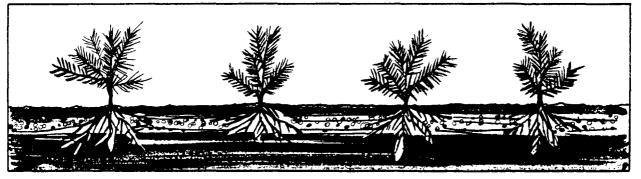


Resource Management



Fire Management



Forestry Assistance CINC. DOC.

STATE OF ALASKA STATI

DIVISION OF FORESTRY

1982

ANNUAL REPORT

The State of Alaska Division of Forestry dedicates this Annual Report to the memory of Bill Adams.

William Hayes Adams, a long time resident of Alaska and an employee with the Alaska Department of Natural Resources, passed away October 18, 1982, in Anchorage, Alaska. He had been with the Department's Division of Forestry since 1978.

Bill, as he was known, began his career in resource management in 1954 as a Forester in Palmer, Alaska. Bill served in many subsequent costions and locations during his 28 year career.

Bill was well known and his abilities highly respected throughout the wildland fire organizations in Alaska, the lower 48 states and Canada. We gained respect as one of the most knowledgeable professional resource managers specializing in fire management issues. Bill made numerous contributions to fire and resource management throughout his wareer effectively changing the Alaska fire management program substantially. He was especially talented in being able to visualize the future and perceive changes that were coming or necessary to meet the challenges of modern fire management.

FOREWORD

The 1982 Annual Report summarizes the various accomplishments and activities the Division of Forestry has been involved in during 1982. In spite of a national economic recession, and decreased oil revenues, a working together of Legislative and Administrative processes has provided the DOF with the resources to achieve many accomplishments in fire and forest management. Topics discussed in this report are the key objectives for 1982, problems faced trying to accomplish them, and an outlook concerning what challenges DOF faces in future years.

As State Forester, I wish to express to all DOF personnel my appreciation for the dedication, professionalism and plain hard work during this past year. The demand for services the DOF provides to the citizens of Alaska has accelerated at a rapid rate this past year. The amount of acres protected from wildfire, the demand for firewood, houselogs, saw timber, etc., have all increased. The DOF has stayed on top of this demand in part by the innovativeness and dedication of its personnel.

This annual report not only discusses the activities and accomplishments of 1982, but also takes a look at the challenges for 1983. I am confident that Forestry will face and conquer these as well as in previous years.

John L. Sturgeon

State Forester

TABLE OF CONTENTS

	Page
Fire Management	2
Key Objectives for 1982	2
Predominant Problems	2
1982 Fire Weather	3
Support Capability	4
Aviation Management	4
Accounting Procedures	5
Fire Training	5-6
Fire Management Planning	7
State's Fire Protection Area	8
Fire Statistics	9-14
Objectives for 1983	15
Forestry Assistance	16
Key Objectives for 1982	16
Predominant Problems	16
Inspections	16
Field Staff Increased	17
Nursery Construction	17
Seedlings Produced	17
Tree Planting	18
Objectives for 1983	19
Resource Management	20
Establishment of State Forest	20
Forest Products Available to Public	20
Industrial Forestry Development	20
Training	21
Predominant Problems	21
First State Forest Established	22
Timber Sale Program	22
Public Needs	22
State Forest Resources Program Plan	23
Forest Operations	23
Computer Programs	23
Timber Statistics	24-26
Division of Forestry Personnel	27-29
Bill Adams	30-31

Chapter 1 - Fire Management

The beginning of 1982 was dedicated to identification of operational problems the Division encountered during the unusually severe 1981 fire season. Many new policies and internal procedures were developed to provide improved continuity and coordination throughout the organization. Some of the procedures transcended interagency lines to stabilize operational functions between agencies. Some very specific objectives were identified for the 1982 season.

A. Key Objectives for 1982

- 1. Expand the staff within the State Office to accommodate Interagency Fire Planning, Communications system development and coordination of fire operations including technical direction.
- 2. Improve the Division posture in Aviation management.
- Develop an accurate cost accounting system for suppression actions.
- 4. Conduct an aggressive training program to increase the technical fire skills throughout the Division.
- 5. Identify clear authorities, responsibilities and working relationships between the State Office and District Offices.
- 6. Initiate a strong effort in Fire Management Planning to clearly identify reasonable protection levels for State land.
- 7. Identify future program requirements for optimum cost effective protection of State and private lands considering protection area trade off with other agencies.
- Reduce initial attack response times on roadside fires.
- 9. More effectively use the seasonal forest technicians in forestry work when they are not involved in fire suppression.

B. Predominant Problems

The fire season for 1982 proved to be a mild season with only one of the 261 fires reaching any significant size. This first fire of the season started on Kodiak Island near an area designated for open to entry staking by the public. The fire posed no serious threat to the resources. However, due to the high number of people in the area at the time the fire was burning, a decision was made to suppress it. It was finally contained at 900 acres without incident and the land staking progressed uninterupted. The balance of the season resulted in routine initial attack incidents which posed no serious problems.

In Southeastern Alaska exceptionally warm and dry weather caused the concern of problem fire potential, especially for open fires and industrial activities in the forest. A public order was issued to restrict open burning effective June 28, but the order was cancelled on the same day after .50 inch of rain fell. It was discovered that improved coordination between the Division of Forestry and the USFS is needed to determine uniform closure to open burning in areas where Forest Service and State management authorities meet. This issue will be clearly identified in the cooperative agreement between the agencies prior to the 1983 fire season.

During June both BLM and DOF experienced lightning fire activity and the potential for problem fires increased. The BLM retardant aircraft fleet was not sufficient enough in numbers to support initial attack activity and, furthermore, was dedicated to BLM fires leaving the DOF without dependable retardant aircraft responses. The DOF arranged for a DC-7 retardant aircraft through the Boise Interagency Fire Center to come to Alaska and join the Statewide BLM fleet. This aided the capability of both agencies to suppress fires at the initial attack stage and provided dedicated support to the State. The aircraft remained for eight days and was released when fire activity subsided.

The only other significant problem plaguing the Division was erosion that was occurring along some tractor constructed fire lines that were built several years ago. The Division performed rehabilitation work on the Aggie Creek and Delta fire lines to stop the flow of siltation into main tributaries. The Division developed a policy governing the use of tractors constructing firelines to prevent future recurrence.

C. Weather for the 1982 Fire Season

Overall, the 1982 fire weather season was cool and damp with sporadic thunderstorm activity scattered throughout the State which caused very few fire starts.

