

The first radios were introduced in the Intermountain Region and used by the Forest Service in about 1928 or 1929*, and required a pack outfit to haul them in plus tools and equipment to set them up. They were a great aid to Forest Service men. 1/

The first two-way radios were used about 1937 or 1938 for communication between fire camps and the Supervisor's Office in Jackson. 2/

Voice communication via a system of radio repeater stations, was established in 1964 on the Teton National Forest. With the completion of a radio repeater station constructed on Hawk's Rest Mountain in the Teton Wilderness Area radio contact was now possible to practically any area in the back country of the Wilderness area. Other stations located at Phillips Ridge, Rosie's Ridge, Monument Ridge, Oil Well Ridge and Huckleberry Mountain enable radio communications over practically the entire Teton National Forest. The system also includes radio transmitters and receivers at all Ranger Stations and Guard Stations, along with mobile radio units in some of the Forest Service vehicles and several hand portable radios. 3/

The repeater stations pick up radio signals, amplify them and then rebroadcast the signal. This allows a radio signal which is broadcast from any location of the Forest to be heard anywhere else on the Forest. 4/

The radio network was established to provide quick and adequate communications between District Rangers, field men, and the Supervisor's office. It is also used in times of emergency such as coordinating the search efforts for lost persons, avalanche rescues, fire and civil defense. 5/

The prime purpose of the radio network is for forest fire detection and fighting. Using the radio system, a fire can be reported to the District Ranger or Forest Supervisor, and fire fighting crews can be dispatched in a matter of a few minutes. During a fire, the radio is used to coordinate the work of the fire fighting crews to the District Ranger who can give directions for fighting the fire and get more assistance when needed. 6/

1/ Forest Service Files

2/ Former Supervisor of the Teton Forest in an interview in 1974.

3/- 6/ Forest Service Files.

* Radios weren't used on the Teton till about 1941.

During a fire, the radio serves as the basic communication link between fire fighting crews on the fire line, and the fire boss who is directing fire suppression activities. It also is used for communication between air tankers and aerial observers and personnel on the fire lines or base camps. 1/

With the development of the Forest radio network, general administration, fire detection and suppression, and other general Forest activities are now conducted much more efficiently and at less cost to the Government, thus effecting savings of taxpayers' dollars. 2/

1/ Forest Service Files.

2/ Ibid.

PART V

NATURAL RESOURCES AND FUNCTIONS

A. Watershed Management

Water without exception is the most important resource in use.

Water quality is excellent except during spring runoff, and occasional summer storms. Nearly all sedimentation occurs from natural causes, but some comes from trails. Water pollution by human occupancy is negligible at present.

Precipitation varies from an average of 23 inches at lower elevations to 45 inches or more on higher plateaus. Most precipitation falls as snow. Studies indicate 1,066,000 acre feet in the Snake River drainage. Ninety percent of the total stream flow occurs during the months of April through August. There are no existing or planned water projects for the area.

Watershed conditions are highly variable. With very few minor exceptions, geologic conditions account for the siltation observed during spring runoff. Mass wasting, slopes greater than the angle of repose, stream channel scouring and bank cutting, coupled with the heavy water flow from spring snow-melt result in the muddy high stream flows of the spring period.

Demands for high quality onsite and downstream water will continue to increase. As visitor use increases, so will the potential for human caused water pollution. Measures to reduce and control pollution from a variety of sources will be necessary. These actions must be carefully planned and executed to protect and avoid compromising wilderness values.

Management decisions in order to prevent pollution, should require all wilderness users to pack out all their unburnable refuse; allow no detergents, other cleaning materials or human wastes to enter surface waters. Maintaining water quality will continue to be an important factor influencing all future land use decisions.

Every acre in the National Forest is important as a water producing area. Average yield from the Teton National Forest is approximately 3 million acre feet annually. It is significant that water in the streams and lakes be of good quality for several reasons. This indicates the soil is staying in place where it is needed to produce maximum crops of forage and timber. Mountain lakes and streams can continue to support the tempting trout species. The trumpeter swan, beaver, mink or otter require good quality water as a part of their natural habitat. Canoeing, boating and waterskiing are prominent sporting attractions, but only as long as the waters are kept clean. 1/

1/ Forest Service Files

Surface runoff, over most slopes, is controlled effectively by adequate vegetal cover. The slope-soil movement rate into the drainage system appears low, with some exceptions. The steep, arid, south facing slopes along the mid-Gros Ventre River are the first group of exceptions. Moisture is lacking, vegetation sparse, and soil movement into the drainage system is low to moderate. The second group of exceptions to the regulated runoff with low sediment yield is the areas where natural slope failures have occurred in the past. In these areas, relatively large quantities of sediment enter the drainage system.

Channels in the upper reaches tend to carry more regulated flows than the lower elevation channels. Clays and sands are annually flushed through the system and vast quantities of gravel and cobble size sediments are deposited in mid and low elevation trunk channels.

High quality stream flow originating on high elevation lands are locally degraded downstream as human activities and natural caused slope failure debris tend to concentrate there. At this time, only naturally occurring slope failures and channel sediment sources measurably degrade downstream waters.

Flood hazards to life and property within, and downstream of, are low. An exception would be a major catastrophic event such as the Gros Ventre slide and flood which occurred in 1925. The flood hazard is limited to a generally narrow flood-plain band enveloping trunk and main channels.

The Teton National Forest started its outgrowing zone of influence on a local status when the rich irrigation country in southern Idaho began to develop using water out of the Snake River. This Forest is one of the important sources of water supply for that development.

B. Timber Management

The timbered slopes of the Teton National Forest enhance the beauty of the rugged mountains and give charm and serenity to the entire area.

In addition to scenic values, the timber contributes to the economy of the surrounding communities in Idaho, Colorado, and Wyoming. It provides lumber for homes and construction of all types. 1/

1/ Forest Service Files

Lodgepole pine, Engelmann spruce, and Douglas fir are the principal commercial tree species on the forest. Harvest of these species is conducted by local timber operators. One mill can be seen next to the Hoback Highway about 20 miles south of Jackson.

Sustained yield cutting is practiced to insure perpetual timber and increased yields for future generations, as well as for our use today. This harvesting is done by methods which provide ample regeneration. Some of these methods are strip cutting, and individual tree selection, depending on the multiple use values and the site and species involved.

All timber harvesting is done in a manner which will protect watersheds and scenic values, in addition to providing space for new trees with resulting accelerated growth and vigor for older ones.

The timber of the Teton National Forest contributes materially to the esthetics of this country. Aspen, Engelmann spruce, Douglas fir, alpine fir, whitebark and limber pine and lodgepole pine provide a pleasing backdrop for the photographer, protection to vital watersheds, shade for the campgrounds, and homes for large and small animals and birds. (Figure 76)

The 336,000 forested acres include extensive stands of lodgepole pine and Engelmann spruce. Scattered patches of alpine fir and limber pine are found at the higher elevations. Lodgepole pine generally consists of pure stands of even-aged lodgepole pine. It covers large areas of the Forest. It is found on level or rolling areas at all elevations from 6,500 to 8,500 feet. In a 1913-1914 survey it was stated that these trees should be handled as a selection forest at that time. The cut should not exceed 60% of the total stand in volume. Later clear-cutting may be allowed in even-aged stands where satisfactory reproduction has followed an old cutting. Brush should be lopped and scattered. 1/

Engelmann spruce type is an all-aged forest found on protected slopes up to 8,500 feet, and often on level land or slightly exposed slopes up to 8,500 feet elevation. It should be handled as a selection forest. Spruce is found in mixture with Douglas fir, lodgepole pine, and alpine fir. It seldom forms more than 80% of the stand. Douglas fir should be favored equally with the spruce, 65% in volume of the stand should be left after cutting. Brush should be lopped and scattered except where the fire risk is exceptionally great, then it should be piled and burned. 2/

Douglas fir type is usually an all-aged type of pure Forest, but is often found in mixture with Engelmann spruce and alpine fir. Occasionally lodgepole pine enters the mixture. This

1/ Forest Service Files.

2/ Preliminary Forest Plan, Chapter II, Silviculture, 1913-1914.

type is found on all exposures and on all soils between the altitudinal limits of 6,500 and 9,000 feet. It should be managed with the purpose of producing an all-aged selection forest of pure Douglas fir. The brush should be lopped and scattered. 1/

Sub-alpine type is a mixed forest found at elevations of 8,500 to 10,000 feet, alpine fir or limber pine being the dominant species. This type is of little commercial value but the area is large and if a market were found for its products the cut would be great. 2/

Timber operations for 1913-1914. The consumption and demand for timber at present is limited to that used by settlers of the Jackson Hole country, an agricultural valley supporting about 1,700 people. The present demand is about 1,500 M board feet per annum and will increase with settlement and development. The following table shows the amount of timber cut and sold during the past five years, also a free use timber taken in thousand feet board measure:

Year	:	Sold	:	Cut	:	Free Use	
						Green	Dead
1911	:	85	:	99	:	378	204
1912	:	821	:	283	:	639	424
1913	:	805	:	443	:	763	203
1914	:	366	:	249	:	863	267
1915	:	1,794	:	1,165	:	1,356	355

Dead free use is mostly used for fuel and the green consists of building logs and fencing.

The present stumpage price is \$1.50 per M. Cutting costs from \$1.00 to \$2.00 to \$2.50. Hauling costs from \$3.00 to \$4.00, and sawing costs about \$5.00 per M. Making a total cost of manufacture of common rough lumber of from \$12.00 to \$15.00 per M. The average selling price of this lumber at the mill is \$15.50 per M. The profit is therefore small. The demand being limited and the business divided between some six or seven mills, operators are not justified in making improvements and operating on a scale sufficiently large to place the business on an economical basis.

The bulk of the timber on the Forest must find sale on the general market and the driving of the South Fork of Snake River

1/ & 2/ from the Preliminary Forest Plan for 1913-1914.

presents the only present transportation route. The greater portion of the timber being located on drivable tributaries of this stream. After leaving the Forest boundaries, this fork of Snake River flows west into Idaho, where railroad transportation facilities are available. The cutting of timber for this future market will be in connection with a working circle composed of the Teton and Wyoming Forests, since a large quantity of timber on the Wyoming is accessible to market under similar conditions. 1/

Idaho Falls, Idaho, will probably be the place of market and sale.

The main objects to be considered in the silvicultural management of this Forest is, first the production of a sustained annual yield for the consumption of the home market, second the production of a yield of the greatest possible commercial value for the general market, and third watershed protection.

In 1911 timber appraisals included possibilities of "driving" logs down almost all the major streams on the forest.

In 1926 there were proposals for a tie mill lower in the Snake River for cutting of 150,000 ties a year on the Hoback. The proposal included floating them down the tributaries of the Hoback, on down the Hoback and Snake River to the mill site.

In 1926 there was a Timber Sale Report written as the Mosquito Creek Chance for a Mosquito Creek Tie Sale. This reported an opportunity to cut approximately 100,000 ties a year in Mosquito Creek, 60% were to be hand hewn under contract for 20¢ per tie and the other 40% to be sawed. A portable mill was to be used at the logging site. All the ties were to be floated down Mosquito Creek and on down the Snake River to a railroad loading site at Ririe, Idaho. The only market for this timber at that time was the Oregon Short Line Railroad Company for ties for the Pocatello treating plant. 2/

In 1927 a report on the possibility for cutting ties on the Hoback and driving them by river to Ririe or Idaho Falls. The following quote is made by a Forest Service lumberman who examined the Snake River for driving in 1911. "As to driving logs on the Snake River, when I state the stream varies from 200 to 500 feet in width, and so deep that I could not ford the main stream anywhere on horseback during August, and that during spring

1/ From the Preliminary Forest Plan for 1913-1914

2/ Forest Service Files.

floods it is four or five feet higher, the question of driving is, of course, answered in the affirmative. Boats containing over a ton of merchandise have been taken from Jackson down the river to Pritchard Flats and through the canyon. Some logs and ties were driven from opposite Wolf Creek, and the expressive remark of one settler very aptly described the stream, 'Anything you shove into the Snake River won't stop going.'"

1. Summary of Results Under Previous Plans

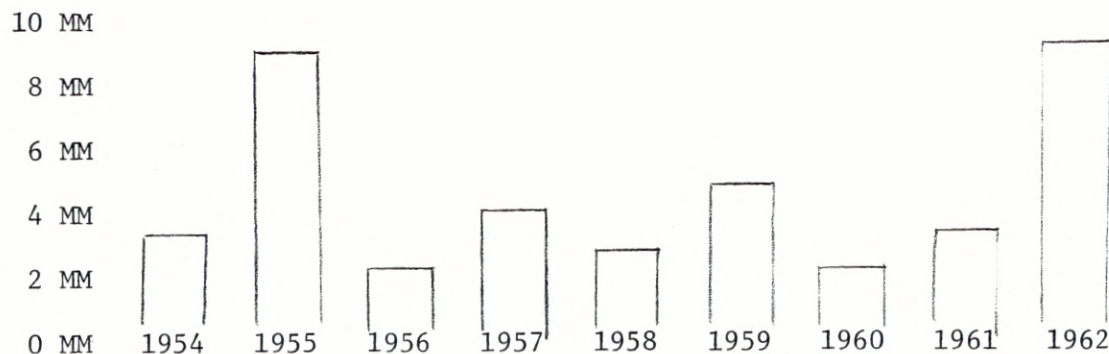
Although the first timber sale of record was in June of 1904, a management plan was not prepared for the forest until 1924 when one was prepared for the Hoback Basin area. It was approved by the Chief in 1926 and provided for the cutting of 160,000 railroad ties and 1.3 MMBM of sawtimber annually. The plan was not followed.

In 1911, timber appraisals had included proposals for driving ties down the major streams on the forest. The proposals were renewed in 1924 for the Hoback area and in 1926 for a Mosquito Creek tie sale and again in 1927 for the Hoback area. The Mosquito Creek sale was proposed again in 1930 with the same results. No tie sale was ever made as a result of these plans.

Even though a policy statement prepared in 1955 showed an allowable annual cut of 12 MMBM, the actual cut since that time has been approximately 5 MMBM.

TABLE 1. TIMBER CUT, F. Y. 1954 to F. Y. 1962

TETON WORKING CIRCLE



1/

1/ The above page from the Forest Service Files.

2. Land Description

a. Boundaries

The boundaries of the Working Circle coincide with those of the Teton National Forest. It is bounded on the north by Yellowstone National Park, on the west by Grand Teton National Park, the National Elk Refuge, and the Targhee National Forest, and on the south by the Bridger National Forest. The entire eastern boundary is with the Shoshone National Forest of Region Two.

b. Subdivisions

The Teton Working Circle is subdivided into five blocks which generally correspond to ranger district boundaries in effect in 1962. The Buffalo District has been divided into two blocks to facilitate management planning and the presentation of data.

The Teton Wilderness Area, Block 5, is included in the Working Circle as an integral part of the Teton National Forest. Although there will be no timber harvested from the Wilderness Area, it will be protected from forest fires, insects, and disease outbreaks much as the rest of the Working Circle is protected. Some trees will necessarily be cut while constructing trails and controlling fires. Dead trees may be cut for firewood by campers. Since no commercial timber cutting is planned or permitted, the Wilderness Area is treated as a separate block in this plan. Volume and type area data for this area are excluded in the allowable cut calculations found elsewhere in the plan. ^{1/}

<u>Block</u>	<u>Ranger District No.</u>	<u>Gross Area (Acres)</u>
1. Jackson	D-1	261,301
2. Buffalo	D-2	201,168
3. Gros Ventre	D-3	400,977
4. Hoback	D-4	302,400
5. Wilderness Area	D-5	563,460

c. Relation to Other Working Circles

The Teton Working Circle is bounded by the Targhee Working Circle on the west, the Bridger Working Circle on the south, and the Wind River Working Circle on the east. The highway system traversing the Teton area also traverses the Targhee, Bridger, and Wind River Working Circles so that

^{1/} Forest Service Files.

it is possible for timber from the Teton to be processed in any of the adjacent working circles. At the present time, most of the timber cut on the Teton is being processed at Dubois within the Wind River Working Circles, and a small amount of timber cut on the Bridger is being processed at Camp Creek on the Teton Working Circle.

Modern logging developments, particularly in transportation have resulted in operators cutting simultaneously on adjacent working circles. These developments dictate that close correlation of management practices and objectives be achieved between the Teton, Wind River, Bridger and Targhee Working Circles.

In 1958, the Management Situation Objectives' Report was drawn up and the following was given regarding timber. The Teton Forest to maintain quality and quantity in maximum production. Commercial forest stands are intermingled with other lands over the entire forest. There are approximately 200,000 acres of commercial forest type. A total volume of 913,000,000 board feet or is estimated, which will support a sustained yield of approximately 12,000,000 board-feet annually. Lands suited for continuous crops of timber will be managed for timber production, must preserve soil and water values, provide for integration with recreation use, grazing and permit acceptable wildlife environment.

Vegetation may be considered as timber and forage, or merely mountain type mantle to protect the soil. Both water and vegetation may require management for either recreation, water production, sustained timber yield, grazing use, or for wildlife purposes. Vegetation consists not only of woodland, but grass, weeds, and brush types which includes sagebrush, willows, and others. 1/

3. Legislation

In 1947, the Forest Service's reappraisal of the U.S. forest situation showed that sawtimber was being used 1/2 times as fast as it was being renewed, and that quality of standing timber was also being markedly reduced, with cutting practices on two-thirds of private land poor to destructive. Also in 1947, Congress passed a forest pest control act (61 Stat. 177) providing for more prompt detection and suppression of outbreaks of insects and disease, and for cooperation with States and land-owners. In 1949, the Anderson-Mansfield Reforestation and Re-vegetation Act for the National Forests was passed (63 Stat. 762). Also, the Clark-McNary Act was supplemented and amended to increase federal aid to states in forest fire protection, and

1/ Forest Service Files.

to extend distribution of tree planting stock to all forest landowners, instead of just farmers. It also increased authorized funds for assistance to small woodland owners in forest management.

In 1950, Congress provided in the Granger-Thye Act (Stat. 82) for local advisory boards to National Forests from grazing permittees, for range improvements, and for a limit of 10 years on grazing permits, with renewals. The Cooperative Forest Management Act (64 Stat. 473) authorized cooperation with the states for technical services to private forest landowners and to operators and processors of primary forest products; it superseded the Norris-Doxey Act of 1937.

In 1953, research and control work on forest insects and diseases, formerly handled by other Agriculture Department agencies, was transferred to the Forest Service.

A timber resource review was issued by the Forest Service in 1958. It showed that the rate of growth was increasing, although wood quality was still declining, and that substantial increases in timber growth would be needed to meet the greatly increased requirements of the future. In 1959, a comprehensive, long-term program for the National Forests was submitted to Congress.

The landmark Multiple Use-Sustained Yield Act of 1960 (74 Stat. 215) declared that National Forests are to be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes, to serve the public good, judiciously balancing each use in each situation -- thus giving Congressional confirmation of long-established Forest Service policy. The highest practical output of forest resources is to be attained without impairing the productivity of the land.

In 1961 the Forest Service prepared a 10-year development program for the national forests. It called for an upward revision in needs for meeting, among other things, intensified timber management and increased timber harvests, and timber harvest and protection purposes. 1/

1/ Forest Service Files

4. Mountain Pine Beetle Infestation

From 1914 to the present time there has been a suppression program of the mountain pine beetle. It has been an expensive and increasing infestation both on Forest Service lands and those of Teton National Park. (See appendix for statistic tables) The pine bark beetle attack the lodgepole pine and turn them brown and are an eyesore on the valley sides. This program was highly criticized by the public as a waste of tax money as it didn't seem to control the beetle when chemical sprays were used. * The existing epidemic of mountain pine beetles has caused extensive mortality in lodgepole stands. Bark beetle activity will continue to fluctuate in the natural ecosystem, and will continue to cause mortality in overmature lodgepole stands.

In 1964, the Multiple Use Survey Report for the Teton Mountain Pine Beetle Project gives the following information:

The purpose of the proposed project is to control a Mountain Pine Beetle infestation by approved methods such as chemical spray with EDB, fell and chemical sprinkle with EDB, fall and burn, standing burn and to perform an operational survey on the area.

The location of the project is mainly in the Middle Slope Zone with small portions in the Travel and Water influence Zones, and the corridor between Grand Teton National Park and Yellowstone National Park from the boundary of the Targhee National Forest and the wilderness area boundary.

The size of the infestation is estimated at 60,000 acres outside of the wilderness area. According to the survey report for the fall of 1964 there were 399,000 infested trees on 49,500 acres on the North Teton Infestation and 26,330 infested trees on 5,720 acres on the Middle and South Teton Infestations. This made a total of 425,330 infested trees on 55,220 acres outside the Teton Wilderness Area.

The land is National Forest land except for small portions of private ownership. The Forest Service has memorandums of understanding and will acquire additional agreements as needed, covering private lands where treating will occur. Due to the importance of this project, as has been done in the past, it was coordinated with the Wyoming Game and Fish Department, Jackson, Wyoming, and the Grand Teton National Park, Moose, Wyoming, and dude ranch operators within and adjacent to the infested area. The Forest Service furnished Grand Teton Park with mixed chemical for their treating project. They in turn reimbursed the Forest Service for this

* At first there was much criticism but this has changed.

service on a cost basis. 1/

The physical characteristics of the area were not materially changed by this activity. Any soil disturbing projects such as road construction was covered by a separate multiple use report.

The Survey Plan for the fall of 1967 gave the following facts.

The areas to be surveyed were the North Teton Zone with some reconnaissance in the Middle and South Teton Zones. Approximately 20,000 acres were to be surveyed and a reconnaissance conducted on approximately 30,000 acres.

All areas surveyed were done by contract. The survey consisted of taking 1/5 acre circular plots five chains apart and parallel, to accomplish a five-percent survey. Cruise lines were marked at the beginning and end with blue flagging with the cruise line written on it. Each plot center was marked with white flagging with the plot number and cruise line written on it. Checking was done by Forest Service checkers to a 50% minimum standard to insure contract compliance.

All reconnaissance was done by running 1/4 chain strips spaced 25 chains apart and parallel to accomplish a one percent coverage. This was done by force account crews and the data recorded on plot data sheets which included the following: strip number and beginning point, number of new attacks, and any remarks pertinent to the strip. In addition, each man carried a blown up aerial photo and plotted each strip location and all groups of new attacks of three or more trees. The purpose was to give information as to total number of attacks and a ratio of new attacks to old attacks.

Recommendations

- a. Report be approved and project be done with the coordinating requirements listed in the report.
- b. Dispose of all slash in Travel and Water Influence Zones.
- c. Remove all string and tags from the areas in and adjacent to campgrounds and within view of highways in the Travel influence Zone.
- d. Keep chemicals from entering live streams of water sources.
- e. Prevent erosion damage on existing roads.
- f. Limit snow removal to major roads.
- g. Locate all camping areas, corrals, and supply dumps in accordance with Ranger Multiple Use Plans. 2/

1/ & 2/ Forest Service Files.

- h. All camps, corrals, and supply dumps are to be kept clean and the site restored upon completion of contract.
- i. Contractor's horses will not be permitted to graze on National Forest lands.
- j. No treatment by the standing burning method will be done within view of highways, recreation sites, and administrative improvements in the Travel and Water Influence Zones.

The epidemic of mountain beetle has killed overmature lodgepole over an extensive area. Evidence suggests insect epidemics have been historic but not as extensive as in modern times. Indigenous insect populations and diseases can be found throughout the wilderness.

Insect and disease infestations will persist within the area and demands may be made to control insect and disease infestations. The likelihood of large buildups of insect population may be reduced if fire is allowed to play its natural role. The values of the area as a control for study of insects and diseases will increase.

New management decisions for the future, as given in The Management Plan for 1973 are as follows: "All insects and plant diseases will be allowed to play their natural role. No insect or disease control work will be undertaken. Pesticides, except for personal insect repellents, will not be permitted. The conifer type will be considered a valuable benchmark or control situation for scientific study.

5. Reforestation

In 1924, the Clarke-McNary Law (43 Stat. 653) included a provision that provided for Federal cooperation with the States in producing and distributing tree seedlings for windbreaks, shelterbelts, and farm woodlands, and forestry assistance to farmers. This law gave a strong impetus to State Forestry agencies.

In 1949, the Anderson-Mansfield Reforestation and Revegetation Act for the National Forests was passed (63 Stat. 762). Also, the Clarke-McNary Act was supplemented and amended to increase Federal aid to states in forest fire protection, and to extend distribution of tree planting stock to all forest landowners, instead of just farmers. It also increased authorized funds for assistance to small woodland owners in forest management.

The Teton National Forest has carried on a tree planting project for a number of years by the use of seedlings, for natural regeneration. In 1969 contractors were hired to plant about half a million seedling trees on the forest -- lodgepole pine, Engelmann Spruce, and Douglas Fir. In 1973, 1/

1/ Forest Service Files

over 1,000,000 trees were planted in areas that had been logged and had not reforested naturally.

Logged areas are inspected annually to determine whether or not natural regeneration is occurring. When no trees are growing naturally after a three year period, plans are activated for planting trees.

Seed Cone Gathering. The Teton Forest has also been purchasing cones from designated areas. The persons interested in gathering cones to sell registered with one of the District Rangers. Lodgepole pine, Douglas fir, and Engelmann spruce seed cones were gathered. Cones had to be collected from designated areas because it was necessary for the Forest Service to know the elevation, exposure, soil type, and age of trees where the seed originated in order to plant them in the same or a similar location.

6. Clearcutting

A major forest land issue that arose in the sixties was the "clearcutting" controversy. Clearcutting is a cultural treatment that involves harvesting all trees on a designated tract in order to create a new, even-aged forest stand. The technique was, and is, used primarily for those species that cannot tolerate shade, are subject to windthrow, or for other reasons grow best in even-aged stands.

The controversy over clearcutting stemmed primarily from its visual impact; a newly clearcut area looked bad. No other system of producing a forest leaves such a conspicuous mark on the landscape. Although the Forest Service had taken some steps to lessen the offensiveness of the practice, such as limiting the size of clearcuts and hiring landscape architects to help lay out esthetically acceptable logging operations, feelings were still strong on both sides of the issue. One extreme openly advocates clearcutting without restriction; the other would banish it from all forest practice. Clearly the question of how to measure and evaluate esthetic factors and balance them with other values needed to be resolved.

The Forest Service has accelerated and redirected research to put more emphasis on solving environmental problems. In 1972 it was estimated that 30 percent of the 1971 research budget was aimed at environmental problems and 50 percent at problems affecting both production and environment. This research included such things as using timber management for improvement of habitat for game and non-game species, and increased use of manufacturing residue cluttering the woods after timber harvests. These were aimed at avoiding unsightly and costly waste disposal problems as well as increasing useable wood supplied.

Both the law which created the Forest Service and the more recent Multiple Use-Sustained Yield Act order that outputs of the National Forests be maintained without impairment of the land's productivity. This has been and will continue to be the agency's guiding principle. This approach has particular value to the nation, because unlike such resources as oil, gas, coal and minerals, wood is a renewable resource. It has an ecological cycle of its own into which man can fit comfortably without distorting any of the links. 1/

C. Grazing

Livestock grazing started around 1900 with the introduction of cattle to the Spread Creek and Gros Ventre drainages. Grazing administration has been one of the primary jobs of Forest Service personnel since the establishment of the Teton Forest. Over the years, the Planning Unit has been the sole source for summer forage for a large number of cattle. 2/

1. History of Grazing on the Gros Ventre District

In this plan it is intended only to give an "overall" picture of grazing conditions, needs, and problems; and the ultimate goal toward which all grazing activities on the district should lead. 3/

"Before the white man came, this district was undoubtedly heavily used by game. Remains of numerous large Indian camps, the builders of which undoubtedly came to hunt; findings of old skulls of such animals as buffalo, antelope, elk and deer; and lastly the fact that it is ideal range and accessible to the plains which served as winter range for early game herds. 4/

"With the settling of the country along Green River, migration to and from the plains and this country was interrupted and finally around 1900 it stopped all together, and the elk began wintering in this country on the least snow covered parts of what had been their summer range. Naturally, the Gros Ventre became winter range because the open, rolling country on each side of the river was in a region of comparatively light snowfall. This concentration of such a large herd in the area, undoubtedly started or greatly accelerated the processes which have led to the present range condition in that area. From the time this area began to be used as winter range until a few years ago, the number of game animals using it was probably large enough to cause a steady and fairly rapid deterioration in the vegetative cover. However, at

1/ Clearcutting Duplicates Nature's Way to New Forests,
A reprint from Vol. 17, No. 4, January, 1972 of the
Student Lawyer Journal

2/ Forest Service Files

3/-5/ Grazing Work Plan, Sec. 1, District Plan, A. P. Balch, 1941.

the same time other factors were tending to bring relief to the area. Man and nature were both working on the herd and gradually reducing it in numbers, and winter feeding operations began to draw elk from outlying areas into the feed yard at Jackson. Since 1937 it has been evident that the number of elk wintering on the Gros Ventre has increased to around 2000 head. It is felt that this is somewhere near the number that the drainage can safely support. Even with this number, certain favorite areas will continue to be overgrazed and there will be heavy loss from starvation.

"The foregoing discussion of game, while lengthy is thought to be important to this plan because of the importance of this district as a grazing area for game. The following history of domestic grazing was obtained from old files, conversations with old settlers, letters, and reports; but there was no data found that was complete enough to give a picture prior to 1927. There is no record of allotment boundaries prior to 1936, although it is known that most of them had been about the same for several years preceding this.

"The Gros Ventre has been settled for about 40 years, and one of the earliest routes into Jackson Hole followed this river, so there has been more or less use of the area along the river by domestic stock since about 1890. The use from settlers probably amounted to about 1500 animal months per year, with a decided increase during the period from 1914 to 1920. Since then it has dropped to around 1000 animal months per year. This use by stock belonging to residents within the area has always been small compared to the use made of the District by stock belonging to ranchers in the main valley.

"Because the Gros Ventre drainage was close to the first large ranches settled in the valley, and one of the most desirable "higher" ranges, it was the first to be used when the range on the flats began to get crowded. Naturally, the grazing from these valley herds was at first confined to the more accessible and desirable portions of the drainage. The "pushing back", as demand made it necessary, was slow enough so that domestic stock have, undoubtedly, also contributed to the poor range condition found along the river.

"It was probably around 1916 before the "pushing back" process gained much headway; and no real effort was made to use such areas as the head of Moccasin, Leeds Creek, and the head of South Spread for another ten or twelve years, although the two former had been used by cattle from the other side for several years. The first real effort to get stock off the river into higher country, probably came in 1919 when the Elk Winter Range (approximately with the same boundaries as it has today in 1941) was established. This is also about the time that the allotments in use now were established, though there were numerous, minor boundary changes before the present were

arrived at.

The following table shows data on use gleaned from various sources for the years prior to 1936, and from the allotment 29 R-4's since that time.

