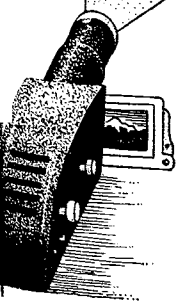


Victory Program
Farm

LIBRARY
COLORADO STATE COLLEGE
FORT COLLINS, COLORADO

D-30

VISUAL AIDS IN WARTIME



Extension Service
Colorado State College
Fort Collins
Colorado

the county extension agent or state specialist can present the lecture and slides. He should take special pains to explain each picture carefully, and tie it in with the specific subject at hand (some pictures may tell more than one story).

At the close of the meeting volunteers might be asked for, to repeat that story, with the aid of the projector and slides, in their communities, and a definite schedule made at that time. Those volunteers should then be instructed in operation of the projector and cautioned about care of slides. (Give each a copy of this circular, opened to those instructions.)

Once started, this system of carrying the story by visual means, with the aid of voluntary leaders, has unlimited possibilities. It will be limited largely by availability of projectors, sets of slides, and suitable screens.

Getting Projectors.—Every community will have one or more "color fans" who might be asked by the county extension worker to help in such a plan. If they are not qualified to handle the subjects, perhaps they will lend or rent their equipment for the duration. High-school teachers, USDA representatives, and certain commercial concerns are good prospects.

The College Photo Shop at Fort Collins has a limited number of projectors for rental (see copy of the June 1942 Blue List) but not enough to meet all needs in all counties. They will be made available to counties as far as possible, but some reserve must be held for the use of state specialists.

Securing Slides.—Most county workers now have their own cameras (35 mm.) and have started county slide libraries. Those who have not secured enough local slides for complete sets may "sandwich in" other slides with them to tell complete stories. Local fans, the College Photo Shop, and other sources can provide good selections of slides for most purposes.

Special sets of slides covering subjects from a state-wide viewpoint have been assembled by state extension specialists, and may be secured from the Photo Shop. In some instances more than one set on a given subject is available. For special sets, county workers should write to the specialists concerned, who can make suitable selections for their specific requirements.

Hints and suggestions for making more local slides will be discussed later in this circular.

Use Your Slides—Otherwise They Are Useless

Using Slide Projectors

Listen carefully to each instruction because each different make of projector has its own peculiarities. Read the instruction book carefully if one is available.

Many projectors are made of rather brittle plastics these days, and will break easily. Handle them carefully, and be sure to pack them tightly (with padding) in their cases if they are to be sent by mail or express.

Projection lenses should be protected from dust and dirt at all times. (Remember—no more till the war is won.) Use a soft, lintless cloth, or chamois skin to clean lens surfaces.

Check lamps carefully before using, to make certain that they are of the right voltage for the current to be used.

Always use a beaded screen, if possible, especially in the daytime. Light-colored walls, cardboard, sheets, and other materials can be used in emergencies. Do not try to project larger pictures than the size of your crowd requires for everyone to see. The larger the picture on the screen, the less brilliant it will be.

A projector should be operated from a table or substantial object so it will be level and steady, and on which there will be ample space to permit handling slides.

Rooms should be darkened as much as possible for good projection. Make certain that no outside light strikes the screen. Place it in the darkest corner of the room for daytime use.

Using 2x2 Slides

Show the slides in a sequence or order which will make their story progressive rather than "jumpy." The order in which the county worker or teacher showed them should be most desirable.

Handle slides in such a way as not to touch the surfaces of the transparencies. They collect fingerprints remarkably well. (See hints at back for protection of films.)

Remember that slides must go into the projector completely reversed and upside down, to project the picture the proper way. Most slides will be marked with a thumb tab in the upper-right-hand corner, when in the proper position.

The syllabus or running story to go with the slides should be well in hand so "the show" will move along easily. If questions are asked, answers should be to the point. Some projectors get so hot that slides may be ruined if left in place over one or two minutes.

Always return slides to the carrying case in the same order you found them, and with tabs at the top, ready for use.

Making Colored Slides

Here again, volumes could be written before such a subject would be covered. Extension workers are not generally considered or supposed to be expert photographers, but many of them have found "picture-taking" a good way to make records, and carry the story away with them.

