#### FIELDS COBB MEMORIAL WALKING TOUR

#### W.I.F.D.W.C. - Pingree Park September 1980

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#### Stop

- 1 Cronartium comandrae in pole-sized lodgepole pine.
- Recent clearcut in overmature lodgepole pine. Stand was very heavily infested with dwarf mistletoe. Size of clearcut is approximately 5 acres, much smaller than is used for commercial sales in this area (20-40 acres). Gross volume removed was approximately 3600 cubic feet per acre.
- Various treatments are being applied to this approximately 10-acre area (see attached map). Five stand types are represented in this area.
  - A. Overstory. This mature stand of lodgepole pine was very heavily infested by dwarf mistletoe and approximately 1/3 of the trees had already been killed by the parasite. Average dwarf mistletoe rating (DMR) was 5.1. Average tree size was 7 inches d.b.h. and 33 feet tall. Basal area 70 square feet/acre.

Treatment: Complete overstory removal—natural regeneration from cones in slash.

B. Scattered overstory with 30-year-old understory. Stand data:

|             | Overstory |       | Understory |       |
|-------------|-----------|-------|------------|-------|
|             | Before    | After | Before     | After |
| Trees/acre  | 120       |       | 660        | 200   |
| Ave. d.b.h. | 7.8       | -     | 2.6        | 3.8   |
| Ave. height | 31        | -     | 14         | 20    |
| BA/acre     | 40        |       | 26         | 16    |
| DMR         | 5.8       | -     | 1.6        | 1.8   |

Treatment: Remove all overstory trees; thin understory from growing stock level 110 to 60.

C. 30-year-old stand, essentially no overstory. Stand data:

|             | Before | After |
|-------------|--------|-------|
| Trees/acre  | 690    | 210   |
| Ave. d.b.h. | 3.6    | 4.8   |
| Ave. height | 17     | 22    |
| BA/acre     | 50     | 26    |
| DMR         | 1.0    | 0.8   |

Treatment: Thin from growing stock level 130 to GSL 100.

#### D. 70-year-old pole stand previously thinned. Stand data:

|             | Before   | After |
|-------------|--|-------|
| Trees/acre  | 570  | 340   |
| Ave. d.b.h. | 6.2  | 7.0   |
| Ave. height | 19 4 - William - 31 / 19 19 19 19 19 19 19 19 19 19 19 19 19 | 33    |
| BA/acre     | 127  | 90    |
| DMR         | . 2.7  | 2.3   |

Treatment: Thin from growing stock level 175 to GSL 110.

## E. 70-year-old unthinned pole stand.

Predominantly lodgepole pine with patches of aspen and Engelmann spruce. Thinning data:

|             | Before | After |
|-------------|--------|-------|
|             | v      |       |
| Trees/acre  | 755    | 190   |
| Ave. d.b.h. | 4.4    | 6.3   |
| Ave. height | 28     | 36    |
| BA/acre     | 80     | 40    |
| DMR         | 1.5    | 1.3   |

Treatment: Thin from growing stock level 160 to GSL 60.

Optional visit to discuss Shigometer vigor rating in relation to dwarf mistletoe infection intensity and thinnings in lodgepole pine. The thinnings were made approximately 40 years ago in a stand now about 100 years old. Four plots: 1 unthinned, and others thinned to spacing of about 8 x 8, 10 x 10 and 12 x 12 feet were established:

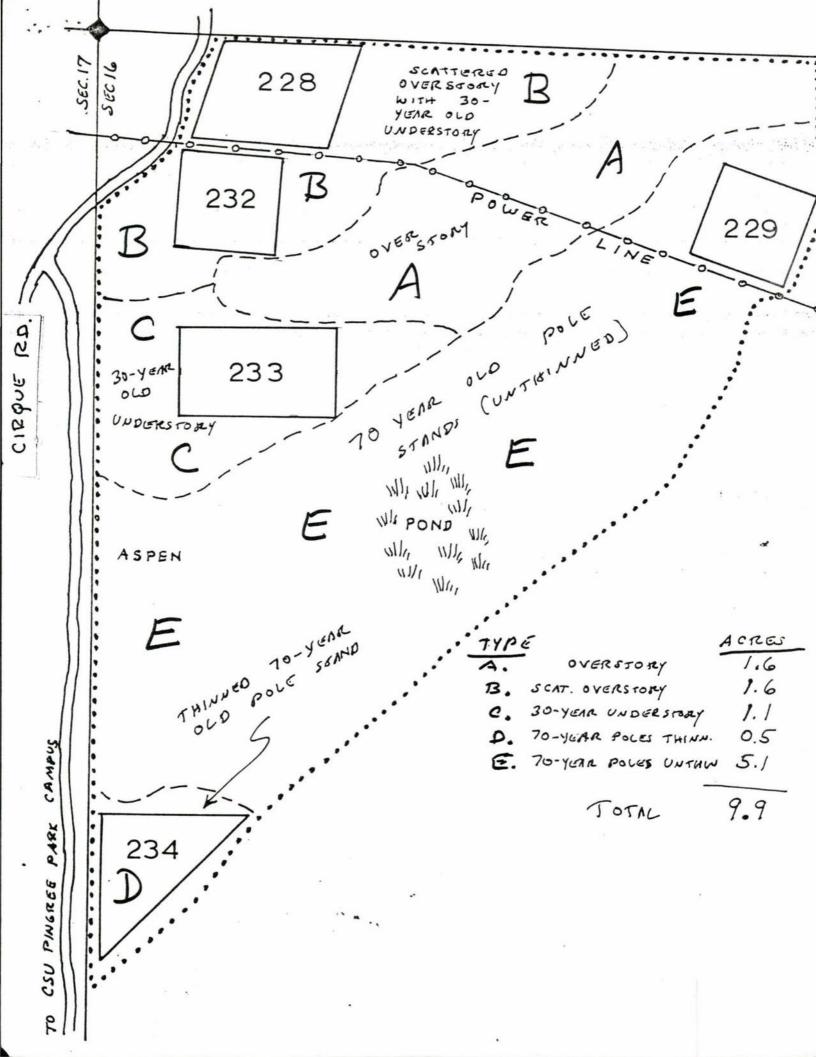
| 1941       |   | <u>19</u>  | <u>1980</u>   |  |
|------------|---|------------|---|--|
|            | Merch. cu.                                  |            | Merch. cu.  |  |
| Trees/acre | ft./acre                                    | Trees/acre | ft./acre  |  |
| 6060       | -   | 2860       | -   |  |
| 680        | -   | 664        | 1540  |  |
| 464        | -   | 392        | 1410  |  |
| 320        | -   | 288        | 1980  |  |
| 194        | <u>41</u>                                   | 19         | 80  |  |
| BA         | GSL   | BA         | GSL   |  |
| 200        | 1030  | 200        | 500   |  |
| 63         | 138   | 138        | 188   |  |
| 36         | 88  | 93         | 120   |  |
| 36         | 69  | 91         | 121   |  |
|            | Trees/acre  6060 680 464 320  BA  200 63 36 | Merch. cu. | Merch. cu.         Trees/acre         Trees/acre           6060         -         2860           680         -         664           464         -         392           320         -         288           1941         19           BA         GSL         BA           200         1030         200           63         138         138           36         88         93 |  |

|           | 19                    | 41       |           | 1980        | ):            |
|-----------|-----------------------|----------|-----------|-------------|---------------|
| Plot      | d.b.h.                | Height   |           | d.b.h.      | Height        |
| Unthinned | 2.3                   | 20       |           | 3.7         | 25            |
| 8 x 8     | 4.1                   | 29       |           | 6.2         | 40            |
| 10 x 10   | 3.8                   | 29       | A 5 45    | 6.6         | 44            |
| 10 x 10   | 4.6                   | 33       |           | 7.6         | 52            |
|           | 19                    | 41       |           | 1980        |               |
|           | % trees               |          |           | % trees     |               |
| Plot      | infected              |          |           | infected    | DMR           |
|           | And the second of the | 4 hr - 4 | 1 - A-A-1 | a tare to a | e de de la se |
| Unthinned | 5                     |          |           | 92          | 3.4           |
| 8 x 8     | 4                     | 1.00     |           | 100         | 4.9           |
| 10 x 10   | 2                     |          | *.        | 100         | 3.8           |
| 12 - 12   | 2                     |          |           | 100         | 2 0           |

Shigometer vigor readings in lodgepole pine:

| DMR | No. of trees | Resistance (k ohms) Mean and standard deviation |
|-----|--------------|---|
| 0   | 12           | 17 + 4  |
| 1   | 13           | 15 <del>+</del> 3                               |
| 2   | 18           | 17 + 4  |
| 3   | 17           | 16 <del>+</del> 3                               |
| 4   | 33           | 18 + 7  |
| 5   | 39           | 19 <del>+</del> 7                               |
| 6   | 41           | 27 + 12   |

Note: Only Class 6 is significantly different.





Foothills Campus Colorado State University Fort Collins, Colorado 80523 (303) 491-8660 FAX: (303) 491-8645

#### AGREEMENT

THIS AGREEMENT, made this 8th day of April, 1995, by and between the Office of Housing and Food Service, Pingree Park Campus, CSU, 215 Palmer Center, Fort Collins, Colorado 80523, hereinafter referred to as the LANDOWNER, and the State Board of Agriculture in behalf of the Colorado State Forest Service, Fort Collins District, Foothills Campus, Bldg. #1052, Colorado State University, Fort Collins, Colorado 80523 (303-491-8660), hereinafter referred to as the CONTRACTOR; and

WHEREAS, the CONTRACTOR has the expertise to provide forest practice services; and

WHEREAS, the LANDOWNER desires to implement forest practices as described in this Agreement.

NOW, THEREFORE, it is hereby agreed that:

1. LANDOWNER warrants that he/she is the owner of the property described as follows or has obtained authority from the owner of said property to grant all rights to CONTRACTOR provided for in this Agreement. The property is described as follows:

Property known as "Pingree Park Campus" in sections 16, 17, 20, 21, and 29 of Township 7 North, Range 73 West, 6th Principal Meridian, Larimer County, Colorado.

2. LANDOWNER grants to CONTRACTOR the right to a access to the above described property for the following purposes:

Design and administration of salvage sales to remove burned timber and hazardous trees, and development of a forest stewardship management plan.

Management plan implementation.

- 3. CONTRACTOR agrees to provide the services specified in Paragraph 2 of this Agreement in consideration for:
  - Revenue generated from salvage sales is to be used for "landscaping" and tree management of the Pingree Park Campus as agreed upon by the Pingree Park Campus Director and the Colorado State Forest Service.
  - Implementation of the forest stewardship management plan as agreed upon by the Pingree Park Campus Director and the Colorado State Forest Service.

- 4. It is understood between the LANDOWNER and the CONTRACTOR that this Agreement shall begin on the date first above written, and shall remain in force until cancelled by either party.
- 5. This Agreement may be terminated by either party ten (10) days following written notice to the other party.
- CONTRACTOR may assign the rights provided for in this Agreement to a subcontractor of its choice without obtaining the approval of the LANDOWNER.
- 7. The CONTRACTOR shall maintain during the life of this Agreement such liability insurance as is required by Colorado law.
- 8. This Agreement shall be extended due to inability of the CONTRACTOR to perform the work due to circumstances beyond his control or as mutually agreed to by the LANDOWNER and CONTRACTOR. All extensions will be written and become a part of this Agreement.
- Financial obligations of CSFS payable after the current fiscal year are contingent upon funds for that purpose being appropriated, budgeted, and otherwise made available.
- 10. The CONTRACTOR agrees as part of this Agreement that it will comply with all applicable laws regarding discrimination on the basis of race, creed, color, sex, or handicap including but limited to Executive Order 11246 as amended or as may be further amended hereafter.
- 11. The laws of the State of Colorado and rules and regulations issued pursuant thereto shall be applied in the interpretation, execution and enforcement of this Agreement.
- 12. The signatories hereto aver that they are familiar with 18-8-301, etc seq., (Bribery and Corrupt Influences) and 18-8-401, et. seq., (Abuse of Public Office), C.R.S. 1973, as amended, and that no violation of such provision is present.
- 13. The signatories aver that to his/her knowledge no CSFS employee has any personal or beneficial interest whatsoever in the services or property described herein.

IN WITNESS WHEREOF the parties hereto have executed this Agreement on the day first above written.

LANDOWNER

Director Pingue Park Canquis CS4

CONTRACTOR

David A. Farmer

Page 2 of 2

Rex Kellumy

Pingree Park Campus Colorado State University Fort Collins, Co. 80523

# a cano dee management

# PLAN

FOR THE PINGREE PARK CAMPUS



#### PREFACE

....Plan in full awareness of natures' forces, forms, and features— the sweep of the sun, the air currents, the peaks and hollows of the earth, rock and soil strata, vegetation, lakes and streams, watersheds and natural drainage ways—and this awareness should obviously entail planning in harmony with the elements of nature. If we disregard them we will engender countless unnecessary frictions and preclude those experiences of fitness and compatibility that can bring so much pleasure and satisfaction to our lives.

John O. Simonds Landscape Architecture

#### PREFACE

"The perceptions of relationships produces an experience. If the relationships are unpleasant, the experience is unpleasant. If the relationships sensed are those of fitness, convienience, and order, the experience is one of pleasure, and the degree of pleasure is dependent on the degree of fitness, convenience, and order. "

John O. Simonds

"The ultimate principle of landscape architecture is merely the application and adjustment of one system to another, were contrasting subjects are brought into a harmonious relationship resulting in a superior unity called order."

Stanley White

#### PREFACE

Our eyes do not divide us from the world, but unite us with it.

Let this be known to be true. Let us then abandon the simplicity of seperation and give unity its due. Let us abandon the simplicity of self-mutilation which has been our way and give expression to the potential harmony of man-nature. The world is abundant, we require only a deference born of understanding to fulfill man's promise. Man is that uniquely conscious creature who can percieve and express. He must become the steward of the biosphere. To do this he must design with nature.

Ian L. McHarg
Design with Nature

- J. Preface
- II. Premises
- JII. Master Plan
- IV. Conclusions and Recommendations
- V. Bibliography

Rederence have not been eited in this day!

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#### I TRODUCTIC

The purpose of this special studies project was to examine, review, and make recommendations for future development and uses within the Pingree Park Campus.

After numerous interviews and meetings with both faculty and administrative personnel and extensive library research the data was then assimilated to satisy four goals that were established early in the project. The goals were as follows:

- 1. To establish a logical and viable land use management plan for the placement and development of facilities and uses within the Pingree Park Campus.
- To address present environmental degredation problems and establish programs for their improvement and maintenance.
- 3. To preserve and maintain the historical and cultural features that are unique to the Pingree Park environ.
- 4. To improve the park visitors orientation within the campus including such things as improved circulation patterns, land use zoning, interpretative programs, and improved trail systems throughout the Park.

The task force committee, under guidance of W.D. Miller, consisted of; Jeff Gaiser, Mike French, Pat Hettle, and Dick Bouts.

This report along with maps and specific guidelines and recommendations were a direct result of the task force efforts. We would like to thank those of whom have help us throughout the semester on this special studies project. Optimistically, these efforts will become a pioneering effort to establish a viable and desirable land use management plan for the Pingree Park Campus. With effective implementation procedures, Pingree should become the showplace of what can be done to improve this unique and outstanding campus environment.

We would especially like to thank Dwain Niller, Charles Barney, Dale Hein, Doug Gilbert, Bob Aukerman, Edwin Mogren, Clinton Wasser, Chuck Mahoney, Crion Koenig, Bob Burnham, C.W. Hotchkiss, D.L. Madson, Bill Bertchey, Chuck West, Lee Miller, Chuck Terrell, and the many others that have provided valuable input into this land use management plan. Without their help and guidance this project would not have been possible.

# DGEMISES

#### PREMISES

Pingree Park is located 45 miles west of Fort Collins at the upper reaches of the Cache La Poudre River. The Park is just five miles from the Continental Divide in the Front Range of the Rocky Mountains of Northern Colorado. The Park is bordered by Rocky Mountain National Park on the southside and Roosevelt National Forest on other sides. Some other privately owned property is also found in the area.

Colorado State University's Pingree Park Campus is located at an elevation of 9,000 feet and its approximate 310 acres play an integral role for the high mountain environment.

Pingree Park was formed during the last glacial period. The upper reaches of the valley were carved and gouged by a glacier that left the glacial deposits in the form of lateral moraines that make up the ridges on each side of the Pingree Park Valley. The Little South Fork of the Cache La Poudre River that flows through the valley has since deposited clay and silt in the valley bottom. The valley is now characterized by an open park with willows, grasses, beaver ponds and a meandering stream.

The surrounding area is characterized by dense stands of lodgepole and scattered aspen stands. Spruce and fir stands are found at higher elevation with alpine tundra found above timberline.

The Colorado State University Pingree Park Campus is located in the lower, (eastern), reaches of the park. Recent acquisition of the Koenig Ranch has increased CSU land holdings to 310 acres in the park itself with 720 additional acres in nearby areas. CSU development has been centralized in one area in the trees of the northeast corner of

of the park. The campus facilities currently provide classrooms, housing, and services for up to 360 students and 13 family units for faculty use. Most of the facilities have been built for summer use only. Facilities that have been winterized include the Research Laboratory, Conference Condominiums, Center/Classroom Building, Service Building, and the cafeteria. Other facilities include 22 student cabins, 2 dormitories, 13 family units, 2 classrooms and a recreation hall. A weather data gathering station, observation shelter, softball field and two volley ball nets are located in the open park adjacent to the buildings.

The acquisition of the Koenig Ranch in 1974 has provided CSU with an additional 163 acres in the park. This land is important for its historical value as well as for its natural condition for educational purposes of forestry students. The buildings located on the Koenig property have historical significance as the original Koenig Homestead. The natural riparian environment is valuable for its role in the training of forestry students from CSU.

#### AREAS OF CONFLICT

Within the Pingree Park area there are several conflicts among possible uses.

### Conflicts between Development and the Natural Environment

Continued development of Pingree Park will have mitigating effects on the natural environment if not carefully planned and implemented. Past development at Pingree has been done without consideration of building locations, erosion controls, lack of circulation controls, garbage locations, and the location of the sewage treatment. Another problem area has been with building materials that do not relate to the Pingree Park environment. One good example is the tin roofs found on some of the buildings. This material is fireproof, inexpensive, and maintenance free but it does not relate to the environment. It is important to use materials with all of these qualities but they must relate to the natural environment.

The locations of existing buildings has concentrated high numbers of people in a small area. Without proper circulation routes and controls this will result in soil compaction, trampled vegetation and loss of wildlife habitat.

Without proper planning and impleme. Lation the potential conflicts between development and the natural environment are severe.

#### Conflicts between Automobile and Pedestrian traffic

The current circulation at Pingree Park has resulted from little or no planning. Vehicles routes and pedestrian trails coincide, resulting in hazardous conditions. Vehicles currently have unrestricted travel on

any roads on the campus. Careful and thoughtful planning of good circulation routes that campus visiters will use is essential to eliminate the potentially hazardous conditions that exist at Pingree.

#### Conflicts between Campus Visiters and Private Property Cuners.

One last area of conflict exists between campus visiters who may accidently cross onto private property adjacent to the Pingree Park campus. Visiters should be adviced of the locations of private property adjacent to the campus, early in their stay. This land should also be posted if not already. Efforts need to be made to eliminate possibilities which could result in confrontations between campus visiters and private property owners.

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#### HASTER LIVE

#### Introduction

The Little South Poudre Watershed is the site of intensive studies of many and varied facets of natural resources.

Numerous agencies- federal, state, and private-are working together to develop a better understanding of individual resources and resource interrelations.

Concurrent with the research effort is an intensive, multi-level education program centered at the Pingree Park Campus.

The goal of all these efforts is an integrated program of research and education that will produce basic resource information, afford an opportunity to test and demonstrate management techniques, provide in-the-field experience for training of present and future resource managers and in-vestigators, and provide an opportunity for all interested persons to learn more about our natural resources.

The heart of activities is the Pingree Park Campus of Colorado State University. Here, near the center of the watershed, approximately 200 future resource managers recieve field training each summer as part of their degree requirements in the College of Forestry and Natural Resources.

Approximately 30 to 40 college science teachers also come each year. Yet even younger students come to Pingree; several two-week summer science courses for high school, junior high, and elementary school students are held along with other conventions, conferences, and retreats. Research participation programs for students are also in operation.

Thus, the Little South might be thought of figuatively as a "watershed of knowledge" where many come to drink-' from the elementary school student for perhaps his/her first real quaff of natural resources, to the richly experienced teachers or resource managers to revitalize and further strengthen their understanding of the tremendous complexity with which he/she works.

The goal of Colorado State University in the Little South Watershed is a compatible program of research and education emphasizing the holistic approach inherent in the ecosystem concept.

#### The Plan

#### The Plan

The Pingree Park Campus, as a part of the total University system, is to remain a major teaching and research center for programs needing the environment of this unique setting.

### General Planning Concepts

- 1) The season for general use will be from May 1 to November 30.

  Some research activities will continue throughout the year.

  Consequently, roads to the park must be kept open during the season of general use. Snowmobiles should be used when needed during the off-season period. The extended season requires some winterized facilities which are to be grouped in a central core.
- 2) The total maximum planned capacity at any given time is 550.
- 3) Further development on the campus will be minimal. Emphasis will be given to winterizing utilities. At present the wastewater treatment plant is operating at maximum capacity.
- 4) Traffic and parking are major problems to be dealt with.
- Recreation, trails and interpretation values and facilities
   leave much to be desired.

## Land/Use Concept

This plan calls for the continuing development of Pingree Park as a campus for Forestry students and for general University and Community use during the spring, summer, and fall months. Some use of the campus by researchers will occur year around. The planned maximum capacity of 550, including students, faculty, staff, and families, is for instructional purposes.

Every attempt is being made to safeguard the natural environment.

Parking has been moved off the main campus to a central area to the north and south parking lots (newest additions). The planned development of future buildings will utilize the area efficiently without overcrowding. Generally speaking, the land use zones for the park consist of fixe categories; faculty, student life, service, conferences, special activities, and environmental conservation.

Activities within each zone should be in accord with these land use designations. Further demand for winterized facilities with a capacity of 180 participants is now being developed. These facilities would include the 200-seat multi-purpose classroom, the existing research laboratory (for research only), the new living complex, dormitories, and some faculty and staff housing. In addition, the maintenance buildings and manager-maintenance employees' cabin are included in this winterized core. For economy in development and efficiency in use, these facilities will be grouped in a central core. The rest of the facilities are to be partially winterized for late summer and early fall use.

The following discussion will cover briefly some aspects of recommendations that this task force has devised for the Pingree Park campus. Each section will contain to some degree, existing conditions. and future plans and recommendations that will relate within a holistic theme for the campus.

### Circulation

One of the main concerns of this project was to improve the visitors perception and orientation of the Pingree Park campus. Often ambiguity exists between visitors and their perceptions of spatial relationships

within the park. We feel that improved signs, under the direction of Bob Burnham, would greatly alleviate some of this ambiguity. Also, the design and development of an entrance feature could greatly enhance the visitors' perception of the campus. We recommend that circulation patterns to the north and south parking lots (newly constructed) serve as the focal channel for the entrance to the park. Bern construction or a key operated gate system would direct traffic volume and flow to these parking lots. We also recommend that in this orientation area that a new office center be constructed to monitor, control and distribute users of the campus. It is within this area that the winterized core exists and the newest construction activities have occurred. Management policies should emphasize concentrating vehicles to the northern portion of campus being used for overflow purposes when the need arises.

