The writing and scheduling depends upon the school and teacher, but by the February deadline, the essays are rolling in and judging begins. Commission personnel screen the essays and select the best ones for final judging by a committee composed of a representative from the Commission, State Department of Education, and the Izaak Walton League.

Winners are announced statewide and many local award programs are held in addition to the one in Richmond. At the Capitol, the scholarship winner and grand prize winner of each of the eight grades are presented their prizes by the governor and, after a tour of the city, further festivities are held during the luncheon which is attended by many representatives and friends of the sponsors and winners.

After the luncheon, it is almost time to start planning for the next year. The contest necessitates considerable effort being expended but as a method for extending wildlife and all natural resource conservation education, it has proven itself as a grassroots teaching tool in the schools of Virginia.

## MOTION PICTURE PRODUCTION IN MARYLAND

By DAVID J. SMITH
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Our program in Maryland is the result of an attempt some years ago to have a commercial studio produce for us a twenty-five minute film on one of the phases of our management work. After having contacted all such studios in the Baltimore area we realized that such a project was priced out of our class. We did not abandon the idea entirely, however, but instead, planned to try the job on our own. For an amount less than one such production would have cost us, we purchased a Kodak cine special 16 mm. camera, fully equipped and made the film complete with all the trimmings, sound effects, music and narration. It was so well accepted by the sporting public that we have added ten additional films to our library during the past seven years. During that time we also added to our production equipment until today, we have enough to do most of the basic operations.

We still have the same old Kodak cine special camera, to which we have added a syncronous motor for use when we make lip-sync dialogue pictures. This type of movie filming was recently made a reality to the small producer through the introduction of a new product that accurately controls the speed of a tape recorder. We recently acquired an inexpensive ½" tape recorder that utilizes this new product. It incorporates on the tape recorder an ingenious device known by the trade name of "Ranger Tone." This device imposes a signal at right angles to the other material being recorded on the tape but in no way affects the quality of the recording. It uses the standard sixty cycles in our alternating current to govern the frequency of this signal which, in turn, controls the speed of the machine in the playback without the slightest variation. To isolate the camera noises from the recording tapes, when used with that equipment, a blimp was made of ½" plywood, lined with sheet lead and sponge rubber which proved to be very effective, especially in the out-of-doors.

Since many shooting locations are along stream sides and other remote areas where electricity is not available, a portable converter generator was purchased to supply current to operate the camera motor and recorder from an ordinary 12-volt storage battery. This piece is small enough to be carried by hand for a long distance and does a very satisfactory job.

The only other major piece we have had to buy was a syncronous motor drive for our 16 mm. Bell and Howell projector. It attaches to any projector in a matters of seconds thus avoiding the necessity of having a projector standing idly by in our editing room. Since our recorder and projector can now be operated syncronously, our films can be narrated in any room with proper acoustical qualities. We have just completed such a room with a sound isolating booth for our projectors. This saves us the high cost of renting a commercial studio for this purpose.

A few editing devices, such as a Bell & Howell viewer, a professional hot splicer and a four-place sync machine complete the list of equipment we found essential to turn out a finished product. Of course, there will always be some laboratory work that requires expensive processing equipment, such as that used in processing film, converting our magnetic ½" tape to an optical track, etc. This work will continue to be done by the commercial people.

Now, regarding the use of this equipment, we have our power supply, our camera and our tape recorder. With this equipment, we capture the photography and the matching sounds simultaneously. The photography is then sent to the laboratory to be processed while the tape is converted to optical track. A copy of each is made, with edge numbers printed on both original and copy alike for later identification, for editing purposes. When the copies are received from the laboratory they are edited scene for scene until a finished work print results. Any narration or special sound effects are then made on our tape recorder while the work print is being screened by our syncronous projector. The original photography and track is then matched, through the use of the sync machine, to the corresponding edge numbers on the work print. Sounds are mixed into one composite optical sound track. All that remains now is to print the two together and an answer print results. A few final adjustments as to color corrections, etc., and we are ready to have our release prints made for distribution.

As to the cost of all of this mentioned equipment, the Maryland Game and Inland Fish Commission has actually less than four thousand dollars invested and except for small incidentals, added from time to time, feel that it is sufficient to produce our own motion pictures in the future with a minimum of cash outlay.

The question arises, how many people are used in making these films? We have no special group designated to do this work. It usually develops that some Department Chief finds the need for a special explanation of some adopted policy and an idea for a film is developed. We then get our heads together and work up a shooting script. He then contacts those people in his Department who are associated with the problem and requests their cooperation in the making of the film. Suitable subjects from among our employees are selected for the acting parts (they seldom object) and the work begins. Since the film usually covers a period of time that requires scenes in the various seasons, enough time is allowed between shootings to enable one man to act as script writer, camera man, sound man, editor and director. I do not recommend this plan to you but such a one exists here in the State of Maryland and cannot be remedied under our present budget set-up.

I am sure that the people in this room are acquainted with the importance that motion pictures play in projecting our thoughts and ideas in the conservation field. Nothing in written form can possibly have the dramatic impact of a motion picture. Through this medium we employ the use of all of our arts and sciences to appeal to the two most important of our viewers senses, the sense of hearing as well as the sense of vision. At the same time he receives our message in an atmosphere of entertainment rather than in a sense of duty or obligation to his sport or hobby through reading the same material in some lengthy report.

Through the organized program of distribution which includes the readily available medium of TV, our films are seen and heard by a great majority of those people for whom they are intended. Many, many people have reported seeing some of our films so often they can recite the narration verbatim. We also have letters in our files confirming the important part they have played in reversing the opinions of certain important and influential organizations who have voted to act contrary to our Commission's proven findings, which, most assuredly, would have had serious consequences.

In spite of our limited amount of money and our minimum crew we turn out about three pictures every two years and feel that it is a most important segment of our conservation program.