Susranville, Calif.—August 23, 1957—Deer rank high in the list of California's natural resources. The capital value of the deer herds of the State has been placed as high as 1 billion dollars. As the human population of California continues to rise, there is growing need to grow and harvest more deer. The number of deer that can be produced is limited mainly by the supply of natural forage.

There is considerable opportunity in California for growing more deer forage and therefore more deer. This can be accomplished in two principal ways (1) by encouraging natural reproduction of forage plants and (2) artificial reseeding and planting.

Natural regeneration of deer forage plants is curbed primarily by deer and livestock grazing. Where the plants are grazed too closely each year, reproduction is decreased or prevented and the plants themselves in time killed. However, plants will remain thrifty and reproduce adequately if a certain amount of each year's growth is left on the plants. Herbage growth in excess of this amount can be considered available for grazing. Deer and livestock numbers, if both are involved should be regulated so only the available plant growth is utilized each year.

In addition to close grazing, wild fires, insects and rodents kill out some deer forage plants each year. There is need for developing methods of controlling these destructive forces.

In many localities preferred deer forage plants have been destroyed or reduced to such a low density that natural reestablishment of the stand will take many years - in some cases, hundreds of years. In these situations the only hope of getting new forage plants in a reasonable time is through artificial reseeding and planting of seedling stock. Unfortunately methods for reseeding and planting most deer forage plants have not been developed yet. In fact research on this problem in California was started only within the last ten years.
In 1962 the California Forest and Range Experiment Station undertook cooperative studies with the California Department of Fish and Game to develop methods for artificially reseeding and planting deer forage plants in California. The project is financed with Pitman-Robertson funds.

This work was started on deer winter ranges in the Eastside region of California where deer forage, particularly browse, has been destroyed on thousands of acres by grazing, fires, insects (tent caterpillars) and rodents and the need for artificial reseeding and planting is great. This region encompasses the range of the Rocky Mountain mule deer, probably the most highly prized game animal in the State.

Shrub and tree browse especially are needed on these ranges because they provide herbage and twigs above the snow which usually blankets these ranges for several months each year. Both native and introduced species are being considered in the program.

Most of the research to date has been concentrated on bitterbrush, the most widespread and valuable native deer browse in the region. Many of the facts determined for this species can be applied to other species.

In the five years of study to date enough information has been obtained on bitterbrush to permit pilot seeding trials. An 18 acre seeding was made on deer winter range in Modoc County this spring with promising results. Also this spring bitterbrush seedlings started in the greenhouse were planted successfully in the field.

Many leads are being obtained on ways and means of growing more deer food. For example, there are indications that 2,4-D can be used to kill sagobrush in bitterbrush stands without damaging bitterbrush. This could be a practical way of stimulating better growth and reproduction of bitterbrush in some situations.
PRESS RELEASE 8/23/47

Strains of bitterbrush that sprout following burning have been found. If sprouting proves to be an inherited characteristic sprouting strains that withstand the destructive effects of fire, probably could be developed and planted on the range.

Although considerable progress has been made to date many more years of research by many agencies will be needed before practical reseeding and planting methods can be developed for the many plant species needed in California for proper nourishment of the deer herds.

If more and healthier deer are to be produced and harvested in California closer attention must be given to keeping deer and livestock numbers in balance with the available forage supply, developing methods for artificial reseeding and planting and for controlling destructive factors like fires, insects and rodents.

***** ***** *****

Highlights of a talk to be presented by A. L. Hormay, Leader, Susanville Research Center at a meeting of the Northern Counties Wildlife Conservation Association in Redding, California on August 22, 1957. Mr. Hormay was granted a Superior Service award by the U. S. Department of Agriculture in Washington for developing a rest-rotation system of grazing that has shown the way to restore the productivity of livestock ranges in California mountains.