A new road extending from the north dormitory around the north side of the beaver pond to connect with the road in the family area at a point southwest of the beaver pond will be added. This will provide access to additional building sites for family units but, more importantly, it will provide a second service road out of this area in case of forest fire. Also, bridges should be retained and renovated for fire-safety purposes.

Another concept within the circulation topic is the retention of the bridge over the Little South Poudre, which connects with campus roads south of Classroom B, for a desired emergency ingress-egress route for fire safety purposes. There is also an opportunity to create firebreaks around the park on those sides not already developed. These breaks should be developed to relate to the landscape without any straight or tangent lines. Several techniques are currently being used by the Forest Service.

Maintenance vehicles and facilities should be moved from the southern portion of campus to the service area near the waste-water treatment plant. It is here in the service area that the gas pumps are to be relocated. We recommend that garbage facilities with a fence around the dumpsters also be constructed within this service area with the thought that garbage be delivered to this location from all pick-up points daily.

#### Trails

Trails in the area need to be evaluated and rehabilitation procedures established for their development and maintenance. Elimination of unnecessary trails and detailed studies of functional alternatives is greatly needed on campus. Remove all previously placed gravel from the trails as they add to soil compaction and make revegetative procedures quite difficult. Soil and erosional programs and controls for the whole campus need to be established. Steep slopes, their improvement and maintenance all deserve detailed consideration.

#### Trails and Barriers

(see other paper)

#### Lighting for Campus Trails

Lighting for pedestrian traffic on campus should also be considered.

These lighting facilities should be of a low profile with light concentrated near the ground low for foot traffic at night. Native materials should be considered in the design of these lighting facilities.

#### Signs

The development of signs is now in the design stage under Bob Burnham. Important components of this section include pedestrian/vehicular signs, structure signs, and private landownership signs.

#### Trails and Barriers

#### Introduction:

This section of our plan will deal with standards for the design and construction of trails, trail barriers, and parking barriers. These standards were compiled from information obtained from the National Park Service, U.S. Department of the Interior, National Recreation and Park Association, National Audubon Society, and other related groups. They were then consolidated into the <u>Park Practice Design</u> book of standards.

This section of the report will not deal with the location of trails or barriers and makes no decisions as to where they are to be located. It will simply give information on designs, materials, proper construction, measurement specifications, and facility maintenance. Also, the report will include only those facilities that are functionally useful and that follow the disciplines for sound planning in a natural, mountain environment such as Pingree Park.

#### I. Trails

The buildings and facilities of the Pingree Park campus are all located in the same relatively small area. The close proximity of facilities, the lack of roads to some facilities, and the deterioration of the area by vehicular traffic demonstrates the importance of a well developed and designed trail system for the area.

Right of Way

Trails for this area should be three to eight feet wide, depending of the amount of use and the type of trail. Baths leading to and from heavily used facilities such as the messhall and classrooms should be wide enough for several persons to walk abreast and cleared to a height of ten feet so branches will not hang down when wet or laden with snow. Less heavily used paths, such as natural and historical trails, can be narrower as they usually accommodate smaller groups of travelers at any one time. Large trees should only be cut when it is impractical to build around them. If it is necessary to cut trees, those in the tread of the trail must be removed completely. Trees that must be removed on the sides of the trail should be cut a few inches above and herizontal to the surface. (FIGURE 1)

Cut off here, if impossible to save

Tread of trail

Tread of trail

Where practicable all trees should be left intact. In no event should stumps be removed when located as shown.

Cut off as indicated and leave stump to support trail.

Suggested treatment of trees and stumps along the trail. Never remove more trees or rocks than is necessary. Important natural features can often be saved by skirting the trail around them.

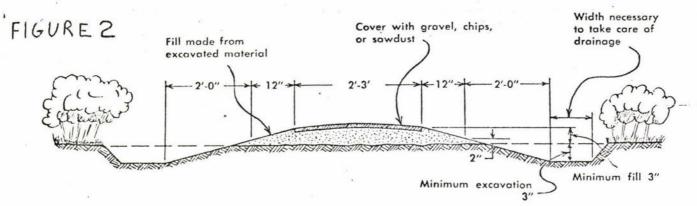
Large native rocks may also enhance the natural setting of the trail and should not be removed if possible. Any rocks or stones nor purposely left must be completely removed from the tread.

Leeds, grasses, and other vegetation are not only unsightly, but also dangerous. While it is true they help to slow the process of erosion in some cases, they are slippery when wet and branched vegetation may cause users to stumble. Many shrubs and trees in this area will send up sprouts even when the main stem has been cut. In such cases it would be wise to use chemical controls to insure a clear tread. Regardless of the methods used, all trails should be completely cleared of vegetation.

#### Base

In preparing the base for a trail, the basic makeup of the ground surface and slope of the land must be considered. On dry sites where the tread does not slope, no particular base preparation is needed.

On wet sites, such as the sensitive areas and along the stream, the tread should be raised three to six inches above the surrounding area. (FIGURE 2)

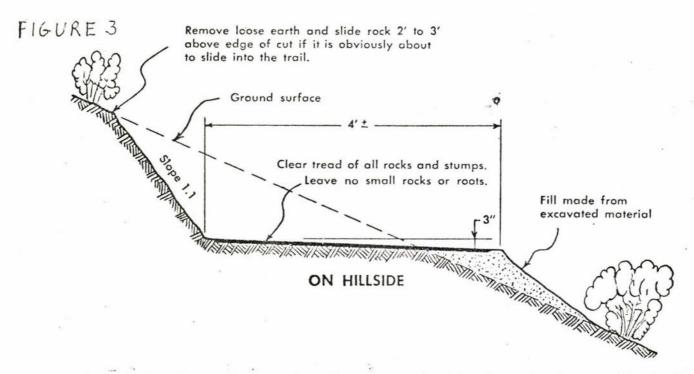


Design of a built-up trail over a wet or seasonally soggy area.

Another design for a built-up trail; logs treated with a preservative can be used for curbing. Curbing, however, should not be used to confine people to a trail.



Trails that run along hillsides must have treads that are cut into the slope. These trails should be cleared of rock and loose material two to three feet above the cut. Excavated material used for fill should be planted with native grasses and forbs to insure against prosion. (FIGURE 3)

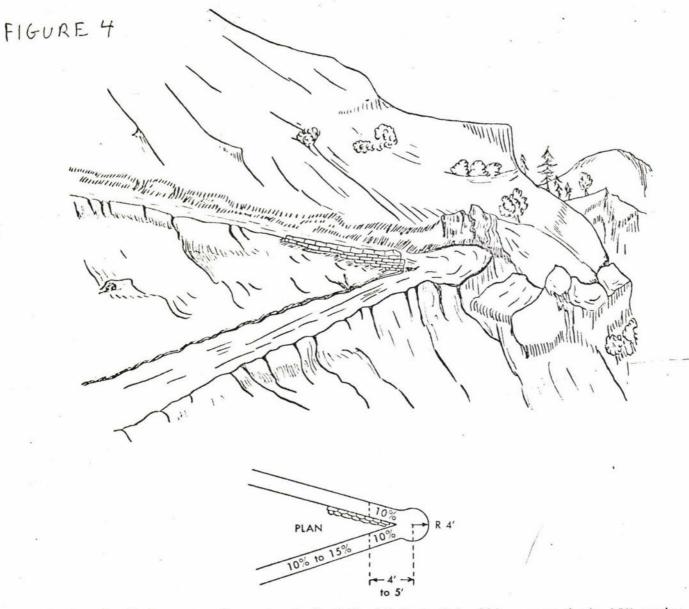


Trail specifications for a trail along a slope. Note absence of curbing. Exposed surfaces on sides should be planted to grass.

Grade

possible. A grade of 10% or less is recommended, but should never a least a make lay hell of exceed 15%. In some cases, such as a trail to the Madonna, switch—backs may have to be used to keep the grade below 15%. (FIGURE 4)

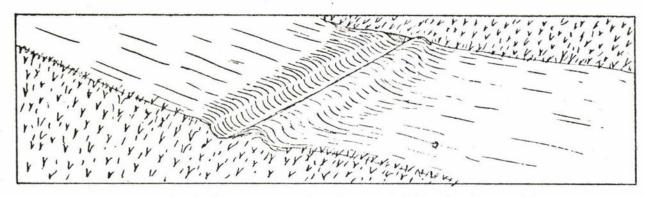
In some situations, steps may be used to traverse steep slopes. Slabs of native stene, railroad ties, or hewn logs will serve as good materials for steps. If wood is used, it must be treated with water repellent and a preservative.



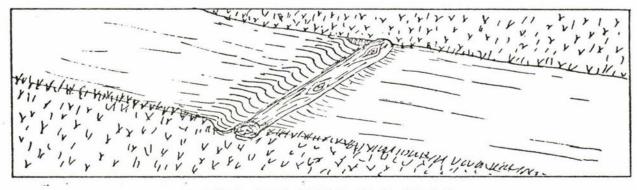
Design of trail along steep slope using the "switchback." No trail should have more than a 15% grade.

#### Drainage

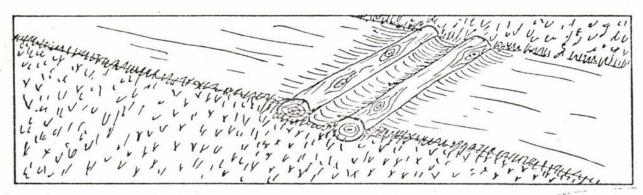
Drainage is an important item to consider in trail construction. (FIGURE 5) shows four methods of diverting water across a trail. On hillsides, the tread should be graded so that the outside is three inches lower than the inside to facilitate drainage. There should be no gutters on the inside cut of a trail. (FIGURE 6)



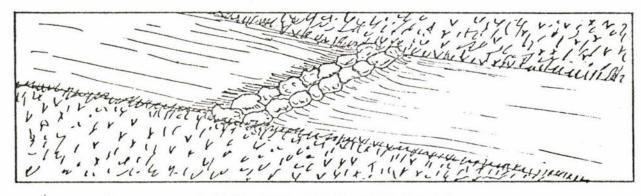
"THANK-YOU-MAM" CUT INTO THE TRAIL



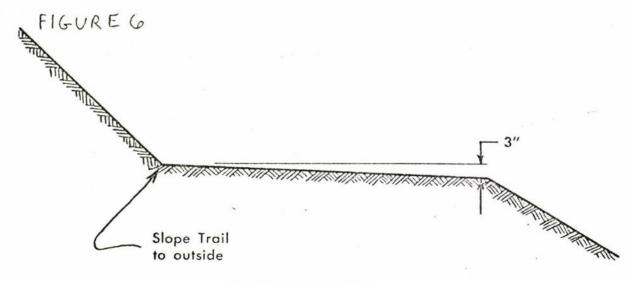
1 LOG SET INTO THE TRAIL



2 LOGS SET INTO THE TRAIL



ROCKS SET INTO THE TRAIL



**OUTSIDE SLOPE** 

Trails should be sloped to the outside to permit run-off. Do not gutter trails on the inside cut.

#### Surfacing

If trails are not heavily used, no surfacing other than native material need be used. For areas of heavier use, a mixture of native soil and wood chips can be used to make the trail durable and give it a natural appearing surface. Blacktop, concrete, and soil cements are not recommended for the area because temperature and climatic changes cause fracturing and displacement of these surfacing materials.

The crushed rock now being used on some trails in the area is not eff desirable. This rock destroys the natural appearance of the trail and makes walking difficult.

Trails that are already in existence should be used when ever possible. New trails should be built under the guidance of skilled personel following the standards set down above. It is important to remember that trails are a useful facility for education and directional movement of persons. Too many trails destroy these educational possibilities and the aesthetic value of the area.

#### II. Parking Barriers

Parking barriers can also be built to help maintain the natural beauty of the Pingree Park area. Large native rocks and logs from the area can successfully be used. If wood products are used for barriers, the wood must be treated to prevent roting and decomposition of the barrier.

Existing natural barriers, i.e. tree lines or hillsides, are recommended for use. These can then be supplemented with man-made barriers to fill any gaps. (FIGURE 7) gives three simple examples of effective barriers that can be constructed from materials native to the areasel demanded to 25 and 7.

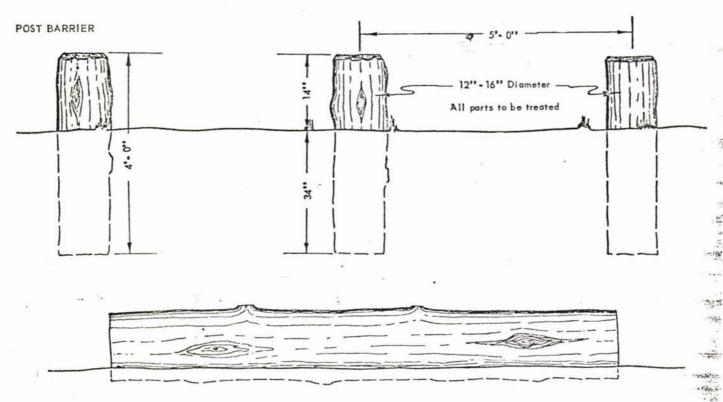
extensive barriers of these types of barriers are used, they should extend around the entire parking area. They should not be used to block gaps in natural barriers.

It is important that fall barriers be made of native materials when possible. We should also remember that Simple barriers are usually more aesthetically pleasing, easier to install, and less expensive than the more complex versions.

## Simple Barriers

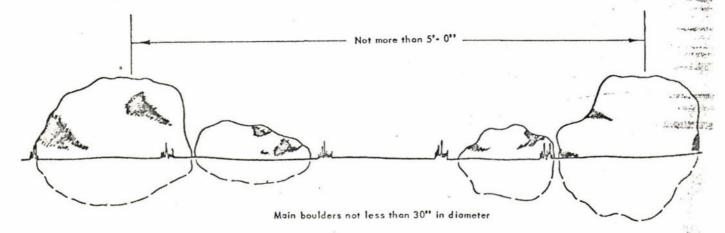
# FIGURE 7

The placing of short posts, logs and large rocks between trees and large shrubs will often be sufficient, in a subtle way, to control traffic without distractings from other park values. All parts of post barriers should be treated with fungicide timberlox or use creosoted posts.



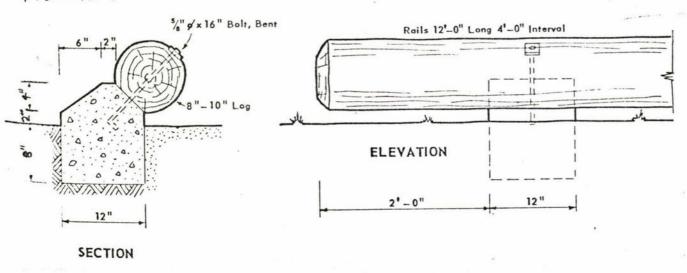
LOG BARRIER

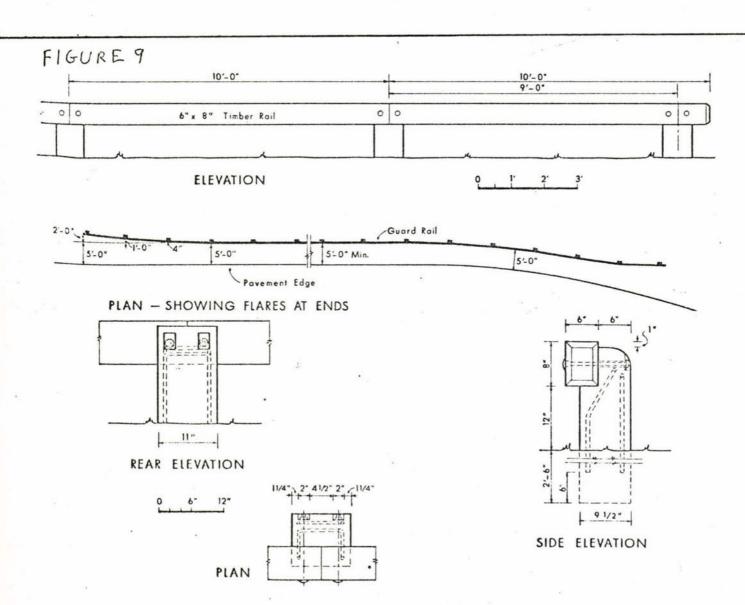
Bury 4 to 6 inches below ground surface



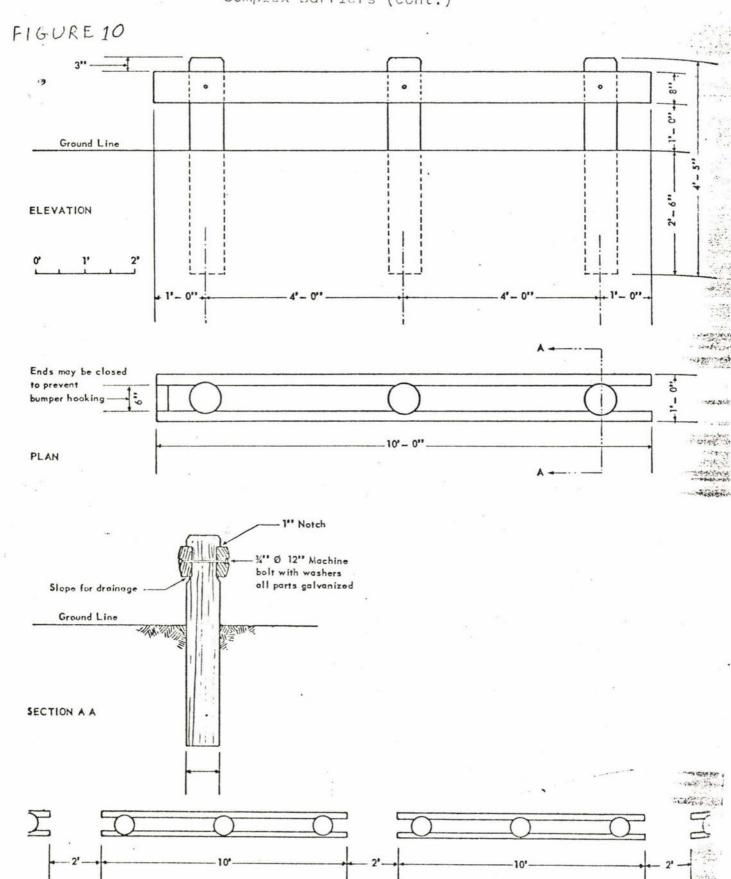
# Complex Barriers

FIGURE 8





#### Complex Barriers (cont.)



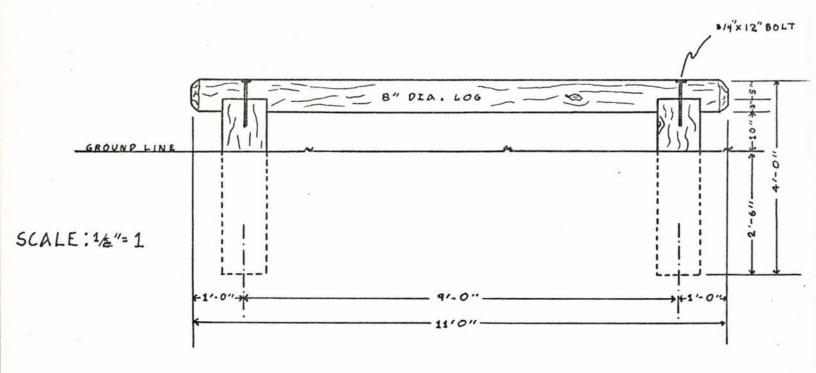
PLAN SHOWING SPACING BETWEEN BARRIERS

#### III. Trail Barriers

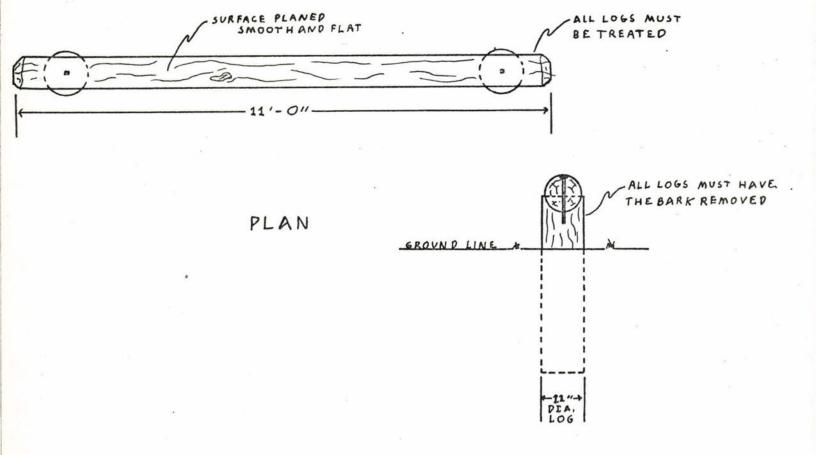
Trail barriers can be used to direct and control foot traffic offectively. These structures should be constructed and placed where there is a need to confine use of the area to designated trails.

Simple trail barriers can be constructed of logs and materials native to the Pingree Park area. Before construction of the barriers itself, the logs must be peeled of bark and treated to prevent rotting. The railing log may also be planned flat on top to offer a sitting place for those using the trail. In this case, the railing log must be at least eight inches in diameter to support the users weight. (FIGURE 11)

### TRAIL BARRIER



### FRONT



END

There is good opportunity for creating signs for structures. At the observation shelter, for example, painting, renovation and an interpretative map illustrating peaks, points of interest, and environmental components within viewing distances could greatly enhance this and similar structures and facilities.

Signs for some of the Koenig structures, the smoke house, bear trap, and interpretative trails should be designed and developed.

An orientation center at the new office/center complex should provide rules and regulations concerning topics of trail and facility locations, recreation, parking, pet control within the park and other topics under the concept of management control.

#### Expansion

Further development and expansion of the Pingree Park Campus must be logical, economical, and within established standards and guidelines. Barriers, signs, buildings, trails, and utilities must all be developed and maintained in such a manner as to relate to some holistic theme for the campus. The following are some of the general standards and guidelines that we have developed for expansion of the Pingree Park Campus.

- We feel that structures should be limited to one story, low profile components unless dense stands of vegetation are able to visually absorb a taller structure.
- 2) Use natural materials and colors, that have no reflective patterns in roofs, windows, or door frames. Also, all structures should have covered bottoms for fire-safety purposes.
- 3) Revegetate construction sites and have a rehabilitation plan from the onset. In planting, use natural landscape plant materials indigenous to the Lodgepole Pine Community with some added exotic plantings as a variety component. The use of rock landscape could add to the parks landscape quality.

- 4) Relocation studies for the transmission line, within the park, should be evaluated in detail so that these lines do not detract from the parks inherent visual quality.
- 5) The old fish study, structures along the steep banks, near the entrance of the park should be removed.
- 6) Alternative trail systems, interpretative programs, and recreation activities should be considered in detail. Interpretation and recreation must be provided and become a vital component with the park environment.
- 7) Remove or renovate all fences to relate to the holistic theme for the campus. Also, renovate the weather station and amphitheatre portions of the park.
- 8) The pond near the faculty cabins should be preserved for educational purposes. We recommend that revegetation procedures and painting of the water supply tanks and pump stations in this area also be done as soon as possible.

