognized the potential and the advantages of conservation tillage farming. The Committee, working closely with the Alachua County ACP Development Group, recommended the special project to the Florida State ASC Committee for approval and funding. The project was designed to demonstrate on a community-wide basis the techniques to be followed when using a minimum tillage operation to grow corn and soybeans.

Cost-share assistance was provided under the project for farmers to utilize ACP practice SL9 – Conservation Tillage Systems. (See Exhibit 1 for practice specifications.) A 70 percent cost-share rate was approved which reimbursed the participating farmer for most of the out-of-pocket expense incurred above those expenses normally associated with “standard” row-cropping methods.

In order for farmers to become familiar with and to utilize the most recent developments in multi-cropping minimum tillage and no-tillage, a farm visit was made to each participating farm to inspect the fields and to develop a plan of operation. The plans were developed in consultation with Dr. Raymond Gallaher, Associate Professor of Agronomy, Institute of Food and Agricultural Services, University of Florida; the Cooperative Extension Agent; and the SCS District Conservationist, and included specific recommendations for farmers to follow in planting and providing necessary weed control (see Exhibit 2). A follow-up inspection was made by ASCS to check compliance.

Farm tours were held in connection with the project to demonstrate planting techniques, and to evaluate plant growth and weed control during the growing season.

Farmer Participation

A total of 20 farmers participated in the demonstration project. These producers grew 940 acres of corn and grain sorghum and 412 acres of soybeans. Yields were comparable to those for crops grown using the "standard" row-cropping system.

Summary

Participating farmers were generally successful in carrying out their first-year minimum tillage operation. Yields were satisfactory. Most farmers reported a reduction in fuel cost. However, several farmers indicated that fuel savings were offset by the increased expense incurred for weed control. Overall, most participating farmers believe crops can be grown with less expense using multi-cropping minimum or no-tillage systems than with the "standard" row-cropping system.

Additional experience is needed, however, for producers to realize the maximum benefits. They believe that the system should be tested over a period of years -- i.e. three to five years -- in order for them to assess benefits. Some farmers are concerned about the impact that a wet growing season or an unusual dry growing season would have on yields. Most participants believe that weed control would be a serious problem during wet years.

The SL9 - Conservation Tillage System ACP practice specifications have been changed to permit farmers to receive cost-sharing for three consecutive years. This change will permit farmers to do demonstration planting to help them further evaluate minimum tillage operations, to gain the necessary experience, and to develop techniques that will be most effective under the system.

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EXHIBIT 1

SL9 CONSERVATION TILLAGE SYSTEMS

- A Purpose. To demonstrate a method of installing tillage systems and residue management systems of farming that will:
- 1 Protect soil from wind and water erosion and improve soil permeability.
 - 2 Prevent or reduce pollution from sediment and chemically contaminated runoff from agricultural non-point sources.
- B Applicability. To cropland needing erosion or sediment control while being devoted to the production of intertilled or small grain crops.
- C Policies.
- 1 Cost-sharing is not authorized where the farmer has already adopted a satisfactory conservation tillage system of farming.
 - 2 Cost-sharing for this practice may be approved for no more than 3 years with the same person.
 - 3 The land involved must be protected by crop residue, temporary cover, or other permitted management methods from harvest until the next planting.
 - 4 Eligible tillage operations may consist of:
 - a Chisel plowing with other limited operations, or
 - b Plow-plant, or
 - c Light tillage without plowing, or
 - d Approved slot or strip tillage operations ahead of planting, or
 - e Planting on chemically killed sods, or
 - f Other similar methods.
 - 5 All tillage operations must be performed as nearly as practicable on the contour or parallel to terraces, except where the committee determines that this is not necessary.

EXHIBIT 1

- 6 Chemicals used in performing this practice must be Federally, State and locally registered and must be applied strictly in accordance with authorized uses, directions on the label, and other Federal or State policies and requirements.
- 7 Cost-sharing is not authorized for designated set-aside acreage.
- 8 Cost-sharing is not authorized for acreages where the crop is cultivated unless prior approval of the method of cultivation is approved in advance by the county committee.

D Specifications.

- 1 Performance of this practice shall be carried out according to the plan developed in consultation with the Cooperative Extension Agent, a representative of the Institute of Food and Agricultural Sciences, Department of Agronomy, University of Florida, and the SCS District Conservationist.
- 2 Cost-sharing is authorized on a per-acre basis for the following:
 - a Planter and related equipment. (Excludes tractor).
 - b Planting operation. (Includes tractor and labor).
 - c Applying herbicide. (Includes material).
 - d Insecticide -- material only.
 - e Applying post directed application of herbicide. (Includes material).
- 3 Performance shall be verified by a representative of the county committee before approval of cost-share payment.

E Maximum Cost-share Rates.

- 1 Regular Rates
 - a \$ 3.50 per acre for planter and related equipment.

- b \$ 4.20 per acre for planting.
- c \$12.25 per acre to apply herbicide.
- d \$ 8.40 per acre for the insecticide.
- e \$ 7.70 per acre to apply post directed application of herbicide.

2 Rates for Low-income Farmers

- a \$ 4.00 per acre for planter and related equipment.
- b \$ 4.80 per acre for planting.
- c \$14.00 per acre to apply herbicide.
- d \$ 9.60 per acre for the insecticide.
- e \$ 8.80 per acre to apply post directed application of herbicide.

EXHIBIT 2

CONSERVATION TILLAGE SYSTEMS

NAME _____ FSN _____

Performance of practice SL9 must be carried out according to a plan developed by ASCS in consultation with the Extension Agent; Department of Agronomy, University of Florida; and the SCS District Conservationist. The following recommendations are to be used as a guide, If for any reason they cannot be followed, contact the County Executive Director for other recommendations.

Crop: _____

Acreage: _____ Photograph Number: _____

Irrigated:

Non-irrigated:

Succeeding Crop or Land Use: _____

Contour Planting:

Conventional Planting:

Apply Herbicide:

Suggested Material: 1/ _____

Apply Insecticide:

Suggested Material: 1/ _____

Apply Postemergency Herbicides:

Suggested Material: 1/ _____

- 1/ Identify material that should be used for the crop to be planted. Attach any pamphlet, written guidelines, etc., applicable to the use of the material to the farmer's copy of the plan before delivery to the farmer.

EXHIBIT 2

Equipment to be Used: _____

Land Preparation Authorized: _____

General Comments and Additional Guidelines: _____