Year:	Allotments										Totals
	*Elk W. Range	Fish Cr.	Bacon Cr.	Ditch Cr.	Upper Gros	District					
	*AN. Num.	A.M. No.	A.M. No.	A.M. No.	A.M. No.	A.M. No.	A.M. No.	A.M. No.	A.M. No.	A.M. No.	A.M.
25:1926:	:2790:	:	:	:	:	:	:	:	:	:	:
26:2007:	:3446:	:	:	:	:	:	:	:	:	:	:
27:2113	:3004:1300	:	:1032:	:896	:	:579	:	:	:	:	:
28:2228	:2800:1365	:	:995:	:795	:	:983	:	:	:	:	:
29:1666	:2590:1435	:	:1030:	:645	:	:	:	:	:	:	:
30:1864	:3040:1467	:	:1040:	:577	:	:299	:	:	:	:	:
31:2022	:3190:1370	:	:1150:	:	:	:	:	:	:	:	:
32:2351	:3235:1445	:	:1360:	:	:	:	:	:	:	:	:
33:1994	:2955:	:	:	:	:	:	:	:	:	:	:
34:2096	:3426:	:	:	:	:	:	:	:	:	:	:
35:1332	:2016:1965	:8213:1870:7845	:626	:2129	:927	:	:	:	:	:	:
36:1761 (168)	:3415:1736	:8088:1742:8480	:580	:1569	:881	:2765	:5108:24317				
37:1696 (291)	:2546:1674	:6508:1675:7426	:665	:2330	:995	:3908	:5280:22718				
38:1180 (217)	:2202:1563	:6489:1501:7276	:659	:2226	:957	:3899	:4897:22092				
39:3206 (207)	:3504:2075	:9620:1621:7453	:648	:2172	:993	:3810	:5604:26559				
40:1950 (207)	:2337:2043	:9032:1615:7382	:729	:2676	:1024:3743	:5618:25170					
41:1936 (220)	:2576:2010	:9783:1578:7419	:1052:3705	:874	:3139	:5719:26622					

These figures contain the use, both year-long, and spring use from adjacent allotments. The figures in parenthesis is the number of stock run on the allotment for the full season (residents within the area).

"Area on District used for grazing. Starting at Bacon Peak and running roughly northeast is the eastern boundary of grazing territory for this district. The balance of the district is administered by the Bridger National Forest.

"There is an area of about 25,000 acres in the Spread Creek drainage, which (although it is on the Blackrock Ranger District) is administered with the Gros Ventre District as far as grazing use is concerned.

"There is considerable area on the Elk Winter Range allotment, south of the Gros Ventre and west of Crystal Creek, where there is no domestic grazing of any description. Also, there are areas of this allotment, located near the river, which are not used by stock except when crossing or technically in trespass.

"The following table gives information on the area of the district and acreage of usable and unusable range. The usable range was planimetered from the type map, correcting the type lines where

knowledge of the ground dictated such action. Areas not ordinarily used by cattle were also excluded. It is thought that the figures thus arrived at are suitable for general purposes. It is known, however, that in some cases the areas don't check with the amount of use they can be subjected to. This is not true of any allotment as a whole, but is true of units within at least two allotments. Examples are found in the Ditch Creek allotment and Charter's portion of the Upper Gros Ventre allotment.

Total area of District (including portion of South Spread and excluding 43,400 acres administered by the Bridger as explained above).	378,900
Private land within boundary and on which there is (largely) no grazing, or grazing hasn't been waived to Forest.	<u>6,200</u>
National Forest area	372,700
Area not grazed by stock (see above)	<u>90,481</u>
Total area open to grazing	282,219

Table showing distribution of grazing area

<u>Allotment:</u>	<u>Usable</u>	<u>Unusable</u>	<u>Total</u>
Elk Winter Range	24,528	17,408	41,936
Ditch Creek	17,946	10,905	28,851
Upper Gros Ventre	23,078	26,855	49,933
Bacon Creek	40,398	24,566	64,964
Fish Creek	<u>48,927</u>	<u>47,608</u>	<u>96,535</u>
Totals	134,877	127,342	262,219

Carrying Capacity of District.

"The estimated carrying capacity as shown following, is based on past observations of the utilization after a known number of cattle had used units, drainages or allotments for a known period of time. In most areas of average cover, it appears that with five acres of usable range available per cow month, between 50 and 60% of the available feed is utilized ("available" used in the sense of the amount which can be grazed with correct use). Ideally, such utilization would be evenly spread over the area, leaving the other half for the game. Practically, it works out that cattle, preferring timbered country with small parks, and the high meadows (until snow drives them out) make up the bulk of the utilization on such areas. Therefore there is no service conflict between the

two classes of grazing as long as the Elk Winter Range is protected from domestic grazing; and as long as there is no increase in the numbers in one of the other classes. The game use shown in the table is as accurate an estimate as can be arrived at both from the winter counts and counts made during the summer, and includes both summer and winter use.

Allotment	Domestic: Elk :Deer :Animal Month Use:Acres usable range				per An. Month	
	:An. Mo. :	No. :	No. :	1Elk-1C 3Deer-1C:	:Domestic :	Both
Elk Winter Range	: 3000 :	1200 :	200 :	8900	: (1) 8.1 :	(2) 11.1
Bacon Creek	: 8000 :	600 :	100 :	4500	: 5.0 :	3.2
Upper Gros Ventre	:(3)5000 :	400 :	100 :	3100	: 5.7 :	3.2
Fish Creek	:(4)9725 :	300 :	100 :	2400	: 5.0 :	4.0
Ditch Creek	: 4000 :	200 :	200 :	2400	: (5) 4.5 :	
Totals	: 29725 :	2700 :	700 :	21300	: 5.5 :	4.9

- (1) Figured on basis of usable range in area cattle are restricted to.
- (2) Figured on total area of Elk Range (132,417 acres).
- (3) This doesn't include Charter for 1 month as this use is figured in the 3000 animal months on the Elk Refuge.
- (4) This is allowing 675 animal months to the Elk Range and already included in the 3000 figure for that allotment.
- (5) As stated before, the usable area figure on Ditch Creek is thought to be too low, which accounts for this low figure.
- (6) This figure based on total area of Elk Range plus only the usable area of the other allotments.

"This question of carrying capacity should not be considered closed. The above figures only give the picture that can be drawn with knowledge at hand. As time goes by, more definite knowledge should be gained from observations and the figures changed to fit the facts.

"Thus far the discussion has given a history of the grazing as far as is known, a survey of the available resources, an estimate of what part of that resource is needed for game, and an estimate of what is left for domestic stock. With these conditions set forth, it is thought that a single statement can be formulated which will serve as a general guide in handling the resource, so as to gain the desired goal. It should be -- 'To perpetuate the resource, and keep the total of game and domestic utilization at a safe figure by limiting the game population to the number that can safely winter on the available feed, and control the domestic grazing so that the surplus of feed left on summer ranges, by the game, is utilized to the point of proper utilization.'

"There are problems that affect grazing on the district as a whole as listed below.

- (1) Getting support from game interests to limit the number of game animals to that sized herd which the winter range will support.
- (2) Getting cowmen to cooperate fully in a program of combined game and domestic grazing.
- (3) Getting general public support of a program of combined game and domestic grazing.
- (4) Getting better distribution on all allotments.
- (5) Getting a later opening date for the district.
- (6) Eliminating trespass on the Elk Winter Range.
- (7) Correcting or verifying the present usable range and carrying capacity figures.
- (8) Insufficient data on game use.

"Program for solving problems. (1) Solving this problem requires the cooperation of the game department and education of game department and other interests. The program is to continue preaching that a game herd should be held to the size that can safely winter on available range. (2) As yet, the cowmen don't seem to realize that they could accomplish some things with very little, if any, added cost to themselves, that would go a long way toward decreasing friction between the factions, and lessen the possibility of "common cause" from real to imagined wrongs, uniting a large enough group to defeat them totally. The most obvious thing cowmen could do is help eliminate trespass on the Elk Range. (3) Continuing and strengthening our program of education, and eliminating every source of adverse agitation as fast as we can, is the surest way of solving problem (3). Our program of education is generally speaking, to be carried on over a field much larger than Jackson Hole, as interest in the game manifests itself in visitors from all over the country. This also accounts for the fact that the trespass on the Elk Winter Range causes more than local criticism. It is thought that the elimination of such adverse criticism would go a long way toward making the interested public see that game and cattle can use the same area. (4) The solving of distribution problems depends on planning the grazing on the allotments, and these are discussed below on the allotment plans. (5) This problem is one that can't be solved until the right opportunity presents itself, and it will probably have to be solved in a different manner for each allotment. If permittees ever reduce their herds, or acquire pasture enough to hold their stock until June 15, the so-called spring units would undoubtedly be benefitted. This possibility seems remote at the present time. Another possibility which has been talked of is to impose a proportionate cut in season instead of a cut in numbers, wherever such action is possible on a sale or transfer. Another possibility lies in a merger of the Ditch Creek and Fish Creek allotments. (6) This problem can only be satisfactorily solved when proposed fences around the boundary of the area are completed. It is a fact that meanwhile much criticism could be stopped if a rider were employed to take care of it, but so far nothing has been done. Therefore, it is believed that the Forest should take a hand in employing such a rider.

(7) The carrying capacities used are estimates based on the best information and data we now have. In order to establish them as correct, or change them as results show they should be changed, it will be necessary to keep close check currently on utilization of individual units of range. Forms are provided in the allotment plans for the recording of such use data. Permanent inspection plots are also being laid out where data can be obtained periodically and checked with previous findings. With such data obtained and recorded over a period of years, it should be possible to gain a very definite knowledge as to how much use a unit can stand. If, along with this, the "usable area" map is corrected whenever possible, the time should come when a definite correlation between acres of usable range and animal months can be worked out. (8) Our knowledge of exactly how much forage is required by game, what kinds they use naturally, and where they prefer to range, is admittedly sketchy. Yet such information is needed to develop any plan of management. Game must be considered in any grazing plan in order that the problem of obtaining applicable information arises. Besides the customary winter count of elk and deer, it is apparent that summer counts are desirable. For this reason, it has been customary in the past few years for the ranger to keep tally of game sighted, and the location. It is thought this could also be done by guards, and more information obtained. This information has been incorporated in the yearly Wildlife Report. One study on utilization is carried on in the Winter Range. It is expected to take data on utilization (where such can be taken) on the summer range and keep such a record. (8) The proposed projects for improvement in the area should be set up on a priority plan on the basis of total benefit to the resource.

"Past history. The boundary of the Fish Creek and C & H Allotment has been changed frequently in the past. The present boundary has been in effect in its entirety since 1935.

"Prior to about 1919, the allotment included all of the Gros Ventre drainage north of the river up to and including North Fish Creek. The bulk of the stock was grazed close to the river, and along the lower parts of the main side drainages. Fish Creek was used up as far as Fish Creek Basin and very little above this.

"After 1919, then the Elk Winter Range Area No. 1 along the Gros Ventre was set aside, the heavy grazing use was pushed farther back in the side streams. At first, the Area No. 1 included Slate Creek, so grazing by domestic stock was prohibited. It was probably around 1919 that Fish Creek Basin was so heavily overgrazed and nearly ruined.

"Old timers say that one herd of about 1,000 head was for several summers close-herded in the open country comprising the basin. Present indications point to some such past use, as there is evi-

dence of huge old salt grounds all located along the main streams; and every indication of an extremely heavy use at some past period.

"Starting about 1923, a more concentrated effort was made to get better distribution; drift fences were built, and effort was made to cut down the use in Fish Creek Basin. As the result of such a program, this area has been undoubtedly improving, but the overgrazed condition was so serious that improvement has been slow.

"In 1933, the South Fork of Spread Creek was added to this allotment as fall range. This area, although included in the Blackrock allotment, had never been used much and was practically virgin range land.

"In 1935, Slate Creek was withdrawn from the Elk Winter Range area, and all except the Carmichael Fork added to this allotment. Slate Creek has a large area of accessible range, although part of it contains much tall larkspur, which makes it poor spring range.

"These two additions added approximately 15,000 acres of accessible range to the Fish Creek allotment. All of this additional range supports an excellent stand of forage, especially Spread Creek, which is almost in a virgin state as far as grazing by domestic stock goes. With such an addition in feed, and without any increase in allowance, this allotment now has more feed than the present allowance of 1750 head can utilize. It is easily seen that with proper distribution, many more head of stock could use the area without harming it.

"The area is one visited by hundreds of hunters each fall and these hunters represent an enormous "pressure group" in the country. Permittees must surely realize that what little effort is needed to keep a few cattle off the area, is very small compared to the effort that would be required to stop a movement to get all cattle off of the Gros Ventre. At the same time, they must know that probably every unlucky hunter returns to his home with the story that cattle on the Elk Reserve are keeping the elk off the area. Considering these facts, it looks as if it would only be good business for permittees to stop as much agitation as possible by making a reasonable attempt to keep cattle off of the area. In so doing, they would be helping to avoid bringing about a show-down battle with a group that they would have very few hopes of defeating.

"The question of deferring parts of units needs further study, and more data is needed on the date of vegetational readiness and seed maturity on different portions of the range.

"Range improvements. The following range improvements should be made as fast as funds become available:

- (1) Clean out game trails to get at the feed on the divide between Spread Creek and Cottonwood.
- (2) Short pieces of drift fence at various points along the Elk Winter Range.
- (3) Drift fence between Blackrock and this allotment south of Two Ocean Peak."* 1/

1/ The preceeding eight pages under "History of Grazing on the Gros Ventre District" are excerpted from Ranger Balch's Grazing Working Plan, 1941.

* Ranger Balch's Grazing Working Plan has been used as an example of the grazing plan and history of the cattle problem on the Forest. Most of the grazing of cattle took place on his district and that of the Blackrock.

2. General Statistics

SUMMARY OF TETON GRAZING PERMITS

1907 - 1943

Year	Term		Annual		Temporary		Total		Horses		Grand Total	
	L.S.	Per.	L.S.	Per.	L.S.	Per.	L.S.	Per.	L.S.	Per.	L.S.	Per.
1907	4197	56					4197	56	103	12	4300	68
1908	5129	67					5129	67	94	11	5223	78
1909	5802	63					5802	63	156	15	5958	78
1910	4525	43					4525	43	85	9	4610	52
1911	6149	61					6149	61	155	16	6304	77
1912	7705	64					7705	64	96	10	7801	74
1913	8462	64					8462	64	151	14	8613	78
1914	8608	75			30	1	8638	76	122	14	8760	90
1915	9163	84			400	1	9563	85	194	21	9757	106
1916	12575	114			477	4	13052	118	325	39	13377	157
1917	8693	67			6167	83	14860	150	319	37	15179	187
1918	10690	74			5264	86	15954	160	391	48	16345	208
1919	15186	139			3187	13	18373	152	486	55	18859	207
1920	14172	126			2418	19	16590	145	404	49	16994	194
1921	12740	125			2337	11	15077	136	337	39	15414	175
1922	12930	120			2765	8	15695	128	329	30	16024	158
1923	12438	113			3010	6	15448	119	378	28	15826	147
1924	10395	93			2421	13	12816	106	333	26	13149	132
1925	10994	74			1543	13	12537	87	366	27	12903	114
1926	9895	71			2257	42	12152	113	487	34	12639	147
1927	9313	68			2502	40	11815	108	348	25	12163	133
1928	8741	59			2628	41	11369	100	374	27	11743	127
1929	8922	55			1830	33	10752	88	343	24	11095	112
1930	8736	52	932	6	1536	33	11204	91	285	21	11489	112
1931	8890	53	162	5	3402	44	12454	102	298	25	12752	127
1932	8873	49	240	7	3589	55	12702	111	569	37	13271	148
1933	9308	49	335	7	4316	59	13959	115	440	31	14399	146
1934	8938	45	388	8	5621	62	14947	115	381	26	15328	141
1935	10135	49	495	8	4993	39	15623	96	406	30	16029	126
1936	5731	18	7629	47	822	14	14182	79	548	42	14730	121
1937	12810	64	610	10	2161	27	15581	101	531	38	16112	139
1938	12623	68	926	20	1316	27	14865	115	499	33	15364	148
1939	12823	63	1030	24	1358	29	15211	116	606	40	15817	156
1940	12956	62	1548	39	1110	19	15614	120	506	35	16120	155
1941	12798	62	1052	33	1578	35	15428	130	458	30	15886	160
1942	13415	65	605	15	2401	44	16421	124	603	39	17024	163
1943	14203	68			3781	58	17984	126	640	39	18624	165

During 1948, 15,480 cattle and horses and 15,713 sheep were permitted on the Teton National Forest. This stock was owned by 121 cattlemen and 5 sheepmen. The average time spent on the forest by sheep was approximately three and a half months, and cattle was an average of approximately four months. The average cost to the stockmen for this range that year was 44¢ a month for cattle, 56¢ for horses, and 9 1/2¢ for sheep. The Teton Forest reported that year a total of 412,210 recreation visitors staying a total of 249,890 man-days on the Forest. 1/

Teton Forest Grazing Averages 1959.

<u>Forest Average</u>	<u>Jackson</u>	<u>Buffalo</u>	<u>Gros Ventre</u>	<u>Hoback</u>	<u>Total</u>
					1,700,766

Range C.Y. 1959

No of livestock permits	160	
No. of Livestock	16,023 cattle	11,200 sheep
Income	\$33,129	

25% Allocations to County, F. Y. 1959 (All sources)

<u>County</u>	<u>Net National Forest Average</u>	<u>25% Allocated to County</u>
Fremont	108,048	\$ 897.77
Lincoln	49,380	410.30
Park	174,930	1,453.50
Sublette	249,753	2,075.21
Teton	<u>1,118,655</u>	<u>9,294.94</u>
Total	1,700,766	\$14,131.72 <u>2/</u>

3. Cattle Drives

Each spring and fall the cattle were moved to and from their summer grazing areas. This entailed the moving of herds by their owners and helpers and sometimes by a combined force of several owners and herds. The cattle grazed enroute and needed to be checked and counted by rangers to see that there weren't more than the specified allotment per area.

Other cattle drives were made when the cattle were shipped to market.

One of the first cattle shipments was written up in the Jackson Hole Courier of October 16, 1919 (Lincoln County, Wyoming) which gives the following account. "Nephi Moulton and Henry May were taking their beef out to Victor, Idaho one day last week." Notices in October 1919, signed by J. S. Francis, Deputy Inspector, stated that any stock shipped out of state must be inspected for shipping. The following article appears in the

1/ Forest Service Files

2/ Ibid. Robert I. Casebeer, Range Conservationist Report.

Jackson Hole Courier for Thursday, September 16, 1920.

RANCHERS NOTICE
FIRST COOPERATIVE SHIPMENT

"Cars are ordered, via Victor, for the first cooperative shipment of cattle October 4th. Will start to gather cattle at Moran September 22nd, leave Kelly the 27th, Jackson the 30th, and Wilson October 1st.

"There will be no change in this plan. Arrangements are made for good pasture at Victor to rest every day or two. If you have a full car of cattle or even car lots, your cattle may be consigned to any commission firm that you choose, or, if the cattle are well branded, two or three owners may club together and ship to their choice of firms.

"Forty years of experience shipping cattle have taught me every detail of the business. I advise shipping to good reliable firms through a reliable agent. By so doing you save time, personal risk and money. This is corroborated by the fact that nearly 50% of the livestock shipped throughout the west is now handled by cooperative shipments. The movement is growing fast in the west.

"I stand responsible for all risk, except for natural death, on all classes of stock except canners and unsound cattle.

"See me personally regarding terms."

Advertisement--9/23/20

W. J. Kelly

Note: W. J. (Bill) Kelly bought most of the cattle in Jackson Hole at this time.

Two cattle drives made by Henry H. Francis were the first cattle drives of large size made from the Blackrock Range on Togwotee Pass over Teton Pass to Victor, Idaho in November of 1919 and from Ashton, Idaho back to the Blackrock range in June of 1920. Will Steningraber, who worked for Mr. D. E. Skinner of the Hatchet Ranch said that the United States Forest Service wouldn't give Mr. Skinner permission to drive cattle to Ashton in 1919 or before and the cattle drive of June 1920 from Ashton back into Jackson Hole and finally to Blackrock was the first cattle drive Skinner ever made from Ashton to Jackson Hole. Skinner bought the cattle herd in 1915-1916.

Ross Porter and Milt Porter homesteaded at Squirrel Meadows from 1916 to 1928 and had sheep from 1927 through 1941 but they never drove any cattle into Jackson. 1/

1/ Markham, John, Cattle Drives in Jackson Hole, Wyoming.

"Mr. Skinner also owned the Elk Ranch and had cattle there. He had a hard time with the Forest Service and Yellowstone Park, and they were on his tail all the time. Horace Albright, Superintendent of Yellowstone said the cattle were eating all of the shrubbery off the south side of Yellowstone Park and had a grazing inspector from Washington D. C. come in to investigate. Cattle drives were hard on the land.

"Some of the cattle drives were taken from Blackrock to the railroad at Hudson, Wyoming over Togwotee Pass. A number of others used the Ashton-Moran road." 1/

CATTLE DRIVES IN JACKSON HOLE WYOMING
BY JOHN MARKHAM

The following letter from Elmer Arthur, Box 75, Ft. Bridger, Wyoming answered by letter to him of September 30, 1969 on the cattle drive he and a crew of drovers made from the Elk Ranch to Hudson, Wyoming in the fall of 1916:

Ft. Bridger, Wyoming 82933
October 13, 1969

John Markham
157 West Bradford Avenue
Sonora, California 95370

Dear John:

The beef drive we made in the fall of 1916 from the Elk Ranch to Hudson, Wyoming had the following owners and brands. D. E. Skinner had the  on the left ribs and Val Allen branded with the Open

A Quarter Circle  on the left hip plus the brand Skinner and

Allen got when they bought out (Otto) Kusche  the Lazy K over E brand.

Elmer Arthur and Carl Roice cowboyed for Skinner and Allen and Bill Lozier. Bill Lozier was not on this drive and I cannot remember his brand. Si Ferrin was one of the cattle owners who also on this drive and he branded J F  on the left hip.

Glenn Ferrin cooked and drove the mess wagon. Walt Nichols cowboyed for Ferrin and Pierce Cunningham, another owner on the drive who branded with the Flying U  on the left hip - the brand he got from Uhl when he bought him out. Pierce had another brand but I can't remember it but maybe Henry Francis might know Frank Coffin.

1/ Markham, John, Cattle Drives in Jackson Hole, Wyoming.

CATTLE DRIVES IN JACKSON HOLE WYOMING
BY JOHN MARKHAM

was on this drive for Coffins and Rudy Harold. Coffin's brand was 5 Box Bar  on the left hip but I can't remember

Harold's brand. Roy Nipper was another cattle owner who was not on this drive and I can't remember his brand but I think it was  on the left hip. We didn't have a horse wrangler

so Si Ferrin usually took the extra horses and went with Glenn (Ferrin) to make camp for noon but some times Frank Coffin went instead of Si and Glenn. When we got over on Wind River they hired Percy Nowlin as guide and he took the extra horses and went with Glenn Ferrin. We had about three horses for each cow boy as each of us had a night horse and took turns night guarding the cattle. We did not have any tents and just made our beds out on the ground. If i remember right we had 486 head in our drive. Pierce Cunningham and Si Ferrin went to Omaha with the cattle. I think we were 12 days from the Elk Ranch to Hudson so we averaged about 12 miles per day as we grazed the cattle on the way. Both our out fit and the Black Rock out fit came back in one bunch and together we had over 60 head of horses in the cavvy and I think we were 6 days coming back to the Elk Ranch. I am not sure whether Jim Wallace had any cattle in the drive. His brand was V  on the left ribs.

THE 1916 CATTLE DRIVE FROM THE BLACK ROCK RANGE

The Black Rock out fit also made a round trip in the fall of 1916 and left the Black Rock range the same day we left the Elk Ranch so they were one day ahead of us but we caught up with them at Hudson. Trexler and Mosser had cattle on this drive but didnt make the drive.

They had a lot of cattle on this drive with the Hatchet 

brand. Orin Seaton, Clem Starrett and Warren Henry all had cattle on this drive and they were all on it. Their brands were  Reverse Four Bar Reverse Four for Orin Seaton,

Clem Starrett's brand was the Spanish 5 . (In 1916 it was changed to (2) the Quarter Circle Two Quarter Circle.)

I can't remember Warren Henry's brand. Joe Infanger was another cattle owner who also had cattle on this drive and Jack Fee, whose brand was R H (later changed to the lazy J  and Bar F

) had cattle on this drive but did not make the drive him self but Jim Budge whose brand was the Double Dipper , had cattle in this herd and also made this drive as did Allen Budge whose brand was B R.

Fred Deyo and Lloyd Seaton were horse wranglers on this drive

CATTLE DRIVES IN JACKSON HOLE WYOMING

and Pete Grim, Henry Francis were cowboys on this drive from Black Rock to Hudson. John Smykal was their cook and drove the mess wagon. We hired a pilot at Dubois, Shorty McElroy.

This is the information I got from Henry Francis.

Sincerely yours,

Elmer Arthur

Salida, Colorado 81201
Rt. 1 Box 324
October 11, 1969

Dear John:

Since we are having a big snow storm last night and today and I am "house bound" I will write you about a cattle drive back in 1926. I made a trip about every fall from Jackson Hole to Victor, Idaho from the year 1913 up until the year 1944. Mostly with beef cattle being shipped to market. Some falls I made as many as three trips for different neighbors.

Some were good trips, some were "Hell" on men, horses and cattle. I remember one trip just after the new year in particular. Ralph Dee Moyer and I took about sixty head of clean ups- mostly old cows and wore out bulls to Victor for shipment. The first day we made Nate Davis's road house at the foot of the mountain. Next morning we left real early, we thought it seemed cold as "hell" because we had to walk at every opportunity to keep from freezing up.

Fact is we walked most of the way to Victor with chaps, spurs, overshoes and heavy coats. This didn't make walking any easier. We got into Victor about 4 p.m. with the sun still shining bright and still 24 degrees below zero. Found out then it had been down to 54 degrees below zero in Wilson that morning. This was one of the bad trips needless to say. I also helped gather cattle and trail them to Victor for D. E. Skinner. I made numerous trips back in the "teens" (1913 through 1919) to and from the Forest ranges on the Gros Ventre water shed for Mose Giltner, J. P. Ranch Co. and others. Finally run my own cattle on the Bacon Creek range for 26 years. I sold out to Mosley in 1944 and moved to Gunnison, Colorado.

CATTLE DRIVES IN JACKSON HOLE WYOMING
BY JOHN MARKHAM

The Bacon Creek range covered a large area which includes all of the south Fish Creek drainage. We estimated it to be about 70 miles around the outside loop. We started on Bacon Creek in the spring then worked to the continental divide next to Green River and also the Wind River. Lots of mixing with the Green River and Wind River cattle during July and August. When we were on the extreme eastern side of our range we were about ninety miles from home.

FALL OF 1926

This is a drive Jimmy Boyle, Ed Martin and I made from the upper Green River over the old Hoback Road in the fall of 1926. This was in the fore part of November and the weather happened to be ideal each and every day which was a big asset. The three of us ran cattle together on the Bacon Creek range and were all under stocked at the time. We were long on feed and plenty short on finances. Bob Miller of the Jackson State Bank at that time had lots of faith in an old cow, also in any one who wasn't afraid to work, so we didn't have much trouble arranging for a loan to buy more cattle.

We took off for the Pinedale area about November 1st of 1926 (horseback those days) and we wound up buying 287 head, cows, some real young yearling heifers and a few dry cows also a few yearling steers. It took us several days to locate and buy them, then more days to get them all in one bunch at Perry Jenkins Bar Cross Ranch at Cora, Wyoming. 1/

On June 22, 1969 I received a letter from United States Senator and former Governor of Wyoming, Clifford P. Hansen and Senator Hansen gave me the following interesting account of a cattle drive he made in 1927:

"Your recollections of the drive made to Hudson poignantly reminded me of a similar trip I made in 1927. I was almost fifteen and we gathered cattle on the north Fish Creek range, took them across the continental divide stopping at the George Cross ranch near Dubois for a few days and then crossing the Reservation as they did going on to Hudson." Senator Hansen refers to the cattle drive made by J. V. (Val) Allen, his son Marion Allen, Jim Budge, Will Lozier, Clem Starrett, Quincy Francis (Henry Francis's brother) and several other drovers. In recalling this cattle drive - probably made in October of 1920 - my uncle, Will Steingraber said this was the last cattle drive they made from the Elk or Hatchet Ranches to Hudson as it was too far and feed was too scarce. The cattle drive made by Clifford Hansen from Fish Creek up on the Gros Ventre (Grosvont) River to Hudson in 1927 - a total distance of about 175 miles - was probably the longest cattle drive ever made from Jackson Hole Wyoming.

1/ Merrit Ferrin, Jackson, Wyo.

Jackson Hole Cattlemen.

J. P. Ranch Co., (Quarter Circle JP) Jackson
Hannes Harthorn, Grovont
James Wallace, Elk (OV)) now owned by the Bruce Porter Estate.
Hammond and Bispham, Teton (HuB)
Howard & Topping, Elk, (LJDash)
G. S. Ratliff, Jackson (RSBar)
J. A. Kafferlin, Kelly (Quarter Circle LK)
George W. Kelly, Jackson (69)
Hanshew, Kelly (TH)
S. N. Leek, Jackson (Quarter Circle N L)
A. Ward and Sons, Wilson (AXBar)
E. Murphy, Grovont (Division Mark)
James I. May, Grovont (7 Lazy 3)
W. J. Kelly, Kelly (SK)
Joe Markham, Moran (4J)
George H. Riniker, Grovont (Lazy RV)
Nephi Moulton, Zenith (Quarter Circle N)
Bar BC Ranch, Grovont (BC)
Bennie L. Linn (LIN) Wilson
Thomas E. Lemmon, Kelly (2BarK)
Mary J. Lucas, Jackson (Bar Lazy U) (S)
E. Crandall, Wilson (11Bar)
D. Lafferty (2 Dash 9) Now Verland Taylor's
Arthur Simpson, Jackson (VShield)
Webster Laplant, Jackson (O)
Ben F. Goe, Jackson (GO)
Ted Lovejoy, Kelly (Elephant Head)
Jakes Budge, Kelly, (Jointed Lazy D's) & (Bar Cross)
Carl Wright, Kelly (K Lazy M)
A. J. Vogel, Jackson (Quarter Circle V Quarter Circle)
W. L. Winegar, Jackson (Pitchfork)
Shawback and Miller, Grovont (Lazy FS)
J. D. Ferrin, Elk (JF)
Charles Wilson, Jackson (CW)
J. H. Francis, Jackson (Quarter Circle X Quarter Circle)
H. M. Ely, Jackson (EO)
M. V. Giltner, Jackson (UP)
Henrie R. Robison, Jackson
P. C. Hansen, Zenith (Lazy P6 and TBar) 1/

1/ 1916 Jackson Hole, Wyoming Cattle Brands, Lincoln County,
Wyoming (now Teton) by John Markham

5. Present Situation

Today, cattle on the hoof are still being moved to suitable grazing range on the Teton National Forest and are a common summer sight. Cattle and sheep and several thousand saddle and pack horses graze the Forest each summer and fall.

