

UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
BUREAU OF SPORT FISHERIES AND WILDLIFE

Branch of Predator and Rodent Control

ALASKA DISTRICT - ANNUAL REPORT

FY 1962



Cooperating With:
Bureau of Indian Affairs
Alaska Department of Fish and Game
Alaska Department of Natural Resources
Alaska Department of Health and Welfare
And Others

Submitted by: Bob L. Burkholder
Acting Regional Supervisor
Box 6123
Anchorage, Alaska



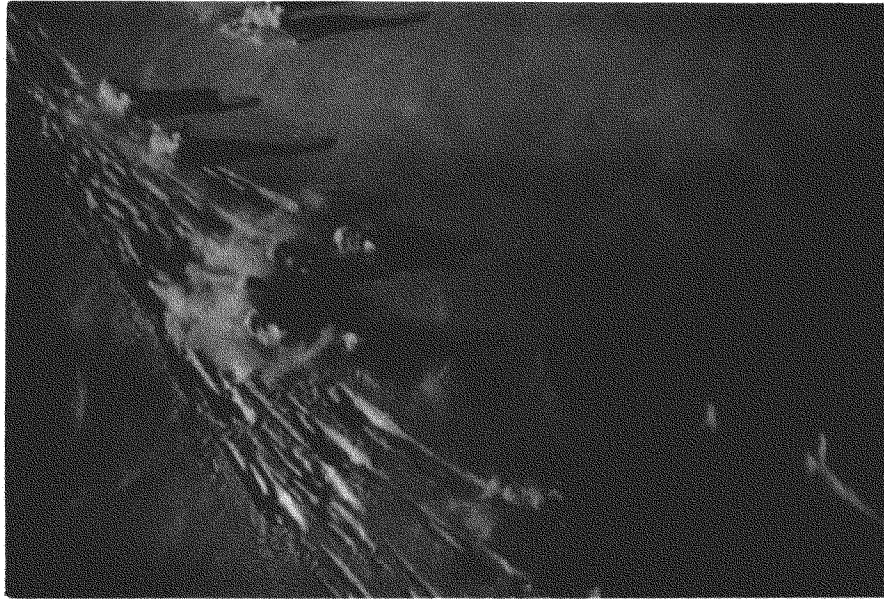
PROGRAM SUMMARY

In Alaska prior to 1948 some predator control activities were conducted on a limited scale by the Alaska Game Commission. The first organized control work by the Branch of Predator and Rodent Control started in 1948 and has continued at various levels of intensity till the present time, with a build-up through 1958 and a gradual decrease since then. The level of control activity reached a low point last year, but has shown a definite trend toward stabilization.

Originally, control work was geared to the management of game animals with livestock interests of secondary importance; however, this situation is now being reversed. Game animals of all species are generally at a high level population-wise because of a series of mild winters, other ecological aspects, and past predator control efforts. Hunting pressure even with liberal open seasons and bag limits has not kept up with these expanding game populations, and therefore little if any predator control work was needed. On the other hand, it is expected that when severe winter conditions come to Alaska again, or other factors vary to cause a decrease in game animals, predation control will be necessary as a proper and effective tool of game management.

At the present time the livestock industry in Alaska is expanding and has become the primary objective of predator control efforts. As of January 1, 1962, the annual report for Alaska on farm production by the Agricultural Estimates Division, U. S. Department of Agriculture, indicates that cattle and sheep comprise 95% of total livestock values. The total number of cattle is up 8% and sheep made a gain of 11% from 1961. Wool increased 7% and milk by 16%; however, 16% fewer beef cattle were marketed. Cash receipts to producers in Alaska totaled \$4,372,400, up 7% from last year and this represents an increase of 23% since 1958. This upward trend is expected to continue and increase. Bear, both black and grizzly, are the chief predators of cattle as are foxes of sheep.

The Bureau of Indian Affairs' report indicates an overall increase in reindeer numbers also. This increase is slight; however, certain of the herds were again hard hit by caribou migrations causing the herd size to decrease as the reindeer joined with wild cousins. Considering this fact, plus increased cropping as the market improves, gives the slight total increase a greater significance than may be appreciated. The reindeer are important to the native economy, providing a dependable source of meat at a reasonable price to the villages. Marketing problems are being overcome and reindeer meat is available in Alaskan cities. In addition, markets for hides and other by-products are improving. Reindeer meat sold showed a 10% increase over last year's figure and a June 15 news release indicated that Alaskan inspected reindeer meat was admissible to the Seattle market. This fact will no doubt further augment reindeer production. According to the State Department of Agriculture reindeer meat



(Photo by Crawford, ADF&G)

Game animals are abundant



(Photo by FWS)

Likewise the wolf

production was greater than the state's pork and beef production combined. Reindeer meat totaled 485,000 pounds compared with 444,000 pounds of the latter two items.

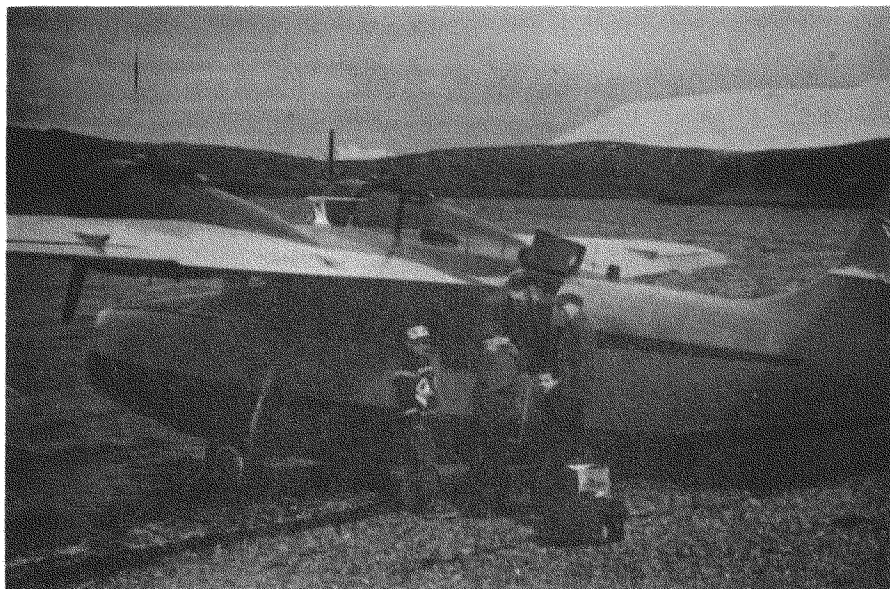
The control program is designed to protect domestic livestock and poultry, semi-domesticated reindeer, game and fur animals; and to prevent damage by rodents to range and forest vegetation, growing crops, horticulture, stored foods, and property. Protection is also provided the public health through the control of animals and birds in the suppression of rabies, hepatitis, and other animal borne diseases. Wolves, feral dogs, stock-killing bears, foxes, coyotes, rats, mice, and nuisance birds and animals are all subject to control at various times. These programs are conducted in cooperation with Federal and State agencies, municipal governments, livestock associations, conservation and sportsmen groups, and individuals.