Historical Values (see other paper)

#### HISTORY OF PINGREE PARK

Pingree Park's long and varied history began in the early 1800's with the passing of fur traders through the area. It became a possession of C.S.U. in 1912 and the first student attended Pingree in 1917. The number of students attending Pingree has steadily increased since that time to almost 300 in 1975. During this 175 year time span many other interesting and significant events have taken place. The need to preserve and interpert these events for the future students and visitors at Pingree Park is an important part of this plan. It involves establishing a positive chronology and interpertation of specific sites. The following is a chronology of historical facts relating to the establishment of the Forestry camp at Pingree Park, followed by specific sites and recommendations.

#### HISTORY OF PINGREE PARK

9 Type and the

Pingree Park has a long and interesting history. This history should be preserved to the best of our ability for the present and future generations of students and visitors to the park. The following is a chronology of historical facts relating to the establishment of the Forestry Camp at Pingree Park. Chronology:

- 1803 Louisiana Purchase included the Cache la Poudre Canyon.
- 1800-30 Fur trappers, including Kit Carson, were working through this general area.
- 1849-50 Kit Carson set up four fur trader's camps in the Chambers Lake area. Prospectors separched for gold in the vicinity.
- John W. Pingree, a six-foot, 225-pound Scotch lumber jack traveled up the Poudre, along the Little South Poudre, and finally into the Park looking for ties for the U.P. Railread then built through Nebraska and Wyoming.
- In the spring, Pingree established a logging camp near the site of the present Forestry Camp. He hired 30 to 40 the hacks, who walked 25 miles into camp. Fresh meat was supplied by professional hunters, who received six cents a pound, dressed weight, for deer, elk, bear and mountain sheep. Kit Carson was among these hunters. Numerous mountain lions preyed upon the horses.
- The first tie drive was made down the Little South this spring. The ties were landed at LaPorte and hauled by wagon to Tie Siding or Cheyenne. Charles W. Pennock built another tie camp three miles east of Pingree Park on what is now Pennock Greek. This camp was only half as large as Pingree's camp. An average man could hew 30 to 40 ties per day, a good man averaged 50 to 60, while it is said Pingree could cut 100 during the course of the day. The men were paid 10 cents per tie.
- The camps closed in the fall because the railroad no longer needed ties. Coe and Carter, tie contractors for the U.P.A.R., built a narrow gauge three-foot wide road down the Pingree trail to the Fustic and on up the Poudre to Cameron Pass.
- 1875-78 Currie and Kissock started running cattle in the area.

- Cache la Poudre and North Park Toll Road Company was incorporated to build a wagon toll road from the foot of Pingree Hill (near Rustic) up the Poudre to Chambers Lake and over Cameron rass into North Par. Pingree Hill was named for George W. Pingree, a hunter and trapper, who built a cabin near the present site of Rustic.
- 1380 Toll Road over Cameron Pass into North Park completed.
- Ben Flowers built the Flowers Road from the head of Rist Canyon, across Stove Prairie and Poverty Flat, past Crown froing and into North Park. Gost to build 500 dollars. Now used primarily as a Forest Service trail.
- 1888 C.G. Buckingham took cattle into Pingree Fark.
- Large forest fire occurred over most of the area aroung the Park. Resulted in Lodgepole pine reproduction now present.
- 1892 Hourglass Reservoir built.
- The area was withdrawn from settlement. The Cache la Poudre and North Park Toll Road became a public highway.
- 1903-4 Brown Lake Dam built. Washed out in 1906. Tom Gard homesteaded the lower Bennett place
- 1905 The area was added to the Medicine Bow National Forest by President Theodore Roosevelt.
- 1906 First Twin Lakes Dam stated by Charles Ramsey, and finished in 1908.
- 1908 Charles Ramsey homesteaded the upper end of Bennett Creek where he built a log barn and a cabin.
- 1910 Area which is now Roosevelt National Forest became the Colorado National Forest.
- A special act of Congress granted Colorado State University the privilege of selecting a number of tracts of forest land, lying within the National Forests, for use by the school.
- President Charles A. Lory of Colorado State University, Supervisor H.N. Wheeler of Colorado National Forest, State Forester and Professor B.O. Longyear, President Edwards of the State Board, and Governor E.M. Ammons selected 1600 acres of land including the camp site in Pingree Park. They traveled by a steam-driven auto up the Buckhorn Road to the Ranger Station and by spring-board and horse over Pennock Pass into the Park. They stayed at the cabin of the Frank R. Koenigs, "who were honeymooning above timberline and looking after a bunch of cattle on the range." This was in August and photographs were taken of the group. Plans for the lodge were drawn up in 1913 and the lodge was completed this year (1914) on December 7. The workmen stayed at the Koenig place.

- Pingree Park was established as a summer camp for the Civil Engineering Department. It was soon abandoned because of inaccessibility. Prof. B.C. Longyear had planned the area as a location for forestry research and instruction and took this opportunity to establish the Forestry Camp. Rocky Mountain National Park was established. Hugh Ramsey brought a truck from Loveland to haul lumber to town on two-day trips. This was the first truck into the Park according to available records.
- The Tunnel above Thompson Resort was holed through. It and the Big Narrows road were built by Tynan's Road Builders (convict labor).
- 1917 Cne student at Pingree Park.
- 1918 Two students at the Park.
- 1919 Stanley Steamer first car into the Park.
- 1922 The students ate, slept and studied in the Lodge.
- The students slept in tents. Reggers road built providing a new entrance into the Park. PA Dodge roadster was the second car into the Park.
- 1924 Cameron Pass road first opened for auto traffic. Commanche Reservoir built.
- Winter Kill in Lodgepole pines. Firebreak started, completed in 1928.
- 1926-27 Cave built for Light Plant.
- 1927 Students were first required to attend the camp. The lodge had electric lights (32 volts), hot and cold water, and a bathroom. The old bunkhouse was built.
- 1932 Colorado National Forest became the Roosevelt National Forest by proclamation of President Herbert Hoover.
- "Little South" C.C.C. Camp on flat bench across road from Fish Creek Camp Ground built present road from the main Poudre to intersection with Pennock Pass Road.
- No summer camp held. The W.P.A. occupied the camp and built the Cirque Road. (cirque meadows?)
- 1936 Summer camp held on the North Fork of the Michigan River in North Park.
- 1937 Twenty-seven students at Pingree.
- Summer camp now absolutely required. Students built the Bunkhouse Annex and began the faculty cabins.
- 1939 Faculty cabins Nos. 1, 2, and 3 completed. Cabin 4 had been built some time previously. Students transplanted fish from Twin Lakes to Cirque Beaver Ponds, because of low water in Twin Lakes. (Morrill Trail built.

(Cirque Mudocos)

- N.Y.A. crew of students built the "campfire circle" 1940 placed rock walls along the drive to the cave and replaced the water bars in the Back Ridge Road. This road had opened about 1936 and closely follows the old Mummy Pass Trail.
- 1941 First student cabins were built.
- Three military planes crashed. One on Stormy Peaks, 1943-44 one on Crown Point, one in Buckhorn Canyon. when was he found? when? A STYDENT
- Harley Booth, lost on a solo hike.
  He was NETER from D. 1946
- Ridge Road in back of camp opened up. The palisade-1947 and-horizontal-log students cabins were built.
- 1948 Cabin No. 5 was built. First overnight trip up Stormy Peak was made.
- The Lake Cabin, No. 6, was built. Lodge was remodeled. 1949
- The showerhouse and latrine was built. Students cabins 1950 were doubled in size. Generator house built. lands in Cirque exchanged for those along the Little South in front of the camp owned by Starkey. Waterline laid to student cabins.
- Remains of J. Lee Dean, First Dean of Forestry, interred 1951 on granite knoll along trail through the swamp to camp spring. U.S. Forest Service granted special-use permit to use national forest areas surrounding park as "forestry, range, and wild land experimental area and training ground for students." TP Faculty washhouse was constructed. Camp wired for electric lights. First annual, winter Pingree Park - Stormy Feaks trip made by students and faculty. Exact date ,
- Shorter access road and bridge built across Little South 1952 Poudre.
- Remaining student cabins doubled in size. Lodge refloored 1953-54 and reroofed. Entrance gate and pole fencing installed.
- Two new student cabins built. Boundary fencing initiated 1955 and completed in 1956. (Fluroescent) lights installed in all cabins conserveng power.
- Modern Dining Hall constructed under State Building Mill-1956 Levy contract. This was planned to accommodate at least 150 students. # Four new student cabins built with student help along west side of back road . A John Wetzel lost explain climbing Poudre cliffs.
- Cabin No. 5 remodeled and enlarged. Criginal lodge restored 1957 to classroom use; instructor office and equipment room installed. Two student cabins built along west side of back road. Latrine modernized. First trees transplanted to front of new messhall. Front "lawn" and baseball diamond seeded. P Record 92 students at camp this year, requiring 4 instructors.

- Cabin No. 7 built. Metal water-storage tanks installed at spring, two additional student cabins built along back road. Back "lawn" seeded. Concrete apron completed about the dining hall as runoff drainway.
- 1959 State Board of Agriculture started holding summer meetings at ringree.
- Two student cabins were accidentally burned and reconstructed. Two stream gages were installed for watershed studies. Meterorological station was enlarged and weather records and stream gaging stations were read bi-weekly throughout the winter. P Botany Department staff initiated an N.S.F. alpine study using Pingree camp as headquarters.
  - First dormitory built at Pingree to accommodate National Science Foundation Summer Science Institute. In addition to 67 forestry college students, 39 high school and junior college science teachers enrolled at camp. Seven faculty members were engaged in the instruction of the two groups.
  - Second dormitory and classroom built at Pingree Park to accommodate N.S.F. Sunmer Science Institute and serve other University purposes. The camp area was designated "Pingree Park Campus" indicative that the University is developing a fuller program of instruction, institutes, and research in the area. N.S.F. Undergraduate Research Participation Program was expanded to include a new phenology project in addition to wildlife and genetics projects that were initiated in 1960. Alpine research project and yearlong records of weather and streamflow are being continued.
  - 1963 Research Lab started.
  - 1964 REA (rural electric power) to camp, commercial telephone service installed.
  - 1966 North Dormitory Research Laboratory Completed.
  - 1967 Eight week session. 147 students in camp.
  - Helicopter crash during fish planting operation Emmaline Lake . F 72 students K 52 week session.

    Leventy-two
  - Lounge in North Dorm convented to classroom. Library added in Old Classroom. Fist camp nurse. Volleyball and basketball gourts, constructed. New parking lot behind cabin #9. Road widened and straightened. H-90 students on a 52 week session.
  - New look Lor siding on Old Classroom building and Shop building replaced with board and batten siding to conform to exteriors of Messhall and South Dormitory. Rehabilitation of Old Classroom Building. Recreation room, vending operation implemented in Shop Building. Research lab and cabin #9 improvements. Ho students in camp of 5 weeks.
  - 1971 Messhall remodeling commenced #P Students and faculty called in on four fires Deadman Lookout, Skyline, Buckhorn and

Interpretation on the many historical sites at Pingree would be a positive addition for future students and visitors to the park. This might be done by providing a route map showing the location of each site. A sign at each site would provide an interpretation of the site. These signs should conform to the standards of style, material, and color recommended in this plan. Each sign should be informing and give factual information about each site.

#### Example:

#### DEAN MEMORIAL

"MEMORIAL TO JOSHUA LEE DEAN, 1896-1951, WHO SERVED AS THE FIRST DEAN OF C.S.U.'S FORESTRY SCHOOL"

The route followed to each site should follow the existing trails as much as possible and conform to the standards set for trails.

Specific sites for interpretation:

- 1) Old Classroom
- 2) Koeing Homestead
- 5) Dean Memorial
- 4) Bear Trap
- 5) Sewage and Water Treatment Plant
- 6) First Student Cabin
- 7) Weather Station

- Bull Mountain (largest fire in the state in 8 years).

  (cont.) Amphitheater built by students in the second session.

  Dump phased out. First dual session at ringree. Rist first session 59 students, 2nd session 49 students.
- The Koeing property, consisting of 163 acres, was purchased and added to the Pingree Park Campus. Messhall remodeling completed. Old student wash house completely rehabilitated. Five rooms added to South Dorm. New roof on faculty cabin #6. Two new faculty cabins, Nos. 10 & 11 were built. Camp road improved. Master Plan study for Pingree Park completed. Dietician added to staff. 91 students in first session, 5 weeks. 82 students in second 5 week session.
- 1973 Construction started on sewage treatment plant and lift station.
- 1974 Construction started on condominium style dorms.
- Sewage treatment plant completed, and in operation. Condominiums style dorms completed. Construction started on water treatment plant and new classroom lounge combination.

-> INTERPRETATION

Comments on specific items of historical interest at Pingree Park.

- 1) The bear trap north of the camp was built by Hugh Ramsey:
- 2) The madonna was painted on rocks to the west of the camp. It was painted by Joyce Koeing and over looks the park.
- 3) The second cabin to the south of the main Koeing cabin was used as a school house.
- 4) The old mining car sitting in front of the Koeing cabin was used in construction of Hourglass Reservoir.

Orion Koeing expressed interest in the establishment of a museum at the Park. He has many old pictures and would be willing to have copies made for the museum. He also has many other odds and ends which might be of interest for a museum.

Professor J.V.K. Wagar also expressed interest in establishment of a museum. He would like to see the displays, presently at Pingree, containing old firefighting hand tools placed in a museum. He is also a good source of historical information.

The historical information was gathered and compiled by Michael French, senior in the department of Recreation Resources, 1975.

#### SOURCES OF INFORMATION:

- 1) Crion Koenig 2025 North College Ft. Collins, Co. 80521
- 2) Professor Charles Mahoney
  Department of Recreation Resources
  Colorado State University
  Ft. Collins, Co. 80521
- J.V.K. Wagar 415 East Laurel Ft. Collins, Co. 80521
- 4) Environmental Impact Analysis
  Expansion of the Pingree Park Campus
  Colorado State University
  College of Forestry and Natural Resources
- 5) "Historical Facts Relating to the Establishment of the Forestry Camp at Pingree Park"

# SUMMAGY

#### SUMMARY

with effective implementation, maintenance, and evaluation of exis existing facilities and programs a viable land use management plan for the Pingree Park Campus can be established. The following is a summary list of recommendations that we feel should recieve priority in preliminary implementation of this land use management plan. With effective and efficient monitoring, and evaluation, achievement of needed revisions, (what demand dictates), for the Pingree Park Campus.

#### RECOMMENDATIONS

#### A. General

- 1. Land Use Management recommendations stated in this plan should have student, faculty, and administrative approval
- 2. Inventory and map all trails, structures, bridges, ponds and facilities located on the Pingree Park Campus.
- 3. Determine the carrying capacity of the area before any further development.
- Any future development should be confined to either the service, conference or student land use zones in the northern portion of the campus.

#### B. Historic

- 1. The Koenig Ranch structures within campus boundaries provide an excellent opportunity for interpretive programming and should be preserved and developed in this manner.
- The North Classroom should be converted into a museum-library facility.
- 3. Develop an interpretive sign showing the geologic process that formed the Pingree Park area.

#### C. Circulation

- Control present traffic flow by channeling vehicles to the newly constructed parking lots.
- 2. Other parking areas should be used for overflow purposes only.

- 3. Access to other areas of the campus should be restricted to service and faculty vehicles and pedestrian traffic only by use of some form of barrier near the parking lots.
- 4. Trails and barrier maintenance and construction should follow the standards set down in this plan.
- 5. Any trails not recommended in this plan should be rehabilitated.
- 6. Erosion and soil stabilization controls for the entire campus need to be established.

#### D. Facilities

- 1. All structures and facilities should relate to some holistic theme for the Pingree Park Campus.
- Remove all fences within campus boundaries except for those with a specific function.
- 3. Utilities should be placed underground and winterized.
- 4. Improve the campus entrance.
- Water supply tanks, pump houses, wells and any other structure, should be painted with colors that relate to the environment and surrounded by natural landscape buffers.
- Renovate the student cabins, amphitheater, weather station, observation shelter and other structures in need of maintenance.
- 7. Expand the present recreation hall and relocate volleyball, basketball courts and horse shoe pits in the old parking lots.
- 8. Remove the old fish studies located on the steep bank near the park's entrance.
- 9. Fire-safety procedures should be established.
- 10. Revegetate past high density areas and around newly constructed buildings.
- Establish an Office/Information Center in the conference zone to control, orient and distribute campus visitors.

CSU HOUSING OFFICE MAR 1,5 1976 CSU Pingree Park
Resource Interpretation
Plan

## NATURAL RESOURCE INTERPRETIVE PLAN C.S.U. PINGREE PARK CAMPUS

#### Objectives of Pingree Park

The C.S.U. Master Plan "Patterns for the 1970's" states that:

"The Pingree Park Campus as a part of the total University system is to remain a major teaching and research center for those programs needing the environment of this unique setting." This statement relates the continuing importance of the Pingree Park Campus, and is the overall theme under which this plan is prepared.

The campus prior to 1975 was operated primarily as a forestry camp for C.S.U. students, with some use by other groups such as Poudre R-1 School District for outdoor education activities. The camp also served as a base for natural resources research projects. In 1975, a modern and unique conference center was constructed, enabling use of facilities by increased numbers and types of groups. Environmental impacts of this increased use were examined prior to the construction of facilities.

Recent land exchanges between C.S.U. and the U.S. Forest Service have increased the campus size to approximately 1,100 acres. This increase in size and increase in diversity of use provides opportunities for building on the basic educational programs of Pingree Park through increased natural resource interpretive activities.

#### Administration

The Colorado State Forest Service was designated by President A. R. Chamberlain to "administer, manage and protect all University related

forest lands in cooperation with other C.S.U. agencies and the Land Use Committee." This plan identifies and schedules activities to be carried out at Pingree Park in accordance with this designation.

The C.S.U. agency directly responsible for the administration of camp facilities is the Department of Student Services. The College of Forestry and Natural Resources schedules and administers the forestry camp operations in cooperation with the Department of Student Services. Formalization of the working relationship between the Colorado State Forest Service and the Department of Student Services is set forth below.

#### C.S.F.S.

- Will be responsible for land management and protection on forested Pingree Park lands outside of the developed area of the camp (see map of responsibilities).
- Will provide technical information, services and interpretation in all resource matters on areas within the developed area of the camp.

#### Student Services

- Will administer all activities within the developed area of the camp.
- Will provide access to C.S.F.S. to manage and administer lands outside the developed camp.

#### Objectives of Interpretation and Management of Natural Resources

The 1970's have been a decade of environmental concern. More than ever, people have involved themselves with the use and manage-

ment of natural resources. It is evident that scarce non-renewable resources such as fossil fuels and minerals will not last forever. Use and understanding of renewable natural resources may provide some alternative solutions to those scarce non-renewable resources but social pressures generated out of misunderstanding may prevent or limit viable and professionally sound management of renewable resources. Influencing peoples ideas about resource management therefore is a primary concern, particularly to C.S.U. and the Colorado State Forest Service. The legislative authority of C.S.F.S. as the State's forestry information service exists.

Numerous publics use the forested lands and trails on the C.S.U. Pingree Park Campus. A unique opportunity exists to provide these publics with information on renewable natural resources through subtle and effective vehicles such as increased signing of activities and resource management demonstration areas. This plan designates these activities, schedules their completion and develops an ongoing program of resource interpretation on the Pingree Park Campus for both public resource users and students of natural resources.

#### Plan of Activities

Activities to be carried out are scheduled in three phases. Phase I is the interpretive phase where existing conditions and resources are better explained through a signing program. Three activities have been completed by Chuck Mahoney's interpretive class. Phase II is a demonstration phase where management practices are installed and explained. Generally, new practices will be installed but existing and past practices will be utilized where they exist.

Phase III begins the ongoing interpretive and management program for the park. Demonstration areas are expanded and more sophisticated interpretive programs are initiated. With Phase III, increased financial support for the program will be necessary to the extent that a seasonal information specialist may be located at the camp during the summer months to maintain and improve demonstration areas and provide interpretive services.

A schedule of specific activities is presented in Figure 1.

All signs will be routed wood consistent with the design developed by Dr. Mahoney's interpretive techniques class. Demonstration areas will be designed to illustrate integrated resource management techniques as well as the primary theme stated in the plan. Visual impacts of certain projects such as pruning, thinning and harvesting demonstration areas will be minimized through irregular shaped design and thorough slash treatment or disposal. Volunteer student, C.S.F.S. and department personnel will be utilized to construct signs, displays and install demonstration practices where available and practical.

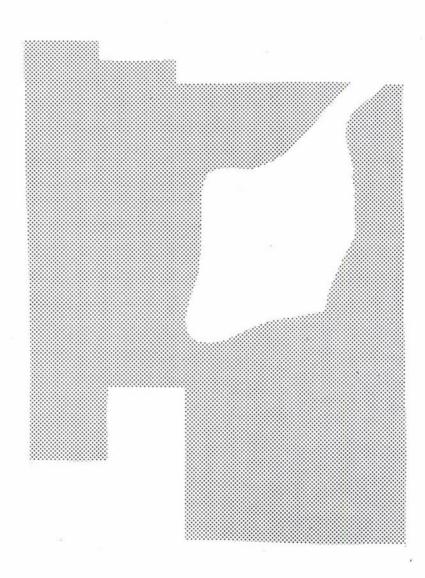
#### Conclusions

The Pingree Park Campus and its educational programs have provided invaluable experience to professional resource managers for over 50 years. Surrounding National Park and wilderness lands illustrate natural processes and interactions. Human use of natural resources should attempt to duplicate natural processes. The public as well as resource managers, through expanded interpretive and demonstration programs can be shown how management of resources attempts this duplication and minimizes impacts while providing for multiple use of resources.

#### APPENDIX B

#### PHOTOGRAPHS

- 1. Geology display in old classroom.
- Old thinning in mistletoed lodgepole pine on Cirque Meadows Trail (Map Location C).
- Two hundred year old lodgepole pine illustrating successional processes (Map Location E).
- 4. View of park from lateral moraine (Map Location E).
- 5. Young lodgepole proposed thinning demonstration (Map Location F).
- 6. Proposed wildlife habitat improvement demonstration (Map Location H).
- 7. Proposed timber harvest demonstration area (Map Location I).