Numbers increased until cattle ranching became a principal industry and has remained as one of the main sources of income to the economy of Teton County. A trace of the old West is still evidenced by a few remaining genuine cowboys in the practical western garb of their profession.

For the protection of local ranchers and to stabilize ranching as a local industry, grazing on National Forests was put under a permit system in 1901. The range is divided into administrative units called cattle and sheep allotments. In 1961 there were 16 allotments on the Forest where 62 permittees grazed a total of 13,620 cattle. This use is primarily summer and early fall. Ranchers feed the cattle during winter and spring, usually at their home ranch in the valley. As the native grasses and forbs on higher forest ranges become well developed, usually in June, ranchers and hired hands drive the cattle onto specified units of range. During the summer, cattle are moved around over the range by cowboys, or riders, who distribute the animals for conformance with good range management practices developed between the rancher and the Forest Ranger. At the end of the grazing season, the roundup comes, ranchers and all hands gather the cattle from the open ranges and push them down to the home ranch for the winter.

The Forest Service plans include management of the forage resource for optimum benefits/cost within the parameter imposed by the requirements of esthetics, soils, timber regeneration, big game range use and certain recreation activities.

Livestock grazing in the Spread Creek-Grosvont management area is largely confined to the Gros Ventre stock trail. This amounts to about 500 cow-months per year. The trail has been used since the early 1900's to move cattle up to and from the summer range. Vegetation along the trail has changed over the years toward grasses and forbs resistant to grazing. Trailing cattle normally takes 3-4 weeks and causes annoyance to some and gives pleasure to others. The annual cattle drive, involving some 5,000 animals, is a traditional event in Jackson Hole and has a sentimental appeal in local communities. Some visible cattle trails have been developed which may detract from the roadside scene. Some of these are caused by elk. The trails cause some minor erosion in areas of heavy clay soils. Livestock grazing in the area has been restricted in favor of elk

winter range since 1918. The Forest Service plans to continue using Gros Ventre stock trail and eliminate soil erosion problems. 1/

The majority of five cattle allotments are included in the Spread Creek-Gros Ventre Planning Unit. These five allotments have a grazing obligation of upwards of 6,000 head of cattle. In addition, there are an estimated 192 animal months of transportation livestock use brought into the area by hunters, fishermen and commercial outfitters.

The Land Use Plan recognizes this use as generally being in harmony with the environment and recommends that it be continued consistent with the carrying capacity of the available forage and proper coordination with other uses and activities.

Other uses and activities, including livestock and big game grazing which consume certain species of grasses, forbs, and brush, are managed to maintain desirable plant communities as well as provide for the diversity needed for other wildlife. The native patterns of plant communities will be maintained and improved through proper management of livestock use, harvest of mature, overmature, insect-infested and diseased timber and protection by fire. 2/

D. Wildlife Management

Wildlife is an attraction for the Teton National Forest visitor at every season of the year. During the summer you can see, with the expenditure of a little time, some of these animals in their favorable localities. In most cases the roads have been built so as to avoid going through localities inhabited by wildlife for fear of frightening them away.

1. Moose

Within the Jackson Hole area, Shiras' moose is the most common big game animal in summers, and it is frequently seen in the smaller ponds and marshy meadows. Though the moose is the largest member of the deer family, it is not as wary as deer. It can swim proficiently, feed under water, navigate deep snow if it has to, plow through the mud of swamps and is extremely solitary in its habits. It weighs between 900 to 1,500 pounds, depending on the variety, with the cows about three-quarters the weight of the bulls.

Moose are large, long-legged, dark-colored animals, taller at the shoulder than at the hips. The neck appears to be short, the muzzle is broad and pendulous; a beard or "bell" hangs from the chin; it has no known use. Only the males have antlers which are palmate--that is, they have a flat, shovel-like surface with points of varying lengths giving off the main

1/-2/ Forest Service Files.

part, or palm. Added to the outlandish appearance of the animal, this odd-like adornment is often incongruous in the extreme. Record measurements attained by the Yellowstone or Wyoming variety are: greatest spread, 58 1/2 inches; length of palm, 39 inches; width of palm, 11 3/4 inches; circumference of antler, 7 1/2 inches; number of points, one antler, 14.

At one time the Wyoming moose was reduced to a small population with its center in the area of the Upper Yellowstone River inside and just south of Yellowstone Park and on the Upper Thorfare River, a tributary of the Yellowstone. There, in large willow "flats", the moose could winter and spread to adjacent areas for summer forage. At the same time there was a smaller, more widely-scattered, population throughout the Upper Snake River drainage in northwestern Wyoming. In recent years the Wyoming moose has increased enormously and there are populations in all the localities mentioned, as well as smaller groups scattered widely from the former centers of concentration. Added to the natural increase have been artificial transplants by the Wyoming Game and Fish Commission from Jackson Hole to the Big Horn Mountains in the north-central part of Wyoming where moose have not been seen previously in the memory of man. It is thought by some that certain wintering grounds, Upper Wind River, Wyoming and Lower Buffalo River in Teton County, for example, are becoming too heavily populated for the permanent good of the land. These two areas are adjacent and the animals are separated during a part of the year by excessively deep snow in the high country along the Continental Divide; during spring, summer and fall there is an exchange of moose across the mountain range. The problem is attracting the attention of sportsmen and game officials and studies in the future will likely clear the question. 1/

The moose become much less wary soon after the hunting season is over and they will congregate in "herds" during the winter, probably because winter forage is more concentrated. Where highways pass through centers of winter range, as on the lower Buffalo River, travelers can see groups of 10 to 25 animals. They drop their antlers from January 1 to 15th.

Hunting of moose under permit is allowed each year in Wyoming. In some years past, permits were obtained by the lot system, or drawing, have covered cow moose as well as bulls of all ages in certain areas where the animals were considered overabundant; in other areas only mature bulls may be taken on the permit. The hide of the moose, because of its extreme thickness and toughness, has many uses--for example, in the manufacture of

1/ Grand Teton Magazine, U. S. Department Interior, 1938, and The Wyoming or Yellowstone Moose, Wildlife Series No. 2, Jackson Hole Wildlife Park, author James Simon.

rustic furniture. Accidental killing of moose by inexperienced of careless hunters has always been frequent and occurs even where moose are protected in an "open" area for elk. Often these accidental kills are not reported to the authorities. Highway mortalities through gunshot wounds accounts for considerable winter kill. Frightened motorists often kill an animal when it shows nothing more than extreme fatigue after being chased for hours on the snow-covered, steeply-banked roads, first in one direction then back, by passing automobiles. 1/ The Forest Service and the State Highway Department eventually made turnouts with snowplow or bulldozer as a break in the steep snow-bank, angling off the highway in the direction of a ridge where the snow is less deep. The moose doesn't like to get off the highway and try to make it up a steep bank into the deep snow. Sometimes a moose will be run up and down a highway so long that he will wear out his feet and can't get up, and dies. Some of the frightened animals will attack cars in desperation.

Ticks are a serious threat to moose. Toward spring when the snow starts to settle, animals are found dead or dying with thousands of engorged ticks on their bodies. See part IV for a more detailed discussion on the ticks, page 182.

A great variety of grasses, water plants, weeds, shrubs and trees is eaten by moose during the summer and periods in the spring. In winter they feed on buds and twigs of willows, the willow thicket of a river or stream bottom. Other forms of woody plants may be utilized in winter: aspen twigs and bark, cottonwood and balsam fir. The moose is essentially a browser rather than a grazer. It has to go down on its knees to browse for grasses due to its long legs and short neck. 2/

2. Deer

Mule deer are increasing in the Teton National Forest and Jackson Hole. At present it is common in southern Jackson Hole along the main streams where there is a winter concentration due to its seasonal migratory habits, similar to but not so pronounced as those of the elk. Its gradual disappearance in the thirties cannot be explained, but doubtless it will come back in due time provided the hunting pressure is not too great. In 1948 there seemed to be no reduction but actually an increase in the number of deer in southern Jackson Hole. The mule deer is spread widely throughout the Rocky Mountains and is the most important game animal of the region. Its huge ears, from which it gets its name, are an easy means of identification. Its antlers are branched, unlike the white-tail's, the tines of which are unbranched. The mule deer's tail

1/ Grand Teton Magazine, U. S. Depart. Interior, 1938, and The Wyoming or Yellowstone Moose, Wildlife Series No. 2, Jackson Hole Wildlife Park, author James Simon.

2/ Ibid.

is small, rounded and with a black tip, quite different in appearance from the whitetail's larger, bushy appendage. Spotted fawns are born as singles or twins, usually late in June. 1/

The whitetail deer disappeared from Jackson Hole before 1924. They were present in Yellowstone Park until that date so it is more than likely that there were some in Jackson Hole. 2/

3. Buffalo

Buffalo are actually native to Jackson Hole; some were found here before the valley was settled, but whether they were seasonal visitors is not known. During the days of the buffalo hunter, when millions of bison swarmed over the plains east of Jackson Hole across the Continental Divide, they were killed in such numbers and so wantonly that often only the tongue or part of the hump was taken as food. Evidence of buffalo being in Jackson Hole was found on the north side of Upper Slide Lake at the west end near Dallas Lake about 15 years ago when Jack Sanders of Jackson with a group of friends was up there. They went into that area to fish Dallas Lake and decided to drive to the shore of Upper Slide where there is a natural valley where there seemed to be a drainage of creek out of Dallas into Upper Slide Lake. As they traveled over this grassy flat, the first jeep sunk clear in and when they got out, they could feel the unstable ground beneath. It would hold a person but not something heavy, and could be compared to a tundra. While they were working with the jeep, they found some exposed, bleached bones which they dug out with sticks and shovels. They found about 9 or 10 buffalo skulls without any cracked places (indicating Indians had killed them) and did not seem to be as large as prehistoric skulls should be. When they went back four years ago, there was nothing left on the surface but they were sure there were more under the ground. The area was swampy so it is a great possibility that the animals got in and couldn't get out. Also, Mr. Sanders thought that Dallas Lake, being a natural lake, the Indians might have camped there and used the swamp as a trap for buffalo. The same year they also found large, boulder-type rocks which were made up of shells (sea). 3/

Drives over cliffs were usually held in the fall when buffalo could be herded more easily than during calving or rutting seasons. No known techniques of this kind are known in

1/ Jackson Hole Wildlife Park, J.R. Simon, Page 3.

2/ Ibid.

3/ Excerpted from a letter by Jack Sanders, April 9, 1975, Jackson, Wyoming.

Jackson Hole but perhaps it was a similar technique that was used in Upper Slide Lake. When the lead animals plunged over the drive, the others followed and the dead, disabled and maimed were easily dispatched by hunters.

As late as the summer of 1945 three stragglers from the Yellowstone Park buffalo herds passed through Jackson Hole, presumably headed south. 1/

4. Elk or Wapiti

The elk have been the most important of the big game animals in Jackson Hole, at least since the occupancy of white men; and they have done much to make the valley known to the world. Their history constitutes one of the most interesting chapters in the story of the valley. Not many years ago as the winter range of elk was more and more taken up by the cattleman and rancher, depriving the elk of the areas where they might find winter forage not too deeply covered by winter snow, it became apparent that something must be done to save these magnificent animals. 2/ (Note: The early history of the elk has been covered in earlier portions of this book, which will be summarized here.)

Some fifty or sixty years ago, an elk hunt in Jackson Hole was a great adventure for eastern dudes. Pack outfitters found it a lucrative business.

The early settlers found the elk a source of meat for their table along with antelope which were once plentiful in the valley and other game and birds. They also found that the elk got hungry in times of deep snow and raided their haystacks--and cattle had to be fed as they provided the settlers' main money crop. They tried putting the hay up on platforms, and also tried fencing it in, but when the weather was severe, the elk tore down the fences and platforms to get hay. 3/ (Figure 14)

The winter of 1908-09 was a very severe one. It was estimated that there were 15,000 elk wintering on Flat Creek, and by February 1st they began to die of starvation. Local residents petitioned the legislature, then in session, for help to keep the entire herd from starving to death, and while the legislators pondered the matter, ranchers donated all the hay they could spare and hauled it out on sleighs to try to keep the animals alive. In that terrible winter, elk carcasses littered the countryside, and living skeletons wandered aimlessly through

1/ Jackson Hole Wildlife Park, J. R. Simon, Page 3.

2/ Grand Teton National Park pamphlet, page 15.

3/ Forest Service Files.

the snow. A deep snow buried the valley's native forage and threatened thousands of elk with starvation. 1/

Since the 1880's, a large portion of the herd summering in Yellowstone Park had wintered in Jackson Hole. For centuries before that, the animals had merely migrated through Jackson Hole on their way to the warmer grasslands of the Green River in the basin. With the appearance of ranches and barbed-wire fences along Green River in the early 1880's, the elk began to avoid the warmer basin in favor of the less densely settled Jackson Hole. 2/

The State finally appropriated \$5,000 to buy more hay and to reimburse the ranchers for what they had furnished. Even so, about half the herd died of malnutrition. 3/

The State of Wyoming felt that they were not able financially to carry the burden of caring for the elk, and the legislature sent a Memorial to Congress to cooperate by appropriating money to "feed, protect, and otherwise preserve the big game which winter in great numbers within Wyoming". Congress did cooperate, and in 1911 sent a biologist, E. A. Preble, to investigate the situation and return a report. As a result, in 1912 Congress appropriated \$20,000 to be used to buy hay and wintering grounds. A tract of 1,760 acres adjoining the town of Jackson was purchased. Thus, the National Elk Refuge was established, containing only this amount of land in 1912. Since then the refuge has been extended by other acts of Congress, by Executive Orders, and by donations from the Izaak Walton League of America. In 1922, during the formative years of the refuge, 40 acres of land within the marsh were set aside by an Executive Order as the "Flat Creek Bird Refuge". In 1937, this reservation became a part of the National Elk Refuge. In the 1930's WPA help was used to develop the headquarters area, and to build the big game boundary fence along the south and west sides of the refuge. 4/

The National Elk Refuge, administered by the Bureau of Sport Fisheries and Wildlife, U. S. Fish and Wildlife Service, now includes 23,754 acres and provides a winter feeding area for 7,000 to 11,000 elk that migrate to the lower elevations of Jackson Hole from their high mountain summer ranges, mostly in Teton National Forest lands. Mr. D. C. Nowlin was the first Supervisor and manager, and played an important part in its establishment. While serving in the State Legislature, he took an active interest in the preservation and protection of game in the state and became known as the father of our pre-

1/ Jackson Hole Guide, "Teton County Has Colorful Past", 12/30/65.

2/ Saylor, David J., Jackson Hole, Wyoming, Univ. of Oklahoma Press, Norman, 1970.

3/ National Elk Refuge, U.S. Depart. Interior Fish & Wildlife Service, Bureau of Sport Fisheries & Wildlife Information pamphlet.

4/ Ibid.

sent game laws. He was the author of the first game protective measure to become a law ever introduced in the State of Wyoming, and from that beginning Wyoming has her wonderful game laws, her State and National Game Preserves, with State and National Parks excelled by none. 1/

The refuge feeds about 50 percent of the elk of the Jackson Hole Herd for half the year. The largest recorded number was 11,500 in the snowy season of 1955-56. 2/

In 1927, Dr. Olaus Murie, U. S. Biological expert, scientist and naturalist was sent to Jackson Hole to study the elk problems. Dr. Murie was a pioneer researcher on elk diseases and one of the area's first ecologists. His work on the elk was known all over the world. The state Audubon Society changed its name to the Murie Audobon Society in honor of the family of naturalists. 3/

The severe winter killed half the herd of elk and the count from 1921 was the lowest count in the history, 9,346.

Summer range of the elk extends over the 1,700,000 acres of the Teton Forest, ^{and also} Grand Teton and south Yellowstone Parks. To serve the elk better, and to keep them from concentrating in one spot, other feed grounds have been established in the Forest. At one time there were as many as 35,000 elk ranging over Jackson Hole. The impact on the range available was terrific and the winter of 1919-20 took a huge toll. 4/

In retrospect, there was more going on, and more chaos, on the Wyoming range in the years 1898-1914 than in all other years of Wyoming history taken together. Out of it all, a pattern could be seen emerging. Cattle, sheep and other big game, rather than irrigators and dry farmers, would occupy most of the range for the foreseeable future. Conservation of timber, minerals, and big game in the national interest became permanent policy in Washington, and permanent also became state-federal friction over programs designed to implement conservation policy. In Jackson Hole, ranchers petitioned Congress to make Jackson Hole a recreational area, because ranching and stock raising did not pay. 5/

One of the outstanding natural phenomena in wildlife is the southward migration each fall of thousands of widely scattered elk to the Elk Refuge near the town of Jackson. The migration

1/ Mortimer, Bernice Nowlin, Daniel C. Nowlin, History and Biography.

2/ National Elk Refuge, U. S. Depart. of Interior Fish & Wildlife Service, Bureau of Sport Fisheries & Wildlife.

3/ The Jackson Hole Guide, December 30, 1965, "Teton County Has Colorful Past".

4/ Ibid.

5/ Larson, T. A., History of Wyoming.

occurs in reverse as the elk return to the summer range. At the most these movements are less than fifty miles each way. The elk move toward the high country in Yellowstone Park and south of it, on Big Game Ridge, the Thorofare Plateau, and in the mountains east of Jackson Hole. A small herd summers in the north end of the Teton Range. 1/

In 1936, most everyone was wondering if the elk herd had vanished. A great many hunters went grumbling back to their various homes without an elk. The "natives" explained the lack of elk in three ways. It was either due to the slaughter of the elk the winter before; the opening of the game preserve; or a false count of them the preceeding winter. Each of these deserves special attention and explanation.

During the winter of 1935, much furor was caused by the elk slaughter by the State Game Department, which was under heavy criticism by local people and out-of-state big game hunters. The local paper and various officials received many letters of protest from all over the country. The Game Department had become most mercenary. They had contracted to sell 1,000 elk to the Bell Packing Company of Cheyenne, Wyoming to be shipped east or used for relief purposes. Their excuse was that there were so many elk, they had to cut down the herd, as they would otherwise starve and they couldn't feed so many thousands at the feed grounds in Jackson. People were protesting mainly because even though this commercial slaughter would be undertaken only once, no one could see the necessity of resorting to such a drastic measure, a measure which would take the thrill, the sport, and the interest out of the biggest game hunting in the United States. The elk herd being the largest natural resource of the state, upon which millions of dollars had been spent for protection, they were to be cut down in a far-from-sportsmanlike manner. They thought it should be the privilege of the hunter to carry home the elk as a reward of effort. According to the protest made by a local Jackson attorney, the State Game Commission had no legal right to kill wildlife that is being protected. 2/

The place of slaughter was on the winter feedgrounds, where the animals were accustomed to be fed and protected. The game wardens would coax the elk down from the upper government ranch with strategically placed hay or otherwise round them up for slaughter. Unknown persons several times tore down the fence and let out the several hundred elk enclosed. The local paper came out with the question in headlines, "Who Let Down the Fence for the Elk?". The majority of the citizens smiled to themselves. It was a time of many bitter words both locally and from outside. The many protests stopped the slaughter, but not until 600 of the proposed 1000 had been killed. 3/

1/ Jackson Hole Wildlife Park, A Pamphlet, Page 4, and Grand Teton National Park, Wyo., a pamphlet, Page 15.

2/ Allan, E.B., notes from various newspapers, 1935-36.

3/ Ibid.

The second reason given for the seeming shortage was the opening of the Game Preserve. The elk move down after a heavy snow storm from the upper areas to their winter feedgrounds or where they can find food otherwise. The same year of the protested slaughter, closed territory that should never have been opened, was. (The Game Preserve had been closed since 1905 when it was created as the Teton State Game Preserve and elk hunting and grazing was prohibited.) As a result, the herd going to their winter refuge, had to run a gauntlet of from 10 to 15 miles of hunters shooting into the bunches as they attempted to pass the line of fire. It was a terrible mess. Anyone who could afford a license could drive a car to the upper Spread Creek area and kill his elk or line up along the Buffalo River, which was the line of closed territory formerly, and kill his elk. The elk were not accustomed to being shot here. There was no sport in it. The lives of hunters as well as elk were in danger. One hunter, thinking he had shot an elk, found several hunters claiming it. After the shooting was over, the entire place looked a shambles with wounded elk and carasses half-dressed, lying about. The remains of properly dressed animals, too, added to the debris. It was known as the 1935 Spread Creek Massacre.

The third reason was the false impression that the elk weren't counted accurately. Nearly every winter the Game Department and the Forest Service counted the elk herd. It has been done the past years by plane. The plane carrying official counters flies low over the country, and when a herd is spotted, each man counts the elk below him. The count is tabulated and compared. If there is too much difference, it is done again. By the end of the period, a more than fair count is obtained. This gives the officials a fairly accurate estimate of how many elk there are and how many licenses can be sold the following year.

Each of these reasons given above played a big part in the discussion and ill-feeling that ensued in the fall of 1936, when the elk, seemingly, failed to appear.

On December 9th, the big herd began crossing. We drove up the highway to Turpin Meadows from the Blackrock Station some 16 miles above Moran. Hundreds of elk were on the hills near the highway--something like 500 elk to a group. They continued to cross for days. The highway from Turpin Meadows on down towards Moran for some twelve miles was a continuous area of tracks. It looked like there were plenty of elk left in the country after all. We estimated something like 10,000 had crossed in this vicinity and more were still seen in the upper areas of Enos Lake and Two Ocean Pass that weren't on the move yet. The big herd usually had moved down earlier than this. 1/

1/ From the diary of E. B. Allan & excerpts from early Jackson papers.

In April of 1938, an investigation of elk losses in the Gros Ventre drainage took place due to a letter from Dutch Olsen of Kelly, Wyoming to Colonel Osmund Latrobe stating that 1,500 elk had died on the Gros Ventre up to April 18th and that further losses would result due to failure of the feeding program. Colonel Latrobe conferred with the U. S. Biological Survey and made the following requests: (1) complete study of the situation; (2) drift fences be taken down to allow weakened elk to return to summer range; (3) feeding bins be extended; (4) ranchers be allowed to put out feed for the elk from the bins. The Colonel also mentioned the use of the Gros Ventre by cattle to the detriment of the elk.

The State Game and Fish Commission had two reports made by two different investigating parties. The first party consisted of Fred Deyo, Deputy Game Warden; Art Buckingham, Assistant Forest Supervisor; Albert Feuz, representing the Biological Survey; and A. P. Balch, Forest Ranger; who spent ten days from May 16 to May 26 riding over different parts of the elk winter range to ascertain the loss of elk and other game animals in the Gros Ventre drainage. They believed they had located 80 percent of the kills.

The results were tabulated and showed a loss of 573 elk, consisting of 403 calves, 88 cows, 71 bulls and 11 spikes. Several elk had died early in the winter, probably from wounds, and two bulls are known to have been killed in a snow slide. In addition 27 deer and four mountain sheep carcasses were found. Based on the airplane count, the total 573 indicated a loss of about 15 percent. This is considerably heavier than that experienced in ordinary feedgrounds where there are considerable losses each winter.

Paunch contents showed a large portion of coarse browse and other more or less indigestible refuse. In the concentrated areas practically 100 percent of all available winter forage had been taken. This party consisted of ranchers including Dutch Olsen. The losses were very heavy in the vicinity of the Dutch Olsen ranch, which accounted for his over-estimate on losses for the whole region.

A second investigation took place on July 6 to July 10. The investigators were Dr. John W. Scott, executive secretary to the Wyoming Game and Fish Commission; Dr. Olaus J. Murie, U. S. Biological Survey; Orange A. Olsen, assistant to the assistant Regional Forester, U. S. Forest Service; Art Buckingham, assistant forest supervisor; Fred Deyo, deputy game warden, and

A. P. Balch, Forest Ranger. The purpose of the second trip was to more fully and accurately answer the questions of Colonel Latrobe. The following results were ascertained: (1) extend some of the drift fences to prevent cattle from drifting back on elk winter range; (2) construct a drift fence across Bacon Creek to aid in rotation management of summer cattle range and protect the elk winter range; (3) move one of the feed bins from Goosewing to Collier Hills which is the center of one of the concentrated areas where elk may be fed in an emergency. 1/

Note: Elk counts over the years will be given in the Appendix of this book.

As far back as 1909, the state legislature memorialized Congress to appropriate \$30,000 to buy up land on the Gros Ventre River for a feedground for elk. The consensus of opinion after meetings and discussions was that a feedground up on the Gros Ventre was undesirable, and a committee was appointed to voice their objections to Congress. On the committee were W. P. Redmond, Steven Leek, Ralph Spencer, Ted Pederson, and L. B. Hoagland. It was remarked that no number of men aided by a game reserve law and a ten-foot fence, could keep the elk anywhere except in their old established wintering grounds. Also, the Gros Ventre was not a natural spot due to heavy snow in winter and the impossibility of hauling hay up there. Ralph Spencer suggested that the swamp north of Jackson would be better, as it had long been used as a wintering ground by the elk. 2/

Thirteen years later the Izaak Walton League was born in Chicago. Led, and initially financed, by a few eastern philanthropists, the infant organization stepped right into one of its most renowned accomplishments. That was raising money by popular subscription to purchase the first 1700 acres of what now constitutes the Jackson Hole National Wildlife Refuge. This feat was accomplished in 1927 when Congress accepted the gift of the land for the designated purpose of preserving the elk herd. 3/

As a game animal, hunted in the proper setting, the elk is superb. Its large size, speed and wariness, its wild and rugged habitat, and the excellent quality of the meat, all recommend it to the hunter.

Normally, during the spring, summer and fall, elk feed on grasses and weeds and supplement this fare with smaller quantities of woody plants or browse. During the winter, in areas free of snow, dried grasses and weeds still constitute the major portion of the diet by preference, but when snow is too deep to paw away and uncover the desired food, the various types of brush are used extensively. When elk are concentrated, trees such as aspen and narrow-leaf cottonwood are likely to be badly damaged. Very young trees are eaten, and thus the timber

1/ Wyoming Wildlife, official publication, April 1938, article entitled "Investigation of Elk Losses in Gros Ventre Drainage".

2/ Jackson Hole Guide, "Teton Co. Has Colorful Past", 2/9/67.

3/ Ibid.

is not able to reproduce. Extensive groves of aspen trees may be killed by the barking of the adult tree, and it is not an uncommon occurrence to see "high-lining" on various coniferous trees such as balsam fir and Douglas fir. High-lining occurs during winter when game animals stand on packed snow at the base of a tree and eat all small branches and twigs as far as they can reach. This gives a grove the appearance of being artificially trimmed. 1/

Endemic diseases are rare among the wapiti except during hard winters when feed is poor, and then necrotic stomatitis may spread as a result of lesions open to infection in the mouth and around the gums and teeth. Stomatitis may be very serious if it attacks semi-starved elk. Scabies, caused by a mite, may affect the animal in winter months. 2/

Many agencies besides the Forest Service are active today in the study of elk management, in order to "balance" the big game with the land. The Wyoming Game and Fish Commission and other State game departments are responsible for the animal itself (except where it occurs in some National Parks), and to some degree regulate its numbers by hunting. Hunting is allowed when elk are abundant or where they are doing damage; seasons are closed when it is believed the numbers can be increased without doing harm. The conservation of this noble animal is an intricate problem involving the proper use of range, particularly the winter range, and artificial feeding in periods of crisis. 3/

Since the general comeback over the nation of most of the big game animals, it has been demonstrated time and again that too great numbers in any given area is a condition dangerous to the long-range welfare of the species itself. It is with this in mind that the present management practices--hunting, feeding, etc.-- are put into effect. Biologists do not recommend artificial feeding as a normal practice. 4/

The management of big game--particularly elk, is a primary concern and issue of the Teton National Forest. Not only is it a popular and important big game hunting area--in 1971 some 1,800 elk and 300 moose were taken by hunters--it also provides key winter range and spring calving habitat for a large segment of the northern Jackson Hole elk herd. The unit lies astride several travel routes used by portions of the herd in its migration from the winter range at the National Elk Refuge and the Gros Ventre River to the summer range in Teton Wilderness

1/ Wildlife Series No. 1, "The American Elk or Wapiti", The Jackson Hole Wildlife Park, Page 3-4/

2/ Ibid.

3/ Ibid.

4/ Ibid.

and south Yellowstone Park. 1/

The social and economic importance of the elk herd to the Jackson Hole communities and to the National Forests and Parks is very significant. On the planning unit alone it is estimated that non-resident hunters spend locally \$330,000 annually on guide services and licenses. Resident hunters from all over Wyoming spend another \$75,000. The guide service industry is a multi-million dollar business in the Jackson-Dubois area. These important expenditures are timely since they occur between the summer tourist season and the winter ski season. The value of the annual wild meat production for local consumption is estimated at 500,000 pounds. Hunting pressure in the unit has increased over 100% in the past decade. The use of four-wheel drive vehicles and trail machines to penetrate the unroaded country has also increased rapidly. 2/

Another wildlife management concern on the planning unit of the Spread Creek-Gros Ventre area involves big game winter ranges, elk calving areas, and cover requirements for migrating elk. Biologists generally agree that a diverse habitat supports the most desirable situation. In this respect timber harvesting perpetuates diversity. Prior to the advent of forest protection by man, the natural ecosystem perpetuated a diverse plant community through the natural forces of fire, insects and disease. While controls over insects and diseases have been limited, that of fire control has been quite successful. The more evident long term plant successional change resulting from fire control has been the increase in the occurrence of coniferous trees, particularly subalpine fir. Conifer increases have often been at the expense of seral forage species that are dependent on periodic burning for regeneration. This increase of subalpine fir which is a stable food item for wintering moose, has tended to favor moose population in past years. Today it is being overbrowsed, which may suggest the moose have reached or extended beyond carrying capacity. Aspen stands on winter ranges also have been adversely affected by a combination of heavy elk and moose use and the absence of fire. Wildfire killing of older trees permit the growth of new aspen sprouts. 3/

5. Antelope (Pronghorn)

Reports of early settlers in the valley indicate that at one time antelope were common; it is likely that they actually migrated in and out of the valley and that only a few wintered in the Hole.

1/ Forest Service Files.

2/ Forest Service Files.

3/ Forest Service Files.

Antelope were mercilessly persecuted at one time and were almost extirpated from the plains of the west. In Wyoming the total number was, at the lowest ebb, less than 2,000. Now with a population of more than 60,000 in Wyoming alone, this beautiful creature is on the safe side. Small bands of antelope are seen in Jackson Hole today during the summer on the "flats". 1/

6. Rocky Mountain Sheep (Bighorn)

This true sheep is so closely related to the domestic sheep that they cross readily. The mountain sheep does not grow wool as does the domestic sheep, but is covered with coarse, hollow hair like that of other wild ruminants -- elk, deer, moose, antelope. The bighorn ram is one of the grandest of American mammals with heavy, curled horns sometimes reaching a full circle in rams of thirteen or fourteen years, the maximum age.