For most purposes, Kodachrome film will be found the most readily adaptable for colored slides. It is fine-grained, gives good color reproduction when properly exposed, and its use can be learned readily. The original cost of the film includes the cost of development, and insertion of each picture into a cardboard frame called a ready-mount.

There are many kinds of cameras which can be used to take colored pictures (transparencies) in the 35 mm. size. Few if any of them are available on the market today, but the average county worker should have little difficulty in securing one from a friend or fellow worker to make needed pictures. (Photo Shop has a few for rental but supply is limited.)

Using Cameras.—It is how a camera is used rather than its make which usually determines the quality and usefulness of slides. Everyone must learn the details for himself. Instruction books which come with cameras are the best instructors for fundamentals. Experience, as usual, is the most valuable teacher. Generally speaking, the most expensive camera is the most accurate and precise.

A camera becomes more of a precision instrument as its price increases, and thus requires greater skill in its operation.

Copies of graphs, charts, colored posters, and other devices needed in slide form require special equipment. In most instances in will be economical to have such work done by a commercial photographer or at the College Photo Shop.

Duplicate "shots" on the spot will save time and money, if extra sets of slides will be needed. Slides can be copied but copies are seldom as good as the originals.

Tips for Beginners

Few people can hold a camera steady for longer than 1/25th of a second. A faster time for snapshots is usually the safer. To save film, time, and cussing, a *tripod* will be found a good investment. Learn to use it and to *keep your camera level* on it.

Exposure meters will soon pay for themselves in film saved. Those having photoelectric cells are generally more accurate, but they should be studied or calibrated to match the ability of your lens and shutter.

The printed *exposure guide* which comes with each roll of Kodachrome film will enable you to get good results if you do not have a meter. Study it carefully and learn to use its recommendations under different light conditions.

Range finders are often more harmful than useful in getting good slides. Backgrounds are important in slides. They should be clear but not outstanding. News pictures, on the other hand, should have backgrounds faded out. Study your instruction book which came with your camera, and find the best distance and stop to use for the greatest depth of focus. Have everything from your object in the foreground to infinity in focus, if you can. *Detail is essential*. More time and finer stops will produce that detail, with most cameras.

Remember that Kodachrome, properly exposed, gets what you see. Have at least a little sky in outdoor pictures if possible, and be sure the skyline is level in your finder before "shooting." The *blue of the sky*, plus a few good clouds, might add attractiveness and composition to your picture.

Slides made when the sun is almost or directly overhead are not generally satisfactory, especially in landscape scenes. Reasonable shadows help to define objects. Learn to use them judiciously.

The emulsions on slides will scratch very easily. Those slides which are valued highly, or which are to be used extensively, should be placed between *cover glasses* for protection. In doing that job, be careful to remove all finger marks from glasses before sealing the slides between them. Good glass mounts will cost from 4 cents up, not including labor.

To protect slides from fingerprints if they are not to be mounted in glass, a special emulsion has been developed. The College Photo Shop is equipped to do that work. The cost is 2 or 3 cents each, depending on the quantity, with a 50-cent minimum charge.

Use Your Slides

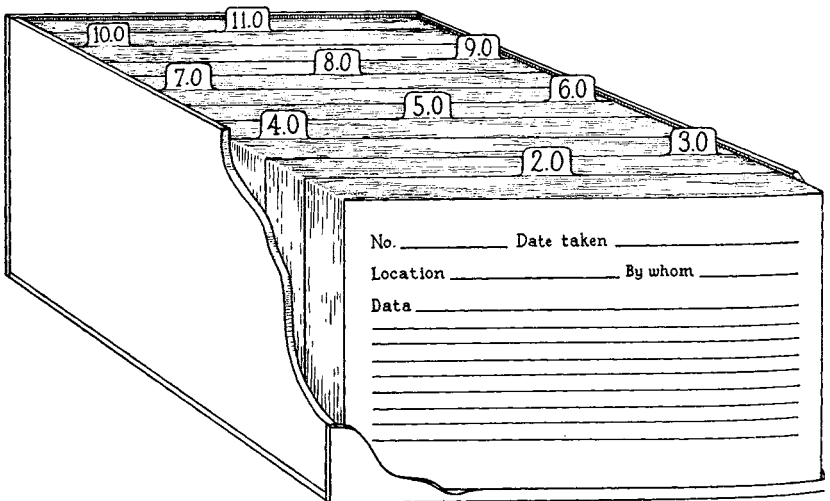
It's easy to make colored slides—and it's lots of fun “previewing” them—but their use determines their value. Too often they are piled up in desk drawers, or in boxes, “for future reference.” If they are worth taking they should be worth using.