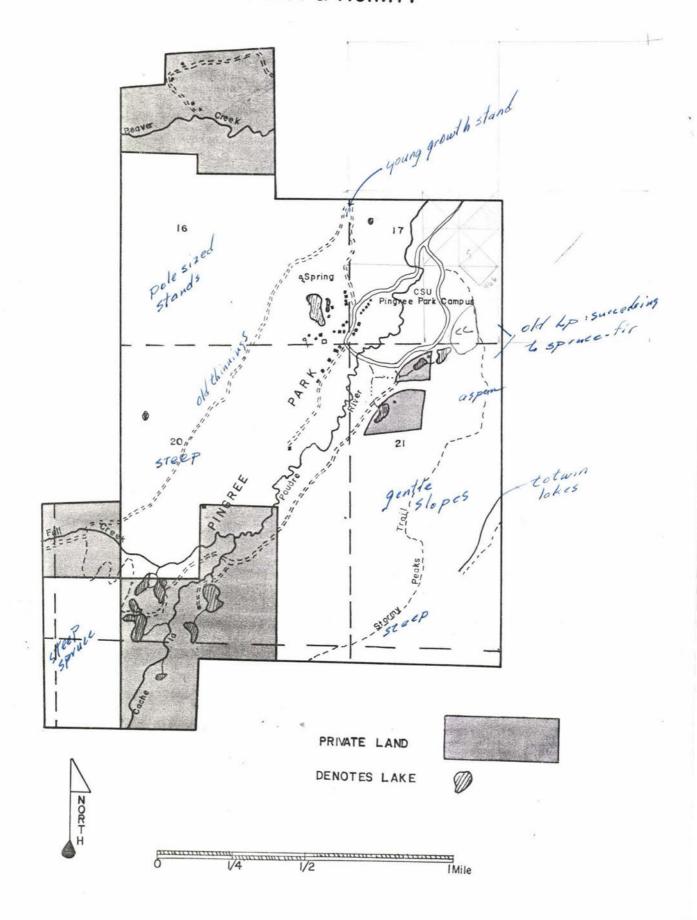
KEY A entrance sign G F B geology display E ı C mistletoe sign D D succession sign B E morraine sign H F thinning demo. G pruning demo. H habitat demo. I harvest demo. J wood display

C

ACTIVITIES

K planning display

## CSU PINGREE PARK PROPERTY & VICINITY



#### OFFICE MEMO

TO: Jim Hubbard, Bill Wilcox, Ron Gosnell

Date 9/8/86

FROM: Ray Mehaffey

SUBJECT: Pingree Park Slash Treatment

2400

**REMARKS:** I have checked with all parties concerned about the "terrible slash problem" at Pingree Park in the dwarf-mistletoe plots. Bill Bertschy and Pat Rastall do not know of any problem or complaints. No one has said anything to them. The topic was quite vague as far as Tom Borden was concerned.

> Linc Mueller, who was on the staff for an Elderhostel group the past two years did shed some light on the question. Apparently Dale Hein was the instructor for the group in 1985. He is a strong wildlife advocate and made numerous negative comments about all forest management practices both at Pingree and on the Roosevelt N.F. He made statements such as "the National Forests should not be for commercial forest (harvesting), only for wildlife and recreation. The Commanche Reservoir Burn should not have been put out but let burn for wildlife habitat." He also downgraded all timber, harvest, fire control, etc.

Linc feels the cutting looks good and is looking better each year. He would like to see more cutting on better sites in lodgepole pine around Pingree. I explained the Pingree Coop Venture and he seemed guite pleased with our plans. He does not feel there is a need to do any more slash treatment in the existing cutover areas. The episode in his words, "was blown out of proportion.'

Therefore, I do not plan any further action, and request the deletion of this project from my MBO and contract. Do you concur?

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### MINUTES

## LAND USE PLANNING COMMITTEE

A meeting of the Land Use Planning Committee was held at 9:00 a.m. on Monday, April 3, 1978, in the Board Room of the Administration Building.

The following members were present:

R. F. Conard E. J. F. Early N. Evans H. A. Gorman D. L. McClintock

D. D. Johnson E. V. Richardson

B. Burnham

. n. t. Conard seconded

Others present ware .... unusly approved.

### ITEM 2 - COLORADO STATE FOREST SERVICE REQUEST FOR FOREST MANAGEMENT OF PINGREE PARK AREA

T. B. Borden presented background of request; namely, the desire to construct a forest trail in the area adjacent to the Pingree Park campus stating the educational value of items to be identified adjacent to the trail such as vegetation identifiers, demonstrations such as forest thinning, Misletoe management, illustrations of lumber Cordwood and acreage, the possibility of a talking tree was also discussed. The Colorado State Forest Service would be responsible for the operation and maintenance of the trail. T. B. Borden requested also that the Colorado State Forest Service be designated to manage the surrounding area. D. D. Johnson moved and E. D. Richardson seconded the motion for approval of the request and it was unanimously approved.

### ITEM 3 - THE USE OF CHRISTMAN FIELD FOR A FIELD STUDY IN PARTICLE MECHANICS.

J. B. Wedding, Civil Engineering, presented background of project proposal indicating the initial request for use of area was made known during land use

#### MINUTES

#### LAND USE PLANNING COMMITTEE

GSES-SO

MAR 5 1980

A meeting of the Land Use Planning Committee was held at 9:30 a.m., Monday, March 3, 1980, in the Board Room of the Administration Building. The following members were present:

R. H. Burnham

J. M. Hughes

R. F. Conard

D. D. Johnson

N. A. Evans

D. L. McClintock

H. A. Gorman

E. V. Richardson

G. A. Greathouse

#### Others present were:

R. T. Beeson, Forester, Colorado State Forest Service

W. J. Bertschy, Director, Pingree Park Ofc. of Housing and Residence Education

T. B. Borden, Director of Colorado State Forest Service

D. R. Cismoski, Assistant to Director of Experiment Station

T. Davis, Division of Colorado Parks and Outdoor Recreation

J. P. Jordan, Director of Experiment Station

D. Will, Division of Colorado Parks and Outdoor Recreation

The meeting was called to order by Chairman, D. L. McClintock. D. D. Johnson recommended approval of the minutes of the January 21, 1980 meeting and <u>H. A.</u>

Gorman seconded the motion. It was unanimously approved.

## ITEM 1 - CONSIDERATION OF ACCESS EASEMENT REQUEST ON COLORADO STATE UNIVERSITY LANDS ADJACENT TO HORSETOOTH MOUNTAIN

D. L. McClintock gave background of existing access easements to transmission towers located on the west side of Horsetooth Reservoir adjacent to Horsetooth Mountain. D. L. McClintock indicated that in 1967 Western Telecommunications Company was granted an easement to access to their transmission tower, however, they have subsequently permitted their easement to lapse. Motorola Radio also has an easement granted to December 19, 1987 to their transmission tower. The two above mentioned towers are located on the 40 and 80 acre sites of Colorado State University property adjacent to the Horsetooth Mountain and Lory State Park. The Office of Vice President of Finance is soliciting input as to whether

the Western Telecommunications Company easement should be extended, considering the possibility that Lory State Park may be expanded, would this easement extension conflict with proposed uses as envisioned by the Colorado Department of Outdoor Recreation? Tim Davis and Doug Will of the Colorado Department of Parks and Recreation presented a master plan for the Lory State Park as perceived by the Colorado Department of Parks and Recreation, indicating that a bill is currently before the state legislature for funds to purchase 500 acres of the north portion of the Soderberg Ranch. Mr. Davis indicated there would be no problem with the access to the towers and future park land uses. The question of timeing was also discussed. It was indicated that the master plan would not become effective until the entire Soderberg Ranch was purchased and this may be several years in the future. D. L. McClintock made a motion to donate the property to the state which was subsequently amended to be subject to the purchase of the entire Soderberg Ranch by the State of Colorado. N. A. Evans indicated the desirability of possible trade with the State of Colorado and D. D. Johnson suggested that the entire matter be brought up at the President's Executive Council. No subsequent action was taken.

## ITEM 2 -: SITE CONSIDERATION RESEARCH DEMONSTRATION FARM SOUTH AREA OF THE MAIN CAMPUS

A background in history of the Research Demonstration Farm was given by

J. P. Jordan (refer Exhibit A). J. P. Jordan indicated alternative sites

Horticulture Farm/Research Demonstration Farm in Greeley were reviewed,

however, the area on the south campus was chosen due to its proximity to

the current proposed dairy farm, Veterinary Teaching Hospital, existing

electrical generating windmill, the proposed future siting of the Equine

Facilities and also the promimity to crop and animal waste methane capabilities.

- J. P. Jordan emphasized that the original House Bill 1145 was conceived by the Colorado Department of Agriculture and that Colorado State University would act as the host for the project. J. P. Jordan further indicated the Farm Department could continue to use the existing area for crop production and also possibly the Department of Energy (D.O.E.) could retrofit one of the existing dairy living quarters as a project. H. A. Gorman expressed concern about the Veterinary Teaching Hospital getting "boxed-in" and that provisions should be made in the land usage for future expansion for the Veterinary Teaching Hospital and supporting buildings. D. D. Johnson moved approval of the site consideration for the Research Demonstration Farm on the south area of the main campus. R. V. Richardson seconded the motion. It was unanimously approved.
- ITEM 3 REQUEST FROM THE COLORADO STATE FOREST SERVICE FOR THE USE OF AN

  ADDITIONAL 6.4 ACRES ADJACENT TO THEIR LAND ASSIGNMENT FOOTHILLS

  CAMPUS
- T. P. Borden, Director of Colorado State Forest Service, gave the background of the request for the use of the additional lands (refer Exhibit B). After a brief discussion, D. D. Johnson moved approval of the request. H. A. Gorman seconded the motion. It was unanimously approved.
- ITEM 4 CONSIDERATION REQUEST BY COLORADO DEPARTMENT OF HEALTH FOR AN AIR

  QUALITY MONITORING STATION
- R. F. Conard gave the background of request for the Colorado Department of Health indicating the recommended site to be west of the Physical Plant Greenhouse.

  Indicating the Department of Health would assume responsibility for all utilities required in the approximately 8 by 10 foot monitoring unit. D. D. Johnson moved approval of the request for the air quality monitoring station west of the

Physical Plant Greenhouse. H. A. Gorman seconded the motion. It was unanimously approved. Subject to appropriate cancellation and reversion clauses. D. D. Johnson amended the motion to include such appropriate signage explaining the purpose of the facility.

#### INFORMATION ITEM #1

Request from Colorado State Forest Service for a Natural Resource Interpretive area on the Pingree Park Campus. R. T. Beeson gave background of proposed project indicating funds became available in the Fall of 1979 for interpretive work. The proposed plan in the Pingree Park area calls for thinning, signage, pruning and wildlife and resource generation. The plots would encompass about 20 acres, generally in lands acquired in the upcoming trades with the U.S. Forest Service. R. T. Beeson indicated any surplus bi-products would be available to Housing for fuel supply. J. M. Hughes questioned whether the project is in conformance with the management of programs of the College of Forestry and Natural Resources in the Pingree Park area. R. T. Beeson indicated that members of the College of Forestry and Natural Resources had been consulted regarding the proposed project and indicated there was a feeling that most of the projects carried on in the Pingree Park area have demonstrated methods of resource protection and this project would show resource and wildlife management techniques. W. J. Bertschy, Director of Pingree Park Housing and Residence Education, had no problems with the need but questioned the location of demonstration plots. It was W. J. Bertschys' understanding that the land exchange with the U.S. Forest Service was more than a year away and also concerns had been expressed by other members of the Pingree Park Management Agency as to how the timeing of the cutting would effect wildlife in the area and whether roads would be required. It was pointed out by

T. P. Borden that this proposed project was in conformance with the charge given by A. R. Chamberlain to the Colorado State Forest Service "...administer, manage and protect all university retained forest lands with the cooperation of other Colorado State Agencies and the Land Use Committee." T. P. Borden indicated that state forest services will endevor to conform to the consensus opinion of adjacent land users.

#### INFORMATION ITEM #2

Ponds in the Spring Creek area. Presentation and a brief background was given by R. F. Conard as to the final design and location of the Ponds to be built adjacent to Spring Creek in the Bay Farm area indicating that impounded water would come from CSU water rights (Arthur Ditch). It was indicated that the original concept was approved by the Land Use Committee, June 1978.

#### INFORMATION ITEM #3

D. D. Johnson gave background and history and need for maintaining CSU land and water resources in light of current encrouching urban development and that inovative approaches to land trades and sales should be investigated to maintain university land and water resources.

#### INFORMATION ITEM #4

- E. V. Richardson presented an update on the approved 1976 master plan for Agriculture Engineering Research Center located on the Foothills Campus indicating that a modular building unit was to be constructed in conformance with the original master plan adjacent to the current Silvaire facility.

  INFORMATION ITEM #5
- D. D. Johnson indicated that due to the nature of items discussed at the Land Use Committee that possible expansion of the committee membership should be investigated which would promote greater communication of the committees actions within the university community.

Land Use Planning Committee Page 6

#### INFORMATION ITEM #6

D. L. McClintock gave a report on items passed by the State Board of Agriculture at their February 29, 1980 meeting.

There being no further business before the Committee, the meeting was adjourned.

Respectfully submitted,

R. H. Burnham, Secretary

cc: C. O. Neidt

G. M. Dennison

R. T. Beeson

W. J. Bertschy

M. A. Binkley

J. B. Borden

D. R. Cismoski

T. Davis

J. R. Hehn

J. P. Jordan

L. T. Suber

D. Will

President's Executive Council



QU

Forest and Wood Sciences

Colorado State University Fort Collins, Colorado 80523

February 29, 1980

Bill Bertschy Pingree Park Campus 108 Student Services Building Campus

Dear Bill:

I am generally in favor of the proposal by the State Forest Service to develop a training and demonstration area.

I believe this proposal would significantly aid environmental education efforts at Pingree. One of the elements lacking at the campus is  $\alpha$  nearby examples of succession. This proposal would provide that. It would also increase diversity in the area and this also is desirable. Lastly, It would provide a specific example of mistletoe management. This would be very useful in our summer program.

With careful planning I believe the proposal could be carried out without visual impact to the "peopled" area of the valley. I, of course, share your concern.

Actually, I would like to see the proposal expanded to the ridge area northwest of camp. A series of units placed there over a period of years would greatly aid our ecological studies. As energy costs increase, these close to camp observations will become more valuable. This area would be less visible and less visited.

Thank you for this opportunity to comment.

Stincerely,

Dennis L. Lynch

DLL/gms



A Campus of Colorado State University 2707L Poudre Canyon Bellvue, Co. (303) 881-2150 Main Office: 108 Student Services Bldg. CSU Ft. Collins, Co. 80523 (303) 491-7377

February 11, 1980

Dr. Freeman Smith Dept. Earth Resources 334 Natural Resources Campus

### Dear Freeman:

Enclosed is a copy of a proposal by CSFS personnel concerning a resource management - mistletoe interpretive effort. We are concerned about the implications of the 25 acre clear cut on the Stormy Peaks trail especially if a road is required to haul out the slash and merchantable timber. We are also concerned about any effects upon visual quality from the campus valley.

I would appreciate your review and comments. I have discussed this with Bob Burnham, Chairman of the Land Use Committee in hopes that they will also review it. Thanks.

Sincerely,

Bill Bertschy

blr

Enclosure

eareful site selection is needed for all treatments see, esthetic concern from trails of roads

careful shape design of orientation for patch-cut important, patch-cut(s)

should conform to 5-8 the height may diam recommendations.

Nords should be properly designs

slash removal (disposal) should be done otherwise - 2 feel that exemples of mynt practices should be done of Pengue

TO: Bill Bertschy 18 February 1980 Page 2

Finally, the activity should come after the nesting season--no cutting before mid August to minimize disturbance of nesting birds.

In summary, the proposed management could be an educational asset at Pingree Park campus. However, there should be no rush -- there is no crisis. Instead, the proposal should be carefully planned to minimize undesirable esthetic impacts and to realize maximum benefits for all values. I'll be pleased to discuss this in more detail with you or CSFS personnel.

Sincerely,

Dale Hein, Professor of Wildlife Biology

DH:ew







Department of Fishery and Wildlife Biology

18 February 1980

Colorado State University Fort Collins, Colorado 80523

Bill Bertschy Housing & Residence Education 108 Student Services CSU Campus

Dear Bill:

Thank you for advising me of CSFS proposal for a mistletoe management and interpretive project at Pingree Park. The project would have significant educational value for the CSU Forestry Summer Camp. However, any objectionable visual impacts from the campus valley should be avoided.

Can the clearcut near Stormy Peaks trail be located east of the ridge so that it would not be visible from the campus valley? Can access to such a clearcut come from the existing roads, either Twin Lakes road from main Pingree road or from network of old logging roads (east fork of Twin Lakes road) in drainage of west fork of Pennock Creek? Such a clearcut should be done within general guidelines recently developed for wildlife values, e.g., leave snags (up to 50 on a 25-acre cut), leave irregular edges, and make boundaries follow natural features of terrains.

Can the three treatments be done close to each other? This would facilitate comparisons and minimize impacts by concentrating activity and visits to the sites. Can all plots be east of the valley or west of the valley (Cirque Road)?

Why the rush? Could the plots be laid out and marked and then cut (preferably several years) later? This would provide an opportunity to get some pretreatment data that would permit later evaluation of the treatments on wildlife. I just returned from a Forest Service workshop in Salt Lake City on forest management for nongame birds. There was great concern over the lack of data and evaluation on lodgepole management impacts on wildlife. I gave a paper on birds in lodgepole forests, and I would welcome this opportunity to increase our knowledge on the subject. I could involve the Pingree students in the pre and post treatment wildlife studies and thereby make the project a useful educational and research project, as well as a management project, at no appreciable extra cost. It is a unique opportunity, and I would be pleased to discuss it with the CSFS. Ideally, the proposed plots should be similar size -- 25 acres for thinning and pruning as well as for the harvest plot. However, this is not absolutely critical.





Department of Fishery and Wildlife Biology

Colorado State University Fort Collins, Colorado 80523

18 February 1980

Bill Bertschy 108 Student Services Bldg. Campus Mail

Re: Proposal for mistletoe-control demonstration area near Pingree Park

Dear Bill:

I was a bit confused by the proposal dated December 1. However, I discussed the project with Ed Mogren and he seemed to have more information about it. Apparently much or all of the work will be off CSU property; new roading will not be necessary; and the clearcut will not be visible from Camp. I was most alarmed over the latter two possibilities.

I believe we can use such demonstration areas near Camp. They can be put in carefully so as not to detract from other values of the surrounding forests. I think you should request to be kept informed as more detailed plans are formulated -- exact locations, number of plots, etc. The Forestry staff at Camp would, I'm sure, like to review these plans.

Sincerely,

J. A. Bailey
Associate Professor
Wildlife Biology

in Daile

JAB:ew

Me William



Forest and Wood Sciences



Colorado State University Fort Collins, Colorado 80523

February 12, 1980

Bill Bertschy 108 Student Services Bldg. Campus

Dear Bill:

I have read over the proposed mistletoe demonstration proposal by John Laut. I see it as a tremendous opportunity for the Pingree Park program -- not only as a demonstration area for our students but as an opportunity of showing visitors to the Park that management of this pathogen is possible.

I concur that the visual quality from the valley should be maintained — and if this demonstration is done correctly there will be no impact on the beauty of the view from the campus. As far as a road to remove the timber from the clearcut is concerned — one already exists so, I feel that a minimum of roading would be necessary.

I believe we should support the proposal, but insist that we review plans so that the visual quality from the valley will be kept.

I would be most happy to talk to you about the proposal.

Sincerely,

E. W. Mogren

Professor of Forest Science

dwc

Office of the President

RECEIVE

Colorado State University Fort Collins, Colorado 80523

MEMORANDUM

June 12, 1978

TO:

Tom Borden, Director

Colorado State Forest Service

FROM:

A. R. Chamberlain

SUBJECT: CSU Related Forest Lands

This memo concerns your recent proposal to the CSU Land Use Committee requesting concurrence in designating the Colorado State Forest Service the administrative responsibility for managing and protecting the forest lands at Pingree Park and other locations on Board owned or controlled lands. It is my understanding the CSFS would plan and implement forest practices on these lands to enhance the teaching, research and public service programs of the University and its associated agencies.

I hereby designate CSFS to administer, manage and protect all University related forest lands in cooperation with other CSU agencies and the Land Use Committee. For purposes of recovering costs, it is expected that CSFS will do so through sale of products or by mutual agreement with other units of the University. Revenues beyond those associated with administrative and operating costs will be deposited in appropriate accounts as prescribed by the President or the Vice President for Planning and Budgets.

M.A. Binkley

J.R. Hehn

D. McClintock.

to C.W. Hotchkiss

Rex Kellums

R.H. Burnham

L.T. Suber



MAR 6 1000

Colorado State University
Fort Collins, Colorado

Office of University Planning and Budgets

March 5, 1980

Ms. Lilian K. Kulke Ms. Betty Lou Conn 1781 South Fairfax Denver, CO 80222

#### Ladies:

I received with interest your letter expressing concern about the clear cut area involved as part of the natural resources interpretive plan proposed for the Pingree Park area by the Colorado State Forest Service. The plan was presented to the University Land Use Committee on March 3, 1980. Several individuals expressed the same concern relative to the clear cut area. The proposal was presented to the Land Use Committee as an informational item only, as it clearly falls within the charge given to the Colorado State Forest Service by A. R. Chamberlain "To administer, manage and protect all University related forest lands in cooperation with other Colorado State University agencies and the Land Use Committee."

T. B. Borden, Director of the Colorado State Forest Service, assured the Land Use Committee that the Forest Service would endeavor to obtain a general consensus prior to commencing the project. A copy of the minutes of the Land Use Committee is being enclosed for your information and copies of your letter are being sent to T. B. Borden and R. T. Beeson, Forester, Colorado State Forest Service for their information. I trust that if and when the project proceeds it will meet with your approval.

Thank you for your concern.

Sincerely,

Robert H. Burnham, AIA

Director, Facilities Planning

RHB:rp

cc: C. O. Neidt, Acting President, Colorado State University

R. T. Beeson, Forester, Colorado State Forest Service

T. B. Borden, Director Colorado State Forest Service

J. R. Hehn, Director University Planning and Budgets

D. L. McClintock, Chairman, Land Use Committee

February 28, 1980

A. 3. 4. 80

Mr. Robert Burnham, Secretary
Land Use Committee
Office of University Planning and Budgets
Colorado State University
Fort Collins, Colorado 80521

Dear Mr. Burnham:

We are writing to you with regard to the Dwarf Mistletoe control program being proposed for the Pingree Park area by the Colorado State Forest Service.

We own land in Pingree Park and would like to comment on the 3 proposals that have been made. We have no professional expertise or knowledge of the program, only our personal feelings as people who have an interest in the area.

The first two proposals of thinning and pruning of infected trees seems to be reasonable and easily accepted as control techniques and would provide a more healthful environment benefitting man as well as animals.

The third proposal, to us, does not seem appropriate if it will result in anything resembling a clear cut area. We are concerned about this for several reasons. If this area is near the Stormy Peaks Trail we know of no access in this area except the road leading to Twin Lakes. This is a rough road and only accessable to trucks and four wheel drive vehicles normally, and ends on the southwest corner of the Twin Lakes area. So access would seem to be a problem or could result in more damage to the environment if construction of a road to the area becomes necessary.

Since Pingree Park is close to Rocky Mountain National Park, we feel wild life that exists here would be adversly affected by a clear cut area. In no way could it be benefical to their habitat. Thirdly, whether this area can be seen or not from the Pingree Park campus or valley is not something that would make it any more acceptable from our point or view.

Our feeling is that we are totally opposed to any type of clear cutting whether it is visible or not. If you are familiar with the Buckhorn road and particularly the view south of the Dickerson Ranch, the sight of that clear cut mountain should be enough to convince anyone that a clear cut area would not be a viable alternative for any kind of parasite control, whether it is Mistletoe or Pink Bark beetle. If a person has cancer you can certainly destroy the cancer by killing the patient. there are no trees, there would be no mistletoe, but is this any kind of reasonable approach to a treatment? do not feel that it is. If the Colorado Forest Service is interested in providing a clear cut area as a demonstration, there is already an existing clear cut area just outside the campus area. The plot of ground was used in connection with a rock crusher when the road from the Poudre CAnyon to the Pingree Park area was widened. We don't know how large this area is but it's within 50 to 100 feet of the main road and the only things that are growing now in the area

are small trees that have begun to make a come-back. could definitely be classified as a clear cut area.

