Widely known in the woodlands section of the pulp and paper industry in Canada, he was a speaker of note on matters relating to forestry and addressed many audiences in Ontario.

Mr. Matatall leaves his wife, the former Mildred Parsons, two daughters, Sharon 14, Jane 11 and a son Douglas 12. His parents Mr. and Mrs. F. A. Matatall of Ottawa also survive.

TECHNICAL NOTE

By W. Bientjes¹

QUALITY OF PHOTOGRAPHIC PRINTS FOR FOREST INTERPRETATION²

Foresters use a wide variety of commercially-processed prints of aerial photographs for interpretation purposes. They may class a certain set of photographs as good or poor without actually knowing why they are good or poor. In general, little interest is shown in the developing and printing processes, inasmuch as they affect interpretation.

It is felt, however, that aerial photos which are to be used for forest interpretation should be of better quality than run-of-the-mill prints. It is useful to know the ideal characteristics of a print for which the experienced interpreter is looking.

These qualities are undoubtedly difficult to define; and preferences will differ between interpreters. The problem was judged important enough, however, to undertake preliminary tests in order to ascertain the effects of paper quality on tone and definition. It is the object of this note to describe and report on these tests which were carried out in co-operation with The Photographic Survey Corporation (Western Division). Only black and white prints were judged, printed on semi-mat paper.

Two randomly-selected stereo-pairs were printed on different grades of Velox paper. Paper grade was so far the only variable investigated. These sets of stereo-pairs were then examined by 5 experienced interpreters who were asked to state their order of preference and give their reasons why. The test was conducted in such manner that the 5 interpreters could not discuss the test prints until the experiment was completed.

In summarizing the results, the following observations were made:

- a. The 5 interpreters showed a marked uniformity in their order of preference.
- b. The tonal range was considered more important than contrast. Those prints which produced the greatest range in the greys were considered preferable, especially for species identification.
- c. This preference for the greater tonal range was a complete reversal of the aims of the photographer, who tried to produce prints with contrast (black and white) instead of differentiation in the greys.

¹ Project Manager, Forestal Limited.

² A contribution of Photogrammetry News, one of a series of reports by a committee under the chairmanship of Mr. J. R. Collins, Forestal, Forestry and Engineering International Limited, Vancouver, B.C.

- d. The third point shows clearly the following fact: As long as the interpreter cannot sharply define his preferences, it is impossible for the photographer to provide him with the best photos.

Some information can be reported on the effects of a different kind of paper.

Some prints of poor quality (very poor definition, hazy) were reprinted on Gevaert paper. These new prints showed a very much better definition and, though far from perfect, were at least usable. It is, therefore, strongly felt that tests should be made on all available commercial photographic papers.

As the importance of aerial photos in forestry is steadily on the increase, it is felt that a thorough investigation of this problem should be carried out.

Such an investigation should cover the following:

1. Tests of all existing types of commercial films.
2. Tests to obtain the most suitable negative density.
3. Tests covering the different kinds and grades of commercial photographic papers.
4. Tests to determine if and to what extent the interpreters' photo requirements vary with the different forest areas.

It is fully realized that experiments of this nature are costly and time consuming. A survey of the available commercial photographic materials alone is already a tremendous task. But every bit of information should be assembled and compiled in order that the forest interpreter and aerial photographer will gain a much better understanding of each other's problem, to the advantage of both.

ERRATUM

Forestry Chronicle Vol. 35, No. 2, page 103, line 12—read 30-55 m.e./100 gm for 30-35 m.e./100 gm.

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