As of March, 1961, the control program in Alaska was directed by the Acting Regional Supervisor at Anchorage. One Assistant District Agent is stationed part time at Anchorage, and one Animal Control Agent is headquartered at Kotzebue. Temporary employees are hired as needed. This is the smallest complement of permanent personnel in the Alaska District since its inception in 1958.

Lee Ellis, Assistant District Agent, Anchorage, was detailed to the Bureau of Indian Affairs for eight months and worked actively in the Branch for the remainder of the year. Coordination of Predator and Rodent Control programs with others of the Bureau of Sport Fisheries and Wildlife was ably handled by Ray Woolford, Chief Division of Wildlife, in Juneau.

Predator and Rodent Control was conducted in cooperation with the Alaska Department of Fish and Game, Alaska Department of Natural Resources, the Alaska Department of Health and Welfare, U. S. Public Health Service, Bureau of Indian Affairs, U. S. Forest Service, Federal Aviation Agency, Umnak Company, Harris Aleutian Livestock Company, Alaska Livestock and Trading Company, Matanuska Valley Breeders Association, the City of Kodiak, the City of Cordova, and the City of Valdez. To these groups and especially the individual representatives of each we wish to express our grateful appreciation. Some money, a lot of time, individual effort, and thought were contributed by these people, without which our service to the public could not have been achieved.

The Alaska Department of Fish and Game is responsible for managing all the resident wild animals and fish and as such, shares a dual responsibility with the Bureau of Sport Fisheries and Wildlife in matters involving control of these animals. This dual responsibility is exclusive in areas concerning game only, however, in the case of livestock, reindeer, commensal rodents, and matters related to the public health and welfare, the other groups and departments mentioned have equal and sometimes greater responsibilities. The resulting and oftentimes conflicting interests involved have presented knotty problems, all of which have not been solved. Despite this fact, a good deal of



(Photo by Jones, FWS)

BLM cooperates with transportation to Aleutian Islands.
Fox Control Project



(Photo by Jones, FWS)

Sheep ranchers furnish transportation, also board and
room on the Aleutian Islands .

progress has been made and working relationships are good in most cases. This spirit of cooperation is expected to improve as confidence is built among all the agencies. Then, problems can be solved according to the principal of the "the best for the most" with each participant and recipient paying a fair share of the cost.

A cooperative agreement with the Bureau of Indian Affairs continues as last year in protecting reindeer herds from predators. This is a good example of close cooperation between the two Federal Agencies and the State. The Bureau of Indian Affairs pays for its flying time and gives the assistance of one man to the predator control effort, while reimbursing the salary of Assistant District Agent Ellis while he is employed as the Manager of the Nunivak Island reindeer operation. The Alaska Department of Natural Resources is included in the cooperative agreement with the State and this permits a close liaison with livestock groups through the State Division of Agriculture, and the State Veterinarian. Bear control on beef cattle ranges on the Kenai and on the dairy cattle range in the Matanuska Valley and fox control on the domestic sheep ranges on the Aleutian Islands are examples of this type of cooperation.

The Alaska Department of Health and Welfare combine with the Branch on rodent control work and rabies control projects. Excellent cooperation has been achieved on rat control projects at Kodiak, Cordova, and Valdez. Rabies has been confirmed in 22 animal cases this past year and control work was initiated at focal points in the Arctic as requested by the State.

Wolf populations have varied a good deal in certain areas of Alaska. For instance, this is the third year that the population was low in the arctic regions, but increases have been noted in the rest of the State, including Southeastern Alaska. Bounty figures have proven to be a fair indication of wolf abundance and bear out these observations. With the exception of the arctic regions wolves are increasing. In 1960, 556 wolf bounties (\$27,800) were paid by the State and in 1961 the number increased by roughly 30% to 718 claims (\$35,900). The past year 896 claims were validated (\$44,800), 25% more than last year.

The Alaska Department of Fish and Game recognizes that bounties are not effective as a control; however, legislative effort to eliminate this waste of funds was soundly defeated last year, and a different approach is in the mill as a result. It has been proposed that wolves be classified as game animals with a limit of one to a license holder. This will be an effective approach to the problem but it can also make the job of legitimate control more difficult.

Good public relations were emphasized over the past year in several ways. The most intangible but highly important one of personal contact with key individuals and groups received the most emphasis, and opportunities were never passed by to supplant misinformation with facts. Along this line, news releases were published and movies were shown on specific projects of immediate interest locally and displays concerning more broad aspects of Branch activities were made up and exhibited.

Good public relations are a necessity and a duty. Statehood has made this realm of public service more difficult, but none-the-less important, through the transfer of public attention and contact to the State departments. This means that more effort is required to get the same results because the opportunities for public contact are fewer. Generally, our public relations are good but remain so only insofar as the public is factually informed and this requires a constant effort.

