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Dodd Property Natural Area Study
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HE DODD PROPERTY Natural Area Study



Department of Geography / University of Colorado

THE DODD PROPERTY
NATURAL AREA STUDY

Wilbert J. Ulman and Helen Louise Young
Editors

DEPARTMENT OF GEOGRAPHY
UNIVERSITY OF COLORADO
Boulder, Colorado
1970

TABLE OF CONTENTS

Chapter			Page
	FOREWORD	. •	V
	ACKNOWLEDGMENTS	. •	vii
1.	INTRODUCTION	o é	1
2.	ENVIRONMENTAL SURVEY	• •	4
	Geomorphology Climate Flora and Fauna General Soil Descriptions		
3.	PAST, PRESENT AND FUTURE LAND USE Max H. Dodson and John L. Harper	• •	19
	Past Land Use Present Land Use Future Land Use		
4.	CADASTRAL AND LAND TENURE	• •	28
	Cadastral Survey Land Tenure		
5.	LAND ECONOMICS	• •	38
6.	CONCLUSIONS	• •	43
APPENDIX I.	SELECTED PHOTOGRAPHS OF THE DODD PROPERTY		46
APPENDIX II.	AIR PHOTO OF AREA - 1969		49
APPENDIX III.	. NATURAL AREAS COMMITTEE MEETING MINUTES		52
APPENDIX IV.	MEMORANDA FROM ROBERT S. GREGG	6 4	56
APPENDIX V.	ANALYSIS OF POSSIBLE FUNDING	6 6	62
APPENDIX VI.	NEWSPAPER CLIPPING - HISTORIC CABIN	• (67

FIGURES

1.	Page Location
2.	Relief Map
3.	Lefthand Creek Floodplain 6
4.	Lefthand Creek Cross-Section
5.	Terraces and Vegetation 8
6.	Climograph
7.	Vegetation
8.	Soils
9.	Land Use - 1955
10.	Current Land Use
11.	Original Patent Map
12.	Cadastral Map - 1910
13.	Cadastral Map - 1930
14.	Cadastral Map - 1950
15.	Cadastral Map - 1970
16.	Increase of Average Assessed Valuation
17.	Average Assessed Evaluations
18.	Land Evaluation by Owner
19.	The Historic Old Settler's Cabin Built Circa 185948
20.	An Example of an Old-Style Rail Fence Along the Dodd Property
21.	Property for Sale East of Haystack Mountain
22.	Aerial View of the Dodd Property from the North51

TABLES

			Page
1.	General	Soil Descriptions (Slope)	15
2.	Partial	History of Land Transactions, Section 27	34
3.	Partial	History of Land Transactions, Section 28	35

NOTE

Since the preparation of this report, the old settler's cabin has been moved from the original site to Hermitage Park in Longmont, Colorado.

FOREWORD

This report is one of six undertaken this year in the Department of Geography at the University of Colorado. It has become almost a tradition for the graduate seminar in land use to initiate a project in the local area in cooperation with an agency of the Boulder community on either the municipal or county level, sometimes both.

These studies achieve a number of objectives. The participating students undertake a realistic project which they are able to plan, execute, and publish within the brief span of one semester. Also, these studies provide new information for municipal and county officials and citizen groups concerned with planning and guiding the growth and development of the City of Boulder and Boulder County. In short, these are professional training exercises for graduate geographers and are a serious effort in providing new planning perspectives in the interest of public service.

In response to a suggestion by the Natural Areas Committee of the University of Colorado, the land use seminar elected to study and analyze a number of natural sites in the Boulder Valley. The group was also joined in the endeavor by the graduate field seminar of the Department of Geography.

The cooperative base within the Boulder community was wider than usual this year. The sites chosen for study seemed to have potential for a variety of uses beyond their present development. These included instruction, greenbelt, and open space. The graduate students involved worked in cooperation with the resident property owners, the Parks and Recreation Department and the Planning Office of the City of Boulder, the Department of Development and the Parks and Open Space Advisory Committee of Boulder County, the Boulder and Longmont Offices of the Soil Conservation Service, the Science Director of the Boulder Valley RE-2 School District, the Planning Office and the Natural Areas Committee of the University of Colorado, and the Denver Regional Council of Governments.

Sometimes the graduate researchers felt they would have liked to pursue certain themes in greater depth if there had been more time available. Nonetheless, they join me in expressing the hope that this report provides informative insights on a fascinating part of Boulder County.

The various chapters which appear in this study were originally submitted as special reports by the individuals indicated. They represent the endeavors and views of the authors and in no way should be interpreted as the official views of the Department of Geography or any other cooperating agency or organization previously mentioned. Because of this independence from official views, the participants in this project are especially grateful to the Graduate School of the University of Colorado, the City of

Boulder, the Boulder County Commissioners, the University of Colorado Foundation, and the Boulder Valley RE-2 School District for sharing the costs of printing this report.

This is the collective and individual effort of a group of dedicated geographers concerned about the quality of the local environment and its attendant stresses. Boulder County residents, students, and local officials may gain understanding from this report that will assist them in their efforts to perpetuate the Boulder area as a pleasant and attractive place to live.

Donald D. MacPhail, Ph.D. Professor of Geography

Boulder, Colorado June, 1970

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The graduate students participaing in the 1970 geography Land Use Seminar are indebted to many persons whose cooperation helped make this report possible. Within the Boulder County offices, thanks go to the following: Mr. Harold Copeland, Mrs. Carol Musser and others in the County Assessor's Office for use of land ownership records; Mr. Harold Nesbitt and Mr. Ross Campbell of the U.S. Soil Conservation Service for use of aerial photographs of the study area; and to various realtors, landowners, and other parties who willingly provided information through interviews. A special thanks is extended to Mr. John Dodd for his cooperation and support throughout the study. Mr. Don Look of Look Photo Services has been particularly helpful in solving some of the photographic problems. Finally, the editors also wish to acknowledge the assistance and guidance provided by Professor Donald D. MacPhail during all phases of this report; to Mrs. Nancy Stonington for the cover design and to Mrs. Sue Middleton for final typing; Mr. Wilbert J. Ulman completed the final preparation of the maps for publication with the copy camera and contact printer of the Geography Department.

Helen Louise Young Wilbert J. Ulman

CHAPTER 1. INTRODUCTION

Wil Ulman and Helen Louise Young

Accelerated urban and population growth along Colorado's Rocky Mountain Front Range during the past two decades has resulted in striking changes upon the landscape. Boulder, with its constantly growing university enrollment and numerous research oriented industries is ranked as a leader in Colorado community growth. Constant encroachment of urban facilities onto Boulder's fringe results in a changing land use pattern. Open space becomes less apparent as the land is subjected to more intensive use. Cornfields are replaced by residential tracts and gravel roads become expressways as the natural landscape is pushed ever further into the hinterland.

Boulder is unique among most rapidly growing communities in that a high degree of planning has resulted in setting aside land for greenbelts to provide some semblance of openess for area residents. There are, however, still a number of areas within close proximity to Boulder which possess unique natural characteristics of value to the community and should be set aside as parks or areas of special use. Hereafter these areas will be referred to as natural areas.

For the purposes of this report, a natural area is described as one which has unique ecological characteristics—floristic, geologic, or combinations thereof. Naturally, such an area would be a valuable site to observe plant and animal habitats and topographic or geologic phenomena. Presently several observation and study sites still exist within a relatively short driving distance from Boulder. One such site, and the subject of this report, is the Dodd property.

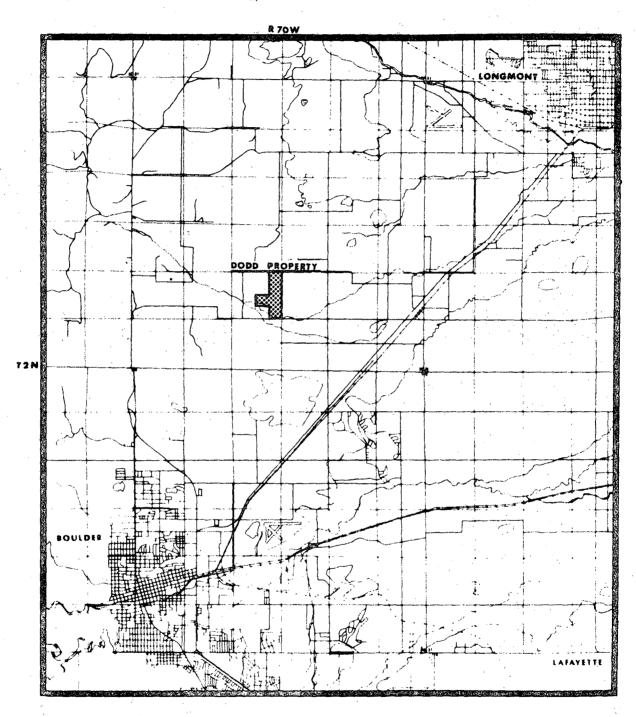
The Dodd property, a 193-acre tract, located 2.65 miles west of Niwot, Colorado, on Boulder County Road No. 34 (Figure 1) possesses certain unique qualities which in the past have been the object of interest to the natural sciences of the University of Colorado (biology, geography, geology, for example). Observable phenomena on the Dodd property have stimulated a close study by the Boulder Natural Areas Committee who have tried unsuccessfully to acquire this area as an outdoor classroom.

This report includes an inventory of the qualities associated with the Dodd property in which four teams conducted intensive research. An initial environmental survey of the area was made to assess the physical characteristics. Three other phases of investigation followed; these covered: land use, land tenure and cadastral, and finally land economics.

Methodology

The methodology involved in preparation of this report included the following steps: 1) field reconnaissance of the area; 2) assemblage of

DODD PROPERTY



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maps and aerial photos; 3) collection of land value, tenure and cadastral data; 4) intensive research of pertinent literature; 5) interviews with persons having some knowledge or interest in the area, and 6) editing of the individual reports.

The field reconnaissance involved several visits to the Dodd property to survey the topography and to discern spatial relationships between subdivisions and other types of land use and the Dodd property. Base maps for the study were constructed from the 1950 and 1967 U.S. Geological Survey Niwot, Colorado Quadrangle. Aerial photos of the area were flown by the U.S. Department of Agriculture, Soil Conservation Service. Data for the land values, tenure and cadastral surveys were obtained from the land books in the Boulder County Assessor's Office and the Transamerica Title Company. Library research augmented all phases of the report. Background materials for the environmental survey of topography and flora and fauna and Lefthand Creek Floodplain documents were valuable in report preparation.

Interviews were conducted mainly with landowners, realtors and city and county planners in order to gain a well-rounded view of all parties interested in this natural area. Finally, the four reports, done by separate teams, were compiled and edited resulting in this volume.

CHAPTER 2. ENVIRONMENTAL SURVEY

James Biggins and William G. Callahan

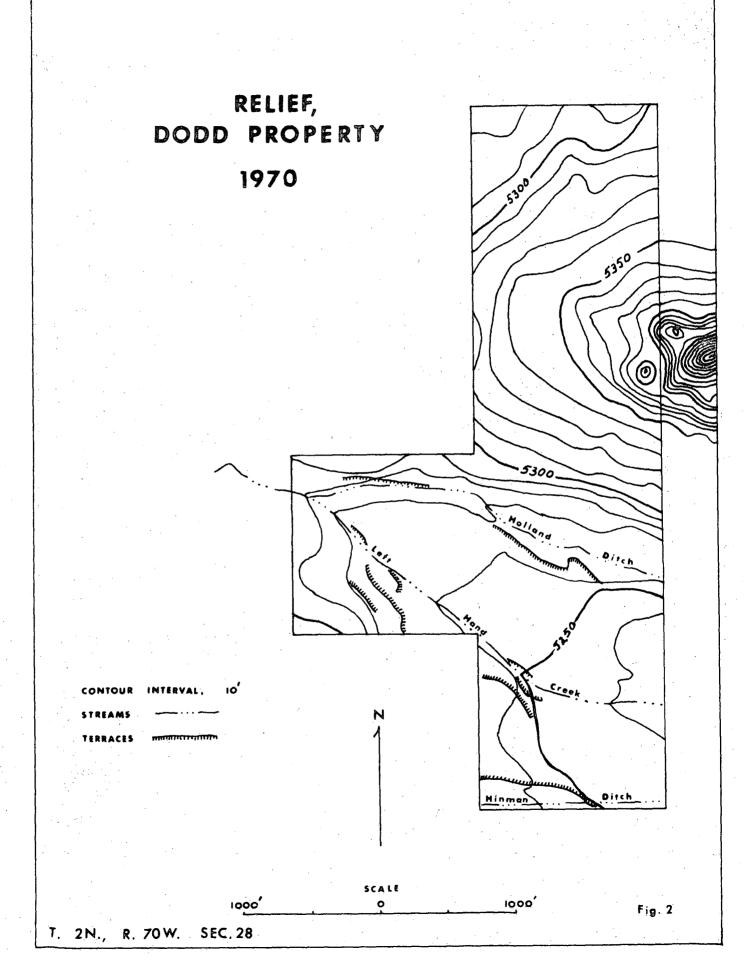
The Dodd property comprises about 193 acres of the eastern half of Section 28, Township 2 North, Range 70 West (T 2 N, R 70 W) in Boulder County. The property is immediately west of Haystack Mountain (elevation 5,589 feet) and is located about 10 miles from Boulder and 3 miles from Niwot. Lefthand Creek flows through the southern portion of the property. Near the creek, the terrain is relatively flat and contains a grove of cottonwoods and several varieties of grass. The remainder of the property is grassland on the moderate to steep lower slopes of Haystack Mountain. Elevations within the property range from 5,235 feet on Lefthand Creek, where it crosses the eastern property line, to about 5,340 feet at the top of a knob just west of the summit of Haystack Mountain. The summit of the mountain is not on the Dodd property (Figure 2).

