USE PLASTIC TO PROTECT AERIAL PHOTOGRAPHS

Recent developments of devices to aid in the interpretation of aerial photographs have increased the efficiency and field use of photographs for mapping and surveys of forest and range lands. However, there has always been the problem of protecting the photographs and preserving the information placed upon them from weather and rough field use. Under ordinary use and working conditions, a thin coat of transparent plastic sprayed on the photographs in the field will provide this protection. The plastic is available commercially in pressurized containers and can be conveniently carried on any field job.

Plastic was sprayed on aerial photographs used for type mapping and locating sample plots on the Starkey Experimental Forest and Range in northeastern Oregon during the summer of 1952. Soft wax pencil type lines or other penciled notations and markings made on either the face or back of the photographs before spraying were not smeared or obliterated during field use. The plastic coat waterproofed the photographs, dirt and dust were easily removed without damage to type lines or penciled notes, and the photographs withstood repeated rough field use under all types of weather conditions with little or no deterioration.

Application of the plastic to the photograph is a simple procedure. The spray can is held 12 to 15 inches from the photo and the spray applied with a sweeping side-to-side motion. This insures an even coverage on all parts of the photograph. The plastic coat dries in approximately five minutes and the photograph is ready for use. Under normal use, one thin coat of plastic is sufficient, but if continuous hard use is anticipated, it is recommended that two, and possibly three coats, be applied. No matter how many layers of plastic are applied to the photograph, they do not hinder stereoscopic work. One 12-ounce can will spray an area of approximately 44 square feet.

After the original information has been fixed on the photograph by spraying, additional information may be added by writing or marking directly over the plastic coat. This information may be fixed by applying another coat of plastic.

If necessary, the plastic covering and any markings either fixed by it or placed directly on it may be removed. The plastic covering may be wiped off with a cloth that has been dipped in a solvent, such as carbon tetrachloride or common lighter fluid. Markings placed on the plastic coat may be removed by erasing or wiping with a cloth.

Marking instruments with sharp points should not be used after the photograph has been sprayed. A sharp pen point will pierce the thin coat of plastic and a blot will form between the photo and plastic coat. A sharp-pointed, hard-leaded pencil will also pierce the thin coat of plastic and the plastic covering will peel off the photograph.

Due to the highly combustible solvent used in the plastic, care should be taken not to use it near an open flame. Cans should not be stored where the temperature may exceed 120°F. Under high temperatures, the gas in the can may expand sufficiently to result in an explosion and possible injury.

Whatever job the forest or range manager encounters when using aerial photographs, spraying with transparent
plastic will save much time and money. Plastic spray should have considerable value for most field uses of aerial photographs, whether it be a mapping job, a timber cruise, a vegetative survey, or routine administrative work on any forest or range unit.

Plastic spray need not be limited strictly to use on aerial photographs. Various types of maps, sketches of field plots, or written documents used in the field are a few of the many articles that may be made more useable by spraying with plastic. Compasses may be rendered waterproof and windproof. Other field instruments may be treated with plastic to protect them against dust, rain or snow, and corrosion. These are but a few of the many uses to which plastic spray may be put.

Credit should be given to Donald P. Streich, summer field assistant on the Starkey Experimental Forest and Range during 1952, for the initial development of this idea.

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USE OF SCYHTETTE IN RANGE FORAGE STUDIES

In harvesting range forage one must use sampling procedures which usually necessitate clipping a large number of sample plots. Long, narrow areas for clipping, 1.5 feet by 12 feet, have been recommended by a joint committee of the American Society of Agronomy, American Dairy Science Association, American Society of Animal Production, and American Society of Range Management (Pasture and range research techniques, a report by the joint committee published in Jour. of Agron. 44(1): 39–50. 1952). However, extensive hand clipping becomes tedious, time consuming, and expensive. Since few agronomic harvesters are adaptable to range conditions the appearance of the "Scythette" on the market seems to offer considerable promise for obtaining yields of range forage under a variety of conditions. The Scythette has been used for two seasons in range research work at Oregon State College. It was thought that other workers would be interested in a short report on the performance and usefulness of the Scythette during this period.

Figure 1 is a diagrammatic sketch of the Scythette. It is powered by a single cylinder, 2 cycle, air-cooled gasoline