We hope that you can make our views known to the people involved in this project. We agree certainly with their intent to control a problem that could have a potentially adverse effect on the area but we disagree with their plans if it in any way involves clear cutting, a process which we feel is a method of destruction, not of control.

Sincerely yours,

1781 South Fairfax Denver, Colorado 80222 Bill Bertschy 108 Student Services Bldg. Campus

Dear Bill:

I have read over the proposed mistletoe demonstration proposal by John Laut. I see it as a tremendous opportunity for the Pingree Park program -- not only as a demonstration area for our students but as an opportunity of showing visitors to the Park that management of this pathogen is possible.

I concur that the visual quality from the valley should be maintained — and if this demonstration is done correctly there will be no impact on the beauty of the view from the campus. As far as a road to remove the timber from the clearcut is concerned — one already exists so, I feel that a minimum of roading would be necessary.

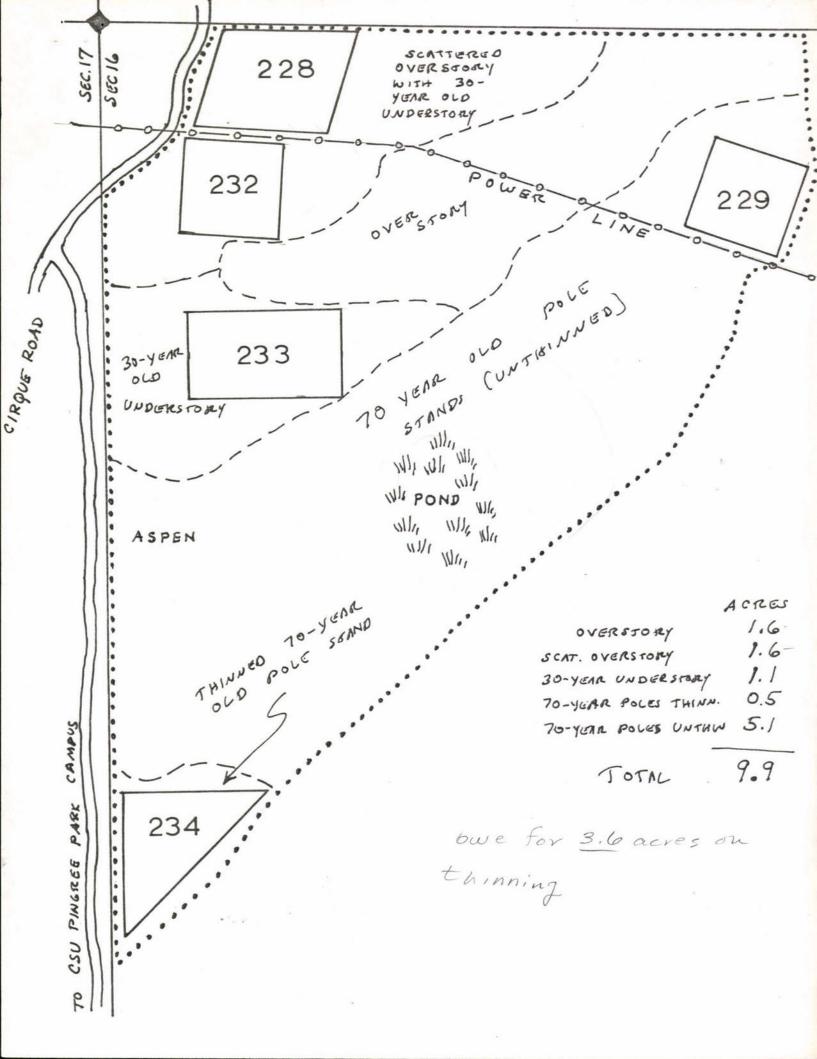
I believe we should support the proposal, but insist that we review plans so that the visual quality from the valley will be kept.

I would be most happy to talk to you about the proposal.

Sincerely,

E. W. Mogren Professor of Forest Science

dwc





A Campus of Colorado State University 2707L Poudre Canyon Bellvue, Co. (303) 881-2150 Main Office: 108 Student Services Bldg. CSU Ft. Collins, Co. 80523 (303) 491-7377

February 11, 1980

Dr. Ed Mogren Dept. of Forestry & Wood Science 133 Forestry Campus

Dear Dr. Mogren:

Enclosed is a copy of a proposal by CSFS personnel concerning a resource management - mistletoe interpretive effort. We are concerned about the implications of the 25 acre clear cut on the Stormy Peaks trail especially if a road is required to haul out the slash and merchantable timber. We are also concerned about any effects upon visual quality from the campus valley.

I would appreciate your review and comments. I have discussed this with Bob Burnham, Chairman of the Land Use Committee in hopes that they will also review it. Thanks.

Sincerely,

Bill Bertschy

blr

Enclosure

W. 12- V Office



Colorado State University Fort Collins, Colorado 80523

FEB 14 1980

Office of University Planning and Budgets

February 12, 1980

### MEMORANDUM

TO:

J. H. Banning

W. Bertschy

J. M. Hughes

C. L. Mahoney

FROM:

R. H. Burnham, Secretary Land Use Committee

SUBJECT: Natural Resource Interpretive Plan for Pingree Park Area

Please be advised that the Colorado State Forest Service is making application for a grant to fund a natural resource interpretive plan for the Pingree Park area. As you are aware the Colorado State Forest Service has the charge to "administer, manage and protect all university related forest lands in cooperation with other Colorado State University agencies and the Land Use Committee". This project appears to fall within the charge given to the Colorado State Forest Service by A. R. Chamberlain. This matter will be brought before the Land Use Committee as an agenda item for information only at the next to be scheduled committee meeting.

If there appear to be any conflicts between your agency and this proposed project or you require more information, please contact this office in the near future (by February 27, 1980).

### RHB:rp

cc: R. T. Beeson

4. B. Borden

J. R. Hehn

D. L. McClintock

Terry B final druft - to R-2 12/12/79

DWARF MISTLETOE CONTROL DEMONSTRATIONS

A Proposal

Colorado State Forest Service

December 1, 1979

tit

The Pingree Park Campus of Colorado State University, located in Larimer County, surrounded by Roosevelt National Forest, Rocky Mountain National Park, and some private forested land, contains 1,100 acres, including about 900 acres of lodgepole pine. The campus is maintained primarily as a training and demonstration area in ecosystem conservation and is used by various colleges and departments of the University, public school systems, and other groups for formal training and as a conference site.

The Colorado State Forest Service has been assigned certain responsibilities for management of forest resources of the campus, and has prepared a general management plan for those resources (3). Beyond this specific charge, a primary role of the Colorado State Forest Service is to ensure transfer of up-to-date technology to forest landowners and managers and to ensure protection and management of the State's forest resources.

Most lodgepole pine stands at Pingree Park are infested with dwarf mistletoe to varying degrees; many stands need some type of control operation to return them to productive levels. Research has developed several recommendations for control of dwarf mistletoe damage to lodgepole pine stands (1, 2, 4, 5, 6, 7, 8). Adoption of these techniques by land managers, however, has generally been discouragingly slow in the central

Rocky Mountain area. Unit1 we provide better training and demonstrations of effectiveness, these techniques will continue to be largely ignored.

Pingree Park, because of location, role, infestation levels, and administrative organization, is ideal for establishment and maintenance of dwarf mistletoe control demonstration areas to assist in transfer of current technology to practicing foresters, foresters-in-training, and environmentally-conscious publics that visit the campus.

The objectives of this special project are generally to install a series of dwarf mistletoe control plots, to display the various techniques available to the land manager. These plots and corresponding check plots will be signed to inform the observer of the biology, impact and control strategies of dwarf mistletoe. Specifically, plots will be established for:

- Thinning of pole-sized stands, using management prescriptions developed by RMYLD simulation (6).
   Three acres.
- Pruning of light and moderately infected trees. 10 acres.
- Harvest of mature infested stands, using various strategies. 25 acres.

In all stands, pre- and post-treatment surveys will record volume, density, and dwarf mistletoe intensity data. Until the pre-treatment surveys are completed, more specific treatment details cannot be presented.

An important objective for these demonstrations is to create a highly visual, easily understood and attractive information system. Each treatment

| Phase | Activity No. | Theme                   | Activity Description  | Map Key | Yr. Com | pleted | Responsibility     |
|-------|--------------|-------------------------|---|---------|---------|--------|--------------------|
| I     | 1            | Orientation             | Entrance Sign   | А       | Summer  | 1979   | Rec. Resources     |
|       | 2            | Orientation             | Slide Tape Program  |         | Summer  | 1979   | Rec. Resources     |
|       | 3            | Geology                 | Geology display   | В       | Summer  | 1979   | Rec. Resources     |
|       | 4            | Dwarf mistletoe         | Sign on mistletoe plot  | С       | Summer  | 1979   | CSFS               |
|       | 5            | Lodgepole<br>Succession | Sign on stormy peaks trail  | D       | Summer  | 1979   | CSFS               |
| -     | 6            | Lateral Moraine         | Sign on cirque meadows trail  | Е       | Summer  | 1979   | CSFS               |
| II    | 1            | Lodgepole<br>growth     | Thinning demonstration area (3A)                                    | F       | Fall    | 1979   | CSFS               |
|       | 2            | Mistletoe<br>control    | Pruning demonstration area (10A)                                    | G       | Fall    | 1979   | CSFS               |
|       | 3            | Wildlife                | Wildlife habitat Improvement (10A) demonstration area               | Н       | Summer  | 1980   | CSFS-CFNR          |
|       | 4            | Timber-Wildlife         | Timber harvest demonstration (15A)                                  | I       | Summer  | 1980   | CSFS               |
|       | 5            | Wood Utilization        | Utilization display   | J       | Winter  | 1981   | CSFS-Rec Resources |
|       | 6            | Multiple Use            | Resource planning display   | K       | Winter  | 1981   | CSFS-CFNR          |
| III   | 1            | A11                     | Hire seasonal resource interpreter. Maintain and improve practices. |         | Summer  | 1981   | CSFS               |

Figure I. Schedule of Interpretive Management Activities.

and its corresponding non-treated area will be identified and explained by a series of routed-wood signs consistent with the design already established for the existing campus interpretive program. Additional signs will be placed on pre-existing cut-over areas on campus. A brochure, for public heandout, will also be provided.

Demonstration areas will be designed and installed under supervision of Colorado State Forest Service Staff Foresters for Insect and Disease and Forest Management. Dr. Frank Hawksworth, Rocky Mountain Forest and Range Experiment Station, is involved as collaborator and advisor. United States Forest Service, Region 2, FIDM pathologists, Colorado State University Department of Student Services, as camp administrators. and Colorado State University College of Forestry and Natural Resources are also cooperators for this project.

Design of the plots, design and construction of interpretive signs will be completed before spring of 1980. Installation of plots and signs will be started as soon as the campus is accessible in the spring and completed before the end of the fiscal year (September 30, 1980).

Proposed budget (see separate budget sheet) for this project is (all Fiscal Year 1980) \$12,500, of which CSFS will contribute 20% (\$2,500). The balance (\$10,000) is requested from the United States Forest Service, FIDM, under authority of FSM 3462.08-3462.8, Interim Directive #2, February 27, 1979.

(Please see next page.)

| Item  |                          | Total<br>Cost | CSFS<br>(contributed) | USFS     |
|---|--------------------------|---------------|-----------------------|----------|
| Planning and plot design  |                          | \$ 4,000      | \$2,500               | \$ 1,500 |
| Interpretive material:    Design    Construction    Installation    (18 signs x \$250)                  | \$ 750<br>2,250<br>1,000 | 4,500         |                       | 4,500    |
| Installation of practices: Thinning (3 Ac) Marking and cutting (150/Ac) Slash disposal Cleanup (100/Ac) |                          |               |                       |          |
| 250/Ac  |                          | 750           | 0                     | 750      |
| Pruning (10 Ac) Marking and pruning Cleanup   | 150<br>_50               |               |                       |          |
|   | 200/A                    | 2,000         | 0                     | 2,000    |
| Harvest cuts (25 Ac)<br>Net Cost<br>(Total-limited<br>product value)                                    |                          | 1,250         | 0                     | 1,250    |
|   |                          | 12,500        | 2,500<br>20%          | 10,000   |
|   |                          |               |                       | 8        |

### References

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Office of University Planning and Budgets 6064

Bob Brundown

Colorado State University Fort Collins, Colorado 80523

February 19, 1980

### MEMORANDUM

RECEIVED

FEB 2 0 1980

CSFS-SO

TO:

R. F. Conard

N. A. Evans

H. A. Gorman

G. A. Greathouse

J. M. Hughes

L. T. Suber

D. D. Johnson

D. L. McClintock

E. V. Richardson

FROM:

R. H. Burnham (

SUBJECT: Notice of Meeting of Land Use Planning Committee

The next meeting of the Land Use Planning Committee is scheduled for 9:30 a.m., Monday, March 3, 1980, in the Administration Board Room. The Chairman wishes to consider the following items:

- 1. Approval of minutes of January 21, 1980 meeting.
- 2. Consideration of the College of Agriculture land acquisition and relationship to the west area of the main campus and to the agricultural campus (refer Exhibit A). Presentation by D. D. Johnson.
- Consideration of Research Demonstration Farm south area of main campus (Old Dairy Farm). Presentation by D. R. Cismoski.
- Consideration of request from the Colorado Department of Health for air quality monitoring station (refer Exhibit B). Presentation by R. F. Conard.
- Use of Horsetooth Mountain. Presentation by D. L. McClintock.

Informational items to be presented:

- Colorado State Forest Service natural resources interpretive plan for the Pingree Park area (refer Exhibit C). Presentation by R. T. Beeson.
- Development of south area of main campus, Spring Creek Ponds. Presentation by R. F. Conard.

Page 2 Notice of Meeting of Land Use Planning Committee

If there are any other items to be presented before this meeting, please notify R. H. Burnham no later than February 27, 1980 at extension 6064.

## RHB:rp

cc: A. R. Chamberlain

C. O. Neidt

M. A. Binkley

J. R. Hehn G. G. Olson

R. T. Beeson

D. R. Cismoski



Vice President for Research 303/491-7194

Colorado State University Fort Collins, Colorado 80523

February 8, 1980

MEMORANDUM

TO:

Dean Donal Johnson

FROM:

George G. Olson

SUBJECT:

Swanson Farm and Exchange

We have initiated steps to appraise and obtain debt financing to acquire the Swanson farm adjacent to our recently acquired Moreng and Stroh farms.

In view of the large amount of debt that CSURF is presently servicing (about 2½ million) we do not feel that we can ask it to undertake a long-term service of an additional million dollars or so for the Swanson farm. It would be preferable from CSURF's standpoint to exchange it with SBA land that could be sold immediately such as frontage along Elizabeth Street in the Bull Farm area.

Would you assume responsibility for discussing it with the land use committee and prepare an item for executive session discussion at the February 29 meeting of the SBA? We need to know the Board's desires on this exchange before CSURF makes any commitment on financing. If it is the Board's wish to ask CSURF to undertake longer term financing on this acquisition please let Cindy Hanson know and she will try to obtain long term debt to acquire it.

xc: C. J. Hanson

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J. R. Hehn

C. O. Neidt

THIS AREA ALSO CONSIDERED FOR SOLR TO FINANCE

THE DELOCATION OF THE FLOTHIUS

Office of Facilities Construction and Utilization\*

February 4, 1980

Colorado State University Fort Collins, Colorado 80523

## MEMORANDUM

TO:

D. L. McClintock

FROM:

R. F. Conard

SUBJECT: Air Quality Monitoring Station

We have been asked by the Colorado Department of Health (CDH) to allow them to locate an air quality monitoring station in the vicinity of the College and Laurel intersection. R. H. Burnham and I met with local CDH representatives to look at different sites and I subsequently met with Mr. Arnold from CDH in Denver to pick a specific site. The proposed site is shown on the attached map.

I think the proposed site is satisfactory from an aesthetic point of view. It will require the use of two parking stalls in the parking lot west of the Physical Plant greenhouse. CDH will pay for all expenses (capital and operating) involved.

If you deem it necessary to get Land Use Planning Committee approval, please include on the next meeting agenda. If it is not necessary, an agreement between the Board and CDH should be drafted. It should include cancellation and reversion clauses, as appropriate.

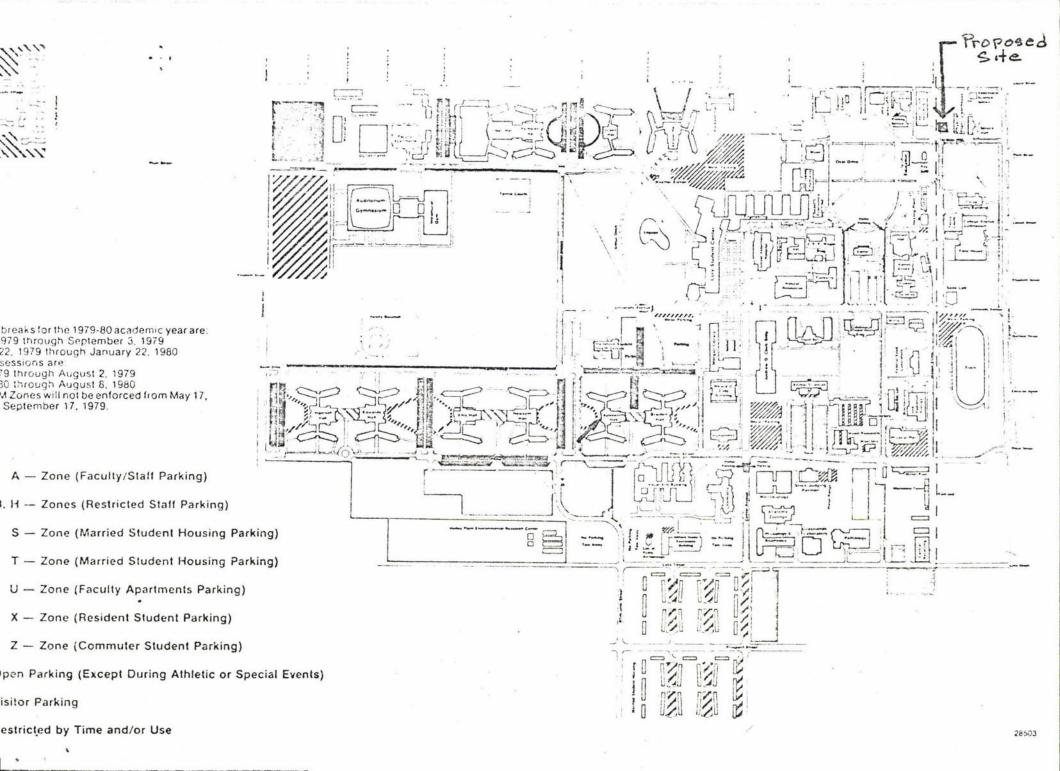
2 Tener

Please let me know if you want us to do anything further with this.

RFC/ble

xc: R. H. Burnham J. R. Hehn

Enc1





Colorado State University Fort Collins, Colorado

Office of University Planning and Budgets February 12, 1980

### MEMORANDUM

TO:

J. H. Banning '

W. Bertschy

J. M. Hughes

C. L. Mahoney

FROM:

R. H. Burnham, Secretary Land Use Committee Sucu Rain

SUBJECT: Natural Resource Interpretive Plan for Pingree Park Area

Please be advised that the Colorado State Forest Service is making application for a grant to fund a natural resource interpretive plan for the Pingree Park area. As you are aware the Colorado State Forest Service has the charge to "administer, manage and protect all university related forest lands in cooperation with other Colorado State University agencies and the Land Use Committee". This project appears to fall within the charge given to the Colorado State Forest Service by A. R. Chamberlain. This matter will be brought before the Land Use Committee as an agenda item for information only at the next to be scheduled committee meeting.

If there appear to be any conflicts between your agency and this proposed project or you require more information, please contact this office in the near future (by February 27, 1980).

RHB:rp

cc: R. T. Beeson

T. B. Borden

J. R. Hehn

D. L. McClintock



A Campus of Colorado State University 2707L Poudre Canyon Bellvue, Co. (303) 881-2150 Main Office: 108 Student Services Bldg. CSU Ft. Collins, Co. 80523 (303) 491-7377

February 11, 1980

Dr. Ed Mogren
Dept. of Forestry & Wood Science
133 Forestry
Campus

Dear Dr. Mogren:

Enclosed is a copy of a proposal by CSFS personnel concerning a resource management - mistletoe interpretive effort. We are concerned about the implications of the 25 acre clear cut on the Stormy Peaks trail especially if a road is required to haul out the slash and merchantable timber. We are also concerned about any effects upon visual quality from the campus valley.

I would appreciate your review and comments. I have discussed this with Bob Burnham, Chairman of the Land Use Committee in hopes that they will also review it. Thanks.

Sincerely,

Bill Bertschy

blr

Enclosure

Bill Bertschy 108 Student Services Bldg. Campus

Dear Bill:

I have read over the proposed mistletoe demonstration proposal by John Laut. I see it as a tremendous opportunity for the Pingree Park program -- not only as a demonstration area for our students but as an opportunity of showing visitors to the Park that management of this pathogen is possible.

I concur that the visual quality from the valley should be maintained — and if this demonstration is done correctly there will be no impact on the beauty of the view from the campus. As far as a road to remove the timber from the clearcut is concerned — one already exists so, I feel that a minimum of roading would be necessary.

I believe we should support the proposal, but insist that we review plans so that the visual quality from the valley will be kept.

I would be most happy to talk to you about the proposal.

Sincerely,

E. W. Mogren Professor of Forest Science

dwc

Tonto only

Office of the Vice President for Student Affairs

APR 1 6 1979

79.

SFS-SO C

Colorado State University Fort Collins, Colorado 80523

April 13, 1979

TO:

Joseph Goldhammer

FROM:

Rex Kellums

RE:

Pingree Park's underground water

This office forwarded the news copy of water filings to alert your office to hearsay information that Pingree Park is one of the areas filed on.

Do we need to take special steps to protect University land holdings in the Pingree Park area?

xc: Tom Borden Chuck Mahoney Bill Bertschy Teny lovehis?

Student Services

August 2, 1978

Colorado State University Fort Collins, Colorado

MEMORANDUM

TO: Rex Kellums Tom Borden Terry Beeson

Del Brown

Charles Mahoney

FROM: William J. Bertschy, Director of Pingree Park W.115.

RE: Notes and agreement from meeting at Pingree Park, July 27, 1978

Tom Borden prefaced the meeting by talking about the history of the Colorado State Forest Service. He expressed the importance of being able to "show" management and in order to do this at Pingree Park a long range master plan must be devised.