May marked a return to the norm around the State with cool temperatures averaging at or a little below normal. Precipitation amounts were generally at or above normal with little or no thunderstorm activity.

June started out with cool moist weather which lasted until the 12th when the fire weather season finally got underway with thunderstorms blossoming throughout the Interior from Bethel to Northway. Southcentral and Eastern Interior regions were relatively cloud free with good daytime heating and a high pressure system aloft over the Kuskokwim and the lower Yukon Valleys which allowed for plenty of thunderstorm activity through the rest of the month. Several weak systems did manage to move through the State, but rainfall for the month was generally below normal with temperatures at or above normal.

July was a continuation of the June weather pattern which grew warmer and_dryer with temperatures in the Interior well into the 80's by the 7th of the month. During the four day period from July 8th to the 11th, over 11,000 lightning strikes were recorded throughout the Interior by the Lightning Detection System. By the 12th, the weather pattern began to change with clouds and showers scattered throughout the State. Thunderstorm activity began to subside with the remaining activity being wet or average wet which kept fire starts to a minimum.

August started out with widespread thunderstorm activity in the Copper River Basin and in the Matanuska and Susitna valleys. This system shifted southwest into the Kuskokwim, Alaska Ranges and toward the Yukon-Kuskokwim Delta on the 7th. From the 8th through the 10th scattered thunderstorms occurred from the Seward Peninsula to the Upper Yukon Valley and from the southern slopes of the Brooks to the Alaska Range. Activity tapered off with the movement of a low pressure system in the southeastern Bering Sea that brought considerable moisture and clouds to the State which continued into September with cooling temperatures. The first wide-spread snowfall fell on October 3rd, which relatively inactive fire season.

D. Achievements

Support Capability Improved

The objective of expanding the State Office staff to improve fire operations, planning and communications has been achieved. Most significant is the Division's capability to effectively respond to the Interagency Fire Management planning effort which will allow classification of land into protection categories and assure the fire suppression forces respond to fires as determined by land management priorities.

A five-year communications plan was started which identified problems that we have and gave some ideas of where we should go. After comments and revision, the plan will be completed next year.

Aviation Management Improved

The aviation management program realized significant improvement in the areas of contracting, business administration and field technical level capability. The development οf the Operations Manual and District Air Operations Plans established standards which achieved uniform operations. important is the capability to relate professionally to the aviation community. The Division acquired two twin Beachcraft aircraft from military surplus. In addition to the two existing Beavers owned by DOF, we now have four aircraft providing dependable dedicated utility service at a substantial savings.

Accounting Procedural Change

The fiscal accounting process was improved in 1982 allowing the Division to routinely process billings and accurately account for expenditures for each individual fire action. The significance of this process can be measured in terms of prompt payment to vendors, elimination of duplicate payments and being able to track costs accurately for billing other agencies.

Aggressive Fire Training Program

One of the most significant improvements in 1982 was in the Division's fire training program. Recognizing the need for extensive training to increase overall fire qualifications, a very aggressive program was constructed.

Many technical fire and administrative courses were represented, as seen on the following page.

In 1982 there were 29 courses taught involving about 350 different people, 743 course hours and 15,872 trainee hours.

ANNUAL FIRE TRAINING SUMMARY

Course Description	No. of Trainees	Course Hours	Trainee Hours
Basic Fire Fighter/Fire Behavior	31	16	496
Water/Pumps	5	24	120
Chainsaws	14	8	112
Tractors	59	8	472
Firing Equipment	8	12	96
Fire Business Management	147	8	1,176
Organizing for Fire Suppression	4	24	96
Sector Boss	4	. 24	9 6
Maps & Records Officer	47	24	1,128
Air Service Manager/Intermediate	56	40	2,240
Air Operations			
Camp Officer/Equipment Officer/	41	40	1,640
Supply Officer			
Intermediate Fire Behavior	13	40	520
Fire Organization & Management	41	40	1,640
Plans Chief	2	40	80
Service Chief	2	40	80
Air Service Officer	31	40	1,240
Fire Command	1	80	80
Advanced Fire Behavior	1	80	80
Instructor Training	6	36	192
Retardant Site Setup	25	8	200
Preliminary Fire Investigation	43	8	344
Basic First Aid	78	8	624
Helitorch Training	5	8	40
Natural Resource Officer	8	40	320
EFF Crew Training	103	24	2,448
Burn Treatment	13	8	104
Communications	13	5	15 6
Paracargo	2	6	1.3
Helicopter Safety	5	8	<u> 40</u>
TOTALS	808	743	15,372

				5-~-
Annual Comparison	1980	1981	1982	Ave
Initial Attack Training - Course Hours	326	103	132	
Project Fire Training - Course Hours	216	117	384	-
E.F.F. Training - Course Hours	64	130	24	
Other Fire Training - Course Hours TOTAL COURSE HOURS	$\frac{104}{710}$	$\frac{288}{638}$	203 743	5
TOTAL COUNSE HOURS	110	038	145	

Although there was an 85% increase in course hours taught over 1981, the training effort only reached 80% of the course hours identified in the 5-year training plan. Trainee hours more than doubled in 1982 due to a large increase in the number of trainees attending fire training.

Authorities, Responsibilities and Working Relationships

Delegations of authority were developed and approved. In addition, a statewide list of Central Office, District Office and Area Office responsibilities was developed. These have helped us meet our objective of establishing clear authorities, responsibilities and working relationships between the Central and District offices.

Fire Management Planning

In 1982 the Tanana-Minchumina Fire Management Plan was implemented. This and future plans should significantly reduce the suppression cost in areas where fire has little impact on the resources. It also allows focusing suppression efforts on a priority basis to areas where the highest level of protection is required.

Implementing the Tanana-Minchumina Fire Plan this year placed 2.2 million acres of State land in a no action (limited) category. This, in turn, saved the State an annual \$127,000 in presuppression costs for 1982. There is no accurate means of estimating how much money has and will be saved in suppression costs, but it has been predicted to be millions of dollars in future years.

On July 13, BLM reported a fire on State land, limited action area in the Melojitna drainage. With overcast skies and rain showers, this lightning fire grew to only 15 acres in 2 days before it was rained out. No attack action took place. A fire burning at this same time in a limited action area in Denali National Park threatened State land near Healy, but it was rained out before it left the Park. It grew to 6,100 acres.