During the summer the various herds move to higher altitudes. Each herd has a definite summer range, both along or among the high cliffs, as the wild sheep is essentially a cliff-dwelling species. There is little wandering from these districts, which are actually historic ranges, since the time the sheep were pushed farther into mountains country as a result of the advance of civilization. 2/ Occasionally they may be seen on the Teton National Forest in early morning and late evening, particularly along the Gros Ventre River around Red Hills, along the lower end of Crystal Creek and in the vicinity of Stinking Springs in Hoback Canyon. 3/

Mountain sheep have been greatly reduced in numbers and today most herds are gradually becoming smaller, not as a result of hunting, but by natural causes not altogether known. 4/ Bighorn sheep are hunted by special permit only.

7. Other Wildlife

Of the large carnivores, the coyote is the most numerous. Though seen infrequently, black bears are common and are hunted in season. Bobcat, lynx, as are mountain lions, are frequent in varying numbers. Sightings are rare, while tracks are reported periodically. 5/

1/ Jackson Hole Wildlife Park, James R. Simon, Moran, Wyo., p. 4.

2/ Ibid.

3/ Forest Service Files.

4/ Jackson Hole Wildlife Park, James R. Simon, p. 4.

5/ Forest Service Files.

Threatened species include the grizzly bear and the prairie falcon. There is also growing evidence that the northern timber wolf, another threatened species, has recently been seen. The only endangered species identified to date, is the American peregrine falcon. 1/

Furbearers and rodents, which are seldom seen, but are present, are the badger, mink, beaver, river otter, muskrat, longtailed weasel, pine marten, yellow-bellied marmot, porcupine, snowshoe rabbit hare, whitetailed jackrabbit, golden-mantled ground squirrel, and red fox. 2/

The occurrence of avian fauna is highly variable, depending upon the habitat type. The greatest variety and abundance of birdlife is found in the aspen association. Characteristic species include the mountain bluebird, tree swallow, house wren, yellow-bellied sapsucker, chickadees, warbling vireo, ruby-crowned kinglet, Oregon junco, and robin. In contrast, birdlife at higher elevations is typically of lower density. Common species include the raven, gray jay, Clark's nutcracker, and chickadee. 3/

Game birds include the ruffed and blue grouse, and waterfowl. Numerous potholes and ponds afford optimum nesting habitat for a variety of waterfowl. Unique water-oriented birds nesting here include the sandhill crane, great blue heron, and trumpeter swan. The osprey and bald eagle have been known to frequent the area, but there is no current evidence of nesting activity. Golden eagles are of common occurrence. 4/

8. Fisheries

Game fish include the native Snake River Cutthroat trout, rainbow trout, whitefish and brook trout. Non-game fish are represented by suckers and minnows. Grayling, Mackinaw, carp and chubs are also established in the lakes. 5/

There are about 109 streams and it is estimated that the fishable length of these streams is about 335 miles. The Snake River, Buffalo, Blackrock Creek, Cottonwood, Spread Creek, Gros Ventre River, Crystal Creek, Ditch Creek are some of the streams that are fished with success. The best fishing is where access is difficult as these streams haven't been fished out.

1/ Forest Service Files.

2/ Forest Service Files.

3/ Forest Service Files.

4/ Forest Service Files.

5/ Forest Service Files.

E. Archaeological Sites and Discoveries and Geological Areas

1. Dr. John D. Love (1973) has documented known archaeological sites and discovered others in the Teton Forest. Evidence of primitive cultures have been attested to by stone circles, arrow points, chips, stone implements, wickiups and stone shelters. Occupancy was seasonal for purposes of hunting trips, as the severe climate precluded year-long living. 1/

Dr. Love began his study of the area in 1945 and continued during parts of most subsequent field seasons through 1969. During that time, a reconnaissance geological map was made and sections of the Harbell Formation, aggregating 75,000 feet, and the Pinyon Conglomerate, aggregating 20,000 feet, were measured. Lithologic samples were collected at stratigraphic intervals of 10-100 feet from most sections. More than 10,000 samples were analyzed by the U. S. Geological Survey, chiefly for gold, silver, and mercury. Other work included a study of thin sections and heavy-mineral separates of key beds and an examination of several hundred samples of fossils. Many persons contributed to this study during the past 24 years. 2/

Paleontologists who identified the fossil collections are: R. W. Brown and J. A. Wolfe, leaves; E. B. Leopold and R. H. Tschudy, pollen; J. B. Reeside, Jr., D. W. Taylor and T. C. Yen, mollusks; G. E. Lewis, vertebrate fossils; R. E. Peck, Chara; and E. G. Kauffman, brackish-water fossil *Mytilus* from the American Museum of Natural History dinosaur quarry in the Harbell Formation in a stratigraphic section and of mammals from beds overlying the Pinyon Conglomerate; he also led the A.M.N.H. 1969 field party that found *Leptoceratops* in the Pinyon Conglomerate on Pinyon Peak. 3/

Associated with conglomerate beds 250 feet below the Bobcat Member and 800 feet above the base of the Bobcat Member are sandstones that contain dinosaur remains. These occurrences are somewhat anomalous, because dinosaurs are commonly associated with sluggish streams and swamps rather than a high-energy environment such as that in which the conglomerates were deposited. The Harbell Formation is of late but not latest

1/ Forest Service Files

2/ Harbell Formation (Upper Cretaceous) and Pinyon Conglomerate (Uppermost Cretaceous and Paleocene), Northwestern Wyoming. Geological Survey Professional Paper 734-A by Dr. J. D. Love, U. S. Printing Office, Washington: 1973.

3/ Ibid.

Cretaceous age. This age assignment is based on collections of Cretaceous pollen, leaves, acritarchs, dinoflagelites, dinosaurs, and Chara. Leaves are abundant and well preserved in many sections. Many claystones and siltstones are throughout the region that contain mollusks, but these are fragile and thin shelled and commonly crushed.

Dinosaur remains have also been found in association with conglomerates 250 feet below the base of the Bobcat Member of the Harebell Formation. (Dinosaur remains were found on Pilgrim Creek and mammals on Pacific Creek in 1966.)

During the summer of 1969, a tooth of a Leptoceratops, a small hornless dinosaur of latest Cretaceous age, was found 150 feet above the base of the Pinyon Conglomerate on Pinyon Peak. This indicates that at least the lowest 150 feet of the Pinyon Conglomerate in this type of locality is of latest Cretaceous age.

A coal-bearing sequence locally known as the coal member constitutes the basal part of the Pinyon Conglomerate, two miles north of Mount Leidy. It is well exposed and the thickness measures 50 feet, and north of Mount Leidy it is 140 feet. The chief significance of the coal member is that it contains Paleocene fossils from rocks above the Pinyon Conglomerate.

The coal member of the Pinyon Conglomerate indicates that for a brief interval in the early Paleocene time some nonconglomerate Paleocene strata were deposited in very localized coal swamps. No evidence has yet been found of a marine or brackish water environment. During the remainder of the time represented by Pinyon deposition, the environment was one in which layer after layer of quartzite gravel was deposited by rivers so powerful that most fine-grained sediment was carried out of the area. Despite the harshness of this terrain, it was not entirely devoid of life. Tree stumps, one of which is 39 inches in diameter, occur about 500 feet above the base of the conglomerate in the Dry Cottonwood Creek locality, and, in the same area and part of the section, small fragile land snails and other types are present in claystone lenses within the conglomerate, suggesting a warm humid climate and abundant water. Dr. Love and his group found the remains of a prehistoric tropical coal swamp within 100 yards of the entrance to Holmes Cave. It should be on what is now the top of the mountain. 1/

1/ This page excerpted from Dr. Love's Harebell Formation (Upper Cretaceous) and Pinyon Conglomerate (Uppermost Cretaceous and Paleocene), Northwestern Wyoming and Local Stratigraphic and Tectonic Significance of Leptoceratops, a Cretaceous Dinosaur in the Pinyon Conglomerate, Northwestern Wyoming, Malcolm C. McKenna and J. D. Love, New York, N.Y., Laramie, WY

2. In 1939 Ranger Alfred E. Balch discovered large clam fossils in the sandstone layers above Goosewing when he was in charge of that district. The sandstone layers were soft with hard lumps and contained clams that measured from six to eight inches across. They were on a ridge above Goosewing. 1/
3. Past Goosewing and east of the Goosewing Ranch there are fifteen to twenty teepee circles on a promontory. 2/

On the north end of Blacktail Butte near the fault, there are many artifacts and some teepee rings.

The presence of prehistoric man in the Gros Ventre has long been known locally. The locations of several ancient Indian campsites have been known for many years and have been picked over for artifacts. According to a 1972 survey by Charles Love, the Gros Ventre was a main travel route used by prehistoric peoples. The potential for further valuable archaeological discoveries is significant. The Forest Service plans to encourage archaeological and historical studies and prepare an analysis of situation, both in the Gros Ventre and other areas of the forest, and protect known sites from disturbance. These areas are scattered all over Jackson Hole although some are now in Teton National Park and the Elk Refuge. They plan to continue to circulate Geological Area brochures. 3/

Note: See Appendix for list of Unique Features on the Teton National Forest.

A little-known part of forestry is protecting and developing archaeological finds. The remains of prehistoric cultures in the National Forests present a challenge to the Forest Service archaeologist. He must identify, preserve and interpret these remains for the modern visitor's enjoyment and enlightenment. 4/

4. Holmes Cave

Holmes Cave is located near the headwaters of Blackrock Creek on the old North Washakie Trail. It was discovered September 1898 by Edwin B. Holmes of Brookline, Massachusetts, John H. Holland of Scio, Oregon and Neil Matheson of Toltec, Wyoming. 5/

1/ Interview with retired Ranger Balch, Tubac, Arizona, 1/8/74

2/ Interview with Elizabeth E. Brownell, Tubac, Arizona, April, 1975.

3/ Forest Service Files

4/ National Forests in Your Life, 1970 Yearbook

5/ From an account in the Jackson Hole Museum owned by W.C. Lawrence and Homer Richards, Jackson, Wyoming.

It was explored September 6, 7, 8 and 9 in 1905 by Edwin B. Holmes, his brother from Brookline, Massachusetts, John H. Holland, Neil Matheson, T. R. Wilson of Alta, Wyoming, R. E. Griggs, Alta, Wyoming and H. E. Green of Alta, Wyoming. They measured the Holland Chamber (named after John Holland) and found it to be 754 feet long by 452 feet wide. A board about 10" by 12" with the 1905 names on it is still in the big room of the cave above the natural bridge. There are two rooms in the cave. 1/

In July of 1933, a group lead by Sunny Allan, ranger of the Blackrock District, explored the cave. In the party were two fireguards, Tony Grass and Jack Tevebaugh and Esther Allan. They had to crawl through a small stream that came out of the small entrance to enter a tunnel inside. Through the arrow-shaped "hall entry" they passed over ground to the thirty-one foot fall which descended into the Holland Chamber. The party clambered over a swaying ladder of rope with a spray from the falls striking them in the face, down into the formidable, cold and dark interior of the largest chamber of the cave. The rush of the subsided spring waters was the only sound to greet them. It was an eerie experience. 2/

In August of 1933, a second trip was made to the cave with people from Jackson and other places. Contradictory features of the former trip were noticed by those that had explored it in July. There was no limestone formation there, it was breccia. Holmes Cave, then, was an extinct volcano. The volcanic fissure undoubtedly lead miles into the bowels of the earth through the silt formed by the uprushing lava of several million years ago. 3/

Frightened by rumors of the fall and crumbling rocks of the cave, many who had planned on making the trip into it refused. After Sunday's discovery of a volcanic formation, it was easily disputed that the walls of the cave were apt to crumble. Too, the small stream which entered the pinhole opening into the vault-like interior of the cave, had not washed, splashed and carried away the alleged limestones on the inner chambers, but had lazily followed a course of least resistance through the volcanic fissure. 4/

1/ From an account in the Jackson Hole Museum owned by W. C. Lawrence and Homer Richards, Jackson, Wyoming.

2/ Diary of E. B. Allan

3/ Courier Newspaper, August 1933 edition account.

4/ Ibid.

Another interesting feature of Holmes Cave is the fact that "there are the remains of a prehistoric, tropical, coal swamp fifty million years old within one hundred yards of the entrance to the cave. Exciting that it should be on what is now the top of the mountain." 1/

F. Fire Management

1. Main Fires

As early as 1897, chronic fire danger in the woodlands flanking Jackson Hole had resulted in the creation of the Teton Forest Reserve. Before the reserve was established, forest fires had ravaged the area destroying much valuable timber and subjecting the watershed to soil erosion. One particularly severe fire in 1879* (the Snow King Fire) 2/ had so thoroughly swept the valley that by 1897 only very young trees could be found there. Army surveillance and fire-control units, operating under orders from a forest reserve administrator, seemed to offer the best means of safeguarding Jackson Hole's youthful timber. Federal jurisdiction in the reserve extended only to trees and waterways; wild game remained under state control. 3/ S. N. Leek in 1923 took a panoramic picture of the great change that took place on Snow King as to the growth of trees because of this fire.

Indians often set fires to burn off old grass and force game out of the timber. This was thought to have caused some of the big fires in the early part of the century.

The fire of 1879 is described by an old-timer as follows: "The Teton peaks were nearly covered; smoke was all over the country by evening, very dense. The sun went down in fiery redness--most destructive fire then known in the country. It swept over the greater part of Jackson Hole during the summer of 1879. It wasted thousands of acres of valuable timber, untold forage, and many wild animals perished the following winter from starvation. Countless others and birds were trapped by fire and smoke. The snows came and put it out. The scars from the gigantic fire took centuries to restore the growth." 4/

In 1900 the "Forty Mile Fire" on the Hoback burned all summer until a foot of snow fell and put it out. 5/

The Hart Lake Fire of 1910 (Wellner) burned about 3-4 million acres. The fire took about four sections of land around upper Hart Lake. 6/

*There is a difference on dates for the Snow King Fire but the consensus of opinion is 1897 according to Thomas Moran, the Jackson Hole Courier of March 25, 1965, Taylor Fire Relations Report, Teton National Park records, and the Jackson Hole Guide, 9/30/65, Floy Tonkin.
1/ Letter from J. D. Love, Geologist for the Department of Geology of the University of Wyoming. Mr. Love found this data on one of his Geological Surveys in Jackson Hole.

(Footnotes to preceeding page)

2/ Saylor, David, Jackson Hole, Wyoming and Robert Miller.

3/ Forest Service Files

4/ Van DeVeer, Old Time Stories, Archives, University of Wyoming.

5/ J. Taylor Report, Forest Service Files.

6/ Ibid.

Fire, Report, J. Taylor

1910	13 fire mentioned, 3 large	
1914	Many fires	
1919	306 fires	(Lindsley 1919)
1920-		
1930	33 small fires & Hart Lake, 18,756 acres	
1931	98 fires. 20,364 acres. Gravel Creek, 8,000 acres Fox Park	
1932	30 fires, 2049 acres.	
1933	39 fires, 541 acres.	
1935	56 fires, 320 acres	
1936	42 fires, 21 acres	
1937	42 fires, 3 acres	
1938	35 fires, 1,847 acres	
1940	64 fires, 20,613	

1919 was probably the worst fire year on record thus far. Look-outs were assigned following the bad fire year, and were instrumental in making quick attacks. Radios introduced in 1935 for use on fires. 1/

The Pacific-Mink Creek burn, July 8, 1931, started by campers on Gravel Creek. It burned 10,960 acres. Ranger Sunny Allan and his crew kept it out of Yellowstone Park. The fire was going east when a spark from the fire started it going north toward Yellowstone. 2/

The Mosquito Creek fire of 1934 started September 18th when a terrific wind storm spread new fires over a mile area. It burned through the 21st when rain and snow put it out. It burned from Coburn Creek to Fall Creek and from Munger west to various forks of drainage. 3/

In 1935, 800 men were sent to battle the large forest fire in the Fall Creek region as flames ran along a wide front. The terrific blaze was believed started by hunters. Flames and smoke were visible for many miles and scores of local residents visited the scene. Endangered were ranch buildings and hundreds of acres of heavy timber with a twelve mile front. The fire, fanned by a wind that at times was estimated at 40

1/ Taylor, J. Fire Report, Forest Service Files.

2/ Diary of Ranger K. C. Allan

3/ Forest Service Files

miles per hour, was reported to have destroyed two ranch buildings but the rumor was not verified. Workers were sent from CCC camps in the area and unemployed men in the valley were enlisted. Smoke from the fire hung over Jackson and South Park, blotting out the sun and making it impossible to see even the nearby mountains. Flames were visible from Jackson over the high mountain just south of town. Pushing eastward toward the Snake, it was reported that officials feared it might cross the river and continue to ravage thick forests. Supervisor McCain said the fire was caused by hunters or campers. 1/

Forest Service officials described the blaze as the worst in Jackson Hole in many years, and some said that this fire made the recent Mosquito Creek fire look like a bonfire. (The Mosquito Creek fire covered between 7,500 to 10,000 acres, all of which was in heavy timber.) 2/

Many hunters said that the region in which the blaze burned was in open country and part of it in the best hunting area of Jackson Hole. They believe, however, that the big game escaped the flames, as the animals sense the danger and move to other parts of the forest. 3/

Yellowstone Fire. Teton County's largest forest fire of 1935 was the worst blaze of the year. The fire covered more than 1,000 acres and about 150 CCC boys were taken by airplane to fight the large blaze on the headwaters of the Yellowstone River on the Teton Forest about 15 miles south of Yellowstone Park boundary. The CCC fire-fighters were taken from the Hatchet Ranch field by Pilot A. A. Bennett, who made more than a score of round-trips in his large plane to Hawk's Rest. The last 12 miles to the scene of the fire had to be made on foot or with pack outfits.

Pilot Bennett flew over the fire soon after it was reported and brought back word that it would be impossible to land firefighters nearer to the blaze than Hawk's Rest. It is believed this fire started on a trail and several pack outfits had been in the vicinity just before the fire. The blaze was in thickly timbered, mountainous country and the only access was by foot, horse or plane. 4/

1/ Account in the Jackson Hole Guide, 1935.

2/ Ibid.

3/ Ibid.

4/ Diary of K. C. and E. B. Allan.

Supervisor West called the 1940 fire season the worst in the history of the Teton National Forest. The largest and most remote fire was the Fox Park fire on the upper reaches of the South Fork of the Snake River and only a short distance from the boundary of Yellowstone Park. It was started by lightening (there were fourteen lightening fires reported in one day). It was the year of fires of this kind. Ogden officials came up and established headquarters at the old telephone cabin above the Moran Dam to give help due to the many fires. 1/

Jim Imeson, CCC foreman with 12 CCC boys went to a fire near the Flagg Ranch and Sunny Allan took a crew to go help him. They had the fire under control in a few days when they saw a smoke rising near Fox Park to the east. Sunny took six boys with him and left part of the crew on the Flagg Ranch fire. He had one pack horse and a radio.

They hiked to the fire, packing in their sleeping bags on their backs. Men kept coming in to Hawk's Rest. Jim Imeson called to report another fire and Sunny left to go on it taking part of his crew with him. Jim went back to the first fire. 2/

They got to Big Game Ridge at dark. Ranger Allan called Jackson and Bennett brought breakfast to the crew the next day. Camp was set at Fox Park meadows. Men kept coming to Hawk's Rest and then hiked to the fire, 50 men on the fire finally. No beds the first night. Bennett brought beds (20 at a time) and the CCC boys tried to catch them--when they hit they jumped 20 feet in the air. (Only enough beds for one third of the men the first trip so they were quickly snatched from each other.) Some curled up on the warm fire-bed to keep warm and caught bad colds. Sunny ordered 50 gallons of cough syrup from Jackson.

Seven fires were started by lightening about the same time on Ranger Allan's Buffalo District.

The Fox Park (Mink Creek Burn) joined the Gravel Creek fire on the north. 4000 acres were burned. Glade Creek and Huckleberry fires were at the same time and one in Berry Creek. 3/

The Gravel Creek Fire of August 1, 1963, started in the Teton Wilderness and burned 4,000 acres. Hot shot fire crews from Regions I and VI were detailed to Jackson. It was also a light-

1/ Diary of K. C. and E. B. Allan

2/ Ibid.

3/ Ibid.

ening fire. Sho' Ban Indian firefighters and a crew from Grand Teton National Park, plus helicopters, aerial tankers and tractors were used to halt the blaze. At the peak of the burning there were about 400 men on the line and 442 acres burned before control was established. This was the largest fire to occur in recent years. 1/

In 1964, after a fairly light fire season during the summer, the situation changed. The hunting season which opened September 10th, brought warming fires which were left unattended and during the heat of the day, took off into available fuel. On September 13th, many fires were reported, including one near the Supervisor's office, which started in the Gill Addition residential district, and spread into the Elk Refuge in the tall grass. 2/

Three smokejumpers were dropped into a fire at Crystal Creek on the Gros Ventre District and Spent two nights on that fire. 3/

There were two trespass fires on the Forest the summer of 1964; one in connection with the burning of right-of-way slash on the Gros Ventre Road, and the other on a logging operation where overheated equipment caused a fire to break out. There was also a fairly large fire on Bull Creek.

During the past five years (1973 included) sixteen fires have occurred on the Spread Creek-Grovont Unit. Fourteen were caused by lightening and two were man-caused. The largest fire to occur in the past ten years was contained at 179 acres. An analysis of the past ten years indicates a trend toward an increasing number of fire starts.

Fuel build-up has accelerated in some areas since the massive bark beetle epidemic in lodgepole pine stands during the early mid-1960's. This factor, plus the general buildup that has gradually occurred, resulted from better fire protection, and indicates a trend toward more and larger fires. 4/

2. Detection and Suppression Methods

Lookout stations: Nate Davis in A. C. McCain's day was depended on for spotting and reporting fires as the lookout from his ranch which commanded a wide view of the forest west of Snake River. The Forest Service depended upon him. Later, five lookout stations were maintained on the Teton Forest. 5/

1/ Forest Service Files

2/ Ibid.

3/ Ibid.

4/ Ibid.

5/ Ibid.

- a. Monument Ridge
- b. Huckleberry Mountain
- c. Deer Creek
- d. Munger Mountain
- e. Baldy Mountain
- f. Signal Mountain
- g. Blacktail Butte

Signal Mountain and Blacktail Butte were originally maintained before the Teton National Park took them over. Mr. Ben Sheffield was the first lookout on Signal Mountain and his station was a mere tent shelter. He served as lookout man from the late thirties to the early forties. At first he only had a tent there and spent the nights in it during the fire danger season. (Figure 29)⁵⁹

Major changes have been made over the years in the methods of suppressing fires. The pulaski fire tool, half mattock and half axe -- still the basic weapon of the firefighter -- was the product of an early-day ranger, Edward C. "Big Ed" Pulaski, who distinguished himself in the great forest fire of 1910 in Idaho. He saved his crew by forcing them to remain in a cave while the blaze swept over, and in the process lost most of his own eyesight. (This item from the Southern Lumberman, issue of August 15, 1971 by Cliff Owsley.)

Methods of delivery service to fires has been expanded from the pack outfit transportation, which was the main source, to the modern method of cargo planes and parachuting supplies to fires. In use now is the cargo-carrying helicopter, which can deliver items on the fire line into the main camp. The smoke jumper is limited by weather conditions. Although the pick and shovel method by ground crews is still used, fires are now being partially controlled and slowed up by a retardant delivered by air tankers, helicopters, or through ground tankers. Water pumps and ground water pumper units also help in checking a fire and putting it out. Fuel breaks are located to limit fire spread, and trenching and back-firing.

The U. S. Meteorologists at the Boise Inter-Agency Fire Center provide daily fire weather briefings and fire weather forecasts to the Bureau of Land Management and Forest Service fire experts. These three agencies combine their talents and resources to protect all lands in the west from wildfire. 1/

3. Uncontrolled fire results

- a. Created big game ranges in North Idaho and the northern Rockies.
- b. A disaster to trees, watersheds but quickly vegetated by shrubs -- now forage.
- c. Wildlife not seriously considered in big game habitat --

1/ Forest Service Files.

- controlled burning used to improve wildlife habitat.
- d. It may induce germination.
 - e. Kills many wild animals and birds.
 - f. Detracts for many years in the scenery and leaves scars on the mountain area.

In the early 1970's, prescribed burns were to be carried out in the Jackson Hole area. These burns were applications of a comparatively young science known as "fire ecology". The Forest Service and Teton National Park professed a realization that fire is a natural part of the environment and that total suppression changed the composition of our environment. Such a theory represented a significant departure from the traditional Forest Service dogma which held that fires were something to be fought rather than encouraged. George Gruell, wildlife biologist with the Forest Service and Lloyd Loope, biologist with Grand Teton National Park, conducted research on prescribed burns such as the first one on Blacktail Butte in 1972. Their research lead them to the hypothesis that fire is natural; and their work yielded data that suggested the mosaic pattern of healthy forests might depend on it.

Prior to the advent of forest protection by man, the natural ecosystem perpetuated a diverse plant community through the natural forces of fire, insects and disease. While controls over insects and disease have been limited, that of fire control has been quite successful. The more evident long term plant successional change resulting from fire control has been the increase in the occurrence of coniferous trees, particularly subalpine fir. Where natural regeneration takes place it is annually browsed back by wintering ungulates. The studies have suggested that wildfire passing through a decadent aspen stand will kill the remaining older trees and stimulate a profusion of new aspen sprouts from the root systems. Where this has occurred by accidental fires, the profusion of aspen sprouting successfully regenerated the stand despite heavy browsing.

G. Recreation Management

During the past thirty-four or -five years, nation-wide attention has been directed toward the Jackson's Hole Region by the grandeur of the scenic attractions, wealth of wildlife, profusion of plant life, and the general attractiveness of a wilderness area of relatively easy access yet scarcely touched by industrial undertakings.

With the advent of well improved highways into the region, the influx of people seeking relaxation out of doors has increased to such an extent that the tourist business has become the leading business. The welfare of the Jackson Hole Valley is so definitely tied with the Teton National Forest and the two form such a definite single complete unit, that it is impossible, in any consideration, to attempt to separate them. 1/

1/ Forest Service Files.

The tourist business is attracted to this area due to the valley being the only gateway to Grand Teton National Park and one of the more popular gateways to Yellowstone National Park. It is inevitable that a great many persons will continue to visit the area each year. Principle reasons for people stopping in the Jackson Hole area for a period of time are its summer climate, fishing, hunting, scenery, and the spirit of the "Old West" which has been quite successfully retained in the community.

The home of the world's largest elk herd is on the Teton National Forest and in Jackson Hole. In addition to elk, other big game animals in abundance include deer, moose, mountain sheep, and bear. In this area is the only hunting season for moose anywhere within the Continental United States at present and one of the very few places where mountain sheep may be hunted. Several hundred miles of good trout fishing streams are found within the forest as well as numerous lakes well stocked with fish. It is generally conceded that fishing is one of the greatest single drawing powers to this area from the standpoint of money spent.

1. Tourist Travel

From the records obtained from Yellowstone National Park which show the number of automobiles and persons entering and leaving through the south entrance of the park, a very reliable index of the travel through Jackson Hole was obtained. The south entrance travel records were supplemented by traffic counts made by the Forest Service at the junction of U.S. Highways numbers 187 and 287 about one mile north of Moran. These records were obtained in 1933 and 1938. The peak season are the months of July and August. 1/

Estimated Recreation Business in Jackson Hole 1933, 1938, 1945

<u>Year</u>	<u>No. of Visitors</u> <u>Man Days</u>	<u>Amount of</u> <u>Expenditures</u>
1933 (1929-33 av.)	82,753	\$521,943.00
1938	170,000	\$1,553,239.00
1945	363,893	\$2,295,209.00

2. Classification of Visitors

In an effort to determine the type of recreational facilities needed and the number of accommodations needed, the visitors to Jackson Hole have been classified. This classification was obtained from a composite estimate of several forest officers, resort owners, service station attendants, and other local business men.

a. Vacationists: These visitors spending several days in Jackson

Hole for the principal purpose of enjoying the scenery and climate. This class constitutes 15% of the total number of visitors.

- b. Fishermen: Those visitors spending several days in Jackson Hole for the principal purpose of enjoying the fishing, either in the lakes or in the streams. This class constitutes 20% of the total number of visitors.
 - c. Tourists: Those visitors traveling through Jackson Hole enroute to or from Yellowstone National Park or other points. This class constitutes 56% of the total number.
 - d. Hunters: Those visitors spending several days in Jackson Hole for the principal purpose of enjoying the hunting. This class constitutes 3% of the total.
 - e. Summer Home Owners and Guests: Those visitors who have legal residence out of the county, but who spend several weeks in Jackson Hole at their own summer homes or at the summer homes of friends; they are particularly interested in the fishing, scenery and climate. This class constitutes 2% of the total number.
 - f. Dudes: Those visitors spending several weeks in Jackson Hole at Dude Ranches where their activities and entertainment are supervised by the Dude Ranch operators; they are particularly interested in the scenery, horseback riding and Dude Ranch activities. This class constitutes 3% of the total number of visitors.
 - g. Primitive Area Visitors: Those visitors who may be placed in some other classification, but who spend several days traveling on horseback through the primitive areas to enjoy the naturalness of the undeveloped region. This class constitutes 3% of the total number.
 - h. Picnickers: Those visitors who may be placed in some other classification or who may be local residents and who spend a few hours in the forest areas for the particular purpose of picnicking. This class constitutes 5% of the number.
 - i. Organization Campers: Those visitors belonging to an organization group who spend several days in Jackson Hole to enjoy the scenery, fishing, boating, hiking and nature study under supervised direction. This class constitutes 2% of the total number of visitors.
3. Special Use Permits: By an act of Congress approved May 20th, 1862 "To Secure Homesteads for Actual Settlers on the Public Domain".

The first application for a special use permit at the Flagg Ranch site was made by Ed Sheffield on July 8, 1916. In 1916 there were 40 special use permits, 24 non-pay and 16 pay permits for a total of \$159.88. In 1931 the Flagg Ranch was under issued permit to Mr. Brannon, a newcomer.

The special use permit for Turpin Meadows was apparently first issued to Chester Simpson in 1930. It was issued to John S. Turner in 1935 and changed over to Reed and Bert Turner in 1941. There have been two others since then.

Eddie Markham and Herb Steingraber had the Flagg Ranch in the 1940's.

Other special use permits were issued for summer homes along the Jackson Lake shore a few miles from Moran and were later turned over to Teton National Park. Other special permits were issued for stores, horse concessions, resorts, boating and service stations, skiing areas and winter sports uses, easements, including water storage and transmission facilities, horse pastures, utility easement, outfitter hunting camps, and electronic sites.

4. Campgrounds: There are a number of campgrounds scattered around the Teton Forest. Over the years, the Forest Service found that campers do not like large campgrounds and a number of smaller ones were placed so as to be readily accessible to the traveling public. The public preferred campgrounds to be located near improved highways. The Forest Service has tried to locate them within one-fourth mile of the highways. (Note: a complete list of campgrounds is in the Appendix of this book.)

