to Dean Ehrenreich and Sowles

From Maurice Hornocker

Subject Research Proposal



Date 13 January 1975

I should like to propose the enclosed abstracted proposal for your consideration for funding through the Wilderness Research Institute.

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Maurice Hornocker Unit Leader

MH:elb

## PRELIMINARY RESEARCH PROPOSAL

Idaho Cooperative Wildlife Research Unit

- 1. Program: Animal Damage Control
- 2. Project Title: Dynamics of an unexploited coyote population
- 3. <u>Project Leader</u>: Maurice Hornocker, Leader, Idaho Cooperative Wildlife Research Unit.
- 4. <u>Management Contact</u>: Idaho Fish and Game Department, U. S. Forest Service, BLM, various private organizations.
- 5. <u>Objectives</u>: 1. To study the dynamics of an unexploited population of coyotes, determining sex and age structure, productivity and survival.

2. To determine what, if any, self regulatory factors are operating to limit population size.

To study the influence of coyotes on mule deer populations.

- 6. <u>Justification</u>: There is need for an understanding of natural regulatory mechanisms which operate in an unexploited population of coyotes. The effects of food abundance or food shortage on such a population may be predicted, but little has been documented on self-regulatory factors. An understanding of such mechanisms, if they exist, could be most help-ful in the management of coyote populations. The relationship of such a population of coyotes to mule deer populations is important and could have management implications in many areas of the West.
- 7. Scope: The study will be conducted in the Idaho Primitive Area, a 1 7 million acre area managed by the U. S. Forest Service as wilderness since the 1930's. No coyote control has been carried out in the arr since the mid-1940's. No domestic livestock are grazed anywhere i the Idaho Primitive Area; coyotes prey only on wild species. The research will be carried out in the Big Creek drainage in the cr part of the Primitive Area. The Project Leader conducted moun research in this area for 10 years logistics have been work Coyotes will be live-trapped, individually marked, and instradio transmitters. Data will be collected from individual population throughout the year on all aspects of the project to coordinate the project closely with the Denver Predator Units of the FWS: it would be beneficial if Dr serve on the graduate committee.

8.	Personnel: One Ph.D. cand	idate, one	full-time :	field assistant,
	Project duration - 3 to 4 y	years. Est	timated man	months, total,
	including Unit Leader - 144	4.		

9. <u>Schedule</u> : Initiation - Fall 1975.	Completion -	Fall	1979.
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10. Budget Estimates:

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	Calanias & Users	FY 1976	FY <u>1977</u>	FY <u>1978</u>	FY 1979
I	Salaries & Wages Ph.D. Student Field Asst. Fringe benefits 17%	3,600 8,000 % 1,972	3,600 8,200 2,006	3,800 8,400 2,074	3,800 8,400 2,074
	Total Salaries & Wages	13,572	13,806	14,274	14,274
II	Permanent Equipment Radio telemetry equipment:				
	2 receivers 25 transmitters @\$65 50 coyote traps @\$4.00	1,350			T - 1
		1,625	1,625	1,625	1,625
		200		- []	
111	Travel Light aircraft renta	.1.		τ. Γ	
	Radiotracking Travel to study area from Moscow	3,000	4,000	4,000	3,000
		1,200	1,200	1,200	1,200
IV	Misc. Equip & Supplie				
	Misc. radio equip Food and misc. field supplies for camps,	300 1,750	300 1,750	300 1,750	300 1,750
	etc. Computer time Publishing Costs	-	1,000	1,000	2,000 3,500
		22,997	23,681	24,149	27,649

Grand total, 4 year project \$ 98,476