

respective communities. This material gave excellent control in all demonstrations, not only on the weevil but the spittle bug as well. This naturally led the farmers to ask if this material would be available in 1959 in fertilizer for top dressing. Farmers had been advised of the experiments being conducted along these lines. This one request was the most frequently asked question by farmers throughout the county. The agent is glad to report that farmers will be able to use such a mixture in the spring of 1959 since it has been approved by the experiment station as well as by the state fertilizer control board. It is anticipated that most farmers in the county that had infested stands will use this material during February of 1959.

2. Hay Program

Grayson County produced a surplus of hay during the 1957 feeding season. Other sections of the state were not so fortunate, therefore the agent has cooperated with the state agricultural department and reliable hay dealers in locating surplus hay for sale to be shipped to drought stricken counties.

time in 1957. The greatest concentration was in the Elk Creek section, in an area with a radius of about two miles. Entomologist from V.P.I. were immediately called in and a county wide meeting was called to tell farmers and equipment dealers what necessary steps should be taken in order to prevent destruction of many alfalfa fields. The appearance of this insect was a surprise to the extension agent, farmers, equipment and insecticide dealers alike since it had not been reported to have been nearer than one hundred twenty five miles of the county previously.

A meeting was held in January of 1958 for all equipment and insecticide dealers as well as custom spray owners to warn them that the alfalfa weevil would spread to other areas of the county in 1958. They were advised as to the proper equipment and methods for the most satisfactory control of the weevil. This meeting served its purpose in that when the weevil did appear, custom spray rigs were available, adequate supplies of insecticide were in hands of the dealers and spraying was conducted in a systematic manner.

a. Other Methods of Control

Several farmers cooperated in conducting demonstrations in controlling the alfalfa weevil by using granulated heptachlor material. All these demonstrations were observed with much interest by the county agent as well as farmers in the

e. State Competition

One member from Grayson County was interested in the state competition because of his very fine work in the 4-H electric project. He attended the 4-H electric congress with the county agent in Richmond the latter part of August. At the congress he was declared a district winner, one of two from a district and twelve from the state. We think he has the ability and the interest to give some other members some competition for the state winner award in the future.

XIII. Cooperation with Other Agencies

1. Agricultural Agencies

The cooperation between the extension service and other agricultural agencies of the county has been very close. Perhaps more time has been spent with the AEC in holding community meetings to explain the 1958 AEC program than any other single agricultural agency. These meetings were well attended.

XIV. Emergency Programs

As usual it seems hard for a county agent to get through a year without something unexpected coming up that demands his attention and time.

1. Alfalfa Weevil

The alfalfa weevil was found in the county for the first

the Hampshire breed is used, it tends to eliminate some of the prejudice that exists among farmers not favoring the leaner type of hogs.

c. 4-H Camp

4-H members from the county were divided in junior and senior groups for camp. The county agent from Grayson attended the senior camp at Clyde Austin in Greeneville, Tennessee at which 87 senior 4-H club members from 10 counties attended. These members were thirteen years old and up. Seven members from Grayson County attended this camp in June. A lady leader along with 23 junior 4-H campers, ten to thirteen years old attended Junior Camp at V. I. Ranch in Washington County with 4-H members from five other counties. It is felt that the junior-senior breakdown is best since it gives the junior members more opportunity to display leadership and abilities. Before the breakdown, naturally the seniors dominated as officers in sports as well as most other camp activities during the week.

d. 4-H Short Course

For the first time in seven years the agents were able to interest a boy and girl in attending 4-H Short Course at V.F.I. in June. These folks were very much impressed during the trip and it is believed that due to the very favorable reports, others will want to go in 1959.

During 1958 there were thirteen 4-H clubs enrolled in the county by both the county agent and home demonstration agent. There were three hundred eight (308) boys and four hundred sixty-five (465) girls or a total of seven hundred seventy (770) members, both boys and girls. The 308 boys carried 429 different projects and completed 273 of these projects. In all clubs, one related project was carried by all members. The related projects for 1958 were Home Grounds Beautification. This project proved to be of most interest to members. In addition to the related projects each member was given an opportunity to carry additional projects.

