2. Secure approval for employment of assistant agent to work with members.

3. Participate in more activities available to club members.

C. Problems

1. Rapid turn-over of assistant agents.

2. No assistance available at present.

3. Lack of time to conduct both adult and 4-H work.

4. Organization on community basis out of school complicates enrollment and transportation problems.

D. Extension Program of Education

1. Revise system of competition between clubs to determine county banner winner with higher rating on enrollment and completions (January-February).

2. Interest each club in entering county talent contest and enter county winners in district contest (February).

3. Enter two calves in baby beef show and sale (April).

B. Goals for 1960

1. Increase the annual growth to 235 board feet per acre.

2. Establish a stand of desireable trees, where cuttings are made, through such means as scarifying, poisening, planting and leaving seed trees, on twenty five farms.

C. Problems

1. Long time investment before cash returns.

2. Lack of confidence as to future market and price of product.

3. Shortage of capital on part of farmers.

4. Lack of know-how as to what should be done and how to do it on individual tracts.

5. Use of unwise cutting practices.

6. Lack of markets for particular products, especially low-grade hard woods.

D. Extension Program of Education

1. Conduct forestry tour to show what can be expected by carrying out specific practices (April).

2. Conduct an educational program to acquaint farmers with opportunities available through proper management (September-November).

3. Set up two woodland management demonstrations (August-September).

IX. 4-H Club Work

A. Situation

1. Enrollment is low in proportion to population of children of club age available.

2. Need to participate in more activities.

B. Goals for 1960

1. Increase enrollment to 75 members.

C. Problems

1. Disease

2. Marketing

3. Housing

4. Management

D. Extension Program of Education

1. Answer all calls to assist in diognosing disease.

2. Teach individuals how to vaccinate their own animals.

3. Recommend methods of preventing disease and parasites.

4. Arrange for professional assistance in shearing sheep.

5. Cooperate with the Petersburg Feeder Calf Producers Association and arrange for farmers to sell their calves through this organization.

6. Assist in organizing a feeder pig sale in Petersburg and assist farmers in entering pigs and prepareing them for the sale.

VIII. Forestry

A. Situation

1. About 72% of the total land area is covered with some form of timber growth.

2. About 30% of the forest land area is owned by companies or individuals for forest products purposes.

3. Emphasis has been placed on tree planting in recent years with over one million trees planted annually.

4. The estimated annual growth per acre is 200 board feet, while the potential annual growth is 500 board feet under proper management.

b. New builders who desire to establish driveways, lawns and plantings.

B. 1960 Goal

1. Secure the required assistance or information for those requesting service or do the job for them.

C. Problems

1. Available information, especially in connection with lawns, is prepared for the state and may not be best suited for a particular county or locality.

2. Specialists and other trained personnel not available at the time needed.

D. Extension Program of Education

1. Assist in prepareing landscape plans when requested.

2. Supply suggestions for establishing and maintaining lawns, prepared by the agent, to those requesting this.

3. Use lawns already established under the agents supervision as demonstrations of what may be done.

VII. Livestock

A. Situation

1. Due partly to the market situation and partly to farms being placed in the soil bank, there is some reduction in beef cattle numbers.

2. Some dairy farms go out of production most every year and others start into the business, which keeps the number of farms and the number of cows about the same.

3. The increase in hog production has halted and there is some indication that production will be decreased this year.

B. Goal for 1960

1. Establish a livestock committee and develop a program of work in connection with livestock production.

B. 1960 Goals

1. Determine needs and requirements of interested farmers and community groups.

2. Offer the plans service available through our Agricultural Engineering Department.

3. When required plans are not available, secure assistance from our Agricultural Engineering Department or the agent prepare plans and give required assistance himself.

C. Problems

1. Plans not available to meet the needs of many situations arising.

2. Requirements vary so much in feed storage and livestock barns that plans for size and type of building desired are not available.

3. Majority of structures now being built are pole type and few farmers or carpenters are experienced in this type structure.

D. Extension Program of Action

1. Secure plans, when available, from the Agricultural Engineering Department.

2. Secure the service of an Agricultural Engineer when necessary.

3. Agent to draw plans and work out bills of material when possible or where necessary.

4. Agent to do the engineering required for grading and in laying out the building and provide some supervision in construction where necessary.

