

# natural sciences notes

## HYDROLOGY

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### American Falls to Be Dried

The American Falls of the Niagara River will be dried up for six months next year if plans of the U.S. Army Corps of Engineers go through.

The water would be diverted to Horseshoe Falls near Canada so that U.S. engineers and geologists can study ways to prevent erosion and rock falls above the cataract, as well as remove rubble from previous falls.

The plan is subject to approval by the International Joint Commission, charged with caring for boundary affairs between the United States and Canada. The dates—May to December 1968—may bring repercussions from business and municipalities, for they come at the height of the tourist season.

## AGRICULTURE

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### Corn, Wheat Tested for Cracks

U.S. wheat, corn, soybeans and other grains crack too much in handling and shipping.

In an effort to solve this problem, highlighted some years ago when Russia selected Canadian wheat because U.S. wheat contained many damaged kernels, agriculturalists are studying the stresses that cause cracking.

With X-ray negatives, scientists of the U.S. Agricultural Research Service and Kansas State University can detect internal cracking caused by environmental factors or rough handling. Results of their studies will help farmers use better harvesting methods, and help manufacturers produce better handling equipment.

## ZOOLOGY

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### Male Lizards Unneeded

Fathers are not needed in a strange group of whiptail lizards that seem to reproduce without males, according to scientists at Texas A&M University.

While several lower forms of life, such as algae and aphids, may reproduce offspring from only one parent, these lizards (*Cnemidophorus tesselatus*) are the highest form yet discovered.

Only an occasional male is found among the whiptail colonies.

Reproductive cells of the female lizards apparently do not undergo the meiosis process that halves the number of chromosomes. The parthenogenic females simply contribute the full number of chromosomes—46, the same as humans—to the offspring.

## AGRICULTURE

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### Cattle Dine on Newspapers

A newsworthy diet of ground-up papers and molasses has been keeping cattle fat and healthy in a 56-day dairy experiment at the Pennsylvania State University.

The novel diet may help alleviate food shortages in an increasingly populated world, and reduce competition for food now existing between man and cattle, researchers believe.

Each of the six experimental heifers daily munched two and a half pounds of cut and ground paper—either ordinary newspaper or slick magazines—which provided the necessary fiber roughage. To this was added nearly as much molasses, now in plentiful supply and soybean meal. They were also fed conventional corn silage. The experimental cows appeared to digest the paper-molasses diet as well as six other control cows digested usual cattle feed.

## AGRICULTURE

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### Record Peanut Crop

More peanuts are being produced this year than ever before. A possible crop of more than 20 million tons—including the shells—is forecast by Department of Agriculture researchers. This mountain of peanuts is expected to be 14 percent larger than last year's crop.

Much of the added nuts will come from India which increased production this year, as did Senegal, South America, and possibly mainland China. A record crop in the United States helped boost peanut production in North America by four percent. Production in Brazil and Argentina, declined.

## ORNITHOLOGY

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### Hawaiian Nukupuu Not Extinct

A small perching bird with a long, down-curving bill, considered extinct for 71 years, has recently been discovered alive in the Kipahulu Valley on Maui Island, Hawaii.

The sighting of the Maui nukupuu, was announced by Stewart L. Udall, Secretary of Interior, which co-sponsored a scientific expedition with The Nature Conservancy, a private organization in Washington, D.C.

Three other birds on the endangered species list of the International Union for the Conservation of Nature and Natural Resources were also sighted by expedition members—crested honeycreepers, Maui creepers, and Maui parrotbills. Discoveries of these and other rare animal species have led The Nature Conservancy to organize a project to acquire the 9,600-acre Haleakala area for protection of natural surroundings and wildlife.

## POLLUTION

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### Water Limits Set on Lake Erie

The Public Health Service has warned mariners plying Lake Erie against drinking or cooking with any water taken aboard within five miles of the Lake's coast line. Water should not be used if taken from within 20 miles of metropolitan areas, or from other polluted sectors.

Most of the water in the Great Lakes can be adequately disinfected by chlorination, recent investigations show. Most lake vessels use this method. City water supplies generally receive more extensive treatment.

The other partially contaminated areas defined by the Health Service include parts of Lake Erie that lie east of the boundary between Pennsylvania and New York, and west of Pelee Point. Green Bay and Saginaw Bay have also been judged too impure for general use.

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