Of the thirteen clubs, twelve were school clubs while the remaining one was an out of school club that met at night or on Saturday. The school clubs naturally reached more members but it is felt that the best work was done in the smaller out of school club. Time does not permit the organization of many such clubs.

b. Pig Chain

The Sears Roebuck Foundation sponsored pig chain has continued in 1958. At present the five gilts are with 4-H members of the Baywood Club. All the gilts have done well and are bred for February farrowing. It is felt that this is an extension livestock project for boy and girls. They all take a personal interest in their animals and since

of Commerce. This particular community, Corners Rock Community, was the area winner the first year of the contest eight years ago. They placed in the Blue Group, (\$120.00) and received an additional \$100.00 prize for having the outstanding farm program in the area.

Cox's Chapel, the community from the county, participated in the area sweepstakes contest and was declared second place winner for 1956. This same community, through it's local grange was state winner in the Grange Community Service Contest in 1957. This was not all for Cox's Chapel; they were named among the top ten of the nation in this contest. They were notified to attend the national meeting at Colorado Springs, Colorado. Then they knew they were among the three top winners of the nation. This position they had hold twice previously and were declared third place winners each time; but on the evening of November 16, 1957 at Colorado Springs, they were declared first place winner in the national contest and brought back to Cox's Chapel a check for \$10,000. This money has been well spent and again in 1959 you will hear from Cox's Chapel Community. They will be back in regular competition in the area community awards program as well as in the national grange service contest.

2. 4-H Club Work

a. Organization

were used on beans, tobacco and corn.

XI. Forestry

1. Re-forestation

More interest is being shown in forestry each year. During the 1957 planting season, there were 110,000 seedlings set in Grayson County. These seedlings were set by 27 different farmers. During the spring of 1958, 127,000 seedlings were delivered and set in the county. 4-H club boys either requested free (500 each) or purchased 12,000 of these seedlings. Eighteen (18) members set trees in 1958. These 127,000 seedlings were set on 38 different farms in the county. All seedlings planted were white pine. Due to the inquiries we had, we are expecting equally as many trees to be set in 1959 as in 1958.

XII. Extension Sponsered Clubs

1. Community Clubs

The County Extension sponsored community clubs in the county are co-sponsored by the Galax Chamber of Commerce along with communities of Carroll County. Galax is a twin city, in that it lies in both Grayson and Carroll Counties. Grayson County had five communities participating in the community improvement club work during 1958. Two of these communities participated in the county contest, one being ineligible having won the club contest three years ago. The county winner made a good showing in the area contest sponsored by the Bristol Chamber

The station has increased their power from 250 watts to 1000 watts. Therefore, more people can be reached through radio than before. Previously only about one half the farm people could get the local station. Since the power was increased, all farms in the county get satisfactory reception.

2. Newspaper

The county is serviced by one bi-weekly newspaper. The weekly paper previously serving the county was purchased by the bi-weekly. The present paper has good coverage over about three fourths of the county. The agent has written about 126 articles for this paper during the past year. This is in addition to a weekly column that appears in the Monday's paper on the farm page. In addition to the above the agent has been able to assist in many stories for the farm page. The management of the paper has given splendid cooperation to the agent in publishing meetings and other items of interest to the farmers.

X. Agricultural Engineering

1. Irrigation

Due to the comparatively favorable season, no irrigation was done in the past year. No new systems were purchased. According to the 1954 census, 13 farms irrigated 175 acres of land that year. There are only seven systems in the county, however, more than one farmer used some of the systems. They were used chiefly on alfalfa but some were

VIII. Farm and Home Development

Grayson County now has ten families on the farm and home development phase of the county extension program. The county agent has done some work with all these families on different phases of this operation, while the home agent has worked with those that were ready to plan and make improvements in remodeling, redecorating as well as building new homes.

Like in most other programs, most of these ten families have taken a keen interest in this program and have moved along rather rapidly; others haven't taken the interest that the agents had anticipated they would, and have not made as much progress.

IX. Publicity and Communications

1. Radio

Approximately forty one (41) broadcasts were made over the local radio station during the year. The county agent has one regular broadcast per week. Two days each week is used by the agents from Grayson and the other four days are allotted to agents from Carroll County and Alleghany County, W. C. It is felt that many people are reached by the radio program and frequent requests are received for more detail information.

VII. Extension TVA Demonstration Program

Extension TVA Demonstration farms number ten in the county at this time. During the past year three have been discontinued. We have been authorized to take additional farms and will get to this in December and January. The number of farms that will be taken on will be eight or ten.

