

## Soil Erosion in Relation to Overgrazing in Idaho

VERNON A. YOUNG

Professor of Range Management, University of Idaho, Moscow, Idaho

Through the mismanagement and excessive overstocking of our western grazing lands, 589 million of the 728 million acres are eroding more or less seriously due to overgrazing. Not only are our ranges threatened with destruction but our forests and watersheds as well. With even the partial destruction of these natural resources the industries correlated with the human welfare of the regions involved become seriously affected. Today Idaho is bearing more than her share (especially in the southern part) of this destructive burden.

Where overgrazing has been practiced in mountainous regions such desirable and once abundant forage species as needle, brome, wheat and fescue grasses are now sparsely distributed. These grasses with rather large fibrous root systems which helped to bind the soil have, in most areas, been replaced by annual grasses and weeds not suited for either soil binding or livestock forage. Forest and brouse lands which have suffered from fire and later by overgrazing have also been seriously eroded. Overgrazing by abundant wildlife on certain winter ranges has more recently introduced a new problem in erosion control.

Sheet and shoestring erosion which follows overgrazing removes the organic portion of the substratum. Shoe-

string erosion gives birth to gullies that may deepen and widen to such proportions that even the courses of mountain streams may be altered. The water table may also be lowered in certain areas by deep gullies and the desirable deep rooted range species may die of drought and be replaced by the more undesirable superficial species.

In general, Idaho's mountain ranges are highly conducive to rapid runoff after storms because of steep topography.

To correct such a state of affairs as indicated above, the following conservation practices are suggested.

1. Deferred and rotation methods of grazing whereby portions of the range will be used during seasons for which they are best adapted.
2. The grazing of a range with classes of livestock that will utilize only the key species to such a degree that a sustained yield carrying capacity may be maintained.
3. Artificial reseeding of desirable range species on certain badly overgrazed and eroded areas where natural seeding cannot be accomplished. The use of contour-terraces and check dams may also be desirable on such areas. Livestock on such areas should be prohibited.
4. The education of the public as to the value of range conservation.

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