Reindeer offer Alaska new agricultural industry

FAIRBANKS, ALASKA -Reindeer herds may provide Alaska with a new agricultural industry.

Although there once were some 600,000 reindeer on the Alaskan tundra, the industry virtually collapsed for economic, biological and political reasons, and the number of animals dwindled to only 30,000.

Now Alaskans are trying to solve some of those problems—with the idea of enlarging the reindeer herds. Working together are U.S. Department of Agriculture researchers and extension workers, the University of Alaska in Fairbanks, and state and native groups and organizations.

Diseases and parasites plague

the reindeer, and Dr. Robert A. Dieterich, a veterinarian and professor at the university, seeks ways to control them. His research and testing have helped solve two major reindeer health problems, warble flies and brucellosis.

Under Dieterich's direction, the Northwest Alaska Native Association began last year to inoculate a portion of its herd for protection against warbles, parasitic flies which seriously inhibit weight gain in animals and weaken their resistance to disease.

Warbles also destroy all commercial potential for the hides by perforating them with holes. To fight this pest, Dieterich is using famphur, a larvicide which has been used successfully on cattle.

However, traditional methods of application-pouring famphur over the animal's back-though successful with cattle, won't work for reindeer. Hair on the reindeer's back is water repellant, so famphur can't penetrate. In addition, this method, like inoculation with a needle and syringe, requires physical handling that causes damaging stress to the semi-wild animals:

Dieterich, in cooperation with the 3M Company, is seeking the answer with a ballistic implant system. A 25-calibre compressed air rifle can be used to shoot a biodegradable, drug-impregnated pellet into the reindeer. The newly-developed method also could make possible vaccination or treatment of other free-ranging species such as moose and caribou.

The Reindeer Herder's Association listed control of brucellosis, along with warbles, among its highest research priorities. Vaccine used for brucellosis in cattle in the United States is not effective with reindeer, so Dieterich is testing alternatives.

John Shaeffer, president of the Northwest - Alaska Native Association, says he hopes a lot of people will get into the business of reindeer.

Shaeffer says the association could harvest 1,200 carcasses annually by increasing its present herd from 7,000 to 30,000 reindeer. That would lower red meat costs in the region and provide an estimated 40 full-time jobs and 80 seasonal jobs.

Both the lower meat costs and jobs would benefit Northwestern Alaska, with its 14 percent

unemployment rate. The average income per household in that area is near the national poverty level.

Additional income can be realized from the hides, once the warble fly is eliminated. Antlers already are generating income from sales in the Orient, where they are used for medicinal purposes. Top grades sold for \$50 a pound last year.

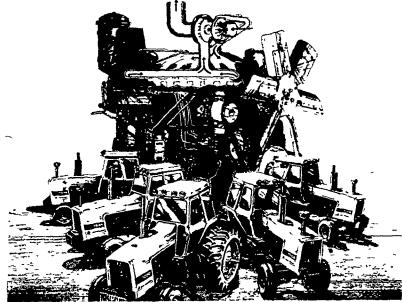
Almost half a square mile of range is needed to support each reindeer, said Jack Luick, university scientist who studies the nutrition and management problems of the animals. The amount of land a herd requires depends, in part, on management practices.

Alaska's 13 herd owners hold land-use permits for areas ranging from 500,000 to 1 million acres. Twelve allow their herds to wander free on the open range. The thir-

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