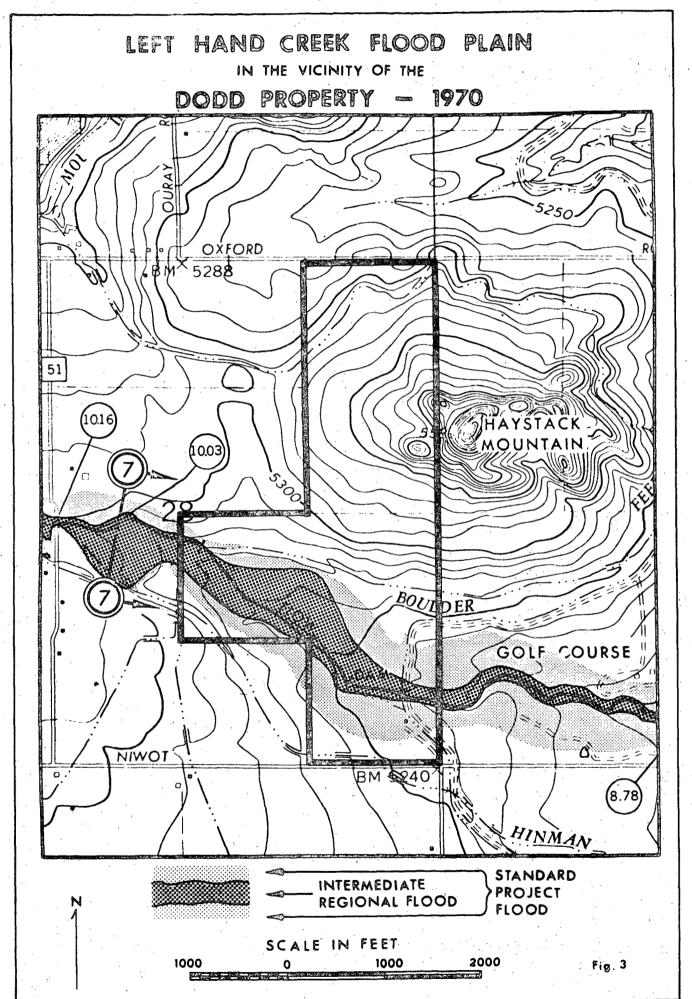
Geomorphology

The area including the Dodd property is underlain by Creatceous shale - the only definite outcrops being on the slopes of Haystack Mountain. A low anticline is found in the shale, but is not responsible for any surface features (Hunter, 1947). The nature of the surface results from erosion and deposition, with Lefthand Creek being the chief agent (Figure 3).

Lefthand Creek has a gradient averaging 80 feet per mile. The floodplain averages about 50 feet in width, and is composed of sand and gravel. The gravel includes well-rounded boulders of granite and other igneous rocks, gneiss, and at least three varieties of sandstone. Five low, discontinuous terraces, three south of the floodplain and two north of the floodplain form the gently sloping ground that makes up the southern property (Figure 4). The terraces are recognizable only at the edge of the floodplain and on the western portion of the property. The lowest and most recent terraces adjacent to the floodplain have been eroded along the inner edges by recent floods and the exposed parts of the terraces contain alluvium or loess and thin layers of gravel (Figure 5). All the terraces contain small, shallow, ovate depressions, including a partially filled oxbow on the lowest terrace south of Lefthand Creek in the western part of the property. Because the origin of most of these depressions is not clear they may be subsidence pits, nearly closed meander scars, or subsidence depressions in settling alluvium. All depressions appear to be relatively impervious to seepage, and apparently collect water by runoff, spring-feeding, or both.

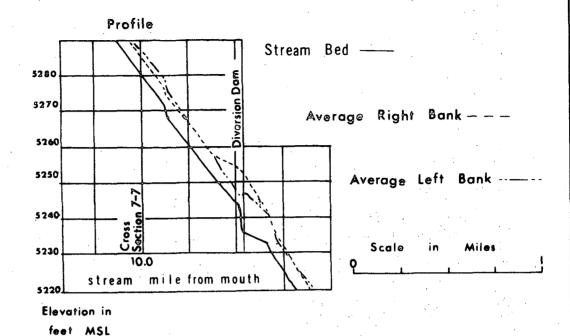
The western slopes of Haystack Mountain are concave, ranging from gradients of 1:200 feet in the lower portions of 1:7 feet on the upper slopes. The lower slopes have been plowed and are cobble-strewn. The upper slopes,





LEFT HAND CREEK

CROSS SECTIONS



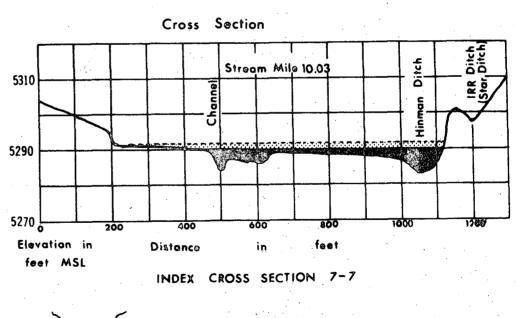
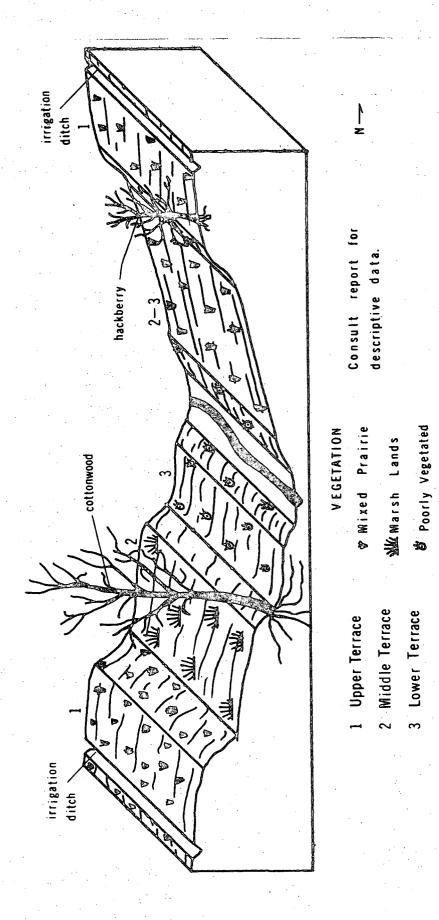




Fig. 4

Source: U.S. Army Corps of Engineers



IDEALIZED TERRACE REPRESENTATION

terminating in a knob west of the mountain top, are apparently underlain by poorly sorted gravel, including boulders over one foot in diameter, set in a soft, gray matrix partially cemented by discontinuous caliche about 2 feet below the surface.

Lefthand Creek is the only stream of any kind on the property. A shallow gully, 500 feet long, in plowed land south of the knob on Haystack contains cobble-capped pedestals about 2 inches high, giving some measure of the depth of the most recent erosion, much of which may be due to wind. Since most of the surface is porous, drainage may be subsurface; underground drainage could also supply water to the low depressions on the terraces.

The topography of this area is due to a combination of changing stream patterns and protective caps of gravel on ancient surfaces. Remnants of a once-continuous sheet of gravel, that presumably was spread by streams over the whole area, is preserved on the upper parts of Haystack Mountain and Table Mountain, one mile to the northwest. This gravel layer may be the source of the cobbles and boulders scattered over the lower slopes of Haystack Mountain. The similarity of gravels on Table Mountain and Haystack Mountain and the conformity of their summits give support to the idea of a widespread gravel layer. The assumption is that Lefthand Creek has diverted from its former course between the two mountains into a shorter, but deeper stream valley south of Haystack Mountain after it had cut through some of the land between the two mountains. Lefthand Creek gradually assumed its present course, while the zone between the mountains could have been deepened by smaller streams because the layer of gravel had its bounding terraces formed later. The present gravel bed has been excavated and widened artificially in the eastern part of the property to reduce the risk of overflow during flooding.

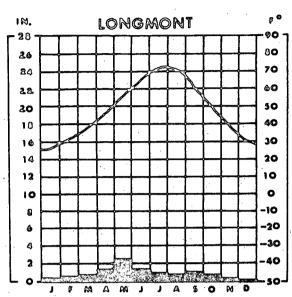
Climate

The Dodd property, located between Boulder and Longmont, can be typified climatically as having temperatures and rainfall values somewhat between those of Boulder and Longmont (Figure 6). Although temperature and precipitation are the major climatic controls, intermittent, strong winds are not uncommon to the area. These westerly winds, known locally as "chinooks," undoubtedly affect vegetation and soil to some degree.

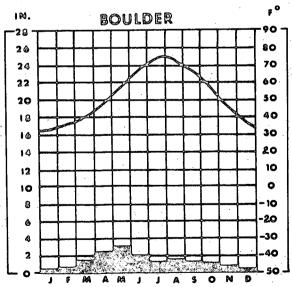
As with many streams issuing from the Front Range, Lefthand Creek has been subjected to periodic flooding as a result of local climatic extremes. The U.S. Army Corps of Engineers has noted that flooding occurs along Lefthand Creek on the average of once every 15 years. The most severe modern floods were June, 1949 (1,140 cubic feet per second [cfs] water flow), 1938 (812 cfs, no month given), and August, 1951 (785 cfs) (U.S. Army Corps of Engineers, 1969). Although floods are not predictable and are quite variable in volume, they are most frequent in spring and summer when sporadic thundershowers accompany alpine snowmalt. The area adjacent to Lefthand Creek in the Haystack Mountain vicinity that the Corps of Engineers believe would be affected by flooding as indicated by Figure 3.

CLIMOGRAPHS

Station elev. 4950°
Mean annual temp. 48.3°
Mean annual precip. 12.03°
Mean annual snowfall 34.2°
Highest rec. temp. 105°
Lowest rec. temp. -38°



Station elev. 5385°
Mean annual temp. 52.3°
Mean annual precip.18.57"
Mean annual snowfall 80.5"
Highest rec. temp. 104°
Lowest rec. temp. -33°



Flora and Fauna

The Dodd property, lying within the transition zone of subalpine to grassland, portrays plant and wildlife characteristics typical of this zone. Numerous animal burrows are found on the stream terraces. The inhabitants were not seen, but common piedmont mammals: skunks, rabbits, squirrels, prairie dogs and mice and birds would be expected to live in the area.

The vegetation is predominantly native and introduced grasses scattered throughout the area. Hackberry, wild cherry, alder, skunkbrush, and numerous herbs may be found. Although there is a change in elevation of about 195 feet, plant distribution does not seem to be determined by elevation; rather it is controlled by local variations on microclimate and edaphic factors. Thus, there is a distinct localization of cottonwood along Lefthand Creek, rushes in marshy depressions on the terraces, and yucca and skunkbrush on open hillsides (Figure 7). An unusual plant feature on the property is a single ponderosa pine, 35 to 40 feet high, in the western segment of the property - possibly a remnant of a former grove.

Vegetation Categories (Weaver and Albertson, 1956), (See Figure 7)

High Dry Grassland (Category I): The predominant grasses are blue gramma (Bouteloua gracilis), western wheat grass (Agropyron smithii), and little bluestem (Andropogon scoparius), with needle-and-thread (Stipa comata). Skunkbrush, (Rhus trilobata) and small soapweed (Yucca glauca) are scattered throughout.

High Dry Grassland (Category II): The predominant grasses are big blue-stem (Andropogon gerardi), little bluestem (Andropogon scoparius), side oats gramma (Bouteloua curtipendula), switchgrass (Panicum virgatum), sand drop-seed) (Sporobolus cryptandrus), and indian ricegrass (Oryzopsis hymenoides) with minor amounts of Category I intermixed.

Mixed Prairie: Mixed prairie reduced by overgrazing to a short-grass disclimax. Short grasses and cactus (Opuntia polyacantha) are the chief species. A wide mixture of soapweed (Yucca glauca), sand milkweed (Asclepias arenaria), and yellow spined thistle (Crisium ochrocentrum) are intermixed.

Cottonwood: Plains cottonwood (Populus sargentii) are situated primarily along the banks of Lefthand Creek. A few smaller stands can be found along the irrigation ditches.

<u>Poorly Vegetated</u>: Extremely reduced grass cover - possibly a result of overgrazing. In scattered but frequently occurring areas the vegetation is entirely absent exposing bare soil and rock.

Bunch Grass: Plains bluegrass (Poa arida) predominates in conjunction with blue gramma (Bouteloua gracilis) and small amounts of grasses listed in Categories I and II.

Cultivated Areas: areas presently being cropped.

Marsh Lands: Here a fairly uniform layer of sedges exist in which rushes (Carex filifolia) predominate. Water is collected on the surface to a depth of approximately one-half inch.