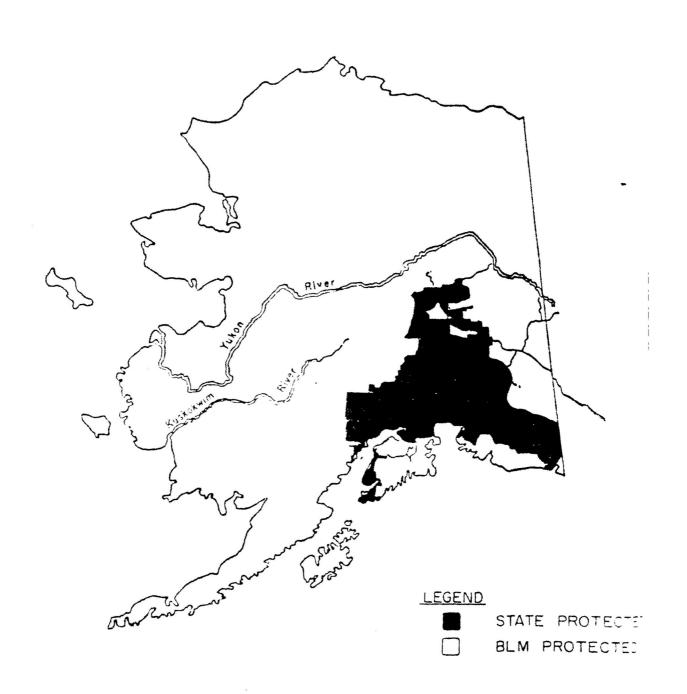
In 1982 three new Interagency Fire Management Plans were initiated with a goal of being implemented by May 1, 1983. These are: Upper Yukon-Tanana (45 million acres), Copper Basin (19.7 million acres), and Kuskokwim Iliamna (42.5 million acres). In addition, the 40-mile Plan is undergoing complete revision.

fhe overall goal is to have all burnable acres in the state covered by Fire Management Plans by May 1984.

In 1981 at the "End of the Season" meeting, 39 objectives were identified for completion in 1982; of these, 75% were completed.

Although a lot of work is yet to be done, the improvements realized in 1982 have allowed the Division to reach a professional profile in fire management.

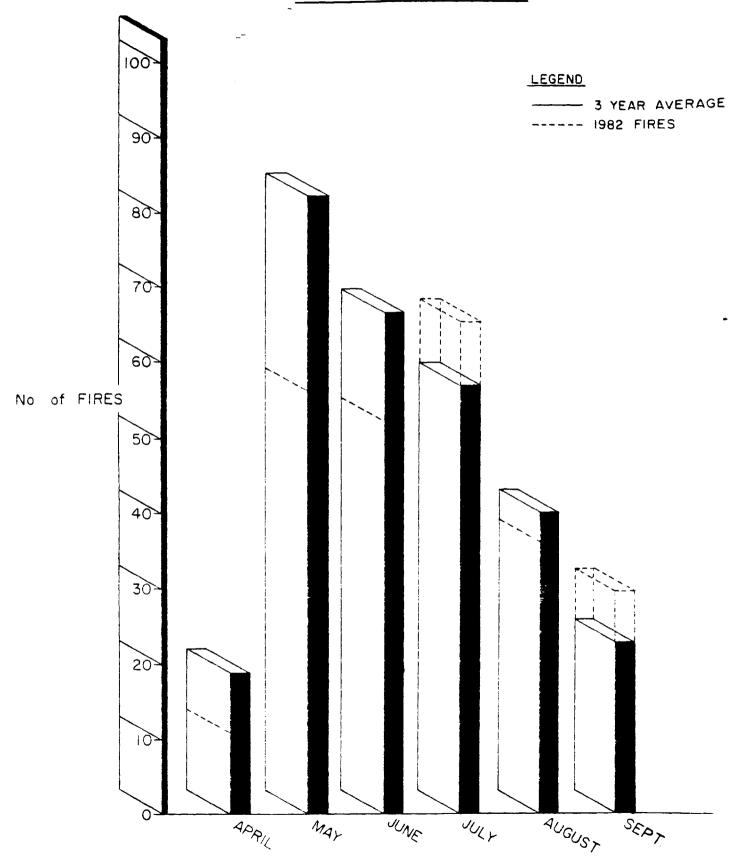
STATES FIRE PROTECTION AREA



YEAR

NUMBER OF FIRES PER MONTH

3 YEAR AVERAGE



MONTH

35

Lightning

1,941

Human
Number Acres

15 34
2 1
0 0
17 35

Number Acres

36 446
16 1,530
0 0
52 1,976

Total

Note:

Total

Pertains to State and private lands protected by BLM and includes FA and No action response

NUMBER OF INCIDENTS AND ACRES BURNED BY DISTRICT

	Lig	htning	Huma	ın	No Action/False Alarm	То	tal.	
District	Number	Acres	Number	Acres	Number	Number	Acres	
					ŧ			
Southcentral	0	0	98	1,011	63	161	1,011	
Northcentral	5	8	43	142.7	44	92	150.7	
Southeast	0	0	8	133.35	0	8	133,35	
Total	5	8	149	1,287.05	107	261	1,295.05	

Note:

Pertains to lands protected by the State and includes FA and no action responses. No Action - Unit responds to a verified fire and takes no suppression action. False Alarm - Unit responds to a fire call and not finding the fire.

NUMBER OF INCIDENTS AND ACRES BURNED BY ANLA

	Ligh	tning	Н	uman	Totals			
District	Number	Acres	Number	Acres	Number	Acres		
Anch/Mat-Su	0	0	59	14.88	59	14.88		
Copper River	0	0	56	9.08	56	9.08		
Kenai	0	0	46	987.04	46	987.04		
Southcentral Dist Total	0	0	 161	1,011	 161	1,011		
Fairbanks	6	3	41	18.1	47	21.1		
Delta	3	5	42	124.6	45	129.6		
Northcentral Dist Total	9	8	 83	142.7	92	150.7		
Haines	0	0	5	132.35	5	132.35		
Ketchikan	0	0	3	1	3	1		
Southeast Dist Total	0	0	8	133.35	 8	133.35		
Total	9	8	 252	1,287.05	261	1,295.05		

Note:

Pertains to lands protected by the State and includes FA and no action responses.