Recreation on forest land is managed so that it can best serve the steadily increasing numbers of Americans seeking relaxation in the outdoors. Attractions range from family picnic areas to remote trout streams -- to vast wilderness tracts. Much of the recreation is afforded by the trails, streams, woodlands, and natural environment of the forest. However, there are a wide range of facilities for camping, picnicking, boating, swimming, and winter sports sites. An extensive system of roads and trails is required to provide access to recreational sites and development. *1/

5. Dude Ranches after 1900: The trail of the summer vacationists had deviated during the last decade from the old familiar course to embrace vast areas in Wyoming and Montana. An invasion of eastern tourists, known as "dudes", had followed the opening of modern transportation to this beautiful country. Located in the mountainous regions of these two far western states, on the last frontier, are the dude ranches, in the mouths of the canyons, among the foothills,

1/ Forest Service Files.

* Tables of Comparative Statistics on Recreation Use, Appendix.

or in the clearings in the forest. These ranches are not pretentious places, but rustic and unique. Their popularity began in 1904 with the Eaton Brothers Dude Ranch at Wolf, Wyoming. Many of these ranches are or were situated in territory within the Teton Forest. Their Dude Ranchers' Association has its headquarters at Billings, Montana.

Wealthy sportsmen who packed into Jackson Hole before 1919, stayed at Merymere, Leek's Camp, or Sheffield's cabins, were so impressed with the beauty of the valley that some of them returned to build summer homes here. Owen Wister, who packed into the region in 1887, 1891, and 1893, was one of these. He returned in 1911 with his family and the following year built a two-story cabin on the present R Lazy S Ranch on the Moose-Wilson road. The JY started on Phelps Lake by Louis H. Joy and the Circle H, were among those of this period. The "dudes" were impressed with the "tall" tales they heard from natives and dude wranglers about the bygone days -- the trappers, the horse thieves, and bad men who had frequented Jackson Hole. It all added glamour to the beauty of the valley, the wildlife to be seen, the clean mountain air and the splendid hunting and fishing. The dude ranches found their applications reaching new highs and the venture more profitable than they had hoped.

The hey-day of the dude ranch business was from 1919-1940. Although Jackson Hole was isolated by poor roads and difficulty getting into it, hunting parties of wealthy and famous men came anyway. They had heard of the mountain paradise at the foot of the famous Teton Mountains and thus the dude ranch business was born.

The dudes who came to Jackson Hole in 1919 found the stony square a far cry from the present green park in Jackson, boxed in by log and false-front stores and stretches of board walks that echoed hollowly to the thump of high-heeled boots. They bought their necessities at the mercantile store of Roy and Frank Van Vleck or at Pap Deloney's general merchandise; their drugs at "Doc" Steele's; ate their lunch at "Ma" Reed's hotel and stopped for a drink at Rube Tuttle's saloon. 1/

The following is a list of dude ranches located in the Forest Service area. It was compiled from an early edition of the Union Pacific booklet, DUDE RANCHES OUT WEST. 2/

1/ The above from old newspapers, clippings and diaries over the years from the E. B. Allan collection.

2/ Union Pacific pamphlet, Dude Ranches Out West, no date.

- a. Bar BC Ranch, 18 miles from Jackson and 45 miles from Victor Idaho. It was started by Struthers Burt and Dr. Horace Carncross in 1910 and later run by the owners and directors, Struthers Burt and Irving F. Corse. They advertised hot water and portable tubs, a large swimming pool, excellent sanitation, its own garden, dairy, ice house and beef herd, with fresh fruit and vegetables served. It had 35 comfortable log cabins which accommodated 60 guests.
- b. Bar BC J-0 (Junior Outfit) three-quarters of a mile from the Bar BC and managed by DeWitt Dominick. It had accommodations for 22 boys, ages 13 to 18.
- c. Castle Rock Ranch, 14 miles from Jackson on Horse Creek.
- d. Crescent Lazy H, four miles south of Wilson and 24 miles from Victor, Idaho. Accommodations for 50 guests. Manager Edward G. Brown.
- e. Double Diamond L. Outfit. Located on the shore of Jenny Lake at the foot of the Grand Teton peaks. Manager, A. C. Lyon, Diamond L. This was not a dude ranch but a dude outfit, and was located mostly in Teton Park with pack trips into the Forest Service area.
- f. Double Diamond Ranch, 16 miles north of Jackson at the base of Grand Teton, between Cottonwood and Taggart Creeks, borders a portion of the Grand Teton National Park and includes 75 acres. Tent houses for 35 boys. Proprietors: J. S. Clark, JR., Frank Williams, and F.A. Truslow.
- g. Flying V. Ranch (later the Ramshorn) located 4 miles northeast of Kelly, Wyoming. Accommodations, heated cabins and floored tents with an attractive 11-room ranch house. It is a producing ranch with horses, cattle and fresh produce raised on the ranch. Manager, John F. Woodman, former Forest Ranger, bonded guide and his wife, Dolly, is a registered nurse. 1/ This ranch was homesteaded in the early 1900's by Grant Shinkle. Owners were Mickey Adams, Don Miller, Jack Woodman, Paul Petzoldt, E. G. Johnson, Greer Sugdin, Alvin Adams, and about 1954 Katy Starratt had a park lease on it for a dude ranch. She made many improvements and renamed it the Elbow after her previous ranch north of Teton Park. The first dude ranch operation was that

1/ Union Pacific pamphlet, Dude Ranches Out West, no date.

of Jack Woodman. While he owned it, there was a tragic fire in which his caretaker, his wife, the Eddie McPhersons were killed when the main house and some of the cabins were destroyed. 1/

- h. Gros Ventre Ranch, located on the south bank of Gros Ventre River across the valley from the Grand Teton, 18 miles from Jackson. Utmost comfort for 20 guests. David Abercrombie, manager, Kelly, Wyoming.
- i. Old Jackson Lake Lodge, two miles north of Moran, 23 miles south of Yellowstone Park and 18 miles north of Grand Teton National Park. (It was known as the famous Amoretti Inn in 1912 and its location was described as overlooking the east shore of Jackson Lake at the junction of the three roads to the southern entrance of Yellowstone Park.) It accommodated 125 persons in two and three-room cabins. 2/ (Figure 74)
- j. JY Ranch, on the south shore of Phelps Lake near Death Canyon, 21 miles northwest of Jackson, 14 miles north of Wilson and about 50 miles from the south entrance to Yellowstone Park. Accommodations for 60 persons in two and three-room cabins. Furnished dining room on the lake shore, central bathhouse, two large recreation lodges with another ranch, owned by the management, which supplies fresh eggs, vegetables, milk, meat, etc. Licenses, camping clothes, candy, tobacco, cigarettes and medicine sold at the ranch store. The JY is one of the oldest, largest, and most notable in Jackson Hole. It was started in 1908 by Lou Joy. Later it was owned and managed by H.S.A. Stewart. It now belongs to the Rockefeller family and is used as their summer home.
- k. Leek's Camp, located on the east shore of Jackson Lake, opposite Forellen Peak, on the main highway to Yellowstone Park. Furnished to suit the individual as to cabins. Owners and managers, S. N. Leek and his son Holly.
- l. SK Ranch, started by James S. Simpson, pioneer, bonded guide, owner of the SK Brand, conducted his own fishing, hunting and pack trips out of Turpin Meadows Lodge.
- m. STS Ranch, located on the South Fork of the Snake River, 2 miles by road and three-quarters of a mile by trail from Moose, Wyoming. Accommodations consist of main cabin, a bath house with a modern bathtub; a well equipped laundry and cabins to house 10 guests.

1/-2/ Jackson Hole Guide, "Dude Ranches of Jackson Hole", September 10, 1964.



Figure 74. Jackson Lake Lodge about 1930. Pictured is a group of Senator Wollcott's Senatorial Committee from Washington D. C. on their arrival from Yellowstone Park. Included in the photograph are Teton Park Superintendent Sam Woodring, Roger Toll, Superintendent of Yellowstone, Harold Fabian Head of the Rockefeller's Snake River Land Co., and Horace Albright, former Superintendent of Yellowstone Park.

Allan Collection



Figure 75. Teton Lodge, Moran, Wyoming, early 1930's.
Allan Collection.

- n. Teton Lodge, Moran, Wyoming; reached by auto stage from Victor, Idaho, Rock Springs, Wyoming, or via Yellowstone bus service from West Yellowstone, Montana. Accommodations, main lodge and separate cabins for 300 persons. Run by the Teton Lodge Co., Moran, Wyoming. (Fig. 75)
- o. White Grass Ranch located 20 miles from Jackson and 50 miles south of Yellowstone, contains 360 acres. Accommodates about 40 guests. Manager and owner, Harold R. Hammond and Tucker Bispham, Moose, Wyoming.
- p. Triangle X Ranch near the Snake River, east of the Grand Tetons, 12 miles south of Moran and 26 miles north of Jackson. Accommodations, large rustic headquarters, 6 log cabins for about 20 guests. Owner and manager John S. Turner. Mr. Turner later sold this ranch to his son John, who ran it to the present time and is now included in Teton National Park. (After John's death his wife, Louise, continued to run it.)
- q. Turpin Meadows Lodge, 20 miles east of Moran, Wyoming, on the Buffalo River, in the heart of the Jackson Hole hunting country. Accommodations for 25 people in rustic log cabins, dining room, store and service station. Manager Lester N. Leek. 1/ Dutch Henry built the first Turpin Meadow Store. Chester Simpson then leased it from the Forest Service and Lester Leek and Jimmy Simpson ran it and built the first cabins there. Simpson and Leek went broke during the depression when they got tangled up with a con-man in 1932, when the man brought a party of some 40 young dudes out from Iowa and Chicago. He absconded with the money he had collected and never was caught. They sold their investment to John S. Turner in 1933, and the Forest Service lease was transferred to him. 2/

Turpin Meadows and lodge was named after fiery-tempered Dick Turpin (1840-1919), Kentucky born soldier, Indian fighter, tie-cutter and miner who came to Jackson's Hole in 1888. After wintering at Turpin Meadows, he moved to a cabin on Turpin Creek. When he thought the valley was becoming too crowded, he located 10.5 miles up the Gros Ventre where he stayed until his last days. 3/

Suspicious at first of the phone installed in his cabin by the Forest Rangers, he soon saw its use in getting his groceries. As he always said, "By gawd,

1/ Union Pacific pamphlet, Dude Ranches Out West, no date.
2/-3/ Diary of E. B. Allan

partner, I can just holler down to Pap Deloney and he'll send it up!" 1/

John S. Turner and his sons, Burt and Reed, ran Turpin Meadows Lodge until recent years. John Turner, "Dad", started dude ranches for his sons and then left them in charge. He started with Triangle X. Ranch and then it was his son John's; Turpin Meadows he turned over to his sons Bert and Reed and finally acquired Beaver Tooth Neal's place, known as Boggy Bench,* which he ran until he retired. "Dad" Turner added much to his ranches with his "tall tales" and personality--a tamer of dudes and frontiers. 2/

- u. The Circle H Ranch, run by Harry Barker on the Moose-Wilson Road, which he bought in 1945. 3/
- v. The R Lazy S Ranch had several owners. The last was Robert McConaughay. It was located on the Moose-Wilson Road and it was here that Owen Wister built his two-story home. It was recently purchased by Teton National Park. 4/

Other dude ranches not noted in the Union Pacific Pamphlet are: The Moosehead Ranch at Elk, Wyoming, which was also a working ranch, owned and operated by Fred and Eva Topping; the Danny Ranch, owned and operated by Tony Grace, and is now the Jenny Lake Ranch in Teton Park (Mr. Grace sold out to the Rockefellers); the Flagg Ranch, located south of Yellowstone Park, a few miles from the South Entrance; Teton Valley Ranch, a few miles north of Kelly, Wyoming, was a ranch for boys, and Wendell Wilson owned and operated it; Signal Mountain Lodge, on the shores on Jackson Lake near Moran, on the old highway, Jackson-Moran, was a fishing lodge; the Square G, Jenny Lake, Wyoming had a number of rustic cabins with a main dining room and lounge, and its dudes usually stayed all season and returned year after year. It was owned and operated by the Albert Gabbeyes. It was sold to the Rockefellers. 5/

"At the same time wealthy easterners were establishing ranches in Jackson Hole as summer places: the C. D. Huylers at the Bear Paw which was later a dude ranch run

1/ Diary of E. B. Allan

2/ Ibid.

3/ Ibid.

4/ Ibid.

5/ Ibid.

* Also known as Buffalo River Ranch.

by them; "Cissie" Patterson whose ranch was known as "the Countess's Place", since she was the Countess Gizycka when she came to Jackson Hole; Ruth Hanna McCormick at the Bar Double R; a cooperative group under Spiers and Ressler at the R Lazy S; Mrs. Charles de Rhame at the JDR Ranch; another cooperative group under Struthers Burt at the Three Rivers Ranch above Moran and others. 1/ Some of the above were later changed to dude ranches as new owners took over or the old owners went into the business."

The "Dude Ranch" is not an expression that carries a clearcut meaning to everyone, for a dude ranch is neither a summer hotel nor a farm where dudes "ranch". Mrs. William Wells claims that the word "dude" was generally used long before 1900. When the Wells first came to Jackson Hole in 1893 a few of the settlers got their winter's "grub stake" even then, by taking an outside hunter in the fall and such a man was always referred to as "the dude". * 2/ Hence a ranch that did this for a business was known as a "dude ranch".

In the west every farm is a ranch and they varied in size from the small ranch to five or ten thousand acres, some of the stock and grain ranches are even larger. Most of the ranches are in settings of appealing beauty with mountains, lakes, and a stream in their yards, or close by. Their hospitality is far more genuine, spontaneous and personal than that of an ordinary ranch.

Many eastern families used to spend their vacations at these ranches, coming back year after year for most of the summer. Riding western saddles, hiking, fishing and hunting in the real western outdoors. Visitors or guests at the ranches are entertained. The rancher is known as a "dude" wrangler. He, his cowboys, and the rest of his business associates are the "outfit".

Each ranch had its "brand", which is a letter, insignia, or often the initials of the owner. It is a mark which is branded or burned into all the stock on the ranch. These brands were first used on all stock on the ranch. It also served as the trade mark of each particular dude ranch.

1/ Hayden, Betty, From Trapper to Trader, page 41.

* This article, The Gros Ventre Lodge, Wyoming's First Dude Ranch, was an historic article describing what may have been Wyoming's first dude ranch is reprinted from the Wyoming Wildlife, Sept. 1952. Lester Bagley was then State Game and Fish Commissioner for Wyoming.

2/ Bagley, Lester and Harpower, James K., Wyoming's First Dude Ranch, The Gros Ventre Lodge, (Forest Service files) p. 11

The dude ranches have been gradually dying out as they have been bought up by Grand Teton National Park and used for other purposes. There are only a few of them left and each year they become less.

6. Skiing and the Development of Snow King

Skiing in Jackson Hole was not always a sport. It was a means of transportation in the early days. When a person wanted to go some place -- for supplies, to visit, to hunt -- he put on his homemade skis and went. The snow was too deep for travel on horseback and sleigh. The homemade skis had to have something to keep them attached to the wearer's foot. This was solved by " housings", a sort of boot attached to the ski instead of the wearer, into which the skier put his feet, clothed in heavy homeknit wool socks. Commercial wax was a luxury seldom employed. Elk tallow and pitch from the pines could be melted together to form a very good wax. The wax was applied with a hot iron. The skier also carried "climbers" with him for steep hills. These were strips of elk hide with the hair on and were buckled or tied under the skis in the middle part with the hair pointing back. Usually the hair side was trimmed in crosswise fashion for better traction.

Ski poles as they are now known were not known then. The skier carried a long pole such as a sapling which he could use as a rudder when traveling downhill, or as an oar to propel himself on level or uphill stretches. He would also ride it on steep hills.

During the winter of 1925-26, Mike O'Neal transferred to the local Forest Service. He brought store-made skis and his own invention for making bindings. He was assisted by C. H. Brown, blacksmith, who shaped irons that encased the shoe soles with a strap across the top and around the heel. Mike used the large ends of two bamboo fishing poles, with pointed irons shaped by Brown, and ladies embroidery hoops criss-crossed by riveted leather straps. Mike was one of the earliest skiers in Jackson Hole to use modern skiing methods and it is reported that he built a ski jump, probably the first, on Snow King. 1/

In 1933, the town hill was called the Ruth Hanna Simms Ski Hill to honor a wealthy valley resident, Ruth Hanna McCormick Simms, who donated the money to the Jackson Winter Sports Association to build a ski jump. 2/

1/ Teton Annual Magazine, Vol 6, 1973-74. Page 22 & 23.

2/ Ibid. Page 24.

In 1935 and 1936, the Teton Forest Service had the CCC's build a horse and hiking trail to the top of Snow King and erect a small shelter on top. This trail turned into the first ski run on the mountain. The following year the Jackson Ski Club was formed and sponsored its first ski meet consisting of a ski jump and downhill run. The mountain at that time was covered with second growth timber which had sprung up following a fire in 1879 that had burned the entire Cache Creek Ridge. 1/

The Engen brothers, Alf and Sverre, one winter in the thirties came to Jackson to put on a jumping exhibition which was presented by a Jackson businessman, George Lamb. The Engens drove to the Idaho side of Teton Pass and got a ride to the top on the mail sleigh and then skied down into the Jackson Hole valley. On their return trip they were flown in an early model plane by A. A. Bennett. 2/

In 1939 four men from the Hoback Canyon, Arthur "Banty" Bowlsby, and the three Hicks brothers, Sam, Ed and Joe, put on a ski exhibition in Sun Valley, which made a big hit. They were then known as the Hoback Boys. They skied with a big, long pole to steer with and had very long homemade skis. Instead of bindings, they had "housings" which they had made by using a block of wood cut the approximate shape and size of the foot. Then a strip of belting (rubber or leather) about five inches wide that was carefully cut and shaped into a rude semblance of a shoe, laced with leather shoestrings. Next a canvas sack or legging was sewed to the top of the "shoe", long enough to reach to just below their knees and tied around the leg at the top to keep the snow out. They wore cowboy clothes complete with hats. They skied very well and did tricks on skis and jumped through a firey hoop. Later they gave the same demonstration on Snow King. 3/

The name of the hill lost its lady-like name between 1932-1938 reportedly due to Dr. and Mrs. Naegeli, both practicing dentists in Jackson and members of the new ski club, who suggested the town hill be called Snow King. 4/

Fred Brown, the first president of the Jackson Ski Club, was one of the foremost skiers in the area then. He owned the Teton Pass Ranch and his father the Crescent H Ranch. Fred skied places where no one else had skied, even to the present time. He toured the country behind the Tetons, from Teton Pass to the Yellowstone boundary and from Teton Pass to the Snake River. He also gave ski lessons to the local citizens. 5/

1/-5/ The Teton Annual Magazine, Volume 6, 1973-74.

With the growing interest in skiing, some of the people of the town were talking about getting an uphill facility. The next year, 1939, the Jackson Hole Club, a chamber of commerce type of organization, called for bids for an uphill facility. Neil Rafferty, an early skier, had seen a tow near Salt Lake City similar to the one that could be built in Jackson. He had an architect in Moran draw up a design or layout of it. Neal presented this plan to a group of citizens who were impressed and said they would give him a lease. They had a lift by the winter of 1939 and 1940. The hill wasn't groomed as it is now and stumps and rocks were sticking out all over it. 1/

A new ranger, Victor Stokes, at the Jackson Lake Ranger Station, had come in and started to train anyone interested in the art of the snowplow technique. Neal Rafferty and Jim Braman were among his first pupils. It started Neal and Jim in being interested in real skiing.

The cable for the first tow was bought used in Casper, Wyoming from an oil drilling outfit for \$500 for 4,000 feet. The lift consisted mainly of the cable and an old Ford tracer to turn the cable. People were towed uphill by holding onto a stick at the end of a rope which they clamped onto the cable with a wrench that was left at the top of the hill by the skier. 2/

The coming of Scandinavians and Europeans into this country brought a new concept of skiing, since it had been perfected in those countries before it had here.

In 1939, a set of house logs was purchased and set on rocks as the start of the present ski shelter. These fell down during the first winter so a basement was dug and material for the foundation was obtained from the old CCC camp on Cliff Creek. Local residents turned out to help lay the foundation, and later build the shelter. 3/

Two leases were obtained, one from the town and one from the Forest Service. The lower third of the mountain is on city owned land, the upper two-thirds on National Forest land. 4/

The rope tow served the skiers until 1946 when a single chair lift was built. It was constructed from old mine tram parts from a Colorado mine. In the intervening years

1/ - 3/ Teton Annual Magazine, Vol. 6, 1973-74.

4/ Forest Service Files

it has been improved, and has had an enviable safety and performance record during its years of operation. The ski season runs from Christmas until April 1st. The ski lift is operated in the summer as well as winter. An outstanding view of all of Jackson Hole is provided from the top of Snow King Mountain. The summer business is usually longer than the winter time use of the lift. The unique location -- practically in town -- makes an ideal family and children's hill. An excellent ski school is included in the permit. The first ski school was started by Chuck Helm in 1943. 1/

The Ski Shelter at the foot of Snow King has an interesting history. Contrary to general belief it was not originally built for a ski shelter but for a youth center in the spring of 1941. A group of high school students organized to raise money to build a recreation center for young people and their parents helped to keep their children out of bars in town and give them a place to go. The children worked at any job they could get to raise money but only had \$400 on the estimated \$5,000 it would cost. Mr. and Mrs. C. D. Huyler, who owned the Bear Paw Ranch, gave a barbecue which started the contributions coming into a fund for the Ski Shelter. The mayor and town council donated the site, seven and a half acres costing \$2,500 were bought by the town. A horseshoe court, tennis court and football field were planned for the youth plus swings and playground equipment for the smaller ones. Things slowed down during the war but the Rotary Club took an interest in the project, and the Ski Club entered the scene. Many benefits were given to raise money; the Forest Service trucks were donated for use in hauling; high school children and adults donated their labor, especially on Sundays and the building began to take shape. On April 5, 1944, the building was dedicated. Since the Ski Club had taken an active part, it was called the Ski Shelter. 2/

Time marched on, and along about 1949, the Rockefeller family, through the Jackson Hole Preserve, donated \$2,500 toward the building. Mrs. Elena Hunt gave the main room a beautiful fireplace as a memorial to her daughter Georgene. The basement room was finished off for a Boy Scout room, and another fine fireplace was built in it by Dr. and Mrs. D. G. Macleod in memory of their son Robert, who was killed in a snowslide on Teton Pass. It

1/ Forest Service Files.

2/ Jackson Hole Guide, Feb. 24, 1966, "Teton County Has Colorful Past".

became a community center. Since then more improvements have been added, and it is now an adequate shelter for many things. 1/

With so many more skiers on the hill, ski patrolmen were needed. In 1949 the patrolmen weren't up to the Standard Red Cross for dealing with injuries on the mountain. Dr. MacLeod gave a course in first aid with splinting and rescue work stressed. The patrolmen gradually became better and better. 2/

Avalanche control followed in a year or so. Mr. A. K. Wogensen, Forest Service ranger, and sometimes a ski patrolman, did this work. They would blast the cornice off the top of Snow King to the east by using ditching dynamite and electric detonators. The Forest Service was in charge the first years. This often kept snow slides from running. Ranger Wogensen and his crew also instigated a rescue plan for recovering skiers under avalanches. They used poles placed in three foot intervals with binder twine strung between the poles, and would probe this area with two men keeping the prod lines up. They would do one side and then the other and finally the middle and as they worked the hill, they left the poles up so they could tell where they had left off. They used wall conduit pipes for probes and finally had a whole bundle of them that were stored in the Snow King chairlift warehouse. They probed each square foot of the avalanche path. 3/

After the ski season was over, Wogensen and his crew went on the south side of Snow King at Leek's Canyon and built contour trenches with a bulldozer in 1958 or '59. Here they planted trees -- lodgepole pine, Douglas-fir, yellow pine, Russian oak and wild plum, all the trees they could get from Mr. Dalquist. After a season or two, they found that the Douglas-fir and lodgepole pine were the logical ones to use. They were planted in four foot intervals as a windbreak to catch the snow. These trees are now the height of a room. They were maintenance barriers at first. The Boy Scouts took over the replacement of trees there later. 4/

1/ Jackson Hole Guide, Feb. 24, 1966, "Teton County has Colorful Past".

2/ Ibid.

3/ A. K. Wogensen interview on tape, Jan. 31, 1974.

4/ Ibid.

A skier named Stanley who came in to ski from the mid-west was one who was buried under a snowslide. He was skiing Leek's Canyon from the top of Snow King when he triggered a slide which covered him. It took two days with the prodding method before they found him (the first known avalanche fatality). 1/

They learned to get food to the workers and planned it for every four hours. 2/

Avalanche control techniques got better and better and finally became the regular procedure all over the Intermountain West from the beginning in Jackson Hole. 3/

About 1960, the Forest Service turned over the avalanche and rescue work to Neil Rafferty and the Ski Corporation. 4/

Many advances have been made concerning the forecasting of avalanches such as depth hoar, terrain analysis, slope stability, temperature, snow intensity and so on. The Forest Service at Teton Village has one of the more sophisticated ski area weather and snow recording stations on the continent with Gary Poulson in charge as of 1973. "Despite all this impressive scientific knowledge, experts rely heavily on an amorphous 'feel' for snow conditions" and still use the same probe line technique developed in the early 1950's. Today trained dogs and the Pieps electronic homing device have been added in rescue work. It takes many years of experience to develop an awareness of the snow conditions and its dangers. 5/

Within the last few months of 1974 the lower portion of the ski hill was added to the National Forest by Congress to facilitate a land exchange with the city of Jackson. An exchange is proposed which would result in the Forest Service acquiring the lower portion of the ski hill in exchange for a flat piece of land about a mile to the west which the city desires to acquire for a cemetery. The exchange is highly desirable, and should be consummated within the near future. 6/

The corporation just recently changed hands. The new corporation plans to continue to operate a "family type" area. They are presently preparing a master plan, which

1/ A. D. Wogensen, interview on tape, Jan. 31, 1974

2/-4/ Ibid.

5/ Jackson Hole News, Jan. 16, 1975, "Avalanche Course" by Richard Murphy; Teton Village Extra, Jan.-Feb. 1975, "Two Sides of Avalanches".

6/ Forest Service Files.

contemplates a new lift to replace the present one in a few years, and some minor modifications on runs. 1/

In February of 1964, it was announced that the biggest ski area in the U.S.A. would be open in 1965. The vast ski development called Teton Village was opened in June of 1965. A special-use permit was granted to the corporation by the United States Forest Service. The area involved in the permit encompassed between five and six square miles of Teton National Forest land, located on the flanks of the historic and much photographed Teton Mountain Range. Here there is a two and a half mile tramway and several chair lifts. The jig-back tramway will carry in its two 63 passenger cabins, skiers to a 10,430-foot peak, thereby offering the longest single vertical drop of any developed ski area in the U. S. or Canada today. The complete alpine town at the base of the ski runs includes homesites, commercial chalets, lodges, restaurants, ski shops, gift shops, and other businesses, and is located on 165 acres of privately owned land on the valley floor. 2/ Teton Village has increased the amount of skiers and tourists into the valley both in winter and summer.

"Snow Avalanches", an illustrated 84-page handbook on modern methods of avalanche forecasting and control, was distributed by the Forest Service during 1961. Employees of the Intermountain Region helped write and compile facts for the publication. Administered by the Wasatch National Forest, Alta is the central collecting station for avalanche data, and was the first of its kind established. 3/

7. Wilderness System

In 1924, the Forest Service set aside the first wilderness area in the United States; it set aside others later, and today there are about 10 million acres in primitive area in this system, plus about 4 million acres of primitive areas. No roads, mass recreation, or timber cutting is permitted on such areas.

A major forest attraction is the Teton Wilderness, 563,500 acres (885 square miles) of back country accessible only on foot or horseback. Each season over 8,000 visitors spend approximately eight days apiece on the trails

1/ Forest Service Files.

2/ Ibid.

3/ "Forest Ranger at Work", The 1961 Yearbook, U.S. Department of Agriculture, F. S. Intermountain Region, page 28.

of this hinterland, set aside for the preservation of primitive conditions. (Figure 77)

The Wilderness offers views of coniferous timber, waterfalls, wide meadows, lakes and streams (providing excellent fishing) and broad valleys. Along the Continental Divide the visitor sees steep canyons and barren alpine country where snowfall is not uncommon in July. The highest point on the Teton National Forest is Yount's Peak, 12,165 feet, at the head of the Yellowstone River.

Highlights of a wilderness trip might include a look at Yellowstone Meadow, a big game spot; Two Ocean Pass, where Two Ocean Creek divides and sends one stream to the Pacific Ocean and the other to the Atlantic. Another feature is the falls on the South Fork of the Buffalo River, dropping over 100 feet into a canyon not over 50 feet wide. (Figure 78)

8. Multiple Use-Sustained Yield Act of 1960.

On June 12, 1960, Congress passed the Multiple Use Act -- a mandate for management of the National Forests. This one-page Act, gives directions under which the Forest Service and the U. S. Department of Agriculture manages the National Forests for outdoor recreation, range, timber, watershed, and wildlife and fish purposes. It also recognized wilderness as a National Forest resource.

9. The National Environmental Policy Act of 1969 (NEPA)

This is the most recent and far reaching legislation to affect National Forest System management. It states its purpose: "To declare a National Policy which will encourage productivity and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological system and natural resources important to the Nation; and to establish a Council on Environmental Quality."

The Teton Forest is a land of many uses and manages all renewable resources (recreation, forage, timber, water, and wildlife habitat) for sustained and harmonious use so that they are utilized in the combination that will best meet the needs of all the American people. This is achieved by giving consideration to their relative values



Figure 77

A major Forest attraction is the Teton Wilderness, 563,500 acres (885 square miles) of back country accessible only on foot or horseback. Each season over 8,000 visitors spend approximately eight days each on the trails of this hinterland, set aside for the preservation of primitive conditions.

Forest Service Photo.