VEGETATION, DODD PROPERTY 1970

LEGEND

Migh Dry Grassland

Migh Dry Grassland

Cottonwood

Poorly Vegetated

Cultivated Area

Mersh Land

vocatestica Possessional Possessional Gravel Unvegetated

Fallow Land

Hackberry

Alder

Wild Cherry

A Ponderosa Pine

Mixed Prairie

1000

SCALE

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ia. 7

Gravel: no vegetation present.

Fallow Areas: not presently being cropped.

<u>Hackberry</u>: These trees (<u>Celtis occidentalis</u>) are restricted to the south bank of the Holland Ditch on the upper terrace in the center of the property.

Alder: (Alnus serrulata) Only one small stand was observed in the area in which the hackberries were previously noted (as above).

<u>Wild Cherry: (Prunus pennsylvanica)</u> Limited clusters exist along the Holland Ditch only.

<u>Ponderosa Pine:</u> (<u>Pinus ponderosa</u>) Only one tree of this type exists on the property, and is located in the southwest corner of the western extension of the property.

Soils

The "Soils Handbook for Boulder Survey Area," a report for the U.S. Department of Agriculture (Moreland, 1966) gives the following soils descriptions for the area. Figure 8 shows the distribution of the soil types in the study area and Table I provides the slope designations.

Samsil Clay (51-CD): A shallow well-drained soil with clay or clay loam surface soil and underlain by shale at less than 20 inches. These soils are on uplands. Water intake rate is slow and water-holding capacity is low. These soils are best suited for pasture. If irrigated, frequent light irrigations will probably be necessary to maintain sufficient available moisture and avoid erosion. If not irrigated, proper range use is necessary to maintain desirable grasses and avoid erosion. These soils have severe limitations for septic tank filter fields and for foundations.

Hargreave Fine Sandy Loam (52-CD): A moderately deep, well-drained soil with fine sandy loam surface soils and fine sandy clay loam subsoils. These soils are underlain by sandstones at 20 to 40 inches, and are located on uplands. The water intake rate is moderately rapid and the water holding capacity is medium. These soils are used for irrigated and dry cropland and pasture. Erosion control is necessary to prevent wind erosion. There are severe limitations for septic tank filter fields because of the depth to bedrock.

Kutch Clay Loam (53-CD): A moderately deep, well-drained soil with clay loam surface soils and clay subsoils. These soils are underlain by shale at 20 to 40 inches and are located on uplands. The water intake rate is slow and the water-holding capacity is medium. This soil is used for irrigated and dry cropland, but is better suited for pasture than crops. Careful irrigation is needed to avoid water-logging. There are severe limitations for septic tank filter fields because of the depth to the bedrock and the slope, but these soils are moderately easy to excavate.

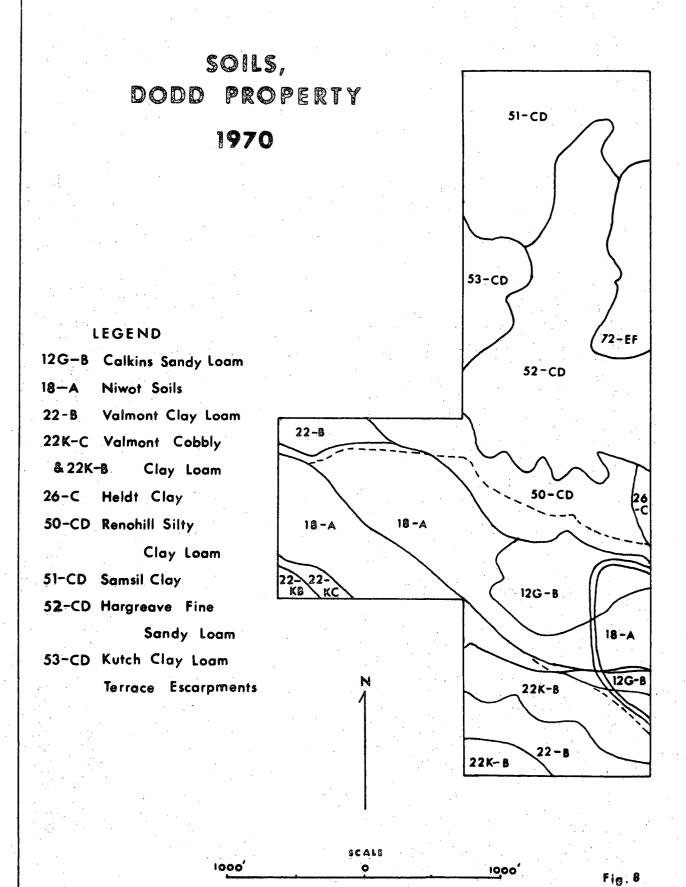


TABLE I. GENERAL SOIL DESCRIPTIONS

(Slope Designations)

Soil Code*	Percentage of Slope
. A	0 - 1
В	1 = 3
AB	0 - 3
C	3 - 5
D	5 - 9
CD	3 - 9
E	9 - 25
CE	3 - 25
DE	5 - 25
DF	5 - 55
EF	9 - 60
F	0ver 25

^{*}Code identified in general soil description immediately preceding and can be related to those letters above which appear in Figure 8.

Renohill Silty Clay Loam (50-CD): A moderately deep, well-drained soil with silty clay loam surface soils and silty clay or clay subsoils. These soils are underlain by shale at 20 to 40 inches and are located on uplands. The water intake rate is slow while the water holding capacity is medium. This type soil is used for irrigated and dry cropland, but is better suited for close growing crops and pasture to help control erosion. On slopes of over five per cent, these soils should not be dry farmed because of the erosion hazard. There are severe limitations for septic tank filter fields.

Terrace Escarpments (72-EF): This is a land type consisting of a thin layer of cobble material over shale which occurs mainly on the side slopes of old high terraces and pediment surfaces. The water intake rate is slow although the cobble on the surface may help. The water-holding capacity is low. These soils are best suited for range or pasture. With good range management, fairly good amounts of forage can be obtained. There are severe limitations for septic tank filter fields, and for foundations.

Valmont Clay Loam (22-B): A moderately deep, well-drained soil with clay loam surface soils and clay or clay loam subsoils. This type is underlain by cobbly and gravelly layers at 20 to 40 inches, and is located on terraces and high pediments or outwash fans. Water inflitration is moderately slow while the water-holding capacity is medium. This soil is used for irrigated and dry cropland and pasture. Erosion control is important. Moisutre conservation is necessary on dry farmed areas. There are moderate limitations for septic tank filter fields, and excavation may be somewhat difficult because of cobble in the substrata.

Valmont Cobbly Clay Loam (22K-C and 22K-B): These soils are like 22-B except that there are large amounts of cobble and gravel on the surface and throughout. Cultivation is difficult, and most areas are used for pasture or rangeland. There are moderate limitations for septic tank filter fields, and excavation is difficult.

Niwot Soils (18-A): A shallow, somewhat poorly drained soil with loam or clay loam surface soil and underlain by sand and gravel at less than 20 inches. These soils are on low bottomlands and terraces, usually adjacent to stream channels. The water intake rate is medium and the water-holding capacity is low. This type is used primarily for irrigated and dry pasture. More frequent irrigation may be necessary although most areas have a seasonal watertable and may receive infrequent flooding. There are severe limitations for septic tank filter fields. These soils are good sources of sand and gravel.

Calkins Sandy Loam (12G-B): A deep, somewhat poorly drained soil with sandy loam surface soils and sandy loam subsurface layers. The water intake rate is moderately rapid while the water holding capacity is moderately low. These soils are on low terraces and bottomlands and are used for irrigated farming, being well suited for this use. Wind erosion may be a hazard and drainage may be necessary to lower the watertable. There are severe limitations for septic tank filter fields because of the high watertable.

Heldt Clay (26-C): A deep, well-drained soil with clay loam or clay surface soils and clay subsoils. This type is located on terraces and uplands. The water intake rate is slow and the water-holding capacity is high. This soil is used for irrigated and dry farming and pasture, but is best suited for pasture because of workability. There are severe limitations for septic tank filter fields because of a slowly permeable subsoil.

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CHAPTER 3 . PAST, PRESENT AND FUTURE LAND USE

Max H. Dodson and John L. Harper

Past Land Use

Historically, the Dodd property and the Haystack Mountain area have undergone few major changes in land utilization until the past five or six years. The Haystack Mountain area was first legally settled in 1864 and 1865 and was first irrigated shortly thereafter (Lang, 1932). Cropland is conjectured to have been initially confined to the floodplain, but after the Holland Ditch was completed in 1866 cropland was assumed to have advanced up the southern slopes of Haystack Mountain.

Soils in and around Haystack are, according to D. C. Moreland, soil scientist for the Longmont Soil Conservation Service, generally unfavorable for any extensive crop production but are good for grazing and pasture areas. With this information, combined with that from various personal interviews with John Dodd, landowner, it was ascertained that up until the Dodd family purchased the property in 1940, pasture and grazing was the predominant land use of their property. The raising of cereal grains and cattle feed was of secondary importance.

An interesting past land use of the Dodd property is found in the history of the old log cabin southwest of Haystack Mountain (Appendix V). This cabin was built by Jacob Affolten, a homesteader, in the early 1860s. It was used as a residence until 1950, but has had some rather interesting visitors and residents. In the 1860s it was used to muster out Civil War soldiers. While Affolten was living in the house in the mid-1860s, the Arapahoe Chief Niwot (meaning "lefthand" in English) visited and camped around the cabin (Darby, 1970). The Dodd property was a favorite wintering spot for the Arapahoe Indians who found a good supply of game and drinking water in the vicinity. Stone rings about 20 feet in diameter are still visible some 200 yards southwest of the cabin. These stones were used to hold down the edges of the tepees. Between 1867 and 1876 the cabin was used periodically as the headquarters of the F. V. Hayden Survey which made geological maps and reports of the Rocky Mountains (Johnson, no date).

When the Dodds first obtained the 200 acres, it had previously been a dairy farm which supported approximately 20 milk cows. The grazing area was confined to the acreage just below the Holland Ditch but not including the 40 acres extending to the west. Here was located a considerable amount of swamp area which was successfully drained by the Dodds shortly a ter they assumed ownership

The first use the Dodd family made of its newly acquired land was dairy farming. They, like their predecessors, grazed and milked approxi-

mately 20 cows. The milking area was the small barn and corral area adjacant to the log cabin in the southern part of their property just north of Niwot Road. The Dodds continued the dairy operation for approximately two years and eventually had to terminate operations due to increased health-sanitation regulations and expense of operation.

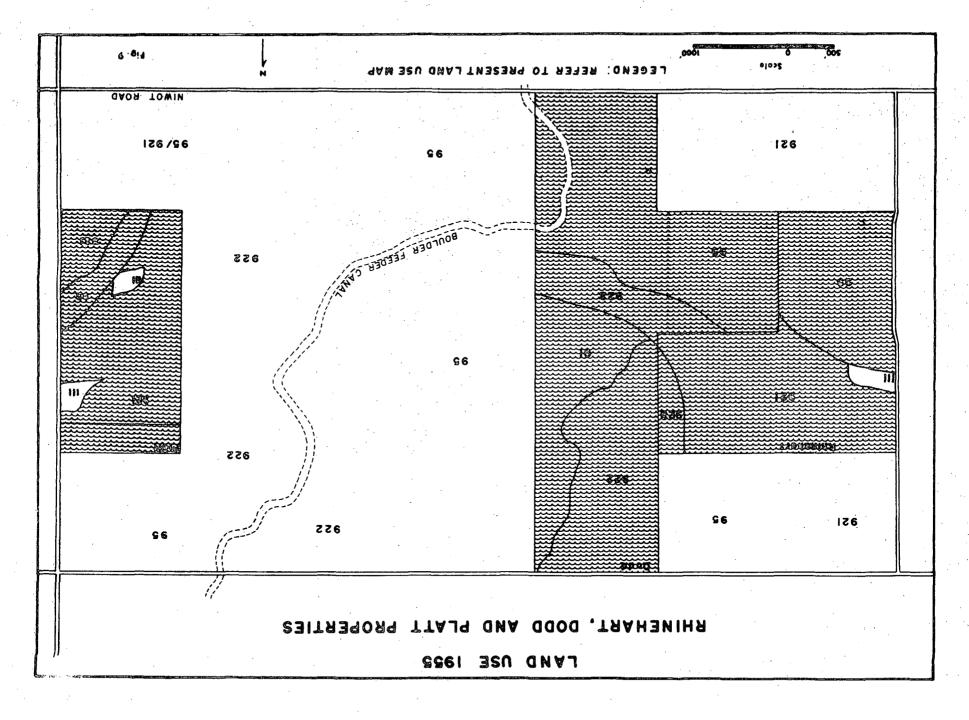
The pasture area which was used for the grazing of the dairy cattle has been continued in use as grazing land. On the upper slopes of Haystack Mountain where irrigation was not possible dryland farming was conducted, which is presently the practice.

