PHOTOGRAPHY IN RELATION TO PASTURE INVESTIGATION IN THE SOIL CONSERVATION SERVICE

R. F. Copple

SINCE its beginning the Soil Conservation Service has attempted to make use of every available means which might aid in awakening the American farmer to the problem of erosion and enlist him voluntarily in a national program to conserve the soil. Not only does the farmer need to be enlisted in this program, but also a large percentage of those who are interested in conservation of our resources.

Not the least important of the implements at hand is photography, and the potency of the photograph has been constantly stressed as a means of emphasizing the acute need for action to combat erosion. Where the printed word may be drab and uninteresting, pictures tell a graphic and absorbing story—a story readable at a glance by everyone. Behind each photograph should be a reason for its existence. It should not, like Topsy, "just grow up".

Before a photograph is taken definite plans should be made to save both time and motion. Even with careful planning, however, there are a number of situations which lead a photographer almost to despair. One is unfavorable weather, but even that obstacle can sometimes be partially overcome by proper knowledge of photographic technic.

A number of suggestions are made here for those who use or take photographs. These suggestions do not cover the complete list nor are they expected to meet each particular situation or set-up for the photographer. The illustrations used in this paper are on pasture problems, principally in West Virginia and Ohio.

DEPTH OF FOCUS

One of the most important points to remember is depth of focus. This is accomplished best by stopping down the diaphragm to about 32 or less. This small aperture, of course, necessitates taking a much longer exposure. How long the exposure should be, depends upon the light, the film, and the subject. The value of a photo-electric cell for determining the exposure will be discussed under another section. A longer exposure tends to give clearer detail in the foreground, as well as in the background (Fig. 1).

Wind proves an aggravation to the photographer because he can do little or nothing about it, except postpone the job, if convenient. In some regions the forenoon frequently has less wind than the afternoon. For objects like grain fields which are continuously in motion, an instantaneous exposure is the only choice. Close-ups of turf can be protected from the wind by circling the area to be photographed with about 15 feet of grass rug which may be 3 to 4 feet high, thus

---

1 Contribution from the Soil Conservation Service, U. S. Dept. of Agriculture. Also presented at the annual meeting of the Society, held in Chicago, Ill., December 6, 1935. As given at Chicago, this paper included about 30 slides on pasture management which were used to illustrate many of the points on photography. Received for publication February 21, 1936.

2 Associate Agronomist, Soil Conservation Service, Zanesville, Ohio.