NUMBER OF INCIDENTS AND ACRES BURNED BY MONTH

		S	SCD			N	ICD			S	ED		TOTAL				
	Ligh	tning	H	uman	Ligl	ntning	H	Human		Lightning		Human	Ligh	itning	H	uman	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.		No	. Acres	No.	Acres	No.	Acres	
A 1	- 1				_		_	_		_		-				20. 2	
April	0 '	0	11	38.3	0	0	0	0	0	0	0	0	0	0	11	38.3	
May	0	0	33	31.7	0	0	21	108.6	0	0	2	83	0	0	56	223.3	
June	0	0	28	4.9	1	4	23	16.1	0	0	1	0	1	4	52	21	
July	0	0	40	7.8	8	4	20	17.2	0	0	5	50.35	8	4	65	75.35	
August	0	0	24	22.3	0	0	12	. 2	0	0	0	O	0	0	36	22.5	
Sept.	0	0	22	6	0	0	7	.6	0	0	0	O	0	0	29	6.6	
pre-	0	0	3	900	0	0	0	0	0	0	0	0	0	0	3	900	
season					2000000					e		v.	1010200 100				
Total	0	0	161	1,011	9	8	83	142.7	0	0	8	133.35	9	8		1,287.05	

Note:

Pertains to lands protected by the State and includes FA and no action responses.

1982

NUMBER OF INCIDENTS AND ACRES BURNED BY CAUSE

	Lig	htning	c	ampfire	Ec	juip.	De	hris	Sm	oking	М	isc.		RR	Ince	ndiary	Chi	ldren	т	otal
District	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Anch/Mat-Su	0	0	2	0	3	. 3	15	11.87	4	. 76	1	1.5	ì	. 25	t	0	1	. 2	28	14.88
Copper R.	0	0	6	. 8	7	.21	11	1.52	2	5	6	.63	0	0	1	. 25	6	.61	39	9.08
Kensi	Ð	0	5	900.5	6	35.27	10	32.25	1	6.5	2	8	0	0	1	0	6	4.52	31	987.04
Southcentral	0	0	13	901.3	16	35.84	36	45.64	7	12.26	9	10.13	1	. 25	3	. 25	13	5.33	98	1,011
Fairbanks	2	3	2	6	3	.6	5	8	0	D	3	2.25	0	0	0	0	2	1.25	17	21.1
Delta	3	5	5	. 6	7	. 6	15	123.4	0	0	0	0	0	9	0	0	1	0	31	129.6
Northcentral	5	8	7	6.6	10	1.2	20	131.4	0	n	3	2.25	0	0	0	0	3	1.25	48	150.7
Haines	0	0	2	82	0	0	1	50	0	D	1	.25	0	0)	. 1	0	0	5	132.35
Ketchikan	0	0	2	1	0	0	1	n	n	0	0	0	0	0	0	0	0	0	3	1
Southeast	0	0	4	83	n	0	2	50	0	0	3	. 25	n	0	1	. 1	0	0	8	133.35
Total	5	8	24	990.9	26	37.04	58	221.04	7	12.26	13	12.63	1	. 25	4	. 35	16	6.58	154	1,295.05

Note:

Pertains to lands protected by the State and does not include FA and no action responses.

NUMBER OF INCIDENTS AND ACRES RUPNED BY OWNERSHIP

	;	State		Private	Boro	ough/City	N.	ative		BLM		RR	Mi	litary		USES	ı	SFRVS		NPS	TC	TAL
Distri	ct No.	Acres	No	. Acres	No.	. Acres	No.	Acres	No.	Acres	No.	Acres	Nο.	Acres	No.	Acres	No.	Acres	No	Acres	No.	Acres
* SCD	54	904.69	74	79.20	4	.01	15	26.26	9	.53	2	. 31	0	ņ	0	O	0	0	3	o	161	1,011
* NCD	38	15.3	46	129.1	1	0	0	0	1	1.3	2.	(i	3	۲,	0	()	0	0	ī	0	92	150.7
* SED	3	50.1	2	1	0	0	1	8.2	0	0	0	0	0	O	2	. 25	0	n O	0	0	В	133.35
Total	95	970.09		209.3	5	.01	16	108.26	10	1.83	4	.31	3	5	2		0	0	4	0	261	1,295.05

Note:

Pertains to lands protected by the State and includes FA and No action responses. * SCD - Southcentral District NCD - Northcentral District SED - Southeast District

1982
NUMBER OF INCIDENTS AND ACRES BURNED BY SIZE CLASS

															(Fal	se Alarm)	(No	Action)		
		A		В		C		D		E		F		G		Z		R	T	otal
District	No.	Acres	No.	Acres	No.	Acres	No .	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Anch/Mat-Su	22	2.43	6	12.45	0	0	0	0	0	0	0	0	0	0	9	0	22	0	59	14.88
Copper R	38	4.08	1	5	0	0	0	0	0	0	0	0	0	0	8	o	9	0	56	9.08
Kenai	19	2.79	9	30.25	2	54	0	0	1	900	0	0	0	0	8	0	7	0	46	987.04
Southcentral	79	9.3	16	47.7	2	54	0	0	1	900	0	0	0	0	25	0	38	0	161	1011
Fairbanks	6	1	11	20.1	0	0	0	0	0	0	0	0	0	0	7	0	23	0	47	21.1
Delta	18	1.6	10	23	3	105	0	0	0	0	0	0	0	0	1	0	13	0	45	129.6
Northcentral	24	2.6	21	43.1	3	105	0	0	0	0	0	0	0	0	8	0	36	0	92	150.7
Haines	3	.35	0	0	2	132	0	0	0	0	0	0	0	0	0	0	0	0	5	132.35
Ketchikan	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	}	1
d Southeast	5	. 35	1	1	2	135	0	0	0	0	0	0	0	0	0	0	0	0	8	133.35
Total	108	12.25	38	91.8	7	294	0	0	1	900	0	0	0	0	33	0	74	0	261	1,295.05

Note:

Pertains to lands protected by the State and includes FA and no action responses.

NUMBER OF INCIDENTS AND ACRES BURNED BY DISTRICT

	SCI	D	NC	D)	⊹s	ED	TOTAL		
1,	Number	Acres	Number	Acres	Number	Acres	Number Acres		
Federal lands Protected by the State	6	.53	4	6.3	3	82.25	13 89,08		

Note:

1. Excludes FA and no action responses.

*2. Includes two USFS fires of which .25 acres burned.

E. Objectives for the 1983 Calendar Year

Looking ahead the Division anticipates a challenging year for 1983. Workload priorities have been identified commensurate with the long-term goals for the State. Some of the objectives are highlighted.