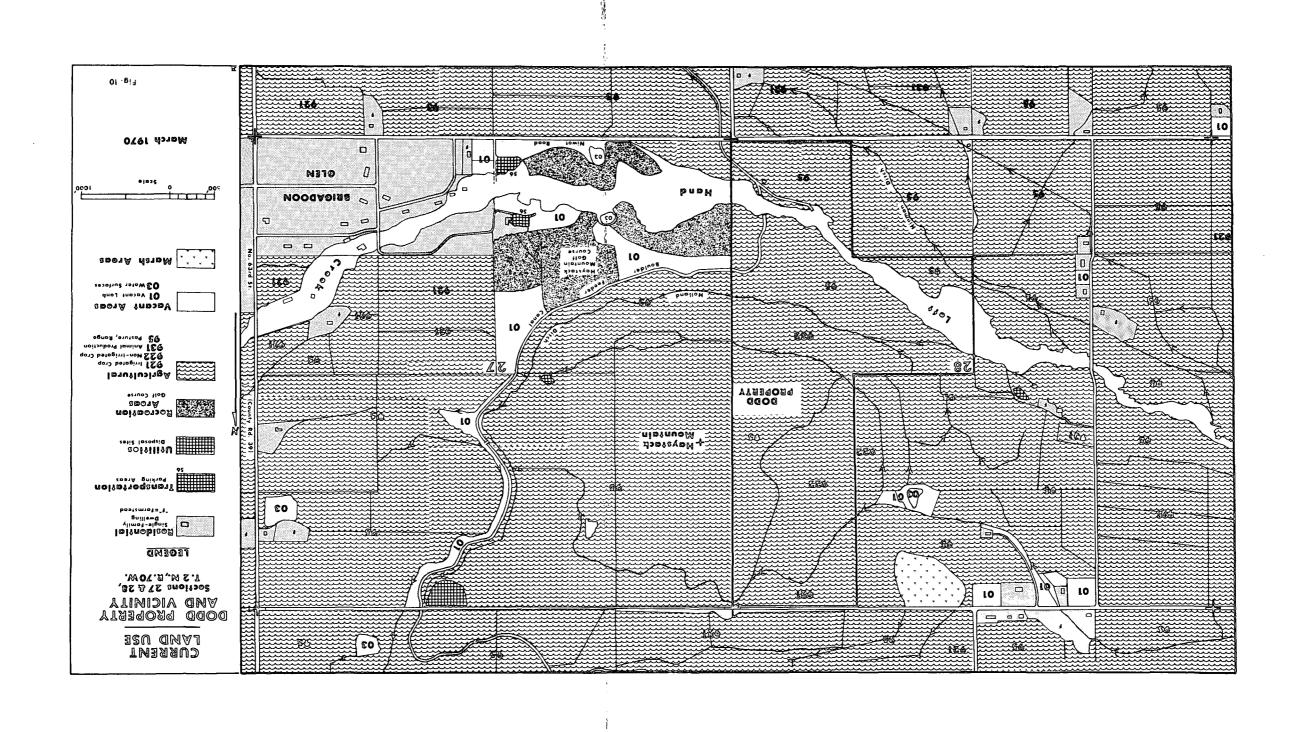
The first significant change in land use of the Dodd property since the Dodds terminated their dairy business was the construction of the Boulder Feeder Canal in 1954, which connected the Colorado-Big Thompson system at Carter Lake to the north with Boulder Reservoir to the south. In early 1964, a diversion canal between Lefthand Creek and the Boulder Feeder Canal was completed by the Lefthand Creek Water Supply Company. The structure is bounded on all sides by the Dodd property. Also, the Lefthand Creek Water Supply Company purchased approximately 1.4 acres of land in 1961, just west of the Haystack summit on the eastern edge of the Dodd property, for the purpose of a right-of-way to repair water pipelines. According to John Dodd, the Company had tentative plans to construct a water tank on this property but to date no such efforts have been made.

For the area surrounding the Dodd property in Sections 27 and 28, land use has changed to a much larger degree. Agriculturally, the Rhinehart and Platt properties show a possible trend that has taken place in the adjacent area. The land use map of 1955 (Figure 9) shows that these properties had a preponderance of cropland. The Rhinehart cropland consisted largely of alfalfa and cereal grains with non-irrigated grassland to the west. The Platt cropland consisted of corn, alfalfa and possibly a small acreage in sugar beets. The current land use map (Figure 10) shows a greater proportion of acreage of pasture/grazing land for both properties. One possible reason for this is a matter of economics. The soils and terrain do not favor croplands under increasing costs of operation and upkeep. The feasibility of growing cultivated crops in quantity does not exist. Also, both Rhinehart and Platt accrued some income from selling parcels of their land to individual home builders, and this may have negated the desire or necessity to plant crops.

The most significant change in land use for the Haystack Mountain area has been the encroachment of the rural residential settlement of Brigadoon Glen which was first subdivided in September, 1964. It occupies what had previously been a pasture/grazing area with some irrigated cropland to the east. The Haystack Mountain Golf Course was first in operation in 1966 and, like the land encompassing Brigadoon Glen, was earlier a pasture/grazing area.

A land use which has not been previously mentioned but nevertheless bears significance was the drilling activity conducted by various oi. and gas companies. According to John Dodd, drilling operations in the area were being conducted as far back as the late 1910s. Several producing gas wells were established but were soon abandoned.





In conclusion, the historic picture of the Haystack Mountain area and the Dodd property shows two trends. First, the shift from cropland to pasture is readily apparent; secondly, urban leap-frogging and development is starting to show its influence on the land use. Future land use can be postulated by noting the historical record of change in the area. It can be seen that saturation by urban sprawl, whether in the form of rural residential settlement or as tract homes, is inevitable unless action is taken to preserve some of the more unique open spaces in this area between Boulder and Longmont.

Present Land Use

The predominant land use activities observed in the vicinity of the Dodd property today are related to agriculture. Of these, the grazing of livestock and cultivation dominate, in that order of significance.

Agricultural Activities

The map of current land use in the area (Figure 10) discloses that the majority of the acreage included in the study is devoted either to improved pasture or to unimproved, natural range. Pasture lands tend to be situated on lower slopes and the Lefthand Creek floodplain, and irrigated pasture is the rule. The expanse of pasture east of and below Haystack Mountain, in the NEt, Section 27, shows evidence of a rather extensive sprinkler system which is no longer operational (Dodd, 1970). The Hygiene Dairy, east across North 63rd Street (County Road No. 39) in the NW, Section 26, was responsible for the improvement of the pasture in question to serve as added grazing space for the dairy herd.

Unimproved pasturage is generally restricted to the upper reaches of the steeper topography that culminates in Haystack Mountain, in the E_2 , NE_4 , Section 28 and NW_4 , Section 27. The natural short-grass range on the Dodd property located just south of the Haystack summit area has been abandoned to grazing for the past several seasons. The Dodd brothers confine their livestock presently to the lower slopes south of the Holland Ditch.

Cropland within the study area is limited in extent and in crop variety. The Dodds have some 13 acres of spring wheat seeded in the NE%, NE%, Section 28, but this acreage is presently lying fallow. Besides wheat, other grains planted sparingly in the vicinity of the Dodd property are corn and barley. Alfalfa hay is produced on some low-lying lands, although most of the pasturage is in grass.

Livestock numbers, predominantly in cattle, are not available for the grazing season. During this winter field season the only animals in evidence in Sections 27 and 28 were some two dozen head of dairy-breed cows and calves in an enclosed feeding area, plus a few head of mixed-breed cattle on pasture to the east, at the Sellmer farm in the SEL, NWL, Section 28.

Residential Development

Aside from several individual farm residences and the Brigadoon Glen subdivision, single-family residences are scattered along area roads on 1-to 5-acre lots, mostly within a hundred feet or so of the roadside. These occurrences are noted on Figure 10 with the single-family residence code and pattern. Farm homes, in addition, are keyed with the letter "f" to denote farmsteads.

Brigadoon Glen, located in the $S_{\frac{1}{2}}$, $SE_{\frac{1}{4}}$, Section 27, represents the classical rural residential area in which relatively expensive homes are situated on lots of approximately 1 acre. Presently, only 15 of 62 platted lots are occupied by homes (Figure 10); the majority of them are facing Lefthand Creek, either on the existing floodplain or on the first or second terraces above it. Two homes are under construction.

East of Brigadoon Glen, across County Road No. 19 and north of Niwot Road, two platted subdivisions are well established. The trend toward rural, single-family residential land use is growing steadily in this area as a reflection of the proximity of the IBM plant and of the general urbanization of rural lands between Boulder and Longmont.

Recreational Activities

Of primary consideration in analyzing the future of the Dodd property as a natural area site is the long-term effect of an adjoining land use, the Haystack Mountain Golf Course, in the SW4, Section 27. This 32-par nine-hole course began operation in 1966 as a small-scale enterprise, in which category it remains today. It includes grassed fairways and manicured greens, and it is complemented with a 200-yard driving range. There is no clubhouse per se, but the owner-manager's residence functions as one.

Other Forms of Land Utilization

The study area is traversed by Lefthand Creek which courses southeastward through Section 28 to arc around the base of Haystack Mountain. Along the reach of this stream (Figure 3) the floodplain is quite narrow and subject to severe flooding under conditions approximating those of the May, 1969 four-day rains. No zoning of the floodplain exists, but the U.S. Army Corps of Engineers is presently conducting studies and hearings, in conjunction with Boulder County, to affect restrictive zoning.

The major ditch line shown on Figure 10, running southwestward through the W2, Section 27 and into the SE4, Section 28, is the Boulder Feeder Canal (Boulder Creek Supply Canal). On the Dodd property a siphon structure channels this flow under that of Lefthand Creek, and a diversion structure just upstream on Lefthand Creek was completed in 1964 to deflect creek waters into the canal.

Two smaller ditch systems, and a host of laterals and diversions, are depicted on Figure 10. The Holland Ditch branches from Lefthand Creek in the center of Section 27. Originating in the $W_{\frac{1}{2}}$, Section 28, the Hinman Ditch follows the lip of the major terrace south of Lefthand Creek in the SW $_{\frac{1}{2}}$, Section 28 and then angles southeastward into Section 33 south of Niwot Road.

A small, undeveloped 1.37 acre parcel within the Dodd block of land (NE $\frac{1}{4}$, Section 28) is owned by the Lefthand Water Supply Company. It reportedly is the future site of a water tank to be constructed when and if residential pressure demands. Three plots of waste disposal are shown within the two-section study area; they are dumps for construction materials and abandoned automobiles and farm equipment.

Future Land Use

The historical and present land use studies of the Dodd property give some indications as to what the future land use of the area will be. Urbanization has recently begun on former agricultural land and for several reasons this trend should persist. The location of the area would definitely lend itself to further development as a place to live in that it lies between two urbanized areas, Longmont and Boulder, whose populations, according to the Bureau of Census have increased 55 and 191 per cent respectively in the 20-year period since 1940.

The present urbanization in the area, Brigadoon Glenn, is quite accessible to the IBM plant which is located just 1.5 miles southeast of the Dodd property. According to several individual realtors handling property in the area, the geographic location of the area is very much responsible for the high selling price of the land. The 97 acres for sale in the NW4, Section 27 is being handled by Boulder Realty which expects that the area will be purchased for urban development. An unconfirmed amount of \$2,000 per acre is the asking price。 In Section 27 (NW%) there are 80 acres for sale by the Alpine Realty and the asking price is \$1,500 per acre and again development is assumed to be the prime incentive for buying the land. The Arapahoe Realty has unofficially sold a 100-acre farm in the St, NW4, Section 28 to a Boulder attorney who supposedly bought it as a future development. Mr. C.L. Ebel of Haystack Mountain Golf Course has intentions of selling homesties on his property along the Niwot Road frontage according to the information printed on his golf course score cards. The Dodd brothers willfully point out that agriculturally the land could and would sell for a large sum of money.

It can be noted that it would be naive indeed to assume that the Dodd property naturally will remain relatively unchanged for the next few years. Lefthand Creek offers an attractive location for homesites with full-grown trees lining the banks and the slopes of Haystack Mountain would offer a spectacular vista for homesites.

Presently, the majority of the area is zoned for agriculture with Brigadoon Glen the only rural residential zoning in the immediate vicinity.

The trends toward urbanization, however, may be modified by other developments. The only significant resistance to urbanization is twofold. First, the U.S. Army Corps of Engineers' floodplain study of Lefthand Creek could lead to floodplain zoning which could hinder or stop further development. A considerable amount of the southern half of the Dodd property adjacent to Lefthand Creek would be affected. Secondly, if Boulder and Longmont continue their rapid expansion perhaps portions of the area would fall under a program similar to the Boulder Greenbelt.

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Lange, Marjorie E. 1932. "The Appropriation to Private Use of Land and Water in the St. Vrain Valley before the founding of the Chicago-Colorado Colony (1871)." Unpublished M.A. thesis, University of Colorado.

Maps

Boulder County, Colorado. October 1965. County Zoning Map No. 6.

CHAPTER 4. CADASTRAL AND LAND TENURE

Gary A. Heaslet, George R. Greenbank and Robert E. Key

Information on cadastral and land tenure survey is represented by Figures 11, 12, 13, 14, and 15. The maps present a graphic pattern of existing land ownership as of the date of original grants, and in 1910, 1930, 1950, and 1970. This information was gathered primarily from the Boulder County Assessor's Office and personal interviews.

Essentially, only two sections (Sections 27 and 28 of T 2 N, R 70 W) are involved. Property transaction records are complete only from 1922 and the sequence of conveyances is included in the report (Tables 2 and 3). This information enables one to determine intermittent land transactions not shown on the maps.