Bill Bertschy reported on the present management practices at Pingree Park. He emphasized key phrases on management practices from various sources. From Pattern for the 70's (CSU's master plan) he quoted, "no facilities are to be permitted in any zone which is not in harmony with the use in that zone." From An Improvement Plan for Pingree Park; "buildings, trails and utilities must all be developed and maintained in such a manner as to relate to an integral theme for the campus." Bill introduced two major issues he is concerned with: 1). who are the people we need to serve and; 2). education. He proposed that the group should work together on definitions of terms and that the management at Pingree Park be continued as is proposed in the Master Plan particularly in the zoned areas of the campus.

Tom Borden expressed his desire for the opportunity to provide a learning experience for anyone who enters the Pingree area. The idea of constructing interpretive trails was brought up. These trails would inform people what managment involves and would also teach values (i.e., value of pruning, thinning).

Terry Beeson also agreed that the trails would be a learning opportunity. He mentioned the idea of being able to tell the story of resources in the Pingree area.

Bill Bertschy agreed with the need for better interpretation. He raised the question of which audience do we serve - residents or non-residents. how much can we provide for them, and how are we to accommodate them? These were a few of his concerns that were left unanswered. Bill also asked if the Director of Pingree Park will still be the day to day decision maker in land management questions. Are we to assume that we will still be involved in these decisions?

Rex Kellums also added his thoughts in asking if the impacts of changes will benefit or strain the operation here at Pingree.

Again the meeting returned back to the topic of the interpretive trail. Charles Mahoney suggested that we find out what people are interested in here at Pingree and what they should know. We would need to develop themes of interpretation such as water resources and wildlife. Interpretation might be broadened to include more than just a trail. If such a plan were to go into action we would need to evaluate it on a regular basis - "is our message coming across?" He also suggested the possibility of having a class of students at CSU work on this as a class exercise in the fall.

Tom Borden emphasized that he would like to see Pingree become an interpretive area. Bill Bertschy sees the need for a solid group of people to work on this idea. He proposed that we formulate such a group with representatives from the College of Forestry, State Forest Service and Pingree Park Student Services Offices.

Bill Bertschy asked who now has the authority at Pingree. Rex Kellums stated that Bill is the direct person responsible for the policies and daily management decisions. Tom Borden agreed that whatever is done on a daily basis Bill still has authority over the operation. Authority for overall planning decisions will be the responsibility of the formal group.

The group wrapped up the meeting by agreeing that Bill Bertschy, Terry Beeson and Charles Mahoney form a task force to begin the development of an interpretive plan for the natural and human resources of Pingree Park located on Forest lands. The charge is that they have a preliminary plan by March 1, 1979 with implementation to begin approximately May 1, 1979. The plan will be signed by Dr. James Banning, V.P. for Student Affairs, Dr. Jay Hughes, Dean of the College of Forestry and Natural Resources, and Tom Borden, Director of the State Forest Service.

# College of Forestry and Natural Resources

## Department of Forest and Wood Sciences

Date: January 25, 1979

TO: R. H. Burham, Office of University Planning and Budgets

FROM: Gilbert H. Fechner, Forest and Wood Sciences Department

SUBJECT: Schory Tract, Estes Park

Thank you for your memo of January 8, 1979, reiterating your statement in our prior phone conversation, that our use of the above-named tract for conducting quaking aspen research is limited to a two- or three-year commitment. We will, of course, abide by university regulations.

It is clear, however, that the research needs of the College of Forestry and Natural Resources, particularly those of the Forest and Wood Sciences Department, are not understood by university administration.

In Colorado, indeed in Larimer County, we have the unique variation in altitude which produces examples of the Eastern Plains, Foothill-Mesa, Montane, Subalpine and Alpine vegetation zones in a horizontal distance of less than 100 miles. Trees and other vegetation are separately adapted to these different zones; in fact, they are adapted to very local areas. To move plants over even very short latitudinal or altitudinal distances (i.e., to move them into different life zones) is to ignore their ecological adaptation. On the other hand, it is of scientific importance to be able to study the response of plants moved into different life zones.

Thus, the Estes Park tract, which lies in the Montane Zone, provides an environment for Montane Zone studies only. The Pingree Park area, on the other hand, is ideal for study of the Subalpine Zone, but neither is suitable for study of the other zone. Likewise, neither of these two locations can fulfill the requirements for studying tree response to the Foothill-Mesa or Eastern Plains zones. In the Forest and Wood Sciences Department, we currently have research commitments to establish tree plantations in these several zones.

This variation in life zone is critical. It is imperative that the University retain suitable examples of the native vegetation (and forest experimental areas) in each of these different zones.

<sup>1/</sup> Ecologically each 400 foot difference in altitude is equivalent to approximately 1° latitude. Thus, a 10,000 foot difference within our county produces a latitudinal difference equivalent to about 1625 miles, in the Great Plains. This would produce a corresponding variation in vegetation as would be found between Chicago and the northern shore of Hudson Bay.

R. H. Burnham Page 2

We need tracts of lands in University ownership in all of the life zones represented in Colorado: the Eastern Plains, Foothill-Mesa, Montane, Subalpine, Alpine zones. This is a plea to your office to think not in terms of consolidating lands in some areas (such as Fort Collins or Pingree Park), or in selling lands that are outlying, but to retain in University ownership examples of lands in the several natural life zones within our diverse state and even to attempt further land acquisition in these different zones. Representatives of the Forest and Wood Sciences Department will be happy to advise your office of our resource needs.

cc: Barney
Binkley
Frayer
Hehn
Hughes
McClintock
Olson



Office of Vice President for Finance

Colorado State University Fort Collins, Colorado 80523

January 29, 1979

TO:

R. H. Burnham

FROM:

D. L. McClintock

SUBJECT: Land Needs for College of Forestry and Natural Resources

In a recent memo to you, Gil Fechner articulated in a general way a number of land requirements he sees for his department. The University and the Research Foundation own land in a variety of locations (Estes Park, Pingree Park, near Mount Princeton, near Snowmass, on the eastern plains, Horsetooth Mountain and so forth). Perhaps use may be made of some of these.

On a more general level, however, it might be well for a specific statement of land needs to be prepared for the College much as the College of Agriculture did some time ago. A "shopping list" of land requirements in priority order, giving size and other desirable characteristics, would be most useful to all of us and would permit an orderly approach to acquiring appropriate parcels of land.

DLM: es

cc: G. H. Fechner

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### College of Forestry and Natural Resources

### Department of Forest and Wood Sciences

Date: March 8, 1979

TO:

R. H. Burnham, Office of University Planning and Budgets

FROM:

Gilbert H. Fechner, Forest and Wood Sciences Department

SUBJECT:

Land needs, College of Forestry and Natural Resources

In response to your note at the bottom of a copy of Dave McClintock's memo of January 29 to you, we have surveyed the current land needs for research and resident instruction in the College of Forestry and Natural Resources. These needs are summarized by department below.

### Fishery and Wildlife Biology Department

(Contact: Douglas L. Gilbert, 491-5020). Needs are for land in the Fort Collins area for the erection of firing ranges. See attached copy of memorandum (Ryder to Fechner) for background and details.

### Forest and Wood Sciences Department

(Contact: Gilbert H. Fechner, 491-6546). The current land needs of this department for research and instructional purposes are summarized in Table 1 and detailed in Table 2.

You will notice that some of our needs do not become critical until late this year or in 1980 (for planting or other use in the spring of 1980 and the spring of 1981). However, it is also apparent that we must establish three plots this spring; the Schory tract in Estes Park will support one of these; no land has been allocated for the other two.

Table 1. Plot and area summary, Forest and Wood Sciences Department

| Zone                                       | Plots<br>Number | Area 1/ |
|--|-----------------|---------|
| Eastern Plains Fort Collins area Elsewhere | 5 2             | 10.5    |
| Foothill-Mesa                              | 2               | 6.0     |
| Foothill-Mesa or Montane                   | 5               | 88.0    |
| Montane                                    | 4               | 12.5    |
| Subalpine                                  | _4_             | 12.5    |
| $\frac{1}{Plus \ buffer}$ strips           | 22              | 131.5   |

From Table 1, it seems that the current needs of the Forest and Wood Sciences Department could be met in relatively few locations. The Fort Collins Eastern Plains Zone may be represented on the Rigden or Stroh farms, whereas some lands on the Maxwell Ranch may be suitable for Foothill-Mesa Zone sites. The Montane and Subalpine Zones constitute somewhat different problems: such lands may not be presently in university ownership, aside from the Schory tract (Montane) and lands on the Pingree Park campus (Subalpine). Lands on the Pingree Park campus are not open enough for plot establishment; some could be used for fire ecology designation.

### Range Science Department

(Contact: C. Wayne Cook, 491-6620). Two land parcels are needed immediately, as follows:

- 1. Native range near Fort Collins (closer than Waverly) 20 to 160 Acres
- Grass/range plant nursery " 5 Acres

### Recreation Resources Department

(Contact: Arthur T. Wilcox, 491-5126). No additional current land needs. See attached copy of memorandum (Wilcox to Fechner) regarding the Northern Colorado Nature Center.

Keep in mind that the needs defined in this memorandum are current needs (brushfire). Long-term policy is another matter.

Please advise us of the next steps to take, at your early convenience.

Lie

cc: Chamberlain, T.

Hughes Cook McClintock Frayer 01son Gilbert Wilcox

Hehn

Table 2 -- Test plantation land needs, Forest and Wood Sciences Department 1/

|     | Project and Activity   | Zone                                  | Suggested Location and Type of Area                             | Date of<br>Establishment            | Minimum Area <sup>2</sup> /      |
|-----|--|---------------------------------------|---|-------------------------------------|----------------------------------|
|     |  | Quakt                                 | ng Aspen Propagation Project                                    |                                     |                                  |
| 2.  | Establishment test<br>Establishment test<br>Establishment test | Montane<br>Foothill-Mesa<br>Subalpine | Estes Park<br>Near Fort Collins                                 | May, 1979<br>May, 1980<br>May, 1980 | 1.0 Acre<br>1.0 Acre<br>1.0 Acre |
|     | * 19   | Colorado State Fo                     | rest Service Tree Improvement Project                           |                                     |                                  |
|     | Narrowleaf cottonwood variation                                | Eastern Plains                        | Agricultural land or alluvial river<br>bottom near Fort Collins | May, 1980                           | 2.0 Acres                        |
| 5.  | Narrowleaf cottonwood  | Foothill-Mesa<br>or Montane           | Alluvial river bottom near Fort                                 | May, 1980                           | 2.0 Acres                        |
| 6.  | Hybrid poplar trials   | Eastern Plains                        | Agricultural land or Poudre river bottom<br>near Fort Collins   | May, 1980                           | 1.0 Acre                         |
| 7.  |  | Eastern Plains                        | Agricultural land or South Plate river                          | May, 1981                           | 1.0 Acre                         |
| 8.  |  | Eastern Plains                        | Agricultural land or Arkansas river                             | May, 1981                           | 1.0 Acre                         |
|     | Scotch pine variation  | Eastern Plains                        | Agricultural land near Fort Collins                             | May, 1980                           | 6.5 Acres                        |
| 10. | Ponderosa pine variation                                       | Foothill-Mesa<br>or Montane           | Northern Colorado   | May, 1980                           | 2.0 Acres                        |
| 11. | Ponderosa pine variation                                       | Footh111-Mesa<br>or Montane           | Central Colorado  | May, 1981                           | 2.0 Acres                        |
|     | Ponderosa pine variation                                       | Foothill-Mesa<br>or Montane           | Southern Colorado   | May, 1981                           | 2.0 Acres                        |
| 13. | Lodgepole pine variation                                       | Montane                               |   | May, 1981                           | 1.0 Acre                         |
| 14. | Lodgepole pine variation                                       | Subalpine *                           |   | May, 1981                           | 1.0 Acre                         |
|     | Lodgepole pine seed pro-<br>duction area                       | Subalpine                             |   | May, 1981                           | 0.5 Acre                         |
|     | Douglas-fir progeny  | Montane                               |   | May, 1981                           | 0.5 Acre                         |
| 17. | Juniper - GP-13  | Foothill-Mesa                         | Near Fort Collins   | May, 1980                           | 5.0 Acres                        |
|     |  | <u>Clonal</u>                         | Variation of Quaking Aspen Project                              |                                     |                                  |
| 18. | Phenology study  | Eastern Plains                        | Agricultural land near Fort Collins                             | No. 1070                            | 0.5.                             |
| 19. | Leaf color variation   | Eastern Plains                        | Agricultural land near Fort Collins                             | May, 1979<br>May, 1979              | 0.5 Acre                         |
|     |  |                                       | Fire Effects Project  | nay, 1979                           | 0.5 Acre                         |
|     | Fire Ecology   | Montane                               | Typical Forest Land   | May, 1980                           | 10.0+ Acres                      |
| 21. | Fire Ecology   | Subalpine                             | Typical Forest Land   | May, 1980                           | 10.0+ Acres                      |
|     |  |                                       | Resident Instruction  |                                     |                                  |
| 22. | Forest Blometry<br>Laboratory                                  | Foothill-Mesa<br>or Montane           | Well-covered with trees, near<br>Fort Collins                   | August, 1979                        | 80.0 Acres                       |
|     |  |                                       |   |                                     |                                  |

<sup>1/</sup> All areas 1 to 19 must be open; i.e., free of forest competition, relatively flat (slope less than 5 percent), reasonably accessible, and have water nearby. Land will be needed for a minimum of 10 to 15 years.

<sup>2/</sup> Area of plot; additional service area will be needed; e.g., a buffer strip around each plot approximately 50 feet wide.

#### MEMO

March 2, 1979

TO:

Gil Fechner

FROM:

Art Wilcox

SUBJECT: CSU Properties for College Use

Our department has one principle concern that seems to be stable at the moment but needs to be documented.

That is the Northern Colorado Nature Center which comprises about 80 acres along the Cashe La Poudre River on the Rigdon Farm.

Since the farm was acquired, our department has been responsible for operating this center. We do this in close cooperation with Poudre R-1 School District and with personnel involvement from a number of departments on campus.

This is an important facility for teaching, laboratory demonstration work, and small research projects. It will be continued to be used for this purpose. We are in fact coordinating our efforts with the City of Fort Collins to expand the use of the area to adjoining city lands.

Our department is in charge. Recently there has been a deterioration of all-college cooperation, and some major decisions should be made regarding future management of the area by the University.

AW:ba

#### DEPARTMENT OF FISHERY AND WILDLIFE BIOLOGY

#### MEMORANDUM

6 March 1979

TO:

Gil Fechner

FROM:

R. A. Ryder (for D. L. Gilbert)

SUBJECT: Lands Needed by Department of Fishery and Wildlife Biology

I have polled faculty in our Department and following are the needs for lands for teaching and research:

- Indoor shooting range and classroom space for Del Benson's shooting sports class. Prefer close-in University lands. Division of Wildlife will probably build the facilities. Current ROTC range is scheduled to be torn down soon. Also, currently ROTC personnel must be at their range whenever it is used which is inconvenient for classroom use.
- 2. Outdoor firing range. Land preferably west of Hughes Stadium is needed. Currently no rifle range nearer to Fort Collins than Owl Canyon is available. The police range near the Hydraulics Laboratory has been closed. The trap range on South Shields is scheduled to be closed because of conflicting land uses. Benson has previously reviewed potential sites with Don Jameson when he was Acting Dean.

1:30 mai 19 Bob Burnam 491-6064

of Forestry and Natural Resources

Department of Forest and Wood Sciences

Date: March 1, 1979

TO:

Mary Strachan, CSFS

FROM:

Gil Fechner

SUBJECT: Tree Improvement Project

As you are aware, we are gradually getting a few activities underway in the Tree Improvement Project. We hope that they will eventually be productive. We deeply appreciate the assistance and suggestions that you have provided, and the storage, greenhouse, and field bed space that you have allowed us to use. We look heavily to your continued help.

Our graduate students on the project, Musser Moore and Steve Ernst, and I will have increasing needs to visit the nursery as our studies progress. Please bear with us until we learn the ropes of how to keep out of the way and still get our work done.

In trying to spread out the work within the project, major graduate student responsibilities for field activities now look like this:

#### Musser Moore -

Lodgepole pine variation  $\frac{1}{2}$ Lodgepole pine seed production area Ponderosa pine variation2/ Juniper - GP-13 Douglas-fir progeny2/

#### Steve Ernst -

Narrowleaf cottonwood variation 1/ Hybrid poplar trials 2/Scotch pine variation—

I will, of course, participate in all of the activities; and both graduate students will help one another, as will Work-Study students, as the work load demands.

As we have previously discussed, the Tree Improvement Project will require land for outplanting plots, beginning as soon as May, 1980. In this connection, I have been asked by Dean Hughes to summarize land needs for the entire College of Forestry and Natural Resources. Our first effort is directed toward universityowned land, and I will send you a copy as soon as it is submitted to the Office

 $<sup>\</sup>frac{1}{}$  Thesis study

 $<sup>\</sup>frac{2}{}$  Study plan in preparation

Marv Strachan March 1, 1979 Page 2

of Planning and Budgets. We will continue to press this approach in the hope university lands will be allocated for our immediate needs and that university policy will eventually recognize the total needs of forestry. If this approach is not productive, we will need to look to other sources in order to carry out our Tree Improvement Project plans.

cc: Borden Ernst
Frayer
Moore

#### IDEAS FOR EXPANDING INTERPRETIVE ACTIVITES ACTIVITIES AT PINGREE PARK

- A large variety of users have access to major trails such as I Cirque and Stormy Peaks at Pingree. Origins of these users are: Sky Ranch, Tom Bennett CG and Pingree facilities. It appears that the Cirque Meadows Trail is the most heavily used.
- ΙI No interpretation of natural resource conditions, history, practices or use exists for most users that see the resources from existing trails. Several conditions provide opportunities:
  - Young stand-mistletoe free at major switchback Α. in Cirque Trail.
  - В. Mistletoe infections.
  - C. Aspen stands.
  - D. View of Pingree Park below.
  - E. Geologic development of Park and Morraine.
  - F. Cirques.
  - G. Perched pond.
  - Lodgepole pine and aspen as increder subclimax. Н.
  - I. Age - growth - use of lodgepole and aspen
    - 1. Human use
    - 2. Animal use
    - 3. Value in ecosystem
    - 4.
  - J. Stand modifications by humans
    - Reproduction along trail 1.
    - 2. Old thinnings on Cirque Trail

Natural regeneration-succession Stormy feat strail

1 modifications by humans

### NATIONAL

## ASSOCIATION OF STATE FORESTERS

C. W. MOODY, President Montgomery, Alabama

H. GENE HERTEL, Vice President Des Moines, Iowa

THEODORE NATTI, Sec'y - Treas. Concord, New Hampshire



1976

Executive

Committee

PAUL R. KRAMER, Immediate Past - Pres.
College Station, Texas

ERNEST J. GEBHART, Member at Large Columbus, Ohio

- New thinning in young growth stand at switchback in Cirque Trail.
- III Most users do not get the feeling of resource dynamics. A time-scaled format could be used to demonstrate resource dynamics illustrating "this is how it was, is and is going to be".
- IV Initial interpretative efforts should concentrate on the heaviest-used area: Cirque Trail, etc. This is to provide information to the most number of people.
- V Dr. Mahoney's class in interpretation should examine opportunities and develop an interpretive plan to be implemented during 1978-79. Goals should be developed to guide the class project. Resources, e.g. \$, should be provided.

mk

### NATIONAL

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1976

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ERNEST J. GEBHART, Member at Large Columbus, Ohio

#### OFFICE MEMO

TO:

Del, John L, Tom B

Date June 26, 1980

Denny Bertelshofes 482-3822

FROM:

Terry B

**SUBJECT:** Pingree Park Cutting

#### REMARKS:

I have completed laving out the two areas of treatment and have the following recommendations to finish harvesting and hauling by October 1, 1980.

#### Area 1:

Overstory removal and thinning -- 7.35 acres.

Mark, cut, skid and deck at edge of Cirque Meadows Road.

116 trees/acre to be cut or 852 trees.

Use forestry students supervised by Denny Lunch.

#### Cost Estimate --

Mandays --

40 cut

40 skid (use CSFS skidder)

10 deck

 $90 \times $40/\text{manday} = $3,600.$ 

64 -CSFS All material (74 cords) to be donated to Pingree Park for heating. CSFS recovers no value.

#### Area 2:

Clearcut 4.4 acres.

Cut all pine inside boundaries, skid, deck at landing on Koenig Road.

Contract with Mark Morgan to cut, skid and deck. CSFS will haul as work progresses.

#### Cost Estimate --

Cut, skid and deck -- Morgan plus labor one week with tree shear

\$4,000

Haul green and dead to Fort Collins CSFS Foothills

500

\$4,500

At \$30/cord the value recovered by CSFS should be \$5,500 (if sold or used to supplement our own heat.)

Memo re Pingree Park Cutting dated June 26, 1980 Page 2

#### Alternatives:

#### Area 1:

Overstory removal

(a) Commercial sale (acreage and volume not sufficient to support).

(b) Hire and supervise a crew ourselves. Denny has expressed an interest in providing experience for students.

#### Area 2:

Clearcut

(a) Put area up for bid; may be possible but probably couldn't be done before October 1.

(b) Hire and supervise our own crews (area is unsafe for inexperienced people).

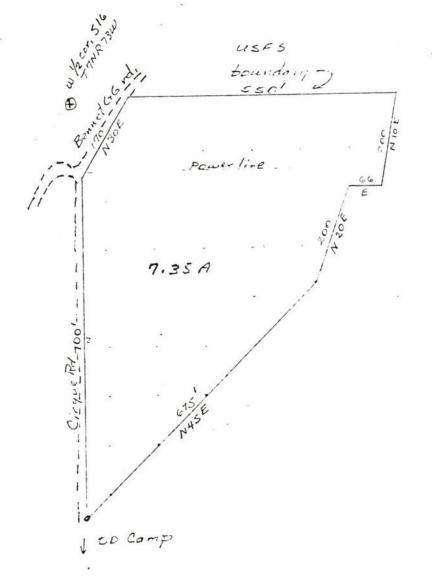
Could we get together Monday, June 30, to discuss?