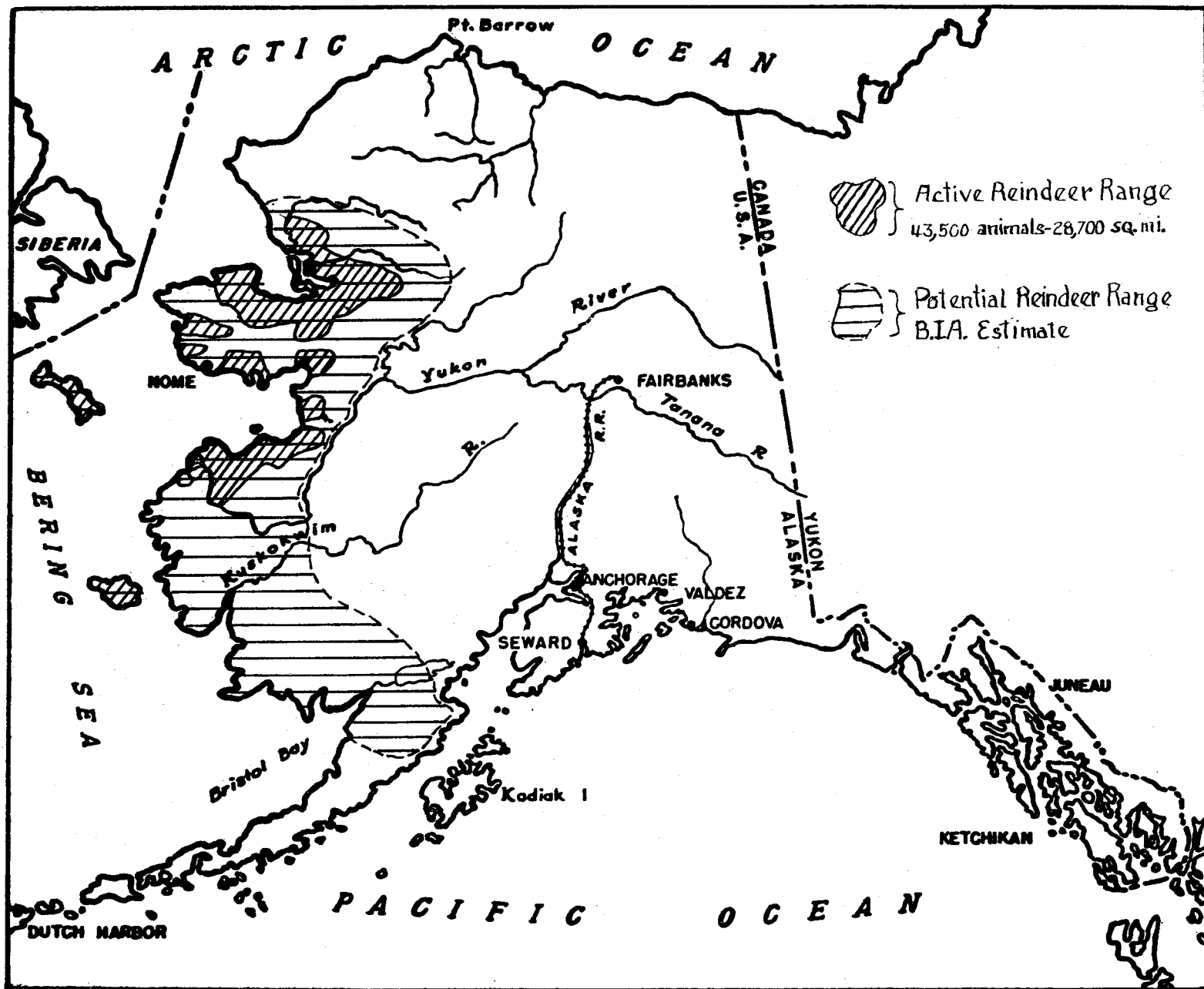
PREDATOR CONTROL OPERATIONS

Wolves:

The only wolf control project this past year was in the coastal regions of Alaska north of the Yukon-Kuskokwim Delta to the Noatak River. Within this area control was further confined to the individual reindeer grazing ranges (see map). Howard Bowman, Animal Control Agent-Pilot, was in charge of the field operation, receiving assistance from Mr. John J. Manley, Range Manager, Bureau of Indian Affairs. A Cessna 180 was assigned the Kotzebue station during the winter period and a Supercub on floats for the summer work. Assistant District Agent, Lee Ellis, was detailed to Kotzebue during the winter months to improve field techniques of the operation. Bowman reports as follows:

The wolf population was generally low throughout the area, and predation from wolves over the past winter was sporadic - wolves would kill for one night at a herd, then leave the country, returning neither to their old kill or to the herd. Weather conditions experienced during the winter past imposed many unfavorable circumstances on the situation - an unusually stormy winter meant that herds became scattered and thus were easier prey for the wolves; at the same time, the mail service from the villages was interrupted by the poor flying conditions, thus delaying the reports of predation. In addition, the high winds and blowing snow which accompanied the storms would virtually eliminate any sign of tracks or hope of tracking conditions. Fortunately, the only wolves present on the reindeer ranges were those that drifted through from the surrounding wilderness areas - exactly four instances of confirmed wolf predation were reported, and in each instance the wolves had killed during the nighttime and had left the country by the next day, not to return. Other reports of predation by wolves were investigated but could not be confirmed, chiefly in the Stebbins area.

The number of wolves in the district was again at a minimum; however, this is a case where a very few wolves may be too many. Experience has proved that one wolf can cause considerable loss by scattering the reindeer over so large an area that some are never recovered. This indirect loss is sometimes more important from the standpoint of time devoted to rounding up the scattered herds, and number of animals lost, than is the actual killing that is associated with it.



Feral Dogs:

Dogs reverting to a semi-wild state are becoming more of a problem in the State. Last year's efforts on this problem in Southeastern Alaska were not continued due to lack of personnel stationed in the area; however, a limited program was continued at the request of the U. S. Army at Fort Richardson near Anchorage. Five dogs, the nucleus of the large packs reported each spring, were killed on lethal stations this late winter and since that time no new packs have been reported. Excellent cooperation was received from the military and they in turn were well pleased with the control efforts. Getter lines are presently active in the area to help prevent the problem from occurring again.

In the Arctic loose dogs were dispatched when necessary as part of the rabies suppression program.

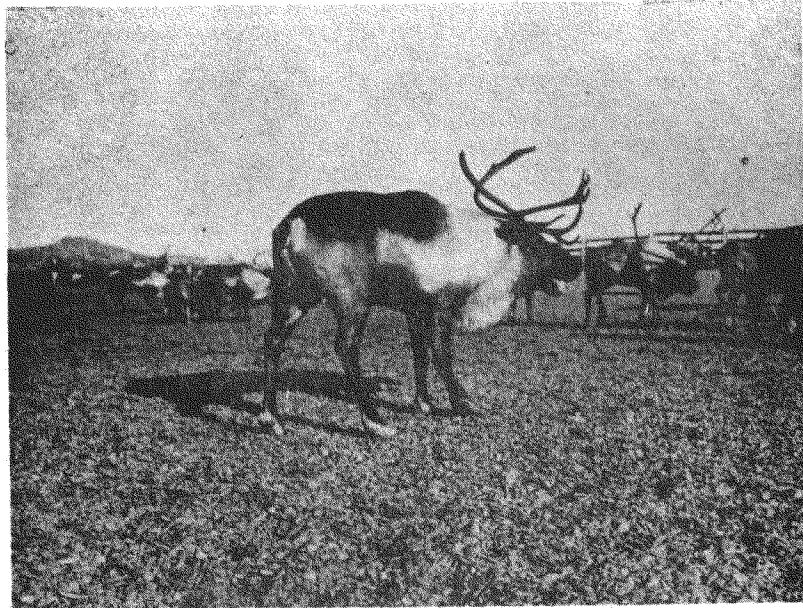
Mandatory inoculation and loose dog regulations are becoming more of a reality on both the State and local level through recent legislation; however, much is yet to be accomplished before the problem will be under control.