As a whole, these TVA Demonstration farms are serving a real purpose in their respective communities. In all cases, alfalfa has increased on these farms. With the use of 0-20-40 these farmers have done a good job of demonstration that the use of adequate amounts of fertilizer in the right proportion definitely pays on top dressing alfalfa, increase yield and longevity of the stands. Three of these farms are now using silage that did not have it prior to becoming demonstration farms.

One farm is using free choice silage from a trench silo with free access to good legume hay and limited amounts of grain. This farmer was able to show an increase in production with less feed cost as well as a great saving in labor cost. A new milking parlor with pipe line milkers and bulk tank was also put in. This is the only farm in the county conducting such a demonstration. Several field meetings have been held on this farm and hundreds of other farmers have visited his operation.

On November 7, 1958 the association started using frozen semen. The previous breeding fee had been \$6.50 but due to the additional cost of storing the frozen semen, the breeding fee was raised to \$7.00 per service. As was anticipated by the board of directors, the additional 50¢ per service did not hurt the program, since there were many advantages to its use; namely, better conception rate as well as several bulls of each breed from which to choose.

4. Dairy Herd Improvement Association

The Grayson County Dairy Herd Improvement Association has twenty four (24) members with a total of 914 cows. Since 1957 the association has more than doubled in herds as well as number of cows.

The Association was able to hire a new supervisor at the beginning of the year, 1957, that has proven to be an excellent worker and is very popular among the members. Because of the above, the association has been able to more than double in size, both in number of members and cows. Furthermore it is felt that the DHIA members are getting their moneys worth out of being members now for the first time in several years.

1957 over the 1956 supply. The supply for the corresponding period of 1958 was about the same but it was felt that this would have been higher had it not been for the severe cold weather during these months.

a. V-Type Milking Barn

The agent has cooperated with the companies buying grade C milk in the county in encouraging producers to install or construct V-Type milking barns. This type of milking barn has been well received and 79 such barns have been put in during the past two years. Many of these are new structures, while some have been installed in existing buildings. Eighty (80) per cent of these producers did not have milking machines prior to their constructing the V-type barn. They, of course have bought cow to can milkers. This entire program is designed to make the job of milking easier and to encourage producers to increase their cow number.

3. Artificial Breeding

The agent has continued to work with the artificial breeding association of the county. The number of cows bred during the past year has increased by approximately 250 over the number bred in 1957. The total for 1958 will reach nearly 1200 cows bred artificially. The technician employed by the association continues to give good service and has been able to maintain a satisfactory conception rate.

More than ninety (90) per cent of the Grade A milk produced in Grayson County is now picked up by tanker truck from bulk tanks. The larger majority of our producers went to bulk tanks voluntarily. A small number of pipe line milkers have been installed particularly when new farms have been built.

2. Grade C

About 1100 farmers in the county sell grade C milk from herds ranging in size from 2 to 20 cows. The average being 5 to 6 cows. All of the milk goes to the two companies, namely Carnation for condensing purposes at Galax or to Kraft Foods Cheese Plant located at the county seat in Independence. The Kraft plant is in its third year of operation. The Carnation plant at Galax has been in operation for a number of years. Both receive milk from other counties and at the peak season they will handle about 350,000 pounds daily. The capacity of both plants is somewhat larger.

Both of these companies announced in March 1956, that an incentive price of 50¢ per hundred would be paid in January, February and March for milk produced over the corresponding period of the previous year. This announcement has stimulated interest in the grade C producers and many of them are adjusting their operation as much as possible to take advantage of the incentive price. Reports from the companies indicate that this incentive price offered for the first quarter, increased the milk supply about fifteen per cent average in

number of people feeding whey in the future should increase. Most of these 800 whey fed hogs have received a very small quantity of grain; most of the gain has been on whey and pasture. The majority of whey feeding is limited to summer time, since most nights during the winter are cold enough to freeze. Some have insulated tanks but few have installed automatic defrosters in their troughs.

VI. Dairying

1. Grade A

There are 68 Grade A dairies operating in the county at this time. During the past year there have been two men to discontinue selling Grade A, and five new producers have been added.

The general trend among our Grade A men is to holstein cows. They are gradually replacing the guernsey and jersey breeds. There have been seventy three (73) springing heifers brought in from out of state during 1958. The majority of these went to new Grade A dairy herds. Approximately thirty five (35) per cent however have been placed with Grade C producers.

