Vaccine means herd today, alive tomorrow

by CHARLES HARPSTER Nebraskan Staff Writer

"For 18 months it was really frustrating. We could watch calf scours wipe out 200 calves from a herd in a week, but we couldn't infect them with it in the lab."

Dr. C. A. Mebus described the problem that faced his research team at the University Department of Veterinary Science before a breakthrough came in the search for a calf scours vaccine. This vaccine may soon be marketed nationwide.

The disease has been studied since the first of the century, he said, but no one could reproduce it consistently in the lab. Treatments that were successful in the past are now ineffective because cattle have built up a resistance, Mebus said.

A herd infected by calf scours may lose up to 50 per cent of its new-born calves. Those that do not die from the disease never fully recover, Mebus said, resulting in a 50- to 75-pound decrease in adult weight.

Repeated injections of infected material into healthy calves failed to produce the disease in the lab, he said. The frustration came because calves were infected so easily in the field.

A first breakthrough came when the infected material was injected into a calf's small intestine through a tube, preventing the material from being altered by stomach acids. The calf soon became infected with the disease, clearing the way for research into the cause.

Once the disease was produced consistently in the lab, a

second breakthrough came — for the first time, the specific virus causing the disease was isolated.

The next step, Mebus said, was to grow the virus in a series of cell cultures until a weakened form, suitable for inoculation, was the result. He added that the vaccine works similarly to polio or small pox

The problem had grown so serious in Nebraska that the Stock Growers Association and the Sandhills Cattle Association went to the State Department of Agriculture for help. In the spring of 1966, Mebus said, the research began. Money came from the Department of Agriculture and the University budget.

The research was expensive because the 70 to 100 calves used each year cost up to \$60 each. Many had to be taken by Caesarian section to keep the animal uninfected. Before the tests were completed, the cost per calf was about \$600, he said.

Norden Laboratories of Lincoln should have the vaccine on the market by 1973, according to Dr. Ed McConnell, vice president of the I a b's marketing. Time-consuming safety and effectiveness tests must be run in order to meet standards of the U.S. Department of Agriculture, he said.

"It must have a realistic cost so cattlemen will be able to buy it. Otherwise, it won't do us any good to produce it," McConnell said.

He called the discovery a "very exciting breakthrough," and said the vaccine has "much potential" in solving the worldwide problem of calf scours.

M.E.N. attempts to revive scholars

Mu Epsilon Nu, (M.E.N.)
men's education honorary is
currently attempting to reestablish a full tuition
scholarship for an outstanding
high school senior.

The scholarship which goes to a person planning to attend the University's teaching college was not awarded last year due to a lack of interest and funds, said Bob Smallfoot, president of the group.

Applicants are recommended by the Office of Scholarships and Financial Aids and chosen on the basis of an essay written for the competition.

The Henzilek Award, an annual honor given to the

outstanding male teacher in the state, will be presented at the groups spring banquet, said Smallfoot. The winner is chosen from nominations made by the student bodies of public schools across the state.

Another project of the group, designed to be of benefit to its members is Teaching Trips. Members journey to an area school and take over classes for a day.

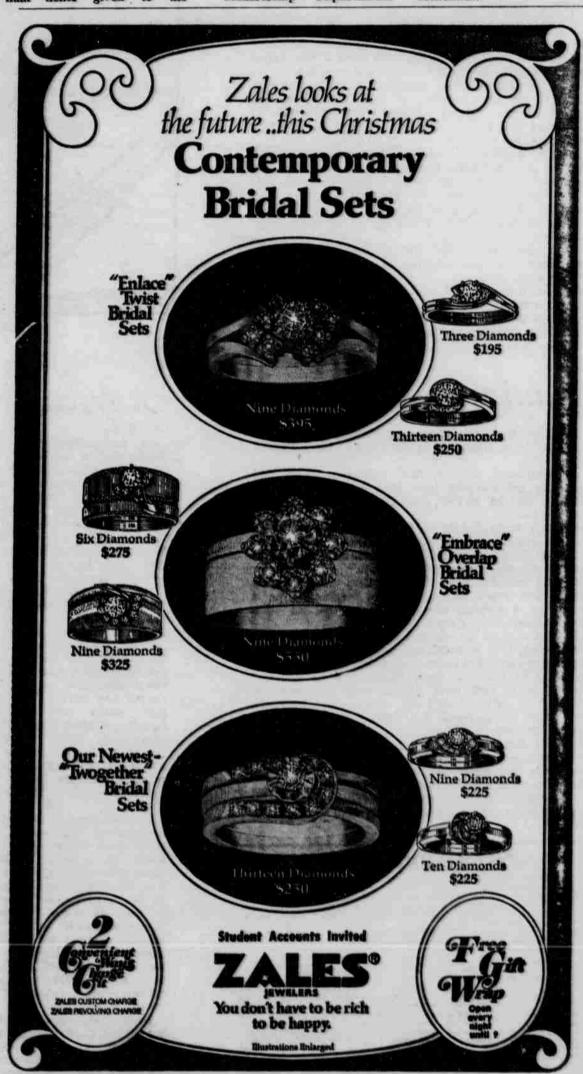
"We feel that this gives our members a chance to decide if they really want to teach by giving them an opportunity to actually experience teaching before graduation," said Smallfoot.

Membership requirements

for Mu Epsilon Nu include being a sophomore or above, enrolled in teachers college with a 2.75 or above grade average.

East Campus choir carols

The East Campus Choir will present a concert of Christmas carols on Sunday, December 6 at 2:30 p.m. in the East Campus activities building. The choir is composed of students from the Colleges of Agriculture and Home economics.



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