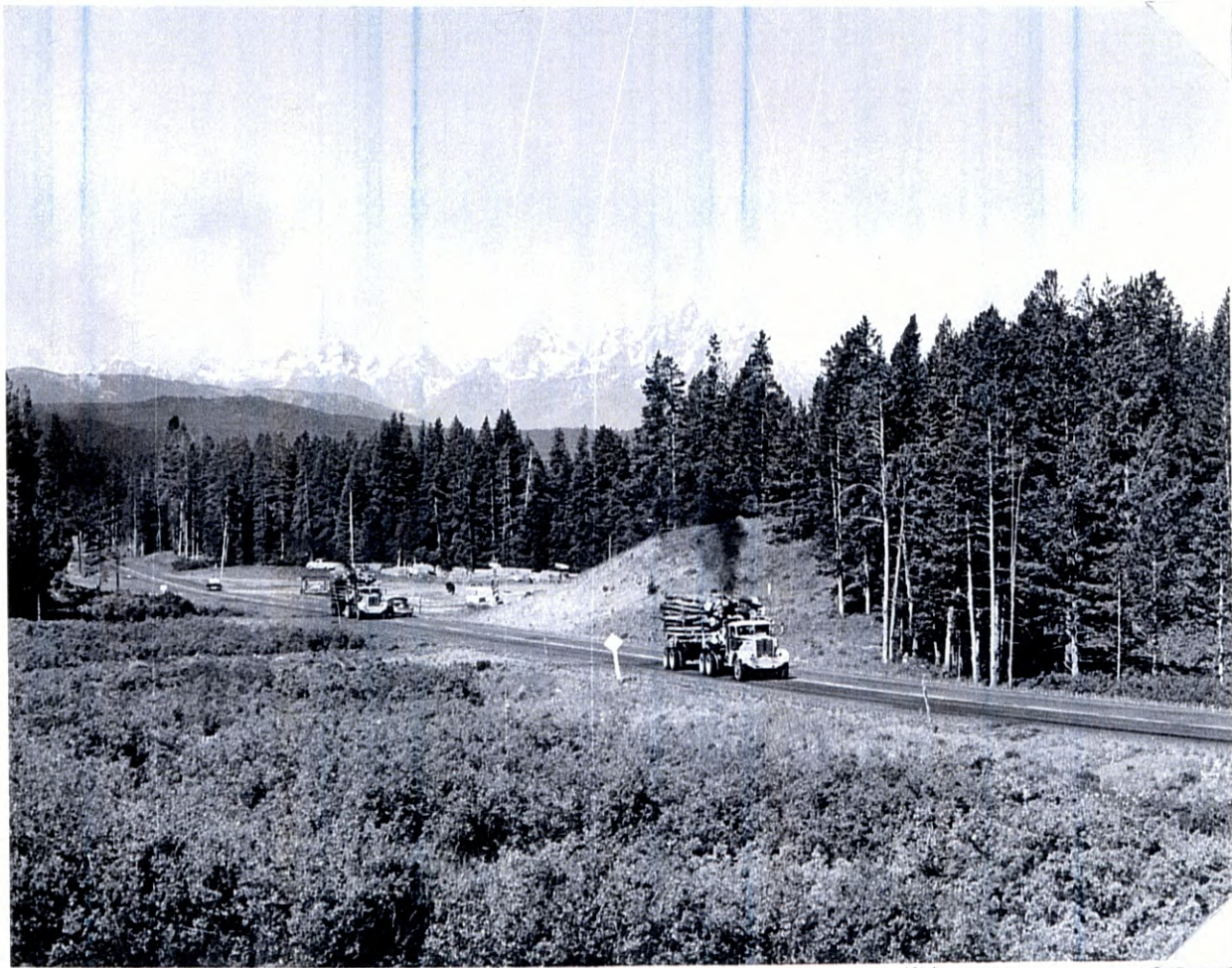


Figure 76

The timber of the Teton National Forest contributes materially to the aesthetics of this country. Aspen, Engelmann spruce, Douglas fir, alpine fir, whitebark and limber pine, and lodgepole pine provide a pleasing backdrop for the photographer, protection to vital watersheds, shade for campgrounds, and homes for large and small animals and birds.

Lodgepole pine is the principal commercial tree species, and approximately twenty million board feet are cut annually.

Because of an epidemic of mountain pine beetle, timber sales are made in stricken areas as a control measure. Most timber is sold to local sawmills.

Forest Service Photo.

and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.

The Teton National Forest is administered under the policy that the greatest good is derived from an area when it furnishes every use possible without destroying the resources. Under such a policy the Forest has remained an integral part of the lives of all those who live in Jackson Hole and its social and economic value to others has steadily increased. 1/

1/ This and the preceding page from Forest Service files.

PART VI
MISCELLANEOUS

A. Firsts in Jackson Hole

1. The first known trappers in Jackson Hole before 1884 were James Goodland and Dave Brackenbridge.
2. As early as 1865, Tim Hibbard came to Jackson Hole and camped all one winter near the east side of the present Snake River bridge, which was called Hibbard Lake and Floy, now the Ely Ranch. The lake has been drained and the bed is now farmed. There were a great many buffalo heads and quite a number of arrowheads, chipped out of flint by the Indians who had hunted buffalo in the early days, lying about the flats.
3. At the mouth of Flat Creek, now the Scott Ranch, members of the Hudson Bay Company used this spot as headquarters for camp supplies.
4. The first settlers came in the year of 1884. John Carnes, one of the group had an Indian wife.
5. About 1885 some early trappers, namely Lorenzo Bebee and Carrol Thompson, built a round log cabin on the later Schofield Ranch.
6. In 1885 Robert Miller settled in Jackson Hole.
7. In 1886, Michell Dipwater, John Dicks, "Shorty" Hoskins and "Sandy" Marshal stayed in the valley.
8. In 1887 William Crawford, John Cherry, Dick Turpin (whose ranch was in Gros Ventre canyon), and John Jackson settled in the valley.
9. In 1888 there were eighteen people living in Jackson Hole, seventeen men and the Indian wife of John Carnes.
10. In 1889 S. N. Leek, Sellar Cheney, Brig Adams, Ed Blair, Irvin Wilson and Sylvester Wilson settled here. At that time there were sixty-four people in the valley.
11. The first homestead was in 1884.
12. The first post office was called Marysvale after its first postmistress, Mrs. Mary White, and was established in 1892.
13. W. O. Owen made the first survey of Jackson Hole in the year 1892 and 1893 with a group of associates.
14. The first cattle, about 100 head, were brought into the valley in 1883 and were wintered on wild hay.

15. The first families to come over Teton Pass was in the fall of 1889 which brought the population up to 64. The caravan was led by Sylvester Wilson and consisted of six covered wagons.
16. The first white child to be born in the valley, Effie Wilson, now Mrs. Earl Simpson, was March 17, 1891, and Howard Cheney, the first boy, was born June 20, 1891.
17. John Holland had the first garden in the year 1891.
18. The first hayseed raised in the country was gathered by the first school teacher, Mr. Henry Johnson, from hay grown on Ervin Wilson's ranch.
19. The first wagon was brought into Jackson Hole by John Carnes and Holland via Bacon Creek and down the Gros Ventre River in the year 1884. The first wagon driven over Teton Pass belonged to R. E. Miller. It was brought over in 1885. The first buggy or buckboard was brought over the Pass in 1894.
20. The first sawmill was a water-power one brought into Jackson Hole from Market Lake, Idaho in 1893 by S. N. Leek. John Wilson assisted him in hauling it in. Ed Blair helped set it up on Mill Creek four miles up Mosquito Creek and four miles from Wilson. The location was on the west side of Snake River.
21. S. N. Leek had the first victrola or gramophone. It was presented to him by the editor of the Recreation magazine, as a gift for his writings about Jackson Hole.
22. The first riding plow was brought into the valley by Sylvester Wilson in 1886.
23. The first stove was brought into Jackson on a packhorse by R. E. Miller.
24. The first blacksmith shop was run by L. C. Edmonson at Wilson and later a shop was built by Link Imeson at Jackson. Those who ran the shop were James Vogel, Otto Lumbeck and his father, a Mr. Smith. Later the shop was run by Brown and Wood.
25. William Menor had the first commercial enterprise, a ferry boat across the Snake River. He installed it in 1895 about 14 miles above where the large steel bridge is now located. The ferry was still being operated as of 1924. Teton National Park restored it later and it is being operated for summer visitors as an historical place.
26. The first drugstore was built by E. C. Steele with part of the building used as his home.

27. The first hotel, run by Mrs. John Anderson, located in Jackson, was a house on Antelope Flats. Later this was moved to the present site of the Jackson Hotel in the year 1901. It was later covered with bricks.
28. The first Latter Day Saint's Church was built in 1905 by Parker and Mullins, carpenters. The cost of the building was \$3,000. About \$2,500 was donated by the fourteen Mormon families living in the valley at that time.
29. The first radio was brought into Jackson by Harold Sheard in 1919.
30. The first brickyard, a lime kiln just west of the present town of Jackson, was operated by Jim Parker and Mullen. They made the bricks for the Jackson buildings.
31. The first attempt at a dude ranch was made by Harvey K. Glidden, step-father of actress Maude Adams. S. N. Leek claimed to have had the first dude ranch in Jackson's Hole, a tent camp, where later he built log cabins at Leek's Lodge on the shore of Jackson Lake above Moran to the north.
32. S. N. Leek had the first grain binder and the first movie projector in Jackson's Hole. He made the first moving pictures and showed them on his projector in 1919.
33. The townsite of Jackson was laid out in 1897. Mrs. Robert Miller purchased land from John Simpson for the townsite. There were only four buildings in the townsite: Foster's Saloon, Deloney's Store, the Clubhouse, and Anderson's Hotel and post office.
34. The first brick building was built by the Latter Day Saints in 1905 and was their church.
35. In 1916 the first hospital was started.
36. The first appropriation made by the government for administration of Teton Forest was July 1, 1898. Charles Deloney, Evans-ton, Wyoming was named the first supervisor of the Teton District and Roland W. Brown clerk and ranger. The first Forest Service cabin reportedly was built in the spring of 1900 at Jenny Lake.
37. The first supervisor's office was on the Elk Refuge in 1902 with Robert Miller as the first supervisor of the Teton Forest.
38. The first sale of timber on record for Teton County was in June 1904 when Edward Blair bought 100,000 feet b.m. of sawtimber.

39. Ben Sheffield and Louis Joy had the first permits to cut wild hay in 1906.
40. The first bank in Jackson Hole was founded by Robert Miller and several prosperous neighbors and was called the Jackson State Bank. Miller was president and Mayor Harry Wagner was cashier. They issued stock at \$100 a share; capital was listed at \$10,000 with no reserves. This was the year 1914, assets had risen to \$26,000 and the bank was capable of assuming considerable responsibility in the promotion of regional development. The bank provided the region with its first safe place for savings and its only dependable specie exchange market.
41. Robert E. Miller established the first loan business about the early 1900's. His first loan--several tons of hay distributed at a high rate of interest, was to the Wilson family during their first Jackson Hole winter and he thus established a reputation as a source of credit. Soon he was acting on an informal basis as financier for the entire region and was known as 12% Miller because of his exceedingly high rate of interest on his loans. He was certainly an opportunist in many ways and built himself into a very wealthy man due to his acquisition of property and foreclosures on those who couldn't meet their loans to him and because of his business acumen.
42. William Dunn drove the first car, a Cadillac, which was brought into the valley over the Ashton Trail during the twenties.
43. The first store in Jackson Hole was run by Charles Deloney, a Civil War veteran, in 1899. At that time Mr. Deloney could stand on the steps of his store and see nearly any kind of game but not any houses.
44. The first funeral services held were those of Jim Goe. The services were held in Deloney's store as there were no churches or public meeting houses at that time. Jim Goe was also the first man buried in the Jackson Cemetery.
45. The first typewriter, an old-style Oliver, was brought into the valley by Charlie Lee.
46. The first livery barn was built across the corner from DeLoney's old store. It was built by setting posts up with boards thrown over the tops of the posts. Hay was then thrown over the top. The first winter a bear decided to hibernate in the hay. He was finally discovered by some men while pitching hay from the barn. They dragged him around in the snow, but it being 40 below zero, the bear was too stiff, cold, and sleepy to put up much of a fight.

47. The elk were first fed by the settlers in the winter of 1908-1909.
48. The first house was built of logs by the outlaws, or horse thieves, on the old Miller ranch east of Jackson on what is now known as the Elk Refuge. The government authorities bought this ranch later and three or four more for the purpose of raising hay to feed the elk and using it for a winter pasture for them.
49. The first band was started in Jackson about 1904. Dr. Melton was the director. The band consisted of 22 pieces and was very good. It used to go to Idaho to play for celebrations.
50. Music for the first dances -- Peter Karns and Richard Mayor -- used to play for the dances and sometimes they got someone to play the organ to chord for them. People used to come from all parts of the valley on skis or snowshoes to attend. They had to make it an all night affair as they couldn't see to get back home till daylight.
51. The first movie house was started by Fred Lovejoy, manager of the Jackson Valley Telephone Company, with the help of S. N. Leek and was in the I.O.O.F. Hall. The first show was March 21, 1919.
52. The first chautauqua, the Ellison-White Chautauqua, was held July 17th to the 21st, 1921. It was held annually after that for some time.
53. The first ascent of the Grand Teton Peak was made in 1898 by Billy Owen, Jack Shive, Frank Peterson and McDermitt. They spent about three months trying to reach the top. They built a rock monyment and placed a flag on top of the peak. They had to make a trail up the mountain by digging steps in the rock cliffs and using ropes to pull themselves up the rock walls.

A second trip to the top of the Grand Teton was made by G. Blackburn, A. R. Arrow and A. Davis on August 5th and 6th, 1923. They made the trip in 36 hours from base camp. They followed nearly the same route that the former party took. It was much easier for them as they could use the trail the first party had made. It is reported that they found the initials, flag and monument left by the first party.

54. The first telephone was started by Fred Lovejoy in 1905. The two telephones were connected between the Jackson Hotel and Mose Giltern's.

55. The first rodeo was brought in by Harold Sheard in 1919.
56. By 1912, the Episcopal Church had built a hostel, or rest house.
57. The first mayor of Jackson was Harry Wagner.
58. Emile Wolff packed the first hay that was fed to the elk on his back.
59. Hamilton and Sargent brought in the first sail boat. It was carried over Conant Pass by four men.
60. The first daily mail was delivered to Jackson by James R. Riggan. At the age of 14, he rode over Teton Pass on a horse with the mail bags slung over his saddle and delivered it to Jackson. In 1930 he took the mail contract over Teton Pass; in the summer by truck and in winter by sleigh. In 1934 he had the first mail contract through the Hoback from Pinedale.
61. The first flour ever made in Jackson's Hole was July 10, 1919. "The Kneedy Flour Mill at Kelly turned out its first barrel of flour and incidentally the first flour ever made in Jackson Hole. The mill has been running since July 1st, cleaning wheat and grinding feed for cattle. Unfortunately Mr. Kneedy has been laid up with a very sore arm and shoulder, but John, the junior partner, is endeavoring to keep the mill running." (Note: The mill burned in October, 1921.)
62. The first Snake River float was in 1912. It hauled lumber from Wilson to Hog Island on a raft built by Ora Grisamer with sweeps on each end to guide it.
63. The Jackson Hole Courier was started in 1909. Mr. Roy Van Vleck and one other party financed Mr. Douglas Rodebeck in starting it, a weekly paper. The following men have been editors and publishers since that time: Mr. Hoadland, Edward Hunnicutt, Richard Winger, T. H. Baxtern, and W. G. Bunn until his death in October 1923. His death was caused by falling over a cliff while hunting mountain sheep.
64. The first airplane brought into the valley flew over Teton Pass from Blackfoot, Idaho. The pilot was H. H. Barker. He brought with him Jack Winton, his mechanic. They were here during the Frontier celebration September 1st and 2nd, 1920. They took passengers up during the celebration, 80 people during the two days they were here.
65. The first bridge over the Snake River was built by settlers in 1915 and was made of steel. For several years after the people settled in the valley, they had to ford the Snake going to Victor, Idaho, by way of Wilson, Wyoming. The river during high water was very treacherous -- sometimes washing great holes in the river bed in just a short time and often at the

regular fords. In this way it made the river very unsafe to cross.

66. Jackson first came to national attention in 1920 when the election of an all-woman municipal officers election took place. The Detroit Free Press carried the news to the outside world. The first town in the United States to be entirely governed by women was from June 1920 to June 1934. Jackson's "petticoat government" decided to get things done and not leave it up to the men. They put on a lively campaign and made history across the United States. The Mayor was Mrs. Robert Miller; Council Women, Mrs. Mae Deloney, Mrs. Rose Crabtree (defeating her husband, Henry), Mrs. Faustina Haight, and Mrs. Genevieve Van Vleck; and Marshal Pearl Williams Hupp. Mrs. Marta Winger was town clerk, and Mrs. Dr. Huff was appointed Health Officer. A print of the ladies hangs in the Congressional Library in Washington. D. C. President Calvin Coolidge, then governor of Massachusetts, congratulated the citizens of Jackson for electing women to all town offices, and paid high tribute "to the good sense" of the people of Jackson. While in office the ladies secured the title to the city cemetery and built a road to it. They met the conditions which gave Jackson the ground for Frontier Park (where the fairgrounds now is located), aid to the city park, and improved streets.
67. Teton County was created in 1921 by act of the State Legislature. Before this Jackson was part of Lincoln County with the County Seat at Kemmerer and the nearest land office in Evanston. When a homesteader wanted to prove up on his land, he had to take his two witnesses with him to Evanston, which was expensive, as it usually took several days there and back. They appointed a United States Commissioner with headquarters in Jackson. (Note: this item from an interview with E. N. Moody, former teacher, attorney, county clerk, and long-time resident of Jackson Hole.)
68. The first car through the Hoback, June 14, 1923. J. R. Jones drove through the Hoback Canyon when he went to Rock Springs for his children who had been attending school there. The trip through the canyon was quite a procession -- the car was preceded by a plow, a ditcher, and a grader with six horses hitched to each and twelve men to help.
69. The first school in Jackson Hole was started in 1894 at South Park. It was a subscription school held in one room of the old homestead building belonging to Sylvester Wilson. It was also one of the first log cabins in the valley. It was also used for all sorts of entertainment and dances. It still stands there and is now one of Jackson Hole's historic landmarks.

Note: The information for Firsts in Jackson Hole was gathered from old newspapers, from Souvenir History of Jackson Hole, by the Seventh and Eighth grades of the Jackson Public School (1923-24), under the supervision of their teacher, Roland W. Brown, Jr. (The facts were obtained from parents and relatives), and also from an interview with E. N. Moody, former teacher, county clerk and attorney in Jackson.

B. Old Graves on the Forest

Not too much is known as to what persons were buried in some of the graves on land that was once, or still is, Forest Service land.

Newbald's sister is buried on the west side of Blacktail Butte, up the draw from the old location of the Newbald Ranch, about 400 yards up the draw. The grave was located by the Jim Budges and Esther Allan for the Teton County Historical Society, October 1968. No marker has been placed on the grave. It is said she died because she was fed iron shavings when she became ill by a minister of a strange religion. Her baby is said to have died, too, and been buried there.

There is an unknown grave near the Country Club Golf Course. Sylvia Hansen knew about this but was unable to remember who was buried there.

Dennis Lance is buried at the Teton Valley Ranch.

There are five graves in the old cemetery at Kelly, Wyoming: Byron Goe, Frank Sebastian, Dr. Corey and two unknown. The old cemetery is located above Kelly across the river and has been fenced in by the Teton National Park.

There is a grave in back of the new, red building north of Jackson, but person unknown.

There is an old grave near Enos Lake, but no identification.

There is a cemetery on the old Gray place in which are the graves of Magnum and Barnum.

John Counts is buried near the Porter Pool down the Hoback. Al Austen claimed there was a grave he had made for Jack Davis there. There is a question as to which or if both were buried there. 1/

Thomas Brown is buried at Brown's Meadow. It is 100 yards east along the edge of trees from where the trail from Huckleberry Lookout enters Brown's Meadow. The stone shown in the Forest Service Historical file #1600 is at the base of the wooden

1/ Notes taken by E. B. Allan when chairman for the Teton Co. Historical Society on the Graves Committee.

cross on one end of the grave, and was still in place on October 30, 1962 when Bob Casebeer visited it. The inscription is:

Thos
Brown
1891

1/

A Mr. Fitzmeyer, trapper of the Snake River and Glade Creek, is buried near the Flagg Ranch about halfway between the ranch and Dime Creek. The old road to Yellowstone used to go right by it. The grave is marked with a concrete headstone and located about 50' east of the highway and about 200' north where the road turns into Walt Corn's hunting camp on Dime Creek. Fitzmeyer had taken a woman to "hole up" with him for the winter and she had brought in another woman for company. When "Fitz" was out trapping, they had company in the form of soldiers from the South Gate at Yellowstone. Mr. Fitzmeyer had started out one morning on a trapping trip and forgot something and came back to find a soldier with his woman. The soldiers got into a fight with him and Fitzmeyer was killed. A coroner's jury indicated Fitzmeyer had taken his own life but there was strong evidence that either one of the girls or soldiers shot him. He was buried close to his cabin site where he had a roadhouse summers. William H. Jackson visited the grave site in August 1968 with Slim Lawrence and Mike Rinehart, and took a colored picture of the grave. Fitzmeyer was killed about 1912. 2/ *

There is a grave up Horse Creek near Porcupine Creek in a cave.

Two graves are on the Fall Creek Road. One is thought to be that of Bill Howard. 3/

A worker on the Moran Dam was accidentally buried in one of the piers. They were pouring concrete piers of good size at each end of the dam, and it was necessary to send two men down into the forms each morning to puddle the concrete so it came down through the chute from the cement mill. One morning, so it is said, two Hungarians went down into the east pier in the morning and only one came out when the noon whistle blew. Apparently the other one had been trapped in the

1/ Forest Service Files.

2/ Ibid., The Jackson Hole Museum and Sunny Allan, interview.

* There was heavy freighting from Ashton to Moran then. The old Reclamation Road forded the river below the Flagg Ranch and came out near Dime Creek and onto Moran on the old Sheridan Trail road. There was an old army cabin 2 or 3 miles below the Flagg Ranch and the entrance to Yellowstone Park with no bridge at Flagg Ranch.

3/ Teton Co. Historical Files.

concrete and is still buried there in the pier. 1/

C. Place Names

Arizona Creek was named after an Arizonian called Arizona George who wintered on Jackson Lake in 1888-89.

Astoria Hot Springs. For many years these were known as the Johnny Counts Hot Springs, for the picturesque settler who homesteaded these flats. It took its present name in 1960 after the Astoria party. These first known explorers of the canyon were tired of horse packing, and eager to hit canoe waters to the Pacific. The Snake looked good to them until they saw its narrow canyon and white water rapids. On October 2, 1811 they changed their minds and headed over Teton Pass mostly because their guides talked them out of floating the Snake in their dugout canoes. Here, also have been found the bones of buffalo species long extinct, and traces of pre-historic hunters. The springs were not mentioned in the accounts of the Astoria party.

Bar BC Ranch was named after Struthers Burt and Dr. Corncross, who owned it.

Battle Mountain, a red nugget sandstone peak near the mouth of Granite Creek. The old trapper route and Indian trail ascended the open grassy slopes near the telephone line to the pass north-east of the mountain, then descended to Granite Creek and back to the Hoback. The name was given because of the sordid battle between the few Indians and the white posse headed by William Manning. This skirmish caused the Indian scare of 1895. * **

Bradley Lake was named after Professor Stanley Bradley, chief geologist on the Hayden 1872 survey.

Bridger Lake, named after Jim Bridger who discovered Two Ocean Pass and the division of the waters going to the Pacific and Atlantic Oceans from that point. (Figure 78)

Buffalo Fork. Undoubtedly named for a mountain variety of the species of animal.

Burnt Wagon Gulch. Bill Scott and Bill Seeborn found the burned wagon in a gulch just behind Mrs. Geraldine Lucas' place (now used by the Harold Fabians as a summer home and owned by the

1/ Balderston, William, Narrative Describing Experiences in Jackson Hole, Wyoming, 1913, 1914, 1915.

* See complete story in Pre-Forest History.

** Mr. S. N. Leek said the name "Battle Mountain was given to this cliff because of the piles of rock in the canyon on the side of the mountain, which were built by Indians who lay in wait for antelope as they passed on their semi-annual migration to the Red Desert for the winter, and back to Jackson Hole summers.

Rockefellers) in 1914. Two men had come in with a wagon and a black team. Abe Ward, then sheriff, found a 25-35 rifle in a hollow log. He took it to Frank Waterman who was Justice of the Peace who traced it and found it had been ordered by a Montana man. He wrote to the town and found he had left with a trapper in a wagon drawn by a black team but had not returned. Jackson Holers had seen one man riding a black horse followed by another black one going out over Phillips Canyon.

Burro Hill was named after "Burro" Smith who had a number of burros there, on the place he owned below Tracy Lake above Moran near the Blackrock Road at that time. Ranger McDermitt named the hill Burro Hill because Smith let his animals run over this hill most all the time. Nathan Smith owned the place that Karlle Johnson had later.

Cache Creek. Source not known for sure, but probably named for a fur cache made in the area.

Coburn Creek. One of several streams in the vicinity which had been named Fall of Falls. It was renamed after "Ruff" Coburn who had the first ranch on the creek.

Conant Creek and Conant Pass were named by Richard Leigh for one Al Conant who came to these mountains in 1865. 1/

Coulter Creek. Named in honor of John N. Coulter, who was a botanist for the Hayden Expedition of 1872 from the University of Chicago. Mr. Coulter and Mr. Aven Nelson published the "Manual of the Botany of the Rocky Mountain Region" in 1885 and "New Manual of Botany of the Central Rocky Mountains" in 1909. Both are still used as standard texts. 2/

Dead Man's Bar. This bar in the twisting Jackson Hole Snake River served as the stage for a prospector's feud where three of the four male actors met death.

Ditch Creek, named by the settlers of Jackson Hole because of ditches dug in 1870 to divert water in that area for placer mining. The washing of gravel was done on the Snake River west of Shadow Mountain Ranch.

Enos Lake, named after an Indian who was with Fremont in 1842 and who, at the age of 102, was exhibited at the San Francisco Exposition in 1915. He lived four years longer.

Ferry Lake. Named for John Ferry, who was an artist that stayed at Herb Whiteman's cabin near Moran. He was a commer-

1/ Wyoming State Archives and Historical Department, Vertical File, March 10, 1967.

2/ See Bonney's Guide, page 120, for the complete account.

cial artist for the North Pacific Railroad.

Gros Ventre. The name Gros Ventre comes from the Atsina, a detached band of the Arapaho Indians. They skirted the range on visits from their home in present Montana, to their friends on the South Platte. Present day writers puzzle over the term Gros Ventre (French for "big bellies") applied to these athletically built warriors. The name actually originates from the Indian sign language -- a sweeping pass with both hands in front of the abdomen -- meant to convey the idea of "always hungry", for example, "beggars". Early trappers referred to them as Blackfeet because of their affiliation with that tribe. (The Hidatsa, a distinctly separate Siouхан tribe, also known as "Gros Ventres", formerly tattooed parallel stripes across the chest. The gesture sign to indicate this style of tattooing led careless observers to also interpret this sign as "Gros Ventre" although this was the meaning of neither and both signs were different.

Hatchet Ranch. The original Hatchet Ranch was named after its colorful cattle brand.

Hidden Creek. It was called Blind Creek by the old timers and later changed to Hidden Creek.

Hoback Canyon, Hoback River. They were named for the Astorian John Hoback, also spelled Hobaugh, Hobough, Hubough, and Hauberk. Hoback, a Kentuckian, came west with Andrew Henry's Missouri fur trappers in 1809. Driven from the Three Forks area (Montana) by the implacably hostile Indians, the Atsina, Henry led his brigade south to the North Fork of Snake River where in the autumn of 1810 he erected a temporary winter shelter, which came to be known as Henry's Fort, near present St. Anthony, Idaho. After the fort's abandonment in the spring of 1811, the brigade disintegrated and Hoback, with two Kentuckian companions (Edward Robinson and Jacob Reznor), set out for St. Louis. Fearing the hostility of the Upper Missouri tribes, they took a southern route across what is now northwestern Wyoming, rather than going directly north to the Yellowstone and Missouri. Near the mouth of the Niobrara River, on the Missouri, they encountered Hunt's outbound Astorians. The Astorians, in the employ of John Jacob Astor's American Fur Co., were to proceed from St. Louis to the mouth of the Columbia River and establish a trading post. There they would meet the other contingent of Astorians, who had traveled by boat around the tip of South America. From the mouth of the Columbia a network of trading posts were to be set up throughout the Pacific northwest and central Rockies. Hoback, Robinson and Reznor gave an account of Indian hostilities along the river ahead and dissuaded Hunt from his original plan to follow the Lewis and

Clark route through present day Montana to the headwaters of the Columbia. Consequently, Hunt engaged the three adventurers to guide him back across the route they had followed from Fort Henry. The party proceeded overland crossing the Bighorns and starting up the Wind River. Game was scarce and their newly hired guides suggested a detour south to the upper Green River to find Buffalo. After a successful hunt they crossed the divide into the Hoback watershed, followed down the Hoback into Jackson Hole. They continued westward via Teton Pass and after much debate left their horses at Henry's abandoned fort. At Fort Henry that fall, the trio, no longer being of value as guides, remained behind to trap for Hunt in the area. Misfortune befell them the next summer, while leading the overland Astor party back to St. Louis. Once again, after this rescue, the three declined an opportunity to return to civilization "in their present ragged condition" as Stuart noted, and engaged to trap for the company for two more years in the sector of their earlier trails. All three were killed by Indians near the mouth of the Boise River in Idaho in 1814. Members of the returning party apparently named the river in question the Hoback. Hunt's journal as it appears in Nouvelles Annales refers to the stream only as a "small river", but Robert Stuart, re-tracing Hunt's route through the Jackson region in 1812, calls it "Hoback River" -- first known application of the name.

Jackson's Hole was named after David E. Jackson, early trapper and trail blazer in 1829,*

Jackson Lake was named by Captain William Sublette for his fellow trapper David E. Jackson.

Jenny Lake was named after the wife of Richard Leigh, known as "Beaver Dick". His wife was a squaw named Jenny. They camped at Jenny Lake the greater part of one summer.

Lee Ranger Station was named after Ranger Charlie Lee who had charge of the Wilson area in 1905 where the present Lee Ranger Station bears his name.

Leigh Lake was named for Beaver Dick Leigh, early trapper and guide. He was also guide for the Hayden Expedition.

Lion Rock. This rock is located in the red mountains up Gros Ventre Canyon. There is a cliff that looks like a lion lying down there.

* "Hole" meant a basin or mountain-girt valley to trappers of that era.

Marysvale after the first postmistress, Mrs. Fred White, whose given name was Mary. The post office was located about six miles up Flat Creek from the present town of Jackson and remained there from 1891 to 1893.

Mill Creek took its name from being the first water power mill in Jackson Hole. Ed Blair helped Steven Leek set it up when it was brought over Teton Pass from Market Lake, Idaho in 1893.

Moran. The town of Moran was named after the famous Thomas Moran, landscape artist who, with his artist brother Peter, visited the Tetons from the Idaho side in 1879. He did not reach Jackson Hole at that time.

Mount Hancock was named in 1871 by Captain Barlow for General W.S. Hancock, Commander of the Military Department in Yellowstone Park.

Mount Leidy was named for the paleontologist with the Hayden group.

Mount Moran. Also named after the artist who painted the Tetons and Mt. Moran.

Mount Wister. Named after the famous author of The Virginian who pack-tripped through the upper country of Jackson Hole in the 1880's and 1890's and had a home in Jackson Hole.

Munger Mountain is located in the southern part of Jackson Hole and was named after a prospector who mined at the foot of the mountain for gold. He also panned for gold on the Snake River bars a couple of miles above the junction to the Hoback.

Nez Perce was the name given to the Grand Teton by the French-Canadians. Many other names were originally from this source until changed by American trappers.

Nigger Channel. The first stream north of the Gros Ventre River on the main highway north to the park. A black man came into Jackson Hole and was killed and thrown in an irrigation ditch by some of the local men who didn't think negroes should be in Jackson Hole. The channel is located near the town of Kelly.