Most of our Grade A men are trying to increase production through better management and breeding rather than buying more cows.

the pool is sold to a local mill that normally comes within one or two cents of the pool price. As in the past, arrangements were made for a representative of the ASC office to be on hand to receive applications for incentive payment. It is felt that this is another service to the farmers of the county and it certainly eliminates many sales slips being misplaced.

4. Hogs

Most of the hogs produced in the county are for home use. There are around 800 sows in the county on about 325 farms. Pigs from these sows are sold locally either to neighbors or to trucks from near-by North Carolina. There has been a noticeable trend from such breeds as Hereford, Poland China, OIG, etc. to the Hampshire breed in the past few years. Farmers with Hampshire pigs never have any trouble selling them at home by the time they are eight weeks old. Most farmers are now providing pasture for their hogs. The local Kraft Foods Cheese Plant has as a by-product large quantities of whey which they offer farmers free at the plant. The feeding of whey to hogs is becoming more popular and more farmers are taking advantage of the free supply.

There were about 800 hogs fed whey in the county this year. Whey fed hog herds number from 3 to 100. Farmers that have fed whey this past year have made money, therefore the

b. Foot Rot

Sheep producers in adjoining counties have been plagued with foot rot in their flocks. To our knowledge, not a case has shown up in the county. Our producers are on a constant lookout for this condition and when it does show up, information will be sent out on proper treatment to cure the affected animals as well as how to keep it from spreading to additional animals. Farmers have been warned of the seriousness of this condition and have been rather cautious in buying their replacements.

c. Wool Pool

Grayson County pools it's wool with two other Virginia counties and four North Carolina counties. In 1957, for the first time in twenty three (23) years history of the pool, the pool wool was bringing less at weighing time than was being offered by other buyers. Because of this, the pool only received about 14,000 pounds of the 20,000 pounds normally collected. As usual the wool pool committee made a good sale in 1958 and wool did not advance as in 1957. Therefore, there were 19,900 pounds of wool collected from the pool members. Of this amount of wool, ninety-eight (98) per cent of it sold as clear wool, netting the producer 47¢ per pound, while county buyers were offering 40¢ for the same wool. While not all producers take advantage of the pool, it is made available to all. What does not come to

made in already existing flocks. Many of our flocks in the county number less than twenty (20) ewes. Many as small as ten (10) ewes. Most of these small flock owners could profitably carry twice as many ewes on their farms very economically. As always, the Grayson County farmers realized more profit from their sheep dollar in 1958 than was realized from dollars invested in any other type of livestock.

Through the cooperation of a cooperative in this area, replacement ewes were made available to Grayson County farmers in size lots requested. Unfortunately only one man made up his mind in time to get some of these ewes. Since we have some in the county of this type and they have proven to be satisfactory, it is felt that if the same service is made available in future years, several more western ewes can be brought in to the county.

a. Internal Parasites

Most flock owners are doing some work on controlling internal parasites. Perhaps seventy (70) per cent of the sheep got at least two treatments of phenothiazine per year; another twenty per cent got the recommended four doses per year and another ten per cent got treated when serious trouble occurred.

attention was again called to the problem and they are still being reminded that something should be done to get rid of these lice before winter.

2. Feeder Steer Sale

The agent cooperated with the local livestock market, the agent from Carroll County and the Division of Markets in conducting two feeder steer sales during the year. The first sale was held on October 3 and the second one on October 23.

The first sale, held on October 3 had 799 cattle consigned, the sale held on October 23 had 399 head. Prices received by farmers were quite satisfactory in both sales. The cattle were graded by representatives of the Division of Markets and were penned and sold according to weights and grades. Since these sales were a success it is believed that future sales will be successful and will have more interest for county producers. Approximately ninety (90) per cent of the cattle sold in these sales went out of the county and fifty (50) per cent went out of the state.