- -- Assume protection of the Kenai Moose Range realizing acre trade off with BLM for interim State land protection.
- -- Organize a core planning and management group for preparation of the McGrath/Bristol Bay area scheduled to come under State protection in 1985, per agreement with BLM.
- -- Complete work on four fire management plan areas.
- -- Develop cooperative agreements with local fire departments where possible to reduce the Division's need for a larger work force in initial attack.
- -- Complete a communications plan which identifies the most cost effective design of total communication needs.
- -- Complete the Division's Policy and Procedure Manual.
- -- Continue to present quality high intensity training sessions to maximize benefits.
- -- Work directly with land developers to reduce the threat of escaped fires yet arrange the best possible burning plan to benefit the developers on a site specific basis.
- -- Overall, design the optimum fire protection program at the most cost efficient means.
- -- Continue to increase the efficiency of our initial attack operations and dispatching and logistical functions.

Chapter 2 - Forestry Assistance

The Forestry Assistance component of our Division is taking on more and more responsibilities. Historically, the administration of the Forest Practices Regulations constituted our major workload. This past year, however, we were assigned another program, the Nursery and its production of seedlings and other plants, and we laid the groundwork for two more programs, both of which are to be instituted in 1984: one is High Yield Forestry, which has to do with research related to forest production, harvesting, reforestation and such; the other is to be a comprehensive Service Forestry Program that will make avaliable a wide variety of assistance to private land owners.

A. Key Objectives for 1982

Throughout this year, as in the past, one of our major endeavors was to encourage the steady harvest and flow of wood products, both for personal and industrial use, while assuring the methods of operation complied with the Forest Practices Regulations. This is not a simple task and requires a good working relationship with the timber industry, especially the field personnel. Developing a favorable rapport with loggers and woods personnel necessitates field presence on our part, and this we strive to accomplish.

Proper enforcement of the Forest Practices Regulations and proper compliance thereto are based upon a mutual understanding of all parties concerned. Hence, we had as one of our key objectives this year the training of both our personnel and that of the timber industry as to what the Forest Practice Regulations are all about.

Another target we had this year was the salvaging of wood products from those lands destined to be cleared as part of the State's Agricultural Project on Point MacKenzie.

Planning played a key role also during 1982: planning required prior to taking over the Nursery Program and that involved in the development of the High Yield Forestry and the Service Forestry Programs for presentation to the 1983 Legislature.

B. Predominant Problems

Poor market conditions during 1982, essentially the world over, resulted in a slowdown in harvesting operations over the whole State, especially in the Southeast.

C. Achievements

Record Number of Inspections

In spite of generally poor market conditions, we conducted more inspections during 1982 than since the program was implemented in 1979. Had the slowdown not occurred, we would not have been able

to keep pace with our workload. We were notified of 30 harvesting operations involving some 13,000 acres, from which 300 million board feet of timber was logged. On this acreage we conducted 130 field operations and examined the construction of about 80 miles of logging roads. Several notices of violation were issued during the year in regard to problems with road construction activities. None were extremely serious, and none caused lasting or extensive damage to water quality. Also, not one occurred twice on the same operation.

Field Presence Increased

We increased our field staff in the Southeast to three, with the transfer of one position from Anchorage to Petersburg. This transfer not only gave us more field presence to administer the Forest Practices Regulations, but it also enabled us to keep up with our contractual obligation to the Bureau of Land Management in monitoring harvesting operations subject to Section 22(k)(2) of ANCSA.

Nursery Construction

A year or so ago, the decision was made to move our nursery operation from Palmer to Eagle River, and the concrete foundations were laid for two greenhouses in 1982. The new location will lend itself to more economical operations since it is in the proximity of a supply of natural gas and is also closer to our other operations. Also, the environment in the new locality is less severe, which will enable seedling production out-of-doors as well as in the greenhouses.

Seedlings Produced

1982 was a banner year for production. We produced 401,400 containerized conifer seedlings, mostly white spruce; 5400 hardwood cuttings; and 3,000 seedlings of several species for research. Seed collection was financed by State and Private Forestry, U.S. Forest Service. Approximately 140 bushels of comes were collected, from which 168 kilograms of seed were extracted. This quantity of seed is not easy to come by. Hence, a cone collection campaign was undertaken among a variety of youth groups and charity organizations, affording them an opportunity to earn money. They came through with flying colors.



TREE PLANTING



Objectives for 1983

Outlook for Timber Industry Bleak for 1983

The outlook for the timber industry for 1983 still remains bleak at this point in time. This should give us the opportunity to keep pace with harvesting activities and strive to increase our field presence.

Enforcement of 22(k)

There is one more year remaining under our contractual obligation to BLM, after which our entire field force can be utilized to administer our regulations. We have developed a considerable degree of rapport with the timber industry and should continue to maintain and increase it along with our field presence.

Service Forestry Program

Additional effort will be directed to the non-industrial private forest landowner not only as it relates to salvage activities on agricultural lands, but also to the development of markets and the intensive management of all private forest land in the state. A full-fledged Service Forestry Program has been forwarded to the Legislature for funding for Fiscal Year 1984 which would enable us to provide full-time assistance to those landowners desiring such assistance.

High Yield Forestry

Another program, High Yield Forestry, hopefully will be instituted in FY 84. It will provide the data necessary to make sound land management decisions regarding harvesting, reforestation and protection of Alaska's forest land base.

Completion of Greenhouse Facilities

One final item to be accomplished during 1983 was the relocation of the State Forest Nursery from Palmer to Eagle River into two new greenhouses presently under construction. This will give us the capability to produce approximately 750,000 seedlings annually for reforestation and research purposes, which is still below the current demand of 1,200,000 seedlings.

Chapter 3 - Resource Management

The overall objective of this component is to encourage the personal use and development of those forest lands retained in State ownership by making available on a sustained yield basis at reasonable costs all of those products and benefits usually associated with the forest such as firewood, houselogs, lumber, wildlife habitat, water, fish and game, recreation, forage, and aesthetics. Major emphasis is placed upon timber sales as a means of achieving this objective, some immediate results of which are the creation of jobs for Alaskans and the generation of revenue for the State. The Division of Forestry is responsible for the development of the State Forest Resources Program Plan. It defines goals and objectives for the Division on an annual basis for a five-year period, quantifies the resources required to achieve objectives and assigns priorities on a cost/benefit basis.

A. Key Objectives for 1982

Establishment of State Forest

A high priority objective for 1982 was to initiate the establishment of a system of State Forests. An assured supply of wood at a reasonable cost over the long term is a prerequisite for the development of forest industry in Alaska, and State-owned lands dedicated to forest production are a viable alternative to meeting this need. Hence, great effort was devoted to this effort in the past year.