Foxes:

Control of red foxes on the sheep ranches of Umnak and Unalaska Islands was of paramount importance the past year. This is the sixth year that such control has been in effect and results are quite graphic. The work is done prior to and during lambing time. Lamb survival was less than 40% and now is better than 90%. This year's inventory of sheep totaled 15,000.

Close herding is not practiced in the Aleutians, in fact the sheep are handled much like cattle with round-ups for shearing, marking, and docking. Control operations are conducted by jeep, horseback, and dory under the most severe weather conditions of alternate snow and rain storms driven by 60-80 knot winds. Control devices include strychnine lethal stations, strychnine drop baits in dens, and shooting with a rifle. Eagles as well as foxes cause considerable lamb loss and some are taken along with the foxes.

Sheep ranching on the Aleutian Islands is a highly profitable industry since the wool produced is clean, long fibered, and of the highest quality. The ranchers have said that our control work is the difference between success and failure of their operation. A total of 142 foxes were accounted for during the operation this year and an undetermined number were carried away by high tides from the stations placed on the beaches. This was a sharp drop from the 522 total foxes taken last year despite normal conditions and a greater effort expended, and indicates a successful control operation. Another index of this and previous years' successes is the fact that of the many known den sites checked, only two were found to be active. With these observations in mind control work on the islands is accomplished and will require periodic maintenance in order to prevent reinfestation from those major portions of the islands that have not been worked. This operation, due mostly to its relative geographical isolation, is expensive and it may be possible to work it every other year and still maintain the degree of



(Photo by Ellis, FWS)

Predator control on reindeer ranges has helped expand this industry.



(Photo by Ellis, FWS)

Fox control on domestic sheep ranges of the Aleutian Islands has materially increased lamb crops.



(Photo by Ellis, FWS)

Strychnin-tallow baits are placed at den sites.



(Photo by Jones, FWS)

Foxes are shot.

control desired. This possibility should be explored providing the risk of losing our present advantaged is not too great.

Coyotes:

At the present time, coyotes are not a serious predator and during the past year no effort was made to control them. Future problems may arise with individual cases of small livestock predation as they have in the past. Last year a band of 150 sheep was established on the Kenai Peninsula, and one would expect a problem to develop in the face of the relatively dense coyote populations that exists there. Presently the sheep are close herded and very much confined but this situation will no doubt change as the band increases.

Bears:

Bears, both the black and grizzly varieties, can and often are effective predators on livestock and reindeer in Alaska. It was found necessary to conduct control operations in two areas, the Matanuska Valley and the Arctic. It is expected that more work of this kind will be necessary as the livestock industry expands and people seeking outdoor recreation become more numerous.

In the Matanuska Valley where 77% of the value of all milk products in Alaska is produced a shortage of feed exists which makes necessary the use of a high mountain valley on the Little Susitna River for summer range. Dairy stock (mostly replacement animals) are ranged there by local dairy-men and the Alaska Agricultural Experiment Station. These young cattle represent those individuals of each herd with the best blood lines and production potential. Their estimated value is \$300 each and in 1960 a total of 14 head of stock was missing. Of these only three were found and they had been killed by a bear and as a result the range was to be abandoned unless aid was forthcoming. Last year a cooperative control program was initiated and a man was employed full time from June through August. This man is paid by State Fish and Game funds and is under supervision of the Fish and Wildlife Service. The Matanuska Valley Stock Breeders Association contribute to the program also. As a result, last year was the first year in the history of the use of this range that no loss occurred from any cause. Five black bear were taken. Of these, three were trapped among the cattle and two were shot, having been chased from the cattle the previous day. Other black bear and at least two grizzly bear were sighted in the general area but no attempt was made to kill them because they were not considered an immediate threat to the cattle.

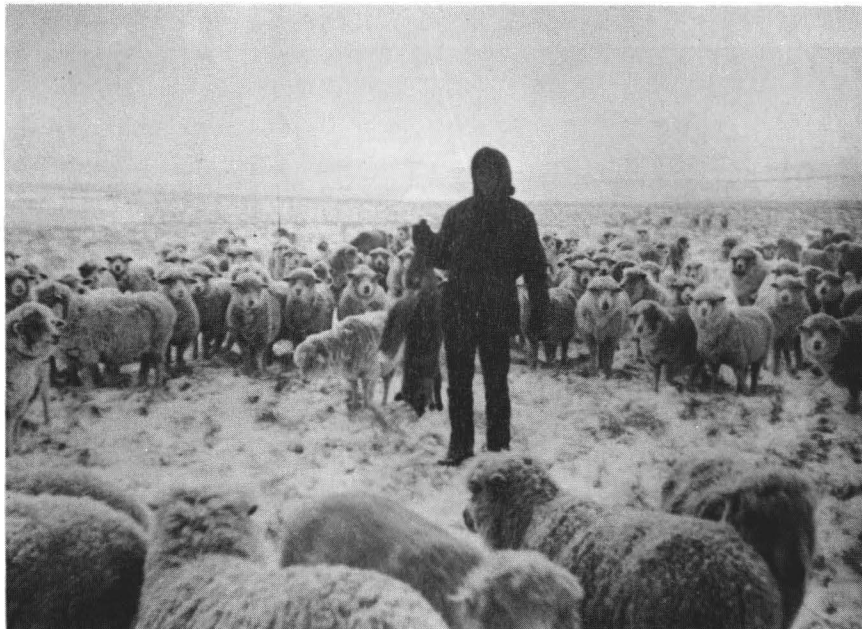
A similar program is underway this year and to date no loss has occurred nor have any bears been killed. Again both types of bear are in evidence in the area but there has been no cause for alarm.

The U. S. Army at Fort Richardson has alerted this office to the possibility that they may request control of black bears in their picnic and recreation areas on the base. If this operation is started, cyanide guns will be used and the tops will be dismantled each morning and replaced at night as a safety precaution.



(Photo by FWS)

Area of reported cattle loss to bear.
Upper Little Susitna River summer
range north of Palmer.



(Photo by Jones, FWS)

Foxes are predators of sheep.

Once again, bear predation was reported in the reindeer herds during the fawning period. This is a difficult time to operate because the ice is not safe for skis and there is not enough water free of ice for floats. This year the situation was more critical because deep snow and the late spring caused the reindeer to range into the wind blown hills - nearer grizzly habitat than is desirable. One bear was shot while harrassing the reindeer herd near Buckland. Howard Bowman describes this situation as follows:

The spring bear turned predator proved much more tenacious than were the winter wolves, as its predation was only terminated upon the death of the bear in almost every reported instance. Here again the weather was an important factor, as the deep snow in the valleys forced the reindeer to fawn on the hillsides this spring - and being on the hillsides placed the reindeer plus fawns right where the bear were coming out of hibernation. In only one instance was there prompt reporting of the predation at the time of its occurrence at the Paul Hadley Herd, near the village of Buckland. This case was readily dealt with, as we had the bear in sight within ten minutes flying time after reaching the herd area.