RTBmk Enc. Area 1

# Pingree Overstory Removal and thinning

Stand Table

| DBH    | Trees/A | BA/A | Merch CF/A | BF/A   |
|--------|---------|------|------------|--------|
| 4      | 103     | 11.4 | 82.3       | 196.7  |
| 5      | 156     | 25.7 | 232.7      | 763,5  |
| 6      | 25      | 5.7  | 62.0       | 228,8  |
| 7      | 65      | 20,0 | 342.2      | 1371.3 |
| 8      | 14      | 5.7  | 102.1      | 414.6  |
| 7      | 29      | 14.3 | 292.1      | 1210.9 |
| 10     | 5       | 2,9  | 53.6       | 223,3  |
| //     | _       | _    | _          | _      |
| /2     | 3_      | 2,9  | 68.6       | 294.7  |
| TOTALS | 400     | 88.6 | 1235.2     | 4705.8 |
| Tin +  | . 116   | 45.8 | 858.6      | 3516.8 |

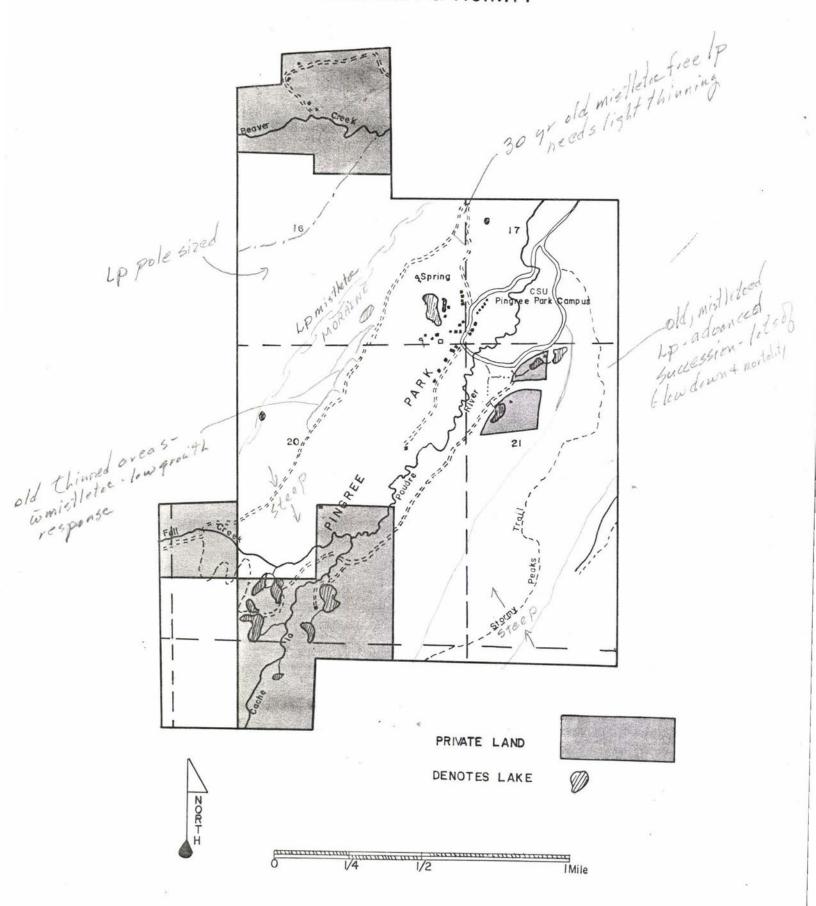


25.8 MBF on 7.35 A or TH cords removed

32 sq. = 7.35 A

N N

### CSU PINGREE PARK PROPERTY & VICINITY



Rosovices 5 NTD WE NEED to discuss impacts MINUTES

CSFS-SO

#### LAND USE PLANNING COMMITTEE

A meeting of the Land Use Planning Committee was held at 9:00 a.m., Monday, March 26, 1979, in the Board Room of the Administration Building. The following members were present:

R. H. Burnham

D. L. McClintock

R. F. Conard

E. V. Richardson

G. A. Greathouse

L. T. Suber

J. M. Hughes

Others present were:

P. N. Davis, Director Educational Media

D. K. Garfield, Engineering Research Center for E. V. Richardson Jack Law, Agricultural Sciences

G. P. Sherwood, Director Housing and Residence Education

The meeting was called to order by Chairman, D. L. McClintock. E. V. Richardson recommended approval of the minutes of the October 10, 1978 meeting and R. F. Conard seconded the motion. It was unanimously approved.

#### ITEM 1 - CATV ANTENNA REQUEST

P. N. Davis gave background of a request from the Sunflower Cablevision Television Firm of Lawrence Kansas. The request was to install a receiving antenna on one of Colorado State University's highrise dormitory roofs. Davis described numerous benefits to the University in working with the firm indicating the potential exists for serving University close-circuit television Outreach programs such as SURGE and BIO-TIE. The firm is constructing a television studio adjacent to the University on private lands, and the studio also could provide an opportunity for "hands-on"training, for the Department of Communications. The Program as described would directly involve student functions and relate to teaching and research programs of the University. E. V. Richardson questioned the availability of television access to the Foothills Campus.

Land Use Planning Committee Minutes Page 2

Davis indicated the potential for Foothills and other areas. Staff research has indicated there are no structural and/or aestetic problems with the location on the highrise. G. P. Sherwood stated he has no problems with the request. E. V. Richardson made the motion for approval and L. T. Suber seconded the motion that the request be approved in principle subject to proper agreement papers to be drawn up. It was unanimously approved.

#### ITEM 2 - NAME PROPOSAL, VETERINARY MEDICINE BUILDING

J. M. Hughes gave background and rationale for naming the Old Veterinary Medicine Building the J.V.K. Wager Building. It was noted that the State Board of Agriculture approved this name change at its meeting of March 16, 1979. A proposed sign in conformance to campus graphics would be placed possibly on the intersection of West Drive and the Oval.

#### ITEM 3 - PROGRESS REPORT LAKE SHERWOOD/AGRICULTURE CAMPUS IRRIGATION SYSTEM

E. V. Richardson gave background data relative to working with the engineer representating Everett Enterprises who intend to construct a housing development to the east and downstream of Lake Sherwood which necessitates the rerouting of the irrigation waters from Lake Sherwood to the Agriculture Campus. The development engineer is working with Colorado State University's physical plant in this relocation process. Cost to be borne by the developer. The project to be completed prior to the spring 1979 irrigation season.

#### ITEM 4 - HORSETOOTH OUTLET ENLARGEMENT

E. V. Richardson reported that the Fort Collins-Loveland Water District, City of Fort Collins and Colorado State University Soldier Canyon Dam

water outlet project is on schedule to complete the enlargement of the outlet from 30" to 54".

NOTE: E. V. Richardson left meeting and was replaced by D. K. Garfield.

#### ITEM 5 - ADDITIONAL PARKING VETERINARY TEACHING HOSPITAL

D. L. McClintock presented a proposal to increase the parking at the Veterinary Teaching Hospital. The proposed gravel parking lot to be immediately adjacent and to the north of the new hospital. (Refer Exhibit A-1). Recent past experience indicates the inadequacies of the current parking which is located to the south of the new hospital.

R. F. Conard suggested moving the lot to the east thereby leaving the proposed area for future expansion and/or development of the hospital.

R. H. Burnham indicated that by moving the gravel lot to the east, the current curb cut east of the city substation on Drake Road could be utilized as access to this lot rather than driving through and around the hospital complex. E. V. Richardson moved approval of the expansion of the lot to the ammended location to the east, R. H. Burnham seconded the motion and it was unanimously approved by the committee.

#### ITEM 6 - CITY BIKE TRAIL REQUEST - BAY FARM AREA

D. L. McClintock gave history of negotiation with city over the past several years for a bike trail easement adjacent to the Sherwood Lateral on the South Campus. (Refer Exhibit A-2). McClintock stated that the city is anticipating an easement free of charge; however, the University is asking for improvement of the load carrying capacity of the bridge that will traverses the Sherwood Lateral. G. A. Greathouse expressed concern relative to the loss of the dirt lane on the south side of the lateral which would have to be replaced or a second bridge be provided crossing

the lateral. He also indicated that provision for discharge of irrigation water from the field to the south would also have to be made under the bike lane. D. L. McClintock indicated the city is currently having the 1.4 acres of easement appraised. J. M. Hughes suggested the appraisal should be based on replacement costs.

Negotiations with the city are continuing and Land Use Committee will be kept advised.

#### ITEM 7 - PROSPECT STREET CONFERENCE CENTER

D. L. McClintock indicated that the Kansas group of investors interested in the conference center property had been asked to exercise their option of purchase and they had agreed, subject to zoning, obtaining a liquor license and financing.

#### ITEM 8 - LAKE STREET TRANSFORT TRANSFER STATION

D. L. McClintock indicated the four lots on Lake Street south of Central Receiving have had houses removed and the site cleared, he requested the area be designated overflow parking with zones to be designated by the Office of Parking Management. The City of Fort Collins Transfort Transfer location would also be located on this lot. R. F. Conard stated the committee could grant use, subject to future need by the University for a higher and better use of the area. R. F. Conard made the motion and R. H. Burnham seconded that the site be allocated to Parking Management for a gravel overflow lot, zoning to be designated. It was unanimously approved. R. F. Conard made the motion that the City of Fort Collins be granted interim use of part of the lot for a Transfort Transfer Station for a period of 3 to 4 years subject to a vacancy notification of no more than 180 days. The motion was

seconded by D. K. Garfield and unanimously approved by the committee.

#### ITEM 9 - CLOSURE OF UNIVERSITY AVENUE AND ISOTOPE DRIVE

D. L. McClintock described the implementation of the master plan stating that the mentioned streets were being closed to vehicular traffic as of March 26, 1979. It was noted Isotope Drive will become construction parking as the second floor of the Engineering Arcade construction is implemented. L. T. Suber stated with the possible construction of the main steam line renovation and extension in Isotope Drive, possibly the drive pavement could be replaced and permanent landscaping be implemented as part of the master plan in as much as the center of the street has to be removed for the steam line work.

#### ITEM 10 - BAY FARM AREA

R. H. Burnham indicated and described the recent update of the current usage of Bay Farm area stating that there were no current conflicts at this point in time; however, usage of some areas is being reviewed for better utilization of plots. (Refer Exhibit A-3).

#### ITEM 11 - NORLARCO CREDIT UNION REQUEST

R. H. Burnham indicated that the State Board of Agriculture had denied the request for a building site on University land as the program did not directly involve those of student functions or the teaching and research programs of the University.

#### ITEM 12 - DRAKE ROAD IMPROVEMENTS

R. H. Burnham indicated City of Fort Collins as stated that a fourth lane will be added to Drake Road on the north side of the road adjacent to CSU properties this summer, and that the University and CSURF have been asked to participate in the improvement district. (Refer Exhibit A-4).

Funds for this project have been requested from the state legislature.

#### ITEM 13 - CENTRAL CORE LANDSCAPING

R. H. Burnham indicated the AD-HOCLandscape Committee was in the process of developing a composite schematic landscape proposal for the core area which includes the Student Center Plaza, Forestry and Natural Resources Block and the area adjacent to the Shepardson Building.

The proposal will consolidate and tie together the numerous schemes that have been developed over the years. The committee comprised of J. M. Henre, Art Department; M. J. Paulson, Recreation Resources; G. W. Reid, Department of Horticulture; and W. D. Weddel, Director Student Center and R. H. Burnham, Director Facilities Planning will present the proposal to the Land Use Landscape Subcommittee for recommendations prior to submission to the Land Use Committee for action. Coordinated input will be received from the Colorado State Forest Service, the Development Fund, and ASCSU.

ITEM 14 - LAND REQUIREMENTS - COLLEGE OF FORESTRY AND NATURAL RESOURCES

Current and future land requirements have been submitted from the College
of Forestry and Natural Resources. R. H. Burnham indicated that the

Office of University Planning and Budgets is working with the Colorado

State Forest Service to inventory the natural resources available to the

University on all University-owned properties. As this is completed, the

College of Forestry and Natural Resources requirements will be evaluated
in regard to current resources and recommendations for land assignments,

recommendations will be made to the Land Use Committee to implement College
of Forestry and Natural Resources requirements. It was noted that future
land requirements have been received from the College of Agricultural

Sciences and it was suggested that other Colleges make the land and/or resource needs known to the Office of University Planning and Budgets.

#### ITEM 15 - CITY STORM WATER RETENTION POND REQUEST

L. T. Suber gave a background of City request for a storm water retention pond in the Foothills area east of Hughes Stadium adjacent to Overland Trail stating that the historical natural drainage had been to the north; however, private sector development in this area had blocked natural drainage. The City is now proposing a 19 acre (46 acre foot) holding pond in the area immediately east of the CSU rodeo arena west of Overland Trail. (Refer Exhibit B-1). G. A. Greathouse indicated that this land is currently assigned to the College of Agricultural Sciences and is used for rodeo contestant parking. It was agreed in principle only that L. T. Suber and G. A. Greathouse work with the City and solicit City proposals for possible site options for the retention pond and that they report back to the Land Use Committee with site development proposals. It was understood that the City requested lands be deeded to the City and easements provided; however, no action was taken pending receipt of site development proposals.

### ITEM 16 - ARTHROPOD-BORNE ANIMAL DISEASE CENTER - ANIMAL CARE FACILITY

R. F. Conard indicated USDA had selected C.E. McGuire of Greeley as design consultant for the proposed facility to be located on approximately 6.4 acres immediately south of the Communicable Disease Center in the Foothills Campus. (Refer ExhibitB-2). The federal government has funded design fees; however, no construction funds are available at this time. It was anticipated that construction would not proceed before 1981 providing funds were available. The College of Veterinary Medicine and

Biomedical Sciences has been notified that their Radiation Study

Facilities at this site will have to be removed prior to construction

of the new buildings.

#### ITEM 17 - CSU FARMS

G. A. Greathouse indicated the purchase of the Stroh Farm northeast of I-25 and Highway 14. This represents a replacement of land and not necessarily a land increase. The College of Agricultural Sciences has lost the use of the Allen Farm, Shields Street area, and a portion of the acreage on the east Agricultural Campus.

There being no further business before the Committee, the meeting was adjourned.

Respectfully submitted,

R. H. Burnham, Secretary

cc: A. R. Chamberlain

J. R. Hehn

M. A. Binkley

G. G. Olson

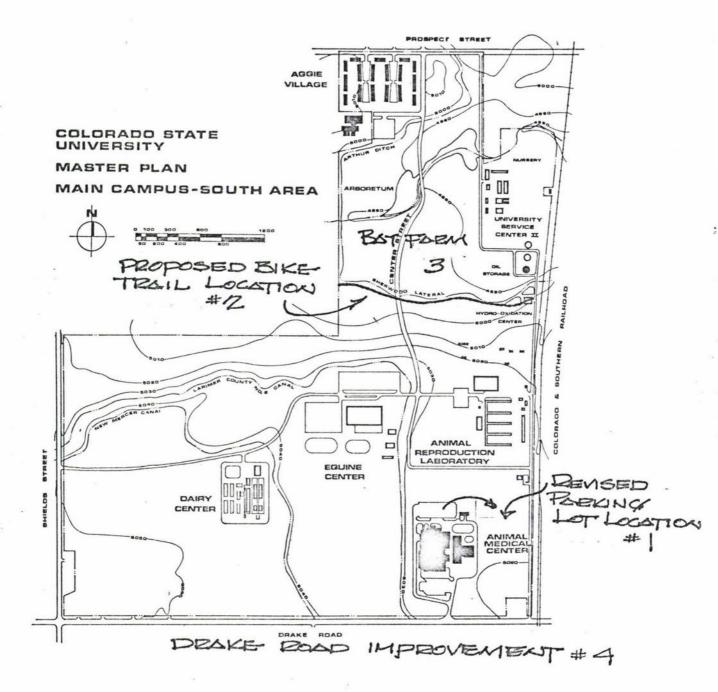
P. N. Davis

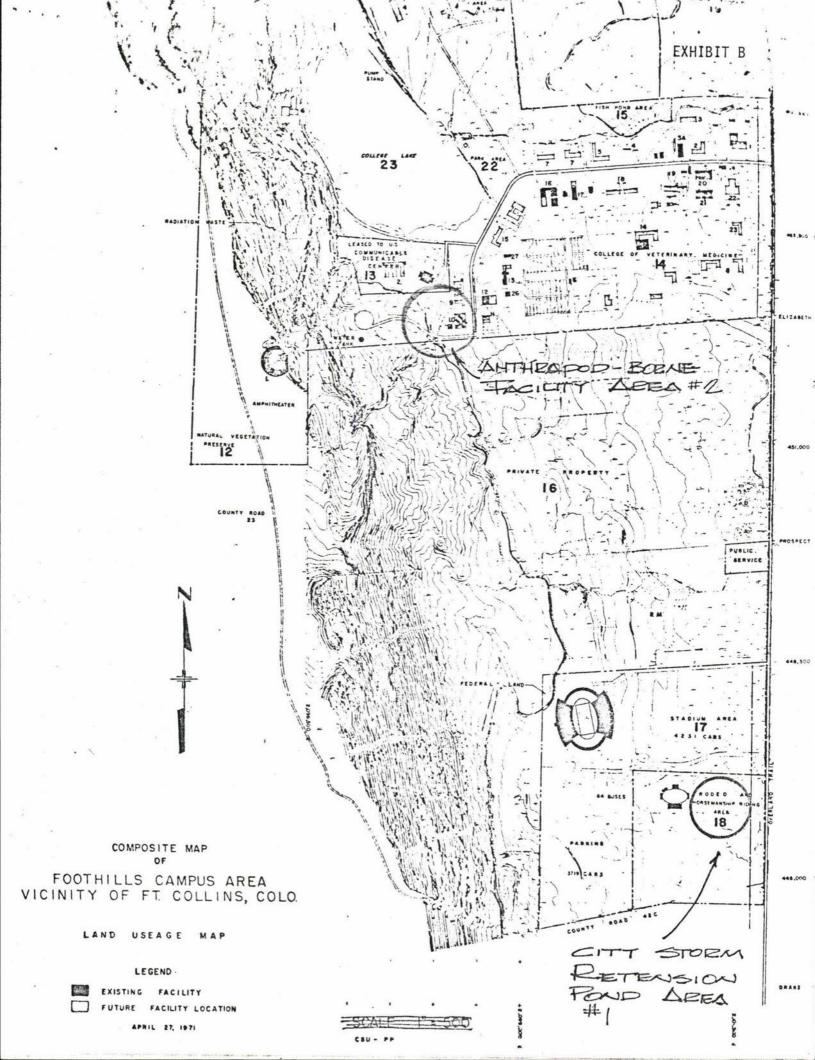
D. K. Garfield

J. Law

G. P. Sherwood

President's Executive Council







### Agricultural Enterprises, Incorporated

4825 South Sandstone Drive Fort Collins, Colorado 80526 (303) 226-1871 • (303) 482-2762 P.O. Box 113 Masonville, CO 80541

Lincoln E. Sherman Colo. State Forest Service Colorado State University Foothills Campus Fort Collins, CO 80523

Dear Lincoln:

Last year you were interested in obtaining a copy of the owners names and addresses for the Mummy Range Exemption Plat lands where I have my log cabin (behind CSU Pingree campus). I just received this updated roster of owners. I hope you are still planning to promote improved forest conditions in our area.

MAY 1 0 1989
FT. COLLINS DISTRICT

ADF
FOR
SEC
DED
TSI

#### Mummy Range Inc. Membership, May 1989

#### Lot

- 1a Ed & Donna Shefferd, 1954 14th St. SE, Loveland, CO 80537 (667-6487)
- 1b Jerry Eckert, 900 Club View, Ft. Collins, CO 80524 (482-6350)
- 2 Jan and Jean Newman, 1923 Westfield Dr., Ft. Collins, CO 80526 (226-5382)
  Jerry & Carol Goddard, 7532 Joel Place, Loveland, CO 80537 (667-6722)
- Daniel E. Binkley & Jane A. Higgins, 1218 W. Mountain, Ft. Collins, CO 80521 (493-6396)

  John A. Wiens & Beatrice Van Horne, 1208 W. Mountain, Ft. Collins, CO 80521 (484-5312)
- 4 Jim Mucklow, 1064 Sailors Reef, Ft. Collins, CO 80525 (223-7275)
- 5 Bert & Martha Masterson, 1048 Montview, Ft. Collins, CO 80521 (482-9878)
- 6 David & Barbara McWhorter, 5503 Fossil Creek Dr., Ft. Collins, CO 80526 (223-8777)
- 7 John McKean, 4825 S. Sandstone Dr, Ft. Collins, CO 80526 (226-1871)
  Jack & Veronica O'Hearn, 2045 S. Kenton Ct, Aurora, CO 80014 (755-6518)
- 8 C. Paul & Cheri Sayers, 1301 Miramont Dr, Ft. Collins, CO 80524 (484-7526)

  James & Ruth DeMartini, 947 Lochness Ct, Ft. Collins, CO 80524 (221-1364)

  James & Ann Thomas, 1413 Miramont Dr, Ft. Collins, CO 80524 (493-4916)

  Jim & Linda Wagner, 1530 Miramont Dr, Ft. Collins, CO 80524 (221-1571)
- 9 Sylvia Mucklow, 2020 Evergreen Dr, Ft. Collins, CO 80521 (484-9195)
- 10 Refer to #4
- 11a Gilbert & Maxine Fechner, 601 W. Prospect, Ft. Collins, CO 80526 (482-3792)

  11b Janet Miller-Heyl, 639 Colfax, Cortez, CO 81321
- 12 Winslow & Helen Caughey, 135 Fairway Ln, Ft. Collins, CO 80525 (226-4243)

| OBH   | Par Acre | Standing 7<br>Board | Ft. (Scrib | 5   |     |                          |          | Dec      | d Down   |      |      | my Feaks          |          | Total  | 1 Cubic | FY Vol | ione / Ac | re sta | iding 4 dead   |
|-------|----------|---------------------|------------|-----|-----|--------------------------|----------|----------|----------|------|------|-------------------|----------|--------|---------|--------|-----------|--------|----------------|
|       | 30       | 40                  | 50         | 60  | 70  | Total                    | _20_     | 30       | 40       | 50   | 60   | TOTAL             |          | 20     | 30      | 40     | 50        | 60     | 70 70          |
| 4     |          |                     |            |     |     |                          | 10       | 12.75    |          |      |      | 22,75             |          | 10.0   | 83.4    |        |           |        | 93             |
| 6     | 188      | 138                 | 182        |     |     | 508                      | 9        | 9.42     | 25,12    |      |      | 43.54             |          | 9,0    | 8011    | 72,2   | 58.8      |        | 22             |
| 8     | 108      | 456                 | 392        |     |     | 956                      | 30       | 45.3     | 20,2     |      |      | 95,5              |          | 30.0   | 79.3    | 156.5  | 113.4     |        | 379            |
| 10    | 120      | 160                 | 1428       | 496 |     | 2204                     | 18       | 33       | 102,9    | 73.6 |      | 227.5             |          | 18.0   | 66.0    | 147.0  | 460.0     |        | 69             |
| 12    |          | 492                 | 832        | 756 |     | 2080                     |          | 15       | 81,6     | 49,4 | 28,9 | 174,9             |          |        | 148,0   | 184.4  | 316,2     | 216.7  | 76:            |
| 14    |          |                     | 212        | 256 |     | 46.8                     | 12       |          | 51.8     | 63   | 37,1 | 163.9             |          | 12.0   | 84.5    | 280,5  | 410.1     | 224.9  | 101.           |
| 16    |          |                     | 214        | 516 | 302 | 1032                     |          |          |          | 78.4 |      | 78,4              |          |        |         |        | 127.8     | 116.7  | 67.2 3/1       |
| 18    |          |                     |            |     | 306 | 306                      |          |          |          |      |      |                   |          |        |         |        |           |        | 66.8 66        |
| TOT   | AL       |                     |            |     |     | 7554                     |          |          |          |      |      | 806.49            |          |        |         |        |           |        | 3539.          |
| Grani | TOTAL    |                     |            |     |     | 33.4M                    |          |          | 1        |      |      | 3564              |          |        |         |        |           |        | 15573          |
|       |          |                     |            |     | (   | 9-055)                   |          |          |          |      |      | 42 cords          |          |        |         |        |           |        | 183.2<br>Cords |
|       |          |                     |            |     |     |                          |          |          |          |      |      |                   |          |        |         |        |           |        |                |
|       |          |                     |            |     |     |                          |          |          |          |      |      | 14 cords          | non chi  | spelle |         |        |           |        | 1              |
| salve | deliver  | ed thec             | had        |     | #   | 3340<br>Sawtimb          | er       |          |          |      |      | \$1260<br>welword |          |        |         |        | Hused as  |        | \$5496         |
|       |          |                     |            |     |     |                          |          |          |          |      |      |                   |          |        |         |        |           |        |                |
|       |          |                     |            |     |     | 15 cerd<br>7.11<br>1074a | s chippe | the gree | u        |      |      |                   |          |        |         |        |           |        |                |
|       |          |                     |            |     |     | 107ya                    | vds of   | chips    | to band  | , .  |      | 28 cord           | s techip | lord   |         |        |           |        |                |
|       |          |                     |            |     |     |                          |          |          |          |      |      | 199.1             |          |        |         |        |           |        |                |
|       |          |                     |            |     |     |                          |          |          |          |      |      | 每                 |          |        |         |        |           |        |                |
|       |          |                     |            |     |     |                          | T+       | 1 olive  | to basel | ,    |      |                   |          |        |         |        |           |        |                |
|       |          |                     |            |     |     |                          | 1018     | - unips  | - vere / |      |      |                   |          |        |         |        |           |        |                |
|       |          |                     |            |     |     |                          |          |          |          |      |      |                   |          |        |         |        |           |        |                |
|       |          |                     |            |     |     |                          |          |          | - 9      |      |      |                   |          |        |         |        |           |        |                |
|       |          |                     |            |     |     | -                        |          |          |          |      |      | -                 |          |        |         |        |           |        |                |

SU

Colorado State Forest Service

Colorado State University Fort Collins, Colorado 80523

November 1, 1979

Mr. G. L. Downing, Director FIDM, S&PF USDA Forest Service 11177 West 8th Avenue P. O. Box 25127 Lakewood, Colorado 80225

Dear George,

Enclosed is a draft proposal/request for financial support to install dwarf mistletoe control demonstration plots on the Pingree Park campus of CSU.