The number and types of ownership have proliferated moderately through the years, but have accelerated greatly in the last decade. The ownership pattern and resulting development has paralleled census figures which reveal a doubling of population in the Boulder area roughly every 10 years. Undoubtedly, the establishment of IBM and Beech Aircraft plants nearby has had an impact on this area.

The 1970 map (Figure 15) shows several areas of multiple ownership, represented as Brigadoon Glen, "various owners," C. & M. Platt, and the Boulder Seven Corporation. The latter three contain in-holdings of several acres each and are developed as suburban-country residential properties; however, Brigadoon Glen is a platted subdivision containing 1 to 2-acre lots. Cadastral patterns indicate a trend toward suburban, fringe-type residential development encroaching upon the proposed natural area site.

Land Tenure

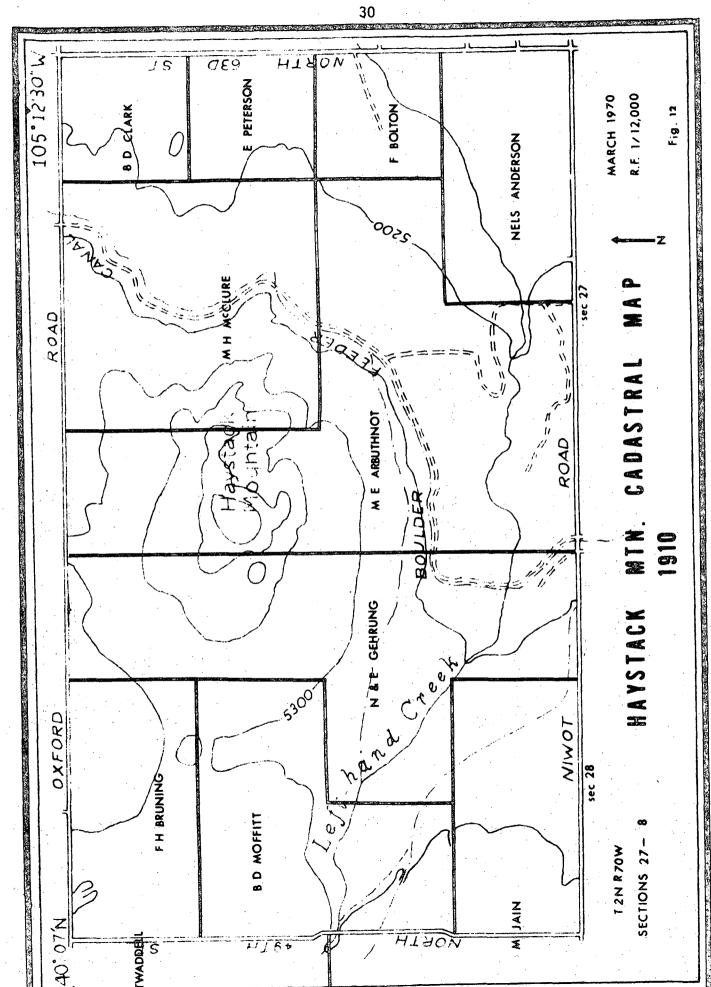
Land tenure in the two sections of the study area is divided into three general classifications. Approximately 800 of the 1,280 acres in the study are farmed and operated by the owners, most of whom live on their property or in the near vicinity. Three hundred and twenty acres are leased by owners for farming purposes. The remaining 160 acres consist of individual homes and adjacent property. Private residential property sizes range from 1 acre sites in Brigadoon Glen to sites as large as 10 acres. These smaller residential properties often have summer crops but are farmed by the owners in every case.

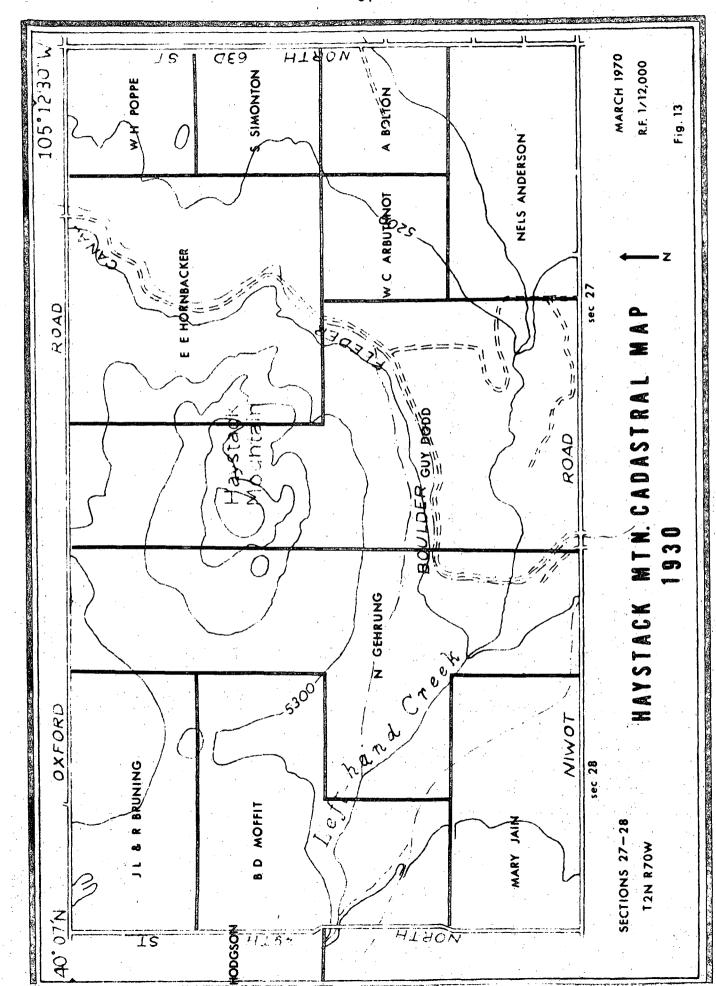
Although portions of the area reflect gradual residential encroachment, there are still some fairly large land holdings that remain in agricultural use. For example, the Brunings have 160 acres in Section 28, as well as 40

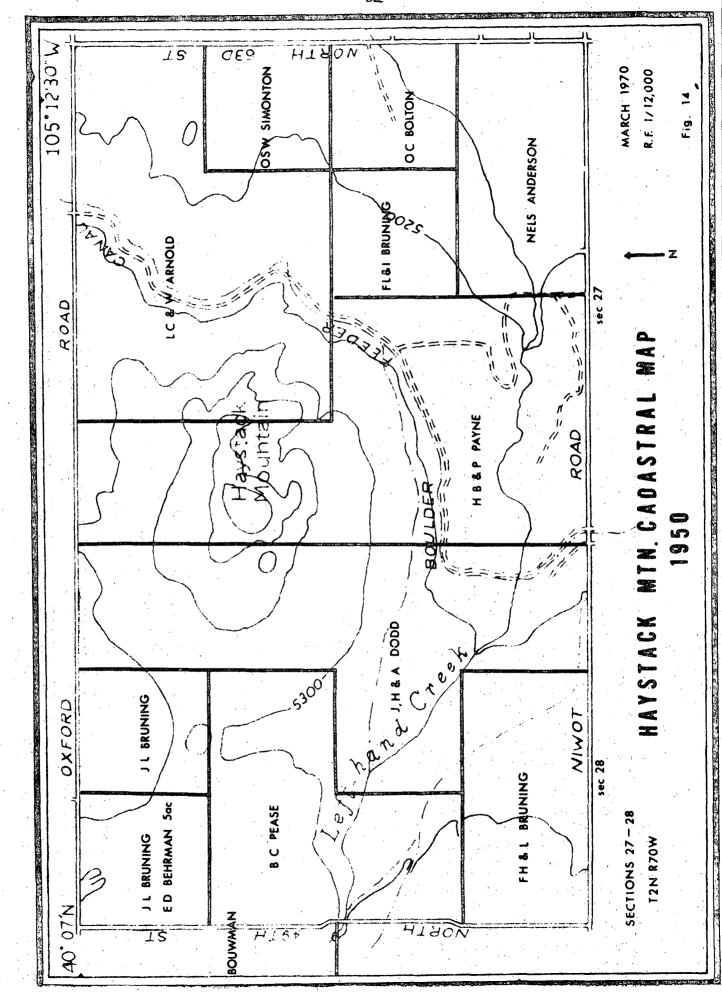
July 10 1872 Homestead Jacob Affolten Dec 15 1870 Homesfead	Chicago Colorado Co			
Affolten 15 1870 nesfead	colorado Co			State of Louisiana
Affolten 15 1870 nesfead	Colorado Co			assigned to Bedford L Meartin
	Colorado Co			Dec 15 1871
a no g	10 1972			Land Grant
Š Š				
Dec 15 1880 Homesfead	ŧ	Mary E Arbuthnot		
Homesfead		Nov 19 1867	Andre	Andro Peler Larson
		Bought	<	May 15 1880
			Ĭ	Homestead
Charles Wallace				
assigned to J Affolfen May 10 1866		1 +. 3		
Soundy Vision		German Fajardo	do	Meriding Vigil wife of
		assigned to Wil	liam Arbuthnot	Mauricio assigned to
		Aug 1	Aug 1 1866	George F Baun
		Bounty		March 20 1867
Frederick Afolten				Bounty
May 15 1876				
Homestead				

RIGINAL PATENT MAP - SECTIONS 27 - 28

Fig. 11







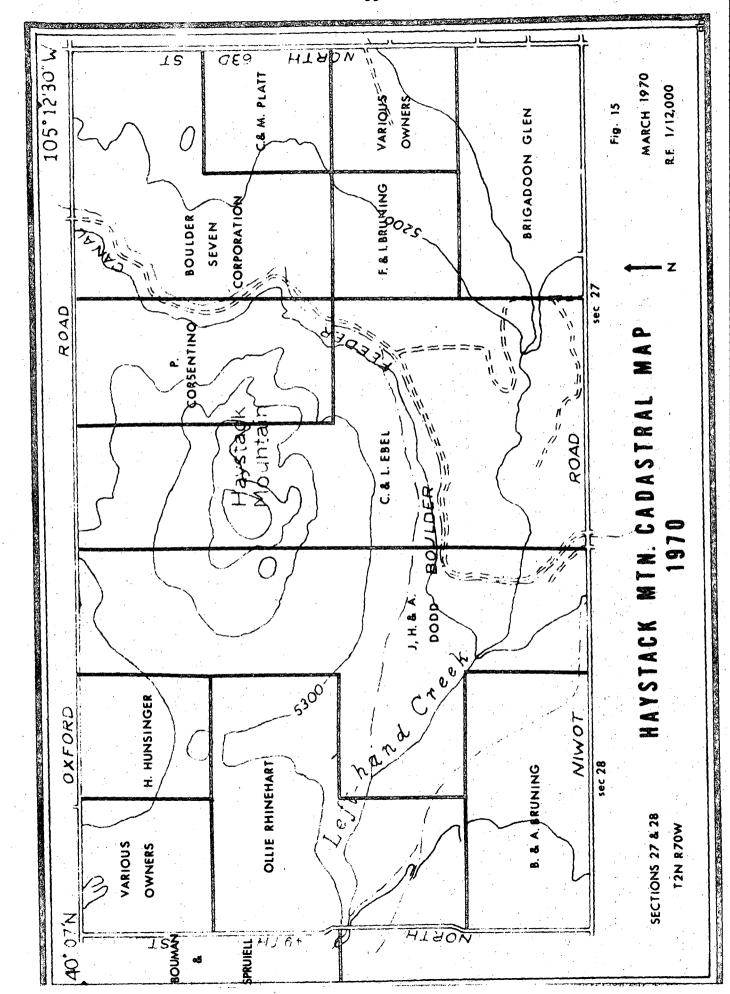


TABLE 2. PARTIAL HISTORY OF LAND TRANSACTIONS, SECTION 27

Township 2, Range 70

			•
	Description	Grantee	Filing Date
NE& NE&		W. H. Poppie	2-9-1922
WZ NWZ		Stella M. & S. A. Arbuthnot	9-14-1922
W3 NWA		Guy Dodd	2-13-1924
NE NE	•	W. H. Poppie	12-1-1924
NE% SE%		Francis L. Bolton	1-28-1926
NEX SEX		Almira Bolton	12-29-1926
	& N12 NE14	E. E. Hornbaker	11-17-1928
1/2 in NE		Otis C. Bolton	4-27-1931
	& all SW34	F. H. Pounds	12-18-1935
SW3 & W		Arthur E. Hammans	3-5-1940
SWA & W	 . *	Anne O. & Arthur E. Hammans	8-15-1940
NEX NEX	-	Louisa G. & William G. Arnold	4-18-1944
	W14 & W1/2 NE1/4	James H. Hornbaker exal	8-28-1944
	W34 & W35 NE34	Louisa G. & William G. Arnold	10-26-1944
SWA & W		Holland B. & Pearl B. Payne	1-7-1946
NWA SEX		Francis L. & M. R. Bruning	8-6-1947
SE1 NE1		Otis C. Bolton	7-11-1952
	& NE% SE	Carl D. & Myrtle E. Platt	7-12-1952
	.32 acs.	U.S.A.	9-10-1953
	6.45 acs.	U.S.A.	9-10-1953
SW4 6.2		U.S.A.	7-21-1953
	& Ety of NWY Wy NEX	Pete Corsentino	12-28-1953
S3 SE4		Henry L. Anderson & Helen A.	
2 024		Bloon	2-18-1954
St SE		Henry L. Anderson	4-5-1954
S¾ SE¾		Henry L. Anderson & Helen A.	
0.2 00.4	,	Bloon	4-12-1954
SEŁ NE	& NET SET	Carl D. & Myrtle E. Platt	3-9-1957
SEX SEX		Henry L. Anderson	11-26-1957
NEX NEX	•	Martin L. & Anne M. Hall	9-11-1962
SEX & W		Clarence J. & Lois J. Ebel	3-26-1963
•	& W2 NEX & 13 E3	Leonard P. Cresentino	4-25-1963
NEX & N		Martin L. & Anne M. Hall	9-12-1963
Sty SEt		Development Enterprize, Inc.	6-1-1964
	& W1 NE1 & 11 E1		
NWG		Bou Her Seven Corp.	3-15-1966
l ac. N	E SE	Fr. Paul Jlosephean	7-22-1968
1 ac.NE		J. & Ralph D. Brower	7-22-1968
1 ac NE		Margo J. & Allan H. Nelson	7-22-1968
20 acs.		Ralph D. Bower etal	7-29-1968
NE SE		Francis E. & Revat Dennhardt	7-7-1969
	•		