Make Firewood and Other Forest Products Available to Public

One of our Division's most active and intimate interfaces with the public involves personal use of the forest products of firewood, houselogs and rough lumber. Making these products available through small timber sales and personal-use contracts is one of the most time-consuming and gratifying functions of our Division. Very high on our list of priorities, therefore, was satisfying this very important demand, which is increasing annually with the influx of more people to Alaska.

Encourage Industrial Forestry Development

Making timber available on a larger scale for commercial uses, both domestic and export, especially at reasonable costs on a sustained yield basis, encourages industrial development Nourishing the industrial sector of forestry has the potential of being one of our most rewarding endeavors in terms of jobs and revenues, and we continue to look for ways to develop our under-utilized hardwood resource as an area for immediate potential growth.

Encourage Coordinated, Planned Development

Proper planning is an important necessity and results in worthwhile products. Early last year we initiated the development of a State Forest Resources Program Plan. Our efforts were continued this year, and completion is scheduled for the third quarter of 1983. Closely associated with this planning effort was the development of the Division's input to the Department's Annual Statewide Natural Resources Plan. We set as a major objective to generate the best Forestry Element that had yet been presented.

Upgrade Forester Expertise with Additional Training

The accomplishment of Divisional objectives requires personnel trained in the fundamentals and well-versed in the application of a wide variety of technologies. A high priority objective for 1982 was to work closely with our people, especially those in the Districts and Areas, to provide them with technical assistance and training wherever needed.

B. Predominant Problems

Alaska's forest land base is being reduced and/or fragmented at an alarming rate, a problem that must be addressed in the near future, if not immediately. Native and municipal entitlements coupled with continued emphasis on land disposals have severely limited the amount of accessible State-owned forest land. The diminishing supply of such land will result in severe competition from a variety of public and private uses on the remaining State-owned forest land. Some of these uses will be compatible, and some will not be compatible with long term forest production. All of these factors argue for immediate legislative or administrative designation of adequate acreages of State land dedicated to retention for sustained-yield forest production.

The industrial development of Alaska's forest resources is not a simple, short-term proposition. Alaska's population of less than a half million people does not warrant large capital investments in processing plants, and the world market is badly depressed. Local utilization and manufacturing standards, coupled with high cost of labor, result in wood products that are not competitive with the imports. In contrast, personal-use demands are increasing constantly with firewood hard to come-by in some areas either because of scarcity or inaccessibility. The development of forest resources should be represented by a special projects person responsible for the development of the forest products industry.

C. Achievements in 1982

First State Forest Established

On July 1, 1982, Alaska took the first step in the development of a system of State-owned lands dedicated to the multiple-use management of forest resources: the Haines State Forest Resource Management Area was established. An historical development, the legislation responsible was the result of cooperation among a host of diverse interest groups who agreed to agree upon the multiple-use concept that lands with contiguous boundaries and, indeed, even more intimate relationships could be managed to the advantage of all its renewable natural resources. Another bill will be introduced in 1983 to establish additional such State Forest Areas.

Many hours have been spent meeting with concerned interests by Division of Forestry personnel for the establishment of a State Forest within the Tanana River Valley adjacent to Fairbanks. This interior forest area, along with a coastal forest area adjacent to Icy Bay, Alaska, will be the Division's priority State Forest proposals.

Timber Sale Program

During 1982, approximately \$450,000 was generated from the sale of some 32 million board feet of wood products including 42,000 cords of firewood and 97,000 linear feet of house logs. This program entailed the administration of over 100 commercial sales, approximately 3,930 personal-use contracts, and 40 beach log salvage licenses and, undoubtedly, touched the lives of thousands of Alaskans by affording such benefits as shelter, heat, and income, both primary and supplemental.

Helping to Make Forest Products Available

If a system of State Forests becomes a reality, we expect more and more people to seek the benefits that it can provide, and we welcome the opportunity to serve them. Indeed, several studies were conducted this past year to ascertain how we might do a better job in this respect:

- 1. "Outlook for Supplying Wood for Personal Use in Southeast Alaska."
- "Outlook for Supplying Timber to Small Loggers and Mills in Southeast Alaska."
- 3. "Kenai Peninsula Timber Supply and Marketing Opportunities."

Needs of Alaska's Loggers and Sawmill Operators

In addition, a questionnaire was distributed throughout the State to loggers and sawmill operators inquiring of their needs for wood, equipment and financing. These data will be analyzed and reported later.

State Forest Resources Program Plan

During the year with the able assistance of the State and Private Forestry arm of the U.S. Forest Service, real progress was made in the development of our State Forest Resources Program Plan. A forestry opinion survey was conducted throughout the State resulting in the development of a list of concerns and needs. Incidently, we received better than a 40% response, which is phenomenal for a mail-out type questionnaire and indicates a high level of interest in forest resources. Then a workshop was implemented which involved administrators from all levels of our Division. Goals and objectives were generated for the Plan. a by-product of this effort and working closely with the Planning Section of the Department's Research and Development Division, the Forestry Element was improved upon for the Department's Statewide Natural Resources Plan for 1983. It was highly commended and established as a model for the other Divisions, all of which culminates in a State Forest Resources Program Plan that will serve as a guide to the achievement of those goals and objectives that will most benefit Alaskans.

Forest Operations

The Division of Forestry has made real contributions during 1982. One of the most dramatic was through the application of computers and data processing. For years the paperwork for timber sales has been accomplished by hand, and the processing of thousands of documents consumed a lot of time, thus costing an inordinate amount of money and resulting in less than efficient service to customers.