3. Sheep

Grayson County farmers continue to gradually build up sheep numbers. Sheep are found on 430 farms in the county, the total number is around 7500 breeding ewes. This number shows an increase of approximately 200 over last year. There have been a few new flocks added but most of the increase has been

the state, the prices on feeder calves have been pretty well established. The agent keeps the farmer of the county informed as to prevailing prices of cattle after the marketing season starts by radio and newspapers. Many of our small producers carry the calf crop over until the following spring and sell at that time to farmers in the county as well as farmers from near-by counties.

a. Internal Parasites

Farmers are not more conscious of internal parasites. They are discussing symptoms and treating much more than in the past. Many are treating individual animals showing symptoms while some treated their entire herds for the first time this year. Publicity was given on the fact that all researches conducted show that most cattle in the county can be expected to be infested with internal parasites. Radio programs were devoted to the subject as well as news articles giving symptoms of infestations and methods of control.

b. External Parasites

In traveling over the county last spring, it was quite evident that many cattle, particularly beef, were heavily infested with lice. This was called to the farmers attention on the radio and through circular letters and news articles and the agent also made farm visits. As a result some 1500 cattle were dipped and a larger number were sprayed to bring these parasites under control. In October the farmers

89¢ per pound as compared to 85¢ per pound last year for the first crop. This tobacco is graded and sold on a grade basis. The same prices were paid this year as have been paid for the past three years, and runs from 45¢ to \$1.25 per pound, with an additional ten per cent being added. A second sale was held on November 10. The highest quality tobacco was sold in this sale since in aromatic tobacco the higher quality is in the top of the plant which is completely reversed from burley tobacco. In the second sale thirty-nine (39) growers sold 2,605 pounds of tobacco for \$2,618.86, averaging \$1.01 per pound.

V. Livestock

1. Feeder Calf Sale

Farmers wishing to sell their calves through feeder calf sales, sold through the Wytheville and West Jefferson sale in 1958. Top steer calves went for \$38.00 per hundred, and heifers went as high as \$31.00. Many other farmers in the county who had calves for sale were able to sell in the field to a better advantage than in the past, but in most cases sold too early to take advantage of the rising market. Some farmers sold their steer calves for \$28.00 in the field. Others who sold early, only received \$25.00 per hundred for heifers and steer calves. The feeder calf sales throughout the state have definitely helped the producer who does not participate in these sales, in that, if they hold their calves until after the sale schedule is half completed in

b. Fertilizer

An increase in the number of farmers having their soil tested from their tobacco fields has been noticed. As a result more has been accomplished toward getting the proper fertilizer applied to tobacco land than in the past. The use of fertilizer analysis (5-12-15) has taken on rather rapidly and is showing good results. Too many farmers are still using too much nitrogen on their tobacco and not enough potash. The extension agent is and will continue to bring this to the farmers attention and strive to have this situation corrected as fast as possible.

c. Grading and Sorting Demonstration

Two grading and sorting demonstrations were conducted by a representative of the tobacco grading service of the USDA from Greenville, Tennessee. These demonstrations were attended by sixty-five (65) farmers that seemed to get quite a lot from the demonstration and questions. Through these demonstrations it is felt that farmers will be prone to sort their tobacco crop to a better advantage and that by doing this, they will be able to realize a greater return from their crop.

7. Aromatic tobacco

Grayson County still leads all the other counties in the state in the production of aromatic tobacco. The first sale was held on October 14 at Independence. Thirty-two (32) growers sold 5,280 pounds of tobacco for \$4,383.05. This is about

leaflet on "Plant Bed Management" and "The Control of Diseases of Burley Tobacco" was mailed to each tobacco farmer. A letter accompanied this leaflet, stressing the importance of producing good, early strong, disease free plants. Because of this and other factors, only a few cases of blue-mold were reported and wildfire in burley tobacco was much less severe in 1956.

During the spring of 1956, many farmers used agricultural streptomycin for the control of wildfire in plant beds. In most cases the results were good but a few reported some damage from this disease in the field. It is not known whether it was picked up in the fields after transplanting or whether the plants had a light infestation in the beds that further developed during the damp weather after transplanting.

The agent cooperated with the state experiment station in a survey among the burley tobacco farmers in the county who had obtained the highest yields. The purpose of this survey was to find out how much actual plant food was being used in order to obtain these high yields. It had been pointed out to the experiment station personnel that many farmers were using plant food in excess to that being recommended by the experiment station. This was true with a part of the questionnaires returned, however, in the majority of cases even though the amount used was in excess, it was still pretty well in balance with the fertilizer requirements of the crop.

in maintaining their alfalfa stands for a longer period.

d. Other Hay

Much of the grass hay produced in the county is from old permanent meadows. Farmers were encouraged through personal contact, radio and newspaper articles to apply 6-30-30 and ammonium nitrate to their fields, when this was done the increase in yield amounted to as much as four times the normal yield.

e. Hay Supply and Storage

For the third time in several years the farmers of Grayson County have an adequate hay supply to carry their livestock through the winter. The supply is adequate but the quality is not. Too much of the hay is far poor quality to begin with, (non-legume) and much of it loses quality because of storage methods. There are 147 pick-up balers in the county and many of them are used for custom work. We still have fifty (50) per cent of our hay stacked or ricked outside and much of the hay damages that is stored in this manner.

