

RESULTS OF LESPEDEZA BICOLOR PLANTINGS IN GEORGIA

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Pittman-Robertson funds for the conservation and development of wildlife, became available to Georgia in the fall of 1943. One of the first projects to be initiated under the Act was the Farm Game Habitat Restoration Project, based on an Agreement of Understanding between the State Game and Fish Commission and the supervisors of the 20 Soil Conservation Districts then existing in the State. Under this agreement the State was to furnish materials for planting wildlife borders for the production of food for quail and a Project Leader to assist in administering the provisions of the agreement. For their part, the Soil Conservation District Supervisors agreed to secure the planting of these borders on the farms of their various districts to be maintained by cooperating farmers for wildlife purposes.

METHODS

The agreement of understanding called for the planting of borders of *Lespedeza bicolor* and *L. sericea*. The bicolor to produce food for quail and the *sericea* to provide cover for birds in the fields. These borders were to be planted along the edges of fields or on terraces across fields. It was stipulated that the borders should be from twenty five to forty feet wide.

During the first two years, efforts were made to establish these borders from seed. Bicolor seed in the hull were planted. Sericea seed were scarified. Both bicolor and sericea seed were furnished by the State Game and Fish Commission. Work Unit Conservationists of the Soil Conservation Service in the various counties of the state supervised the selection of border sites and the seeding of same. The project was largely an experiment from the viewpoint of actually establishing borders.

RESULTS AND DISCUSSION

Results the first two years, especially the first year, were disheartening. Seed in many cases failed to germinate, especially the bicolor seed. In the sandy coastal plain section of the state long and hot dry weather often caused the small plants to die before the root system was firmly established. The Project Leader and Soil Conservation Personnel did a great deal of experimenting and finally came to the conclusion that if the project was to be successful on a state-wide basis, plants of the bicolor would have to be substituted for seed. Since plants in such quantities were not available, the Project Leader conceived the idea of producing the plants in the state. Agreements were reached with a number of pivotal farmers to plant seed furnished by the State Game and Fish Commission and sell the plants to the Commission at a specified price. There was some doubt in the minds of the Soil Conservation Leaders whether the effort to produce plants would meet with

success. However, it did. The first year 1,000,000 plants were produced from 100 pounds of seed. The next year, 7,000,000 plants were produced from 800 pounds of seed. This year the results were not so good due to very unusual weather conditions. Approximately 1,200 pounds of seed were planted and the production of plants will probably not go over 8,000,000. Since the project in this state calls for only about 3,000,000 plants per year there has been a considerable surplus. This surplus has been allotted to the same type project in other states of this region. Last year nearly 4,000,000 plants were furnished other states and this year about the same number will be available.

During the five years just ended a total of 7,642 borders have been planted in the state. Of this number 6,861 have been successful while 781 have been listed as failures. These figures are not altogether correct due to the fact that a number of borders of the first two years shown on the records as failures later became most satisfactory. The percentage of failures the first year when seed were used ran as high as 37 per cent. The second year while still using seed the per centage of failures dropped to approximately 20 per cent. The third year when seed and plants were used the failures showed 14 per cent while the last two years using plants only the failures ran less than 3 per cent. The percentage of failures for the five year period ran about 10 per cent. With plants the losses are negligible. It is the opinion of the Game and Fish Commission as well as of the Soil Conservation Service leaders for the region that from a material standpoint the project has been successful.

There must be other results if the project accomplishes that for which it was intended, namely, the conservation and development of the quail life of the state. The question naturally arises as to what effect the establishment of these borders has had on the quail population. During the past year we have been making observations in various sections of the state. Soil Conservation Technicians, hunters, and farmers were asked several months ago to make special observations to discover if possible, whether or not the bicolor attracts quail, if they feed on the plant's seed and especially whether or not there are more birds than there were five years ago. The results of these studies have been most satisfactory. From every section of the state have come reports that the wildlife borders are accomplishing desired results. Technicians, especially those who hunt have stated without hesitation that they are finding more birds than at any time within the past ten years. Hunters, local as well as those who come to Georgia for hunting, testify that they have no trouble finding birds in satisfactory numbers on those farms where bicolor borders have been established on a sufficient scale as to produce the necessary food. Farmers, who themselves like to hunt, as well as those who simply desire to conserve wildlife, are unanimous in the opinion that they have, in many cases, more than twice the number of quail that were on the farm in 1943. One farmer, standing in his field made this statement, "I have three borders. I want at least three more. I love to hunt. Five years ago there were very few quail on my farm, only one covey so far as I could find. Today I have five coveys on this small farm. I can show you three coveys on one border, and at this moment one quail hen is nesting less than one hundred yards from where we are standing." Other farmers feel the same. One farmer reported sixty birds on one border. Visiting the border the Project Leader actually saw what appeared to be this number. From all sources comes the statement that quail are not only feeding on the borders but that they are nesting in them in preference to other places. All

observers are unanimous in stating that they can always find quail at or near the borders, and especially at feeding hours. A number of the hunters have taken the time and trouble to examine the crops of quail they have shot and all of them report bicolor being taken in larger quantities than other foods.

So far in Georgia, all parties concerned are high in their praise of what has been accomplished by the project. Better still, interest is growing by leaps and bounds not only on the part of those who have already established borders but on the part of those neighbors who were at first skeptical of the project but who now have evidence at hand that it does accomplish results.

SUMMARY

If suggestions are in order we would offer this advice: Bicolor is a temperamental plant. To be successful in growing plants from seed it is absolutely necessary to follow certain rules as to the preparation of soil, method and depth of seeding, condition of the soil from the standpoint of moisture content at the time of planting, manner and types of cultivation and fertilization. Anyone planning to grow plants would do well to visit a section where they are being grown and acquaint himself with all the factors that enter into the problem.