VI. Landscaping

A. Situation

1. Requests for assistance in this field may be divided into two groups.

a. Those desireing to renovate old lawns and relocate driveways and shrubs.

IV. Peanuts

A. 1960 Goal

1. To increase the average yield of peanuts to 1500 pounds per acre.

B. Problems

1. Weed, disease and insect control.

2. Improper use of lime and fertilizer.

3. Improper plowing and cultivation

C. Extension Program of Education

1. Hold educational meeting for growers (February).

2. Work with agronomy committee in setting up two demonstrations designed to show proper method of turning the land and cultivating the crop to prevent stem rot (March-May-June).

3. Encourage the use of recommended varieties (March-April).

4. Encourage farmers to lime and fertilize their fields in keeping with soil analysis reports (March, April, May).

5. Establish better cultural practices through circulars, news articles, radio and television program (March through June).

V. Farm Buildings

A. Situation

1. Requests for assistance with plans, bills of material and laying out building sites has increased many times during recent years.

2. Farm housing, of various kinds, is inadequate on many farms.

3. Expansion of operations in community centers and on some farms require additional space.

III. Flue-cured Tobacco

A. 1960 Goals

1. Encourage production of better quality tobacco by use of recommended varieties and proper fertilization.

2. Check the spread of blackshank by encouraging crop rotations. Recommend the use of blackshank resistant varieties only on farms where all available fields are infested.

3. Maintain production at the high level already attained, with emphasis on quality.

4. Control damage done by root knott nematode by recommending the use of Ky. 31 fescue in rotations and by proper soil fumigation where rotations are not practical.

B. Problems

1. Poor quality tobacco.

2. Losses on account of disease and insects.

3. Improper use of varieties.

4. Improper fertilization.

C. Extension Program of Education

1. Furnish a list of varieties recommended to growers (January).

2. Encourage the production of better quality tobacco through fertilizer recommendations based on soil analysis (January-May).

3. Encourage all farmers to establish rotations to prevent the build-up of blackshank in their fields. Advise the use of resistant varieties only on infested fields and where rotations are not practical (Spring-Fall).

4. Advise the use of Ky. 31 fescue in the tobacco rotation to reduce damage by root knott nematode (August to October).

5. Stress the production of quality tobacco, disease and insect control, through news items, circulars and radio and television programs (January through June).

4. Set up two rotational grazing demonstrations (May).

5. Locate three supplementary pasture demonstrations with the use of sweet sudan grass and pearl millet, seeded on various dates to extend grazing period (May-June).

6. Publicize methods of providing more pasture and forage crops through news items, circulars, field meetings, tours, television and radio programs.

II. Corn

A. 1960 Goal

1. Increase average yield per acre to 52 bushels.

B. Problems

1. Improper fertilization (Failure to use proper amounts and injury to seed by placing too much in the row)

2. Planting non-adopted varieties.

3. Improper spacing.

4. Improper cultivation (cultivating too deep).

C. Extension Program of Education

1. Provide farmers and seedsmen with a list of recommended varieties (February).

2. Cooperate with the agronomy committee in establishing two result demonstrations in proper and improper cultivation (May).

3. Set up two result demonstrations in which fertilizer will be applied, based on needs as shown by soil tests and placed properly to avoid injury to seed and young plants (April).

4. Encourage rotations in which corn will follow legume crops after which tobacco or peanuts will be grown (March-April).

5. Publicize recommended varieties, proper cultivation, proper fertilization and rotations through dealers, the press, circulars and radio and television programs.

ACTIVITIES

I. Pasture and Forage Crops

A. 1960 Goals

1. Establish supplementary pasture of sweet sudan grass or pearl millet on 45 percent of the dairy and livestock farms.

2. Encourage a wider use of orchard grass and improve varieties of red clover for hay crops.

3. Increase improved pastures to 11,000 acres.

4. Keep alfalfa producers informed as to recommended control measures for alfalfa weevil.

5. Encourage the seeding of Ky. 31 fescue, in a rotation, on 15 percent of the flue-cured tobacco farms.

B. Problems

1. Inadequate limeing and fertilization.

2. Over grazing.

3. Lack of sufficient open land.

4. Weed Control.

5. No provision for rotated grazing.

6. Neglect of and restrictions against insect control measures.

C. Extension Program of Education

1. In view of work already done in connection with pasture improvement, it is reasonable to assume that most farmers know how to establish a first class pasture. Therefore, the greatest need is in the management of pastures already seeded and in increasing acreages.