TABLE 3. PARTIAL HISTORY OF LAND TRANSACTIONS, SECTION 28

Township 2 N_o Range 70

Description	Grantee	Filing Date
Wis NWis	C. W. Bell	12-28-1923
W3 NWG	Lloyd E. & Carrie Hodgson	11-1-1926
	Atra A. & Milton D. Moffitt	1-14-1932
NE NW less 5 acs.	John I. Bruning	11-28-1932
E' NE & & E' SE & NW SE	Emma Gehrung	7-30-1935
Was NWas	Aisee & Margaretha Bouwman	1-3-1939
Was SWas & SEAs SWas & SWas SEAs	Frank H. & Lottie J. Bruning	7-8-1940
EZ NEZ & EZ SEZ & NWZ SEZ	John J., Hugh J., & Alva M. Dodd	
SEX NWX & SWX NE & NEX SWX	Wm. S. & Florence Turley	9-4-1942
NWG NEW	John I. Bruning	2-14-1944
5 acres in NE% NW%		7-14-1945
SET NWY & NET SWY & SWY NET		4-2-1946
5 acs in NE% NW%	Ernst D. & Evelyn A. Behrmann	4-9-1951
SE' NW & SW NE & NE & NE SW	W. A. & Allie F. Rhinehart	1-11-1952
1.48 ac. N3 SE% 1.65	U.S.A.	7-25-1953
NW4 NW4 & SW4 NW4	Aisse Bouwman	12-30-1960
Sty SWT & NWT SWT & SWT SET	Frank H. Bruning	1-27-1961
1.377 acs. SE¼ N₩%	Left Hand Land & Water Co.	10-30-1961
1.377 acs. SE¼ NE¾	Left Hand Water Supply Co.	12-11-1961
5 acs. in NE% NW%	John H. & Hedwig H. Meyer	9-11-1962
2.4 acs. Et SEt SEt	Left Hand Ditch Co.	1-16-1963
NE% SW% 1.30 acs.	Algons & Patricia J. Reining	4-26-1963
5 acs. in NE% NW%	Richard S. & Agnes M. Baker	2-25-1964
3.9 acs in NE% NW%	Keith R. & Mary R. Morgan	2-25-1964
NWG NWG & SWG NWG SEG NEG	Aisse Bouwman & Gino Spruiell	2-15-1966
SEX SWX & SWX SEX	Boyde B. & Ruth E. Bruning	1-17-1966
NW4 NE4 40 acs.	Howard D. Hunsinger	10-31-1966
NE% NW% less 5 acs.	John I. Bruning	11-22-1966
NE% NW% 5.3 acs.	Minie R. & Jenny Lee Van Arsdale	12-8-1966
NEX NWX 11 acs.	Willard J. Humpal	12-20-1966
NEX NW% 10 acs.	Harold Trey	12-20-1966
NEX NWX 9.3 acs.	Arason Brenker	12-21-1966
5.3 acs. NE% NW%	Jenny Lee Van Arsdale	6-7-1967
NE's NW's 10 acs.	Thomas D. & Carole A. Lynch	2-23-1968
SEX NWG & SWG NEX & NEX SWG	Ollie F. Rhinehart	5-8-1969
NW4 11 acs.	A. G. Jr. & Virgeen H. Hedgecock	9-2-1969
NEZ NWZ 10 acs.	John F. & Phyllis M. Olson	10-16-1969
NET NWA 9.3 acs.	Robert H. & Bernadine D. Tschody	10-17-1969

acres in Section 27. Frank Bruning originally homesteaded the area in 1904, and has farmed the area since that time. The Dodd property encompasses almost 200 acres, much of which is still farmed.

Section 27 shows the greatest change in ownership and tenure patterns. The 80 acres belonging to Pete Corsentino are leased to a nearby dairy for pasture and grazing. Mr. Corsentino is presently residing in California and the Boulder Realty is advertising the property as ideal for residential development. The Ebel property includes a nine-hole golf course and 12 homes sites fronting on Niwot Road. Lot sizes are approximately an acre. The trend would seem to indicate a gradual reduction in property sizes as residential development moves into an area still dominated to some extent by agricultural use.

References

Boulder County Assessor's Office. 1922 to 1970. Land ownership transaction records for Boulder County, Colorado.

Maps

Freeze, Samuel. Map of Boulder County, compiled in part from official data, and in part from actual surveys made for the purpose, by Samuel Freeze, in October, November, December, and January, A.D. 1880-81.
Norlin Library Historical Collection, University of Colorado, Boulder, Colorado.

CHAPTER 5. LAND ECONOMICS

Michael R. Tripp, Manik Hwang, and Scott Mernitz

Information on land values in the area of the Dodd property are shown graphically on three attached maps. Figure 16 indicates changes in value between 1960 and 1970 expressed as percentages, and Figure 17 shows current appraised valuations. Data for both maps were gathered from the Boulder County Assessor's Office. A third map is included to record the owner-estimated values, and asking prices (where applicable) of land in the area (Figure 18).

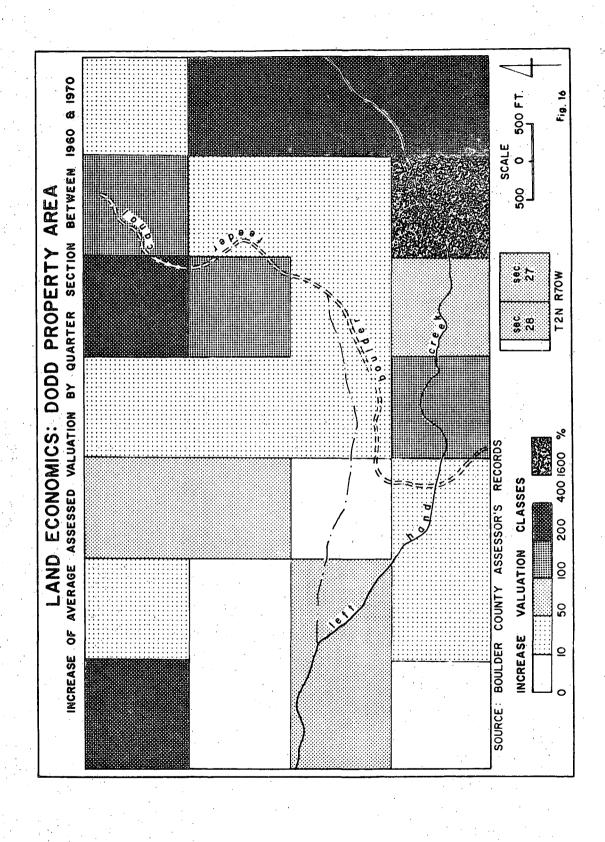
Land valued by production capacity has distinct limits imposed on its economic evaluation by the costs of production. The cost of the land logically will not rise above the point at which the operator can expect to receive a fair return on his investment of time, money, and effort.

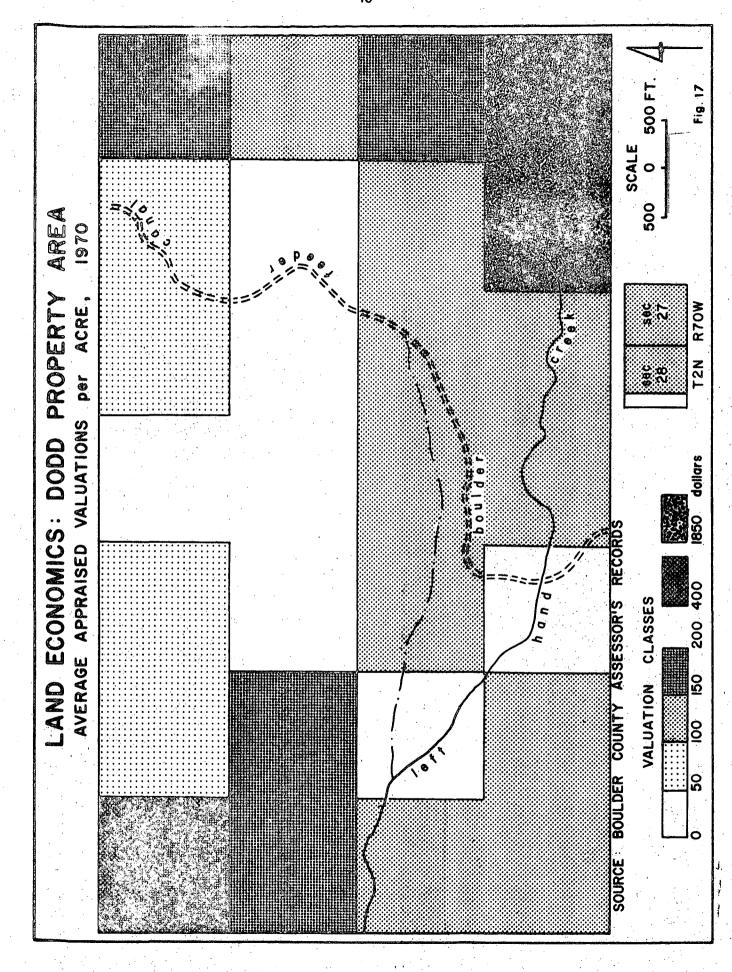
Once agricultural land comes to be viewed as desirable for residential purposes, the basis for evaluation changes sharply. Not only is a different group of users and potential users involved, but the criteria employed to assign value to the land now consists of such factors as distance from place of employment, shopping and schools, availability of utility services, and site advantages as a location on which to build a home.

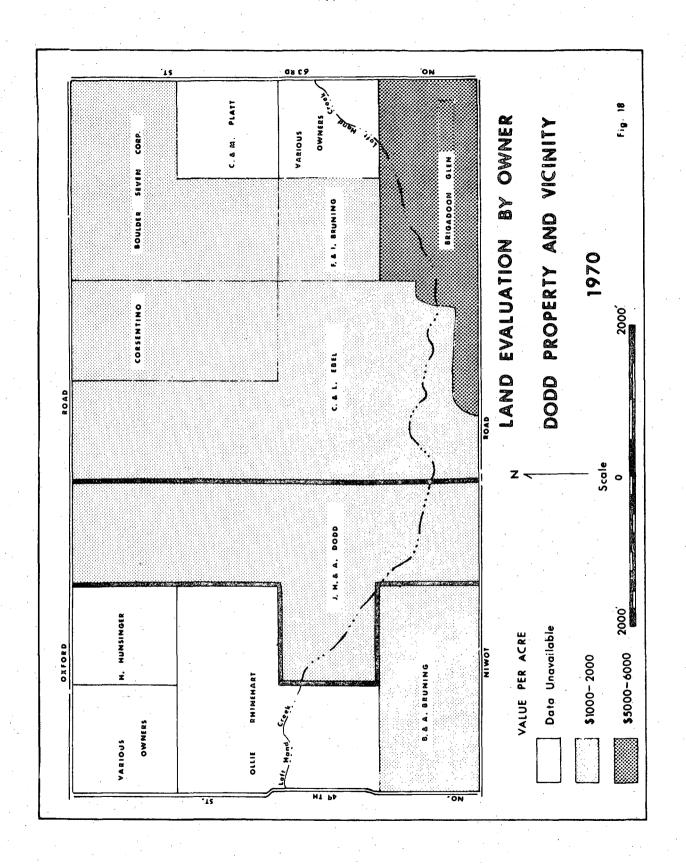
There has been a continuing decline of farming in the area due to increasing production costs unaccompanied by corresponding financial returns; however, the resulting land use shift to pasture has maintained the low assessed values characteristic of Haystack Mountain itself as well as immediately adjacent land including nearly all of Section 28 during the 1960 and 1970 period (Figure 16). The much higher assessed values, reflected in the appraised values (Figure 17), on numerous small one-or two-acre parcels primarily located on the floodplain of Lefthand Creek in the southeast portion of the study area indicate the conversion of this land to subdivision and rural residential development.