Nowlin Meadows. Named for Dan C. Nowlin, an early State Game Warden, a member of the Biological Survey and later was manager of the National Elk Refuge.

Pendergraft Meadows and Pendergraft Peak were named after "Slim" Pendergraft, who was a licensed guide, sheriff, and later Deputy

Game Warden until his death in about 1942.

Phelps Lake was possibly named after George H. Phelps who prospected the region for gold in 1864. Another source claims it was named after an early surveyor.

Purdy Basin was probably named after Charles Purdy, who, with two others, headed a notorious gang who slaughtered hundreds of elk, left the carcasses, and sold the teeth. He was finally apprehended for taking an elk in Yellowstone Park. The three were sentenced on September 12, 1907 to serve three months in Fort Yellowstone guardhouse.

Randolph Mountain. Randolph (Randy) was an early pioneer who homesteaded at Tracy Lake northwest of the Blackrock Ranger Station. He died about 1905. He gave Ranger Rudolph Rosencrans quite a run with his poaching and "Rosie" tried to catch him.

Robert Lincoln Pass. A low area between Togwotee Pass and Union Pass which Phillip H. Sheridan used. He named it in honor of the Secretary of War Robert T. Lincoln. It is also said this pass was named by President Chester A. Arthur for the same reason. It was later changed to Sheridan Pass.

Rosie's Ridge was named for Rudolph Rosencrans, better known as "Rosie". The ridge is near Blackrock on the north side of the highway. "Rosie" was one of the earliest rangers and served under Superintendent Robert Miller on the Yellowstone Reserve. In 1902 he received his ranger appointment and was the first ranger of the Buffalo District from 1903-1927.

Russold Hill was named for Edward D. Russold, who homesteaded the district just east of the hill in 1915 in the Gros Ventre area.

Saint John's Peak. Named after Orestes St. John, one of Hayden's Survey members in 1878.

Sheffield Creek. Ben Sheffield started a dude business at the old town of Moran site (below the present Jackson Lake Dam) in 1903; developed Teton Lodge to a world-wide fame. He sold out in 1928. The old road which ran from Grassy Lake around to Jackson Lake was built by him to transport his wealthy "dudes" or clients to his hunting camps and lodge. He would have preferred that way into the valley to remain primitive with good hunting, but the government took the road from Sheffield by condemnation in 1910 to supply the dam construction on Jackson Lake. Sheffield Creek was appropriately named after him.

Skull Creek. Emil Wolff found a human skull and some bones (human). On further search, he found a large double spring bear trap with a man's hand caught in its jaws. Mr. Wolff set the trap again and when he returned to the set, he found the trap sprung and the remains of a bear's foot in it. The man killed in the trap was someone from outside the valley that Emil had met but did not know. Emil was always a little disturbed at having this trap so he gave it to W. C. Lawrence, who put it in the Jackson Hole Museum still containing the bear's foot. Emil Wolff gave the name to this creek as a result of this incident.

Signal Mountain. Legend has it that in 1891 Robert Ray Hamilton, a partner of John Sargent, was mysteriously missing on a hunting trip. Foul play may have been the cause. Searchers, according to a prearranged plan, were to build a fire on top of a nearby mountain when his body was found, to let others know. This mountain was thus named Signal Mountain as a signal fire was built there.

Snake River. Some local sources say it is called Snake because of its serpentine course. Others hold it was named for the Indians who lived along its banks in summer. The latter seems the most plausible although there is a vagueness of the term "snake" as applied loosely to the Shoshone, Bannock, and Painte tribes. One author says, "The name 'Snake' means inland; a priest has declared the Indians were so named because, like reptiles, they dug food from the earth", and a third says "These Indians ate snakes". A fourth declared that when such an Indian asked the name of his tribe he made a serpentine movement intended to suggest not snakes but basket weaving.

Spread Creek is below the junction of the North Fork and South Fork of the Buffalo River and was first called Elk Horn Creek on the map of 1879 and the map of 1912. It evidently got its name from its form.

Sublette Lake was named for William L. Sublette, trapper in 1826.

Taggart Lake was named for Bradley's assistant, W. R. Taggart, geologist on the Hayden 1872 expedition.

Teton Mountains . The Tetons were first called Pilot Knobs. In 1818 they were called Trois Tetons, meaning three or women's breasts in French. The Indians called them Tee-win-at, meaning three pinnacles. The name Tee-win-at has a special significance to this day to the Indians. During the filming of "Bad Bascomb" starring Wallace Beery, Indians had been hired as ex-

tras. One night at Jackson Lake Lodge they staged an Indian dance. During the afternoon a lady gathering notes for a book asked one Indian what the Indians called the Tetons. The Indian said he could not say the name for if he did a bad rain would come. There was not a cloud in the sky. She finally asked a young Indian and he said he would tell the name. When he said the word Teewinot, a great silence came among the Indians. That night during the dance a big storm came. One Indian said to another, "See Indian say the name and big storm come". He added that if Indian say name while standing in front of the mountains that brings the storm. 1/

Teton National Forest. Received its name from the Teton Peaks, which were originally within the Forest Service boundaries.

Togwotee Pass. (Map of 1879 by A. D. Wilson Tee-e and the map of 1898 by T. S. Brandegée pass route was explored by Captain William Engineers, in 1873 as a possible route for named the pass for one of his Shoshone Indian Strikery, the word Togwotee being a word a spear". One of the last independent S (Tududikas or Dakurika Indians) Togwotee the Plains Shoshone under Chief Washakie and famous guide during the end of the was also a feared medicine man. When in Arthur with his attendants rode from Washakie Yellowstone Park, he passed along Indian paths and trails, and the guides were some Dakurika Indians who conducted him to Togwotee.

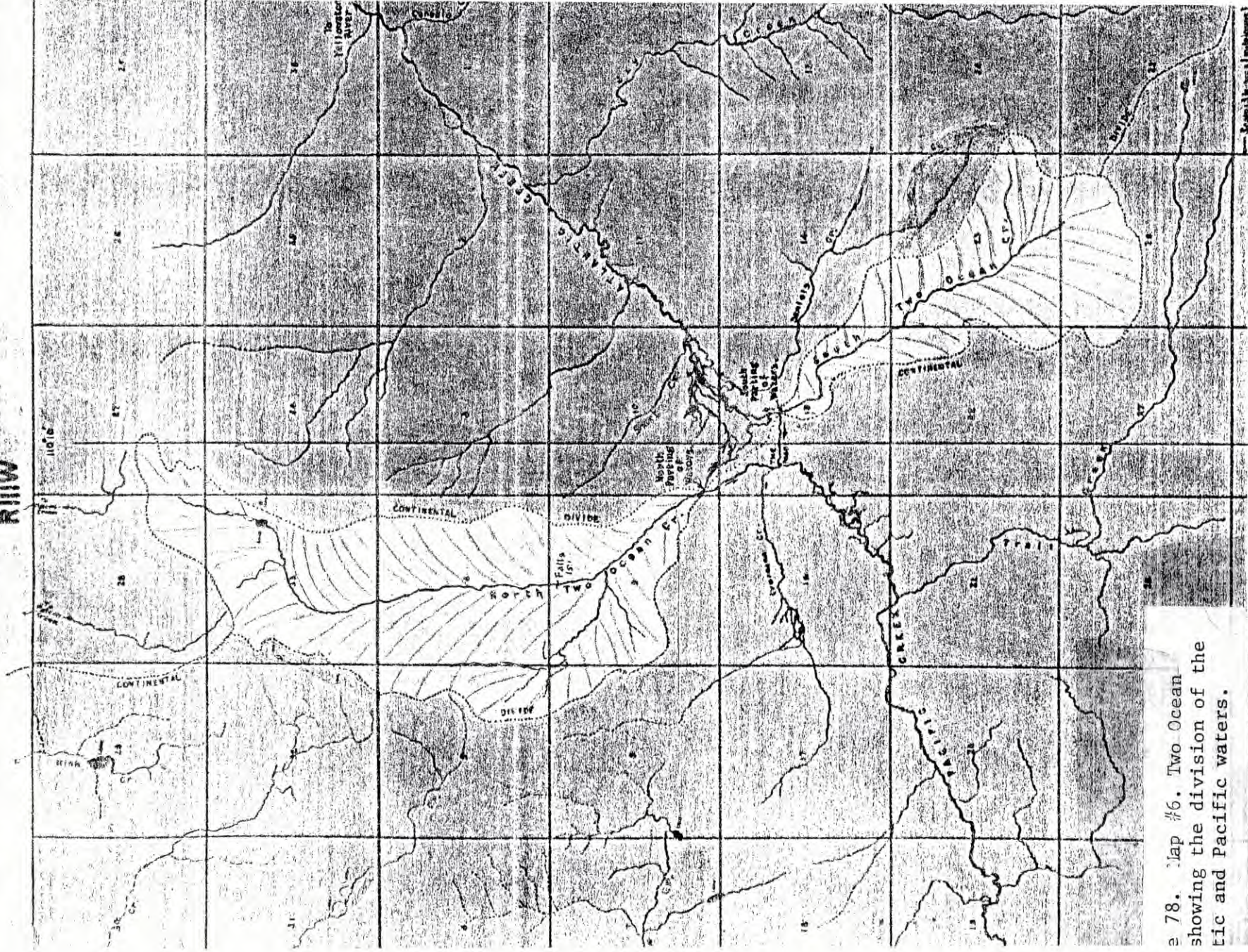
To-Gwo-
The
h
nong
isted

Dodge

Turpin Creek, Turpin Meadows and Turpin Meadows Lodge all received their names due to Dick Turpin. Dick Turpin, a fiery-tempered man who spent his first Jackson Hole winter there in that area in 1887, making rounds of his various trapper cabins throughout the meadows. Dick Turpin (1840-1919), Kentucky born soldier, Indian fighter, tie cutter, and miner, came to Jackson's Hole in 1888 to stay. His real name was said to be William A. Smalley. After wintering in Turpin Meadows he moved to a cabin on Turpin Creek in the spring of 1889. Then he located north of Jackson. Finally, when he thought the valley below was becoming too crowded, he located 10.5 miles farther up the Gros Ventre where he stayed until his last days. Turpin Meadows is located on the Buffalo River and Turpin Creek on the Gros Ventre.

Two Ocean Pass. Trapper Osborne Russell in 1835 followed the Pacific Creek trail north to Two Ocean Pass. His journals give the first accurate description of this phenomenal parting

1/ Diary of E. B. Allan



is 78. Map #6. Two Ocean showing the division of the tatic and Pacific waters.

Pacific
Waters.

TWO OCEAN PASS

Atlantic
Water

911402M

of the waters. A bulletin of the U. S. Geological and Geographical Survey contains a section by F. V. Hayden, geologist in charge of an early exploration to the area. Hayden observes that the first published notice of the pass was given in a report of an exploration party headed by Captain W. F. Reynolds in 1868. Reynolds' report describes the phenomenon as related to him by Jim Bridger, famous frontiersman and scout. In 1873, Captain Jones of the U. S. Engineers gave a brief report of the pass after a reconnaissance of northwestern Wyoming. He noted the apparent rise of the water, now called Two Ocean Creek, to the top of the Divide. He termed the flow of the one stream to the Atlantic Ocean as "one of the longest voyages known to running water". Captain Jones was the first eyewitness observer of the area to map it, and his version gave the names Pacific Creek and Atlantic Creek to the two streams. The creek at one point divides to have part of it flowing to the Pacific and the other to the Atlantic. (See Figure 78)

Union Pass. In 1860, it was named by Captain W. F. Reynolds of the Army Engineers. He decided on the name Union Pass because he considered it to be the topographical center of the continent. It was used as a travel route from the Wind River country to the Jackson Hole and Yellowstone country by early trappers and explorers. He crossed Union Pass guided by the "mountain man", Jim Bridger, while on a mapping and exploring expedition. Union Pass is located on the boundary between the Teton and Shoshone National Forests and was recently added to the National Register of Historic Landmarks. It is located in the SW 1/4, SE 1/4 of Section 25, Range 109 West, Township 41 North.

Wilson Canyon was named for Sylvester Wilson, who homesteaded nearby in 1889. He was the first settler to come into Jackson Hole and settled near what is now the town of Wilson.

Wyoming is a corruption of an Indian name meaning "Great Plains" or "at the Big Plains". It is a Delaware name, Mscheweami-ing.

Yellowstone. The name is old, as age is reckoned in the west. The Minnetaree Indian name was "Hi Twi a da no" meaning Rock-yellow River. According to Thwaite (Clough), the term was used as early as 1798 by the English fur factor, David Thompson. But both the name and the river appear to have been unknown to Americans until 1805 when Lewis and Clark came upon the stream's mouth in their outbound journey of exploration up the Missouri. The entry in their journal suggests that the name originated with earlier French rivermen -- possibly predating Thompson: "The river which has been known to the French as the Roche Jaune (Yellow Rock), or as we have it, Yellowstone, rises according to Indian information in the Rocky Mountains"; "Goures" believes Lewis and Clark made

the first translation and are probably the original authors of the word.

Younts Peak. The highest peak in the Teton Forest (12,165), was named for Harry S. Younts, a packer for the 1878 Hayden Survey group who climbed the west spur of the Teton Peak that year. In 1880 he was appointed gamekeeper of the Yellowstone National Park, thus becoming the first national park ranger.

Note: The material on Place Names obtained from the Souvenir History of Jackson Hole, 1924, by the Seventh and Eighth grades of Jackson Public Schools; old newspapers; old maps; magazines; Bonney's Guide; Teton County Library, Wyoming State Archives and Historical Department; Teton Mountains by Nolie Mumie, Forest Service Files; notes and clippings from E. B. Allan Files, and Wyoming Place Names by Mae Urbanek, from Johnson Publishing Co., Boulder, Colorado 1967.

D. Movies Filmed on the Teton National Forest

1922 - The Cowboy and the Lady, starring John Wayne and Mary Miles Minter.

1920's Three Bad Men, starring Tom Mix.

1930 - The Big Trail, starring John Wayne and Margaret Churchill, Fox Company. This was the first big movie made in Jackson Hole. There were between 300 to 500 movie folks living in tents; 385 saddle horses; 400 work horses and 500 head of cattle used. The cemetery that has fooled many historians and Forest officials, was made by the company for this picture. It was located on the hill east from the Jackson Lake Ranger Station and just above the Ox Bow of the river, up across the old highway from Moran to Turpin Meadows. It has been photographed and used in several magazines as an authentic, old graveyard of the pioneer days.

1939 - Wyoming, starring Wallace Beery with Ann Rutherford, Bobs Watson, child star, Marjorie Main and a number of other actors. It was an MGM picture with Richard Thorpe, director. The company was headquartered at Signal Mountain Lodge at Moran. Filming was done mostly on the Jenny Lake Flats to Moran with a replica of a ranch house built in the flats. Large caravans of

covered wagons were filmed along the Jackson-Moran highway. Esther Allan was a double for Ann Rutherford and Sunny Allan was coordinator for the Teton Forest and MGM and helped find locations for them and other matters. Most of the picture was shot on the Jackson Lake District.

1939 - Wildlife movie made at Blackrock by J. W. Farrell and John B. Hatcher with Almer Nelson, Fred Deyo and "Slim" Pendergraft helping with it. Almer Nelson was in charge of the Elk Refuge and Deyo and Pendergraft were Game Wardens. Charlie Hedrick used his pack outfits for it.

1940 - A Forest Service movie was made by the U. S. Forest Service showing the life of a Forest Ranger. It was filmed at Blackrock and the Jackson Lake Ranger Stations. Walter K. Scott, Department of Agriculture, Washington D. C., was cameraman (formerly cameraman for the Will Rodgers movies); Director, Carl S. Clancy, Department of Agriculture, USFS, Washington D. C.; and a ranger brought in for the part of a ranger. They did some shots at the Blackrock area for one day and spent a week at the Jackson Lake R. S. They finished March 8, 1940.

1945 - Bad Bascomb. Starring Wallace Beery with Marshall Thompson, Jane Green, Rennie Riano, Margaret O'Brien, Leo Carillo and others. An MGM production directed by Sylvan Simon. Two hundred Indians from the Wind River Reservation were hired and many local citizens as extras. Bill Beard from Driggs, Idaho used his oxen in the picture 1945-46. * 1/

1951 - The Big Sky, starring Kirk Douglas with Dewey Martin, Elizabeth Throat, Arthur Hunnicut and Buddy Baer, an RKO production with Howard Hawks as director. This picture was filmed partly on the Forest and partly in Teton National Park.

* Bill Beard and his family didn't use their oxen for early timber work in Jackson Hole, just for movies and in parades in Jackson. The Blackmans, who had a sawmill at Swanson's in the upper Hoback, used their oxen in an early day timber contract with the Forest Service. The Beards raise oxen on their ranch near Driggs, Idaho, and have for many years. They now have six span. They did use the oxen on timber work on the Targhee National Forest.

1/ Letter from Elizabeth Hayden as quoted from Bill Beard, March 8, 1975.

- 1951 - Shane, starring Jean Arthur, Brandon DeWilde and Alan Ladd, a Paramount production. They built a small town on the Jenny Lake flats a few miles east of the old Jackson-Moran Highway.
- 1953 - Far Horizons, starring Fred McMurry, Charlton Heston, and others. It was a Warner Brothers production. They used the same story and same locations as RKO did for The Big Sky.
- 1955 - Jubal Troupe, starring Glenn Ford, was mostly shot at the Triangle X Ranch, and in Teton Park, but some scenes were on the Teton Forest. Ernest Borgnine and Rod Steiger were also in the picture.
- 1962 - Spencer's Mountain, starring Henry Fonda and Maureen O'Hara with Wally Cox, Mimsy Farmer and James MacArthur. It was directed by Delmer Daves. It was partially shot on the Forest. They used one scene on top of Snow King which was renamed Spencer's Mountain for one day. On May 31, 1963, a big premiere was staged in Jackson at the Porter Theater, with a number of celebrities in attendance from Hollywood. It was the first premiere in Jackson. The Spencer home was the two-story, log house at the east entrance to Teton National Park and formerly the Wildlife house which now belongs to Teton Park. 1/

1/ The material on these two pages from old newspapers, the Jackson Hole Museum, Jackson, Wyoming, and diaries of Esther Allan.

APPENDIX

A. Roads

Mosquito Creek Road	1944 (wagon road prior to 1902	30001
Blackrock Office Road	1963	30004
N. F. Spread Creek Road	1966	30005
Snake River C.G. Road	1954	30006
Buffalo River Road	1892 (Army to 1902, F.S.thereafter)	30007
Lava Creek C.G. Road	----	30008
Blackrock R.S. Road	1902 (Wagon road)	30009
Rosie's Ridge Road	1955	30010
Four Mile Meadow	1892 (Army to 1902, F.S.thereafter)	30011
Pacific Creek Road	1935 (Homesteaders)	30012
Blackrock-Spread Creek Road	1946 (Oil exploration co.)	30014
Gros Ventre Road	1892 (F.S. w/homesteaders)	30015
Divide Road	1962 (Timber purchaser)	30016
Flagstaff-Beauty Park Road	1946 (Oil Exploration Co.)	30017-1
Squaw Basin - N. Fish Creek Road	1952 (Oil Exploration Co.)	30018-1
Squaw Basin - N. Fish Creek Road	1911 (F.S. w/homesteaders)	30018-2
Antelope Mtn. Road	1963	30020
Hot Springs Loop Road	1920	30021
Upper Gros Ventre Road	1907 (Homesteaders)	30022
Kimky Creek Ranch Road	1907 (Homesteaders)	30023
Lily Lake Road	1946 (Oil Exploration Co.)	30024
Ditch Creek Road	1950 (" " " ")	30025
Cache Creek Road	1910 (F.S. w/coal mining co.)	30026
Dallas Fork Road	1971 (Timber operator)	30027-1
Camp Creek-Horse Creek Road	1956 (Wyo. Game and Fish)	30028-1
Granite Creek Road	1947 (Coal Mining Co.)	30029-1
Granite Creek Road	1952	30029-2
Wilson-Fall Creek Road	1930's	30030
Big Cottonwood Road	1940's	30032
Lee R.S. Road	1923	30033
Phillips Ridge Road	1930's	30035
Bailey Creek Road	----	30036
Lake of the Woods Road	1968	30037
Bryan Flat Road	1930's (F.S. w/C.C.C.)	30038-1
Bryan Flat Road	1957 (Private landowner)	30038-2
Hoback Campground Road	1936	30039
Bull Creek Road	1966	30040
Dell Creek-Jack Creek Road	1930's (Local ranchers)	30041
Dell Creek Road	----	30042
Jack Cr. N. Fisherman Creek Road	1958	30043
Sour Moose Road	1969	30044
Kozy Campground Road	1963	30045
Cliff Creek-Clark Draw Road	----	30046
Upper Hoback Road	1935 (Sublette County/F.S.)	30047
Hoback Guard Station Road	1934	30049
Lower Spread Creek	1964	30050
N. Fall Creek-Coburn Creek Road	1949	30051
Wagon Creek-Fish Creek Road	1967 (Timber purchaser)	30052
Webb Ranch Road	1950 (local users)	30053
Snow King Mt. Road	---- (Ski Corp. radio trans.)	30054
Togwotee Meadows Road	1964 (Timber)	30055
Sledrunner C.G. Road	1962	30056

Togwotee Pass O/L Road	1964	30057
Lost Lake Road	----	30058
South Rim Road	1967 (Timber Purchaser)	30059
Gibbs Creek Road	1966 (" ")	3006;
Four Mile Meadow P/A Road	1964	30062
Jackpine S/H Road	1954	30065
Swift Creek Road	1952	30066
Granite C.G. Road	1952	30067
Muddy Creek Road	----	30068
Kilgore Creek Road	1956	30069
Jackson Peak Road	1946	30070
Curtis Canyon C/G Road	1962	30071
Sheep Creek Road	1946	30072
Crystal Cr. C.G. Road	1961	30073
Crystal Creek Road	1920 (Local Ranchers)	30074
Angles Trailhead Road	1960 (Local Users)	30075
Turpin Meadows Road	1949	30078
Turpin Meadows Road C.G. Road	----	30079
Soda Lake Road	----	30080
Goosewing R.S. Road	1940	30081
S&W Exclosure Road	1962	30083
Red Hills C.G. Road	1961	30084
Atherton Cr. C.G. Road	1959	30085
Gunsite pass road	1948	30086
Haley Draw Road	1962	30087
Raspberry Creek Road	1966 (Timber purchaser)	30088
Strawberry Creek Road	1967 (Timber purchaser)	30089
Purdy Basin Road	----	30090
Lost Creek Road	1965 (Timber purchaser)	30091
Toppings Lake Road	1965 (" ")	30092
Park Creek Road	1969 (" ")	30093
Hatchet C.G. Road	1961	30094
Crystal Springs G.S. Road	1966	30095
Game Creek Road	1925	30096
Camp Davis Road	----	30097
Flat Creek Road	1910	30099
Little Granite Road	---- (Coal mining co.)	30100
Bottonwood Creek Road	1965 (Timber purchaser)	30102
East Rim Road	1962	30103
Laury Ranch Road	1947 (local ranchers)	30104
Cache Ad. Site Road	1957	30105
Baldy Mtn. L/O Road	1950	30107
Leidy Lake Primitive Road	1958 (Oil Exploration Co.)	30108
Fishlake Primitive Road	----	30109
Leads Creek Primitive Road	1967 (Timber purchaser)	30110
Lost Ridge Primitive Road	1967 (Timber purchaser)	30111
Ashton-Flagg Ranch Road	1900 (Army 1905, F.S. thereafter)	30261
Union Pass Road	1962 (Timber purchaser)	30653-1
Union Pass Road	1966 (Timber purchaser)	30653-2
Phillips Canyon Trail	----	3001
Crater Lakes Trail	abandoned	3002

N.F. Horse Creek Trail	1960 (Outfitters)	3003
Black Canyon Trail	Abandoned	
Teton Pass Trail	1964	3004
Mosquito Creek Trail	----	3005
N.S. Fall Creek Trail		3006
N.F. Mosquito Creek Trail		3007
North Fall Creek Trail		3008
South Fall Creek Trail		3009
Coburn Creek Trail		3011
Munger Mt. Trail		3012
Snow King Trail		3013
Cache Creek		3014
Flat Creek		3015
Goodwin Lake		3016
West Crystal		3017
Granite Creek		3018
Granite Highline		3019
Swift Creek		3020
Crystal Creek		3021
Little Granite Creek		3022
Big Horse Creek		3023
Game Creek		3025
Sheffield-Browns MDW		3026
Jamb Creek		3027
Arizona Creek		3028
West Rodent		3029
Coulter Creek Cutoff		3030
Rodent Cutoff		3031
South Rodent		3032
Wolverine		3033
Wildcat Whetstone		3034
Pilgrim Creek		3035
Pilgrim Creek Cutoff		3036
Pacific Creek		3037
Box Creek-Enos Lake		3038
Lava Trail		3030
Enos Creek		3040
Enos-Pacific Cutoff		3041
Gravel Creek		3042
Mink Creek		3043
Fox Park		3044
Big Game Ridge		3045
Mink Creek Fox Park Cutoff		3046
North Fork Buffalo		3047
Divide Lake		3048
Trail Creek		3049
Two Ocean Plateau		3050
Soda Fork		3051
Nowlin Meadows		3052

S. F. Buffalo	3053
Lake Creek Lost Creek	3054
Upper South Fork Buffalo	3055
Angles Lake	3055
Cub Creek	3056
Upper Cub Creek	3057
Mountain Creek	3058
Thorofare Trail	3059
Yellowstone Trail	3060
Hawks Rest Mountain	3060
Smokey Hollow Cutoff	3061
Atlantic Creek	3062
Falcon Creek	3063
Open Creek	3064
Pass Creek	3065
Butte CRC	3066
Angles Trail	3067
Flagstaff Creek	3068
North Fork Spread Creek	3069
Bull Creek	3070
South Fork Spread Creek	3071
Spread Creek	3072
Kettle Creek	3073
Leidy Creek	3074
Spread Creek Leidy	3075
Mill Creek	3076
South Fork Fish Creek	3077
N.F. Fish Creek	3078
Cottonwood Creek	3079
Bacon Creek	3080
Upper Gros Ventre	3081
Goosewing	3082
Cow Creek	3083
Jagg Creek	3084
Six Lakes	3084
Slate Creek-N.F. Ditch Creek	3085
Middle Fork Ditch Creek - Turpin Creek	3087
Horsetail	3090
Dallas Fork	3091
Haystack-Upper Lake	3092
Red Hills Driveway	3093
Grizzly Lake	3094
Miners Creek	3095
Teepee Creek	3096
West Goosewing	3097
Bruster Lake	3098
Clear Creek	3099
Gros Ventre Cutoff	3100
Bacon Ridge	3101

Schare Creek	3102
Gunsight	3103
Dog Creek	3104
Red Creek	3105
Spruce Creek	3106
Moccasin Creek	3107
Calf Creek	3108
Calf Creek Squaw Creek	3109
Squaw Creek	3110
Purdy Basin	3111
Leeds Creek	3112
Turquoise Lake	3113
Pass Creek-Park Creek	3114
Park Creek Nigger Creek	3115
Truck Creek	3116
Seven Lakes	3117
South Fall-Coburn	3118
Shoal Creek	3119
Granite Creek-Shoal Creek	3121
Jackpine Creek	3122
Rock Creek	3123
West Dell	3124
Dell Creek	3125
Jack Creek	3126
North Fork Fisherman	3127
Muddy Creek	3128
South Fork Hoback	3129
Grizzley Creek	3130
Upper Hoback	3131
Monument Ridge	3132
Little Cliff Creek	3133
Snag Creek	3134
Bondurant Creek	3135
Honeymoon Lake	3136
Cliff Creek	3137
Rams Horn	3138
Adams Creek	3139
Hunter Creek	3140
Pickle Pass	3141
Willow Creek	3142
Grayback Parallel	3143
Mumford Creek	3144
Shepard Adams Creek	3145
Bryan Flat	3147
Bunker	3148

B. <u>Bridges</u>		<u>Built</u>
Yellowstone River		1960
North Fk. Buffalo River		1964
South Fk. Buffalo		1964
Willow Creek		1966
Mosquito Creek		1956
Box Creek		1946
Buffalo River	Turpin Meadows	1943
Spread Creek		1959
Gros Ventre River	Red Hills	1969
Horsetail Creek		1954
Crystal Creek		1952
Goosewing Creek		1950
Blackrock Creek	Flagstaff	1956
North Fk. Spread Creek		1962
South Fk. Spread Creek		1962
Blackrock Creek	Squaw Basin	1952
Soda Creek		1953
Little Granite Creek		1954
Granite Creek	Hot Springs	1969
Schofield Cattlepass		1939
Mosquito Creek		1956
Taylor Creek		1952
Fall Creek		1955
Hoback River		1947
Slough		1945
Hoback River	Bryan Flat	1965
Hoback River	Hoback C.G.	1954
Dell Creek		1953
Faris Cattle Pass		1953
Hoback River	Jack Creek	1962
Cliff Creek		1950
Gibbs Creek		1968
Cliff Creek		1958
Jamb Creek		1958
Hoback River	South Rim	1967
Blackrock Creek	Togwotee Meadows	1964
Granite Creek	Jackpine	1954
Gros Ventre River	Gunsite	1952
Polecat Creek		1967
Glade Creek		1953
South Fish Creek		1966

C. Campgrounds (Present)

<u>Campground</u>	<u>Location</u>	<u>No. of Units</u>
Snake River	2 mi S. of YNP S. Gate	24
Hatchet	9 mi E. of Moran Jct.	9
Lava Creek	4 mi E. of Moran Jct.	5
Atherton Creek	6 mi E. of Kelly	20
Red Hills	10 mi E. of Kelly	5
Crystal Creek	11 mi E. of Kelly	6
Curtis Canyon	8 mi. NE of Jackson	12
Hoback	21 mi SE of Jackson	20
Kozy	26 mi SE of Jackson	8
Granite	35 mi SE of Jackson	53

Picnic Areas

Granite Hot Springs	35 mi SE of Jack- son	6
Four-Mile Meadows	14 mi E. of Moran Jct.	6

General Camping Information

There is a 14-day camping limit in the Teton National Forest, and all designated sites require a Federal Recreation Area Entrance Permit, or payment of a daily fee. Reservations are not accepted for any campsites, and are operated on a "First Come-First Served" basis. Campgrounds are crowded during July and August. Tables, grills, toilets, and drinking water are provided at all campgrounds. No over-night camping, or camping of any type is permitted in picnic sites.

D. Unique Features on the Teton National Forest

Following are the outstanding unique features on each District of the Teton National Forest. Following each unique feature name is a further breakdown of Scenic, Historic, Geologic, or Other.