One predator bear killed six fawns in the Goodhope Herd near Shishmaref. Due to the prevailing poor tracking conditions, contact with the bear tracks was lost by the herder who was trailing the bear via dog team. This incident took place at the time that the deer were being started on their annual spring move from Shishmaref to Espenberg; predation apparently ceased as the deer moved towards Espenberg, according to the herder. Due to the lack of communications, this incident was reported a month after it had occurred.

On the Kenai Peninsula no complaints or requests for assistance with predator problems was received; however, agricultural and livestock interests are on the increase as the population expands. It is expected that problems will increase correspondingly.

RODENT CONTROL

Rodent control activity assumed more importance in the total Predator and Rodent Control program than at any previous time. Most of the effort concerned the control of rats and mice, with the latter of least importance. Some incidental jobs controlling various small rodents were accomplished for individuals by either furnishing them information and/or mixing and furnishing bait.

Rats:

Three rat control projects were undertaken in the coastal communities of



(Photo by Adams, ADH)

Ingredients for mixing rat bait are usually supplied by the city.



(Photo by Adams, ADH)

Demonstrating method of bait mixing to city employees.

Kodiak, Valdez, and Cordova in cooperation with the Alaska Department of Health and Welfare as well as the respective municipalities.

The most acute problem, with respect to history and numbers of rats, occurred at Valdez and paradoxically perhaps, it was here that the most satisfactory control program was achieved.

Valdez is the major port used for shipment of produce and freight to Interior Alaska, and has had a rat problem for as long as the residents can remember. Damaged and contaminated produce and other food products averaged several hundred dollars each year for each establishment and would have been worse except for individual effort of most of the businessmen. It was this "awareness" by the local people that made the program a complete success. When follow-up work was done in October the community was practically rat-free. No one contacted had seen a rat or had sustained rat damage. Warfarin feeding stations were properly maintained in the businesses, homes, the city dock, and other key points. Mr. Bill Pettit, former mayor, said this was the first time that he could remember that rats were not in evidence at Valdez.

At Cordova results of rodent control efforts were less spectacular. This program has continued for the past several years and rats have been decreased periodically but never eliminated entirely. This situation is due in part to the excellent rat harborage inherent in the old buildings, sewers, and boardwalks and in part, to frequent changes in city administrators that result in a lack of continuity of the program.

A similar pattern exists at Kodiak and in both cases public apathy toward the problem will have to be overcome before rat control can become totally effective. In spite of this limited success the benefits of the periodic reduction of rats is quite substantial.

The progress made in all cases is largely due to the effort of the Alaska Department of Health and Welfare personnel working in cooperation with the Bureau of Sport Fisheries and Wildlife and the city officials.

Mice:

Complaints from homesteaders and other individuals were more numerous than last year. These were handled by a "do it yourself plan" with instructions, and in some cases anti-coagulant bait was mixed and furnished free of charge. A case in point was a request received from the Alaska Department of Fish and Game. Permanent bait stations were established and a quantity of mixed bait was supplied for the office-warehouse building and no further complaints have been received.

Parka Squirrels:

This is the first year that these animals have been in serious conflict with man's endeavors in Alaska. Two requests for assistance were received simultaneously last fall, one from the Alaska Agricultural Experiment Station and



(Photo by Adams, ADH)
Sodium Fluoracetate (1080) is carefully handled.



(Photo by Adams, ADH)
The city dump is treated with 1080 bait.

another from a homesteader producing vegetable products near Willow.

An experimental program is under development to determine the best method of control. Both strychnine and 1080 cereal baits are being tested in addition to other baits that may prove more acceptable to the rodents. It is hoped that in addition to solving the immediate problem, knowledge can be gained in developing a sound scientific program for future needs.

It is expected that as agricultural efforts expand and further encroach upon wildlife habitats, problems of this type will continue to intensify. This is not a pleasant prospect but is none-the-less a fact that must be anticipated with well planned control measures.

Beaver:

The past year numerous complaints of beaver damage to cabin sites, road ways, exotic plants, etc., were received and referred to the Alaska Department of Fish and Game, with the explanation that Federal funds and personnel are not available for this work. Should the State wish the Federal Government to participate, and contribute a portion of the cost, it would be feasible to assist them with this problem.

BIRD CONTROL

Bird control and demonstrations of bird scare devices were conducted in cooperation with the Branch of Management and Enforcement and the U. S. Public Health Service. Pigeons roosting in the large airplane hangars and seagulls resting on the runways and approaches to the Anchorage airports are problems under consideration. Seagulls were trapped, banded, and color-coded in an attempt to devise means of prevention and/or control. This work was done by cooperating with the U. S. Department of Health. The Zon Exploder and other scare devices were demonstrated and recommended as a partial solution to the problem.

RABIES

The U. S. Public Health Service reports that rabies was confirmed in 22 animal cases as of April 15 this past fiscal year. Positives were located along the arctic coast from Barter Island on the east to Teller on the west, and from such widely scattered areas in the interior arctic as Bethel, Fort Yukon, and Ambler River. In addition to the usual wildlife vectors (fox, wolf, and dog) the virus was isolated in caribou and the reindeer as well. Two people at Fort Yukon, one at Teller, and one at Wales were bitten by dogs and foxes that proved positive.

Sufficient concern was generated that the State asked for assistance in rabies control and a program was initiated. This was necessarily a very limited program encompassing educational and extension service phases along with an inoculation and the actual control work. More specific details of this are contained in the Kotzebue report following:

Rabid foxes entered the villages of Kotzebue, Koyuk, and Buckland during the latter part of the winter. Reported incidents "peaked" in the early part of March, and permission was secured from the Alaska Department of Fish and Game to initiate control procedures in the vicinity of the affected localities. Considerable emphasis was placed on minimizing the effects of wildlife vectors on human values through preventative measures. As rabies is endemic in the fox population in the Arctic, the most effective (and least costly) means of dealing with the situation was felt to be a workable vaccination program among the canine populations in the villages, coupled with strict enforcement of loose dog ordinances which the villages had formulated. The history of rabies in the Arctic thus far shows that foxes in themselves seldom if ever directly cause rabies in humans; however, the foxes do infect other canines (both dogs and wolves) and these animals, in turn, are readily capable of infecting humans (the dogs by virtue of the constant human-canine exposure factor; the wolves because even a sick wolf is still capable of inflicting injuries on humans). Lethal stations for foxes were established for the times and at the locations where it served the best interests of all concerned to have them.

