Marking Cows with Human Hair Dye

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Highlight

Large, easily applied numbers could be read at considerable distance for the life of the hair coat—150 to 180 days when applied in the fall.

The usual methods of marking cattle—ear tags or neck chains—are often unsatisfactory in livestock management and research. When obtaining birthweights of calves at the Manitou Experimental Forest in Colorado, for instance, it was nearly impossible for us to get close enough to range cows to read ear tags. We needed a large identifying number that could be applied to the cows prior to calving, and that would last several months.

In an attempt to find a suitable dye that was readily available, easily mixed, and could be applied over a wide range of temperatures, Miss Clairol,[2] a typical woman's hair dye, was used to mark the cows. This dye fulfilled these criteria and is readily available at any drugstore or cosmetic counter in a wide range of colors. Other brands would be expected to perform similarly.

Initially a black dye was used to put identifying numbers on the cows in January. The numbers remained visible until after the calves were born in March and April, and were easily readable for a considerable distance (Fig. 1). No adverse effects on animal hair or skin could be detected, and the dye remained effective through the life of the hair coat.

To better evaluate lasting qualities, the dye was then applied and observed throughout different seasons of the year. As shown below, life of the dye marking is shortest

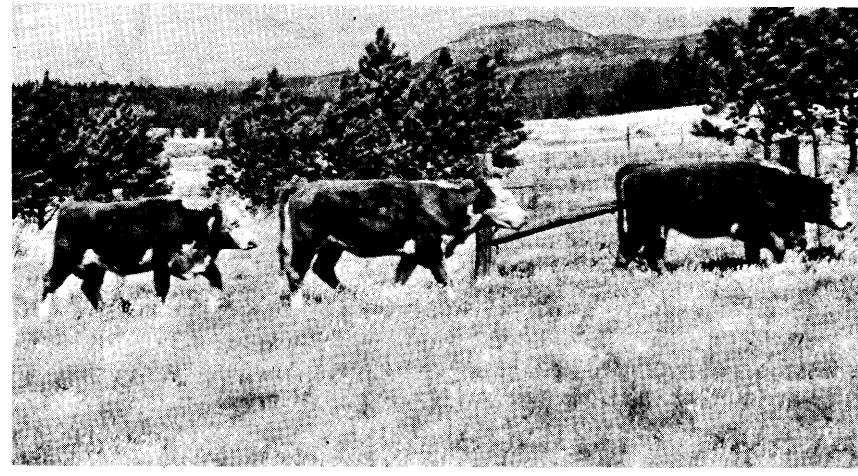

FIG. 1. Dye markings applied as large block numbers were readily readable at a considerable distance.

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[1] *Forest Service, U. S. Department of Agriculture with headquarters at Fort Collins in cooperation with Colorado State University.*

[2] *Mention of a trade name or product is for the convenience of the reader, and does not constitute endorsement or preferential treatment by the U. S. Department of Agriculture.*

in the spring or fall when the hair coat is either being shed or coming in:

Date Applied	Days Readable
Sept. 1	60
Oct. 15	150-180
May 19	60

When applied after October 15, numbers remained legible for 5 to 6 months, even on dark red animals, but lasted only 2 months in the spring or fall. Comparable lasting qualities with the dye were obtained on experimental animals at the Central Plains Experimental Range by R. E. Bement of the Agricultural Research Service. He applied the dye in May, and had to make a second application in August. This last application was readable until the end of September, but then faded as the new hair growth came in with cool fall weather.

In addition to the black dye, a red dye was used on the white faces of Hereford animals. It also worked well, but the advantages gained were not worth the time consumed in applying face markings.

When first applied, the dye may appear wet or perhaps a dirty brown. Since about 15 to 30 minutes are required for the color to develop, the dye should be applied thoroughly just once, then allowed time to color. Protective gloves and old clothing should be worn, although the material is not particularly harmful to the skin.

At Manitou, two shoe-polish bottles equipped with daubers were used to mix the dye and apply the numbers to the cows. Half the dye was put in each shoe-polish bottle, and an equal amount of hydrogen peroxide added. The two bottles marked 24 animals with large numbers at a total cost of less than $1.50. Mr. Bement used a vegetable brush to mark the experimental animals at Central Plains Experimental Range at a comparable low cost.

Either of these two methods works well for marking only a few animals, and the entire contents of a bottle need not be used at one time. The remainder of the dye and peroxide can be saved for future use within the restriction stated on the bottle for storing conditions and longevity. If a large number of animals are to be marked, a more efficient method, such as a pressure spray can, may be feasible. (Note: Hair color is applied in Beauty Salons in plastic squeeze bottles. This method might work on cow hair.—Ed.)

Human hair dye for marking cattle should be useful wherever an identification mark may be needed for a relatively short time. For example, in artificial insemination work individual cows could be marked with a suitable code number to denote the difference in herd sires or breeding date. Also in beef herd improvement programs where pregnancy testing is common, cull animals could be marked when they are tested. If the operator did not wish to sell or separate cull animals at this time, he could easily separate and gather the marked animals from the herd at a later date, and thereby avoid considerable handling.