BUFFALO RANGER DISTRICT

Breccia Cliffs	- Scenic and Geologic
Holmes Cave	- Geologic and Historical
Turpin Meadows	- Scenic and Historical
Angles Lakes	- Scenic
Crater Lake	- Scenic and Geologic
Ferry Lake	- Scenic
Woodard Canyon	- Scenic and Geologic
Hawks Rest	- Scenic and Geologic
Petrified Ridge	- Geologic
Two Ocean Pass	- Scenic, Historical and Geologic
Big Game Ridge	- Historical, Scenic and Geologic
Dime Creek Freight Station	- Historical
Glade Creek Army Post	- Historical
Reclamation Road	- Historical
Togwotee Pass Military Road	- Historical
Big Spring in Soda Fork	- Scenic
Yellowstone and Thorofare Meadows	- Scenic and Other (excellent example of pristine Wyoming meadow lands)
South Fork Buffalo River Falls	- Scenic
North Fork Buffalo River Falls	- Scenic
Enos Lake	- Scenic
Bridger Lake	- Scenic
Yellowstone River	- Other (superb cutthroat trout fishing)
Huckleberry Hot Springs	- Other (natural hot springs)
Spread Creek Scenic Overlook	- Scenic
Togwotee Overlook	- Scenic
Fitzmaier's Grave	- Historical
Brown's Grave	- Historical
Old Whetstone Mine	- Historical
Rudolph Rosencrans' hand-built cabin at Blackrock	- Historical

GROS VENTRE RANGER DISTRICT

Sheep Mountain or "Sleeping Indian" Mountain	- Scenic and Geologic
Brooks Post Office	- Historical
Gros Ventre Mountain Range	- Historical
Gros Ventre Slide	- Geological
Gros Ventre Slide Interpretive Nature Trail	- Other (interpretive feature)
Upper and Lower Slide Lakes	- Scenic
The Red Hills	- Scenic

JACKSON RANGER DISTRICT

View from Snow King Mountain Chairlift	- Scenic
Snow King Nature Trail	- Other (interpretive feature)
View from top of Rendezvous Peak reached by Jackson Hole Ski Area Aerial Tramway (largest vertical rise at any ski area in the United States - 4135 feet)	- Scenic
Granite Hot Springs	- Other (natural hot water)
Gros Ventre Mountains flanking Granite Creek Drainage	- Scenic
Huge, square boulder deposited on valley floor in Granite Creek	- Geologic
Turquoise Lake	- Scenic
View from Jackson Peak	- Scenic
Teton Pass	- Scenic and Historical
BPA Power Line	- Other (example of successful effort to construct major power line and retain aesthetics and scenic beauty.)

HOBACK RANGER DISTRICT

Kilgore Creek Falls	- Scenic
Cliff Creek Falls	- Scenic
Battle Mountain	- Scenic and Geologic
Hoback River	- Scenic
Stinking Springs	- Scenic
Archaeological Area on Hoback Rim (fossil bed discovery)	Other (archaeological)
Bryan Flat Guard Station and Buildings	- Historical

Indian Gardens (series of trenches
probably used for irrigation) in
South Fork of Fisherman Creek,
Stub Creek, and on Gilcrease
property

- Historical

Indian Hunting Blinds in mouth
of Granite Creek

- Historical

Elk Feeding Grounds in Camp Creek,
Riling Draw, and Upper Hoback

- Other (wildlife)

E. Timber Statistics

1. 1939 to 1943

Available Timber

(On Areas Where it can be Handled)

Douglas Fir	444,420,000	FBM
Engelmann Spruce	1,883,223,000	FBM
Lodgepole Pine	2,233,345,000	FBM
Alpine Fir	478,699,000	FBM
White Bark Pine	<u>265,552,000</u>	FBM
Total	5,305,239,000	FBM

2. Timber Sales

<u>Fiscal Year</u>	<u>Timber Sales</u>	<u>Timber Trespass</u>
1939	\$1,970.17	----
1940	2,190.20	----
1941	3,907.08	----
1942	1,948.37	----
1943	676.31	----

3. Timber Cut and Sold 1954 to 1965 by Volume

<u>Fiscal Year</u>	<u>Offered</u>	<u>Sold</u>	<u>Cut</u>
1954	?	?	3,600
1955	?	?	6,900
1956	6,868	6,868	2,684
1957	3,890	3,890	4,130
1958	2,144	2,144	3,061
1959	1,355	1,355	4,727
1960	1,288	1,228	2,678
1961	4,966	4,966	3,810
1962	27,100	20,016	8,607
1963	26,694	6,894	12,881
1964	30,978	33,978	17,926 + 286 free use
1965	29,855	29,855	21,879 + 219 free use

Calendar Year

1954	?	?	9,199
1955	?	?	?
1956	6,009	6,009	3,388
1956	3,685	3,685	3,410
1958	3,016	3,016	5,177
1959	1,026	1,026	1,696
1960	674	674	4,993
1961	31,645	24,145	8,654
1962	4,341	3,591	12,872
1963	37,141	34,141	13,696
1964	15,282	13,932	20,732
1965			

4. Regional Office Annual Summary Reports

<u>Timber Cut, MMBM:</u>	<u>Teton N.F.</u>	<u>Total R-4</u>	<u>% Teton is of R-4</u>
F.Y. 1959	4.93	316.38	1.56
F.Y. 1960	2.68	358.46	.75
F.Y. 1961	3.81	326.66	1.17
TOTAL	11.42	1,001.50	1.14

Net Receipts: (Dollars)

Timber

F.Y. 1959	14,661.94	2,001.265.16	.73
F.Y. 1960	12,403.32	3,476,212.97	.36
F.Y. 1961	9,101.80	2,064,738.48	.44
	36,167.06	7,542,216.61	.48

Lands

F.Y. 1959	8,736.39	104,808.34	8.34
F.Y. 1960	2,817.51	34,873.87	8.08
F.Y. 1961	3,149.54	24,603.20	12.80
	14,703.44	164,285.41	8.95

Recreation

F.Y. 1959			
F.Y. 1960	8,777.54	86,935.97	10.10
F.Y. 1961	9,373.76	100,402.89	9.34
	18,151.30	187,338.86	9.69

F. 1914-1964 Mountain Pine Beetle Infestation Summary

Year	Estimated Trees Infested (By Report)	Trees Treated	Treatment Cost	Remarks
1914	Infestation reported			Not known where.
1928	275			Southwest corner Forest
1929	3,000			
1931	1,496	4,496		Treated Mosquito Cr.
1932	230			No funds for treatment
1933	9,800			Gravel Cr., Mosquito Cr.
1934-44	255,994			Epidemic infestations were also reported to be increasing in the nearby Greys River and Upper Green River drainages. Heavy losses continued to occur with little atten- tion paid to these losses. Apparently, the infestation gradu- ally decreased to 12,000 infested trees in 1945.
1945	12,000			Mosquito Cr., Fall- Pitchard Creek
1946	30,000	6,000		Forest & Teton Park
1947	115,958	26,457	\$170,885	Burned standing, oiled standing with Ortho mix. Aerial applica- tion using DDT was tested and was not successful
1948	55,000	36,361	\$226,194	Treated with Ortho mix, sprayed standing

F. 1916-1964 Mountain Pine Beetle Infestation Summary (Continued)

Year	Estimated Trees Infested (By Report)	Trees Treated	Treatment Cost	Remarks
1949	35,000	24,472	\$243,530	Treated with Ortho mix, sprayed standing. Caribou, Teton, and Targhee Project. This was part of a 67,000 tree infestation.
1950	1,833	5,825	\$ 81,500	Treated in Lost Creek by "Fall and Burn" method.
1951	9,800			No reports for next 3 years.
1955	3,000			
1956	180	3,483	\$ 19,700	Fall and spray, spray standing (EDB)
1957	870	1,477	\$ 16,790	Chemical spraying (EDB)
1958	1,000	1,295	\$ 12,550	Chemical spraying (EDB)
1959	2,050	1,517	\$ 12,225	Chemical spraying (EDB)
1960	15,079	6,907	\$ 38,799	Chemical spraying (EDB)
1961	150,000	18,493	\$103,275	Fall and Burn, Chemical Spraying (EDB)
1962	120,000	50,017	\$204,034	Chemical spraying (EDB)
1963	170,000	86,636	\$401,300	Chemical spraying (EDB and logging)
1964	180,000	154,365	\$400,588 (partial)	Chemical spraying (EDB), logging and pile burn
1965	425,000	312,456	\$804,783	
1966	207,500			

Insect Control Through Timber Sales

<u>Fiscal Year</u>	<u>Volume Sold Bd. Ft.</u>	<u>Trees Treated By Commercial Cut</u>
1963-4	9,587,000	17,000
1965	10,570,000	23,500
1966	9,600,000	7,000
1967	22,310,000	1,000
1968 (Proposed)	4,500,000	--
TOTAL	56,567,000	48,500

G. Grazing and Land Use Statistics

F.Y. 1939 - 1943 (A Sampling for Years)

<u>Fiscal Year</u>	<u>Grazing and Grazing Trespass</u>	<u>Land Use</u>
1939	\$11,456.68	\$ 946.45
1940	11,170.00	862.40
1941	12,397.68	756.10
1942	15,115.07	1,343.60
1943	17,124.49	831.70

Combined Receipts for 1939-43

	<u>Timber Sales</u>	<u>Forest Products Sales</u>	<u>Timber Trespass</u>	<u>Grazing & Grazing Trespass</u>	<u>Land Use</u>	<u>Power</u>	<u>Total</u>
9	\$1,970.17	\$-----	--	\$11,456.68	\$946.45	-	\$14,373.30
0	2,190.20	-----	--	11,170.00	862.40	-	14,222.60
1	3,907.08	49.05	--	12,397.68	756.10	-	16,109.91
2	1,948.37	109.20	--	15,115.07	1,343.60	-	18,516.24
3	676.31	20.55	--	17,124.49	831.70	-	18,653.05

H. Recreation Statistics

Classification of visitors to Jackson Hole showing the percentage of the total number of visitors in each class, the number of visitors in each class and the number of man days spent in Jackson Hole by each class, 1933, 1938 and 1945. (Year 1933 is average for period 1929-1933.)

Class of Visitor	% of Total	Av. No. Days Spent in Region	No. of Visitors			Man Days		
			1933	1938	1945	1933	1938	1945
Excursionists	15	3	8,659	25,500	37,680	25,707	76,500	113,040
Shermen	20	2	11,425	34,000	50,240	22,850	68,000	100,480
Artists	56	1/2	31,990	95,200	140,672	15,995	47,600	70,336
Writers	3	4	1,714	5,100	7,536	6,856	20,400	30,140
Summer Home Owners & Guests	.2	42	114	340	502	4,797	14,280	21,084
Religious	.3	21	171	510	754	3,598	10,710	15,834
Primitive Area Visitors	.3	7	171	510	754	1,199	3,570	5,278
Wreckers	5	1/3	2,856	8,500	12,560	952	2,833	4,187
Organization Workers	.2	7	114	340	502	799	2,380	3,514
	100.00		57,124	170,000	251,200	82,753	246,273	363,893

Class of Visitor	Expenditures per day per person	Man Days			Total Expenditures		
		1933	1938	1945	1933	1938	1945
Vacationists	\$6.25	25,707	76,500	113,040	\$160,669	478,125	706,500
Fishermen	6.25	22,850	68,000	100,480	142,812	425,000	628,000
Tourists	5.00	15,995	47,600	70,336	79,995	238,000	351,680
Hunters	8.50	6,856	20,400	30,140	58,276	173,400	256,190
Summer Home Owners and Guests	2.80	4,797	14,280	21,084	13,432	39,984	59,035
Dudes	15.00	3,598	10,710	15,834	53,970	160,650	237,510
Primitive Area Visitors	10.00	1,199	3,570	5,278	11,990	35,700	52,780
Organization Campers	1.00	799	2,380	3,514	799	2,380	3,514
Totals		81,801	243,440	359,706	521,943	1,553,239	2,295,209

Av. of \$6.38 per person per day is apent in Jackson Hole.

Note: Picnickers have been omitted from this table because of the fact that they are recruited from local residents or from visitors classified otherwise and therefor contribute very little to business. For this reason the total man days of this table will not check with Table No. 4.

Activity	1961**	1962	1963	1964**	1965	1966	1967	1968	1969	1970	1971	1972
Winter Sports	24,000	24,500	25,000	25,000	34,500	48,200	63,200	90,700	87,100	116,300	147,600	169,600
Hunting	27,000	29,000	32,000	55,000	56,700	47,000	47,900	53,800	55,400	55,900	40,500	51,300
Fishing	35,000	38,800	39,700	32,500	41,100	42,200	40,900	53,500	65,600	72,000	72,200	73,100
Camping	42,000	50,000	133,000	142,000	185,300	175,200	173,300	235,200	271,100	209,800	174,000	159,000
Other	417,000	467,700	475,300	485,500	461,100	453,700	477,100	460,600	453,500	466,700	475,300	487,800
Total	545,000	610,000	705,000	740,000	778,700	766,300	802,400	893,800	932,700	920,700	909,600	940,800

*A Visitor Day is a 12-hour recreation day, whether it be one person participating in an activity for 12 hours or 12 people participating in an activity for one hour. There are thus two 12-hour Visitor Days in a 24-hour calendar day.

**The 1961 through 1964 figures were originally computed as recreation "visits" to the Forest. The Visitor Day concept began in 1965. The 1961 through 1964 figures were recalculated from "visits" into Visitor Days so that there would be a uniform statistical picture for the 12-year period.

The "other" category lumps together all the remaining recreation activities. This includes such things as driving for pleasure, hiking, horseback riding, viewing outstanding scenery, photography, nature study, team sports, picnicking, and many more.

Teton National Forest
Statistical Summary of Winter Sports
(In Visitor Days*)

Activity	FY 65	FY 66	FY 67	FY 68	FY 69	FY 70	FY 71	FY 72
Skiing	23,800	32,800	43,400	64,900	54,900	80,600	107,100	126,900
Snowmobiling	2,500	5,100	8,300	10,700	15,700	16,700	20,500	22,000
Viewing Outstanding Scenery and Participating as a spectator	6,200	7,900	8,600	12,000	13,000	15,000	16,000	16,500
Ice Skating, Sledding, Tobogganing, and Snow Play	2,000	2,400	2,900	3,100	3,500	4,000	4,000	4,200
Totals	34,500	48,200	63,200	90,700	87,100	116,300	147,600	169,600

* A Visitor Day is a 12-hour recreation day, whether it be one person participating in an activity for 12 hours, or 12 people participating in an activity for 1 hour. There are thus two 12-hour Visitor Days in a 24 hour calendar day.

National Park Visitors

<u>Year</u>	<u>No.</u>	<u>Yellowstone</u> <u>% of 1941</u>	<u>No.</u>	<u>Grand Teton</u> <u>% of 1941</u>
1941	579,696		125,489	
1942	185,746	32	33,808	27
1943	61,696	11	8,203	7
1944	86,593	15	19,978	16
1945	189,264	33	41,349	33
1946	807,917	139	136,441	109
1947	937,776	162	142,975	114
1948	1,018,279	176	153,154	122
1949	1,131,159	196	166,506	133
1950	1,110,524	192	189,286	151
1951	1,163,894	201	637,785	508
1952	1,350,295	233	785,343	626
1953	1,326,858	229	942,966	752
1954	1,328,893	230	1,003,489	797
1955	1,360,515	235	1,104,725	878
1956	1,457,782	252	1,197,241	954
1957	1,585,875	274	1,306,340	1038
1958	1,442,428	249	1,428,497	1138
1959	1,392,196	241	1,529,638	1219
1960	1,443,288	250	1,429,905	1140
1961	1,524,088	263	1,492,434	1190

Season Travel By Entrance Station

	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1964-65</u> <u>Difference</u>	<u>1964-65</u> <u>Percent</u>
North	55,459	62,983	65,376	199,653	226,739	235,354	+ 8,615	+ 3.8%
West	154,262	154,657	159,026	555,344	556,765	572,493	+ 15,728	+ 2.8%
East	114,854	122,299	139,810	413,475	440,276	503,316	+ 63,040	+ 14.3%
South	164,522	165,738	177,716	592,279	596,657	639,778	+ 43,121	+ 7.2%
*Northeast	31,004	30,244	30,982	111,614	108,879	111,535	+ 2,656	+ 2.4%
Totals	520,101	535,921	572,910	1,872,365	1,929,316	2,062,476	+133,160	+ 6.9%

* Northeast Entrance closed for season on 10/25/63; 10/17/64; 9/30/65

From 1959 Resource Study of Teton County

<u>Source</u>	<u>Basic Income</u>		<u>Business Produced</u>	
	<u>Amt.</u>	<u>%</u>	<u>Amt.</u>	<u>%</u>
Tourists	6,979,300	72.1	12,463,900	70.8
Ranching	1,238,500	12.8	2,848,600	16.2
Government	1,136,900	11.8	1,784,900	10.1
Manufacturing	223,700	2.3	371,300	2.1
Misc.	94,000	1.0	135,100	0.8

Expenditures by Tourists in Teton County

Highway Tourists	6,421,200
Air and Bus Travelers	549,800
Skiers	<u>8,300</u>
Total	6,979,300

I. Wildlife Statistics

Wildlife History

From "Report of the State Game Warden, Wyoming", Nate P. Wilson to the Governor for the year, 1916.

"There will be a bill presented at the coming legislature asking that certain portions of the Teton State Game Preserve be opened to hunting, and good arguments will be furnished. I strongly recommend that we give this question very careful consideration. Personally, I question the advisability of such a move. However, I do think we might experiment along lines that will be suggested, provided the power to close or open the preserve is placed in the hands of our State Game Commission. In this way, if we find that the opening of the preserve is not working out as expected, we can close the same without legislation."

Game History

1917 Grazing report:

"The State Game Preserve is slightly changed from former years by an act of the State Legislature, which opened new hunting grounds on Buffalo Fork River and North and closed a portion of the Yellowstone River. The arguments for the opening of a strip through the middle of the game preserve was to divide the game of the summer range and drift these on the East to winter ranges on the East of the Yellowstone National Park, thus relieve the congested conditions on the winter ranges of Jackson's Hole."

1915 grazing report -- No feeding was done last year.

Jackson Elk Commission

1927 commission for "The Conservation of the elk of Jackson Hole, Wyoming" was appointed by the Secretary of War, chairman of the President's National Conference on Outdoor Recreation. First meeting in Washington D. C. Feb. 28 to March 4, 1929.

Commission members:

Chairman - Charles Sheldon, Boone and Crockett Club
W. C. Deloney, Jackson, Rep. Governor of Wyoming
Robert E. Miller, Jackson
Irving H. Harom, Valley, Wyoming
E. A. Goldman, U. S. Biological Survey
Will C. Barnes, U. S. Forest Service
Horace M. Albright, N.P.S.
F. S. Herbert, General Land Office
Seth E. Gordon, Izaak Walton League of America
O. H. Van Norden, Camp Fire Club of America
Kermit Roosevelt, American Game Protective Association

T. S. Palmer, American Society of Mammalogists
 Arthur Ringland, Secretary of National Conference
 on Outdoor Recreation

Second meeting, Washington, D. C. December 4 and 5, 1929

Fourth Meeting, New York City, Nov. 30, 1931

Fifth Meeting, New York City, Nov. 22, 1932

Sixth Meeting, New York City, Jan. 22 and 23, 1934

Elk Kills

	1931	1932	1935	1936	1937
Thorofare & Upper Yellowstone	39	51	62	7	87
N. Fork & Soda Fork	83	45			

TABULATED OFFICIAL COUNTS

OF JACKSON HOLE ELK HERD

Forest Supervisor A. C. McCain At Jackson, Wyoming. Furnishes
Index with Specific Data Regarding number of Elk in Jackson Hole Country

(Facts and figures below prove that without a doubt there are more elk in the Jackson Hole herd today that there were in 1912 and double the number there were in 1921. In times past, there has been a disposition to question the count and sincerity of game protection officials in the Jackson Hole area. This year the count was observed by 2 representatives of the Izaak Walton League. The data given by U. S. Forest Supervisor are official and accurate. Many of our readers write us every year about big game conditions in Wyoming. To them the news that our elk are not being exterminated but are being conserved as one of the big assets of the state will be welcome news. The INDEX is greatly indebted to Supervisor McCain for the data which follows: --Editor INDEX.)

Jackson, Wyoming, April 20, 1927

Editor INDEX. -- Noting your interest in Wyoming game matters as evidenced by the space and prominence given to game preservation and related matters in a recent issue of your paper, I thought you might be interested in a few facts and figures relative to the Jackson Hole elk herd, especially at this time when so much conflicting information is being broadcast. Following are some statistics regarding the elk in question:

RECORD OFFICIAL COUNTS OF THE JACKSON HOLE ELK HERD

		<u>Jackson Valley Feed Grounds & Vicinity</u>	<u>Gros Ventre Winter Range</u>		<u>Outlying Ranger Districts</u>		
Year	%	Number	%	Number	%	Number	Total
1912	59	8000	24	3240	17	2228	13,528
1916	38	7472	32	6283	30	6018	19,763
1921	45	4233	24	2773	31	2840	9,846
1925	31	5996	47	9128	22	4369	19,493
1927	46	8832	28.8	5543	25.3	4863	19,238

The above counts represent only the Jackson Hole elk, whose range is confined exclusively to the Teton National Forest and Jackson valley. The Shoshone, Yellowstone Park, Wind River and Green River elk are not included.

These counts were conducted by Wyoming game officials, the Forest Service and the Biological Survey, and the numbers of animals enumerated are only those actually seen -- there are no added estimates of any description.

The last count during March, 1927, which returned a total of 19,238 elk was participated in by 2 observers chosen by the Izaak Walton League.

Since it is impossible to count separately by age, class or sexes for the entire herd, we make such counts on the feed grounds where the elk are under control and where each age, class, or sex can be counted accurately.

The last count of this description was made during February 1927, and we find that at the next rutting season (September 1927) we will have one bull 3 yrs. and 4 mo. old or older for each 8 cows 2 years old or older.

It is a far cry from oil to elk. However, it is not far from oilmen to sportsmen, and I am very glad to note your very great interest in game matters.

Very truly yours,
(Sgd.) A. C. McCain,
Forest Supervisor

TABULATION OF BIG GAME CENSUS

YEAR	ELK*		DEER		MOOSE		SHEEP		REMARKS
	census	kill	census	kill	census	kill	census	kill	
1912	13,528								
1916	19,763								
1921	9,346	500			1,200	75	1,500	10	Approx. 1/2 of elk winter killed in 1920
1925	19,492								
1927	19,238	835			1,500	9	600		
1932	19,855	2,344			1,455	20	975	16	
1935	22,035	6,292			1,050	76	1,800		Closed to sheep
1938	17,370	3,200			1,400	10	1,300	3	
1941	17,902	2,700			1,400	25	450	25	
1945	15,014	2,548	1,085	203	1,045	58	550	2	
1949	16,070								
1952	15,829								

Elk numbers are counts - all other figures are estimates only.

2/3/56

On February 24, 1955 Ranger Safran and I made a Sno-Cat trip to the Gros Ventre to inspect game range and make grouse utilization measurements. We were accompanied by Dr. Helmut Beuchner of the Conservation Foundation, and D. W. Cooper, Wyoming Game and Fish Commission.

Game Animals Observed

<u>Game</u>	<u>Total</u>	<u>Cow</u>	<u>Calves</u>	<u>Bull</u>	<u>Date</u>
<u>loose</u>					
Warm Springs	3	1	1	1	2/24
Alkali Creek	1				"
Dibble's Race Track	3				"
Grey Cliffs	2	1	1		2/25
Crystal Creek	3				"
Total	12				

<u>Mountain Sheep</u>	<u>Total</u>	<u>Ram</u>	<u>Ewes</u>	<u>Lambs</u>	<u>Uncl.</u>	<u>Date</u>
I.W.W. Creek	1	1				2/24
Atherton	6	6				"
Red Hills	18			4	14	2/24-25
Grey Cliffs	10	1	6	2	1	2/25
Crystal	1		1			2/25
Total	36	8	7	6	15	

1k

North exposure above Cheeks	9
South exposure above Cheeks	18
Red Hills	4
North exposure Red Rocks	29
Crystal Creek	40+
Lightning Creek	14
Dibble's Race Track	42+

As much as Dr. Beuchner was scheduled to speak at the Izaak Walton Convention in Jackson on the 26th, the trip was limited to two days.

1956 JACKSON HOLE ELK CENSUS

March 6-17, 1956

North Snake Management Area (North of Snake River in Targhee Forest) 80

South Park-Hoback Management Area

Aerial Count:

Munger Mountain, Fall Creek	193
Bailey Creek to Hoback River	121
Bryan Flat, Willow Creek	93
Hoback River to Jackson, East of Highway	130
Snake River bottom above mouth of Hoback River	163
Upper Hoback area, east of Cliff Creek, Granite Creek	135
	<u>835</u>

Feedgrounds

South Park	1,341
Dog Creek	350
Camp Creek	502
Dell Creek	86
Game Creek	45
	<u>2,324</u>

Total for South Park-Hoback 3,159

Teton Management Area

Aerial Count:

Gros Ventre River above Forest Boundary	1,392
Elk Refuge and Adjacent Area	477
North of Refuge - Snake River, Buffalo Fork	334
Gros Ventre River below Elk Refuge	37
	<u>2,240</u>

Feedgrounds

Elk Refuge	
Quarters #9 Feedground	1,369
Quarters #5 Feedground	5,342
Shop Feedground	4,306
North Gap Feedground	595
	<u>11,612</u>

Blackrock Feedground	121
Fish Creek Feedground	600
Feedground above Robinson's	112
	<u>833</u>

Total for Feedgrounds 12,445

Total for Teton Area 14,685

Total for Jackson Hole Unit 17,924

J. Legislation Summary - A Chronologic Record 1891-1973
Teton National Forest, Wyoming

<u>Kind and Number</u>	<u>Date Approved</u>	<u>Date Effective</u>	<u>Document</u>	
			<u>Citation</u>	<u>Effect</u>
Proclama- tion	2/22/1897	3/1/1898	29 Stat. 906	Established
Proclama- tion	1/29/1902		32 Stat. 1999	Re-described boundary. Super- seded Proc. of 2/22/1897
Proclama- tion	1/29/1903		32 Stat. 2030	Consolidated with Yellowstone. Discontinued name.
E.O. 872	7/1/1908			Re-established from portion of Yellowstone
Proclama- tion, 1192	4/19/1912		37 Stat. 1737	Eliminated lands.
Proclama- tion, 1336	6/30/1916		39 Stat. 1783	Eliminated lands.
Public 211	8/16/1916		39 Stat. 515	Added land.
E.O. 3584	12/1/1921			Eliminated land.
E.O. 4088	10/18/1924			Eliminated land.
Public 817	2/26/1929		45 Stat. 1314	Transferred lands to Grand Teton National Park.
Proclama- tion 2578	3/15/1943		8-F.R.3277 57 Stat. 741	Transferred land to Jackson Hole National Monument.
Public 787	8/14/1950		64 Stat. 850	Added land from Jackson Hole Na- tional Monument.
Secy. of Ag. Admin. Order	10/12/1973	10/17/1973	38-F.R. 28855, 28856	Transferred land to the Department of Interior.

Table on the preceding page compiled in the Division of Engineering, Washington, D. C., October 1973. Forest Service Files.

Note: The above is noted and discussed in detail throughout this book.

K. RANGER DISTRICTS AND RANGERS, TETON NATIONAL FOREST

It has been difficult to determine which are fully active ranger districts, the exact time of their duration, etc. The following is a summary as nearly as possible to work out from information on hand in 1961.

District and Rangers

<u>Date:</u>	D-1	D-2	D-3	D-4	D-5	D-6	D-7
	Jackson Lake						
910	Jack Fee	Rosencrans					
911	Ohl	"					
912	"	"				Smith	
913	"	"				"	
914	Rosencrans	Rosencrans	(Gros Ventre) Gunther			Smith (Wilson)	
915	"	"				Smith	
916	"	"	(Horsetail) Coulter	"			
917	"	"		"			
918	"	"		"			
919	"	"			Buchenroth	Buchenroth	Coulter
920	"	"	Gunther	Strober	"	"	
921	"	"	(Hoback) Coulter	Connor	"	"	
922	"	"	"	"	"	"	
923	"	"	"	"	"	"	
924	Ohl	"	"	"	"	"	Horel D-7 Harris D-8
925	"	"	(Kelly) Dibble	"	"	"	
926	"	"	"	"	"	(Teton) Horel	
927	"	Rosencrans	"	"	"	Horel & McDonald	
928	"	Seebohm, Acting Ranger	"	Connor & Lambert	"	McDonald	
929	Allan	"	"	Lambert	"	"	

Date:

	D-1	D-2	D-3	D-4	D-5	D-6	D-7
			(Kelly)			(Lee R.S.)	
1930	Allan	Allan	Dibble	Lambert	Buchenroth	McDonald	
1931	Price	Allan	Dibble	Lambert	Buchenroth	Ohl	
1932	"	"	"	"	"	"	
	(Moran R.D.)						
1933	Langer	"	"	"	"	"	
1934	Balch	"	"	"	"	"	
1935	"	"	"	"	"	"	
1936	Stokes	"	"	"	Langer		
1937	"		"	"	Stokes		
1938	Allan	Cox	Balch	Dibble	Lambert		
1939	"	"	"	"	"		
1940	"	"	"	"	Lambert & Brewer		
1941	"	"	"	"	Brewer		
1942	tranferred to BPA til '44 then GTNP in '44 (Combined as	"	"	"	"		
1943	D-2) (Jack- son) Brewer	(Buffalo) Cox	(Gros Ventre)	(Hoback) Dibble	---	COMBINED AS D-1-----	
1944	"	"	Frome	"			
1945	"	Taylor	Frome & Dibble	Dibble & Reynolds			
1946	Brewer & Wadsworth		Dibble	Reynolds			
1947	Wadsworth	Taylor	"	"			
1948	"	Taylor & Dibble	Dibble & Wogensen	"			
1949	"	Dibble	Wogensen	"			
1950	"	"	"	"			
1951	"	"	"	"			
1952	"	"	"	"			
1953	Wadsworth & Wogensen	Dienema	Wogensen & Safran	"			

Date:

	D-1	D-2	D-3	D-4
1954	Wogensen	Dienema	Safran	Reynolds
1955	"	Dienema & Safran	Safran & Long	"
1956	"	Safran	Long	"
1957	Wogensen & Shank	Safran & Wogensen	"	"
1958	Wogensen & Shank	Wogensen & Payne	Long & Rinehart	Reynolds & Shank
1959	Wogensen	Payne	Rinehart	Shank & Brierley
1960	Wogensen & Daniels	Payne	Cornell & Rinehart	Brierley
1961	Daniels & Wogensen	Payne & Hooper	Cornell & Schuldt	"
1962	Daniels	Hooper	Schuldt	Brierley
1963	Daniels	Hooper	Schuldt	Brierley & Foltz
1964	"	"	"	Foltz
1965	Long	"	"	"
1966	"	"	"	"
1967	"	"	"	"
1968	"	"	"	"
1969	Long & Sprague	"	Scott	"
1970	Sprague	"	"	Mower
1971	Sprague & Sevy	"	"	Mower
1972	Sevy	Lawrence	Beckman	"
1973		"	"	"

TETON AND BRIDGER COMBINATION AS OF JULY 1, 1973

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