6. Burley Tobacco

a. Grayson County has 600 burley allotments that average about .6 acre per allotment. The county has the average highest yield per acre of any of the burley counties in Virginia. In the past there has been considerable trouble with bluesold and wildfire. In February 1957 and 1958, a

b. Varieties of alfalfa

Several farmers have cooperated in seeding several varieties of alfalfa in the same field. Field meetings have been held on these farms. Very little difference has been observed in the varieties. Varieties tested have been, Buffalo, Williamsburg, Atlantic and Kansas Common. All the varieties do well in this county, but perhaps the Atlantic produced a slightly higher quality hay with more leaves and smaller stems. The new variety Narragansett has not been thoroughly tested in this county but at least 21 farmers seeded it during the past year for the first time.

c. Fertilization

A study of 203 soil samples taken in 1955 from land to be seeded to alfalfa as well as a few from land already in alfalfa show the following analysis as to phosphate and potash levels. Phosphate, Very High - 5, High - 23, Medium - 103, Low - 72. Potash, Very high - 16, High - 26, Medium - 100, Low - 61. 111 of these samples had a PH of 6.4 as above while 142 had a PH of less than 6.3. This gave an idea as to the lime and fertilizer needs at that time. Because of such information it has been helpful in analyzing the total situation since these samples came from all parts of the county. Since these samples were taken, the trend with our farmers to do a better job of fertilizing the alfalfa crop has been noted. They are realizing the importance of the potash need

5. Hay Crops

a. Alfalfa

Alfalfa acreage, while not near adequate yet, has increased during the past years. In 1950 there were 433 farms growing 6,012 acres. 463 farmers have sown alfalfa for the first time during the five year period. The number of acres has increased to 4,000 acres. This gave 6.0 acre average for 900 farms. The above figures are somewhat encouraging but the need for more alfalfa in the county is still great. There were still 1,300 farms in the county that had no alfalfa at the end of 1954. Thirty-five (35) new farmers seeded alfalfa for the first time in 1958. Many old, as well as new growers took advantage of the A-3 ASC practice and seeded alfalfa during the year. It is estimated that the alfalfa acreage at this time is between 7,500 and 8,000 acres. This being true, it would show an increase of 1500 acres during the past three years. There were 500 acres of alfalfa seeded during the past year under the A-3 practice of the ASC program. The 500 acres were seeded on 31 farms. Much of this new acreage of course, was to replace old stands on the way out. Farmers in this county do not just plow alfalfa stands up, without seeding equal or more acreage back to alfalfa.

The Extension Agent has stressed the importance of alfalfa more than any other crop and will continue to do so until the acreage is much higher than it is now.

Some pasture was reseeded in 1958, however not as much as was done following the dry year of 1954 and 1955. Most of the pasture that had given out because of the droughts had been reseeded previously. Much of what was seeded during the past year was cropland being returned to pasture and was done through the ASC cost share program. Due to favorable weather conditions, pasture in Grayson County was the best and furnished more forage for all types of livestock than they have for the past five years. Farmers are continuing to treat the pastures that need treatment the worst, where accessible, on the cost share program of the ASC.

Most farmers top dressing pasture today are using either a complete fertilizer or a material containing both phosphate and potash. Accessible pastures have had one or more applications of phosphate in the past and according to the soil samples taken from old pasture fields, the need for potash is noted.

4. Supplementary Pastures

a. Winter

The interest in winter pasture has increased. More farmers are sowing a heavy seeding of small grain mixture for winter pastures. The dairymen and sheep producers have become more interested in this than the beef producers. Several newspaper articles and radio programs were devoted to winter pasture during July, August and September.

companies urging the use of silage for higher winter production.

One grade A dairyman has completed his second winter feeding period using silage and hay free choice with limited grain. His total production increased above the previous winter; the labor cost was much less and grain feeding was less than half, thereby giving him more net profit. This farmer fills a 450 ton trench silo, from 22 acres of corn and two cuttings of alfalfa from 35 acres, plus small grain from the 12 acres of silage corn land after it has been grazed in the spring.