Please review it and let me know, soon, what else we should do and the prospects of fundings. Obviously, we want to start the planning and I&E design as soon as possible.

Thanks.

John G. Laut Staff Forester Insect & Disease

JGL/cp

Enclosure

#### DWARF MISTLETOE CONTROL DEMONSTRATIONS

#### A Proposal

# Colorado State Forest Service November 1, 1979

The Pingree Park Campus of C.S.U. located in Larimer County, surrounded by Roosevelt National Forest, Rocky Mountain National Park and some private forested land contains 1,100 acres including acres of lodgepole pine. The campus is maintained primarily as a training and demonstration area in ecosystem conservation and is used by various colleges and departments of the University, public school systems and various other groups for formal training and as a conference site.

C.S.F.S. has been assigned certain responsibilities for the management of the forest resources of the campus and has prepared a general management plan for those resources.

Most of the lodgepole pine stands are infested with dwarf mistletoe to varying degrees, many of which need some type of control operation to return them to productive levels. Research has developed several recommendations for control of dwarf mistletoe damage to lodgepole pine stands. Adoption of these techniques, by land managers, however, has generally been discouragingly slow in the central Rocky Mountain area. Until we provide better training and demonstrations of effectiveness, these techniques will continue to be largely ignored.

Pingree Park, because of location, role, infestation levels and administrative organization is ideal for the establishment and maintenance of dwarf

mistletoe control demonstration areas to assist in transfer of current technology to practicing foresters, foresters-in-training and environmentally conscience publics that visit the campus.

The objectives of this special project are generally to install a series of dwarf mistletoe control plots, to display the various techniques available to the land manager. These plots and corresponding check plots will be signed to inform the observer of the biology, impact and control strategies of dwarf mistletoe. Specifically, plots will be established for:

- 1. Thinning of pole-sized stands, using management prescriptions developed by LPMIST simulation. 3 acres.
- 2. Pruning of light and moderately infected stands. 10 acres.
- Harvest of mature infested stands, using various strategies.
   acres.

An important objective for these demonstration is to create a highly visual, easily understood and attractive information system. Each treatment and its corresponding non-treated area will be identified and explained by a series of routed-wood signs consistent with the design already established for the existing campus interpretive program. Additional signs will be placed on pre-existing cut-over areas on the campus. A brochure, for public handout, will also be provided.

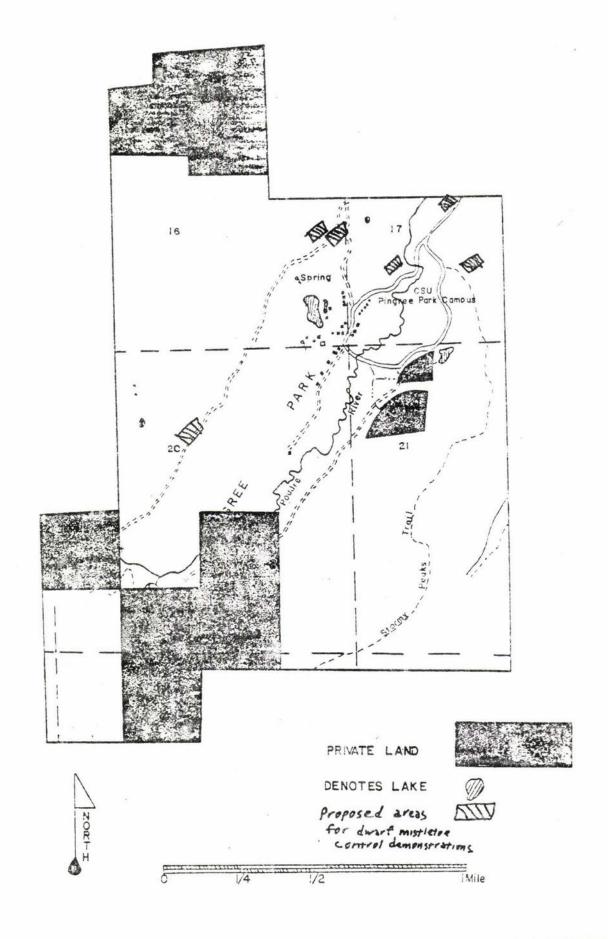
Demonstration areas will be designed and installed under supervision of CSFS Staff Foresters for Insect and Disease and Forest Management. Frank Hawksworth, Rocky Mountain Forest and Range Experiment Station, is involved as collaborator and advisor. U.S.F.S. R-2, FIDM pathologists, CSU Department of Student Services, as camp administrators and CSU College of Forestry and Natural Resources are also cooperators for this project.

Design of the plots, design and construction of interpretive signs will be completed before spring of 1980. Installation of plots and signs will be started as soon as the campus is accessible in the spring and completed before the end of the fiscal year (September 30, 1980).

Proposed budget (see separate budget sheet) for this project is (all FY 1980) \$12,500, of which CSFS will contribute 20% (2,500). The balance (10,000) is requested from U.S.F.S, FIDM, under authority of FSM 3462.08-3462.8, Interim Directive #2, February 27, 1979.

| Item  |                     | Total Cost | CSFS<br>(contributed) | USFS         |
|---|---------------------|------------|-----------------------|--------------|
| Planning & plot design  |                     | 4000       | 2500                  | 1500         |
| Interpretive material Design Construction Installation (18 signs x \$250)                       | 750<br>3250<br>1000 | 4500       | •                     | 4500         |
| Installation of practices 1. Thinning (3Ac) Marking & cutting-150/a Slash disposa Cleanup 100/a | 1                   | 8          |                       |              |
| 250/a   | cre                 | 750        | 0                     | 750          |
| 2. Pruning (10 acres) Marking & pruning Cleanup   | 150<br>50           |            |                       |              |
|   | 200/acre            | 2000       | 0                     | 2000         |
| 3. Harvest cuts (25 acres) Net cost (Total- limited pro-  |                     | 1250       | 0                     | 1250         |
| duct value)   |                     | 12500      | 2500<br>20%           | 10000<br>80% |

#### CSU PINGREE PARK PROPERTY & VICINITY







GU

Forest and Wood Sciences

Colorado State University
Fort Collins, Colorado
80523

March 10, 1980

Mr. Bill Bertschy Pingree Park Campus 108 Student Services Building Colorado State University

Dear Bill:

I have reviewed the Dwarf Mistletoe Control Demonstration proposal for the Pingree Park area and have the following comments:

- Exact location of the several proposed plots is not given.
   It is not even stated on whose land these plots are planned.
   I have not given permission for the establishment of any plots on my property which is crossed by Cirque Road.
- 2. The exact treatments and dimensions are not specified for the thinning, pruning, or harvest plots.
- 3. I would be opposed to a 25-acre clearcut along the Stormy Peaks Trail, especially if a road were needed. Many other suitable stands of mature timber must exist, such as north of the camp area.

Although, I have not investigated, I believe that other private property owners in Pingree Park would agree with my comments.

Sincerely,

Gilbert H. Fechner

Professor of Forest Genetics

Gilly it Herhour

GHF/gms

cc: Members, Mummy Range Incorporated

#### TRANSMITTAL SHEET - CSFS MANUAL

SERIES NO. 4000 AMENDMENT NO. 12 D

DATE: July 11, 1978

Amendments to each SERIES are numbered consecutively. Check the last transmittal sheet you received for this series to see that the above amendment is in sequence. Retain this transmittal sheet until the next amendment is received. Keep only the last transmittal sheet. Place it at the front of the series behind the title.

| SERIES/ | / TITLE// | CHAPTER | NEW PAGES          | REPLACES PAGES |
|---------|-----------|---------|--------------------|----------------|
| 4000    | 4100      | 4140    | 4143.01<br>4143.02 | New Pages      |

#### ABSTRACT:

Responsibility of Management and Protection of CSU related forest lands.

Thomas B. Borden State Forester

#### FOREST MANAGEMENT

CHAPTER 4140

STATE LANDS

4141

State School Lands Objectives

4141.01

4141.02 4141.02a

Policy Statement - Environmental Impact Policy Statement - Correspondence & Documents

4142

Colorado State Forest

\*4143

Management and Protection of CSU Related Forest Lands \*

#### OFFICE MEMO

TO:

Del, John L, Tom B

Date June 26, 1980

FROM:

Jerry B

**SUBJECT:** Pingree Park Cutting

REMARKS:

I have completed laving out the two areas of treatment and have the following recommendations to finish harvesting and hauling by October 1, 1980.

#### Area 1:

Overstory removal and thinning -- 7.35 acres.

Mark, cut, skid and deck at edge of Cirque Meadows Road.

116 trees/acre to be cut or 852 trees.

Use forestry students supervised by Denny Lunch.

#### Cost Estimate --

Mandays --

40 cut

40 skid (use CSFS skidder)

10 deck

 $90 \times 40/\text{manday} = 3,600.$ 

64 -CSFS All material (74 cords) to be donated to Pingree Park for heating. CSFS recovers no value.

#### Area 2:

Clearcut 4.4 acres.

Cut all pine inside boundaries, skid, deck at landing on Koenig Road.

Contract with Mark Morgan to cut, skid and deck. CSFS will haul as work progresses.

#### Cost Estimate --

Cut, skid and deck -- Morgan plus labor one week with tree shear

\$4,000

Haul green and dead to Fort Collins

CSFS Foothills

500

\$4,500

At \$30/cord the value recovered by CSFS should be \$5,500 (if sold or used to supplement our own heat.)

Memo re Pingree Park Cutting dated June 26, 1980 Page 2

#### Alternatives:

#### Area 1:

Overstory removal

(a) Commercial sale (acreage and volume not sufficient to support).

(b) Hire and supervise a crew ourselves. Denny has expressed an interest in providing experience for students.

#### Area 2:

Clearcut

(a) Put area up for bid; may be possible but probably couldn't be done before October 1.

(b) Hire and supervise our own crews (area is unsafe for inexperienced people).

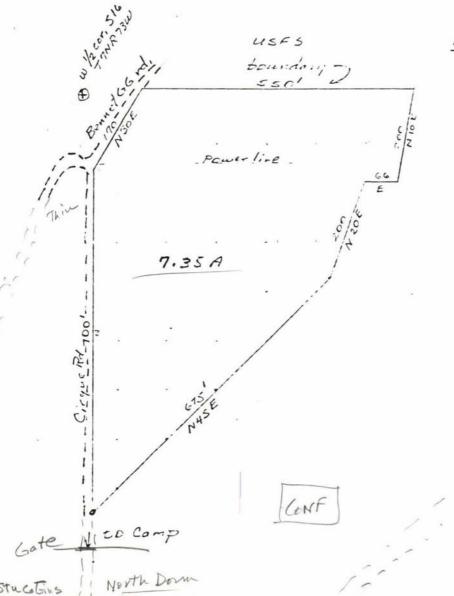
Could we get together Monday, June 30, to discuss?

RTBmk Enc. · Area 1

# Pingree Overstory Removal and thinning

Stand Table

| DBH    | Trees/A | BA/A | Merch CF/A | BF/A   |
|--------|---------|------|------------|--------|
| 4      | 103     | 11.4 | 82.3       | 196.7  |
| 5      | 156     | 25.7 | 232.7      | 763,5  |
| 6      | 25      | 5.7  | 62.0       | 228,8  |
| 7      | 65      | 20,0 | 342.2      | 1371.3 |
| 8      | 14      | 5.7  | 102.1      | 416.6  |
| 7      | 29      | 14.3 | 292.1      | 1210.9 |
| 10     | 5       | 2,9  | 53.6       | 223,3  |
| 11     | -       | _    | _          | _      |
| /2     | _3_     | 2,9  | 68.6       | 294.7  |
| TOTALS | 400     | 88.6 | 1235.2     | 4705.8 |
| Tin +  | . 116   | 45.8 | 858.6      | 3516.8 |



25.8 MBF on 7.35 A or 74 cords removed

32 sq. = 7.35 A

l

100

N

# Total Cubic Volume / Acre

|     |      | HI   | -     |       |       |       |        |
|-----|------|------|-------|-------|-------|-------|--------|
| DBH | 20   | 30   | 40    | 50    | 60    | 70    | Total  |
| 4   | 10.0 | 83.4 |       |       |       |       | 93.4   |
| 6   | 9.0  | 80.1 | 72.2  | 58.8  |       |       | 220,1  |
| 8   | 300  | 79.3 | 1565  | 113.4 |       |       | 379,2  |
| 10  | 18.0 | 66.0 | 147.0 | 460.0 |       |       | 691.0  |
| 12  |      | 48.0 | 184.4 | 316.2 | 216.7 |       | 765,3  |
| 14  | 12.0 | 84.5 | 280.5 | 410.1 | 224-9 |       | 1012,0 |
| 16  |      |      |       | 127.8 | 116.7 | 134.0 | 378.5  |
|     | •    |      |       |       |       |       | 36396  |

7759, =4.42 A 50' Es boundary degheir Stermy Pls trail

## 1. Service Agreement Between The Colorado State Forest Service and Mark Morgan

The Colorado State Forest Service agrees to pay Mark Morgan in accordance with the following terms and specifications for work to be done before September 30, 1980 on the parcel of land (7.4 acres) located on the attached map known as Exhibit B.

#### Terms and Specifications

- 1. All unmarked lodgepole pine will be felled by Morgan or his employees with stumps no higher than one foot. Marked trees will be left with logging damage minimized.
- 2. All material over five inches diameter at the small end and eight feet long will be skidded to one of several landings located along the Cirque Meadows Road. Saw timber to a minimum top diameter of 6" in 2' multiples plus 3" trim allowance per 8' section is to be delivered to CSFS Foothills campus. All other material is to be left in the decks.
- 3. All slash will be lopped and scattered to one foot or less in height.
- 4. Unmarked trees within one tree height of the power line right of way will not be required to be cut if in the opinion of the contractor their removal will damage the power line.
- 5. Mark Morgan and his employees will take all reasonable precautions to prevent forest fires and be liable for any negligence on their part that results in property damage.
- Title to all wood will be retained by CSFS as CSU's forest land managing agent.
- 7. Bills not to exceed \$1000.00 per invoice will be presented weekly. Acreage performed will be stated at \$397.30 per acre payment rate.

Agreed on July 18, 1980 by:

Thomas B. Borden, State Forester

Mark Morgan

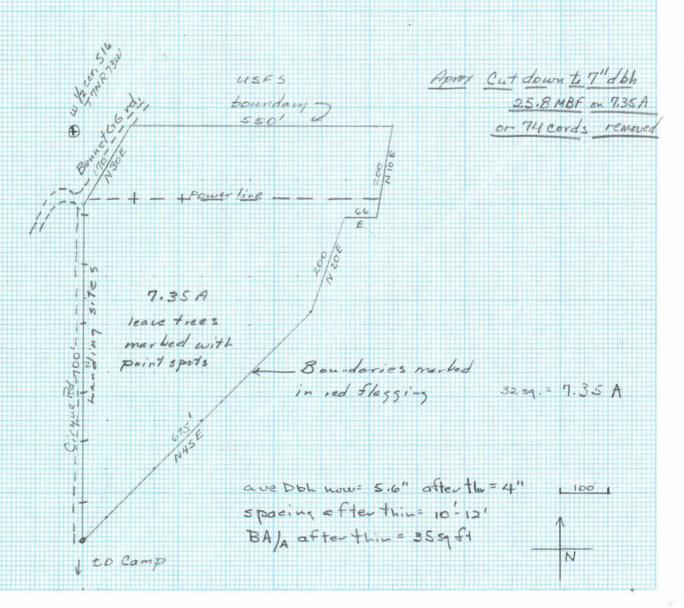
Terry Beeson, CSFS

Bill Wilcox, CSFS

| Pingree | Overstory | Removal | and | thinning | - Exhibit B |
|---------|-----------|---------|-----|----------|-------------|
|         |           |         |     |          |             |

|       | 1 |   |   |    |
|-------|---|---|---|----|
| STand |   | - | X | 10 |
|       |   |   |   |    |

| DBH    | Trees/A | BA/A | Merch CF/A | BF/A   |
|--------|---------|------|------------|--------|
| 4      | 103     | 11.4 | 82.3       | 196.7  |
| 5      | 156     | 25.7 | 232.7      | 763,5  |
| 6      | 25      | 5.7  | 62.0       | 228,8  |
| 7      | 65      | 20,0 | 342.2      | /37/,3 |
| 8      | 14      | 5.7  | 102,1      | 416.6  |
| 7      | 29      | 14,3 | 292.1      | 1210.9 |
| 10     | 5       | 2,9  | 53,6       | 223,3  |
| 11     | -       |      | -          |        |
| /2     | _ 3     | 2,9  | 68.6       | 294.7  |
| TOTALS | 400     | 88.6 | 1235.2     | 4705.8 |
| Tin +  | . 116   | 45.8 | 858.6      | 35/6.8 |



2/2/2

# 2. Service Agreement Between The Colorado State Forest Service and Mark Morgan

The Colorado State Forest Service agrees to pay for services from Mark Morgan in accordance with the following terms and specifications for work to be done before September 15, 1980 on the parcel of land (4.4 acres) located on the attached map, known as Exhibit A.

#### Terms and Specifications

- 1. All standing lodgepole pine will be felled with stumps no higher than one foot. All other live trees of other species will be left with damage to them by logging minimized.
- 2. All wood over 50% sound and 5 inches in diameter at the small end will be skidded to the designated landing site on the major haul road.
- 3. Merchantible sawlogs in 2' multiples with 3" of trim allowance per 8' length will be sorted and loaded for hauling. Firewood grade material will be chipped for hauling or loaded in long log length for hauling.
- 4. Mark Morgan will arrange for hauling in a timely manner. All merchantible wood will be delivered to CSFS foothills location as sawlogs, long length firewood, or chips.
- 5. Slash will be lopped and scattered to a one foot or less height above ground.
- 6. The total price will not exceed \$1568 per acre for felling, skidding, sorting, chipping, loading, hauling and delivery. Bills will be presented weekly with the total weekly bill not to exceed \$1000.00. Acreage performed and cost per acre should be stated on the bill.
- 7. Mark Morgan and all of his employees will take all reasonable precautions to prevent forest fires and be liable for any negligence that results in property damage.
- 8. Mark Morgan will keep close contact with CSFS regarding delivery of products so that all material can be removed in a timely manner.
- 9. Title to all wood will be retained by CSFS as CSU's forest land managing agent.

Agreed on July 18, 1980 by:

Thomas B. Borden, State Forester

Terry Beeson, CSFS

Bill Wilcox, CSFS

Alrea 2

| Total | Cubic' | Volume / Acre |  |
|-------|--------|---------------|--|
|       |        |               |  |

|        |         | ,     |       | C     |       |       |         |             |           |      |
|--------|---------|-------|-------|-------|-------|-------|---------|-------------|-----------|------|
|        |         |       | HT    |       |       |       |         |             |           |      |
|        | DBH     | 20    | 30    | 40    | 50    | 60    | 70      | Total       |           |      |
|        | 4       | 10.0  | 83.4  |       |       |       |         | 93.4        |           |      |
|        | 6       | 9.0   | 80.1  | 72.2  | 58.8  |       |         | 220,1       |           |      |
|        | B       | 300   | 79.3  | 1565  | 113.4 |       |         | 379,2       |           |      |
|        | 10      | 18.0  | 66.0  | 147.0 | 460.0 |       |         | 691.0       |           |      |
|        | 12      |       | 48.0  | 184.4 | 316.2 | 216.7 |         | 765,3       |           |      |
|        | 14      | 12.0  | 84.5  | 280.5 | 410.1 | 224.9 |         | 1012,0      |           |      |
|        | 16      |       |       |       | 127.8 | 116.7 | 134.0   | 378.5       |           |      |
|        | ,       | _     |       |       |       |       |         | 3539.5      | er        |      |
|        |         | 2     | 20,   |       |       |       | 18400   | ords on 4.4 | 12A       |      |
| 30     | 16      |       |       | -     |       |       |         | -           | -         |      |
| 3/     | 500     |       |       |       |       |       |         |             |           |      |
| . / "  |         |       |       |       |       |       |         | 7759, = 4.  | 42 A      |      |
| 6      |         |       |       | 4     |       |       |         |             |           |      |
| 1      |         |       |       |       |       |       |         |             | 50'       |      |
| 1      |         | *     |       |       | 28    |       |         |             |           |      |
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| 328    |         |       |       |       |       |       | NOE NOE | \ \         | ed vibbo  |      |
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6166- hEB

### UNITED STATES DEPARTMENT OF AGRICULTURE FOREST SERVICE

Arapaho and Roosevelt National Forests
Estes-Poudre Ranger District
148 Remington Street
Fort Collins, CO 80524

RECEIVED
JUL 1 1 1980
CSES-SO
1580
July 8, 1980



Terry Beeson Colorado State Forest Service Colorado State University Fort Collins, CO 80523

#### Dear Terry:

As per your letter of July 1, 1980, and our group discussions on the ground on June 10, this letter is your permission to proceed with the demonstration project on National Forest lands. Your activities will be subject to the following restrictions:

- 1. Restrict the size of the cut on National Forest land to that mapped.
- 2. No roads will be constructed, and any spur roads used will be closed at termination of use.
- 3. Should you decide to sell the wood, we will need to contract our portion.
- 4. Slash should be scattered as close to the ground as possible.

Keep in mind that the area is within a proposed Wild & Scenic River corridor. If you have any questions or changes, please contact me.

Sincerely,

Louis J. Bertishofer District Ranger HELDER VER

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HUTCHER PRO 12 PENNANDA CONTRACTOR

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