2. Establish three demonstrations to show the use of required amounts of fertilizer and lime (February-March).

3. Establish two alfalfa demonstrations showing the proper use of lime, fertilizer, weed and insect control measures (February).

Agriculture is the county's leading industry. Flue-cured tobacco is the chief source of income while peanuts rank second. Dairy products, hogs, cattle and poultry supply a very considerable income on many farms. Lumber and pulpwood are important in the county's economy.

CHANGES INFLUENCING PLAN

Because of the price situation, interest in poultry production in the form of laying flocks, is slowing up. After developing to the point where there were twenty five buildings housing 1000 to 1200 hens each. There has been no new additions since the spring of 1959.

Interest in forest improvement and production practices is increasing. This includes poisening of hardwood stands, bulldozing and planting. A number of small farms have been placed in the soil bank and the open area planted with pine trees.

There is keen interest in new crop varieties, especially corn, peanuts, soybeans and tobacco.

Many tobacco growers are changing to resistant varieties in an attempt to avoid the build-up of blackshank disease in their soil. They are producting smaller yields of low quality tobacco when they should be establishing rotations and growing non-resistant recommended varieties.

Each year there is a great demand on the agents time to assist with various kinds of farm building structures. During recent years, this has been extanded into community buildings, such as office buildings and church additions.

Small farms are going out of production or being combined into larger operations through purchase or rental agreements.

Livestock farming, especially commercial hog production, is slowing down. Some beef cattle herds are being sold and others are being reduced in size.

HOW THE PLAN WAS DEVELOPED

A long term program of work has been developed for the county covering field crops and forestry. Some work has been done on a livestock and dairy program but this has not been completed.

The following plan has been selected from the programs developed, with the aid of the agronomy, forestry and livestock committees.

GENERAL SITUATION

Dinwiddie County lies southwest and adjacent to the city of Petersburg. About one-third of the county is in the upper Tidewater Section and the other two-thirds is in the Piedmont Plateau. The dividing line between these two areas, while not too clearly defined, follows a general north-south direction. The Appomattox River forms a part of the northern boundry and the Nottoway River, the southwest boundry.

To a casual observer, the agricultural development of the county may not be impressive. Good farms are next door to poor farms; large farms are mixed with small ones; practically all farms are partly forested and large private ownership of forest land is scattered over the county in relatively small tracts. In addition to this is the fact that most of the agricultural development is based on crop farming which does not require large attractive outbuildings and pasture lands that go along with livestock farming.

The topography is generally level or slightly rolling with very small varations in elevation, which range from about 50 feet above sea level in the east to around 400 feet in the west. About 90% of the area drains into the Nottoway River and the remainder into the Appomattox. Swampy areas are found in the eastern part of the county, otherwise it is well drained and the surface relief is favorable for crop production.

The loam and clay soils of the Piedmont, the sandy soils of the Coastal Plains and mixtures of these are found in the county. The light, well-drained soils are preferred for the important flue-cured tobacco and peanut crops. There is much of this soil in the county. Much of the forested land is as valuable for agricultural use as the land now being farmed. The addition of lime, fertilizer and organic matter is a requirement for profitable production. The Piedmont soils require more lime and less potash than the sandy Coastal Plain soils.

Forestry is the most extensive land use, covering almost 75% of the 507 square miles of land area. About 40% of the forest land is owned by companies and individuals for forest production purposes only.

According to the last census report, there were 1636 farms in the county, comprising 58.8% of the land area, the average size of which was 116.7 acres.

PLAN OF WORK - EXTENSION PROGRAM

DINWIDDIE COUNTY VIRGINIA

DECEMBER 1, 1959 TO NOVEMBER 30, 1960

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HEADQUARTERS - DINWIDDIE VIRGINIA

B. F. Bedwell, County Agent

Margie B. Reese, Secretary