State, Federal, city, and private individuals have recognized the need for a long range plan, based on fact rather than this oft repeated "shot-gun" approach and have begun to focus on a proper solution to the problem.

ITEMS OF INTEREST

Migratory Bird Stamp sales are increasing as a result of MCA Bowman's educational program at Kotzebue. Two years ago no duck stamps were sold. The next year there were 30 sold and this year 58 were purchased prior to opening day.

The Fish and Wildlife Service Cessna 180 stationed at Kotzebue was hit twice with a small caliber rifle while parked in front of the village. This was judged as pure vandalism without connotations of resentment that has been manifest in regard to USGMA patrol work in other remote areas. The incident is under investigation by the F.B.I.

On Nunivak Island, in cooperation with the Bureau of Indian Affairs, reindeer were herded successfully via the Fish and Wildlife Service airplane - from the grouping of individual bands of deer into a main herd out on the open range up to and including driving the deer into a corral at the end of the drive trail. Many days and literally hundreds of man-hours were saved by this technique.

Cooperation with various other projects included assisting the Branch of Refuges with the winter moose composition counts on the Kenai, conducting a caribou/wolf census in the Nelchina area with the Alaska Department of Fish and Game and furnishing transportation for State personnel on other projects of minor but mutual concern.

The complete and unstinting cooperation and assistance of both the Bureau of Indian Affairs Range Conservationist and the Bureau of Indian Affairs Area Land Operations Officer have contributed materially to the success enjoyed by the Kotzebue-based predator control activity. The Range Conservationist, for example, was ready and willing to serve as gunner on every opportunity presented to him, and was of great assistance around the airplane. Helping with the airplane consisted of items such as the following: tying it down at the end of a day's flying; refueling; lending the vital "helping hand" on many occasions when the wind came up during the night, which invariably meant going out of doors in the pitch black of a howling storm to manhandle a heavy airplane around by brute force so that it pointed into the wind and thus could ride out the storm unharmed (and add sub-zero temperatures, plus the fact that - often as not - the skis on the aircraft would be frozen down, and it becomes readily apparent just how vital and sincere the help was). On one occasion, the Range Conservationist donated the use of his quarters to Fish and Wildlife Service personnel temporarily stationed at Kotzebue for a three month period.

MCA Bowman is scheduled for educational leave this winter in order for him to qualify for permanent status. His replacement will be Harley King, former employer with Predator and Rodent Control here in Alaska.

The Branch of Predator and Rodent Control has been asked to present technical advice to a citizens committee formed to establish a cooperative rabies program in the State.

The National Pest Control Conference at Sacramento, California, was attended by Burkholder as regional representative.

A black bear in the Matanuska Valley killed 2 calves, 30 rabbits, and smashed many rabbit pens. He was shot the following day.

Burkholder wrote some incidental observations on wolverine that will be published in the Journal of Mammalogy.

ASSIGNMENT OF PERSONNEL

Leaman S. Ellis, Assistant District Agent, was on loan to the Bureau of Indian Affairs for six months to manage the reindeer project on Nunivak Island. The Wrangell headquarters was closed and Ellis will be stationed at Anchorage as Principal Assistant with a possible 5-month assignment to the Bureau of Indian Affairs.

S. Douglas Jones, Wildlife Aid, was stationed at Umnak and Unalaska Islands for the period March 1 to June 15 on fox control.

Roy R. Carpenter, stationed at Palmer, formerly from the Montana District is employed by the State under Bureau of Sport Fisheries and Wildlife supervision from June 1 through the middle of September on bear and rodent control.

