

ALASKA DEPARTMENT OF FISH AND GAME  
JUNEAU, ALASKA

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CARIBOU REPORT

by  
Robert E. Pegau

Final Report  
Federal Aid in Wildlife Restoration  
Projects W-17-4, W-17-5, W-17-6, W-17-7 and W-17-8  
Job 3.5R

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FINAL REPORT (RESEARCH)

State: Alaska

Cooperator: Robert E. Pegau

Project Nos: W-17-4 through W-17-8      Project Title: Big Game Investigations

Job No: 3.5R      Job Title: Exclosure Construction  
and Caribou Range  
Vegetation Analysis

Period Covered: July 1, 1971 to April 1, 1976

SUMMARY

Four one-acre exclosures were built on the Arctic caribou herd's range between 1969 and 1973. Three of the exclosures are on winter ranges and one on the calving grounds. Vegetation transects were established, read and photographed both inside and outside each exclosure. The vegetation was reexamined at two of the exclosures 4 years after they had been built. During that interval there was no detectable change in the vegetation inside or outside the exclosure.

After subsequent periodic inspections of the exclosures it appears that the hog wire is a more effective fencing material requiring less maintenance than the barbed wire. Both the wooden posts and galvanized pipes seem to be suitable for corner posts and braces. Less maintenance was required on those exclosures where wooden posts had also been used at 80-foot intervals in combination with the steel fence posts.

#### RECOMMENDATIONS

The vegetation should be reexamined and photographed at 5-year intervals. Comparisons with the original photographs and readings will aid in detecting the impact caribou are having on the vegetation. Future exclosures on Arctic ranges should be constructed with wooden posts when available or galvanized pipes for corners. Steel fence posts can be used along each side and on those sites not underlain with permafrost, wooden posts can also be used to strengthen the sides. Four-foot hog wire topped with one strand of galvanized wire or barbed wire is the most suitable fencing material.

#### LITERATURE CITED

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