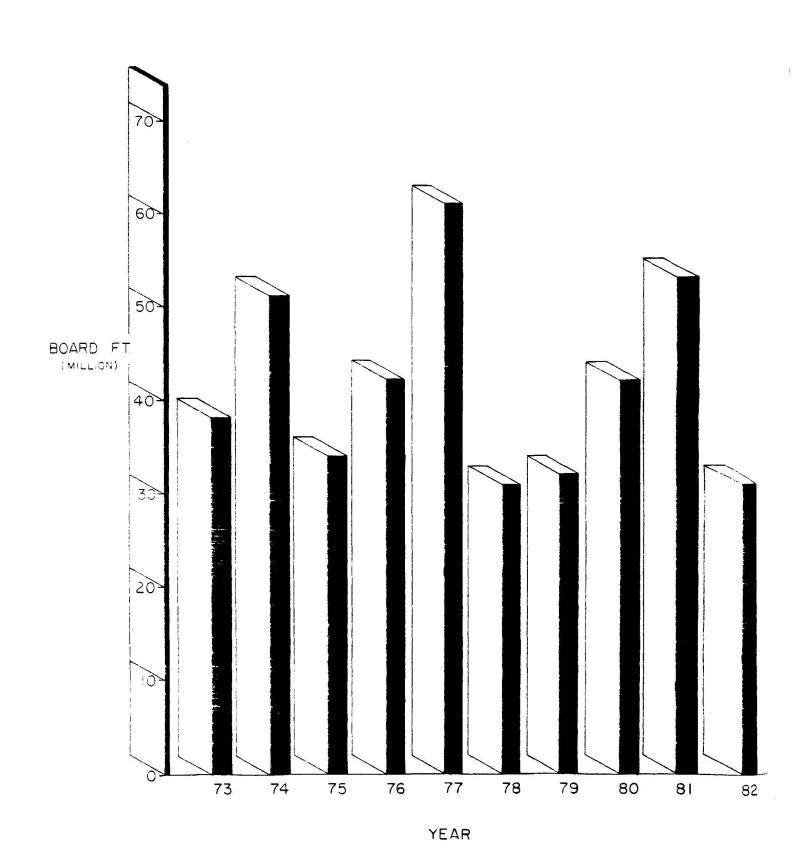
Computer Programs

Several computer programs were developed. One of the programs not only issues firewood cutting contracts, but also precludes duplication thereof and keeps a running total of the number of contracts issued and the volume of wood sold per cutting area. The other generates cut-and-sold reports for other kinds of timber sales which checks the status of specific sales and lists a variety of information in practically any order desired including expiration date.

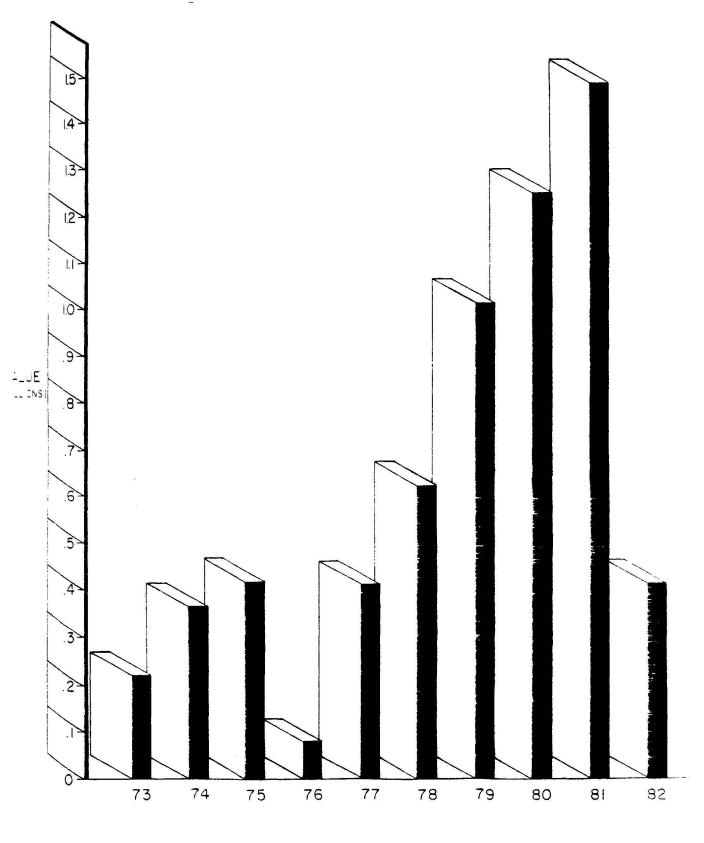
We are using computers more and more for such time consuming and essential operations as forest inventories, construction of tables depicting the volume, growth and yield of trees and forest stands, and for analyzing biomass data. At the same time, we continuously are investigating the possibility of using the computer systems of sister resource management agencies such as that of the U.S. Forest Service at Ft. Collins, Colorado which enables us to access a multitude of programs.

This past year has seen a change in who gives initial review of area plans. The Districts now do the majority of the review and give their onthe-ground judgment in the development of Area Plans. The Division of Forestry participated in plans for the Tanana Area, Susitna-Beluga Area, Bristol Bay and the Chugach Regional Study.

VOLUME OF TIMBER CUT ANNUALLY



VALUE OF TIMBER CUT ANNUALLY



NUMBER OF CONTRACTS ISSUED

	COMMI	ERCIAL US	<u>E</u>	PERSONAL USE								
YEAR	FUEL WOOD	SAW ŁOGS	BEACHLOG SALVAGE	FUEL WOOD	HOUSE LOGS	SAW LOGS						
1982	42	42	30	2714	65	38						
1981	26	44	24	3295	80	44						
1980		43		2215	8	86						

D. New Objectives for 1983

Jobs and revenue are all important to the well being of Alaskans, and alternative sources must be developed as the role of petroleum diminishes. Hence, a major endeavor during 1983 and ensuing years will be to generate revenues and enhance employment in this tremendously potential area of renewable forest resources by promoting forest industry by 1) dedicating more State land to sustained-yield forest production; 2) making that land more accessible through the construction of roads; 3) encouraging the use of the whole wood inventory, including hardwoods, by market and utilization surveys and reports; 4) making financial assistance available through long term, reasonable cost loans; and, 4) in general, making it easier for people to do business with the State.

Another time tested and proven objective will be to service the needs of an increasing number of Alaskans for firewood, houselogs and rough lumber. Closely related to this worthwhile endeavor is the effort to undertake the development of a management plan for the Haines State Forest Resource Management Area. It will be founded upon the concept of multiple-use and will assure all Alaskans that from State lands dedicated to forest production will be available not only wood products, but also other benefits such as wildlife habitat, water, fish and game, recreation, forage and aesthetics.