This development, perhaps most directly attributable to the presence of the IBM plant 1.5 miles southeast, has been of sufficient duration and intensity to cause the other landholders in the area to readjust what they consider to be the market value of their land as potential residential and/or industrial property to amounts several times above what even the best agricultural land parcels would have brought based on the value of the crops that would have been produced.

Figure 16 reveals the two principal patterns in this trend. The largest proportion of land in the study area is held in blocks of at least 40 acres. All of the owners or realtors handling these properties (who were contacted) set values on them from \$1,000 to \$2,000 per acre, and in one case, \$2,500 per acre if sold in parcels as small as 10 acres. The







other pattern includes a portion of Mr. Ebel's property fronting on Niwot Road as well as all of Brigadoon Glen, both situated in the southeastern corner of the study area. This land has been subdivided and improved in varying degrees with building lot sizes averaging slightly over 1 acre and each evaluated at \$5,000 and move.

Both Mr. Flanders (John Dodd's attorney in Longmont) and Mr. Art Palmer of the Boulder County Planning and Zoning Commission consider the present fair market value of undeveloped land in the study area to be between \$750 and \$1,000 per acre.

In view of the changing land use pattern in the study area from agricultural to residential uses and the concommitant upward shift in property values, it seems very reasonable to assume that such a trend will continue to intensify and thereby not only bring increasing population pressure to bear on the study site but also result in a steadily rising market value for the land comprising the site.

CHAPTER 6. CONCLUSION

Wil Ulman and Helen Louise Young

The conservation or preservation of our natural areas necessitates the consideration of changing land uses and values. Each area is unique with its own social, cultural, and land use changes affecting future development.

The Dodd property is presently in a state of semi-isolation. Housing projects have not been built in the immediate area and few individuals wander onto the property or climb the slopes of Haystack Mountain. Typi-cally, as with other areas on Boulder's fringe, the trend toward more intensive occupance of the land has begun. Subdivisions are in evidence less than 2 miles to the east. Someday in the near future, the Dodd property may be subdivided and houses may possibly flank the slopes of Haystack Mountain.

Preserving the quality of the Dodd property may take the form of several alternative uses of the land. Certainly the least desirable alternative would be intensive subdivision of the land, permanently altering the attributes of this site. More desirable alternatives to using the Dodd property including the following: purchase by the University of Colorado or by the Boulder Valley School district for use as an educational experimental or observational site; permanent agricultural zoning of the area or preserving of the floodplain in its natural state; preservation in parks or greenbelt with public access allowed; or preservation of the area as an historical site.

Biologists consider the property and nearby Haystack Mountain to provide a wide variety of habitats in close proximity to each other. These habitats include marsh, ponds, a creek, grassland, slopes of varying exposure and a cobble-covered, conical hill. Adding to the value as a study area is the short distance, hence easy accessibility to the University and to Boulder Valley Schools (Gregg, 1970).

As recently as December, 1969, John Dodd offered the University of Colorado the opportunity to purchase the Dodd property as a study area. Efforts to instigate the purchase were conducted by Dr. Robert Gregg Professor of Biology; however, his efforts to buy the property were unsuccessful (Appendix IV).

The zoning policies of Boulder County may affect development of the site. Boulder County planners have not officially projected development for this area. Presently all of Sections 27 and 28 are zoned for agriculture except for the SW4, Section 27 which is zoned rural residential (Brigadoon Glen subdivision). The county's study of Lefthand Creek floodplain zoning revisions may significantly alter development within the area. Construction of homes, for instance, may be prohibited within 100-year floodplain limits.

The Parks and Open Space Council of Boulder County is presently studying natural areas within Boulder County and will formulate a list of properties which the council will suggest purchasing or preserving (Porreca, 1970). The Council presently has no intention of purchasing the land for greenbelt but wishes to see it undeveloped and would favor some type of private land dedication or a tax easement to keep the land undeveloped.

The historical significance of the old settler's cabin, the stone rings with which the Arapahoes' tepees were held down and the old fence posts on the Dodd property, are ample reason to suggest preservation of the site by some state or local historical society. Certainly relics of Colorado's early history warrant active interest by citizens.

In order to determine the feasibility of saving this natural and historic area, the attitude and plans of the landowners and the trends in surrounding development must be considered. Local governmental and university attitudes are also important.

The Dodd property is owned jointly by three brothers, Alva, Sr., Hugh, and John--all of whom live near Niwot, Colorado, several miles east of the property. Interviews were conducted with two of the three brothers, Hugh and John. In addition, John reflected on the attitude of the third brother, Alva, Sr. There exists a difference in opinion among the brothers as to the future of the property. John wishes to see the property preserved in its natural state by either the University or some conservation agency. Hugh offered little information in the interview, therefore, his true attitude remains unknown. John Dodd offered his observation of Alva's intentions to hold the land in its present state only until the "best price" was offered for the land, whether for residential development or for conservation. Of all the Dodd properties, the particular site studied in this report is less intensively used for agriculture than any of their other holdings. It is quite likely that this particular parcel might be the first to be sold. John Dodd has been approached by Boulder realty agents in the past (Dodd, John, 1970).

The owner of Haystack Mountain, Mr. C. L. Ebel, is proprietor of the Haystack Mountain golf course. His future plans would include recreational development of Haystack Mountain. He reported that someday he might be able to convert the slopes of Haystack into toboggan or junior ski runs. An ice skating rink would be constructed on the small Haystack Lake with warming houses nearby. A revolving restaurant might possibly be built on top of the mountain. The plans for such development are not drawn up, and Mr. Ebel stresses that the development is "only a dream" at present (Ebel, 1970).

The aesthetic qualities of the Dodd Property are evident. Streambased land is at a premium not only for recreation, but also for residential development purposes. Land developers are quick to assess this fact and as urbanization continues, this land will not lie idle long. If the Dodd property is to be preserved, prolonged efforts toward this end will only result in a greater cost and more intensive deterioration of the values of this natural and historic site.

References

Dodd, John. May, 1970. Landowner. Personal interview.

Ebel, C. L. April. 1970. Landowner. Personal interview.

Gregg, Robert. May, 1970. Professor of Biology, University of Colorado. Personal interview.

Porreca, Vincent. May, 1970. Assistant Boulder County Planner, Personal interview.

Maps

Boulder County, Colorado. October, 1965. County Zoning Map No. 6.

APPENDIX I

SELECTED PHOTOGRAPHS OF THE DODD PROPERTY

Figure 19

The historic old settler's cabin is perhaps the oldest house still standing in Boulder County. It was built by Jacob Affolten circa 1859. (Photo by Donald D. MacPhail)

Figure 20

An example of an old-style rail fence along the Dodd property.

Figure 21

This property for sale east of Haystack Mountain is indicative of potential residential development.

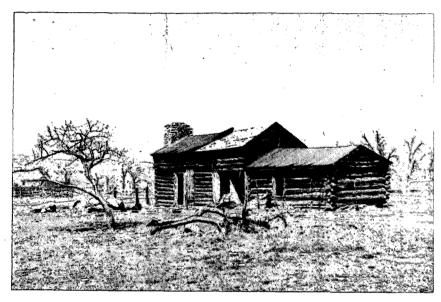


Figure 19



Fig. 20

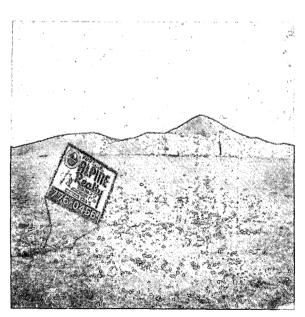


Fig. 21

APPENDIX II

AIR PHOTO OF AREA - 1969

Figure 22

Aerial view of the Dodd property from the north. Haystack Mountain appears at the left (east). The eastern boundary of the property adjoins the left part of the cleared land in the foreground. It continues in a straight line across the base of Haystack Mountain to the road beyond Lefthand Creek in the middle distance. The old settler's cabin is located at "C" in the photo. (Photo by Max Dodson)

Figure 22

APPENDIX III

NATURAL AREAS COMMITTEE MINUTES

NATURAL AREAS COMMITTEE

Meeting -- January 12, 1968

MINUTES

The meeting was called to order with 14 members present.

DODD PROPERTY:

Dr. Gregg reported on his talks with Dean Manning about the Dodd property and the possibility of establishing a natural area system for the University. Dean Manning was interested and took considerable time with him. Dr. Gregg was then referred to Homer Ball to discuss the financial aspects of the proposal. Mr. Ball was present at the luncheon and told of the various approaches to this matter. He felt the first step was to have an appraisal made. He outlined the following potential sources of funding:

- Sale of University land
- 2. Development Fund
- 3. State appropriations
- 4. Federal Education Resources grant
- City greenbelt program
- 6. Matching funds from Land and Water (use) Fund
- 7. The Nature Conservancy
- 8. Donation by seller
- 9. Long-term purchase in small parcels; money from Ball's office.

After considerable discussion it was moved, seconded and passed that an appraisal be made. Mr. Ball said that his office had funds for this purpose. Bob Gregg is chairman, Kurt Gerstle and Bettie Willard are on the committee.

It was suggested that the committee compile a list of other lands that should be purchased by the University so that the magnitude of the Natural Area project could be assessed by the Administration. White Rocks was identified as high priority.

It was pointed out that the cabin on the property is of historic significance in that it was used by the Hayden Survey.

OTHER BUSINESS:

BOULDER - GRANBY TURNPIKE:

The imminent danger of a bill to authorize \$100,000 for a feasibility study of a Boulder-Granby Turnpike was emphasized. The committee voted to send a wire to Governor Love, urging him not to place this bill on his legislative call, to be signed by individuals rather than the committee. All Bartlett suggested the alternative of cars riding "piggy-back"

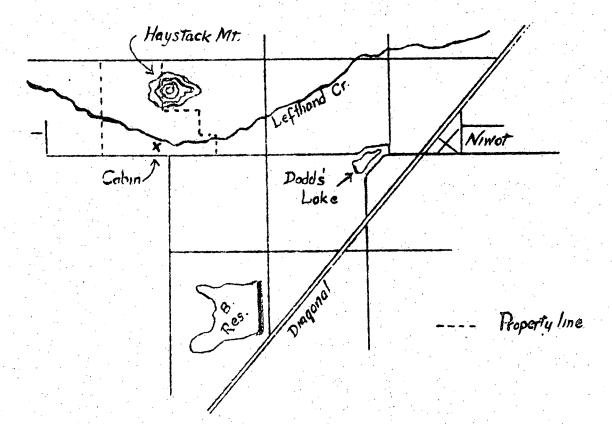
through the Moffat Tunnel - a proposal that needs to be more fully investigated and pushed if feasible. It would certainly be a unique experience.

FLORISSANT:

The statement is readon on (sic) Florissant and will go to appropriate State and Federal politicians. This is the time for individual correspondence with Dominick.

Respectfully submitted,
Bettie Willard, Secretary

DODD PROPERTY



APPENDIX IV

MEMORANDA FROM ROBERT E. GREGG

"TO: All members of the faculty of the Department of Biology

FROM: Robert Gregg

SUBJECT: The Dodd Property.

As a member of the NATURAL AREAS COMMITTEE, I have worked for more than four years to have the University acquire the parcel of land belonging to the John Dodd Family.

The object of these activities was to secure a sizable tract near to the University and in the plains vegetation zone (an area in semi-natural state that would quickly return to natural conditions when vacated by grazing) that could be used by members of our department for teaching and research in varying aspects of field biology.

These objectives were twice unanimously and enthusiastically endorsed by the staff in biology, and I was directed to proceed with negotiations.

The Information was prepared in detail for the consideration of the administration. Twice we were given an encouraging reception and felt there was a real possibility that something definitive would be accomplished. But when it reached the point where the University was asked to take positive steps we were turned down (a pattern wholly consistent with its past performance where Biology is concerned).

My last letter to the administration, that is to say, Eugene Wilson, Director of Business Affairs, set forth our request and our needs, and was to have been signed by Robert Pennak, Askell Löve, and myself as chairman for the negotiations. Dr. Löve refused to sign, because, among other things, I had not made a request also for land to create a botancial garden. This last point is entirely irrelevant to the objective we had followed. The letter was redrafted, signed by Pennak, and by Gregg, and sent to Wilson. The latter responded promptly and told me there was no chance of our securing the funds necessary for the purchase of the Dodd Property, and that there were no other avenues of approach. In fact, he said, what we needed was an 'Angel' to provide us with required money. (This is not news:)

At the meeting of the N.A.C. on March 21 of this year, Dr. Löve at his request, appeared to present his views on the question of obtaining the afore-said Dodd property. I quote from the minutes of this meeting which record Dr. Löve's comments. 'He stated unequivocally that he could say nothing about the Dodd Property as a representative of the Biology Department. He was firm in his conviction that he was in no position to represent what the Biology Department wants since it in in the process of working out its goals at present. He cited two letters written to Dean Manning about the property, one which he wrote in March 1968 and one which Dr. Gregg wrote in April 1968. Claims that he did not know anything about the second letter as Chairman, and that the second letter was written as though it were representing the Biology Department. He was then asked what his personal opinion of the land was. He had two specific comments: 1) It is

too far away from the campus 2) It has no usefulness from the botanical point of view. He also felt that the University should invest its money first in equipment for experimental biology rather than in land acquisition. A short discussion resulted in which the original purposes of the Committee were reviewed: To bring together people on the University campus who had a common interest in environmental issues, wise land use, planning, and preservation of natural areas.'