Perhaps it is the lack of a suitable filing system which prevents them from being used more extensively—and it takes time and equipment to file them properly.

Filing System.—Many systems are on the market for filing slides but a simple, home-made set-up will serve the purpose, and cost very little money.

A supply of cards (3x5 inches) printed or mimeographed as shown in the illustration, will form the key to everything that is needed to identify each slide. Different colors of cards may be used for slides filed under different headings. Duplicate cards, one set to go with a set of slides, will avoid copying legends each time.

The filing scheme should be worked out with care so that it can be expanded as need arises. A decimal system will be found the most convenient. It can be outlined on a large sheet of cardboard, and hung on the wall for quick reference. Here's a suggested plan:



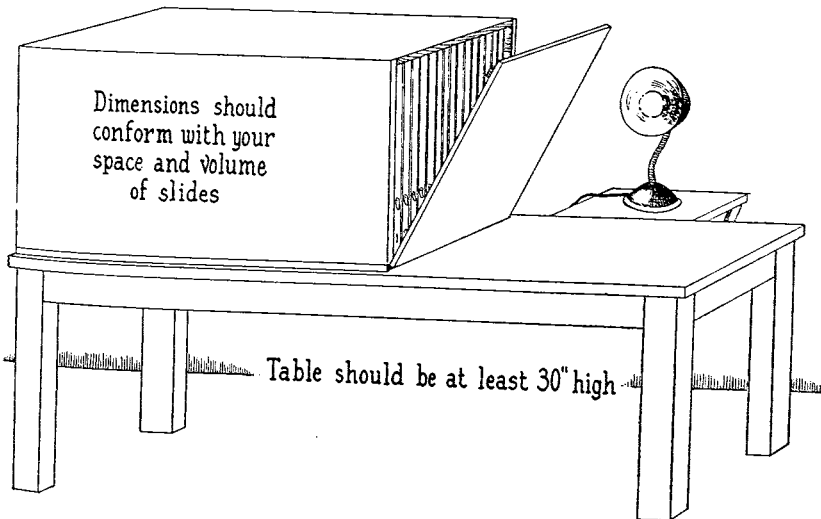
A simple file, with a card describing each slide in detail, makes your collection much more valuable, and usable by others.