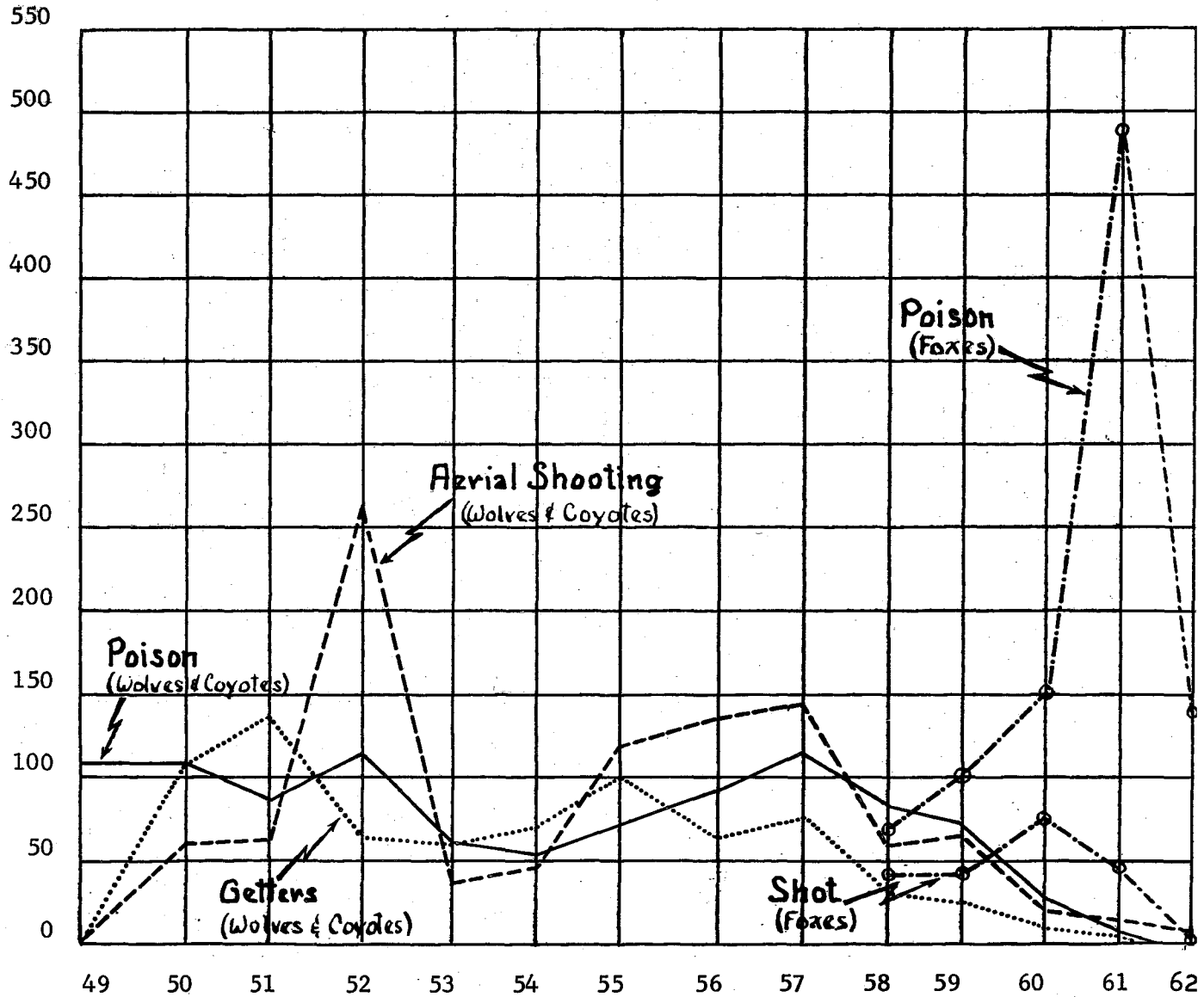
STATION ASSIGNMENT

Permanent Personnel

Bob L. Burkholder	Acting Regional Supervisor & District Agent	Anchorage
Leaman L. Ellis	Assistant District Agent	Anchorage
Howard N. Bowman	Animal Control Agent-Pilot	Kotzebue
Raymond Woolford	Chief Division of Wildlife	Juneau

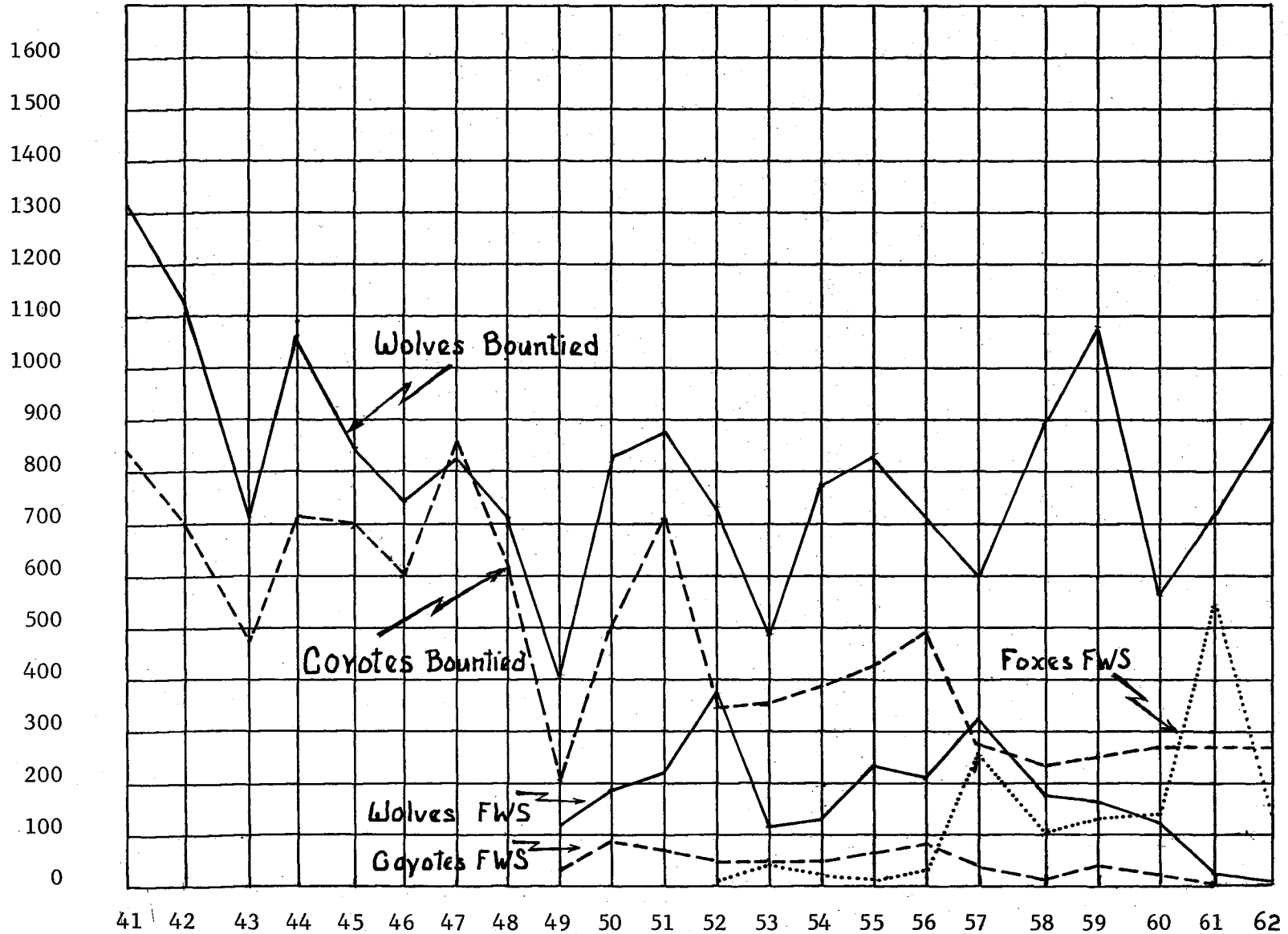
METHOD OF TAKING WOLVES & COYOTES ALSO PREDATORY FOXES

Fiscal Years



RECORDED PREDATOR SPECIES TAKEN IN ALASKA

FY 1941 to 1962



UMNAK COMPANY, INC.

1232 Milam Street -- Phone DRake 4-5957
AMARILLO, TEXAS

February 2, 1962

Mr. Bob L. Burkholder
Acting Regional Supervisor, P & RC
Fish and Wildlife Service
P. O. Box 6123
Anchorage, Alaska

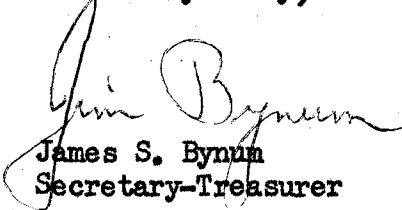
Dear Bob:

I was certainly pleased to get your letter of January 29, 1962 and to learn that you want to finalize your plans to put a full-time man on fox control work on the sheep ranges at Umnak.

You are quite right in assuming that Umnak Company wishes this service again this year and that we will cooperate by furnishing housing and transportation on the Island as in the past.

We feel that this service has been invaluable to us in the past. We appreciate the help the Branch of Predator and Rodent Control has given us more than you will ever know. As you might guess, establishing a sheep ranch on the Chain is somewhat of a touch and go proposition and your help and encouragement has been a great factor in our optimistic outlook for the future. We will be most happy to help you carry out this control work in any way that we are able.

Yours very truly,


James S. Bynum
Secretary-Treasurer

Department of Natural Resources
Division of Agriculture

STATE VETERINARIAN
BOX 2473
JUNEAU, ALASKA



27 June, 1962

U S Fish and Wildlife Service
Branch of Predator and Rodent Control

To Whom it May Concern:

The Alaska Department of Natural Resources, Division of Agriculture wishes to express their thanks for the fine cooperation extended in the predatory control work. This includes not only the programs pertaining to livestock, but also, the excellent work on our ever present rabies problem in the Arctic.