All my correspondence with Mr. John Dodd and with the University Administration has been turned over to Dr. Betty Willard. Secretary of the N.A.C.

I have withdrawn from all further efforts to convince the University of the desirability and the necessity of obtaining the Dodd Property. I regret to say that the real losers in this fiasco are the Department of Biology, the University of Colorado, and the present and future students and classes in field biology who desperately need an outdoor laboratory.

I might add as a postscript, that the reaction of the Committee to Dr. Love's presentation has been, to put it mildly, one of utter astonishment and amazement.

R. E. Gregg"

DODDS LAKE PASTURE

"Location: 2 1/2 miles west of Niwot, Colorado

Legal Description: T.2N - R.70W., Sec. 27-28 (portions of) - Approx. 192 acres

Elevation: approx. 5240 ft.

Geology: bottomland of Lefthand Creek: Haystack Mt. (an erosional remnant)

Geography: valley of Lefthand Creek, passing just south of Haystack Mountain

permanent stream moist stream banks

spring

drier river benches (above water table)

ponds (water filled swales)

irrigation ditch and head gate with spillway

sloping base of Haystack Mt.

Flora: sparse cottonwood bottomland

meadow pasture

spring brook?

upland prairie (would be under nature conditions)

Fauna: has not been intensively investigated, but with the variety of ecological conditions (and especially the presence of permanent moisture), there is no doubt that a substantial local sample of the regional fauna is present or would regenerate. Wild ducks and hawks have been observed; insects have been collected.

Unusual feature: an original settler's cabin (logs with tin roof) still stands on the site; it could be preserved and would provide some archaeological or sociological interest.

Significance:

with the fast disappearance of natural areas on the plains near Boulder, the preservation of such becomes critical. Much mountain land is protected in public ownership of one sort or another, but it seems not to be realized by people in general that flat prairie should be preserved also. This type of land does not offer majestic scenery, but it usually has a wealth of biological forms that exceeds some mountain areas, especially the higher altitudes. The parcel of land near Niwot offers an opportunity to save some of our vanishing prairie, and it is particularly attractive because of the presence of good moisture supply and a variety of habitat forms.

Ownership: Mr. John Dodd, and his two brothers - Niwot, Colorado"

"Use of the site: at present, verbal permission, obtained in 1960, from the owners, is still in force; use is limited to small classes, however, with due respect for the owner's interests.

Outlook: Mr. John Dodd is interested in selling a portion of the land, but with the hope that the new owners would preserve its natural features and use for scientific purposes. He is also interested in having the University acquire and preserve the unique features of this land, and use it for research and instructional purposes.

Robert E. Gregg"

UNIVERSITY OF COLORADO

BOULDER, COLORADO 80302

Department of Biology

"October 7, 1968

Mr. William T. Garrett, Chairman Colorado Chapter The Nature Conservancy 2916 Perry Denver, Colorado 80212

"Dear Mr. Garrett:

For a number of years The Natural Areas Committee, of the University, has been trying to have the University purchase or otherwise acquire a parcel of land near the city which could be used by the Biology Department as an outdoor laboratory for teaching and research. The accompanying correspondence, etc., will supply the details, and I would particularly call your attention to my description of the Dodd's Lake Pasture, the legal description of the property, and my letter to Dean Manning which sets forth the various uses that our Department would make of this land.

After more than a year-and-a-half of negotiations with Mr. Dodd and the University Administration, including investigation of details of the legal description (which see) and a real estate appraisal, we have finally received an unequivocal refusal by the University to take any further steps toward the acquisition of the property. Needless to say, this has been very discouraging, especially in view of the fact that Mr. Dodd definitely wishes to see Haystack Mountain and surrounding acreage preserved in a natural state. He has offered to negotiate with the University, and has offered to make concessions regarding the sale or transfer of all or part of the land.

We are all committed to the belief that the Dodd Property would make an excellent site for field studies by the Department of Biology, and at the same time preserve its natural features. The situation is urgent owning to the fact that wild land in the vicinity of Boulder is rapidly disappearing under the impact of development. Therefore, we are appealing to you and the Nature Conservancy to investigate and consider this area for purchase, lease, or otherwise acquire by the Conservancy. If we can answer questions or provide additional information, we shall be most happy to do so.

Very sincerely yours, (Sgd.)

Robert E. Gregg Professor of Biology Member: Natural Areas Committee" APPENDIX V

ANALYSIS OF POSSIBLE FUNDING

UNIVERSITY OF COLORADO Business Office Boulder, Colorado 80302

Office of the Vice President and Business Affairs and Treasurer

⁴January 9, 1968

MEMORANDUM

"TO: Professor Robert Gregg

FROM: Homer Ball, Business Manager

RE: Dodds Lake Pasture

"After our conversation on December 15 about acquisition of the Dodd property, I have done some further checking. To review the various possibilities we discussed:

- l. Gift. Attached is some information about acquisition by the Dodd family. They must certainly have quite an appreciation in the land and would face rather heavy capital gains taxes if they sold. I believe a partial sale-partial gift or life estate arrangement (except there would be no income from the land unless a caretaker salary could be arranged) has possibilities and I will ask Mr. Dwight Roberts to call you about further information along these lines.
- 2. Purchase. The two University accounts which might be used are both pledged for the funding of Physical Science Research Building No. 3. I know of no available funds for the purchase.

A grant is a possibility, I suppose, but I am not knowledgeable in this area.

Another possibility is the sale of some presently owned land, such as the East Campus Arapahoe frontage, to raise money to buy less expensive land. You should probably discuss such an idea with Mr. Jim Bowers, Planning Director.

3. Lease - Purchase. If adequate current funds could be provided for rent, the University could at least tie up the land by a lease-purchase agreement.

Perhaps some combination of two or more of these ideas might be developed.

If you (or the Committee) feel the prospects for acquisition are good

enough, we should have an appraisal of the land made. I can arrange for (and pay for) such an appraisal.

Any land sale or purchase would require prior approval of the Regents but could be tentatively negotiated if funding were in sight.

Finally, although you and the Committee would recommend the acquisition for long term natural area use, if the "price is right", the acquisition could be partially justified as a good investment.

Please let me know if I may help.

(Sgd.)

Homer Ball Business Manager

HB:jh

Enclosure

cc: Mr. Dwight Roberts"

UNIVERSITY OF COLORADO Business Office Boulder, Colorado 80302

Office of the Vice President for Business Affairs and Treasurer

"March 1, 1968

"MEMORANDUM

TO; Professor Robert Gregg

FROM: Homer Ball (Initialed HB)

RE: Dodd Farm Acquisition

Mr. Bowers has found two sources of federal grants which might work:

- 1. Open Space Land Program, HUD, 50-50 matching grant
- 2. A land acquisition program under Title I, Office of Education, HEW

He is inquiring further into these programs and will get a better idea if the Dodd acquisition could meet the criteria.

Attached is a financial scheme which must be checked by someone more knowledgeable than I for legality, feasibility, etc. I am sending Dwight Roberts a copy for verification by him or by Dean King.

In the meantime, if you talk to Mr. Dodd, I suggest you inquire of him if he would consider leasing with an option to buy. You could explain that it will take months to secure assurance of total funds and accumulate sufficient cash to make the first year payment. (I assume he will definitely not want to take all the money in one year. The income tax would be exorbitant.) The shortest lease would be one year, two might be preferable. Of course, the purchase price would have to be agreeable to him. I am not sure what the lease payment should be—perhaps up to \$2,000 a year would be about right for a lease to graze cattle or horses. The lease arrangment would gain us time to apply for a grant and raise our part of the money. I assume Dean Manning would be likely to allocate the funds for a lease if he feels our chances for a grant are reasonably good and that the attached scheme is reasonable.

HB:jh

cc: Mr. Dwight Roberts"

Analysis of Possible Funding Dodd Farm Purchase (192,573 acres)

March 1, 1968

"1. Assume C.U. can acquire for appraisal figure of Purchase price (indicated) for 200 acres 7,000 \$89,000

Or, say \$90,000 capital gain
Or, taxable long-term gain of \$45,000 (taken in one year)
Assume additional annual income of 5,000
\$50,000

Tax would be about Producing \$80,000 net

2. Assume take payments as follows

1st year	\$28,000	(taxable	long-	-term	gain	\$13,000)
2nd year	28,000	11	10	81	88	ii .
3rd year	28,000	15	11	11	61	11
4th year	12,000	11	. 11	11	J)	6,000

\$16,000

Assume additional income of \$5,000, then in first 3 years

capital gain \$13.000 ordinary income \$5.000 \$18,000

Tax would be about \$3,260 x 3 years or \$9,780 Fourth year taxes about 1,600 \$11,380

Producing \$84,620 net

Unfortunately, the interest earning available by taking the net in one year may equal or exceed the tax savings.

It does not appear that a partial gift arrangement would be beneficial to Mr. Dodd unless his other income is significantly greater than the assumed \$5,000 per year.

If we assume no gift and a \$96,000 purchase price, and further assume we could get a 50-50 matching grant, the University would have a goal of \$48,000 to raise. If the payments could be spread over 4 years and if we had a one year lease, it might be possible to allocate that much money from:

1. Research overhead?

2. Gifts via Development Foundation

3. Purchase of Land account

4. other sources - specific appropriation from the Senate?

In summary, I must admit that I am not hopeful of success in this project."

APPENDIX VI

NEWSPAPER CLIPPING - HISTORIC CABIN

Boulder County's Oldest Cabin

Less than two miles from that loft, and it was probably quite point on the computer-age, the Certainty it was considered door to that testimony to moder the proof to the control of the c

Because it was so recently in-habited, the cabin mingles the very old original materials with materials of modern vintage. Square nails gave way to round ones as improvements and repairs made of boards was plong with a front entrance, a cement sidewalk, some cement "chinking" rel were made addition made

The cabin-building is attributed to a man named Jacob Affolter, who sent a son to the Colorado legislature and still has descend-

ents in Boulder County. Since the cabin was built in 1839, we can speculate that Jacob Affolter had at least informal title to the land by that time, although it was not recorded until 1876, with a notation that Andrew Johnson.

Page 14 . Town & Country . October 5, 1557

County's Oldest Cabin (cont.) Boulder

By this time. however. Affolter the had deeded the land to Christin E: Neid deeded being larcecorded in 1878, two years after the Affolter's ownership was record of ed. Such informal trading contrasts sharply with foday's newery proper and quickly recorded the very proper and quickly recorded the real estate dealings. Today's he land is far too valuable for any at possible silp-up on who owns if at he what time.

In 1901, the cabin changed hands This was during the Civil War.

This was during the Civil War.

This was during the war was being

to durit, this country was hungering after the newly discovered

gold and contending with Indian

pruptings in this area. Soldiers

were sent to Colorado to put
down Indian uprisings. and it
were stationed in army tents.

At a later date. Niwot area

At a later date. Niwot area

tresidents used the cabin for wedincreased the cabin for weddings and funerals. because there
was no building in Niwot large
was no building in Niwot large
enough to house such events.

To go back to the beginning.

In 1001, the cabin changed hands again; this time the Gehrung a brothers purchased it for \$3,000. a The boys took their three sisters it in 1960, by means of a quilt- kind deed which yielded cach a m

they had heaters of one kind or another in all the rooms. Bouland in the common should are sucretary, she declares.

Today the cabin stands alone amid the trees and weeds that grow along Left Hand Creek. It shaires its quiet setting, and its shistorical importance, with viepee rings, which oldtimers say still exist from the days the lindians camped along Left Hand Creek. "Tepee rings" which oldtimers say still exist from the days the lindians camped along Left Hand Creek. "Tepee rings" are circles of stones the Indians placed a around the edges of their tents. If you have an exploring bent, you might like to find them.

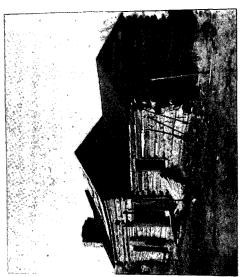
Indebtedness is acknowledged to Rudolph Johnson. 735 16th. refined Boulder lawyer and former state lengialator, who supplied it much of this information. while President: had caused 1/5 interest in the property.

tetters to be made patent by the Content and Content land Office in Washing ber some lively parties at the Gorardow as still a Cehrungs. The Gehrung name is did territory.

But his time, however. Affolter laught until her recent death is but decided the land to Christin Extella was a stenographer and mission (1872), with the deed being later became assistant editor of Rollings and the Content latent of the strangent of the land to Christin Extella was a stenographer and an Kislon (1872), with the deed being later became assistant editor of Rollings as the content of the

Hurtzeler.
The fluxtelers, who operated a fine fluxtelers, a fine in the property.
The fluxteler recalls that the cabin may have been a bit chilly, but

Boulder's aldest cabla is located "east half, southeast quarter, and northwest quarter of southter of the southwest quarter all in Section 28, Township 2 North, Range 70 W." You can find it just south of Haystack Mountain. east quarter and northeast quar-



Clipping from Town and Country Review, October 5, 1967. Clipping provided by Mr. J. Schooland.