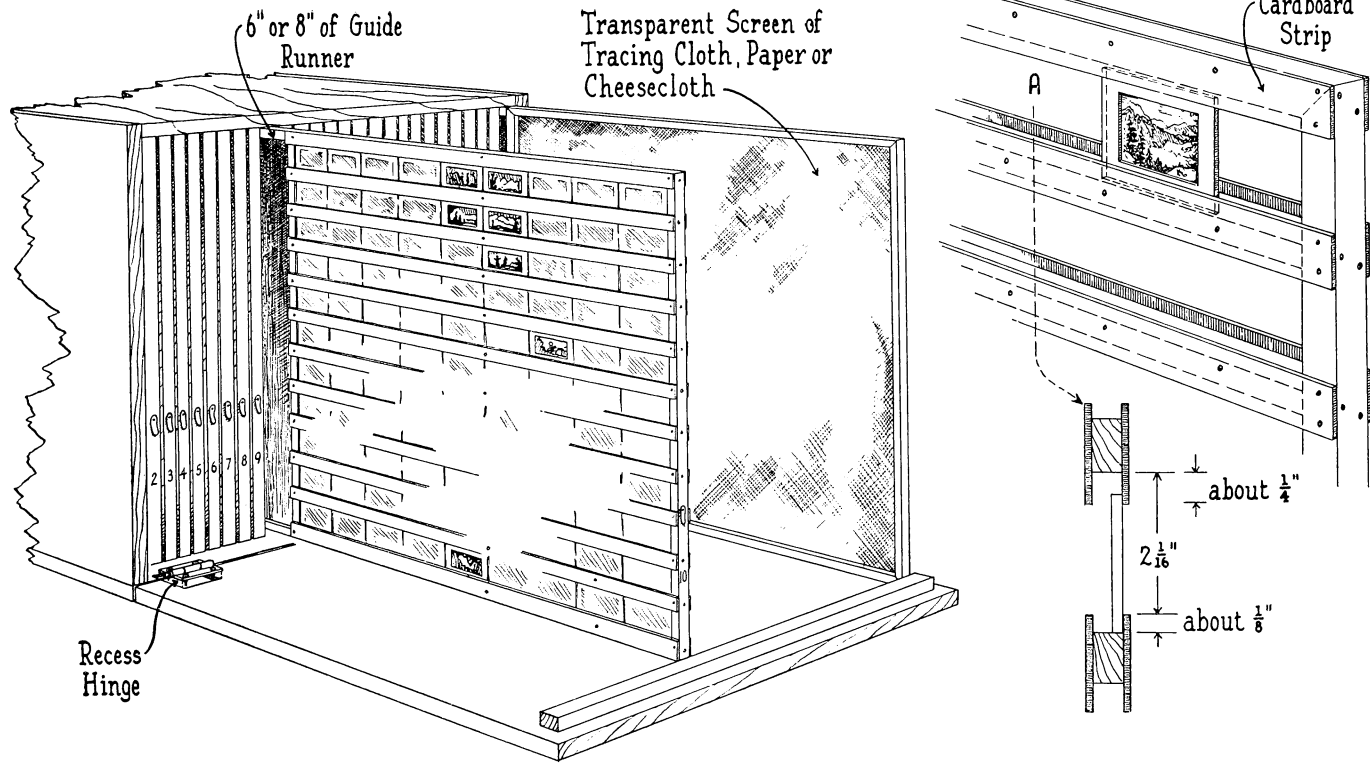
1. Agronomy
 - 1.0 General
 - 1.1 Grasses
 - 1.10 General
 - 1.11 Irrigated Pastures
 - 1.12 Dryland Pastures—etc., etc.
 - 1.2 Field Crops
 - 1.20 General
 - 1.21 Sugar Beets
 - 1.211 Beet Seed and Machinery
 - 1.212 Thinning
 - 1.213 Irrigating—etc., etc.
2. Horticulture (with divisions)
3. Animal Husbandry (with divisions)—etc., etc.

Perhaps you will decide against too fine a classification at the start but it won't take much more time to begin right, and avoid having to "back up and start over." When you get a thousand or more slides in your files, careful classification will begin to pay dividends.

Remember—you may not be the only person who will wish to use your slides. Give complete details on each filing card so that anyone can learn the story.

Filing Cabinet.—The quickest way to prepare or select a set of slides is to look at everything available under a given subject. Commercial equipment for clear-vision filing is expensive, but similar equipment can be built at reasonable cost. The illustration shows a cabinet built by a "color fan" for his own use, which would serve





A clear-vision filing cabinet for slides greatly facilitates finding what you want.

well in most county extension offices. Perhaps a 4-H club boy, who is handy in the shop, could make one.

The diffusion screen at the back, with a light behind it, will greatly increase the ease with which slides can be viewed.

Don't forget to number the panels according to your filing system.

In the event that you cannot get a filing cabinet, slide boxes are available at small cost, or they can be made very easily. Partitions holding 5 or 6 slides are better and more convenient than those holding single slides.

If You Are Making Slides, File Them So You Can Find Them Quickly—Use Them to Capacity

Literature and Services

Numerous booklets and circulars are available to help with all kinds of visual aids. Write to the camera and film companies, to the electric companies, and similar concerns. Your local dealers often have helpful material and suggestions.

The College Editorial Service has distributed copies of several USDA manuals on illustrations for circular letters, suggestions for exhibits, visual aid handbooks, and others. If you have misplaced them or need others, write to the Editorial Service.

Movie films are available from many sources. Those county workers who have projectors will find an unlimited supply of "commercials and industrials" available, but the best results will be secured with good "home movies" if they can be financed. USDA films are available through the War Boards, but even they will not take the place of good home-made movies.

Our Apologies

This manuscript is brief—we haven't covered a small portion of your questions—but possibly some ideas presented will help you to extend yourselves and your services during the coming months and years.

Our grateful acknowledgements go to J. E. McClintock of Ohio State University, Don Bennett and L. A. Schlup of the Federal Extension Service, Grant Eddy and Mrs. C. M. Robinson of the College Photo Shop, and to all others who have contributed ideas and experiences so generously.