It is our hope that these programs may continue in the future on the same cooperative plane.

Very truly yours,

A handwritten signature in cursive script, reading "Phil R. Holsworth".

Phil R. Holsworth
Commissioner of Natural Resources

A handwritten signature in cursive script, reading "Fred S. Honsinger".

Fred S. Honsinger, D. V. M.
State Veterinarian



IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU OF INDIAN AFFAIRS

Juneau Area Office

Juneau, Alaska

June 21, 1962

Cooperative Agreement for Use of

U. S. Fish & Wildlife Service Aircraft

For the third consecutive year, we have had ideal cooperation with the Bureau of Sports Fisheries and Wildlife in the joint use of their aircraft stationed at Kotzebue. The convenience of having use of this aircraft in relation to our reindeer operations results in far more efficient use of available funds than when commercial charters are used. Not only are rates considerably lower, but the pilot usually is on the same itinerary as the Range Conservationist.

I wish to express our appreciation to Howard Bowman, Animal Control Agent-Pilot stationed at Kotzebue for the past three years this Agreement has been in effect. He has contributed immensely to the success of the cooperative operation at Kotzebue. It is a pleasure to work with him.

Approximately half of the flight time during 1961 was spent on the Nunivak Island operation. Here again, the aircraft saved the Nunivak reindeer operations time and funds. The spotting and actual roundup of reindeer was accomplished by the aircraft saving many time-consuming miles of legwork by herders on the ground.

There was some reduction in total time the aircraft was used in comparison to 1960. The Kotzebue Range Conservationist position being vacant for several months was one of the reasons.

A Cessna 180 was used during winter operations. This aircraft, being faster than the Piper Super Cub, totalled less hours. Although the Cessna 180 has a higher hourly rate, with a faster cruising speed and more space (4-place), it is more efficient.

We highly recommend that this cooperative agreement be renewed for F.Y. 1963.

E. L. Nygard

E. L. Nygard

Area Land Operations Officer

EMPLOYMENTS AND EXPENDITURES

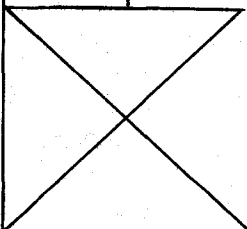
Source of Funds	Man Years Employment	E x p e n d i t u r e s		
		Salaries	Expenses*	Total
I. BUREAU FUNDS				
6115 Supervisory	1	\$ 9,055.00	\$ 3,720.00	\$12,775.00
6115 Field	2-3/12	15,557.00	14,500.00	30,057.00
Total 6115 Funds	3-3/12	\$24,612.00	\$18,220.00	\$42,832.00
II. OTHER FEDERAL FUNDS				
Bureau of Indian Affairs	8/12	\$ 6,400.00	\$ 3,500.00	\$ 9,900.00
Total Federal Funds	8/12	\$ 6,400.00	\$ 3,500.00	\$ 9,900.00
III. COOPERATIVE FUNDS				
(1) State Funds: Alaska Department of Fish & Game	3/12	\$ 1,700.00	\$ 184.00	\$ 1,884.00
	3/12	\$ 1,700.00	\$ 184.00	\$ 1,884.00
(2) Other Coop. Funds			\$ 1,750.00	\$ 1,750.00
Total Cooperative Funds			\$ 1,750.00	\$ 1,750.00
	3/12	\$ 1,700.00	\$ 1,934.00	\$ 3,634.00
GRAND TOTAL		\$32,712.00	\$23,654.00	\$56,366.00

*Includes \$8,000 for Aircraft Pool.

P-2 ANIMALS TAKEN & METHODS USED

Animals	Traps	Getters	Preda- cides	Shot	Air- plane	Totals	Reported Unconfirmed
Bear, Black	3			2		5	
Bear, Grizzly				1		1	
Dog, Feral			4	2		6	
Coyote							
Fox			140	2		142	
Wolf					4	4	
TOTAL	3	0	144	7	4	158	

P-3 REDUCTIONAL METHODS USED

Method	Amounts	Station Records			
		No. Placed		No. Destroyed	
		Public Lands	Private Lands	Public Lands	Private Lands
1. Predacides:					
Compound 1080	none				
Thallium	none				
Strychnine (powder)	none				
Strychnine (tablets)	3500	200		200	
Other	none				
2. Traps	3				
3. Getters	41				
4. Airplanes*	370				

*Includes administrative flying for BIA at Kotzebue

R-1 EMPLOYMENTS & EXPENDITURES

Source of Funds	Man Years Employment	E x p e n d i t u r e s		
		Salaries	Other	Total
I. BUREAU FUNDS				
6115 Supervisory	1/12	\$ 722.00	\$ 49.00	\$ 771.00
6115 Field	2/12	1,629.00	1,000.00	2,629.00
Total 6115 Funds	3/12	\$2,351.00	\$1,049.00	\$3,400.00
II. OTHER FEDERAL FUNDS				
U.S. Department of Agriculture			\$ 50.00	\$ 50.00
Total Federal Funds			\$ 50.00	\$ 50.00
III. COOPERATIVE FUNDS				
1. State of Alaska Dep't of Health & Welfare	1/12	\$ 500.00	\$ 100.00	\$ 600.00
2. City Funds	1/12	\$ 100.00	\$ 100.00	\$ 200.00
Total Cooperative Funds		\$ 600.00	\$ 200.00	\$ 800.00
TOTAL FEDERAL & COOPERATIVE FUNDS	8/12	\$2,951.00	\$1,299.00	\$4,250.00

TABLE R-2

AREAS TREATED AND MATERIALS USED - FEDERALLY SUPERVISED

Species	Number of Acres Treated		Number of Premises Treated	Pounds of Bait				
	Federal	Other		Strychnine	Compound 1080	Zinc phosphide	Anti-coagulants	Other
Field Mice	10		10		7		50	
Ground Squirrels	10	160	2	20	20			
Rodents, Commensal	60		80		20		500	
Woodchucks								
etc.								
TOTALS	80	160	92	20	47		550	

PR-1 PUBLIC RELATIONS

	Meetings		Demonstrations		Exhibits	
	Number	Attend.	Number	Attend.	Number	Attend.
State (or sub-district)	18	2500	2	20	3	20,000
Totals	18	2500	2	20	3	20,000

Area	Number Radio and TV Programs	Number of Newsletters, Articles, etc	Visual Aids Used	
			Films	Slides
State (or sub-district)	3	10	2	
Totals	3	10	2	