3. Pasture

Pasture in Grayson County is the most important single crop grown. There are 108,936 acres devoted to this crop in the county as compared to 89,858 acres five years ago. The above 108,936 acres of pasture is found on 2,229 farms. Of this, 108,936 acres, 16,624 acres is improved pasture. In the 1950 census, there were only 448 farms that reported 10,911 acres of cropland pastured. Much of this 14,000 acres of land which is no longer considered as cropland, was too steep to crop profitably and it is thought that since the operator considers it no longer as cropland, it is showing considerable progress in the right direction. During the same period there has been a reduction in the number of acres of cropland harvested of about 6,000 acres; most of this 6,000 acres has been turned back to pasture.

using 300 pounds of 3-12-6. Others are using 400 to 600 pounds of 0-30-30 and adding 200 to 300 pounds of 33 per cent ammonium nitrate at planting time. Farmers using plenty of fertilizer in 1958 have made very high yields since moisture conditions have been very favorable.

2. Silage

Corn growing for silage increased by approximately 100 acres in 1958 above the previous year. Sixty-five (65) to seventy (70) per cent of this corn was used in upright silos. The remaining thirty (30) to thirty-five (35) per cent was stored in either trench or bunker type silos. These types of silos are becoming more popular with Grayson County farmers. They not only find them more economical to construct per ton capacity but find they have some advantage in cost to fill and feed from. The number of farmers feeding silage has increased by ten to fifteen per cent during the past two years. More emphasis has been put on silage by extension workers, milk companies, field men as well as all milk companies buying both Grade A and C milk in the county. The two companies buying Grade C milk pay a 50¢ per hundred premium for milk to any producer in January, February and March over the amount sold during the same months the previous year. This has helped stimulate interest in silage, especially on the smaller farm. Several feature articles on silage were written for the newspaper in connection with paid advertisements from milk

With livestock as the major enterprise, the cropping system of the county is devoted to production of the feed crops, mainly pasture and forage crops. About one sixth of the farms produce some type of cash crop such as tobacco, poultry and fruits, which are found on most farms, but in many cases it is only produced for home consumption.

III. Board of Agriculture

The efforts of the agent in carrying out the Extension program of the county, for the past year, has been in keeping with the Extension Plan of Work. This plan of work was outlined by the County Board of Agriculture.

IV. Agronomy

1. Corn for Grain

Corn grown for grain in Grayson County is decreasing in acreage each year, while the total production in bushels is remaining constant. From 1949 to 1954, acreage of corn decreased by 2,947 acres. The average yield in 1949 was 42 bushels and in 1958 is estimated to be 65 bushels.

The increase yield has been made possible by the use of new and adapted varieties of hybrid, as well as the increased use of recommended fertilizers applied at the recommended rate. The addition of nitrogen, either as a side-dressing or applied in the mixture at planting time has increased the yield considerably. Many farmers are now applying 800 pounds of 10-10-10 per acre and five to six years ago, they were

I. Introduction

This report covers a part of the activities of the County Extension Agent that were carried out in Grayson County from December 1, 1957 through November 30, 1958. In making this report, the agent has mentioned the most important activities, however, it must be kept in mind that the agent has devoted much time to less important projects not mentioned in this report.

II. Type of Agriculture

Grayson County has been described as the plateau deeply cut by streams and broken by mountains and by high hills which have round tops and steep slopes. The county is often called "The Roof of Virginia", because of the two highest mountains of the state being located here. The elevation ranges from 2,000 feet where New River leaves the county on the East to 5,715 feet at the top of Mount Rogers in the West. Eighty-five (85) per cent of the land is cleared and about the same percentage is either steep or rolling. The steep rough pastures on most of the 2,626 farms average 86.2 acres per farm; can be utilized only by beef cattle or sheep, which ranks second and third as the main source of income of the county. Dairying ranks first, from the standpoint of income. The large dairy herds are concentrated in the central and eastern parts of the county, but dairy cattle are found in all sections.

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1958

ANNUAL REPORT

GRAYSON COUNTY

ANNUAL NARRATIVE REPORT

COUNTY EXTENSION WORK

Virginia Agricultural Extension Service

C. F. Simpson

Name

County

Title

Agent

Assistant Agent

Assistant Agent

Assistant Agent



1958

Grayson

County