DOF PERSONNEL LISTED BY BUDGET COMPONENT DIV OF FORESTRY ADMINISTRATION

John L. Sturgeon Henry Ketchum Patricia Jacobs Rodney E. Christianson Denise Winter Diane Miller Wilma Bibby

STATE FIRE MANAGEMENT

Ronald G. Hanks Elmer J. Hurd Jr. William H. Adams Scott D. Wolfe Lonnie L. Greenough Norman P. Malotte Russell J. Bagley Roger Knueppel

STATE FOREST ASSISTANCE

Nickolas Mihalow Daniel C. Ketchum Pierre H. Authier

STATE RESOURCE MANAGEMENT

David E. Wallingford Richard McMahan William F. Latocha Phyllis Ryan Earl Stephens Joe Stehlik Dave Freer Joseph F. Wehrman

FIRE - SCDO

David Dehart
Russell J. Harding
Karla Burton
John See
Wade Wahrenbrock
Lynn Wilcock
Larry R. Adams
Donald Fuller

Keith Smith
Allen G. Edgren
Martin Maricle
Michael Lettis
Dennis Ricker
Winifred Rixter
Walter Embree
Mike Peacock

FIRE - SCDO SEASONAL

Thomas Marok
Christian Sorensen
Burton Munson
Mark Kansteiner
Larry Bowlus
Mary Palmer
William Plate
Ben Compton
Robert Barbour
Christopher Olson
Richard F. Plate
Robert E. Southwick
Kevin G. Keplinger
Walter Dewey

Raymond Kraemer
Dale Anderegg
Brian Heise
Scott M. McEwen
Gary D. Mullen
Raymond J. Shinn
Kermit Dudley
Craig Grams
Richard M. Webster
John A. Rapphahn
Deborah Grube
Richard Dupuis
Robert D. Limbean
Charles Eubank
Edwin G. Church

TIMBER - SCDO

Susan M. Graves James S. Peterson William A. Beebe Gary Korhonen Steve Strube Marc Lee Jeffrey A. Bedford Karey D. Waldrop Richard Rogers

David Orr

TIMBER - SCDO - SEASONAL

Daniel W. Fink

FIRE - NCDO

Lester Fortune James Couckuyt II Troxell Hebert Vicki Weatherford Peter Buenau Richard Edmondson John Gregor Keith Oberrecht Cynthia Rinear Shirlie Kirkpatrick James Lewandoski

FIRE - NCDO - SEASONAL

J. Thomas Kurth Michael McGowan David Johnson Jesse Sheperd Douglas Mackie Frank V. Cole Larry Dorshorst Harry Graetz William Simonsma Mindy Steiner Philip D. Carrico Peter Simpson Gary Reabold James Colla Guy Shuman Jeff Yarman Armond Dube

Elbert Ferguson Mike Bradley Donald M. Gronewald Susan H. Christensen Steve Savage Ronald Reitmeyer Dave Gilbert Gary Hopkins Michael T. Miller Daniel Rogers Bruce Smith Steven Phillips Richard L. Tafoya Michael Roos Robert C. Hogan Robert Zimmerman James J. Savage

TIMBER - NCDO

Daniel Wieczorek Richard Malchow William Johnson Karen L. Lewandoski Fredric Bethune Steve Clautice Richard Jackson Dennis R. McCall Michael F. Czopek Ralph Rhodes David Maxell

FIRE - SEDO - SEASONAL

Melanie D. Moats

TIMBER - SEDO

Gary Saupe
John-Paul Zeller
Paul Maki
James L. McAllister
Steve Joslin
Paul Tweiten

Florence Nash William Hanson Terry C. Meehan Larry Fry James Eleazer Bruce Johnson John Grant

TIMBER - SEDO - SEASONAL

Greg Podsiki John F. Rowland William D. Egolf

BILL ADAMS

Early in his career Bill established a close, personal relationship with the people in the villages. He was the primary sponsor for developing the employment of the Native crews into BLM's fire suppression efforts. This effort has resulted in a very positive program providing an excellent suppression force available in the State. He did not stop there. Always seeing the needs of the future, Bill began work with the newly established Native Corporations and other agency land managers establishing a productive relationship between them and BLM. His work assured that fire organizations would be responsive to the new managers. The positive business relationships that exist today are a direct result of his efforts.

His experience and capability as a fireman was deve ed through direct exposure to hundreds of fires all over Alaska. B had a keen ability to look at a fire situation and tell what was goong to happen and where the major problems would occur. After directing suppression action on wildland fires for several years, Bill perceived that the policy of total suppression on all fires could and should not continue, both from a cost standpoint and from a resource management requirement. From this first perception Bill pioneered a new formula for determining the type of suppression action that best fit the value of the resources, considered the actual impact of the fire identified suppression alternatives to achieve the best possible cost effective approach for action. Today the resulting product is applied statewide and known as the "modified attack policy." During development of this process he essentially brought together for the first time in Alaska, the fire suppression organization and the resource management organization to equate suppression action to resource damage. This program was typical of Bill's philosophy that fire is a natural element in the Alaska environment and was expressed in detail in the many papers he developed on the subject. Bill provided the first thoughts that still echo in current day fire management that not all fires need to be suppressed.

He continued his efforts of building a professional fire management organization throughout Alaska by personally arranging several symposiums on fire and resource management bringing together the most noted speakers available. Publications generated from that effort are widely utilized today throughout the fire management community.

Management aspects weren't all that Bill addressed. He developed many new concepts in suppression techniques that improved the suppression capabilities of the organization and substantially lowered the cost of fire fighting. One of the most noteworthy is the aerial firing program where he first dropped thermite grenades from an aircraft to burn out vegetation along streams and rivers to stop the advance of large forest fires without employing the traditional large number of fire fighters on the ground to do the work. This development has saved untold millions of dollars in fire suppression over the years.

Before his retirement from BLM, Bill became directly involved with the newly developing fire organization of the State of Alaska. He successfully aided the state organization by arranging a systematic transfer of protection responsibilities while the Department of Natural Resources was arranging its protection responsibilities.

Once he retired from BLM in 1977, Bill continued his fire management career with the State of Alaska's Division of Forestry. During this period he continued to provide clear and innovative guidance to this growing organization. There is no question that the foundation the State of Alaska's fire suppression program is built on philosophy constructed by Bill. He was one of the strongest advocates for fire planning. He realized that a state such as Alaska with a small population and an extremely large land base could not afford to provide fire suppression protection at the same level that had been provided in the past.

One of his most outstanding accomplishments during his time with the State was guiding it through its first series of project fires. Although the State had been in the fire business for a few years it had never had the ultimate test of a single large project fire or a series of project fires. That test come in a conflagration in 1979 called the Delta Barley fire. The State organized its first overhead team, leased helicopters and airtankers for the first time and hired many fire crews from across the State. During this "testing period" Bill stood by night and day as an advisor. With his invaluable assistance the State made it through its first fire burst relatively The guidance and outstanding leadership displayed on the unscathed. Delta Barley fire was just one example from hundreds of Bills contributions to the State's fire program. Typically, whenever any major fire problems occurred, Bill took on the challenge. The Fire Management Programs today stand more professionally because of this man's dedication, foresight and perseverance.